Final Regulatory Impact Analysis: CAFE Data Book

(Appendix I – Standard Setting Analysis)

Corporate Average Fuel Economy Standards for Passenger Cars and Light Trucks for Model Years 2027 and Beyond and Fuel Efficiency Standards for Heavy-Duty Pickup Trucks and Vans for Model Years 2030 and Beyond

May 2024

U.S. Department of Transportation
National Highway Traffic Safety Administration

NHTSA

Contents

Summary Tables

Table 1 - Incremental Benefits Over the Lifetimes of Total Fleet Produced Through 2031 (2021$ BILLIONS), 3% Percent Discount Rate, by Alternative, All SC-GHG Levels

Incremental Benefits Over the Lifetimes of Total Fleet Produced Through 2031 (2021$ BILLIONS), 3% Percent Discount Rate, by Alternative, All SC-GHG Levels					
Alternative	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Total Incremental Social Benefits, SC-GHG 3%	36.1	53.2	66.9	73.8	85.8
Total Incremental Social Benefits, SC-GHG 2.5%	47.1	68.5	85.7	94.4	109.6
Total Incremental Social Benefits, SC-GHG 2%	59.7	85.8	107.2	117.8	136.6
Net Incremental Social Benefits, SC-GHG 3%	11.6	21.4	19.8	13.7	5.1
Net Incremental Social Benefits, SC-GHG 2.5%	22.7	36.7	38.7	34.3	28.8
Net Incremental Social Benefits, SC-GHG 2%	35.2	54.0	60.1	57.7	55.8

Table 2 - Incremental Benefits Over the Lifetimes of Total Fleet Produced Through 2031 (2021$ BILLIONS), 7% Percent Discount Rate, by Alternative, All SC-GHG Levels

Incremental Benefits Over the Lifetimes of Total Fleet Produced Through 2031 (2021$ BILLIONS), 7% Percent Discount Rate, by Alternative, All SC-GHG Levels					
Alternative	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Total Incremental Social Benefits, SC-GHG 3%	23.4	34.2	42.9	47.2	54.7
Total Incremental Social Benefits, SC-GHG 2.5%	34.5	49.4	61.7	67.9	78.4
Total Incremental Social Benefits, SC-GHG 2%	47.0	66.8	83.1	91.3	105.4
Net Incremental Social Benefits, SC-GHG 3%	7.2	13.2	11.8	7.9	0.9
Net Incremental Social Benefits, SC-GHG 2.5%	18.2	28.4	30.7	28.5	24.6
Net Incremental Social Benefits, SC-GHG 2%	30.8	45.8	52.1	51.9	51.6

Table 3 - Incremental Benefits Over the Lifetimes of Total Fleet for Calendar Years 2022-2050 (2021$ BILLIONS), 3% Percent Discount Rate, by Alternative, All SC-GHG Levels

Incremental Benefits Over the Lifetimes of Total Fleet for Calendar Years 2022-2050 (2021$ BILLIONS), 3% Percent Discount Rate, by Alternative, All SC-GHG Levels					
Alternative	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Total Incremental Social Benefits, SC-GHG 3%	137.7	211.3	276.0	335.9	456.2
Total Incremental Social Benefits, SC-GHG 2.5%	184.2	282.0	368.4	449.3	611.5
Total Incremental Social Benefits, SC-GHG 2%	236.9	362.2	473.0	577.9	787.5
Net Incremental Social Benefits, SC-GHG 3%	60.8	96.0	100.2	92.4	103.3
Net Incremental Social Benefits, SC-GHG 2.5%	107.4	166.8	192.5	205.9	258.6
Net Incremental Social Benefits, SC-GHG 2%	160.1	247.0	297.1	334.4	434.6

Table 4 - Incremental Benefits Over the Lifetimes of Total Fleet for Calendar Years 2022-2050 (2021$ BILLIONS), 7% Percent Discount Rate, by Alternative, All SC-GHG Levels

Incremental Benefits Over the Lifetimes of Total Fleet for Calendar Years 2022-2050 (2021$ BILLIONS), 7% Percent Discount Rate, by Alternative, All SC-GHG Levels					
Alternative	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Total Incremental Social Benefits, SC-GHG 3%	83.1	126.5	165.1	200.7	271.2
Total Incremental Social Benefits, SC-GHG 2.5%	129.7	197.2	257.5	314.2	426.5
Total Incremental Social Benefits, SC-GHG 2%	182.4	277.4	362.1	442.7	602.5
Net Incremental Social Benefits, SC-GHG 3%	39.6	63.1	68.8	68.8	80.8
Net Incremental Social Benefits, SC-GHG 2.5%	86.1	133.9	161.2	182.2	236.1
Net Incremental Social Benefits, SC-GHG 2%	138.8	214.1	265.8	310.7	412.1

Table 5 - Estimated Costs, Benefits, and Net Benefits Across MYs 1983-2031 (billions of dollars), Total Fleet for Alternative PC2LT002, SC-GHG 2%

Estimated Costs, Benefits, and Net Benefits Across MYs 1983-2031 (billions of dollars), Total Fleet for Alternative PC2LT002, SC-GHG 2%				
	3% Discount Rate	7% Discount Rate	3% Discount Rate	7% Discount Rate
Costs	24.5	16.2	1.0	1.2
Benefits	59.7	47.0	2.3	3.4
Net Benefits	35.2	30.8	1.4	2.2

Table 6 - Estimated Costs, Benefits, and Net Benefits Across MYs 1983-2031 (billions of dollars), Passenger Car Fleet for Alternative PC2LT002, SC-GHG 2%

Estimated Costs, Benefits, and Net Benefits Across MYs 1983-2031 (billions of dollars), Passenger Car Fleet for Alternative PC2LT002, SC-GHG 2%				
	Totals		Annualized	
	3% Discount Rate	7% Discount Rate	3% Discount Rate	7% Discount Rate
Costs	7.2	5.1	0.3	0.4
Benefits	20.9	16.2	0.8	1.2
Net Benefits	13.7	11.1	0.5	0.8

Table 7 - Estimated Costs, Benefits, and Net Benefits Across MYs 1983-2031 (billions of dollars), Light Truck Fleet for Alternative PC2LT002, SC-GHG 2%

Estimated Costs, Benefits, and Net Benefits Across MYs 1983-2031 (billions of dollars), Light Truck Fleet for Alternative PC2LT002, SC-GHG 2%				
	Totals		Annualized	
	3% Discount Rate	7% Discount Rate	3% Discount Rate	7% Discount Rate
Costs	17.3	11.1	0.7	0.8
Benefits	38.8	30.8	1.5	2.2
Net Benefits	21.5	19.7	0.8	1.4

Table 8 - Estimated Costs, Benefits, and Net Benefits Across MYs 1983-2031 (billions of dollars), Total Fleet for Alternative PC1LT3, SC-GHG 2%

Estimated Costs, Benefits, and Net Benefits Across MYs 1983-2031 (billions of dollars), Total Fleet for Alternative PC1LT3, SC-GHG 2%				
	Totals		Annualized	
	3% Discount Rate	7% Discount Rate	3% Discount Rate	7% Discount Rate
Costs	31.8	21.0	1.2	1.5
Benefits	85.8	66.8	3.4	4.9
Net Benefits	54.0	45.8	2.1	3.3

Table 9 - Estimated Costs, Benefits, and Net Benefits Across MYs 1983-2031 (billions of dollars), Passenger Car Fleet for Alternative PC1LT3, SC-GHG 2%

Estimated Costs, Benefits, and Net Benefits Across MYs 1983-2031 (billions of dollars), Passenger Car Fleet for Alternative PC1LT3, SC-GHG 2%				
	Totals		Annualized	
	3% Discount Rate	7% Discount Rate	3% Discount Rate	7% Discount Rate
Costs	11.9	7.2	0.5	0.5
Benefits	6.8	5.2	0.3	0.4
Net Benefits	-5.0	-2.0	-0.2	-0.1

Table 10 - Estimated Costs, Benefits, and Net Benefits Across MYs 1983-2031 (billions of dollars), Light Truck Fleet for Alternative PC1LT3, SC-GHG 2%

Estimated Costs, Benefits, and Net Benefits Across MYs 1983-2031 (billions of dollars), Light Truck Fleet for Alternative PC1LT3, SC-GHG 2%				
	Totals		Annualized	
	3% Discount Rate	7% Discount Rate	3% Discount Rate	7% Discount Rate
Costs	19.9	13.9	0.8	1.0
Benefits	79.0	61.6	3.1	4.5
Net Benefits	59.0	47.7	2.3	3.5

Table 11 - Estimated Costs, Benefits, and Net Benefits Across MYs 1983-2031 (billions of dollars), Total Fleet for Alternative PC2LT4, SC-GHG 2%

Estimated Costs, Benefits, and Net Benefits Across MYs 1983-2031 (billions of dollars), Total Fleet for Alternative PC2LT4, SC-GHG 2%				
	Totals		Annualized	
	3% Discount Rate	7% Discount Rate	3% Discount Rate	7% Discount Rate
Costs	47.1	31.0	1.8	2.3
Benefits	107.2	83.1	4.2	6.0
Net Benefits	60.1	52.1	2.4	3.8

Table 12 - Estimated Costs, Benefits, and Net Benefits Across MYs 1983-2031 (billions of dollars), Passenger Car Fleet for Alternative PC2LT4, SC-GHG 2%

Estimated Costs, Benefits, and Net Benefits Across MYs 1983-2031 (billions of dollars), Passenger Car Fleet for Alternative PC2LT4, SC-GHG 2%				
	Totals		Annualized	
	3% Discount Rate	7% Discount Rate	3% Discount Rate	7% Discount Rate
Costs	18.6	11.5	0.7	0.8
Benefits	11.8	9.0	0.5	0.7
Net Benefits	-6.8	-2.6	-0.3	-0.2

Table 13 - Estimated Costs, Benefits, and Net Benefits Across MYs 1983-2031 (billions of dollars), Light Truck Fleet for Alternative PC2LT4, SC-GHG 2%

Estimated Costs, Benefits, and Net Benefits Across MYs 1983-2031 (billions of dollars), Light Truck Fleet for Alternative PC2LT4, SC-GHG 2%				
	Totals		Annualized	
	3% Discount Rate	7% Discount Rate	3% Discount Rate	7% Discount Rate
Costs	28.5	19.5	1.1	1.4
Benefits	95.4	74.2	3.7	5.4
Net Benefits	66.9	54.6	2.6	4.0

Table 14 - Estimated Costs, Benefits, and Net Benefits Across MYs 1983-2031 (billions of dollars), Total Fleet for Alternative PC3LT5, SC-GHG 2%

Estimated Costs, Benefits, and Net Benefits Across MYs 1983-2031 (billions of dollars), Total Fleet for Alternative PC3LT5, SC-GHG 2%				
	Totals		Annualized	
	3% Discount Rate	7% Discount Rate	3% Discount Rate	7% Discount Rate
Costs	60.1	39.4	2.4	2.9
Benefits	117.8	91.3	4.6	6.6
Net Benefits	57.7	51.9	2.3	3.8

Table 15 - Estimated Costs, Benefits, and Net Benefits Across MYs 1983-2031 (billions of dollars), Passenger Car Fleet for Alternative PC3LT5, SC-GHG 2%

Estimated Costs, Benefits, and Net Benefits Across MYs 1983-2031 (billions of dollars), Passenger Car Fleet for Alternative PC3LT5, SC-GHG 2%				
	Totals		Annualized	
	3% Discount Rate	7% Discount Rate	3% Discount Rate	7% Discount Rate
Costs	25.0	15.6	1.0	1.1
Benefits	16.3	12.3	0.6	0.9
Net Benefits	-8.7	-3.3	-0.3	-0.2

Table 16 - Estimated Costs, Benefits, and Net Benefits Across MYs 1983-2031 (billions of dollars), Light Truck Fleet for Alternative PC3LT5, SC-GHG 2%

Estimated Costs, Benefits, and Net Benefits Across MYs 1983-2031 (billions of dollars), Light Truck Fleet for Alternative PC3LT5, SC-GHG 2%				
	Totals		Annualized	
	3% Discount Rate	7% Discount Rate	3% Discount Rate	7% Discount Rate
Costs	35.1	23.8	1.4	1.7
Benefits	101.5	78.9	4.0	5.7
Net Benefits	66.4	55.1	2.6	4.0

Table 17 - Estimated Costs, Benefits, and Net Benefits Across MYs 1983-2031 (billions of dollars), Total Fleet for Alternative PC6LT8, SC-GHG 2%

Estimated Costs, Benefits, and Net Benefits Across MYs 1983-2031 (billions of dollars), Total Fleet for Alternative PC6LT8, SC-GHG 2%				
	Totals		Annualized	
	3% Discount Rate	7% Discount Rate	3% Discount Rate	7% Discount Rate
Costs	80.8	53.8	3.2	3.9
Benefits	136.6	105.4	5.4	7.7
Net Benefits	55.8	51.6	2.2	3.7

Table 18 - Estimated Costs, Benefits, and Net Benefits Across MYs 1983-2031 (billions of dollars), Passenger Car Fleet for Alternative PC6LT8, SC-GHG 2%

Estimated Costs, Benefits, and Net Benefits Across MYs 1983-2031 (billions of dollars), Passenger Car Fleet for Alternative PC6LT8, SC-GHG 2%				
	Totals		Annualized	
	3% Discount Rate	7% Discount Rate	3% Discount Rate	7% Discount Rate
Costs	36.0	23.5	1.4	1.7
Benefits	29.1	22.0	1.1	1.6
Net Benefits	-6.9	-1.5	-0.3	-0.1

Table 19 - Estimated Costs, Benefits, and Net Benefits Across MYs 1983-2031 (billions of dollars), Light Truck Fleet for Alternative PC6LT8, SC-GHG 2%

Estimated Costs, Benefits, and Net Benefits Across MYs 1983-2031 (billions of dollars), Light Truck Fleet for Alternative PC6LT8, SC-GHG 2%				
	Totals		Annualized	
	3% Discount Rate	7% Discount Rate	3% Discount Rate	7% Discount Rate
Costs	44.7	30.3	1.8	2.2
Benefits	107.5	83.4	4.2	6.1
Net Benefits	62.7	53.1	2.5	3.9

Table 20 - Estimated Costs, Benefits, and Net Benefits Across Calendar Years 2022-2050 (billions of dollars), Total Fleet for Alternative PC2LT002, SC-GHG 2%

Estimated Costs, Benefits, and Net Benefits Across Calendar Years 2022-2050 (billions of dollars), Total Fleet for Alternative PC2LT002, SC-GHG 2%				
	Totals		Annualized	
	3% Discount Rate	7% Discount Rate	3% Discount Rate	7% Discount Rate
Costs	76.8	43.6	4.0	3.6
Benefits	236.9	182.4	12.3	14.9
Net Benefits	160.1	138.8	8.3	11.3

Table 21 - Estimated Costs, Benefits, and Net Benefits Across Calendar Years 2022-2050 (billions of dollars), Passenger Car Fleet for Alternative PC2LT002, SC-GHG 2%

Estimated Costs, Benefits, and Net Benefits Across Calendar Years 2022-2050 (billions of dollars), Passenger Car Fleet for Alternative PC2LT002, SC-GHG 2%				
	Totals		Annualized	
	3% Discount Rate	7% Discount Rate	3% Discount Rate	7% Discount Rate
Costs	29.4	16.0	1.5	1.3
Benefits	86.8	67.3	4.5	5.5
Net Benefits	57.3	51.3	3.0	4.2

Table 22 - Estimated Costs, Benefits, and Net Benefits Across Calendar Years 2022-2050 (billions of dollars), Light Truck Fleet for Alternative PC2LT002, SC-GHG 2%

Estimated Costs, Benefits, and Net Benefits Across Calendar Years 2022-2050 (billions of dollars), Light Truck Fleet for Alternative PC2LT002, SC-GHG 2%				
	Totals		Annualized	
	3% Discount Rate	7% Discount Rate	3% Discount Rate	7% Discount Rate
Costs	47.4	27.6	2.5	2.2
Benefits	150.1	115.1	7.8	9.4
Net Benefits	102.8	87.5	5.4	7.1

Table 23 - Estimated Costs, Benefits, and Net Benefits Across Calendar Years 2022-2050 (billions of dollars), Total Fleet for Alternative PC1LT3, SC-GHG 2%

Estimated Costs, Benefits, and Net Benefits Across Calendar Years 2022-2050 (billions of dollars), Total Fleet for Alternative PC1LT3, SC-GHG 2%				
	Totals		Annualized	
	3% Discount Rate	7% Discount Rate	3% Discount Rate	7% Discount Rate
Costs	115.3	63.4	6.0	5.2
Benefits	362.2	277.4	18.9	22.6
Net Benefits	247.0	214.1	12.9	17.4

Table 24 - Estimated Costs, Benefits, and Net Benefits Across Calendar Years 2022-2050 (billions of dollars), Passenger Car Fleet for Alternative PC1LT3, SC-GHG 2%

Estimated Costs, Benefits, and Net Benefits Across Calendar Years 2022-2050 (billions of dollars), Passenger Car Fleet for Alternative PC1LT3, SC-GHG 2%				
	Totals		Annualized	
	3% Discount Rate	7% Discount Rate	3% Discount Rate	7% Discount Rate
Costs	37.0	18.7	1.9	1.5
Benefits	28.2	21.8	1.5	1.8
Net Benefits	-8.8	3.1	-0.5	0.2

Table 25 - Estimated Costs, Benefits, and Net Benefits Across Calendar Years 2022-2050 (billions of dollars), Light Truck Fleet for Alternative PC1LT3, SC-GHG 2%

Estimated Costs, Benefits, and Net Benefits Across Calendar Years 2022-2050 (billions of dollars), Light Truck Fleet for Alternative PC1LT3, SC-GHG 2%				
	Totals		Annualized	
	3% Discount Rate	7% Discount Rate	3% Discount Rate	7% Discount Rate
Costs	78.3	44.7	4.1	3.6
Benefits	334.0	255.7	17.4	20.8
Net Benefits	255.8	211.0	13.3	17.2

Table 26 - Estimated Costs, Benefits, and Net Benefits Across Calendar Years 2022-2050 (billions of dollars), Total Fleet for Alternative PC2LT4, SC-GHG 2%

Estimated Costs, Benefits, and Net Benefits Across Calendar Years 2022-2050 (billions of dollars), Total Fleet for Alternative PC2LT4, SC-GHG 2%				
	Totals		Annualized	
	3% Discount Rate	7% Discount Rate	3% Discount Rate	7% Discount Rate
Costs	175.8	96.3	9.2	7.8
Benefits	473.0	362.1	24.6	29.5
Net Benefits	297.1	265.8	15.5	21.7

Table 27 - Estimated Costs, Benefits, and Net Benefits Across Calendar Years 2022-2050 (billions of dollars), Passenger Car Fleet for Alternative PC2LT4, SC-GHG 2%

Estimated Costs, Benefits, and Net Benefits Across Calendar Years 2022-2050 (billions of dollars), Passenger Car Fleet for Alternative PC2LT4, SC-GHG 2%				
	Totals		Annualized	
	3% Discount Rate	7% Discount Rate	3% Discount Rate	7% Discount Rate
Costs	59.3	30.8	3.1	2.5
Benefits	57.2	43.8	3.0	3.6
Net Benefits	-2.1	13.0	-0.1	1.1

Table 28 - Estimated Costs, Benefits, and Net Benefits Across Calendar Years 2022-2050 (billions of dollars), Light Truck Fleet for Alternative PC2LT4, SC-GHG 2%

Estimated Costs, Benefits, and Net Benefits Across Calendar Years 2022-2050 (billions of dollars), Light Truck Fleet for Alternative PC2LT4, SC-GHG 2%				
	Totals		Annualized	
	3% Discount Rate	7% Discount Rate	3% Discount Rate	7% Discount Rate
Costs	116.6	65.5	6.1	5.3
Benefits	415.8	318.3	21.7	25.9
Net Benefits	299.2	252.8	15.6	20.6

Table 29 - Estimated Costs, Benefits, and Net Benefits Across Calendar Years 2022-2050 (billions of dollars), Total Fleet for Alternative PC3LT5, SC-GHG 2%

Estimated Costs, Benefits, and Net Benefits Across Calendar Years 2022-2050 (billions of dollars), Total Fleet for Alternative PC3LT5, SC-GHG 2%				
	Totals		Annualized	
	3% Discount Rate	7% Discount Rate	3% Discount Rate	7% Discount Rate
Costs	243.4	131.9	12.7	10.7
Benefits	577.9	442.7	30.1	36.1
Net Benefits	334.4	310.7	17.4	25.3

Table 30 - Estimated Costs, Benefits, and Net Benefits Across Calendar Years 2022-2050 (billions of dollars), Passenger Car Fleet for Alternative PC3LT5, SC-GHG 2%

Estimated Costs, Benefits, and Net Benefits Across Calendar Years 2022-2050 (billions of dollars), Passenger Car Fleet for Alternative PC3LT5, SC-GHG 2%				
	Totals		Annualized	
	3% Discount Rate	7% Discount Rate	3% Discount Rate	7% Discount Rate
Costs	82.2	43.5	4.3	3.5
Benefits	83.8	64.0	4.4	5.2
Net Benefits	1.6	20.5	0.1	1.7

Table 31 - Estimated Costs, Benefits, and Net Benefits Across Calendar Years 2022-2050 (billions of dollars), Light Truck Fleet for Alternative PC3LT5, SC-GHG 2%

Estimated Costs, Benefits, and Net Benefits Across Calendar Years 2022-2050 (billions of dollars), Light Truck Fleet for Alternative PC3LT5, SC-GHG 2%				
	Totals		Annualized	
	3% Discount Rate	7% Discount Rate	3% Discount Rate	7% Discount Rate
Costs	161.3	88.5	8.4	7.2
Benefits	494.1	378.7	25.7	30.8
Net Benefits	332.8	290.2	17.3	23.6

Table 32 - Estimated Costs, Benefits, and Net Benefits Across Calendar Years 2022-2050 (billions of dollars), Total Fleet for Alternative PC6LT8, SC-GHG 2%

Estimated Costs, Benefits, and Net Benefits Across Calendar Years 2022-2050 (billions of dollars), Total Fleet for Alternative PC6LT8, SC-GHG 2%				
	Totals		Annualized	
	3% Discount Rate	7% Discount Rate	3% Discount Rate	7% Discount Rate
Costs	352.9	190.4	18.4	15.5
Benefits	787.5	602.5	41.0	49.1
Net Benefits	434.6	412.1	22.6	33.6

Table 33 - Estimated Costs, Benefits, and Net Benefits Across Calendar Years 2022-2050 (billions of dollars), Passenger Car Fleet for Alternative PC6LT8, SC-GHG 2%

Estimated Costs, Benefits, and Net Benefits Across Calendar Years 2022-2050 (billions of dollars), Passenger Car Fleet for Alternative PC6LT8, SC-GHG 2%				
	Totals		Annualized	
	3% Discount Rate	7% Discount Rate	3% Discount Rate	7% Discount Rate
Costs	130.0	69.6	6.8	5.7
Benefits	162.7	123.1	8.5	10.0
Net Benefits	32.7	53.5	1.7	4.4

Table 34 - Estimated Costs, Benefits, and Net Benefits Across Calendar Years 2022-2050 (billions of dollars), Light Truck Fleet for Alternative PC6LT8, SC-GHG 2%

Estimated Costs, Benefits, and Net Benefits Across Calendar Years 2022-2050 (billions of dollars), Light Truck Fleet for Alternative PC6LT8, SC-GHG 2%				
	Totals		Annualized	
	3% Discount Rate	7% Discount Rate	3% Discount Rate	7% Discount Rate
Costs	222.9	120.8	11.6	9.8
Benefits	624.8	479.3	32.6	39.0
Net Benefits	401.9	358.5	20.9	29.2

Table 35 - Estimated Total Fleet Costs, Benefits, and Net Benefits Across MYs 1983-2031 (billions of dollars) Total Fleet, by Alternative, SC-GHG 2%

Estimated Total Fleet Costs, Benefits, and Net Benefits Across MYs 1983-2031 (billions of dollars) Total Fleet, by Alternative, SC-GHG 2%						
Alternative	3% Discount Rate			7% Discount Rate		
	Costs	Benefits	Net Benefits	Costs	Benefits	Net Benefits
2.00%/Y Pc And 2.00%/Y Lt (0% Lt o 2028)	24.5	59.7	35.2	16.2	47.0	30.8
1.00%/Y Pc And 3.00%/Y Lt During 2027-2032	31.8	85.8	54.0	21.0	66.8	45.8
2.00%/Y Pc And 4.00%/Y Lt During 2027-2032	47.1	107.2	60.1	31.0	83.1	52.1
3.00%/Y Pc And 5.00%/Y Lt During 2027-2032	60.1	117.8	57.7	39.4	91.3	51.9
6.00%/Y Pc And 8.00%/Y Lt During 2027-2032	80.8	136.6	55.8	53.8	105.4	51.6

Table 36 - Estimated Passenger Car Fleet Costs, Benefits, and Net Benefits Across MYs 1983-2031 (billions of dollars) Passenger Car Fleet, by Alternative, SC-GHG 2%

Estimated Passenger Car Fleet Costs, Benefits, and Net Benefits Across MYs 1983-2031 (billions of dollars) Passenger Car Fleet, by Alternative, SC-GHG 2%						
Alternative	3% Discount Rate			7% Discount Rate		
	Costs	Benefits	Net Benefits	Costs	Benefits	Net Benefits
2.00%/Y Pc And 2.00%/Y Lt (0% Lt To 2028)	7.2	20.9	13.7	5.1	16.2	11.1
1.00%/Y Pc And 3.00%/Y Lt During 2027-2032	11.9	6.8	-5.0	7.2	5.2	-2.0
2.00%/Y Pc And 4.00%/Y Lt During 2027-2032	18.6	11.8	-6.8	11.5	9.0	-2.6
3.00%/Y Pc And 5.00%/Y Lt During 2027-2032	25.0	16.3	-8.7	15.6	12.3	-3.3
6.00%/Y Pc And 8.00%/Y Lt During 2027-2032	36.0	29.1	-6.9	23.5	22.0	-1.5

Table 37 - Estimated Light Truck Fleet Costs, Benefits, and Net Benefits Across MYs 1983-2031 (billions of dollars) Light Truck Fleet, by Alternative, SC-GHG 2%

Estimated Light Truck Fleet Costs, Benefits, and Net Benefits Across MYs 1983-2031 (billions of dollars) Light Truck Fleet, by Alternative, SC-GHG 2%						
Alternative	3% Discount Rate			7% Discount Rate		
	Costs	Benefits	Net Benefits	Costs	Benefits	Net Benefits
2.00%/Y Pc And 2.00%/Y Lt (0% Lt To 2028)	17.3	38.8	21.5	11.1	30.8	19.7
1.00%/Y Pc And 3.00%/Y Lt During 2027-2032	19.9	79.0	59.0	13.9	61.6	47.7
2.00%/Y Pc And 4.00%/Y Lt During 2027-2032	28.5	95.4	66.9	19.5	74.2	54.6
3.00%/Y Pc And 5.00%/Y Lt During 2027-2032	35.1	101.5	66.4	23.8	78.9	55.1
6.00%/Y Pc And 8.00%/Y Lt During 2027-2032	44.7	107.5	62.7	30.3	83.4	53.1

Table 38 - Estimated Total Fleet Costs, Benefits, and Net Benefits Across Calendar Years 2022-2050 (billions of dollars) Total Fleet, by Alternative, SC-GHG 2%

Estimated Total Fleet Costs, Benefits, and Net Benefits Across Calendar Years 2022-2050 (billions of dollars) Total Fleet, by Alternative, SC-GHG 2%						
Alternative	3% Discount Rate			7% Discount Rate		
	Costs	Benefits	Net Benefits	Costs	Benefits	Net Benefits
2.00%/Y Pc And 2.00%/Y Lt (0% Lt To 2028)	76.8	236.9	160.1	43.6	182.4	138.8
1.00%/Y Pc And 3.00%/Y Lt During 2027-2032	115.3	362.2	247.0	63.4	277.4	214.1
2.00%/Y Pc And 4.00%/Y Lt During 2027-2032	175.8	473.0	297.1	96.3	362.1	265.8
3.00%/Y Pc And 5.00%/Y Lt During 2027-2032	243.4	577.9	334.4	131.9	442.7	310.7
6.00%/Y Pc And 8.00%/Y Lt During 2027-2032	352.9	787.5	434.6	190.4	602.5	412.1

Table 39 - Estimated Passenger Car Fleet Costs, Benefits, and Net Benefits Across Calendar Years 2022-2050 (billions of dollars) Passenger Car Fleet, by Alternative, SC-GHG 2%

Estimated Passenger Car Fleet Costs, Benefits, and Net Benefits Across Calendar Years 2022-2050 (billions of dollars) Passenger Car Fleet, by Alternative, SC-GHG 2%						
Alternative	3% Discount Rate			7% Discount Rate		
	Costs	Benefits	Net Benefits	Costs	Benefits	Net Benefits
2.00%/Y Pc And 2.00%/Y Lt (0% Lt To 2028)	29.4	86.8	57.3	16.0	67.3	51.3
1.00%/Y Pc And 3.00%/Y Lt During 2027-2032	37.0	28.2	-8.8	18.7	21.8	3.1
2.00%/Y Pc And 4.00%/Y Lt During 2027-2032	59.3	57.2	-2.1	30.8	43.8	13.0
3.00%/Y Pc And 5.00%/Y Lt During 2027-2032	82.2	83.8	1.6	43.5	64.0	20.5
6.00%/Y Pc And 8.00%/Y Lt During 2027-2032	130.0	162.7	32.7	69.6	123.1	53.5

Table 40 - Estimated Light Truck Fleet Costs, Benefits, and Net Benefits Across Calendar Years 2022-2050 (billions of dollars) Light Truck Fleet, by Alternative, SC-GHG 2%

Estimated Light Truck Fleet Costs, Benefits, and Net Benefits Across Calendar Years 2022-2050 (billions of dollars) Light Truck Fleet, by Alternative, SC-GHG 2%						
Alternative	3% Discount Rate			7% Discount Rate		
	Costs	Benefits	Net Benefits	Costs	Benefits	Net Benefits
2.00%/Y Pc And 2.00%/Y Lt (0% Lt To 2028)	47.4	150.1	102.8	27.6	115.1	87.5
1.00%/Y Pc And 3.00%/Y Lt During 2027-2032	78.3	334.0	255.8	44.7	255.7	211.0
2.00%/Y Pc And 4.00%/Y Lt During 2027-2032	116.6	415.8	299.2	65.5	318.3	252.8
3.00%/Y Pc And 5.00%/Y Lt During 2027-2032	161.3	494.1	332.8	88.5	378.7	290.2
6.00%/Y Pc And 8.00%/Y Lt During 2027-2032	222.9	624.8	401.9	120.8	479.3	358.5

CAFE Costs per Vehicle

Table 41 - MY 2031 Required and Achieved CAFE Levels (mpg), and Per-Vehicle Regulatory Costs ($) for Total Fleet by Alternative

MY 2031 Required and Achieved CAFE Levels (mpg), and Per-Vehicle Regulatory Costs ($) for Total Fleet by Alternative			
	Avg Required (mpg)	Avg Achieved (mpg)	Avg Reg. Cost ($)
No Action Alternative (Reference Baseline)	46.9	52.1	1149
Alternative PC2LT002	50.4	52.5	1541
Alternative PC1LT3	53.2	53.7	1756
Alternative PC2LT4	56.0	54.9	2141
Alternative PC3LT5	59.0	55.9	2575
Alternative PC6LT8	69.2	57.4	3951

Table 42 - MY 2031 Required and Achieved CAFE Levels (mpg), and Per-Vehicle Regulatory Costs ($) for Passenger Car Fleet by Alternative

MY 2031 Required and Achieved CAFE Levels (mpg), and Per-Vehicle Regulatory Costs ($) for Passenger Car Fleet by Alternative			
	Avg Required (mpg)	Avg Achieved (mpg)	Avg Reg. Cost ($)
No Action Alternative (Reference Baseline)	58.8	69.8	834
Alternative PC2LT002	65.1	70.8	1191
Alternative PC1LT3	61.8	69.1	1002
Alternative PC2LT4	65.1	70.8	1284
Alternative PC3LT5	68.5	73.0	1682
Alternative PC6LT8	80.1	78.6	3137

Table 43 - MY 2031 Required and Achieved CAFE Levels (mpg), and Per-Vehicle Regulatory Costs ($) for Light Truck Fleet by Alternative

MY 2031 Required and Achieved CAFE Levels (mpg), and Per-Vehicle Regulatory Costs ($) for Light Truck Fleet by Alternative			
	Avg Required (mpg)	Avg Achieved (mpg)	Avg Reg. Cost ($)
No Action Alternative (Reference Baseline)	42.6	46.2	1308
Alternative PC2LT002	45.2	46.4	1718
Alternative PC1LT3	49.6	48.1	2144
Alternative PC2LT4	52.2	49.2	2585
Alternative PC3LT5	55.0	49.8	3039
Alternative PC6LT8	64.6	50.3	4373

Various Impacts of Alternatives

Table 44 - Impacts for Alternative PC2LT002, SC-GHG 2%

Impacts for Alternative PC2LT002, SC-GHG 2%			
Category	Passenger Car	Light Truck	Combined Fleet
Fuel Economy			
Required Fuel Economy for MY 2032(mpg)	65.1	45.2	50.4
Achieved Fuel Economy for MY 2032 (mpg)	70.8	46.4	52.5
Achieved Fuel Economy for MY 2020 - for reference (mpg)	47.1	32.1	36.5
Average MY 2031 Vehicle - Incremental to Alternative 0 (Baseline)			
Per Vehicle Price Increase (dollars)	357	409	392
Lifetime Fuel Cost (per vehicle), 3% Discount Rate (dollars)	-548	-690	-639
Lifetime Fuel Cost (per vehicle), 7% Discount Rate (dollars)	-429	-534	-496
Payback Period Relative to MY 2020, 3% Discount Rate (years)	0.0	0.0	0.0
Payback Period Relative to MY 2020, 7% Discount Rate (years)	0.0	1.0	0.7
Lifetime of Vehicles Through 2031 - Incremental to Alternative 0 (Baseline)			
Total Lifetime Fuel Volume (billion gallons)	-5	-8	-13
Total Lifetime CO2 Volume (million metric tons)	-52	-104	-156
Fatalities (Including Rebound Miles)	9	144	153
Fatalities (Excluding Rebound Miles)	-33	75	42
Total Technology Costs, 3% Discount Rate ($b)	5.5	8.5	14.0
Total Technology Costs, 7% Discount Rate ($b)	4.0	6.2	10.2
Total Net Societal Benefits, 3% Discount Rate ($b)	13.7	21.5	35.2
Total Net Societal Benefits, 7% Discount Rate ($b)	11.1	19.7	30.8

Table 45 - Impacts for Alternative PC1LT3, SC-GHG 2%

Impacts for Alternative PC1LT3, SC-GHG 2%			
Category	Passenger Car	Light Truck	Combined Fleet
Fuel Economy			
Required Fuel Economy for MY 2032(mpg)	61.8	49.6	53.2
Achieved Fuel Economy for MY 2032 (mpg)	69.1	48.1	53.7
Achieved Fuel Economy for MY 2020 - for reference (mpg)	47.1	32.1	36.5
Average MY 2031 Vehicle - Incremental to Alternative 0 (Baseline)			
Per Vehicle Price Increase (dollars)	168	835	607
Lifetime Fuel Cost (per vehicle), 3% Discount Rate (dollars)	-300	-1,165	-895
Lifetime Fuel Cost (per vehicle), 7% Discount Rate (dollars)	-235	-902	-693
Payback Period Relative to MY 2020, 3% Discount Rate (years)	0.0	1.0	0.7
Payback Period Relative to MY 2020, 7% Discount Rate (years)	0.0	1.0	0.7
Lifetime of Vehicles Through 2031 - Incremental to Alternative 0 (Baseline)			
Total Lifetime Fuel Volume (billion gallons)	-1	-17	-19
Total Lifetime CO2 Volume (million metric tons)	-16	-200	-216
Fatalities (Including Rebound Miles)	233	-9	224
Fatalities (Excluding Rebound Miles)	201	-152	49
Total Technology Costs, 3% Discount Rate ($b)	1.5	15.4	16.9
Total Technology Costs, 7% Discount Rate ($b)	1.1	11.2	12.3
Total Net Societal Benefits, 3% Discount Rate ($b)	-5.0	59.0	54.0
Total Net Societal Benefits, 7% Discount Rate ($b)	-2.0	47.7	45.8

Table 46 - Impacts for Alternative PC2LT4, SC-GHG 2%

Impacts for Alternative PC2LT4, SC-GHG 2%			
Category	Passenger Car	Light Truck	Combined Fleet
Fuel Economy			
Required Fuel Economy for MY 2032(mpg)	65.1	52.2	56.0
Achieved Fuel Economy for MY 2032 (mpg)	70.8	49.2	54.9
Achieved Fuel Economy for MY 2020 - for reference (mpg)	47.1	32.1	36.5
Average MY 2031 Vehicle - Incremental to Alternative 0 (Baseline)			
Per Vehicle Price Increase (dollars)	450	1,277	992
Lifetime Fuel Cost (per vehicle), 3% Discount Rate (dollars)	-503	-1,434	-1,148
Lifetime Fuel Cost (per vehicle), 7% Discount Rate (dollars)	-394	-1,111	-891
Payback Period Relative to MY 2020, 3% Discount Rate (years)	1.0	1.0	1.0
Payback Period Relative to MY 2020, 7% Discount Rate (years)	1.0	2.0	1.7
Lifetime of Vehicles Through 2031 - Incremental to Alternative 0 (Baseline)			
Total Lifetime Fuel Volume (billion gallons)	-2	-21	-23
Total Lifetime CO2 Volume (million metric tons)	-28	-239	-267
Fatalities (Including Rebound Miles)	318	48	366
Fatalities (Excluding Rebound Miles)	269	-134	135
Total Technology Costs, 3% Discount Rate ($b)	4.5	21.1	25.6
Total Technology Costs, 7% Discount Rate ($b)	3.3	15.2	18.5
Total Net Societal Benefits, 3% Discount Rate ($b)	-6.8	66.9	60.1
Total Net Societal Benefits, 7% Discount Rate ($b)	-2.6	54.6	52.1

Table 47 - Impacts for Alternative PC3LT5, SC-GHG 2%

Impacts for Alternative PC3LT5, SC-GHG 2%			
Category	Passenger Car	Light Truck	Combined Fleet
Fuel Economy			
Required Fuel Economy for MY 2032(mpg)	68.5	55.0	59.0
Achieved Fuel Economy for MY 2032 (mpg)	73.0	49.8	55.9
Achieved Fuel Economy for MY 2020 - for reference (mpg)	47.1	32.1	36.5
Average MY 2031 Vehicle - Incremental to Alternative 0 (Baseline)			
Per Vehicle Price Increase (dollars)	848	1,730	1,426
Lifetime Fuel Cost (per vehicle), 3% Discount Rate (dollars)	-758	-1,591	-1,343
Lifetime Fuel Cost (per vehicle), 7% Discount Rate (dollars)	-595	-1,235	-1,044
Payback Period Relative to MY 2020, 3% Discount Rate (years)	1.0	2.0	1.7
Payback Period Relative to MY 2020, 7% Discount Rate (years)	2.0	3.0	2.7
Lifetime of Vehicles Through 2031 - Incremental to Alternative 0 (Baseline)			
Total Lifetime Fuel Volume (billion gallons)	-3	-22	-26
Total Lifetime CO2 Volume (million metric tons)	-38	-254	-292
Fatalities (Including Rebound Miles)	404	128	531
Fatalities (Excluding Rebound Miles)	338	-73	265
Total Technology Costs, 3% Discount Rate ($b)	7.4	24.7	32.0
Total Technology Costs, 7% Discount Rate ($b)	5.3	17.8	23.1
Total Net Societal Benefits, 3% Discount Rate ($b)	-8.7	66.4	57.7
Total Net Societal Benefits, 7% Discount Rate ($b)	-3.3	55.1	51.9

Table 48 - Impacts for Alternative PC6LT8, SC-GHG 2%

Impacts for Alternative PC6LT8, SC-GHG 2%			
Category	Passenger Car	Light Truck	Combined Fleet
Fuel Economy			
Required Fuel Economy for MY 2032(mpg)	80.1	64.6	69.2
Achieved Fuel Economy for MY 2032 (mpg)	78.6	50.3	57.4
Achieved Fuel Economy for MY 2020 - for reference (mpg)	47.1	32.1	36.5
Average MY 2031 Vehicle - Incremental to Alternative 0 (Baseline)			
Per Vehicle Price Increase (dollars)	2,303	3,065	2,802
Lifetime Fuel Cost (per vehicle), 3% Discount Rate (dollars)	-1,321	-1,703	-1,607
Lifetime Fuel Cost (per vehicle), 7% Discount Rate (dollars)	-1,039	-1,323	-1,252
Payback Period Relative to MY 2020, 3% Discount Rate (years)	5.0	5.0	5.0
Payback Period Relative to MY 2020, 7% Discount Rate (years)	12.0	12.0	12.0
Lifetime of Vehicles Through 2031 - Incremental to Alternative 0 (Baseline)			
Total Lifetime Fuel Volume (billion gallons)	-6	-24	-30
Total Lifetime CO2 Volume (million metric tons)	-69	-268	-337
Fatalities (Including Rebound Miles)	501	259	760
Fatalities (Excluding Rebound Miles)	395	40	435
Total Technology Costs, 3% Discount Rate ($b)	13.5	29.6	43.0
Total Technology Costs, 7% Discount Rate ($b)	9.7	21.4	31.1
Total Net Societal Benefits, 3% Discount Rate ($b)	-6.9	62.7	55.8
Total Net Societal Benefits, 7% Discount Rate ($b)	-1.5	53.1	51.6

Required and Achieved CAFE Levels, Reference Baseline vs Preferred Alternative by Manufacturer

Table 49 - Comparison of No Action Alternative (Reference Baseline) and Alternative PC2LT002 Required and Achieved CAFE Levels in MYs 2022-2031 for the Total Fleet (mpg)

Comparison of No Action Alternative (Reference Baseline) and Alternative PC2LT002 Required and Achieved CAFE Levels in MYs 2022-2031 for the Total Fleet (mpg)			
	BMW	Ford	GM

	No Action Alternative (Reference Baseline)		Alternative PC2LT002		No Action Alternative (Reference Baseline)		Alternative PC2LT002		No Action Alternative (Reference Baseline)		Alternative PC2LT002	
Model Year	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved
2022	37.6	35.3	37.6	35.3	31.4	30.9	31.4	30.9	32.5	30.8	32.5	30.8
2023	38.0	38.1	38.0	38.1	31.9	32.7	31.9	32.7	33.0	31.0	33.0	31.0
2024	41.3	41.8	41.3	41.8	34.3	37.4	34.3	37.4	35.4	37.3	35.4	37.3
2025	44.7	45.7	44.7	45.7	37.3	38.4	37.3	38.4	38.4	42.5	38.4	42.5
2026	49.6	51.9	49.6	51.9	41.4	41.5	41.4	41.5	42.6	44.2	42.6	44.2
2027	49.6	52.3	50.0	51.3	41.4	43.8	41.4	43.7	42.5	43.3	42.7	43.0
2028	49.5	51.2	50.4	51.0	41.4	43.2	41.5	44.2	42.5	42.9	42.7	42.6
2029	49.5	51.3	51.3	51.0	41.4	43.4	42.4	45.0	42.5	42.8	43.6	43.0
2030	49.5	52.5	52.3	52.2	41.4	42.6	43.2	44.3	42.5	42.5	44.4	42.8
2031	49.5	55.1	53.5	53.9	41.3	42.6	44.0	44.1	42.5	42.8	45.4	44.7

Table 50 - Comparison of No Action Alternative (Reference Baseline) and Alternative PC2LT002 Required and Achieved CAFE Levels in MYs 2022-2031 for the Total Fleet (mpg)

Comparison of No Action Alternative (Reference Baseline) and Alternative PC2LT002 Required and Achieved CAFE Levels in MYs 2022-2031 for the Total Fleet (mpg)												
	Honda				Hyundai				KIA			
	No Action Alternative (Reference Baseline)		Alternative PC2LT002		No Action Alternative (Reference Baseline)		Alternative PC2LT002		No Action Alternative (Reference Baseline)		Alternative PC2LT002	
Model Year	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved
2022	39.1	40.0	39.1	40.0	39.6	41.4	39.6	41.4	39.5	40.9	39.5	40.9
2023	39.5	44.4	39.5	44.4	40.1	43.5	40.1	43.5	39.9	43.6	39.9	43.6
2024	42.9	44.5	42.9	44.5	43.5	46.2	43.5	46.2	43.4	47.3	43.4	47.3
2025	46.5	48.3	46.5	48.3	47.1	50.4	47.1	50.4	47.0	49.3	47.0	49.3
2026	51.5	52.0	51.5	52.0	52.3	53.5	52.3	53.5	52.1	52.5	52.1	52.5
2027	51.5	53.1	51.9	53.1	52.2	54.2	52.8	55.2	52.0	52.6	52.5	52.0
2028	51.4	55.0	52.3	54.8	52.2	53.4	53.2	54.6	52.0	52.3	53.0	53.6
2029	51.4	56.3	53.3	55.9	52.2	52.9	54.3	55.5	52.0	52.0	54.0	54.3
2030	51.4	57.8	54.4	57.0	52.2	53.2	55.4	55.9	52.0	52.3	55.1	55.5
2031	51.4	60.5	55.6	58.7	52.1	54.9	56.5	57.7	51.9	53.7	56.2	57.1

Table 51 - Comparison of No Action Alternative (Reference Baseline) and Alternative PC2LT002 Required and Achieved CAFE Levels in MYs 2022-2031 for the Total Fleet (mpg)

Comparison of No Action Alternative (Reference Baseline) and Alternative PC2LT002 Required and Achieved CAFE Levels in MYs 2022-2031 for the Total Fleet (mpg)												
	JLR				Karma				Lucid			
	No Action Alternative (Reference Baseline)		Alternative PC2LT002		No Action Alternative (Reference Baseline)		Alternative PC2LT002		No Action Alternative (Reference Baseline)		Alternative PC2LT002	
Model Year	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved
2022	32.9	29.0	32.9	29.0	40.6	106.8	40.6	106.8	40.6	742.5	40.6	742.5
2023	33.4	37.9	33.4	37.9	41.1	106.8	41.1	106.8	41.1	742.5	41.1	742.5
2024	36.2	41.8	36.2	41.8	44.3	106.8	44.3	106.8	44.3	742.5	44.3	742.5
2025	39.4	42.1	39.4	42.1	48.1	106.8	48.1	106.8	48.1	742.5	48.1	742.5
2026	43.7	45.9	43.7	45.9	53.5	542.6	53.5	542.6	53.5	742.5	53.5	742.5
2027	43.7	45.9	43.8	45.0	54.1	520.9	55.2	328.4	54.1	709.0	55.2	394.4
2028	43.7	44.9	43.8	43.9	54.1	270.0	56.3	207.1	54.1	345.2	56.3	248.6
2029	43.7	43.8	44.7	42.9	54.1	182.1	57.5	151.2	54.1	228.1	57.5	181.5
2030	43.7	44.1	45.6	43.8	54.1	137.4	58.6	119.0	54.1	170.3	58.6	142.9
2031	43.7	47.2	46.5	46.5	54.1	137.4	59.8	119.0	54.1	170.3	59.8	142.9

Table 52 - Comparison of No Action Alternative (Reference Baseline) and Alternative PC2LT002 Required and Achieved CAFE Levels in MYs 2022-2031 for the Total Fleet (mpg)

Comparison of No Action Alternative (Reference Baseline) and Alternative PC2LT002 Required and Achieved CAFE Levels in MYs 2022-2031 for the Total Fleet (mpg)												
	Mazda				Mercedes-Benz				Mitsubishi			
	No Action Alternative (Reference Baseline)		Alternative PC2LT002		No Action Alternative (Reference Baseline)		Alternative PC2LT002		No Action Alternative (Reference Baseline)		Alternative PC2LT002	
Model Year	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved
2022	37.3	36.5	37.3	36.5	36.8	32.8	36.8	32.8	42.0	40.3	42.0	40.3
2023	37.8	47.1	37.8	47.1	37.3	39.5	37.3	39.5	42.6	40.6	42.6	40.6
2024	41.1	49.5	41.1	49.5	40.4	40.4	40.4	40.4	46.2	48.6	46.2	48.6
2025	44.6	50.3	44.6	50.3	43.8	42.0	43.8	42.0	50.0	62.3	50.0	62.3
2026	49.5	53.0	49.5	53.0	48.6	49.4	48.6	49.4	55.5	62.3	55.5	62.3
2027	49.5	53.3	49.6	52.8	48.6	51.7	49.0	50.7	55.5	62.0	56.0	60.7
2028	49.4	54.3	49.6	53.4	48.6	52.9	49.3	52.0	55.4	66.5	56.4	66.2
2029	49.4	55.5	50.7	54.6	48.5	51.8	50.3	50.9	55.4	64.9	57.5	64.6
2030	49.4	56.8	51.7	55.8	48.5	51.3	51.3	51.7	55.4	63.4	58.7	63.3
2031	49.4	59.6	52.7	57.7	48.5	53.8	52.4	53.6	55.4	63.4	59.9	63.9

Table 53 - Comparison of No Action Alternative (Reference Baseline) and Alternative PC2LT002 Required and Achieved CAFE Levels in MYs 2022-2031 for the Total Fleet (mpg)

Comparison of No Action Alternative (Reference Baseline) and Alternative PC2LT002 Required and Achieved CAFE Levels in MYs 2022-2031 for the Total Fleet (mpg)												
	Nissan				Stellantis				Subaru			
	No Action Alternative (Reference Baseline)		Alternative PC2LT002		No Action Alternative (Reference Baseline)		Alternative PC2LT002		No Action Alternative (Reference Baseline)		Alternative PC2LT002	
Model Year	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved
2022	38.9	38.6	38.9	38.6	31.9	28.9	31.9	28.9	37.8	39.0	37.8	39.0
2023	39.4	42.4	39.4	42.4	32.3	30.9	32.3	30.9	38.2	43.7	38.2	43.7
2024	42.7	44.9	42.7	44.9	35.0	34.9	35.0	34.9	41.5	46.3	41.5	46.3
2025	46.3	48.3	46.3	48.3	38.1	41.7	38.1	41.7	45.1	48.9	45.1	48.9
2026	51.3	52.2	51.3	52.2	42.3	42.4	42.3	42.4	50.1	51.5	50.1	51.5
2027	51.3	52.1	51.7	51.6	42.2	42.8	42.3	42.8	50.1	53.9	50.2	53.2
2028	51.2	52.9	52.2	52.8	42.2	42.3	42.4	42.3	50.0	55.8	50.3	54.8
2029	51.2	52.6	53.2	52.8	42.2	43.3	43.2	43.7	50.0	57.6	51.3	56.4
2030	51.2	54.1	54.3	55.0	42.2	43.0	44.1	43.8	50.0	59.7	52.3	57.9
2031	51.2	55.5	55.3	56.3	42.2	44.2	45.0	44.8	50.0	63.1	53.4	60.2

Table 54 - Comparison of No Action Alternative (Reference Baseline) and Alternative PC2LT002 Required and Achieved CAFE Levels in MYs 2022-2031 for the Total Fleet (mpg)

Comparison of No Action Alternative (Reference Baseline) and Alternative PC2LT002 Required and Achieved CAFE Levels in MYs 2022-2031 for the Total Fleet (mpg)												
	Tesla				Toyota				Volvo			
	No Action Alternative (Reference Baseline)		Alternative PC2LT002		No Action Alternative (Reference Baseline)		Alternative PC2LT002		No Action Alternative (Reference Baseline)		Alternative PC2LT002	
Model Year	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved
2022	40.7	699.0	40.7	699.0	37.1	39.1	37.1	39.1	36.0	43.8	36.0	43.8
2023	41.3	707.6	41.3	707.6	37.5	41.0	37.5	41.0	36.4	47.1	36.4	47.1
2024	44.8	710.6	44.8	710.6	40.6	45.3	40.6	45.3	39.5	47.5	39.5	47.5
2025	48.7	714.2	48.7	714.2	43.9	47.2	43.9	47.2	42.8	53.4	42.8	53.4
2026	54.1	714.6	54.1	714.6	48.7	51.8	48.7	51.8	47.6	60.3	47.6	60.3
2027	54.1	682.5	55.2	380.6	48.7	51.4	49.0	50.7	47.6	59.2	47.8	57.1
2028	54.1	332.7	56.2	239.9	48.6	52.4	49.2	51.6	47.5	56.9	48.0	54.9
2029	54.1	220.0	57.3	175.2	48.6	53.8	50.2	52.7	47.5	54.7	48.9	52.9
2030	54.1	164.3	58.4	137.9	48.6	55.2	51.2	53.9	47.5	52.8	49.9	54.0
2031	54.1	164.3	59.7	137.9	48.6	58.0	52.2	55.8	47.5	52.8	50.9	53.6

Table 55 - Comparison of No Action Alternative (Reference Baseline) and Alternative PC2LT002 Required and Achieved CAFE Levels in MYs 2022-2031 for the Total Fleet (mpg)

Comparison of No Action Alternative (Reference Baseline) and Alternative PC2LT002 Required and Achieved CAFE Levels in MYs 2022-2031 for the Total Fleet (mpg)								
	VWA				Total			
	No Action Alternative (Reference Baseline)		Alternative PC2LT002		No Action Alternative (Reference Baseline)		Alternative PC2LT002	
Model Year	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved
2022	37.9	36.3	37.9	36.3	35.8	36.5	35.8	36.5
2023	38.3	38.5	38.3	38.5	36.2	38.9	36.2	38.9
2024	41.6	45.7	41.6	45.7	39.1	43.1	39.1	43.1
2025	45.0	48.5	45.0	48.5	42.4	46.7	42.4	46.7
2026	50.0	51.8	50.0	51.8	47.0	49.9	47.0	49.9
2027	49.9	51.4	50.2	50.9	47.0	50.3	47.3	49.9
2028	49.9	50.9	50.5	51.7	46.9	50.3	47.4	50.2
2029	49.9	50.0	51.5	50.9	46.9	50.5	48.4	50.8
2030	49.8	50.7	52.6	52.5	46.9	50.7	49.4	51.1
2031	49.8	52.6	53.6	54.1	46.9	52.1	50.4	52.5

Table 56 - Comparison of No Action Alternative (Reference Baseline) and Alternative PC2LT002 Required and Achieved CAFE Levels in MYs 2022-2031 for the Passenger Car Fleet (mpg)

Comparison of No Action Alternative (Reference Baseline) and Alternative PC2LT002 Required and Achieved CAFE Levels in MYs 2022-2031 for the Passenger Car Fleet (mpg)												
	BMW				Ford				GM			
	No Action Alternative (Reference Baseline)		Alternative PC2LT002		No Action Alternative (Reference Baseline)		Alternative PC2LT002		No Action Alternative (Reference Baseline)		Alternative PC2LT002	
Model Year	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved
2022	43.3	37.8	43.3	37.8	43.4	45.5	43.4	45.5	45.1	41.9	45.1	41.9
2023	44.0	42.2	44.0	42.2	44.1	45.8	44.1	45.8	45.8	42.3	45.8	42.3
2024	47.8	51.8	47.8	51.8	47.9	66.6	47.9	66.6	49.7	54.2	49.7	54.2
2025	52.0	54.7	52.0	54.7	52.1	69.2	52.1	69.2	54.1	57.7	54.1	57.7
2026	57.7	60.9	57.7	60.9	57.9	69.2	57.9	69.2	60.1	63.4	60.1	63.4
2027	57.7	64.2	58.9	62.5	57.9	69.3	59.0	75.5	60.1	63.3	61.3	63.0
2028	57.7	62.6	60.1	61.8	57.9	66.4	60.2	72.0	60.1	61.9	62.6	61.6
2029	57.7	62.1	61.3	61.3	57.9	63.7	61.5	68.8	60.1	61.2	63.9	65.8
2030	57.7	62.9	62.6	62.6	57.9	61.2	62.7	66.0	60.1	60.1	65.1	65.3
2031	57.7	65.8	63.9	64.4	57.9	61.2	64.0	65.4	60.1	60.7	66.5	68.1

Table 57 - Comparison of No Action Alternative (Reference Baseline) and Alternative PC2LT002 Required and Achieved CAFE Levels in MYs 2022-2031 for the Passenger Car Fleet (mpg)

Comparison of No Action Alternative (Reference Baseline) and Alternative PC2LT002 Required and Achieved CAFE Levels in MYs 2022-2031 for the Passenger Car Fleet (mpg)												
	Honda				Hyundai				KIA			
	No Action Alternative (Reference Baseline)		Alternative PC2LT002		No Action Alternative (Reference Baseline)		Alternative PC2LT002		No Action Alternative (Reference Baseline)		Alternative PC2LT002	
Model Year	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved
2022	44.7	45.6	44.7	45.6	44.2	45.3	44.2	45.3	44.7	47.0	44.7	47.0
2023	45.4	52.2	45.4	52.2	44.9	48.8	44.9	48.8	45.4	49.7	45.4	49.7
2024	49.4	52.6	49.4	52.6	48.8	53.7	48.8	53.7	49.4	57.0	49.4	57.0
2025	53.7	56.7	53.7	56.7	53.1	54.6	53.1	54.6	53.6	59.4	53.6	59.4
2026	59.6	59.6	59.6	59.6	59.0	60.7	59.0	60.7	59.6	60.6	59.6	60.6
2027	59.6	60.2	60.8	60.9	59.0	62.2	60.2	65.0	59.6	60.9	60.8	60.4
2028	59.6	63.1	62.1	63.6	59.0	61.0	61.4	63.8	59.6	60.0	62.1	61.7
2029	59.6	64.7	63.3	64.9	59.0	60.5	62.7	65.6	59.6	59.6	63.3	63.9
2030	59.6	66.5	64.6	66.2	59.0	60.6	64.0	65.3	59.6	59.8	64.6	65.6
2031	59.6	69.8	66.0	68.2	59.0	62.6	65.3	68.1	59.6	61.5	65.9	67.7

Table 58 - Comparison of No Action Alternative (Reference Baseline) and Alternative PC2LT002 Required and Achieved CAFE Levels in MYs 2022-2031 for the Passenger Car Fleet (mpg)

Comparison of No Action Alternative (Reference Baseline) and Alternative PC2LT002 Required and Achieved CAFE Levels in MYs 2022-2031 for the Passenger Car Fleet (mpg)												
	JLR				Karma				Lucid			
	No Action Alternative (Reference Baseline)		Alternative PC2LT002		No Action Alternative (Reference Baseline)		Alternative PC2LT002		No Action Alternative (Reference Baseline)		Alternative PC2LT002	
Model Year	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved
2022	43.2	30.6	43.2	30.6	40.6	106.8	40.6	106.8	40.6	742.5	40.6	742.5
2023	43.8	68.6	43.8	68.6	41.1	106.8	41.1	106.8	41.1	742.5	41.1	742.5
2024	47.6	69.1	47.6	69.1	44.3	106.8	44.3	106.8	44.3	742.5	44.3	742.5
2025	51.8	69.2	51.8	69.2	48.1	106.8	48.1	106.8	48.1	742.5	48.1	742.5
2026	57.5	74.2	57.5	74.2	53.5	542.6	53.5	542.6	53.5	742.5	53.5	742.5
2027	57.5	75.4	58.7	70.9	54.1	520.9	55.2	328.4	54.1	709.0	55.2	394.4
2028	57.5	70.1	59.9	66.2	54.1	270.0	56.3	207.1	54.1	345.2	56.3	248.6
2029	57.5	65.4	61.1	62.1	54.1	182.1	57.5	151.2	54.1	228.1	57.5	181.5
2030	57.5	62.8	62.4	63.1	54.1	137.4	58.6	119.0	54.1	170.3	58.6	142.9
2031	57.5	65.7	63.7	65.0	54.1	137.4	59.8	119.0	54.1	170.3	59.8	142.9

Table 59 - Comparison of No Action Alternative (Reference Baseline) and Alternative PC2LT002 Required and Achieved CAFE Levels in MYs 2022-2031 for the Passenger Car Fleet (mpg)

Comparison of No Action Alternative (Reference Baseline) and Alternative PC2LT002 Required and Achieved CAFE Levels in MYs 2022-2031 for the Passenger Car Fleet (mpg)												
	Mazda				Mercedes-Benz				Mitsubishi			
	No Action Alternative (Reference Baseline)		Alternative PC2LT002		No Action Alternative (Reference Baseline)		Alternative PC2LT002		No Action Alternative (Reference Baseline)		Alternative PC2LT002	
Model Year	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved
2022	46.1	41.5	46.1	41.5	41.8	35.5	41.8	35.5	47.0	42.9	47.0	42.9
2023	46.8	42.5	46.8	42.5	42.4	45.3	42.4	45.3	47.7	43.3	47.7	43.3
2024	50.9	55.6	50.9	55.6	46.1	47.9	46.1	47.9	51.9	61.2	51.9	61.2
2025	55.3	58.8	55.3	58.8	50.1	52.7	50.1	52.7	56.4	67.6	56.4	67.6
2026	61.5	61.5	61.5	61.5	55.6	71.3	55.6	71.3	62.7	67.7	62.7	67.7
2027	61.5	61.5	62.7	62.4	55.6	74.1	56.8	70.8	62.7	66.7	63.9	65.3
2028	61.5	62.3	64.0	63.3	55.6	69.8	57.9	66.9	62.7	72.5	65.2	72.5
2029	61.5	63.2	65.3	65.9	55.6	66.4	59.1	63.7	62.7	70.6	66.6	70.8
2030	61.5	64.5	66.7	66.9	55.6	63.7	60.3	61.2	62.7	68.9	67.9	69.2
2031	61.5	67.6	68.0	69.7	55.6	66.5	61.6	63.6	62.7	68.9	69.3	70.4

Table 60 - Comparison of No Action Alternative (Reference Baseline) and Alternative PC2LT002 Required and Achieved CAFE Levels in MYs 2022-2031 for the Passenger Car Fleet (mpg)

Comparison of No Action Alternative (Reference Baseline) and Alternative PC2LT002 Required and Achieved CAFE Levels in MYs 2022-2031 for the Passenger Car Fleet (mpg)												
	Nissan				Stellantis				Subaru			
	No Action Alternative (Reference Baseline)		Alternative PC2LT002		No Action Alternative (Reference Baseline)		Alternative PC2LT002		No Action Alternative (Reference Baseline)		Alternative PC2LT002	
Model Year	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved
2022	44.7	44.3	44.7	44.3	41.8	29.2	41.8	29.2	46.0	38.3	46.0	38.3
2023	45.4	49.4	45.4	49.4	42.4	31.9	42.4	31.9	46.7	52.1	46.7	52.1
2024	49.3	53.8	49.3	53.8	46.1	45.5	46.1	45.5	50.7	52.2	50.7	52.2
2025	53.6	58.7	53.6	58.7	50.0	55.8	50.0	55.8	55.1	65.4	55.1	65.4
2026	59.6	64.9	59.6	64.9	55.6	57.7	55.6	57.7	61.3	68.1	61.3	68.1
2027	59.6	65.0	60.8	64.0	55.6	57.6	56.8	56.1	61.3	71.8	62.5	69.1
2028	59.6	64.0	62.1	63.1	55.6	56.2	57.9	55.5	61.3	72.4	63.8	69.6
2029	59.6	63.0	63.3	62.2	55.6	56.1	59.1	56.7	61.3	73.6	65.1	70.5
2030	59.6	63.6	64.6	64.9	55.6	55.4	60.3	56.1	61.3	74.1	66.4	70.8
2031	59.6	65.3	65.9	66.9	55.6	57.8	61.5	60.6	61.3	77.9	67.8	73.9

Table 61 - Comparison of No Action Alternative (Reference Baseline) and Alternative PC2LT002 Required and Achieved CAFE Levels in MYs 2022-2031 for the Passenger Car Fleet (mpg)

Comparison of No Action Alternative (Reference Baseline) and Alternative PC2LT002 Required and Achieved CAFE Levels in MYs 2022-2031 for the Passenger Car Fleet (mpg)												
	Tesla				Toyota				Volvo			
	No Action Alternative (Reference Baseline)		Alternative PC2LT002		No Action Alternative (Reference Baseline)		Alternative PC2LT002		No Action Alternative (Reference Baseline)		Alternative PC2LT002	
Model Year	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved
2022	41.1	698.9	41.1	698.9	44.7	46.7	44.7	46.7	42.9	64.5	42.9	64.5
2023	41.7	698.9	41.7	698.9	45.4	51.6	45.4	51.6	43.6	67.5	43.6	67.5
2024	45.3	698.9	45.3	698.9	49.4	54.3	49.4	54.3	47.4	69.3	47.4	69.3
2025	49.3	698.9	49.3	698.9	53.6	57.5	53.6	57.5	51.5	75.5	51.5	75.5
2026	54.8	698.9	54.8	698.9	59.6	62.8	59.6	62.8	57.2	126.6	57.2	126.6
2027	54.8	668.2	55.9	381.4	59.6	64.4	60.8	63.1	57.2	125.8	58.3	112.1
2028	54.8	329.6	57.0	240.4	59.6	65.7	62.1	64.2	57.2	109.1	59.5	98.6
2029	54.8	218.8	58.2	175.6	59.6	67.3	63.4	65.4	57.2	96.3	60.8	88.0
2030	54.8	163.8	59.4	138.3	59.6	68.9	64.6	66.8	57.2	86.1	62.0	79.4
2031	54.8	163.8	60.7	138.3	59.6	72.2	65.9	68.8	57.2	86.1	63.3	79.4

Table 62 - Comparison of No Action Alternative (Reference Baseline) and Alternative PC2LT002 Required and Achieved CAFE Levels in MYs 2022-2031 for the Passenger Car Fleet (mpg)

	VWA				Total			
	No Action Alternative (Reference Baseline)		Alternative PC2LT002		No Action Alternative (Reference Baseline)		Alternative PC2LT002	
Model Year	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved
2022	45.0	40.1	45.0	40.1	44.1	47.1	44.1	47.1
2023	45.7	41.6	45.7	41.6	44.8	51.6	44.8	51.6
2024	49.7	49.1	49.7	49.1	48.7	58.4	48.7	58.4
2025	54.0	53.1	54.0	53.1	52.9	62.7	52.9	62.7
2026	60.0	62.6	60.0	62.6	58.8	68.3	58.8	68.3
2027	60.0	64.5	61.2	63.0	58.8	69.3	60.0	68.6
2028	60.0	64.0	62.5	67.9	58.8	68.6	61.2	68.4
2029	60.0	62.0	63.8	65.5	58.8	67.9	62.5	68.6
2030	60.0	62.0	65.1	65.0	58.8	67.5	63.7	68.6
2031	60.0	64.1	66.4	67.7	58.8	69.8	65.1	70.8

Table 63 - Comparison of No Action Alternative (Reference Baseline) and Alternative PC2LT002 Required and Achieved CAFE Levels in MYs 2022-2031 for the Light Truck Fleet (mpg)

Comparison of No Action Alternative (Reference Baseline) and Alternative PC2LT002 Required and Achieved CAFE Levels in MYs 2022-2031 for the Light Truck Fleet (mpg)												
	BMW				Ford				GM			
	No Action Alternative (Reference Baseline)		Alternative PC2LT002		No Action Alternative (Reference Baseline)		Alternative PC2LT002		No Action Alternative (Reference Baseline)		Alternative PC2LT002	
Model Year	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved
2022	32.5	32.7	32.5	32.7	30.3	29.6	30.3	29.6	29.8	28.3	29.8	28.3
2023	33.0	34.4	33.0	34.4	30.8	31.6	30.8	31.6	30.3	28.6	30.3	28.6
2024	35.9	34.4	35.9	34.4	33.2	35.5	33.2	35.5	32.5	34.0	32.5	34.0
2025	39.0	39.0	39.0	39.0	36.1	36.5	36.1	36.5	35.4	39.5	35.4	39.5
2026	43.4	45.1	43.4	45.1	40.1	39.7	40.1	39.7	39.3	40.7	39.3	40.7
2027	43.4	44.0	43.4	43.5	40.1	42.1	40.1	41.7	39.3	39.8	39.3	39.5
2028	43.4	43.4	43.4	43.5	40.1	41.6	40.1	42.4	39.3	39.5	39.3	39.3
2029	43.4	43.8	44.2	43.8	40.1	41.9	41.0	43.4	39.3	39.5	40.1	39.3
2030	43.4	45.2	45.1	44.9	40.1	41.2	41.8	42.8	39.3	39.3	40.9	39.1
2031	43.4	47.5	46.1	46.5	40.1	41.2	42.6	42.6	39.3	39.6	41.8	40.9

Table 64 - Comparison of No Action Alternative (Reference Baseline) and Alternative PC2LT002 Required and Achieved CAFE Levels in MYs 2022-2031 for the Light Truck Fleet (mpg)

Comparison of No Action Alternative (Reference Baseline) and Alternative PC2LT002 Required and Achieved CAFE Levels in MYs 2022-2031 for the Light Truck Fleet (mpg)												
	Honda				Hyundai				KIA			
	No Action Alternative (Reference Baseline)		Alternative PC2LT002		No Action Alternative (Reference Baseline)		Alternative PC2LT002		No Action Alternative (Reference Baseline)		Alternative PC2LT002	
Model Year	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved
2022	34.0	35.0	34.0	35.0	34.0	36.4	34.0	36.4	34.0	34.6	34.0	34.6
2023	34.5	38.0	34.5	38.0	34.5	37.4	34.5	37.4	34.5	37.5	34.5	37.5
2024	37.5	38.1	37.5	38.1	37.5	38.3	37.5	38.3	37.5	38.8	37.5	38.8
2025	40.8	41.9	40.8	41.9	40.7	45.5	40.7	45.5	40.8	40.8	40.8	40.8
2026	45.3	46.1	45.3	46.1	45.3	46.1	45.3	46.1	45.3	45.3	45.3	45.3
2027	45.3	47.5	45.3	47.1	45.3	46.3	45.3	45.9	45.3	45.3	45.3	44.7
2028	45.3	48.8	45.3	48.3	45.3	45.9	45.3	45.9	45.3	45.6	45.3	46.6
2029	45.3	50.0	46.2	49.2	45.3	45.4	46.2	46.2	45.3	45.3	46.2	46.3
2030	45.3	51.2	47.2	50.2	45.3	45.8	47.1	47.1	45.3	45.7	47.2	47.2
2031	45.3	53.6	48.2	51.7	45.3	47.3	48.1	48.1	45.3	47.0	48.1	48.4

Table 65 - Comparison of No Action Alternative (Reference Baseline) and Alternative PC2LT002 Required and Achieved CAFE Levels in MYs 2022-2031 for the Light Truck Fleet (mpg)

Comparison of No Action Alternative (Reference Baseline) and Alternative PC2LT002 Required and Achieved CAFE Levels in MYs 2022-2031 for the Light Truck Fleet (mpg)												
	JLR				Karma				Lucid			
	No Action Alternative (Reference Baseline)		Alternative PC2LT002		No Action Alternative (Reference Baseline)		Alternative PC2LT002		No Action Alternative (Reference Baseline)		Alternative PC2LT002	
Model Year	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved
2022	32.7	29.0	32.7	29.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2023	33.2	37.5	33.2	37.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2024	36.0	41.4	36.0	41.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2025	39.2	41.7	39.2	41.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2026	43.5	45.5	43.5	45.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2027	43.5	45.5	43.5	44.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2028	43.5	44.5	43.5	43.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2029	43.5	43.5	44.4	42.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2030	43.5	43.8	45.3	43.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2031	43.5	46.9	46.2	46.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table 66 - Comparison of No Action Alternative (Reference Baseline) and Alternative PC2LT002 Required and Achieved CAFE Levels in MYs 2022-2031 for the Light Truck Fleet (mpg)

Comparison of No Action Alternative (Reference Baseline) and Alternative PC2LT002 Required and Achieved CAFE Levels in MYs 2022-2031 for the Light Truck Fleet (mpg)												
	Mazda				Mercedes-Benz				Mitsubishi			
	No Action Alternative (Reference Baseline)		Alternative PC2LT002		No Action Alternative (Reference Baseline)		Alternative PC2LT002		No Action Alternative (Reference Baseline)		Alternative PC2LT002	
Model Year	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved
2022	36.0	35.7	36.0	35.7	32.9	30.4	32.9	30.4	37.0	37.4	37.0	37.4
2023	36.6	48.0	36.6	48.0	33.4	35.2	33.4	35.2	37.6	37.7	37.6	37.7
2024	39.8	48.6	39.8	48.6	36.3	35.3	36.3	35.3	40.8	39.0	40.8	39.0
2025	43.2	49.2	43.2	49.2	39.5	35.6	39.5	35.6	44.4	57.3	44.4	57.3
2026	48.0	51.9	48.0	51.9	43.9	39.1	43.9	39.1	49.3	57.3	49.3	57.3
2027	48.0	52.2	48.0	51.6	43.9	41.1	43.9	40.8	49.3	57.6	49.3	56.4
2028	48.0	53.3	48.0	52.1	43.9	44.0	43.9	43.9	49.3	61.1	49.3	60.5
2029	48.0	54.5	49.0	53.2	43.9	43.8	44.8	43.7	49.3	59.8	50.3	59.2
2030	48.0	55.8	50.0	54.4	43.9	44.1	45.7	45.8	49.3	58.5	51.4	58.1
2031	48.0	58.5	51.0	56.2	43.9	46.4	46.6	47.4	49.3	58.5	52.4	58.2

Table 67 - Comparison of No Action Alternative (Reference Baseline) and Alternative PC2LT002 Required and Achieved CAFE Levels in MYs 2022-2031 for the Light Truck Fleet (mpg)

Comparison of No Action Alternative (Reference Baseline) and Alternative PC2LT002 Required and Achieved CAFE Levels in MYs 2022-2031 for the Light Truck Fleet (mpg)												
	Nissan				Stellantis				Subaru			
	No Action Alternative (Reference Baseline)		Alternative PC2LT002		No Action Alternative (Reference Baseline)		Alternative PC2LT002		No Action Alternative (Reference Baseline)		Alternative PC2LT002	
Model Year	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved
2022	32.9	32.6	32.9	32.6	30.7	28.9	30.7	28.9	36.5	39.1	36.5	39.1
2023	33.4	35.6	33.4	35.6	31.2	30.7	31.2	30.7	37.0	42.4	37.0	42.4
2024	36.3	36.8	36.3	36.8	33.8	33.7	33.8	33.7	40.2	45.4	40.2	45.4
2025	39.5	39.5	39.5	39.5	36.8	40.3	36.8	40.3	43.7	46.9	43.7	46.9
2026	43.9	42.2	43.9	42.2	40.9	40.9	40.9	40.9	48.6	49.5	48.6	49.5
2027	43.9	42.1	43.9	41.8	40.9	41.3	40.9	41.4	48.6	51.8	48.6	51.3
2028	43.9	43.9	43.9	44.2	40.9	40.9	40.9	41.0	48.6	53.8	48.6	53.0
2029	43.9	44.0	44.8	44.9	40.9	42.0	41.7	42.4	48.6	55.7	49.6	54.6
2030	43.9	46.0	45.7	46.7	40.9	41.7	42.6	42.5	48.6	57.9	50.6	56.3
2031	43.9	47.2	46.6	47.4	40.9	42.9	43.4	43.3	48.6	61.2	51.6	58.5

Table 68 - Comparison of No Action Alternative (Reference Baseline) and Alternative PC2LT002 Required and Achieved CAFE Levels in MYs 2022-2031 for the Light Truck Fleet (mpg)

Comparison of No Action Alternative (Reference Baseline) and Alternative PC2LT002 Required and Achieved CAFE Levels in MYs 2022-2031 for the Light Truck Fleet (mpg)												
	Tesla				Toyota				Volvo			
	No Action Alternative (Reference Baseline)		Alternative PC2LT002		No Action Alternative (Reference Baseline)		Alternative PC2LT002		No Action Alternative (Reference Baseline)		Alternative PC2LT002	
Model Year	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved
2022	33.4	700.3	33.4	700.3	33.0	35.0	33.0	35.0	33.4	38.0	33.4	38.0
2023	33.9	936.4	33.9	936.4	33.5	36.0	33.5	36.0	33.9	41.4	33.9	41.4
2024	36.9	1046.7	36.9	1046.7	36.3	40.8	36.3	40.8	36.8	41.7	36.8	41.7
2025	40.1	1186.5	40.1	1186.5	39.4	42.4	39.4	42.4	40.0	47.6	40.0	47.6
2026	44.5	1186.5	44.5	1186.5	43.8	46.8	43.8	46.8	44.5	49.6	44.5	49.6
2027	44.5	1097.1	44.5	365.7	43.8	45.8	43.8	45.3	44.5	48.7	44.5	47.6
2028	44.5	397.6	44.5	230.5	43.8	46.7	43.8	46.2	44.5	47.7	44.5	46.6
2029	44.5	242.9	45.4	168.3	43.8	48.1	44.7	47.3	44.5	46.7	45.4	45.7
2030	44.5	174.8	46.3	132.5	43.8	49.4	45.6	48.4	44.5	45.8	46.3	47.9
2031	44.5	174.8	47.3	132.5	43.8	51.9	46.5	50.2	44.5	45.8	47.3	47.5

Table 69 - Comparison of No Action Alternative (Reference Baseline) and Alternative PC2LT002 Required and Achieved CAFE Levels in MYs 2022-2031 for the Light Truck Fleet (mpg)

Comparison of No Action Alternative (Reference Baseline) and Alternative PC2LT002 Required and Achieved CAFE Levels in MYs 2022-2031 for the Light Truck Fleet (mpg)								
	VWA				Total			
	No Action Alternative (Reference Baseline)		Alternative PC2LT002		No Action Alternative (Reference Baseline)		Alternative PC2LT002	
Model Year	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved
2022	34.0	33.9	34.0	33.9	32.1	32.1	32.1	32.1
2023	34.5	36.6	34.5	36.6	32.6	34.0	32.6	34.0
2024	37.5	43.7	37.5	43.7	35.2	37.5	35.2	37.5
2025	40.8	46.0	40.8	46.0	38.3	41.1	38.3	41.1
2026	45.3	46.9	45.3	46.9	42.6	43.7	42.6	43.7
2027	45.3	45.8	45.3	45.6	42.6	44.1	42.6	43.7
2028	45.3	45.3	45.3	45.3	42.6	44.2	42.6	44.2
2029	45.3	44.8	46.3	45.0	42.6	44.7	43.5	44.9
2030	45.3	45.8	47.2	47.2	42.6	45.0	44.3	45.3
2031	45.3	47.6	48.2	48.3	42.6	46.2	45.2	46.4

Table 70 - Comparison of No Action Alternative (Reference Baseline) and Alternative PC2LT002 Required and Achieved CAFE Levels in MYs 2022-2031 for the Domestic Car Fleet (mpg)

Comparison of No Action Alternative (Reference Baseline) and Alternative PC2LT002 Required and Achieved CAFE Levels in MYs 2022-2031 for the Domestic Car Fleet (mpg)												
	BMW				Ford				GM			
	No Action Alternative (Reference Baseline)		Alternative PC2LT002		No Action Alternative (Reference Baseline)		Alternative PC2LT002		No Action Alternative (Reference Baseline)		Alternative PC2LT002	
Model Year	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved
2022	0.0	0.0	0.0	0.0	43.4	45.5	43.4	45.5	44.3	41.2	44.3	41.2
2023	0.0	0.0	0.0	0.0	44.1	45.8	44.1	45.8	45.0	41.7	45.0	41.7
2024	0.0	0.0	0.0	0.0	47.9	66.6	47.9	66.6	48.9	54.7	48.9	54.7
2025	0.0	0.0	0.0	0.0	52.1	69.2	52.1	69.2	53.2	58.2	53.2	58.2
2026	0.0	0.0	0.0	0.0	57.9	69.2	57.9	69.2	59.1	62.7	59.1	62.7
2027	0.0	0.0	0.0	0.0	57.9	69.3	59.0	75.5	59.1	62.6	60.3	62.6
2028	0.0	0.0	0.0	0.0	57.9	66.4	60.2	72.0	59.1	61.1	61.5	61.1
2029	0.0	0.0	0.0	0.0	57.9	63.7	61.5	68.8	59.1	60.5	62.8	65.8
2030	0.0	0.0	0.0	0.0	57.9	61.2	62.7	66.0	59.1	59.1	64.0	64.2
2031	0.0	0.0	0.0	0.0	57.9	61.2	64.0	65.4	59.1	59.7	65.4	66.5

Table 71 - Comparison of No Action Alternative (Reference Baseline) and Alternative PC2LT002 Required and Achieved CAFE Levels in MYs 2022-2031 for the Domestic Car Fleet (mpg)

Comparison of No Action Alternative (Reference Baseline) and Alternative PC2LT002 Required and Achieved CAFE Levels in MYs 2022-2031 for the Domestic Car Fleet (mpg)												
	Honda				Hyundai				KIA			
	No Action Alternative (Reference Baseline)		Alternative PC2LT002		No Action Alternative (Reference Baseline)		Alternative PC2LT002		No Action Alternative (Reference Baseline)		Alternative PC2LT002	
Model Year	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved
2022	44.7	45.6	44.7	45.6	48.7	53.4	48.7	53.4	45.8	47.1	45.8	47.1
2023	45.4	52.2	45.4	52.2	49.5	2658.3	49.5	2658.3	46.5	47.2	46.5	47.2
2024	49.4	52.6	49.4	52.6	53.8	3125.8	53.8	3125.8	50.6	62.1	50.6	62.1
2025	53.7	56.7	53.7	56.7	58.4	3792.9	58.4	3792.9	55.0	61.9	55.0	61.9
2026	59.6	59.6	59.6	59.6	64.9	4821.9	64.9	4821.9	61.1	62.1	61.1	62.1
2027	59.6	60.2	60.8	60.9	64.9	7575.1	66.3	674.6	61.1	62.6	62.3	61.9
2028	59.6	63.1	62.1	63.6	64.9	999.0	67.6	425.3	61.1	61.9	63.6	61.2
2029	59.6	64.7	63.3	64.9	64.9	534.7	69.0	310.5	61.1	61.3	64.9	70.7
2030	59.6	66.5	64.6	66.2	64.9	361.0	70.4	242.7	61.1	61.8	66.2	70.9
2031	59.6	69.8	66.0	68.2	64.9	354.6	71.8	239.8	61.1	63.6	67.6	72.6

Table 72 - Comparison of No Action Alternative (Reference Baseline) and Alternative PC2LT002 Required and Achieved CAFE Levels in MYs 2022-2031 for the Domestic Car Fleet (mpg)

Comparison of No Action Alternative (Reference Baseline) and Alternative PC2LT002 Required and Achieved CAFE Levels in MYs 2022-2031 for the Domestic Car Fleet (mpg)												
	JLR				Karma				Lucid			
	No Action Alternative (Reference Baseline)		Alternative PC2LT002		No Action Alternative (Reference Baseline)		Alternative PC2LT002		No Action Alternative (Reference Baseline)		Alternative PC2LT002	
Model Year	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved
2022	0.0	0.0	0.0	0.0	40.6	106.8	40.6	106.8	40.6	742.5	40.6	742.5
2023	0.0	0.0	0.0	0.0	41.1	106.8	41.1	106.8	41.1	742.5	41.1	742.5
2024	0.0	0.0	0.0	0.0	44.3	106.8	44.3	106.8	44.3	742.5	44.3	742.5
2025	0.0	0.0	0.0	0.0	48.1	106.8	48.1	106.8	48.1	742.5	48.1	742.5
2026	0.0	0.0	0.0	0.0	53.5	542.6	53.5	542.6	53.5	742.5	53.5	742.5
2027	0.0	0.0	0.0	0.0	54.1	520.9	55.2	328.4	54.1	709.0	55.2	394.4
2028	0.0	0.0	0.0	0.0	54.1	270.0	56.3	207.1	54.1	345.2	56.3	248.6
2029	0.0	0.0	0.0	0.0	54.1	182.1	57.5	151.2	54.1	228.1	57.5	181.5
2030	0.0	0.0	0.0	0.0	54.1	137.4	58.6	119.0	54.1	170.3	58.6	142.9
2031	0.0	0.0	0.0	0.0	54.1	137.4	59.8	119.0	54.1	170.3	59.8	142.9

Table 73 - Comparison of No Action Alternative (Reference Baseline) and Alternative PC2LT002 Required and Achieved CAFE Levels in MYs 2022-2031 for the Domestic Car Fleet (mpg)

Comparison of No Action Alternative (Reference Baseline) and Alternative PC2LT002 Required and Achieved CAFE Levels in MYs 2022-2031 for the Domestic Car Fleet (mpg)												
	Mazda				Mercedes-Benz				Mitsubishi			
	No Action Alternative (Reference Baseline)		Alternative PC2LT002		No Action Alternative (Reference Baseline)		Alternative PC2LT002		No Action Alternative (Reference Baseline)		Alternative PC2LT002	
Model Year	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved
2022	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2023	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2024	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2025	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2026	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2027	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2028	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2029	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2030	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2031	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table 74 - Comparison of No Action Alternative (Reference Baseline) and Alternative PC2LT002 Required and Achieved CAFE Levels in MYs 2022-2031 for the Domestic Car Fleet (mpg)

Comparison of No Action Alternative (Reference Baseline) and Alternative PC2LT002 Required and Achieved CAFE Levels in MYs 2022-2031 for the Domestic Car Fleet (mpg)												
	Nissan				Stellantis				Subaru			
	No Action Alternative (Reference Baseline)		Alternative PC2LT002		No Action Alternative (Reference Baseline)		Alternative PC2LT002		No Action Alternative (Reference Baseline)		Alternative PC2LT002	
Model Year	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved
2022	44.5	43.4	44.5	43.4	41.4	28.7	41.4	28.7	0.0	0.0	0.0	0.0
2023	45.2	44.6	45.2	44.6	42.0	31.5	42.0	31.5	0.0	0.0	0.0	0.0
2024	49.1	49.1	49.1	49.1	45.7	45.6	45.7	45.6	0.0	0.0	0.0	0.0
2025	53.4	54.7	53.4	54.7	49.6	55.9	49.6	55.9	0.0	0.0	0.0	0.0
2026	59.3	62.2	59.3	62.2	55.1	57.1	55.1	57.1	0.0	0.0	0.0	0.0
2027	59.3	62.4	60.5	61.8	55.1	57.0	56.3	55.5	0.0	0.0	0.0	0.0
2028	59.3	61.8	61.8	61.1	55.1	55.7	57.4	55.1	0.0	0.0	0.0	0.0
2029	59.3	61.1	63.0	60.5	55.1	55.8	58.6	56.7	0.0	0.0	0.0	0.0
2030	59.3	62.1	64.3	64.5	55.1	55.1	59.8	56.1	0.0	0.0	0.0	0.0
2031	59.3	63.9	65.6	66.7	55.1	57.6	61.0	61.0	0.0	0.0	0.0	0.0

Table 75 - Comparison of No Action Alternative (Reference Baseline) and Alternative PC2LT002 Required and Achieved CAFE Levels in MYs 2022-2031 for the Domestic Car Fleet (mpg)

Comparison of No Action Alternative (Reference Baseline) and Alternative PC2LT002 Required and Achieved CAFE Levels in MYs 2022-2031 for the Domestic Car Fleet (mpg)												
	Tesla				Toyota				Volvo			
	No Action Alternative (Reference Baseline)		Alternative PC2LT002		No Action Alternative (Reference Baseline)		Alternative PC2LT002		No Action Alternative (Reference Baseline)		Alternative PC2LT002	
Model Year	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved
2022	40.8	671.8	40.8	671.8	43.1	43.2	43.1	43.2	42.3	45.3	42.3	45.3
2023	41.4	671.8	41.4	671.8	43.7	43.9	43.7	43.9	42.9	49.2	42.9	49.2
2024	45.0	671.8	45.0	671.8	47.5	49.4	47.5	49.4	46.7	49.7	46.7	49.7
2025	48.9	671.8	48.9	671.8	51.7	55.5	51.7	55.5	50.7	55.0	50.7	55.0
2026	54.4	671.8	54.4	671.8	57.4	57.3	57.4	57.3	56.4	1119.7	56.4	1119.7
2027	54.4	642.7	55.5	373.0	57.4	59.1	58.6	58.4	56.4	1051.7	57.5	434.6
2028	54.4	319.7	56.6	235.1	57.4	60.3	59.8	59.4	56.4	434.9	58.7	274.0
2029	54.4	212.8	57.8	171.7	57.4	62.1	61.0	60.8	56.4	274.1	59.9	200.0
2030	54.4	159.5	58.9	135.2	57.4	64.0	62.2	62.7	56.4	200.1	61.1	157.5
2031	54.4	159.5	60.2	135.2	57.4	66.9	63.5	64.6	56.4	200.1	62.3	157.5

Table 76 - Comparison of No Action Alternative (Reference Baseline) and Alternative PC2LT002 Required and Achieved CAFE Levels in MYs 2022-2031 for the Domestic Car Fleet (mpg)

Comparison of No Action Alternative (Reference Baseline) and Alternative PC2LT002 Required and Achieved CAFE Levels in MYs 2022-2031 for the Domestic Car Fleet (mpg)								
	VWA				Total			
	No Action Alternative (Reference Baseline)		Alternative PC2LT002		No Action Alternative (Reference Baseline)		Alternative PC2LT002	
Model Year	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved
2022	41.4	34.1	41.4	34.1	43.5	48.9	43.5	48.9
2023	42.0	34.2	42.0	34.2	44.2	52.4	44.2	52.4
2024	45.7	40.2	45.7	40.2	48.1	60.9	48.1	60.9
2025	49.6	40.3	49.6	40.3	52.3	66.6	52.3	66.6
2026	55.2	117.7	55.2	117.7	58.0	71.4	58.0	71.4
2027	55.2	117.1	56.3	104.1	58.0	71.9	59.2	71.2
2028	55.2	104.5	57.4	94.0	58.0	71.1	60.4	70.4
2029	55.2	97.7	58.6	87.6	58.0	70.2	61.7	70.7
2030	55.2	90.2	59.8	81.5	58.0	69.5	62.9	70.4
2031	55.2	91.8	61.0	82.6	58.0	71.6	64.2	72.6

Table 77 - Comparison of No Action Alternative (Reference Baseline) and Alternative PC2LT002 Required and Achieved CAFE Levels in MYs 2022-2031 for the Imported Car Fleet (mpg)

Comparison of No Action Alternative (Reference Baseline) and Alternative PC2LT002 Required and Achieved CAFE Levels in MYs 2022-2031 for the Imported Car Fleet (mpg)												
	BMW				Ford				GM			
	No Action Alternative (Reference Baseline)		Alternative PC2LT002		No Action Alternative (Reference Baseline)		Alternative PC2LT002		No Action Alternative (Reference Baseline)		Alternative PC2LT002	
Model Year	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved
2022	43.3	37.8	43.3	37.8	0.0	0.0	0.0	0.0	47.1	43.8	47.1	43.8
2023	44.0	42.2	44.0	42.2	0.0	0.0	0.0	0.0	47.9	44.0	47.9	44.0
2024	47.8	51.8	47.8	51.8	0.0	0.0	0.0	0.0	52.0	52.9	52.0	52.9
2025	52.0	54.7	52.0	54.7	0.0	0.0	0.0	0.0	56.5	56.6	56.5	56.6
2026	57.7	60.9	57.7	60.9	0.0	0.0	0.0	0.0	62.8	65.1	62.8	65.1
2027	57.7	64.2	58.9	62.5	0.0	0.0	0.0	0.0	62.8	65.0	64.1	63.9
2028	57.7	62.6	60.1	61.8	0.0	0.0	0.0	0.0	62.8	64.0	65.4	62.9
2029	57.7	62.1	61.3	61.3	0.0	0.0	0.0	0.0	62.8	63.1	66.8	65.9
2030	57.7	62.9	62.6	62.6	0.0	0.0	0.0	0.0	62.8	62.9	68.1	68.1
2031	57.7	65.8	63.9	64.4	0.0	0.0	0.0	0.0	62.8	63.3	69.5	72.6

Table 78 - Comparison of No Action Alternative (Reference Baseline) and Alternative PC2LT002 Required and Achieved CAFE Levels in MYs 2022-2031 for the Imported Car Fleet (mpg)

Comparison of No Action Alternative (Reference Baseline) and Alternative PC2LT002 Required and Achieved CAFE Levels in MYs 2022-2031 for the Imported Car Fleet (mpg)												
	Honda				Hyundai				KIA			
	No Action Alternative (Reference Baseline)		Alternative PC2LT002		No Action Alternative (Reference Baseline)		Alternative PC2LT002		No Action Alternative (Reference Baseline)		Alternative PC2LT002	
Model Year	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved
2022	44.9	30.4	44.9	30.4	44.1	45.1	44.1	45.1	44.4	47.0	44.4	47.0
2023	45.6	31.2	45.6	31.2	44.8	47.3	44.8	47.3	45.0	50.6	45.0	50.6
2024	49.6	31.3	49.6	31.3	48.7	52.0	48.7	52.0	49.0	55.5	49.0	55.5
2025	53.8	31.7	53.8	31.7	52.9	52.9	52.9	52.9	53.2	58.7	53.2	58.7
2026	59.8	427.4	59.8	427.4	58.8	58.8	58.8	58.8	59.1	60.1	59.1	60.1
2027	59.8	409.1	61.1	242.0	58.8	60.2	60.0	63.1	59.1	60.4	60.3	59.9
2028	59.8	205.5	62.3	152.6	58.8	59.2	61.2	62.1	59.1	59.4	61.6	61.8
2029	59.8	137.2	63.6	111.4	58.8	58.8	62.5	63.9	59.1	59.1	62.8	62.0
2030	59.8	102.9	64.9	87.7	58.8	59.0	63.8	63.8	59.1	59.2	64.1	64.1
2031	59.8	102.9	66.2	87.7	58.8	60.9	65.1	66.5	59.1	60.8	65.4	66.3

Table 79 - Comparison of No Action Alternative (Reference Baseline) and Alternative PC2LT002 Required and Achieved CAFE Levels in MYs 2022-2031 for the Imported Car Fleet (mpg)

Comparison of No Action Alternative (Reference Baseline) and Alternative PC2LT002 Required and Achieved CAFE Levels in MYs 2022-2031 for the Imported Car Fleet (mpg)												
	JLR				Karma				Lucid			
	No Action Alternative (Reference Baseline)		Alternative PC2LT002		No Action Alternative (Reference Baseline)		Alternative PC2LT002		No Action Alternative (Reference Baseline)		Alternative PC2LT002	
Model Year	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved
2022	43.2	30.6	43.2	30.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2023	43.8	68.6	43.8	68.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2024	47.6	69.1	47.6	69.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2025	51.8	69.2	51.8	69.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2026	57.5	74.2	57.5	74.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2027	57.5	75.4	58.7	70.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2028	57.5	70.1	59.9	66.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2029	57.5	65.4	61.1	62.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2030	57.5	62.8	62.4	63.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2031	57.5	65.7	63.7	65.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table 80 - Comparison of No Action Alternative (Reference Baseline) and Alternative PC2LT002 Required and Achieved CAFE Levels in MYs 2022-2031 for the Imported Car Fleet (mpg)

Comparison of No Action Alternative (Reference Baseline) and Alternative PC2LT002 Required and Achieved CAFE Levels in MYs 2022-2031 for the Imported Car Fleet (mpg)												
	Mazda				Mercedes-Benz				Mitsubishi			
	No Action Alternative (Reference Baseline)		Alternative PC2LT002		No Action Alternative (Reference Baseline)		Alternative PC2LT002		No Action Alternative (Reference Baseline)		Alternative PC2LT002	
Model Year	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved
2022	46.1	41.5	46.1	41.5	41.8	35.5	41.8	35.5	47.0	42.9	47.0	42.9
2023	46.8	42.5	46.8	42.5	42.4	45.3	42.4	45.3	47.7	43.3	47.7	43.3
2024	50.9	55.6	50.9	55.6	46.1	47.9	46.1	47.9	51.9	61.2	51.9	61.2
2025	55.3	58.8	55.3	58.8	50.1	52.7	50.1	52.7	56.4	67.6	56.4	67.6
2026	61.5	61.5	61.5	61.5	55.6	71.3	55.6	71.3	62.7	67.7	62.7	67.7
2027	61.5	61.5	62.7	62.4	55.6	74.1	56.8	70.8	62.7	66.7	63.9	65.3
2028	61.5	62.3	64.0	63.3	55.6	69.8	57.9	66.9	62.7	72.5	65.2	72.5
2029	61.5	63.2	65.3	65.9	55.6	66.4	59.1	63.7	62.7	70.6	66.6	70.8
2030	61.5	64.5	66.7	66.9	55.6	63.7	60.3	61.2	62.7	68.9	67.9	69.2
2031	61.5	67.6	68.0	69.7	55.6	66.5	61.6	63.6	62.7	68.9	69.3	70.4

Table 81 - Comparison of No Action Alternative (Reference Baseline) and Alternative PC2LT002 Required and Achieved CAFE Levels in MYs 2022-2031 for the Imported Car Fleet (mpg)

Comparison of No Action Alternative (Reference Baseline) and Alternative PC2LT002 Required and Achieved CAFE Levels in MYs 2022-2031 for the Imported Car Fleet (mpg)												
	Nissan				Stellantis				Subaru			
	No Action Alternative (Reference Baseline)		Alternative PC2LT002		No Action Alternative (Reference Baseline)		Alternative PC2LT002		No Action Alternative (Reference Baseline)		Alternative PC2LT002	
Model Year	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved
2022	45.2	46.9	45.2	46.9	44.9	33.5	44.9	33.5	46.0	38.3	46.0	38.3
2023	45.9	68.7	45.9	68.7	45.5	35.8	45.5	35.8	46.7	52.1	46.7	52.1
2024	49.9	72.0	49.9	72.0	49.5	45.1	49.5	45.1	50.7	52.2	50.7	52.2
2025	54.3	72.7	54.3	72.7	53.8	55.1	53.8	55.1	55.1	65.4	55.1	65.4
2026	60.3	73.1	60.3	73.1	59.8	62.6	59.8	62.6	61.3	68.1	61.3	68.1
2027	60.3	73.0	61.5	70.8	59.8	62.6	61.0	61.0	61.3	71.8	62.5	69.1
2028	60.3	70.7	62.8	69.1	59.8	60.5	62.3	59.0	61.3	72.4	63.8	69.6
2029	60.3	68.6	64.0	67.0	59.8	58.5	63.5	57.1	61.3	73.6	65.1	70.5
2030	60.3	67.7	65.4	66.1	59.8	57.6	64.8	56.2	61.3	74.1	66.4	70.8
2031	60.3	69.4	66.7	67.5	59.8	59.2	66.1	57.6	61.3	77.9	67.8	73.9

Table 82 - Comparison of No Action Alternative (Reference Baseline) and Alternative PC2LT002 Required and Achieved CAFE Levels in MYs 2022-2031 for the Imported Car Fleet (mpg)

Comparison of No Action Alternative (Reference Baseline) and Alternative PC2LT002 Required and Achieved CAFE Levels in MYs 2022-2031 for the Imported Car Fleet (mpg)												
	Tesla				Toyota				Volvo			
	No Action Alternative (Reference Baseline)		Alternative PC2LT002		No Action Alternative (Reference Baseline)		Alternative PC2LT002		No Action Alternative (Reference Baseline)		Alternative PC2LT002	
Model Year	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved
2022	42.4	839.5	42.4	839.5	45.3	48.0	45.3	48.0	43.2	78.9	43.2	78.9
2023	43.1	839.5	43.1	839.5	46.0	54.8	46.0	54.8	43.9	80.4	43.9	80.4
2024	46.8	839.5	46.8	839.5	50.0	56.1	50.0	56.1	47.7	83.6	47.7	83.6
2025	50.9	839.5	50.9	839.5	54.3	58.2	54.3	58.2	51.8	90.0	51.8	90.0
2026	56.6	839.5	56.6	839.5	60.4	64.9	60.4	64.9	57.6	91.5	57.6	91.5
2027	56.6	799.6	57.7	420.9	60.4	66.4	61.6	64.9	57.6	91.1	58.7	84.8
2028	56.6	378.4	58.9	265.4	60.4	67.7	62.9	66.0	57.6	82.4	59.9	77.2
2029	56.6	247.7	60.1	193.7	60.4	69.2	64.2	67.1	57.6	75.2	61.2	70.8
2030	56.6	184.2	61.3	152.6	60.4	70.7	65.5	68.3	57.6	69.1	62.4	65.4
2031	56.6	184.2	62.6	152.6	60.4	74.1	66.8	70.3	57.6	69.1	63.7	65.4

Table 83 - Comparison of No Action Alternative (Reference Baseline) and Alternative PC2LT002 Required and Achieved CAFE Levels in MYs 2022-2031 for the Imported Car Fleet (mpg)

Comparison of No Action Alternative (Reference Baseline) and Alternative PC2LT002 Required and Achieved CAFE Levels in MYs 2022-2031 for the Imported Car Fleet (mpg)								
	VWA				Total			
	No Action Alternative (Reference Baseline)		Alternative PC2LT002		No Action Alternative (Reference Baseline)		Alternative PC2LT002	
Model Year	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved
2022	45.3	40.7	45.3	40.7	44.7	45.5	44.7	45.5
2023	46.0	42.3	46.0	42.3	45.4	51.0	45.4	51.0
2024	50.0	49.9	50.0	49.9	49.3	56.2	49.3	56.2
2025	54.4	54.4	54.4	54.4	53.6	59.4	53.6	59.4
2026	60.4	60.4	60.4	60.4	59.5	65.5	59.5	65.5
2027	60.4	62.4	61.6	61.2	59.5	67.0	60.7	66.2
2028	60.4	62.2	62.9	66.5	59.5	66.3	62.0	66.6
2029	60.4	60.3	64.2	64.3	59.5	65.7	63.3	66.6
2030	60.4	60.5	65.5	64.0	59.5	65.8	64.6	66.8
2031	60.4	62.7	66.8	66.8	59.5	68.1	65.9	69.2

Incremental Benefits and Costs

Table 84 - Incremental Benefits and Costs Over the Lifetimes of Total Fleet Produced Through 2031 (2021$ BILLIONS), 3% Percent Discount Rate, by Alternative, SC-GHG 2%

Incremental Benefits and Costs Over the Lifetimes of Total Fleet Produced Through 2031 (2021$ BILLIONS), 3% Percent Discount Rate, by Alternative, SC-GHG 2%					
Alternative	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Private Costs					
Technology Costs to Increase Fuel Economy	14.0	16.9	25.6	32.0	43.0
Consumer Surplus Loss from Reduced New Vehicle Sales	0.0	0.0	0.1	0.2	0.7
Safety Costs Internalized by Drivers	2.7	4.3	5.7	6.5	8.0
Subtotal - Incremental Private Costs	16.8	21.3	31.3	38.7	51.7
External Costs					
Congestion and Noise Costs from Rebound-Effect Driving	2.1	3.0	4.7	6.5	8.4
Safety Costs Not Internalized by Drivers	1.4	1.8	4.0	7.2	11.9
Loss in Fuel Tax Revenue	4.2	5.7	7.0	7.6	8.7
Subtotal - Incremental External Costs	7.7	10.5	15.7	21.4	29.0
Total Incremental Social Costs	24.5	31.8	47.1	60.1	80.8
Private Benefits					
Reduced Fuel Costs	21.4	32.3	40.7	44.8	52.0
Benefits from Additional Driving	4.3	6.9	9.0	10.3	12.4
Less Frequent Refueling	1.3	1.7	2.2	2.5	3.1
Subtotal - Incremental Private Benefits	27.0	41.0	51.9	57.6	67.5
External Benefits					
Reduction in Petroleum Market Externality	1.0	1.4	1.7	1.8	2.1
Reduced Climate Damages, SC-GHG 2%	30.9	42.7	52.8	57.7	66.5
Reduced Health Damages	0.7	0.8	0.8	0.7	0.6
Subtotal - Incremental External Benefits	32.6	44.9	55.2	60.2	69.1
Total Incremental Social Benefits, SC-GHG 2%	59.7	85.8	107.2	117.8	136.6
Net Incremental Social Benefits, SC-GHG 2%	35.2	54.0	60.1	57.7	55.8

Table 85 - Incremental Benefits and Costs Over the Lifetimes of Passenger Car Fleet Produced Through 2031 (2021$ BILLIONS), 3% Percent Discount Rate, by Alternative, SC-GHG 2%

Incremental Benefits and Costs Over the Lifetimes of Passenger Car Fleet Produced Through 2031 (2021$ BILLIONS), 3% Percent Discount Rate, by Alternative, SC-GHG 2%					
Alternative	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Private Costs					
Technology Costs to Increase Fuel Economy	5.5	1.5	4.5	7.4	13.5
Consumer Surplus Loss from Reduced New Vehicle Sales	0.0	0.0	0.0	0.1	0.2
Safety Costs Internalized by Drivers	1.0	0.8	1.2	1.6	2.6
Subtotal - Incremental Private Costs	6.5	2.3	5.8	9.1	16.4
External Costs					
Congestion and Noise Costs from Rebound-Effect Driving	0.1	3.5	4.7	5.7	6.9
Safety Costs Not Internalized by Drivers	-0.7	5.6	7.4	9.2	11.1
Loss in Fuel Tax Revenue	1.4	0.4	0.7	1.0	1.7
Subtotal - Incremental External Costs	0.7	9.5	12.9	15.9	19.7
Total Incremental Social Costs	7.2	11.9	18.6	25.0	36.0
Private Benefits					
Reduced Fuel Costs	8.0	2.4	4.3	6.0	10.9
Benefits from Additional Driving	1.6	1.2	1.8	2.4	3.9
Less Frequent Refueling	0.6	0.0	0.2	0.3	0.7
Subtotal - Incremental Private Benefits	10.1	3.7	6.3	8.7	15.5
External Benefits					
Reduction in Petroleum Market Externality	0.3	0.1	0.2	0.2	0.4
Reduced Climate Damages, SC-GHG 2%	10.2	3.2	5.5	7.5	13.5
Reduced Health Damages	0.2	-0.1	-0.2	-0.2	-0.3
Subtotal - Incremental External Benefits	10.8	3.1	5.5	7.5	13.6
Total Incremental Social Benefits, SC-GHG 2%	20.9	6.8	11.8	16.3	29.1
Net Incremental Social Benefits, SC-GHG 2%	13.7	-5.0	-6.8	-8.7	-6.9

Table 86 - Incremental Benefits and Costs Over the Lifetimes of Light Truck Fleet Produced Through 2031 (2021$ BILLIONS), 3% Percent Discount Rate, by Alternative, SC-GHG 2%

Incremental Benefits and Costs Over the Lifetimes of Light Truck Fleet Produced Through 2031 (2021$ BILLIONS), 3% Percent Discount Rate, by Alternative, SC-GHG 2%					
Alternative	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Private Costs					
Technology Costs to Increase Fuel Economy	8.5	15.4	21.1	24.7	29.6
Consumer Surplus Loss from Reduced New Vehicle Sales	0.0	0.0	0.0	0.1	0.5
Safety Costs Internalized by Drivers	1.7	3.5	4.4	4.9	5.3
Subtotal - Incremental Private Costs	10.2	19.0	25.6	29.7	35.4
External Costs					
Congestion and Noise Costs from Rebound-Effect Driving	2.0	-0.5	0.0	0.8	1.5
Safety Costs Not Internalized by Drivers	2.1	-3.8	-3.4	-2.0	0.9
Loss in Fuel Tax Revenue	2.9	5.3	6.3	6.7	7.0
Subtotal - Incremental External Costs	7.0	1.0	2.9	5.5	9.4
Total Incremental Social Costs	17.3	19.9	28.5	35.1	44.7
Private Benefits					
Reduced Fuel Costs	13.4	29.9	36.4	38.8	41.0
Benefits from Additional Driving	2.8	5.7	7.2	7.9	8.5
Less Frequent Refueling	0.8	1.7	2.0	2.2	2.4
Subtotal - Incremental Private Benefits	16.9	37.3	45.6	48.8	52.0
External Benefits					
Reduction in Petroleum Market Externality	0.7	1.3	1.5	1.6	1.7
Reduced Climate Damages, SC-GHG 2%	20.7	39.5	47.3	50.1	53.0
Reduced Health Damages	0.5	0.9	1.0	0.9	0.9
Subtotal - Incremental External Benefits	21.9	41.7	49.8	52.7	55.5
Total Incremental Social Benefits, SC-GHG 2%	38.8	79.0	95.4	101.5	107.5
Net Incremental Social Benefits, SC-GHG 2%	21.5	59.0	66.9	66.4	62.7

Table 87 - Incremental Benefits and Costs Over the Lifetimes of Total Fleet Produced Through 2031 (2021$ BILLIONS), 7% Percent Discount Rate, by Alternative, SC-GHG 2%Incremental Benefits and Costs Over the Lifetimes of Total Fleet Produced Through 2031 (2021$ BILLIONS), 7% Percent Discount Rate, by Alternative, SC-GHG 2%					
Alternative	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Private Costs					
Technology Costs to Increase Fuel Economy	10.2	12.3	18.5	23.1	31.1
Consumer Surplus Loss from Reduced New Vehicle Sales	0.0	0.0	0.0	0.1	0.5
Safety Costs Internalized by Drivers	1.5	2.4	3.2	3.6	4.5
Subtotal - Incremental Private Costs	11.7	14.7	21.7	26.9	36.0
External Costs					
Congestion and Noise Costs from Rebound-Effect Driving	1.2	1.8	2.8	3.7	5.0
Safety Costs Not Internalized by Drivers	0.9	1.3	2.6	4.5	7.9
Loss in Fuel Tax Revenue	2.4	3.2	4.0	4.3	4.9
Subtotal - Incremental External Costs	4.5	6.3	9.3	12.5	17.8
Total Incremental Social Costs	16.2	21.0	31.0	39.4	53.8
Private Benefits					
Reduced Fuel Costs	12.0	18.1	22.8	25.0	28.9
Benefits from Additional Driving	2.4	3.9	5.1	5.8	6.9
Less Frequent Refueling	0.8	1.0	1.2	1.4	1.8
Subtotal - Incremental Private Benefits	15.2	22.9	29.1	32.2	37.5
External Benefits					
Reduction in Petroleum Market Externality	0.6	0.8	0.9	1.0	1.2
Reduced Climate Damages, SC-GHG 2%	30.9	42.7	52.8	57.7	66.5
Reduced Health Damages	0.4	0.4	0.4	0.3	0.2
Subtotal - Incremental External Benefits	31.8	43.9	54.1	59.0	67.9
Total Incremental Social Benefits, SC-GHG 2%	47.0	66.8	83.1	91.3	105.4
Net Incremental Social Benefits, SC-GHG 2%	30.8	45.8	52.1	51.9	51.6

Table 88 - Incremental Benefits and Costs Over the Lifetimes of Passenger Car Fleet Produced Through 2031 (2021$ BILLIONS), 7% Percent Discount Rate, by Alternative, SC-GHG 2%Incremental Benefits and Costs Over the Lifetimes of Passenger Car Fleet Produced Through 2031 (2021$ BILLIONS), 7% Percent Discount Rate, by Alternative, SC-GHG 2%					
Alternative	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Private Costs					
Technology Costs to Increase Fuel Economy	4.0	1.1	3.3	5.3	9.7
Consumer Surplus Loss from Reduced New Vehicle Sales	0.0	0.0	0.0	0.0	0.2
Safety Costs Internalized by Drivers	0.6	0.4	0.7	0.9	1.5
Subtotal - Incremental Private Costs	4.6	1.6	4.0	6.3	11.4
External Costs					
Congestion and Noise Costs from Rebound-Effect Driving	0.1	2.1	2.8	3.3	4.2
Safety Costs Not Internalized by Drivers	-0.3	3.3	4.4	5.5	7.0
Loss in Fuel Tax Revenue	0.8	0.2	0.4	0.5	0.9
Subtotal - Incremental External Costs	0.5	5.6	7.5	9.3	12.1
Total Incremental Social Costs	5.1	7.2	11.5	15.6	23.5
Private Benefits					
Reduced Fuel Costs	4.5	1.3	2.4	3.3	5.9
Benefits from Additional Driving	0.9	0.7	1.0	1.4	2.2
Less Frequent Refueling	0.3	0.0	0.1	0.2	0.4
Subtotal - Incremental Private Benefits	5.7	2.0	3.5	4.8	8.4
External Benefits					
Reduction in Petroleum Market Externality	0.2	0.1	0.1	0.1	0.2
Reduced Climate Damages, SC-GHG 2%	10.2	3.2	5.5	7.5	13.5
Reduced Health Damages	0.1	-0.1	-0.1	-0.1	-0.2
Subtotal - Incremental External Benefits	10.5	3.2	5.5	7.5	13.5
Total Incremental Social Benefits, SC-GHG 2%	16.2	5.2	9.0	12.3	22.0
Net Incremental Social Benefits, SC-GHG 2%	11.1	-2.0	-2.6	-3.3	-1.5

Table 89 - Incremental Benefits and Costs Over the Lifetimes of Light Truck Fleet Produced Through 2031 (2021$ BILLIONS), 7% Percent Discount Rate, by Alternative, SC-GHG 2%

Incremental Benefits and Costs Over the Lifetimes of Light Truck Fleet Produced Through 2031 (2021$ BILLIONS), 7% Percent Discount Rate, by Alternative, SC-GHG 2%					
Alternative	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Private Costs					
Technology Costs to Increase Fuel Economy	6.2	11.2	15.2	17.8	21.4
Consumer Surplus Loss from Reduced New Vehicle Sales	0.0	0.0	0.0	0.1	0.3
Safety Costs Internalized by Drivers	0.9	2.0	2.5	2.7	3.0
Subtotal - Incremental Private Costs	7.1	13.2	17.8	20.6	24.7
External Costs					
Congestion and Noise Costs from Rebound-Effect Driving	1.1	-0.3	0.0	0.4	0.8
Safety Costs Not Internalized by Drivers	1.2	-2.0	-1.8	-1.0	0.9
Loss in Fuel Tax Revenue	1.6	3.0	3.6	3.8	4.0
Subtotal - Incremental External Costs	4.0	0.7	1.8	3.2	5.6
Total Incremental Social Costs	11.1	13.9	19.5	23.8	30.3
Private Benefits					
Reduced Fuel Costs	7.5	16.7	20.4	21.8	23.0
Benefits from Additional Driving	1.5	3.2	4.0	4.4	4.8
Less Frequent Refueling	0.4	1.0	1.2	1.2	1.4
Subtotal - Incremental Private Benefits	9.5	20.9	25.6	27.4	29.1
External Benefits					
Reduction in Petroleum Market Externality	0.4	0.7	0.8	0.9	0.9
Reduced Climate Damages, SC-GHG 2%	20.7	39.5	47.3	50.1	53.0
Reduced Health Damages	0.2	0.4	0.5	0.5	0.4
Subtotal - Incremental External Benefits	21.3	40.7	48.6	51.5	54.3
Total Incremental Social Benefits, SC-GHG 2%	30.8	61.6	74.2	78.9	83.4
Net Incremental Social Benefits, SC-GHG 2%	19.7	47.7	54.6	55.1	53.1

Table 90 - Incremental Benefits and Costs for Calendar Years 2022-2050 for Total Fleet Produced Through MY 2050 (2021$ BILLIONS), 3% Percent Discount Rate, by Alternative, SC-GHG 2%Incremental Benefits and Costs for Calendar Years 2022-2050 for Total Fleet Produced Through MY 2050 (2021$ BILLIONS), 3% Percent Discount Rate, by Alternative, SC-GHG 2%					
Alternative	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Private Costs					
Technology Costs to Increase Fuel Economy	43.1	63.4	107.3	158.4	233.9
Consumer Surplus Loss from Reduced New Vehicle Sales	0.0	0.0	0.2	0.4	1.6
Safety Costs Internalized by Drivers	9.7	15.8	20.8	25.6	33.5
Subtotal - Incremental Private Costs	52.9	79.3	128.3	184.4	269.0
External Costs					
Congestion and Noise Costs from Rebound-Effect Driving	6.3	10.4	13.6	16.7	21.7
Safety Costs Not Internalized by Drivers	1.4	1.5	2.6	3.8	9.8
Loss in Fuel Tax Revenue	16.2	24.1	31.4	38.5	52.4
Subtotal - Incremental External Costs	23.9	36.0	47.6	59.0	83.9
Total Incremental Social Costs	76.8	115.3	175.8	243.4	352.9
Private Benefits					
Reduced Fuel Costs	82.0	129.5	169.5	207.0	280.7
Benefits from Additional Driving	15.2	24.9	32.5	39.6	50.9
Less Frequent Refueling	2.3	-0.4	-0.6	-2.7	-0.5
Subtotal - Incremental Private Benefits	99.5	154.0	201.3	243.9	331.1
External Benefits					
Reduction in Petroleum Market Externality	4.2	6.2	8.1	9.9	13.6
Reduced Climate Damages, SC-GHG 2%	129.2	196.4	256.3	314.8	430.6
Reduced Health Damages	4.0	5.7	7.3	9.3	12.2
Subtotal - Incremental External Benefits	137.4	208.3	271.6	334.0	456.4
Total Incremental Social Benefits, SC-GHG 2%	236.9	362.2	473.0	577.9	787.5
Net Incremental Social Benefits, SC-GHG 2%	160.1	247.0	297.1	334.4	434.6

Table 91 - Incremental Benefits and Costs for Calendar Years 2022-2050 for Passenger Car Fleet Produced Through MY 2050 (2021$ BILLIONS), 3% Percent Discount Rate, by Alternative, SC-GHG 2%Incremental Benefits and Costs for Calendar Years 2022-2050 for Passenger Car Fleet Produced Through MY 2050 (2021$ BILLIONS), 3% Percent Discount Rate, by Alternative, SC-GHG 2%

Alternative	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Private Costs					
Technology Costs to Increase Fuel Economy	12.8	-1.5	13.0	32.7	62.2
Consumer Surplus Loss from Reduced New Vehicle Sales	0.0	0.0	0.1	0.1	0.5
Safety Costs Internalized by Drivers	4.0	2.9	4.4	6.0	10.8
Subtotal - Incremental Private Costs	16.9	1.4	17.5	38.8	73.5
External Costs					
Congestion and Noise Costs from Rebound-Effect Driving	3.5	13.1	15.0	14.7	18.3
Safety Costs Not Internalized by Drivers	3.1	20.6	23.0	23.2	27.9
Loss in Fuel Tax Revenue	6.0	1.9	3.8	5.5	10.3
Subtotal - Incremental External Costs	12.6	35.6	41.8	43.4	56.6
Total Incremental Social Costs	29.4	37.0	59.3	82.2	130.0
Private Benefits					
Reduced Fuel Costs	30.6	9.4	19.5	29.7	58.3
Benefits from Additional Driving	5.7	4.2	6.4	8.7	15.3
Less Frequent Refueling	-1.8	-1.4	-1.4	-1.9	-1.8
Subtotal - Incremental Private Benefits	34.5	12.1	24.5	36.4	71.8
External Benefits					
Reduction in Petroleum Market Externality	1.5	0.5	1.0	1.4	2.7
Reduced Climate Damages, SC-GHG 2%	48.7	15.3	31.0	44.9	86.1
Reduced Health Damages	2.0	0.3	0.7	1.0	2.1
Subtotal - Incremental External Benefits	52.2	16.1	32.7	47.4	90.9
Total Incremental Social Benefits, SC-GHG 2%	86.8	28.2	57.2	83.8	162.7
Net Incremental Social Benefits, SC-GHG 2%	57.3	-8.8	-2.1	1.6	32.7

Table 92 - Incremental Benefits and Costs for Calendar Years 2022-2050 for Light Truck Fleet Produced Through MY 2050 (2021$ BILLIONS), 3% Percent Discount Rate, by Alternative, SC-GHG 2%Incremental Benefits and Costs for Calendar Years 2022-2050 for Light Truck Fleet Produced Through MY 2050 (2021$ BILLIONS), 3% Percent Discount Rate, by Alternative, SC-GHG 2%					
Alternative	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Private Costs					
Technology Costs to Increase Fuel Economy	30.3	64.9	94.3	125.7	171.7
Consumer Surplus Loss from Reduced New Vehicle Sales	0.0	0.0	0.1	0.3	1.1
Safety Costs Internalized by Drivers	5.7	12.9	16.4	19.7	22.8
Subtotal - Incremental Private Costs	36.0	77.9	110.8	145.6	195.5
External Costs					
Congestion and Noise Costs from Rebound-Effect Driving	2.7	-2.7	-1.4	2.0	3.3
Safety Costs Not Internalized by Drivers	-1.7	-19.1	-20.5	-19.4	-18.1
Loss in Fuel Tax Revenue	10.3	22.2	27.6	33.0	42.1
Subtotal - Incremental External Costs	11.3	0.4	5.7	15.7	27.3
Total Incremental Social Costs	47.4	78.3	116.6	161.3	222.9
Private Benefits					
Reduced Fuel Costs	51.4	120.2	150.0	177.3	222.5
Benefits from Additional Driving	9.4	20.7	26.1	31.0	35.5
Less Frequent Refueling	4.1	1.0	0.8	-0.8	1.3
Subtotal - Incremental Private Benefits	64.9	141.9	176.8	207.5	259.3
External Benefits					
Reduction in Petroleum Market Externality	2.6	5.7	7.1	8.5	10.9
Reduced Climate Damages, SC-GHG 2%	80.5	181.1	225.2	269.9	344.5
Reduced Health Damages	2.1	5.4	6.6	8.2	10.1
Subtotal - Incremental External Benefits	85.2	192.2	238.9	286.6	365.5
Total Incremental Social Benefits, SC-GHG 2%	150.1	334.0	415.8	494.1	624.8
Net Incremental Social Benefits, SC-GHG 2%	102.8	255.8	299.2	332.8	401.9

Table 93 - Incremental Benefits and Costs for Calendar Years 2022-2050 for Total Fleet Produced Through MY 2050 (2021$ BILLIONS), 7% Percent Discount Rate, by Alternative, SC-GHG 2%Incremental Benefits and Costs for Calendar Years 2022-2050 for Total Fleet Produced Through MY 2050 (2021$ BILLIONS), 7% Percent Discount Rate, by Alternative, SC-GHG 2%

Alternative	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Private Costs					
Technology Costs to Increase Fuel Economy	26.7	37.6	62.1	89.6	131.1
Consumer Surplus Loss from Reduced New Vehicle Sales	0.0	0.0	0.1	0.3	1.0
Safety Costs Internalized by Drivers	4.8	7.7	10.1	12.4	16.1
Subtotal - Incremental Private Costs	31.5	45.3	72.3	102.2	148.2
External Costs					
Congestion and Noise Costs from Rebound-Effect Driving	3.1	5.2	6.8	8.3	10.7
Safety Costs Not Internalized by Drivers	0.8	1.0	1.7	2.6	6.1
Loss in Fuel Tax Revenue	8.1	11.9	15.5	18.8	25.4
Subtotal - Incremental External Costs	12.1	18.1	24.0	29.7	42.2
Total Incremental Social Costs	43.6	63.4	96.3	131.9	190.4
Private Benefits					
Reduced Fuel Costs	40.6	63.5	83.0	100.9	135.5
Benefits from Additional Driving	7.5	12.1	15.9	19.3	24.6
Less Frequent Refueling	1.3	0.0	0.0	-0.9	0.1
Subtotal - Incremental Private Benefits	49.4	75.6	98.8	119.3	160.3
External Benefits					
Reduction in Petroleum Market Externality	2.1	3.0	3.9	4.8	6.5
Reduced Climate Damages, SC-GHG 2%	129.2	196.4	256.3	314.8	430.6
Reduced Health Damages	1.7	2.4	3.1	3.9	5.1
Subtotal - Incremental External Benefits	133.0	201.8	263.3	323.4	442.2
Total Incremental Social Benefits, SC-GHG 2%	182.4	277.4	362.1	442.7	602.5
Net Incremental Social Benefits, SC-GHG 2%	138.8	214.1	265.8	310.7	412.1

Table 94 - Incremental Benefits and Costs for Calendar Years 2022-2050 for Passenger Car Fleet Produced Through MY 2050 (2021$ BILLIONS), 7% Percent Discount Rate, by Alternative, SC-GHG 2%Incremental Benefits and Costs for Calendar Years 2022-2050 for Passenger Car Fleet Produced Through MY 2050 (2021$ BILLIONS), 7% Percent Discount Rate, by Alternative, SC-GHG 2%					
Alternative	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Private Costs					
Technology Costs to Increase Fuel Economy	8.3	-0.1	8.0	18.9	35.6
Consumer Surplus Loss from Reduced New Vehicle Sales	0.0	0.0	0.0	0.1	0.3
Safety Costs Internalized by Drivers	1.9	1.4	2.1	2.9	5.2
Subtotal - Incremental Private Costs	10.3	1.3	10.2	21.9	41.2
External Costs					
Congestion and Noise Costs from Rebound-Effect Driving	1.6	6.4	7.4	7.4	9.3
Safety Costs Not Internalized by Drivers	1.3	10.0	11.3	11.5	14.2
Loss in Fuel Tax Revenue	2.9	1.0	1.9	2.7	5.0
Subtotal - Incremental External Costs	5.7	17.4	20.6	21.6	28.4
Total Incremental Social Costs	16.0	18.7	30.8	43.5	69.6
Private Benefits					
Reduced Fuel Costs	14.9	4.7	9.5	14.6	28.1
Benefits from Additional Driving	2.8	2.1	3.1	4.2	7.5
Less Frequent Refueling	-0.6	-0.6	-0.6	-0.8	-0.6
Subtotal - Incremental Private Benefits	17.0	6.1	12.1	18.0	34.9
External Benefits					
Reduction in Petroleum Market Externality	0.7	0.2	0.5	0.7	1.3
Reduced Climate Damages, SC-GHG 2%	48.7	15.3	31.0	44.9	86.1
Reduced Health Damages	0.8	0.1	0.3	0.4	0.8
Subtotal - Incremental External Benefits	50.2	15.7	31.8	46.0	88.2
Total Incremental Social Benefits, SC-GHG 2%	67.3	21.8	43.8	64.0	123.1
Net Incremental Social Benefits, SC-GHG 2%	51.3	3.1	13.0	20.5	53.5

Table 95 - Incremental Benefits and Costs for Calendar Years 2022-2050 for Light Truck Fleet Produced Through MY 2050 (2021$ BILLIONS), 7% Percent Discount Rate, by Alternative, SC-GHG 2%**Incremental Benefits and Costs for Calendar Years 2022-2050 for Light Truck Fleet Produced Through MY 2050 (2021$ BILLIONS), 7% Percent Discount Rate, by Alternative, SC-GHG 2%**

Alternative	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Private Costs					
Technology Costs to Increase Fuel Economy	18.4	37.7	54.1	70.7	95.5
Consumer Surplus Loss from Reduced New Vehicle Sales	0.0	0.0	0.1	0.2	0.7
Safety Costs Internalized by Drivers	2.8	6.3	7.9	9.5	10.9
Subtotal - Incremental Private Costs	21.2	44.0	62.1	80.4	107.1
External Costs					
Congestion and Noise Costs from Rebound-Effect Driving	1.6	-1.3	-0.7	0.9	1.4
Safety Costs Not Internalized by Drivers	-0.4	-8.9	-9.5	-8.9	-8.1
Loss in Fuel Tax Revenue	5.2	10.9	13.6	16.2	20.4
Subtotal - Incremental External Costs	6.4	0.7	3.4	8.1	13.7
Total Incremental Social Costs	27.6	44.7	65.5	88.5	120.8
Private Benefits					
Reduced Fuel Costs	25.8	58.8	73.5	86.4	107.4
Benefits from Additional Driving	4.7	10.1	12.7	15.0	17.2
Less Frequent Refueling	1.9	0.7	0.6	-0.2	0.8
Subtotal - Incremental Private Benefits	32.3	69.5	86.8	101.2	125.4
External Benefits					
Reduction in Petroleum Market Externality	1.3	2.8	3.4	4.1	5.2
Reduced Climate Damages, SC-GHG 2%	80.5	181.1	225.2	269.9	344.5
Reduced Health Damages	0.9	2.3	2.8	3.5	4.3
Subtotal - Incremental External Benefits	82.8	186.1	231.5	277.5	354.0
Total Incremental Social Benefits, SC-GHG 2%	115.1	255.7	318.3	378.7	479.3
Net Incremental Social Benefits, SC-GHG 2%	87.5	211.0	252.8	290.2	358.5

Technology Costs per Vehicle, by Model Year

Table 96 - Estimated Average Per Vehicle Technology Costs ($), Total Fleet for Manufacturer (Total)

Estimated Average Per Vehicle Technology Costs ($), Total Fleet for Manufacturer (Total)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	0	468	994	1,358	1,369	1,173	1,144	1,117	1,119	1,149
Alternative PC2LT002	0	468	994	1,358	1,369	1,294	1,322	1,364	1,395	1,524
Alternative PC1LT3	0	468	994	1,358	1,369	1,309	1,365	1,412	1,465	1,604
Alternative PC2LT4	0	468	994	1,358	1,369	1,340	1,456	1,543	1,719	1,857
Alternative PC3LT5	0	468	994	1,358	1,369	1,384	1,512	1,621	1,876	2,097
Alternative PC6LT8	0	468	994	1,358	1,369	1,472	1,659	1,826	2,152	2,392

Table 97 - Estimated Average Per Vehicle Technology Costs ($), Passenger Car Fleet for Manufacturer (Total)

Estimated Average Per Vehicle Technology Costs ($), Passenger Car Fleet for Manufacturer (Total)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	0	392	858	1,087	1,038	988	924	862	836	834
Alternative PC2LT002	0	392	858	1,087	1,038	1,111	1,131	1,211	1,210	1,177
Alternative PC1LT3	0	392	858	1,087	1,038	1,012	971	966	946	908
Alternative PC2LT4	0	392	858	1,087	1,038	1,041	1,073	1,159	1,163	1,125
Alternative PC3LT5	0	392	858	1,087	1,038	1,119	1,167	1,282	1,329	1,403
Alternative PC6LT8	0	392	858	1,087	1,038	1,229	1,393	1,623	1,762	1,912

Table 98 - Estimated Average Per Vehicle Technology Costs ($), Light Truck Fleet for Manufacturer (Total)

Estimated Average Per Vehicle Technology Costs ($), Light Truck Fleet for Manufacturer (Total)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	0	512	1,071	1,504	1,542	1,269	1,257	1,247	1,262	1,308
Alternative PC2LT002	0	512	1,071	1,504	1,542	1,389	1,420	1,441	1,488	1,699
Alternative PC1LT3	0	512	1,071	1,504	1,542	1,464	1,568	1,641	1,732	1,963
Alternative PC2LT4	0	512	1,071	1,504	1,542	1,496	1,652	1,739	2,006	2,236
Alternative PC3LT5	0	512	1,071	1,504	1,542	1,521	1,689	1,793	2,159	2,458
Alternative PC6LT8	0	512	1,071	1,504	1,542	1,598	1,795	1,929	2,353	2,641

Table 99 - Estimated Average Per Vehicle Technology Costs ($), Total Fleet for Manufacturer (BMW)

Estimated Average Per Vehicle Technology Costs ($), Total Fleet for Manufacturer (BMW)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	0	524	1,110	1,576	1,340	1,032	926	943	1,131	1,286
Alternative PC2LT002	0	524	1,110	1,576	1,340	1,022	966	988	1,195	1,303
Alternative PC1LT3	0	524	1,110	1,576	1,340	1,010	960	971	1,151	1,402
Alternative PC2LT4	0	524	1,110	1,576	1,340	1,025	995	1,009	1,211	1,456
Alternative PC3LT5	0	524	1,110	1,576	1,340	1,031	1,023	1,041	1,341	1,579
Alternative PC6LT8	0	524	1,110	1,576	1,340	1,041	1,040	1,058	1,361	1,722

Table 100 - Estimated Average Per Vehicle Technology Costs ($), Total Fleet for Manufacturer (Ford)

Estimated Average Per Vehicle Technology Costs ($), Total Fleet for Manufacturer (Ford)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	0	787	1,570	1,663	1,694	1,360	1,266	1,157	1,059	982
Alternative PC2LT002	0	787	1,570	1,663	1,694	1,467	1,549	1,536	1,443	1,382
Alternative PC1LT3	0	787	1,570	1,663	1,694	1,858	2,078	2,183	2,070	1,986
Alternative PC2LT4	0	787	1,570	1,663	1,694	1,889	2,109	2,213	2,101	2,007
Alternative PC3LT5	0	787	1,570	1,663	1,694	1,902	2,121	2,225	2,114	2,020
Alternative PC6LT8	0	787	1,570	1,663	1,694	1,902	2,122	2,226	2,114	2,020

Table 101 - Estimated Average Per Vehicle Technology Costs ($), Total Fleet for Manufacturer (GM)

Estimated Average Per Vehicle Technology Costs ($), Total Fleet for Manufacturer (GM)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	0	213	1,880	2,440	2,349	2,160	2,058	2,017	1,963	1,930
Alternative PC2LT002	0	213	1,880	2,440	2,349	2,536	2,426	2,567	2,520	3,466
Alternative PC1LT3	0	213	1,880	2,440	2,349	2,535	2,423	2,469	2,418	3,328
Alternative PC2LT4	0	213	1,880	2,440	2,349	2,535	2,423	2,566	2,517	3,454
Alternative PC3LT5	0	213	1,880	2,440	2,349	2,535	2,424	2,566	2,522	3,653
Alternative PC6LT8	0	213	1,880	2,440	2,349	2,536	2,425	2,567	2,522	3,693

Table 102 - Estimated Average Per Vehicle Technology Costs ($), Total Fleet for Manufacturer (Honda)

Estimated Average Per Vehicle Technology Costs ($), Total Fleet for Manufacturer (Honda)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	0	560	610	1,040	1,144	1,001	1,013	1,007	1,001	985
Alternative PC2LT002	0	560	610	1,040	1,144	1,301	1,285	1,254	1,221	1,127
Alternative PC1LT3	0	560	610	1,040	1,144	1,038	1,055	1,075	1,072	988
Alternative PC2LT4	0	560	610	1,040	1,144	1,108	1,172	1,197	1,287	1,184
Alternative PC3LT5	0	560	610	1,040	1,144	1,379	1,483	1,486	1,607	1,475
Alternative PC6LT8	0	560	610	1,040	1,144	1,379	1,701	1,847	1,944	1,785

Table 103 - Estimated Average Per Vehicle Technology Costs ($), Total Fleet for Manufacturer (Hyundai)

Estimated Average Per Vehicle Technology Costs ($), Total Fleet for Manufacturer (Hyundai)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	0	262	458	937	1,000	923	839	775	798	875
Alternative PC2LT002	0	262	458	937	1,000	1,099	1,027	1,112	1,155	1,218
Alternative PC1LT3	0	262	458	937	1,000	1,094	1,076	1,145	1,245	1,327
Alternative PC2LT4	0	262	458	937	1,000	1,273	1,252	1,411	1,492	1,551
Alternative PC3LT5	0	262	458	937	1,000	1,416	1,414	1,763	2,718	3,153
Alternative PC6LT8	0	262	458	937	1,000	2,035	2,013	2,411	3,339	3,741

Table 104 - Estimated Average Per Vehicle Technology Costs ($), Total Fleet for Manufacturer (KIA)

Estimated Average Per Vehicle Technology Costs ($), Total Fleet for Manufacturer (KIA)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	0	132	375	514	677	639	634	588	631	716
Alternative PC2LT002	0	132	375	514	677	632	1,313	1,714	1,829	1,850
Alternative PC1LT3	0	132	375	514	677	632	934	991	1,319	1,412
Alternative PC2LT4	0	132	375	514	677	632	1,394	1,797	4,453	4,340
Alternative PC3LT5	0	132	375	514	677	632	1,396	1,868	4,620	4,643
Alternative PC6LT8	0	132	375	514	677	632	1,396	1,922	4,806	4,981

Table 105 - Estimated Average Per Vehicle Technology Costs ($), Total Fleet for Manufacturer (JLR)

Estimated Average Per Vehicle Technology Costs ($), Total Fleet for Manufacturer (JLR)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	0	1,565	2,130	2,156	1,449	980	850	697	749	752
Alternative PC2LT002	0	1,565	2,130	2,156	1,449	978	850	698	864	881
Alternative PC1LT3	0	1,565	2,130	2,156	1,449	978	850	698	859	3,166
Alternative PC2LT4	0	1,565	2,130	2,156	1,449	978	850	698	864	3,178
Alternative PC3LT5	0	1,565	2,130	2,156	1,449	978	850	697	863	3,169
Alternative PC6LT8	0	1,565	2,130	2,156	1,449	978	850	696	864	3,169

Table 106 - Estimated Average Per Vehicle Technology Costs ($), Total Fleet for Manufacturer (Karma)

Estimated Average Per Vehicle Technology Costs ($), Total Fleet for Manufacturer (Karma)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	0	0	0	0	-3,300	-3,693	-3,948	-4,296	-4,602	-4,776
Alternative PC2LT002	0	0	0	0	-3,300	-3,693	-3,948	-4,296	-4,602	-4,776
Alternative PC1LT3	0	0	0	0	-3,300	-3,693	-3,948	-4,296	-4,602	-4,776
Alternative PC2LT4	0	0	0	0	-3,300	-3,693	-3,948	-4,296	-4,602	-4,776
Alternative PC3LT5	0	0	0	0	-3,300	-3,693	-3,948	-4,296	-4,602	-4,776
Alternative PC6LT8	0	0	0	0	-3,300	-3,693	-3,948	-4,296	-4,602	-4,776

Table 107 - Estimated Average Per Vehicle Technology Costs ($), Total Fleet for Manufacturer (Lucid)

Estimated Average Per Vehicle Technology Costs ($), Total Fleet for Manufacturer (Lucid)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT002	0	0	0	0	0	0	0	0	0	0
Alternative PC1LT3	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT4	0	0	0	0	0	0	0	0	0	0
Alternative PC3LT5	0	0	0	0	0	0	0	0	0	0
Alternative PC6LT8	0	0	0	0	0	0	0	0	0	0

Table 108 - Estimated Average Per Vehicle Technology Costs ($), Total Fleet for Manufacturer (Mazda)

Estimated Average Per Vehicle Technology Costs ($), Total Fleet for Manufacturer (Mazda)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	0	1,014	1,198	1,281	1,354	1,212	1,272	1,316	1,378	1,436
Alternative PC2LT002	0	1,014	1,198	1,281	1,354	1,229	1,250	1,318	1,374	1,323
Alternative PC1LT3	0	1,014	1,198	1,281	1,354	1,231	1,239	1,289	1,351	1,301
Alternative PC2LT4	0	1,014	1,198	1,281	1,354	1,251	1,270	1,568	1,667	1,593
Alternative PC3LT5	0	1,014	1,198	1,281	1,354	1,342	1,356	1,946	2,084	1,981
Alternative PC6LT8	0	1,014	1,198	1,281	1,354	5,288	5,097	7,018	9,040	8,170

Table 109 - Estimated Average Per Vehicle Technology Costs ($), Total Fleet for Manufacturer (Mercedes-Benz)

Estimated Average Per Vehicle Technology Costs ($), Total Fleet for Manufacturer (Mercedes-Benz)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	0	925	947	1,149	1,552	1,529	1,442	1,324	1,311	1,561
Alternative PC2LT002	0	925	947	1,149	1,552	1,426	1,344	1,223	1,326	1,470
Alternative PC1LT3	0	925	947	1,149	1,552	1,426	1,413	1,290	1,417	1,553
Alternative PC2LT4	0	925	947	1,149	1,552	1,426	1,413	1,291	1,414	1,548
Alternative PC3LT5	0	925	947	1,149	1,552	1,427	1,415	1,306	1,454	1,584
Alternative PC6LT8	0	925	947	1,149	1,552	1,444	1,431	1,348	1,504	1,654

Table 110 - Estimated Average Per Vehicle Technology Costs ($), Total Fleet for Manufacturer (Mitsubishi)

Estimated Average Per Vehicle Technology Costs ($), Total Fleet for Manufacturer (Mitsubishi)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	0	84	1,283	2,723	2,018	1,846	1,616	1,434	1,279	1,154
Alternative PC2LT002	0	84	1,283	2,723	2,018	1,834	1,660	1,477	1,328	1,246
Alternative PC1LT3	0	84	1,283	2,723	2,018	1,833	1,631	1,448	1,298	1,176
Alternative PC2LT4	0	84	1,283	2,723	2,018	1,833	1,662	1,478	1,387	1,353
Alternative PC3LT5	0	84	1,283	2,723	2,018	1,834	1,768	1,582	1,661	1,630
Alternative PC6LT8	0	84	1,283	2,723	2,018	1,834	2,770	2,574	2,676	2,708

Table 111 - Estimated Average Per Vehicle Technology Costs ($), Total Fleet for Manufacturer (Nissan)

Estimated Average Per Vehicle Technology Costs ($), Total Fleet for Manufacturer (Nissan)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	0	651	825	1,227	1,176	1,343	1,364	1,254	1,233	1,238
Alternative PC2LT002	0	651	825	1,227	1,176	1,316	1,377	1,310	1,413	1,362
Alternative PC1LT3	0	651	825	1,227	1,176	1,316	1,675	1,603	1,635	1,552
Alternative PC2LT4	0	651	825	1,227	1,176	1,316	1,767	1,707	1,979	1,879
Alternative PC3LT5	0	651	825	1,227	1,176	1,316	1,776	1,716	2,134	2,088
Alternative PC6LT8	0	651	825	1,227	1,176	1,317	1,860	1,799	2,213	2,327

Table 112 - Estimated Average Per Vehicle Technology Costs ($), Total Fleet for Manufacturer (Stellantis)

Estimated Average Per Vehicle Technology Costs ($), Total Fleet for Manufacturer (Stellantis)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	0	847	1,635	2,479	2,028	1,596	1,492	1,468	1,401	1,475
Alternative PC2LT002	0	847	1,635	2,479	2,028	1,848	1,751	1,773	1,790	1,866
Alternative PC1LT3	0	847	1,635	2,479	2,028	1,809	1,715	1,826	1,862	1,920
Alternative PC2LT4	0	847	1,635	2,479	2,028	1,887	1,792	1,902	1,923	1,995
Alternative PC3LT5	0	847	1,635	2,479	2,028	1,930	1,835	1,944	1,955	2,041
Alternative PC6LT8	0	847	1,635	2,479	2,028	1,930	1,834	1,943	1,955	2,041

Table 113 - Estimated Average Per Vehicle Technology Costs ($), Total Fleet for Manufacturer (Subaru)

Estimated Average Per Vehicle Technology Costs ($), Total Fleet for Manufacturer (Subaru)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	0	460	494	638	757	841	970	1,059	1,154	1,227
Alternative PC2LT002	0	460	494	638	757	816	935	1,020	1,108	1,108
Alternative PC1LT3	0	460	494	638	757	815	934	1,018	1,105	1,105
Alternative PC2LT4	0	460	494	638	757	815	949	1,047	1,174	1,167
Alternative PC3LT5	0	460	494	638	757	816	1,031	1,220	1,417	1,421
Alternative PC6LT8	0	460	494	638	757	816	1,360	1,914	2,384	2,277

Table 114 - Estimated Average Per Vehicle Technology Costs ($), Total Fleet for Manufacturer (Tesla)

Estimated Average Per Vehicle Technology Costs ($), Total Fleet for Manufacturer (Tesla)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	0	7	11	16	16	15	15	15	15	15
Alternative PC2LT002	0	7	11	16	16	0	0	0	0	0
Alternative PC1LT3	0	7	11	16	16	0	0	0	0	0
Alternative PC2LT4	0	7	11	16	16	0	0	0	0	0
Alternative PC3LT5	0	7	11	16	16	0	0	0	0	0
Alternative PC6LT8	0	7	11	16	16	0	0	0	0	0

Table 115 - Estimated Average Per Vehicle Technology Costs ($), Total Fleet for Manufacturer (Toyota)

Estimated Average Per Vehicle Technology Costs ($), Total Fleet for Manufacturer (Toyota)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	0	234	492	644	963	662	732	798	865	928
Alternative PC2LT002	0	234	492	644	963	639	700	763	828	849
Alternative PC1LT3	0	234	492	644	963	641	724	819	918	932
Alternative PC2LT4	0	234	492	644	963	644	873	988	1,091	1,151
Alternative PC3LT5	0	234	492	644	963	644	873	988	1,107	1,327
Alternative PC6LT8	0	234	492	644	963	646	913	1,044	1,358	1,659

Table 116 - Estimated Average Per Vehicle Technology Costs ($), Total Fleet for Manufacturer (Volvo)

Estimated Average Per Vehicle Technology Costs ($), Total Fleet for Manufacturer (Volvo)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	0	140	195	1,128	1,041	677	531	363	219	115
Alternative PC2LT002	0	140	195	1,128	1,041	622	477	310	390	257
Alternative PC1LT3	0	140	195	1,128	1,041	622	478	311	609	474
Alternative PC2LT4	0	140	195	1,128	1,041	622	478	311	714	579
Alternative PC3LT5	0	140	195	1,128	1,041	622	478	311	724	593
Alternative PC6LT8	0	140	195	1,128	1,041	720	575	468	784	652

Table 117 - Estimated Average Per Vehicle Technology Costs ($), Total Fleet for Manufacturer (VWA)

Estimated Average Per Vehicle Technology Costs ($), Total Fleet for Manufacturer (VWA)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	0	458	946	1,142	1,138	817	776	691	875	1,042
Alternative PC2LT002	0	458	946	1,142	1,138	849	997	926	1,204	1,370
Alternative PC1LT3	0	458	946	1,142	1,138	845	908	840	1,235	1,470
Alternative PC2LT4	0	458	946	1,142	1,138	852	1,001	931	1,320	1,565
Alternative PC3LT5	0	458	946	1,142	1,138	852	1,054	984	1,370	1,635
Alternative PC6LT8	0	458	946	1,142	1,138	851	1,128	1,056	1,441	1,695

Table 118 - Estimated Average Per Vehicle Technology Costs ($), Passenger Car Fleet for Manufacturer (BMW)

Estimated Average Per Vehicle Technology Costs ($), Passenger Car Fleet for Manufacturer (BMW)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	0	655	1,742	1,797	1,356	1,243	1,103	1,038	1,109	1,170
Alternative PC2LT002	0	655	1,742	1,797	1,356	1,223	1,124	1,069	1,182	1,155
Alternative PC1LT3	0	655	1,742	1,797	1,356	1,198	1,058	989	1,055	1,039
Alternative PC2LT4	0	655	1,742	1,797	1,356	1,229	1,128	1,064	1,177	1,150
Alternative PC3LT5	0	655	1,742	1,797	1,356	1,240	1,186	1,126	1,437	1,397
Alternative PC6LT8	0	655	1,742	1,797	1,356	1,261	1,220	1,160	1,476	1,575

Table 119 - Estimated Average Per Vehicle Technology Costs ($), Passenger Car Fleet for Manufacturer (Ford)

Estimated Average Per Vehicle Technology Costs ($), Passenger Car Fleet for Manufacturer (Ford)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	0	93	1,401	1,657	1,130	1,000	882	750	639	557
Alternative PC2LT002	0	93	1,401	1,657	1,130	1,701	1,573	1,432	1,339	1,204
Alternative PC1LT3	0	93	1,401	1,657	1,130	1,399	1,271	1,135	1,018	986
Alternative PC2LT4	0	93	1,401	1,657	1,130	1,701	1,573	1,432	1,339	1,204
Alternative PC3LT5	0	93	1,401	1,657	1,130	1,832	1,702	1,560	1,465	1,329
Alternative PC6LT8	0	93	1,401	1,657	1,130	1,832	1,702	1,560	1,465	1,329

Table 120 - Estimated Average Per Vehicle Technology Costs ($), Passenger Car Fleet for Manufacturer (GM)

Estimated Average Per Vehicle Technology Costs ($), Passenger Car Fleet for Manufacturer (GM)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	0	57	1,209	1,368	1,290	1,162	1,056	1,000	924	901
Alternative PC2LT002	0	57	1,209	1,368	1,290	1,296	1,189	2,003	1,965	2,068
Alternative PC1LT3	0	57	1,209	1,368	1,290	1,296	1,187	1,563	1,508	1,467
Alternative PC2LT4	0	57	1,209	1,368	1,290	1,296	1,189	2,003	1,965	2,057
Alternative PC3LT5	0	57	1,209	1,368	1,290	1,296	1,189	2,003	1,989	2,968
Alternative PC6LT8	0	57	1,209	1,368	1,290	1,296	1,189	2,003	1,989	2,965

Table 121 - Estimated Average Per Vehicle Technology Costs ($), Passenger Car Fleet for Manufacturer (Honda)

Estimated Average Per Vehicle Technology Costs ($), Passenger Car Fleet for Manufacturer (Honda)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	0	538	568	1,033	966	901	861	824	784	737
Alternative PC2LT002	0	538	568	1,033	966	1,461	1,372	1,287	1,196	993
Alternative PC1LT3	0	538	568	1,033	966	988	929	871	807	633
Alternative PC2LT4	0	538	568	1,033	966	972	914	858	795	622
Alternative PC3LT5	0	538	568	1,033	966	1,431	1,405	1,312	1,209	993
Alternative PC6LT8	0	538	568	1,033	966	1,431	1,844	2,043	1,883	1,613

Table 122 - Estimated Average Per Vehicle Technology Costs ($), Passenger Car Fleet for Manufacturer (Hyundai)

Estimated Average Per Vehicle Technology Costs ($), Passenger Car Fleet for Manufacturer (Hyundai)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	0	362	642	671	954	935	846	801	800	844
Alternative PC2LT002	0	362	642	671	954	1,243	1,146	1,288	1,262	1,329
Alternative PC1LT3	0	362	642	671	954	1,054	959	1,002	1,041	1,116
Alternative PC2LT4	0	362	642	671	954	1,243	1,146	1,288	1,261	1,281
Alternative PC3LT5	0	362	642	671	954	1,315	1,216	1,607	1,566	1,761
Alternative PC6LT8	0	362	642	671	954	2,378	2,251	2,751	2,648	2,786

Table 123 - Estimated Average Per Vehicle Technology Costs ($), Passenger Car Fleet for Manufacturer (KIA)

Estimated Average Per Vehicle Technology Costs ($), Passenger Car Fleet for Manufacturer (KIA)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	0	70	515	687	550	563	508	480	496	536
Alternative PC2LT002	0	70	515	687	550	563	1,543	2,325	2,406	2,334
Alternative PC1LT3	0	70	515	687	550	563	687	822	898	953
Alternative PC2LT4	0	70	515	687	550	563	1,543	2,325	2,409	2,337
Alternative PC3LT5	0	70	515	687	550	563	1,548	2,458	2,724	2,634
Alternative PC6LT8	0	70	515	687	550	563	1,548	2,565	3,064	3,257

Table 124 - Estimated Average Per Vehicle Technology Costs ($), Passenger Car Fleet for Manufacturer (JLR)

Estimated Average Per Vehicle Technology Costs ($), Passenger Car Fleet for Manufacturer (JLR)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	0	4,386	4,186	3,979	2,885	2,693	2,419	2,077	1,916	1,880
Alternative PC2LT002	0	4,386	4,186	3,979	2,885	2,570	2,299	1,965	2,109	1,972
Alternative PC1LT3	0	4,386	4,186	3,979	2,885	2,569	2,301	1,967	1,925	1,802
Alternative PC2LT4	0	4,386	4,186	3,979	2,885	2,569	2,297	1,963	2,106	1,970
Alternative PC3LT5	0	4,386	4,186	3,979	2,885	2,571	2,298	1,964	2,105	1,967
Alternative PC6LT8	0	4,386	4,186	3,979	2,885	2,570	2,299	1,965	2,107	1,970

Table 125 - Estimated Average Per Vehicle Technology Costs ($), Passenger Car Fleet for Manufacturer (Karma)

Estimated Average Per Vehicle Technology Costs ($), Passenger Car Fleet for Manufacturer (Karma)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	0	0	0	0	-3,300	-3,693	-3,948	-4,296	-4,602	-4,776
Alternative PC2LT002	0	0	0	0	-3,300	-3,693	-3,948	-4,296	-4,602	-4,776
Alternative PC1LT3	0	0	0	0	-3,300	-3,693	-3,948	-4,296	-4,602	-4,776
Alternative PC2LT4	0	0	0	0	-3,300	-3,693	-3,948	-4,296	-4,602	-4,776
Alternative PC3LT5	0	0	0	0	-3,300	-3,693	-3,948	-4,296	-4,602	-4,776
Alternative PC6LT8	0	0	0	0	-3,300	-3,693	-3,948	-4,296	-4,602	-4,776

Table 126 - Estimated Average Per Vehicle Technology Costs ($), Passenger Car Fleet for Manufacturer (Lucid)

Estimated Average Per Vehicle Technology Costs ($), Passenger Car Fleet for Manufacturer (Lucid)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT002	0	0	0	0	0	0	0	0	0	0
Alternative PC1LT3	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT4	0	0	0	0	0	0	0	0	0	0
Alternative PC3LT5	0	0	0	0	0	0	0	0	0	0
Alternative PC6LT8	0	0	0	0	0	0	0	0	0	0

Table 127 - Estimated Average Per Vehicle Technology Costs ($), Passenger Car Fleet for Manufacturer (Mazda)

Estimated Average Per Vehicle Technology Costs ($), Passenger Car Fleet for Manufacturer (Mazda)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	0	220	959	1,089	971	854	856	838	839	847
Alternative PC2LT002	0	220	959	1,089	971	1,069	1,147	1,254	1,223	1,191
Alternative PC1LT3	0	220	959	1,089	971	1,069	1,056	1,027	1,012	995
Alternative PC2LT4	0	220	959	1,089	971	1,069	1,147	1,254	1,222	1,191
Alternative PC3LT5	0	220	959	1,089	971	1,069	1,147	1,487	1,437	1,389
Alternative PC6LT8	0	220	959	1,089	971	1,070	1,148	9,619	8,836	7,959

Table 128 - Estimated Average Per Vehicle Technology Costs ($), Passenger Car Fleet for Manufacturer (Mercedes-Benz)

Estimated Average Per Vehicle Technology Costs ($), Passenger Car Fleet for Manufacturer (Mercedes-Benz)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	0	1,324	1,347	1,676	1,987	1,735	1,506	1,256	1,147	1,283
Alternative PC2LT002	0	1,324	1,347	1,676	1,987	1,571	1,335	1,087	981	1,106
Alternative PC1LT3	0	1,324	1,347	1,676	1,987	1,571	1,335	1,087	971	1,096
Alternative PC2LT4	0	1,324	1,347	1,676	1,987	1,571	1,335	1,087	969	1,093
Alternative PC3LT5	0	1,324	1,347	1,676	1,987	1,575	1,338	1,120	1,060	1,176
Alternative PC6LT8	0	1,324	1,347	1,676	1,987	1,611	1,374	1,212	1,165	1,326

Table 129 - Estimated Average Per Vehicle Technology Costs ($), Passenger Car Fleet for Manufacturer (Mitsubishi)

Estimated Average Per Vehicle Technology Costs ($), Passenger Car Fleet for Manufacturer (Mitsubishi)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	0	77	2,187	2,296	1,630	1,460	1,262	1,077	922	797
Alternative PC2LT002	0	77	2,187	2,296	1,630	1,438	1,321	1,134	983	941
Alternative PC1LT3	0	77	2,187	2,296	1,630	1,438	1,263	1,076	925	805
Alternative PC2LT4	0	77	2,187	2,296	1,630	1,438	1,321	1,134	983	875
Alternative PC3LT5	0	77	2,187	2,296	1,630	1,438	1,384	1,195	1,247	1,159
Alternative PC6LT8	0	77	2,187	2,296	1,630	1,438	2,248	2,049	2,144	2,151

Table 130 - Estimated Average Per Vehicle Technology Costs ($), Passenger Car Fleet for Manufacturer (Nissan)

Estimated Average Per Vehicle Technology Costs ($), Passenger Car Fleet for Manufacturer (Nissan)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	0	710	929	1,194	1,142	1,239	1,133	1,021	1,002	986
Alternative PC2LT002	0	710	929	1,194	1,142	1,204	1,098	987	1,208	1,212
Alternative PC1LT3	0	710	929	1,194	1,142	1,204	1,133	1,021	1,028	1,005
Alternative PC2LT4	0	710	929	1,194	1,142	1,204	1,169	1,057	1,274	1,239
Alternative PC3LT5	0	710	929	1,194	1,142	1,204	1,185	1,072	1,440	1,510
Alternative PC6LT8	0	710	929	1,194	1,142	1,204	1,335	1,220	1,582	1,946

Table 131 - Estimated Average Per Vehicle Technology Costs ($), Passenger Car Fleet for Manufacturer (Stellantis)

Estimated Average Per Vehicle Technology Costs ($), Passenger Car Fleet for Manufacturer (Stellantis)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	0	739	3,102	3,483	2,790	2,558	2,374	2,253	2,140	2,196
Alternative PC2LT002	0	739	3,102	3,483	2,790	2,517	2,419	2,460	2,365	2,599
Alternative PC1LT3	0	739	3,102	3,483	2,790	2,517	2,419	2,460	2,364	2,467
Alternative PC2LT4	0	739	3,102	3,483	2,790	2,516	2,419	2,460	2,364	2,607
Alternative PC3LT5	0	739	3,102	3,483	2,790	2,517	2,419	2,460	2,364	2,739
Alternative PC6LT8	0	739	3,102	3,483	2,790	2,517	2,420	2,460	2,364	2,745

Table 132 - Estimated Average Per Vehicle Technology Costs ($), Passenger Car Fleet for Manufacturer (Subaru)

Estimated Average Per Vehicle Technology Costs ($), Passenger Car Fleet for Manufacturer (Subaru)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	0	1,417	1,370	2,163	1,589	1,479	1,358	1,212	1,076	961
Alternative PC2LT002	0	1,417	1,370	2,163	1,589	1,388	1,255	1,105	962	842
Alternative PC1LT3	0	1,417	1,370	2,163	1,589	1,388	1,254	1,104	962	841
Alternative PC2LT4	0	1,417	1,370	2,163	1,589	1,388	1,254	1,104	962	841
Alternative PC3LT5	0	1,417	1,370	2,163	1,589	1,388	1,254	1,104	1,014	890
Alternative PC6LT8	0	1,417	1,370	2,163	1,589	1,388	1,315	1,443	1,459	1,298

Table 133 - Estimated Average Per Vehicle Technology Costs ($), Passenger Car Fleet for Manufacturer (Tesla)

Estimated Average Per Vehicle Technology Costs ($), Passenger Car Fleet for Manufacturer (Tesla)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT002	0	0	0	0	0	0	0	0	0	0
Alternative PC1LT3	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT4	0	0	0	0	0	0	0	0	0	0
Alternative PC3LT5	0	0	0	0	0	0	0	0	0	0
Alternative PC6LT8	0	0	0	0	0	0	0	0	0	0

Table 134 - Estimated Average Per Vehicle Technology Costs ($), Passenger Car Fleet for Manufacturer (Toyota)

Estimated Average Per Vehicle Technology Costs ($), Passenger Car Fleet for Manufacturer (Toyota)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	0	336	544	768	868	852	879	868	861	851
Alternative PC2LT002	0	336	544	768	868	792	806	786	775	652
Alternative PC1LT3	0	336	544	768	868	792	806	788	770	647
Alternative PC2LT4	0	336	544	768	868	792	806	794	801	683
Alternative PC3LT5	0	336	544	768	868	792	806	794	843	774
Alternative PC6LT8	0	336	544	768	868	796	910	941	1,508	1,651

Table 135 - Estimated Average Per Vehicle Technology Costs ($), Passenger Car Fleet for Manufacturer (Volvo)

Estimated Average Per Vehicle Technology Costs ($), Passenger Car Fleet for Manufacturer (Volvo)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	0	65	117	496	1,258	1,059	903	725	580	471
Alternative PC2LT002	0	65	117	496	1,258	908	755	579	436	329
Alternative PC1LT3	0	65	117	496	1,258	908	755	579	436	330
Alternative PC2LT4	0	65	117	496	1,258	908	755	579	436	330
Alternative PC3LT5	0	65	117	496	1,258	908	755	579	469	378
Alternative PC6LT8	0	65	117	496	1,258	908	755	579	469	378

Table 136 - Estimated Average Per Vehicle Technology Costs ($), Passenger Car Fleet for Manufacturer (VWA)

Estimated Average Per Vehicle Technology Costs ($), Passenger Car Fleet for Manufacturer (VWA)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	0	170	1,013	1,202	1,324	1,199	1,156	1,006	1,073	1,141
Alternative PC2LT002	0	170	1,013	1,202	1,324	1,186	1,603	1,446	1,484	1,585
Alternative PC1LT3	0	170	1,013	1,202	1,324	1,169	1,354	1,202	1,252	1,333
Alternative PC2LT4	0	170	1,013	1,202	1,324	1,186	1,603	1,448	1,481	1,587
Alternative PC3LT5	0	170	1,013	1,202	1,324	1,186	1,748	1,591	1,614	1,774
Alternative PC6LT8	0	170	1,013	1,202	1,324	1,186	1,949	1,789	1,801	1,931

Table 137 - Estimated Average Per Vehicle Technology Costs ($), Light Truck Fleet for Manufacturer (BMW)

Estimated Average Per Vehicle Technology Costs ($), Light Truck Fleet for Manufacturer (BMW)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	0	377	414	1,346	1,325	820	750	849	1,152	1,399
Alternative PC2LT002	0	377	414	1,346	1,325	820	810	909	1,207	1,448
Alternative PC1LT3	0	377	414	1,346	1,325	820	862	953	1,247	1,765
Alternative PC2LT4	0	377	414	1,346	1,325	820	862	955	1,246	1,764
Alternative PC3LT5	0	377	414	1,346	1,325	820	862	956	1,245	1,763
Alternative PC6LT8	0	377	414	1,346	1,325	820	862	958	1,246	1,871

Table 138 - Estimated Average Per Vehicle Technology Costs ($), Light Truck Fleet for Manufacturer (Ford)

Estimated Average Per Vehicle Technology Costs ($), Light Truck Fleet for Manufacturer (Ford)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	0	874	1,591	1,664	1,757	1,400	1,308	1,202	1,105	1,028
Alternative PC2LT002	0	874	1,591	1,664	1,757	1,441	1,546	1,548	1,455	1,401
Alternative PC1LT3	0	874	1,591	1,664	1,757	1,910	2,168	2,298	2,186	2,097
Alternative PC2LT4	0	874	1,591	1,664	1,757	1,910	2,168	2,298	2,186	2,097
Alternative PC3LT5	0	874	1,591	1,664	1,757	1,910	2,168	2,298	2,186	2,097
Alternative PC6LT8	0	874	1,591	1,664	1,757	1,910	2,168	2,298	2,186	2,097

Table 139 - Estimated Average Per Vehicle Technology Costs ($), Light Truck Fleet for Manufacturer (GM)

Estimated Average Per Vehicle Technology Costs ($), Light Truck Fleet for Manufacturer (GM)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	0	263	2,086	2,751	2,650	2,440	2,335	2,297	2,249	2,211
Alternative PC2LT002	0	263	2,086	2,751	2,650	2,884	2,766	2,721	2,671	3,847
Alternative PC1LT3	0	263	2,086	2,751	2,650	2,884	2,766	2,721	2,671	3,846
Alternative PC2LT4	0	263	2,086	2,751	2,650	2,884	2,766	2,721	2,671	3,846
Alternative PC3LT5	0	263	2,086	2,751	2,650	2,884	2,766	2,721	2,671	3,846
Alternative PC6LT8	0	263	2,086	2,751	2,650	2,884	2,766	2,721	2,671	3,897

Table 140 - Estimated Average Per Vehicle Technology Costs ($), Light Truck Fleet for Manufacturer (Honda)

Estimated Average Per Vehicle Technology Costs ($), Light Truck Fleet for Manufacturer (Honda)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	0	585	656	1,047	1,324	1,101	1,161	1,185	1,212	1,226
Alternative PC2LT002	0	585	656	1,047	1,324	1,141	1,199	1,221	1,245	1,257
Alternative PC1LT3	0	585	656	1,047	1,324	1,088	1,181	1,275	1,334	1,339
Alternative PC2LT4	0	585	656	1,047	1,324	1,244	1,427	1,531	1,775	1,745
Alternative PC3LT5	0	585	656	1,047	1,324	1,327	1,560	1,656	2,005	1,958
Alternative PC6LT8	0	585	656	1,047	1,324	1,327	1,560	1,656	2,004	1,958

Table 141 - Estimated Average Per Vehicle Technology Costs ($), Light Truck Fleet for Manufacturer (Hyundai)

Estimated Average Per Vehicle Technology Costs ($), Light Truck Fleet for Manufacturer (Hyundai)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	0	113	188	1,304	1,062	907	831	741	794	915
Alternative PC2LT002	0	113	188	1,304	1,062	905	870	882	1,015	1,074
Alternative PC1LT3	0	113	188	1,304	1,062	1,148	1,230	1,335	1,517	1,608
Alternative PC2LT4	0	113	188	1,304	1,062	1,312	1,393	1,572	1,800	1,911
Alternative PC3LT5	0	113	188	1,304	1,062	1,552	1,677	1,967	4,258	5,022
Alternative PC6LT8	0	113	188	1,304	1,062	1,576	1,700	1,967	4,258	5,022

Table 142 - Estimated Average Per Vehicle Technology Costs ($), Light Truck Fleet for Manufacturer (KIA)

Estimated Average Per Vehicle Technology Costs ($), Light Truck Fleet for Manufacturer (KIA)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	0	213	194	302	828	729	778	713	787	921
Alternative PC2LT002	0	213	194	302	828	714	1,047	1,016	1,169	1,298
Alternative PC1LT3	0	213	194	302	828	714	1,220	1,187	1,808	1,947
Alternative PC2LT4	0	213	194	302	828	714	1,220	1,187	6,842	6,690
Alternative PC3LT5	0	213	194	302	828	714	1,220	1,187	6,842	7,008
Alternative PC6LT8	0	213	194	302	828	714	1,220	1,187	6,842	7,008

Table 143 - Estimated Average Per Vehicle Technology Costs ($), Light Truck Fleet for Manufacturer (JLR)

Estimated Average Per Vehicle Technology Costs ($), Light Truck Fleet for Manufacturer (JLR)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	0	1,490	2,077	2,111	1,415	939	814	665	722	726
Alternative PC2LT002	0	1,490	2,077	2,111	1,415	940	816	669	835	856
Alternative PC1LT3	0	1,490	2,077	2,111	1,415	940	816	668	834	3,198
Alternative PC2LT4	0	1,490	2,077	2,111	1,415	940	816	669	834	3,206
Alternative PC3LT5	0	1,490	2,077	2,111	1,415	940	816	668	834	3,197
Alternative PC6LT8	0	1,490	2,077	2,111	1,415	940	817	667	835	3,197

Table 144 - Estimated Average Per Vehicle Technology Costs ($), Light Truck Fleet for Manufacturer (Karma)

Estimated Average Per Vehicle Technology Costs ($), Light Truck Fleet for Manufacturer (Karma)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT002	0	0	0	0	0	0	0	0	0	0
Alternative PC1LT3	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT4	0	0	0	0	0	0	0	0	0	0
Alternative PC3LT5	0	0	0	0	0	0	0	0	0	0
Alternative PC6LT8	0	0	0	0	0	0	0	0	0	0

Table 145 - Estimated Average Per Vehicle Technology Costs ($), Light Truck Fleet for Manufacturer (Lucid)

Estimated Average Per Vehicle Technology Costs ($), Light Truck Fleet for Manufacturer (Lucid)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT002	0	0	0	0	0	0	0	0	0	0
Alternative PC1LT3	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT4	0	0	0	0	0	0	0	0	0	0
Alternative PC3LT5	0	0	0	0	0	0	0	0	0	0
Alternative PC6LT8	0	0	0	0	0	0	0	0	0	0

Table 146 - Estimated Average Per Vehicle Technology Costs ($), Light Truck Fleet for Manufacturer (Mazda)

Estimated Average Per Vehicle Technology Costs ($), Light Truck Fleet for Manufacturer (Mazda)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	0	1,153	1,239	1,312	1,415	1,268	1,335	1,389	1,460	1,526
Alternative PC2LT002	0	1,153	1,239	1,312	1,415	1,254	1,266	1,328	1,397	1,343
Alternative PC1LT3	0	1,153	1,239	1,312	1,415	1,257	1,267	1,330	1,403	1,348
Alternative PC2LT4	0	1,153	1,239	1,312	1,415	1,279	1,289	1,616	1,736	1,656
Alternative PC3LT5	0	1,153	1,239	1,312	1,415	1,384	1,388	2,016	2,185	2,073
Alternative PC6LT8	0	1,153	1,239	1,312	1,415	5,944	5,701	6,624	9,071	8,203

Table 147 - Estimated Average Per Vehicle Technology Costs ($), Light Truck Fleet for Manufacturer (Mercedes-Benz)

Estimated Average Per Vehicle Technology Costs ($), Light Truck Fleet for Manufacturer (Mercedes-Benz)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	0	544	574	686	1,178	1,354	1,388	1,381	1,447	1,791
Alternative PC2LT002	0	544	574	686	1,178	1,302	1,351	1,334	1,611	1,772
Alternative PC1LT3	0	544	574	686	1,178	1,302	1,479	1,461	1,793	1,938
Alternative PC2LT4	0	544	574	686	1,178	1,302	1,479	1,461	1,790	1,934
Alternative PC3LT5	0	544	574	686	1,178	1,302	1,479	1,461	1,789	1,932
Alternative PC6LT8	0	544	574	686	1,178	1,302	1,479	1,461	1,791	1,933

Table 148 - Estimated Average Per Vehicle Technology Costs ($), Light Truck Fleet for Manufacturer (Mitsubishi)

Estimated Average Per Vehicle Technology Costs ($), Light Truck Fleet for Manufacturer (Mitsubishi)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	0	93	208	3,203	2,445	2,266	1,995	1,813	1,660	1,533
Alternative PC2LT002	0	93	208	3,203	2,445	2,265	2,022	1,840	1,693	1,569
Alternative PC1LT3	0	93	208	3,203	2,445	2,265	2,029	1,847	1,699	1,576
Alternative PC2LT4	0	93	208	3,203	2,445	2,265	2,029	1,847	1,825	1,873
Alternative PC3LT5	0	93	208	3,203	2,445	2,265	2,180	1,996	2,110	2,142
Alternative PC6LT8	0	93	208	3,203	2,445	2,265	3,329	3,130	3,250	3,314

Table 149 - Estimated Average Per Vehicle Technology Costs ($), Light Truck Fleet for Manufacturer (Nissan)

Estimated Average Per Vehicle Technology Costs ($), Light Truck Fleet for Manufacturer (Nissan)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	0	571	688	1,268	1,218	1,469	1,637	1,529	1,505	1,533
Alternative PC2LT002	0	571	688	1,268	1,218	1,452	1,706	1,689	1,654	1,538
Alternative PC1LT3	0	571	688	1,268	1,218	1,452	2,322	2,296	2,360	2,208
Alternative PC2LT4	0	571	688	1,268	1,218	1,452	2,480	2,478	2,825	2,650
Alternative PC3LT5	0	571	688	1,268	1,218	1,452	2,480	2,478	2,968	2,787
Alternative PC6LT8	0	571	688	1,268	1,218	1,452	2,480	2,478	2,968	2,787

Table 150 - Estimated Average Per Vehicle Technology Costs ($), Light Truck Fleet for Manufacturer (Stellantis)

Estimated Average Per Vehicle Technology Costs ($), Light Truck Fleet for Manufacturer (Stellantis)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	0	863	1,415	2,337	1,922	1,463	1,373	1,362	1,302	1,379
Alternative PC2LT002	0	863	1,415	2,337	1,922	1,756	1,661	1,681	1,713	1,768
Alternative PC1LT3	0	863	1,415	2,337	1,922	1,712	1,619	1,740	1,793	1,845
Alternative PC2LT4	0	863	1,415	2,337	1,922	1,800	1,707	1,826	1,863	1,911
Alternative PC3LT5	0	863	1,415	2,337	1,922	1,849	1,755	1,874	1,899	1,945
Alternative PC6LT8	0	863	1,415	2,337	1,922	1,849	1,755	1,874	1,899	1,945

Table 151 - Estimated Average Per Vehicle Technology Costs ($), Light Truck Fleet for Manufacturer (Subaru)

Estimated Average Per Vehicle Technology Costs ($), Light Truck Fleet for Manufacturer (Subaru)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	0	284	337	379	618	736	907	1,034	1,166	1,270
Alternative PC2LT002	0	284	337	379	618	722	884	1,006	1,131	1,150
Alternative PC1LT3	0	284	337	379	618	721	882	1,004	1,129	1,147
Alternative PC2LT4	0	284	337	379	618	721	899	1,038	1,208	1,220
Alternative PC3LT5	0	284	337	379	618	722	994	1,238	1,483	1,509
Alternative PC6LT8	0	284	337	379	618	722	1,367	1,990	2,536	2,438

Table 152 - Estimated Average Per Vehicle Technology Costs ($), Light Truck Fleet for Manufacturer (Tesla)

Estimated Average Per Vehicle Technology Costs ($), Light Truck Fleet for Manufacturer (Tesla)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	0	135	217	297	292	288	283	279	274	270
Alternative PC2LT002	0	135	217	297	292	4	0	0	0	0
Alternative PC1LT3	0	135	217	297	292	4	0	0	0	0
Alternative PC2LT4	0	135	217	297	292	4	0	0	0	0
Alternative PC3LT5	0	135	217	297	292	4	0	0	0	0
Alternative PC6LT8	0	135	217	297	292	4	0	0	0	0

Table 153 - Estimated Average Per Vehicle Technology Costs ($), Light Truck Fleet for Manufacturer (Toyota)

Estimated Average Per Vehicle Technology Costs ($), Light Truck Fleet for Manufacturer (Toyota)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	0	165	458	567	1,021	546	644	757	867	973
Alternative PC2LT002	0	165	458	567	1,021	546	636	749	860	966
Alternative PC1LT3	0	165	458	567	1,021	550	674	837	1,007	1,104
Alternative PC2LT4	0	165	458	567	1,021	554	913	1,104	1,267	1,435
Alternative PC3LT5	0	165	458	567	1,021	554	914	1,104	1,267	1,664
Alternative PC6LT8	0	165	458	567	1,021	554	914	1,105	1,267	1,664

Table 154 - Estimated Average Per Vehicle Technology Costs ($), Light Truck Fleet for Manufacturer (Volvo)

Estimated Average Per Vehicle Technology Costs ($), Light Truck Fleet for Manufacturer (Volvo)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	0	174	230	1,394	952	522	382	219	75	-27
Alternative PC2LT002	0	174	230	1,394	952	506	366	203	372	228
Alternative PC1LT3	0	174	230	1,394	952	506	366	203	679	533
Alternative PC2LT4	0	174	230	1,394	952	506	366	203	827	680
Alternative PC3LT5	0	174	230	1,394	952	506	366	203	827	680
Alternative PC6LT8	0	174	230	1,394	952	643	502	424	912	764

Table 155 - Estimated Average Per Vehicle Technology Costs ($), Light Truck Fleet for Manufacturer (VWA)

Estimated Average Per Vehicle Technology Costs ($), Light Truck Fleet for Manufacturer (VWA)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	0	653	902	1,104	1,024	586	549	504	757	984
Alternative PC2LT002	0	653	902	1,104	1,024	645	636	619	1,038	1,244
Alternative PC1LT3	0	653	902	1,104	1,024	648	639	623	1,224	1,553
Alternative PC2LT4	0	653	902	1,104	1,024	648	639	623	1,223	1,551
Alternative PC3LT5	0	653	902	1,104	1,024	648	639	623	1,222	1,551
Alternative PC6LT8	0	653	902	1,104	1,024	648	639	623	1,223	1,551

Civil Penalties per Vehicle, by Model Year

Table 156 - Estimated Average Per Vehicle Civil Penalties Costs ($), Total Fleet for Manufacturer (Total)

Estimated Average Per Vehicle Civil Penalties Costs ($), Total Fleet for Manufacturer (Total)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	132	34	3	4	7	12	0	3	1	0
Alternative PC2LT002	132	34	3	4	7	20	15	39	44	17
Alternative PC1LT3	132	34	3	4	7	49	94	125	153	151
Alternative PC2LT4	132	34	3	4	7	70	138	195	256	284
Alternative PC3LT5	132	34	3	4	7	103	213	314	438	478
Alternative PC6LT8	132	34	3	4	7	253	573	898	1,289	1,560

Table 157 - Estimated Average Per Vehicle Civil Penalties Costs ($), Passenger Car Fleet for Manufacturer (Total)

Estimated Average Per Vehicle Civil Penalties Costs ($), Passenger Car Fleet for Manufacturer (Total)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	194	34	4	0	0	0	0	2	2	0
Alternative PC2LT002	194	34	4	0	0	13	45	54	37	6
Alternative PC1LT3	194	34	4	0	0	1	15	16	21	4
Alternative PC2LT4	194	34	4	0	0	13	45	54	37	6
Alternative PC3LT5	194	34	4	0	0	36	105	132	110	48
Alternative PC6LT8	194	34	4	0	0	160	377	572	761	736

Table 158 - Estimated Average Per Vehicle Civil Penalties Costs ($), Light Truck Fleet for Manufacturer (Total)

Estimated Average Per Vehicle Civil Penalties Costs ($), Light Truck Fleet for Manufacturer (Total)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	94	35	3	6	10	19	0	3	0	0
Alternative PC2LT002	94	35	3	6	10	24	0	32	48	23
Alternative PC1LT3	94	35	3	6	10	74	135	180	220	227
Alternative PC2LT4	94	35	3	6	10	99	186	267	370	428
Alternative PC3LT5	94	35	3	6	10	138	269	407	607	701
Alternative PC6LT8	94	35	3	6	10	300	673	1,062	1,561	1,987

Table 159 - Estimated Average Per Vehicle Civil Penalties Costs ($), Total Fleet for Manufacturer (BMW)

Estimated Average Per Vehicle Civil Penalties Costs ($), Total Fleet for Manufacturer (BMW)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	420	0	0	0	0	0	0	0	0	0
Alternative PC2LT002	420	0	0	0	0	0	0	30	16	0
Alternative PC1LT3	420	0	0	0	0	88	176	255	293	83
Alternative PC2LT4	420	0	0	0	0	125	245	369	447	286
Alternative PC3LT5	420	0	0	0	0	155	322	579	616	495
Alternative PC6LT8	420	0	0	0	0	266	745	1,404	1,828	1,869

Table 160 - Estimated Average Per Vehicle Civil Penalties Costs ($), Total Fleet for Manufacturer (Ford)

Estimated Average Per Vehicle Civil Penalties Costs ($), Total Fleet for Manufacturer (Ford)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	73	0	0	0	0	0	0	0	0	0
Alternative PC2LT002	73	0	0	0	0	0	0	0	0	0
Alternative PC1LT3	73	0	0	0	0	0	0	0	0	95
Alternative PC2LT4	73	0	0	0	0	0	0	0	125	434
Alternative PC3LT5	73	0	0	0	0	0	0	0	403	816
Alternative PC6LT8	73	0	0	0	0	0	290	581	1,443	2,210

Table 161 - Estimated Average Per Vehicle Civil Penalties Costs ($), Total Fleet for Manufacturer (GM)

Estimated Average Per Vehicle Civil Penalties Costs ($), Total Fleet for Manufacturer (GM)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	269	145	0	0	0	0	0	0	0	0
Alternative PC2LT002	269	145	0	0	0	2	33	102	218	107
Alternative PC1LT3	269	145	0	0	0	116	311	446	640	578
Alternative PC2LT4	269	145	0	0	0	164	440	607	868	860
Alternative PC3LT5	269	145	0	0	0	228	593	790	1,192	1,209
Alternative PC6LT8	269	145	0	0	0	402	1,067	1,528	2,296	2,577

Table 162 - Estimated Average Per Vehicle Civil Penalties Costs ($), Total Fleet for Manufacturer (Honda)

Estimated Average Per Vehicle Civil Penalties Costs ($), Total Fleet for Manufacturer (Honda)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT002	0	0	0	0	0	0	0	0	0	0
Alternative PC1LT3	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT4	0	0	0	0	0	0	0	0	0	0
Alternative PC3LT5	0	0	0	0	0	7	0	23	0	0
Alternative PC6LT8	0	0	0	0	0	259	232	425	480	770

Table 163 - Estimated Average Per Vehicle Civil Penalties Costs ($), Total Fleet for Manufacturer (Hyundai)

Estimated Average Per Vehicle Civil Penalties Costs ($), Total Fleet for Manufacturer (Hyundai)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT002	0	0	0	0	0	0	0	0	0	0
Alternative PC1LT3	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT4	0	0	0	0	0	0	0	0	0	0
Alternative PC3LT5	0	0	0	0	0	0	0	0	20	97
Alternative PC6LT8	0	0	0	0	0	0	401	514	1,120	1,440

Table 164 - Estimated Average Per Vehicle Civil Penalties Costs ($), Total Fleet for Manufacturer (KIA)

Estimated Average Per Vehicle Civil Penalties Costs ($), Total Fleet for Manufacturer (KIA)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT002	0	0	0	0	0	73	47	49	0	0
Alternative PC1LT3	0	0	0	0	0	136	93	180	0	0
Alternative PC2LT4	0	0	0	0	0	202	189	341	64	0
Alternative PC3LT5	0	0	0	0	0	292	348	574	227	49
Alternative PC6LT8	0	0	0	0	0	549	922	1,341	1,009	749

Table 165 - Estimated Average Per Vehicle Civil Penalties Costs ($), Total Fleet for Manufacturer (JLR)

Estimated Average Per Vehicle Civil Penalties Costs ($), Total Fleet for Manufacturer (JLR)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	478	0	0	0	0	0	0	0	0	0
Alternative PC2LT002	478	0	0	0	0	0	0	264	272	0
Alternative PC1LT3	478	0	0	0	0	43	389	747	860	531
Alternative PC2LT4	478	0	0	0	0	101	539	967	1,161	929
Alternative PC3LT5	478	0	0	0	0	174	689	1,205	1,500	1,349
Alternative PC6LT8	478	0	0	0	0	391	1,168	1,973	2,631	2,833

Table 166 - Estimated Average Per Vehicle Civil Penalties Costs ($), Total Fleet for Manufacturer (Karma)

Estimated Average Per Vehicle Civil Penalties Costs ($), Total Fleet for Manufacturer (Karma)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT002	0	0	0	0	0	0	0	0	0	0
Alternative PC1LT3	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT4	0	0	0	0	0	0	0	0	0	0
Alternative PC3LT5	0	0	0	0	0	0	0	0	0	0
Alternative PC6LT8	0	0	0	0	0	0	0	0	0	0

Table 167 - Estimated Average Per Vehicle Civil Penalties Costs ($), Total Fleet for Manufacturer (Lucid)

Estimated Average Per Vehicle Civil Penalties Costs ($), Total Fleet for Manufacturer (Lucid)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT002	0	0	0	0	0	0	0	0	0	0
Alternative PC1LT3	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT4	0	0	0	0	0	0	0	0	0	0
Alternative PC3LT5	0	0	0	0	0	0	0	0	0	0
Alternative PC6LT8	0	0	0	0	0	0	0	0	0	0

Table 168 - Estimated Average Per Vehicle Civil Penalties Costs ($), Total Fleet for Manufacturer (Mazda)

Estimated Average Per Vehicle Civil Penalties Costs ($), Total Fleet for Manufacturer (Mazda)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	0	88	0	0	0	0	0	0	0	0
Alternative PC2LT002	0	88	0	0	0	6	14	0	0	0
Alternative PC1LT3	0	88	0	0	0	0	0	0	0	0
Alternative PC2LT4	0	88	0	0	0	6	14	0	0	0
Alternative PC3LT5	0	88	0	0	0	20	41	0	0	0
Alternative PC6LT8	0	88	0	0	0	60	168	0	0	140

Table 169 - Estimated Average Per Vehicle Civil Penalties Costs ($), Total Fleet for Manufacturer (Mercedes-Benz)

Estimated Average Per Vehicle Civil Penalties Costs ($), Total Fleet for Manufacturer (Mercedes-Benz)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	618	0	0	209	374	224	0	8	0	0
Alternative PC2LT002	618	0	0	209	374	248	0	90	0	0
Alternative PC1LT3	618	0	0	209	374	352	175	309	209	213
Alternative PC2LT4	618	0	0	209	374	392	258	432	393	432
Alternative PC3LT5	618	0	0	209	374	432	341	564	584	676
Alternative PC6LT8	618	0	0	209	374	553	609	1,065	1,712	2,073

Table 170 - Estimated Average Per Vehicle Civil Penalties Costs ($), Total Fleet for Manufacturer (Mitsubishi)

Estimated Average Per Vehicle Civil Penalties Costs ($), Total Fleet for Manufacturer (Mitsubishi)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	217	149	93	0	0	0	0	0	0	0
Alternative PC2LT002	217	149	93	0	0	0	0	0	0	0
Alternative PC1LT3	217	149	93	0	0	0	0	0	0	0
Alternative PC2LT4	217	149	93	0	0	0	0	0	0	0
Alternative PC3LT5	217	149	93	0	0	0	0	0	0	0
Alternative PC6LT8	217	149	93	0	0	108	0	0	0	0

Table 171 - Estimated Average Per Vehicle Civil Penalties Costs ($), Total Fleet for Manufacturer (Nissan)

Estimated Average Per Vehicle Civil Penalties Costs ($), Total Fleet for Manufacturer (Nissan)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	33	0	0	0	0	121	0	0	0	0
Alternative PC2LT002	33	0	0	0	0	141	42	146	0	0
Alternative PC1LT3	33	0	0	0	0	228	0	41	0	0
Alternative PC2LT4	33	0	0	0	0	262	42	209	0	0
Alternative PC3LT5	33	0	0	0	0	296	176	436	85	55
Alternative PC6LT8	33	0	0	0	0	473	647	1,169	1,064	1,273

Table 172 - Estimated Average Per Vehicle Civil Penalties Costs ($), Total Fleet for Manufacturer (Stellantis)

Estimated Average Per Vehicle Civil Penalties Costs ($), Total Fleet for Manufacturer (Stellantis)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	446	52	24	0	0	0	0	3	5	1
Alternative PC2LT002	446	52	24	0	0	13	44	43	91	30
Alternative PC1LT3	446	52	24	0	0	3	253	156	346	409
Alternative PC2LT4	446	52	24	0	0	13	341	307	595	694
Alternative PC3LT5	446	52	24	0	0	48	457	498	900	1,059
Alternative PC6LT8	446	52	24	0	0	265	932	1,239	1,992	2,480

Table 173 - Estimated Average Per Vehicle Civil Penalties Costs ($), Total Fleet for Manufacturer (Subaru)

Estimated Average Per Vehicle Civil Penalties Costs ($), Total Fleet for Manufacturer (Subaru)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT002	0	0	0	0	0	0	0	0	0	0
Alternative PC1LT3	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT4	0	0	0	0	0	0	0	0	0	0
Alternative PC3LT5	0	0	0	0	0	0	0	0	0	0
Alternative PC6LT8	0	0	0	0	0	191	119	0	0	0

Table 174 - Estimated Average Per Vehicle Civil Penalties Costs ($), Total Fleet for Manufacturer (Tesla)

Estimated Average Per Vehicle Civil Penalties Costs ($), Total Fleet for Manufacturer (Tesla)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT002	0	0	0	0	0	0	0	0	0	0
Alternative PC1LT3	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT4	0	0	0	0	0	0	0	0	0	0
Alternative PC3LT5	0	0	0	0	0	0	0	0	0	0
Alternative PC6LT8	0	0	0	0	0	0	0	0	0	0

Table 175 - Estimated Average Per Vehicle Civil Penalties Costs ($), Total Fleet for Manufacturer (Toyota)

Estimated Average Per Vehicle Civil Penalties Costs ($), Total Fleet for Manufacturer (Toyota)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT002	0	0	0	0	0	3	6	3	0	0
Alternative PC1LT3	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT4	0	0	0	0	0	21	6	12	58	0
Alternative PC3LT5	0	0	0	0	0	76	109	189	269	131
Alternative PC6LT8	0	0	0	0	0	241	516	902	1,119	1,166

Table 176 - Estimated Average Per Vehicle Civil Penalties Costs ($), Total Fleet for Manufacturer (Volvo)

Estimated Average Per Vehicle Civil Penalties Costs ($), Total Fleet for Manufacturer (Volvo)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT002	0	0	0	0	0	0	0	0	0	0
Alternative PC1LT3	0	0	0	0	0	0	76	321	0	215
Alternative PC2LT4	0	0	0	0	0	0	175	492	154	429
Alternative PC3LT5	0	0	0	0	0	0	295	664	395	764
Alternative PC6LT8	0	0	0	0	0	0	569	1,084	1,382	2,109

Table 177 - Estimated Average Per Vehicle Civil Penalties Costs ($), Total Fleet for Manufacturer (VWA)

Estimated Average Per Vehicle Civil Penalties Costs ($), Total Fleet for Manufacturer (VWA)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	283	189	0	0	0	0	0	52	0	0
Alternative PC2LT002	283	189	0	0	0	21	0	123	80	0
Alternative PC1LT3	283	189	0	0	0	92	268	477	351	188
Alternative PC2LT4	283	189	0	0	0	159	364	582	562	451
Alternative PC3LT5	283	189	0	0	0	242	460	763	858	801
Alternative PC6LT8	283	189	0	0	0	493	787	1,476	1,963	2,272

Table 178 - Estimated Average Per Vehicle Civil Penalties Costs ($), Passenger Car Fleet for Manufacturer (BMW)

Estimated Average Per Vehicle Civil Penalties Costs ($), Passenger Car Fleet for Manufacturer (BMW)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	773	0	0	0	0	0	0	0	0	0
Alternative PC2LT002	773	0	0	0	0	0	0	0	0	0
Alternative PC1LT3	773	0	0	0	0	0	0	0	0	0
Alternative PC2LT4	773	0	0	0	0	0	0	0	0	0
Alternative PC3LT5	773	0	0	0	0	0	0	180	0	0
Alternative PC6LT8	773	0	0	0	0	0	352	1,064	1,296	1,343

Table 179 - Estimated Average Per Vehicle Civil Penalties Costs ($), Passenger Car Fleet for Manufacturer (Ford)

Estimated Average Per Vehicle Civil Penalties Costs ($), Passenger Car Fleet for Manufacturer (Ford)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT002	0	0	0	0	0	0	0	0	0	0
Alternative PC1LT3	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT4	0	0	0	0	0	0	0	0	0	0
Alternative PC3LT5	0	0	0	0	0	0	0	0	0	151
Alternative PC6LT8	0	0	0	0	0	0	0	0	1,096	1,871

Table 180 - Estimated Average Per Vehicle Civil Penalties Costs ($), Passenger Car Fleet for Manufacturer (GM)

Estimated Average Per Vehicle Civil Penalties Costs ($), Passenger Car Fleet for Manufacturer (GM)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	443	0	0	0	0	0	0	0	0	0
Alternative PC2LT002	443	0	0	0	0	8	152	38	0	0
Alternative PC1LT3	443	0	0	0	0	0	52	0	0	0
Alternative PC2LT4	443	0	0	0	0	8	152	38	0	0
Alternative PC3LT5	443	0	0	0	0	38	355	122	377	195
Alternative PC6LT8	443	0	0	0	0	142	992	980	1,788	1,705

Table 181 - Estimated Average Per Vehicle Civil Penalties Costs ($), Passenger Car Fleet for Manufacturer (Honda)

Estimated Average Per Vehicle Civil Penalties Costs ($), Passenger Car Fleet for Manufacturer (Honda)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	1	0	0	0	0	0	0	0	0	0
Alternative PC2LT002	1	0	0	0	0	0	0	0	0	0
Alternative PC1LT3	1	0	0	0	0	0	0	0	0	0
Alternative PC2LT4	1	0	0	0	0	0	0	0	0	0
Alternative PC3LT5	1	0	0	0	0	15	0	0	0	0
Alternative PC6LT8	1	0	0	0	0	296	0	0	0	0

Table 182 - Estimated Average Per Vehicle Civil Penalties Costs ($), Passenger Car Fleet for Manufacturer (Hyundai)

Estimated Average Per Vehicle Civil Penalties Costs ($), Passenger Car Fleet for Manufacturer (Hyundai)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT002	0	0	0	0	0	0	0	0	0	0
Alternative PC1LT3	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT4	0	0	0	0	0	0	0	0	0	0
Alternative PC3LT5	0	0	0	0	0	0	0	0	0	0
Alternative PC6LT8	0	0	0	0	0	0	415	334	1,046	1,197

Table 183 - Estimated Average Per Vehicle Civil Penalties Costs ($), Passenger Car Fleet for Manufacturer (KIA)

Estimated Average Per Vehicle Civil Penalties Costs ($), Passenger Car Fleet for Manufacturer (KIA)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT002	0	0	0	0	0	59	89	91	0	0
Alternative PC1LT3	0	0	0	0	0	0	41	0	0	0
Alternative PC2LT4	0	0	0	0	0	59	89	91	0	0
Alternative PC3LT5	0	0	0	0	0	163	253	319	0	0
Alternative PC6LT8	0	0	0	0	0	448	884	1,047	445	0

Table 184 - Estimated Average Per Vehicle Civil Penalties Costs ($), Passenger Car Fleet for Manufacturer (JLR)

Estimated Average Per Vehicle Civil Penalties Costs ($), Passenger Car Fleet for Manufacturer (JLR)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT002	0	0	0	0	0	0	0	0	0	0
Alternative PC1LT3	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT4	0	0	0	0	0	0	0	0	0	0
Alternative PC3LT5	0	0	0	0	0	0	0	150	309	332
Alternative PC6LT8	0	0	0	0	0	0	0	1,094	1,651	2,037

Table 185 - Estimated Average Per Vehicle Civil Penalties Costs ($), Passenger Car Fleet for Manufacturer (Karma)

Estimated Average Per Vehicle Civil Penalties Costs ($), Passenger Car Fleet for Manufacturer (Karma)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT002	0	0	0	0	0	0	0	0	0	0
Alternative PC1LT3	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT4	0	0	0	0	0	0	0	0	0	0
Alternative PC3LT5	0	0	0	0	0	0	0	0	0	0
Alternative PC6LT8	0	0	0	0	0	0	0	0	0	0

Table 186 - Estimated Average Per Vehicle Civil Penalties Costs ($), Passenger Car Fleet for Manufacturer (Lucid)

Estimated Average Per Vehicle Civil Penalties Costs ($), Passenger Car Fleet for Manufacturer (Lucid)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT002	0	0	0	0	0	0	0	0	0	0
Alternative PC1LT3	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT4	0	0	0	0	0	0	0	0	0	0
Alternative PC3LT5	0	0	0	0	0	0	0	0	0	0
Alternative PC6LT8	0	0	0	0	0	0	0	0	0	0

Table 187 - Estimated Average Per Vehicle Civil Penalties Costs ($), Passenger Car Fleet for Manufacturer (Mazda)

Estimated Average Per Vehicle Civil Penalties Costs ($), Passenger Car Fleet for Manufacturer (Mazda)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	0	590	0	0	0	0	0	0	0	0
Alternative PC2LT002	0	590	0	0	0	44	107	0	0	0
Alternative PC1LT3	0	590	0	0	0	0	0	0	0	0
Alternative PC2LT4	0	590	0	0	0	44	107	0	0	0
Alternative PC3LT5	0	590	0	0	0	148	306	0	0	0
Alternative PC6LT8	0	590	0	0	0	445	965	0	0	166

Table 188 - Estimated Average Per Vehicle Civil Penalties Costs ($), Passenger Car Fleet for Manufacturer (Mercedes-Benz)

Estimated Average Per Vehicle Civil Penalties Costs ($), Passenger Car Fleet for Manufacturer (Mercedes-Benz)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	885	0	0	0	0	0	0	0	0	0
Alternative PC2LT002	885	0	0	0	0	0	0	0	0	0
Alternative PC1LT3	885	0	0	0	0	0	0	0	0	0
Alternative PC2LT4	885	0	0	0	0	0	0	0	0	0
Alternative PC3LT5	885	0	0	0	0	0	0	0	0	0
Alternative PC6LT8	885	0	0	0	0	0	0	180	1,127	1,282

Table 189 - Estimated Average Per Vehicle Civil Penalties Costs ($), Passenger Car Fleet for Manufacturer (Mitsubishi)

Estimated Average Per Vehicle Civil Penalties Costs ($), Passenger Car Fleet for Manufacturer (Mitsubishi)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	386	272	0	0	0	0	0	0	0	0
Alternative PC2LT002	386	272	0	0	0	0	0	0	0	0
Alternative PC1LT3	386	272	0	0	0	0	0	0	0	0
Alternative PC2LT4	386	272	0	0	0	0	0	0	0	0
Alternative PC3LT5	386	272	0	0	0	0	0	0	0	0
Alternative PC6LT8	386	272	0	0	0	208	0	0	0	0

Table 190 - Estimated Average Per Vehicle Civil Penalties Costs ($), Passenger Car Fleet for Manufacturer (Nissan)

Estimated Average Per Vehicle Civil Penalties Costs ($), Passenger Car Fleet for Manufacturer (Nissan)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	56	0	0	0	0	0	0	0	0	0
Alternative PC2LT002	56	0	0	0	0	0	78	271	0	0
Alternative PC1LT3	56	0	0	0	0	0	0	76	0	0
Alternative PC2LT4	56	0	0	0	0	0	78	271	0	0
Alternative PC3LT5	56	0	0	0	0	0	222	488	156	0
Alternative PC6LT8	56	0	0	0	0	139	676	1,182	1,191	990

Table 191 - Estimated Average Per Vehicle Civil Penalties Costs ($), Passenger Car Fleet for Manufacturer (Stellantis)

Estimated Average Per Vehicle Civil Penalties Costs ($), Passenger Car Fleet for Manufacturer (Stellantis)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	1,635	154	87	0	0	0	0	22	38	10
Alternative PC2LT002	1,635	154	87	0	0	105	370	361	656	145
Alternative PC1LT3	1,635	154	87	0	0	26	198	89	282	92
Alternative PC2LT4	1,635	154	87	0	0	107	370	361	656	146
Alternative PC3LT5	1,635	154	87	0	0	181	553	634	1,045	420
Alternative PC6LT8	1,635	154	87	0	0	466	1,142	1,542	2,340	2,081

Table 192 - Estimated Average Per Vehicle Civil Penalties Costs ($), Passenger Car Fleet for Manufacturer (Subaru)

Estimated Average Per Vehicle Civil Penalties Costs ($), Passenger Car Fleet for Manufacturer (Subaru)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT002	0	0	0	0	0	0	0	0	0	0
Alternative PC1LT3	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT4	0	0	0	0	0	0	0	0	0	0
Alternative PC3LT5	0	0	0	0	0	0	0	0	0	0
Alternative PC6LT8	0	0	0	0	0	0	0	0	0	0

Table 193 - Estimated Average Per Vehicle Civil Penalties Costs ($), Passenger Car Fleet for Manufacturer (Tesla)

Estimated Average Per Vehicle Civil Penalties Costs ($), Passenger Car Fleet for Manufacturer (Tesla)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT002	0	0	0	0	0	0	0	0	0	0
Alternative PC1LT3	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT4	0	0	0	0	0	0	0	0	0	0
Alternative PC3LT5	0	0	0	0	0	0	0	0	0	0
Alternative PC6LT8	0	0	0	0	0	0	0	0	0	0

Table 194 - Estimated Average Per Vehicle Civil Penalties Costs ($), Passenger Car Fleet for Manufacturer (Toyota)

Estimated Average Per Vehicle Civil Penalties Costs ($), Passenger Car Fleet for Manufacturer (Toyota)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT002	0	0	0	0	0	7	15	7	0	0
Alternative PC1LT3	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT4	0	0	0	0	0	7	15	7	0	0
Alternative PC3LT5	0	0	0	0	0	30	61	79	0	0
Alternative PC6LT8	0	0	0	0	0	100	329	704	394	306

Table 195 - Estimated Average Per Vehicle Civil Penalties Costs ($), Passenger Car Fleet for Manufacturer (Volvo)

Estimated Average Per Vehicle Civil Penalties Costs ($), Passenger Car Fleet for Manufacturer (Volvo)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT002	0	0	0	0	0	0	0	0	0	0
Alternative PC1LT3	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT4	0	0	0	0	0	0	0	0	0	0
Alternative PC3LT5	0	0	0	0	0	0	0	0	0	84
Alternative PC6LT8	0	0	0	0	0	0	0	0	829	1,285

Table 196 - Estimated Average Per Vehicle Civil Penalties Costs ($), Passenger Car Fleet for Manufacturer (VWA)

Estimated Average Per Vehicle Civil Penalties Costs ($), Passenger Car Fleet for Manufacturer (VWA)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	658	468	0	0	0	0	0	14	0	0
Alternative PC2LT002	658	468	0	0	0	55	0	0	215	0
Alternative PC1LT3	658	468	0	0	0	0	0	97	215	0
Alternative PC2LT4	658	468	0	0	0	55	0	0	215	0
Alternative PC3LT5	658	468	0	0	0	151	0	56	416	182
Alternative PC6LT8	658	468	0	0	0	427	0	626	1,405	1,541

Table 197 - Estimated Average Per Vehicle Civil Penalties Costs ($), Light Truck Fleet for Manufacturer (BMW)

Estimated Average Per Vehicle Civil Penalties Costs ($), Light Truck Fleet for Manufacturer (BMW)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT002	0	0	0	0	0	0	0	60	31	0
Alternative PC1LT3	0	0	0	0	0	178	352	510	586	166
Alternative PC2LT4	0	0	0	0	0	252	490	734	895	573
Alternative PC3LT5	0	0	0	0	0	311	643	974	1,235	996
Alternative PC6LT8	0	0	0	0	0	534	1,133	1,739	2,361	2,399

Table 198 - Estimated Average Per Vehicle Civil Penalties Costs ($), Light Truck Fleet for Manufacturer (Ford)

Estimated Average Per Vehicle Civil Penalties Costs ($), Light Truck Fleet for Manufacturer (Ford)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	83	0	0	0	0	0	0	0	0	0
Alternative PC2LT002	83	0	0	0	0	0	0	0	0	0
Alternative PC1LT3	83	0	0	0	0	0	0	0	0	106
Alternative PC2LT4	83	0	0	0	0	0	0	0	139	483
Alternative PC3LT5	83	0	0	0	0	0	0	0	448	890
Alternative PC6LT8	83	0	0	0	0	0	322	644	1,481	2,248

Table 199 - Estimated Average Per Vehicle Civil Penalties Costs ($), Light Truck Fleet for Manufacturer (GM)

Estimated Average Per Vehicle Civil Penalties Costs ($), Light Truck Fleet for Manufacturer (GM)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	211	190	0	0	0	0	0	0	0	0
Alternative PC2LT002	211	190	0	0	0	0	0	120	278	136
Alternative PC1LT3	211	190	0	0	0	148	383	570	818	739
Alternative PC2LT4	211	190	0	0	0	208	521	764	1,111	1,101
Alternative PC3LT5	211	190	0	0	0	282	659	974	1,420	1,494
Alternative PC6LT8	211	190	0	0	0	474	1,087	1,679	2,438	2,821

Table 200 - Estimated Average Per Vehicle Civil Penalties Costs ($), Light Truck Fleet for Manufacturer (Honda)

Estimated Average Per Vehicle Civil Penalties Costs ($), Light Truck Fleet for Manufacturer (Honda)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT002	0	0	0	0	0	0	0	0	0	0
Alternative PC1LT3	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT4	0	0	0	0	0	0	0	0	0	0
Alternative PC3LT5	0	0	0	0	0	0	0	45	0	0
Alternative PC6LT8	0	0	0	0	0	222	459	839	957	1,539

Table 201 - Estimated Average Per Vehicle Civil Penalties Costs ($), Light Truck Fleet for Manufacturer (Hyundai)

Estimated Average Per Vehicle Civil Penalties Costs ($), Light Truck Fleet for Manufacturer (Hyundai)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT002	0	0	0	0	0	0	0	0	0	0
Alternative PC1LT3	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT4	0	0	0	0	0	0	0	0	0	0
Alternative PC3LT5	0	0	0	0	0	0	0	0	46	226
Alternative PC6LT8	0	0	0	0	0	0	383	749	1,219	1,765

Table 202 - Estimated Average Per Vehicle Civil Penalties Costs ($), Light Truck Fleet for Manufacturer (KIA)

Estimated Average Per Vehicle Civil Penalties Costs ($), Light Truck Fleet for Manufacturer (KIA)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT002	0	0	0	0	0	89	0	0	0	0
Alternative PC1LT3	0	0	0	0	0	296	153	390	0	0
Alternative PC2LT4	0	0	0	0	0	371	306	629	139	0
Alternative PC3LT5	0	0	0	0	0	445	459	869	494	106
Alternative PC6LT8	0	0	0	0	0	667	965	1,679	1,667	1,629

Table 203 - Estimated Average Per Vehicle Civil Penalties Costs ($), Light Truck Fleet for Manufacturer (JLR)

Estimated Average Per Vehicle Civil Penalties Costs ($), Light Truck Fleet for Manufacturer (JLR)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	492	0	0	0	0	0	0	0	0	0
Alternative PC2LT002	492	0	0	0	0	0	0	270	278	0
Alternative PC1LT3	492	0	0	0	0	44	398	764	880	543
Alternative PC2LT4	492	0	0	0	0	104	551	989	1,188	950
Alternative PC3LT5	492	0	0	0	0	178	705	1,229	1,528	1,373
Alternative PC6LT8	492	0	0	0	0	400	1,195	1,993	2,654	2,851

Table 204 - Estimated Average Per Vehicle Civil Penalties Costs ($), Light Truck Fleet for Manufacturer (Karma)

Estimated Average Per Vehicle Civil Penalties Costs ($), Light Truck Fleet for Manufacturer (Karma)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT002	0	0	0	0	0	0	0	0	0	0
Alternative PC1LT3	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT4	0	0	0	0	0	0	0	0	0	0
Alternative PC3LT5	0	0	0	0	0	0	0	0	0	0
Alternative PC6LT8	0	0	0	0	0	0	0	0	0	0

Table 205 - Estimated Average Per Vehicle Civil Penalties Costs ($), Light Truck Fleet for Manufacturer (Lucid)

Estimated Average Per Vehicle Civil Penalties Costs ($), Light Truck Fleet for Manufacturer (Lucid)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT002	0	0	0	0	0	0	0	0	0	0
Alternative PC1LT3	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT4	0	0	0	0	0	0	0	0	0	0
Alternative PC3LT5	0	0	0	0	0	0	0	0	0	0
Alternative PC6LT8	0	0	0	0	0	0	0	0	0	0

Table 206 - Estimated Average Per Vehicle Civil Penalties Costs ($), Light Truck Fleet for Manufacturer (Mazda)

Estimated Average Per Vehicle Civil Penalties Costs ($), Light Truck Fleet for Manufacturer (Mazda)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT002	0	0	0	0	0	0	0	0	0	0
Alternative PC1LT3	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT4	0	0	0	0	0	0	0	0	0	0
Alternative PC3LT5	0	0	0	0	0	0	0	0	0	0
Alternative PC6LT8	0	0	0	0	0	0	46	0	0	136

Table 207 - Estimated Average Per Vehicle Civil Penalties Costs ($), Light Truck Fleet for Manufacturer (Mercedes-Benz)

Estimated Average Per Vehicle Civil Penalties Costs ($), Light Truck Fleet for Manufacturer (Mercedes-Benz)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	351	0	0	393	697	415	0	15	0	0
Alternative PC2LT002	351	0	0	393	697	460	0	165	0	0
Alternative PC1LT3	351	0	0	393	697	652	322	570	386	392
Alternative PC2LT4	351	0	0	393	697	726	475	794	725	800
Alternative PC3LT5	351	0	0	393	697	800	628	1,034	1,080	1,252
Alternative PC6LT8	351	0	0	393	697	1,023	1,118	1,798	2,207	2,746

Table 208 - Estimated Average Per Vehicle Civil Penalties Costs ($), Light Truck Fleet for Manufacturer (Mitsubishi)

Estimated Average Per Vehicle Civil Penalties Costs ($), Light Truck Fleet for Manufacturer (Mitsubishi)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	0	0	204	0	0	0	0	0	0	0
Alternative PC2LT002	0	0	204	0	0	0	0	0	0	0
Alternative PC1LT3	0	0	204	0	0	0	0	0	0	0
Alternative PC2LT4	0	0	204	0	0	0	0	0	0	0
Alternative PC3LT5	0	0	204	0	0	0	0	0	0	0
Alternative PC6LT8	0	0	204	0	0	0	0	0	0	0

Table 209 - Estimated Average Per Vehicle Civil Penalties Costs ($), Light Truck Fleet for Manufacturer (Nissan)

Estimated Average Per Vehicle Civil Penalties Costs ($), Light Truck Fleet for Manufacturer (Nissan)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	0	0	0	0	0	267	0	0	0	0
Alternative PC2LT002	0	0	0	0	0	311	0	0	0	0
Alternative PC1LT3	0	0	0	0	0	504	0	0	0	0
Alternative PC2LT4	0	0	0	0	0	578	0	135	0	0
Alternative PC3LT5	0	0	0	0	0	652	123	375	0	121
Alternative PC6LT8	0	0	0	0	0	875	613	1,154	910	1,614

Table 210 - Estimated Average Per Vehicle Civil Penalties Costs ($), Light Truck Fleet for Manufacturer (Stellantis)

Estimated Average Per Vehicle Civil Penalties Costs ($), Light Truck Fleet for Manufacturer (Stellantis)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	253	36	15	0	0	0	0	0	0	0
Alternative PC2LT002	253	36	15	0	0	0	0	0	15	15
Alternative PC1LT3	253	36	15	0	0	0	260	165	355	453
Alternative PC2LT4	253	36	15	0	0	0	337	300	586	769
Alternative PC3LT5	253	36	15	0	0	30	444	480	880	1,147
Alternative PC6LT8	253	36	15	0	0	237	904	1,199	1,944	2,535

Table 211 - Estimated Average Per Vehicle Civil Penalties Costs ($), Light Truck Fleet for Manufacturer (Subaru)

Estimated Average Per Vehicle Civil Penalties Costs ($), Light Truck Fleet for Manufacturer (Subaru)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT002	0	0	0	0	0	0	0	0	0	0
Alternative PC1LT3	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT4	0	0	0	0	0	0	0	0	0	0
Alternative PC3LT5	0	0	0	0	0	0	0	0	0	0
Alternative PC6LT8	0	0	0	0	0	222	138	0	0	0

Table 212 - Estimated Average Per Vehicle Civil Penalties Costs ($), Light Truck Fleet for Manufacturer (Tesla)

Estimated Average Per Vehicle Civil Penalties Costs ($), Light Truck Fleet for Manufacturer (Tesla)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT002	0	0	0	0	0	0	0	0	0	0
Alternative PC1LT3	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT4	0	0	0	0	0	0	0	0	0	0
Alternative PC3LT5	0	0	0	0	0	0	0	0	0	0
Alternative PC6LT8	0	0	0	0	0	0	0	0	0	0

Table 213 - Estimated Average Per Vehicle Civil Penalties Costs ($), Light Truck Fleet for Manufacturer (Toyota)

Estimated Average Per Vehicle Civil Penalties Costs ($), Light Truck Fleet for Manufacturer (Toyota)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT002	0	0	0	0	0	0	0	0	0	0
Alternative PC1LT3	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT4	0	0	0	0	0	30	0	15	93	0
Alternative PC3LT5	0	0	0	0	0	104	138	255	432	211
Alternative PC6LT8	0	0	0	0	0	326	628	1,019	1,559	1,690

Table 214 - Estimated Average Per Vehicle Civil Penalties Costs ($), Light Truck Fleet for Manufacturer (Volvo)

Estimated Average Per Vehicle Civil Penalties Costs ($), Light Truck Fleet for Manufacturer (Volvo)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT002	0	0	0	0	0	0	0	0	0	0
Alternative PC1LT3	0	0	0	0	0	0	107	450	0	302
Alternative PC2LT4	0	0	0	0	0	0	245	689	216	603
Alternative PC3LT5	0	0	0	0	0	0	414	929	556	1,041
Alternative PC6LT8	0	0	0	0	0	0	796	1,514	1,605	2,444

Table 215 - Estimated Average Per Vehicle Civil Penalties Costs ($), Light Truck Fleet for Manufacturer (VWA)

Estimated Average Per Vehicle Civil Penalties Costs ($), Light Truck Fleet for Manufacturer (VWA)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	14	0	0	0	0	0	0	75	0	0
Alternative PC2LT002	14	0	0	0	0	0	0	195	0	0
Alternative PC1LT3	14	0	0	0	0	148	429	704	432	302
Alternative PC2LT4	14	0	0	0	0	222	582	929	772	724
Alternative PC3LT5	14	0	0	0	0	296	735	1,184	1,127	1,177
Alternative PC6LT8	14	0	0	0	0	534	1,256	1,978	2,299	2,716

Regulatory Costs per Vehicle, by Model Year

Table 216 - Estimated Average Per Vehicle Regulatory Costs ($), Total Fleet for Manufacturer (Total)

Estimated Average Per Vehicle Regulatory Costs ($), Total Fleet for Manufacturer (Total)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	132	503	997	1,362	1,376	1,185	1,144	1,120	1,119	1,149
Alternative PC2LT002	132	503	997	1,362	1,376	1,314	1,338	1,403	1,439	1,541
Alternative PC1LT3	132	503	997	1,362	1,376	1,358	1,460	1,537	1,618	1,756
Alternative PC2LT4	132	503	997	1,362	1,376	1,410	1,594	1,738	1,975	2,141
Alternative PC3LT5	132	503	997	1,362	1,376	1,487	1,726	1,935	2,314	2,575
Alternative PC6LT8	132	503	997	1,362	1,376	1,725	2,233	2,724	3,441	3,951

Table 217 - Estimated Average Per Vehicle Regulatory Costs ($), Passenger Car Fleet for Manufacturer (Total)

Estimated Average Per Vehicle Regulatory Costs ($), Passenger Car Fleet for Manufacturer (Total)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	152	434	862	1,093	1,047	1,007	924	866	836	834
Alternative PC2LT002	152	434	862	1,093	1,047	1,143	1,151	1,264	1,249	1,191
Alternative PC1LT3	152	434	862	1,093	1,047	1,079	1,058	1,078	1,056	1,002
Alternative PC2LT4	152	434	862	1,093	1,047	1,135	1,202	1,337	1,342	1,284
Alternative PC3LT5	152	434	862	1,093	1,047	1,254	1,379	1,589	1,648	1,682
Alternative PC6LT8	152	434	862	1,093	1,047	1,544	1,996	2,516	2,872	3,137

Table 218 - Estimated Average Per Vehicle Regulatory Costs ($), Light Truck Fleet for Manufacturer (Total)

Estimated Average Per Vehicle Regulatory Costs ($), Light Truck Fleet for Manufacturer (Total)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	119	543	1,074	1,506	1,548	1,277	1,257	1,249	1,263	1,308
Alternative PC2LT002	119	543	1,074	1,506	1,548	1,403	1,432	1,473	1,534	1,718
Alternative PC1LT3	119	543	1,074	1,506	1,548	1,503	1,666	1,772	1,906	2,144
Alternative PC2LT4	119	543	1,074	1,506	1,548	1,553	1,795	1,942	2,302	2,585
Alternative PC3LT5	119	543	1,074	1,506	1,548	1,608	1,903	2,111	2,658	3,039
Alternative PC6LT8	119	543	1,074	1,506	1,548	1,818	2,353	2,829	3,735	4,373

Table 219 - Estimated Average Per Vehicle Regulatory Costs ($), Total Fleet for Manufacturer (BMW)

Estimated Average Per Vehicle Regulatory Costs ($), Total Fleet for Manufacturer (BMW)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	420	524	1,110	1,576	1,340	1,032	926	943	1,131	1,286
Alternative PC2LT002	420	524	1,110	1,576	1,340	1,022	966	1,019	1,210	1,303
Alternative PC1LT3	420	524	1,110	1,576	1,340	1,098	1,136	1,226	1,444	1,485
Alternative PC2LT4	420	524	1,110	1,576	1,340	1,151	1,240	1,378	1,658	1,741
Alternative PC3LT5	420	524	1,110	1,576	1,340	1,186	1,346	1,620	1,956	2,075
Alternative PC6LT8	420	524	1,110	1,576	1,340	1,307	1,785	2,463	3,189	3,591

Table 220 - Estimated Average Per Vehicle Regulatory Costs ($), Total Fleet for Manufacturer (Ford)

Estimated Average Per Vehicle Regulatory Costs ($), Total Fleet for Manufacturer (Ford)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	73	787	1,570	1,663	1,694	1,360	1,266	1,157	1,059	982
Alternative PC2LT002	73	787	1,570	1,663	1,694	1,467	1,549	1,536	1,443	1,382
Alternative PC1LT3	73	787	1,570	1,663	1,694	1,858	2,078	2,183	2,070	2,081
Alternative PC2LT4	73	787	1,570	1,663	1,694	1,889	2,109	2,213	2,226	2,442
Alternative PC3LT5	73	787	1,570	1,663	1,694	1,902	2,121	2,225	2,516	2,835
Alternative PC6LT8	73	787	1,570	1,663	1,694	1,902	2,412	2,807	3,557	4,230

Table 221 - Estimated Average Per Vehicle Regulatory Costs ($), Total Fleet for Manufacturer (GM)

Estimated Average Per Vehicle Regulatory Costs ($), Total Fleet for Manufacturer (GM)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	269	358	1,880	2,440	2,349	2,160	2,058	2,017	1,963	1,930
Alternative PC2LT002	269	358	1,880	2,440	2,349	2,538	2,458	2,669	2,738	3,572
Alternative PC1LT3	269	358	1,880	2,440	2,349	2,650	2,733	2,915	3,058	3,906
Alternative PC2LT4	269	358	1,880	2,440	2,349	2,698	2,864	3,173	3,385	4,314
Alternative PC3LT5	269	358	1,880	2,440	2,349	2,764	3,017	3,356	3,713	4,862
Alternative PC6LT8	269	358	1,880	2,440	2,349	2,938	3,492	4,095	4,818	6,269

Table 222 - Estimated Average Per Vehicle Regulatory Costs ($), Total Fleet for Manufacturer (Honda)

Estimated Average Per Vehicle Regulatory Costs ($), Total Fleet for Manufacturer (Honda)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	0	560	610	1,040	1,144	1,001	1,013	1,007	1,001	985
Alternative PC2LT002	0	560	610	1,040	1,144	1,301	1,285	1,254	1,221	1,127
Alternative PC1LT3	0	560	610	1,040	1,144	1,038	1,055	1,075	1,072	988
Alternative PC2LT4	0	560	610	1,040	1,144	1,108	1,172	1,197	1,287	1,184
Alternative PC3LT5	0	560	610	1,040	1,144	1,386	1,483	1,509	1,607	1,475
Alternative PC6LT8	0	560	610	1,040	1,144	1,638	1,933	2,272	2,424	2,555

Table 223 - Estimated Average Per Vehicle Regulatory Costs ($), Total Fleet for Manufacturer (Hyundai)

Estimated Average Per Vehicle Regulatory Costs ($), Total Fleet for Manufacturer (Hyundai)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	0	262	458	937	1,000	923	839	775	798	875
Alternative PC2LT002	0	262	458	937	1,000	1,099	1,027	1,112	1,155	1,218
Alternative PC1LT3	0	262	458	937	1,000	1,094	1,076	1,145	1,245	1,327
Alternative PC2LT4	0	262	458	937	1,000	1,273	1,252	1,411	1,492	1,551
Alternative PC3LT5	0	262	458	937	1,000	1,416	1,414	1,763	2,738	3,250
Alternative PC6LT8	0	262	458	937	1,000	2,035	2,415	2,925	4,459	5,181

Table 224 - Estimated Average Per Vehicle Regulatory Costs ($), Total Fleet for Manufacturer (KIA)

Estimated Average Per Vehicle Regulatory Costs ($), Total Fleet for Manufacturer (KIA)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	0	132	375	514	677	639	634	588	631	716
Alternative PC2LT002	0	132	375	514	677	705	1,360	1,763	1,829	1,850
Alternative PC1LT3	0	132	375	514	677	768	1,026	1,171	1,319	1,412
Alternative PC2LT4	0	132	375	514	677	834	1,583	2,138	4,517	4,340
Alternative PC3LT5	0	132	375	514	677	925	1,745	2,442	4,847	4,691
Alternative PC6LT8	0	132	375	514	677	1,181	2,317	3,264	5,815	5,730

Table 225 - Estimated Average Per Vehicle Regulatory Costs ($), Total Fleet for Manufacturer (JLR)

Estimated Average Per Vehicle Regulatory Costs ($), Total Fleet for Manufacturer (JLR)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	478	1,565	2,130	2,156	1,449	980	850	697	749	752
Alternative PC2LT002	478	1,565	2,130	2,156	1,449	978	850	962	1,135	881
Alternative PC1LT3	478	1,565	2,130	2,156	1,449	1,021	1,239	1,445	1,719	3,697
Alternative PC2LT4	478	1,565	2,130	2,156	1,449	1,079	1,389	1,665	2,025	4,106
Alternative PC3LT5	478	1,565	2,130	2,156	1,449	1,151	1,539	1,902	2,363	4,518
Alternative PC6LT8	478	1,565	2,130	2,156	1,449	1,369	2,018	2,670	3,495	6,001

Table 226 - Estimated Average Per Vehicle Regulatory Costs ($), Total Fleet for Manufacturer (Karma)

Estimated Average Per Vehicle Regulatory Costs ($), Total Fleet for Manufacturer (Karma)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	0	0	0	0	-3,300	-3,693	-3,948	-4,296	-4,602	-4,776
Alternative PC2LT002	0	0	0	0	-3,300	-3,693	-3,948	-4,296	-4,602	-4,776
Alternative PC1LT3	0	0	0	0	-3,300	-3,693	-3,948	-4,296	-4,602	-4,776
Alternative PC2LT4	0	0	0	0	-3,300	-3,693	-3,948	-4,296	-4,602	-4,776
Alternative PC3LT5	0	0	0	0	-3,300	-3,693	-3,948	-4,296	-4,602	-4,776
Alternative PC6LT8	0	0	0	0	-3,300	-3,693	-3,948	-4,296	-4,602	-4,776

Table 227 - Estimated Average Per Vehicle Regulatory Costs ($), Total Fleet for Manufacturer (Lucid)

Estimated Average Per Vehicle Regulatory Costs ($), Total Fleet for Manufacturer (Lucid)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT002	0	0	0	0	0	0	0	0	0	0
Alternative PC1LT3	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT4	0	0	0	0	0	0	0	0	0	0
Alternative PC3LT5	0	0	0	0	0	0	0	0	0	0
Alternative PC6LT8	0	0	0	0	0	0	0	0	0	0

Table 228 - Estimated Average Per Vehicle Regulatory Costs ($), Total Fleet for Manufacturer (Mazda)

Estimated Average Per Vehicle Regulatory Costs ($), Total Fleet for Manufacturer (Mazda)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	0	1,102	1,198	1,281	1,354	1,212	1,272	1,316	1,378	1,436
Alternative PC2LT002	0	1,102	1,198	1,281	1,354	1,235	1,264	1,318	1,374	1,323
Alternative PC1LT3	0	1,102	1,198	1,281	1,354	1,231	1,239	1,289	1,351	1,301
Alternative PC2LT4	0	1,102	1,198	1,281	1,354	1,257	1,285	1,568	1,667	1,593
Alternative PC3LT5	0	1,102	1,198	1,281	1,354	1,362	1,397	1,946	2,084	1,981
Alternative PC6LT8	0	1,102	1,198	1,281	1,354	5,348	5,265	7,018	9,040	8,310

Table 229 - Estimated Average Per Vehicle Regulatory Costs ($), Total Fleet for Manufacturer (Mercedes-Benz)

Estimated Average Per Vehicle Regulatory Costs ($), Total Fleet for Manufacturer (Mercedes-Benz)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	618	925	947	1,358	1,926	1,754	1,442	1,332	1,311	1,561
Alternative PC2LT002	618	925	947	1,358	1,926	1,674	1,344	1,313	1,326	1,470
Alternative PC1LT3	618	925	947	1,358	1,926	1,778	1,588	1,600	1,627	1,765
Alternative PC2LT4	618	925	947	1,358	1,926	1,818	1,671	1,723	1,807	1,980
Alternative PC3LT5	618	925	947	1,358	1,926	1,860	1,756	1,870	2,039	2,260
Alternative PC6LT8	618	925	947	1,358	1,926	1,997	2,041	2,413	3,216	3,727

Table 230 - Estimated Average Per Vehicle Regulatory Costs ($), Total Fleet for Manufacturer (Mitsubishi)

Estimated Average Per Vehicle Regulatory Costs ($), Total Fleet for Manufacturer (Mitsubishi)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	217	233	1,377	2,723	2,018	1,846	1,616	1,434	1,279	1,154
Alternative PC2LT002	217	233	1,377	2,723	2,018	1,834	1,660	1,477	1,328	1,246
Alternative PC1LT3	217	233	1,377	2,723	2,018	1,833	1,631	1,448	1,298	1,176
Alternative PC2LT4	217	233	1,377	2,723	2,018	1,833	1,662	1,478	1,387	1,353
Alternative PC3LT5	217	233	1,377	2,723	2,018	1,834	1,768	1,582	1,661	1,630
Alternative PC6LT8	217	233	1,377	2,723	2,018	1,942	2,770	2,574	2,676	2,708

Table 231 - Estimated Average Per Vehicle Regulatory Costs ($), Total Fleet for Manufacturer (Nissan)

Estimated Average Per Vehicle Regulatory Costs ($), Total Fleet for Manufacturer (Nissan)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	33	651	825	1,227	1,176	1,464	1,364	1,254	1,233	1,238
Alternative PC2LT002	33	651	825	1,227	1,176	1,458	1,419	1,457	1,413	1,362
Alternative PC1LT3	33	651	825	1,227	1,176	1,544	1,675	1,644	1,635	1,552
Alternative PC2LT4	33	651	825	1,227	1,176	1,578	1,809	1,916	1,979	1,879
Alternative PC3LT5	33	651	825	1,227	1,176	1,612	1,952	2,152	2,220	2,143
Alternative PC6LT8	33	651	825	1,227	1,176	1,790	2,507	2,968	3,277	3,600

Table 232 - Estimated Average Per Vehicle Regulatory Costs ($), Total Fleet for Manufacturer (Stellantis)

Estimated Average Per Vehicle Regulatory Costs ($), Total Fleet for Manufacturer (Stellantis)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	446	898	1,659	2,479	2,028	1,596	1,492	1,470	1,406	1,476
Alternative PC2LT002	446	898	1,659	2,479	2,028	1,861	1,795	1,816	1,881	1,897
Alternative PC1LT3	446	898	1,659	2,479	2,028	1,812	1,968	1,982	2,208	2,329
Alternative PC2LT4	446	898	1,659	2,479	2,028	1,900	2,133	2,209	2,518	2,689
Alternative PC3LT5	446	898	1,659	2,479	2,028	1,978	2,292	2,442	2,854	3,099
Alternative PC6LT8	446	898	1,659	2,479	2,028	2,194	2,766	3,182	3,947	4,521

Table 233 - Estimated Average Per Vehicle Regulatory Costs ($), Total Fleet for Manufacturer (Subaru)

Estimated Average Per Vehicle Regulatory Costs ($), Total Fleet for Manufacturer (Subaru)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	0	460	494	638	757	841	970	1,059	1,154	1,227
Alternative PC2LT002	0	460	494	638	757	816	935	1,020	1,108	1,108
Alternative PC1LT3	0	460	494	638	757	815	934	1,018	1,105	1,105
Alternative PC2LT4	0	460	494	638	757	815	949	1,047	1,174	1,167
Alternative PC3LT5	0	460	494	638	757	816	1,031	1,220	1,417	1,421
Alternative PC6LT8	0	460	494	638	757	1,007	1,479	1,914	2,384	2,277

Table 234 - Estimated Average Per Vehicle Regulatory Costs ($), Total Fleet for Manufacturer (Tesla)

Estimated Average Per Vehicle Regulatory Costs ($), Total Fleet for Manufacturer (Tesla)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	0	7	11	16	16	15	15	15	15	15
Alternative PC2LT002	0	7	11	16	16	0	0	0	0	0
Alternative PC1LT3	0	7	11	16	16	0	0	0	0	0
Alternative PC2LT4	0	7	11	16	16	0	0	0	0	0
Alternative PC3LT5	0	7	11	16	16	0	0	0	0	0
Alternative PC6LT8	0	7	11	16	16	0	0	0	0	0

Table 235 - Estimated Average Per Vehicle Regulatory Costs ($), Total Fleet for Manufacturer (Toyota)

Estimated Average Per Vehicle Regulatory Costs ($), Total Fleet for Manufacturer (Toyota)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	0	234	492	644	963	662	732	798	865	928
Alternative PC2LT002	0	234	492	644	963	642	705	766	828	849
Alternative PC1LT3	0	234	492	644	963	641	724	819	918	932
Alternative PC2LT4	0	234	492	644	963	665	879	1,000	1,149	1,151
Alternative PC3LT5	0	234	492	644	963	720	982	1,177	1,376	1,458
Alternative PC6LT8	0	234	492	644	963	886	1,429	1,946	2,477	2,825

Table 236 - Estimated Average Per Vehicle Regulatory Costs ($), Total Fleet for Manufacturer (Volvo)

Estimated Average Per Vehicle Regulatory Costs ($), Total Fleet for Manufacturer (Volvo)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	0	140	195	1,128	1,041	677	531	363	219	115
Alternative PC2LT002	0	140	195	1,128	1,041	622	477	310	390	257
Alternative PC1LT3	0	140	195	1,128	1,041	622	554	632	609	689
Alternative PC2LT4	0	140	195	1,128	1,041	622	652	803	868	1,008
Alternative PC3LT5	0	140	195	1,128	1,041	622	773	974	1,119	1,356
Alternative PC6LT8	0	140	195	1,128	1,041	720	1,144	1,551	2,166	2,761

Table 237 - Estimated Average Per Vehicle Regulatory Costs ($), Total Fleet for Manufacturer (VWA)

Estimated Average Per Vehicle Regulatory Costs ($), Total Fleet for Manufacturer (VWA)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	283	647	946	1,142	1,138	817	776	743	875	1,042
Alternative PC2LT002	283	647	946	1,142	1,138	870	997	1,049	1,283	1,370
Alternative PC1LT3	283	647	946	1,142	1,138	938	1,176	1,317	1,585	1,658
Alternative PC2LT4	283	647	946	1,142	1,138	1,011	1,365	1,513	1,882	2,016
Alternative PC3LT5	283	647	946	1,142	1,138	1,093	1,514	1,747	2,228	2,436
Alternative PC6LT8	283	647	946	1,142	1,138	1,344	1,915	2,532	3,404	3,967

Table 238 - Estimated Average Per Vehicle Regulatory Costs ($), Passenger Car Fleet for Manufacturer (BMW)

Estimated Average Per Vehicle Regulatory Costs ($), Passenger Car Fleet for Manufacturer (BMW)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	594	655	1,742	1,797	1,356	1,243	1,103	1,038	1,109	1,170
Alternative PC2LT002	594	655	1,742	1,797	1,356	1,223	1,124	1,108	1,202	1,155
Alternative PC1LT3	594	655	1,742	1,797	1,356	1,303	1,263	1,270	1,363	1,132
Alternative PC2LT4	594	655	1,742	1,797	1,356	1,374	1,403	1,453	1,620	1,449
Alternative PC3LT5	594	655	1,742	1,797	1,356	1,419	1,539	1,726	2,001	1,875
Alternative PC6LT8	594	655	1,742	1,797	1,356	1,562	2,013	2,583	3,166	3,327

Table 239 - Estimated Average Per Vehicle Regulatory Costs ($), Passenger Car Fleet for Manufacturer (Ford)

Estimated Average Per Vehicle Regulatory Costs ($), Passenger Car Fleet for Manufacturer (Ford)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	127	93	1,401	1,657	1,130	1,000	882	750	639	557
Alternative PC2LT002	127	93	1,401	1,657	1,130	1,701	1,573	1,432	1,339	1,204
Alternative PC1LT3	127	93	1,401	1,657	1,130	1,399	1,271	1,135	1,018	1,105
Alternative PC2LT4	127	93	1,401	1,657	1,130	1,701	1,573	1,432	1,480	1,658
Alternative PC3LT5	127	93	1,401	1,657	1,130	1,832	1,702	1,560	1,885	2,123
Alternative PC6LT8	127	93	1,401	1,657	1,130	1,832	2,008	2,211	2,985	3,516

Table 240 - Estimated Average Per Vehicle Regulatory Costs ($), Passenger Car Fleet for Manufacturer (GM)

Estimated Average Per Vehicle Regulatory Costs ($), Passenger Car Fleet for Manufacturer (GM)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	391	268	1,209	1,368	1,290	1,162	1,056	1,000	924	901
Alternative PC2LT002	391	268	1,209	1,368	1,290	1,299	1,248	2,156	2,278	2,219
Alternative PC1LT3	391	268	1,209	1,368	1,290	1,475	1,634	2,063	2,171	2,059
Alternative PC2LT4	391	268	1,209	1,368	1,290	1,547	1,813	2,664	2,825	2,856
Alternative PC3LT5	391	268	1,209	1,368	1,290	1,642	2,020	2,865	3,179	4,040
Alternative PC6LT8	391	268	1,209	1,368	1,290	1,892	2,638	3,677	4,365	5,406

Table 241 - Estimated Average Per Vehicle Regulatory Costs ($), Passenger Car Fleet for Manufacturer (Honda)

Estimated Average Per Vehicle Regulatory Costs ($), Passenger Car Fleet for Manufacturer (Honda)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	0	538	568	1,033	966	901	861	824	784	737
Alternative PC2LT002	0	538	568	1,033	966	1,461	1,372	1,287	1,196	993
Alternative PC1LT3	0	538	568	1,033	966	988	929	871	807	633
Alternative PC2LT4	0	538	568	1,033	966	972	914	858	795	622
Alternative PC3LT5	0	538	568	1,033	966	1,440	1,405	1,339	1,209	993
Alternative PC6LT8	0	538	568	1,033	966	1,733	2,074	2,409	2,330	2,326

Table 242 - Estimated Average Per Vehicle Regulatory Costs ($), Passenger Car Fleet for Manufacturer (Hyundai)

Estimated Average Per Vehicle Regulatory Costs ($), Passenger Car Fleet for Manufacturer (Hyundai)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	0	362	642	671	954	935	846	801	800	844
Alternative PC2LT002	0	362	642	671	954	1,243	1,146	1,288	1,262	1,329
Alternative PC1LT3	0	362	642	671	954	1,054	959	1,002	1,041	1,116
Alternative PC2LT4	0	362	642	671	954	1,243	1,146	1,288	1,261	1,281
Alternative PC3LT5	0	362	642	671	954	1,315	1,216	1,607	1,588	1,861
Alternative PC6LT8	0	362	642	671	954	2,378	2,705	3,291	3,815	4,213

Table 243 - Estimated Average Per Vehicle Regulatory Costs ($), Passenger Car Fleet for Manufacturer (KIA)

Estimated Average Per Vehicle Regulatory Costs ($), Passenger Car Fleet for Manufacturer (KIA)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	0	70	515	687	550	563	508	480	496	536
Alternative PC2LT002	0	70	515	687	550	648	1,601	2,381	2,406	2,334
Alternative PC1LT3	0	70	515	687	550	710	788	1,006	898	953
Alternative PC2LT4	0	70	515	687	550	781	1,746	2,655	2,476	2,337
Alternative PC3LT5	0	70	515	687	550	878	1,923	2,997	2,929	2,682
Alternative PC6LT8	0	70	515	687	550	1,153	2,546	3,787	3,857	3,837

Table 244 - Estimated Average Per Vehicle Regulatory Costs ($), Passenger Car Fleet for Manufacturer (JLR)

Estimated Average Per Vehicle Regulatory Costs ($), Passenger Car Fleet for Manufacturer (JLR)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	1,114	4,386	4,186	3,979	2,885	2,693	2,419	2,077	1,916	1,880
Alternative PC2LT002	1,114	4,386	4,186	3,979	2,885	2,570	2,299	2,320	2,438	1,972
Alternative PC1LT3	1,114	4,386	4,186	3,979	2,885	2,618	2,706	2,685	2,682	2,281
Alternative PC2LT4	1,114	4,386	4,186	3,979	2,885	2,683	2,849	2,881	3,042	2,727
Alternative PC3LT5	1,114	4,386	4,186	3,979	2,885	2,763	2,994	3,091	3,315	3,070
Alternative PC6LT8	1,114	4,386	4,186	3,979	2,885	2,993	3,447	3,765	4,226	4,253

Table 245 - Estimated Average Per Vehicle Regulatory Costs ($), Passenger Car Fleet for Manufacturer (Karma)

Estimated Average Per Vehicle Regulatory Costs ($), Passenger Car Fleet for Manufacturer (Karma)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	0	0	0	0	-3,300	-3,693	-3,948	-4,296	-4,602	-4,776
Alternative PC2LT002	0	0	0	0	-3,300	-3,693	-3,948	-4,296	-4,602	-4,776
Alternative PC1LT3	0	0	0	0	-3,300	-3,693	-3,948	-4,296	-4,602	-4,776
Alternative PC2LT4	0	0	0	0	-3,300	-3,693	-3,948	-4,296	-4,602	-4,776
Alternative PC3LT5	0	0	0	0	-3,300	-3,693	-3,948	-4,296	-4,602	-4,776
Alternative PC6LT8	0	0	0	0	-3,300	-3,693	-3,948	-4,296	-4,602	-4,776

Table 246 - Estimated Average Per Vehicle Regulatory Costs ($), Passenger Car Fleet for Manufacturer (Lucid)

Estimated Average Per Vehicle Regulatory Costs ($), Passenger Car Fleet for Manufacturer (Lucid)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT002	0	0	0	0	0	0	0	0	0	0
Alternative PC1LT3	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT4	0	0	0	0	0	0	0	0	0	0
Alternative PC3LT5	0	0	0	0	0	0	0	0	0	0
Alternative PC6LT8	0	0	0	0	0	0	0	0	0	0

Table 247 - Estimated Average Per Vehicle Regulatory Costs ($), Passenger Car Fleet for Manufacturer (Mazda)

Estimated Average Per Vehicle Regulatory Costs ($), Passenger Car Fleet for Manufacturer (Mazda)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	0	810	959	1,089	971	854	856	838	839	847
Alternative PC2LT002	0	810	959	1,089	971	1,081	1,175	1,254	1,223	1,191
Alternative PC1LT3	0	810	959	1,089	971	1,069	1,056	1,027	1,012	995
Alternative PC2LT4	0	810	959	1,089	971	1,079	1,166	1,254	1,222	1,191
Alternative PC3LT5	0	810	959	1,089	971	1,102	1,204	1,487	1,437	1,389
Alternative PC6LT8	0	810	959	1,089	971	1,181	1,418	9,619	8,836	8,118

Table 248 - Estimated Average Per Vehicle Regulatory Costs ($), Passenger Car Fleet for Manufacturer (Mercedes-Benz)

Estimated Average Per Vehicle Regulatory Costs ($), Passenger Car Fleet for Manufacturer (Mercedes-Benz)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	876	1,324	1,347	1,931	2,363	1,970	1,506	1,265	1,147	1,283
Alternative PC2LT002	876	1,324	1,347	1,931	2,363	1,840	1,335	1,200	981	1,106
Alternative PC1LT3	876	1,324	1,347	1,931	2,363	1,922	1,529	1,407	1,200	1,313
Alternative PC2LT4	876	1,324	1,347	1,931	2,363	1,959	1,614	1,522	1,379	1,516
Alternative PC3LT5	876	1,324	1,347	1,931	2,363	1,999	1,700	1,664	1,624	1,790
Alternative PC6LT8	876	1,324	1,347	1,931	2,363	2,134	1,980	2,168	2,681	3,037

Table 249 - Estimated Average Per Vehicle Regulatory Costs ($), Passenger Car Fleet for Manufacturer (Mitsubishi)

Estimated Average Per Vehicle Regulatory Costs ($), Passenger Car Fleet for Manufacturer (Mitsubishi)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	330	297	2,308	2,296	1,630	1,460	1,262	1,077	922	797
Alternative PC2LT002	330	297	2,308	2,296	1,630	1,438	1,321	1,134	983	941
Alternative PC1LT3	330	297	2,308	2,296	1,630	1,438	1,263	1,076	925	805
Alternative PC2LT4	330	297	2,308	2,296	1,630	1,438	1,321	1,134	983	875
Alternative PC3LT5	330	297	2,308	2,296	1,630	1,438	1,384	1,195	1,247	1,159
Alternative PC6LT8	330	297	2,308	2,296	1,630	1,572	2,248	2,049	2,144	2,151

Table 250 - Estimated Average Per Vehicle Regulatory Costs ($), Passenger Car Fleet for Manufacturer (Nissan)

Estimated Average Per Vehicle Regulatory Costs ($), Passenger Car Fleet for Manufacturer (Nissan)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	29	710	929	1,194	1,142	1,363	1,133	1,021	1,002	986
Alternative PC2LT002	29	710	929	1,194	1,142	1,356	1,150	1,177	1,208	1,212
Alternative PC1LT3	29	710	929	1,194	1,142	1,434	1,133	1,070	1,028	1,005
Alternative PC2LT4	29	710	929	1,194	1,142	1,470	1,219	1,307	1,274	1,239
Alternative PC3LT5	29	710	929	1,194	1,142	1,507	1,391	1,592	1,547	1,573
Alternative PC6LT8	29	710	929	1,194	1,142	1,697	2,081	2,594	2,815	3,248

Table 251 - Estimated Average Per Vehicle Regulatory Costs ($), Passenger Car Fleet for Manufacturer (Stellantis)

Estimated Average Per Vehicle Regulatory Costs ($), Passenger Car Fleet for Manufacturer (Stellantis)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	1,144	866	3,153	3,483	2,790	2,558	2,374	2,258	2,149	2,198
Alternative PC2LT002	1,144	866	3,153	3,483	2,790	2,542	2,509	2,547	2,547	2,652
Alternative PC1LT3	1,144	866	3,153	3,483	2,790	2,522	2,824	2,697	2,851	2,970
Alternative PC2LT4	1,144	866	3,153	3,483	2,790	2,540	2,961	2,924	3,185	3,399
Alternative PC3LT5	1,144	866	3,153	3,483	2,790	2,605	3,140	3,191	3,561	3,860
Alternative PC6LT8	1,144	866	3,153	3,483	2,790	2,974	3,772	4,105	4,764	5,270

Table 252 - Estimated Average Per Vehicle Regulatory Costs ($), Passenger Car Fleet for Manufacturer (Subaru)

Estimated Average Per Vehicle Regulatory Costs ($), Passenger Car Fleet for Manufacturer (Subaru)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	0	1,417	1,370	2,163	1,589	1,479	1,358	1,212	1,076	961
Alternative PC2LT002	0	1,417	1,370	2,163	1,589	1,388	1,255	1,105	962	842
Alternative PC1LT3	0	1,417	1,370	2,163	1,589	1,388	1,254	1,104	962	841
Alternative PC2LT4	0	1,417	1,370	2,163	1,589	1,388	1,254	1,104	962	841
Alternative PC3LT5	0	1,417	1,370	2,163	1,589	1,388	1,254	1,104	1,014	890
Alternative PC6LT8	0	1,417	1,370	2,163	1,589	1,659	1,475	1,443	1,459	1,298

Table 253 - Estimated Average Per Vehicle Regulatory Costs ($), Passenger Car Fleet for Manufacturer (Tesla)

Estimated Average Per Vehicle Regulatory Costs ($), Passenger Car Fleet for Manufacturer (Tesla)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT002	0	0	0	0	0	0	0	0	0	0
Alternative PC1LT3	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT4	0	0	0	0	0	0	0	0	0	0
Alternative PC3LT5	0	0	0	0	0	0	0	0	0	0
Alternative PC6LT8	0	0	0	0	0	0	0	0	0	0

Table 254 - Estimated Average Per Vehicle Regulatory Costs ($), Passenger Car Fleet for Manufacturer (Toyota)

Estimated Average Per Vehicle Regulatory Costs ($), Passenger Car Fleet for Manufacturer (Toyota)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	0	336	544	768	868	852	879	868	861	851
Alternative PC2LT002	0	336	544	768	868	795	814	790	775	652
Alternative PC1LT3	0	336	544	768	868	792	806	788	770	647
Alternative PC2LT4	0	336	544	768	868	816	813	808	867	683
Alternative PC3LT5	0	336	544	768	868	881	935	1,016	1,149	927
Alternative PC6LT8	0	336	544	768	868	1,082	1,514	1,991	2,655	2,821

Table 255 - Estimated Average Per Vehicle Regulatory Costs ($), Passenger Car Fleet for Manufacturer (Volvo)

Estimated Average Per Vehicle Regulatory Costs ($), Passenger Car Fleet for Manufacturer (Volvo)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	0	65	117	496	1,258	1,059	903	725	580	471
Alternative PC2LT002	0	65	117	496	1,258	908	755	579	436	329
Alternative PC1LT3	0	65	117	496	1,258	908	806	781	436	482
Alternative PC2LT4	0	65	117	496	1,258	908	870	883	553	631
Alternative PC3LT5	0	65	117	496	1,258	908	948	984	753	880
Alternative PC6LT8	0	65	117	496	1,258	908	1,123	1,242	1,387	1,671

Table 256 - Estimated Average Per Vehicle Regulatory Costs ($), Passenger Car Fleet for Manufacturer (VWA)

Estimated Average Per Vehicle Regulatory Costs ($), Passenger Car Fleet for Manufacturer (VWA)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	407	449	1,013	1,202	1,324	1,199	1,156	1,078	1,073	1,141
Alternative PC2LT002	407	449	1,013	1,202	1,324	1,217	1,603	1,603	1,592	1,585
Alternative PC1LT3	407	449	1,013	1,202	1,324	1,293	1,660	1,719	1,654	1,544
Alternative PC2LT4	407	449	1,013	1,202	1,324	1,396	1,970	2,006	2,048	2,026
Alternative PC3LT5	407	449	1,013	1,202	1,324	1,502	2,187	2,286	2,434	2,487
Alternative PC6LT8	407	449	1,013	1,202	1,324	1,811	2,662	3,093	3,607	3,930

Table 257 - Estimated Average Per Vehicle Regulatory Costs ($), Light Truck Fleet for Manufacturer (BMW)

Estimated Average Per Vehicle Regulatory Costs ($), Light Truck Fleet for Manufacturer (BMW)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	213	377	414	1,346	1,325	820	750	849	1,152	1,399
Alternative PC2LT002	213	377	414	1,346	1,325	820	810	931	1,219	1,448
Alternative PC1LT3	213	377	414	1,346	1,325	891	1,010	1,182	1,525	1,838
Alternative PC2LT4	213	377	414	1,346	1,325	925	1,078	1,302	1,697	2,036
Alternative PC3LT5	213	377	414	1,346	1,325	951	1,153	1,515	1,911	2,276
Alternative PC6LT8	213	377	414	1,346	1,325	1,051	1,559	2,345	3,212	3,857

Table 258 - Estimated Average Per Vehicle Regulatory Costs ($), Light Truck Fleet for Manufacturer (Ford)

Estimated Average Per Vehicle Regulatory Costs ($), Light Truck Fleet for Manufacturer (Ford)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	66	874	1,591	1,664	1,757	1,400	1,308	1,202	1,105	1,028
Alternative PC2LT002	66	874	1,591	1,664	1,757	1,441	1,546	1,548	1,455	1,401
Alternative PC1LT3	66	874	1,591	1,664	1,757	1,910	2,168	2,298	2,186	2,189
Alternative PC2LT4	66	874	1,591	1,664	1,757	1,910	2,168	2,298	2,309	2,529
Alternative PC3LT5	66	874	1,591	1,664	1,757	1,910	2,168	2,298	2,587	2,915
Alternative PC6LT8	66	874	1,591	1,664	1,757	1,910	2,456	2,872	3,620	4,310

Table 259 - Estimated Average Per Vehicle Regulatory Costs ($), Light Truck Fleet for Manufacturer (GM)

Estimated Average Per Vehicle Regulatory Costs ($), Light Truck Fleet for Manufacturer (GM)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	228	386	2,086	2,751	2,650	2,440	2,335	2,297	2,249	2,211
Alternative PC2LT002	228	386	2,086	2,751	2,650	2,885	2,792	2,810	2,863	3,942
Alternative PC1LT3	228	386	2,086	2,751	2,650	2,982	3,039	3,152	3,304	4,420
Alternative PC2LT4	228	386	2,086	2,751	2,650	3,023	3,156	3,313	3,542	4,723
Alternative PC3LT5	228	386	2,086	2,751	2,650	3,079	3,293	3,492	3,863	5,093
Alternative PC6LT8	228	386	2,086	2,751	2,650	3,231	3,728	4,210	4,945	6,512

Table 260 - Estimated Average Per Vehicle Regulatory Costs ($), Light Truck Fleet for Manufacturer (Honda)

Estimated Average Per Vehicle Regulatory Costs ($), Light Truck Fleet for Manufacturer (Honda)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	0	585	656	1,047	1,324	1,101	1,161	1,185	1,212	1,226
Alternative PC2LT002	0	585	656	1,047	1,324	1,141	1,199	1,221	1,245	1,257
Alternative PC1LT3	0	585	656	1,047	1,324	1,088	1,181	1,275	1,334	1,339
Alternative PC2LT4	0	585	656	1,047	1,324	1,244	1,427	1,531	1,775	1,745
Alternative PC3LT5	0	585	656	1,047	1,324	1,333	1,560	1,675	2,005	1,958
Alternative PC6LT8	0	585	656	1,047	1,324	1,544	1,794	2,139	2,517	2,784

Table 261 - Estimated Average Per Vehicle Regulatory Costs ($), Light Truck Fleet for Manufacturer (Hyundai)

Estimated Average Per Vehicle Regulatory Costs ($), Light Truck Fleet for Manufacturer (Hyundai)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	0	113	188	1,304	1,062	907	831	741	794	915
Alternative PC2LT002	0	113	188	1,304	1,062	905	870	882	1,015	1,074
Alternative PC1LT3	0	113	188	1,304	1,062	1,148	1,230	1,335	1,517	1,608
Alternative PC2LT4	0	113	188	1,304	1,062	1,312	1,393	1,572	1,800	1,911
Alternative PC3LT5	0	113	188	1,304	1,062	1,552	1,677	1,967	4,275	5,113
Alternative PC6LT8	0	113	188	1,304	1,062	1,576	2,032	2,447	5,316	6,479

Table 262 - Estimated Average Per Vehicle Regulatory Costs ($), Light Truck Fleet for Manufacturer (KIA)

Estimated Average Per Vehicle Regulatory Costs ($), Light Truck Fleet for Manufacturer (KIA)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	0	213	194	302	828	729	778	713	787	921
Alternative PC2LT002	0	213	194	302	828	772	1,083	1,056	1,169	1,298
Alternative PC1LT3	0	213	194	302	828	837	1,303	1,362	1,808	1,947
Alternative PC2LT4	0	213	194	302	828	897	1,394	1,539	6,903	6,690
Alternative PC3LT5	0	213	194	302	828	979	1,538	1,802	7,096	7,057
Alternative PC6LT8	0	213	194	302	828	1,215	2,054	2,665	8,102	7,955

Table 263 - Estimated Average Per Vehicle Regulatory Costs ($), Light Truck Fleet for Manufacturer (JLR)

Estimated Average Per Vehicle Regulatory Costs ($), Light Truck Fleet for Manufacturer (JLR)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	461	1,490	2,077	2,111	1,415	939	814	665	722	726
Alternative PC2LT002	461	1,490	2,077	2,111	1,415	940	816	930	1,105	856
Alternative PC1LT3	461	1,490	2,077	2,111	1,415	983	1,205	1,416	1,696	3,730
Alternative PC2LT4	461	1,490	2,077	2,111	1,415	1,041	1,355	1,636	2,001	4,139
Alternative PC3LT5	461	1,490	2,077	2,111	1,415	1,113	1,505	1,874	2,341	4,552
Alternative PC6LT8	461	1,490	2,077	2,111	1,415	1,331	1,985	2,644	3,478	6,042

Table 264 - Estimated Average Per Vehicle Regulatory Costs ($), Light Truck Fleet for Manufacturer (Karma)

Estimated Average Per Vehicle Regulatory Costs ($), Light Truck Fleet for Manufacturer (Karma)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT002	0	0	0	0	0	0	0	0	0	0
Alternative PC1LT3	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT4	0	0	0	0	0	0	0	0	0	0
Alternative PC3LT5	0	0	0	0	0	0	0	0	0	0
Alternative PC6LT8	0	0	0	0	0	0	0	0	0	0

Table 265 - Estimated Average Per Vehicle Regulatory Costs ($), Light Truck Fleet for Manufacturer (Lucid)

Estimated Average Per Vehicle Regulatory Costs ($), Light Truck Fleet for Manufacturer (Lucid)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT002	0	0	0	0	0	0	0	0	0	0
Alternative PC1LT3	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT4	0	0	0	0	0	0	0	0	0	0
Alternative PC3LT5	0	0	0	0	0	0	0	0	0	0
Alternative PC6LT8	0	0	0	0	0	0	0	0	0	0

Table 266 - Estimated Average Per Vehicle Regulatory Costs ($), Light Truck Fleet for Manufacturer (Mazda)

Estimated Average Per Vehicle Regulatory Costs ($), Light Truck Fleet for Manufacturer (Mazda)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	0	1,153	1,239	1,312	1,415	1,268	1,335	1,389	1,460	1,526
Alternative PC2LT002	0	1,153	1,239	1,312	1,415	1,259	1,278	1,328	1,397	1,343
Alternative PC1LT3	0	1,153	1,239	1,312	1,415	1,257	1,267	1,330	1,403	1,348
Alternative PC2LT4	0	1,153	1,239	1,312	1,415	1,285	1,303	1,616	1,736	1,656
Alternative PC3LT5	0	1,153	1,239	1,312	1,415	1,402	1,427	2,016	2,185	2,073
Alternative PC6LT8	0	1,153	1,239	1,312	1,415	5,996	5,854	6,624	9,071	8,340

Table 267 - Estimated Average Per Vehicle Regulatory Costs ($), Light Truck Fleet for Manufacturer (Mercedes-Benz)

Estimated Average Per Vehicle Regulatory Costs ($), Light Truck Fleet for Manufacturer (Mercedes-Benz)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	360	544	574	854	1,550	1,569	1,388	1,387	1,447	1,791
Alternative PC2LT002	360	544	574	854	1,550	1,533	1,351	1,406	1,611	1,772
Alternative PC1LT3	360	544	574	854	1,550	1,655	1,637	1,762	1,986	2,147
Alternative PC2LT4	360	544	574	854	1,550	1,698	1,719	1,891	2,168	2,375
Alternative PC3LT5	360	544	574	854	1,550	1,742	1,803	2,042	2,390	2,662
Alternative PC6LT8	360	544	574	854	1,550	1,881	2,091	2,617	3,668	4,315

Table 268 - Estimated Average Per Vehicle Regulatory Costs ($), Light Truck Fleet for Manufacturer (Mitsubishi)

Estimated Average Per Vehicle Regulatory Costs ($), Light Truck Fleet for Manufacturer (Mitsubishi)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	71	155	269	3,203	2,445	2,266	1,995	1,813	1,660	1,533
Alternative PC2LT002	71	155	269	3,203	2,445	2,265	2,022	1,840	1,693	1,569
Alternative PC1LT3	71	155	269	3,203	2,445	2,265	2,029	1,847	1,699	1,576
Alternative PC2LT4	71	155	269	3,203	2,445	2,265	2,029	1,847	1,825	1,873
Alternative PC3LT5	71	155	269	3,203	2,445	2,265	2,180	1,996	2,110	2,142
Alternative PC6LT8	71	155	269	3,203	2,445	2,344	3,329	3,130	3,250	3,314

Table 269 - Estimated Average Per Vehicle Regulatory Costs ($), Light Truck Fleet for Manufacturer (Nissan)

Estimated Average Per Vehicle Regulatory Costs ($), Light Truck Fleet for Manufacturer (Nissan)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	38	571	688	1,268	1,218	1,585	1,637	1,529	1,505	1,533
Alternative PC2LT002	38	571	688	1,268	1,218	1,580	1,737	1,785	1,654	1,538
Alternative PC1LT3	38	571	688	1,268	1,218	1,678	2,322	2,328	2,360	2,208
Alternative PC2LT4	38	571	688	1,268	1,218	1,708	2,514	2,639	2,825	2,650
Alternative PC3LT5	38	571	688	1,268	1,218	1,739	2,621	2,815	3,028	2,831
Alternative PC6LT8	38	571	688	1,268	1,218	1,902	3,011	3,408	3,829	4,024

Table 270 - Estimated Average Per Vehicle Regulatory Costs ($), Light Truck Fleet for Manufacturer (Stellantis)

Estimated Average Per Vehicle Regulatory Costs ($), Light Truck Fleet for Manufacturer (Stellantis)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	333	903	1,435	2,337	1,922	1,463	1,373	1,364	1,306	1,380
Alternative PC2LT002	333	903	1,435	2,337	1,922	1,767	1,699	1,718	1,792	1,796
Alternative PC1LT3	333	903	1,435	2,337	1,922	1,715	1,851	1,884	2,121	2,241
Alternative PC2LT4	333	903	1,435	2,337	1,922	1,812	2,020	2,112	2,427	2,592
Alternative PC3LT5	333	903	1,435	2,337	1,922	1,892	2,177	2,340	2,757	2,995
Alternative PC6LT8	333	903	1,435	2,337	1,922	2,088	2,631	3,059	3,835	4,418

Table 271 - Estimated Average Per Vehicle Regulatory Costs ($), Light Truck Fleet for Manufacturer (Subaru)

Estimated Average Per Vehicle Regulatory Costs ($), Light Truck Fleet for Manufacturer (Subaru)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	0	284	337	379	618	736	907	1,034	1,166	1,270
Alternative PC2LT002	0	284	337	379	618	722	884	1,006	1,131	1,150
Alternative PC1LT3	0	284	337	379	618	721	882	1,004	1,129	1,147
Alternative PC2LT4	0	284	337	379	618	721	899	1,038	1,208	1,220
Alternative PC3LT5	0	284	337	379	618	722	994	1,238	1,483	1,509
Alternative PC6LT8	0	284	337	379	618	900	1,479	1,990	2,536	2,438

Table 272 - Estimated Average Per Vehicle Regulatory Costs ($), Light Truck Fleet for Manufacturer (Tesla)

Estimated Average Per Vehicle Regulatory Costs ($), Light Truck Fleet for Manufacturer (Tesla)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	0	135	217	297	292	288	283	279	274	270
Alternative PC2LT002	0	135	217	297	292	4	0	0	0	0
Alternative PC1LT3	0	135	217	297	292	4	0	0	0	0
Alternative PC2LT4	0	135	217	297	292	4	0	0	0	0
Alternative PC3LT5	0	135	217	297	292	4	0	0	0	0
Alternative PC6LT8	0	135	217	297	292	4	0	0	0	0

Table 273 - Estimated Average Per Vehicle Regulatory Costs ($), Light Truck Fleet for Manufacturer (Toyota)

Estimated Average Per Vehicle Regulatory Costs ($), Light Truck Fleet for Manufacturer (Toyota)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	0	165	458	567	1,021	546	644	757	867	973
Alternative PC2LT002	0	165	458	567	1,021	548	640	752	860	966
Alternative PC1LT3	0	165	458	567	1,021	550	674	837	1,007	1,104
Alternative PC2LT4	0	165	458	567	1,021	573	918	1,115	1,320	1,435
Alternative PC3LT5	0	165	458	567	1,021	621	1,011	1,274	1,513	1,782
Alternative PC6LT8	0	165	458	567	1,021	767	1,378	1,919	2,370	2,828

Table 274 - Estimated Average Per Vehicle Regulatory Costs ($), Light Truck Fleet for Manufacturer (Volvo)

Estimated Average Per Vehicle Regulatory Costs ($), Light Truck Fleet for Manufacturer (Volvo)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	0	174	230	1,394	952	522	382	219	75	-27
Alternative PC2LT002	0	174	230	1,394	952	506	366	203	372	228
Alternative PC1LT3	0	174	230	1,394	952	506	453	572	679	773
Alternative PC2LT4	0	174	230	1,394	952	506	565	771	996	1,161
Alternative PC3LT5	0	174	230	1,394	952	506	702	971	1,267	1,551
Alternative PC6LT8	0	174	230	1,394	952	643	1,152	1,674	2,481	3,204

Table 275 - Estimated Average Per Vehicle Regulatory Costs ($), Light Truck Fleet for Manufacturer (VWA)

Estimated Average Per Vehicle Regulatory Costs ($), Light Truck Fleet for Manufacturer (VWA)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Reference Baseline)	194	782	902	1,104	1,024	586	549	544	757	984
Alternative PC2LT002	194	782	902	1,104	1,024	660	636	722	1,102	1,244
Alternative PC1LT3	194	782	902	1,104	1,024	721	884	1,076	1,544	1,727
Alternative PC2LT4	194	782	902	1,104	1,024	777	1,001	1,218	1,782	2,009
Alternative PC3LT5	194	782	902	1,104	1,024	845	1,111	1,426	2,104	2,405
Alternative PC6LT8	194	782	902	1,104	1,024	1,062	1,470	2,201	3,281	3,989

Incremental Societal Impacts

Table 276 - Incremental Total Societal Costs ($b) by Year and Alternative for Total Fleet, Discounted at 3%

Incremental Total Societal Costs ($b) by Year and Alternative for Total Fleet, Discounted at 3%											
Model Year	1983-2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Alternative PC2LT002	2.8	0.2	0.2	0.2	0.2	2.4	3.3	4.2	4.5	6.4	24.5
Alternative PC1LT3	5.2	0.4	0.4	0.4	0.4	2.9	4.0	5.1	5.6	7.4	31.8
Alternative PC2LT4	9.6	0.7	0.8	0.8	0.8	3.7	5.5	7.0	8.3	9.9	47.1
Alternative PC3LT5	14.9	1.2	1.2	1.2	1.3	4.5	6.4	7.9	9.5	11.9	60.1
Alternative PC6LT8	30.1	2.2	2.3	2.3	2.5	5.6	7.3	8.4	9.3	10.8	80.8

Table 277 - Incremental Total Societal Costs ($b) by Year and Alternative for Passenger Car Fleet, Discounted at 3%

Incremental Total Societal Costs ($b) by Year and Alternative for Passenger Car Fleet, Discounted at 3%											
Model Year	1983-2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Alternative PC2LT002	1.6	0.1	0.1	0.1	0.1	0.8	0.9	0.9	1.2	1.7	7.2
Alternative PC1LT3	2.9	0.1	0.1	0.1	0.1	0.8	1.3	1.7	2.1	2.6	11.9
Alternative PC2LT4	5.3	0.3	0.3	0.3	0.3	1.0	1.7	2.0	3.4	4.2	18.6
Alternative PC3LT5	8.2	0.5	0.5	0.4	0.4	1.0	1.8	2.1	4.4	5.6	25.0
Alternative PC6LT8	16.7	0.9	0.8	0.8	0.8	1.0	1.8	2.1	4.9	6.4	36.0

Table 278 - Incremental Total Societal Costs ($b) by Year and Alternative for Light Truck Fleet, Discounted at 3%

Incremental Total Societal Costs ($b) by Year and Alternative for Light Truck Fleet, Discounted at 3%											
Model Year	1983-2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Alternative PC2LT002	1.2	0.1	0.1	0.1	0.1	1.6	2.4	3.3	3.4	4.8	17.3
Alternative PC1LT3	2.3	0.2	0.2	0.3	0.3	2.1	2.7	3.5	3.6	4.8	19.9
Alternative PC2LT4	4.3	0.4	0.5	0.5	0.6	2.7	3.9	5.0	4.9	5.8	28.5
Alternative PC3LT5	6.7	0.7	0.8	0.8	0.9	3.5	4.6	5.8	5.1	6.3	35.1
Alternative PC6LT8	13.4	1.4	1.5	1.6	1.7	4.6	5.5	6.3	4.4	4.3	44.7

Table 279 - Incremental Total Societal Costs ($b) by Year and Alternative for Total Fleet, Discounted at 7%

Incremental Total Societal Costs ($b) by Year and Alternative for Total Fleet, Discounted at 7%											
Model Year	1983-2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Alternative PC2LT002	1.8	0.1	0.1	0.1	0.1	1.8	2.3	2.9	3.0	4.1	16.2
Alternative PC1LT3	3.3	0.2	0.2	0.2	0.2	2.1	2.8	3.5	3.8	4.7	21.0
Alternative PC2LT4	5.9	0.4	0.4	0.4	0.4	2.6	3.9	4.8	5.6	6.5	31.0
Alternative PC3LT5	9.1	0.7	0.7	0.7	0.7	3.1	4.5	5.4	6.6	7.9	39.4
Alternative PC6LT8	18.7	1.3	1.3	1.3	1.3	3.9	5.2	6.1	7.0	7.8	53.8

Table 280 - Incremental Total Societal Costs ($b) by Year and Alternative for Passenger Car Fleet, Discounted at 7%

Incremental Total Societal Costs ($b) by Year and Alternative for Passenger Car Fleet, Discounted at 7%											
Model Year	1983-2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Alternative PC2LT002	1.0	0.0	0.0	0.0	0.0	0.6	0.7	0.7	0.9	1.1	5.1
Alternative PC1LT3	1.9	0.1	0.1	0.1	0.1	0.5	0.8	1.0	1.2	1.4	7.2
Alternative PC2LT4	3.4	0.2	0.2	0.1	0.1	0.6	1.1	1.3	2.1	2.4	11.5
Alternative PC3LT5	5.2	0.3	0.3	0.2	0.2	0.7	1.2	1.5	2.7	3.3	15.6
Alternative PC6LT8	10.6	0.5	0.5	0.4	0.4	0.7	1.3	1.7	3.2	4.0	23.5

Table 281 - Incremental Total Societal Costs ($b) by Year and Alternative for Light Truck Fleet, Discounted at 7%

Incremental Total Societal Costs ($b) by Year and Alternative for Light Truck Fleet, Discounted at 7%											
Model Year	1983-2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Alternative PC2LT002	0.7	0.1	0.1	0.1	0.1	1.2	1.7	2.1	2.1	3.0	11.1
Alternative PC1LT3	1.4	0.1	0.1	0.1	0.2	1.6	2.0	2.5	2.5	3.3	13.9
Alternative PC2LT4	2.6	0.2	0.3	0.3	0.3	2.0	2.8	3.5	3.6	4.1	19.5
Alternative PC3LT5	4.0	0.4	0.4	0.4	0.5	2.4	3.3	4.0	3.9	4.6	23.8
Alternative PC6LT8	8.0	0.8	0.8	0.8	0.9	3.2	3.9	4.4	3.7	3.7	30.3

Table 282 - Incremental Total Societal Benefits ($b) by Year and Alternative for Total Fleet, SC-GHG 2% Level, Discounted at 3%

Incremental Total Societal Benefits ($b) by Year and Alternative for Total Fleet, SC-GHG 2% Level, Discounted at 3%											
Model Year	1983-2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Alternative PC2LT002	-2.4	-0.1	-0.1	-0.1	-0.1	6.3	9.3	12.2	14.0	20.7	59.7
Alternative PC1LT3	-4.4	-0.3	-0.3	-0.2	-0.3	8.4	14.2	18.7	21.7	28.3	85.8
Alternative PC2LT4	-8.2	-0.5	-0.5	-0.5	-0.5	10.1	18.0	23.6	29.2	36.6	107.2
Alternative PC3LT5	-12.9	-0.9	-0.8	-0.8	-0.8	10.8	19.7	26.4	33.8	43.3	117.8
Alternative PC6LT8	-25.8	-1.7	-1.6	-1.5	-1.5	11.4	24.2	34.1	44.1	54.8	136.6

Table 283 - Incremental Total Societal Benefits ($b) by Year and Alternative for Passenger Car Fleet, SC-GHG 2% Level, Discounted at 3%

Incremental Total Societal Benefits ($b) by Year and Alternative for Passenger Car Fleet, SC-GHG 2% Level, Discounted at 3%											
Model Year	1983-2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Alternative PC2LT002	-1.3	0.0	0.0	0.0	0.0	2.5	3.5	5.1	5.5	5.7	20.9
Alternative PC1LT3	-2.3	-0.1	-0.1	-0.1	-0.1	1.1	1.4	2.3	2.3	2.2	6.8
Alternative PC2LT4	-4.2	-0.2	-0.1	-0.1	-0.1	1.7	2.5	4.1	4.1	4.1	11.8
Alternative PC3LT5	-6.6	-0.3	-0.2	-0.2	-0.2	2.1	3.4	5.5	5.9	6.7	16.3
Alternative PC6LT8	-13.3	-0.5	-0.4	-0.3	-0.3	2.7	6.5	10.0	11.6	13.2	29.1

Table 284 - Incremental Total Societal Benefits ($b) by Year and Alternative for Light Truck Fleet, SC-GHG 2% Level, Discounted at 3%

Incremental Total Societal Benefits ($b) by Year and Alternative for Light Truck Fleet, SC-GHG 2% Level, Discounted at 3%											
Model Year	1983-2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Alternative PC2LT002	-1.1	-0.1	-0.1	-0.1	-0.1	3.8	5.9	7.1	8.5	15.1	38.8
Alternative PC1LT3	-2.1	-0.2	-0.2	-0.2	-0.2	7.3	12.7	16.3	19.4	26.1	79.0
Alternative PC2LT4	-4.0	-0.4	-0.4	-0.4	-0.4	8.4	15.5	19.5	25.1	32.5	95.4
Alternative PC3LT5	-6.3	-0.6	-0.6	-0.6	-0.6	8.7	16.4	20.8	27.9	36.5	101.5
Alternative PC6LT8	-12.5	-1.2	-1.2	-1.1	-1.2	8.7	17.8	24.1	32.5	41.6	107.5

Table 285 - Incremental Total Societal Benefits ($b) by Year and Alternative for Total Fleet, SC-GHG 2% Level, Discounted at 7%

Incremental Total Societal Benefits ($b) by Year and Alternative for Total Fleet, SC-GHG 2% Level, Discounted at 7%											
Model Year	1983-2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Alternative PC2LT002	-1.9	-0.1	-0.1	-0.1	-0.1	5.2	7.5	9.6	10.9	16.1	47.0
Alternative PC1LT3	-3.5	-0.2	-0.2	-0.2	-0.2	6.8	11.2	14.6	16.7	21.8	66.8
Alternative PC2LT4	-6.6	-0.4	-0.4	-0.4	-0.4	8.1	14.3	18.4	22.5	28.1	83.1
Alternative PC3LT5	-10.3	-0.7	-0.7	-0.6	-0.6	8.7	15.6	20.5	26.0	33.2	91.3
Alternative PC6LT8	-20.6	-1.3	-1.2	-1.1	-1.2	9.2	19.2	26.5	33.9	42.0	105.4

Table 286 - Incremental Total Societal Benefits ($b) by Year and Alternative for Passenger Car Fleet, SC-GHG 2% Level, Discounted at 7%

Incremental Total Societal Benefits ($b) by Year and Alternative for Passenger Car Fleet, SC-GHG 2% Level, Discounted at 7%											
Model Year	1983-2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Alternative PC2LT002	-1.0	0.0	0.0	0.0	0.0	2.0	2.7	4.0	4.2	4.3	16.2
Alternative PC1LT3	-1.8	-0.1	-0.1	0.0	0.0	0.9	1.1	1.8	1.7	1.7	5.2
Alternative PC2LT4	-3.4	-0.1	-0.1	-0.1	-0.1	1.3	2.0	3.2	3.2	3.1	9.0
Alternative PC3LT5	-5.3	-0.2	-0.2	-0.2	-0.1	1.7	2.6	4.3	4.5	5.1	12.3
Alternative PC6LT8	-10.7	-0.4	-0.3	-0.3	-0.3	2.1	5.1	7.8	8.9	10.0	22.0

Table 287 - Incremental Total Societal Benefits ($b) by Year and Alternative for Light Truck Fleet, SC-GHG 2% Level, Discounted at 7%

Incremental Total Societal Benefits ($b) by Year and Alternative for Light Truck Fleet, SC-GHG 2% Level, Discounted at 7%											
Model Year	1983-2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Alternative PC2LT002	-0.9	-0.1	-0.1	-0.1	-0.1	3.1	4.7	5.6	6.6	11.8	30.8
Alternative PC1LT3	-1.7	-0.2	-0.2	-0.1	-0.2	5.9	10.1	12.8	15.0	20.1	61.6
Alternative PC2LT4	-3.2	-0.3	-0.3	-0.3	-0.3	6.8	12.3	15.2	19.3	25.0	74.2
Alternative PC3LT5	-5.0	-0.5	-0.5	-0.5	-0.5	7.0	13.0	16.3	21.5	28.1	78.9
Alternative PC6LT8	-9.9	-0.9	-0.9	-0.9	-0.9	7.0	14.1	18.8	25.0	32.0	83.4

Table 288 - Incremental Total Societal Net Benefits ($b) by Year and Alternative for Total Fleet, SC-GHG 2% Level, Discounted at 3%

Incremental Total Societal Net Benefits ($b) by Year and Alternative for Total Fleet, SC-GHG 2% Level, Discounted at 3%											
Model Year	1983-2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Alternative PC2LT002	-5.2	-0.3	-0.3	-0.3	-0.3	3.9	6.0	8.0	9.4	14.3	35.2
Alternative PC1LT3	-9.6	-0.6	-0.6	-0.6	-0.7	5.5	10.2	13.5	16.1	20.9	54.0
Alternative PC2LT4	-17.8	-1.3	-1.3	-1.3	-1.3	6.3	12.5	16.6	21.0	26.6	60.1
Alternative PC3LT5	-27.8	-2.1	-2.1	-2.0	-2.1	6.3	13.3	18.5	24.3	31.4	57.7
Alternative PC6LT8	-55.8	-3.9	-3.9	-3.8	-4.0	5.8	17.0	25.7	34.8	44.1	55.8

Table 289 - Incremental Total Societal Net Benefits ($b) by Year and Alternative for Passenger Car Fleet, SC-GHG 2% Level, Discounted at 3%

Incremental Total Societal Net Benefits ($b) by Year and Alternative for Passenger Car Fleet, SC-GHG 2% Level, Discounted at 3%											
Model Year	1983-2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Alternative PC2LT002	-2.9	-0.1	-0.1	-0.1	-0.1	1.8	2.6	4.3	4.3	4.0	13.7
Alternative PC1LT3	-5.2	-0.2	-0.2	-0.2	-0.2	0.3	0.1	0.7	0.2	-0.4	-5.0
Alternative PC2LT4	-9.6	-0.4	-0.4	-0.4	-0.4	0.7	0.8	2.2	0.7	-0.1	-6.8
Alternative PC3LT5	-14.8	-0.7	-0.7	-0.6	-0.6	1.1	1.6	3.4	1.5	1.1	-8.7
Alternative PC6LT8	-30.0	-1.3	-1.2	-1.1	-1.1	1.7	4.7	7.9	6.7	6.8	-6.9

Table 290 - Incremental Total Societal Net Benefits ($b) by Year and Alternative for Light Truck Fleet, SC-GHG 2% Level, Discounted at 3%

Incremental Total Societal Net Benefits ($b) by Year and Alternative for Light Truck Fleet, SC-GHG 2% Level, Discounted at 3%											
Model Year	1983-2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Alternative PC2LT002	-2.3	-0.2	-0.2	-0.2	-0.2	2.1	3.4	3.8	5.1	10.3	21.5
Alternative PC1LT3	-4.4	-0.4	-0.4	-0.5	-0.5	5.2	10.0	12.8	15.8	21.3	59.0
Alternative PC2LT4	-8.3	-0.8	-0.9	-0.9	-0.9	5.6	11.7	14.5	20.2	26.7	66.9
Alternative PC3LT5	-12.9	-1.3	-1.4	-1.4	-1.5	5.2	11.8	15.0	22.8	30.3	66.4
Alternative PC6LT8	-25.8	-2.6	-2.7	-2.7	-2.9	4.1	12.3	17.7	28.0	37.3	62.7

Table 291 - Incremental Total Societal Net Benefits ($b) by Year and Alternative for Total Fleet, SC-GHG 2% Level, Discounted at 7%

Incremental Total Societal Net Benefits ($b) by Year and Alternative for Total Fleet, SC-GHG 2% Level, Discounted at 7%											
Model Year	1983-2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Alternative PC2LT002	-3.7	-0.2	-0.2	-0.2	-0.2	3.4	5.1	6.8	7.9	12.1	30.8
Alternative PC1LT3	-6.8	-0.4	-0.4	-0.4	-0.4	4.7	8.4	11.1	13.0	17.1	45.8
Alternative PC2LT4	-12.5	-0.8	-0.8	-0.8	-0.8	5.5	10.3	13.6	16.9	21.6	52.1
Alternative PC3LT5	-19.4	-1.3	-1.3	-1.3	-1.3	5.6	11.1	15.1	19.4	25.3	51.9
Alternative PC6LT8	-39.3	-2.6	-2.5	-2.4	-2.5	5.3	13.9	20.5	27.0	34.2	51.6

Table 292 - Incremental Total Societal Net Benefits ($b) by Year and Alternative for Passenger Car Fleet, SC-GHG 2% Level, Discounted at 7%

Incremental Total Societal Net Benefits ($b) by Year and Alternative for Passenger Car Fleet, SC-GHG 2% Level, Discounted at 7%											
Model Year	1983-2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Alternative PC2LT002	-2.0	-0.1	-0.1	-0.1	-0.1	1.5	2.1	3.3	3.4	3.3	11.1
Alternative PC1LT3	-3.7	-0.1	-0.1	-0.1	-0.1	0.4	0.3	0.8	0.5	0.2	-2.0
Alternative PC2LT4	-6.8	-0.3	-0.3	-0.2	-0.2	0.7	0.9	1.9	1.1	0.7	-2.6
Alternative PC3LT5	-10.5	-0.5	-0.4	-0.4	-0.4	1.0	1.4	2.8	1.8	1.8	-3.3
Alternative PC6LT8	-21.3	-0.9	-0.8	-0.7	-0.7	1.4	3.7	6.1	5.6	6.0	-1.5

Table 293 - Incremental Total Societal Net Benefits ($b) by Year and Alternative for Light Truck Fleet, SC-GHG 2% Level, Discounted at 7%

Incremental Total Societal Net Benefits ($b) by Year and Alternative for Light Truck Fleet, SC-GHG 2% Level, Discounted at 7%											
Model Year	1983-2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Alternative PC2LT002	-1.6	-0.1	-0.1	-0.1	-0.1	1.9	3.1	3.5	4.5	8.8	19.7
Alternative PC1LT3	-3.1	-0.3	-0.3	-0.3	-0.3	4.3	8.0	10.3	12.4	16.9	47.7
Alternative PC2LT4	-5.7	-0.5	-0.6	-0.6	-0.6	4.8	9.5	11.7	15.8	20.9	54.6
Alternative PC3LT5	-8.9	-0.9	-0.9	-0.9	-0.9	4.6	9.7	12.3	17.6	23.5	55.1
Alternative PC6LT8	-17.9	-1.7	-1.7	-1.7	-1.8	3.9	10.2	14.4	21.3	28.2	53.1

Labor Impacts

Table 294 - Estimated Labor Utilization (1000s of Person-Years), Total Fleet for Manufacturer (Total)

Estimated Labor Utilization (1000s of Person-Years), Total Fleet for Manufacturer (Total)						
Model Year	Regulatory Alternative					
	No Action (Reference Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
2022	880	880	880	880	880	880
2023	937	937	937	937	937	937
2024	944	944	944	944	944	944
2025	915	915	915	915	915	915
2026	922	922	922	922	922	922
2027	946	949	949	949	949	947
2028	966	969	968	969	968	965
2029	966	969	969	969	968	963
2030	951	955	955	957	955	948
2031	940	946	945	947	946	938

Table 295 - Estimated Labor Utilization (1000s of Person-Years), Passenger Car Fleet for Manufacturer (Total)

Estimated Labor Utilization (1000s of Person-Years), Passenger Car Fleet for Manufacturer (Total)						
Model Year	Regulatory Alternative					
	No Action (Reference Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
2022	298	298	298	298	298	298
2023	305	305	305	305	305	305
2024	302	302	302	302	302	302
2025	281	281	281	281	281	281
2026	279	279	279	279	279	279
2027	285	285	285	285	285	283
2028	287	287	288	288	287	286
2029	286	286	288	287	286	284
2030	282	281	283	284	284	282
2031	277	277	280	280	281	280

Table 296 - Estimated Labor Utilization (1000s of Person-Years), Light Truck Fleet for Manufacturer (Total)

Estimated Labor Utilization (1000s of Person-Years), Light Truck Fleet for Manufacturer (Total)						
Model Year	Regulatory Alternative					
	No Action (Reference Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
2022	583	583	583	583	583	583
2023	632	632	632	632	632	632
2024	642	642	642	642	642	642
2025	634	634	634	634	634	634
2026	643	643	643	643	643	643
2027	662	664	663	664	664	664
2028	679	682	680	681	681	680
2029	679	683	681	682	683	680
2030	670	674	671	673	671	666
2031	663	668	665	666	665	658

Table 297 - Estimated Labor Utilization (1000s of Person-Years), Domestic Car Fleet for Manufacturer (Total)

Estimated Labor Utilization (1000s of Person-Years), Domestic Car Fleet for Manufacturer (Total)						
Model Year	Regulatory Alternative					
	No Action (Reference Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
2022	185	185	185	185	185	185
2023	190	190	190	190	190	190
2024	189	189	189	189	189	189
2025	176	176	176	176	176	176
2026	174	174	174	174	174	174
2027	178	179	178	178	178	177
2028	179	180	180	180	180	179
2029	179	179	180	179	179	177
2030	176	176	177	177	177	176
2031	173	174	175	175	176	175

Table 298 - Estimated Labor Utilization (1000s of Person-Years), Imported Car Fleet for Manufacturer (Total)

Estimated Labor Utilization (1000s of Person-Years), Imported Car Fleet for Manufacturer (Total)						
Model Year	Regulatory Alternative					
	No Action (Reference Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
2022	112	112	112	112	112	112
2023	115	115	115	115	115	115
2024	113	113	113	113	113	113
2025	105	105	105	105	105	105
2026	105	105	105	105	105	105
2027	107	107	107	107	107	106
2028	108	108	108	108	108	107
2029	108	107	108	108	107	106
2030	106	105	106	107	107	106
2031	104	104	105	105	105	105

Table 299 - Estimated Labor Utilization (1000s of Person-Years), Total Fleet for Manufacturer (BMW)

Estimated Labor Utilization (1000s of Person-Years), Total Fleet for Manufacturer (BMW)						
Model Year	Regulatory Alternative					
	No Action (Reference Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
2022	17	17	17	17	17	17
2023	18	18	18	18	18	18
2024	18	18	18	18	18	18
2025	18	18	18	18	18	18
2026	18	18	18	18	18	18
2027	18	18	18	18	18	18
2028	19	19	19	19	19	19
2029	19	19	19	19	19	19
2030	19	19	19	19	19	18
2031	19	19	19	18	18	18

Table 300 - Estimated Labor Utilization (1000s of Person-Years), Total Fleet for Manufacturer (Ford)

Estimated Labor Utilization (1000s of Person-Years), Total Fleet for Manufacturer (Ford)						
Model Year	Regulatory Alternative					
	No Action (Reference Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
2022	139	139	139	139	139	139
2023	151	151	151	151	151	151
2024	152	152	152	152	152	152
2025	149	149	149	149	149	149
2026	151	151	151	151	151	151
2027	155	155	156	156	156	156
2028	158	159	160	160	160	159
2029	158	159	160	160	160	159
2030	156	157	157	157	156	155
2031	154	154	155	154	154	152

Table 301 - Estimated Labor Utilization (1000s of Person-Years), Total Fleet for Manufacturer (GM)

Estimated Labor Utilization (1000s of Person-Years), Total Fleet for Manufacturer (GM)						
Model Year	Regulatory Alternative					
	No Action (Reference Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
2022	125	125	125	125	125	125
2023	134	134	134	134	134	134
2024	138	138	138	138	138	138
2025	136	136	136	136	136	136
2026	137	137	137	137	137	137
2027	141	142	142	142	142	141
2028	144	145	145	144	144	144
2029	144	145	145	144	144	144
2030	142	143	142	142	141	140
2031	140	144	143	142	142	141

Table 302 - Estimated Labor Utilization (1000s of Person-Years), Total Fleet for Manufacturer (Honda)

Estimated Labor Utilization (1000s of Person-Years), Total Fleet for Manufacturer (Honda)						
Model Year	Regulatory Alternative					
	No Action (Reference Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
2022	118	118	118	118	118	118
2023	125	125	125	125	125	125
2024	124	124	124	124	124	124
2025	119	119	119	119	119	119
2026	120	120	120	120	120	120
2027	123	124	124	124	124	124
2028	126	127	126	126	126	126
2029	126	126	126	126	126	126
2030	124	124	124	124	124	124
2031	122	123	122	122	122	122

Table 303 - Estimated Labor Utilization (1000s of Person-Years), Total Fleet for Manufacturer (Hyundai)

Estimated Labor Utilization (1000s of Person-Years), Total Fleet for Manufacturer (Hyundai)						
Model Year	Regulatory Alternative					
	No Action (Reference Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
2022	21	21	21	21	21	21
2023	22	22	22	22	22	22
2024	21	21	21	21	21	21
2025	20	20	20	20	20	20
2026	21	21	21	21	21	21
2027	21	21	21	21	21	21
2028	21	21	21	21	21	21
2029	21	21	21	21	22	21
2030	21	21	21	21	21	21
2031	21	21	21	21	21	21

Table 304 - Estimated Labor Utilization (1000s of Person-Years), Total Fleet for Manufacturer (KIA)

Estimated Labor Utilization (1000s of Person-Years), Total Fleet for Manufacturer (KIA)						
Model Year	Regulatory Alternative					
	No Action (Reference Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
2022	24	24	24	24	24	24
2023	26	26	26	26	26	26
2024	26	26	26	26	26	26
2025	24	24	24	24	24	24
2026	25	25	25	25	25	25
2027	25	25	25	25	25	25
2028	26	26	26	26	26	26
2029	26	26	26	26	26	26
2030	25	25	26	29	29	28
2031	25	25	25	28	28	28

Table 305 - Estimated Labor Utilization (1000s of Person-Years), Total Fleet for Manufacturer (JLR)

Estimated Labor Utilization (1000s of Person-Years), Total Fleet for Manufacturer (JLR)						
Model Year	Regulatory Alternative					
	No Action (Reference Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
2022	1	1	1	1	1	1
2023	1	1	1	1	1	1
2024	1	1	1	1	1	1
2025	1	1	1	1	1	1
2026	1	1	1	1	1	1
2027	1	1	1	1	1	1
2028	1	1	1	1	1	1
2029	1	1	1	1	1	1
2030	1	1	1	1	1	1
2031	1	1	1	1	1	1

Table 306 - Estimated Labor Utilization (1000s of Person-Years), Total Fleet for Manufacturer (Karma)

Estimated Labor Utilization (1000s of Person-Years), Total Fleet for Manufacturer (Karma)						
Model Year	Regulatory Alternative					
	No Action (Reference Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
2022	0	0	0	0	0	0
2023	0	0	0	0	0	0
2024	0	0	0	0	0	0
2025	0	0	0	0	0	0
2026	0	0	0	0	0	0
2027	0	0	0	0	0	0
2028	0	0	0	0	0	0
2029	0	0	0	0	0	0
2030	0	0	0	0	0	0
2031	0	0	0	0	0	0

Table 307 - Estimated Labor Utilization (1000s of Person-Years), Total Fleet for Manufacturer (Lucid)

Estimated Labor Utilization (1000s of Person-Years), Total Fleet for Manufacturer (Lucid)						
Model Year	Regulatory Alternative					
	No Action (Reference Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
2022	0	0	0	0	0	0
2023	0	0	0	0	0	0
2024	0	0	0	0	0	0
2025	0	0	0	0	0	0
2026	0	0	0	0	0	0
2027	0	0	0	0	0	0
2028	0	0	0	0	0	0
2029	0	0	0	0	0	0
2030	0	0	0	0	0	0
2031	0	0	0	0	0	0

Table 308 - Estimated Labor Utilization (1000s of Person-Years), Total Fleet for Manufacturer (Mazda)

Estimated Labor Utilization (1000s of Person-Years), Total Fleet for Manufacturer (Mazda)						
Model Year	Regulatory Alternative					
	No Action (Reference Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
2022	2	2	2	2	2	2
2023	2	2	2	2	2	2
2024	2	2	2	2	2	2
2025	2	2	2	2	2	2
2026	2	2	2	2	2	2
2027	2	2	2	2	2	2
2028	2	2	2	2	2	2
2029	2	2	2	2	2	3
2030	2	2	2	2	2	2
2031	2	2	2	2	2	2

Table 309 - Estimated Labor Utilization (1000s of Person-Years), Total Fleet for Manufacturer (Mercedes-Benz)

Estimated Labor Utilization (1000s of Person-Years), Total Fleet for Manufacturer (Mercedes-Benz)						
Model Year	Regulatory Alternative					
	No Action (Reference Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
2022	9	9	9	9	9	9
2023	9	9	9	9	9	9
2024	9	9	9	9	9	9
2025	9	9	9	9	9	9
2026	9	9	9	9	9	9
2027	10	10	10	10	10	10
2028	10	10	10	10	10	10
2029	10	10	10	10	10	10
2030	10	10	10	10	10	10
2031	10	10	10	10	10	10

Table 310 - Estimated Labor Utilization (1000s of Person-Years), Total Fleet for Manufacturer (Mitsubishi)

Estimated Labor Utilization (1000s of Person-Years), Total Fleet for Manufacturer (Mitsubishi)						
Model Year	Regulatory Alternative					
	No Action (Reference Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
2022	2	2	2	2	2	2
2023	2	2	2	2	2	2
2024	2	2	2	2	2	2
2025	2	2	2	2	2	2
2026	2	2	2	2	2	2
2027	2	2	2	2	2	2
2028	2	2	2	2	2	2
2029	2	2	2	2	2	2
2030	2	2	2	2	2	2
2031	2	2	2	2	2	2

Table 311 - Estimated Labor Utilization (1000s of Person-Years), Total Fleet for Manufacturer (Nissan)

Estimated Labor Utilization (1000s of Person-Years), Total Fleet for Manufacturer (Nissan)						
Model Year	Regulatory Alternative					
	No Action (Reference Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
2022	59	59	59	59	59	59
2023	62	62	62	62	62	62
2024	62	62	62	62	62	62
2025	60	60	60	60	60	60
2026	60	60	60	60	60	60
2027	61	61	61	61	61	61
2028	62	62	63	63	63	62
2029	62	62	63	63	62	62
2030	61	61	62	62	62	62
2031	61	61	61	61	61	61

Table 312 - Estimated Labor Utilization (1000s of Person-Years), Total Fleet for Manufacturer (Stellantis)

Estimated Labor Utilization (1000s of Person-Years), Total Fleet for Manufacturer (Stellantis)						
Model Year	Regulatory Alternative					
	No Action (Reference Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
2022	90	90	90	90	90	90
2023	100	100	100	100	100	100
2024	103	103	103	103	103	103
2025	103	103	103	103	103	103
2026	103	103	103	103	103	103
2027	105	106	106	106	106	106
2028	107	108	108	108	108	108
2029	107	108	108	108	108	108
2030	105	107	106	106	106	105
2031	104	106	105	105	105	103

Table 313 - Estimated Labor Utilization (1000s of Person-Years), Total Fleet for Manufacturer (Subaru)

Estimated Labor Utilization (1000s of Person-Years), Total Fleet for Manufacturer (Subaru)						
Model Year	Regulatory Alternative					
	No Action (Reference Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
2022	39	39	39	39	39	39
2023	42	42	42	42	42	42
2024	42	42	42	42	42	42
2025	40	40	40	40	40	40
2026	41	41	41	41	41	41
2027	42	42	42	42	42	42
2028	43	43	43	43	43	43
2029	43	43	43	43	43	43
2030	43	43	43	42	42	43
2031	42	42	42	42	42	42

Table 314 - Estimated Labor Utilization (1000s of Person-Years), Total Fleet for Manufacturer (Tesla)

Estimated Labor Utilization (1000s of Person-Years), Total Fleet for Manufacturer (Tesla)						
Model Year	Regulatory Alternative					
	No Action (Reference Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
2022	59	59	59	59	59	59
2023	60	60	60	60	60	60
2024	59	59	59	59	59	59
2025	55	55	55	55	55	55
2026	55	55	55	55	55	55
2027	56	56	56	56	56	55
2028	56	56	56	56	56	56
2029	56	56	56	56	56	55
2030	55	55	56	56	55	55
2031	54	54	55	55	55	54

Table 315 - Estimated Labor Utilization (1000s of Person-Years), Total Fleet for Manufacturer (Toyota)

Estimated Labor Utilization (1000s of Person-Years), Total Fleet for Manufacturer (Toyota)						
Model Year	Regulatory Alternative					
	No Action (Reference Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
2022	165	165	165	165	165	165
2023	173	173	173	173	173	173
2024	173	173	173	173	173	173
2025	166	166	166	166	166	166
2026	168	168	168	168	168	168
2027	172	172	172	172	172	172
2028	176	176	176	176	176	175
2029	176	176	176	176	176	174
2030	174	173	173	173	173	172
2031	172	171	171	171	171	170

Table 316 - Estimated Labor Utilization (1000s of Person-Years), Total Fleet for Manufacturer (Volvo)

Estimated Labor Utilization (1000s of Person-Years), Total Fleet for Manufacturer (Volvo)						
Model Year	Regulatory Alternative					
	No Action (Reference Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
2022	3	3	3	3	3	3
2023	3	3	3	3	3	3
2024	3	3	3	3	3	3
2025	3	3	3	3	3	3
2026	3	3	3	3	3	3
2027	3	3	3	3	3	3
2028	3	3	3	3	3	3
2029	3	3	3	3	3	3
2030	3	3	3	3	3	3
2031	3	3	3	3	3	3

Table 317 - Estimated Labor Utilization (1000s of Person-Years), Total Fleet for Manufacturer (VWA)

Estimated Labor Utilization (1000s of Person-Years), Total Fleet for Manufacturer (VWA)						
Model Year	Regulatory Alternative					
	No Action (Reference Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
2022	8	8	8	8	8	8
2023	8	8	8	8	8	8
2024	8	8	8	8	8	8
2025	8	8	8	8	8	8
2026	8	8	8	8	8	8
2027	8	8	8	8	8	8
2028	8	8	8	8	8	8
2029	8	8	8	8	8	8
2030	8	8	8	8	8	8
2031	8	8	8	8	8	8

Table 318 - Changes in Work Loss Days (thousand instances), Total Fleet through MY 2031

Changes in Work Loss Days (thousand instances), Total Fleet through MY 2031					
Category	Regulatory Alternative				
	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Work Loss Days from Upstream Emissions	-5.8	-11.1	-14.3	-15.8	-18.5
Work Loss Days from Tailpipe Emissions	-10.2	-4.8	-2.2	0.9	6.2
Total Work Loss Days	-16.0	-15.9	-16.5	-14.9	-12.3

Table 319 - Changes in Work Loss Days (thousand instances), Passenger Car Fleet through MY 2031

Changes in Work Loss Days (thousand instances), Passenger Car Fleet through MY 2031					
Category	Regulatory Alternative				
	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Work Loss Days from Upstream Emissions	-2.7	-0.8	-1.5	-2.1	-4.1
Work Loss Days from Tailpipe Emissions	-2.1	3.3	4.9	6.6	9.8
Total Work Loss Days	-4.8	2.5	3.4	4.4	5.7

Table 320 - Changes in Work Loss Days (thousand instances), Light Truck Fleet through MY 2031

Changes in Work Loss Days (thousand instances), Light Truck Fleet through MY 2031					
Category	Regulatory Alternative				
	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Work Loss Days from Upstream Emissions	-3.1	-10.3	-12.7	-13.6	-14.5
Work Loss Days from Tailpipe Emissions	-8.1	-8.1	-7.2	-5.7	-3.5
Total Work Loss Days	-11.1	-18.4	-19.9	-19.3	-18.0

Compliance Impacts

Table 321 - Compliance Impacts and Cumulative Industry Costs by Model Year for Total and Total Fleet, Alternative PC2LT002

Compliance Impacts and Cumulative Industry Costs by Model Year for Total and Total Fleet, Alternative PC2LT002											
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Fuel Economy											
Average Required (mpg)	35.8	36.2	39.1	42.4	47.0	47.3	47.4	48.4	49.4	50.4	N/A
Change from Reference Baseline (%)	0%	0%	0%	0%	0%	1%	1%	3%	5%	7%	N/A
Average Achieved (mpg)	36.5	38.9	43.1	46.7	49.9	49.9	50.2	50.8	51.1	52.5	N/A
Total Regulatory Costs											
Tech. (non-Off-Cycle/non-AC) Costs ($b)	0.0	0.0	0.0	0.0	0.0	1.8	2.7	3.8	4.1	5.6	18.0
Off-Cycle Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	-0.3	-0.3	-0.3	-0.4	-0.8	-2.1
Off-Cycle Credits	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
A/C Efficiency Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1
Avg. A/C Efficiency	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Subtotal Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	1.5	2.4	3.4	3.8	4.7	15.8
Total Civil Penalties ($b)	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.6	0.7	0.3	1.8
Total Regulatory Costs ($b)	0.0	0.0	0.0	0.0	0.0	1.9	3.0	4.3	4.8	5.8	19.8
Sales Impacts											
Sales Change from Reference Baseline (m)	0	0	0	0	0	-0.007	-0.013	-0.023	-0.026	-0.024	-0.1

Table 322 - Compliance Impacts and Cumulative Industry Costs by Model Year for Total and Passenger Car Fleet, Alternative PC2LT002

Compliance Impacts and Cumulative Industry Costs by Model Year for Total and Passenger Car Fleet, Alternative PC2LT002											
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Fuel Economy											
Average Required (mpg)	44.1	44.8	48.7	52.9	58.8	60.0	61.2	62.5	63.7	65.1	N/A
Change from Reference Baseline (%)	0%	0%	0%	0%	0%	2%	4%	6%	8%	11%	N/A
Average Achieved (mpg)	47.1	51.6	58.4	62.7	68.3	68.6	68.4	68.6	68.6	70.8	N/A
Total Regulatory Costs											
Tech. (non-Off-Cycle/non-AC) Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.6	1.1	1.8	1.9	1.7	7.0
Off-Cycle Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	-0.2	-0.2	-0.3	-0.3	-0.5	-1.6
Off-Cycle Credits	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
A/C Efficiency Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Avg. A/C Efficiency	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Subtotal Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.4	0.8	1.5	1.6	1.2	5.4
Total Civil Penalties ($b)	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.3	0.2	0.0	0.8
Total Regulatory Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.7	1.2	2.0	2.1	1.8	7.7
Sales Impacts											
Sales Change from Reference Baseline (m)	0	0	0	0	0	-0.005	-0.013	-0.034	-0.03	-0.016	-0.1

Table 323 - Compliance Impacts and Cumulative Industry Costs by Model Year for Total and Light Truck Fleet, Alternative PC2LT002

Compliance Impacts and Cumulative Industry Costs by Model Year for Total and Light Truck Fleet, Alternative PC2LT002											
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Fuel Economy											
Average Required (mpg)	32.1	32.6	35.2	38.3	42.6	42.6	42.6	43.5	44.3	45.2	N/A
Change from Reference Baseline (%)	0%	0%	0%	0%	0%	0%	0%	2%	4%	6%	N/A
Average Achieved (mpg)	32.1	34.0	37.5	41.1	43.7	43.7	44.2	44.9	45.3	46.4	N/A
Total Regulatory Costs											
Tech. (non-Off-Cycle/non-AC) Costs ($b)	0.0	0.0	0.0	0.0	0.0	1.2	1.7	2.0	2.3	3.9	11.0
Off-Cycle Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	-0.1	-0.1	-0.3	-0.5
Off-Cycle Credits	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
A/C Efficiency Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1
Avg. A/C Efficiency	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Subtotal Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	1.1	1.6	1.9	2.2	3.6	10.4
Total Civil Penalties ($b)	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.3	0.5	0.2	1.1
Total Regulatory Costs ($b)	0.0	0.0	0.0	0.0	0.0	1.2	1.8	2.3	2.7	4.1	12.1
Sales Impacts											
Sales Change from Reference Baseline (m)	0	0	0	0	0	-0.002	0.0005	0.0104	0.0035	-0.007	0.0

Table 324 - Compliance Impacts and Cumulative Industry Costs by Model Year for Total and Domestic Car Fleet, Alternative PC2LT002

Compliance Impacts and Cumulative Industry Costs by Model Year for Total and Domestic Car Fleet, Alternative PC2LT002											
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Fuel Economy											
Average Required (mpg)	43.5	44.2	48.1	52.3	58.0	59.2	60.4	61.7	62.9	64.2	N/A
Change from Reference Baseline (%)	0%	0%	0%	0%	0%	2%	4%	6%	8%	11%	N/A
Average Achieved (mpg)	48.9	52.4	60.9	66.6	71.4	71.2	70.4	70.7	70.4	72.6	N/A
Total Regulatory Costs											
Tech. (non-Off-Cycle/non-AC) Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.6	0.5	0.8	0.9	0.8	3.5
Off-Cycle Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	-0.1	-0.1	-0.1	-0.1	-0.3	-0.7
Off-Cycle Credits	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
A/C Efficiency Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Avg. A/C Efficiency	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Subtotal Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.5	0.4	0.7	0.7	0.5	2.8
Total Civil Penalties ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.1	0.0	0.5
Total Regulatory Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.6	0.6	0.9	1.0	0.8	3.9
Sales Impacts											
Sales Change from Reference Baseline (m)	0	0	0	0	0	-0.002	-0.007	-0.017	-0.015	-0.008	0.0

Table 325 - Compliance Impacts and Cumulative Industry Costs by Model Year for Total and Imported Car Fleet, Alternative PC2LT002

Compliance Impacts and Cumulative Industry Costs by Model Year for Total and Imported Car Fleet, Alternative PC2LT002											
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Fuel Economy											
Average Required (mpg)	44.7	45.4	49.3	53.6	59.5	60.7	62.0	63.3	64.6	65.9	N/A
Change from Reference Baseline (%)	0%	0%	0%	0%	0%	2%	4%	6%	9%	11%	N/A
Average Achieved (mpg)	45.5	51.0	56.2	59.4	65.5	66.2	66.6	66.6	66.8	69.2	N/A
Total Regulatory Costs											
Tech. (non-Off-Cycle/non-AC) Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.1	0.5	1.0	1.0	0.9	3.5
Off-Cycle Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	-0.1	-0.1	-0.2	-0.2	-0.3	-0.9
Off-Cycle Credits	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
A/C Efficiency Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Avg. A/C Efficiency	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Subtotal Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	-0.1	0.4	0.8	0.8	0.6	2.6
Total Civil Penalties ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.3
Total Regulatory Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.1	0.6	1.1	1.1	0.9	3.8
Sales Impacts											
Sales Change from Reference Baseline (m)	0	0	0	0	0	-0.002	-0.007	-0.017	-0.015	-0.008	0.0

Table 326 - Compliance Impacts and Cumulative Industry Costs by Model Year for Total and Total Fleet, Alternative PC1LT3

Compliance Impacts and Cumulative Industry Costs by Model Year for Total and Total Fleet, Alternative PC1LT3											
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Fuel Economy											
Average Required (mpg)	35.8	36.2	39.1	42.4	47.0	48.2	49.4	50.6	51.9	53.2	N/A
Change from Reference Baseline (%)	0%	0%	0%	0%	0%	3%	5%	8%	11%	13%	N/A
Average Achieved (mpg)	36.5	38.9	43.1	46.7	49.9	50.3	50.9	51.7	52.3	53.7	N/A
Total Regulatory Costs											
Tech. (non-Off-Cycle/non-AC) Costs ($b)	0.0	0.0	0.0	0.0	0.0	2.0	3.4	4.5	5.2	6.7	21.8
Off-Cycle Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	-0.3	-0.3	-0.3	-0.4	-0.8	-2.0
Off-Cycle Credits	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
A/C Efficiency Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1
Avg. A/C Efficiency	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Subtotal Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	1.7	3.0	4.1	4.8	5.9	19.6
Total Civil Penalties ($b)	0.0	0.0	0.0	0.0	0.0	0.6	1.4	1.9	2.3	2.3	8.4
Total Regulatory Costs ($b)	0.0	0.0	0.0	0.0	0.0	2.6	4.8	6.4	7.5	9.0	30.2
Sales Impacts											
Sales Change from Reference Baseline (m)	0	0	0	0	0	-0.014	-0.029	-0.04	-0.047	-0.05	-0.2

Table 327 - Compliance Impacts and Cumulative Industry Costs by Model Year for Total and Passenger Car Fleet, Alternative PC1LT3

Compliance Impacts and Cumulative Industry Costs by Model Year for Total and Passenger Car Fleet, Alternative PC1LT3											
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Fuel Economy											
Average Required (mpg)	44.1	44.8	48.7	52.9	58.8	59.4	60.0	60.6	61.2	61.8	N/A
Change from Reference Baseline (%)	0%	0%	0%	0%	0%	1%	2%	3%	4%	5%	N/A
Average Achieved (mpg)	47.1	51.6	58.4	62.7	68.3	68.2	67.8	67.6	67.3	69.1	N/A
Total Regulatory Costs											
Tech. (non-Off-Cycle/non-AC) Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.1	0.3	0.6	0.6	0.4	1.9
Off-Cycle Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	-0.2	-0.2	-0.3	-0.3	-0.5	-1.5
Off-Cycle Credits	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
A/C Efficiency Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Avg. A/C Efficiency	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Subtotal Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	0.3	0.3	-0.1	0.4
Total Civil Penalties ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.3
Total Regulatory Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.4	0.7	1.1	1.1	0.9	4.2
Sales Impacts											
Sales Change from Reference Baseline (m)	0	0	0	0	0	0.0073	0.0165	0.016	0.0262	0.0433	0.1

Table 328 - Compliance Impacts and Cumulative Industry Costs by Model Year for Total and Light Truck Fleet, Alternative PC1LT3

Compliance Impacts and Cumulative Industry Costs by Model Year for Total and Light Truck Fleet, Alternative PC1LT3											
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Fuel Economy											
Average Required (mpg)	32.1	32.6	35.2	38.3	42.6	43.9	45.3	46.7	48.1	49.6	N/A
Change from Reference Baseline (%)	0%	0%	0%	0%	0%	3%	6%	10%	13%	16%	N/A
Average Achieved (mpg)	32.1	34.0	37.5	41.1	43.7	44.3	45.1	46.2	46.9	48.1	N/A
Total Regulatory Costs											
Tech. (non-Off-Cycle/non-AC) Costs ($b)	0.0	0.0	0.0	0.0	0.0	1.9	3.1	3.9	4.6	6.3	19.8
Off-Cycle Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	-0.1	-0.1	-0.3	-0.5
Off-Cycle Credits	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
A/C Efficiency Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1
Avg. A/C Efficiency	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Subtotal Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	1.8	3.0	3.9	4.5	6.0	19.3
Total Civil Penalties ($b)	0.0	0.0	0.0	0.0	0.0	0.5	1.4	1.8	2.2	2.2	8.1
Total Regulatory Costs ($b)	0.0	0.0	0.0	0.0	0.0	2.2	4.1	5.2	6.3	8.1	26.0
Sales Impacts											
Sales Change from Reference Baseline (m)	0	0	0	0	0	-0.021	-0.045	-0.056	-0.074	-0.093	-0.3

Table 329 - Compliance Impacts and Cumulative Industry Costs by Model Year for Total and Domestic Car Fleet, Alternative PC1LT3

Compliance Impacts and Cumulative Industry Costs by Model Year for Total and Domestic Car Fleet, Alternative PC1LT3											
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Fuel Economy											
Average Required (mpg)	43.5	44.2	48.1	52.3	58.0	58.6	59.2	59.8	60.4	61.0	N/A
Change from Reference Baseline (%)	0%	0%	0%	0%	0%	1%	2%	3%	4%	5%	N/A
Average Achieved (mpg)	48.9	52.4	60.9	66.6	71.4	70.9	70.1	70.0	69.2	70.8	N/A
Total Regulatory Costs											
Tech. (non-Off-Cycle/non-AC) Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.4	0.4	0.2	1.3
Off-Cycle Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	-0.1	-0.1	-0.1	-0.1	-0.3	-0.7
Off-Cycle Credits	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
A/C Efficiency Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Avg. A/C Efficiency	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Subtotal Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.2	0.0	0.6
Total Civil Penalties ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Total Regulatory Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.3	0.4	0.6	0.6	0.5	2.4
Sales Impacts											
Sales Change from Reference Baseline (m)	0	0	0	0	0	0.0036	0.0081	0.0079	0.0129	0.0214	0.1

Table 330 - Compliance Impacts and Cumulative Industry Costs by Model Year for Total and Imported Car Fleet, Alternative PC1LT3

Compliance Impacts and Cumulative Industry Costs by Model Year for Total and Imported Car Fleet, Alternative PC1LT3											
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Fuel Economy											
Average Required (mpg)	44.7	45.4	49.3	53.6	59.5	60.1	60.7	61.3	62.0	62.6	N/A
Change from Reference Baseline (%)	0%	0%	0%	0%	0%	1%	2%	3%	4%	5%	N/A
Average Achieved (mpg)	45.5	51.0	56.2	59.4	65.5	65.7	65.6	65.4	65.5	67.6	N/A
Total Regulatory Costs											
Tech. (non-Off-Cycle/non-AC) Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.2	0.2	0.7
Off-Cycle Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	-0.1	-0.1	-0.2	-0.2	-0.3	-0.9
Off-Cycle Credits	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
A/C Efficiency Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Avg. A/C Efficiency	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Subtotal Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	-0.2	-0.1	0.0	0.1	-0.1	-0.2
Total Civil Penalties ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1
Total Regulatory Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.1	0.3	0.5	0.5	0.4	1.8
Sales Impacts											
Sales Change from Reference Baseline (m)	0	0	0	0	0	0.0037	0.0083	0.0081	0.0132	0.0219	0.1

Table 331 - Compliance Impacts and Cumulative Industry Costs by Model Year for Total and Total Fleet, Alternative PC2LT4

Compliance Impacts and Cumulative Industry Costs by Model Year for Total and Total Fleet, Alternative PC2LT4											
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Fuel Economy											
Average Required (mpg)	35.8	36.2	39.1	42.4	47.0	48.7	50.4	52.2	54.1	56.0	N/A
Change from Reference Baseline (%)	0%	0%	0%	0%	0%	4%	7%	11%	15%	19%	N/A
Average Achieved (mpg)	36.5	38.9	43.1	46.7	49.9	50.5	51.4	52.4	53.3	54.9	N/A
Total Regulatory Costs											
Tech. (non-Off-Cycle/non-AC) Costs ($b)	0.0	0.0	0.0	0.0	0.0	2.5	4.7	6.4	8.9	10.4	33.0
Off-Cycle Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	-0.3	-0.3	-0.3	-0.4	-0.8	-2.0
Off-Cycle Credits	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
A/C Efficiency Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1
Avg. A/C Efficiency	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Subtotal Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	2.2	4.4	6.1	8.6	9.6	30.9
Total Civil Penalties ($b)	0.0	0.0	0.0	0.0	0.0	0.9	2.1	2.9	3.8	4.2	14.0
Total Regulatory Costs ($b)	0.0	0.0	0.0	0.0	0.0	3.4	6.8	9.4	12.8	14.6	47.0
Sales Impacts											
Sales Change from Reference Baseline (m)	0	0	0	0	0	-0.019	-0.045	-0.064	-0.091	-0.096	-0.3

Table 332 - Compliance Impacts and Cumulative Industry Costs by Model Year for Total and Passenger Car Fleet, Alternative PC2LT4

Compliance Impacts and Cumulative Industry Costs by Model Year for Total and Passenger Car Fleet, Alternative PC2LT4											
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Fuel Economy											
Average Required (mpg)	44.1	44.8	48.7	52.9	58.8	60.0	61.2	62.5	63.7	65.1	N/A
Change from Reference Baseline (%)	0%	0%	0%	0%	0%	2%	4%	6%	8%	11%	N/A
Average Achieved (mpg)	47.1	51.6	58.4	62.7	68.3	68.6	68.5	68.7	68.7	70.8	N/A
Total Regulatory Costs											
Tech. (non-Off-Cycle/non-AC) Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.3	0.8	1.5	1.7	1.5	5.8
Off-Cycle Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	-0.2	-0.2	-0.3	-0.3	-0.5	-1.5
Off-Cycle Credits	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
A/C Efficiency Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Avg. A/C Efficiency	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Subtotal Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.5	1.3	1.4	1.0	4.2
Total Civil Penalties ($b)	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.3	0.2	0.0	0.8
Total Regulatory Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.7	1.5	2.4	2.6	2.3	9.5
Sales Impacts											
Sales Change from Reference Baseline (m)	0	0	0	0	0	0.0046	0.0079	-0.005	0.0258	0.0487	0.1

Table 333 - Compliance Impacts and Cumulative Industry Costs by Model Year for Total and Light Truck Fleet, Alternative PC2LT4

Compliance Impacts and Cumulative Industry Costs by Model Year for Total and Light Truck Fleet, Alternative PC2LT4											
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Fuel Economy											
Average Required (mpg)	32.1	32.6	35.2	38.3	42.6	44.3	46.2	48.1	50.1	52.2	N/A
Change from Reference Baseline (%)	0%	0%	0%	0%	0%	4%	8%	13%	18%	23%	N/A
Average Achieved (mpg)	32.1	34.0	37.5	41.1	43.7	44.5	45.6	46.7	47.8	49.2	N/A
Total Regulatory Costs											
Tech. (non-Off-Cycle/non-AC) Costs ($b)	0.0	0.0	0.0	0.0	0.0	2.2	3.9	4.9	7.2	8.9	27.2
Off-Cycle Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	-0.1	-0.1	-0.3	-0.5
Off-Cycle Credits	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
A/C Efficiency Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1
Avg. A/C Efficiency	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Subtotal Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	2.2	3.9	4.8	7.2	8.6	26.6
Total Civil Penalties ($b)	0.0	0.0	0.0	0.0	0.0	0.8	1.9	2.7	3.7	4.2	13.2
Total Regulatory Costs ($b)	0.0	0.0	0.0	0.0	0.0	2.7	5.4	7.0	10.2	12.3	37.5
Sales Impacts											
Sales Change from Reference Baseline (m)	0	0	0	0	0	-0.024	-0.053	-0.059	-0.117	-0.145	-0.4

Table 334 - Compliance Impacts and Cumulative Industry Costs by Model Year for Total and Domestic Car Fleet, Alternative PC2LT4

Compliance Impacts and Cumulative Industry Costs by Model Year for Total and Domestic Car Fleet, Alternative PC2LT4											
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Fuel Economy											
Average Required (mpg)	43.5	44.2	48.1	52.3	58.0	59.2	60.4	61.7	62.9	64.2	N/A
Change from Reference Baseline (%)	0%	0%	0%	0%	0%	2%	4%	6%	8%	11%	N/A
Average Achieved (mpg)	48.9	52.4	60.9	66.6	71.4	71.2	70.4	70.7	70.4	72.5	N/A
Total Regulatory Costs											
Tech. (non-Off-Cycle/non-AC) Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.5	0.6	0.5	2.0
Off-Cycle Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	-0.1	-0.1	-0.1	-0.1	-0.3	-0.7
Off-Cycle Credits	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
A/C Efficiency Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Avg. A/C Efficiency	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Subtotal Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.4	0.5	0.3	1.3
Total Civil Penalties ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.1	0.0	0.5
Total Regulatory Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.4	0.5	0.9	1.1	1.0	3.8
Sales Impacts											
Sales Change from Reference Baseline (m)	0	0	0	0	0	0.0023	0.0039	-0.003	0.0127	0.024	0.0

Table 335 - Compliance Impacts and Cumulative Industry Costs by Model Year for Total and Imported Car Fleet, Alternative PC2LT4

Compliance Impacts and Cumulative Industry Costs by Model Year for Total and Imported Car Fleet, Alternative PC2LT4											
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Fuel Economy											
Average Required (mpg)	44.7	45.4	49.3	53.6	59.5	60.7	62.0	63.3	64.6	65.9	N/A
Change from Reference Baseline (%)	0%	0%	0%	0%	0%	2%	4%	6%	9%	11%	N/A
Average Achieved (mpg)	45.5	51.0	56.2	59.4	65.5	66.2	66.7	66.8	67.0	69.2	N/A
Total Regulatory Costs											
Tech. (non-Off-Cycle/non-AC) Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.1	0.6	1.1	1.1	1.0	3.8
Off-Cycle Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	-0.1	-0.1	-0.2	-0.2	-0.3	-0.9
Off-Cycle Credits	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
A/C Efficiency Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Avg. A/C Efficiency	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Subtotal Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	-0.1	0.4	0.9	0.9	0.7	2.9
Total Civil Penalties ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.3
Total Regulatory Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.3	0.9	1.6	1.6	1.3	5.6
Sales Impacts											
Sales Change from Reference Baseline (m)	0	0	0	0	0	0.0023	0.004	-0.003	0.013	0.0246	0.0

Table 336 - Compliance Impacts and Cumulative Industry Costs by Model Year for Total and Total Fleet, Alternative PC3LT5

Compliance Impacts and Cumulative Industry Costs by Model Year for Total and Total Fleet, Alternative PC3LT5											
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Fuel Economy											
Average Required (mpg)	35.8	36.2	39.1	42.4	47.0	49.2	51.5	53.8	56.4	59.0	N/A
Change from Reference Baseline (%)	0%	0%	0%	0%	0%	5%	10%	15%	20%	26%	N/A
Average Achieved (mpg)	36.5	38.9	43.1	46.7	49.9	50.6	51.6	52.7	53.9	55.9	N/A
Total Regulatory Costs											
Tech. (non-Off-Cycle/non-AC) Costs ($b)	0.0	0.0	0.0	0.0	0.0	3.1	5.6	7.6	11.2	13.9	41.4
Off-Cycle Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	-0.3	-0.3	-0.3	-0.4	-0.8	-2.1
Off-Cycle Credits	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
A/C Efficiency Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1
Avg. A/C Efficiency	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Subtotal Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	2.8	5.2	7.2	10.8	13.0	39.2
Total Civil Penalties ($b)	0.0	0.0	0.0	0.0	0.0	1.4	3.3	4.8	6.6	7.1	23.0
Total Regulatory Costs ($b)	0.0	0.0	0.0	0.0	0.0	4.5	8.8	12.4	17.8	20.9	64.4
Sales Impacts											
Sales Change from Reference Baseline (m)	0	0	0	0	0	-0.029	-0.062	-0.09	-0.135	-0.151	-0.5

Table 337 - Compliance Impacts and Cumulative Industry Costs by Model Year for Total and Passenger Car Fleet, Alternative PC3LT5

Compliance Impacts and Cumulative Industry Costs by Model Year for Total and Passenger Car Fleet, Alternative PC3LT5											
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Fuel Economy											
Average Required (mpg)	44.1	44.8	48.7	52.9	58.8	60.6	62.5	64.4	66.4	68.5	N/A
Change from Reference Baseline (%)	0%	0%	0%	0%	0%	3%	6%	10%	13%	16%	N/A
Average Achieved (mpg)	47.1	51.6	58.4	62.7	68.3	68.8	68.9	69.5	70.1	73.0	N/A
Total Regulatory Costs											
Tech. (non-Off-Cycle/non-AC) Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.7	1.3	2.1	2.5	2.9	9.5
Off-Cycle Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	-0.2	-0.2	-0.3	-0.3	-0.5	-1.6
Off-Cycle Credits	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
A/C Efficiency Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Avg. A/C Efficiency	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Subtotal Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.4	1.0	1.9	2.2	2.4	7.9
Total Civil Penalties ($b)	0.0	0.0	0.0	0.0	0.0	0.2	0.5	0.7	0.6	0.2	2.2
Total Regulatory Costs ($b)	0.0	0.0	0.0	0.0	0.0	1.3	2.4	3.7	4.2	4.3	15.8
Sales Impacts											
Sales Change from Reference Baseline (m)	0	0	0	0	0	-0.008	-0.007	-0.025	0.0198	0.0402	0.0

Table 338 - Compliance Impacts and Cumulative Industry Costs by Model Year for Total and Light Truck Fleet, Alternative PC3LT5

Compliance Impacts and Cumulative Industry Costs by Model Year for Total and Light Truck Fleet, Alternative PC3LT5											
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Fuel Economy											
Average Required (mpg)	32.1	32.6	35.2	38.3	42.6	44.8	47.2	49.7	52.3	55.0	N/A
Change from Reference Baseline (%)	0%	0%	0%	0%	0%	5%	11%	17%	23%	29%	N/A
Average Achieved (mpg)	32.1	34.0	37.5	41.1	43.7	44.5	45.7	47.0	48.1	49.8	N/A
Total Regulatory Costs											
Tech. (non-Off-Cycle/non-AC) Costs ($b)	0.0	0.0	0.0	0.0	0.0	2.5	4.3	5.4	8.7	10.9	31.9
Off-Cycle Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	-0.1	-0.1	-0.3	-0.5
Off-Cycle Credits	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
A/C Efficiency Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1
Avg. A/C Efficiency	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Subtotal Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	2.4	4.2	5.4	8.6	10.7	31.3
Total Civil Penalties ($b)	0.0	0.0	0.0	0.0	0.0	1.2	2.7	4.1	6.0	6.8	20.8
Total Regulatory Costs ($b)	0.0	0.0	0.0	0.0	0.0	3.2	6.5	8.6	13.6	16.6	48.6
Sales Impacts											
Sales Change from Reference Baseline (m)	0	0	0	0	0	-0.021	-0.055	-0.065	-0.155	-0.191	-0.5

Table 339 - Compliance Impacts and Cumulative Industry Costs by Model Year for Total and Domestic Car Fleet, Alternative PC3LT5

Compliance Impacts and Cumulative Industry Costs by Model Year for Total and Domestic Car Fleet, Alternative PC3LT5											
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Fuel Economy											
Average Required (mpg)	43.5	44.2	48.1	52.3	58.0	59.9	61.7	63.6	65.5	67.6	N/A
Change from Reference Baseline (%)	0%	0%	0%	0%	0%	3%	6%	10%	13%	17%	N/A
Average Achieved (mpg)	48.9	52.4	60.9	66.6	71.4	71.5	70.9	71.4	71.6	74.4	N/A
Total Regulatory Costs											
Tech. (non-Off-Cycle/non-AC) Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.6	0.6	0.9	1.1	1.4	4.5
Off-Cycle Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	-0.1	-0.1	-0.1	-0.1	-0.3	-0.7
Off-Cycle Credits	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
A/C Efficiency Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Avg. A/C Efficiency	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Subtotal Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.5	0.5	0.7	1.0	1.1	3.8
Total Civil Penalties ($b)	0.0	0.0	0.0	0.0	0.0	0.1	0.4	0.4	0.4	0.2	1.5
Total Regulatory Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.8	1.1	1.6	1.9	2.2	7.5
Sales Impacts											
Sales Change from Reference Baseline (m)	0	0	0	0	0	-0.004	-0.004	-0.012	0.0098	0.0198	0.0

Table 340 - Compliance Impacts and Cumulative Industry Costs by Model Year for Total and Imported Car Fleet, Alternative PC3LT5

Compliance Impacts and Cumulative Industry Costs by Model Year for Total and Imported Car Fleet, Alternative PC3LT5											
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Fuel Economy											
Average Required (mpg)	44.7	45.4	49.3	53.6	59.5	61.4	63.3	65.2	67.2	69.3	N/A
Change from Reference Baseline (%)	0%	0%	0%	0%	0%	3%	6%	10%	13%	16%	N/A
Average Achieved (mpg)	45.5	51.0	56.2	59.4	65.5	66.4	67.1	67.8	68.6	71.7	N/A
Total Regulatory Costs											
Tech. (non-Off-Cycle/non-AC) Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.1	0.7	1.3	1.4	1.5	5.0
Off-Cycle Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	-0.1	-0.1	-0.2	-0.2	-0.3	-0.9
Off-Cycle Credits	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
A/C Efficiency Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Avg. A/C Efficiency	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Subtotal Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.5	1.1	1.3	1.2	4.1
Total Civil Penalties ($b)	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.2	0.1	0.7
Total Regulatory Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.5	1.2	2.2	2.3	2.2	8.3
Sales Impacts											
Sales Change from Reference Baseline (m)	0	0	0	0	0	-0.004	-0.004	-0.013	0.01	0.0203	0.0

Table 341 - Compliance Impacts and Cumulative Industry Costs by Model Year for Total and Total Fleet, Alternative PC3LT5

Compliance Impacts and Cumulative Industry Costs by Model Year for Total and Total Fleet, Alternative PC3LT5											
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Fuel Economy											
Average Required (mpg)	35.8	36.2	39.1	42.4	47.0	49.2	51.5	53.8	56.4	59.0	N/A
Change from Reference Baseline (%)	0%	0%	0%	0%	0%	5%	10%	15%	20%	26%	N/A
Average Achieved (mpg)	36.5	38.9	43.1	46.7	49.9	50.6	51.6	52.7	53.9	55.9	N/A
Total Regulatory Costs											
Tech. (non-Off-Cycle/non-AC) Costs ($b)	0.0	0.0	0.0	0.0	0.0	3.1	5.6	7.6	11.2	13.9	41.4
Off-Cycle Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	-0.3	-0.3	-0.3	-0.4	-0.8	-2.1
Off-Cycle Credits	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
A/C Efficiency Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1
Avg. A/C Efficiency	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Subtotal Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	2.8	5.2	7.2	10.8	13.0	39.2
Total Civil Penalties ($b)	0.0	0.0	0.0	0.0	0.0	1.4	3.3	4.8	6.6	7.1	23.0
Total Regulatory Costs ($b)	0.0	0.0	0.0	0.0	0.0	4.5	8.8	12.4	17.8	20.9	64.4
Sales Impacts											
Sales Change from Reference Baseline (m)	0	0	0	0	0	-0.029	-0.062	-0.09	-0.135	-0.151	-0.5

Table 342 - Compliance Impacts and Cumulative Industry Costs by Model Year for Total and Passenger Car Fleet, Alternative PC6LT8

Compliance Impacts and Cumulative Industry Costs by Model Year for Total and Passenger Car Fleet, Alternative PC6LT8											
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Fuel Economy											
Average Required (mpg)	44.1	44.8	48.7	52.9	58.8	62.5	66.5	70.8	75.3	80.1	N/A
Change from Reference Baseline (%)	0%	0%	0%	0%	0%	6%	13%	20%	28%	36%	N/A
Average Achieved (mpg)	47.1	51.6	58.4	62.7	68.3	69.0	70.8	72.5	74.3	78.6	N/A
Total Regulatory Costs											
Tech. (non-Off-Cycle/non-AC) Costs ($b)	0.0	0.0	0.0	0.0	0.0	1.2	2.4	3.8	4.6	5.4	17.4
Off-Cycle Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	-0.2	-0.3	-0.3	-0.3	-0.5	-1.6
Off-Cycle Credits	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
A/C Efficiency Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Avg. A/C Efficiency	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Subtotal Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	1.0	2.1	3.5	4.3	4.8	15.7
Total Civil Penalties ($b)	0.0	0.0	0.0	0.0	0.0	0.8	1.9	2.9	3.8	3.7	13.2
Total Regulatory Costs ($b)	0.0	0.0	0.0	0.0	0.0	2.7	5.5	8.3	10.2	11.5	38.2
Sales Impacts											
Sales Change from Reference Baseline (m)	0	0	0	0	0	-0.03	-0.05	-0.085	-0.044	-0.028	-0.2

Table 343 - Compliance Impacts and Cumulative Industry Costs by Model Year for Total and Light Truck Fleet, Alternative PC6LT8

Compliance Impacts and Cumulative Industry Costs by Model Year for Total and Light Truck Fleet, Alternative PC6LT8											
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Fuel Economy											
Average Required (mpg)	32.1	32.6	35.2	38.3	42.6	46.3	50.3	54.7	59.4	64.6	N/A
Change from Reference Baseline (%)	0%	0%	0%	0%	0%	9%	18%	28%	39%	52%	N/A
Average Achieved (mpg)	32.1	34.0	37.5	41.1	43.7	44.6	45.9	47.4	48.7	50.3	N/A
Total Regulatory Costs											
Tech. (non-Off-Cycle/non-AC) Costs ($b)	0.0	0.0	0.0	0.0	0.0	3.2	5.3	6.7	10.4	12.4	38.1
Off-Cycle Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	-0.1	-0.1	-0.3	-0.5
Off-Cycle Credits	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
A/C Efficiency Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1
Avg. A/C Efficiency	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Subtotal Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	3.2	5.3	6.7	10.3	12.1	37.5
Total Civil Penalties ($b)	0.0	0.0	0.0	0.0	0.0	2.8	6.8	10.7	15.3	19.1	54.7
Total Regulatory Costs ($b)	0.0	0.0	0.0	0.0	0.0	5.3	11.0	15.8	23.9	29.1	85.1
Sales Impacts											
Sales Change from Reference Baseline (m)	0	0	0	0	0	-0.032	-0.081	-0.112	-0.243	-0.307	-0.8

Table 344 - Compliance Impacts and Cumulative Industry Costs by Model Year for Total and Domestic Car Fleet, Alternative PC6LT8

Compliance Impacts and Cumulative Industry Costs by Model Year for Total and Domestic Car Fleet, Alternative PC6LT8											
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Fuel Economy											
Average Required (mpg)	43.5	44.2	48.1	52.3	58.0	61.7	65.7	69.9	74.3	79.1	N/A
Change from Reference Baseline (%)	0%	0%	0%	0%	0%	6%	13%	21%	28%	36%	N/A
Average Achieved (mpg)	48.9	52.4	60.9	66.6	71.4	71.5	73.2	75.4	76.5	80.3	N/A
Total Regulatory Costs											
Tech. (non-Off-Cycle/non-AC) Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.5	0.9	1.4	1.8	2.2	6.8
Off-Cycle Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	-0.1	-0.1	-0.1	-0.1	-0.3	-0.7
Off-Cycle Credits	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
A/C Efficiency Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Avg. A/C Efficiency	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Subtotal Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.4	0.8	1.3	1.7	1.9	6.1
Total Civil Penalties ($b)	0.0	0.0	0.0	0.0	0.0	0.5	1.1	1.4	1.8	1.7	6.6
Total Regulatory Costs ($b)	0.0	0.0	0.0	0.0	0.0	1.3	2.4	3.5	4.3	5.0	16.4
Sales Impacts											
Sales Change from Reference Baseline (m)	0	0	0	0	0	-0.015	-0.025	-0.042	-0.022	-0.014	-0.1

Table 345 - Compliance Impacts and Cumulative Industry Costs by Model Year for Total and Imported Car Fleet, Alternative PC6LT8

Compliance Impacts and Cumulative Industry Costs by Model Year for Total and Imported Car Fleet, Alternative PC6LT8											
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Fuel Economy											
Average Required (mpg)	44.7	45.4	49.3	53.6	59.5	63.3	67.4	71.7	76.2	81.1	N/A
Change from Reference Baseline (%)	0%	0%	0%	0%	0%	6%	13%	21%	28%	36%	N/A
Average Achieved (mpg)	45.5	51.0	56.2	59.4	65.5	66.7	68.6	69.9	72.2	77.0	N/A
Total Regulatory Costs											
Tech. (non-Off-Cycle/non-AC) Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.7	1.5	2.4	2.9	3.2	10.6
Off-Cycle Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	-0.1	-0.1	-0.2	-0.2	-0.3	-0.9
Off-Cycle Credits	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
A/C Efficiency Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Avg. A/C Efficiency	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Subtotal Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.5	1.3	2.2	2.7	2.9	9.7
Total Civil Penalties ($b)	0.0	0.0	0.0	0.0	0.0	0.3	0.8	1.5	2.1	2.0	6.6
Total Regulatory Costs ($b)	0.0	0.0	0.0	0.0	0.0	1.4	3.1	4.9	6.0	6.4	21.8
Sales Impacts											
Sales Change from Reference Baseline (m)	0	0	0	0	0	-0.015	-0.026	-0.043	-0.023	-0.014	-0.1

Table 346 - Compliance Impacts and Cumulative Industry Costs by Model Year for BMW and Total Fleet, Alternative PC2LT002

Compliance Impacts and Cumulative Industry Costs by Model Year for BMW and Total Fleet, Alternative PC2LT002											
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Fuel Economy											
Average Required (mpg)	37.6	38.0	41.3	44.7	49.6	50.0	50.4	51.3	52.3	53.5	N/A
Change from Reference Baseline (%)	0%	0%	0%	0%	0%	1%	2%	4%	6%	8%	N/A
Average Achieved (mpg)	35.3	38.1	41.8	45.7	51.9	51.3	51.0	51.0	52.2	53.9	N/A
Total Regulatory Costs											
Tech. (non-Off-Cycle/non-AC) Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Off-Cycle Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1
Off-Cycle Credits	9.1	11.1	11.9	12.5	12.5	7.7	7.7	7.5	6.9	5.1	91.8
A/C Efficiency Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Avg. A/C Efficiency	6.0	6.0	6.0	6.1	6.1	4.8	4.8	4.7	4.3	4.0	52.8
Subtotal Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Civil Penalties ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Regulatory Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Sales Impacts											
Sales Change from Reference Baseline (m)	0	0	0	0	0	-2E-04	-5E-04	-0.001	-0.001	-8E-04	0.0

Table 347 - Compliance Impacts and Cumulative Industry Costs by Model Year for Ford and Total Fleet, Alternative PC2LT002

Compliance Impacts and Cumulative Industry Costs by Model Year for Ford and Total Fleet, Alternative PC2LT002											
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Fuel Economy											
Average Required (mpg)	31.4	31.9	34.3	37.3	41.4	41.4	41.5	42.4	43.2	44.0	N/A
Change from Reference Baseline (%)	0%	0%	0%	0%	0%	0%	0%	2%	4%	7%	N/A
Average Achieved (mpg)	30.9	32.7	37.4	38.4	41.5	43.7	44.2	45.0	44.3	44.1	N/A
Total Regulatory Costs											
Tech. (non-Off-Cycle/non-AC) Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.2	0.5	0.7	0.7	0.7	2.8
Off-Cycle Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Cycle Credits	9.9	13.6	14.5	14.5	14.5	8.0	8.0	8.0	8.0	6.4	105.3
A/C Efficiency Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Avg. A/C Efficiency	6.9	7.0	7.0	7.0	7.0	5.6	5.6	5.6	5.6	5.6	63.0
Subtotal Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.2	0.5	0.7	0.7	0.7	2.8
Total Civil Penalties ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Regulatory Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.2	0.5	0.7	0.7	0.7	2.8
Sales Impacts											
Sales Change from Reference Baseline (m)	0	0	0	0	0	-4E-04	-4E-04	0.0005	-4E-04	-0.002	0.0

Table 348 - Compliance Impacts and Cumulative Industry Costs by Model Year for GM and Total Fleet, Alternative PC2LT002

Compliance Impacts and Cumulative Industry Costs by Model Year for GM and Total Fleet, Alternative PC2LT002											
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Fuel Economy											
Average Required (mpg)	32.5	33.0	35.4	38.4	42.6	42.7	42.7	43.6	44.4	45.4	N/A
Change from Reference Baseline (%)	0%	0%	0%	0%	0%	0%	0%	3%	4%	7%	N/A
Average Achieved (mpg)	30.8	31.0	37.3	42.5	44.2	43.0	42.6	43.0	42.8	44.7	N/A
Total Regulatory Costs											
Tech. (non-Off-Cycle/non-AC) Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.7	0.7	1.1	1.1	3.0	6.6
Off-Cycle Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1
Off-Cycle Credits	9.6	12.0	12.9	13.9	13.9	8.3	8.3	8.3	8.3	6.6	102.3
A/C Efficiency Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Avg. A/C Efficiency	6.5	6.7	6.7	6.7	6.7	5.6	5.7	5.7	5.7	5.6	61.5
Subtotal Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.7	0.7	1.1	1.1	2.9	6.5
Total Civil Penalties ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.4	0.2	0.9
Total Regulatory Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.7	0.8	1.3	1.5	3.2	7.5
Sales Impacts											
Sales Change from Reference Baseline (m)	0	0	0	0	0	-6E-04	-0.001	-0.001	-0.002	-0.002	0.0

Table 349 - Compliance Impacts and Cumulative Industry Costs by Model Year for Honda and Total Fleet, Alternative PC2LT002

Compliance Impacts and Cumulative Industry Costs by Model Year for Honda and Total Fleet, Alternative PC2LT002											
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Fuel Economy											
Average Required (mpg)	39.1	39.5	42.9	46.5	51.5	51.9	52.3	53.3	54.4	55.6	N/A
Change from Reference Baseline (%)	0%	0%	0%	0%	0%	1%	2%	4%	6%	8%	N/A
Average Achieved (mpg)	40.0	44.4	44.5	48.3	52.0	53.1	54.8	55.9	57.0	58.7	N/A
Total Regulatory Costs											
Tech. (non-Off-Cycle/non-AC) Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.4	0.4	0.4	0.3	0.2	1.7
Off-Cycle Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	-0.1	-0.1	-0.3
Off-Cycle Credits	7.8	10.0	10.8	12.5	12.5	8.5	8.2	7.8	7.3	5.5	91.0
A/C Efficiency Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Avg. A/C Efficiency	5.5	5.8	6.1	6.1	6.1	5.2	5.0	4.8	4.5	4.2	53.1
Subtotal Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.4	0.4	0.3	0.3	0.1	1.4
Total Civil Penalties ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Regulatory Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.4	0.4	0.4	0.3	0.2	1.7
Sales Impacts											
Sales Change from Reference Baseline (m)	0	0	0	0	0	-8E-04	-0.002	-0.004	-0.004	-0.003	0.0

Table 350 - Compliance Impacts and Cumulative Industry Costs by Model Year for Hyundai and Total Fleet, Alternative PC2LT002

Compliance Impacts and Cumulative Industry Costs by Model Year for Hyundai and Total Fleet, Alternative PC2LT002											
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Fuel Economy											
Average Required (mpg)	39.6	40.1	43.5	47.1	52.3	52.8	53.2	54.3	55.4	56.5	N/A
Change from Reference Baseline (%)	0%	0%	0%	0%	0%	1%	2%	4%	6%	8%	N/A
Average Achieved (mpg)	41.4	43.5	46.2	50.4	53.5	55.2	54.6	55.5	55.9	57.7	N/A
Total Regulatory Costs											
Tech. (non-Off-Cycle/non-AC) Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.3	0.3	0.3	1.3
Off-Cycle Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	-0.2
Off-Cycle Credits	6.4	6.6	6.6	7.4	8.1	6.8	6.8	6.8	6.6	5.6	67.8
A/C Efficiency Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Avg. A/C Efficiency	4.4	4.7	5.2	5.4	5.8	4.9	4.9	4.9	4.7	4.5	49.5
Subtotal Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.3	0.3	0.2	1.1
Total Civil Penalties ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Regulatory Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.3	0.3	0.3	1.3
Sales Impacts											
Sales Change from Reference Baseline (m)	0	0	0	0	0	-6E-04	-0.001	-0.003	-0.003	-0.002	0.0

Table 351 - Compliance Impacts and Cumulative Industry Costs by Model Year for KIA and Total Fleet, Alternative PC2LT002

Compliance Impacts and Cumulative Industry Costs by Model Year for KIA and Total Fleet, Alternative PC2LT002											
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Fuel Economy											
Average Required (mpg)	39.5	39.9	43.4	47.0	52.1	52.5	53.0	54.0	55.1	56.2	N/A
Change from Reference Baseline (%)	0%	0%	0%	0%	0%	1%	2%	4%	6%	8%	N/A
Average Achieved (mpg)	40.9	43.6	47.3	49.3	52.5	52.0	53.6	54.3	55.5	57.1	N/A
Total Regulatory Costs											
Tech. (non-Off-Cycle/non-AC) Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.7	0.7	0.7	2.6
Off-Cycle Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1
Off-Cycle Credits	6.6	7.1	6.8	6.5	7.3	6.6	6.6	6.6	6.4	5.4	65.8
A/C Efficiency Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Avg. A/C Efficiency	4.8	5.4	5.9	6.0	6.0	5.0	5.0	5.0	4.9	4.7	52.8
Subtotal Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.7	0.7	0.7	2.5
Total Civil Penalties ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Total Regulatory Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.7	0.7	0.7	2.7
Sales Impacts											
Sales Change from Reference Baseline (m)	0	0	0	0	0	-4E-04	-9E-04	-0.002	-0.002	-0.001	0.0

Table 352 - Compliance Impacts and Cumulative Industry Costs by Model Year for JLR and Total Fleet, Alternative PC2LT002

Compliance Impacts and Cumulative Industry Costs by Model Year for JLR and Total Fleet, Alternative PC2LT002											
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Fuel Economy											
Average Required (mpg)	32.9	33.4	36.2	39.4	43.7	43.8	43.8	44.7	45.6	46.5	N/A
Change from Reference Baseline (%)	0%	0%	0%	0%	0%	0%	0%	2%	4%	6%	N/A
Average Achieved (mpg)	29.0	37.9	41.8	42.1	45.9	45.0	43.9	42.9	43.8	46.5	N/A
Total Regulatory Costs											
Tech. (non-Off-Cycle/non-AC) Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Cycle Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Cycle Credits	9.9	11.9	12.9	13.9	14.8	7.5	7.5	7.5	7.1	5.3	98.2
A/C Efficiency Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Avg. A/C Efficiency	7.1	7.1	7.1	7.1	7.1	5.3	5.3	5.3	5.1	4.8	61.6
Subtotal Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Civil Penalties ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Regulatory Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Sales Impacts											
Sales Change from Reference Baseline (m)	0	0	0	0	0	-2E-05	-1E-06	7E-05	1E-05	-7E-05	0.0

Table 353 - Compliance Impacts and Cumulative Industry Costs by Model Year for Karma and Total Fleet, Alternative PC2LT002

Compliance Impacts and Cumulative Industry Costs by Model Year for Karma and Total Fleet, Alternative PC2LT002											
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Fuel Economy											
Average Required (mpg)	40.6	41.1	44.3	48.1	53.5	55.2	56.3	57.5	58.6	59.8	N/A
Change from Reference Baseline (%)	0%	0%	0%	0%	0%	2%	4%	6%	8%	11%	N/A
Average Achieved (mpg)	106.8	106.8	106.8	106.8	542.6	328.4	207.1	151.2	119.0	119.0	N/A
Total Regulatory Costs											
Tech. (non-Off-Cycle/non-AC) Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Cycle Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Cycle Credits	5.0	5.0	5.0	5.0	5.0	0.0	0.0	0.0	0.0	0.0	25.0
A/C Efficiency Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Avg. A/C Efficiency	5.0	5.0	5.0	5.0	5.0	0.0	0.0	0.0	0.0	0.0	25.0
Subtotal Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Civil Penalties ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Regulatory Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sales Impacts											
Sales Change from Reference Baseline (m)	0	0	0	0	0	0	0	-2E-06	-2E-06	-2E-06	0.0

Table 354 - Compliance Impacts and Cumulative Industry Costs by Model Year for Lucid and Total Fleet, Alternative PC2LT002

Compliance Impacts and Cumulative Industry Costs by Model Year for Lucid and Total Fleet, Alternative PC2LT002											
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Fuel Economy											
Average Required (mpg)	40.6	41.1	44.3	48.1	53.5	55.2	56.3	57.5	58.6	59.8	N/A
Change from Reference Baseline (%)	0%	0%	0%	0%	0%	2%	4%	6%	8%	11%	N/A
Average Achieved (mpg)	742.5	742.5	742.5	742.5	742.5	394.4	248.6	181.5	142.9	142.9	N/A
Total Regulatory Costs											
Tech. (non-Off-Cycle/non-AC) Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Cycle Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Cycle Credits	5.0	5.0	5.0	5.0	5.0	0.0	0.0	0.0	0.0	0.0	25.0
A/C Efficiency Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Avg. A/C Efficiency	5.0	5.0	5.0	5.0	5.0	0.0	0.0	0.0	0.0	0.0	25.0
Subtotal Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Civil Penalties ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Regulatory Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sales Impacts											
Sales Change from Reference Baseline (m)	0	0	0	0	0	-4E-06	-1E-05	-3E-05	-2E-05	-2E-05	0.0

Table 355 - Compliance Impacts and Cumulative Industry Costs by Model Year for Mazda and Total Fleet, Alternative PC2LT002

Compliance Impacts and Cumulative Industry Costs by Model Year for Mazda and Total Fleet, Alternative PC2LT002											
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Fuel Economy											
Average Required (mpg)	37.3	37.8	41.1	44.6	49.5	49.6	49.6	50.7	51.7	52.7	N/A
Change from Reference Baseline (%)	0%	0%	0%	0%	0%	0%	0%	3%	5%	7%	N/A
Average Achieved (mpg)	36.5	47.1	49.5	50.3	53.0	52.8	53.4	54.6	55.8	57.7	N/A
Total Regulatory Costs											
Tech. (non-Off-Cycle/non-AC) Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Cycle Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1
Off-Cycle Credits	6.5	7.5	8.4	9.4	10.3	8.0	7.8	7.4	7.0	5.3	77.7
A/C Efficiency Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Avg. A/C Efficiency	3.0	4.0	5.0	5.9	6.7	5.8	5.7	5.4	5.1	4.8	51.4
Subtotal Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	-0.1
Total Civil Penalties ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Regulatory Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sales Impacts											
Sales Change from Reference Baseline (m)	0	0	0	0	0	-5E-05	-5E-05	2E-06	-9E-05	-2E-04	0.0

Table 356 - Compliance Impacts and Cumulative Industry Costs by Model Year for Mercedes-Benz and Total Fleet, Alternative PC2LT002

Compliance Impacts and Cumulative Industry Costs by Model Year for Mercedes-Benz and Total Fleet, Alternative PC2LT002											
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Fuel Economy											
Average Required (mpg)	36.8	37.3	40.4	43.8	48.6	49.0	49.3	50.3	51.3	52.4	N/A
Change from Reference Baseline (%)	0%	0%	0%	0%	0%	1%	1%	4%	6%	8%	N/A
Average Achieved (mpg)	32.8	39.5	40.4	42.0	49.4	50.7	52.0	50.9	51.7	53.6	N/A
Total Regulatory Costs											
Tech. (non-Off-Cycle/non-AC) Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1
Off-Cycle Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	-0.2
Off-Cycle Credits	2.5	3.0	3.5	4.8	5.8	5.4	5.7	6.2	6.0	4.7	47.6
A/C Efficiency Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Avg. A/C Efficiency	6.1	6.1	6.1	6.2	6.2	4.6	4.6	4.6	4.5	4.1	53.1
Subtotal Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	-0.1	-0.1	-0.1	0.0	-0.1	-0.3
Total Civil Penalties ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Regulatory Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1
Sales Impacts											
Sales Change from Reference Baseline (m)	0	0	0	0	0	-1E-04	-3E-04	-7E-04	-7E-04	-5E-04	0.0

Table 357 - Compliance Impacts and Cumulative Industry Costs by Model Year for Mitsubishi and Total Fleet, Alternative PC2LT002

Compliance Impacts and Cumulative Industry Costs by Model Year for Mitsubishi and Total Fleet, Alternative PC2LT002											
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Fuel Economy											
Average Required (mpg)	42.0	42.6	46.2	50.0	55.5	56.0	56.4	57.5	58.7	59.9	N/A
Change from Reference Baseline (%)	0%	0%	0%	0%	0%	1%	2%	4%	6%	8%	N/A
Average Achieved (mpg)	40.3	40.6	48.6	62.3	62.3	60.7	66.2	64.6	63.3	63.9	N/A
Total Regulatory Costs											
Tech. (non-Off-Cycle/non-AC) Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Cycle Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Cycle Credits	3.7	3.7	3.8	4.0	4.2	2.9	2.9	2.9	2.9	2.9	33.9
A/C Efficiency Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Avg. A/C Efficiency	5.7	6.0	6.0	6.0	6.0	4.2	4.2	4.2	4.2	4.2	50.7
Subtotal Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Civil Penalties ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Regulatory Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sales Impacts											
Sales Change from Reference Baseline (m)	0	0	0	0	0	-7E-05	-2E-04	-3E-04	-3E-04	-2E-04	0.0

Table 358 - Compliance Impacts and Cumulative Industry Costs by Model Year for Nissan and Total Fleet, Alternative PC2LT002

Compliance Impacts and Cumulative Industry Costs by Model Year for Nissan and Total Fleet, Alternative PC2LT002											
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Fuel Economy											
Average Required (mpg)	38.9	39.4	42.7	46.3	51.3	51.7	52.2	53.2	54.3	55.3	N/A
Change from Reference Baseline (%)	0%	0%	0%	0%	0%	1%	2%	4%	6%	8%	N/A
Average Achieved (mpg)	38.6	42.4	44.9	48.3	52.2	51.6	52.8	52.8	55.0	56.3	N/A
Total Regulatory Costs											
Tech. (non-Off-Cycle/non-AC) Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.1	0.3
Off-Cycle Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	-0.2
Off-Cycle Credits	5.4	5.9	6.4	7.5	8.3	6.7	6.7	6.8	6.6	5.5	65.8
A/C Efficiency Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Avg. A/C Efficiency	5.6	5.9	5.9	6.0	6.0	5.1	5.1	5.2	5.0	4.8	54.7
Subtotal Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	0.0	0.1	0.0	0.1
Total Civil Penalties ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.2
Total Regulatory Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.2	0.1	0.6
Sales Impacts											
Sales Change from Reference Baseline (m)	0	0	0	0	0	-6E-04	-0.001	-0.003	-0.003	-0.002	0.0

Table 359 - Compliance Impacts and Cumulative Industry Costs by Model Year for Stellantis and Total Fleet, Alternative PC2LT002

Compliance Impacts and Cumulative Industry Costs by Model Year for Stellantis and Total Fleet, Alternative PC2LT002											
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Fuel Economy											
Average Required (mpg)	31.9	32.3	35.0	38.1	42.3	42.3	42.4	43.2	44.1	45.0	N/A
Change from Reference Baseline (%)	0%	0%	0%	0%	0%	0%	0%	2%	5%	7%	N/A
Average Achieved (mpg)	28.9	30.9	34.9	41.7	42.4	42.8	42.3	43.7	43.8	44.8	N/A
Total Regulatory Costs											
Tech. (non-Off-Cycle/non-AC) Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.4	0.5	0.5	0.7	0.7	2.8
Off-Cycle Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Cycle Credits	9.4	13.9	14.0	14.1	14.1	8.0	8.0	8.0	8.0	6.2	103.6
A/C Efficiency Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Avg. A/C Efficiency	6.7	6.9	6.9	6.9	6.9	5.7	5.7	5.7	5.7	5.5	62.8
Subtotal Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.4	0.4	0.5	0.7	0.7	2.7
Total Civil Penalties ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.4
Total Regulatory Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.5	0.5	0.6	0.8	0.7	3.1
Sales Impacts											
Sales Change from Reference Baseline (m)	0	0	0	0	0	-5E-04	-5E-04	0.0002	-7E-04	-0.002	0.0

Table 360 - Compliance Impacts and Cumulative Industry Costs by Model Year for Subaru and Total Fleet, Alternative PC2LT002

Compliance Impacts and Cumulative Industry Costs by Model Year for Subaru and Total Fleet, Alternative PC2LT002											
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Fuel Economy											
Average Required (mpg)	37.8	38.2	41.5	45.1	50.1	50.2	50.3	51.3	52.3	53.4	N/A
Change from Reference Baseline (%)	0%	0%	0%	0%	0%	0%	1%	3%	5%	7%	N/A
Average Achieved (mpg)	39.0	43.7	46.3	48.9	51.5	53.2	54.8	56.4	57.9	60.2	N/A
Total Regulatory Costs											
Tech. (non-Off-Cycle/non-AC) Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	-0.2
Off-Cycle Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	-0.2
Off-Cycle Credits	7.7	8.2	9.1	10.2	11.2	8.1	7.8	7.3	6.8	5.2	81.7
A/C Efficiency Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Avg. A/C Efficiency	6.4	6.9	6.9	6.9	6.9	5.9	5.6	5.3	5.0	4.6	60.3
Subtotal Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	-0.1	-0.1	-0.2	-0.4
Total Civil Penalties ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Regulatory Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	-0.2
Sales Impacts											
Sales Change from Reference Baseline (m)	0	0	0	0	0	-2E-04	-3E-04	-1E-05	-4E-04	-9E-04	0.0

Table 361 - Compliance Impacts and Cumulative Industry Costs by Model Year for Tesla and Total Fleet, Alternative PC2LT002

Compliance Impacts and Cumulative Industry Costs by Model Year for Tesla and Total Fleet, Alternative PC2LT002											
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Fuel Economy											
Average Required (mpg)	40.7	41.3	44.8	48.7	54.1	55.2	56.2	57.3	58.4	59.7	N/A
Change from Reference Baseline (%)	0%	0%	0%	0%	0%	2%	4%	6%	8%	10%	N/A
Average Achieved (mpg)	699.0	707.6	710.6	714.2	714.6	380.6	239.9	175.2	137.9	137.9	N/A
Total Regulatory Costs											
Tech. (non-Off-Cycle/non-AC) Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Cycle Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Cycle Credits	5.0	5.1	5.1	5.2	5.2	0.0	0.0	0.0	0.0	0.0	25.7
A/C Efficiency Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Avg. A/C Efficiency	5.0	5.1	5.1	5.1	5.1	0.0	0.0	0.0	0.0	0.0	25.4
Subtotal Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1
Total Civil Penalties ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Regulatory Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sales Impacts											
Sales Change from Reference Baseline (m)	0	0	0	0	0	-4E-04	-0.001	-0.003	-0.003	-0.001	0.0

Table 362 - Compliance Impacts and Cumulative Industry Costs by Model Year for Toyota and Total Fleet, Alternative PC2LT002

Compliance Impacts and Cumulative Industry Costs by Model Year for Toyota and Total Fleet, Alternative PC2LT002											
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Fuel Economy											
Average Required (mpg)	37.1	37.5	40.6	43.9	48.7	49.0	49.2	50.2	51.2	52.2	N/A
Change from Reference Baseline (%)	0%	0%	0%	0%	0%	1%	1%	3%	5%	7%	N/A
Average Achieved (mpg)	39.1	41.0	45.3	47.2	51.8	50.7	51.6	52.7	53.9	55.8	N/A
Total Regulatory Costs											
Tech. (non-Off-Cycle/non-AC) Costs ($b)	0.0	0.0	0.0	0.0	0.0	-0.1	-0.1	-0.1	-0.1	-0.2	-0.5
Off-Cycle Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	-0.1	-0.1	-0.1	-0.1	-0.2	-0.5
Off-Cycle Credits	8.3	8.8	10.6	11.5	13.1	8.6	8.4	8.0	7.5	5.7	90.5
A/C Efficiency Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Avg. A/C Efficiency	6.3	6.3	6.3	6.4	6.4	5.5	5.4	5.1	4.9	4.6	57.1
Subtotal Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	-0.1	-0.1	-0.2	-0.2	-0.4	-1.0
Total Civil Penalties ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Regulatory Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	-0.1	-0.1	-0.2	-0.5
Sales Impacts											
Sales Change from Reference Baseline (m)	0	0	0	0	0	-0.001	-0.002	-0.004	-0.005	-0.004	0.0

Table 363 - Compliance Impacts and Cumulative Industry Costs by Model Year for Volvo and Total Fleet, Alternative PC2LT002

Compliance Impacts and Cumulative Industry Costs by Model Year for Volvo and Total Fleet, Alternative PC2LT002											
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Fuel Economy											
Average Required (mpg)	36.0	36.4	39.5	42.8	47.6	47.8	48.0	48.9	49.9	50.9	N/A
Change from Reference Baseline (%)	0%	0%	0%	0%	0%	0%	1%	3%	5%	7%	N/A
Average Achieved (mpg)	43.8	47.1	47.5	53.4	60.3	57.1	54.9	52.9	54.0	53.6	N/A
Total Regulatory Costs											
Tech. (non-Off-Cycle/non-AC) Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Cycle Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Cycle Credits	7.7	8.4	9.5	10.4	11.3	5.9	5.9	5.9	5.9	4.9	75.8
A/C Efficiency Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Avg. A/C Efficiency	6.1	6.4	6.5	6.5	6.6	4.2	4.3	4.3	4.3	4.3	53.4
Subtotal Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Civil Penalties ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Regulatory Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sales Impacts											
Sales Change from Reference Baseline (m)	0	0	0	0	0	-6E-05	-1E-04	-2E-04	-2E-04	-2E-04	0.0

Table 364 - Compliance Impacts and Cumulative Industry Costs by Model Year for VWA and Total Fleet, Alternative PC2LT002

Compliance Impacts and Cumulative Industry Costs by Model Year for VWA and Total Fleet, Alternative PC2LT002											
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Fuel Economy											
Average Required (mpg)	37.9	38.3	41.6	45.0	50.0	50.2	50.5	51.5	52.6	53.6	N/A
Change from Reference Baseline (%)	0%	0%	0%	0%	0%	1%	1%	3%	6%	8%	N/A
Average Achieved (mpg)	36.3	38.5	45.7	48.5	51.8	50.9	51.7	50.9	52.5	54.1	N/A
Total Regulatory Costs											
Tech. (non-Off-Cycle/non-AC) Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.2	0.2	0.7
Off-Cycle Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1
Off-Cycle Credits	8.3	10.7	11.2	11.8	12.3	7.4	7.4	7.4	7.0	5.6	89.2
A/C Efficiency Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Avg. A/C Efficiency	5.7	6.3	6.3	6.4	6.4	5.1	5.1	5.2	4.9	4.6	56.0
Subtotal Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.2	0.7
Total Civil Penalties ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1
Total Regulatory Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.3	0.2	0.8
Sales Impacts											
Sales Change from Reference Baseline (m)	0	0	0	0	0	-3E-04	-6E-04	-0.001	-0.001	-0.001	0.0

Table 365 - Compliance Impacts and Cumulative Industry Costs for MY 2022 to 2031 Total Fleet by Alternative for Manufacturer (Total)

Compliance Impacts and Cumulative Industry Costs for MY 2022 to 2031 Total Fleet by Alternative for Manufacturer (Total)						
Alternative	No Action (Reference Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Fuel Economy						
Average Required (mpg)	46.9	50.4	53.2	56.0	59.0	69.2
Percent Change from Reference Baseline	0%	7%	13%	19%	26%	48%
Average Achieved (mpg)	52.1	52.5	53.7	54.9	55.9	57.4
Total Regulatory Costs						
Technology Application Costs ($b)	34.3	5.6	6.7	10.4	13.9	17.8
Off-Cycle Technology Costs ($b)	1.3	2.5	2.5	2.5	2.5	2.5
Off-Cycle Credits	0.0	0.0	0.0	0.0	0.0	0.0
A/C Efficiency Technology Costs ($b)	0.1	0.1	0.1	0.1	0.1	0.1
Avg. A/C Efficiency	0.0	0.0	0.0	0.0	0.0	0.0
Subtotal Technology Costs ($b)	35.7	8.1	9.3	13.0	16.4	20.4
Total Civil Penalties ($b)	0.0	0.3	2.3	4.2	7.1	22.8
Total Regulatory Costs ($b)	34.4	5.8	9.0	14.6	20.9	40.6
Sales Impacts						
Sales Change from Reference Baseline (m)	0.00	-0.09	-0.18	-0.32	-0.47	-1.01

Table 366 - Compliance Impacts and Cumulative Industry Costs for MY 2022 to 2031 Passenger Car Fleet by Alternative for Manufacturer (Total)

Compliance Impacts and Cumulative Industry Costs for MY 2022 to 2031 Passenger Car Fleet by Alternative for Manufacturer (Total)						
Alternative	No Action (Reference Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Fuel Economy						
Average Required (mpg)	58.8	65.1	61.8	65.1	68.5	80.1
Percent Change from Reference Baseline	0%	11%	5%	11%	16%	36%
Average Achieved (mpg)	69.8	70.8	69.1	70.8	73.0	78.6
Total Regulatory Costs						
Technology Application Costs ($b)	8.4	1.7	0.4	1.5	2.9	5.4
Off-Cycle Technology Costs ($b)	0.9	1.9	1.9	1.9	1.9	1.9
Off-Cycle Credits	0.0	0.0	0.0	0.0	0.0	0.0
A/C Efficiency Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0
Avg. A/C Efficiency	0.0	0.0	0.0	0.0	0.0	0.0
Subtotal Technology Costs ($b)	9.3	3.6	2.3	3.4	4.8	7.2
Total Civil Penalties ($b)	0.0	0.0	0.0	0.0	0.2	3.7
Total Regulatory Costs ($b)	8.4	1.8	0.9	2.3	4.3	11.5
Sales Impacts						
Sales Change from Reference Baseline (m)	0.00	-0.10	0.11	0.08	0.02	-0.24

Table 367 - Compliance Impacts and Cumulative Industry Costs for MY 2022 to 2031 Light Truck Fleet by Alternative for Manufacturer (Total)

Compliance Impacts and Cumulative Industry Costs for MY 2022 to 2031 Light Truck Fleet by Alternative for Manufacturer (Total)						
Alternative	No Action (Reference Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Fuel Economy						
Average Required (mpg)	42.6	45.2	49.6	52.2	55.0	64.6
Percent Change from Reference Baseline	0%	6%	16%	23%	29%	52%
Average Achieved (mpg)	46.2	46.4	48.1	49.2	49.8	50.3
Total Regulatory Costs						
Technology Application Costs ($b)	26.0	3.9	6.3	8.9	10.9	12.4
Off-Cycle Technology Costs ($b)	0.3	0.7	0.7	0.7	0.7	0.7
Off-Cycle Credits	0.0	0.0	0.0	0.0	0.0	0.0
A/C Efficiency Technology Costs ($b)	0.1	0.0	0.0	0.0	0.0	0.0
Avg. A/C Efficiency	0.0	0.0	0.0	0.0	0.0	0.0
Subtotal Technology Costs ($b)	26.4	4.6	7.0	9.6	11.6	13.1
Total Civil Penalties ($b)	0.0	0.2	2.2	4.2	6.8	19.1
Total Regulatory Costs ($b)	26.0	4.1	8.1	12.3	16.6	29.1
Sales Impacts						
Sales Change from Reference Baseline (m)	0.00	0.01	-0.29	-0.40	-0.49	-0.77

Table 368 - Compliance Impacts and Cumulative Industry Costs for MY 2022 to 2031 Domestic Car Fleet by Alternative for Manufacturer (Total)

Compliance Impacts and Cumulative Industry Costs for MY 2022 to 2031 Domestic Car Fleet by Alternative for Manufacturer (Total)						
Alternative	No Action (Reference Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Fuel Economy						
Average Required (mpg)	58.0	64.2	61.0	64.2	67.6	79.1
Percent Change from Reference Baseline	0%	11%	5%	11%	17%	36%
Average Achieved (mpg)	71.6	72.6	70.8	72.5	74.4	80.3
Total Regulatory Costs						
Technology Application Costs ($b)	4.2	0.8	0.2	0.5	1.4	2.2
Off-Cycle Technology Costs ($b)	0.4	0.9	0.9	0.9	0.9	0.9
Off-Cycle Credits	0.0	0.0	0.0	0.0	0.0	0.0
A/C Efficiency Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0
Avg. A/C Efficiency	0.0	0.0	0.0	0.0	0.0	0.0
Subtotal Technology Costs ($b)	4.6	1.7	1.1	1.4	2.3	3.1
Total Civil Penalties ($b)	0.0	0.0	0.0	0.0	0.2	1.7
Total Regulatory Costs ($b)	4.2	0.8	0.5	1.0	2.2	5.0
Sales Impacts						
Sales Change from Reference Baseline (m)	0.00	-0.05	0.05	0.04	0.01	-0.12

Table 369 - Compliance Impacts and Cumulative Industry Costs for MY 2022 to 2031 Imported Car Fleet by Alternative for Manufacturer (Total)

Compliance Impacts and Cumulative Industry Costs for MY 2022 to 2031 Imported Car Fleet by Alternative for Manufacturer (Total)						
Alternative	No Action (Reference Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Fuel Economy						
Average Required (mpg)	59.5	65.9	62.6	65.9	69.3	81.1
Percent Change from Reference Baseline	0%	11%	5%	11%	16%	36%
Average Achieved (mpg)	68.1	69.2	67.6	69.2	71.7	77.0
Total Regulatory Costs						
Technology Application Costs ($b)	4.2	0.9	0.2	1.0	1.5	3.2
Off-Cycle Technology Costs ($b)	0.5	1.0	1.0	1.0	1.0	1.0
Off-Cycle Credits	0.0	0.0	0.0	0.0	0.0	0.0
A/C Efficiency Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0
Avg. A/C Efficiency	0.0	0.0	0.0	0.0	0.0	0.0
Subtotal Technology Costs ($b)	4.7	1.9	1.2	2.0	2.5	4.1
Total Civil Penalties ($b)	0.0	0.0	0.0	0.0	0.1	2.0
Total Regulatory Costs ($b)	4.2	0.9	0.4	1.3	2.2	6.4
Sales Impacts						
Sales Change from Reference Baseline (m)	0.00	-0.05	0.06	0.04	0.01	-0.12

Table 370 - Compliance Impacts and Cumulative Industry Costs for MY 2022 to 2031 Total Fleet by Alternative for Manufacturer (BMW)

Compliance Impacts and Cumulative Industry Costs for MY 2022 to 2031 Total Fleet by Alternative for Manufacturer (BMW)						
Alternative	No Action (Reference Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Fuel Economy						
Average Required (mpg)	49.5	53.5	55.1	58.1	61.1	71.7
Percent Change from Reference Baseline	0%	8%	11%	17%	23%	45%
Average Achieved (mpg)	55.1	53.9	55.1	55.9	57.0	58.2
Total Regulatory Costs						
Technology Application Costs ($b)	0.9	0.0	0.0	0.1	0.1	0.1
Off-Cycle Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0
Off-Cycle Credits	10.0	15.1	15.1	15.1	15.1	15.1
A/C Efficiency Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0
Avg. A/C Efficiency	6.1	10.1	10.1	10.1	10.1	10.1
Subtotal Technology Costs ($b)	1.0	0.1	0.1	0.1	0.1	0.2
Total Civil Penalties ($b)	0.0	0.0	0.0	0.1	0.2	0.7
Total Regulatory Costs ($b)	0.9	0.0	0.1	0.2	0.3	0.8
Sales Impacts						
Sales Change from Reference Baseline (m)	0.00	0.00	0.00	0.00	-0.01	-0.02

Table 371 - Compliance Impacts and Cumulative Industry Costs for MY 2022 to 2031 Total Fleet by Alternative for Manufacturer (Ford)

Compliance Impacts and Cumulative Industry Costs for MY 2022 to 2031 Total Fleet by Alternative for Manufacturer (Ford)						
Alternative	No Action (Reference Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Fuel Economy						
Average Required (mpg)	41.3	44.0	47.8	50.4	53.1	62.3
Percent Change from Reference Baseline	0%	7%	16%	22%	29%	51%
Average Achieved (mpg)	42.6	44.1	47.3	47.4	47.5	47.5
Total Regulatory Costs						
Technology Application Costs ($b)	3.5	0.7	1.8	1.8	1.8	1.7
Off-Cycle Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0
Off-Cycle Credits	10.0	16.4	16.4	16.4	16.4	16.4
A/C Efficiency Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0
Avg. A/C Efficiency	7.0	12.6	12.6	12.6	12.6	12.6
Subtotal Technology Costs ($b)	3.5	0.7	1.8	1.8	1.8	1.8
Total Civil Penalties ($b)	0.0	0.0	0.2	0.8	1.4	3.8
Total Regulatory Costs ($b)	3.5	0.7	1.9	2.5	3.2	5.5
Sales Impacts						
Sales Change from Reference Baseline (m)	0.00	0.00	-0.04	-0.06	-0.08	-0.13

Table 372 - Compliance Impacts and Cumulative Industry Costs for MY 2022 to 2031 Total Fleet by Alternative for Manufacturer (GM)

Compliance Impacts and Cumulative Industry Costs for MY 2022 to 2031 Total Fleet by Alternative for Manufacturer (GM)						
Alternative	No Action (Reference Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Fuel Economy						
Average Required (mpg)	42.5	45.4	48.7	51.3	54.1	63.4
Percent Change from Reference Baseline	0%	7%	15%	21%	27%	49%
Average Achieved (mpg)	42.8	44.7	44.5	44.8	45.0	45.0
Total Regulatory Costs						
Technology Application Costs ($b)	7.5	3.0	2.7	2.9	3.2	3.2
Off-Cycle Technology Costs ($b)	0.0	0.1	0.1	0.1	0.1	0.1
Off-Cycle Credits	10.0	16.6	16.6	16.6	16.6	16.6
A/C Efficiency Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0
Avg. A/C Efficiency	6.7	12.3	12.3	12.3	12.3	12.3
Subtotal Technology Costs ($b)	7.5	3.1	2.8	3.0	3.3	3.3
Total Civil Penalties ($b)	0.0	0.2	1.1	1.6	2.3	4.9
Total Regulatory Costs ($b)	7.5	3.2	3.8	4.5	5.6	8.1
Sales Impacts						
Sales Change from Reference Baseline (m)	0.00	-0.01	-0.04	-0.05	-0.07	-0.14

Table 373 - Compliance Impacts and Cumulative Industry Costs for MY 2022 to 2031 Total Fleet by Alternative for Manufacturer (Honda)

Compliance Impacts and Cumulative Industry Costs for MY 2022 to 2031 Total Fleet by Alternative for Manufacturer (Honda)						
Alternative	No Action (Reference Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Fuel Economy						
Average Required (mpg)	51.4	55.6	57.3	60.3	63.5	74.5
Percent Change from Reference Baseline	0%	8%	11%	17%	24%	45%
Average Achieved (mpg)	60.5	58.7	59.5	62.2	63.5	68.1
Total Regulatory Costs						
Technology Application Costs ($b)	2.9	0.2	0.0	0.3	0.7	1.1
Off-Cycle Technology Costs ($b)	0.2	0.4	0.4	0.4	0.4	0.4
Off-Cycle Credits	10.0	15.5	15.5	15.5	15.5	15.5
A/C Efficiency Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0
Avg. A/C Efficiency	6.1	10.3	10.3	10.3	10.3	10.3
Subtotal Technology Costs ($b)	3.1	0.7	0.5	0.7	1.2	1.6
Total Civil Penalties ($b)	0.0	0.0	0.0	0.0	0.0	1.1
Total Regulatory Costs ($b)	2.9	0.2	0.0	0.3	0.7	2.2
Sales Impacts						
Sales Change from Reference Baseline (m)	0.00	-0.01	-0.01	-0.02	-0.03	-0.09

Table 374 - Compliance Impacts and Cumulative Industry Costs for MY 2022 to 2031 Total Fleet by Alternative for Manufacturer (Hyundai)

Compliance Impacts and Cumulative Industry Costs for MY 2022 to 2031 Total Fleet by Alternative for Manufacturer (Hyundai)						
Alternative	No Action (Reference Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Fuel Economy						
Average Required (mpg)	52.1	56.5	57.6	60.7	63.9	74.9
Percent Change from Reference Baseline	0%	8%	11%	17%	23%	44%
Average Achieved (mpg)	54.9	57.7	59.0	61.6	64.5	65.4
Total Regulatory Costs						
Technology Application Costs ($b)	1.6	0.3	0.4	0.6	2.0	2.5
Off-Cycle Technology Costs ($b)	0.1	0.2	0.2	0.2	0.2	0.2
Off-Cycle Credits	8.3	13.9	13.9	13.9	13.9	13.9
A/C Efficiency Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0
Avg. A/C Efficiency	6.0	10.5	10.5	10.5	10.5	10.5
Subtotal Technology Costs ($b)	1.7	0.6	0.7	0.8	2.3	2.8
Total Civil Penalties ($b)	0.0	0.0	0.0	0.0	0.1	1.3
Total Regulatory Costs ($b)	1.6	0.3	0.4	0.6	2.1	3.8
Sales Impacts						
Sales Change from Reference Baseline (m)	0.00	-0.01	0.00	-0.01	-0.02	-0.05

Table 375 - Compliance Impacts and Cumulative Industry Costs for MY 2022 to 2031 Total Fleet by Alternative for Manufacturer (KIA)

Compliance Impacts and Cumulative Industry Costs for MY 2022 to 2031 Total Fleet by Alternative for Manufacturer (KIA)						
Alternative	No Action (Reference Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Fuel Economy						
Average Required (mpg)	51.9	56.2	57.7	60.7	64.0	74.9
Percent Change from Reference Baseline	0%	8%	11%	17%	23%	44%
Average Achieved (mpg)	53.7	57.1	58.4	61.5	64.8	69.2
Total Regulatory Costs						
Technology Application Costs ($b)	0.9	0.7	0.4	2.2	2.4	2.6
Off-Cycle Technology Costs ($b)	0.1	0.1	0.1	0.1	0.1	0.1
Off-Cycle Credits	7.9	13.3	13.2	13.2	13.2	13.2
A/C Efficiency Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0
Avg. A/C Efficiency	6.0	10.7	10.7	10.7	10.7	10.7
Subtotal Technology Costs ($b)	0.9	0.8	0.5	2.3	2.5	2.7
Total Civil Penalties ($b)	0.0	0.0	0.0	0.0	0.0	0.5
Total Regulatory Costs ($b)	0.9	0.7	0.4	2.2	2.4	3.0
Sales Impacts						
Sales Change from Reference Baseline (m)	0.00	-0.01	0.00	-0.01	-0.01	-0.04

Table 376 - Compliance Impacts and Cumulative Industry Costs for MY 2022 to 2031 Total Fleet by Alternative for Manufacturer (JLR)

Compliance Impacts and Cumulative Industry Costs for MY 2022 to 2031 Total Fleet by Alternative for Manufacturer (JLR)						
Alternative	No Action (Reference Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Fuel Economy						
Average Required (mpg)	43.7	46.5	50.9	53.6	56.4	66.2
Percent Change from Reference Baseline	0%	6%	16%	23%	29%	51%
Average Achieved (mpg)	47.2	46.5	47.4	47.4	47.4	47.4
Total Regulatory Costs						
Technology Application Costs ($b)	0.1	0.0	0.2	0.2	0.2	0.2
Off-Cycle Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0
Off-Cycle Credits	10.0	15.3	15.3	15.3	15.3	15.3
A/C Efficiency Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0
Avg. A/C Efficiency	7.2	11.9	11.9	11.9	11.9	11.9
Subtotal Technology Costs ($b)	0.1	0.0	0.2	0.2	0.2	0.2
Total Civil Penalties ($b)	0.0	0.0	0.0	0.1	0.1	0.2
Total Regulatory Costs ($b)	0.1	0.0	0.2	0.3	0.3	0.4
Sales Impacts						
Sales Change from Reference Baseline (m)	0.00	0.00	0.00	0.00	0.00	-0.01

Table 377 - Compliance Impacts and Cumulative Industry Costs for MY 2022 to 2031 Total Fleet by Alternative for Manufacturer (Karma)

Compliance Impacts and Cumulative Industry Costs for MY 2022 to 2031 Total Fleet by Alternative for Manufacturer (Karma)						
Alternative	No Action (Reference Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Fuel Economy						
Average Required (mpg)	54.1	59.8	56.9	59.8	63.0	73.7
Percent Change from Reference Baseline	0%	11%	5%	11%	16%	36%
Average Achieved (mpg)	137.4	119.0	119.0	119.0	119.0	119.0
Total Regulatory Costs						
Technology Application Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0
Off-Cycle Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0
Off-Cycle Credits	5.0	5.0	5.0	5.0	5.0	5.0
A/C Efficiency Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0
Avg. A/C Efficiency	5.0	5.0	5.0	5.0	5.0	5.0
Subtotal Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0
Total Civil Penalties ($b)	0.0	0.0	0.0	0.0	0.0	0.0
Total Regulatory Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0
Sales Impacts						
Sales Change from Reference Baseline (m)	0.00	0.00	0.00	0.00	0.00	0.00

Table 378 - Compliance Impacts and Cumulative Industry Costs for MY 2022 to 2031 Total Fleet by Alternative for Manufacturer (Lucid)

Compliance Impacts and Cumulative Industry Costs for MY 2022 to 2031 Total Fleet by Alternative for Manufacturer (Lucid)						
Alternative	No Action (Reference Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Fuel Economy						
Average Required (mpg)	54.1	59.8	56.9	59.8	63.0	73.7
Percent Change from Reference Baseline	0%	11%	5%	11%	16%	36%
Average Achieved (mpg)	170.3	142.9	142.9	142.9	142.9	142.9
Total Regulatory Costs						
Technology Application Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0
Off-Cycle Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0
Off-Cycle Credits	5.0	5.0	5.0	5.0	5.0	5.0
A/C Efficiency Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0
Avg. A/C Efficiency	5.0	5.0	5.0	5.0	5.0	5.0
Subtotal Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0
Total Civil Penalties ($b)	0.0	0.0	0.0	0.0	0.0	0.0
Total Regulatory Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0
Sales Impacts						
Sales Change from Reference Baseline (m)	0.00	0.00	0.00	0.00	0.00	0.00

Table 379 - Compliance Impacts and Cumulative Industry Costs for MY 2022 to 2031 Total Fleet by Alternative for Manufacturer (Mazda)

Compliance Impacts and Cumulative Industry Costs for MY 2022 to 2031 Total Fleet by Alternative for Manufacturer (Mazda)						
Alternative	No Action (Reference Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Fuel Economy						
Average Required (mpg)	49.4	52.7	56.9	60.0	63.2	74.2
Percent Change from Reference Baseline	0%	7%	15%	21%	28%	50%
Average Achieved (mpg)	59.6	57.7	57.6	60.6	64.1	73.3
Total Regulatory Costs						
Technology Application Costs ($b)	0.5	0.0	0.0	0.0	0.1	1.2
Off-Cycle Technology Costs ($b)	0.0	0.1	0.1	0.1	0.1	0.1
Off-Cycle Credits	9.5	14.8	14.8	14.8	14.8	14.8
A/C Efficiency Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0
Avg. A/C Efficiency	6.9	11.7	11.7	11.7	11.7	11.7
Subtotal Technology Costs ($b)	0.6	0.1	0.1	0.1	0.2	1.3
Total Civil Penalties ($b)	0.0	0.0	0.0	0.0	0.0	0.0
Total Regulatory Costs ($b)	0.5	0.0	0.0	0.0	0.1	1.2
Sales Impacts						
Sales Change from Reference Baseline (m)	0.00	0.00	0.00	-0.01	-0.01	-0.01

Table 380 - Compliance Impacts and Cumulative Industry Costs for MY 2022 to 2031 Total Fleet by Alternative for Manufacturer (Mercedes-Benz)

Compliance Impacts and Cumulative Industry Costs for MY 2022 to 2031 Total Fleet by Alternative for Manufacturer (Mercedes-Benz)						
Alternative	No Action (Reference Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Fuel Economy						
Average Required (mpg)	48.5	52.4	54.2	57.1	60.2	70.5
Percent Change from Reference Baseline	0%	8%	12%	18%	24%	45%
Average Achieved (mpg)	53.8	53.6	54.4	54.4	54.9	55.6
Total Regulatory Costs						
Technology Application Costs ($b)	0.8	0.0	0.0	0.0	0.0	0.0
Off-Cycle Technology Costs ($b)	0.1	0.2	0.2	0.2	0.2	0.2
Off-Cycle Credits	8.2	12.9	12.8	12.8	12.8	12.8
A/C Efficiency Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0
Avg. A/C Efficiency	6.2	10.3	10.3	10.3	10.3	10.3
Subtotal Technology Costs ($b)	1.0	0.2	0.2	0.2	0.2	0.2
Total Civil Penalties ($b)	0.0	0.0	0.1	0.1	0.2	0.6
Total Regulatory Costs ($b)	0.8	0.0	0.1	0.1	0.2	0.6
Sales Impacts						
Sales Change from Reference Baseline (m)	0.00	0.00	0.00	0.00	-0.01	-0.02

Table 381 - Compliance Impacts and Cumulative Industry Costs for MY 2022 to 2031 Total Fleet by Alternative for Manufacturer (Mitsubishi)

Compliance Impacts and Cumulative Industry Costs for MY 2022 to 2031 Total Fleet by Alternative for Manufacturer (Mitsubishi)						
Alternative	No Action (Reference Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Fuel Economy						
Average Required (mpg)	55.4	59.9	61.5	64.8	68.2	80.0
Percent Change from Reference Baseline	0%	8%	11%	17%	23%	44%
Average Achieved (mpg)	63.4	63.9	63.1	65.1	68.4	81.1
Total Regulatory Costs						
Technology Application Costs ($b)	0.3	0.0	0.0	0.0	0.1	0.2
Off-Cycle Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0
Off-Cycle Credits	4.2	7.1	7.0	7.0	7.0	7.0
A/C Efficiency Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0
Avg. A/C Efficiency	6.1	10.2	10.2	10.2	10.2	10.2
Subtotal Technology Costs ($b)	0.3	0.0	0.0	0.0	0.1	0.2
Total Civil Penalties ($b)	0.0	0.0	0.0	0.0	0.0	0.0
Total Regulatory Costs ($b)	0.3	0.0	0.0	0.0	0.1	0.2
Sales Impacts						
Sales Change from Reference Baseline (m)	0.00	0.00	0.00	0.00	0.00	-0.01

Table 382 - Compliance Impacts and Cumulative Industry Costs for MY 2022 to 2031 Total Fleet by Alternative for Manufacturer (Nissan)

Compliance Impacts and Cumulative Industry Costs for MY 2022 to 2031 Total Fleet by Alternative for Manufacturer (Nissan)						
Alternative	No Action (Reference Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Fuel Economy						
Average Required (mpg)	51.2	55.3	56.8	59.8	63.0	73.9
Percent Change from Reference Baseline	0%	8%	11%	17%	23%	44%
Average Achieved (mpg)	55.5	56.3	58.2	61.0	62.7	64.8
Total Regulatory Costs						
Technology Application Costs ($b)	2.5	0.1	0.3	0.6	0.8	1.0
Off-Cycle Technology Costs ($b)	0.2	0.3	0.3	0.3	0.3	0.3
Off-Cycle Credits	7.8	13.4	13.4	13.4	13.4	13.4
A/C Efficiency Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0
Avg. A/C Efficiency	6.0	10.8	10.8	10.8	10.8	10.8
Subtotal Technology Costs ($b)	2.7	0.5	0.7	1.0	1.2	1.4
Total Civil Penalties ($b)	0.0	0.0	0.0	0.0	0.1	1.2
Total Regulatory Costs ($b)	2.5	0.1	0.3	0.6	0.9	2.3
Sales Impacts						
Sales Change from Reference Baseline (m)	0.00	-0.01	0.00	-0.01	-0.02	-0.06

Table 383 - Compliance Impacts and Cumulative Industry Costs for MY 2022 to 2031 Total Fleet by Alternative for Manufacturer (Stellantis)

Compliance Impacts and Cumulative Industry Costs for MY 2022 to 2031 Total Fleet by Alternative for Manufacturer (Stellantis)						
Alternative	No Action (Reference Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Fuel Economy						
Average Required (mpg)	42.2	45.0	48.7	51.2	54.0	63.4
Percent Change from Reference Baseline	0%	7%	15%	21%	28%	50%
Average Achieved (mpg)	44.2	44.8	45.9	46.4	46.7	46.7
Total Regulatory Costs						
Technology Application Costs ($b)	5.0	0.7	0.7	0.8	0.9	0.9
Off-Cycle Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0
Off-Cycle Credits	9.7	15.9	15.9	15.9	15.9	15.9
A/C Efficiency Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0
Avg. A/C Efficiency	6.9	12.4	12.4	12.4	12.4	12.4
Subtotal Technology Costs ($b)	5.1	0.7	0.8	0.9	1.0	0.9
Total Civil Penalties ($b)	0.0	0.1	0.7	1.2	1.8	4.1
Total Regulatory Costs ($b)	5.1	0.7	1.4	2.0	2.7	5.0
Sales Impacts						
Sales Change from Reference Baseline (m)	0.00	0.00	-0.04	-0.06	-0.07	-0.13

Table 384 - Compliance Impacts and Cumulative Industry Costs for MY 2022 to 2031 Total Fleet by Alternative for Manufacturer (Subaru)

Compliance Impacts and Cumulative Industry Costs for MY 2022 to 2031 Total Fleet by Alternative for Manufacturer (Subaru)						
Alternative	No Action (Reference Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Fuel Economy						
Average Required (mpg)	50.0	53.4	57.6	60.6	63.9	75.0
Percent Change from Reference Baseline	0%	7%	15%	21%	28%	50%
Average Achieved (mpg)	63.1	60.2	60.3	61.3	64.7	75.2
Total Regulatory Costs						
Technology Application Costs ($b)	2.0	-0.1	-0.1	-0.1	0.1	0.8
Off-Cycle Technology Costs ($b)	0.1	0.2	0.2	0.2	0.2	0.2
Off-Cycle Credits	9.5	14.6	14.6	14.6	14.6	14.6
A/C Efficiency Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0
Avg. A/C Efficiency	6.9	11.5	11.5	11.5	11.5	11.5
Subtotal Technology Costs ($b)	2.1	0.1	0.1	0.1	0.3	1.0
Total Civil Penalties ($b)	0.0	0.0	0.0	0.0	0.0	0.0
Total Regulatory Costs ($b)	2.0	-0.1	-0.1	-0.1	0.1	0.8
Sales Impacts						
Sales Change from Reference Baseline (m)	0.00	0.00	-0.02	-0.03	-0.03	-0.06

Table 385 - Compliance Impacts and Cumulative Industry Costs for MY 2022 to 2031 Total Fleet by Alternative for Manufacturer (Tesla)

Compliance Impacts and Cumulative Industry Costs for MY 2022 to 2031 Total Fleet by Alternative for Manufacturer (Tesla)						
Alternative	No Action (Reference Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Fuel Economy						
Average Required (mpg)	54.1	59.7	57.3	60.3	63.4	74.2
Percent Change from Reference Baseline	0%	10%	6%	11%	17%	37%
Average Achieved (mpg)	164.3	137.9	137.9	137.9	137.9	137.9
Total Regulatory Costs						
Technology Application Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0
Off-Cycle Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0
Off-Cycle Credits	5.2	5.2	5.2	5.2	5.2	5.2
A/C Efficiency Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0
Avg. A/C Efficiency	5.1	5.1	5.1	5.1	5.1	5.1
Subtotal Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0
Total Civil Penalties ($b)	0.0	0.0	0.0	0.0	0.0	0.0
Total Regulatory Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0
Sales Impacts						
Sales Change from Reference Baseline (m)	0.00	-0.01	0.01	0.01	0.00	-0.02

Table 386 - Compliance Impacts and Cumulative Industry Costs for MY 2022 to 2031 Total Fleet by Alternative for Manufacturer (Toyota)

Compliance Impacts and Cumulative Industry Costs for MY 2022 to 2031 Total Fleet by Alternative for Manufacturer (Toyota)						
Alternative	No Action (Reference Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Fuel Economy						
Average Required (mpg)	48.6	52.2	54.9	57.8	60.8	71.3
Percent Change from Reference Baseline	0%	7%	13%	19%	25%	47%
Average Achieved (mpg)	58.0	55.8	56.7	58.6	60.2	62.5
Total Regulatory Costs						
Technology Application Costs ($b)	4.5	-0.2	0.0	0.5	0.9	1.7
Off-Cycle Technology Costs ($b)	0.3	0.6	0.6	0.6	0.6	0.6
Off-Cycle Credits	10.0	15.7	15.7	15.7	15.7	15.7
A/C Efficiency Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0
Avg. A/C Efficiency	6.4	11.0	10.9	10.9	10.9	10.9
Subtotal Technology Costs ($b)	4.8	0.4	0.6	1.1	1.5	2.2
Total Civil Penalties ($b)	0.0	0.0	0.0	0.0	0.3	2.8
Total Regulatory Costs ($b)	4.5	-0.2	0.0	0.5	1.3	4.5
Sales Impacts						
Sales Change from Reference Baseline (m)	0.00	-0.02	-0.02	-0.05	-0.07	-0.16

Table 387 - Compliance Impacts and Cumulative Industry Costs for MY 2022 to 2031 Total Fleet by Alternative for Manufacturer (Volvo)

Compliance Impacts and Cumulative Industry Costs for MY 2022 to 2031 Total Fleet by Alternative for Manufacturer (Volvo)						
Alternative	No Action (Reference Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Fuel Economy						
Average Required (mpg)	47.5	50.9	54.0	56.9	59.9	70.2
Percent Change from Reference Baseline	0%	7%	14%	20%	26%	48%
Average Achieved (mpg)	52.8	53.6	55.8	56.5	56.7	57.3
Total Regulatory Costs						
Technology Application Costs ($b)	0.0	0.0	0.0	0.1	0.1	0.1
Off-Cycle Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0
Off-Cycle Credits	9.1	14.0	14.0	14.0	14.0	14.0
A/C Efficiency Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0
Avg. A/C Efficiency	6.6	10.8	10.8	10.8	10.8	10.8
Subtotal Technology Costs ($b)	0.0	0.0	0.1	0.1	0.1	0.1
Total Civil Penalties ($b)	0.0	0.0	0.0	0.1	0.1	0.3
Total Regulatory Costs ($b)	0.0	0.0	0.1	0.1	0.2	0.4
Sales Impacts						
Sales Change from Reference Baseline (m)	0.00	0.00	0.00	0.00	0.00	-0.01

Table 388 - Compliance Impacts and Cumulative Industry Costs for MY 2022 to 2031 Total Fleet by Alternative for Manufacturer (VWA)

Compliance Impacts and Cumulative Industry Costs for MY 2022 to 2031 Total Fleet by Alternative for Manufacturer (VWA)						
Alternative	No Action (Reference Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Fuel Economy						
Average Required (mpg)	49.8	53.6	56.2	59.2	62.4	73.2
Percent Change from Reference Baseline	0%	8%	13%	19%	25%	47%
Average Achieved (mpg)	52.6	54.1	55.3	56.1	56.7	57.2
Total Regulatory Costs						
Technology Application Costs ($b)	1.3	0.2	0.3	0.3	0.4	0.4
Off-Cycle Technology Costs ($b)	0.0	0.1	0.1	0.1	0.1	0.1
Off-Cycle Credits	9.3	14.9	14.9	14.9	14.9	14.9
A/C Efficiency Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0
Avg. A/C Efficiency	6.4	11.0	11.0	11.0	11.0	11.0
Subtotal Technology Costs ($b)	1.4	0.3	0.3	0.4	0.4	0.5
Total Civil Penalties ($b)	0.0	0.0	0.1	0.3	0.5	1.4
Total Regulatory Costs ($b)	1.3	0.2	0.4	0.6	0.9	1.8
Sales Impacts						
Sales Change from Reference Baseline (m)	0.00	0.00	-0.01	-0.01	-0.02	-0.04

Powertrain Technology Penetration Rate, by Model Year

Table 389 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Total) Total Fleet, No Action Alternative (Reference Baseline)

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Total) Total Fleet, No Action Alternative (Reference Baseline)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	11	12	17	20	22	22	24	24	23	22
Cylinder Deactivation	5	4	3	1	1	1	1	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	32	32	30	29	28	27	26	24	24	23
Variable Geometry Turbo	1	1	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	1	1	1	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	52	51	47	42	39	34	33	31	30	29
Mild Hybrid Powertrains	3.6	3.6	2.3	2.1	1.1	1.0	0.9	0.4	0.5	0.5
Strong Hybrid Powertrains Total	6.9	6.9	10.7	15.9	16.5	22.3	22.8	24.4	24.0	23.3
Plug-In Hybrid Powertrains	1.7	1.4	2.2	1.4	1.4	1.9	1.9	1.9	1.9	1.8
Battery Electric Vehicles (BEVs)	5.5	9.4	13.2	16.2	20.3	20.5	21.5	22.8	25.1	28.1
BEV 100 Mile Range	0.3	2.9	3.6	3.6	3.9	3.9	4.2	4.6	5.1	5.7
BEV 200 Mile Range	1.6	2.8	5.8	7.9	10.6	10.7	11.1	11.7	12.8	14.3
BEV 300 Mile Range	2.7	2.8	2.9	3.8	5.0	5.1	5.4	5.7	6.4	7.4
BEV 400 Mile Range	0.9	0.9	0.9	0.8	0.8	0.8	0.8	0.8	0.8	0.8
DCT Transmissions	4	4	3	3	3	2	2	2	2	2
CVT Transmissions	22	22	21	20	19	19	19	19	18	17
5-Speed Automatic	1	1	0	0	0	0	0	0	0	0
6-Speed Automatic	6	5	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	29	28	27	24	22	20	18	17	16	15
9-Speed Automatic	11	8	8	4	0	0	0	0	0	0
10-Speed Automatic	12	14	15	16	18	14	14	13	13	12

Table 390 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Total) Passenger Car Fleet, No Action Alternative (Reference Baseline)

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Total) Passenger Car Fleet, No Action Alternative (Reference Baseline)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	17	20	23	26	31	32	34	34	32	31
Cylinder Deactivation	1	1	1	1	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	32	30	26	26	23	23	22	21	21	20
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	38	36	33	32	30	29	28	27	26	24
Mild Hybrid Powertrains	2.1	2.1	1.7	2.0	0.9	0.5	0.5	0.5	0.7	0.7
Strong Hybrid Powertrains Total	5.4	4.9	6.0	6.5	6.9	8.4	8.5	8.9	8.6	8.2
Plug-In Hybrid Powertrains	1.2	0.6	0.5	0.1	0.1	0.1	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	12.4	18.4	23.8	26.4	31.4	31.4	32.5	33.8	36.4	39.4
BEV 100 Mile Range	0.6	5.4	7.3	7.4	8.0	8.1	8.7	9.6	10.8	12.1
BEV 200 Mile Range	3.8	5.0	8.4	10.7	14.2	14.2	14.5	14.7	15.6	16.6
BEV 300 Mile Range	5.6	5.7	5.8	6.0	6.8	6.8	6.9	7.1	7.6	8.2
BEV 400 Mile Range	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
DCT Transmissions	7	7	6	6	4	4	4	4	3	3
CVT Transmissions	40	38	36	35	33	37	38	37	35	34
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	5	4	1	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	23	22	22	22	21	16	15	14	14	13
9-Speed Automatic	4	3	3	1	0	0	0	0	0	0
10-Speed Automatic	3	2	2	3	3	3	3	3	2	2

Table 391 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Total) Light Truck Fleet, No Action Alternative (Reference Baseline)

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Total) Light Truck Fleet, No Action Alternative (Reference Baseline)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	7	8	13	17	18	18	19	19	19	18
Cylinder Deactivation	8	6	3	2	1	1	1	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	32	33	32	31	30	29	28	25	25	24
Variable Geometry Turbo	2	1	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	1	0	0	0	0	0	0	0	0	0
Diesel Engines	1	1	1	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	61	60	55	47	44	37	36	34	32	31
Mild Hybrid Powertrains	4.6	4.5	2.6	2.2	1.2	1.2	1.1	0.4	0.4	0.4
Strong Hybrid Powertrains Total	7.8	8.1	13.4	21.0	21.6	29.5	30.0	32.3	31.8	30.9
Plug-In Hybrid Powertrains	1.9	1.9	3.1	2.1	2.1	2.8	2.8	2.8	2.8	2.7
Battery Electric Vehicles (BEVs)	1.3	4.1	7.1	10.7	14.4	14.8	15.8	17.2	19.4	22.5
BEV 100 Mile Range	0.1	1.5	1.6	1.6	1.7	1.7	1.8	2.0	2.2	2.4
BEV 200 Mile Range	0.3	1.5	4.3	6.5	8.7	8.9	9.4	10.1	11.4	13.1
BEV 300 Mile Range	0.9	1.1	1.2	2.6	4.0	4.2	4.6	5.0	5.9	7.0
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	2	2	2	2	2	1	1	1	1	1
CVT Transmissions	12	13	13	12	12	9	10	10	9	9
5-Speed Automatic	2	2	0	0	0	0	0	0	0	0
6-Speed Automatic	7	5	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	32	32	30	25	23	21	20	18	17	16
9-Speed Automatic	15	11	10	5	0	0	0	0	0	0
10-Speed Automatic	18	21	21	23	25	20	20	18	18	17

Table 392 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Total) Domestic Car Fleet, No Action Alternative (Reference Baseline)

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Total) Domestic Car Fleet, No Action Alternative (Reference Baseline)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	11	15	19	24	29	29	35	34	32	31
Cylinder Deactivation	2	2	2	1	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	29	27	23	24	23	22	22	21	21	20
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	35	34	31	31	29	28	27	26	25	24
Mild Hybrid Powertrains	0.4	0.4	0.4	0.4	0.0	0.0	0.0	0.0	0.0	0.0
Strong Hybrid Powertrains Total	3.1	3.2	4.6	6.2	7.5	8.4	8.3	8.5	8.3	8.0
Plug-In Hybrid Powertrains	0.7	0.7	0.8	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Battery Electric Vehicles (BEVs)	17.0	21.0	27.6	30.5	33.7	33.7	34.9	36.4	38.7	41.4
BEV 100 Mile Range	0.3	3.3	6.0	6.0	6.5	6.5	7.3	8.3	9.5	10.7
BEV 200 Mile Range	1.4	2.3	6.2	8.8	11.5	11.5	11.8	12.2	13.1	14.2
BEV 300 Mile Range	10.5	10.6	10.6	10.8	10.9	10.9	11.0	11.1	11.3	11.7
BEV 400 Mile Range	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8
DCT Transmissions	3	3	3	2	1	1	1	1	1	1
CVT Transmissions	45	43	40	39	37	43	42	41	39	37
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	6	6	1	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	18	17	18	18	17	11	11	11	11	10
9-Speed Automatic	3	3	3	1	0	0	0	0	0	0
10-Speed Automatic	5	4	3	3	3	3	3	2	2	2

Table 393 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Total) Imported Car Fleet, No Action Alternative (Reference Baseline)

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Total) Imported Car Fleet, No Action Alternative (Reference Baseline)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	23	25	27	27	33	34	34	34	32	31
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	34	32	29	28	23	23	23	22	21	20
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	40	38	36	34	30	29	28	28	26	25
Mild Hybrid Powertrains	3.7	3.7	3.1	3.6	1.7	1.0	1.0	0.9	1.4	1.4
Strong Hybrid Powertrains Total	7.6	6.6	7.3	6.8	6.2	8.4	8.8	9.3	8.9	8.4
Plug-In Hybrid Powertrains	1.7	0.4	0.3	0.1	0.1	0.1	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	7.9	16.0	20.2	22.4	29.1	29.2	30.1	31.3	34.1	37.4
BEV 100 Mile Range	1.0	7.4	8.5	8.7	9.5	9.5	10.1	10.9	12.1	13.5
BEV 200 Mile Range	6.1	7.6	10.6	12.4	16.9	16.9	17.0	17.2	18.0	19.1
BEV 300 Mile Range	0.9	0.9	1.1	1.3	2.7	2.8	3.0	3.3	4.0	4.8
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
DCT Transmissions	11	10	9	9	8	7	7	6	6	5
CVT Transmissions	35	32	32	31	30	31	34	33	32	30
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	3	2	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	28	27	26	26	24	21	18	18	17	16
9-Speed Automatic	5	4	3	1	0	0	0	0	0	0
10-Speed Automatic	0	1	2	4	3	2	2	3	3	2

Table 394 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Total) Total Fleet, Alternative PC2LT002

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Total) Total Fleet, Alternative PC2LT002										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	11	12	17	20	22	22	23	22	21	20
Cylinder Deactivation	5	4	3	1	1	1	1	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	32	32	30	29	28	25	23	19	18	17
Variable Geometry Turbo	1	1	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	1	1	1	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	52	51	47	42	39	32	30	26	23	21
Mild Hybrid Powertrains	3.6	3.6	2.3	2.1	1.1	1.0	0.9	0.8	1.7	1.7
Strong Hybrid Powertrains Total	6.9	6.9	10.7	15.9	16.5	22.6	25.3	29.2	30.0	28.3
Plug-In Hybrid Powertrains	1.7	1.4	2.2	1.4	1.4	3.8	3.8	3.8	3.7	5.7
Battery Electric Vehicles (BEVs)	5.5	9.4	13.2	16.2	20.3	20.5	21.4	22.8	25.1	28.1
BEV 100 Mile Range	0.3	2.9	3.6	3.6	3.9	3.9	4.2	4.5	5.1	5.7
BEV 200 Mile Range	1.6	2.8	5.8	7.9	10.6	10.7	11.1	11.7	12.8	14.3
BEV 300 Mile Range	2.7	2.8	2.9	3.8	5.0	5.1	5.4	5.7	6.4	7.4
BEV 400 Mile Range	0.9	0.9	0.9	0.8	0.8	0.8	0.8	0.8	0.8	0.8
DCT Transmissions	4	4	3	3	3	2	2	2	2	2
CVT Transmissions	22	22	21	20	19	19	19	18	17	16
5-Speed Automatic	1	1	0	0	0	0	0	0	0	0
6-Speed Automatic	6	5	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	29	28	27	24	22	17	14	12	9	8
9-Speed Automatic	11	8	8	4	0	0	0	0	0	0
10-Speed Automatic	12	14	15	16	18	15	15	12	13	12

Table 395 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Total) Light Truck Fleet, Alternative PC2LT002

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Total) Light Truck Fleet, Alternative PC2LT002										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	7	8	13	17	18	18	18	19	18	17
Cylinder Deactivation	8	6	3	2	1	1	1	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	32	33	32	31	30	28	25	21	21	19
Variable Geometry Turbo	2	1	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	1	0	0	0	0	0	0	0	0	0
Diesel Engines	1	1	1	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	61	60	55	47	44	37	34	30	27	24
Mild Hybrid Powertrains	4.6	4.5	2.6	2.2	1.2	1.2	1.1	0.4	1.4	1.4
Strong Hybrid Powertrains Total	7.8	8.1	13.4	21.0	21.6	28.4	31.5	35.2	35.7	32.6
Plug-In Hybrid Powertrains	1.9	1.9	3.1	2.1	2.1	4.9	4.9	4.9	4.9	7.9
Battery Electric Vehicles (BEVs)	1.3	4.1	7.1	10.7	14.4	14.8	15.8	17.2	19.4	22.5
BEV 100 Mile Range	0.1	1.5	1.6	1.6	1.7	1.7	1.8	2.0	2.2	2.4
BEV 200 Mile Range	0.3	1.5	4.3	6.5	8.7	8.9	9.4	10.1	11.4	13.1
BEV 300 Mile Range	0.9	1.1	1.2	2.6	4.0	4.2	4.6	5.0	5.9	7.0
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	2	2	2	2	2	1	1	1	1	1
CVT Transmissions	12	13	13	12	12	10	10	10	9	9
5-Speed Automatic	2	2	0	0	0	0	0	0	0	0
6-Speed Automatic	7	5	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	32	32	30	25	23	20	17	15	12	10
9-Speed Automatic	15	11	10	5	0	0	0	0	0	0
10-Speed Automatic	18	21	21	23	25	21	19	17	18	17

Table 396 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Total) Passenger Car Fleet, Alternative PC2LT002

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Total) Passenger Car Fleet, Alternative PC2LT002										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	17	20	23	26	31	30	32	30	28	26
Cylinder Deactivation	1	1	1	1	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	32	30	26	26	23	20	18	15	14	12
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	38	36	33	32	30	24	23	17	16	14
Mild Hybrid Powertrains	2.1	2.1	1.7	2.0	0.9	0.5	0.5	1.6	2.4	2.2
Strong Hybrid Powertrains Total	5.4	4.9	6.0	6.5	6.9	11.3	13.1	17.4	18.6	19.9
Plug-In Hybrid Powertrains	1.2	0.6	0.5	0.1	0.1	1.7	1.5	1.4	1.3	1.3
Battery Electric Vehicles (BEVs)	12.4	18.4	23.8	26.4	31.4	31.4	32.5	33.8	36.4	39.4
BEV 100 Mile Range	0.6	5.4	7.3	7.4	8.0	8.1	8.7	9.6	10.8	12.1
BEV 200 Mile Range	3.8	5.0	8.4	10.7	14.2	14.2	14.5	14.7	15.6	16.6
BEV 300 Mile Range	5.6	5.7	5.8	6.0	6.8	6.8	6.9	7.1	7.6	8.2
BEV 400 Mile Range	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
DCT Transmissions	7	7	6	6	4	4	4	3	3	3
CVT Transmissions	40	38	36	35	33	36	37	35	32	30
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	5	4	1	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	23	22	22	22	21	11	6	5	4	3
9-Speed Automatic	4	3	3	1	0	0	0	0	0	0
10-Speed Automatic	3	2	2	3	3	5	6	4	4	3

Table 397 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Total) Domestic Car Fleet, Alternative PC2LT002

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Total) Domestic Car Fleet, Alternative PC2LT002										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	11	15	19	24	29	29	35	32	29	27
Cylinder Deactivation	2	2	2	1	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	29	27	23	24	23	17	17	12	11	9
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	35	34	31	31	29	23	22	17	16	14
Mild Hybrid Powertrains	0.4	0.4	0.4	0.4	0.0	0.0	0.0	0.0	2.1	2.1
Strong Hybrid Powertrains Total	3.1	3.2	4.6	6.2	7.5	10.5	10.4	16.2	17.8	19.6
Plug-In Hybrid Powertrains	0.7	0.7	0.8	0.1	0.1	3.3	3.1	3.0	2.8	2.6
Battery Electric Vehicles (BEVs)	17.0	21.0	27.6	30.5	33.7	33.7	34.9	36.4	38.7	41.4
BEV 100 Mile Range	0.3	3.3	6.0	6.0	6.5	6.5	7.3	8.3	9.5	10.7
BEV 200 Mile Range	1.4	2.3	6.2	8.8	11.5	11.5	11.8	12.2	13.1	14.2
BEV 300 Mile Range	10.5	10.6	10.6	10.8	10.9	10.9	11.0	11.1	11.3	11.7
BEV 400 Mile Range	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8
DCT Transmissions	3	3	3	2	1	1	1	1	1	1
CVT Transmissions	45	43	40	39	37	40	39	37	34	32
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	6	6	1	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	18	17	18	18	17	5	3	2	2	2
9-Speed Automatic	3	3	3	1	0	0	0	0	0	0
10-Speed Automatic	5	4	3	3	3	7	8	4	4	2

Table 398 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Total) Imported Car Fleet, Alternative PC2LT002

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Total) Imported Car Fleet, Alternative PC2LT002										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	23	25	27	27	33	31	30	28	26	24
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	34	32	29	28	23	22	20	18	16	15
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	40	38	36	34	30	25	23	18	17	14
Mild Hybrid Powertrains	3.7	3.7	3.1	3.6	1.7	1.0	1.0	3.1	2.6	2.4
Strong Hybrid Powertrains Total	7.6	6.6	7.3	6.8	6.2	12.1	15.8	18.6	19.4	20.1
Plug-In Hybrid Powertrains	1.7	0.4	0.3	0.1	0.1	0.1	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	7.9	16.0	20.2	22.4	29.1	29.2	30.1	31.3	34.1	37.4
BEV 100 Mile Range	1.0	7.4	8.5	8.7	9.5	9.5	10.1	10.9	12.1	13.5
BEV 200 Mile Range	6.1	7.6	10.6	12.4	16.9	16.9	17.0	17.2	18.0	19.1
BEV 300 Mile Range	0.9	0.9	1.1	1.3	2.7	2.8	3.0	3.3	4.0	4.8
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
DCT Transmissions	11	10	9	9	8	7	6	6	6	5
CVT Transmissions	35	32	32	31	30	32	34	33	30	29
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	3	2	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	28	27	26	26	24	17	9	8	7	5
9-Speed Automatic	5	4	3	1	0	0	0	0	0	0
10-Speed Automatic	0	1	2	4	3	3	4	3	4	4

Table 399 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Total) Total Fleet, Alternative PC1LT3

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Total) Total Fleet, Alternative PC1LT3										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	11	12	17	20	22	22	22	21	19	18
Cylinder Deactivation	5	4	3	1	1	1	1	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	32	32	30	29	28	24	21	17	15	13
Variable Geometry Turbo	1	1	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	1	1	1	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	52	51	47	42	39	31	27	22	19	17
Mild Hybrid Powertrains	3.6	3.6	2.3	2.1	1.1	1.4	1.4	0.9	1.2	1.2
Strong Hybrid Powertrains Total	6.9	6.9	10.7	15.9	16.5	24.9	29.8	35.1	36.8	35.0
Plug-In Hybrid Powertrains	1.7	1.4	2.2	1.4	1.4	2.9	2.9	2.9	2.9	4.9
Battery Electric Vehicles (BEVs)	5.5	9.4	13.2	16.2	20.3	20.5	21.5	22.8	25.2	28.2
BEV 100 Mile Range	0.3	2.9	3.6	3.6	3.9	3.9	4.2	4.6	5.1	5.7
BEV 200 Mile Range	1.6	2.8	5.8	7.9	10.6	10.7	11.1	11.7	12.8	14.3
BEV 300 Mile Range	2.7	2.8	2.9	3.8	5.0	5.1	5.4	5.7	6.4	7.4
BEV 400 Mile Range	0.9	0.9	0.9	0.8	0.8	0.8	0.8	0.8	0.8	0.8
DCT Transmissions	4	4	3	3	3	2	2	2	2	2
CVT Transmissions	22	22	21	20	19	19	18	18	16	16
5-Speed Automatic	1	1	0	0	0	0	0	0	0	0
6-Speed Automatic	6	5	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	29	28	27	24	22	16	13	10	7	6
9-Speed Automatic	11	8	8	4	0	0	0	0	0	0
10-Speed Automatic	12	14	15	16	18	15	12	10	10	9

Table 400 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Total) Passenger Car Fleet, Alternative PC1LT3

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Total) Passenger Car Fleet, Alternative PC1LT3										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	17	20	23	26	31	31	34	31	30	29
Cylinder Deactivation	1	1	1	1	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	32	30	26	26	23	21	20	17	16	15
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	38	36	33	32	30	25	24	21	19	18
Mild Hybrid Powertrains	2.1	2.1	1.7	2.0	0.9	1.6	1.6	1.6	2.0	1.9
Strong Hybrid Powertrains Total	5.4	4.9	6.0	6.5	6.9	10.8	11.4	15.3	15.1	14.8
Plug-In Hybrid Powertrains	1.2	0.6	0.5	0.1	0.1	0.1	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	12.4	18.4	23.8	26.4	31.4	31.4	32.5	33.8	36.3	39.4
BEV 100 Mile Range	0.6	5.4	7.3	7.4	8.0	8.1	8.7	9.6	10.8	12.1
BEV 200 Mile Range	3.8	5.0	8.4	10.7	14.2	14.2	14.5	14.7	15.6	16.6
BEV 300 Mile Range	5.6	5.7	5.8	6.0	6.8	6.8	6.9	7.1	7.6	8.2
BEV 400 Mile Range	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
DCT Transmissions	7	7	6	6	4	4	4	3	3	3
CVT Transmissions	40	38	36	35	33	36	37	36	34	33
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	5	4	1	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	23	22	22	22	21	13	10	8	7	5
9-Speed Automatic	4	3	3	1	0	0	0	0	0	0
10-Speed Automatic	3	2	2	3	3	5	6	4	5	5

Table 401 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Total) Light Truck Fleet, Alternative PC1LT3

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Total) Light Truck Fleet, Alternative PC1LT3										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	7	8	13	17	18	17	16	15	13	12
Cylinder Deactivation	8	6	3	2	1	1	1	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	32	33	32	31	30	25	21	17	15	12
Variable Geometry Turbo	2	1	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	1	0	0	0	0	0	0	0	0	0
Diesel Engines	1	1	1	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	61	60	55	47	44	34	28	22	19	16
Mild Hybrid Powertrains	4.6	4.5	2.6	2.2	1.2	1.2	1.3	0.5	0.9	0.8
Strong Hybrid Powertrains Total	7.8	8.1	13.4	21.0	21.6	32.3	39.2	45.2	48.0	45.4
Plug-In Hybrid Powertrains	1.9	1.9	3.1	2.1	2.1	4.4	4.4	4.4	4.4	7.4
Battery Electric Vehicles (BEVs)	1.3	4.1	7.1	10.7	14.4	14.8	15.8	17.2	19.4	22.4
BEV 100 Mile Range	0.1	1.5	1.6	1.6	1.7	1.7	1.8	2.0	2.2	2.4
BEV 200 Mile Range	0.3	1.5	4.3	6.5	8.7	8.9	9.4	10.1	11.4	13.1
BEV 300 Mile Range	0.9	1.1	1.2	2.6	4.0	4.2	4.6	5.0	5.9	7.0
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	2	2	2	2	2	1	1	1	1	1
CVT Transmissions	12	13	13	12	12	10	9	9	7	7
5-Speed Automatic	2	2	0	0	0	0	0	0	0	0
6-Speed Automatic	7	5	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	32	32	30	25	23	18	15	10	7	6
9-Speed Automatic	15	11	10	5	0	0	0	0	0	0
10-Speed Automatic	18	21	21	23	25	20	16	13	13	11

Table 402 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Total) Domestic Car Fleet, Alternative PC1LT3

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Total) Domestic Car Fleet, Alternative PC1LT3										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	11	15	19	24	29	29	35	33	32	30
Cylinder Deactivation	2	2	2	1	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	29	27	23	24	23	19	19	14	13	13
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	35	34	31	31	29	23	22	17	16	15
Mild Hybrid Powertrains	0.4	0.4	0.4	0.4	0.0	1.9	1.9	1.9	2.7	2.7
Strong Hybrid Powertrains Total	3.1	3.2	4.6	6.2	7.5	11.8	11.5	16.7	16.3	15.7
Plug-In Hybrid Powertrains	0.7	0.7	0.8	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Battery Electric Vehicles (BEVs)	17.0	21.0	27.6	30.5	33.7	33.7	34.9	36.4	38.7	41.4
BEV 100 Mile Range	0.3	3.3	6.0	6.0	6.5	6.5	7.3	8.3	9.5	10.7
BEV 200 Mile Range	1.4	2.3	6.2	8.8	11.5	11.5	11.8	12.2	13.1	14.2
BEV 300 Mile Range	10.5	10.6	10.6	10.8	10.9	10.9	11.0	11.1	11.3	11.7
BEV 400 Mile Range	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8
DCT Transmissions	3	3	3	2	1	1	1	1	1	1
CVT Transmissions	45	43	40	39	37	40	39	38	36	36
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	6	6	1	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	18	17	18	18	17	6	5	4	4	2
9-Speed Automatic	3	3	3	1	0	0	0	0	0	0
10-Speed Automatic	5	4	3	3	3	7	8	5	4	4

Table 403 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Total) Imported Car Fleet, Alternative PC1LT3

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Total) Imported Car Fleet, Alternative PC1LT3										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	23	25	27	27	33	33	33	30	29	28
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	34	32	29	28	23	23	22	21	19	18
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	40	38	36	34	30	27	27	24	23	21
Mild Hybrid Powertrains	3.7	3.7	3.1	3.6	1.7	1.3	1.3	1.2	1.2	1.2
Strong Hybrid Powertrains Total	7.6	6.6	7.3	6.8	6.2	9.9	11.2	14.0	13.9	13.8
Plug-In Hybrid Powertrains	1.7	0.4	0.3	0.1	0.1	0.1	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	7.9	16.0	20.2	22.4	29.1	29.2	30.1	31.3	34.0	37.4
BEV 100 Mile Range	1.0	7.4	8.5	8.7	9.5	9.5	10.1	10.8	12.1	13.4
BEV 200 Mile Range	6.1	7.6	10.6	12.4	16.9	16.9	17.0	17.2	18.0	19.0
BEV 300 Mile Range	0.9	0.9	1.1	1.3	2.7	2.8	3.0	3.3	3.9	4.8
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
DCT Transmissions	11	10	9	9	8	7	6	6	6	5
CVT Transmissions	35	32	32	31	30	32	35	33	32	30
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	3	2	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	28	27	26	26	24	19	14	12	10	8
9-Speed Automatic	5	4	3	1	0	0	0	0	0	0
10-Speed Automatic	0	1	2	4	3	3	3	3	5	5

Table 404 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Total) Total Fleet, Alternative PC2LT4

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Total) Total Fleet, Alternative PC2LT4										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	11	12	17	20	22	21	21	20	17	16
Cylinder Deactivation	5	4	3	1	1	1	1	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	32	32	30	29	28	23	19	15	12	9
Variable Geometry Turbo	1	1	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	1	1	1	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	52	51	47	42	39	30	25	19	15	12
Mild Hybrid Powertrains	3.6	3.6	2.3	2.1	1.1	1.1	1.0	0.9	1.2	1.2
Strong Hybrid Powertrains Total	6.9	6.9	10.7	15.9	16.5	26.4	32.4	38.0	41.5	40.7
Plug-In Hybrid Powertrains	1.7	1.4	2.2	1.4	1.4	2.9	2.9	2.9	2.9	4.9
Battery Electric Vehicles (BEVs)	5.5	9.4	13.2	16.2	20.3	20.5	21.5	22.8	25.2	28.2
BEV 100 Mile Range	0.3	2.9	3.6	3.6	3.9	3.9	4.2	4.6	5.1	5.7
BEV 200 Mile Range	1.6	2.8	5.8	7.9	10.6	10.7	11.1	11.7	12.8	14.3
BEV 300 Mile Range	2.7	2.8	2.9	3.8	5.0	5.1	5.4	5.7	6.4	7.4
BEV 400 Mile Range	0.9	0.9	0.9	0.8	0.8	0.8	0.8	0.8	0.8	0.8
DCT Transmissions	4	4	3	3	3	2	2	2	2	2
CVT Transmissions	22	22	21	20	19	19	19	18	16	15
5-Speed Automatic	1	1	0	0	0	0	0	0	0	0
6-Speed Automatic	6	5	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	29	28	27	24	22	15	8	4	2	1
9-Speed Automatic	11	8	8	4	0	0	0	0	0	0
10-Speed Automatic	12	14	15	16	18	15	14	12	11	9

Table 405 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Total) Passenger Car Fleet, Alternative PC2LT4

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Total) Passenger Car Fleet, Alternative PC2LT4										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	17	20	23	26	31	30	32	30	28	27
Cylinder Deactivation	1	1	1	1	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	32	30	26	26	23	20	18	15	14	12
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	38	36	33	32	30	24	23	17	16	15
Mild Hybrid Powertrains	2.1	2.1	1.7	2.0	0.9	0.5	0.5	1.6	2.4	2.3
Strong Hybrid Powertrains Total	5.4	4.9	6.0	6.5	6.9	12.9	14.7	18.9	19.9	20.5
Plug-In Hybrid Powertrains	1.2	0.6	0.5	0.1	0.1	0.1	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	12.4	18.4	23.8	26.4	31.4	31.4	32.5	33.8	36.3	39.3
BEV 100 Mile Range	0.6	5.4	7.3	7.4	8.0	8.1	8.7	9.6	10.8	12.1
BEV 200 Mile Range	3.8	5.0	8.4	10.7	14.2	14.2	14.5	14.7	15.6	16.6
BEV 300 Mile Range	5.6	5.7	5.8	6.0	6.8	6.8	6.9	7.1	7.6	8.2
BEV 400 Mile Range	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
DCT Transmissions	7	7	6	6	4	4	4	3	3	3
CVT Transmissions	40	38	36	35	33	36	37	35	32	30
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	5	4	1	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	23	22	22	22	21	11	6	5	3	2
9-Speed Automatic	4	3	3	1	0	0	0	0	0	0
10-Speed Automatic	3	2	2	3	3	5	6	4	5	4

Table 406 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Total) Light Truck Fleet, Alternative PC2LT4

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Total) Light Truck Fleet, Alternative PC2LT4										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	7	8	13	17	18	17	15	14	12	10
Cylinder Deactivation	8	6	3	2	1	1	1	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	32	33	32	31	30	24	19	15	11	8
Variable Geometry Turbo	2	1	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	1	0	0	0	0	0	0	0	0	0
Diesel Engines	1	1	1	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	61	60	55	47	44	33	26	20	15	11
Mild Hybrid Powertrains	4.6	4.5	2.6	2.2	1.2	1.4	1.3	0.5	0.6	0.6
Strong Hybrid Powertrains Total	7.8	8.1	13.4	21.0	21.6	33.4	41.5	47.7	52.6	51.2
Plug-In Hybrid Powertrains	1.9	1.9	3.1	2.1	2.1	4.4	4.4	4.4	4.4	7.4
Battery Electric Vehicles (BEVs)	1.3	4.1	7.1	10.7	14.4	14.8	15.8	17.2	19.4	22.4
BEV 100 Mile Range	0.1	1.5	1.6	1.6	1.7	1.7	1.8	2.0	2.2	2.4
BEV 200 Mile Range	0.3	1.5	4.3	6.5	8.7	8.9	9.4	10.1	11.3	13.1
BEV 300 Mile Range	0.9	1.1	1.2	2.6	4.0	4.2	4.6	5.0	5.9	6.9
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	2	2	2	2	2	1	1	1	1	1
CVT Transmissions	12	13	13	12	12	9	10	9	8	7
5-Speed Automatic	2	2	0	0	0	0	0	0	0	0
6-Speed Automatic	7	5	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	32	32	30	25	23	17	9	4	1	1
9-Speed Automatic	15	11	10	5	0	0	0	0	0	0
10-Speed Automatic	18	21	21	23	25	20	19	17	14	11

Table 407 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Total) Domestic Car Fleet, Alternative PC2LT4

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Total) Domestic Car Fleet, Alternative PC2LT4										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	11	15	19	24	29	29	35	32	29	28
Cylinder Deactivation	2	2	2	1	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	29	27	23	24	23	17	17	12	11	9
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	35	34	31	31	29	23	22	17	16	14
Mild Hybrid Powertrains	0.4	0.4	0.4	0.4	0.0	0.0	0.0	0.0	2.1	2.1
Strong Hybrid Powertrains Total	3.1	3.2	4.6	6.2	7.5	13.7	13.5	19.1	20.5	21.7
Plug-In Hybrid Powertrains	0.7	0.7	0.8	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Battery Electric Vehicles (BEVs)	17.0	21.0	27.6	30.5	33.7	33.7	34.9	36.4	38.7	41.4
BEV 100 Mile Range	0.3	3.3	6.0	6.0	6.5	6.5	7.3	8.3	9.5	10.7
BEV 200 Mile Range	1.4	2.3	6.2	8.8	11.5	11.5	11.8	12.2	13.1	14.1
BEV 300 Mile Range	10.5	10.6	10.6	10.8	10.9	10.9	11.0	11.1	11.3	11.7
BEV 400 Mile Range	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8
DCT Transmissions	3	3	3	2	1	1	1	1	1	1
CVT Transmissions	45	43	40	39	37	40	39	37	34	32
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	6	6	1	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	18	17	18	18	17	5	3	2	1	0
9-Speed Automatic	3	3	3	1	0	0	0	0	0	0
10-Speed Automatic	5	4	3	3	3	7	8	5	5	4

Table 408 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Total) Imported Car Fleet, Alternative PC2LT4

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Total) Imported Car Fleet, Alternative PC2LT4										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	23	25	27	27	33	31	30	28	26	25
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	34	32	29	28	23	22	20	18	16	15
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	40	38	36	34	30	25	23	18	17	15
Mild Hybrid Powertrains	3.7	3.7	3.1	3.6	1.7	1.0	1.0	3.1	2.6	2.5
Strong Hybrid Powertrains Total	7.6	6.6	7.3	6.8	6.2	12.2	15.8	18.7	19.4	19.3
Plug-In Hybrid Powertrains	1.7	0.4	0.3	0.1	0.1	0.1	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	7.9	16.0	20.2	22.4	29.1	29.2	30.1	31.3	34.0	37.4
BEV 100 Mile Range	1.0	7.4	8.5	8.7	9.5	9.5	10.1	10.8	12.1	13.4
BEV 200 Mile Range	6.1	7.6	10.6	12.4	16.9	16.9	17.0	17.2	18.0	19.0
BEV 300 Mile Range	0.9	0.9	1.1	1.3	2.7	2.8	3.0	3.3	3.9	4.8
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
DCT Transmissions	11	10	9	9	8	7	6	6	6	5
CVT Transmissions	35	32	32	31	30	32	34	33	30	29
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	3	2	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	28	27	26	26	24	17	9	7	5	4
9-Speed Automatic	5	4	3	1	0	0	0	0	0	0
10-Speed Automatic	0	1	2	4	3	3	4	4	5	5

Table 409 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Total) Total Fleet, Alternative PC3LT5

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Total) Total Fleet, Alternative PC3LT5										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	11	12	17	20	22	21	21	19	15	13
Cylinder Deactivation	5	4	3	1	1	1	1	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	32	32	30	29	28	22	19	15	11	8
Variable Geometry Turbo	1	1	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	1	1	1	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	52	51	47	42	39	30	25	18	14	10
Mild Hybrid Powertrains	3.6	3.6	2.3	2.1	1.1	1.0	1.0	0.5	0.4	0.4
Strong Hybrid Powertrains Total	6.9	6.9	10.7	15.9	16.5	26.6	32.8	39.4	44.1	45.2
Plug-In Hybrid Powertrains	1.7	1.4	2.2	1.4	1.4	2.9	2.9	2.9	2.9	4.9
Battery Electric Vehicles (BEVs)	5.5	9.4	13.2	16.2	20.3	20.5	21.5	22.8	25.2	28.2
BEV 100 Mile Range	0.3	2.9	3.6	3.6	3.9	3.9	4.2	4.6	5.1	5.7
BEV 200 Mile Range	1.6	2.8	5.8	7.9	10.6	10.7	11.1	11.7	12.8	14.3
BEV 300 Mile Range	2.7	2.8	2.9	3.8	5.0	5.1	5.4	5.7	6.4	7.4
BEV 400 Mile Range	0.9	0.9	0.9	0.8	0.8	0.8	0.8	0.8	0.8	0.8
DCT Transmissions	4	4	3	3	3	2	2	2	1	1
CVT Transmissions	22	22	21	20	19	19	19	17	14	12
5-Speed Automatic	1	1	0	0	0	0	0	0	0	0
6-Speed Automatic	6	5	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	29	28	27	24	22	14	7	3	1	1
9-Speed Automatic	11	8	8	4	0	0	0	0	0	0
10-Speed Automatic	12	14	15	16	18	15	15	13	11	7

Table 410 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Total) Passenger Car Fleet, Alternative PC3LT5

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Total) Passenger Car Fleet, Alternative PC3LT5										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	17	20	23	26	31	30	32	28	24	21
Cylinder Deactivation	1	1	1	1	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	32	30	26	26	23	20	18	15	13	9
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	38	36	33	32	30	24	22	17	14	11
Mild Hybrid Powertrains	2.1	2.1	1.7	2.0	0.9	0.5	0.5	0.7	0.4	0.4
Strong Hybrid Powertrains Total	5.4	4.9	6.0	6.5	6.9	13.0	14.7	21.0	25.0	28.5
Plug-In Hybrid Powertrains	1.2	0.6	0.5	0.1	0.1	0.1	0.0	0.0	0.0	0.1
Battery Electric Vehicles (BEVs)	12.4	18.4	23.8	26.4	31.4	31.4	32.5	33.8	36.3	39.3
BEV 100 Mile Range	0.6	5.4	7.3	7.4	8.0	8.1	8.7	9.6	10.8	12.1
BEV 200 Mile Range	3.8	5.0	8.4	10.7	14.2	14.2	14.5	14.7	15.6	16.6
BEV 300 Mile Range	5.6	5.7	5.8	6.0	6.8	6.8	6.9	7.1	7.6	8.2
BEV 400 Mile Range	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
DCT Transmissions	7	7	6	6	4	4	4	3	2	2
CVT Transmissions	40	38	36	35	33	36	37	33	28	26
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	5	4	1	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	23	22	22	22	21	10	5	3	2	1
9-Speed Automatic	4	3	3	1	0	0	0	0	0	0
10-Speed Automatic	3	2	2	3	3	5	7	6	6	3

Table 411 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Total) Light Truck Fleet, Alternative PC3LT5

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Total) Light Truck Fleet, Alternative PC3LT5										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	7	8	13	17	18	17	15	14	11	9
Cylinder Deactivation	8	6	3	2	1	1	1	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	32	33	32	31	30	24	19	14	11	7
Variable Geometry Turbo	2	1	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	1	0	0	0	0	0	0	0	0	0
Diesel Engines	1	1	1	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	61	60	55	47	44	32	26	19	14	9
Mild Hybrid Powertrains	4.6	4.5	2.6	2.2	1.2	1.2	1.2	0.4	0.4	0.4
Strong Hybrid Powertrains Total	7.8	8.1	13.4	21.0	21.6	33.7	42.1	48.8	54.0	53.9
Plug-In Hybrid Powertrains	1.9	1.9	3.1	2.1	2.1	4.4	4.4	4.4	4.4	7.4
Battery Electric Vehicles (BEVs)	1.3	4.1	7.1	10.7	14.4	14.8	15.8	17.2	19.4	22.4
BEV 100 Mile Range	0.1	1.5	1.6	1.6	1.7	1.7	1.8	2.0	2.2	2.4
BEV 200 Mile Range	0.3	1.5	4.3	6.5	8.7	8.9	9.4	10.1	11.3	13.1
BEV 300 Mile Range	0.9	1.1	1.2	2.6	4.0	4.2	4.6	5.0	5.9	6.9
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	2	2	2	2	2	1	1	1	1	0
CVT Transmissions	12	13	13	12	12	9	9	9	7	6
5-Speed Automatic	2	2	0	0	0	0	0	0	0	0
6-Speed Automatic	7	5	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	32	32	30	25	23	16	8	3	1	1
9-Speed Automatic	15	11	10	5	0	0	0	0	0	0
10-Speed Automatic	18	21	21	23	25	20	19	17	14	9

Table 412 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Total) Domestic Car Fleet, Alternative PC3LT5

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Total) Domestic Car Fleet, Alternative PC3LT5										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	11	15	19	24	29	29	35	32	25	23
Cylinder Deactivation	2	2	2	1	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	29	27	23	24	23	17	17	12	11	8
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	35	34	31	31	29	23	22	17	16	13
Mild Hybrid Powertrains	0.4	0.4	0.4	0.4	0.0	0.0	0.0	0.0	0.0	0.0
Strong Hybrid Powertrains Total	3.1	3.2	4.6	6.2	7.5	13.7	13.5	19.9	24.3	27.9
Plug-In Hybrid Powertrains	0.7	0.7	0.8	0.1	0.1	0.1	0.1	0.1	0.1	0.2
Battery Electric Vehicles (BEVs)	17.0	21.0	27.6	30.5	33.7	33.7	34.9	36.4	38.7	41.4
BEV 100 Mile Range	0.3	3.3	6.0	6.0	6.5	6.5	7.3	8.3	9.5	10.7
BEV 200 Mile Range	1.4	2.3	6.2	8.8	11.5	11.5	11.8	12.2	13.1	14.1
BEV 300 Mile Range	10.5	10.6	10.6	10.8	10.9	10.9	11.0	11.1	11.3	11.7
BEV 400 Mile Range	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8
DCT Transmissions	3	3	3	2	1	1	1	1	1	1
CVT Transmissions	45	43	40	39	37	40	39	36	31	28
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	6	6	1	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	18	17	18	18	17	5	3	2	1	0
9-Speed Automatic	3	3	3	1	0	0	0	0	0	0
10-Speed Automatic	5	4	3	3	3	7	8	5	4	2

Table 413 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Total) Imported Car Fleet, Alternative PC3LT5

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Total) Imported Car Fleet, Alternative PC3LT5										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	23	25	27	27	33	31	30	25	22	19
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	34	32	29	28	23	22	20	17	14	11
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	40	38	36	34	30	25	23	17	13	8
Mild Hybrid Powertrains	3.7	3.7	3.1	3.6	1.7	1.0	1.0	1.3	0.8	0.7
Strong Hybrid Powertrains Total	7.6	6.6	7.3	6.8	6.2	12.3	15.9	22.0	25.6	29.0
Plug-In Hybrid Powertrains	1.7	0.4	0.3	0.1	0.1	0.1	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	7.9	16.0	20.2	22.4	29.1	29.2	30.1	31.3	34.0	37.4
BEV 100 Mile Range	1.0	7.4	8.5	8.7	9.5	9.5	10.1	10.9	12.1	13.4
BEV 200 Mile Range	6.1	7.6	10.6	12.4	16.9	16.9	17.0	17.2	18.0	19.0
BEV 300 Mile Range	0.9	0.9	1.1	1.3	2.7	2.8	3.0	3.3	3.9	4.8
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
DCT Transmissions	11	10	9	9	8	7	6	5	4	4
CVT Transmissions	35	32	32	31	30	32	34	31	26	24
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	3	2	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	28	27	26	26	24	15	7	4	2	2
9-Speed Automatic	5	4	3	1	0	0	0	0	0	0
10-Speed Automatic	0	1	2	4	3	4	6	7	8	4

Table 414 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Total) Total Fleet, Alternative PC6LT8

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Total) Total Fleet, Alternative PC6LT8										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	11	12	17	20	22	21	19	15	11	8
Cylinder Deactivation	5	4	3	1	1	1	1	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	32	32	30	29	28	22	17	12	9	5
Variable Geometry Turbo	1	1	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	1	1	1	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	52	51	47	42	39	30	22	15	10	5
Mild Hybrid Powertrains	3.6	3.6	2.3	2.1	1.1	1.0	0.9	0.9	1.0	0.9
Strong Hybrid Powertrains Total	6.9	6.9	10.7	15.9	16.5	27.1	37.1	45.6	52.2	54.4
Plug-In Hybrid Powertrains	1.7	1.4	2.2	1.4	1.4	2.9	2.9	2.9	2.9	4.9
Battery Electric Vehicles (BEVs)	5.5	9.4	13.2	16.2	20.3	20.5	21.5	22.8	25.2	28.2
BEV 100 Mile Range	0.3	2.9	3.6	3.6	3.9	3.9	4.2	4.5	5.1	5.7
BEV 200 Mile Range	1.6	2.8	5.8	7.9	10.6	10.7	11.1	11.7	12.8	14.3
BEV 300 Mile Range	2.7	2.8	2.9	3.8	5.0	5.1	5.4	5.7	6.4	7.4
BEV 400 Mile Range	0.9	0.9	0.9	0.8	0.8	0.8	0.8	0.8	0.8	0.8
DCT Transmissions	4	4	3	3	3	2	2	1	1	1
CVT Transmissions	22	22	21	20	19	18	15	12	7	5
5-Speed Automatic	1	1	0	0	0	0	0	0	0	0
6-Speed Automatic	6	5	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	29	28	27	24	22	13	7	2	0	0
9-Speed Automatic	11	8	8	4	0	0	0	0	0	0
10-Speed Automatic	12	14	15	16	18	15	15	13	11	7

Table 415 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Total) Passenger Car Fleet, Alternative PC6LT8

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Total) Passenger Car Fleet, Alternative PC6LT8										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	17	20	23	26	31	29	29	23	16	11
Cylinder Deactivation	1	1	1	1	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	32	30	26	26	23	20	13	9	6	2
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	38	36	33	32	30	24	16	10	8	3
Mild Hybrid Powertrains	2.1	2.1	1.7	2.0	0.9	0.5	0.5	0.6	1.1	1.0
Strong Hybrid Powertrains Total	5.4	4.9	6.0	6.5	6.9	13.7	24.2	33.6	40.7	47.9
Plug-In Hybrid Powertrains	1.2	0.6	0.5	0.1	0.1	0.1	0.0	0.0	0.0	0.1
Battery Electric Vehicles (BEVs)	12.4	18.4	23.8	26.4	31.4	31.4	32.5	33.8	36.3	39.3
BEV 100 Mile Range	0.6	5.4	7.3	7.4	8.0	8.1	8.7	9.6	10.8	12.1
BEV 200 Mile Range	3.8	5.0	8.4	10.7	14.2	14.2	14.5	14.7	15.6	16.6
BEV 300 Mile Range	5.6	5.7	5.8	6.0	6.8	6.8	6.9	7.1	7.6	8.2
BEV 400 Mile Range	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
DCT Transmissions	7	7	6	6	4	4	2	2	1	1
CVT Transmissions	40	38	36	35	33	35	28	23	15	10
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	5	4	1	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	23	22	22	22	21	10	5	3	1	0
9-Speed Automatic	4	3	3	1	0	0	0	0	0	0
10-Speed Automatic	3	2	2	3	3	5	7	5	6	1

Table 416 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Total) Light Truck Fleet, Alternative PC6LT8

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Total) Light Truck Fleet, Alternative PC6LT8										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	7	8	13	17	18	16	13	11	8	6
Cylinder Deactivation	8	6	3	2	1	1	1	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	32	33	32	31	30	24	19	14	10	6
Variable Geometry Turbo	2	1	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	1	0	0	0	0	0	0	0	0	0
Diesel Engines	1	1	1	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	61	60	55	47	44	32	25	17	11	6
Mild Hybrid Powertrains	4.6	4.5	2.6	2.2	1.2	1.2	1.1	1.0	0.9	0.9
Strong Hybrid Powertrains Total	7.8	8.1	13.4	21.0	21.6	34.0	43.7	51.7	58.2	57.8
Plug-In Hybrid Powertrains	1.9	1.9	3.1	2.1	2.1	4.4	4.4	4.4	4.4	7.5
Battery Electric Vehicles (BEVs)	1.3	4.1	7.1	10.7	14.4	14.8	15.8	17.2	19.4	22.4
BEV 100 Mile Range	0.1	1.5	1.6	1.6	1.7	1.7	1.8	2.0	2.2	2.4
BEV 200 Mile Range	0.3	1.5	4.3	6.5	8.7	8.9	9.4	10.1	11.3	13.1
BEV 300 Mile Range	0.9	1.1	1.2	2.6	4.0	4.2	4.6	5.0	5.9	6.9
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	2	2	2	2	2	1	1	1	1	0
CVT Transmissions	12	13	13	12	12	9	8	7	3	2
5-Speed Automatic	2	2	0	0	0	0	0	0	0	0
6-Speed Automatic	7	5	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	32	32	30	25	23	15	7	2	0	0
9-Speed Automatic	15	11	10	5	0	0	0	0	0	0
10-Speed Automatic	18	21	21	23	25	20	20	17	14	10

Table 417 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Total) Domestic Car Fleet, Alternative PC6LT8

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Total) Domestic Car Fleet, Alternative PC6LT8										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	11	15	19	24	29	29	33	25	15	11
Cylinder Deactivation	2	2	2	1	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	29	27	23	24	23	17	9	4	4	1
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	35	34	31	31	29	23	12	7	7	5
Mild Hybrid Powertrains	0.4	0.4	0.4	0.4	0.0	0.0	0.0	0.0	1.5	1.4
Strong Hybrid Powertrains Total	3.1	3.2	4.6	6.2	7.5	13.7	23.4	34.2	41.7	46.8
Plug-In Hybrid Powertrains	0.7	0.7	0.8	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Battery Electric Vehicles (BEVs)	17.0	21.0	27.6	30.5	33.7	33.7	34.9	36.4	38.7	41.4
BEV 100 Mile Range	0.3	3.3	6.0	6.0	6.5	6.5	7.3	8.3	9.5	10.7
BEV 200 Mile Range	1.4	2.3	6.2	8.8	11.5	11.5	11.8	12.2	13.1	14.1
BEV 300 Mile Range	10.5	10.6	10.6	10.8	10.9	10.9	11.0	11.1	11.3	11.7
BEV 400 Mile Range	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8
DCT Transmissions	3	3	3	2	1	1	0	0	0	0
CVT Transmissions	45	43	40	39	37	40	30	23	14	9
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	6	6	1	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	18	17	18	18	17	5	3	2	1	0
9-Speed Automatic	3	3	3	1	0	0	0	0	0	0
10-Speed Automatic	5	4	3	3	3	7	8	5	4	2

Table 418 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Total) Imported Car Fleet, Alternative PC6LT8

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Total) Imported Car Fleet, Alternative PC6LT8										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	23	25	27	27	33	30	26	21	17	11
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	34	32	29	28	23	22	18	14	9	2
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	40	38	36	34	30	25	19	13	9	1
Mild Hybrid Powertrains	3.7	3.7	3.1	3.6	1.7	1.0	1.0	1.2	0.7	0.6
Strong Hybrid Powertrains Total	7.6	6.6	7.3	6.8	6.2	13.8	25.1	32.9	39.8	48.9
Plug-In Hybrid Powertrains	1.7	0.4	0.3	0.1	0.1	0.1	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	7.9	16.0	20.2	22.4	29.1	29.2	30.1	31.3	34.0	37.4
BEV 100 Mile Range	1.0	7.4	8.5	8.7	9.5	9.5	10.1	10.9	12.1	13.4
BEV 200 Mile Range	6.1	7.6	10.6	12.4	16.9	16.9	17.0	17.2	18.0	19.0
BEV 300 Mile Range	0.9	0.9	1.1	1.3	2.7	2.8	3.0	3.3	3.9	4.8
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
DCT Transmissions	11	10	9	9	8	7	5	3	2	1
CVT Transmissions	35	32	32	31	30	31	27	23	16	11
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	3	2	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	28	27	26	26	24	15	7	4	0	0
9-Speed Automatic	5	4	3	1	0	0	0	0	0	0
10-Speed Automatic	0	1	2	4	3	4	6	6	8	1

Table 419 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (BMW) Total Fleet, No Action Alternative (Reference Baseline)

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (BMW) Total Fleet, No Action Alternative (Reference Baseline)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	0	0	0	0	0	0	0	0
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	91	87	80	76	38	31	30	28	26	24
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	58	53	48	46	33	27	26	25	23	21
Mild Hybrid Powertrains	29.0	29.5	27.9	25.4	1.8	0.0	0.0	0.0	0.0	0.0
Strong Hybrid Powertrains Total	0.0	0.0	0.0	2.8	38.4	46.0	47.3	46.4	43.1	39.7
Plug-In Hybrid Powertrains	5.8	5.8	5.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	3.3	7.4	15.2	21.5	23.3	23.3	23.2	25.5	31.0	36.5
BEV 100 Mile Range	0.8	3.2	3.4	3.3	5.2	5.2	5.1	5.1	5.0	5.0
BEV 200 Mile Range	0.2	1.9	8.5	9.8	9.8	9.7	9.7	10.4	12.2	14.0
BEV 300 Mile Range	2.3	2.3	3.4	8.3	8.3	8.3	8.4	9.9	13.6	17.3
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2
DCT Transmissions	6	6	6	6	5	5	5	5	4	4
CVT Transmissions	0	0	0	0	0	0	0	0	0	0
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	85	73	65	60	31	24	23	22	21	19
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	0	8	10	10	2	2	1	1	1	1

Table 420 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Ford) Total Fleet, No Action Alternative (Reference Baseline)

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Ford) Total Fleet, No Action Alternative (Reference Baseline)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	3	3	3	3	3	3	3	3
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	73	70	62	62	58	45	45	39	39	39
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	72	68	61	62	57	43	43	38	38	38
Mild Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Strong Hybrid Powertrains Total	8.6	8.6	11.0	11.0	11.0	32.5	32.5	38.4	38.4	38.4
Plug-In Hybrid Powertrains	1.2	1.1	1.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Battery Electric Vehicles (BEVs)	3.1	7.7	14.5	15.5	20.0	20.0	19.9	19.9	19.9	19.9
BEV 100 Mile Range	0.5	3.0	2.9	3.0	3.3	3.3	3.3	3.3	3.3	3.3
BEV 200 Mile Range	1.4	3.7	9.8	10.5	10.5	10.5	10.4	10.4	10.4	10.4
BEV 300 Mile Range	1.1	1.1	1.7	2.0	6.3	6.2	6.2	6.2	6.2	6.2
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	2	2	2	2	2	2	2	2	2	2
CVT Transmissions	0	0	0	0	0	0	0	0	0	0
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	1	0	0	0	0	0	0	0	0	0
7-Speed Automatic	1	1	0	0	0	0	0	0	0	0
8-Speed Automatic	29	29	23	16	14	11	11	11	11	11
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	54	51	48	56	54	35	35	29	29	29

Table 421 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (GM) Total Fleet, No Action Alternative (Reference Baseline)

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (GM) Total Fleet, No Action Alternative (Reference Baseline)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	1	7	7	7	7	7	7	7
Cylinder Deactivation	4	4	3	2	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	47	47	36	25	22	22	22	19	18	17
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	5	5	5	1	1	1	1	1	1	1
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	82	82	68	38	33	24	24	22	20	20
Mild Hybrid Powertrains	0.0	0.0	0.0	0.7	0.7	1.6	1.6	1.6	2.3	2.3
Strong Hybrid Powertrains Total	0.0	0.0	2.1	28.7	31.4	39.2	39.3	42.3	43.3	42.8
Plug-In Hybrid Powertrains	0.0	0.0	6.6	10.5	10.6	14.2	14.2	14.2	14.2	14.1
Battery Electric Vehicles (BEVs)	1.6	1.5	14.0	13.9	16.8	16.8	16.7	16.7	16.7	17.7
BEV 100 Mile Range	0.0	0.0	4.4	4.2	4.2	4.1	4.1	4.1	4.1	4.0
BEV 200 Mile Range	1.6	1.5	9.6	9.6	10.9	10.9	10.9	10.9	10.9	11.7
BEV 300 Mile Range	0.0	0.0	0.0	0.0	1.8	1.8	1.8	1.8	1.8	1.9
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	2	2	2	1	0	0	0	0	0	0
CVT Transmissions	9	9	5	5	4	4	4	4	4	4
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	18	18	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	20	20	24	12	11	8	8	8	6	6
9-Speed Automatic	22	22	18	5	1	1	0	0	0	0
10-Speed Automatic	28	28	29	24	25	16	18	15	16	16

Table 422 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Honda) Total Fleet, No Action Alternative (Reference Baseline)

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Honda) Total Fleet, No Action Alternative (Reference Baseline)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	8	8	8	7	7	17	16	15	14
Cylinder Deactivation	27	13	13	3	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	43	53	53	60	59	44	43	41	38	36
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	79	77	77	74	69	55	52	50	47	44
Mild Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Strong Hybrid Powertrains Total	9.3	9.4	9.4	9.4	9.2	23.4	22.6	21.5	20.2	18.9
Plug-In Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	0.0	5.5	5.4	9.4	14.6	14.6	18.0	22.0	26.8	31.6
BEV 100 Mile Range	0.0	3.3	3.3	3.2	4.0	4.0	5.6	7.5	9.8	12.0
BEV 200 Mile Range	0.0	2.0	2.0	6.0	10.2	10.2	11.5	13.2	15.1	17.0
BEV 300 Mile Range	0.0	0.2	0.2	0.2	0.5	0.5	0.9	1.4	2.0	2.5
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	2	2	2	1	1	1	1	1	1	1
CVT Transmissions	55	52	51	51	49	36	34	33	31	28
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	0	0	0	0	0	0	0	0	0	0
9-Speed Automatic	17	3	3	3	0	0	0	0	0	0
10-Speed Automatic	17	29	29	26	26	25	24	23	22	20

Table 423 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Hyundai) Total Fleet, No Action Alternative (Reference Baseline)

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Hyundai) Total Fleet, No Action Alternative (Reference Baseline)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	59	59	59	55	55	59	59	59	57	54
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	19	18	17	17	13	13	13	12	12	11
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	68	68	66	63	60	60	60	59	58	55
Mild Hybrid Powertrains	0.0	0.0	0.4	0.4	0.4	0.4	0.4	0.0	0.0	0.0
Strong Hybrid Powertrains Total	10.9	9.6	9.7	10.0	8.5	8.5	8.6	10.0	9.7	9.3
Plug-In Hybrid Powertrains	1.9	1.7	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	3.3	7.4	9.3	14.0	19.0	18.9	18.9	18.9	21.2	25.0
BEV 100 Mile Range	0.2	4.2	4.2	4.1	4.1	4.0	4.0	4.0	5.2	7.0
BEV 200 Mile Range	2.1	2.2	4.1	8.9	11.7	11.7	11.7	11.7	12.5	14.0
BEV 300 Mile Range	1.0	1.0	1.0	1.0	3.2	3.2	3.2	3.2	3.5	4.0
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	11	11	10	10	9	9	9	8	7	7
CVT Transmissions	22	28	28	24	24	24	24	24	23	22
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	50	42	41	42	40	40	40	39	38	36
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	0	0	0	0	0	0	0	0	0	0

Table 424 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (KIA) Total Fleet, No Action Alternative (Reference Baseline)

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (KIA) Total Fleet, No Action Alternative (Reference Baseline)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	45	57	59	62	61	61	61	61	60	57
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	24	23	21	21	18	18	18	17	17	16
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	32	32	32	30	28	28	28	27	26	25
Mild Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Strong Hybrid Powertrains Total	5.0	5.0	5.0	5.0	3.4	3.4	3.4	4.2	4.1	3.9
Plug-In Hybrid Powertrains	3.0	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	4.4	6.2	9.0	12.0	16.9	16.9	16.9	16.9	19.1	22.5
BEV 100 Mile Range	0.0	1.9	2.9	2.9	2.9	2.9	2.9	2.9	3.6	4.6
BEV 200 Mile Range	3.7	3.6	5.3	8.4	13.4	13.4	13.4	13.4	14.8	16.8
BEV 300 Mile Range	0.7	0.7	0.7	0.7	0.7	0.7	0.6	0.6	0.8	1.1
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	9	9	8	9	7	7	7	7	6	6
CVT Transmissions	32	31	30	28	30	30	44	47	46	44
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	13	0	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	34	47	46	47	43	43	29	25	24	23
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	0	0	0	0	0	0	0	0	0	0

Table 425 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (JLR) Total Fleet, No Action Alternative (Reference Baseline)

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (JLR) Total Fleet, No Action Alternative (Reference Baseline)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	0	0	0	0	0	0	0	0
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	47	39	35	35	20	20	20	20	19	13
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	52	31	27	27	10	10	10	10	9	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	46	38	34	34	20	20	20	20	19	13
Mild Hybrid Powertrains	0.9	0.9	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0
Strong Hybrid Powertrains Total	0.0	12.3	12.4	12.4	44.8	44.9	44.9	44.9	43.0	52.9
Plug-In Hybrid Powertrains	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	0.9	17.8	25.4	25.4	25.4	25.4	25.4	25.4	28.5	33.6
BEV 100 Mile Range	0.9	2.0	5.0	5.0	4.9	4.9	4.9	4.9	4.8	4.6
BEV 200 Mile Range	0.0	14.8	19.4	19.4	19.4	19.4	19.4	19.4	19.3	19.2
BEV 300 Mile Range	0.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	4.4	9.9
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	0	0	0	0	0	0	0	0	0	0
CVT Transmissions	0	0	0	0	0	0	0	0	0	0
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	85	42	34	34	25	8	8	8	8	7
9-Speed Automatic	13	2	2	2	0	0	0	0	0	0
10-Speed Automatic	0	26	26	26	4	21	21	21	20	6

Table 426 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Karma) Total Fleet, No Action Alternative (Reference Baseline)

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Karma) Total Fleet, No Action Alternative (Reference Baseline)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	0	0	0	0	0	0	0	0
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	0	0	0	0	0	0	0	0	0	0
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	0	0	0	0	0	0	0	0	0	0
Mild Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Strong Hybrid Powertrains Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Plug-In Hybrid Powertrains	100.0	100.0	100.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	0.0	0.0	0.0	0.0	100.0	100.0	100.0	100.0	100.0	100.0
BEV 100 Mile Range	0.0	0.0	0.0	0.0	50.0	50.0	50.0	50.0	50.0	50.0
BEV 200 Mile Range	0.0	0.0	0.0	0.0	50.0	50.0	50.0	50.0	50.0	50.0
BEV 300 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	0	0	0	0	0	0	0	0	0	0
CVT Transmissions	0	0	0	0	0	0	0	0	0	0
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	0	0	0	0	0	0	0	0	0	0
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	0	0	0	0	0	0	0	0	0	0

Table 427 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Lucid) Total Fleet, No Action Alternative (Reference Baseline)

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Lucid) Total Fleet, No Action Alternative (Reference Baseline)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	0	0	0	0	0	0	0	0
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	0	0	0	0	0	0	0	0	0	0
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	0	0	0	0	0	0	0	0	0	0
Mild Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Strong Hybrid Powertrains Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Plug-In Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
BEV 100 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BEV 200 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BEV 300 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BEV 400 Mile Range	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
DCT Transmissions	0	0	0	0	0	0	0	0	0	0
CVT Transmissions	0	0	0	0	0	0	0	0	0	0
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	0	0	0	0	0	0	0	0	0	0
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	0	0	0	0	0	0	0	0	0	0

Table 428 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Mazda) Total Fleet, No Action Alternative (Reference Baseline)

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Mazda) Total Fleet, No Action Alternative (Reference Baseline)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	71	69	69	68	65	65	63	60	57	53
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	0	0	0	0	0	0	0	0	0	0
Variable Geometry Turbo	29	6	4	5	4	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	0	0	0	0	0	0	0	0	0	0
Mild Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Strong Hybrid Powertrains Total	0.0	15.1	15.1	15.2	14.6	18.9	18.3	17.5	16.5	15.5
Plug-In Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	0.3	9.4	11.8	11.9	15.7	15.7	18.6	22.2	26.7	31.4
BEV 100 Mile Range	0.3	8.1	10.3	10.4	10.9	10.9	11.3	11.8	12.5	13.1
BEV 200 Mile Range	0.0	1.1	1.3	1.3	4.1	4.1	6.3	8.9	12.2	15.7
BEV 300 Mile Range	0.0	0.2	0.2	0.2	0.7	0.7	1.0	1.4	2.0	2.5
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	3	3	2	2	2	2	2	2	2	2
CVT Transmissions	0	0	0	0	0	0	0	0	0	0
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	97	12	1	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	0	61	69	71	68	63	61	58	55	52
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	0	0	0	0	0	0	0	0	0	0

Table 429 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Mercedes-Benz) Total Fleet, No Action Alternative (Reference Baseline)

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Mercedes-Benz) Total Fleet, No Action Alternative (Reference Baseline)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	0	0	0	0	0	0	0	0
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	90	79	75	73	58	44	27	27	27	24
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	7	7	6	6	6	4	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	63	52	51	49	44	41	27	27	26	24
Mild Hybrid Powertrains	26.5	26.3	23.8	23.1	13.2	2.9	0.2	0.2	0.2	0.1
Strong Hybrid Powertrains Total	0.0	0.0	4.6	5.2	6.7	22.2	43.2	43.2	42.2	39.2
Plug-In Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	3.1	14.1	13.9	15.5	29.8	29.7	29.6	29.5	31.2	36.7
BEV 100 Mile Range	0.0	9.8	9.7	9.4	9.3	9.2	9.1	9.1	8.9	8.2
BEV 200 Mile Range	1.3	2.5	2.5	4.5	13.8	13.8	13.8	13.8	13.9	14.2
BEV 300 Mile Range	1.8	1.8	1.7	1.7	6.7	6.7	6.6	6.6	8.3	13.7
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.6
DCT Transmissions	16	16	16	14	9	6	6	6	6	5
CVT Transmissions	0	0	0	0	0	0	0	0	0	0
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	0	0	0	0	0	0	0	0	0	0
9-Speed Automatic	81	27	14	3	0	0	0	0	0	0
10-Speed Automatic	0	43	51	63	54	42	21	21	21	19

Table 430 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Mitsubishi) Total Fleet, No Action Alternative (Reference Baseline)

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Mitsubishi) Total Fleet, No Action Alternative (Reference Baseline)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	11	11	11	11	58	58	58	58
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	21	21	21	10	10	10	10	10	10	10
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	0	0	0	0	0	0	0	0	0	0
Mild Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Strong Hybrid Powertrains Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Plug-In Hybrid Powertrains	1.4	1.4	1.4	1.3	1.3	1.3	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	0.0	0.8	20.3	31.3	31.2	31.2	32.5	32.4	32.4	32.4
BEV 100 Mile Range	0.0	0.3	6.3	6.1	6.1	6.0	6.0	6.0	6.0	6.0
BEV 200 Mile Range	0.0	0.4	14.0	13.7	13.6	13.5	13.4	13.4	13.4	13.4
BEV 300 Mile Range	0.0	0.0	0.0	11.4	11.6	11.6	13.1	13.1	13.1	13.1
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	1	1	0	0	0	0	0	0	0	0
CVT Transmissions	98	97	78	67	67	67	68	68	68	68
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	0	0	0	0	0	0	0	0	0	0
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	0	0	0	0	0	0	0	0	0	0

Table 431 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Nissan) Total Fleet, No Action Alternative (Reference Baseline)

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Nissan) Total Fleet, No Action Alternative (Reference Baseline)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	10	21	33	33	44	47	45	44
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	1	1	1	1	1	1	1	1	11	10
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	13	13	13	14	14	14	14	14	14	13
Mild Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Strong Hybrid Powertrains Total	0.0	0.0	1.1	1.5	1.5	3.1	3.8	3.8	3.7	3.5
Plug-In Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	1.2	7.9	9.2	12.6	15.4	15.3	15.3	15.3	17.6	20.7
BEV 100 Mile Range	1.0	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.4	5.2
BEV 200 Mile Range	0.3	2.4	3.6	7.1	9.8	9.8	9.7	9.7	11.7	14.4
BEV 300 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	1.1
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	0	0	0	0	0	0	0	0	0	0
CVT Transmissions	71	66	64	62	59	57	56	56	55	52
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0	0	0	0	0
7-Speed Automatic	4	1	0	0	0	0	0	0	0	0
8-Speed Automatic	0	0	0	0	0	0	0	0	0	0
9-Speed Automatic	23	24	24	23	0	0	0	0	0	0
10-Speed Automatic	0	1	1	1	24	25	25	25	24	23

Table 432 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Stellantis) Total Fleet, No Action Alternative (Reference Baseline)

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Stellantis) Total Fleet, No Action Alternative (Reference Baseline)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	0	11	13	12	12	18	18	17
Cylinder Deactivation	20	20	6	5	5	4	4	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	10	10	9	10	9	25	25	23	23	22
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	2	2	1	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	46	44	44	33	33	33	32	30	30	29
Mild Hybrid Powertrains	16.4	16.3	6.4	4.4	4.4	4.4	4.4	0.0	0.0	0.0
Strong Hybrid Powertrains Total	0.0	0.0	18.7	32.7	32.9	33.7	34.4	40.7	40.4	38.8
Plug-In Hybrid Powertrains	4.7	4.7	4.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	0.0	4.6	9.1	17.5	17.9	17.9	17.8	17.8	18.6	21.8
BEV 100 Mile Range	0.0	2.7	2.7	2.6	2.6	2.6	2.6	2.6	2.6	2.5
BEV 200 Mile Range	0.0	1.7	6.1	9.9	10.2	10.2	10.2	10.2	10.7	12.9
BEV 300 Mile Range	0.0	0.3	0.3	5.0	5.0	5.0	5.1	5.1	5.3	6.4
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	1	1	1	0	0	0	0	0	0	0
CVT Transmissions	0	0	0	0	0	0	0	0	0	0
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	2	2	2	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	65	61	38	30	30	29	29	24	24	23
9-Speed Automatic	28	27	27	8	1	1	0	0	0	0
10-Speed Automatic	0	0	0	11	18	18	18	17	17	16

Table 433 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Subaru) Total Fleet, No Action Alternative (Reference Baseline)

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Subaru) Total Fleet, No Action Alternative (Reference Baseline)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	13	39	59	66	62	60	56	52	49
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	24	24	24	23	23	21	20	19	18	17
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	76	75	75	73	71	67	64	60	56	52
Mild Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Strong Hybrid Powertrains Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Plug-In Hybrid Powertrains	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	0.0	5.7	5.7	7.2	10.5	15.5	19.5	23.9	29.0	34.2
BEV 100 Mile Range	0.0	2.5	2.5	2.7	2.8	3.0	3.2	3.4	3.6	3.9
BEV 200 Mile Range	0.0	2.5	2.5	3.8	5.4	7.9	10.0	12.2	14.8	17.3
BEV 300 Mile Range	0.0	0.7	0.7	0.7	2.2	4.5	6.4	8.3	10.7	13.0
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	4	4	4	3	3	3	3	3	3	2
CVT Transmissions	95	90	90	89	86	81	78	73	68	63
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	0	0	0	0	0	0	0	0	0	0
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	0	0	0	0	0	0	0	0	0	0

Table 434 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Tesla) Total Fleet, No Action Alternative (Reference Baseline)

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Tesla) Total Fleet, No Action Alternative (Reference Baseline)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	0	0	0	0	0	0	0	0
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	0	0	0	0	0	0	0	0	0	0
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	0	0	0	0	0	0	0	0	0	0
Mild Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Strong Hybrid Powertrains Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Plug-In Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
BEV 100 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BEV 200 Mile Range	18.5	18.5	18.5	18.4	18.4	18.4	18.4	18.4	18.4	18.4
BEV 300 Mile Range	56.9	57.0	57.0	57.2	57.2	57.2	57.3	57.3	57.3	57.3
BEV 400 Mile Range	24.6	24.5	24.5	24.4	24.4	24.4	24.4	24.4	24.4	24.3
DCT Transmissions	0	0	0	0	0	0	0	0	0	0
CVT Transmissions	0	0	0	0	0	0	0	0	0	0
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	0	0	0	0	0	0	0	0	0	0
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	0	0	0	0	0	0	0	0	0	0

Table 435 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Toyota) Total Fleet, No Action Alternative (Reference Baseline)

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Toyota) Total Fleet, No Action Alternative (Reference Baseline)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	25	24	32	31	37	36	35	34	32	30
Cylinder Deactivation	0	0	1	1	1	1	1	1	1	1
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	7	7	16	17	25	29	29	27	26	24
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	25	25	25	26	25	25	24	23	22	21
Mild Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Strong Hybrid Powertrains Total	24.8	24.2	24.3	23.7	18.6	18.6	18.1	17.3	16.4	15.4
Plug-In Hybrid Powertrains	2.4	1.4	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	0.0	3.6	3.9	6.5	13.8	13.8	16.4	20.1	24.5	28.9
BEV 100 Mile Range	0.0	2.9	2.9	2.8	3.5	3.5	4.3	5.5	6.9	8.3
BEV 200 Mile Range	0.0	0.4	0.7	3.3	9.1	9.1	10.1	11.6	13.3	15.0
BEV 300 Mile Range	0.0	0.3	0.3	0.5	1.2	1.2	1.9	3.0	4.3	5.6
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	1	1	1	1	1	1	1	1	1	1
CVT Transmissions	15	15	14	14	13	22	24	23	21	20
5-Speed Automatic	6	6	0	0	0	0	0	0	0	0
6-Speed Automatic	11	11	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	34	33	49	49	47	39	35	34	32	30
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	6	6	6	6	6	6	6	5	5	5

Table 436 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Volvo) Total Fleet, No Action Alternative (Reference Baseline)

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Volvo) Total Fleet, No Action Alternative (Reference Baseline)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	0	0	0	0	0	0	0	0
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	64	65	65	65	57	57	57	57	57	57
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	5	5	3	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	0	0	0	0	0	0	0	0	0	0
Mild Hybrid Powertrains	27.2	27.0	26.8	26.5	19.4	19.4	19.4	19.4	19.4	19.4
Strong Hybrid Powertrains Total	0.0	0.0	1.8	4.6	4.7	4.7	4.7	4.7	4.7	4.7
Plug-In Hybrid Powertrains	17.6	14.8	14.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	13.4	15.9	15.7	30.3	38.7	38.6	38.5	38.4	38.4	38.4
BEV 100 Mile Range	3.5	6.3	6.3	6.2	6.2	6.2	6.2	6.2	6.2	6.2
BEV 200 Mile Range	9.9	9.6	9.4	9.1	17.4	17.3	17.1	17.1	17.1	17.0
BEV 300 Mile Range	0.0	0.0	0.0	15.0	15.1	15.1	15.1	15.2	15.2	15.2
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	0	0	0	0	0	0	0	0	0	0
CVT Transmissions	0	0	0	0	0	0	0	0	0	0
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	69	69	68	65	57	57	57	57	57	57
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	0	0	0	0	0	0	0	0	0	0

Table 437 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (VWA) Total Fleet, No Action Alternative (Reference Baseline)

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (VWA) Total Fleet, No Action Alternative (Reference Baseline)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	11	11	11	11	11	11	10	10
Cylinder Deactivation	1	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	61	57	47	44	38	36	35	35	33	31
Variable Geometry Turbo	19	19	3	1	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	81	78	55	51	48	46	45	45	43	40
Mild Hybrid Powertrains	8.3	8.2	4.4	4.5	0.5	0.3	0.3	0.3	0.2	0.2
Strong Hybrid Powertrains Total	0.0	0.0	22.6	26.0	29.4	31.7	33.0	33.1	31.3	29.4
Plug-In Hybrid Powertrains	1.4	1.4	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	7.1	10.5	15.0	16.9	21.2	21.1	21.0	21.0	25.3	29.8
BEV 100 Mile Range	2.8	5.2	5.3	5.6	5.6	5.6	5.6	5.6	5.4	5.3
BEV 200 Mile Range	4.1	5.1	9.6	10.0	14.3	14.3	14.2	14.2	16.4	18.8
BEV 300 Mile Range	0.2	0.2	0.2	1.2	1.2	1.2	1.3	1.3	3.4	5.7
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	30	26	22	21	18	16	15	15	14	13
CVT Transmissions	0	0	2	1	0	0	0	0	0	0
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	2	2	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	60	59	36	33	31	28	28	28	26	25
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	0	1	1	1	0	3	3	3	3	3

Table 438 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (BMW) Total Fleet, Alternative PC2LT002

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (BMW) Total Fleet, Alternative PC2LT002										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	0	0	0	0	0	0	0	0
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	91	87	80	76	38	29	28	26	23	21
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	58	53	48	46	33	26	24	23	20	18
Mild Hybrid Powertrains	29.0	29.5	27.9	25.4	1.8	0.0	0.0	0.0	0.0	0.0
Strong Hybrid Powertrains Total	0.0	0.0	0.0	2.8	38.4	47.3	49.1	48.2	46.3	42.7
Plug-In Hybrid Powertrains	5.8	5.8	5.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	3.3	7.4	15.2	21.5	23.3	23.2	23.2	25.5	31.0	36.5
BEV 100 Mile Range	0.8	3.2	3.4	3.3	5.2	5.2	5.1	5.1	5.0	5.0
BEV 200 Mile Range	0.2	1.9	8.5	9.8	9.8	9.7	9.7	10.4	12.2	14.0
BEV 300 Mile Range	2.3	2.3	3.4	8.3	8.3	8.3	8.4	9.9	13.6	17.3
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2
DCT Transmissions	6	6	6	6	5	5	5	5	4	4
CVT Transmissions	0	0	0	0	0	0	0	0	0	0
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	85	73	65	60	31	24	3	2	0	0
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	0	8	10	10	2	1	20	19	18	17

Table 439 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Ford) Total Fleet, Alternative PC2LT002

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Ford) Total Fleet, Alternative PC2LT002										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	3	3	3	3	3	3	3	3
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	73	70	62	62	58	40	31	19	19	19
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	72	68	61	62	57	39	29	18	18	18
Mild Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Strong Hybrid Powertrains Total	8.6	8.6	11.0	11.0	11.0	37.0	46.5	57.9	57.9	57.9
Plug-In Hybrid Powertrains	1.2	1.1	1.2	0.1	0.1	0.1	0.2	0.2	0.2	0.2
Battery Electric Vehicles (BEVs)	3.1	7.7	14.5	15.5	20.0	20.0	19.9	19.9	19.9	19.9
BEV 100 Mile Range	0.5	3.0	2.9	3.0	3.3	3.3	3.3	3.3	3.3	3.3
BEV 200 Mile Range	1.4	3.7	9.8	10.5	10.5	10.5	10.4	10.4	10.4	10.4
BEV 300 Mile Range	1.1	1.1	1.7	2.0	6.3	6.2	6.2	6.2	6.2	6.2
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	2	2	2	2	2	2	2	0	0	0
CVT Transmissions	0	0	0	0	0	0	0	0	0	0
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	1	0	0	0	0	0	0	0	0	0
7-Speed Automatic	1	1	0	0	0	0	0	0	0	0
8-Speed Automatic	29	29	23	16	14	8	8	8	8	4
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	54	51	48	56	54	34	24	14	14	18

Table 440 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (GM) Total Fleet, Alternative PC2LT002

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (GM) Total Fleet, Alternative PC2LT002										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	1	7	7	7	7	6	6	5
Cylinder Deactivation	4	4	3	2	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	47	47	36	25	22	22	22	13	11	4
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	5	5	5	1	1	1	1	1	1	1
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	82	82	68	38	33	24	24	17	15	7
Mild Hybrid Powertrains	0.0	0.0	0.0	0.7	0.7	1.6	1.6	1.6	0.9	0.9
Strong Hybrid Powertrains Total	0.0	0.0	2.1	28.7	31.4	31.4	31.5	40.9	43.3	34.6
Plug-In Hybrid Powertrains	0.0	0.0	6.6	10.5	10.6	22.0	22.1	22.1	22.1	37.8
Battery Electric Vehicles (BEVs)	1.6	1.5	14.0	13.9	16.8	16.8	16.7	16.7	16.7	17.7
BEV 100 Mile Range	0.0	0.0	4.4	4.2	4.2	4.1	4.1	4.0	4.0	4.0
BEV 200 Mile Range	1.6	1.5	9.6	9.6	10.9	10.9	10.9	10.9	10.9	11.7
BEV 300 Mile Range	0.0	0.0	0.0	0.0	1.8	1.8	1.8	1.8	1.8	1.9
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	2	2	2	1	0	0	0	0	0	0
CVT Transmissions	9	9	5	5	4	4	4	3	2	2
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	18	18	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	20	20	24	12	11	3	2	2	0	0
9-Speed Automatic	22	22	18	5	1	1	0	0	0	0
10-Speed Automatic	28	28	29	24	25	22	24	15	16	8

Table 441 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Honda) Total Fleet, Alternative PC2LT002

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Honda) Total Fleet, Alternative PC2LT002										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	8	8	8	7	7	17	16	15	14
Cylinder Deactivation	27	13	13	3	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	43	53	53	60	59	39	38	36	34	32
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	79	77	77	74	69	49	47	45	42	40
Mild Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Strong Hybrid Powertrains Total	9.3	9.4	9.4	9.4	9.2	23.1	22.3	21.2	19.9	18.6
Plug-In Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	5.4	5.2	4.9	4.6	4.3
Battery Electric Vehicles (BEVs)	0.0	5.5	5.4	9.4	14.6	14.6	18.0	22.0	26.8	31.6
BEV 100 Mile Range	0.0	3.3	3.3	3.2	4.0	4.0	5.6	7.5	9.7	12.0
BEV 200 Mile Range	0.0	2.0	2.0	6.0	10.2	10.2	11.6	13.2	15.1	17.0
BEV 300 Mile Range	0.0	0.2	0.2	0.2	0.5	0.5	0.9	1.4	2.0	2.5
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	2	2	2	1	1	1	1	1	1	1
CVT Transmissions	55	52	51	51	49	31	29	28	26	24
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	0	0	0	0	0	0	0	0	0	0
9-Speed Automatic	17	3	3	3	0	0	0	0	0	0
10-Speed Automatic	17	29	29	26	26	25	24	23	22	20

Table 442 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Hyundai) Total Fleet, Alternative PC2LT002

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Hyundai) Total Fleet, Alternative PC2LT002										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	59	59	59	55	55	51	51	47	45	41
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	19	18	17	17	13	12	10	7	7	6
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	68	68	66	63	60	50	48	36	30	26
Mild Hybrid Powertrains	0.0	0.0	0.4	0.4	0.4	0.4	0.4	6.2	10.0	10.1
Strong Hybrid Powertrains Total	10.9	9.6	9.7	10.0	8.5	18.7	20.4	26.9	26.9	28.4
Plug-In Hybrid Powertrains	1.9	1.7	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	3.3	7.4	9.3	14.0	19.0	18.9	18.9	18.9	21.2	25.0
BEV 100 Mile Range	0.2	4.2	4.2	4.1	4.1	4.0	4.0	4.0	5.2	7.0
BEV 200 Mile Range	2.1	2.2	4.1	8.9	11.7	11.7	11.7	11.7	12.6	14.0
BEV 300 Mile Range	1.0	1.0	1.0	1.0	3.2	3.2	3.2	3.2	3.5	4.0
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	11	11	10	10	9	9	7	4	4	4
CVT Transmissions	22	28	28	24	24	24	24	24	22	21
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	50	42	41	42	40	29	30	23	23	19
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	0	0	0	0	0	0	0	3	3	2

Table 443 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (KIA) Total Fleet, Alternative PC2LT002

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (KIA) Total Fleet, Alternative PC2LT002										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	45	57	59	62	61	61	52	48	46	44
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	24	23	21	21	18	18	18	16	16	15
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	32	32	32	30	28	28	28	26	18	17
Mild Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.3	6.0
Strong Hybrid Powertrains Total	5.0	5.0	5.0	5.0	3.4	3.4	13.0	18.8	19.1	18.3
Plug-In Hybrid Powertrains	3.0	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	4.4	6.2	9.0	12.0	16.9	16.9	16.9	16.9	19.1	22.5
BEV 100 Mile Range	0.0	1.9	2.9	2.9	2.9	2.9	2.9	2.8	3.6	4.6
BEV 200 Mile Range	3.7	3.6	5.3	8.4	13.4	13.4	13.4	13.4	14.8	16.8
BEV 300 Mile Range	0.7	0.7	0.7	0.7	0.7	0.7	0.6	0.6	0.8	1.1
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	9	9	8	9	7	7	7	7	6	6
CVT Transmissions	32	31	30	28	30	30	49	48	46	44
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	13	0	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	34	47	46	47	43	41	13	10	7	7
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	0	0	0	0	0	2	2	0	2	2

Table 444 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (JLR) Total Fleet, Alternative PC2LT002

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (JLR) Total Fleet, Alternative PC2LT002										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	0	0	0	0	0	0	0	0
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	47	39	35	35	20	20	20	20	15	9
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	52	31	27	27	10	10	10	10	9	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	46	38	34	34	20	20	20	20	15	9
Mild Hybrid Powertrains	0.9	0.9	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0
Strong Hybrid Powertrains Total	0.0	12.3	12.4	12.4	44.8	44.9	44.9	44.9	47.2	57.7
Plug-In Hybrid Powertrains	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	0.9	17.8	25.4	25.4	25.4	25.4	25.4	25.5	28.5	33.6
BEV 100 Mile Range	0.9	2.0	5.0	5.0	4.9	4.9	4.9	4.9	4.8	4.5
BEV 200 Mile Range	0.0	14.8	19.4	19.4	19.4	19.4	19.4	19.4	19.3	19.2
BEV 300 Mile Range	0.0	1.0	1.0	1.0	1.0	1.1	1.1	1.1	4.4	9.8
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	0	0	0	0	0	0	0	0	0	0
CVT Transmissions	0	0	0	0	0	0	0	0	0	0
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	85	42	34	34	25	8	8	8	0	0
9-Speed Automatic	13	2	2	2	0	0	0	0	0	0
10-Speed Automatic	0	26	26	26	4	21	21	21	24	9

Table 445 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Karma) Total Fleet, Alternative PC2LT002

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Karma) Total Fleet, Alternative PC2LT002										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	0	0	0	0	0	0	0	0
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	0	0	0	0	0	0	0	0	0	0
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	0	0	0	0	0	0	0	0	0	0
Mild Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Strong Hybrid Powertrains Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Plug-In Hybrid Powertrains	100.0	100.0	100.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	0.0	0.0	0.0	0.0	100.0	100.0	100.0	100.0	100.0	100.0
BEV 100 Mile Range	0.0	0.0	0.0	0.0	50.0	50.0	50.0	50.0	50.0	50.0
BEV 200 Mile Range	0.0	0.0	0.0	0.0	50.0	50.0	50.0	50.0	50.0	50.0
BEV 300 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	0	0	0	0	0	0	0	0	0	0
CVT Transmissions	0	0	0	0	0	0	0	0	0	0
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	0	0	0	0	0	0	0	0	0	0
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	0	0	0	0	0	0	0	0	0	0

Table 446 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Lucid) Total Fleet, Alternative PC2LT002

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Lucid) Total Fleet, Alternative PC2LT002										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	0	0	0	0	0	0	0	0
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	0	0	0	0	0	0	0	0	0	0
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	0	0	0	0	0	0	0	0	0	0
Mild Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Strong Hybrid Powertrains Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Plug-In Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
BEV 100 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BEV 200 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BEV 300 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BEV 400 Mile Range	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
DCT Transmissions	0	0	0	0	0	0	0	0	0	0
CVT Transmissions	0	0	0	0	0	0	0	0	0	0
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	0	0	0	0	0	0	0	0	0	0
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	0	0	0	0	0	0	0	0	0	0

Table 447 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Mazda) Total Fleet, Alternative PC2LT002

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Mazda) Total Fleet, Alternative PC2LT002										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	71	69	69	68	65	65	64	59	56	52
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	0	0	0	0	0	0	0	0	0	0
Variable Geometry Turbo	29	6	4	5	4	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	0	0	0	0	0	0	0	0	0	0
Mild Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Strong Hybrid Powertrains Total	0.0	15.1	15.1	15.2	14.6	18.9	18.5	18.6	17.5	16.4
Plug-In Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	0.3	9.4	11.8	11.9	15.7	15.7	17.9	21.9	26.7	31.4
BEV 100 Mile Range	0.3	8.1	10.3	10.4	10.9	10.9	11.2	11.8	12.5	13.1
BEV 200 Mile Range	0.0	1.1	1.3	1.3	4.1	4.1	5.8	8.7	12.2	15.7
BEV 300 Mile Range	0.0	0.2	0.2	0.2	0.7	0.7	0.9	1.4	2.0	2.5
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	3	3	2	2	2	2	2	1	1	1
CVT Transmissions	0	0	0	0	0	6	5	4	4	4
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	97	12	1	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	0	61	69	71	68	58	55	53	49	46
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	0	0	0	0	0	0	1	1	1	1

Table 448 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Mercedes-Benz) Total Fleet, Alternative PC2LT002

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Mercedes-Benz) Total Fleet, Alternative PC2LT002										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	0	0	0	0	0	0	0	0
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	90	79	75	73	58	44	27	27	11	10
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	7	7	6	6	6	4	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	63	52	51	49	44	41	27	27	11	10
Mild Hybrid Powertrains	26.5	26.3	23.8	23.1	13.2	2.9	0.2	0.2	0.2	0.1
Strong Hybrid Powertrains Total	0.0	0.0	4.6	5.2	6.7	22.2	43.2	43.2	57.4	53.2
Plug-In Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	3.1	14.1	13.9	15.5	29.8	29.7	29.5	29.4	31.2	36.7
BEV 100 Mile Range	0.0	9.8	9.7	9.4	9.3	9.2	9.1	9.1	8.9	8.2
BEV 200 Mile Range	1.3	2.5	2.5	4.5	13.8	13.8	13.8	13.8	13.9	14.2
BEV 300 Mile Range	1.8	1.8	1.7	1.7	6.7	6.7	6.6	6.6	8.3	13.8
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.6
DCT Transmissions	16	16	16	14	9	6	6	6	6	5
CVT Transmissions	0	0	0	0	0	0	0	0	0	0
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	0	0	0	0	0	0	0	0	0	0
9-Speed Automatic	81	27	14	3	0	0	0	0	0	0
10-Speed Automatic	0	43	51	63	54	42	21	21	5	5

Table 449 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Mitsubishi) Total Fleet, Alternative PC2LT002

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Mitsubishi) Total Fleet, Alternative PC2LT002										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	11	11	11	11	58	58	58	58
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	21	21	21	10	10	10	10	10	10	8
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	0	0	0	0	0	0	0	0	0	0
Mild Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Strong Hybrid Powertrains Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6
Plug-In Hybrid Powertrains	1.4	1.4	1.4	1.3	1.3	1.3	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	0.0	0.8	20.3	31.3	31.2	31.2	32.5	32.4	32.4	32.4
BEV 100 Mile Range	0.0	0.3	6.3	6.1	6.1	6.0	6.0	6.0	6.0	6.0
BEV 200 Mile Range	0.0	0.4	14.0	13.7	13.6	13.5	13.4	13.4	13.4	13.4
BEV 300 Mile Range	0.0	0.0	0.0	11.4	11.6	11.6	13.1	13.1	13.1	13.1
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	1	1	0	0	0	0	0	0	0	0
CVT Transmissions	98	97	78	67	67	67	68	68	68	66
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	0	0	0	0	0	0	0	0	0	0
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	0	0	0	0	0	0	0	0	0	0

Table 450 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Nissan) Total Fleet, Alternative PC2LT002

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Nissan) Total Fleet, Alternative PC2LT002										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	10	21	33	33	43	42	37	34
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	1	1	1	1	1	1	1	1	11	10
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	13	13	13	14	14	14	13	10	9	9
Mild Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.2	5.0
Strong Hybrid Powertrains Total	0.0	0.0	1.1	1.5	1.5	3.1	8.5	11.6	15.7	16.2
Plug-In Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	1.2	7.9	9.2	12.6	15.4	15.3	15.3	15.3	17.6	20.7
BEV 100 Mile Range	1.0	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.4	5.2
BEV 200 Mile Range	0.3	2.4	3.6	7.1	9.8	9.8	9.7	9.7	11.7	14.4
BEV 300 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	1.1
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	0	0	0	0	0	0	0	0	0	0
CVT Transmissions	71	66	64	62	59	57	53	52	47	44
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0	0	0	0	0
7-Speed Automatic	4	1	0	0	0	0	0	0	0	0
8-Speed Automatic	0	0	0	0	0	0	0	0	0	0
9-Speed Automatic	23	24	24	23	0	0	0	0	0	0
10-Speed Automatic	0	1	1	1	24	25	24	21	20	19

Table 451 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Stellantis) Total Fleet, Alternative PC2LT002

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Stellantis) Total Fleet, Alternative PC2LT002										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	0	11	13	12	12	18	18	17
Cylinder Deactivation	20	20	6	5	5	4	4	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	10	10	9	10	9	20	20	19	19	18
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	2	2	1	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	46	44	44	33	33	32	31	29	29	28
Mild Hybrid Powertrains	16.4	16.3	6.4	4.4	4.4	4.4	4.4	0.0	0.0	0.0
Strong Hybrid Powertrains Total	0.0	0.0	18.7	32.7	32.9	34.7	35.4	42.2	41.8	40.7
Plug-In Hybrid Powertrains	4.7	4.7	4.7	0.0	0.0	3.3	3.3	3.3	3.3	3.2
Battery Electric Vehicles (BEVs)	0.0	4.6	9.1	17.5	17.9	17.9	17.8	17.8	18.5	21.8
BEV 100 Mile Range	0.0	2.7	2.7	2.6	2.6	2.6	2.6	2.6	2.6	2.5
BEV 200 Mile Range	0.0	1.7	6.1	9.9	10.2	10.2	10.2	10.2	10.7	12.9
BEV 300 Mile Range	0.0	0.3	0.3	5.0	5.0	5.0	5.1	5.1	5.3	6.4
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	1	1	1	0	0	0	0	0	0	0
CVT Transmissions	0	0	0	0	0	0	0	0	0	0
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	2	2	2	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	65	61	38	30	30	25	23	16	2	2
9-Speed Automatic	28	27	27	8	1	1	0	0	0	0
10-Speed Automatic	0	0	0	11	18	18	20	20	34	32

Table 452 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Subaru) Total Fleet, Alternative PC2LT002

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Subaru) Total Fleet, Alternative PC2LT002										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	13	39	59	66	62	60	56	52	49
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	24	24	24	23	23	21	20	19	18	17
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	76	75	75	73	71	67	64	61	56	52
Mild Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Strong Hybrid Powertrains Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Plug-In Hybrid Powertrains	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	0.0	5.7	5.7	7.2	10.5	15.5	19.5	23.9	29.0	34.2
BEV 100 Mile Range	0.0	2.5	2.5	2.7	2.8	3.0	3.2	3.4	3.6	3.8
BEV 200 Mile Range	0.0	2.5	2.5	3.8	5.4	7.9	10.0	12.2	14.8	17.3
BEV 300 Mile Range	0.0	0.7	0.7	0.7	2.2	4.5	6.4	8.3	10.7	13.0
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	4	4	4	3	3	3	3	3	3	2
CVT Transmissions	95	90	90	89	86	81	78	73	68	63
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	0	0	0	0	0	0	0	0	0	0
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	0	0	0	0	0	0	0	0	0	0

Table 453 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Tesla) Total Fleet, Alternative PC2LT002

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Tesla) Total Fleet, Alternative PC2LT002										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	0	0	0	0	0	0	0	0
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	0	0	0	0	0	0	0	0	0	0
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	0	0	0	0	0	0	0	0	0	0
Mild Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Strong Hybrid Powertrains Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Plug-In Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
BEV 100 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BEV 200 Mile Range	18.5	18.5	18.5	18.4	18.4	18.4	18.4	18.4	18.4	18.4
BEV 300 Mile Range	56.9	57.0	57.0	57.2	57.2	57.2	57.3	57.3	57.3	57.3
BEV 400 Mile Range	24.6	24.5	24.5	24.4	24.4	24.4	24.4	24.3	24.3	24.3
DCT Transmissions	0	0	0	0	0	0	0	0	0	0
CVT Transmissions	0	0	0	0	0	0	0	0	0	0
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	0	0	0	0	0	0	0	0	0	0
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	0	0	0	0	0	0	0	0	0	0

Table 454 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Toyota) Total Fleet, Alternative PC2LT002

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Toyota) Total Fleet, Alternative PC2LT002										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	25	24	32	31	37	36	35	33	32	30
Cylinder Deactivation	0	0	1	1	1	1	1	1	1	1
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	7	7	16	17	25	29	29	27	26	24
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	25	25	25	26	25	25	24	23	22	21
Mild Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Strong Hybrid Powertrains Total	24.8	24.2	24.3	23.7	18.6	18.6	18.1	17.3	16.5	15.5
Plug-In Hybrid Powertrains	2.4	1.4	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	0.0	3.6	3.9	6.5	13.8	13.8	16.4	20.1	24.5	28.9
BEV 100 Mile Range	0.0	2.9	2.9	2.8	3.5	3.5	4.3	5.5	6.9	8.3
BEV 200 Mile Range	0.0	0.4	0.7	3.3	9.1	9.1	10.2	11.6	13.3	15.0
BEV 300 Mile Range	0.0	0.3	0.3	0.5	1.2	1.2	1.9	3.0	4.3	5.6
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	1	1	1	1	1	1	1	1	1	1
CVT Transmissions	15	15	14	14	13	22	24	23	21	20
5-Speed Automatic	6	6	0	0	0	0	0	0	0	0
6-Speed Automatic	11	11	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	34	33	49	49	47	39	35	34	32	30
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	6	6	6	6	6	6	6	5	5	5

Table 455 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Volvo) Total Fleet, Alternative PC2LT002

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Volvo) Total Fleet, Alternative PC2LT002										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	0	0	0	0	0	0	0	0
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	64	65	65	65	57	57	57	57	41	41
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	5	5	3	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	0	0	0	0	0	0	0	0	0	0
Mild Hybrid Powertrains	27.2	27.0	26.8	26.5	19.4	19.4	19.4	19.4	19.4	19.4
Strong Hybrid Powertrains Total	0.0	0.0	1.8	4.6	4.7	4.7	4.7	4.7	20.2	20.2
Plug-In Hybrid Powertrains	17.6	14.8	14.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	13.4	15.9	15.7	30.3	38.7	38.6	38.4	38.3	38.3	38.3
BEV 100 Mile Range	3.5	6.3	6.3	6.2	6.2	6.2	6.2	6.2	6.2	6.2
BEV 200 Mile Range	9.9	9.6	9.4	9.1	17.4	17.3	17.1	17.0	17.0	17.0
BEV 300 Mile Range	0.0	0.0	0.0	15.0	15.1	15.1	15.1	15.2	15.2	15.2
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	0	0	0	0	0	0	0	0	0	0
CVT Transmissions	0	0	0	0	0	0	0	0	0	0
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	69	69	68	65	57	57	57	57	41	41
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	0	0	0	0	0	0	0	0	0	0

Table 456 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (VWA) Total Fleet, Alternative PC2LT002

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (VWA) Total Fleet, Alternative PC2LT002										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	11	11	11	11	11	11	9	8
Cylinder Deactivation	1	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	61	57	47	44	38	36	27	27	23	21
Variable Geometry Turbo	19	19	3	1	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	81	78	55	51	48	46	38	38	26	24
Mild Hybrid Powertrains	8.3	8.2	4.4	4.5	0.5	0.3	0.3	0.3	5.6	5.1
Strong Hybrid Powertrains Total	0.0	0.0	22.6	26.0	29.4	31.7	41.0	41.0	43.3	41.0
Plug-In Hybrid Powertrains	1.4	1.4	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	7.1	10.5	15.0	16.9	21.2	21.1	21.0	21.0	25.3	29.8
BEV 100 Mile Range	2.8	5.2	5.3	5.6	5.6	5.6	5.6	5.6	5.4	5.3
BEV 200 Mile Range	4.1	5.1	9.6	10.0	14.3	14.3	14.2	14.1	16.4	18.7
BEV 300 Mile Range	0.2	0.2	0.2	1.2	1.2	1.2	1.3	1.3	3.5	5.7
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	30	26	22	21	18	16	14	14	13	12
CVT Transmissions	0	0	2	1	0	3	3	4	1	1
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	2	2	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	60	59	36	33	31	20	8	4	3	0
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	0	1	1	1	0	9	13	17	14	16

Table 457 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (BMW) Total Fleet, Alternative PC1LT3

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (BMW) Total Fleet, Alternative PC1LT3										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	0	0	0	0	0	0	0	0
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	91	87	80	76	38	31	30	28	26	13
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	58	53	48	46	33	27	26	25	23	10
Mild Hybrid Powertrains	29.0	29.5	27.9	25.4	1.8	0.0	0.0	0.0	0.0	0.0
Strong Hybrid Powertrains Total	0.0	0.0	0.0	2.8	38.4	46.0	47.2	46.4	43.1	50.7
Plug-In Hybrid Powertrains	5.8	5.8	5.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	3.3	7.4	15.2	21.5	23.3	23.3	23.2	25.5	31.0	36.5
BEV 100 Mile Range	0.8	3.2	3.4	3.3	5.2	5.2	5.2	5.1	5.1	5.0
BEV 200 Mile Range	0.2	1.9	8.5	9.8	9.8	9.7	9.7	10.4	12.3	14.1
BEV 300 Mile Range	2.3	2.3	3.4	8.3	8.3	8.3	8.3	9.9	13.5	17.2
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2
DCT Transmissions	6	6	6	6	5	5	5	5	4	4
CVT Transmissions	0	0	0	0	0	0	0	0	0	0
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	85	73	65	60	31	24	10	9	9	8
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	0	8	10	10	2	2	15	14	13	1

Table 458 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Ford) Total Fleet, Alternative PC1LT3

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Ford) Total Fleet, Alternative PC1LT3										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	3	3	3	3	3	3	3	3
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	73	70	62	62	58	33	16	4	4	4
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	72	68	61	62	57	32	15	3	3	3
Mild Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	2.8	2.7	2.7	2.7	2.7
Strong Hybrid Powertrains Total	8.6	8.6	11.0	11.0	11.0	44.8	61.3	73.5	73.5	73.5
Plug-In Hybrid Powertrains	1.2	1.1	1.2	0.1	0.1	0.1	0.3	0.3	0.3	0.3
Battery Electric Vehicles (BEVs)	3.1	7.7	14.5	15.5	20.0	20.0	20.0	20.0	20.0	20.0
BEV 100 Mile Range	0.5	3.0	2.9	3.0	3.3	3.3	3.3	3.3	3.3	3.3
BEV 200 Mile Range	1.4	3.7	9.8	10.5	10.5	10.5	10.4	10.4	10.4	10.5
BEV 300 Mile Range	1.1	1.1	1.7	2.0	6.3	6.3	6.2	6.2	6.2	6.2
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	2	2	2	2	2	2	2	0	0	0
CVT Transmissions	0	0	0	0	0	0	0	0	0	3
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	1	0	0	0	0	0	0	0	0	0
7-Speed Automatic	1	1	0	0	0	0	0	0	0	0
8-Speed Automatic	29	29	23	16	14	7	7	3	3	0
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	54	51	48	56	54	27	10	3	3	3

Table 459 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (GM) Total Fleet, Alternative PC1LT3

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (GM) Total Fleet, Alternative PC1LT3										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	1	7	7	7	7	6	6	5
Cylinder Deactivation	4	4	3	2	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	47	47	36	25	22	22	22	13	11	7
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	5	5	5	1	1	1	1	1	1	1
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	82	82	68	38	33	24	24	17	15	9
Mild Hybrid Powertrains	0.0	0.0	0.0	0.7	0.7	1.6	1.6	1.6	1.6	1.6
Strong Hybrid Powertrains Total	0.0	0.0	2.1	28.7	31.4	31.4	31.4	40.9	42.6	32.1
Plug-In Hybrid Powertrains	0.0	0.0	6.6	10.5	10.6	22.0	22.0	22.1	22.0	37.6
Battery Electric Vehicles (BEVs)	1.6	1.5	14.0	13.9	16.8	16.8	16.8	16.7	16.8	17.7
BEV 100 Mile Range	0.0	0.0	4.4	4.2	4.2	4.1	4.1	4.1	4.1	4.1
BEV 200 Mile Range	1.6	1.5	9.6	9.6	10.9	10.9	10.9	10.9	10.9	11.7
BEV 300 Mile Range	0.0	0.0	0.0	0.0	1.8	1.8	1.8	1.8	1.8	1.9
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	2	2	2	1	0	0	0	0	0	0
CVT Transmissions	9	9	5	5	4	4	4	3	2	2
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	18	18	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	20	20	24	12	11	3	2	2	0	0
9-Speed Automatic	22	22	18	5	1	1	0	0	0	0
10-Speed Automatic	28	28	29	24	25	22	24	15	16	10

Table 460 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Honda) Total Fleet, Alternative PC1LT3

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Honda) Total Fleet, Alternative PC1LT3										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	8	8	8	7	7	17	16	15	14
Cylinder Deactivation	27	13	13	3	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	43	53	53	60	59	40	38	33	30	28
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	79	77	77	74	69	50	47	41	38	35
Mild Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.8	0.7	0.7
Strong Hybrid Powertrains Total	9.3	9.4	9.4	9.4	9.2	27.9	27.2	29.2	28.2	26.3
Plug-In Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	0.0	5.5	5.4	9.4	14.6	14.6	18.0	22.0	26.8	31.6
BEV 100 Mile Range	0.0	3.3	3.3	3.2	4.0	4.0	5.6	7.5	9.8	12.1
BEV 200 Mile Range	0.0	2.0	2.0	6.0	10.2	10.2	11.5	13.2	15.1	17.0
BEV 300 Mile Range	0.0	0.2	0.2	0.2	0.5	0.5	0.9	1.4	2.0	2.5
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	2	2	2	1	1	1	1	1	1	1
CVT Transmissions	55	52	51	51	49	32	30	29	27	25
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	0	0	0	0	0	0	0	0	0	0
9-Speed Automatic	17	3	3	3	0	0	0	0	0	0
10-Speed Automatic	17	29	29	26	26	25	24	19	17	16

Table 461 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Hyundai) Total Fleet, Alternative PC1LT3

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Hyundai) Total Fleet, Alternative PC1LT3										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	59	59	59	55	55	50	48	39	36	34
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	19	18	17	17	13	12	10	9	9	7
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	68	68	66	63	60	49	45	35	30	27
Mild Hybrid Powertrains	0.0	0.0	0.4	0.4	0.4	1.3	1.3	0.9	3.8	3.6
Strong Hybrid Powertrains Total	10.9	9.6	9.7	10.0	8.5	18.4	22.9	33.0	33.8	33.8
Plug-In Hybrid Powertrains	1.9	1.7	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	3.3	7.4	9.3	14.0	19.0	18.9	18.9	18.9	21.2	25.0
BEV 100 Mile Range	0.2	4.2	4.2	4.1	4.1	4.0	4.0	4.0	5.2	7.1
BEV 200 Mile Range	2.1	2.2	4.1	8.9	11.7	11.7	11.7	11.7	12.5	13.9
BEV 300 Mile Range	1.0	1.0	1.0	1.0	3.2	3.2	3.2	3.2	3.5	4.0
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	11	11	10	10	9	9	7	6	5	5
CVT Transmissions	22	28	28	24	24	24	24	24	21	20
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	50	42	41	42	40	30	27	18	8	1
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	0	0	0	0	0	0	0	0	10	14

Table 462 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (KIA) Total Fleet, Alternative PC1LT3

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (KIA) Total Fleet, Alternative PC1LT3										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	45	57	59	62	61	61	51	49	33	30
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	24	23	21	21	18	18	18	16	16	15
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	32	32	32	30	28	28	28	26	13	13
Mild Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	1.2
Strong Hybrid Powertrains Total	5.0	5.0	5.0	5.0	3.4	3.4	13.8	17.6	31.8	32.5
Plug-In Hybrid Powertrains	3.0	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	4.4	6.2	9.0	12.0	16.9	16.9	16.9	16.9	19.1	22.5
BEV 100 Mile Range	0.0	1.9	2.9	2.9	2.9	2.9	2.9	2.9	3.6	4.6
BEV 200 Mile Range	3.7	3.6	5.3	8.4	13.4	13.4	13.4	13.4	14.7	16.8
BEV 300 Mile Range	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.8	1.1
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	9	9	8	9	7	7	7	7	6	6
CVT Transmissions	32	31	30	28	30	30	48	49	33	30
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	13	0	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	34	47	46	47	43	41	13	10	9	9
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	0	0	0	0	0	2	2	0	0	0

Table 463 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (JLR) Total Fleet, Alternative PC1LT3

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (JLR) Total Fleet, Alternative PC1LT3										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	0	0	0	0	0	0	0	0
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	47	39	35	35	20	20	20	20	15	7
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	52	31	27	27	10	10	10	10	9	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	46	38	34	34	20	20	20	20	15	7
Mild Hybrid Powertrains	0.9	0.9	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0
Strong Hybrid Powertrains Total	0.0	12.3	12.4	12.4	44.8	44.8	44.8	44.8	47.2	59.0
Plug-In Hybrid Powertrains	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	0.9	17.8	25.4	25.4	25.4	25.4	25.4	25.5	28.5	33.6
BEV 100 Mile Range	0.9	2.0	5.0	5.0	4.9	4.9	4.9	4.9	4.8	4.6
BEV 200 Mile Range	0.0	14.8	19.4	19.4	19.4	19.4	19.4	19.4	19.3	19.2
BEV 300 Mile Range	0.0	1.0	1.0	1.0	1.0	1.1	1.1	1.1	4.4	9.8
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	0	0	0	0	0	0	0	0	0	0
CVT Transmissions	0	0	0	0	0	0	0	0	0	0
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	85	42	34	34	25	8	8	8	1	1
9-Speed Automatic	13	2	2	2	0	0	0	0	0	0
10-Speed Automatic	0	26	26	26	4	21	21	21	24	7

Table 464 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Karma) Total Fleet, Alternative PC1LT3

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Karma) Total Fleet, Alternative PC1LT3										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	0	0	0	0	0	0	0	0
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	0	0	0	0	0	0	0	0	0	0
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	0	0	0	0	0	0	0	0	0	0
Mild Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Strong Hybrid Powertrains Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Plug-In Hybrid Powertrains	100.0	100.0	100.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	0.0	0.0	0.0	0.0	100.0	100.0	100.0	100.0	100.0	100.0
BEV 100 Mile Range	0.0	0.0	0.0	0.0	50.0	50.0	50.0	50.0	50.0	50.0
BEV 200 Mile Range	0.0	0.0	0.0	0.0	50.0	50.0	50.0	50.0	50.0	50.0
BEV 300 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	0	0	0	0	0	0	0	0	0	0
CVT Transmissions	0	0	0	0	0	0	0	0	0	0
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	0	0	0	0	0	0	0	0	0	0
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	0	0	0	0	0	0	0	0	0	0

Table 465 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Lucid) Total Fleet, Alternative PC1LT3

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Lucid) Total Fleet, Alternative PC1LT3										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	0	0	0	0	0	0	0	0
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	0	0	0	0	0	0	0	0	0	0
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	0	0	0	0	0	0	0	0	0	0
Mild Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Strong Hybrid Powertrains Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Plug-In Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
BEV 100 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BEV 200 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BEV 300 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BEV 400 Mile Range	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
DCT Transmissions	0	0	0	0	0	0	0	0	0	0
CVT Transmissions	0	0	0	0	0	0	0	0	0	0
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	0	0	0	0	0	0	0	0	0	0
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	0	0	0	0	0	0	0	0	0	0

Table 466 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Mazda) Total Fleet, Alternative PC1LT3

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Mazda) Total Fleet, Alternative PC1LT3										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	71	69	69	68	65	65	64	61	57	53
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	0	0	0	0	0	0	0	0	0	0
Variable Geometry Turbo	29	6	4	5	4	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	0	0	0	0	0	0	0	0	0	0
Mild Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Strong Hybrid Powertrains Total	0.0	15.1	15.1	15.2	14.6	18.9	18.5	17.6	16.5	15.4
Plug-In Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	0.3	9.4	11.8	11.9	15.7	15.7	17.9	21.9	26.7	31.4
BEV 100 Mile Range	0.3	8.1	10.3	10.4	10.9	10.9	11.2	11.8	12.5	13.2
BEV 200 Mile Range	0.0	1.1	1.3	1.3	4.1	4.1	5.8	8.7	12.2	15.7
BEV 300 Mile Range	0.0	0.2	0.2	0.2	0.7	0.7	0.9	1.4	2.0	2.5
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	3	3	2	2	2	2	2	2	2	2
CVT Transmissions	0	0	0	0	0	6	6	6	6	5
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	97	12	1	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	0	61	69	71	68	58	55	53	49	46
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	0	0	0	0	0	0	0	0	0	0

Table 467 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Mercedes-Benz) Total Fleet, Alternative PC1LT3

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Mercedes-Benz) Total Fleet, Alternative PC1LT3										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	0	0	0	0	0	0	0	0
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	90	79	75	73	58	44	27	27	10	9
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	7	7	6	6	6	4	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	63	52	51	49	44	41	27	27	10	9
Mild Hybrid Powertrains	26.5	26.3	23.8	23.1	13.2	2.9	0.2	0.2	0.2	0.1
Strong Hybrid Powertrains Total	0.0	0.0	4.6	5.2	6.7	22.2	43.1	43.1	58.7	54.4
Plug-In Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	3.1	14.1	13.9	15.5	29.8	29.7	29.6	29.6	31.2	36.7
BEV 100 Mile Range	0.0	9.8	9.7	9.4	9.3	9.2	9.2	9.2	9.0	8.3
BEV 200 Mile Range	1.3	2.5	2.5	4.5	13.8	13.8	13.8	13.8	13.9	14.2
BEV 300 Mile Range	1.8	1.8	1.7	1.7	6.7	6.7	6.7	6.7	8.2	13.6
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.6
DCT Transmissions	16	16	16	14	9	6	6	6	6	6
CVT Transmissions	0	0	0	0	0	0	0	0	0	0
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	0	0	0	0	0	0	0	0	0	0
9-Speed Automatic	81	27	14	3	0	0	0	0	0	0
10-Speed Automatic	0	43	51	63	54	42	21	21	4	3

Table 468 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Mitsubishi) Total Fleet, Alternative PC1LT3

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Mitsubishi) Total Fleet, Alternative PC1LT3										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	11	11	11	11	58	58	58	58
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	21	21	21	10	10	10	10	10	10	10
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	0	0	0	0	0	0	0	0	0	0
Mild Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Strong Hybrid Powertrains Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Plug-In Hybrid Powertrains	1.4	1.4	1.4	1.3	1.3	1.3	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	0.0	0.8	20.3	31.3	31.2	31.2	32.5	32.5	32.5	32.5
BEV 100 Mile Range	0.0	0.3	6.3	6.1	6.1	6.0	6.0	6.0	6.0	6.0
BEV 200 Mile Range	0.0	0.4	14.0	13.7	13.6	13.5	13.5	13.5	13.5	13.5
BEV 300 Mile Range	0.0	0.0	0.0	11.4	11.6	11.6	13.0	13.0	13.0	13.0
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	1	1	0	0	0	0	0	0	0	0
CVT Transmissions	98	97	78	67	67	67	68	68	68	67
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	0	0	0	0	0	0	0	0	0	0
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	0	0	0	0	0	0	0	0	0	0

Table 469 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Nissan) Total Fleet, Alternative PC1LT3

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Nissan) Total Fleet, Alternative PC1LT3										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	10	21	33	33	33	33	32	31
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	1	1	1	1	1	1	1	1	7	7
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	13	13	13	14	14	14	3	0	0	0
Mild Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	1.9
Strong Hybrid Powertrains Total	0.0	0.0	1.1	1.5	1.5	3.1	29.0	32.2	34.7	33.3
Plug-In Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	1.2	7.9	9.2	12.6	15.4	15.3	15.3	15.3	17.6	20.7
BEV 100 Mile Range	1.0	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.4	5.2
BEV 200 Mile Range	0.3	2.4	3.6	7.1	9.8	9.8	9.8	9.7	11.7	14.4
BEV 300 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	1.1
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	0	0	0	0	0	0	0	0	0	0
CVT Transmissions	71	66	64	62	59	57	42	42	41	39
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0	0	0	0	0
7-Speed Automatic	4	1	0	0	0	0	0	0	0	0
8-Speed Automatic	0	0	0	0	0	0	0	0	0	0
9-Speed Automatic	23	24	24	23	0	0	0	0	0	0
10-Speed Automatic	0	1	1	1	24	25	14	11	7	7

Table 470 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Stellantis) Total Fleet, Alternative PC1LT3

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Stellantis) Total Fleet, Alternative PC1LT3										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	0	11	13	12	12	11	11	11
Cylinder Deactivation	20	20	6	5	5	4	4	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	10	10	9	10	9	15	15	13	13	13
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	2	2	1	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	46	44	44	33	33	26	25	17	17	16
Mild Hybrid Powertrains	16.4	16.3	6.4	4.4	4.4	4.6	4.6	0.2	0.2	0.2
Strong Hybrid Powertrains Total	0.0	0.0	18.7	32.7	32.9	43.8	44.5	57.6	57.1	54.8
Plug-In Hybrid Powertrains	4.7	4.7	4.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	0.0	4.6	9.1	17.5	17.9	17.9	17.9	17.9	18.5	21.8
BEV 100 Mile Range	0.0	2.7	2.7	2.6	2.6	2.6	2.6	2.6	2.6	2.5
BEV 200 Mile Range	0.0	1.7	6.1	9.9	10.2	10.2	10.2	10.2	10.7	12.9
BEV 300 Mile Range	0.0	0.3	0.3	5.0	5.0	5.0	5.1	5.1	5.3	6.4
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	1	1	1	0	0	0	0	0	0	0
CVT Transmissions	0	0	0	0	0	0	0	0	0	0
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	2	2	2	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	65	61	38	30	30	19	18	10	2	2
9-Speed Automatic	28	27	27	8	1	1	0	0	0	0
10-Speed Automatic	0	0	0	11	18	18	20	14	22	21

Table 471 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Subaru) Total Fleet, Alternative PC1LT3

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Subaru) Total Fleet, Alternative PC1LT3										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	13	39	59	66	62	60	56	52	49
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	24	24	24	23	23	21	20	19	18	17
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	76	75	75	73	71	67	64	60	56	52
Mild Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Strong Hybrid Powertrains Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Plug-In Hybrid Powertrains	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	0.0	5.7	5.7	7.2	10.5	15.5	19.5	23.9	29.0	34.2
BEV 100 Mile Range	0.0	2.5	2.5	2.7	2.8	3.1	3.2	3.4	3.7	3.9
BEV 200 Mile Range	0.0	2.5	2.5	3.8	5.4	7.9	10.0	12.2	14.8	17.4
BEV 300 Mile Range	0.0	0.7	0.7	0.7	2.2	4.5	6.3	8.3	10.6	12.9
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	4	4	4	3	3	3	3	3	3	2
CVT Transmissions	95	90	90	89	86	81	78	73	68	63
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	0	0	0	0	0	0	0	0	0	0
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	0	0	0	0	0	0	0	0	0	0

Table 472 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Tesla) Total Fleet, Alternative PC1LT3

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Tesla) Total Fleet, Alternative PC1LT3										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	0	0	0	0	0	0	0	0
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	0	0	0	0	0	0	0	0	0	0
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	0	0	0	0	0	0	0	0	0	0
Mild Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Strong Hybrid Powertrains Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Plug-In Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
BEV 100 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BEV 200 Mile Range	18.5	18.5	18.5	18.4	18.4	18.4	18.4	18.4	18.4	18.4
BEV 300 Mile Range	56.9	57.0	57.0	57.2	57.2	57.2	57.3	57.3	57.3	57.3
BEV 400 Mile Range	24.6	24.5	24.5	24.4	24.4	24.4	24.4	24.4	24.4	24.4
DCT Transmissions	0	0	0	0	0	0	0	0	0	0
CVT Transmissions	0	0	0	0	0	0	0	0	0	0
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	0	0	0	0	0	0	0	0	0	0
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	0	0	0	0	0	0	0	0	0	0

Table 473 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Toyota) Total Fleet, Alternative PC1LT3

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Toyota) Total Fleet, Alternative PC1LT3										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	25	24	32	31	37	36	35	33	32	30
Cylinder Deactivation	0	0	1	1	1	1	1	1	1	1
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	7	7	16	17	25	29	29	26	23	22
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	25	25	25	26	25	25	24	22	21	20
Mild Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Strong Hybrid Powertrains Total	24.8	24.2	24.3	23.7	18.6	18.6	18.1	18.4	19.1	18.0
Plug-In Hybrid Powertrains	2.4	1.4	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	0.0	3.6	3.9	6.5	13.8	13.8	16.4	20.1	24.5	28.9
BEV 100 Mile Range	0.0	2.9	2.9	2.8	3.5	3.5	4.3	5.5	7.0	8.4
BEV 200 Mile Range	0.0	0.4	0.7	3.3	9.1	9.1	10.1	11.6	13.2	14.9
BEV 300 Mile Range	0.0	0.3	0.3	0.5	1.2	1.2	1.9	3.0	4.3	5.6
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	1	1	1	1	1	1	1	1	1	1
CVT Transmissions	15	15	14	14	13	22	25	24	22	21
5-Speed Automatic	6	6	0	0	0	0	0	0	0	0
6-Speed Automatic	11	11	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	34	33	49	49	47	39	34	26	23	22
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	6	6	6	6	6	6	6	11	10	10

Table 474 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Volvo) Total Fleet, Alternative PC1LT3

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Volvo) Total Fleet, Alternative PC1LT3										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	0	0	0	0	0	0	0	0
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	64	65	65	65	57	57	57	57	35	35
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	5	5	3	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	0	0	0	0	0	0	0	0	0	0
Mild Hybrid Powertrains	27.2	27.0	26.8	26.5	19.4	19.4	19.4	19.4	19.4	19.4
Strong Hybrid Powertrains Total	0.0	0.0	1.8	4.6	4.7	4.7	4.7	4.7	26.6	26.6
Plug-In Hybrid Powertrains	17.6	14.8	14.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	13.4	15.9	15.7	30.3	38.7	38.7	38.5	38.5	38.5	38.5
BEV 100 Mile Range	3.5	6.3	6.3	6.2	6.2	6.2	6.2	6.2	6.2	6.2
BEV 200 Mile Range	9.9	9.6	9.4	9.1	17.4	17.4	17.2	17.2	17.2	17.2
BEV 300 Mile Range	0.0	0.0	0.0	15.0	15.1	15.1	15.1	15.1	15.1	15.1
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	0	0	0	0	0	0	0	0	0	0
CVT Transmissions	0	0	0	0	0	0	0	0	0	0
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	69	69	68	65	57	57	57	57	21	21
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	0	0	0	0	0	0	0	0	14	14

Table 475 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (VWA) Total Fleet, Alternative PC1LT3

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (VWA) Total Fleet, Alternative PC1LT3										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	11	11	11	11	11	11	3	3
Cylinder Deactivation	1	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	61	57	47	44	38	36	34	34	30	23
Variable Geometry Turbo	19	19	3	1	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	81	78	55	51	48	46	45	45	33	26
Mild Hybrid Powertrains	8.3	8.2	4.4	4.5	0.5	0.3	0.3	0.3	0.2	0.2
Strong Hybrid Powertrains Total	0.0	0.0	22.6	26.0	29.4	31.7	33.6	33.7	41.7	43.6
Plug-In Hybrid Powertrains	1.4	1.4	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	7.1	10.5	15.0	16.9	21.2	21.1	21.1	21.1	25.3	29.8
BEV 100 Mile Range	2.8	5.2	5.3	5.6	5.6	5.6	5.6	5.6	5.4	5.3
BEV 200 Mile Range	4.1	5.1	9.6	10.0	14.3	14.3	14.2	14.2	16.4	18.8
BEV 300 Mile Range	0.2	0.2	0.2	1.2	1.2	1.2	1.2	1.3	3.4	5.7
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	30	26	22	21	18	16	14	14	13	13
CVT Transmissions	0	0	2	1	0	0	0	0	0	0
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	2	2	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	60	59	36	33	31	20	16	11	10	10
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	0	1	1	1	0	11	15	20	9	4

Table 476 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (BMW) Total Fleet, Alternative PC2LT4

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (BMW) Total Fleet, Alternative PC2LT4										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	0	0	0	0	0	0	0	0
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	91	87	80	76	38	29	27	26	22	10
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	58	53	48	46	33	25	24	22	19	7
Mild Hybrid Powertrains	29.0	29.5	27.9	25.4	1.8	0.0	0.0	0.0	0.0	0.0
Strong Hybrid Powertrains Total	0.0	0.0	0.0	2.8	38.4	47.5	49.4	48.5	46.6	53.9
Plug-In Hybrid Powertrains	5.8	5.8	5.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	3.3	7.4	15.2	21.5	23.3	23.3	23.2	25.5	31.0	36.5
BEV 100 Mile Range	0.8	3.2	3.4	3.3	5.2	5.2	5.2	5.1	5.1	5.0
BEV 200 Mile Range	0.2	1.9	8.5	9.8	9.8	9.7	9.7	10.4	12.3	14.1
BEV 300 Mile Range	2.3	2.3	3.4	8.3	8.3	8.3	8.3	9.9	13.5	17.1
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2
DCT Transmissions	6	6	6	6	5	5	5	5	4	4
CVT Transmissions	0	0	0	0	0	0	0	0	0	0
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	85	73	65	60	31	24	3	2	0	0
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	0	8	10	10	2	1	20	19	18	6

Table 477 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Ford) Total Fleet, Alternative PC2LT4

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Ford) Total Fleet, Alternative PC2LT4										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	3	3	3	3	3	3	3	3
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	73	70	62	62	58	30	13	1	1	1
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	72	68	61	62	57	32	15	3	3	3
Mild Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Strong Hybrid Powertrains Total	8.6	8.6	11.0	11.0	11.0	47.5	64.1	76.3	76.2	76.2
Plug-In Hybrid Powertrains	1.2	1.1	1.2	0.1	0.1	0.1	0.3	0.3	0.3	0.3
Battery Electric Vehicles (BEVs)	3.1	7.7	14.5	15.5	20.0	20.0	20.0	19.9	20.0	20.0
BEV 100 Mile Range	0.5	3.0	2.9	3.0	3.3	3.3	3.3	3.3	3.3	3.3
BEV 200 Mile Range	1.4	3.7	9.8	10.5	10.5	10.5	10.4	10.4	10.5	10.5
BEV 300 Mile Range	1.1	1.1	1.7	2.0	6.3	6.3	6.2	6.2	6.2	6.2
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	2	2	2	2	2	2	2	0	0	0
CVT Transmissions	0	0	0	0	0	0	0	0	0	0
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	1	0	0	0	0	0	0	0	0	0
7-Speed Automatic	1	1	0	0	0	0	0	0	0	0
8-Speed Automatic	29	29	23	16	14	4	4	0	0	0
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	54	51	48	56	54	27	10	3	3	3

Table 478 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (GM) Total Fleet, Alternative PC2LT4

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (GM) Total Fleet, Alternative PC2LT4										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	1	7	7	7	7	6	6	5
Cylinder Deactivation	4	4	3	2	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	47	47	36	25	22	22	22	13	11	4
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	5	5	5	1	1	1	1	1	1	1
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	82	82	68	38	33	24	24	17	15	7
Mild Hybrid Powertrains	0.0	0.0	0.0	0.7	0.7	1.6	1.6	1.6	0.9	0.9
Strong Hybrid Powertrains Total	0.0	0.0	2.1	28.7	31.4	31.4	31.5	40.9	43.3	34.8
Plug-In Hybrid Powertrains	0.0	0.0	6.6	10.5	10.6	22.0	22.0	22.1	22.0	37.6
Battery Electric Vehicles (BEVs)	1.6	1.5	14.0	13.9	16.8	16.8	16.8	16.7	16.8	17.7
BEV 100 Mile Range	0.0	0.0	4.4	4.2	4.2	4.1	4.1	4.1	4.1	4.1
BEV 200 Mile Range	1.6	1.5	9.6	9.6	10.9	10.9	10.9	10.9	10.9	11.6
BEV 300 Mile Range	0.0	0.0	0.0	0.0	1.8	1.8	1.8	1.8	1.8	1.9
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	2	2	2	1	0	0	0	0	0	0
CVT Transmissions	9	9	5	5	4	4	4	3	2	2
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	18	18	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	20	20	24	12	11	3	2	2	0	0
9-Speed Automatic	22	22	18	5	1	1	0	0	0	0
10-Speed Automatic	28	28	29	24	25	22	24	15	16	8

Table 479 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Honda) Total Fleet, Alternative PC2LT4

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Honda) Total Fleet, Alternative PC2LT4										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	8	8	8	7	7	17	16	15	14
Cylinder Deactivation	27	13	13	3	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	43	53	53	60	59	39	33	28	17	16
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	79	77	77	74	69	49	43	37	25	24
Mild Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Strong Hybrid Powertrains Total	9.3	9.4	9.4	9.4	9.2	28.5	32.3	34.0	41.5	38.8
Plug-In Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	0.0	5.5	5.4	9.4	14.6	14.6	18.0	22.0	26.8	31.6
BEV 100 Mile Range	0.0	3.3	3.3	3.2	4.0	4.0	5.6	7.5	9.8	12.1
BEV 200 Mile Range	0.0	2.0	2.0	6.0	10.2	10.2	11.5	13.2	15.1	17.0
BEV 300 Mile Range	0.0	0.2	0.2	0.2	0.5	0.5	0.9	1.4	2.0	2.5
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	2	2	2	1	1	1	1	1	1	1
CVT Transmissions	55	52	51	51	49	31	30	28	26	25
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	0	0	0	0	0	0	0	0	0	0
9-Speed Automatic	17	3	3	3	0	0	0	0	0	0
10-Speed Automatic	17	29	29	26	26	25	19	15	4	4

Table 480 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Hyundai) Total Fleet, Alternative PC2LT4

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Hyundai) Total Fleet, Alternative PC2LT4										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	59	59	59	55	55	40	38	29	24	23
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	19	18	17	17	13	12	10	7	6	4
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	68	68	66	63	60	40	35	18	12	9
Mild Hybrid Powertrains	0.0	0.0	0.4	0.4	0.4	0.4	0.4	6.3	6.1	5.8
Strong Hybrid Powertrains Total	10.9	9.6	9.7	10.0	8.5	29.0	33.5	45.3	48.6	48.7
Plug-In Hybrid Powertrains	1.9	1.7	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	3.3	7.4	9.3	14.0	19.0	18.9	18.9	18.9	21.2	25.0
BEV 100 Mile Range	0.2	4.2	4.2	4.1	4.1	4.0	4.0	4.0	5.2	7.1
BEV 200 Mile Range	2.1	2.2	4.1	8.9	11.7	11.7	11.7	11.7	12.5	13.9
BEV 300 Mile Range	1.0	1.0	1.0	1.0	3.2	3.2	3.2	3.2	3.5	4.0
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	11	11	10	10	9	9	7	4	4	4
CVT Transmissions	22	28	28	24	24	24	24	24	19	18
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	50	42	41	42	40	19	17	8	7	5
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	0	0	0	0	0	0	0	0	0	0

Table 481 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (KIA) Total Fleet, Alternative PC2LT4

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (KIA) Total Fleet, Alternative PC2LT4										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	45	57	59	62	61	61	49	45	27	18
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	24	23	21	21	18	18	18	16	16	15
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	32	32	32	30	28	28	28	26	12	9
Mild Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.5
Strong Hybrid Powertrains Total	5.0	5.0	5.0	5.0	3.4	3.4	15.8	21.7	37.8	44.3
Plug-In Hybrid Powertrains	3.0	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	4.4	6.2	9.0	12.0	16.9	16.9	16.9	16.9	19.1	22.5
BEV 100 Mile Range	0.0	1.9	2.9	2.9	2.9	2.9	2.9	2.9	3.6	4.6
BEV 200 Mile Range	3.7	3.6	5.3	8.4	13.4	13.4	13.4	13.4	14.7	16.8
BEV 300 Mile Range	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.6	0.8	1.1
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	9	9	8	9	7	7	7	7	6	6
CVT Transmissions	32	31	30	28	30	30	46	45	27	18
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	13	0	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	34	47	46	47	43	41	13	10	7	7
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	0	0	0	0	0	2	2	0	2	2

Table 482 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (JLR) Total Fleet, Alternative PC2LT4

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (JLR) Total Fleet, Alternative PC2LT4										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	0	0	0	0	0	0	0	0
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	47	39	35	35	20	20	20	20	15	7
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	52	31	27	27	10	10	10	10	9	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	46	38	34	34	20	20	20	20	15	7
Mild Hybrid Powertrains	0.9	0.9	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0
Strong Hybrid Powertrains Total	0.0	12.3	12.4	12.4	44.8	44.8	44.8	44.8	47.2	58.9
Plug-In Hybrid Powertrains	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Battery Electric Vehicles (BEVs)	0.9	17.8	25.4	25.4	25.4	25.4	25.4	25.5	28.5	33.6
BEV 100 Mile Range	0.9	2.0	5.0	5.0	4.9	4.9	4.9	4.9	4.8	4.6
BEV 200 Mile Range	0.0	14.8	19.4	19.4	19.4	19.4	19.4	19.4	19.4	19.2
BEV 300 Mile Range	0.0	1.0	1.0	1.0	1.0	1.1	1.1	1.1	4.4	9.8
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	0	0	0	0	0	0	0	0	0	0
CVT Transmissions	0	0	0	0	0	0	0	0	0	0
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	85	42	34	34	25	8	8	8	0	0
9-Speed Automatic	13	2	2	2	0	0	0	0	0	0
10-Speed Automatic	0	26	26	26	4	21	21	21	24	7

Table 483 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Karma) Total Fleet, Alternative PC2LT4

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Karma) Total Fleet, Alternative PC2LT4										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	0	0	0	0	0	0	0	0
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	0	0	0	0	0	0	0	0	0	0
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	0	0	0	0	0	0	0	0	0	0
Mild Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Strong Hybrid Powertrains Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Plug-In Hybrid Powertrains	100.0	100.0	100.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	0.0	0.0	0.0	0.0	100.0	100.0	100.0	100.0	100.0	100.0
BEV 100 Mile Range	0.0	0.0	0.0	0.0	50.0	50.0	50.0	50.0	50.0	50.0
BEV 200 Mile Range	0.0	0.0	0.0	0.0	50.0	50.0	50.0	50.0	50.0	50.0
BEV 300 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	0	0	0	0	0	0	0	0	0	0
CVT Transmissions	0	0	0	0	0	0	0	0	0	0
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	0	0	0	0	0	0	0	0	0	0
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	0	0	0	0	0	0	0	0	0	0

Table 484 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Lucid) Total Fleet, Alternative PC2LT4

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Lucid) Total Fleet, Alternative PC2LT4										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	0	0	0	0	0	0	0	0
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	0	0	0	0	0	0	0	0	0	0
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	0	0	0	0	0	0	0	0	0	0
Mild Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Strong Hybrid Powertrains Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Plug-In Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
BEV 100 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BEV 200 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BEV 300 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BEV 400 Mile Range	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
DCT Transmissions	0	0	0	0	0	0	0	0	0	0
CVT Transmissions	0	0	0	0	0	0	0	0	0	0
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	0	0	0	0	0	0	0	0	0	0
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	0	0	0	0	0	0	0	0	0	0

Table 485 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Mazda) Total Fleet, Alternative PC2LT4

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Mazda) Total Fleet, Alternative PC2LT4										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	71	69	69	68	65	65	64	54	51	48
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	0	0	0	0	0	0	0	0	0	0
Variable Geometry Turbo	29	6	4	5	4	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	0	0	0	0	0	0	0	0	0	0
Mild Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Strong Hybrid Powertrains Total	0.0	15.1	15.1	15.2	14.6	18.9	18.5	23.8	22.3	20.9
Plug-In Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	0.3	9.4	11.8	11.9	15.7	15.7	17.9	21.9	26.7	31.4
BEV 100 Mile Range	0.3	8.1	10.3	10.4	10.9	10.9	11.2	11.8	12.5	13.2
BEV 200 Mile Range	0.0	1.1	1.3	1.3	4.1	4.1	5.8	8.7	12.2	15.7
BEV 300 Mile Range	0.0	0.2	0.2	0.2	0.7	0.7	0.9	1.4	2.0	2.5
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	3	3	2	2	2	2	2	1	1	1
CVT Transmissions	0	0	0	0	0	6	5	4	4	4
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	97	12	1	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	0	61	69	71	68	58	55	47	44	42
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	0	0	0	0	0	0	1	1	1	1

Table 486 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Mercedes-Benz) Total Fleet, Alternative PC2LT4

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Mercedes-Benz) Total Fleet, Alternative PC2LT4										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	0	0	0	0	0	0	0	0
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	90	79	75	73	58	44	27	27	10	9
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	7	7	6	6	6	4	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	63	52	51	49	44	41	27	27	10	9
Mild Hybrid Powertrains	26.5	26.3	23.8	23.1	13.2	2.9	0.2	0.2	0.2	0.1
Strong Hybrid Powertrains Total	0.0	0.0	4.6	5.2	6.7	22.2	43.1	43.2	58.6	54.4
Plug-In Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	3.1	14.1	13.9	15.5	29.8	29.7	29.6	29.6	31.2	36.7
BEV 100 Mile Range	0.0	9.8	9.7	9.4	9.3	9.2	9.2	9.1	9.0	8.3
BEV 200 Mile Range	1.3	2.5	2.5	4.5	13.8	13.8	13.8	13.8	13.9	14.2
BEV 300 Mile Range	1.8	1.8	1.7	1.7	6.7	6.7	6.7	6.6	8.2	13.6
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.6
DCT Transmissions	16	16	16	14	9	6	6	6	6	6
CVT Transmissions	0	0	0	0	0	0	0	0	0	0
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	0	0	0	0	0	0	0	0	0	0
9-Speed Automatic	81	27	14	3	0	0	0	0	0	0
10-Speed Automatic	0	43	51	63	54	42	21	21	4	3

Table 487 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Mitsubishi) Total Fleet, Alternative PC2LT4

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Mitsubishi) Total Fleet, Alternative PC2LT4										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	11	11	11	11	58	58	58	58
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	21	21	21	10	10	10	10	10	10	6
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	0	0	0	0	0	0	0	0	0	0
Mild Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.0	5.9
Strong Hybrid Powertrains Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.8
Plug-In Hybrid Powertrains	1.4	1.4	1.4	1.3	1.3	1.3	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	0.0	0.8	20.3	31.3	31.2	31.2	32.5	32.5	32.5	32.5
BEV 100 Mile Range	0.0	0.3	6.3	6.1	6.1	6.0	6.0	6.0	6.0	6.0
BEV 200 Mile Range	0.0	0.4	14.0	13.7	13.6	13.5	13.5	13.4	13.5	13.5
BEV 300 Mile Range	0.0	0.0	0.0	11.4	11.6	11.6	13.0	13.0	13.0	13.0
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	1	1	0	0	0	0	0	0	0	0
CVT Transmissions	98	97	78	67	67	67	68	68	67	64
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	0	0	0	0	0	0	0	0	0	0
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	0	0	0	0	0	0	0	0	0	0

Table 488 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Nissan) Total Fleet, Alternative PC2LT4

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Nissan) Total Fleet, Alternative PC2LT4										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	10	21	33	33	33	33	28	27
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	1	1	1	1	1	1	1	1	1	1
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	13	13	13	14	14	14	3	0	0	0
Mild Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.3	5.1
Strong Hybrid Powertrains Total	0.0	0.0	1.1	1.5	1.5	3.1	29.0	32.2	45.1	43.3
Plug-In Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	1.2	7.9	9.2	12.6	15.4	15.3	15.3	15.3	17.6	20.7
BEV 100 Mile Range	1.0	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.4	5.2
BEV 200 Mile Range	0.3	2.4	3.6	7.1	9.8	9.8	9.7	9.7	11.7	14.4
BEV 300 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	1.1
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	0	0	0	0	0	0	0	0	0	0
CVT Transmissions	71	66	64	62	59	57	42	42	36	35
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0	0	0	0	0
7-Speed Automatic	4	1	0	0	0	0	0	0	0	0
8-Speed Automatic	0	0	0	0	0	0	0	0	0	0
9-Speed Automatic	23	24	24	23	0	0	0	0	0	0
10-Speed Automatic	0	1	1	1	24	25	14	11	1	1

Table 489 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Stellantis) Total Fleet, Alternative PC2LT4

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Stellantis) Total Fleet, Alternative PC2LT4										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	0	11	13	12	12	11	11	11
Cylinder Deactivation	20	20	6	5	5	4	4	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	10	10	9	10	9	11	11	10	9	9
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	2	2	1	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	46	44	44	33	33	21	21	12	12	13
Mild Hybrid Powertrains	16.4	16.3	6.4	4.4	4.4	5.4	5.4	1.0	1.0	1.0
Strong Hybrid Powertrains Total	0.0	0.0	18.7	32.7	32.9	47.5	48.2	61.3	60.8	58.8
Plug-In Hybrid Powertrains	4.7	4.7	4.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	0.0	4.6	9.1	17.5	17.9	17.9	17.9	17.9	18.5	21.8
BEV 100 Mile Range	0.0	2.7	2.7	2.6	2.6	2.6	2.6	2.6	2.6	2.5
BEV 200 Mile Range	0.0	1.7	6.1	9.9	10.2	10.2	10.2	10.2	10.7	12.9
BEV 300 Mile Range	0.0	0.3	0.3	5.0	5.0	5.0	5.1	5.1	5.3	6.4
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	1	1	1	0	0	0	0	0	0	0
CVT Transmissions	0	0	0	0	0	0	0	0	0	0
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	2	2	2	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	65	61	38	30	30	16	14	7	0	0
9-Speed Automatic	28	27	27	8	1	1	0	0	0	0
10-Speed Automatic	0	0	0	11	18	18	20	14	20	19

Table 490 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Subaru) Total Fleet, Alternative PC2LT4

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Subaru) Total Fleet, Alternative PC2LT4										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	13	39	59	66	62	60	56	52	49
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	24	24	24	23	23	21	20	19	18	17
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	76	75	75	73	71	67	64	60	56	52
Mild Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Strong Hybrid Powertrains Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Plug-In Hybrid Powertrains	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	0.0	5.7	5.7	7.2	10.5	15.5	19.5	23.9	29.0	34.2
BEV 100 Mile Range	0.0	2.5	2.5	2.7	2.8	3.1	3.2	3.4	3.7	3.9
BEV 200 Mile Range	0.0	2.5	2.5	3.8	5.4	7.9	10.0	12.2	14.8	17.4
BEV 300 Mile Range	0.0	0.7	0.7	0.7	2.2	4.5	6.3	8.3	10.6	12.9
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	4	4	4	3	3	3	3	3	3	2
CVT Transmissions	95	90	90	89	86	81	78	73	68	63
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	0	0	0	0	0	0	0	0	0	0
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	0	0	0	0	0	0	0	0	0	0

Table 491 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Tesla) Total Fleet, Alternative PC2LT4

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Tesla) Total Fleet, Alternative PC2LT4										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	0	0	0	0	0	0	0	0
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	0	0	0	0	0	0	0	0	0	0
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	0	0	0	0	0	0	0	0	0	0
Mild Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Strong Hybrid Powertrains Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Plug-In Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
BEV 100 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BEV 200 Mile Range	18.5	18.5	18.5	18.4	18.4	18.4	18.4	18.4	18.4	18.4
BEV 300 Mile Range	56.9	57.0	57.0	57.2	57.2	57.2	57.3	57.3	57.3	57.2
BEV 400 Mile Range	24.6	24.5	24.5	24.4	24.4	24.4	24.4	24.4	24.4	24.4
DCT Transmissions	0	0	0	0	0	0	0	0	0	0
CVT Transmissions	0	0	0	0	0	0	0	0	0	0
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	0	0	0	0	0	0	0	0	0	0
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	0	0	0	0	0	0	0	0	0	0

Table 492 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Toyota) Total Fleet, Alternative PC2LT4

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Toyota) Total Fleet, Alternative PC2LT4										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	25	24	32	31	37	36	33	32	30	29
Cylinder Deactivation	0	0	1	1	1	1	1	1	1	1
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	7	7	16	17	25	29	29	26	23	18
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	25	25	25	26	25	25	23	20	19	14
Mild Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Strong Hybrid Powertrains Total	24.8	24.2	24.3	23.7	18.6	18.6	19.9	20.1	20.7	23.4
Plug-In Hybrid Powertrains	2.4	1.4	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	0.0	3.6	3.9	6.5	13.8	13.8	16.4	20.1	24.5	28.9
BEV 100 Mile Range	0.0	2.9	2.9	2.8	3.5	3.5	4.3	5.5	7.0	8.4
BEV 200 Mile Range	0.0	0.4	0.7	3.3	9.1	9.1	10.1	11.6	13.2	14.9
BEV 300 Mile Range	0.0	0.3	0.3	0.5	1.2	1.2	1.9	3.0	4.3	5.6
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	1	1	1	1	1	1	1	1	1	1
CVT Transmissions	15	15	14	14	13	22	28	27	25	24
5-Speed Automatic	6	6	0	0	0	0	0	0	0	0
6-Speed Automatic	11	11	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	34	33	49	49	47	39	15	5	1	0
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	6	6	6	6	6	6	20	27	28	23

Table 493 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Volvo) Total Fleet, Alternative PC2LT4

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Volvo) Total Fleet, Alternative PC2LT4										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	0	0	0	0	0	0	0	0
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	64	65	65	65	57	57	57	57	35	35
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	5	5	3	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	0	0	0	0	0	0	0	0	0	0
Mild Hybrid Powertrains	27.2	27.0	26.8	26.5	19.4	19.4	19.4	19.4	19.4	19.4
Strong Hybrid Powertrains Total	0.0	0.0	1.8	4.6	4.7	4.7	4.7	4.7	26.6	26.6
Plug-In Hybrid Powertrains	17.6	14.8	14.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	13.4	15.9	15.7	30.3	38.7	38.6	38.5	38.5	38.6	38.6
BEV 100 Mile Range	3.5	6.3	6.3	6.2	6.2	6.2	6.2	6.2	6.2	6.2
BEV 200 Mile Range	9.9	9.6	9.4	9.1	17.4	17.4	17.2	17.1	17.3	17.3
BEV 300 Mile Range	0.0	0.0	0.0	15.0	15.1	15.1	15.1	15.1	15.1	15.1
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	0	0	0	0	0	0	0	0	0	0
CVT Transmissions	0	0	0	0	0	0	0	0	0	0
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	69	69	68	65	57	57	57	57	21	21
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	0	0	0	0	0	0	0	0	14	14

Table 494 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (VWA) Total Fleet, Alternative PC2LT4

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (VWA) Total Fleet, Alternative PC2LT4										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	11	11	11	11	11	11	3	3
Cylinder Deactivation	1	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	61	57	47	44	38	36	27	27	23	17
Variable Geometry Turbo	19	19	3	1	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	81	78	55	51	48	46	38	38	26	20
Mild Hybrid Powertrains	8.3	8.2	4.4	4.5	0.5	0.3	0.3	0.3	0.2	0.0
Strong Hybrid Powertrains Total	0.0	0.0	22.6	26.0	29.4	31.7	41.0	41.0	48.6	50.4
Plug-In Hybrid Powertrains	1.4	1.4	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	7.1	10.5	15.0	16.9	21.2	21.1	21.1	21.0	25.3	29.8
BEV 100 Mile Range	2.8	5.2	5.3	5.6	5.6	5.6	5.6	5.6	5.4	5.3
BEV 200 Mile Range	4.1	5.1	9.6	10.0	14.3	14.3	14.2	14.2	16.5	18.8
BEV 300 Mile Range	0.2	0.2	0.2	1.2	1.2	1.2	1.2	1.3	3.4	5.7
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	30	26	22	21	18	16	14	14	13	12
CVT Transmissions	0	0	2	1	0	0	0	0	0	0
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	2	2	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	60	59	36	33	31	20	8	4	3	0
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	0	1	1	1	0	11	15	20	9	8

Table 495 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (BMW) Total Fleet, Alternative PC3LT5

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (BMW) Total Fleet, Alternative PC3LT5										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	0	0	0	0	0	0	0	0
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	91	87	80	76	38	29	27	26	18	5
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	58	53	48	46	33	25	23	22	18	5
Mild Hybrid Powertrains	29.0	29.5	27.9	25.4	1.8	0.0	0.0	0.0	0.0	0.0
Strong Hybrid Powertrains Total	0.0	0.0	0.0	2.8	38.4	47.9	49.7	48.8	51.5	58.9
Plug-In Hybrid Powertrains	5.8	5.8	5.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	3.3	7.4	15.2	21.5	23.3	23.3	23.2	25.5	31.0	36.5
BEV 100 Mile Range	0.8	3.2	3.4	3.3	5.2	5.2	5.1	5.1	5.1	5.0
BEV 200 Mile Range	0.2	1.9	8.5	9.8	9.8	9.7	9.7	10.4	12.3	14.1
BEV 300 Mile Range	2.3	2.3	3.4	8.3	8.3	8.3	8.4	9.9	13.5	17.1
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2
DCT Transmissions	6	6	6	6	5	5	5	5	0	0
CVT Transmissions	0	0	0	0	0	0	0	0	0	0
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	85	73	65	60	31	23	1	0	0	0
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	0	8	10	10	2	1	22	21	18	5

Table 496 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Ford) Total Fleet, Alternative PC3LT5

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Ford) Total Fleet, Alternative PC3LT5										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	3	3	3	3	3	3	3	3
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	73	70	62	62	58	30	13	1	1	1
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	72	68	61	62	57	32	15	3	3	3
Mild Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Strong Hybrid Powertrains Total	8.6	8.6	11.0	11.0	11.0	47.5	64.1	76.3	76.2	76.2
Plug-In Hybrid Powertrains	1.2	1.1	1.2	0.1	0.1	0.1	0.3	0.3	0.3	0.3
Battery Electric Vehicles (BEVs)	3.1	7.7	14.5	15.5	20.0	20.0	20.0	19.9	20.0	20.0
BEV 100 Mile Range	0.5	3.0	2.9	3.0	3.3	3.3	3.3	3.3	3.3	3.3
BEV 200 Mile Range	1.4	3.7	9.8	10.5	10.5	10.5	10.4	10.4	10.5	10.5
BEV 300 Mile Range	1.1	1.1	1.7	2.0	6.3	6.2	6.2	6.2	6.2	6.2
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	2	2	2	2	2	2	2	0	0	0
CVT Transmissions	0	0	0	0	0	0	0	0	0	0
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	1	0	0	0	0	0	0	0	0	0
7-Speed Automatic	1	1	0	0	0	0	0	0	0	0
8-Speed Automatic	29	29	23	16	14	4	4	0	0	0
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	54	51	48	56	54	27	10	3	3	3

Table 497 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (GM) Total Fleet, Alternative PC3LT5

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (GM) Total Fleet, Alternative PC3LT5										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	1	7	7	7	7	6	6	5
Cylinder Deactivation	4	4	3	2	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	47	47	36	25	22	22	22	13	11	2
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	5	5	5	1	1	1	1	1	1	1
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	82	82	68	38	33	24	24	17	15	6
Mild Hybrid Powertrains	0.0	0.0	0.0	0.7	0.7	1.6	1.6	1.6	0.9	0.9
Strong Hybrid Powertrains Total	0.0	0.0	2.1	28.7	31.4	31.4	31.5	40.9	43.3	36.3
Plug-In Hybrid Powertrains	0.0	0.0	6.6	10.5	10.6	22.0	22.1	22.1	22.0	37.7
Battery Electric Vehicles (BEVs)	1.6	1.5	14.0	13.9	16.8	16.8	16.7	16.7	16.8	17.7
BEV 100 Mile Range	0.0	0.0	4.4	4.2	4.2	4.1	4.1	4.1	4.1	4.1
BEV 200 Mile Range	1.6	1.5	9.6	9.6	10.9	10.9	10.9	10.9	10.9	11.6
BEV 300 Mile Range	0.0	0.0	0.0	0.0	1.8	1.8	1.8	1.8	1.8	1.9
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	2	2	2	1	0	0	0	0	0	0
CVT Transmissions	9	9	5	5	4	4	4	3	2	0
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	18	18	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	20	20	24	12	11	3	2	2	0	0
9-Speed Automatic	22	22	18	5	1	1	0	0	0	0
10-Speed Automatic	28	28	29	24	25	22	24	15	16	8

Table 498 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Honda) Total Fleet, Alternative PC3LT5

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Honda) Total Fleet, Alternative PC3LT5										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	8	8	8	7	7	17	16	15	14
Cylinder Deactivation	27	13	13	3	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	43	53	53	60	59	39	33	28	17	16
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	79	77	77	74	69	49	43	37	25	24
Mild Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Strong Hybrid Powertrains Total	9.3	9.4	9.4	9.4	9.2	28.5	32.3	34.0	41.4	38.7
Plug-In Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	0.0	5.5	5.4	9.4	14.6	14.6	18.0	22.0	26.8	31.6
BEV 100 Mile Range	0.0	3.3	3.3	3.2	4.0	4.0	5.6	7.5	9.8	12.1
BEV 200 Mile Range	0.0	2.0	2.0	6.0	10.2	10.2	11.5	13.2	15.1	17.0
BEV 300 Mile Range	0.0	0.2	0.2	0.2	0.5	0.5	0.9	1.4	2.0	2.5
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	2	2	2	1	1	1	1	1	1	1
CVT Transmissions	55	52	51	51	49	31	29	28	26	25
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	0	0	0	0	0	0	0	0	0	0
9-Speed Automatic	17	3	3	3	0	0	0	0	0	0
10-Speed Automatic	17	29	29	26	26	25	19	15	4	4

Table 499 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Hyundai) Total Fleet, Alternative PC3LT5

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Hyundai) Total Fleet, Alternative PC3LT5										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	59	59	59	55	55	40	38	23	18	12
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	19	18	17	17	13	12	10	4	3	2
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	1	1	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	68	68	66	63	60	40	35	13	8	1
Mild Hybrid Powertrains	0.0	0.0	0.4	0.4	0.4	0.4	0.4	1.3	1.3	1.3
Strong Hybrid Powertrains Total	10.9	9.6	9.7	10.0	8.5	29.0	33.6	53.6	56.6	61.3
Plug-In Hybrid Powertrains	1.9	1.7	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	3.3	7.4	9.3	14.0	19.0	18.9	18.9	18.9	21.2	25.0
BEV 100 Mile Range	0.2	4.2	4.2	4.1	4.1	4.0	4.0	4.0	5.2	7.1
BEV 200 Mile Range	2.1	2.2	4.1	8.9	11.7	11.7	11.7	11.7	12.5	13.9
BEV 300 Mile Range	1.0	1.0	1.0	1.0	3.2	3.2	3.2	3.2	3.5	4.0
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	11	11	10	10	9	9	7	2	2	2
CVT Transmissions	22	28	28	24	24	24	24	17	12	12
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	50	42	41	42	40	10	8	0	0	0
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	0	0	0	0	0	9	9	8	8	0

Table 500 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (KIA) Total Fleet, Alternative PC3LT5

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (KIA) Total Fleet, Alternative PC3LT5										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	45	57	59	62	61	61	49	42	17	6
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	24	23	21	21	18	18	18	16	15	10
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	32	32	32	30	28	28	28	26	5	1
Mild Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Strong Hybrid Powertrains Total	5.0	5.0	5.0	5.0	3.4	3.4	15.8	25.1	48.9	61.0
Plug-In Hybrid Powertrains	3.0	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	4.4	6.2	9.0	12.0	16.9	16.9	16.9	16.9	19.1	22.5
BEV 100 Mile Range	0.0	1.9	2.9	2.9	2.9	2.9	2.9	2.9	3.6	4.7
BEV 200 Mile Range	3.7	3.6	5.3	8.4	13.4	13.4	13.4	13.4	14.7	16.8
BEV 300 Mile Range	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.6	0.8	1.1
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	9	9	8	9	7	7	7	7	6	1
CVT Transmissions	32	31	30	28	30	30	46	42	17	6
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	13	0	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	34	47	46	47	43	41	13	10	7	7
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	0	0	0	0	0	2	2	0	2	2

Table 501 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (JLR) Total Fleet, Alternative PC3LT5

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (JLR) Total Fleet, Alternative PC3LT5										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	0	0	0	0	0	0	0	0
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	47	39	35	35	20	20	20	20	15	7
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	52	31	27	27	10	10	10	10	9	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	46	38	34	34	20	20	20	20	15	7
Mild Hybrid Powertrains	0.9	0.9	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0
Strong Hybrid Powertrains Total	0.0	12.3	12.4	12.4	44.8	44.9	44.9	44.8	47.2	59.0
Plug-In Hybrid Powertrains	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	0.9	17.8	25.4	25.4	25.4	25.4	25.4	25.5	28.5	33.6
BEV 100 Mile Range	0.9	2.0	5.0	5.0	4.9	4.9	4.9	4.9	4.8	4.6
BEV 200 Mile Range	0.0	14.8	19.4	19.4	19.4	19.4	19.4	19.4	19.3	19.2
BEV 300 Mile Range	0.0	1.0	1.0	1.0	1.0	1.1	1.1	1.1	4.4	9.8
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	0	0	0	0	0	0	0	0	0	0
CVT Transmissions	0	0	0	0	0	0	0	0	0	0
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	85	42	34	34	25	8	8	8	0	0
9-Speed Automatic	13	2	2	2	0	0	0	0	0	0
10-Speed Automatic	0	26	26	26	4	21	21	21	24	7

Table 502 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Karma) Total Fleet, Alternative PC3LT5

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Karma) Total Fleet, Alternative PC3LT5										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	0	0	0	0	0	0	0	0
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	0	0	0	0	0	0	0	0	0	0
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	0	0	0	0	0	0	0	0	0	0
Mild Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Strong Hybrid Powertrains Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Plug-In Hybrid Powertrains	100.0	100.0	100.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	0.0	0.0	0.0	0.0	100.0	100.0	100.0	100.0	100.0	100.0
BEV 100 Mile Range	0.0	0.0	0.0	0.0	50.0	50.0	50.0	50.0	50.0	50.0
BEV 200 Mile Range	0.0	0.0	0.0	0.0	50.0	50.0	50.0	50.0	50.0	50.0
BEV 300 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	0	0	0	0	0	0	0	0	0	0
CVT Transmissions	0	0	0	0	0	0	0	0	0	0
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	0	0	0	0	0	0	0	0	0	0
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	0	0	0	0	0	0	0	0	0	0

Table 503 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Lucid) Total Fleet, Alternative PC3LT5

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Lucid) Total Fleet, Alternative PC3LT5										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	0	0	0	0	0	0	0	0
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	0	0	0	0	0	0	0	0	0	0
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	0	0	0	0	0	0	0	0	0	0
Mild Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Strong Hybrid Powertrains Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Plug-In Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
BEV 100 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BEV 200 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BEV 300 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BEV 400 Mile Range	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
DCT Transmissions	0	0	0	0	0	0	0	0	0	0
CVT Transmissions	0	0	0	0	0	0	0	0	0	0
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	0	0	0	0	0	0	0	0	0	0
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	0	0	0	0	0	0	0	0	0	0

Table 504 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Mazda) Total Fleet, Alternative PC3LT5

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Mazda) Total Fleet, Alternative PC3LT5										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	71	69	69	68	65	65	64	44	41	39
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	0	0	0	0	0	0	0	0	0	0
Variable Geometry Turbo	29	6	4	5	4	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	0	0	0	0	0	0	0	0	0	0
Mild Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	2.0	2.0	1.9	1.8	1.7
Strong Hybrid Powertrains Total	0.0	15.1	15.1	15.2	14.6	18.9	18.5	34.0	31.9	29.9
Plug-In Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	0.3	9.4	11.8	11.9	15.7	15.7	17.9	21.9	26.7	31.4
BEV 100 Mile Range	0.3	8.1	10.3	10.4	10.9	10.9	11.2	11.8	12.5	13.2
BEV 200 Mile Range	0.0	1.1	1.3	1.3	4.1	4.1	5.8	8.7	12.2	15.6
BEV 300 Mile Range	0.0	0.2	0.2	0.2	0.7	0.7	0.9	1.4	2.0	2.5
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	3	3	2	2	2	2	2	1	1	1
CVT Transmissions	0	0	0	0	0	6	5	5	5	4
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	97	12	1	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	0	61	69	71	68	58	55	37	34	32
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	0	0	0	0	0	0	1	1	1	1

Table 505 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Mercedes-Benz) Total Fleet, Alternative PC3LT5

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Mercedes-Benz) Total Fleet, Alternative PC3LT5										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	0	0	0	0	0	0	0	0
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	90	79	75	73	58	44	27	25	6	5
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	7	7	6	6	6	4	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	63	52	51	49	44	41	27	25	6	5
Mild Hybrid Powertrains	26.5	26.3	23.8	23.1	13.2	2.8	0.0	0.0	0.0	0.0
Strong Hybrid Powertrains Total	0.0	0.0	4.6	5.2	6.7	22.4	43.3	45.6	62.8	58.2
Plug-In Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	3.1	14.1	13.9	15.5	29.8	29.7	29.6	29.5	31.2	36.7
BEV 100 Mile Range	0.0	9.8	9.7	9.4	9.3	9.2	9.2	9.1	9.0	8.3
BEV 200 Mile Range	1.3	2.5	2.5	4.5	13.8	13.8	13.8	13.8	13.9	14.2
BEV 300 Mile Range	1.8	1.8	1.7	1.7	6.7	6.7	6.7	6.6	8.2	13.6
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.6
DCT Transmissions	16	16	16	14	9	6	6	6	4	4
CVT Transmissions	0	0	0	0	0	0	0	0	0	0
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	0	0	0	0	0	0	0	0	0	0
9-Speed Automatic	81	27	14	3	0	0	0	0	0	0
10-Speed Automatic	0	43	51	63	54	42	21	19	2	1

Table 506 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Mitsubishi) Total Fleet, Alternative PC3LT5

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Mitsubishi) Total Fleet, Alternative PC3LT5										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	11	11	11	11	58	58	47	47
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	21	21	21	10	10	10	10	10	10	6
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	0	0	0	0	0	0	0	0	0	0
Mild Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Strong Hybrid Powertrains Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.2	15.1
Plug-In Hybrid Powertrains	1.4	1.4	1.4	1.3	1.3	1.3	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	0.0	0.8	20.3	31.3	31.2	31.2	32.5	32.5	32.5	32.5
BEV 100 Mile Range	0.0	0.3	6.3	6.1	6.1	6.0	6.0	6.0	6.0	6.0
BEV 200 Mile Range	0.0	0.4	14.0	13.7	13.6	13.5	13.4	13.4	13.5	13.5
BEV 300 Mile Range	0.0	0.0	0.0	11.4	11.6	11.6	13.0	13.1	13.0	13.0
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	1	1	0	0	0	0	0	0	0	0
CVT Transmissions	98	97	78	67	67	67	68	68	56	52
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	0	0	0	0	0	0	0	0	0	0
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	0	0	0	0	0	0	0	0	0	0

Table 507 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Nissan) Total Fleet, Alternative PC3LT5

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Nissan) Total Fleet, Alternative PC3LT5										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	10	21	33	33	33	33	23	18
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	1	1	1	1	1	1	1	1	1	1
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	13	13	13	14	14	14	3	0	0	0
Mild Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Strong Hybrid Powertrains Total	0.0	0.0	1.1	1.5	1.5	3.1	29.1	32.3	50.3	51.9
Plug-In Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	1.2	7.9	9.2	12.6	15.4	15.3	15.3	15.3	17.6	20.7
BEV 100 Mile Range	1.0	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.4	5.2
BEV 200 Mile Range	0.3	2.4	3.6	7.1	9.8	9.8	9.7	9.7	11.7	14.4
BEV 300 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	1.1
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	0	0	0	0	0	0	0	0	0	0
CVT Transmissions	71	66	64	62	59	57	42	42	31	26
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0	0	0	0	0
7-Speed Automatic	4	1	0	0	0	0	0	0	0	0
8-Speed Automatic	0	0	0	0	0	0	0	0	0	0
9-Speed Automatic	23	24	24	23	0	0	0	0	0	0
10-Speed Automatic	0	1	1	1	24	25	14	11	1	1

Table 508 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Stellantis) Total Fleet, Alternative PC3LT5

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Stellantis) Total Fleet, Alternative PC3LT5										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	0	11	13	12	12	11	11	11
Cylinder Deactivation	20	20	6	5	5	4	4	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	10	10	9	10	9	9	9	8	8	6
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	2	2	1	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	46	44	44	33	33	21	20	11	11	11
Mild Hybrid Powertrains	16.4	16.3	6.4	4.4	4.4	4.4	4.4	0.0	0.0	0.0
Strong Hybrid Powertrains Total	0.0	0.0	18.7	32.7	32.9	49.3	50.0	63.0	62.5	61.6
Plug-In Hybrid Powertrains	4.7	4.7	4.7	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Battery Electric Vehicles (BEVs)	0.0	4.6	9.1	17.5	17.9	17.9	17.9	17.9	18.5	21.8
BEV 100 Mile Range	0.0	2.7	2.7	2.6	2.6	2.6	2.6	2.6	2.6	2.5
BEV 200 Mile Range	0.0	1.7	6.1	9.9	10.2	10.2	10.2	10.2	10.7	12.9
BEV 300 Mile Range	0.0	0.3	0.3	5.0	5.0	5.0	5.1	5.1	5.3	6.4
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	1	1	1	0	0	0	0	0	0	0
CVT Transmissions	0	0	0	0	0	0	0	0	0	0
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	2	2	2	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	65	61	38	30	30	14	12	5	0	0
9-Speed Automatic	28	27	27	8	1	1	0	0	0	0
10-Speed Automatic	0	0	0	11	18	18	20	14	19	17

Table 509 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Subaru) Total Fleet, Alternative PC3LT5

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Subaru) Total Fleet, Alternative PC3LT5										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	13	39	59	66	62	56	50	47	43
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	24	24	24	23	23	21	20	17	13	12
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	76	75	75	73	71	67	61	55	48	45
Mild Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Strong Hybrid Powertrains Total	0.0	0.0	0.0	0.0	0.0	0.0	3.5	7.9	10.5	9.7
Plug-In Hybrid Powertrains	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	0.0	5.7	5.7	7.2	10.5	15.5	19.5	23.9	29.0	34.2
BEV 100 Mile Range	0.0	2.5	2.5	2.7	2.8	3.0	3.2	3.4	3.7	3.9
BEV 200 Mile Range	0.0	2.5	2.5	3.8	5.4	7.9	10.0	12.2	14.8	17.4
BEV 300 Mile Range	0.0	0.7	0.7	0.7	2.2	4.5	6.3	8.3	10.6	12.9
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	4	4	4	3	3	3	2	2	2	2
CVT Transmissions	95	90	90	89	86	81	75	66	58	54
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	0	0	0	0	0	0	0	0	0	0
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	0	0	0	0	0	0	0	0	0	0

Table 510 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Tesla) Total Fleet, Alternative PC3LT5

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Tesla) Total Fleet, Alternative PC3LT5										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	0	0	0	0	0	0	0	0
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	0	0	0	0	0	0	0	0	0	0
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	0	0	0	0	0	0	0	0	0	0
Mild Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Strong Hybrid Powertrains Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Plug-In Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
BEV 100 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BEV 200 Mile Range	18.5	18.5	18.5	18.4	18.4	18.4	18.4	18.4	18.4	18.4
BEV 300 Mile Range	56.9	57.0	57.0	57.2	57.2	57.2	57.3	57.3	57.2	57.2
BEV 400 Mile Range	24.6	24.5	24.5	24.4	24.4	24.4	24.4	24.4	24.4	24.4
DCT Transmissions	0	0	0	0	0	0	0	0	0	0
CVT Transmissions	0	0	0	0	0	0	0	0	0	0
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	0	0	0	0	0	0	0	0	0	0
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	0	0	0	0	0	0	0	0	0	0

Table 511 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Toyota) Total Fleet, Alternative PC3LT5

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Toyota) Total Fleet, Alternative PC3LT5										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	25	24	32	31	37	36	33	32	29	24
Cylinder Deactivation	0	0	1	1	1	1	1	1	1	1
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	7	7	16	17	25	29	29	27	23	17
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	25	25	25	26	25	25	23	20	19	11
Mild Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Strong Hybrid Powertrains Total	24.8	24.2	24.3	23.7	18.6	18.6	19.9	20.1	21.8	29.0
Plug-In Hybrid Powertrains	2.4	1.4	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	0.0	3.6	3.9	6.5	13.8	13.8	16.4	20.1	24.5	28.9
BEV 100 Mile Range	0.0	2.9	2.9	2.8	3.5	3.5	4.3	5.5	7.0	8.4
BEV 200 Mile Range	0.0	0.4	0.7	3.3	9.1	9.1	10.1	11.6	13.2	14.9
BEV 300 Mile Range	0.0	0.3	0.3	0.5	1.2	1.2	1.9	3.0	4.3	5.6
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	1	1	1	1	1	1	1	1	1	1
CVT Transmissions	15	15	14	14	13	22	28	27	25	24
5-Speed Automatic	6	6	0	0	0	0	0	0	0	0
6-Speed Automatic	11	11	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	34	33	49	49	47	39	15	5	1	0
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	6	6	6	6	6	6	20	27	27	17

Table 512 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Volvo) Total Fleet, Alternative PC3LT5

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Volvo) Total Fleet, Alternative PC3LT5										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	0	0	0	0	0	0	0	0
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	64	65	65	65	57	57	57	57	35	35
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	5	5	3	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	0	0	0	0	0	0	0	0	0	0
Mild Hybrid Powertrains	27.2	27.0	26.8	26.5	19.4	19.4	19.4	19.4	19.4	19.4
Strong Hybrid Powertrains Total	0.0	0.0	1.8	4.6	4.7	4.7	4.7	4.7	26.6	26.5
Plug-In Hybrid Powertrains	17.6	14.8	14.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	13.4	15.9	15.7	30.3	38.7	38.6	38.5	38.4	38.6	38.6
BEV 100 Mile Range	3.5	6.3	6.3	6.2	6.2	6.2	6.2	6.2	6.2	6.2
BEV 200 Mile Range	9.9	9.6	9.4	9.1	17.4	17.3	17.2	17.1	17.3	17.3
BEV 300 Mile Range	0.0	0.0	0.0	15.0	15.1	15.1	15.1	15.2	15.1	15.1
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	0	0	0	0	0	0	0	0	0	0
CVT Transmissions	0	0	0	0	0	0	0	0	0	0
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	69	69	68	65	57	57	57	57	19	19
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	0	0	0	0	0	0	0	0	15	15

Table 513 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (VWA) Total Fleet, Alternative PC3LT5

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (VWA) Total Fleet, Alternative PC3LT5										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	11	11	11	11	11	11	3	3
Cylinder Deactivation	1	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	61	57	47	44	38	36	27	27	23	13
Variable Geometry Turbo	19	19	3	1	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	81	78	55	51	48	46	38	38	26	17
Mild Hybrid Powertrains	8.3	8.2	4.4	4.5	0.5	0.3	0.3	0.3	0.2	0.0
Strong Hybrid Powertrains Total	0.0	0.0	22.6	26.0	29.4	31.7	41.0	41.0	48.6	53.6
Plug-In Hybrid Powertrains	1.4	1.4	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	7.1	10.5	15.0	16.9	21.2	21.1	21.1	21.0	25.3	29.8
BEV 100 Mile Range	2.8	5.2	5.3	5.6	5.6	5.6	5.6	5.6	5.4	5.3
BEV 200 Mile Range	4.1	5.1	9.6	10.0	14.3	14.3	14.2	14.2	16.5	18.8
BEV 300 Mile Range	0.2	0.2	0.2	1.2	1.2	1.2	1.3	1.3	3.4	5.6
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	30	26	22	21	18	16	14	14	13	12
CVT Transmissions	0	0	2	1	0	0	0	0	0	0
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	2	2	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	60	59	36	33	31	20	5	0	0	0
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	0	1	1	1	0	11	19	24	13	4

Table 514 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (BMW) Total Fleet, Alternative PC6LT8

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (BMW) Total Fleet, Alternative PC6LT8										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	0	0	0	0	0	0	0	0
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	91	87	80	76	38	29	27	26	18	0
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	58	53	48	46	33	25	23	22	18	0
Mild Hybrid Powertrains	29.0	29.5	27.9	25.4	1.8	0.0	0.0	0.0	0.0	0.0
Strong Hybrid Powertrains Total	0.0	0.0	0.0	2.8	38.4	47.9	49.8	48.9	51.5	63.2
Plug-In Hybrid Powertrains	5.8	5.8	5.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	3.3	7.4	15.2	21.5	23.3	23.2	23.2	25.5	31.0	36.5
BEV 100 Mile Range	0.8	3.2	3.4	3.3	5.2	5.2	5.1	5.1	5.1	5.0
BEV 200 Mile Range	0.2	1.9	8.5	9.8	9.8	9.7	9.7	10.4	12.3	14.1
BEV 300 Mile Range	2.3	2.3	3.4	8.3	8.3	8.3	8.4	9.9	13.5	17.1
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2
DCT Transmissions	6	6	6	6	5	5	5	5	0	0
CVT Transmissions	0	0	0	0	0	0	0	0	0	0
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	85	73	65	60	31	23	1	0	0	0
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	0	8	10	10	2	1	22	21	18	0

Table 515 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Ford) Total Fleet, Alternative PC6LT8

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Ford) Total Fleet, Alternative PC6LT8										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	3	3	3	3	3	3	3	3
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	73	70	62	62	58	30	13	1	1	1
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	72	68	61	62	57	32	15	3	3	3
Mild Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Strong Hybrid Powertrains Total	8.6	8.6	11.0	11.0	11.0	47.5	64.1	76.3	76.3	76.2
Plug-In Hybrid Powertrains	1.2	1.1	1.2	0.1	0.1	0.1	0.3	0.3	0.3	0.3
Battery Electric Vehicles (BEVs)	3.1	7.7	14.5	15.5	20.0	20.0	19.9	19.9	20.0	20.0
BEV 100 Mile Range	0.5	3.0	2.9	3.0	3.3	3.3	3.3	3.3	3.3	3.3
BEV 200 Mile Range	1.4	3.7	9.8	10.5	10.5	10.5	10.4	10.4	10.5	10.5
BEV 300 Mile Range	1.1	1.1	1.7	2.0	6.3	6.2	6.2	6.2	6.2	6.2
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	2	2	2	2	2	2	2	0	0	0
CVT Transmissions	0	0	0	0	0	0	0	0	0	0
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	1	0	0	0	0	0	0	0	0	0
7-Speed Automatic	1	1	0	0	0	0	0	0	0	0
8-Speed Automatic	29	29	23	16	14	4	4	0	0	0
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	54	51	48	56	54	27	10	3	3	3

Table 516 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (GM) Total Fleet, Alternative PC6LT8

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (GM) Total Fleet, Alternative PC6LT8										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	1	7	7	7	7	6	6	5
Cylinder Deactivation	4	4	3	2	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	47	47	36	25	22	22	22	13	11	2
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	5	5	5	1	1	1	1	1	1	1
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	82	82	68	38	33	24	24	17	15	6
Mild Hybrid Powertrains	0.0	0.0	0.0	0.7	0.7	1.6	1.6	1.6	0.9	0.9
Strong Hybrid Powertrains Total	0.0	0.0	2.1	28.7	31.4	31.4	31.5	40.9	43.3	36.3
Plug-In Hybrid Powertrains	0.0	0.0	6.6	10.5	10.6	22.0	22.1	22.1	22.0	37.7
Battery Electric Vehicles (BEVs)	1.6	1.5	14.0	13.9	16.8	16.8	16.7	16.7	16.8	17.7
BEV 100 Mile Range	0.0	0.0	4.4	4.2	4.2	4.1	4.1	4.0	4.1	4.1
BEV 200 Mile Range	1.6	1.5	9.6	9.6	10.9	10.9	10.9	10.9	10.9	11.6
BEV 300 Mile Range	0.0	0.0	0.0	0.0	1.8	1.8	1.8	1.8	1.8	1.9
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	2	2	2	1	0	0	0	0	0	0
CVT Transmissions	9	9	5	5	4	4	4	3	2	0
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	18	18	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	20	20	24	12	11	3	2	2	0	0
9-Speed Automatic	22	22	18	5	1	1	0	0	0	0
10-Speed Automatic	28	28	29	24	25	22	24	15	16	8

Table 517 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Honda) Total Fleet, Alternative PC6LT8

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Honda) Total Fleet, Alternative PC6LT8										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	8	8	8	7	7	13	6	6	5
Cylinder Deactivation	27	13	13	3	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	43	53	53	60	59	39	19	15	4	4
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	79	77	77	74	69	49	26	21	10	10
Mild Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Strong Hybrid Powertrains Total	9.3	9.4	9.4	9.4	9.2	28.5	49.2	56.7	63.0	58.9
Plug-In Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	0.0	5.5	5.4	9.4	14.6	14.6	18.0	22.0	26.8	31.6
BEV 100 Mile Range	0.0	3.3	3.3	3.2	4.0	4.0	5.6	7.5	9.8	12.1
BEV 200 Mile Range	0.0	2.0	2.0	6.0	10.2	10.2	11.6	13.2	15.1	17.0
BEV 300 Mile Range	0.0	0.2	0.2	0.2	0.5	0.5	0.9	1.4	2.0	2.5
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	2	2	2	1	1	1	0	0	0	0
CVT Transmissions	55	52	51	51	49	31	13	6	6	5
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	0	0	0	0	0	0	0	0	0	0
9-Speed Automatic	17	3	3	3	0	0	0	0	0	0
10-Speed Automatic	17	29	29	26	26	25	19	15	4	4

Table 518 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Hyundai) Total Fleet, Alternative PC6LT8

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Hyundai) Total Fleet, Alternative PC6LT8										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	59	59	59	55	55	37	34	19	14	8
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	19	18	17	17	13	12	10	2	1	0
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	2	2	1
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	68	68	66	63	60	40	35	13	8	1
Mild Hybrid Powertrains	0.0	0.0	0.4	0.4	0.4	0.4	0.4	0.0	0.0	0.0
Strong Hybrid Powertrains Total	10.9	9.6	9.7	10.0	8.5	32.8	37.4	58.7	61.7	66.0
Plug-In Hybrid Powertrains	1.9	1.7	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	3.3	7.4	9.3	14.0	19.0	18.9	18.9	18.9	21.2	25.0
BEV 100 Mile Range	0.2	4.2	4.2	4.1	4.1	4.0	4.0	4.0	5.2	7.1
BEV 200 Mile Range	2.1	2.2	4.1	8.9	11.7	11.7	11.7	11.7	12.5	13.9
BEV 300 Mile Range	1.0	1.0	1.0	1.0	3.2	3.2	3.2	3.2	3.5	4.0
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	11	11	10	10	9	9	7	1	1	1
CVT Transmissions	22	28	28	24	24	20	20	14	9	8
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	50	42	41	42	40	10	8	0	0	0
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	0	0	0	0	0	9	9	8	8	0

Table 519 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (KIA) Total Fleet, Alternative PC6LT8

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (KIA) Total Fleet, Alternative PC6LT8										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	45	57	59	62	61	61	49	38	11	0
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	24	23	21	21	18	18	18	16	15	0
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	32	32	32	30	28	28	28	26	6	0
Mild Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Strong Hybrid Powertrains Total	5.0	5.0	5.0	5.0	3.4	3.4	15.8	28.6	54.5	77.5
Plug-In Hybrid Powertrains	3.0	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	4.4	6.2	9.0	12.0	16.9	16.9	16.9	16.9	19.1	22.5
BEV 100 Mile Range	0.0	1.9	2.9	2.9	2.9	2.9	2.9	2.9	3.6	4.6
BEV 200 Mile Range	3.7	3.6	5.3	8.4	13.4	13.4	13.4	13.4	14.7	16.8
BEV 300 Mile Range	0.7	0.7	0.7	0.7	0.7	0.7	0.6	0.6	0.8	1.1
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	9	9	8	9	7	7	7	7	6	0
CVT Transmissions	32	31	30	28	30	30	46	38	11	0
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	13	0	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	34	47	46	47	43	41	13	10	0	0
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	0	0	0	0	0	2	2	0	9	0

Table 520 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (JLR) Total Fleet, Alternative PC6LT8

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (JLR) Total Fleet, Alternative PC6LT8										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	0	0	0	0	0	0	0	0
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	47	39	35	35	20	20	20	20	15	7
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	52	31	27	27	10	10	10	10	9	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	46	38	34	34	20	20	20	20	15	7
Mild Hybrid Powertrains	0.9	0.9	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0
Strong Hybrid Powertrains Total	0.0	12.3	12.4	12.4	44.8	44.9	44.9	44.9	47.2	59.0
Plug-In Hybrid Powertrains	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	0.9	17.8	25.4	25.4	25.4	25.4	25.4	25.4	28.5	33.6
BEV 100 Mile Range	0.9	2.0	5.0	5.0	4.9	4.9	4.9	4.9	4.8	4.6
BEV 200 Mile Range	0.0	14.8	19.4	19.4	19.4	19.4	19.4	19.4	19.3	19.2
BEV 300 Mile Range	0.0	1.0	1.0	1.0	1.0	1.1	1.1	1.1	4.4	9.8
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	0	0	0	0	0	0	0	0	0	0
CVT Transmissions	0	0	0	0	0	0	0	0	0	0
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	85	42	34	34	25	8	8	8	0	0
9-Speed Automatic	13	2	2	2	0	0	0	0	0	0
10-Speed Automatic	0	26	26	26	4	21	21	21	24	7

Table 521 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Karma) Total Fleet, Alternative PC6LT8

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Karma) Total Fleet, Alternative PC6LT8										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	0	0	0	0	0	0	0	0
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	0	0	0	0	0	0	0	0	0	0
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	0	0	0	0	0	0	0	0	0	0
Mild Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Strong Hybrid Powertrains Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Plug-In Hybrid Powertrains	100.0	100.0	100.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	0.0	0.0	0.0	0.0	100.0	100.0	100.0	100.0	100.0	100.0
BEV 100 Mile Range	0.0	0.0	0.0	0.0	50.0	50.0	50.0	50.0	50.0	50.0
BEV 200 Mile Range	0.0	0.0	0.0	0.0	50.0	50.0	50.0	50.0	50.0	50.0
BEV 300 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	0	0	0	0	0	0	0	0	0	0
CVT Transmissions	0	0	0	0	0	0	0	0	0	0
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	0	0	0	0	0	0	0	0	0	0
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	0	0	0	0	0	0	0	0	0	0

Table 522 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Lucid) Total Fleet, Alternative PC6LT8

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Lucid) Total Fleet, Alternative PC6LT8										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	0	0	0	0	0	0	0	0
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	0	0	0	0	0	0	0	0	0	0
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	0	0	0	0	0	0	0	0	0	0
Mild Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Strong Hybrid Powertrains Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Plug-In Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
BEV 100 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BEV 200 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BEV 300 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BEV 400 Mile Range	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
DCT Transmissions	0	0	0	0	0	0	0	0	0	0
CVT Transmissions	0	0	0	0	0	0	0	0	0	0
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	0	0	0	0	0	0	0	0	0	0
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	0	0	0	0	0	0	0	0	0	0

Table 523 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Mazda) Total Fleet, Alternative PC6LT8

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Mazda) Total Fleet, Alternative PC6LT8										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	71	69	69	68	65	48	47	2	2	2
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	0	0	0	0	0	0	0	0	0	0
Variable Geometry Turbo	29	6	4	5	4	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	0	0	0	0	0	0	0	0	0	0
Mild Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Strong Hybrid Powertrains Total	0.0	15.1	15.1	15.2	14.6	36.3	35.4	75.6	71.0	66.4
Plug-In Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	0.3	9.4	11.8	11.9	15.7	15.7	17.9	21.9	26.7	31.4
BEV 100 Mile Range	0.3	8.1	10.3	10.4	10.9	10.9	11.2	11.8	12.5	13.2
BEV 200 Mile Range	0.0	1.1	1.3	1.3	4.1	4.1	5.8	8.7	12.2	15.7
BEV 300 Mile Range	0.0	0.2	0.2	0.2	0.7	0.7	0.9	1.4	2.0	2.5
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	3	3	2	2	2	2	2	1	1	1
CVT Transmissions	0	0	0	0	0	6	5	0	0	0
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	97	12	1	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	0	61	69	71	68	40	38	0	0	0
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	0	0	0	0	0	0	1	1	1	1

Table 524 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Mercedes-Benz) Total Fleet, Alternative PC6LT8

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Mercedes-Benz) Total Fleet, Alternative PC6LT8										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	0	0	0	0	0	0	0	0
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	90	79	75	73	58	42	25	23	4	2
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	7	7	6	6	6	4	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	63	52	51	49	44	39	25	23	4	2
Mild Hybrid Powertrains	26.5	26.3	23.8	23.1	13.2	2.8	0.0	0.0	0.0	0.0
Strong Hybrid Powertrains Total	0.0	0.0	4.6	5.2	6.7	24.1	45.0	47.2	64.4	60.9
Plug-In Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	3.1	14.1	13.9	15.5	29.8	29.7	29.5	29.5	31.2	36.7
BEV 100 Mile Range	0.0	9.8	9.7	9.4	9.3	9.2	9.1	9.1	9.0	8.3
BEV 200 Mile Range	1.3	2.5	2.5	4.5	13.8	13.8	13.8	13.8	13.9	14.2
BEV 300 Mile Range	1.8	1.8	1.7	1.7	6.7	6.7	6.6	6.6	8.2	13.6
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.6
DCT Transmissions	16	16	16	14	9	5	4	4	3	2
CVT Transmissions	0	0	0	0	0	0	0	0	0	0
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	0	0	0	0	0	0	0	0	0	0
9-Speed Automatic	81	27	14	3	0	0	0	0	0	0
10-Speed Automatic	0	43	51	63	54	42	21	19	2	0

Table 525 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Mitsubishi) Total Fleet, Alternative PC6LT8

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Mitsubishi) Total Fleet, Alternative PC6LT8										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	11	11	11	11	11	11	0	0
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	21	21	21	10	10	10	10	10	10	4
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	0	0	0	0	0	0	0	0	0	0
Mild Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Strong Hybrid Powertrains Total	0.0	0.0	0.0	0.0	0.0	0.0	46.8	46.8	58.0	63.4
Plug-In Hybrid Powertrains	1.4	1.4	1.4	1.3	1.3	1.3	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	0.0	0.8	20.3	31.3	31.2	31.2	32.5	32.4	32.5	32.5
BEV 100 Mile Range	0.0	0.3	6.3	6.1	6.1	6.0	6.0	6.0	6.0	6.0
BEV 200 Mile Range	0.0	0.4	14.0	13.7	13.6	13.5	13.4	13.4	13.5	13.5
BEV 300 Mile Range	0.0	0.0	0.0	11.4	11.6	11.7	13.1	13.1	13.0	13.0
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	1	1	0	0	0	0	0	0	0	0
CVT Transmissions	98	97	78	67	67	67	21	21	10	4
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	0	0	0	0	0	0	0	0	0	0
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	0	0	0	0	0	0	0	0	0	0

Table 526 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Nissan) Total Fleet, Alternative PC6LT8

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Nissan) Total Fleet, Alternative PC6LT8										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	10	21	33	33	33	33	22	12
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	1	1	1	1	1	1	1	1	1	1
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	13	13	13	14	14	14	3	0	0	0
Mild Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Strong Hybrid Powertrains Total	0.0	0.0	1.1	1.5	1.5	3.1	37.9	41.1	58.9	66.4
Plug-In Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	1.2	7.9	9.2	12.6	15.4	15.3	15.3	15.3	17.6	20.7
BEV 100 Mile Range	1.0	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.4	5.2
BEV 200 Mile Range	0.3	2.4	3.6	7.1	9.8	9.8	9.7	9.7	11.7	14.4
BEV 300 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	1.1
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	0	0	0	0	0	0	0	0	0	0
CVT Transmissions	71	66	64	62	59	57	33	33	22	12
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0	0	0	0	0
7-Speed Automatic	4	1	0	0	0	0	0	0	0	0
8-Speed Automatic	0	0	0	0	0	0	0	0	0	0
9-Speed Automatic	23	24	24	23	0	0	0	0	0	0
10-Speed Automatic	0	1	1	1	24	25	14	11	1	1

Table 527 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Stellantis) Total Fleet, Alternative PC6LT8

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Stellantis) Total Fleet, Alternative PC6LT8										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	0	11	13	12	12	11	11	11
Cylinder Deactivation	20	20	6	5	5	4	4	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	10	10	9	10	9	9	9	8	8	6
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	2	2	1	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	46	44	44	33	33	21	20	11	11	11
Mild Hybrid Powertrains	16.4	16.3	6.4	4.4	4.4	4.4	4.4	0.0	0.0	0.0
Strong Hybrid Powertrains Total	0.0	0.0	18.7	32.7	32.9	49.3	50.0	63.1	62.5	61.6
Plug-In Hybrid Powertrains	4.7	4.7	4.7	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Battery Electric Vehicles (BEVs)	0.0	4.6	9.1	17.5	17.9	17.9	17.8	17.8	18.5	21.8
BEV 100 Mile Range	0.0	2.7	2.7	2.6	2.6	2.6	2.6	2.6	2.6	2.5
BEV 200 Mile Range	0.0	1.7	6.1	9.9	10.2	10.2	10.2	10.2	10.7	12.9
BEV 300 Mile Range	0.0	0.3	0.3	5.0	5.0	5.0	5.1	5.1	5.3	6.4
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	1	1	1	0	0	0	0	0	0	0
CVT Transmissions	0	0	0	0	0	0	0	0	0	0
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	2	2	2	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	65	61	38	30	30	14	12	5	0	0
9-Speed Automatic	28	27	27	8	1	1	0	0	0	0
10-Speed Automatic	0	0	0	11	18	18	20	14	19	17

Table 528 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Subaru) Total Fleet, Alternative PC6LT8

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Subaru) Total Fleet, Alternative PC6LT8										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	13	39	59	66	62	43	34	16	15
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	24	24	24	23	23	21	20	8	1	1
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	76	75	75	73	71	67	49	31	7	6
Mild Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.6	8.0	7.5
Strong Hybrid Powertrains Total	0.0	0.0	0.0	0.0	0.0	0.0	16.1	33.0	52.9	49.1
Plug-In Hybrid Powertrains	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	0.0	5.7	5.7	7.2	10.5	15.5	19.5	23.9	29.0	34.2
BEV 100 Mile Range	0.0	2.5	2.5	2.7	2.8	3.0	3.2	3.4	3.7	3.9
BEV 200 Mile Range	0.0	2.5	2.5	3.8	5.4	7.9	10.0	12.2	14.8	17.4
BEV 300 Mile Range	0.0	0.7	0.7	0.7	2.2	4.5	6.4	8.3	10.6	12.9
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	4	4	4	3	3	3	2	1	1	1
CVT Transmissions	95	90	90	89	86	81	62	42	17	15
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	0	0	0	0	0	0	0	0	0	0
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	0	0	0	0	0	0	0	0	0	0

Table 529 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Tesla) Total Fleet, Alternative PC6LT8

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Tesla) Total Fleet, Alternative PC6LT8										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	0	0	0	0	0	0	0	0
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	0	0	0	0	0	0	0	0	0	0
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	0	0	0	0	0	0	0	0	0	0
Mild Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Strong Hybrid Powertrains Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Plug-In Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
BEV 100 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BEV 200 Mile Range	18.5	18.5	18.5	18.4	18.4	18.4	18.4	18.4	18.4	18.4
BEV 300 Mile Range	56.9	57.0	57.0	57.2	57.2	57.2	57.3	57.3	57.3	57.2
BEV 400 Mile Range	24.6	24.5	24.5	24.4	24.4	24.4	24.4	24.3	24.4	24.4
DCT Transmissions	0	0	0	0	0	0	0	0	0	0
CVT Transmissions	0	0	0	0	0	0	0	0	0	0
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	0	0	0	0	0	0	0	0	0	0
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	0	0	0	0	0	0	0	0	0	0

Table 530 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Toyota) Total Fleet, Alternative PC6LT8

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Toyota) Total Fleet, Alternative PC6LT8										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	25	24	32	31	37	36	32	30	23	16
Cylinder Deactivation	0	0	1	1	1	1	1	1	1	1
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	7	7	16	17	25	29	29	26	20	14
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	25	25	25	26	25	25	21	18	17	7
Mild Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	1.5
Strong Hybrid Powertrains Total	24.8	24.2	24.3	23.7	18.6	18.6	21.6	22.4	30.8	40.6
Plug-In Hybrid Powertrains	2.4	1.4	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	0.0	3.6	3.9	6.5	13.8	13.8	16.4	20.1	24.5	28.9
BEV 100 Mile Range	0.0	2.9	2.9	2.8	3.5	3.5	4.3	5.5	7.0	8.4
BEV 200 Mile Range	0.0	0.4	0.7	3.3	9.1	9.1	10.2	11.6	13.2	14.9
BEV 300 Mile Range	0.0	0.3	0.3	0.5	1.2	1.2	1.9	3.0	4.3	5.6
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	1	1	1	1	1	1	1	1	1	0
CVT Transmissions	15	15	14	14	13	22	26	25	18	14
5-Speed Automatic	6	6	0	0	0	0	0	0	0	0
6-Speed Automatic	11	11	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	34	33	49	49	47	39	15	4	1	0
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	6	6	6	6	6	6	20	27	25	16

Table 531 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Volvo) Total Fleet, Alternative PC6LT8

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Volvo) Total Fleet, Alternative PC6LT8										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	0	0	0	0	0	0	0	0
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	64	65	65	65	57	57	57	57	35	35
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	5	5	3	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	0	0	0	0	0	0	0	0	0	0
Mild Hybrid Powertrains	27.2	27.0	26.8	26.5	19.4	19.4	19.4	19.4	19.4	19.4
Strong Hybrid Powertrains Total	0.0	0.0	1.8	4.6	4.7	4.7	4.7	4.7	26.6	26.6
Plug-In Hybrid Powertrains	17.6	14.8	14.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	13.4	15.9	15.7	30.3	38.7	38.6	38.4	38.4	38.6	38.6
BEV 100 Mile Range	3.5	6.3	6.3	6.2	6.2	6.2	6.2	6.2	6.2	6.2
BEV 200 Mile Range	9.9	9.6	9.4	9.1	17.4	17.3	17.1	17.0	17.2	17.3
BEV 300 Mile Range	0.0	0.0	0.0	15.0	15.1	15.1	15.2	15.2	15.1	15.1
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	0	0	0	0	0	0	0	0	0	0
CVT Transmissions	0	0	0	0	0	0	0	0	0	0
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	69	69	68	65	57	35	35	21	6	6
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	0	0	0	0	0	22	22	36	29	29

Table 532 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (VWA) Total Fleet, Alternative PC6LT8

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (VWA) Total Fleet, Alternative PC6LT8										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	11	11	11	11	11	11	3	3
Cylinder Deactivation	1	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	61	57	47	44	38	36	20	20	16	7
Variable Geometry Turbo	19	19	3	1	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	81	78	55	51	48	46	31	31	19	11
Mild Hybrid Powertrains	8.3	8.2	4.4	4.5	0.5	0.3	0.3	0.3	0.2	0.0
Strong Hybrid Powertrains Total	0.0	0.0	22.6	26.0	29.4	31.7	47.8	47.8	55.1	59.7
Plug-In Hybrid Powertrains	1.4	1.4	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	7.1	10.5	15.0	16.9	21.2	21.1	21.0	21.0	25.3	29.8
BEV 100 Mile Range	2.8	5.2	5.3	5.6	5.6	5.6	5.6	5.6	5.4	5.3
BEV 200 Mile Range	4.1	5.1	9.6	10.0	14.3	14.2	14.2	14.1	16.5	18.8
BEV 300 Mile Range	0.2	0.2	0.2	1.2	1.2	1.2	1.3	1.3	3.4	5.6
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	30	26	22	21	18	16	7	7	7	6
CVT Transmissions	0	0	2	1	0	0	0	0	0	0
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	2	2	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	60	59	36	33	31	20	5	0	0	0
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	0	1	1	1	0	11	19	24	13	4

Mass Reduction Penetration Rate, by Model Year

Table 533 - Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Total) Total Fleet, No Action Alternative (Reference Baseline)

Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Total) Total Fleet, No Action Alternative (Reference Baseline)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Mass Reduction Level 0 (%)	16	15	11	9	8	8	8	6	5	4
Mass Reduction Level 1 (%)	24	25	25	26	27	28	28	30	31	31
Mass Reduction Level 2 (%)	13	13	10	6	6	4	3	3	3	3
Mass Reduction Level 3 (%)	38	39	45	50	50	51	52	51	52	51
Mass Reduction Level 4 (%)	8	8	8	8	8	8	8	9	9	10
Mass Reduction Level 5 (%)	1	1	1	1	1	1	1	1	1	1
Avg Curb Weight - Fleet (pounds)	4,032	4,040	4,033	4,037	4,039	4,039	4,041	4,037	4,036	4,034
Diff. from Reference Baseline - Fleet (pounds)	0	0	0	0	0	0	0	0	0	0

Table 534 - Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Total) Passenger Car Fleet, No Action Alternative (Reference Baseline)

Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Total) Passenger Car Fleet, No Action Alternative (Reference Baseline)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Mass Reduction Level 0 (%)	10	10	10	9	6	5	5	4	4	4
Mass Reduction Level 1 (%)	28	28	25	25	27	29	29	30	29	28
Mass Reduction Level 2 (%)	14	11	8	6	5	5	5	5	4	4
Mass Reduction Level 3 (%)	34	36	43	46	46	46	46	44	45	45
Mass Reduction Level 4 (%)	12	12	14	14	14	14	14	16	16	17
Mass Reduction Level 5 (%)	1	1	1	1	1	2	2	2	2	2
Avg Curb Weight - Fleet (pounds)	4,032	4,040	4,033	4,037	4,039	4,039	4,041	4,037	4,036	4,034
Diff. from Reference Baseline - Fleet (pounds)	0	0	0	0	0	0	0	0	0	0

Table 535 - Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Total) Light Truck Fleet, No Action Alternative (Reference Baseline)

Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Total) Light Truck Fleet, No Action Alternative (Reference Baseline)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Mass Reduction Level 0 (%)	20	18	12	10	9	9	9	7	6	4
Mass Reduction Level 1 (%)	21	23	26	27	27	27	27	30	31	33
Mass Reduction Level 2 (%)	13	13	12	6	6	4	3	2	2	2
Mass Reduction Level 3 (%)	41	41	46	52	52	54	55	55	55	54
Mass Reduction Level 4 (%)	5	5	5	5	5	5	5	5	5	6
Mass Reduction Level 5 (%)	0	0	0	0	0	0	0	0	0	0
Avg Curb Weight - Fleet (pounds)	4,032	4,040	4,033	4,037	4,039	4,039	4,041	4,037	4,036	4,034
Diff. from Reference Baseline - Fleet (pounds)	0	0	0	0	0	0	0	0	0	0

Table 536 - Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Total) Domestic Car Fleet, No Action Alternative (Reference Baseline)

Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Total) Domestic Car Fleet, No Action Alternative (Reference Baseline)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Mass Reduction Level 0 (%)	4	4	4	3	2	2	2	1	1	1
Mass Reduction Level 1 (%)	19	19	13	12	13	13	13	14	13	11
Mass Reduction Level 2 (%)	20	15	13	8	7	6	6	6	5	5
Mass Reduction Level 3 (%)	39	44	50	57	57	57	57	53	55	56
Mass Reduction Level 4 (%)	15	15	17	17	18	18	18	23	23	24
Mass Reduction Level 5 (%)	3	3	3	3	3	3	3	3	3	3
Avg Curb Weight - Fleet (pounds)	4,032	4,040	4,033	4,037	4,039	4,039	4,041	4,037	4,036	4,034
Diff. from Reference Baseline - Fleet (pounds)	0	0	0	0	0	0	0	0	0	0

Table 537 - Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Total) Imported Car Fleet, No Action Alternative (Reference Baseline)

Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Total) Imported Car Fleet, No Action Alternative (Reference Baseline)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Mass Reduction Level 0 (%)	17	17	16	14	10	8	7	7	6	7
Mass Reduction Level 1 (%)	36	36	36	38	41	44	44	45	45	45
Mass Reduction Level 2 (%)	8	8	3	3	3	3	3	3	3	3
Mass Reduction Level 3 (%)	29	29	35	35	35	35	35	35	35	35
Mass Reduction Level 4 (%)	10	10	10	10	10	10	10	10	10	10
Mass Reduction Level 5 (%)	0	0	0	0	0	0	0	0	0	0
Avg Curb Weight - Fleet (pounds)	4,032	4,040	4,033	4,037	4,039	4,039	4,041	4,037	4,036	4,034
Diff. from Reference Baseline - Fleet (pounds)	0	0	0	0	0	0	0	0	0	0

Table 538 - Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Total) Total Fleet, Alternative PC2LT002

Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Total) Total Fleet, Alternative PC2LT002										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Mass Reduction Level 0 (%)	16	15	11	9	8	8	7	4	4	3
Mass Reduction Level 1 (%)	24	25	25	26	27	28	28	30	30	30
Mass Reduction Level 2 (%)	13	13	10	6	6	4	3	3	3	3
Mass Reduction Level 3 (%)	38	39	45	50	50	50	50	48	48	43
Mass Reduction Level 4 (%)	8	8	8	8	8	10	11	14	14	20
Mass Reduction Level 5 (%)	1	1	1	1	1	1	1	1	1	1
Avg Curb Weight - Fleet (pounds)	4,032	4,040	4,033	4,037	4,039	4,036	4,035	4,027	4,025	4,012
Diff. from Reference Baseline - Fleet (pounds)	0	0	0	0	0	3	6	10	11	22

Table 539 - Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Total) Passenger Car Fleet, Alternative PC2LT002

Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Total) Passenger Car Fleet, Alternative PC2LT002										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Mass Reduction Level 0 (%)	10	10	10	9	6	5	4	3	3	3
Mass Reduction Level 1 (%)	28	28	25	25	27	28	27	27	27	25
Mass Reduction Level 2 (%)	14	11	8	6	5	5	5	5	4	3
Mass Reduction Level 3 (%)	34	36	43	46	46	44	45	41	41	39
Mass Reduction Level 4 (%)	12	12	14	14	14	17	17	21	23	27
Mass Reduction Level 5 (%)	1	1	1	1	1	2	2	2	2	2
Avg Curb Weight - Fleet (pounds)	4,032	4,040	4,033	4,037	4,039	4,036	4,035	4,027	4,025	4,012
Diff. from Reference Baseline - Fleet (pounds)	0	0	0	0	0	3	6	10	11	22

Table 540 - Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Total) Light Truck Fleet, Alternative PC2LT002

Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Total) Light Truck Fleet, Alternative PC2LT002										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Mass Reduction Level 0 (%)	20	18	12	10	9	9	9	5	4	3
Mass Reduction Level 1 (%)	21	23	26	27	27	27	28	31	32	33
Mass Reduction Level 2 (%)	13	13	12	6	6	4	3	2	2	2
Mass Reduction Level 3 (%)	41	41	46	52	52	53	52	52	52	45
Mass Reduction Level 4 (%)	5	5	5	5	5	6	8	10	10	17
Mass Reduction Level 5 (%)	0	0	0	0	0	0	0	0	0	0
Avg Curb Weight - Fleet (pounds)	4,032	4,040	4,033	4,037	4,039	4,036	4,035	4,027	4,025	4,012
Diff. from Reference Baseline - Fleet (pounds)	0	0	0	0	0	3	6	10	11	22

Table 541 - Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Total) Domestic Car Fleet, Alternative PC2LT002

Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Total) Domestic Car Fleet, Alternative PC2LT002										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Mass Reduction Level 0 (%)	4	4	4	3	2	2	2	1	1	1
Mass Reduction Level 1 (%)	19	19	13	12	13	13	13	13	13	11
Mass Reduction Level 2 (%)	20	15	13	8	7	6	6	6	5	4
Mass Reduction Level 3 (%)	39	44	50	57	57	54	54	51	52	50
Mass Reduction Level 4 (%)	15	15	17	17	18	21	21	25	26	30
Mass Reduction Level 5 (%)	3	3	3	3	3	3	3	3	3	3
Avg Curb Weight - Fleet (pounds)	4,032	4,040	4,033	4,037	4,039	4,036	4,035	4,027	4,025	4,012
Diff. from Reference Baseline - Fleet (pounds)	0	0	0	0	0	3	6	10	11	22

Table 542 - Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Total) Imported Car Fleet, Alternative PC2LT002

Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Total) Imported Car Fleet, Alternative PC2LT002										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Mass Reduction Level 0 (%)	17	17	16	14	10	8	6	6	5	5
Mass Reduction Level 1 (%)	36	36	36	38	41	42	40	40	40	39
Mass Reduction Level 2 (%)	8	8	3	3	3	3	3	3	3	3
Mass Reduction Level 3 (%)	29	29	35	35	35	35	37	32	30	28
Mass Reduction Level 4 (%)	10	10	10	10	10	12	14	17	20	24
Mass Reduction Level 5 (%)	0	0	0	0	0	0	1	2	2	2
Avg Curb Weight - Fleet (pounds)	4,032	4,040	4,033	4,037	4,039	4,036	4,035	4,027	4,025	4,012
Diff. from Reference Baseline - Fleet (pounds)	0	0	0	0	0	3	6	10	11	22

Table 543 - Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Total) Total Fleet, Alternative PC1LT3

Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Total) Total Fleet, Alternative PC1LT3										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Mass Reduction Level 0 (%)	16	15	11	9	8	8	7	4	4	3
Mass Reduction Level 1 (%)	24	25	25	26	27	27	26	27	26	26
Mass Reduction Level 2 (%)	13	13	10	6	6	4	3	3	3	3
Mass Reduction Level 3 (%)	38	39	45	50	50	47	48	47	49	44
Mass Reduction Level 4 (%)	8	8	8	8	8	13	15	18	19	24
Mass Reduction Level 5 (%)	1	1	1	1	1	1	1	1	1	1
Avg Curb Weight - Fleet (pounds)	4,032	4,040	4,033	4,037	4,039	4,028	4,023	4,012	4,006	3,993
Diff. from Reference Baseline - Fleet (pounds)	0	0	0	0	0	11	18	25	30	41

Table 544 - Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Total) Passenger Car Fleet, Alternative PC1LT3

Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Total) Passenger Car Fleet, Alternative PC1LT3										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Mass Reduction Level 0 (%)	10	10	10	9	6	5	4	3	3	3
Mass Reduction Level 1 (%)	28	28	25	25	27	28	25	25	25	23
Mass Reduction Level 2 (%)	14	11	8	6	5	5	5	5	4	3
Mass Reduction Level 3 (%)	34	36	43	46	46	45	46	44	45	43
Mass Reduction Level 4 (%)	12	12	14	14	14	16	19	21	22	25
Mass Reduction Level 5 (%)	1	1	1	1	1	2	2	2	2	2
Avg Curb Weight - Fleet (pounds)	4,032	4,040	4,033	4,037	4,039	4,028	4,023	4,012	4,006	3,993
Diff. from Reference Baseline - Fleet (pounds)	0	0	0	0	0	11	18	25	30	41

Table 545 - Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Total) Light Truck Fleet, Alternative PC1LT3

Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Total) Light Truck Fleet, Alternative PC1LT3										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Mass Reduction Level 0 (%)	20	18	12	10	9	9	9	5	4	3
Mass Reduction Level 1 (%)	21	23	26	27	27	27	27	28	26	27
Mass Reduction Level 2 (%)	13	13	12	6	6	4	3	2	2	2
Mass Reduction Level 3 (%)	41	41	46	52	52	47	48	48	51	44
Mass Reduction Level 4 (%)	5	5	5	5	5	12	13	17	17	24
Mass Reduction Level 5 (%)	0	0	0	0	0	0	0	0	0	0
Avg Curb Weight - Fleet (pounds)	4,032	4,040	4,033	4,037	4,039	4,028	4,023	4,012	4,006	3,993
Diff. from Reference Baseline - Fleet (pounds)	0	0	0	0	0	11	18	25	30	41

Table 546 - Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Total) Domestic Car Fleet, Alternative PC1LT3

Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Total) Domestic Car Fleet, Alternative PC1LT3										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Mass Reduction Level 0 (%)	4	4	4	3	2	2	2	1	1	1
Mass Reduction Level 1 (%)	19	19	13	12	13	13	13	13	12	10
Mass Reduction Level 2 (%)	20	15	13	8	7	6	6	6	5	4
Mass Reduction Level 3 (%)	39	44	50	57	57	54	54	51	52	51
Mass Reduction Level 4 (%)	15	15	17	17	18	22	22	26	27	30
Mass Reduction Level 5 (%)	3	3	3	3	3	3	3	3	3	3
Avg Curb Weight - Fleet (pounds)	4,032	4,040	4,033	4,037	4,039	4,028	4,023	4,012	4,006	3,993
Diff. from Reference Baseline - Fleet (pounds)	0	0	0	0	0	11	18	25	30	41

Table 547 - Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Total) Imported Car Fleet, Alternative PC1LT3

Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Total) Imported Car Fleet, Alternative PC1LT3										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Mass Reduction Level 0 (%)	17	17	16	14	10	8	6	6	5	5
Mass Reduction Level 1 (%)	36	36	36	38	41	42	36	37	38	36
Mass Reduction Level 2 (%)	8	8	3	3	3	3	3	3	3	3
Mass Reduction Level 3 (%)	29	29	35	35	35	36	38	37	37	36
Mass Reduction Level 4 (%)	10	10	10	10	10	11	16	17	17	20
Mass Reduction Level 5 (%)	0	0	0	0	0	0	0	0	0	0
Avg Curb Weight - Fleet (pounds)	4,032	4,040	4,033	4,037	4,039	4,028	4,023	4,012	4,006	3,993
Diff. from Reference Baseline - Fleet (pounds)	0	0	0	0	0	11	18	25	30	41

Table 548 - Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Total) Total Fleet, Alternative PC2LT4

Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Total) Total Fleet, Alternative PC2LT4										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Mass Reduction Level 0 (%)	16	15	11	9	8	8	7	4	4	3
Mass Reduction Level 1 (%)	24	25	25	26	27	28	26	27	25	26
Mass Reduction Level 2 (%)	13	13	10	6	6	4	3	3	3	3
Mass Reduction Level 3 (%)	38	39	45	50	50	46	46	45	46	41
Mass Reduction Level 4 (%)	8	8	8	8	8	13	16	20	21	27
Mass Reduction Level 5 (%)	1	1	1	1	1	1	1	1	1	1
Avg Curb Weight - Fleet (pounds)	4,032	4,040	4,033	4,037	4,039	4,029	4,022	4,010	3,999	3,985
Diff. from Reference Baseline - Fleet (pounds)	0	0	0	0	0	10	19	27	37	49

Table 549 - Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Total) Passenger Car Fleet, Alternative PC2LT4

Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Total) Passenger Car Fleet, Alternative PC2LT4										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Mass Reduction Level 0 (%)	10	10	10	9	6	5	4	3	3	3
Mass Reduction Level 1 (%)	28	28	25	25	27	28	25	25	25	23
Mass Reduction Level 2 (%)	14	11	8	6	5	5	5	5	4	3
Mass Reduction Level 3 (%)	34	36	43	46	46	44	45	41	41	39
Mass Reduction Level 4 (%)	12	12	14	14	14	17	19	23	25	29
Mass Reduction Level 5 (%)	1	1	1	1	1	2	2	2	2	2
Avg Curb Weight - Fleet (pounds)	4,032	4,040	4,033	4,037	4,039	4,029	4,022	4,010	3,999	3,985
Diff. from Reference Baseline - Fleet (pounds)	0	0	0	0	0	10	19	27	37	49

Table 550 - Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Total) Light Truck Fleet, Alternative PC2LT4

Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Total) Light Truck Fleet, Alternative PC2LT4										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Mass Reduction Level 0 (%)	20	18	12	10	9	9	9	5	4	3
Mass Reduction Level 1 (%)	21	23	26	27	27	27	27	27	25	27
Mass Reduction Level 2 (%)	13	13	12	6	6	4	3	2	2	2
Mass Reduction Level 3 (%)	41	41	46	52	52	47	47	47	49	41
Mass Reduction Level 4 (%)	5	5	5	5	5	12	15	18	19	26
Mass Reduction Level 5 (%)	0	0	0	0	0	0	0	0	1	1
Avg Curb Weight - Fleet (pounds)	4,032	4,040	4,033	4,037	4,039	4,029	4,022	4,010	3,999	3,985
Diff. from Reference Baseline - Fleet (pounds)	0	0	0	0	0	10	19	27	37	49

Table 551 - Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Total) Domestic Car Fleet, Alternative PC2LT4

Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Total) Domestic Car Fleet, Alternative PC2LT4										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Mass Reduction Level 0 (%)	4	4	4	3	2	2	2	1	1	1
Mass Reduction Level 1 (%)	19	19	13	12	13	13	13	13	13	11
Mass Reduction Level 2 (%)	20	15	13	8	7	6	6	6	5	4
Mass Reduction Level 3 (%)	39	44	50	57	57	54	54	51	52	50
Mass Reduction Level 4 (%)	15	15	17	17	18	21	21	25	26	30
Mass Reduction Level 5 (%)	3	3	3	3	3	3	3	3	3	3
Avg Curb Weight - Fleet (pounds)	4,032	4,040	4,033	4,037	4,039	4,029	4,022	4,010	3,999	3,985
Diff. from Reference Baseline - Fleet (pounds)	0	0	0	0	0	10	19	27	37	49

Table 552 - Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Total) Imported Car Fleet, Alternative PC2LT4

Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Total) Imported Car Fleet, Alternative PC2LT4										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Mass Reduction Level 0 (%)	17	17	16	14	10	8	6	6	5	5
Mass Reduction Level 1 (%)	36	36	36	38	41	42	36	37	37	36
Mass Reduction Level 2 (%)	8	8	3	3	3	3	3	3	3	3
Mass Reduction Level 3 (%)	29	29	35	35	35	35	37	32	30	28
Mass Reduction Level 4 (%)	10	10	10	10	10	12	17	21	23	27
Mass Reduction Level 5 (%)	0	0	0	0	0	0	1	2	2	2
Avg Curb Weight - Fleet (pounds)	4,032	4,040	4,033	4,037	4,039	4,029	4,022	4,010	3,999	3,985
Diff. from Reference Baseline - Fleet (pounds)	0	0	0	0	0	10	19	27	37	49

Table 553 - Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Total) Total Fleet, Alternative PC3LT5

Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Total) Total Fleet, Alternative PC3LT5										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Mass Reduction Level 0 (%)	16	15	11	9	8	8	7	4	4	3
Mass Reduction Level 1 (%)	24	25	25	26	27	27	26	26	24	23
Mass Reduction Level 2 (%)	13	13	10	6	6	4	3	3	3	3
Mass Reduction Level 3 (%)	38	39	45	50	50	42	40	38	38	31
Mass Reduction Level 4 (%)	8	8	8	8	8	17	23	27	30	38
Mass Reduction Level 5 (%)	1	1	1	1	1	1	1	1	2	2
Avg Curb Weight - Fleet (pounds)	4,032	4,040	4,033	4,037	4,039	4,023	4,013	3,999	3,983	3,963
Diff. from Reference Baseline - Fleet (pounds)	0	0	0	0	0	16	28	38	53	71

Table 554 - Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Total) Passenger Car Fleet, Alternative PC3LT5

Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Total) Passenger Car Fleet, Alternative PC3LT5										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Mass Reduction Level 0 (%)	10	10	10	9	6	5	4	3	3	3
Mass Reduction Level 1 (%)	28	28	25	25	27	28	24	24	24	22
Mass Reduction Level 2 (%)	14	11	8	6	5	5	5	5	4	3
Mass Reduction Level 3 (%)	34	36	43	46	46	41	37	32	32	28
Mass Reduction Level 4 (%)	12	12	14	14	14	19	28	33	34	40
Mass Reduction Level 5 (%)	1	1	1	1	1	2	2	3	3	3
Avg Curb Weight - Fleet (pounds)	4,032	4,040	4,033	4,037	4,039	4,023	4,013	3,999	3,983	3,963
Diff. from Reference Baseline - Fleet (pounds)	0	0	0	0	0	16	28	38	53	71

Table 555 - Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Total) Light Truck Fleet, Alternative PC3LT5

Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Total) Light Truck Fleet, Alternative PC3LT5										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Mass Reduction Level 0 (%)	20	18	12	10	9	9	9	5	4	3
Mass Reduction Level 1 (%)	21	23	26	27	27	27	27	27	24	24
Mass Reduction Level 2 (%)	13	13	12	6	6	4	3	2	2	2
Mass Reduction Level 3 (%)	41	41	46	52	52	43	42	41	42	33
Mass Reduction Level 4 (%)	5	5	5	5	5	16	20	24	27	37
Mass Reduction Level 5 (%)	0	0	0	0	0	0	0	0	1	2
Avg Curb Weight - Fleet (pounds)	4,032	4,040	4,033	4,037	4,039	4,023	4,013	3,999	3,983	3,963
Diff. from Reference Baseline - Fleet (pounds)	0	0	0	0	0	16	28	38	53	71

Table 556 - Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Total) Domestic Car Fleet, Alternative PC3LT5

Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Total) Domestic Car Fleet, Alternative PC3LT5										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Mass Reduction Level 0 (%)	4	4	4	3	2	2	2	1	1	1
Mass Reduction Level 1 (%)	19	19	13	12	13	13	13	13	12	10
Mass Reduction Level 2 (%)	20	15	13	8	7	6	6	6	5	4
Mass Reduction Level 3 (%)	39	44	50	57	57	51	42	39	42	40
Mass Reduction Level 4 (%)	15	15	17	17	18	24	33	37	37	40
Mass Reduction Level 5 (%)	3	3	3	3	3	4	4	4	4	4
Avg Curb Weight - Fleet (pounds)	4,032	4,040	4,033	4,037	4,039	4,023	4,013	3,999	3,983	3,963
Diff. from Reference Baseline - Fleet (pounds)	0	0	0	0	0	16	28	38	53	71

Table 557 - Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Total) Imported Car Fleet, Alternative PC3LT5

Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Total) Imported Car Fleet, Alternative PC3LT5										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Mass Reduction Level 0 (%)	17	17	16	14	10	8	6	6	5	5
Mass Reduction Level 1 (%)	36	36	36	38	41	42	35	36	35	34
Mass Reduction Level 2 (%)	8	8	3	3	3	3	3	3	3	3
Mass Reduction Level 3 (%)	29	29	35	35	35	32	31	24	22	16
Mass Reduction Level 4 (%)	10	10	10	10	10	15	23	29	32	41
Mass Reduction Level 5 (%)	0	0	0	0	0	0	1	2	2	2
Avg Curb Weight - Fleet (pounds)	4,032	4,040	4,033	4,037	4,039	4,023	4,013	3,999	3,983	3,963
Diff. from Reference Baseline - Fleet (pounds)	0	0	0	0	0	16	28	38	53	71

Table 558 - Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Total) Total Fleet, Alternative PC6LT8

Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Total) Total Fleet, Alternative PC6LT8										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Mass Reduction Level 0 (%)	16	15	11	9	8	8	7	4	4	3
Mass Reduction Level 1 (%)	24	25	25	26	27	27	26	26	22	22
Mass Reduction Level 2 (%)	13	13	10	6	6	4	3	3	3	2
Mass Reduction Level 3 (%)	38	39	45	50	50	42	41	38	40	32
Mass Reduction Level 4 (%)	8	8	8	8	8	17	22	26	29	38
Mass Reduction Level 5 (%)	1	1	1	1	1	1	1	2	3	3
Avg Curb Weight - Fleet (pounds)	4,032	4,040	4,033	4,037	4,039	4,023	4,014	4,000	3,981	3,959
Diff. from Reference Baseline - Fleet (pounds)	0	0	0	0	0	16	27	37	55	75

Table 559 - Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Total) Passenger Car Fleet, Alternative PC6LT8

Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Total) Passenger Car Fleet, Alternative PC6LT8										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Mass Reduction Level 0 (%)	10	10	10	9	6	5	4	3	3	3
Mass Reduction Level 1 (%)	28	28	25	25	27	28	24	24	24	22
Mass Reduction Level 2 (%)	14	11	8	6	5	5	5	5	4	3
Mass Reduction Level 3 (%)	34	36	43	46	46	41	38	33	33	27
Mass Reduction Level 4 (%)	12	12	14	14	14	19	26	31	32	40
Mass Reduction Level 5 (%)	1	1	1	1	1	3	3	4	4	4
Avg Curb Weight - Fleet (pounds)	4,032	4,040	4,033	4,037	4,039	4,023	4,014	4,000	3,981	3,959
Diff. from Reference Baseline - Fleet (pounds)	0	0	0	0	0	16	27	37	55	75

Table 560 - Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Total) Light Truck Fleet, Alternative PC6LT8

Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Total) Light Truck Fleet, Alternative PC6LT8										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Mass Reduction Level 0 (%)	20	18	12	10	9	9	9	5	4	3
Mass Reduction Level 1 (%)	21	23	26	27	27	27	27	27	22	22
Mass Reduction Level 2 (%)	13	13	12	6	6	4	3	2	2	2
Mass Reduction Level 3 (%)	41	41	46	52	52	43	42	41	43	34
Mass Reduction Level 4 (%)	5	5	5	5	5	16	20	24	27	37
Mass Reduction Level 5 (%)	0	0	0	0	0	1	1	1	2	2
Avg Curb Weight - Fleet (pounds)	4,032	4,040	4,033	4,037	4,039	4,023	4,014	4,000	3,981	3,959
Diff. from Reference Baseline - Fleet (pounds)	0	0	0	0	0	16	27	37	55	75

Table 561 - Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Total) Domestic Car Fleet, Alternative PC6LT8

Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Total) Domestic Car Fleet, Alternative PC6LT8										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Mass Reduction Level 0 (%)	4	4	4	3	2	2	2	1	1	1
Mass Reduction Level 1 (%)	19	19	13	12	13	13	13	13	12	10
Mass Reduction Level 2 (%)	20	15	13	8	7	6	6	6	5	4
Mass Reduction Level 3 (%)	39	44	50	57	57	51	42	39	42	36
Mass Reduction Level 4 (%)	15	15	17	17	18	24	33	37	37	44
Mass Reduction Level 5 (%)	3	3	3	3	3	4	4	4	4	4
Avg Curb Weight - Fleet (pounds)	4,032	4,040	4,033	4,037	4,039	4,023	4,014	4,000	3,981	3,959
Diff. from Reference Baseline - Fleet (pounds)	0	0	0	0	0	16	27	37	55	75

Table 562 - Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Total) Imported Car Fleet, Alternative PC6LT8

Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Total) Imported Car Fleet, Alternative PC6LT8										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Mass Reduction Level 0 (%)	17	17	16	14	10	8	6	6	5	5
Mass Reduction Level 1 (%)	36	36	36	38	41	42	35	36	35	33
Mass Reduction Level 2 (%)	8	8	3	3	3	3	3	3	3	2
Mass Reduction Level 3 (%)	29	29	35	35	35	32	34	27	25	19
Mass Reduction Level 4 (%)	10	10	10	10	10	13	19	24	28	37
Mass Reduction Level 5 (%)	0	0	0	0	0	1	2	4	4	4
Avg Curb Weight - Fleet (pounds)	4,032	4,040	4,033	4,037	4,039	4,023	4,014	4,000	3,981	3,959
Diff. from Reference Baseline - Fleet (pounds)	0	0	0	0	0	16	27	37	55	75

Table 563 - Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (BMW) Total Fleet, Alternative PC2LT002

Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (BMW) Total Fleet, Alternative PC2LT002										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Mass Reduction Level 0 (%)	43	43	42	33	24	14	13	12	13	14
Mass Reduction Level 1 (%)	35	35	35	44	53	63	64	64	60	59
Mass Reduction Level 2 (%)	22	23	23	23	23	23	23	23	23	23
Mass Reduction Level 3 (%)	0	0	0	0	0	0	0	0	3	3
Mass Reduction Level 4 (%)	0	0	0	0	0	0	0	1	1	0
Mass Reduction Level 5 (%)	0	0	0	0	0	0	0	0	0	0
Avg Curb Weight - Fleet (pounds)	4,301	4,313	4,319	4,323	4,316	4,306	4,308	4,309	4,307	4,308
Diff. from Reference Baseline - Fleet (pounds)	0	0	0	0	0	0	0	0	3	4

Table 564 - Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Ford) Total Fleet, Alternative PC2LT002

Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Ford) Total Fleet, Alternative PC2LT002										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Mass Reduction Level 0 (%)	13	9	9	9	9	9	9	0	0	0
Mass Reduction Level 1 (%)	6	10	6	6	6	6	6	15	15	15
Mass Reduction Level 2 (%)	7	7	0	0	0	0	0	0	0	0
Mass Reduction Level 3 (%)	64	65	75	75	75	63	56	50	50	50
Mass Reduction Level 4 (%)	10	10	10	10	10	22	29	35	35	35
Mass Reduction Level 5 (%)	0	0	0	0	0	0	0	0	0	0
Avg Curb Weight - Fleet (pounds)	4,399	4,395	4,386	4,390	4,392	4,376	4,368	4,344	4,345	4,345
Diff. from Reference Baseline - Fleet (pounds)	0	0	0	0	0	16	25	35	34	34

Table 565 - Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (GM) Total Fleet, Alternative PC2LT002

Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (GM) Total Fleet, Alternative PC2LT002										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Mass Reduction Level 0 (%)	4	4	3	3	1	1	1	1	1	1
Mass Reduction Level 1 (%)	36	36	11	6	8	8	8	7	7	6
Mass Reduction Level 2 (%)	45	46	46	18	18	5	5	5	5	4
Mass Reduction Level 3 (%)	15	15	41	73	74	86	86	77	77	43
Mass Reduction Level 4 (%)	0	0	0	0	0	0	0	9	9	45
Mass Reduction Level 5 (%)	0	0	0	0	0	0	0	1	1	1
Avg Curb Weight - Fleet (pounds)	4,310	4,322	4,293	4,274	4,277	4,266	4,270	4,260	4,260	4,193
Diff. from Reference Baseline - Fleet (pounds)	0	0	0	0	0	0	0	0	0	63

Table 566 - Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Honda) Total Fleet, Alternative PC2LT002

Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Honda) Total Fleet, Alternative PC2LT002										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Mass Reduction Level 0 (%)	2	2	2	1	1	0	0	0	0	0
Mass Reduction Level 1 (%)	0	0	0	0	0	1	1	1	1	1
Mass Reduction Level 2 (%)	12	4	4	4	4	4	4	4	4	4
Mass Reduction Level 3 (%)	86	95	95	95	95	95	95	95	95	95
Mass Reduction Level 4 (%)	0	0	0	0	0	0	0	0	0	0
Mass Reduction Level 5 (%)	0	0	0	0	0	0	0	0	0	0
Avg Curb Weight - Fleet (pounds)	3,559	3,565	3,571	3,582	3,586	3,587	3,591	3,593	3,593	3,593
Diff. from Reference Baseline - Fleet (pounds)	0	0	0	0	0	0	0	-1	-1	0

Table 567 - Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Hyundai) Total Fleet, Alternative PC2LT002

Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Hyundai) Total Fleet, Alternative PC2LT002										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Mass Reduction Level 0 (%)	1	1	0	0	0	0	0	0	0	0
Mass Reduction Level 1 (%)	6	6	6	6	6	2	2	2	2	2
Mass Reduction Level 2 (%)	12	12	0	0	0	0	0	0	0	0
Mass Reduction Level 3 (%)	65	66	78	79	79	79	79	70	70	71
Mass Reduction Level 4 (%)	16	16	16	15	15	19	19	28	28	27
Mass Reduction Level 5 (%)	0	0	0	0	0	0	0	0	0	0
Avg Curb Weight - Fleet (pounds)	3,524	3,532	3,527	3,537	3,540	3,535	3,538	3,528	3,529	3,529
Diff. from Reference Baseline - Fleet (pounds)	0	0	0	0	0	7	7	18	17	17

Table 568 - Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (KIA) Total Fleet, Alternative PC2LT002

Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (KIA) Total Fleet, Alternative PC2LT002										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Mass Reduction Level 0 (%)	0	0	0	0	0	0	0	0	0	0
Mass Reduction Level 1 (%)	0	0	0	0	0	0	0	0	0	0
Mass Reduction Level 2 (%)	3	3	0	0	0	0	0	0	0	0
Mass Reduction Level 3 (%)	83	84	86	87	87	87	72	70	56	31
Mass Reduction Level 4 (%)	14	14	14	13	13	13	25	25	40	65
Mass Reduction Level 5 (%)	0	0	0	0	0	0	3	4	4	4
Avg Curb Weight - Fleet (pounds)	3,485	3,495	3,498	3,510	3,514	3,516	3,497	3,494	3,475	3,442
Diff. from Reference Baseline - Fleet (pounds)	0	0	0	0	0	0	23	26	46	79

Table 569 - Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (JLR) Total Fleet, Alternative PC2LT002

Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (JLR) Total Fleet, Alternative PC2LT002										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Mass Reduction Level 0 (%)	1	0	0	0	0	0	0	0	0	0
Mass Reduction Level 1 (%)	62	62	62	62	62	62	62	62	62	62
Mass Reduction Level 2 (%)	18	18	18	18	18	18	18	18	18	18
Mass Reduction Level 3 (%)	18	19	19	19	19	19	19	19	19	19
Mass Reduction Level 4 (%)	1	1	1	1	1	1	1	1	1	1
Mass Reduction Level 5 (%)	0	0	0	0	0	0	0	0	0	0
Avg Curb Weight - Fleet (pounds)	4,736	4,734	4,735	4,736	4,737	4,737	4,738	4,738	4,738	4,738
Diff. from Reference Baseline - Fleet (pounds)	0	0	0	0	0	0	0	0	0	0

Table 570 - Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Karma) Total Fleet, Alternative PC2LT002

Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Karma) Total Fleet, Alternative PC2LT002										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Mass Reduction Level 0 (%)	100	100	100	100	0	0	0	0	0	0
Mass Reduction Level 1 (%)	0	0	0	0	100	100	100	100	100	100
Mass Reduction Level 2 (%)	0	0	0	0	0	0	0	0	0	0
Mass Reduction Level 3 (%)	0	0	0	0	0	0	0	0	0	0
Mass Reduction Level 4 (%)	0	0	0	0	0	0	0	0	0	0
Mass Reduction Level 5 (%)	0	0	0	0	0	0	0	0	0	0
Avg Curb Weight - Fleet (pounds)	5,250	5,250	5,250	5,250	5,064	5,064	5,064	5,064	5,064	5,064
Diff. from Reference Baseline - Fleet (pounds)	0	0	0	0	0	0	0	0	0	0

Table 571 - Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Lucid) Total Fleet, Alternative PC2LT002

Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Lucid) Total Fleet, Alternative PC2LT002										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Mass Reduction Level 0 (%)	0	0	0	0	0	0	0	0	0	0
Mass Reduction Level 1 (%)	0	0	0	0	0	0	0	0	0	0
Mass Reduction Level 2 (%)	0	0	0	0	0	0	0	0	0	0
Mass Reduction Level 3 (%)	100	100	100	100	100	100	100	100	100	100
Mass Reduction Level 4 (%)	0	0	0	0	0	0	0	0	0	0
Mass Reduction Level 5 (%)	0	0	0	0	0	0	0	0	0	0
Avg Curb Weight - Fleet (pounds)	5,220	5,220	5,220	5,220	5,220	5,220	5,220	5,220	5,220	5,220
Diff. from Reference Baseline - Fleet (pounds)	0	0	0	0	0	0	0	0	0	0

Table 572 - Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Mazda) Total Fleet, Alternative PC2LT002

Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Mazda) Total Fleet, Alternative PC2LT002										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Mass Reduction Level 0 (%)	47	0	0	0	0	0	0	0	0	0
Mass Reduction Level 1 (%)	15	62	63	63	63	63	64	64	64	64
Mass Reduction Level 2 (%)	0	0	0	0	0	0	0	0	0	0
Mass Reduction Level 3 (%)	34	34	34	33	33	33	33	33	33	33
Mass Reduction Level 4 (%)	4	3	3	3	3	3	3	3	3	3
Mass Reduction Level 5 (%)	0	0	0	0	0	0	0	0	0	0
Avg Curb Weight - Fleet (pounds)	3,651	3,591	3,593	3,598	3,599	3,600	3,602	3,602	3,602	3,602
Diff. from Reference Baseline - Fleet (pounds)	0	0	0	0	0	0	0	0	0	0

Table 573 - Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Mercedes-Benz) Total Fleet, Alternative PC2LT002

Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Mercedes-Benz) Total Fleet, Alternative PC2LT002										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Mass Reduction Level 0 (%)	54	54	54	54	43	37	16	10	10	12
Mass Reduction Level 1 (%)	0	0	0	0	11	16	37	43	43	41
Mass Reduction Level 2 (%)	18	17	17	17	17	17	17	17	17	17
Mass Reduction Level 3 (%)	0	0	0	0	0	1	1	1	1	1
Mass Reduction Level 4 (%)	28	28	28	28	28	28	29	29	29	29
Mass Reduction Level 5 (%)	1	1	1	1	1	1	1	1	1	1
Avg Curb Weight - Fleet (pounds)	4,266	4,272	4,274	4,281	4,269	4,259	4,224	4,216	4,216	4,220
Diff. from Reference Baseline - Fleet (pounds)	0	0	0	0	0	0	37	36	36	33

Table 574 - Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Mitsubishi) Total Fleet, Alternative PC2LT002

Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Mitsubishi) Total Fleet, Alternative PC2LT002										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Mass Reduction Level 0 (%)	81	81	81	82	82	82	36	36	24	15
Mass Reduction Level 1 (%)	0	0	0	0	0	0	47	47	58	68
Mass Reduction Level 2 (%)	0	0	0	0	0	0	0	0	0	0
Mass Reduction Level 3 (%)	19	19	19	18	18	18	18	18	18	18
Mass Reduction Level 4 (%)	0	0	0	0	0	0	0	0	0	0
Mass Reduction Level 5 (%)	0	0	0	0	0	0	0	0	0	0
Avg Curb Weight - Fleet (pounds)	3,295	3,302	3,306	3,314	3,317	3,319	3,260	3,261	3,248	3,237
Diff. from Reference Baseline - Fleet (pounds)	0	0	0	0	0	0	61	61	74	85

Table 575 - Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Nissan) Total Fleet, Alternative PC2LT002

Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Nissan) Total Fleet, Alternative PC2LT002										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Mass Reduction Level 0 (%)	17	15	15	14	13	13	13	13	3	3
Mass Reduction Level 1 (%)	40	42	42	43	44	44	44	44	55	54
Mass Reduction Level 2 (%)	44	43	38	25	22	20	9	6	2	3
Mass Reduction Level 3 (%)	0	0	0	12	12	12	23	26	30	29
Mass Reduction Level 4 (%)	0	0	6	6	9	9	9	9	9	9
Mass Reduction Level 5 (%)	0	0	0	0	0	2	2	2	2	2
Avg Curb Weight - Fleet (pounds)	3,740	3,748	3,746	3,752	3,750	3,748	3,741	3,741	3,721	3,722
Diff. from Reference Baseline - Fleet (pounds)	0	0	0	0	0	0	0	-2	-2	0

Table 576 - Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Stellantis) Total Fleet, Alternative PC2LT002

Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Stellantis) Total Fleet, Alternative PC2LT002										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Mass Reduction Level 0 (%)	22	20	20	14	13	13	13	0	0	1
Mass Reduction Level 1 (%)	43	45	45	51	52	52	52	57	56	53
Mass Reduction Level 2 (%)	1	1	1	1	1	1	1	1	1	1
Mass Reduction Level 3 (%)	21	21	21	21	21	21	21	29	29	28
Mass Reduction Level 4 (%)	13	13	13	14	14	14	14	14	15	18
Mass Reduction Level 5 (%)	0	0	0	0	0	0	0	0	0	0
Avg Curb Weight - Fleet (pounds)	4,539	4,540	4,542	4,534	4,535	4,536	4,538	4,505	4,502	4,494
Diff. from Reference Baseline - Fleet (pounds)	0	0	0	0	0	0	0	22	23	28

Table 577 - Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Subaru) Total Fleet, Alternative PC2LT002

Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Subaru) Total Fleet, Alternative PC2LT002										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Mass Reduction Level 0 (%)	0	0	0	0	0	0	0	0	0	0
Mass Reduction Level 1 (%)	99	99	99	99	99	99	99	99	99	99
Mass Reduction Level 2 (%)	1	1	1	1	1	1	1	1	1	1
Mass Reduction Level 3 (%)	0	0	0	0	0	0	0	0	0	0
Mass Reduction Level 4 (%)	0	0	0	0	0	0	0	0	0	0
Mass Reduction Level 5 (%)	0	0	0	0	0	0	0	0	0	0
Avg Curb Weight - Fleet (pounds)	3,634	3,637	3,638	3,641	3,642	3,643	3,644	3,644	3,644	3,644
Diff. from Reference Baseline - Fleet (pounds)	0	0	0	0	0	0	0	0	0	0

Table 578 - Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Tesla) Total Fleet, Alternative PC2LT002

Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Tesla) Total Fleet, Alternative PC2LT002										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Mass Reduction Level 0 (%)	0	0	0	0	0	0	0	0	0	0
Mass Reduction Level 1 (%)	0	0	0	0	0	0	0	0	0	0
Mass Reduction Level 2 (%)	0	0	0	0	0	0	0	0	0	0
Mass Reduction Level 3 (%)	0	0	0	0	0	0	0	0	0	0
Mass Reduction Level 4 (%)	85	85	85	85	85	85	85	85	85	85
Mass Reduction Level 5 (%)	15	15	15	15	15	15	15	15	15	15
Avg Curb Weight - Fleet (pounds)	4,300	4,300	4,300	4,300	4,300	4,301	4,301	4,301	4,301	4,301
Diff. from Reference Baseline - Fleet (pounds)	0	0	0	0	0	0	0	0	0	0

Table 579 - Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Toyota) Total Fleet, Alternative PC2LT002

Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Toyota) Total Fleet, Alternative PC2LT002										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Mass Reduction Level 0 (%)	25	25	8	8	8	8	8	8	8	3
Mass Reduction Level 1 (%)	20	20	37	37	37	37	37	37	37	42
Mass Reduction Level 2 (%)	0	0	0	0	0	0	0	0	0	0
Mass Reduction Level 3 (%)	55	55	55	55	55	55	55	55	55	55
Mass Reduction Level 4 (%)	0	0	0	0	0	0	0	0	0	0
Mass Reduction Level 5 (%)	0	0	0	0	0	0	0	0	0	0
Avg Curb Weight - Fleet (pounds)	3,924	3,936	3,913	3,926	3,930	3,933	3,937	3,939	3,939	3,929
Diff. from Reference Baseline - Fleet (pounds)	0	0	0	0	0	0	-1	-2	-1	-1

Table 580 - Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Volvo) Total Fleet, Alternative PC2LT002

Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Volvo) Total Fleet, Alternative PC2LT002										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Mass Reduction Level 0 (%)	28	28	28	28	9	9	9	9	9	9
Mass Reduction Level 1 (%)	0	0	0	0	19	19	19	19	19	19
Mass Reduction Level 2 (%)	72	72	72	72	73	73	73	73	73	73
Mass Reduction Level 3 (%)	0	0	0	0	0	0	0	0	0	0
Mass Reduction Level 4 (%)	0	0	0	0	0	0	0	0	0	0
Mass Reduction Level 5 (%)	0	0	0	0	0	0	0	0	0	0
Avg Curb Weight - Fleet (pounds)	4,378	4,379	4,379	4,379	4,353	4,353	4,353	4,353	4,353	4,353
Diff. from Reference Baseline - Fleet (pounds)	0	0	0	0	0	0	0	0	0	0

Table 581 - Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (VWA) Total Fleet, Alternative PC2LT002

Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (VWA) Total Fleet, Alternative PC2LT002										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Mass Reduction Level 0 (%)	59	60	42	28	24	22	20	20	20	16
Mass Reduction Level 1 (%)	20	20	37	51	54	55	40	41	41	42
Mass Reduction Level 2 (%)	0	0	0	0	0	0	0	0	0	0
Mass Reduction Level 3 (%)	20	20	21	21	21	21	36	35	35	37
Mass Reduction Level 4 (%)	0	0	0	0	0	2	4	4	4	4
Mass Reduction Level 5 (%)	0	0	0	0	0	0	0	0	0	0
Avg Curb Weight - Fleet (pounds)	4,024	4,033	4,013	4,000	3,996	3,991	3,970	3,971	3,974	3,964
Diff. from Reference Baseline - Fleet (pounds)	0	0	0	0	0	4	24	23	22	25

Powertrain Technology Penetration Rate, by Alternative

Table 582 - Powertrain Technology Penetration Rate (%) for Manufacturer (Total), MY 2031 Total Fleet by Alternative

Powertrain Technology Penetration Rate (%) for Manufacturer (Total), MY 2031 Total Fleet by Alternative						
Alternative	No Action (Reference Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Non-Hybrid High Compression Engines	22	20	18	16	13	8
Cylinder Deactivation	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	23	17	13	9	8	5
Variable Geometry Turbo	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	29	21	17	12	10	5
Mild Hybrid	0.5	1.7	1.2	1.2	0.4	0.9
Strong Hybrid	22.9	27.5	33.4	37.1	38.7	43.5
Plug-In Hybrid	1.8	5.7	4.9	4.9	4.9	4.9
Battery Electric Vehicles (BEVs)	28.14	28.13	28.17	28.19	28.19	28.19
BEV 100 Mile Range	5.66	5.66	5.70	5.71	5.72	5.72
BEV 200 Mile Range	14.28	14.28	14.28	14.28	14.27	14.27
BEV 300 Mile Range	7.38	7.38	7.38	7.37	7.37	7.37
BEV 400 Mile Range	0.81	0.81	0.82	0.83	0.83	0.83
DCT Transmissions	0	0	0	0	0	0
CVT Transmissions	17	16	16	15	12	5
5-Speed Automatic	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0
8-Speed Automatic	15	8	6	1	1	0
9-Speed Automatic	0	0	0	0	0	0
10-Speed Automatic	12	12	9	9	7	7

Table 583 - Powertrain Technology Penetration Rate (%) for Manufacturer (Total), MY 2031 Passenger Car Fleet by Alternative

Powertrain Technology Penetration Rate (%) for Manufacturer (Total), MY 2031 Passenger Car Fleet by Alternative						
Alternative	No Action (Reference Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Non-Hybrid High Compression Engines	31	26	29	27	21	11
Cylinder Deactivation	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	20	12	15	12	9	2
Variable Geometry Turbo	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	24	14	18	15	11	3
Mild Hybrid	0.7	2.2	1.9	2.3	0.4	1.0
Strong Hybrid	8.2	19.0	14.5	19.6	25.6	35.8
Plug-In Hybrid	0.0	1.3	0.0	0.0	0.1	0.1
Battery Electric Vehicles (BEVs)	39.38	39.39	39.36	39.35	39.34	39.34
BEV 100 Mile Range	12.12	12.12	12.11	12.11	12.11	12.11
BEV 200 Mile Range	16.64	16.64	16.63	16.62	16.62	16.62
BEV 300 Mile Range	8.21	8.21	8.20	8.20	8.20	8.20
BEV 400 Mile Range	2.42	2.42	2.42	2.42	2.42	2.42
DCT Transmissions	0	0	0	0	0	0
CVT Transmissions	34	30	33	30	26	10
5-Speed Automatic	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0
8-Speed Automatic	13	3	5	2	1	0
9-Speed Automatic	0	0	0	0	0	0
10-Speed Automatic	2	3	5	4	3	1

Table 584 - Powertrain Technology Penetration Rate (%) for Manufacturer (Total), MY 2031 Light Truck Fleet by Alternative

Powertrain Technology Penetration Rate (%) for Manufacturer (Total), MY 2031 Light Truck Fleet by Alternative						
Alternative	No Action (Reference Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Non-Hybrid High Compression Engines	18	17	12	10	9	6
Cylinder Deactivation	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	24	19	12	8	7	6
Variable Geometry Turbo	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	31	24	16	11	9	6
Mild Hybrid	0.4	1.4	0.8	0.6	0.4	0.9
Strong Hybrid	30.4	31.8	43.1	46.2	45.5	47.5
Plug-In Hybrid	2.7	7.9	7.4	7.4	7.4	7.5
Battery Electric Vehicles (BEVs)	22.46	22.46	22.42	22.41	22.41	22.41
BEV 100 Mile Range	2.40	2.40	2.40	2.40	2.40	2.40
BEV 200 Mile Range	13.09	13.09	13.07	13.06	13.06	13.06
BEV 300 Mile Range	6.96	6.96	6.95	6.95	6.94	6.94
BEV 400 Mile Range	0.00	0.00	0.00	0.00	0.00	0.00
DCT Transmissions	0	0	0	0	0	0
CVT Transmissions	9	9	7	7	6	2
5-Speed Automatic	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0
8-Speed Automatic	16	10	6	1	1	0
9-Speed Automatic	0	0	0	0	0	0
10-Speed Automatic	17	17	11	11	9	10

Table 585 - Powertrain Technology Penetration Rate (%) for Manufacturer (Total), MY 2031 Domestic Car Fleet by Alternative

Powertrain Technology Penetration Rate (%) for Manufacturer (Total), MY 2031 Domestic Car Fleet by Alternative						
Alternative	No Action (Reference Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Non-Hybrid High Compression Engines	31	27	30	28	23	11
Cylinder Deactivation	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	20	9	13	9	8	1
Variable Geometry Turbo	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	24	14	15	14	13	5
Mild Hybrid	0.0	2.1	2.7	2.1	0.0	1.4
Strong Hybrid	8.0	19.6	15.7	21.7	23.8	38.7
Plug-In Hybrid	0.1	2.6	0.1	0.1	0.2	0.1
Battery Electric Vehicles (BEVs)	41.39	41.39	41.37	41.36	41.36	41.36
BEV 100 Mile Range	10.75	10.75	10.75	10.75	10.75	10.75
BEV 200 Mile Range	14.16	14.16	14.15	14.15	14.14	14.14
BEV 300 Mile Range	11.67	11.68	11.67	11.67	11.67	11.67
BEV 400 Mile Range	4.80	4.80	4.80	4.80	4.80	4.80
DCT Transmissions	0	0	0	0	0	0
CVT Transmissions	37	32	36	32	28	9
5-Speed Automatic	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0
8-Speed Automatic	10	2	2	0	0	0
9-Speed Automatic	0	0	0	0	0	0
10-Speed Automatic	2	2	4	4	2	2

Table 586 - Powertrain Technology Penetration Rate (%) for Manufacturer (Total), MY 2031 Imported Car Fleet by Alternative

Powertrain Technology Penetration Rate (%) for Manufacturer (Total), MY 2031 Imported Car Fleet by Alternative						
Alternative	No Action (Reference Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Non-Hybrid High Compression Engines	31	24	28	25	19	11
Cylinder Deactivation	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	20	15	18	15	11	2
Variable Geometry Turbo	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	25	14	21	15	8	1
Mild Hybrid	1.4	2.4	1.2	2.5	0.7	0.6
Strong Hybrid	8.4	18.4	13.3	17.6	27.3	33.0
Plug-In Hybrid	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	37.43	37.43	37.39	37.38	37.37	37.37
BEV 100 Mile Range	13.45	13.45	13.44	13.44	13.44	13.44
BEV 200 Mile Range	19.05	19.06	19.04	19.03	19.03	19.03
BEV 300 Mile Range	4.83	4.84	4.82	4.81	4.81	4.81
BEV 400 Mile Range	0.09	0.09	0.09	0.09	0.09	0.09
DCT Transmissions	0	0	0	0	0	0
CVT Transmissions	30	29	30	29	24	11
5-Speed Automatic	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0
8-Speed Automatic	16	5	8	4	2	0
9-Speed Automatic	0	0	0	0	0	0
10-Speed Automatic	2	4	5	5	4	1

Table 587 - Powertrain Technology Penetration Rate (%) for Manufacturer (BMW), MY 2031 Total Fleet by Alternative

Powertrain Technology Penetration Rate (%) for Manufacturer (BMW), MY 2031 Total Fleet by Alternative						
Alternative	No Action (Reference Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Non-Hybrid High Compression Engines	0	0	0	0	0	0
Cylinder Deactivation	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	24	21	13	10	5	0
Variable Geometry Turbo	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	21	18	10	7	5	0
Mild Hybrid	0.0	0.0	0.0	0.0	0.0	0.0
Strong Hybrid	39.7	42.7	50.7	53.9	58.9	63.2
Plug-In Hybrid	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	36.45	36.45	36.45	36.45	36.45	36.45
BEV 100 Mile Range	4.97	4.96	5.01	5.03	5.04	5.03
BEV 200 Mile Range	14.01	14.01	14.05	14.07	14.08	14.08
BEV 300 Mile Range	17.27	17.28	17.18	17.15	17.13	17.14
BEV 400 Mile Range	0.20	0.20	0.20	0.20	0.20	0.20
DCT Transmissions	0	0	0	0	0	0
CVT Transmissions	0	0	0	0	0	0
5-Speed Automatic	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0
8-Speed Automatic	19	0	8	0	0	0
9-Speed Automatic	0	0	0	0	0	0
10-Speed Automatic	1	17	1	6	5	0

Table 588 - Powertrain Technology Penetration Rate (%) for Manufacturer (Ford), MY 2031 Total Fleet by Alternative

Powertrain Technology Penetration Rate (%) for Manufacturer (Ford), MY 2031 Total Fleet by Alternative						
Alternative	No Action (Reference Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Non-Hybrid High Compression Engines	3	3	3	3	3	3
Cylinder Deactivation	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	39	19	4	1	1	1
Variable Geometry Turbo	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	38	18	3	3	3	3
Mild Hybrid	0.0	0.0	2.7	0.0	0.0	0.0
Strong Hybrid	38.4	57.9	67.4	70.1	70.1	70.1
Plug-In Hybrid	0.1	0.2	0.3	0.3	0.3	0.3
Battery Electric Vehicles (BEVs)	19.93	19.92	19.96	19.98	19.98	19.98
BEV 100 Mile Range	3.27	3.27	3.27	3.27	3.27	3.27
BEV 200 Mile Range	10.42	10.42	10.45	10.46	10.46	10.46
BEV 300 Mile Range	6.24	6.24	6.25	6.25	6.25	6.25
BEV 400 Mile Range	0.00	0.00	0.00	0.00	0.00	0.00
DCT Transmissions	0	0	0	0	0	0
CVT Transmissions	0	0	3	0	0	0
5-Speed Automatic	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0
8-Speed Automatic	11	4	0	0	0	0
9-Speed Automatic	0	0	0	0	0	0
10-Speed Automatic	29	18	3	3	3	3

Table 589 - Powertrain Technology Penetration Rate (%) for Manufacturer (GM), MY 2031 Total Fleet by Alternative

Powertrain Technology Penetration Rate (%) for Manufacturer (GM), MY 2031 Total Fleet by Alternative						
Alternative	No Action (Reference Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Non-Hybrid High Compression Engines	7	5	5	5	5	5
Cylinder Deactivation	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	17	4	7	4	2	2
Variable Geometry Turbo	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0
Diesel Engines	1	1	1	1	1	1
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	20	7	9	7	6	6
Mild Hybrid	2.3	0.9	1.6	0.9	0.9	0.9
Strong Hybrid	42.8	33.1	29.9	33.3	34.3	34.3
Plug-In Hybrid	14.1	37.8	37.6	37.6	37.7	37.7
Battery Electric Vehicles (BEVs)	17.65	17.66	17.65	17.65	17.65	17.65
BEV 100 Mile Range	4.01	4.00	4.07	4.09	4.10	4.09
BEV 200 Mile Range	11.70	11.71	11.66	11.64	11.63	11.64
BEV 300 Mile Range	1.95	1.95	1.93	1.93	1.93	1.93
BEV 400 Mile Range	0.00	0.00	0.00	0.00	0.00	0.00
DCT Transmissions	0	0	0	0	0	0
CVT Transmissions	4	2	2	2	0	0
5-Speed Automatic	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0
8-Speed Automatic	6	0	0	0	0	0
9-Speed Automatic	0	0	0	0	0	0
10-Speed Automatic	16	8	10	8	8	8

Table 590 - Powertrain Technology Penetration Rate (%) for Manufacturer (Honda), MY 2031 Total Fleet by Alternative

Powertrain Technology Penetration Rate (%) for Manufacturer (Honda), MY 2031 Total Fleet by Alternative						
Alternative	No Action (Reference Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Non-Hybrid High Compression Engines	14	14	14	14	14	5
Cylinder Deactivation	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	36	32	28	16	16	4
Variable Geometry Turbo	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	44	40	35	24	24	10
Mild Hybrid	0.0	0.0	0.7	0.0	0.0	0.0
Strong Hybrid	18.9	18.6	26.3	38.8	38.7	58.9
Plug-In Hybrid	0.0	4.3	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	31.56	31.56	31.56	31.56	31.56	31.56
BEV 100 Mile Range	12.00	11.99	12.05	12.07	12.08	12.07
BEV 200 Mile Range	17.01	17.02	16.97	16.96	16.95	16.96
BEV 300 Mile Range	2.54	2.55	2.53	2.53	2.53	2.53
BEV 400 Mile Range	0.00	0.00	0.00	0.00	0.00	0.00
DCT Transmissions	0	0	0	0	0	0
CVT Transmissions	28	24	25	25	25	5
5-Speed Automatic	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0
8-Speed Automatic	0	0	0	0	0	0
9-Speed Automatic	0	0	0	0	0	0
10-Speed Automatic	20	20	16	4	4	4

Table 591 - Powertrain Technology Penetration Rate (%) for Manufacturer (Hyundai), MY 2031 Total Fleet by Alternative

Powertrain Technology Penetration Rate (%) for Manufacturer (Hyundai), MY 2031 Total Fleet by Alternative						
Alternative	No Action (Reference Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Non-Hybrid High Compression Engines	54	41	34	23	12	8
Cylinder Deactivation	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	11	6	7	4	2	0
Variable Geometry Turbo	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	1
Diesel Engines	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	55	26	27	9	1	1
Mild Hybrid	0.0	10.1	3.6	5.8	1.3	0.0
Strong Hybrid	3.3	22.4	27.9	42.8	34.4	13.8
Plug-In Hybrid	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	24.97	24.97	24.97	24.97	24.97	24.97
BEV 100 Mile Range	7.04	7.04	7.06	7.07	7.07	7.07
BEV 200 Mile Range	13.95	13.96	13.92	13.90	13.90	13.90
BEV 300 Mile Range	3.97	3.97	3.99	3.99	4.00	4.00
BEV 400 Mile Range	0.00	0.00	0.00	0.00	0.00	0.00
DCT Transmissions	0	0	0	0	0	0
CVT Transmissions	22	21	20	18	12	8
5-Speed Automatic	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0
8-Speed Automatic	36	19	1	5	0	0
9-Speed Automatic	0	0	0	0	0	0
10-Speed Automatic	0	2	14	0	0	0

Table 592 - Powertrain Technology Penetration Rate (%) for Manufacturer (KIA), MY 2031 Total Fleet by Alternative

Powertrain Technology Penetration Rate (%) for Manufacturer (KIA), MY 2031 Total Fleet by Alternative						
Alternative	No Action (Reference Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Non-Hybrid High Compression Engines	57	44	30	18	6	0
Cylinder Deactivation	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	16	15	15	15	10	0
Variable Geometry Turbo	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	25	17	13	9	1	0
Mild Hybrid	0.0	6.0	1.2	0.5	0.0	0.0
Strong Hybrid	3.9	11.4	25.7	15.3	22.0	38.5
Plug-In Hybrid	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	22.52	22.52	22.52	22.52	22.52	22.52
BEV 100 Mile Range	4.61	4.61	4.64	4.65	4.65	4.65
BEV 200 Mile Range	16.81	16.82	16.79	16.78	16.77	16.78
BEV 300 Mile Range	1.10	1.10	1.10	1.10	1.10	1.10
BEV 400 Mile Range	0.00	0.00	0.00	0.00	0.00	0.00
DCT Transmissions	0	0	0	0	0	0
CVT Transmissions	44	44	30	18	6	0
5-Speed Automatic	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0
8-Speed Automatic	23	7	9	7	7	0
9-Speed Automatic	0	0	0	0	0	0
10-Speed Automatic	0	2	0	2	2	0

Table 593 - Powertrain Technology Penetration Rate (%) for Manufacturer (JLR), MY 2031 Total Fleet by Alternative

Powertrain Technology Penetration Rate (%) for Manufacturer (JLR), MY 2031 Total Fleet by Alternative						
Alternative	No Action (Reference Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Non-Hybrid High Compression Engines	0	0	0	0	0	0
Cylinder Deactivation	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	13	9	7	7	7	7
Variable Geometry Turbo	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	13	9	7	7	7	7
Mild Hybrid	0.0	0.0	0.0	0.0	0.0	0.0
Strong Hybrid	52.9	57.7	59.0	58.9	59.0	59.0
Plug-In Hybrid	0.0	0.0	0.0	0.1	0.0	0.0
Battery Electric Vehicles (BEVs)	33.58	33.58	33.58	33.58	33.58	33.58
BEV 100 Mile Range	4.56	4.55	4.56	4.56	4.56	4.56
BEV 200 Mile Range	19.17	19.18	19.19	19.19	19.19	19.19
BEV 300 Mile Range	9.85	9.85	9.83	9.83	9.83	9.84
BEV 400 Mile Range	0.00	0.00	0.00	0.00	0.00	0.00
DCT Transmissions	0	0	0	0	0	0
CVT Transmissions	0	0	0	0	0	0
5-Speed Automatic	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0
8-Speed Automatic	7	0	1	0	0	0
9-Speed Automatic	0	0	0	0	0	0
10-Speed Automatic	6	9	7	7	7	7

Table 594 - Powertrain Technology Penetration Rate (%) for Manufacturer (Karma), MY 2031 Total Fleet by Alternative

Powertrain Technology Penetration Rate (%) for Manufacturer (Karma), MY 2031 Total Fleet by Alternative						
Alternative	No Action (Reference Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Non-Hybrid High Compression Engines	0	0	0	0	0	0
Cylinder Deactivation	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	0	0	0	0	0	0
Variable Geometry Turbo	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	0	0	0	0	0	0
Mild Hybrid	0.0	0.0	0.0	0.0	0.0	0.0
Strong Hybrid	0.0	0.0	0.0	0.0	0.0	0.0
Plug-In Hybrid	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	100.00	100.00	100.00	100.00	100.00	100.00
BEV 100 Mile Range	50.00	50.00	50.00	50.00	50.00	50.00
BEV 200 Mile Range	50.00	50.00	50.00	50.00	50.00	50.00
BEV 300 Mile Range	0.00	0.00	0.00	0.00	0.00	0.00
BEV 400 Mile Range	0.00	0.00	0.00	0.00	0.00	0.00
DCT Transmissions	0	0	0	0	0	0
CVT Transmissions	0	0	0	0	0	0
5-Speed Automatic	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0
8-Speed Automatic	0	0	0	0	0	0
9-Speed Automatic	0	0	0	0	0	0
10-Speed Automatic	0	0	0	0	0	0

Table 595 - Powertrain Technology Penetration Rate (%) for Manufacturer (Lucid), MY 2031 Total Fleet by Alternative

Powertrain Technology Penetration Rate (%) for Manufacturer (Lucid), MY 2031 Total Fleet by Alternative						
Alternative	No Action (Reference Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Non-Hybrid High Compression Engines	0	0	0	0	0	0
Cylinder Deactivation	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	0	0	0	0	0	0
Variable Geometry Turbo	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	0	0	0	0	0	0
Mild Hybrid	0.0	0.0	0.0	0.0	0.0	0.0
Strong Hybrid	0.0	0.0	0.0	0.0	0.0	0.0
Plug-In Hybrid	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	100.00	100.00	100.00	100.00	100.00	100.00
BEV 100 Mile Range	0.00	0.00	0.00	0.00	0.00	0.00
BEV 200 Mile Range	0.00	0.00	0.00	0.00	0.00	0.00
BEV 300 Mile Range	0.00	0.00	0.00	0.00	0.00	0.00
BEV 400 Mile Range	100.00	100.00	100.00	100.00	100.00	100.00
DCT Transmissions	0	0	0	0	0	0
CVT Transmissions	0	0	0	0	0	0
5-Speed Automatic	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0
8-Speed Automatic	0	0	0	0	0	0
9-Speed Automatic	0	0	0	0	0	0
10-Speed Automatic	0	0	0	0	0	0

Table 596 - Powertrain Technology Penetration Rate (%) for Manufacturer (Mazda), MY 2031 Total Fleet by Alternative

Powertrain Technology Penetration Rate (%) for Manufacturer (Mazda), MY 2031 Total Fleet by Alternative						
Alternative	No Action (Reference Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Non-Hybrid High Compression Engines	53	52	53	48	39	2
Cylinder Deactivation	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	0	0	0	0	0	0
Variable Geometry Turbo	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	0	0	0	0	0	0
Mild Hybrid	0.0	0.0	0.0	0.0	1.7	0.0
Strong Hybrid	15.5	16.4	15.4	20.9	29.9	16.7
Plug-In Hybrid	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	31.37	31.36	31.36	31.36	31.36	31.36
BEV 100 Mile Range	13.15	13.14	13.17	13.17	13.18	13.18
BEV 200 Mile Range	15.67	15.67	15.66	15.65	15.65	15.65
BEV 300 Mile Range	2.55	2.55	2.54	2.54	2.54	2.54
BEV 400 Mile Range	0.00	0.00	0.00	0.00	0.00	0.00
DCT Transmissions	0	0	0	0	0	0
CVT Transmissions	0	4	5	4	4	0
5-Speed Automatic	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0
8-Speed Automatic	52	46	46	42	32	0
9-Speed Automatic	0	0	0	0	0	0
10-Speed Automatic	0	1	0	1	1	1

Table 597 - Powertrain Technology Penetration Rate (%) for Manufacturer (Mercedes-Benz), MY 2031 Total Fleet by Alternative

Powertrain Technology Penetration Rate (%) for Manufacturer (Mercedes-Benz), MY 2031 Total Fleet by Alternative						
Alternative	No Action (Reference Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Non-Hybrid High Compression Engines	0	0	0	0	0	0
Cylinder Deactivation	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	24	10	9	9	5	2
Variable Geometry Turbo	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	24	10	9	9	5	2
Mild Hybrid	0.1	0.1	0.1	0.1	0.0	0.0
Strong Hybrid	39.2	53.2	54.4	54.4	58.2	60.9
Plug-In Hybrid	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	36.68	36.68	36.68	36.68	36.68	36.68
BEV 100 Mile Range	8.16	8.15	8.26	8.30	8.32	8.31
BEV 200 Mile Range	14.17	14.17	14.19	14.19	14.19	14.19
BEV 300 Mile Range	13.75	13.76	13.64	13.61	13.59	13.60
BEV 400 Mile Range	0.59	0.59	0.59	0.58	0.58	0.58
DCT Transmissions	0	0	0	0	0	0
CVT Transmissions	0	0	0	0	0	0
5-Speed Automatic	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0
8-Speed Automatic	0	0	0	0	0	0
9-Speed Automatic	0	0	0	0	0	0
10-Speed Automatic	19	5	3	3	1	0

Table 598 - Powertrain Technology Penetration Rate (%) for Manufacturer (Mitsubishi), MY 2031 Total Fleet by Alternative

Powertrain Technology Penetration Rate (%) for Manufacturer (Mitsubishi), MY 2031 Total Fleet by Alternative						
Alternative	No Action (Reference Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Non-Hybrid High Compression Engines	58	58	58	58	47	0
Cylinder Deactivation	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	10	8	10	6	6	4
Variable Geometry Turbo	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	0	0	0	0	0	0
Mild Hybrid	0.0	0.0	0.0	5.9	0.0	0.0
Strong Hybrid	0.0	1.6	0.0	3.8	15.1	58.1
Plug-In Hybrid	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	32.43	32.44	32.50	32.52	32.53	32.53
BEV 100 Mile Range	5.96	5.96	6.02	6.04	6.05	6.04
BEV 200 Mile Range	13.36	13.36	13.47	13.51	13.53	13.52
BEV 300 Mile Range	13.11	13.12	13.01	12.97	12.95	12.96
BEV 400 Mile Range	0.00	0.00	0.00	0.00	0.00	0.00
DCT Transmissions	0	0	0	0	0	0
CVT Transmissions	68	66	67	64	52	4
5-Speed Automatic	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0
8-Speed Automatic	0	0	0	0	0	0
9-Speed Automatic	0	0	0	0	0	0
10-Speed Automatic	0	0	0	0	0	0

Table 599 - Powertrain Technology Penetration Rate (%) for Manufacturer (Nissan), MY 2031 Total Fleet by Alternative

Powertrain Technology Penetration Rate (%) for Manufacturer (Nissan), MY 2031 Total Fleet by Alternative						
Alternative	No Action (Reference Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Non-Hybrid High Compression Engines	44	34	31	27	18	12
Cylinder Deactivation	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	10	10	7	1	1	1
Variable Geometry Turbo	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	13	9	0	0	0	0
Mild Hybrid	0.0	5.0	1.9	5.1	0.0	0.0
Strong Hybrid	3.5	16.2	33.3	30.4	29.7	34.4
Plug-In Hybrid	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	20.68	20.68	20.68	20.68	20.68	20.68
BEV 100 Mile Range	5.21	5.21	5.21	5.21	5.21	5.21
BEV 200 Mile Range	14.37	14.36	14.38	14.38	14.38	14.38
BEV 300 Mile Range	1.10	1.11	1.09	1.08	1.08	1.08
BEV 400 Mile Range	0.00	0.00	0.00	0.00	0.00	0.00
DCT Transmissions	0	0	0	0	0	0
CVT Transmissions	52	44	39	35	26	12
5-Speed Automatic	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0
8-Speed Automatic	0	0	0	0	0	0
9-Speed Automatic	0	0	0	0	0	0
10-Speed Automatic	23	19	7	1	1	1

Table 600 - Powertrain Technology Penetration Rate (%) for Manufacturer (Stellantis), MY 2031 Total Fleet by Alternative

Powertrain Technology Penetration Rate (%) for Manufacturer (Stellantis), MY 2031 Total Fleet by Alternative						
Alternative	No Action (Reference Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Non-Hybrid High Compression Engines	17	17	11	11	11	11
Cylinder Deactivation	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	22	18	13	9	6	6
Variable Geometry Turbo	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	29	28	16	13	11	11
Mild Hybrid	0.0	0.0	0.2	1.0	0.0	0.0
Strong Hybrid	38.8	40.7	54.8	58.8	61.6	61.6
Plug-In Hybrid	0.0	3.2	0.0	0.0	0.1	0.1
Battery Electric Vehicles (BEVs)	21.82	21.81	21.81	21.81	21.81	21.81
BEV 100 Mile Range	2.47	2.47	2.48	2.48	2.49	2.49
BEV 200 Mile Range	12.93	12.92	12.93	12.93	12.93	12.93
BEV 300 Mile Range	6.43	6.42	6.40	6.40	6.39	6.39
BEV 400 Mile Range	0.00	0.00	0.00	0.00	0.00	0.00
DCT Transmissions	0	0	0	0	0	0
CVT Transmissions	0	0	0	0	0	0
5-Speed Automatic	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0
8-Speed Automatic	23	2	2	0	0	0
9-Speed Automatic	0	0	0	0	0	0
10-Speed Automatic	16	32	21	19	17	17

Table 601 - Powertrain Technology Penetration Rate (%) for Manufacturer (Subaru), MY 2031 Total Fleet by Alternative

Powertrain Technology Penetration Rate (%) for Manufacturer (Subaru), MY 2031 Total Fleet by Alternative						
Alternative	No Action (Reference Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Non-Hybrid High Compression Engines	49	49	49	49	43	15
Cylinder Deactivation	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	17	17	17	17	12	1
Variable Geometry Turbo	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	52	52	52	52	45	6
Mild Hybrid	0.0	0.0	0.0	0.0	0.0	7.5
Strong Hybrid	0.0	0.0	0.0	0.0	9.7	36.0
Plug-In Hybrid	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	34.17	34.17	34.17	34.17	34.17	34.17
BEV 100 Mile Range	3.85	3.85	3.90	3.92	3.93	3.92
BEV 200 Mile Range	17.35	17.35	17.35	17.35	17.35	17.35
BEV 300 Mile Range	12.98	12.98	12.92	12.90	12.89	12.90
BEV 400 Mile Range	0.00	0.00	0.00	0.00	0.00	0.00
DCT Transmissions	0	0	0	0	0	0
CVT Transmissions	63	63	63	63	54	15
5-Speed Automatic	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0
8-Speed Automatic	0	0	0	0	0	0
9-Speed Automatic	0	0	0	0	0	0
10-Speed Automatic	0	0	0	0	0	0

Table 602 - Powertrain Technology Penetration Rate (%) for Manufacturer (Tesla), MY 2031 Total Fleet by Alternative

Powertrain Technology Penetration Rate (%) for Manufacturer (Tesla), MY 2031 Total Fleet by Alternative						
Alternative	No Action (Reference Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Non-Hybrid High Compression Engines	0	0	0	0	0	0
Cylinder Deactivation	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	0	0	0	0	0	0
Variable Geometry Turbo	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	0	0	0	0	0	0
Mild Hybrid	0.0	0.0	0.0	0.0	0.0	0.0
Strong Hybrid	0.0	0.0	0.0	0.0	0.0	0.0
Plug-In Hybrid	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	100.00	100.00	100.00	100.00	100.00	100.00
BEV 100 Mile Range	0.00	0.00	0.00	0.00	0.00	0.00
BEV 200 Mile Range	18.36	18.35	18.37	18.38	18.38	18.38
BEV 300 Mile Range	57.30	57.30	57.26	57.24	57.23	57.24
BEV 400 Mile Range	24.35	24.34	24.37	24.38	24.38	24.38
DCT Transmissions	0	0	0	0	0	0
CVT Transmissions	0	0	0	0	0	0
5-Speed Automatic	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0
8-Speed Automatic	0	0	0	0	0	0
9-Speed Automatic	0	0	0	0	0	0
10-Speed Automatic	0	0	0	0	0	0

Table 603 - Powertrain Technology Penetration Rate (%) for Manufacturer (Toyota), MY 2031 Total Fleet by Alternative

Powertrain Technology Penetration Rate (%) for Manufacturer (Toyota), MY 2031 Total Fleet by Alternative						
Alternative	No Action (Reference Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Non-Hybrid High Compression Engines	30	30	30	29	24	16
Cylinder Deactivation	1	1	1	1	1	1
Dynamic Cylinder Deactivation	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	24	24	22	18	17	14
Variable Geometry Turbo	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	21	21	20	14	11	7
Mild Hybrid	0.0	0.0	0.0	0.0	0.0	1.5
Strong Hybrid	15.4	15.5	18.0	21.7	24.0	30.6
Plug-In Hybrid	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	28.85	28.85	28.85	28.85	28.85	28.85
BEV 100 Mile Range	8.30	8.29	8.36	8.38	8.39	8.39
BEV 200 Mile Range	14.95	14.96	14.91	14.89	14.89	14.89
BEV 300 Mile Range	5.60	5.61	5.58	5.57	5.57	5.57
BEV 400 Mile Range	0.00	0.00	0.00	0.00	0.00	0.00
DCT Transmissions	0	0	0	0	0	0
CVT Transmissions	20	20	21	24	24	14
5-Speed Automatic	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0
8-Speed Automatic	30	30	22	0	0	0
9-Speed Automatic	0	0	0	0	0	0
10-Speed Automatic	5	5	10	23	17	16

Table 604 - Powertrain Technology Penetration Rate (%) for Manufacturer (Volvo), MY 2031 Total Fleet by Alternative

Powertrain Technology Penetration Rate (%) for Manufacturer (Volvo), MY 2031 Total Fleet by Alternative						
Alternative	No Action (Reference Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Non-Hybrid High Compression Engines	0	0	0	0	0	0
Cylinder Deactivation	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	57	41	35	35	35	35
Variable Geometry Turbo	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	0	0	0	0	0	0
Mild Hybrid	19.4	19.4	19.4	19.4	19.4	19.4
Strong Hybrid	4.7	20.2	26.6	26.6	26.5	26.6
Plug-In Hybrid	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	38.37	38.34	38.55	38.60	38.63	38.62
BEV 100 Mile Range	6.16	6.16	6.18	6.19	6.20	6.20
BEV 200 Mile Range	17.04	17.01	17.23	17.30	17.33	17.32
BEV 300 Mile Range	15.17	15.17	15.13	15.11	15.10	15.11
BEV 400 Mile Range	0.00	0.00	0.00	0.00	0.00	0.00
DCT Transmissions	0	0	0	0	0	0
CVT Transmissions	0	0	0	0	0	0
5-Speed Automatic	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0
8-Speed Automatic	57	41	21	21	19	6
9-Speed Automatic	0	0	0	0	0	0
10-Speed Automatic	0	0	14	14	15	29

Table 605 - Powertrain Technology Penetration Rate (%) for Manufacturer (VWA), MY 2031 Total Fleet by Alternative

Powertrain Technology Penetration Rate (%) for Manufacturer (VWA), MY 2031 Total Fleet by Alternative						
Alternative	No Action (Reference Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Non-Hybrid High Compression Engines	10	8	3	3	3	3
Cylinder Deactivation	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	31	21	23	17	13	7
Variable Geometry Turbo	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	40	24	26	20	17	11
Mild Hybrid	0.2	5.1	0.2	0.0	0.0	0.0
Strong Hybrid	29.4	41.0	43.6	50.4	53.6	59.7
Plug-In Hybrid	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	29.78	29.78	29.78	29.78	29.78	29.78
BEV 100 Mile Range	5.29	5.28	5.29	5.29	5.29	5.29
BEV 200 Mile Range	18.76	18.75	18.80	18.82	18.83	18.82
BEV 300 Mile Range	5.72	5.73	5.67	5.65	5.64	5.65
BEV 400 Mile Range	0.02	0.02	0.02	0.02	0.02	0.02
DCT Transmissions	0	0	0	0	0	0
CVT Transmissions	0	1	0	0	0	0
5-Speed Automatic	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0
8-Speed Automatic	25	0	10	0	0	0
9-Speed Automatic	0	0	0	0	0	0
10-Speed Automatic	3	16	4	8	4	4

Mass Reduction Penetration Rate, by Alternative

Table 606 - Mass Reduction Penetration Rate and Curb Weights for Manufacturer (Total), MY 2031 Total Fleet by Alternative

Mass Reduction Penetration Rate and Curb Weights for Manufacturer (Total), MY 2031 Total Fleet by Alternative						
Alternative	No Action (Reference Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Mass Reduction Level 0 (%)	4	3	3	3	3	3
Mass Reduction Level 1 (%)	31	30	26	26	23	22
Mass Reduction Level 2 (%)	3	3	3	3	3	2
Mass Reduction Level 3 (%)	51	43	44	41	31	32
Mass Reduction Level 4 (%)	10	20	24	27	38	38
Mass Reduction Level 5 (%)	1	1	1	1	2	3
Avg Curb Weight - Fleet (pounds)	4,034	4,012	3,993	3,985	3,963	3,959
Diff. from Reference Baseline - Fleet (pounds)	0	22	41	49	71	75
Avg Curb Weight - Passenger Car (pounds)	3,434	3,414	3,416	3,410	3,391	3,388
Diff. from Reference Baseline - Passenger Car (pounds)	0	20	18	24	43	46
Avg Curb Weight - Light Truck (pounds)	4,337	4,314	4,290	4,283	4,260	4,255
Diff. from Reference Baseline - Light Trucks (pounds)	0	23	47	54	77	82

Table 607 - Mass Reduction Penetration Rate and Curb Weights for Manufacturer (Total), MY 2031 Passenger Car Fleet by Alternative

Mass Reduction Penetration Rate and Curb Weights for Manufacturer (Total), MY 2031 Passenger Car Fleet by Alternative						
Alternative	No Action (Reference Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Mass Reduction Level 0 (%)	4	3	3	3	3	3
Mass Reduction Level 1 (%)	28	25	23	23	22	22
Mass Reduction Level 2 (%)	4	3	3	3	3	3
Mass Reduction Level 3 (%)	45	39	43	39	28	27
Mass Reduction Level 4 (%)	17	27	25	29	40	40
Mass Reduction Level 5 (%)	2	2	2	2	3	4
Avg Curb Weight - Fleet (pounds)	4,034	4,012	3,993	3,985	3,963	3,959
Diff. from Reference Baseline - Fleet (pounds)	0	22	41	49	71	75
Avg Curb Weight - Passenger Car (pounds)	3,434	3,414	3,416	3,410	3,391	3,388
Diff. from Reference Baseline - Passenger Car (pounds)	0	20	18	24	43	46
Avg Curb Weight - Light Truck (pounds)	4,337	4,314	4,290	4,283	4,260	4,255
Diff. from Reference Baseline - Light Trucks (pounds)	0	23	47	54	77	82

Table 608 - Mass Reduction Penetration Rate and Curb Weights for Manufacturer (Total), MY 2031 Light Truck Fleet by Alternative

Mass Reduction Penetration Rate and Curb Weights for Manufacturer (Total), MY 2031 Light Truck Fleet by Alternative						
Alternative	No Action (Reference Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Mass Reduction Level 0 (%)	4	3	3	3	3	3
Mass Reduction Level 1 (%)	33	33	27	27	24	22
Mass Reduction Level 2 (%)	2	2	2	2	2	2
Mass Reduction Level 3 (%)	54	45	44	41	33	34
Mass Reduction Level 4 (%)	6	17	24	26	37	37
Mass Reduction Level 5 (%)	0	0	0	1	2	2
Avg Curb Weight - Fleet (pounds)	4,034	4,012	3,993	3,985	3,963	3,959
Diff. from Reference Baseline - Fleet (pounds)	0	22	41	49	71	75
Avg Curb Weight - Passenger Car (pounds)	3,434	3,414	3,416	3,410	3,391	3,388
Diff. from Reference Baseline - Passenger Car (pounds)	0	20	18	24	43	46
Avg Curb Weight - Light Truck (pounds)	4,337	4,314	4,290	4,283	4,260	4,255
Diff. from Reference Baseline - Light Trucks (pounds)	0	23	47	54	77	82

Table 609 - Mass Reduction Penetration Rate and Curb Weights for Manufacturer (Total), MY 2031 Domestic Car Fleet by Alternative

Mass Reduction Penetration Rate and Curb Weights for Manufacturer (Total), MY 2031 Domestic Car Fleet by Alternative						
Alternative	No Action (Reference Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Mass Reduction Level 0 (%)	1	1	1	1	1	1
Mass Reduction Level 1 (%)	11	11	10	11	10	10
Mass Reduction Level 2 (%)	5	4	4	4	4	4
Mass Reduction Level 3 (%)	56	50	51	50	40	36
Mass Reduction Level 4 (%)	24	30	30	30	40	44
Mass Reduction Level 5 (%)	3	3	3	3	4	4
Avg Curb Weight - Fleet (pounds)	4,034	4,012	3,993	3,985	3,963	3,959
Diff. from Reference Baseline - Fleet (pounds)	0	22	41	49	71	75
Avg Curb Weight - Passenger Car (pounds)	3,434	3,414	3,416	3,410	3,391	3,388
Diff. from Reference Baseline - Passenger Car (pounds)	0	20	18	24	43	46
Avg Curb Weight - Light Truck (pounds)	4,337	4,314	4,290	4,283	4,260	4,255
Diff. from Reference Baseline - Light Trucks (pounds)	0	23	47	54	77	82

Table 610 - Mass Reduction Penetration Rate and Curb Weights for Manufacturer (Total), MY 2031 Imported Car Fleet by Alternative

Mass Reduction Penetration Rate and Curb Weights for Manufacturer (Total), MY 2031 Imported Car Fleet by Alternative						
Alternative	No Action (Reference Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Mass Reduction Level 0 (%)	7	5	5	5	5	5
Mass Reduction Level 1 (%)	45	39	36	36	34	33
Mass Reduction Level 2 (%)	3	3	3	3	3	2
Mass Reduction Level 3 (%)	35	28	36	28	16	19
Mass Reduction Level 4 (%)	10	24	20	27	41	37
Mass Reduction Level 5 (%)	0	2	0	2	2	4
Avg Curb Weight - Fleet (pounds)	4,034	4,012	3,993	3,985	3,963	3,959
Diff. from Reference Baseline - Fleet (pounds)	0	22	41	49	71	75
Avg Curb Weight - Passenger Car (pounds)	3,434	3,414	3,416	3,410	3,391	3,388
Diff. from Reference Baseline - Passenger Car (pounds)	0	20	18	24	43	46
Avg Curb Weight - Light Truck (pounds)	4,337	4,314	4,290	4,283	4,260	4,255
Diff. from Reference Baseline - Light Trucks (pounds)	0	23	47	54	77	82

Table 611 - Mass Reduction Penetration Rate and Curb Weights for Manufacturer (BMW), MY 2031 Total Fleet by Alternative

Mass Reduction Penetration Rate and Curb Weights for Manufacturer (BMW), MY 2031 Total Fleet by Alternative						
Alternative	No Action (Reference Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Mass Reduction Level 0 (%)	14	14	14	14	14	14
Mass Reduction Level 1 (%)	62	59	62	60	56	56
Mass Reduction Level 2 (%)	23	23	23	23	23	5
Mass Reduction Level 3 (%)	0	3	0	3	0	0
Mass Reduction Level 4 (%)	0	0	0	0	7	25
Mass Reduction Level 5 (%)	0	0	0	0	0	0
Avg Curb Weight - Fleet (pounds)	4,312	4,308	4,308	4,302	4,289	4,247
Diff. from Reference Baseline - Fleet (pounds)	0	4	4	10	23	65
Avg Curb Weight - Passenger Car (pounds)	3,786	3,777	3,786	3,779	3,754	3,732
Diff. from Reference Baseline - Passenger Car (pounds)	0	9	0	7	32	54
Avg Curb Weight - Light Truck (pounds)	4,829	4,829	4,829	4,829	4,829	4,767
Diff. from Reference Baseline - Light Trucks (pounds)	0	0	0	0	0	62

Table 612 - Mass Reduction Penetration Rate and Curb Weights for Manufacturer (Ford), MY 2031 Total Fleet by Alternative

Mass Reduction Penetration Rate and Curb Weights for Manufacturer (Ford), MY 2031 Total Fleet by Alternative						
Alternative	No Action (Reference Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Mass Reduction Level 0 (%)	0	0	0	0	0	0
Mass Reduction Level 1 (%)	15	15	6	6	6	6
Mass Reduction Level 2 (%)	0	0	0	0	0	0
Mass Reduction Level 3 (%)	75	50	19	19	19	19
Mass Reduction Level 4 (%)	10	35	74	74	74	74
Mass Reduction Level 5 (%)	0	0	0	0	0	0
Avg Curb Weight - Fleet (pounds)	4,379	4,345	4,253	4,253	4,253	4,253
Diff. from Reference Baseline - Fleet (pounds)	0	34	126	126	126	126
Avg Curb Weight - Passenger Car (pounds)	3,752	3,698	3,698	3,698	3,698	3,698
Diff. from Reference Baseline - Passenger Car (pounds)	0	54	54	54	54	54
Avg Curb Weight - Light Truck (pounds)	4,447	4,415	4,315	4,315	4,315	4,315
Diff. from Reference Baseline - Light Trucks (pounds)	0	32	132	132	132	132

Table 613 - Mass Reduction Penetration Rate and Curb Weights for Manufacturer (GM), MY 2031 Total Fleet by Alternative

Mass Reduction Penetration Rate and Curb Weights for Manufacturer (GM), MY 2031 Total Fleet by Alternative						
Alternative	No Action (Reference Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Mass Reduction Level 0 (%)	1	1	1	1	1	1
Mass Reduction Level 1 (%)	7	6	6	6	6	6
Mass Reduction Level 2 (%)	5	4	4	4	4	4
Mass Reduction Level 3 (%)	73	43	45	43	43	43
Mass Reduction Level 4 (%)	13	45	43	45	44	44
Mass Reduction Level 5 (%)	0	1	0	1	2	2
Avg Curb Weight - Fleet (pounds)	4,256	4,193	4,193	4,187	4,185	4,186
Diff. from Reference Baseline - Fleet (pounds)	0	63	63	69	71	70
Avg Curb Weight - Passenger Car (pounds)	3,214	3,174	3,192	3,174	3,167	3,167
Diff. from Reference Baseline - Passenger Car (pounds)	0	40	22	40	47	47
Avg Curb Weight - Light Truck (pounds)	4,541	4,472	4,472	4,472	4,472	4,472
Diff. from Reference Baseline - Light Trucks (pounds)	0	69	69	69	69	69

Table 614 - Mass Reduction Penetration Rate and Curb Weights for Manufacturer (Honda), MY 2031 Total Fleet by Alternative

Mass Reduction Penetration Rate and Curb Weights for Manufacturer (Honda), MY 2031 Total Fleet by Alternative						
Alternative	No Action (Reference Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Mass Reduction Level 0 (%)	0	0	0	0	0	0
Mass Reduction Level 1 (%)	1	1	0	1	0	0
Mass Reduction Level 2 (%)	4	4	4	4	4	4
Mass Reduction Level 3 (%)	95	95	95	95	55	55
Mass Reduction Level 4 (%)	0	0	1	0	40	40
Mass Reduction Level 5 (%)	0	0	0	0	1	1
Avg Curb Weight - Fleet (pounds)	3,593	3,593	3,587	3,588	3,529	3,529
Diff. from Reference Baseline - Fleet (pounds)	0	0	6	5	64	64
Avg Curb Weight - Passenger Car (pounds)	3,153	3,153	3,148	3,153	3,105	3,105
Diff. from Reference Baseline - Passenger Car (pounds)	0	0	5	0	48	48
Avg Curb Weight - Light Truck (pounds)	4,021	4,021	4,021	4,021	3,952	3,952
Diff. from Reference Baseline - Light Trucks (pounds)	0	0	0	0	69	69

Table 615 - Mass Reduction Penetration Rate and Curb Weights for Manufacturer (Hyundai), MY 2031 Total Fleet by Alternative

Mass Reduction Penetration Rate and Curb Weights for Manufacturer (Hyundai), MY 2031 Total Fleet by Alternative						
Alternative	No Action (Reference Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Mass Reduction Level 0 (%)	0	0	0	0	0	0
Mass Reduction Level 1 (%)	6	2	2	2	2	2
Mass Reduction Level 2 (%)	0	0	0	0	0	0
Mass Reduction Level 3 (%)	79	71	83	63	18	18
Mass Reduction Level 4 (%)	15	27	15	35	72	69
Mass Reduction Level 5 (%)	0	0	0	0	7	11
Avg Curb Weight - Fleet (pounds)	3,546	3,529	3,540	3,513	3,436	3,432
Diff. from Reference Baseline - Fleet (pounds)	0	17	6	33	110	114
Avg Curb Weight - Passenger Car (pounds)	3,247	3,216	3,241	3,215	3,173	3,167
Diff. from Reference Baseline - Passenger Car (pounds)	0	31	6	32	74	80
Avg Curb Weight - Light Truck (pounds)	3,937	3,937	3,937	3,911	3,788	3,788
Diff. from Reference Baseline - Light Trucks (pounds)	0	0	0	26	149	149

Table 616 - Mass Reduction Penetration Rate and Curb Weights for Manufacturer (KIA), MY 2031 Total Fleet by Alternative

Mass Reduction Penetration Rate and Curb Weights for Manufacturer (KIA), MY 2031 Total Fleet by Alternative						
Alternative	No Action (Reference Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Mass Reduction Level 0 (%)	0	0	0	0	0	0
Mass Reduction Level 1 (%)	0	0	0	0	0	0
Mass Reduction Level 2 (%)	0	0	0	0	0	0
Mass Reduction Level 3 (%)	87	31	49	20	20	20
Mass Reduction Level 4 (%)	13	65	51	65	65	65
Mass Reduction Level 5 (%)	0	4	0	15	15	15
Avg Curb Weight - Fleet (pounds)	3,521	3,442	3,464	3,398	3,398	3,398
Diff. from Reference Baseline - Fleet (pounds)	0	79	57	123	123	123
Avg Curb Weight - Passenger Car (pounds)	3,140	3,061	3,100	3,061	3,061	3,061
Diff. from Reference Baseline - Passenger Car (pounds)	0	79	40	79	79	79
Avg Curb Weight - Light Truck (pounds)	3,958	3,877	3,888	3,795	3,795	3,795
Diff. from Reference Baseline - Light Trucks (pounds)	0	81	70	163	163	163

Table 617 - Mass Reduction Penetration Rate and Curb Weights for Manufacturer (JLR), MY 2031 Total Fleet by Alternative

Mass Reduction Penetration Rate and Curb Weights for Manufacturer (JLR), MY 2031 Total Fleet by Alternative						
Alternative	No Action (Reference Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Mass Reduction Level 0 (%)	0	0	0	0	0	0
Mass Reduction Level 1 (%)	62	62	52	52	52	52
Mass Reduction Level 2 (%)	18	18	18	18	18	18
Mass Reduction Level 3 (%)	19	19	19	19	19	19
Mass Reduction Level 4 (%)	1	1	1	1	1	1
Mass Reduction Level 5 (%)	0	0	10	10	10	10
Avg Curb Weight - Fleet (pounds)	4,738	4,738	4,676	4,676	4,676	4,676
Diff. from Reference Baseline - Fleet (pounds)	0	0	62	62	62	62
Avg Curb Weight - Passenger Car (pounds)	3,655	3,655	3,655	3,655	3,655	3,655
Diff. from Reference Baseline - Passenger Car (pounds)	0	0	0	0	0	0
Avg Curb Weight - Light Truck (pounds)	4,763	4,763	4,700	4,700	4,700	4,700
Diff. from Reference Baseline - Light Trucks (pounds)	0	0	63	63	63	63

Table 618 - Mass Reduction Penetration Rate and Curb Weights for Manufacturer (Karma), MY 2031 Total Fleet by Alternative

Mass Reduction Penetration Rate and Curb Weights for Manufacturer (Karma), MY 2031 Total Fleet by Alternative						
Alternative	No Action (Reference Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Mass Reduction Level 0 (%)	0	0	0	0	0	0
Mass Reduction Level 1 (%)	100	100	100	100	100	100
Mass Reduction Level 2 (%)	0	0	0	0	0	0
Mass Reduction Level 3 (%)	0	0	0	0	0	0
Mass Reduction Level 4 (%)	0	0	0	0	0	0
Mass Reduction Level 5 (%)	0	0	0	0	0	0
Avg Curb Weight - Fleet (pounds)	5,064	5,064	5,064	5,064	5,064	5,064
Diff. from Reference Baseline - Fleet (pounds)	0	0	0	0	0	0
Avg Curb Weight - Passenger Car (pounds)	5,064	5,064	5,064	5,064	5,064	5,064
Diff. from Reference Baseline - Passenger Car (pounds)	0	0	0	0	0	0
Avg Curb Weight - Light Truck (pounds)	0	0	0	0	0	0
Diff. from Reference Baseline - Light Trucks (pounds)	0	0	0	0	0	0

Table 619 - Mass Reduction Penetration Rate and Curb Weights for Manufacturer (Lucid), MY 2031 Total Fleet by Alternative

Mass Reduction Penetration Rate and Curb Weights for Manufacturer (Lucid), MY 2031 Total Fleet by Alternative						
Alternative	No Action (Reference Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Mass Reduction Level 0 (%)	0	0	0	0	0	0
Mass Reduction Level 1 (%)	0	0	0	0	0	0
Mass Reduction Level 2 (%)	0	0	0	0	0	0
Mass Reduction Level 3 (%)	100	100	100	100	100	100
Mass Reduction Level 4 (%)	0	0	0	0	0	0
Mass Reduction Level 5 (%)	0	0	0	0	0	0
Avg Curb Weight - Fleet (pounds)	5,220	5,220	5,220	5,220	5,220	5,220
Diff. from Reference Baseline - Fleet (pounds)	0	0	0	0	0	0
Avg Curb Weight - Passenger Car (pounds)	5,220	5,220	5,220	5,220	5,220	5,220
Diff. from Reference Baseline - Passenger Car (pounds)	0	0	0	0	0	0
Avg Curb Weight - Light Truck (pounds)	0	0	0	0	0	0
Diff. from Reference Baseline - Light Trucks (pounds)	0	0	0	0	0	0

Table 620 - Mass Reduction Penetration Rate and Curb Weights for Manufacturer (Mazda), MY 2031 Total Fleet by Alternative

Mass Reduction Penetration Rate and Curb Weights for Manufacturer (Mazda), MY 2031 Total Fleet by Alternative						
Alternative	No Action (Reference Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Mass Reduction Level 0 (%)	0	0	0	0	0	0
Mass Reduction Level 1 (%)	64	64	63	33	21	21
Mass Reduction Level 2 (%)	0	0	0	0	0	0
Mass Reduction Level 3 (%)	33	33	33	64	9	9
Mass Reduction Level 4 (%)	3	3	3	3	70	34
Mass Reduction Level 5 (%)	0	0	0	0	0	36
Avg Curb Weight - Fleet (pounds)	3,602	3,602	3,601	3,559	3,447	3,397
Diff. from Reference Baseline - Fleet (pounds)	0	0	1	43	155	205
Avg Curb Weight - Passenger Car (pounds)	3,010	3,010	3,010	3,010	2,954	2,898
Diff. from Reference Baseline - Passenger Car (pounds)	0	0	0	0	56	112
Avg Curb Weight - Light Truck (pounds)	3,692	3,692	3,692	3,644	3,524	3,474
Diff. from Reference Baseline - Light Trucks (pounds)	0	0	0	48	168	218

Table 621 - Mass Reduction Penetration Rate and Curb Weights for Manufacturer (Mercedes-Benz), MY 2031 Total Fleet by Alternative

Mass Reduction Penetration Rate and Curb Weights for Manufacturer (Mercedes-Benz), MY 2031 Total Fleet by Alternative						
Alternative	No Action (Reference Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Mass Reduction Level 0 (%)	31	12	12	12	12	12
Mass Reduction Level 1 (%)	22	41	41	41	41	39
Mass Reduction Level 2 (%)	17	17	17	17	17	17
Mass Reduction Level 3 (%)	1	1	1	1	1	1
Mass Reduction Level 4 (%)	29	29	29	28	28	30
Mass Reduction Level 5 (%)	1	1	1	1	1	1
Avg Curb Weight - Fleet (pounds)	4,253	4,220	4,218	4,217	4,216	4,212
Diff. from Reference Baseline - Fleet (pounds)	0	33	35	36	37	41
Avg Curb Weight - Passenger Car (pounds)	3,957	3,957	3,957	3,957	3,957	3,947
Diff. from Reference Baseline - Passenger Car (pounds)	0	0	0	0	0	10
Avg Curb Weight - Light Truck (pounds)	4,499	4,438	4,437	4,437	4,437	4,437
Diff. from Reference Baseline - Light Trucks (pounds)	0	61	62	62	62	62

Table 622 - Mass Reduction Penetration Rate and Curb Weights for Manufacturer (Mitsubishi), MY 2031 Total Fleet by Alternative

Mass Reduction Penetration Rate and Curb Weights for Manufacturer (Mitsubishi), MY 2031 Total Fleet by Alternative						
Alternative	No Action (Reference Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Mass Reduction Level 0 (%)	82	15	15	15	15	15
Mass Reduction Level 1 (%)	0	68	67	67	0	0
Mass Reduction Level 2 (%)	0	0	0	0	0	0
Mass Reduction Level 3 (%)	18	18	18	18	85	18
Mass Reduction Level 4 (%)	0	0	0	0	0	67
Mass Reduction Level 5 (%)	0	0	0	0	0	0
Avg Curb Weight - Fleet (pounds)	3,322	3,237	3,234	3,233	3,147	3,061
Diff. from Reference Baseline - Fleet (pounds)	0	85	88	89	175	261
Avg Curb Weight - Passenger Car (pounds)	3,044	2,967	2,967	2,967	2,891	2,815
Diff. from Reference Baseline - Passenger Car (pounds)	0	77	77	77	153	229
Avg Curb Weight - Light Truck (pounds)	3,618	3,522	3,522	3,522	3,426	3,329
Diff. from Reference Baseline - Light Trucks (pounds)	0	96	96	96	192	289

Table 623 - Mass Reduction Penetration Rate and Curb Weights for Manufacturer (Nissan), MY 2031 Total Fleet by Alternative

Mass Reduction Penetration Rate and Curb Weights for Manufacturer (Nissan), MY 2031 Total Fleet by Alternative						
Alternative	No Action (Reference Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Mass Reduction Level 0 (%)	3	3	3	3	3	3
Mass Reduction Level 1 (%)	54	54	32	32	22	22
Mass Reduction Level 2 (%)	3	3	3	3	3	3
Mass Reduction Level 3 (%)	29	29	51	29	29	20
Mass Reduction Level 4 (%)	9	9	9	31	41	51
Mass Reduction Level 5 (%)	2	2	2	2	2	2
Avg Curb Weight - Fleet (pounds)	3,722	3,722	3,688	3,657	3,623	3,611
Diff. from Reference Baseline - Fleet (pounds)	0	0	34	65	99	111
Avg Curb Weight - Passenger Car (pounds)	3,237	3,237	3,217	3,198	3,198	3,175
Diff. from Reference Baseline - Passenger Car (pounds)	0	0	20	39	39	62
Avg Curb Weight - Light Truck (pounds)	4,291	4,291	4,251	4,210	4,136	4,136
Diff. from Reference Baseline - Light Trucks (pounds)	0	0	40	81	155	155

Table 624 - Mass Reduction Penetration Rate and Curb Weights for Manufacturer (Stellantis), MY 2031 Total Fleet by Alternative

Mass Reduction Penetration Rate and Curb Weights for Manufacturer (Stellantis), MY 2031 Total Fleet by Alternative						
Alternative	No Action (Reference Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Mass Reduction Level 0 (%)	6	1	1	1	1	1
Mass Reduction Level 1 (%)	55	53	36	36	36	36
Mass Reduction Level 2 (%)	1	1	1	1	1	1
Mass Reduction Level 3 (%)	25	28	45	45	45	45
Mass Reduction Level 4 (%)	14	18	18	18	18	18
Mass Reduction Level 5 (%)	0	0	0	0	0	0
Avg Curb Weight - Fleet (pounds)	4,522	4,494	4,459	4,459	4,458	4,458
Diff. from Reference Baseline - Fleet (pounds)	0	28	63	63	64	64
Avg Curb Weight - Passenger Car (pounds)	3,811	3,749	3,749	3,749	3,748	3,748
Diff. from Reference Baseline - Passenger Car (pounds)	0	62	62	62	63	63
Avg Curb Weight - Light Truck (pounds)	4,617	4,594	4,556	4,556	4,556	4,556
Diff. from Reference Baseline - Light Trucks (pounds)	0	23	61	61	61	61

Table 625 - Mass Reduction Penetration Rate and Curb Weights for Manufacturer (Subaru), MY 2031 Total Fleet by Alternative

Mass Reduction Penetration Rate and Curb Weights for Manufacturer (Subaru), MY 2031 Total Fleet by Alternative						
Alternative	No Action (Reference Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Mass Reduction Level 0 (%)	0	0	0	0	0	0
Mass Reduction Level 1 (%)	99	99	99	99	99	79
Mass Reduction Level 2 (%)	1	1	1	1	1	1
Mass Reduction Level 3 (%)	0	0	0	0	0	21
Mass Reduction Level 4 (%)	0	0	0	0	0	0
Mass Reduction Level 5 (%)	0	0	0	0	0	0
Avg Curb Weight - Fleet (pounds)	3,644	3,644	3,643	3,643	3,643	3,614
Diff. from Reference Baseline - Fleet (pounds)	0	0	1	1	1	30
Avg Curb Weight - Passenger Car (pounds)	3,279	3,279	3,279	3,279	3,279	3,265
Diff. from Reference Baseline - Passenger Car (pounds)	0	0	0	0	0	14
Avg Curb Weight - Light Truck (pounds)	3,703	3,703	3,703	3,703	3,703	3,671
Diff. from Reference Baseline - Light Trucks (pounds)	0	0	0	0	0	32

Table 626 - Mass Reduction Penetration Rate and Curb Weights for Manufacturer (Tesla), MY 2031 Total Fleet by Alternative

Mass Reduction Penetration Rate and Curb Weights for Manufacturer (Tesla), MY 2031 Total Fleet by Alternative						
Alternative	No Action (Reference Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Mass Reduction Level 0 (%)	0	0	0	0	0	0
Mass Reduction Level 1 (%)	0	0	0	0	0	0
Mass Reduction Level 2 (%)	0	0	0	0	0	0
Mass Reduction Level 3 (%)	0	0	0	0	0	0
Mass Reduction Level 4 (%)	85	85	85	85	85	85
Mass Reduction Level 5 (%)	15	15	15	15	15	15
Avg Curb Weight - Fleet (pounds)	4,301	4,301	4,301	4,301	4,300	4,301
Diff. from Reference Baseline - Fleet (pounds)	0	0	0	0	1	0
Avg Curb Weight - Passenger Car (pounds)	4,294	4,294	4,294	4,294	4,294	4,294
Diff. from Reference Baseline - Passenger Car (pounds)	0	0	0	0	0	0
Avg Curb Weight - Light Truck (pounds)	4,416	4,416	4,416	4,416	4,416	4,416
Diff. from Reference Baseline - Light Trucks (pounds)	0	0	0	0	0	0

Table 627 - Mass Reduction Penetration Rate and Curb Weights for Manufacturer (Toyota), MY 2031 Total Fleet by Alternative

Mass Reduction Penetration Rate and Curb Weights for Manufacturer (Toyota), MY 2031 Total Fleet by Alternative						
Alternative	No Action (Reference Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Mass Reduction Level 0 (%)	3	3	3	3	3	3
Mass Reduction Level 1 (%)	42	42	42	42	37	37
Mass Reduction Level 2 (%)	0	0	0	0	0	0
Mass Reduction Level 3 (%)	55	55	55	55	43	43
Mass Reduction Level 4 (%)	0	0	0	0	17	17
Mass Reduction Level 5 (%)	0	0	0	0	0	1
Avg Curb Weight - Fleet (pounds)	3,928	3,929	3,925	3,923	3,886	3,885
Diff. from Reference Baseline - Fleet (pounds)	0	-1	3	5	42	43
Avg Curb Weight - Passenger Car (pounds)	3,354	3,354	3,354	3,354	3,342	3,338
Diff. from Reference Baseline - Passenger Car (pounds)	0	0	0	0	12	16
Avg Curb Weight - Light Truck (pounds)	4,269	4,269	4,269	4,269	4,218	4,218
Diff. from Reference Baseline - Light Trucks (pounds)	0	0	0	0	51	51

Table 628 - Mass Reduction Penetration Rate and Curb Weights for Manufacturer (Volvo), MY 2031 Total Fleet by Alternative

Mass Reduction Penetration Rate and Curb Weights for Manufacturer (Volvo), MY 2031 Total Fleet by Alternative						
Alternative	No Action (Reference Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Mass Reduction Level 0 (%)	9	9	9	9	9	9
Mass Reduction Level 1 (%)	19	19	19	19	19	19
Mass Reduction Level 2 (%)	73	73	73	73	73	73
Mass Reduction Level 3 (%)	0	0	0	0	0	0
Mass Reduction Level 4 (%)	0	0	0	0	0	0
Mass Reduction Level 5 (%)	0	0	0	0	0	0
Avg Curb Weight - Fleet (pounds)	4,353	4,353	4,353	4,353	4,353	4,353
Diff. from Reference Baseline - Fleet (pounds)	0	0	0	0	0	0
Avg Curb Weight - Passenger Car (pounds)	4,331	4,331	4,331	4,331	4,331	4,331
Diff. from Reference Baseline - Passenger Car (pounds)	0	0	0	0	0	0
Avg Curb Weight - Light Truck (pounds)	4,362	4,362	4,362	4,362	4,362	4,362
Diff. from Reference Baseline - Light Trucks (pounds)	0	0	0	0	0	0

Table 629 - Mass Reduction Penetration Rate and Curb Weights for Manufacturer (VWA), MY 2031 Total Fleet by Alternative

Mass Reduction Penetration Rate and Curb Weights for Manufacturer (VWA), MY 2031 Total Fleet by Alternative						
Alternative	No Action (Reference Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Mass Reduction Level 0 (%)	16	16	16	16	16	16
Mass Reduction Level 1 (%)	60	42	42	42	42	42
Mass Reduction Level 2 (%)	0	0	0	0	0	0
Mass Reduction Level 3 (%)	23	37	21	37	21	39
Mass Reduction Level 4 (%)	0	4	20	4	20	2
Mass Reduction Level 5 (%)	0	0	0	0	0	0
Avg Curb Weight - Fleet (pounds)	3,989	3,964	3,941	3,959	3,939	3,961
Diff. from Reference Baseline - Fleet (pounds)	0	25	48	30	50	28
Avg Curb Weight - Passenger Car (pounds)	3,559	3,490	3,440	3,490	3,439	3,495
Diff. from Reference Baseline - Passenger Car (pounds)	0	69	119	69	120	64
Avg Curb Weight - Light Truck (pounds)	4,243	4,243	4,243	4,243	4,243	4,243
Diff. from Reference Baseline - Light Trucks (pounds)	0	0	0	0	0	0

Required and Achieved CAFE Levels, Comparison

Table 630 - Required and Achieved CAFE Levels (mpg) for Total Fleet for Alternative PC2LT002

Required and Achieved CAFE Levels (mpg) for Total Fleet for Alternative PC2LT002												
Model Year	BMW			Ford			GM			Honda		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	37.6	35.3	-2.3	31.4	30.9	-0.5	32.5	30.8	-1.7	39.1	40.0	0.9
2023	38.0	38.1	0.1	31.9	32.7	0.8	33.0	31.0	-2.0	39.5	44.4	4.9
2024	41.3	41.8	0.5	34.3	37.4	3.1	35.4	37.3	1.9	42.9	44.5	1.6
2025	44.7	45.7	1.0	37.3	38.4	1.1	38.4	42.5	4.1	46.5	48.3	1.8
2026	49.6	51.9	2.3	41.4	41.5	0.1	42.6	44.2	1.6	51.5	52.0	0.5
2027	50.0	51.3	1.3	41.4	43.7	2.3	42.7	43.0	0.3	51.9	53.1	1.2
2028	50.4	51.0	0.6	41.5	44.2	2.7	42.7	42.6	-0.1	52.3	54.8	2.5
2029	51.3	51.0	-0.3	42.4	45.0	2.6	43.6	43.0	-0.6	53.3	55.9	2.6
2030	52.3	52.2	-0.1	43.2	44.3	1.1	44.4	42.8	-1.6	54.4	57.0	2.6
2031	53.5	53.9	0.4	44.0	44.1	0.1	45.4	44.7	-0.7	55.6	58.7	3.1

Table 631 - Required and Achieved CAFE Levels (mpg) for Total Fleet for Alternative PC2LT002

Required and Achieved CAFE Levels (mpg) for Total Fleet for Alternative PC2LT002												
Model Year	Hyundai			KIA			JLR			Karma		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	39.6	41.4	1.8	39.5	40.9	1.4	32.9	29.0	-3.9	40.6	106.8	66.2
2023	40.1	43.5	3.4	39.9	43.6	3.7	33.4	37.9	4.5	41.1	106.8	65.7
2024	43.5	46.2	2.7	43.4	47.3	3.9	36.2	41.8	5.6	44.3	106.8	62.5
2025	47.1	50.4	3.3	47.0	49.3	2.3	39.4	42.1	2.7	48.1	106.8	58.7
2026	52.3	53.5	1.2	52.1	52.5	0.4	43.7	45.9	2.2	53.5	542.6	489.1
2027	52.8	55.2	2.4	52.5	52.0	-0.5	43.8	45.0	1.2	55.2	328.4	273.2
2028	53.2	54.6	1.4	53.0	53.6	0.6	43.8	43.9	0.1	56.3	207.1	150.8
2029	54.3	55.5	1.2	54.0	54.3	0.3	44.7	42.9	-1.8	57.5	151.2	93.7
2030	55.4	55.9	0.5	55.1	55.5	0.4	45.6	43.8	-1.8	58.6	119.0	60.4
2031	56.5	57.7	1.2	56.2	57.1	0.9	46.5	46.5	0.0	59.8	119.0	59.2

Table 632 - Required and Achieved CAFE Levels (mpg) for Total Fleet for Alternative PC2LT002

Required and Achieved CAFE Levels (mpg) for Total Fleet for Alternative PC2LT002												
Model Year	Lucid			Mazda			Mercedes-Benz			Mitsubishi		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	40.6	742.5	701.9	37.3	36.5	-0.8	36.8	32.8	-4.0	42.0	40.3	-1.7
2023	41.1	742.5	701.4	37.8	47.1	9.3	37.3	39.5	2.2	42.6	40.6	-2.0
2024	44.3	742.5	698.2	41.1	49.5	8.4	40.4	40.4	0.0	46.2	48.6	2.4
2025	48.1	742.5	694.4	44.6	50.3	5.7	43.8	42.0	-1.8	50.0	62.3	12.3
2026	53.5	742.5	689.0	49.5	53.0	3.5	48.6	49.4	0.8	55.5	62.3	6.8
2027	55.2	394.4	339.2	49.6	52.8	3.2	49.0	50.7	1.7	56.0	60.7	4.7
2028	56.3	248.6	192.3	49.6	53.4	3.8	49.3	52.0	2.7	56.4	66.2	9.8
2029	57.5	181.5	124.0	50.7	54.6	3.9	50.3	50.9	0.6	57.5	64.6	7.1
2030	58.6	142.9	84.3	51.7	55.8	4.1	51.3	51.7	0.4	58.7	63.3	4.6
2031	59.8	142.9	83.1	52.7	57.7	5.0	52.4	53.6	1.2	59.9	63.9	4.0

Table 633 - Required and Achieved CAFE Levels (mpg) for Total Fleet for Alternative PC2LT002

Required and Achieved CAFE Levels (mpg) for Total Fleet for Alternative PC2LT002												
Model Year	Nissan			Stellantis			Subaru			Tesla		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	38.9	38.6	-0.3	31.9	28.9	-3.0	37.8	39.0	1.2	40.7	699.0	658.3
2023	39.4	42.4	3.0	32.3	30.9	-1.4	38.2	43.7	5.5	41.3	707.6	666.3
2024	42.7	44.9	2.2	35.0	34.9	-0.1	41.5	46.3	4.8	44.8	710.6	665.8
2025	46.3	48.3	2.0	38.1	41.7	3.6	45.1	48.9	3.8	48.7	714.2	665.5
2026	51.3	52.2	0.9	42.3	42.4	0.1	50.1	51.5	1.4	54.1	714.6	660.5
2027	51.7	51.6	-0.1	42.3	42.8	0.5	50.2	53.2	3.0	55.2	380.6	325.4
2028	52.2	52.8	0.6	42.4	42.3	-0.1	50.3	54.8	4.5	56.2	239.9	183.7
2029	53.2	52.8	-0.4	43.2	43.7	0.5	51.3	56.4	5.1	57.3	175.2	117.9
2030	54.3	55.0	0.7	44.1	43.8	-0.3	52.3	57.9	5.6	58.4	137.9	79.5
2031	55.3	56.3	1.0	45.0	44.8	-0.2	53.4	60.2	6.8	59.7	137.9	78.2

Table 634 - Required and Achieved CAFE Levels (mpg) for Total Fleet for Alternative PC2LT002

Required and Achieved CAFE Levels (mpg) for Total Fleet for Alternative PC2LT002												
Model Year	Toyota			Volvo			VWA			Total		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	37.1	39.1	2.0	36.0	43.8	7.8	37.9	36.3	-1.6	35.8	36.5	0.7
2023	37.5	41.0	3.5	36.4	47.1	10.7	38.3	38.5	0.2	36.2	38.9	2.7
2024	40.6	45.3	4.7	39.5	47.5	8.0	41.6	45.7	4.1	39.1	43.1	4.0
2025	43.9	47.2	3.3	42.8	53.4	10.6	45.0	48.5	3.5	42.4	46.7	4.3
2026	48.7	51.8	3.1	47.6	60.3	12.7	50.0	51.8	1.8	47.0	49.9	2.9
2027	49.0	50.7	1.7	47.8	57.1	9.3	50.2	50.9	0.7	47.3	49.9	2.6
2028	49.2	51.6	2.4	48.0	54.9	6.9	50.5	51.7	1.2	47.4	50.2	2.8
2029	50.2	52.7	2.5	48.9	52.9	4.0	51.5	50.9	-0.6	48.4	50.8	2.4
2030	51.2	53.9	2.7	49.9	54.0	4.1	52.6	52.5	-0.1	49.4	51.1	1.7
2031	52.2	55.8	3.6	50.9	53.6	2.7	53.6	54.1	0.5	50.4	52.5	2.1

Table 635 - Required and Achieved CAFE Levels (mpg) for Passenger Car Fleet for Alternative PC2LT002

Required and Achieved CAFE Levels (mpg) for Passenger Car Fleet for Alternative PC2LT002												
Model Year	BMW			Ford			GM			Honda		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	43.3	37.8	-5.5	43.4	45.5	2.1	45.1	41.9	-3.2	44.7	45.6	0.9
2023	44.0	42.2	-1.8	44.1	45.8	1.7	45.8	42.3	-3.5	45.4	52.2	6.8
2024	47.8	51.8	4.0	47.9	66.6	18.7	49.7	54.2	4.5	49.4	52.6	3.2
2025	52.0	54.7	2.7	52.1	69.2	17.1	54.1	57.7	3.6	53.7	56.7	3.0
2026	57.7	60.9	3.2	57.9	69.2	11.3	60.1	63.4	3.3	59.6	59.6	0.0
2027	58.9	62.5	3.6	59.0	75.5	16.5	61.3	63.0	1.7	60.8	60.9	0.1
2028	60.1	61.8	1.7	60.2	72.0	11.8	62.6	61.6	-1.0	62.1	63.6	1.5
2029	61.3	61.3	0.0	61.5	68.8	7.3	63.9	65.8	1.9	63.3	64.9	1.6
2030	62.6	62.6	0.0	62.7	66.0	3.3	65.1	65.3	0.2	64.6	66.2	1.6
2031	63.9	64.4	0.5	64.0	65.4	1.4	66.5	68.1	1.6	66.0	68.2	2.2

Table 636 - Required and Achieved CAFE Levels (mpg) for Passenger Car Fleet for Alternative PC2LT002

Required and Achieved CAFE Levels (mpg) for Passenger Car Fleet for Alternative PC2LT002												
Model Year	Hyundai			KIA			JLR			Karma		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	44.2	45.3	1.1	44.7	47.0	2.3	43.2	30.6	-12.6	40.6	106.8	66.2
2023	44.9	48.8	3.9	45.4	49.7	4.3	43.8	68.6	24.8	41.1	106.8	65.7
2024	48.8	53.7	4.9	49.4	57.0	7.6	47.6	69.1	21.5	44.3	106.8	62.5
2025	53.1	54.6	1.5	53.6	59.4	5.8	51.8	69.2	17.4	48.1	106.8	58.7
2026	59.0	60.7	1.7	59.6	60.6	1.0	57.5	74.2	16.7	53.5	542.6	489.1
2027	60.2	65.0	4.8	60.8	60.4	-0.4	58.7	70.9	12.2	55.2	328.4	273.2
2028	61.4	63.8	2.4	62.1	61.7	-0.4	59.9	66.2	6.3	56.3	207.1	150.8
2029	62.7	65.6	2.9	63.3	63.9	0.6	61.1	62.1	1.0	57.5	151.2	93.7
2030	64.0	65.3	1.3	64.6	65.6	1.0	62.4	63.1	0.7	58.6	119.0	60.4
2031	65.3	68.1	2.8	65.9	67.7	1.8	63.7	65.0	1.3	59.8	119.0	59.2

Table 637 - Required and Achieved CAFE Levels (mpg) for Passenger Car Fleet for Alternative PC2LT002

Required and Achieved CAFE Levels (mpg) for Passenger Car Fleet for Alternative PC2LT002												
Model Year	Lucid			Mazda			Mercedes-Benz			Mitsubishi		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	40.6	742.5	701.9	46.1	41.5	-4.6	41.8	35.5	-6.3	47.0	42.9	-4.1
2023	41.1	742.5	701.4	46.8	42.5	-4.3	42.4	45.3	2.9	47.7	43.3	-4.4
2024	44.3	742.5	698.2	50.9	55.6	4.7	46.1	47.9	1.8	51.9	61.2	9.3
2025	48.1	742.5	694.4	55.3	58.8	3.5	50.1	52.7	2.6	56.4	67.6	11.2
2026	53.5	742.5	689.0	61.5	61.5	0.0	55.6	71.3	15.7	62.7	67.7	5.0
2027	55.2	394.4	339.2	62.7	62.4	-0.3	56.8	70.8	14.0	63.9	65.3	1.4
2028	56.3	248.6	192.3	64.0	63.3	-0.7	57.9	66.9	9.0	65.2	72.5	7.3
2029	57.5	181.5	124.0	65.3	65.9	0.6	59.1	63.7	4.6	66.6	70.8	4.2
2030	58.6	142.9	84.3	66.7	66.9	0.2	60.3	61.2	0.9	67.9	69.2	1.3
2031	59.8	142.9	83.1	68.0	69.7	1.7	61.6	63.6	2.0	69.3	70.4	1.1

Table 638 - Required and Achieved CAFE Levels (mpg) for Passenger Car Fleet for Alternative PC2LT002

Required and Achieved CAFE Levels (mpg) for Passenger Car Fleet for Alternative PC2LT002												
Model Year	Nissan			Stellantis			Subaru			Tesla		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	44.7	44.3	-0.4	41.8	29.2	-12.6	46.0	38.3	-7.7	41.1	698.9	657.8
2023	45.4	49.4	4.0	42.4	31.9	-10.5	46.7	52.1	5.4	41.7	698.9	657.2
2024	49.3	53.8	4.5	46.1	45.5	-0.6	50.7	52.2	1.5	45.3	698.9	653.6
2025	53.6	58.7	5.1	50.0	55.8	5.8	55.1	65.4	10.3	49.3	698.9	649.6
2026	59.6	64.9	5.3	55.6	57.7	2.1	61.3	68.1	6.8	54.8	698.9	644.1
2027	60.8	64.0	3.2	56.8	56.1	-0.7	62.5	69.1	6.6	55.9	381.4	325.5
2028	62.1	63.1	1.0	57.9	55.5	-2.4	63.8	69.6	5.8	57.0	240.4	183.4
2029	63.3	62.2	-1.1	59.1	56.7	-2.4	65.1	70.5	5.4	58.2	175.6	117.4
2030	64.6	64.9	0.3	60.3	56.1	-4.2	66.4	70.8	4.4	59.4	138.3	78.9
2031	65.9	66.9	1.0	61.5	60.6	-0.9	67.8	73.9	6.1	60.7	138.3	77.6

Table 639 - Required and Achieved CAFE Levels (mpg) for Passenger Car Fleet for Alternative PC2LT002

Required and Achieved CAFE Levels (mpg) for Passenger Car Fleet for Alternative PC2LT002												
Model Year	Toyota			Volvo			VWA			Total		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	44.7	46.7	2.0	42.9	64.5	21.6	45.0	40.1	-4.9	44.1	47.1	3.0
2023	45.4	51.6	6.2	43.6	67.5	23.9	45.7	41.6	-4.1	44.8	51.6	6.8
2024	49.4	54.3	4.9	47.4	69.3	21.9	49.7	49.1	-0.6	48.7	58.4	9.7
2025	53.6	57.5	3.9	51.5	75.5	24.0	54.0	53.1	-0.9	52.9	62.7	9.8
2026	59.6	62.8	3.2	57.2	126.6	69.4	60.0	62.6	2.6	58.8	68.3	9.5
2027	60.8	63.1	2.3	58.3	112.1	53.8	61.2	63.0	1.8	60.0	68.6	8.6
2028	62.1	64.2	2.1	59.5	98.6	39.1	62.5	67.9	5.4	61.2	68.4	7.2
2029	63.4	65.4	2.0	60.8	88.0	27.2	63.8	65.5	1.7	62.5	68.6	6.1
2030	64.6	66.8	2.2	62.0	79.4	17.4	65.1	65.0	-0.1	63.7	68.6	4.9
2031	65.9	68.8	2.9	63.3	79.4	16.1	66.4	67.7	1.3	65.1	70.8	5.7

Table 640 - Required and Achieved CAFE Levels (mpg) for Light Truck Fleet for Alternative PC2LT002

Required and Achieved CAFE Levels (mpg) for Light Truck Fleet for Alternative PC2LT002												
Model Year	BMW			Ford			GM			Honda		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	32.5	32.7	0.2	30.3	29.6	-0.7	29.8	28.3	-1.5	34.0	35.0	1.0
2023	33.0	34.4	1.4	30.8	31.6	0.8	30.3	28.6	-1.7	34.5	38.0	3.5
2024	35.9	34.4	-1.5	33.2	35.5	2.3	32.5	34.0	1.5	37.5	38.1	0.6
2025	39.0	39.0	0.0	36.1	36.5	0.4	35.4	39.5	4.1	40.8	41.9	1.1
2026	43.4	45.1	1.7	40.1	39.7	-0.4	39.3	40.7	1.4	45.3	46.1	0.8
2027	43.4	43.5	0.1	40.1	41.7	1.6	39.3	39.5	0.2	45.3	47.1	1.8
2028	43.4	43.5	0.1	40.1	42.4	2.3	39.3	39.3	0.0	45.3	48.3	3.0
2029	44.2	43.8	-0.4	41.0	43.4	2.4	40.1	39.3	-0.8	46.2	49.2	3.0
2030	45.1	44.9	-0.2	41.8	42.8	1.0	40.9	39.1	-1.8	47.2	50.2	3.0
2031	46.1	46.5	0.4	42.6	42.6	0.0	41.8	40.9	-0.9	48.2	51.7	3.5

Table 641 - Required and Achieved CAFE Levels (mpg) for Light Truck Fleet for Alternative PC2LT002

Required and Achieved CAFE Levels (mpg) for Light Truck Fleet for Alternative PC2LT002												
Model Year	Hyundai			KIA			JLR			Karma		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	34.0	36.4	2.4	34.0	34.6	0.6	32.7	29.0	-3.7	0.0	0.0	0.0
2023	34.5	37.4	2.9	34.5	37.5	3.0	33.2	37.5	4.3	0.0	0.0	0.0
2024	37.5	38.3	0.8	37.5	38.8	1.3	36.0	41.4	5.4	0.0	0.0	0.0
2025	40.7	45.5	4.8	40.8	40.8	0.0	39.2	41.7	2.5	0.0	0.0	0.0
2026	45.3	46.1	0.8	45.3	45.3	0.0	43.5	45.5	2.0	0.0	0.0	0.0
2027	45.3	45.9	0.6	45.3	44.7	-0.6	43.5	44.6	1.1	0.0	0.0	0.0
2028	45.3	45.9	0.6	45.3	46.6	1.3	43.5	43.6	0.1	0.0	0.0	0.0
2029	46.2	46.2	0.0	46.2	46.3	0.1	44.4	42.6	-1.8	0.0	0.0	0.0
2030	47.1	47.1	0.0	47.2	47.2	0.0	45.3	43.5	-1.8	0.0	0.0	0.0
2031	48.1	48.1	0.0	48.1	48.4	0.3	46.2	46.2	0.0	0.0	0.0	0.0

Table 642 - Required and Achieved CAFE Levels (mpg) for Light Truck Fleet for Alternative PC2LT002

Required and Achieved CAFE Levels (mpg) for Light Truck Fleet for Alternative PC2LT002												
Model Year	Lucid			Mazda			Mercedes-Benz			Mitsubishi		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	0.0	0.0	0.0	36.0	35.7	-0.3	32.9	30.4	-2.5	37.0	37.4	0.4
2023	0.0	0.0	0.0	36.6	48.0	11.4	33.4	35.2	1.8	37.6	37.7	0.1
2024	0.0	0.0	0.0	39.8	48.6	8.8	36.3	35.3	-1.0	40.8	39.0	-1.8
2025	0.0	0.0	0.0	43.2	49.2	6.0	39.5	35.6	-3.9	44.4	57.3	12.9
2026	0.0	0.0	0.0	48.0	51.9	3.9	43.9	39.1	-4.8	49.3	57.3	8.0
2027	0.0	0.0	0.0	48.0	51.6	3.6	43.9	40.8	-3.1	49.3	56.4	7.1
2028	0.0	0.0	0.0	48.0	52.1	4.1	43.9	43.9	0.0	49.3	60.5	11.2
2029	0.0	0.0	0.0	49.0	53.2	4.2	44.8	43.7	-1.1	50.3	59.2	8.9
2030	0.0	0.0	0.0	50.0	54.4	4.4	45.7	45.8	0.1	51.4	58.1	6.7
2031	0.0	0.0	0.0	51.0	56.2	5.2	46.6	47.4	0.8	52.4	58.2	5.8

Table 643 - Required and Achieved CAFE Levels (mpg) for Light Truck Fleet for Alternative PC2LT002

Required and Achieved CAFE Levels (mpg) for Light Truck Fleet for Alternative PC2LT002												
Model Year	Nissan			Stellantis			Subaru			Tesla		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	32.9	32.6	-0.3	30.7	28.9	-1.8	36.5	39.1	2.6	33.4	700.3	666.9
2023	33.4	35.6	2.2	31.2	30.7	-0.5	37.0	42.4	5.4	33.9	936.4	902.5
2024	36.3	36.8	0.5	33.8	33.7	-0.1	40.2	45.4	5.2	36.9	1046.7	1009.8
2025	39.5	39.5	0.0	36.8	40.3	3.5	43.7	46.9	3.2	40.1	1186.5	1146.4
2026	43.9	42.2	-1.7	40.9	40.9	0.0	48.6	49.5	0.9	44.5	1186.5	1142.0
2027	43.9	41.8	-2.1	40.9	41.4	0.5	48.6	51.3	2.7	44.5	365.7	321.2
2028	43.9	44.2	0.3	40.9	41.0	0.1	48.6	53.0	4.4	44.5	230.5	186.0
2029	44.8	44.9	0.1	41.7	42.4	0.7	49.6	54.6	5.0	45.4	168.3	122.9
2030	45.7	46.7	1.0	42.6	42.5	-0.1	50.6	56.3	5.7	46.3	132.5	86.2
2031	46.6	47.4	0.8	43.4	43.3	-0.1	51.6	58.5	6.9	47.3	132.5	85.2

Table 644 - Required and Achieved CAFE Levels (mpg) for Light Truck Fleet for Alternative PC2LT002

Required and Achieved CAFE Levels (mpg) for Light Truck Fleet for Alternative PC2LT002												
Model Year	Toyota			Volvo			VWA			Total		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	33.0	35.0	2.0	33.4	38.0	4.6	34.0	33.9	-0.1	32.1	32.1	0.0
2023	33.5	36.0	2.5	33.9	41.4	7.5	34.5	36.6	2.1	32.6	34.0	1.4
2024	36.3	40.8	4.5	36.8	41.7	4.9	37.5	43.7	6.2	35.2	37.5	2.3
2025	39.4	42.4	3.0	40.0	47.6	7.6	40.8	46.0	5.2	38.3	41.1	2.8
2026	43.8	46.8	3.0	44.5	49.6	5.1	45.3	46.9	1.6	42.6	43.7	1.1
2027	43.8	45.3	1.5	44.5	47.6	3.1	45.3	45.6	0.3	42.6	43.7	1.1
2028	43.8	46.2	2.4	44.5	46.6	2.1	45.3	45.3	0.0	42.6	44.2	1.6
2029	44.7	47.3	2.6	45.4	45.7	0.3	46.3	45.0	-1.3	43.5	44.9	1.4
2030	45.6	48.4	2.8	46.3	47.9	1.6	47.2	47.2	0.0	44.3	45.3	1.0
2031	46.5	50.2	3.7	47.3	47.5	0.2	48.2	48.3	0.1	45.2	46.4	1.2

Table 645 - Required and Achieved CAFE Levels (mpg) for Domestic Car Fleet for Alternative PC2LT002

Required and Achieved CAFE Levels (mpg) for Domestic Car Fleet for Alternative PC2LT002												
Model Year	BMW			Ford			GM			Honda		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	0.0	0.0	0.0	43.4	45.5	2.1	44.3	41.2	-3.1	44.7	45.6	0.9
2023	0.0	0.0	0.0	44.1	45.8	1.7	45.0	41.7	-3.3	45.4	52.2	6.8
2024	0.0	0.0	0.0	47.9	66.6	18.7	48.9	54.7	5.8	49.4	52.6	3.2
2025	0.0	0.0	0.0	52.1	69.2	17.1	53.2	58.2	5.0	53.7	56.7	3.0
2026	0.0	0.0	0.0	57.9	69.2	11.3	59.1	62.7	3.6	59.6	59.6	0.0
2027	0.0	0.0	0.0	59.0	75.5	16.5	60.3	62.6	2.3	60.8	60.9	0.1
2028	0.0	0.0	0.0	60.2	72.0	11.8	61.5	61.1	-0.4	62.1	63.6	1.5
2029	0.0	0.0	0.0	61.5	68.8	7.3	62.8	65.8	3.0	63.3	64.9	1.6
2030	0.0	0.0	0.0	62.7	66.0	3.3	64.0	64.2	0.2	64.6	66.2	1.6
2031	0.0	0.0	0.0	64.0	65.4	1.4	65.4	66.5	1.1	66.0	68.2	2.2

Table 646 - Required and Achieved CAFE Levels (mpg) for Domestic Car Fleet for Alternative PC2LT002

Required and Achieved CAFE Levels (mpg) for Domestic Car Fleet for Alternative PC2LT002												
Model Year	Hyundai			KIA			JLR			Karma		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	48.7	53.4	4.7	45.8	47.1	1.3	0.0	0.0	0.0	40.6	106.8	66.2
2023	49.5	2658.3	2608.8	46.5	47.2	0.7	0.0	0.0	0.0	41.1	106.8	65.7
2024	53.8	3125.8	3072.0	50.6	62.1	11.5	0.0	0.0	0.0	44.3	106.8	62.5
2025	58.4	3792.9	3734.5	55.0	61.9	6.9	0.0	0.0	0.0	48.1	106.8	58.7
2026	64.9	4821.9	4757.0	61.1	62.1	1.0	0.0	0.0	0.0	53.5	542.6	489.1
2027	66.3	674.6	608.3	62.3	61.9	-0.4	0.0	0.0	0.0	55.2	328.4	273.2
2028	67.6	425.3	357.7	63.6	61.2	-2.4	0.0	0.0	0.0	56.3	207.1	150.8
2029	69.0	310.5	241.5	64.9	70.7	5.8	0.0	0.0	0.0	57.5	151.2	93.7
2030	70.4	242.7	172.3	66.2	70.9	4.7	0.0	0.0	0.0	58.6	119.0	60.4
2031	71.8	239.8	168.0	67.6	72.6	5.0	0.0	0.0	0.0	59.8	119.0	59.2

Table 647 - Required and Achieved CAFE Levels (mpg) for Domestic Car Fleet for Alternative PC2LT002

Required and Achieved CAFE Levels (mpg) for Domestic Car Fleet for Alternative PC2LT002												
Model Year	Lucid			Mazda			Mercedes-Benz			Mitsubishi		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	40.6	742.5	701.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2023	41.1	742.5	701.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2024	44.3	742.5	698.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2025	48.1	742.5	694.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2026	53.5	742.5	689.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2027	55.2	394.4	339.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2028	56.3	248.6	192.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2029	57.5	181.5	124.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2030	58.6	142.9	84.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2031	59.8	142.9	83.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table 648 - Required and Achieved CAFE Levels (mpg) for Domestic Car Fleet for Alternative PC2LT002

Required and Achieved CAFE Levels (mpg) for Domestic Car Fleet for Alternative PC2LT002												
Model Year	Nissan			Stellantis			Subaru			Tesla		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	44.5	43.4	-1.1	41.4	28.7	-12.7	0.0	0.0	0.0	40.8	671.8	631.0
2023	45.2	44.6	-0.6	42.0	31.5	-10.5	0.0	0.0	0.0	41.4	671.8	630.4
2024	49.1	49.1	0.0	45.7	45.6	-0.1	0.0	0.0	0.0	45.0	671.8	626.8
2025	53.4	54.7	1.3	49.6	55.9	6.3	0.0	0.0	0.0	48.9	671.8	622.9
2026	59.3	62.2	2.9	55.1	57.1	2.0	0.0	0.0	0.0	54.4	671.8	617.4
2027	60.5	61.8	1.3	56.3	55.5	-0.8	0.0	0.0	0.0	55.5	373.0	317.5
2028	61.8	61.1	-0.7	57.4	55.1	-2.3	0.0	0.0	0.0	56.6	235.1	178.5
2029	63.0	60.5	-2.5	58.6	56.7	-1.9	0.0	0.0	0.0	57.8	171.7	113.9
2030	64.3	64.5	0.2	59.8	56.1	-3.7	0.0	0.0	0.0	58.9	135.2	76.3
2031	65.6	66.7	1.1	61.0	61.0	0.0	0.0	0.0	0.0	60.2	135.2	75.0

Table 649 - Required and Achieved CAFE Levels (mpg) for Domestic Car Fleet for Alternative PC2LT002

Required and Achieved CAFE Levels (mpg) for Domestic Car Fleet for Alternative PC2LT002												
Model Year	Toyota			Volvo			VWA			Total		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	43.1	43.2	0.1	42.3	45.3	3.0	41.4	34.1	-7.3	43.5	48.9	5.4
2023	43.7	43.9	0.2	42.9	49.2	6.3	42.0	34.2	-7.8	44.2	52.4	8.2
2024	47.5	49.4	1.9	46.7	49.7	3.0	45.7	40.2	-5.5	48.1	60.9	12.8
2025	51.7	55.5	3.8	50.7	55.0	4.3	49.6	40.3	-9.3	52.3	66.6	14.3
2026	57.4	57.3	-0.1	56.4	1119.7	1063.3	55.2	117.7	62.5	58.0	71.4	13.4
2027	58.6	58.4	-0.2	57.5	434.6	377.1	56.3	104.1	47.8	59.2	71.2	12.0
2028	59.8	59.4	-0.4	58.7	274.0	215.3	57.4	94.0	36.6	60.4	70.4	10.0
2029	61.0	60.8	-0.2	59.9	200.0	140.1	58.6	87.6	29.0	61.7	70.7	9.0
2030	62.2	62.7	0.5	61.1	157.5	96.4	59.8	81.5	21.7	62.9	70.4	7.5
2031	63.5	64.6	1.1	62.3	157.5	95.2	61.0	82.6	21.6	64.2	72.6	8.4

Table 650 - Required and Achieved CAFE Levels (mpg) for Imported Car Fleet for Alternative PC2LT002

Required and Achieved CAFE Levels (mpg) for Imported Car Fleet for Alternative PC2LT002												
Model Year	BMW			Ford			GM			Honda		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	43.3	37.8	-5.5	0.0	0.0	0.0	47.1	43.8	-3.3	44.9	30.4	-14.5
2023	44.0	42.2	-1.8	0.0	0.0	0.0	47.9	44.0	-3.9	45.6	31.2	-14.4
2024	47.8	51.8	4.0	0.0	0.0	0.0	52.0	52.9	0.9	49.6	31.3	-18.3
2025	52.0	54.7	2.7	0.0	0.0	0.0	56.5	56.6	0.1	53.8	31.7	-22.1
2026	57.7	60.9	3.2	0.0	0.0	0.0	62.8	65.1	2.3	59.8	427.4	367.6
2027	58.9	62.5	3.6	0.0	0.0	0.0	64.1	63.9	-0.2	61.1	242.0	180.9
2028	60.1	61.8	1.7	0.0	0.0	0.0	65.4	62.9	-2.5	62.3	152.6	90.3
2029	61.3	61.3	0.0	0.0	0.0	0.0	66.8	65.9	-0.9	63.6	111.4	47.8
2030	62.6	62.6	0.0	0.0	0.0	0.0	68.1	68.1	0.0	64.9	87.7	22.8
2031	63.9	64.4	0.5	0.0	0.0	0.0	69.5	72.6	3.1	66.2	87.7	21.5

Table 651 - Required and Achieved CAFE Levels (mpg) for Imported Car Fleet for Alternative PC2LT002

Required and Achieved CAFE Levels (mpg) for Imported Car Fleet for Alternative PC2LT002												
Model Year	Hyundai			KIA			JLR			Karma		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	44.1	45.1	1.0	44.4	47.0	2.6	43.2	30.6	-12.6	0.0	0.0	0.0
2023	44.8	47.3	2.5	45.0	50.6	5.6	43.8	68.6	24.8	0.0	0.0	0.0
2024	48.7	52.0	3.3	49.0	55.5	6.5	47.6	69.1	21.5	0.0	0.0	0.0
2025	52.9	52.9	0.0	53.2	58.7	5.5	51.8	69.2	17.4	0.0	0.0	0.0
2026	58.8	58.8	0.0	59.1	60.1	1.0	57.5	74.2	16.7	0.0	0.0	0.0
2027	60.0	63.1	3.1	60.3	59.9	-0.4	58.7	70.9	12.2	0.0	0.0	0.0
2028	61.2	62.1	0.9	61.6	61.8	0.2	59.9	66.2	6.3	0.0	0.0	0.0
2029	62.5	63.9	1.4	62.8	62.0	-0.8	61.1	62.1	1.0	0.0	0.0	0.0
2030	63.8	63.8	0.0	64.1	64.1	0.0	62.4	63.1	0.7	0.0	0.0	0.0
2031	65.1	66.5	1.4	65.4	66.3	0.9	63.7	65.0	1.3	0.0	0.0	0.0

Table 652 - Required and Achieved CAFE Levels (mpg) for Imported Car Fleet for Alternative PC2LT002

Required and Achieved CAFE Levels (mpg) for Imported Car Fleet for Alternative PC2LT002												
Model Year	Lucid			Mazda			Mercedes-Benz			Mitsubishi		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	0.0	0.0	0.0	46.1	41.5	-4.6	41.8	35.5	-6.3	47.0	42.9	-4.1
2023	0.0	0.0	0.0	46.8	42.5	-4.3	42.4	45.3	2.9	47.7	43.3	-4.4
2024	0.0	0.0	0.0	50.9	55.6	4.7	46.1	47.9	1.8	51.9	61.2	9.3
2025	0.0	0.0	0.0	55.3	58.8	3.5	50.1	52.7	2.6	56.4	67.6	11.2
2026	0.0	0.0	0.0	61.5	61.5	0.0	55.6	71.3	15.7	62.7	67.7	5.0
2027	0.0	0.0	0.0	62.7	62.4	-0.3	56.8	70.8	14.0	63.9	65.3	1.4
2028	0.0	0.0	0.0	64.0	63.3	-0.7	57.9	66.9	9.0	65.2	72.5	7.3
2029	0.0	0.0	0.0	65.3	65.9	0.6	59.1	63.7	4.6	66.6	70.8	4.2
2030	0.0	0.0	0.0	66.7	66.9	0.2	60.3	61.2	0.9	67.9	69.2	1.3
2031	0.0	0.0	0.0	68.0	69.7	1.7	61.6	63.6	2.0	69.3	70.4	1.1

Table 653 - Required and Achieved CAFE Levels (mpg) for Imported Car Fleet for Alternative PC2LT002

Required and Achieved CAFE Levels (mpg) for Imported Car Fleet for Alternative PC2LT002												
Model Year	Nissan			Stellantis			Subaru			Tesla		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	45.2	46.9	1.7	44.9	33.5	-11.4	46.0	38.3	-7.7	42.4	839.5	797.1
2023	45.9	68.7	22.8	45.5	35.8	-9.7	46.7	52.1	5.4	43.1	839.5	796.4
2024	49.9	72.0	22.1	49.5	45.1	-4.4	50.7	52.2	1.5	46.8	839.5	792.7
2025	54.3	72.7	18.4	53.8	55.1	1.3	55.1	65.4	10.3	50.9	839.5	788.6
2026	60.3	73.1	12.8	59.8	62.6	2.8	61.3	68.1	6.8	56.6	839.5	782.9
2027	61.5	70.8	9.3	61.0	61.0	0.0	62.5	69.1	6.6	57.7	420.9	363.2
2028	62.8	69.1	6.3	62.3	59.0	-3.3	63.8	69.6	5.8	58.9	265.4	206.5
2029	64.0	67.0	3.0	63.5	57.1	-6.4	65.1	70.5	5.4	60.1	193.7	133.6
2030	65.4	66.1	0.7	64.8	56.2	-8.6	66.4	70.8	4.4	61.3	152.6	91.3
2031	66.7	67.5	0.8	66.1	57.6	-8.5	67.8	73.9	6.1	62.6	152.6	90.0

Table 654 - Required and Achieved CAFE Levels (mpg) for Imported Car Fleet for Alternative PC2LT002

Required and Achieved CAFE Levels (mpg) for Imported Car Fleet for Alternative PC2LT002												
Model Year	Toyota			Volvo			VWA			Total		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	45.3	48.0	2.7	43.2	78.9	35.7	45.3	40.7	-4.6	44.7	45.5	0.8
2023	46.0	54.8	8.8	43.9	80.4	36.5	46.0	42.3	-3.7	45.4	51.0	5.6
2024	50.0	56.1	6.1	47.7	83.6	35.9	50.0	49.9	-0.1	49.3	56.2	6.9
2025	54.3	58.2	3.9	51.8	90.0	38.2	54.4	54.4	0.0	53.6	59.4	5.8
2026	60.4	64.9	4.5	57.6	91.5	33.9	60.4	60.4	0.0	59.5	65.5	6.0
2027	61.6	64.9	3.3	58.7	84.8	26.1	61.6	61.2	-0.4	60.7	66.2	5.5
2028	62.9	66.0	3.1	59.9	77.2	17.3	62.9	66.5	3.6	62.0	66.6	4.6
2029	64.2	67.1	2.9	61.2	70.8	9.6	64.2	64.3	0.1	63.3	66.6	3.3
2030	65.5	68.3	2.8	62.4	65.4	3.0	65.5	64.0	-1.5	64.6	66.8	2.2
2031	66.8	70.3	3.5	63.7	65.4	1.7	66.8	66.8	0.0	65.9	69.2	3.3

Table 655 - Required and Achieved CAFE Levels (mpg) for Total Fleet for Alternative PC1LT3

Required and Achieved CAFE Levels (mpg) for Total Fleet for Alternative PC1LT3												
Model Year	BMW			Ford			GM			Honda		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	37.6	35.3	-2.3	31.4	30.9	-0.5	32.5	30.8	-1.7	39.1	40.0	0.9
2023	38.0	38.1	0.1	31.9	32.7	0.8	33.0	31.0	-2.0	39.5	44.4	4.9
2024	41.3	41.8	0.5	34.3	37.4	3.1	35.4	37.3	1.9	42.9	44.5	1.6
2025	44.7	45.7	1.0	37.3	38.4	1.1	38.4	42.5	4.1	46.5	48.3	1.8
2026	49.6	51.9	2.3	41.4	41.5	0.1	42.6	44.2	1.6	51.5	52.0	0.5
2027	50.6	51.2	0.6	42.7	45.6	2.9	43.7	43.0	-0.7	52.6	52.9	0.3
2028	51.7	50.8	-0.9	43.9	46.9	3.0	44.9	42.7	-2.2	53.7	54.8	1.1
2029	52.8	50.8	-2.0	45.2	48.5	3.3	46.1	43.0	-3.1	54.9	56.4	1.5
2030	54.0	51.7	-2.3	46.4	47.6	1.2	47.4	42.7	-4.7	56.1	57.7	1.6
2031	55.1	55.1	0.0	47.8	47.3	-0.5	48.7	44.5	-4.2	57.3	59.5	2.2

Table 656 - Required and Achieved CAFE Levels (mpg) for Total Fleet for Alternative PC1LT3

Required and Achieved CAFE Levels (mpg) for Total Fleet for Alternative PC1LT3												
Model Year	Hyundai			KIA			JLR			Karma		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	39.6	41.4	1.8	39.5	40.9	1.4	32.9	29.0	-3.9	40.6	106.8	66.2
2023	40.1	43.5	3.4	39.9	43.6	3.7	33.4	37.9	4.5	41.1	106.8	65.7
2024	43.5	46.2	2.7	43.4	47.3	3.9	36.2	41.8	5.6	44.3	106.8	62.5
2025	47.1	50.4	3.3	47.0	49.3	2.3	39.4	42.1	2.7	48.1	106.8	58.7
2026	52.3	53.5	1.2	52.1	52.5	0.4	43.7	45.9	2.2	53.5	542.6	489.1
2027	53.3	55.3	2.0	53.1	52.0	-1.1	45.1	45.0	-0.1	54.6	328.4	273.8
2028	54.3	55.2	0.9	54.2	53.7	-0.5	46.4	43.9	-2.5	55.2	207.1	151.9
2029	55.4	56.2	0.8	55.3	53.8	-1.5	47.9	42.9	-5.0	55.7	151.2	95.5
2030	56.5	57.1	0.6	56.5	56.6	0.1	49.4	43.8	-5.6	56.3	119.0	62.7
2031	57.6	59.0	1.4	57.7	58.4	0.7	50.9	47.4	-3.5	56.9	119.0	62.1

Table 657 - Required and Achieved CAFE Levels (mpg) for Total Fleet for Alternative PC1LT3

Required and Achieved CAFE Levels (mpg) for Total Fleet for Alternative PC1LT3												
Model Year	Lucid			Mazda			Mercedes-Benz			Mitsubishi		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	40.6	742.5	701.9	37.3	36.5	-0.8	36.8	32.8	-4.0	42.0	40.3	-1.7
2023	41.1	742.5	701.4	37.8	47.1	9.3	37.3	39.5	2.2	42.6	40.6	-2.0
2024	44.3	742.5	698.2	41.1	49.5	8.4	40.4	40.4	0.0	46.2	48.6	2.4
2025	48.1	742.5	694.4	44.6	50.3	5.7	43.8	42.0	-1.8	50.0	62.3	12.3
2026	53.5	742.5	689.0	49.5	53.0	3.5	48.6	49.4	0.8	55.5	62.3	6.8
2027	54.6	394.4	339.8	50.9	52.8	1.9	49.7	50.7	1.0	56.6	60.7	4.1
2028	55.2	248.6	193.4	52.3	53.3	1.0	50.8	52.5	1.7	57.8	65.8	8.0
2029	55.7	181.5	125.8	53.8	54.5	0.7	51.9	51.5	-0.4	59.0	64.2	5.2
2030	56.3	142.9	86.6	55.3	55.7	0.4	53.0	52.5	-0.5	60.3	62.9	2.6
2031	56.9	142.9	86.0	56.9	57.6	0.7	54.2	54.4	0.2	61.5	63.1	1.6

Table 658 - Required and Achieved CAFE Levels (mpg) for Total Fleet for Alternative PC1LT3

Required and Achieved CAFE Levels (mpg) for Total Fleet for Alternative PC1LT3												
Model Year	Nissan			Stellantis			Subaru			Tesla		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	38.9	38.6	-0.3	31.9	28.9	-3.0	37.8	39.0	1.2	40.7	699.0	658.3
2023	39.4	42.4	3.0	32.3	30.9	-1.4	38.2	43.7	5.5	41.3	707.6	666.3
2024	42.7	44.9	2.2	35.0	34.9	-0.1	41.5	46.3	4.8	44.8	710.6	665.8
2025	46.3	48.3	2.0	38.1	41.7	3.6	45.1	48.9	3.8	48.7	714.2	665.5
2026	51.3	52.2	0.9	42.3	42.4	0.1	50.1	51.5	1.4	54.1	714.6	660.5
2027	52.3	51.6	-0.7	43.4	43.4	0.0	51.5	53.1	1.6	54.7	380.6	325.9
2028	53.4	55.0	1.6	44.7	43.0	-1.7	53.0	54.7	1.7	55.4	239.9	184.5
2029	54.5	55.0	0.5	46.0	44.9	-1.1	54.5	56.4	1.9	56.0	175.2	119.2
2030	55.7	57.2	1.5	47.3	45.1	-2.2	56.0	58.0	2.0	56.6	137.9	81.3
2031	56.8	58.2	1.4	48.7	45.9	-2.8	57.6	60.3	2.7	57.3	137.9	80.6

Table 659 - Required and Achieved CAFE Levels (mpg) for Total Fleet for Alternative PC1LT3

Required and Achieved CAFE Levels (mpg) for Total Fleet for Alternative PC1LT3												
Model Year	Toyota			Volvo			VWA			Total		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	37.1	39.1	2.0	36.0	43.8	7.8	37.9	36.3	-1.6	35.8	36.5	0.7
2023	37.5	41.0	3.5	36.4	47.1	10.7	38.3	38.5	0.2	36.2	38.9	2.7
2024	40.6	45.3	4.7	39.5	47.5	8.0	41.6	45.7	4.1	39.1	43.1	4.0
2025	43.9	47.2	3.3	42.8	53.4	10.6	45.0	48.5	3.5	42.4	46.7	4.3
2026	48.7	51.8	3.1	47.6	60.3	12.7	50.0	51.8	1.8	47.0	49.9	2.9
2027	49.8	50.8	1.0	48.8	57.1	8.3	51.1	51.0	-0.1	48.2	50.3	2.1
2028	51.0	51.9	0.9	50.0	54.9	4.9	52.4	51.2	-1.2	49.4	50.9	1.5
2029	52.3	53.3	1.0	51.3	53.0	1.7	53.7	50.4	-3.3	50.6	51.7	1.1
2030	53.6	54.8	1.2	52.6	56.1	3.5	54.9	52.9	-2.0	51.9	52.3	0.4
2031	54.9	56.7	1.8	54.0	55.8	1.8	56.2	55.3	-0.9	53.2	53.7	0.5

Table 660 - Required and Achieved CAFE Levels (mpg) for Passenger Car Fleet for Alternative PC1LT3

Required and Achieved CAFE Levels (mpg) for Passenger Car Fleet for Alternative PC1LT3												
Model Year	BMW			Ford			GM			Honda		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	43.3	37.8	-5.5	43.4	45.5	2.1	45.1	41.9	-3.2	44.7	45.6	0.9
2023	44.0	42.2	-1.8	44.1	45.8	1.7	45.8	42.3	-3.5	45.4	52.2	6.8
2024	47.8	51.8	4.0	47.9	66.6	18.7	49.7	54.2	4.5	49.4	52.6	3.2
2025	52.0	54.7	2.7	52.1	69.2	17.1	54.1	57.7	3.6	53.7	56.7	3.0
2026	57.7	60.9	3.2	57.9	69.2	11.3	60.1	63.4	3.3	59.6	59.6	0.0
2027	58.3	62.0	3.7	58.4	71.1	12.7	60.7	63.0	2.3	60.2	60.9	0.7
2028	58.9	60.5	1.6	59.0	68.0	9.0	61.3	61.6	0.3	60.8	63.6	2.8
2029	59.5	59.9	0.4	59.6	65.1	5.5	61.9	64.8	2.9	61.4	64.9	3.5
2030	60.1	60.3	0.2	60.2	62.5	2.3	62.6	63.9	1.3	62.1	66.3	4.2
2031	60.7	62.2	1.5	60.8	63.1	2.3	63.2	64.8	1.6	62.7	68.3	5.6

Table 661 - Required and Achieved CAFE Levels (mpg) for Passenger Car Fleet for Alternative PC1LT3

Required and Achieved CAFE Levels (mpg) for Passenger Car Fleet for Alternative PC1LT3												
Model Year	Hyundai			KIA			JLR			Karma		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	44.2	45.3	1.1	44.7	47.0	2.3	43.2	30.6	-12.6	40.6	106.8	66.2
2023	44.9	48.8	3.9	45.4	49.7	4.3	43.8	68.6	24.8	41.1	106.8	65.7
2024	48.8	53.7	4.9	49.4	57.0	7.6	47.6	69.1	21.5	44.3	106.8	62.5
2025	53.1	54.6	1.5	53.6	59.4	5.8	51.8	69.2	17.4	48.1	106.8	58.7
2026	59.0	60.7	1.7	59.6	60.6	1.0	57.5	74.2	16.7	53.5	542.6	489.1
2027	59.6	62.8	3.2	60.2	60.4	0.2	58.1	70.9	12.8	54.6	328.4	273.8
2028	60.2	61.7	1.5	60.8	60.9	0.1	58.7	66.3	7.6	55.2	207.1	151.9
2029	60.8	62.3	1.5	61.4	61.5	0.1	59.3	62.1	2.8	55.7	151.2	95.5
2030	61.4	62.7	1.3	62.1	62.2	0.1	59.9	61.1	1.2	56.3	119.0	62.7
2031	62.0	64.9	2.9	62.7	64.1	1.4	60.5	63.0	2.5	56.9	119.0	62.1

Table 662 - Required and Achieved CAFE Levels (mpg) for Passenger Car Fleet for Alternative PC1LT3

Required and Achieved CAFE Levels (mpg) for Passenger Car Fleet for Alternative PC1LT3												
Model Year	Lucid			Mazda			Mercedes-Benz			Mitsubishi		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	40.6	742.5	701.9	46.1	41.5	-4.6	41.8	35.5	-6.3	47.0	42.9	-4.1
2023	41.1	742.5	701.4	46.8	42.5	-4.3	42.4	45.3	2.9	47.7	43.3	-4.4
2024	44.3	742.5	698.2	50.9	55.6	4.7	46.1	47.9	1.8	51.9	61.2	9.3
2025	48.1	742.5	694.4	55.3	58.8	3.5	50.1	52.7	2.6	56.4	67.6	11.2
2026	53.5	742.5	689.0	61.5	61.5	0.0	55.6	71.3	15.7	62.7	67.7	5.0
2027	54.6	394.4	339.8	62.1	62.4	0.3	56.2	70.8	14.6	63.3	65.3	2.0
2028	55.2	248.6	193.4	62.7	62.8	0.1	56.8	66.9	10.1	63.9	71.4	7.5
2029	55.7	181.5	125.8	63.4	63.8	0.4	57.3	63.7	6.4	64.6	69.6	5.0
2030	56.3	142.9	86.6	64.0	64.9	0.9	57.9	61.1	3.2	65.2	68.1	2.9
2031	56.9	142.9	86.0	64.6	67.7	3.1	58.5	63.5	5.0	65.9	68.3	2.4

Table 663 - Required and Achieved CAFE Levels (mpg) for Passenger Car Fleet for Alternative PC1LT3

Required and Achieved CAFE Levels (mpg) for Passenger Car Fleet for Alternative PC1LT3												
Model Year	Nissan			Stellantis			Subaru			Tesla		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	44.7	44.3	-0.4	41.8	29.2	-12.6	46.0	38.3	-7.7	41.1	698.9	657.8
2023	45.4	49.4	4.0	42.4	31.9	-10.5	46.7	52.1	5.4	41.7	698.9	657.2
2024	49.3	53.8	4.5	46.1	45.5	-0.6	50.7	52.2	1.5	45.3	698.9	653.6
2025	53.6	58.7	5.1	50.0	55.8	5.8	55.1	65.4	10.3	49.3	698.9	649.6
2026	59.6	64.9	5.3	55.6	57.7	2.1	61.3	68.1	6.8	54.8	698.9	644.1
2027	60.2	64.0	3.8	56.2	56.1	-0.1	61.9	69.1	7.2	55.3	381.4	326.1
2028	60.8	63.4	2.6	56.8	55.5	-1.3	62.5	69.6	7.1	55.9	240.4	184.5
2029	61.4	62.4	1.0	57.3	56.7	-0.6	63.1	70.4	7.3	56.4	175.6	119.2
2030	62.1	63.2	1.1	57.9	56.1	-1.8	63.8	70.7	6.9	57.0	138.3	81.3
2031	62.7	64.8	2.1	58.5	58.8	0.3	64.4	73.9	9.5	57.6	138.3	80.7

Table 664 - Required and Achieved CAFE Levels (mpg) for Passenger Car Fleet for Alternative PC1LT3

Required and Achieved CAFE Levels (mpg) for Passenger Car Fleet for Alternative PC1LT3												
Model Year	Toyota			Volvo			VWA			Total		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	44.7	46.7	2.0	42.9	64.5	21.6	45.0	40.1	-4.9	44.1	47.1	3.0
2023	45.4	51.6	6.2	43.6	67.5	23.9	45.7	41.6	-4.1	44.8	51.6	6.8
2024	49.4	54.3	4.9	47.4	69.3	21.9	49.7	49.1	-0.6	48.7	58.4	9.7
2025	53.6	57.5	3.9	51.5	75.5	24.0	54.0	53.1	-0.9	52.9	62.7	9.8
2026	59.6	62.8	3.2	57.2	126.6	69.4	60.0	62.6	2.6	58.8	68.3	9.5
2027	60.2	63.1	2.9	57.8	112.1	54.3	60.6	62.9	2.3	59.4	68.2	8.8
2028	60.8	64.2	3.4	58.3	98.6	40.3	61.2	65.1	3.9	60.0	67.8	7.8
2029	61.4	65.5	4.1	58.9	88.0	29.1	61.9	63.0	1.1	60.6	67.6	7.0
2030	62.1	66.7	4.6	59.5	79.4	19.9	62.5	62.5	0.0	61.2	67.3	6.1
2031	62.7	68.7	6.0	60.1	79.4	19.3	63.1	64.8	1.7	61.8	69.1	7.3

Table 665 - Required and Achieved CAFE Levels (mpg) for Light Truck Fleet for Alternative PC1LT3

Required and Achieved CAFE Levels (mpg) for Light Truck Fleet for Alternative PC1LT3												
Model Year	BMW			Ford			GM			Honda		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	32.5	32.7	0.2	30.3	29.6	-0.7	29.8	28.3	-1.5	34.0	35.0	1.0
2023	33.0	34.4	1.4	30.8	31.6	0.8	30.3	28.6	-1.7	34.5	38.0	3.5
2024	35.9	34.4	-1.5	33.2	35.5	2.3	32.5	34.0	1.5	37.5	38.1	0.6
2025	39.0	39.0	0.0	36.1	36.5	0.4	35.4	39.5	4.1	40.8	41.9	1.1
2026	43.4	45.1	1.7	40.1	39.7	-0.4	39.3	40.7	1.4	45.3	46.1	0.8
2027	44.7	43.5	-1.2	41.4	43.8	2.4	40.5	39.5	-1.0	46.7	46.7	0.0
2028	46.1	43.8	-2.3	42.7	45.3	2.6	41.8	39.3	-2.5	48.2	48.2	0.0
2029	47.5	44.1	-3.4	44.0	47.2	3.2	43.1	39.3	-3.8	49.7	49.9	0.2
2030	49.0	45.2	-3.8	45.3	46.4	1.1	44.4	39.1	-5.3	51.2	51.2	0.0
2031	50.5	49.4	-1.1	46.7	46.0	-0.7	45.8	40.9	-4.9	52.8	52.8	0.0

Table 666 - Required and Achieved CAFE Levels (mpg) for Light Truck Fleet for Alternative PC1LT3

Required and Achieved CAFE Levels (mpg) for Light Truck Fleet for Alternative PC1LT3												
Model Year	Hyundai			KIA			JLR			Karma		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	34.0	36.4	2.4	34.0	34.6	0.6	32.7	29.0	-3.7	0.0	0.0	0.0
2023	34.5	37.4	2.9	34.5	37.5	3.0	33.2	37.5	4.3	0.0	0.0	0.0
2024	37.5	38.3	0.8	37.5	38.8	1.3	36.0	41.4	5.4	0.0	0.0	0.0
2025	40.7	45.5	4.8	40.8	40.8	0.0	39.2	41.7	2.5	0.0	0.0	0.0
2026	45.3	46.1	0.8	45.3	45.3	0.0	43.5	45.5	2.0	0.0	0.0	0.0
2027	46.7	47.7	1.0	46.7	44.7	-2.0	44.9	44.6	-0.3	0.0	0.0	0.0
2028	48.1	48.5	0.4	48.2	47.2	-1.0	46.2	43.6	-2.6	0.0	0.0	0.0
2029	49.6	49.7	0.1	49.6	47.0	-2.6	47.7	42.6	-5.1	0.0	0.0	0.0
2030	51.1	51.1	0.0	51.2	51.2	0.0	49.2	43.5	-5.7	0.0	0.0	0.0
2031	52.7	52.7	0.0	52.8	52.8	0.0	50.7	47.1	-3.6	0.0	0.0	0.0

Table 667 - Required and Achieved CAFE Levels (mpg) for Light Truck Fleet for Alternative PC1LT3

Required and Achieved CAFE Levels (mpg) for Light Truck Fleet for Alternative PC1LT3												
Model Year	Lucid			Mazda			Mercedes-Benz			Mitsubishi		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	0.0	0.0	0.0	36.0	35.7	-0.3	32.9	30.4	-2.5	37.0	37.4	0.4
2023	0.0	0.0	0.0	36.6	48.0	11.4	33.4	35.2	1.8	37.6	37.7	0.1
2024	0.0	0.0	0.0	39.8	48.6	8.8	36.3	35.3	-1.0	40.8	39.0	-1.8
2025	0.0	0.0	0.0	43.2	49.2	6.0	39.5	35.6	-3.9	44.4	57.3	12.9
2026	0.0	0.0	0.0	48.0	51.9	3.9	43.9	39.1	-4.8	49.3	57.3	8.0
2027	0.0	0.0	0.0	49.5	51.6	2.1	45.2	40.8	-4.4	50.8	56.4	5.6
2028	0.0	0.0	0.0	51.0	52.1	1.1	46.6	44.5	-2.1	52.4	60.7	8.3
2029	0.0	0.0	0.0	52.6	53.3	0.7	48.1	44.3	-3.8	54.0	59.3	5.3
2030	0.0	0.0	0.0	54.2	54.5	0.3	49.5	47.0	-2.5	55.7	58.2	2.5
2031	0.0	0.0	0.0	55.9	56.3	0.4	51.1	48.5	-2.6	57.4	58.3	0.9

Table 668 - Required and Achieved CAFE Levels (mpg) for Light Truck Fleet for Alternative PC1LT3

Required and Achieved CAFE Levels (mpg) for Light Truck Fleet for Alternative PC1LT3												
Model Year	Nissan			Stellantis			Subaru			Tesla		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	32.9	32.6	-0.3	30.7	28.9	-1.8	36.5	39.1	2.6	33.4	700.3	666.9
2023	33.4	35.6	2.2	31.2	30.7	-0.5	37.0	42.4	5.4	33.9	936.4	902.5
2024	36.3	36.8	0.5	33.8	33.7	-0.1	40.2	45.4	5.2	36.9	1046.7	1009.8
2025	39.5	39.5	0.0	36.8	40.3	3.5	43.7	46.9	3.2	40.1	1186.5	1146.4
2026	43.9	42.2	-1.7	40.9	40.9	0.0	48.6	49.5	0.9	44.5	1186.5	1142.0
2027	45.2	41.8	-3.4	42.1	42.1	0.0	50.1	51.2	1.1	45.9	365.7	319.8
2028	46.6	47.5	0.9	43.4	41.7	-1.7	51.7	52.9	1.2	47.3	230.5	183.2
2029	48.1	48.2	0.1	44.8	43.7	-1.1	53.3	54.6	1.3	48.8	168.3	119.5
2030	49.6	51.4	1.8	46.2	43.9	-2.3	54.9	56.3	1.4	50.3	132.5	82.2
2031	51.1	52.0	0.9	47.6	44.6	-3.0	56.6	58.5	1.9	51.8	132.5	80.7

Table 669 - Required and Achieved CAFE Levels (mpg) for Light Truck Fleet for Alternative PC1LT3

Required and Achieved CAFE Levels (mpg) for Light Truck Fleet for Alternative PC1LT3												
Model Year	Toyota			Volvo			VWA			Total		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	33.0	35.0	2.0	33.4	38.0	4.6	34.0	33.9	-0.1	32.1	32.1	0.0
2023	33.5	36.0	2.5	33.9	41.4	7.5	34.5	36.6	2.1	32.6	34.0	1.4
2024	36.3	40.8	4.5	36.8	41.7	4.9	37.5	43.7	6.2	35.2	37.5	2.3
2025	39.4	42.4	3.0	40.0	47.6	7.6	40.8	46.0	5.2	38.3	41.1	2.8
2026	43.8	46.8	3.0	44.5	49.6	5.1	45.3	46.9	1.6	42.6	43.7	1.1
2027	45.1	45.4	0.3	45.9	47.6	1.7	46.7	45.7	-1.0	43.9	44.3	0.4
2028	46.5	46.5	0.0	47.3	46.6	-0.7	48.2	45.4	-2.8	45.3	45.1	-0.2
2029	48.0	48.0	0.0	48.7	45.7	-3.0	49.7	45.0	-4.7	46.7	46.2	-0.5
2030	49.5	49.5	0.0	50.2	50.2	0.0	51.2	48.4	-2.8	48.1	46.9	-1.2
2031	51.0	51.3	0.3	51.8	49.8	-2.0	52.8	50.8	-2.0	49.6	48.1	-1.5

Table 670 - Required and Achieved CAFE Levels (mpg) for Domestic Car Fleet for Alternative PC1LT3

Required and Achieved CAFE Levels (mpg) for Domestic Car Fleet for Alternative PC1LT3												
Model Year	BMW			Ford			GM			Honda		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	0.0	0.0	0.0	43.4	45.5	2.1	44.3	41.2	-3.1	44.7	45.6	0.9
2023	0.0	0.0	0.0	44.1	45.8	1.7	45.0	41.7	-3.3	45.4	52.2	6.8
2024	0.0	0.0	0.0	47.9	66.6	18.7	48.9	54.7	5.8	49.4	52.6	3.2
2025	0.0	0.0	0.0	52.1	69.2	17.1	53.2	58.2	5.0	53.7	56.7	3.0
2026	0.0	0.0	0.0	57.9	69.2	11.3	59.1	62.7	3.6	59.6	59.6	0.0
2027	0.0	0.0	0.0	58.4	71.1	12.7	59.7	62.6	2.9	60.2	60.9	0.7
2028	0.0	0.0	0.0	59.0	68.0	9.0	60.3	61.1	0.8	60.8	63.6	2.8
2029	0.0	0.0	0.0	59.6	65.1	5.5	60.9	64.8	3.9	61.4	64.9	3.5
2030	0.0	0.0	0.0	60.2	62.5	2.3	61.5	63.3	1.8	62.1	66.3	4.2
2031	0.0	0.0	0.0	60.8	63.1	2.3	62.1	63.4	1.3	62.7	68.3	5.6

Table 671 - Required and Achieved CAFE Levels (mpg) for Domestic Car Fleet for Alternative PC1LT3

Required and Achieved CAFE Levels (mpg) for Domestic Car Fleet for Alternative PC1LT3												
Model Year	Hyundai			KIA			JLR			Karma		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	48.7	53.4	4.7	45.8	47.1	1.3	0.0	0.0	0.0	40.6	106.8	66.2
2023	49.5	2658.3	2608.8	46.5	47.2	0.7	0.0	0.0	0.0	41.1	106.8	65.7
2024	53.8	3125.8	3072.0	50.6	62.1	11.5	0.0	0.0	0.0	44.3	106.8	62.5
2025	58.4	3792.9	3734.5	55.0	61.9	6.9	0.0	0.0	0.0	48.1	106.8	58.7
2026	64.9	4821.9	4757.0	61.1	62.1	1.0	0.0	0.0	0.0	53.5	542.6	489.1
2027	65.6	674.6	609.0	61.7	61.9	0.2	0.0	0.0	0.0	54.6	328.4	273.8
2028	66.3	425.3	359.0	62.3	61.2	-1.1	0.0	0.0	0.0	55.2	207.1	151.9
2029	66.9	310.5	243.6	63.0	63.6	0.6	0.0	0.0	0.0	55.7	151.2	95.5
2030	67.6	242.7	175.1	63.6	64.0	0.4	0.0	0.0	0.0	56.3	119.0	62.7
2031	68.3	239.8	171.5	64.2	65.6	1.4	0.0	0.0	0.0	56.9	119.0	62.1

Table 672 - Required and Achieved CAFE Levels (mpg) for Domestic Car Fleet for Alternative PC1LT3

Required and Achieved CAFE Levels (mpg) for Domestic Car Fleet for Alternative PC1LT3												
Model Year	Lucid			Mazda			Mercedes-Benz			Mitsubishi		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	40.6	742.5	701.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2023	41.1	742.5	701.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2024	44.3	742.5	698.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2025	48.1	742.5	694.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2026	53.5	742.5	689.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2027	54.6	394.4	339.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2028	55.2	248.6	193.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2029	55.7	181.5	125.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2030	56.3	142.9	86.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2031	56.9	142.9	86.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table 673 - Required and Achieved CAFE Levels (mpg) for Domestic Car Fleet for Alternative PC1LT3

Required and Achieved CAFE Levels (mpg) for Domestic Car Fleet for Alternative PC1LT3												
Model Year	Nissan			Stellantis			Subaru			Tesla		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	44.5	43.4	-1.1	41.4	28.7	-12.7	0.0	0.0	0.0	40.8	671.8	631.0
2023	45.2	44.6	-0.6	42.0	31.5	-10.5	0.0	0.0	0.0	41.4	671.8	630.4
2024	49.1	49.1	0.0	45.7	45.6	-0.1	0.0	0.0	0.0	45.0	671.8	626.8
2025	53.4	54.7	1.3	49.6	55.9	6.3	0.0	0.0	0.0	48.9	671.8	622.9
2026	59.3	62.2	2.9	55.1	57.1	2.0	0.0	0.0	0.0	54.4	671.8	617.4
2027	59.9	61.8	1.9	55.7	55.5	-0.2	0.0	0.0	0.0	54.9	373.0	318.1
2028	60.5	61.1	0.6	56.3	55.1	-1.2	0.0	0.0	0.0	55.5	235.1	179.6
2029	61.2	60.5	-0.7	56.8	56.7	-0.1	0.0	0.0	0.0	56.0	171.7	115.7
2030	61.8	61.8	0.0	57.4	56.1	-1.3	0.0	0.0	0.0	56.6	135.2	78.6
2031	62.4	63.4	1.0	58.0	59.0	1.0	0.0	0.0	0.0	57.2	135.2	78.0

Table 674 - Required and Achieved CAFE Levels (mpg) for Domestic Car Fleet for Alternative PC1LT3

Required and Achieved CAFE Levels (mpg) for Domestic Car Fleet for Alternative PC1LT3												
Model Year	Toyota			Volvo			VWA			Total		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	43.1	43.2	0.1	42.3	45.3	3.0	41.4	34.1	-7.3	43.5	48.9	5.4
2023	43.7	43.9	0.2	42.9	49.2	6.3	42.0	34.2	-7.8	44.2	52.4	8.2
2024	47.5	49.4	1.9	46.7	49.7	3.0	45.7	40.2	-5.5	48.1	60.9	12.8
2025	51.7	55.5	3.8	50.7	55.0	4.3	49.6	40.3	-9.3	52.3	66.6	14.3
2026	57.4	57.3	-0.1	56.4	1119.7	1063.3	55.2	117.7	62.5	58.0	71.4	13.4
2027	58.0	58.4	0.4	56.9	434.6	377.7	55.7	104.1	48.4	58.6	70.9	12.3
2028	58.6	59.4	0.8	57.5	274.0	216.5	56.3	94.0	37.7	59.2	70.1	10.9
2029	59.2	60.8	1.6	58.1	200.0	141.9	56.9	88.5	31.6	59.8	70.0	10.2
2030	59.8	62.4	2.6	58.7	157.5	98.8	57.4	82.2	24.8	60.4	69.2	8.8
2031	60.4	64.2	3.8	59.3	157.5	98.2	58.0	83.3	25.3	61.0	70.8	9.8

Table 675 - Required and Achieved CAFE Levels (mpg) for Imported Car Fleet for Alternative PC1LT3

Required and Achieved CAFE Levels (mpg) for Imported Car Fleet for Alternative PC1LT3												
Model Year	BMW			Ford			GM			Honda		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	43.3	37.8	-5.5	0.0	0.0	0.0	47.1	43.8	-3.3	44.9	30.4	-14.5
2023	44.0	42.2	-1.8	0.0	0.0	0.0	47.9	44.0	-3.9	45.6	31.2	-14.4
2024	47.8	51.8	4.0	0.0	0.0	0.0	52.0	52.9	0.9	49.6	31.3	-18.3
2025	52.0	54.7	2.7	0.0	0.0	0.0	56.5	56.6	0.1	53.8	31.7	-22.1
2026	57.7	60.9	3.2	0.0	0.0	0.0	62.8	65.1	2.3	59.8	427.4	367.6
2027	58.3	62.0	3.7	0.0	0.0	0.0	63.5	63.9	0.4	60.4	242.0	181.6
2028	58.9	60.5	1.6	0.0	0.0	0.0	64.1	62.9	-1.2	61.0	152.6	91.6
2029	59.5	59.9	0.4	0.0	0.0	0.0	64.7	64.7	0.0	61.7	111.4	49.7
2030	60.1	60.3	0.2	0.0	0.0	0.0	65.4	65.5	0.1	62.3	87.7	25.4
2031	60.7	62.2	1.5	0.0	0.0	0.0	66.1	68.7	2.6	62.9	87.7	24.8

Table 676 - Required and Achieved CAFE Levels (mpg) for Imported Car Fleet for Alternative PC1LT3

Required and Achieved CAFE Levels (mpg) for Imported Car Fleet for Alternative PC1LT3												
Model Year	Hyundai			KIA			JLR			Karma		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	44.1	45.1	1.0	44.4	47.0	2.6	43.2	30.6	-12.6	0.0	0.0	0.0
2023	44.8	47.3	2.5	45.0	50.6	5.6	43.8	68.6	24.8	0.0	0.0	0.0
2024	48.7	52.0	3.3	49.0	55.5	6.5	47.6	69.1	21.5	0.0	0.0	0.0
2025	52.9	52.9	0.0	53.2	58.7	5.5	51.8	69.2	17.4	0.0	0.0	0.0
2026	58.8	58.8	0.0	59.1	60.1	1.0	57.5	74.2	16.7	0.0	0.0	0.0
2027	59.4	61.0	1.6	59.7	59.9	0.2	58.1	70.9	12.8	0.0	0.0	0.0
2028	60.0	60.0	0.0	60.3	60.8	0.5	58.7	66.3	7.6	0.0	0.0	0.0
2029	60.6	60.7	0.1	60.9	60.9	0.0	59.3	62.1	2.8	0.0	0.0	0.0
2030	61.2	61.2	0.0	61.6	61.6	0.0	59.9	61.1	1.2	0.0	0.0	0.0
2031	61.8	63.4	1.6	62.2	63.7	1.5	60.5	63.0	2.5	0.0	0.0	0.0

Table 677 - Required and Achieved CAFE Levels (mpg) for Imported Car Fleet for Alternative PC1LT3

Required and Achieved CAFE Levels (mpg) for Imported Car Fleet for Alternative PC1LT3												
Model Year	Lucid			Mazda			Mercedes-Benz			Mitsubishi		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	0.0	0.0	0.0	46.1	41.5	-4.6	41.8	35.5	-6.3	47.0	42.9	-4.1
2023	0.0	0.0	0.0	46.8	42.5	-4.3	42.4	45.3	2.9	47.7	43.3	-4.4
2024	0.0	0.0	0.0	50.9	55.6	4.7	46.1	47.9	1.8	51.9	61.2	9.3
2025	0.0	0.0	0.0	55.3	58.8	3.5	50.1	52.7	2.6	56.4	67.6	11.2
2026	0.0	0.0	0.0	61.5	61.5	0.0	55.6	71.3	15.7	62.7	67.7	5.0
2027	0.0	0.0	0.0	62.1	62.4	0.3	56.2	70.8	14.6	63.3	65.3	2.0
2028	0.0	0.0	0.0	62.7	62.8	0.1	56.8	66.9	10.1	63.9	71.4	7.5
2029	0.0	0.0	0.0	63.4	63.8	0.4	57.3	63.7	6.4	64.6	69.6	5.0
2030	0.0	0.0	0.0	64.0	64.9	0.9	57.9	61.1	3.2	65.2	68.1	2.9
2031	0.0	0.0	0.0	64.6	67.7	3.1	58.5	63.5	5.0	65.9	68.3	2.4

Table 678 - Required and Achieved CAFE Levels (mpg) for Imported Car Fleet for Alternative PC1LT3

Required and Achieved CAFE Levels (mpg) for Imported Car Fleet for Alternative PC1LT3												
Model Year	Nissan			Stellantis			Subaru			Tesla		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	45.2	46.9	1.7	44.9	33.5	-11.4	46.0	38.3	-7.7	42.4	839.5	797.1
2023	45.9	68.7	22.8	45.5	35.8	-9.7	46.7	52.1	5.4	43.1	839.5	796.4
2024	49.9	72.0	22.1	49.5	45.1	-4.4	50.7	52.2	1.5	46.8	839.5	792.7
2025	54.3	72.7	18.4	53.8	55.1	1.3	55.1	65.4	10.3	50.9	839.5	788.6
2026	60.3	73.1	12.8	59.8	62.6	2.8	61.3	68.1	6.8	56.6	839.5	782.9
2027	60.9	70.8	9.9	60.4	60.9	0.5	61.9	69.1	7.2	57.1	420.9	363.8
2028	61.5	70.3	8.8	61.0	59.0	-2.0	62.5	69.6	7.1	57.7	265.4	207.7
2029	62.1	68.2	6.1	61.6	57.1	-4.5	63.1	70.4	7.3	58.3	193.7	135.4
2030	62.8	67.2	4.4	62.2	56.2	-6.0	63.8	70.7	6.9	58.9	152.6	93.7
2031	63.4	68.6	5.2	62.9	57.5	-5.4	64.4	73.9	9.5	59.5	152.6	93.1

Table 679 - Required and Achieved CAFE Levels (mpg) for Imported Car Fleet for Alternative PC1LT3

Required and Achieved CAFE Levels (mpg) for Imported Car Fleet for Alternative PC1LT3												
Model Year	Toyota			Volvo			VWA			Total		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	45.3	48.0	2.7	43.2	78.9	35.7	45.3	40.7	-4.6	44.7	45.5	0.8
2023	46.0	54.8	8.8	43.9	80.4	36.5	46.0	42.3	-3.7	45.4	51.0	5.6
2024	50.0	56.1	6.1	47.7	83.6	35.9	50.0	49.9	-0.1	49.3	56.2	6.9
2025	54.3	58.2	3.9	51.8	90.0	38.2	54.4	54.4	0.0	53.6	59.4	5.8
2026	60.4	64.9	4.5	57.6	91.5	33.9	60.4	60.4	0.0	59.5	65.5	6.0
2027	61.0	64.9	3.9	58.2	84.8	26.6	61.0	61.0	0.0	60.1	65.7	5.6
2028	61.6	66.0	4.4	58.7	77.2	18.5	61.6	63.6	2.0	60.7	65.6	4.9
2029	62.2	67.2	5.0	59.3	70.8	11.5	62.3	61.6	-0.7	61.3	65.4	4.1
2030	62.9	68.3	5.4	59.9	65.4	5.5	62.9	61.4	-1.5	62.0	65.5	3.5
2031	63.5	70.3	6.8	60.5	65.4	4.9	63.5	63.7	0.2	62.6	67.6	5.0

Table 680 - Required and Achieved CAFE Levels (mpg) for Total Fleet for Alternative PC2LT4

Required and Achieved CAFE Levels (mpg) for Total Fleet for Alternative PC2LT4												
Model Year	BMW			Ford			GM			Honda		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	37.6	35.3	-2.3	31.4	30.9	-0.5	32.5	30.8	-1.7	39.1	40.0	0.9
2023	38.0	38.1	0.1	31.9	32.7	0.8	33.0	31.0	-2.0	39.5	44.4	4.9
2024	41.3	41.8	0.5	34.3	37.4	3.1	35.4	37.3	1.9	42.9	44.5	1.6
2025	44.7	45.7	1.0	37.3	38.4	1.1	38.4	42.5	4.1	46.5	48.3	1.8
2026	49.6	51.9	2.3	41.4	41.5	0.1	42.6	44.2	1.6	51.5	52.0	0.5
2027	51.2	51.4	0.2	43.1	45.7	2.6	44.1	43.0	-1.1	53.2	53.4	0.2
2028	52.7	51.3	-1.4	44.8	47.0	2.2	45.9	42.7	-3.2	54.9	55.9	1.0
2029	54.4	51.3	-3.1	46.6	48.7	2.1	47.5	43.1	-4.4	56.6	57.6	1.0
2030	56.2	52.5	-3.7	48.5	47.8	-0.7	49.4	42.8	-6.6	58.4	60.4	2.0
2031	58.1	55.9	-2.2	50.4	47.4	-3.0	51.3	44.8	-6.5	60.3	62.2	1.9

Table 681 - Required and Achieved CAFE Levels (mpg) for Total Fleet for Alternative PC2LT4

Required and Achieved CAFE Levels (mpg) for Total Fleet for Alternative PC2LT4												
Model Year	Hyundai			KIA			JLR			Karma		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	39.6	41.4	1.8	39.5	40.9	1.4	32.9	29.0	-3.9	40.6	106.8	66.2
2023	40.1	43.5	3.4	39.9	43.6	3.7	33.4	37.9	4.5	41.1	106.8	65.7
2024	43.5	46.2	2.7	43.4	47.3	3.9	36.2	41.8	5.6	44.3	106.8	62.5
2025	47.1	50.4	3.3	47.0	49.3	2.3	39.4	42.1	2.7	48.1	106.8	58.7
2026	52.3	53.5	1.2	52.1	52.5	0.4	43.7	45.9	2.2	53.5	542.6	489.1
2027	53.9	57.0	3.1	53.7	52.0	-1.7	45.5	45.0	-0.5	55.2	328.4	273.2
2028	55.4	56.9	1.5	55.4	54.0	-1.4	47.4	43.9	-3.5	56.3	207.1	150.8
2029	57.2	58.8	1.6	57.0	54.8	-2.2	49.4	42.9	-6.5	57.5	151.2	93.7
2030	58.9	59.7	0.8	58.8	58.8	0.0	51.4	43.8	-7.6	58.6	119.0	60.4
2031	60.7	61.6	0.9	60.7	61.5	0.8	53.6	47.4	-6.2	59.8	119.0	59.2

Table 682 - Required and Achieved CAFE Levels (mpg) for Total Fleet for Alternative PC2LT4

Required and Achieved CAFE Levels (mpg) for Total Fleet for Alternative PC2LT4												
Model Year	Lucid			Mazda			Mercedes-Benz			Mitsubishi		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	40.6	742.5	701.9	37.3	36.5	-0.8	36.8	32.8	-4.0	42.0	40.3	-1.7
2023	41.1	742.5	701.4	37.8	47.1	9.3	37.3	39.5	2.2	42.6	40.6	-2.0
2024	44.3	742.5	698.2	41.1	49.5	8.4	40.4	40.4	0.0	46.2	48.6	2.4
2025	48.1	742.5	694.4	44.6	50.3	5.7	43.8	42.0	-1.8	50.0	62.3	12.3
2026	53.5	742.5	689.0	49.5	53.0	3.5	48.6	49.4	0.8	55.5	62.3	6.8
2027	55.2	394.4	339.2	51.4	53.2	1.8	50.2	50.7	0.5	57.2	60.7	3.5
2028	56.3	248.6	192.3	53.4	53.7	0.3	51.8	52.5	0.7	59.0	66.3	7.3
2029	57.5	181.5	124.0	55.5	57.1	1.6	53.5	51.4	-2.1	60.9	64.7	3.8
2030	58.6	142.9	84.3	57.7	58.8	1.1	55.3	52.5	-2.8	62.8	64.0	1.2
2031	59.8	142.9	83.1	60.0	60.6	0.6	57.1	54.4	-2.7	64.8	65.1	0.3

Table 683 - Required and Achieved CAFE Levels (mpg) for Total Fleet for Alternative PC2LT4

Required and Achieved CAFE Levels (mpg) for Total Fleet for Alternative PC2LT4												
Model Year	Nissan			Stellantis			Subaru			Tesla		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	38.9	38.6	-0.3	31.9	28.9	-3.0	37.8	39.0	1.2	40.7	699.0	658.3
2023	39.4	42.4	3.0	32.3	30.9	-1.4	38.2	43.7	5.5	41.3	707.6	666.3
2024	42.7	44.9	2.2	35.0	34.9	-0.1	41.5	46.3	4.8	44.8	710.6	665.8
2025	46.3	48.3	2.0	38.1	41.7	3.6	45.1	48.9	3.8	48.7	714.2	665.5
2026	51.3	52.2	0.9	42.3	42.4	0.1	50.1	51.5	1.4	54.1	714.6	660.5
2027	52.9	51.6	-1.3	43.9	43.9	0.0	52.0	53.1	1.1	55.3	380.6	325.3
2028	54.5	55.3	0.8	45.7	43.4	-2.3	54.0	55.0	1.0	56.5	239.9	183.4
2029	56.2	55.4	-0.8	47.4	45.4	-2.0	56.1	56.7	0.6	57.7	175.2	117.5
2030	58.0	60.0	2.0	49.3	45.5	-3.8	58.3	59.0	0.7	58.9	137.9	79.0
2031	59.8	61.0	1.2	51.2	46.4	-4.8	60.6	61.3	0.7	60.3	137.9	77.6

Table 684 - Required and Achieved CAFE Levels (mpg) for Total Fleet for Alternative PC2LT4

Required and Achieved CAFE Levels (mpg) for Total Fleet for Alternative PC2LT4												
Model Year	Toyota			Volvo			VWA			Total		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	37.1	39.1	2.0	36.0	43.8	7.8	37.9	36.3	-1.6	35.8	36.5	0.7
2023	37.5	41.0	3.5	36.4	47.1	10.7	38.3	38.5	0.2	36.2	38.9	2.7
2024	40.6	45.3	4.7	39.5	47.5	8.0	41.6	45.7	4.1	39.1	43.1	4.0
2025	43.9	47.2	3.3	42.8	53.4	10.6	45.0	48.5	3.5	42.4	46.7	4.3
2026	48.7	51.8	3.1	47.6	60.3	12.7	50.0	51.8	1.8	47.0	49.9	2.9
2027	50.4	50.8	0.4	49.2	57.1	7.9	51.7	51.0	-0.7	48.7	50.5	1.8
2028	52.1	52.7	0.6	51.1	55.0	3.9	53.5	51.9	-1.6	50.4	51.4	1.0
2029	53.9	54.4	0.5	52.9	53.0	0.1	55.3	51.0	-4.3	52.2	52.4	0.2
2030	55.8	56.1	0.3	54.8	56.9	2.1	57.3	53.6	-3.7	54.1	53.3	-0.8
2031	57.8	58.6	0.8	56.9	56.5	-0.4	59.2	56.1	-3.1	56.0	54.9	-1.1

Table 685 - Required and Achieved CAFE Levels (mpg) for Passenger Car Fleet for Alternative PC2LT4

Required and Achieved CAFE Levels (mpg) for Passenger Car Fleet for Alternative PC2LT4												
Model Year	BMW			Ford			GM			Honda		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	43.3	37.8	-5.5	43.4	45.5	2.1	45.1	41.9	-3.2	44.7	45.6	0.9
2023	44.0	42.2	-1.8	44.1	45.8	1.7	45.8	42.3	-3.5	45.4	52.2	6.8
2024	47.8	51.8	4.0	47.9	66.6	18.7	49.7	54.2	4.5	49.4	52.6	3.2
2025	52.0	54.7	2.7	52.1	69.2	17.1	54.1	57.7	3.6	53.7	56.7	3.0
2026	57.7	60.9	3.2	57.9	69.2	11.3	60.1	63.4	3.3	59.6	59.6	0.0
2027	58.9	62.6	3.7	59.0	75.5	16.5	61.3	63.0	1.7	60.8	60.8	0.0
2028	60.1	61.9	1.8	60.2	72.0	11.8	62.6	61.6	-1.0	62.1	63.5	1.4
2029	61.3	61.3	0.0	61.5	68.8	7.3	63.9	65.8	1.9	63.3	64.8	1.5
2030	62.6	62.6	0.0	62.7	66.0	3.3	65.1	65.3	0.2	64.6	66.2	1.6
2031	63.9	64.4	0.5	64.0	65.4	1.4	66.5	68.1	1.6	66.0	68.1	2.1

Table 686 - Required and Achieved CAFE Levels (mpg) for Passenger Car Fleet for Alternative PC2LT4

Required and Achieved CAFE Levels (mpg) for Passenger Car Fleet for Alternative PC2LT4												
Model Year	Hyundai			KIA			JLR			Karma		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	44.2	45.3	1.1	44.7	47.0	2.3	43.2	30.6	-12.6	40.6	106.8	66.2
2023	44.9	48.8	3.9	45.4	49.7	4.3	43.8	68.6	24.8	41.1	106.8	65.7
2024	48.8	53.7	4.9	49.4	57.0	7.6	47.6	69.1	21.5	44.3	106.8	62.5
2025	53.1	54.6	1.5	53.6	59.4	5.8	51.8	69.2	17.4	48.1	106.8	58.7
2026	59.0	60.7	1.7	59.6	60.6	1.0	57.5	74.2	16.7	53.5	542.6	489.1
2027	60.2	65.0	4.8	60.8	60.4	-0.4	58.7	70.9	12.2	55.2	328.4	273.2
2028	61.4	63.8	2.4	62.1	61.7	-0.4	59.9	66.2	6.3	56.3	207.1	150.8
2029	62.7	65.6	2.9	63.3	63.9	0.6	61.1	62.0	0.9	57.5	151.2	93.7
2030	64.0	65.3	1.3	64.6	65.6	1.0	62.4	63.0	0.6	58.6	119.0	60.4
2031	65.3	67.2	1.9	65.9	67.7	1.8	63.6	64.9	1.3	59.8	119.0	59.2

Table 687 - Required and Achieved CAFE Levels (mpg) for Passenger Car Fleet for Alternative PC2LT4

Required and Achieved CAFE Levels (mpg) for Passenger Car Fleet for Alternative PC2LT4												
Model Year	Lucid			Mazda			Mercedes-Benz			Mitsubishi		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	40.6	742.5	701.9	46.1	41.5	-4.6	41.8	35.5	-6.3	47.0	42.9	-4.1
2023	41.1	742.5	701.4	46.8	42.5	-4.3	42.4	45.3	2.9	47.7	43.3	-4.4
2024	44.3	742.5	698.2	50.9	55.6	4.7	46.1	47.9	1.8	51.9	61.2	9.3
2025	48.1	742.5	694.4	55.3	58.8	3.5	50.1	52.7	2.6	56.4	67.6	11.2
2026	53.5	742.5	689.0	61.5	61.5	0.0	55.6	71.3	15.7	62.7	67.7	5.0
2027	55.2	394.4	339.2	62.7	62.4	-0.3	56.8	70.8	14.0	63.9	65.3	1.4
2028	56.3	248.6	192.3	64.0	63.3	-0.7	57.9	66.9	9.0	65.2	72.5	7.3
2029	57.5	181.5	124.0	65.3	65.9	0.6	59.1	63.7	4.6	66.6	70.8	4.2
2030	58.6	142.9	84.3	66.7	66.9	0.2	60.3	61.1	0.8	67.9	69.2	1.3
2031	59.8	142.9	83.1	68.0	69.7	1.7	61.6	63.5	1.9	69.3	69.6	0.3

Table 688 - Required and Achieved CAFE Levels (mpg) for Passenger Car Fleet for Alternative PC2LT4

Required and Achieved CAFE Levels (mpg) for Passenger Car Fleet for Alternative PC2LT4												
Model Year	Nissan			Stellantis			Subaru			Tesla		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	44.7	44.3	-0.4	41.8	29.2	-12.6	46.0	38.3	-7.7	41.1	698.9	657.8
2023	45.4	49.4	4.0	42.4	31.9	-10.5	46.7	52.1	5.4	41.7	698.9	657.2
2024	49.3	53.8	4.5	46.1	45.5	-0.6	50.7	52.2	1.5	45.3	698.9	653.6
2025	53.6	58.7	5.1	50.0	55.8	5.8	55.1	65.4	10.3	49.3	698.9	649.6
2026	59.6	64.9	5.3	55.6	57.7	2.1	61.3	68.1	6.8	54.8	698.9	644.1
2027	60.8	64.0	3.2	56.8	56.1	-0.7	62.5	69.1	6.6	55.9	381.4	325.5
2028	62.1	63.7	1.6	57.9	55.5	-2.4	63.8	69.6	5.8	57.0	240.4	183.4
2029	63.3	62.8	-0.5	59.1	56.7	-2.4	65.1	70.4	5.3	58.2	175.6	117.4
2030	64.6	65.6	1.0	60.3	56.1	-4.2	66.4	70.7	4.3	59.4	138.3	78.9
2031	65.9	67.1	1.2	61.5	60.6	-0.9	67.8	73.9	6.1	60.7	138.3	77.6

Table 689 - Required and Achieved CAFE Levels (mpg) for Passenger Car Fleet for Alternative PC2LT4

Required and Achieved CAFE Levels (mpg) for Passenger Car Fleet for Alternative PC2LT4												
Model Year	Toyota			Volvo			VWA			Total		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	44.7	46.7	2.0	42.9	64.5	21.6	45.0	40.1	-4.9	44.1	47.1	3.0
2023	45.4	51.6	6.2	43.6	67.5	23.9	45.7	41.6	-4.1	44.8	51.6	6.8
2024	49.4	54.3	4.9	47.4	69.3	21.9	49.7	49.1	-0.6	48.7	58.4	9.7
2025	53.6	57.5	3.9	51.5	75.5	24.0	54.0	53.1	-0.9	52.9	62.7	9.8
2026	59.6	62.8	3.2	57.2	126.6	69.4	60.0	62.6	2.6	58.8	68.3	9.5
2027	60.8	63.1	2.3	58.3	112.1	53.8	61.2	63.0	1.8	60.0	68.6	8.6
2028	62.1	64.2	2.1	59.5	98.6	39.1	62.5	67.9	5.4	61.2	68.5	7.3
2029	63.4	65.5	2.1	60.8	88.0	27.2	63.8	65.6	1.8	62.5	68.7	6.2
2030	64.6	67.1	2.5	62.0	79.4	17.4	65.1	65.0	-0.1	63.7	68.7	5.0
2031	65.9	69.1	3.2	63.3	79.4	16.1	66.4	67.8	1.4	65.1	70.8	5.7

Table 690 - Required and Achieved CAFE Levels (mpg) for Light Truck Fleet for Alternative PC2LT4

Required and Achieved CAFE Levels (mpg) for Light Truck Fleet for Alternative PC2LT4												
Model Year	BMW			Ford			GM			Honda		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	32.5	32.7	0.2	30.3	29.6	-0.7	29.8	28.3	-1.5	34.0	35.0	1.0
2023	33.0	34.4	1.4	30.8	31.6	0.8	30.3	28.6	-1.7	34.5	38.0	3.5
2024	35.9	34.4	-1.5	33.2	35.5	2.3	32.5	34.0	1.5	37.5	38.1	0.6
2025	39.0	39.0	0.0	36.1	36.5	0.4	35.4	39.5	4.1	40.8	41.9	1.1
2026	43.4	45.1	1.7	40.1	39.7	-0.4	39.3	40.7	1.4	45.3	46.1	0.8
2027	45.2	43.5	-1.7	41.8	43.8	2.0	40.9	39.5	-1.4	47.2	47.6	0.4
2028	47.0	43.8	-3.2	43.6	45.3	1.7	42.7	39.3	-3.4	49.2	50.0	0.8
2029	49.0	44.1	-4.9	45.4	47.2	1.8	44.4	39.3	-5.1	51.2	51.9	0.7
2030	51.0	45.2	-5.8	47.3	46.4	-0.9	46.3	39.1	-7.2	53.4	55.6	2.2
2031	53.2	49.4	-3.8	49.2	46.0	-3.2	48.2	40.9	-7.3	55.6	57.2	1.6

Table 691 - Required and Achieved CAFE Levels (mpg) for Light Truck Fleet for Alternative PC2LT4

Required and Achieved CAFE Levels (mpg) for Light Truck Fleet for Alternative PC2LT4												
Model Year	Hyundai			KIA			JLR			Karma		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	34.0	36.4	2.4	34.0	34.6	0.6	32.7	29.0	-3.7	0.0	0.0	0.0
2023	34.5	37.4	2.9	34.5	37.5	3.0	33.2	37.5	4.3	0.0	0.0	0.0
2024	37.5	38.3	0.8	37.5	38.8	1.3	36.0	41.4	5.4	0.0	0.0	0.0
2025	40.7	45.5	4.8	40.8	40.8	0.0	39.2	41.7	2.5	0.0	0.0	0.0
2026	45.3	46.1	0.8	45.3	45.3	0.0	43.5	45.5	2.0	0.0	0.0	0.0
2027	47.2	48.9	1.7	47.2	44.7	-2.5	45.3	44.6	-0.7	0.0	0.0	0.0
2028	49.1	49.8	0.7	49.2	47.2	-2.0	47.2	43.6	-3.6	0.0	0.0	0.0
2029	51.2	51.7	0.5	51.2	47.0	-4.2	49.2	42.6	-6.6	0.0	0.0	0.0
2030	53.3	53.5	0.2	53.3	52.4	-0.9	51.2	43.5	-7.7	0.0	0.0	0.0
2031	55.5	55.5	0.0	55.6	55.6	0.0	53.4	47.1	-6.3	0.0	0.0	0.0

Table 692 - Required and Achieved CAFE Levels (mpg) for Light Truck Fleet for Alternative PC2LT4

Required and Achieved CAFE Levels (mpg) for Light Truck Fleet for Alternative PC2LT4												
Model Year	Lucid			Mazda			Mercedes-Benz			Mitsubishi		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	0.0	0.0	0.0	36.0	35.7	-0.3	32.9	30.4	-2.5	37.0	37.4	0.4
2023	0.0	0.0	0.0	36.6	48.0	11.4	33.4	35.2	1.8	37.6	37.7	0.1
2024	0.0	0.0	0.0	39.8	48.6	8.8	36.3	35.3	-1.0	40.8	39.0	-1.8
2025	0.0	0.0	0.0	43.2	49.2	6.0	39.5	35.6	-3.9	44.4	57.3	12.9
2026	0.0	0.0	0.0	48.0	51.9	3.9	43.9	39.1	-4.8	49.3	57.3	8.0
2027	0.0	0.0	0.0	50.0	52.0	2.0	45.7	40.8	-4.9	51.4	56.4	5.0
2028	0.0	0.0	0.0	52.1	52.5	0.4	47.6	44.5	-3.1	53.5	60.7	7.2
2029	0.0	0.0	0.0	54.3	55.9	1.6	49.6	44.3	-5.3	55.7	59.3	3.6
2030	0.0	0.0	0.0	56.5	57.7	1.2	51.6	46.9	-4.7	58.1	59.2	1.1
2031	0.0	0.0	0.0	58.9	59.4	0.5	53.8	48.5	-5.3	60.5	60.9	0.4

Table 693 - Required and Achieved CAFE Levels (mpg) for Light Truck Fleet for Alternative PC2LT4

Required and Achieved CAFE Levels (mpg) for Light Truck Fleet for Alternative PC2LT4												
Model Year	Nissan			Stellantis			Subaru			Tesla		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	32.9	32.6	-0.3	30.7	28.9	-1.8	36.5	39.1	2.6	33.4	700.3	666.9
2023	33.4	35.6	2.2	31.2	30.7	-0.5	37.0	42.4	5.4	33.9	936.4	902.5
2024	36.3	36.8	0.5	33.8	33.7	-0.1	40.2	45.4	5.2	36.9	1046.7	1009.8
2025	39.5	39.5	0.0	36.8	40.3	3.5	43.7	46.9	3.2	40.1	1186.5	1146.4
2026	43.9	42.2	-1.7	40.9	40.9	0.0	48.6	49.5	0.9	44.5	1186.5	1142.0
2027	45.7	41.8	-3.9	42.6	42.6	0.0	50.6	51.2	0.6	46.4	365.7	319.3
2028	47.6	47.8	0.2	44.4	42.2	-2.2	52.7	53.2	0.5	48.3	230.5	182.2
2029	49.6	48.7	-0.9	46.2	44.2	-2.0	54.9	55.0	0.1	50.3	168.3	118.0
2030	51.7	54.5	2.8	48.1	44.3	-3.8	57.2	57.4	0.2	52.4	132.5	80.1
2031	53.8	55.0	1.2	50.1	45.0	-5.1	59.6	59.6	0.0	54.6	132.5	77.9

Table 694 - Required and Achieved CAFE Levels (mpg) for Light Truck Fleet for Alternative PC2LT4

Required and Achieved CAFE Levels (mpg) for Light Truck Fleet for Alternative PC2LT4												
Model Year	Toyota			Volvo			VWA			Total		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	33.0	35.0	2.0	33.4	38.0	4.6	34.0	33.9	-0.1	32.1	32.1	0.0
2023	33.5	36.0	2.5	33.9	41.4	7.5	34.5	36.6	2.1	32.6	34.0	1.4
2024	36.3	40.8	4.5	36.8	41.7	4.9	37.5	43.7	6.2	35.2	37.5	2.3
2025	39.4	42.4	3.0	40.0	47.6	7.6	40.8	46.0	5.2	38.3	41.1	2.8
2026	43.8	46.8	3.0	44.5	49.6	5.1	45.3	46.9	1.6	42.6	43.7	1.1
2027	45.6	45.4	-0.2	46.3	47.6	1.3	47.2	45.7	-1.5	44.3	44.5	0.2
2028	47.5	47.6	0.1	48.3	46.7	-1.6	49.2	45.4	-3.8	46.2	45.6	-0.6
2029	49.5	49.4	-0.1	50.3	45.7	-4.6	51.2	45.0	-6.2	48.1	46.7	-1.4
2030	51.6	51.0	-0.6	52.4	51.0	-1.4	53.4	48.4	-5.0	50.1	47.8	-2.3
2031	53.7	53.7	0.0	54.6	50.6	-4.0	55.6	50.8	-4.8	52.2	49.2	-3.0

Table 695 - Required and Achieved CAFE Levels (mpg) for Domestic Car Fleet for Alternative PC2LT4

Required and Achieved CAFE Levels (mpg) for Domestic Car Fleet for Alternative PC2LT4												
Model Year	BMW			Ford			GM			Honda		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	0.0	0.0	0.0	43.4	45.5	2.1	44.3	41.2	-3.1	44.7	45.6	0.9
2023	0.0	0.0	0.0	44.1	45.8	1.7	45.0	41.7	-3.3	45.4	52.2	6.8
2024	0.0	0.0	0.0	47.9	66.6	18.7	48.9	54.7	5.8	49.4	52.6	3.2
2025	0.0	0.0	0.0	52.1	69.2	17.1	53.2	58.2	5.0	53.7	56.7	3.0
2026	0.0	0.0	0.0	57.9	69.2	11.3	59.1	62.7	3.6	59.6	59.6	0.0
2027	0.0	0.0	0.0	59.0	75.5	16.5	60.3	62.6	2.3	60.8	60.8	0.0
2028	0.0	0.0	0.0	60.2	72.0	11.8	61.5	61.1	-0.4	62.1	63.5	1.4
2029	0.0	0.0	0.0	61.5	68.8	7.3	62.8	65.8	3.0	63.3	64.8	1.5
2030	0.0	0.0	0.0	62.7	66.0	3.3	64.0	64.2	0.2	64.6	66.2	1.6
2031	0.0	0.0	0.0	64.0	65.4	1.4	65.4	66.5	1.1	66.0	68.1	2.1

Table 696 - Required and Achieved CAFE Levels (mpg) for Domestic Car Fleet for Alternative PC2LT4

Required and Achieved CAFE Levels (mpg) for Domestic Car Fleet for Alternative PC2LT4												
Model Year	Hyundai			KIA			JLR			Karma		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	48.7	53.4	4.7	45.8	47.1	1.3	0.0	0.0	0.0	40.6	106.8	66.2
2023	49.5	2658.3	2608.8	46.5	47.2	0.7	0.0	0.0	0.0	41.1	106.8	65.7
2024	53.8	3125.8	3072.0	50.6	62.1	11.5	0.0	0.0	0.0	44.3	106.8	62.5
2025	58.4	3792.9	3734.5	55.0	61.9	6.9	0.0	0.0	0.0	48.1	106.8	58.7
2026	64.9	4821.9	4757.0	61.1	62.1	1.0	0.0	0.0	0.0	53.5	542.6	489.1
2027	66.3	674.6	608.3	62.3	61.9	-0.4	0.0	0.0	0.0	55.2	328.4	273.2
2028	67.6	425.3	357.7	63.6	61.2	-2.4	0.0	0.0	0.0	56.3	207.1	150.8
2029	69.0	310.5	241.5	64.9	70.7	5.8	0.0	0.0	0.0	57.5	151.2	93.7
2030	70.4	242.7	172.3	66.2	70.9	4.7	0.0	0.0	0.0	58.6	119.0	60.4
2031	71.8	239.8	168.0	67.6	72.6	5.0	0.0	0.0	0.0	59.8	119.0	59.2

Table 697 - Required and Achieved CAFE Levels (mpg) for Domestic Car Fleet for Alternative PC2LT4

Required and Achieved CAFE Levels (mpg) for Domestic Car Fleet for Alternative PC2LT4												
Model Year	Lucid			Mazda			Mercedes-Benz			Mitsubishi		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	40.6	742.5	701.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2023	41.1	742.5	701.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2024	44.3	742.5	698.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2025	48.1	742.5	694.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2026	53.5	742.5	689.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2027	55.2	394.4	339.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2028	56.3	248.6	192.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2029	57.5	181.5	124.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2030	58.6	142.9	84.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2031	59.8	142.9	83.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table 698 - Required and Achieved CAFE Levels (mpg) for Domestic Car Fleet for Alternative PC2LT4

Required and Achieved CAFE Levels (mpg) for Domestic Car Fleet for Alternative PC2LT4												
Model Year	Nissan			Stellantis			Subaru			Tesla		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	44.5	43.4	-1.1	41.4	28.7	-12.7	0.0	0.0	0.0	40.8	671.8	631.0
2023	45.2	44.6	-0.6	42.0	31.5	-10.5	0.0	0.0	0.0	41.4	671.8	630.4
2024	49.1	49.1	0.0	45.7	45.6	-0.1	0.0	0.0	0.0	45.0	671.8	626.8
2025	53.4	54.7	1.3	49.6	55.9	6.3	0.0	0.0	0.0	48.9	671.8	622.9
2026	59.3	62.2	2.9	55.1	57.1	2.0	0.0	0.0	0.0	54.4	671.8	617.4
2027	60.5	61.8	1.3	56.3	55.5	-0.8	0.0	0.0	0.0	55.5	373.0	317.5
2028	61.8	61.1	-0.7	57.4	55.1	-2.3	0.0	0.0	0.0	56.6	235.1	178.5
2029	63.0	60.5	-2.5	58.6	56.7	-1.9	0.0	0.0	0.0	57.8	171.7	113.9
2030	64.3	64.5	0.2	59.8	56.1	-3.7	0.0	0.0	0.0	58.9	135.2	76.3
2031	65.6	66.1	0.5	61.0	61.0	0.0	0.0	0.0	0.0	60.2	135.2	75.0

Table 699 - Required and Achieved CAFE Levels (mpg) for Domestic Car Fleet for Alternative PC2LT4

Required and Achieved CAFE Levels (mpg) for Domestic Car Fleet for Alternative PC2LT4												
Model Year	Toyota			Volvo			VWA			Total		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	43.1	43.2	0.1	42.3	45.3	3.0	41.4	34.1	-7.3	43.5	48.9	5.4
2023	43.7	43.9	0.2	42.9	49.2	6.3	42.0	34.2	-7.8	44.2	52.4	8.2
2024	47.5	49.4	1.9	46.7	49.7	3.0	45.7	40.2	-5.5	48.1	60.9	12.8
2025	51.7	55.5	3.8	50.7	55.0	4.3	49.6	40.3	-9.3	52.3	66.6	14.3
2026	57.4	57.3	-0.1	56.4	1119.7	1063.3	55.2	117.7	62.5	58.0	71.4	13.4
2027	58.6	58.4	-0.2	57.5	434.6	377.1	56.3	104.1	47.8	59.2	71.2	12.0
2028	59.8	59.4	-0.4	58.7	274.0	215.3	57.4	94.1	36.7	60.4	70.4	10.0
2029	61.0	60.8	-0.2	59.9	200.1	140.2	58.6	88.5	29.9	61.7	70.7	9.0
2030	62.2	62.9	0.7	61.1	157.5	96.4	59.8	82.2	22.4	62.9	70.4	7.5
2031	63.5	65.0	1.5	62.3	157.5	95.2	61.0	83.3	22.3	64.2	72.5	8.3

Table 700 - Required and Achieved CAFE Levels (mpg) for Imported Car Fleet for Alternative PC2LT4

Required and Achieved CAFE Levels (mpg) for Imported Car Fleet for Alternative PC2LT4												
Model Year	BMW			Ford			GM			Honda		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	43.3	37.8	-5.5	0.0	0.0	0.0	47.1	43.8	-3.3	44.9	30.4	-14.5
2023	44.0	42.2	-1.8	0.0	0.0	0.0	47.9	44.0	-3.9	45.6	31.2	-14.4
2024	47.8	51.8	4.0	0.0	0.0	0.0	52.0	52.9	0.9	49.6	31.3	-18.3
2025	52.0	54.7	2.7	0.0	0.0	0.0	56.5	56.6	0.1	53.8	31.7	-22.1
2026	57.7	60.9	3.2	0.0	0.0	0.0	62.8	65.1	2.3	59.8	427.4	367.6
2027	58.9	62.6	3.7	0.0	0.0	0.0	64.1	63.9	-0.2	61.1	242.0	180.9
2028	60.1	61.9	1.8	0.0	0.0	0.0	65.4	62.9	-2.5	62.3	152.6	90.3
2029	61.3	61.3	0.0	0.0	0.0	0.0	66.8	65.9	-0.9	63.6	111.4	47.8
2030	62.6	62.6	0.0	0.0	0.0	0.0	68.1	68.1	0.0	64.9	87.7	22.8
2031	63.9	64.4	0.5	0.0	0.0	0.0	69.5	72.6	3.1	66.2	87.7	21.5

Table 701 - Required and Achieved CAFE Levels (mpg) for Imported Car Fleet for Alternative PC2LT4

Required and Achieved CAFE Levels (mpg) for Imported Car Fleet for Alternative PC2LT4												
Model Year	Hyundai			KIA			JLR			Karma		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	44.1	45.1	1.0	44.4	47.0	2.6	43.2	30.6	-12.6	0.0	0.0	0.0
2023	44.8	47.3	2.5	45.0	50.6	5.6	43.8	68.6	24.8	0.0	0.0	0.0
2024	48.7	52.0	3.3	49.0	55.5	6.5	47.6	69.1	21.5	0.0	0.0	0.0
2025	52.9	52.9	0.0	53.2	58.7	5.5	51.8	69.2	17.4	0.0	0.0	0.0
2026	58.8	58.8	0.0	59.1	60.1	1.0	57.5	74.2	16.7	0.0	0.0	0.0
2027	60.0	63.1	3.1	60.3	59.9	-0.4	58.7	70.9	12.2	0.0	0.0	0.0
2028	61.2	62.1	0.9	61.6	61.8	0.2	59.9	66.2	6.3	0.0	0.0	0.0
2029	62.5	63.9	1.4	62.8	62.0	-0.8	61.1	62.0	0.9	0.0	0.0	0.0
2030	63.8	63.8	0.0	64.1	64.1	0.0	62.4	63.0	0.6	0.0	0.0	0.0
2031	65.1	65.6	0.5	65.4	66.3	0.9	63.6	64.9	1.3	0.0	0.0	0.0

Table 702 - Required and Achieved CAFE Levels (mpg) for Imported Car Fleet for Alternative PC2LT4

Required and Achieved CAFE Levels (mpg) for Imported Car Fleet for Alternative PC2LT4												
Model Year	Lucid			Mazda			Mercedes-Benz			Mitsubishi		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	0.0	0.0	0.0	46.1	41.5	-4.6	41.8	35.5	-6.3	47.0	42.9	-4.1
2023	0.0	0.0	0.0	46.8	42.5	-4.3	42.4	45.3	2.9	47.7	43.3	-4.4
2024	0.0	0.0	0.0	50.9	55.6	4.7	46.1	47.9	1.8	51.9	61.2	9.3
2025	0.0	0.0	0.0	55.3	58.8	3.5	50.1	52.7	2.6	56.4	67.6	11.2
2026	0.0	0.0	0.0	61.5	61.5	0.0	55.6	71.3	15.7	62.7	67.7	5.0
2027	0.0	0.0	0.0	62.7	62.4	-0.3	56.8	70.8	14.0	63.9	65.3	1.4
2028	0.0	0.0	0.0	64.0	63.3	-0.7	57.9	66.9	9.0	65.2	72.5	7.3
2029	0.0	0.0	0.0	65.3	65.9	0.6	59.1	63.7	4.6	66.6	70.8	4.2
2030	0.0	0.0	0.0	66.7	66.9	0.2	60.3	61.1	0.8	67.9	69.2	1.3
2031	0.0	0.0	0.0	68.0	69.7	1.7	61.6	63.5	1.9	69.3	69.6	0.3

Table 703 - Required and Achieved CAFE Levels (mpg) for Imported Car Fleet for Alternative PC2LT4

Required and Achieved CAFE Levels (mpg) for Imported Car Fleet for Alternative PC2LT4												
Model Year	Nissan			Stellantis			Subaru			Tesla		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	45.2	46.9	1.7	44.9	33.5	-11.4	46.0	38.3	-7.7	42.4	839.5	797.1
2023	45.9	68.7	22.8	45.5	35.8	-9.7	46.7	52.1	5.4	43.1	839.5	796.4
2024	49.9	72.0	22.1	49.5	45.1	-4.4	50.7	52.2	1.5	46.8	839.5	792.7
2025	54.3	72.7	18.4	53.8	55.1	1.3	55.1	65.4	10.3	50.9	839.5	788.6
2026	60.3	73.1	12.8	59.8	62.6	2.8	61.3	68.1	6.8	56.6	839.5	782.9
2027	61.5	70.8	9.3	61.0	60.9	-0.1	62.5	69.1	6.6	57.7	420.9	363.2
2028	62.8	71.8	9.0	62.3	59.0	-3.3	63.8	69.6	5.8	58.9	265.4	206.5
2029	64.0	69.6	5.6	63.5	57.1	-6.4	65.1	70.4	5.3	60.1	193.7	133.6
2030	65.4	68.5	3.1	64.8	56.2	-8.6	66.4	70.7	4.3	61.3	152.6	91.3
2031	66.7	70.0	3.3	66.1	57.5	-8.6	67.8	73.9	6.1	62.6	152.6	90.0

Table 704 - Required and Achieved CAFE Levels (mpg) for Imported Car Fleet for Alternative PC2LT4

Required and Achieved CAFE Levels (mpg) for Imported Car Fleet for Alternative PC2LT4												
Model Year	Toyota			Volvo			VWA			Total		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	45.3	48.0	2.7	43.2	78.9	35.7	45.3	40.7	-4.6	44.7	45.5	0.8
2023	46.0	54.8	8.8	43.9	80.4	36.5	46.0	42.3	-3.7	45.4	51.0	5.6
2024	50.0	56.1	6.1	47.7	83.6	35.9	50.0	49.9	-0.1	49.3	56.2	6.9
2025	54.3	58.2	3.9	51.8	90.0	38.2	54.4	54.4	0.0	53.6	59.4	5.8
2026	60.4	64.9	4.5	57.6	91.5	33.9	60.4	60.4	0.0	59.5	65.5	6.0
2027	61.6	64.9	3.3	58.7	84.8	26.1	61.6	61.2	-0.4	60.7	66.2	5.5
2028	62.9	66.0	3.1	59.9	77.2	17.3	62.9	66.5	3.6	62.0	66.7	4.7
2029	64.2	67.3	3.1	61.2	70.8	9.6	64.2	64.3	0.1	63.3	66.8	3.5
2030	65.5	68.6	3.1	62.4	65.4	3.0	65.5	64.0	-1.5	64.6	67.0	2.4
2031	66.8	70.6	3.8	63.7	65.4	1.7	66.8	66.8	0.0	65.9	69.2	3.3

Table 705 - Required and Achieved CAFE Levels (mpg) for Total Fleet for Alternative PC3LT5

Required and Achieved CAFE Levels (mpg) for Total Fleet for Alternative PC3LT5												
Model Year	BMW			Ford			GM			Honda		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	37.6	35.3	-2.3	31.4	30.9	-0.5	32.5	30.8	-1.7	39.1	40.0	0.9
2023	38.0	38.1	0.1	31.9	32.7	0.8	33.0	31.0	-2.0	39.5	44.4	4.9
2024	41.3	41.8	0.5	34.3	37.4	3.1	35.4	37.3	1.9	42.9	44.5	1.6
2025	44.7	45.7	1.0	37.3	38.4	1.1	38.4	42.5	4.1	46.5	48.3	1.8
2026	49.6	51.9	2.3	41.4	41.5	0.1	42.6	44.2	1.6	51.5	52.0	0.5
2027	51.7	51.4	-0.3	43.6	45.8	2.2	44.6	43.0	-1.6	53.7	53.8	0.1
2028	53.9	51.6	-2.3	45.8	47.1	1.3	46.8	42.7	-4.1	56.0	56.7	0.7
2029	56.2	51.5	-4.7	48.0	48.8	0.8	49.0	43.0	-6.0	58.4	58.5	0.1
2030	58.6	53.4	-5.2	50.5	47.9	-2.6	51.6	42.9	-8.7	60.9	61.8	0.9
2031	61.1	57.0	-4.1	53.1	47.5	-5.6	54.1	45.0	-9.1	63.5	63.5	0.0

Table 706 - Required and Achieved CAFE Levels (mpg) for Total Fleet for Alternative PC3LT5

Required and Achieved CAFE Levels (mpg) for Total Fleet for Alternative PC3LT5												
Model Year	Hyundai			KIA			JLR			Karma		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	39.6	41.4	1.8	39.5	40.9	1.4	32.9	29.0	-3.9	40.6	106.8	66.2
2023	40.1	43.5	3.4	39.9	43.6	3.7	33.4	37.9	4.5	41.1	106.8	65.7
2024	43.5	46.2	2.7	43.4	47.3	3.9	36.2	41.8	5.6	44.3	106.8	62.5
2025	47.1	50.4	3.3	47.0	49.3	2.3	39.4	42.1	2.7	48.1	106.8	58.7
2026	52.3	53.5	1.2	52.1	52.5	0.4	43.7	45.9	2.2	53.5	542.6	489.1
2027	54.4	57.8	3.4	54.3	52.0	-2.3	46.0	45.0	-1.0	55.8	328.4	272.6
2028	56.6	57.8	1.2	56.5	54.0	-2.5	48.4	43.9	-4.5	57.5	207.1	149.6
2029	58.9	60.8	1.9	58.8	55.4	-3.4	51.0	42.9	-8.1	59.3	151.2	91.9
2030	61.4	61.9	0.5	61.4	60.6	-0.8	53.6	43.8	-9.8	61.1	119.0	57.9
2031	63.9	64.5	0.6	64.0	64.8	0.8	56.4	47.4	-9.0	63.0	119.0	56.0

Table 707 - Required and Achieved CAFE Levels (mpg) for Total Fleet for Alternative PC3LT5

Required and Achieved CAFE Levels (mpg) for Total Fleet for Alternative PC3LT5												
Model Year	Lucid			Mazda			Mercedes-Benz			Mitsubishi		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	40.6	742.5	701.9	37.3	36.5	-0.8	36.8	32.8	-4.0	42.0	40.3	-1.7
2023	41.1	742.5	701.4	37.8	47.1	9.3	37.3	39.5	2.2	42.6	40.6	-2.0
2024	44.3	742.5	698.2	41.1	49.5	8.4	40.4	40.4	0.0	46.2	48.6	2.4
2025	48.1	742.5	694.4	44.6	50.3	5.7	43.8	42.0	-1.8	50.0	62.3	12.3
2026	53.5	742.5	689.0	49.5	53.0	3.5	48.6	49.4	0.8	55.5	62.3	6.8
2027	55.8	394.4	338.6	52.0	53.8	1.8	50.8	50.7	-0.1	57.8	60.7	2.9
2028	57.5	248.6	191.1	54.5	54.4	-0.1	52.9	52.6	-0.3	60.2	67.6	7.4
2029	59.3	181.5	122.2	57.3	60.2	2.9	55.2	51.7	-3.5	62.7	66.0	3.3
2030	61.1	142.9	81.8	60.2	62.3	2.1	57.6	53.1	-4.5	65.5	67.1	1.6
2031	63.0	142.9	79.9	63.2	64.1	0.9	60.2	54.9	-5.3	68.2	68.4	0.2

Table 708 - Required and Achieved CAFE Levels (mpg) for Total Fleet for Alternative PC3LT5

Required and Achieved CAFE Levels (mpg) for Total Fleet for Alternative PC3LT5												
Model Year	Nissan			Stellantis			Subaru			Tesla		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	38.9	38.6	-0.3	31.9	28.9	-3.0	37.8	39.0	1.2	40.7	699.0	658.3
2023	39.4	42.4	3.0	32.3	30.9	-1.4	38.2	43.7	5.5	41.3	707.6	666.3
2024	42.7	44.9	2.2	35.0	34.9	-0.1	41.5	46.3	4.8	44.8	710.6	665.8
2025	46.3	48.3	2.0	38.1	41.7	3.6	45.1	48.9	3.8	48.7	714.2	665.5
2026	51.3	52.2	0.9	42.3	42.4	0.1	50.1	51.5	1.4	54.1	714.6	660.5
2027	53.5	51.6	-1.9	44.3	44.1	-0.2	52.6	53.2	0.6	55.9	380.6	324.7
2028	55.7	55.5	-0.2	46.6	43.6	-3.0	55.2	55.7	0.5	57.7	239.9	182.2
2029	58.0	55.6	-2.4	49.0	45.7	-3.3	57.9	58.3	0.4	59.5	175.2	115.7
2030	60.5	61.1	0.6	51.4	45.6	-5.8	60.9	61.7	0.8	61.4	137.9	76.5
2031	63.0	62.7	-0.3	54.0	46.7	-7.3	63.9	64.7	0.8	63.4	137.9	74.5

Table 709 - Required and Achieved CAFE Levels (mpg) for Total Fleet for Alternative PC3LT5

Required and Achieved CAFE Levels (mpg) for Total Fleet for Alternative PC3LT5												
Model Year	Toyota			Volvo			VWA			Total		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	37.1	39.1	2.0	36.0	43.8	7.8	37.9	36.3	-1.6	35.8	36.5	0.7
2023	37.5	41.0	3.5	36.4	47.1	10.7	38.3	38.5	0.2	36.2	38.9	2.7
2024	40.6	45.3	4.7	39.5	47.5	8.0	41.6	45.7	4.1	39.1	43.1	4.0
2025	43.9	47.2	3.3	42.8	53.4	10.6	45.0	48.5	3.5	42.4	46.7	4.3
2026	48.7	51.8	3.1	47.6	60.3	12.7	50.0	51.8	1.8	47.0	49.9	2.9
2027	50.9	50.8	-0.1	49.8	57.1	7.3	52.2	51.0	-1.2	49.2	50.6	1.4
2028	53.2	52.7	-0.5	52.1	54.9	2.8	54.5	52.2	-2.3	51.5	51.6	0.1
2029	55.6	54.4	-1.2	54.6	53.0	-1.6	57.1	51.3	-5.8	53.8	52.7	-1.1
2030	58.2	56.2	-2.0	57.1	57.0	-0.1	59.7	53.9	-5.8	56.4	53.9	-2.5
2031	60.8	60.2	-0.6	59.9	56.7	-3.2	62.4	56.7	-5.7	59.0	55.9	-3.1

Table 710 - Required and Achieved CAFE Levels (mpg) for Passenger Car Fleet for Alternative PC3LT5

Required and Achieved CAFE Levels (mpg) for Passenger Car Fleet for Alternative PC3LT5												
Model Year	BMW			Ford			GM			Honda		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	43.3	37.8	-5.5	43.4	45.5	2.1	45.1	41.9	-3.2	44.7	45.6	0.9
2023	44.0	42.2	-1.8	44.1	45.8	1.7	45.8	42.3	-3.5	45.4	52.2	6.8
2024	47.8	51.8	4.0	47.9	66.6	18.7	49.7	54.2	4.5	49.4	52.6	3.2
2025	52.0	54.7	2.7	52.1	69.2	17.1	54.1	57.7	3.6	53.7	56.7	3.0
2026	57.7	60.9	3.2	57.9	69.2	11.3	60.1	63.4	3.3	59.6	59.6	0.0
2027	59.5	62.8	3.3	59.6	76.8	17.2	61.9	63.0	1.1	61.5	61.4	-0.1
2028	61.4	62.7	1.3	61.5	73.2	11.7	63.9	61.6	-2.3	63.4	64.7	1.3
2029	63.3	62.1	-1.2	63.4	69.9	6.5	65.8	65.8	0.0	65.3	66.1	0.8
2030	65.2	65.2	0.0	65.4	67.0	1.6	67.9	65.4	-2.5	67.3	67.4	0.1
2031	67.2	67.2	0.0	67.4	66.4	-1.0	70.0	70.0	0.0	69.4	69.4	0.0

Table 711 - Required and Achieved CAFE Levels (mpg) for Passenger Car Fleet for Alternative PC3LT5

Required and Achieved CAFE Levels (mpg) for Passenger Car Fleet for Alternative PC3LT5												
Model Year	Hyundai			KIA			JLR			Karma		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	44.2	45.3	1.1	44.7	47.0	2.3	43.2	30.6	-12.6	40.6	106.8	66.2
2023	44.9	48.8	3.9	45.4	49.7	4.3	43.8	68.6	24.8	41.1	106.8	65.7
2024	48.8	53.7	4.9	49.4	57.0	7.6	47.6	69.1	21.5	44.3	106.8	62.5
2025	53.1	54.6	1.5	53.6	59.4	5.8	51.8	69.2	17.4	48.1	106.8	58.7
2026	59.0	60.7	1.7	59.6	60.6	1.0	57.5	74.2	16.7	53.5	542.6	489.1
2027	60.8	65.6	4.8	61.5	60.4	-1.1	59.3	70.9	11.6	55.8	328.4	272.6
2028	62.7	64.4	1.7	63.3	61.7	-1.6	61.1	66.2	5.1	57.5	207.1	149.6
2029	64.6	68.4	3.8	65.3	65.6	0.3	63.0	62.0	-1.0	59.3	151.2	91.9
2030	66.6	68.0	1.4	67.3	69.9	2.6	65.0	63.0	-2.0	61.1	119.0	57.9
2031	68.7	71.5	2.8	69.4	72.1	2.7	67.0	64.8	-2.2	63.0	119.0	56.0

Table 712 - Required and Achieved CAFE Levels (mpg) for Passenger Car Fleet for Alternative PC3LT5

Required and Achieved CAFE Levels (mpg) for Passenger Car Fleet for Alternative PC3LT5												
Model Year	Lucid			Mazda			Mercedes-Benz			Mitsubishi		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	40.6	742.5	701.9	46.1	41.5	-4.6	41.8	35.5	-6.3	47.0	42.9	-4.1
2023	41.1	742.5	701.4	46.8	42.5	-4.3	42.4	45.3	2.9	47.7	43.3	-4.4
2024	44.3	742.5	698.2	50.9	55.6	4.7	46.1	47.9	1.8	51.9	61.2	9.3
2025	48.1	742.5	694.4	55.3	58.8	3.5	50.1	52.7	2.6	56.4	67.6	11.2
2026	53.5	742.5	689.0	61.5	61.5	0.0	55.6	71.3	15.7	62.7	67.7	5.0
2027	55.8	394.4	338.6	63.4	62.4	-1.0	57.4	70.9	13.5	64.6	65.3	0.7
2028	57.5	248.6	191.1	65.3	63.3	-2.0	59.1	67.0	7.9	66.6	73.5	6.9
2029	59.3	181.5	122.2	67.4	68.5	1.1	61.0	64.6	3.6	68.6	71.7	3.1
2030	61.1	142.9	81.8	69.5	69.5	0.0	62.8	62.8	0.0	70.8	72.5	1.7
2031	63.0	142.9	79.9	71.6	72.3	0.7	64.8	65.1	0.3	73.0	73.3	0.3

Table 713 - Required and Achieved CAFE Levels (mpg) for Passenger Car Fleet for Alternative PC3LT5

Required and Achieved CAFE Levels (mpg) for Passenger Car Fleet for Alternative PC3LT5												
Model Year	Nissan			Stellantis			Subaru			Tesla		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	44.7	44.3	-0.4	41.8	29.2	-12.6	46.0	38.3	-7.7	41.1	698.9	657.8
2023	45.4	49.4	4.0	42.4	31.9	-10.5	46.7	52.1	5.4	41.7	698.9	657.2
2024	49.3	53.8	4.5	46.1	45.5	-0.6	50.7	52.2	1.5	45.3	698.9	653.6
2025	53.6	58.7	5.1	50.0	55.8	5.8	55.1	65.4	10.3	49.3	698.9	649.6
2026	59.6	64.9	5.3	55.6	57.7	2.1	61.3	68.1	6.8	54.8	698.9	644.1
2027	61.4	64.0	2.6	57.3	56.1	-1.2	63.2	69.1	5.9	56.5	381.4	324.9
2028	63.4	64.1	0.7	59.1	55.5	-3.6	65.1	69.6	4.5	58.2	240.4	182.2
2029	65.3	63.1	-2.2	60.9	56.7	-4.2	67.1	70.4	3.3	60.1	175.6	115.5
2030	67.3	66.8	-0.5	62.8	56.1	-6.7	69.2	72.0	2.8	61.9	138.3	76.4
2031	69.4	69.8	0.4	64.8	62.0	-2.8	71.3	75.2	3.9	63.8	138.3	74.5

Table 714 - Required and Achieved CAFE Levels (mpg) for Passenger Car Fleet for Alternative PC3LT5

Required and Achieved CAFE Levels (mpg) for Passenger Car Fleet for Alternative PC3LT5												
Model Year	Toyota			Volvo			VWA			Total		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	44.7	46.7	2.0	42.9	64.5	21.6	45.0	40.1	-4.9	44.1	47.1	3.0
2023	45.4	51.6	6.2	43.6	67.5	23.9	45.7	41.6	-4.1	44.8	51.6	6.8
2024	49.4	54.3	4.9	47.4	69.3	21.9	49.7	49.1	-0.6	48.7	58.4	9.7
2025	53.6	57.5	3.9	51.5	75.5	24.0	54.0	53.1	-0.9	52.9	62.7	9.8
2026	59.6	62.8	3.2	57.2	126.6	69.4	60.0	62.6	2.6	58.8	68.3	9.5
2027	61.5	63.1	1.6	58.9	112.1	53.2	61.9	63.0	1.1	60.6	68.8	8.2
2028	63.4	64.2	0.8	60.8	98.6	37.8	63.8	69.5	5.7	62.5	68.9	6.4
2029	65.3	65.5	0.2	62.7	88.0	25.3	65.8	67.0	1.2	64.4	69.5	5.1
2030	67.3	67.7	0.4	64.6	80.1	15.5	67.7	66.3	-1.4	66.4	70.1	3.7
2031	69.4	70.7	1.3	66.6	80.3	13.7	69.9	69.9	0.0	68.5	73.0	4.5

Table 715 - Required and Achieved CAFE Levels (mpg) for Light Truck Fleet for Alternative PC3LT5

Required and Achieved CAFE Levels (mpg) for Light Truck Fleet for Alternative PC3LT5												
Model Year	BMW			Ford			GM			Honda		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	32.5	32.7	0.2	30.3	29.6	-0.7	29.8	28.3	-1.5	34.0	35.0	1.0
2023	33.0	34.4	1.4	30.8	31.6	0.8	30.3	28.6	-1.7	34.5	38.0	3.5
2024	35.9	34.4	-1.5	33.2	35.5	2.3	32.5	34.0	1.5	37.5	38.1	0.6
2025	39.0	39.0	0.0	36.1	36.5	0.4	35.4	39.5	4.1	40.8	41.9	1.1
2026	43.4	45.1	1.7	40.1	39.7	-0.4	39.3	40.7	1.4	45.3	46.1	0.8
2027	45.6	43.5	-2.1	42.3	43.8	1.5	41.4	39.5	-1.9	47.7	47.8	0.1
2028	48.0	43.8	-4.2	44.5	45.3	0.8	43.6	39.3	-4.3	50.2	50.6	0.4
2029	50.6	44.1	-6.5	46.8	47.2	0.4	45.8	39.3	-6.5	52.9	52.6	-0.3
2030	53.2	45.2	-8.0	49.3	46.4	-2.9	48.3	39.1	-9.2	55.6	57.1	1.5
2031	56.0	49.4	-6.6	51.9	46.0	-5.9	50.8	40.9	-9.9	58.6	58.6	0.0

Table 716 - Required and Achieved CAFE Levels (mpg) for Light Truck Fleet for Alternative PC3LT5

Required and Achieved CAFE Levels (mpg) for Light Truck Fleet for Alternative PC3LT5												
Model Year	Hyundai			KIA			JLR			Karma		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	34.0	36.4	2.4	34.0	34.6	0.6	32.7	29.0	-3.7	0.0	0.0	0.0
2023	34.5	37.4	2.9	34.5	37.5	3.0	33.2	37.5	4.3	0.0	0.0	0.0
2024	37.5	38.3	0.8	37.5	38.8	1.3	36.0	41.4	5.4	0.0	0.0	0.0
2025	40.7	45.5	4.8	40.8	40.8	0.0	39.2	41.7	2.5	0.0	0.0	0.0
2026	45.3	46.1	0.8	45.3	45.3	0.0	43.5	45.5	2.0	0.0	0.0	0.0
2027	47.7	49.8	2.1	47.7	44.7	-3.0	45.8	44.6	-1.2	0.0	0.0	0.0
2028	50.2	50.9	0.7	50.2	47.2	-3.0	48.2	43.6	-4.6	0.0	0.0	0.0
2029	52.8	53.1	0.3	52.8	47.0	-5.8	50.8	42.6	-8.2	0.0	0.0	0.0
2030	55.6	55.3	-0.3	55.6	52.4	-3.2	53.4	43.5	-9.9	0.0	0.0	0.0
2031	58.5	57.0	-1.5	58.6	57.9	-0.7	56.2	47.1	-9.1	0.0	0.0	0.0

Table 717 - Required and Achieved CAFE Levels (mpg) for Light Truck Fleet for Alternative PC3LT5

Required and Achieved CAFE Levels (mpg) for Light Truck Fleet for Alternative PC3LT5												
Model Year	Lucid			Mazda			Mercedes-Benz			Mitsubishi		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	0.0	0.0	0.0	36.0	35.7	-0.3	32.9	30.4	-2.5	37.0	37.4	0.4
2023	0.0	0.0	0.0	36.6	48.0	11.4	33.4	35.2	1.8	37.6	37.7	0.1
2024	0.0	0.0	0.0	39.8	48.6	8.8	36.3	35.3	-1.0	40.8	39.0	-1.8
2025	0.0	0.0	0.0	43.2	49.2	6.0	39.5	35.6	-3.9	44.4	57.3	12.9
2026	0.0	0.0	0.0	48.0	51.9	3.9	43.9	39.1	-4.8	49.3	57.3	8.0
2027	0.0	0.0	0.0	50.6	52.7	2.1	46.2	40.8	-5.4	51.9	56.4	4.5
2028	0.0	0.0	0.0	53.2	53.2	0.0	48.6	44.5	-4.1	54.6	62.2	7.6
2029	0.0	0.0	0.0	56.0	59.1	3.1	51.2	44.3	-6.9	57.5	60.8	3.3
2030	0.0	0.0	0.0	59.0	61.3	2.3	53.9	46.9	-7.0	60.5	62.0	1.5
2031	0.0	0.0	0.0	62.1	63.0	0.9	56.7	48.4	-8.3	63.7	63.7	0.0

Table 718 - Required and Achieved CAFE Levels (mpg) for Light Truck Fleet for Alternative PC3LT5

Required and Achieved CAFE Levels (mpg) for Light Truck Fleet for Alternative PC3LT5												
Model Year	Nissan			Stellantis			Subaru			Tesla		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	32.9	32.6	-0.3	30.7	28.9	-1.8	36.5	39.1	2.6	33.4	700.3	666.9
2023	33.4	35.6	2.2	31.2	30.7	-0.5	37.0	42.4	5.4	33.9	936.4	902.5
2024	36.3	36.8	0.5	33.8	33.7	-0.1	40.2	45.4	5.2	36.9	1046.7	1009.8
2025	39.5	39.5	0.0	36.8	40.3	3.5	43.7	46.9	3.2	40.1	1186.5	1146.4
2026	43.9	42.2	-1.7	40.9	40.9	0.0	48.6	49.5	0.9	44.5	1186.5	1142.0
2027	46.2	41.8	-4.4	43.0	42.8	-0.2	51.2	51.3	0.1	46.8	365.7	318.9
2028	48.6	47.8	-0.8	45.3	42.4	-2.9	53.9	53.9	0.0	49.3	230.5	181.2
2029	51.2	48.7	-2.5	47.7	44.5	-3.2	56.7	56.7	0.0	51.9	168.3	116.4
2030	53.9	55.4	1.5	50.2	44.5	-5.7	59.7	60.3	0.6	54.6	132.5	77.9
2031	56.7	55.9	-0.8	52.8	45.2	-7.6	62.8	63.2	0.4	57.5	132.6	75.1

Table 719 - Required and Achieved CAFE Levels (mpg) for Light Truck Fleet for Alternative PC3LT5

Required and Achieved CAFE Levels (mpg) for Light Truck Fleet for Alternative PC3LT5												
Model Year	Toyota			Volvo			VWA			Total		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	33.0	35.0	2.0	33.4	38.0	4.6	34.0	33.9	-0.1	32.1	32.1	0.0
2023	33.5	36.0	2.5	33.9	41.4	7.5	34.5	36.6	2.1	32.6	34.0	1.4
2024	36.3	40.8	4.5	36.8	41.7	4.9	37.5	43.7	6.2	35.2	37.5	2.3
2025	39.4	42.4	3.0	40.0	47.6	7.6	40.8	46.0	5.2	38.3	41.1	2.8
2026	43.8	46.8	3.0	44.5	49.6	5.1	45.3	46.9	1.6	42.6	43.7	1.1
2027	46.1	45.4	-0.7	46.8	47.6	0.8	47.7	45.7	-2.0	44.8	44.5	-0.3
2028	48.5	47.6	-0.9	49.3	46.6	-2.7	50.2	45.4	-4.8	47.2	45.7	-1.5
2029	51.1	49.4	-1.7	51.9	45.7	-6.2	52.9	45.0	-7.9	49.7	47.0	-2.7
2030	53.8	51.0	-2.8	54.6	51.0	-3.6	55.7	48.4	-7.3	52.3	48.1	-4.2
2031	56.6	55.2	-1.4	57.5	50.6	-6.9	58.6	50.8	-7.8	55.0	49.8	-5.2

Table 720 - Required and Achieved CAFE Levels (mpg) for Domestic Car Fleet for Alternative PC3LT5

Required and Achieved CAFE Levels (mpg) for Domestic Car Fleet for Alternative PC3LT5												
Model Year	BMW			Ford			GM			Honda		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	0.0	0.0	0.0	43.4	45.5	2.1	44.3	41.2	-3.1	44.7	45.6	0.9
2023	0.0	0.0	0.0	44.1	45.8	1.7	45.0	41.7	-3.3	45.4	52.2	6.8
2024	0.0	0.0	0.0	47.9	66.6	18.7	48.9	54.7	5.8	49.4	52.6	3.2
2025	0.0	0.0	0.0	52.1	69.2	17.1	53.2	58.2	5.0	53.7	56.7	3.0
2026	0.0	0.0	0.0	57.9	69.2	11.3	59.1	62.7	3.6	59.6	59.6	0.0
2027	0.0	0.0	0.0	59.6	76.8	17.2	60.9	62.6	1.7	61.5	61.4	-0.1
2028	0.0	0.0	0.0	61.5	73.2	11.7	62.8	61.1	-1.7	63.4	64.7	1.3
2029	0.0	0.0	0.0	63.4	69.9	6.5	64.7	65.8	1.1	65.3	66.1	0.8
2030	0.0	0.0	0.0	65.4	67.0	1.6	66.7	64.2	-2.5	67.3	67.4	0.1
2031	0.0	0.0	0.0	67.4	66.4	-1.0	68.8	67.0	-1.8	69.4	69.4	0.0

Table 721 - Required and Achieved CAFE Levels (mpg) for Domestic Car Fleet for Alternative PC3LT5

Required and Achieved CAFE Levels (mpg) for Domestic Car Fleet for Alternative PC3LT5												
Model Year	Hyundai			KIA			JLR			Karma		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	48.7	53.4	4.7	45.8	47.1	1.3	0.0	0.0	0.0	40.6	106.8	66.2
2023	49.5	2658.3	2608.8	46.5	47.2	0.7	0.0	0.0	0.0	41.1	106.8	65.7
2024	53.8	3125.8	3072.0	50.6	62.1	11.5	0.0	0.0	0.0	44.3	106.8	62.5
2025	58.4	3792.9	3734.5	55.0	61.9	6.9	0.0	0.0	0.0	48.1	106.8	58.7
2026	64.9	4821.9	4757.0	61.1	62.1	1.0	0.0	0.0	0.0	53.5	542.6	489.1
2027	66.9	674.6	607.7	63.0	61.9	-1.1	0.0	0.0	0.0	55.8	328.4	272.6
2028	69.0	425.3	356.3	64.9	61.2	-3.7	0.0	0.0	0.0	57.5	207.1	149.6
2029	71.2	310.5	239.3	66.9	80.0	13.1	0.0	0.0	0.0	59.3	151.2	91.9
2030	73.3	242.7	169.4	69.0	80.1	11.1	0.0	0.0	0.0	61.1	119.0	57.9
2031	75.6	239.8	164.2	71.1	81.7	10.6	0.0	0.0	0.0	63.0	119.0	56.0

Table 722 - Required and Achieved CAFE Levels (mpg) for Domestic Car Fleet for Alternative PC3LT5

Required and Achieved CAFE Levels (mpg) for Domestic Car Fleet for Alternative PC3LT5												
Model Year	Lucid			Mazda			Mercedes-Benz			Mitsubishi		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	40.6	742.5	701.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2023	41.1	742.5	701.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2024	44.3	742.5	698.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2025	48.1	742.5	694.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2026	53.5	742.5	689.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2027	55.8	394.4	338.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2028	57.5	248.6	191.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2029	59.3	181.5	122.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2030	61.1	142.9	81.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2031	63.0	142.9	79.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table 723 - Required and Achieved CAFE Levels (mpg) for Domestic Car Fleet for Alternative PC3LT5

Required and Achieved CAFE Levels (mpg) for Domestic Car Fleet for Alternative PC3LT5												
Model Year	Nissan			Stellantis			Subaru			Tesla		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	44.5	43.4	-1.1	41.4	28.7	-12.7	0.0	0.0	0.0	40.8	671.8	631.0
2023	45.2	44.6	-0.6	42.0	31.5	-10.5	0.0	0.0	0.0	41.4	671.8	630.4
2024	49.1	49.1	0.0	45.7	45.6	-0.1	0.0	0.0	0.0	45.0	671.8	626.8
2025	53.4	54.7	1.3	49.6	55.9	6.3	0.0	0.0	0.0	48.9	671.8	622.9
2026	59.3	62.2	2.9	55.1	57.1	2.0	0.0	0.0	0.0	54.4	671.8	617.4
2027	61.2	61.8	0.6	56.8	55.5	-1.3	0.0	0.0	0.0	56.1	373.0	316.9
2028	63.1	61.1	-2.0	58.6	55.1	-3.5	0.0	0.0	0.0	57.8	235.1	177.3
2029	65.0	60.5	-4.5	60.4	56.7	-3.7	0.0	0.0	0.0	59.6	171.7	112.1
2030	67.0	65.6	-1.4	62.3	56.1	-6.2	0.0	0.0	0.0	61.4	135.2	73.8
2031	69.1	69.2	0.1	64.2	62.6	-1.6	0.0	0.0	0.0	63.3	135.2	71.9

Table 724 - Required and Achieved CAFE Levels (mpg) for Domestic Car Fleet for Alternative PC3LT5

Required and Achieved CAFE Levels (mpg) for Domestic Car Fleet for Alternative PC3LT5												
Model Year	Toyota			Volvo			VWA			Total		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	43.1	43.2	0.1	42.3	45.3	3.0	41.4	34.1	-7.3	43.5	48.9	5.4
2023	43.7	43.9	0.2	42.9	49.2	6.3	42.0	34.2	-7.8	44.2	52.4	8.2
2024	47.5	49.4	1.9	46.7	49.7	3.0	45.7	40.2	-5.5	48.1	60.9	12.8
2025	51.7	55.5	3.8	50.7	55.0	4.3	49.6	40.3	-9.3	52.3	66.6	14.3
2026	57.4	57.3	-0.1	56.4	1119.7	1063.3	55.2	117.7	62.5	58.0	71.4	13.4
2027	59.2	58.4	-0.8	58.1	434.6	376.5	56.9	104.1	47.2	59.9	71.5	11.6
2028	61.0	59.4	-1.6	59.9	274.0	214.1	58.6	94.1	35.5	61.7	70.9	9.2
2029	62.9	60.8	-2.1	61.7	200.1	138.4	60.4	88.5	28.1	63.6	71.4	7.8
2030	64.8	64.8	0.0	63.6	157.5	93.9	62.3	82.2	19.9	65.5	71.6	6.1
2031	66.8	68.4	1.6	65.6	157.5	91.9	64.2	83.3	19.1	67.6	74.4	6.8

Table 725 - Required and Achieved CAFE Levels (mpg) for Total Fleet for Alternative PC6LT8

Required and Achieved CAFE Levels (mpg) for Total Fleet for Alternative PC6LT8												
Model Year	BMW			Ford			GM			Honda		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	37.6	35.3	-2.3	31.4	30.9	-0.5	32.5	30.8	-1.7	39.1	40.0	0.9
2023	38.0	38.1	0.1	31.9	32.7	0.8	33.0	31.0	-2.0	39.5	44.4	4.9
2024	41.3	41.8	0.5	34.3	37.4	3.1	35.4	37.3	1.9	42.9	44.5	1.6
2025	44.7	45.7	1.0	37.3	38.4	1.1	38.4	42.5	4.1	46.5	48.3	1.8
2026	49.6	51.9	2.3	41.4	41.5	0.1	42.6	44.2	1.6	51.5	52.0	0.5
2027	53.3	51.5	-1.8	44.9	45.8	0.9	46.0	43.0	-3.0	55.5	53.7	-1.8
2028	57.4	51.6	-5.8	48.7	47.1	-1.6	49.8	42.6	-7.2	59.7	59.3	-0.4
2029	61.8	51.6	-10.2	52.9	48.8	-4.1	54.0	43.0	-11.0	64.2	62.8	-1.4
2030	66.5	53.5	-13.0	57.4	47.9	-9.5	58.6	42.9	-15.7	69.2	66.4	-2.8
2031	71.7	58.2	-13.5	62.3	47.5	-14.8	63.4	45.0	-18.4	74.5	68.1	-6.4

Table 726 - Required and Achieved CAFE Levels (mpg) for Total Fleet for Alternative PC6LT8

Required and Achieved CAFE Levels (mpg) for Total Fleet for Alternative PC6LT8												
Model Year	Hyundai			KIA			JLR			Karma		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	39.6	41.4	1.8	39.5	40.9	1.4	32.9	29.0	-3.9	40.6	106.8	66.2
2023	40.1	43.5	3.4	39.9	43.6	3.7	33.4	37.9	4.5	41.1	106.8	65.7
2024	43.5	46.2	2.7	43.4	47.3	3.9	36.2	41.8	5.6	44.3	106.8	62.5
2025	47.1	50.4	3.3	47.0	49.3	2.3	39.4	42.1	2.7	48.1	106.8	58.7
2026	52.3	53.5	1.2	52.1	52.5	0.4	43.7	45.9	2.2	53.5	542.6	489.1
2027	56.2	58.4	2.2	56.0	52.0	-4.0	47.5	45.0	-2.5	57.5	328.4	270.9
2028	60.3	58.4	-1.9	60.2	54.0	-6.2	51.6	43.9	-7.7	61.2	207.1	145.9
2029	64.8	61.6	-3.2	64.7	55.9	-8.8	56.1	42.9	-13.2	65.1	151.2	86.1
2030	69.7	62.8	-6.9	69.6	62.7	-6.9	60.9	43.8	-17.1	69.3	119.0	49.7
2031	74.9	65.4	-9.5	74.9	69.2	-5.7	66.2	47.4	-18.8	73.7	119.0	45.3

Table 727 - Required and Achieved CAFE Levels (mpg) for Total Fleet for Alternative PC6LT8

Required and Achieved CAFE Levels (mpg) for Total Fleet for Alternative PC6LT8												
Model Year	Lucid			Mazda			Mercedes-Benz			Mitsubishi		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	40.6	742.5	701.9	37.3	36.5	-0.8	36.8	32.8	-4.0	42.0	40.3	-1.7
2023	41.1	742.5	701.4	37.8	47.1	9.3	37.3	39.5	2.2	42.6	40.6	-2.0
2024	44.3	742.5	698.2	41.1	49.5	8.4	40.4	40.4	0.0	46.2	48.6	2.4
2025	48.1	742.5	694.4	44.6	50.3	5.7	43.8	42.0	-1.8	50.0	62.3	12.3
2026	53.5	742.5	689.0	49.5	53.0	3.5	48.6	49.4	0.8	55.5	62.3	6.8
2027	57.5	394.4	336.9	53.7	56.7	3.0	52.4	50.9	-1.5	59.7	60.7	1.0
2028	61.2	248.6	187.4	58.1	57.2	-0.9	56.4	52.8	-3.6	64.2	78.7	14.5
2029	65.1	181.5	116.4	63.1	69.2	6.1	60.7	52.0	-8.7	69.0	76.5	7.5
2030	69.3	142.9	73.6	68.4	71.6	3.2	65.4	53.4	-12.0	74.3	78.2	3.9
2031	73.7	142.9	69.2	74.2	73.3	-0.9	70.5	55.6	-14.9	80.0	81.1	1.1

Table 728 - Required and Achieved CAFE Levels (mpg) for Total Fleet for Alternative PC6LT8

Required and Achieved CAFE Levels (mpg) for Total Fleet for Alternative PC6LT8												
Model Year	Nissan			Stellantis			Subaru			Tesla		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	38.9	38.6	-0.3	31.9	28.9	-3.0	37.8	39.0	1.2	40.7	699.0	658.3
2023	39.4	42.4	3.0	32.3	30.9	-1.4	38.2	43.7	5.5	41.3	707.6	666.3
2024	42.7	44.9	2.2	35.0	34.9	-0.1	41.5	46.3	4.8	44.8	710.6	665.8
2025	46.3	48.3	2.0	38.1	41.7	3.6	45.1	48.9	3.8	48.7	714.2	665.5
2026	51.3	52.2	0.9	42.3	42.4	0.1	50.1	51.5	1.4	54.1	714.6	660.5
2027	55.1	51.6	-3.5	45.8	44.1	-1.7	54.3	53.2	-1.1	57.6	380.5	322.9
2028	59.3	56.0	-3.3	49.7	43.6	-6.1	58.8	58.1	-0.7	61.4	239.9	178.5
2029	63.8	56.1	-7.7	53.9	45.7	-8.2	63.8	65.8	2.0	65.4	175.2	109.8
2030	68.7	61.8	-6.9	58.5	45.6	-12.9	69.1	73.1	4.0	69.6	137.9	68.3
2031	73.9	64.8	-9.1	63.4	46.7	-16.7	75.0	75.2	0.2	74.2	137.9	63.7

Table 729 - Required and Achieved CAFE Levels (mpg) for Total Fleet for Alternative PC6LT8

Required and Achieved CAFE Levels (mpg) for Total Fleet for Alternative PC6LT8												
Model Year	Toyota			Volvo			VWA			Total		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	37.1	39.1	2.0	36.0	43.8	7.8	37.9	36.3	-1.6	35.8	36.5	0.7
2023	37.5	41.0	3.5	36.4	47.1	10.7	38.3	38.5	0.2	36.2	38.9	2.7
2024	40.6	45.3	4.7	39.5	47.5	8.0	41.6	45.7	4.1	39.1	43.1	4.0
2025	43.9	47.2	3.3	42.8	53.4	10.6	45.0	48.5	3.5	42.4	46.7	4.3
2026	48.7	51.8	3.1	47.6	60.3	12.7	50.0	51.8	1.8	47.0	49.9	2.9
2027	52.5	50.8	-1.7	51.4	57.9	6.5	53.9	51.0	-2.9	50.8	50.7	-0.1
2028	56.6	52.9	-3.7	55.6	55.7	0.1	58.2	52.6	-5.6	54.8	52.1	-2.7
2029	61.1	54.7	-6.4	60.0	54.2	-5.8	62.7	51.7	-11.0	59.2	53.6	-5.6
2030	66.1	57.9	-8.2	64.9	57.6	-7.3	67.8	54.4	-13.4	64.0	55.2	-8.8
2031	71.3	62.5	-8.8	70.2	57.3	-12.9	73.2	57.2	-16.0	69.2	57.4	-11.8

Table 730 - Required and Achieved CAFE Levels (mpg) for Passenger Car Fleet for Alternative PC6LT8

Required and Achieved CAFE Levels (mpg) for Passenger Car Fleet for Alternative PC6LT8												
Model Year	BMW			Ford			GM			Honda		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	43.3	37.8	-5.5	43.4	45.5	2.1	45.1	41.9	-3.2	44.7	45.6	0.9
2023	44.0	42.2	-1.8	44.1	45.8	1.7	45.8	42.3	-3.5	45.4	52.2	6.8
2024	47.8	51.8	4.0	47.9	66.6	18.7	49.7	54.2	4.5	49.4	52.6	3.2
2025	52.0	54.7	2.7	52.1	69.2	17.1	54.1	57.7	3.6	53.7	56.7	3.0
2026	57.7	60.9	3.2	57.9	69.2	11.3	60.1	63.4	3.3	59.6	59.6	0.0
2027	61.4	63.0	1.6	61.6	76.8	15.2	63.9	63.0	-0.9	63.4	61.4	-2.0
2028	65.3	63.0	-2.3	65.5	73.2	7.7	68.0	61.6	-6.4	67.5	72.0	4.5
2029	69.5	62.4	-7.1	69.7	69.9	0.2	72.3	65.8	-6.5	71.8	78.4	6.6
2030	73.9	65.5	-8.4	74.1	67.0	-7.1	77.0	65.4	-11.6	76.4	79.4	3.0
2031	78.7	69.8	-8.9	78.8	66.4	-12.4	81.9	70.2	-11.7	81.2	81.2	0.0

Table 731 - Required and Achieved CAFE Levels (mpg) for Passenger Car Fleet for Alternative PC6LT8

Required and Achieved CAFE Levels (mpg) for Passenger Car Fleet for Alternative PC6LT8												
Model Year	Hyundai			KIA			JLR			Karma		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	44.2	45.3	1.1	44.7	47.0	2.3	43.2	30.6	-12.6	40.6	106.8	66.2
2023	44.9	48.8	3.9	45.4	49.7	4.3	43.8	68.6	24.8	41.1	106.8	65.7
2024	48.8	53.7	4.9	49.4	57.0	7.6	47.6	69.1	21.5	44.3	106.8	62.5
2025	53.1	54.6	1.5	53.6	59.4	5.8	51.8	69.2	17.4	48.1	106.8	58.7
2026	59.0	60.7	1.7	59.6	60.6	1.0	57.5	74.2	16.7	53.5	542.6	489.1
2027	62.8	66.8	4.0	63.4	60.4	-3.0	61.2	70.9	9.7	57.5	328.4	270.9
2028	66.8	65.6	-1.2	67.4	61.7	-5.7	65.1	66.2	1.1	61.2	207.1	145.9
2029	71.0	70.3	-0.7	71.8	66.9	-4.9	69.3	62.0	-7.3	65.1	151.2	86.1
2030	75.5	69.9	-5.6	76.3	75.3	-1.0	73.7	63.0	-10.7	69.3	119.0	49.7
2031	80.3	73.6	-6.7	81.2	83.0	1.8	78.4	64.9	-13.5	73.7	119.0	45.3

Table 732 - Required and Achieved CAFE Levels (mpg) for Passenger Car Fleet for Alternative PC6LT8

Required and Achieved CAFE Levels (mpg) for Passenger Car Fleet for Alternative PC6LT8												
Model Year	Lucid			Mazda			Mercedes-Benz			Mitsubishi		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	40.6	742.5	701.9	46.1	41.5	-4.6	41.8	35.5	-6.3	47.0	42.9	-4.1
2023	41.1	742.5	701.4	46.8	42.5	-4.3	42.4	45.3	2.9	47.7	43.3	-4.4
2024	44.3	742.5	698.2	50.9	55.6	4.7	46.1	47.9	1.8	51.9	61.2	9.3
2025	48.1	742.5	694.4	55.3	58.8	3.5	50.1	52.7	2.6	56.4	67.6	11.2
2026	53.5	742.5	689.0	61.5	61.5	0.0	55.6	71.3	15.7	62.7	67.7	5.0
2027	57.5	394.4	336.9	65.4	62.4	-3.0	59.2	71.8	12.6	66.7	65.3	-1.4
2028	61.2	248.6	187.4	69.6	63.3	-6.3	63.0	67.8	4.8	70.9	84.7	13.8
2029	65.1	181.5	116.4	74.0	79.3	5.3	67.0	65.8	-1.2	75.4	82.2	6.8
2030	69.3	142.9	73.6	78.7	79.7	1.0	71.3	64.0	-7.3	80.2	83.7	3.5
2031	73.7	142.9	69.2	83.8	82.7	-1.1	75.8	67.3	-8.5	85.4	86.5	1.1

Table 733 - Required and Achieved CAFE Levels (mpg) for Passenger Car Fleet for Alternative PC6LT8

Required and Achieved CAFE Levels (mpg) for Passenger Car Fleet for Alternative PC6LT8												
Model Year	Nissan			Stellantis			Subaru			Tesla		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	44.7	44.3	-0.4	41.8	29.2	-12.6	46.0	38.3	-7.7	41.1	698.9	657.8
2023	45.4	49.4	4.0	42.4	31.9	-10.5	46.7	52.1	5.4	41.7	698.9	657.2
2024	49.3	53.8	4.5	46.1	45.5	-0.6	50.7	52.2	1.5	45.3	698.9	653.6
2025	53.6	58.7	5.1	50.0	55.8	5.8	55.1	65.4	10.3	49.3	698.9	649.6
2026	59.6	64.9	5.3	55.6	57.7	2.1	61.3	68.1	6.8	54.8	698.9	644.1
2027	63.4	64.0	0.6	59.2	56.1	-3.1	65.2	69.1	3.9	58.3	381.4	323.1
2028	67.5	65.5	-2.0	63.0	55.5	-7.5	69.3	71.0	1.7	62.0	240.4	178.4
2029	71.7	64.5	-7.2	67.0	56.7	-10.3	73.8	77.5	3.7	66.0	175.6	109.6
2030	76.3	68.3	-8.0	71.2	56.1	-15.1	78.5	80.3	1.8	70.1	138.3	68.2
2031	81.2	74.6	-6.6	75.8	62.0	-13.8	83.5	83.5	0.0	74.7	138.3	63.6

Table 734 - Required and Achieved CAFE Levels (mpg) for Passenger Car Fleet for Alternative PC6LT8

Required and Achieved CAFE Levels (mpg) for Passenger Car Fleet for Alternative PC6LT8												
Model Year	Toyota			Volvo			VWA			Total		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	44.7	46.7	2.0	42.9	64.5	21.6	45.0	40.1	-4.9	44.1	47.1	3.0
2023	45.4	51.6	6.2	43.6	67.5	23.9	45.7	41.6	-4.1	44.8	51.6	6.8
2024	49.4	54.3	4.9	47.4	69.3	21.9	49.7	49.1	-0.6	48.7	58.4	9.7
2025	53.6	57.5	3.9	51.5	75.5	24.0	54.0	53.1	-0.9	52.9	62.7	9.8
2026	59.6	62.8	3.2	57.2	126.6	69.4	60.0	62.6	2.6	58.8	68.3	9.5
2027	63.4	63.2	-0.2	60.8	112.0	51.2	63.9	63.0	-0.9	62.5	69.0	6.5
2028	67.4	65.1	-2.3	64.8	98.6	33.8	67.9	71.9	4.0	66.5	70.8	4.3
2029	71.8	66.9	-4.9	68.8	88.0	19.2	72.2	69.3	-2.9	70.8	72.5	1.7
2030	76.3	74.5	-1.8	73.2	80.0	6.8	76.9	68.5	-8.4	75.3	74.3	-1.0
2031	81.2	79.9	-1.3	77.9	80.3	2.4	81.8	72.0	-9.8	80.1	78.6	-1.5

Table 735 - Required and Achieved CAFE Levels (mpg) for Light Truck Fleet for Alternative PC6LT8

Required and Achieved CAFE Levels (mpg) for Light Truck Fleet for Alternative PC6LT8												
Model Year	BMW			Ford			GM			Honda		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	32.5	32.7	0.2	30.3	29.6	-0.7	29.8	28.3	-1.5	34.0	35.0	1.0
2023	33.0	34.4	1.4	30.8	31.6	0.8	30.3	28.6	-1.7	34.5	38.0	3.5
2024	35.9	34.4	-1.5	33.2	35.5	2.3	32.5	34.0	1.5	37.5	38.1	0.6
2025	39.0	39.0	0.0	36.1	36.5	0.4	35.4	39.5	4.1	40.8	41.9	1.1
2026	43.4	45.1	1.7	40.1	39.7	-0.4	39.3	40.7	1.4	45.3	46.1	0.8
2027	47.1	43.5	-3.6	43.6	43.8	0.2	42.7	39.5	-3.2	49.3	47.8	-1.5
2028	51.2	43.8	-7.4	47.4	45.3	-2.1	46.4	39.3	-7.1	53.6	50.6	-3.0
2029	55.7	44.1	-11.6	51.5	47.2	-4.3	50.5	39.3	-11.2	58.2	52.6	-5.6
2030	60.5	45.2	-15.3	56.0	46.4	-9.6	54.9	39.1	-15.8	63.3	57.1	-6.2
2031	65.8	49.9	-15.9	60.9	46.0	-14.9	59.6	40.9	-18.7	68.8	58.6	-10.2

Table 736 - Required and Achieved CAFE Levels (mpg) for Light Truck Fleet for Alternative PC6LT8

Required and Achieved CAFE Levels (mpg) for Light Truck Fleet for Alternative PC6LT8												
Model Year	Hyundai			KIA			JLR			Karma		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	34.0	36.4	2.4	34.0	34.6	0.6	32.7	29.0	-3.7	0.0	0.0	0.0
2023	34.5	37.4	2.9	34.5	37.5	3.0	33.2	37.5	4.3	0.0	0.0	0.0
2024	37.5	38.3	0.8	37.5	38.8	1.3	36.0	41.4	5.4	0.0	0.0	0.0
2025	40.7	45.5	4.8	40.8	40.8	0.0	39.2	41.7	2.5	0.0	0.0	0.0
2026	45.3	46.1	0.8	45.3	45.3	0.0	43.5	45.5	2.0	0.0	0.0	0.0
2027	49.2	50.0	0.8	49.2	44.7	-4.5	47.3	44.6	-2.7	0.0	0.0	0.0
2028	53.5	51.0	-2.5	53.5	47.2	-6.3	51.4	43.6	-7.8	0.0	0.0	0.0
2029	58.1	53.1	-5.0	58.2	47.0	-11.2	55.9	42.6	-13.3	0.0	0.0	0.0
2030	63.2	55.3	-7.9	63.2	52.4	-10.8	60.7	43.5	-17.2	0.0	0.0	0.0
2031	68.7	57.0	-11.7	68.7	57.9	-10.8	66.0	47.1	-18.9	0.0	0.0	0.0

Table 737 - Required and Achieved CAFE Levels (mpg) for Light Truck Fleet for Alternative PC6LT8

Required and Achieved CAFE Levels (mpg) for Light Truck Fleet for Alternative PC6LT8												
Model Year	Lucid			Mazda			Mercedes-Benz			Mitsubishi		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	0.0	0.0	0.0	36.0	35.7	-0.3	32.9	30.4	-2.5	37.0	37.4	0.4
2023	0.0	0.0	0.0	36.6	48.0	11.4	33.4	35.2	1.8	37.6	37.7	0.1
2024	0.0	0.0	0.0	39.8	48.6	8.8	36.3	35.3	-1.0	40.8	39.0	-1.8
2025	0.0	0.0	0.0	43.2	49.2	6.0	39.5	35.6	-3.9	44.4	57.3	12.9
2026	0.0	0.0	0.0	48.0	51.9	3.9	43.9	39.1	-4.8	49.3	57.3	8.0
2027	0.0	0.0	0.0	52.2	55.9	3.7	47.7	40.8	-6.9	53.6	56.4	2.8
2028	0.0	0.0	0.0	56.7	56.4	-0.3	51.8	44.5	-7.3	58.3	73.1	14.8
2029	0.0	0.0	0.0	61.7	67.9	6.2	56.3	44.3	-12.0	63.3	71.2	7.9
2030	0.0	0.0	0.0	67.0	70.5	3.5	61.2	46.9	-14.3	68.8	73.0	4.2
2031	0.0	0.0	0.0	72.9	72.0	-0.9	66.6	48.4	-18.2	74.8	75.9	1.1

Table 738 - Required and Achieved CAFE Levels (mpg) for Light Truck Fleet for Alternative PC6LT8

Required and Achieved CAFE Levels (mpg) for Light Truck Fleet for Alternative PC6LT8												
Model Year	Nissan			Stellantis			Subaru			Tesla		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	32.9	32.6	-0.3	30.7	28.9	-1.8	36.5	39.1	2.6	33.4	700.3	666.9
2023	33.4	35.6	2.2	31.2	30.7	-0.5	37.0	42.4	5.4	33.9	936.4	902.5
2024	36.3	36.8	0.5	33.8	33.7	-0.1	40.2	45.4	5.2	36.9	1046.7	1009.8
2025	39.5	39.5	0.0	36.8	40.3	3.5	43.7	46.9	3.2	40.1	1186.5	1146.4
2026	43.9	42.2	-1.7	40.9	40.9	0.0	48.6	49.5	0.9	44.5	1186.5	1142.0
2027	47.7	41.8	-5.9	44.4	42.8	-1.6	52.8	51.3	-1.5	48.4	365.7	317.3
2028	51.8	47.8	-4.0	48.3	42.4	-5.9	57.4	56.5	-0.9	52.6	230.5	177.9
2029	56.4	48.7	-7.7	52.5	44.5	-8.0	62.4	64.3	1.9	57.1	168.3	111.2
2030	61.3	55.4	-5.9	57.1	44.5	-12.6	67.8	72.0	4.2	62.1	132.5	70.4
2031	66.6	55.9	-10.7	62.0	45.2	-16.8	73.8	74.0	0.2	67.5	132.5	65.0

Table 739 - Required and Achieved CAFE Levels (mpg) for Light Truck Fleet for Alternative PC6LT8

Required and Achieved CAFE Levels (mpg) for Light Truck Fleet for Alternative PC6LT8												
Model Year	Toyota			Volvo			VWA			Total		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	33.0	35.0	2.0	33.4	38.0	4.6	34.0	33.9	-0.1	32.1	32.1	0.0
2023	33.5	36.0	2.5	33.9	41.4	7.5	34.5	36.6	2.1	32.6	34.0	1.4
2024	36.3	40.8	4.5	36.8	41.7	4.9	37.5	43.7	6.2	35.2	37.5	2.3
2025	39.4	42.4	3.0	40.0	47.6	7.6	40.8	46.0	5.2	38.3	41.1	2.8
2026	43.8	46.8	3.0	44.5	49.6	5.1	45.3	46.9	1.6	42.6	43.7	1.1
2027	47.6	45.4	-2.2	48.4	48.4	0.0	49.3	45.7	-3.6	46.3	44.6	-1.7
2028	51.7	47.6	-4.1	52.6	47.4	-5.2	53.6	45.4	-8.2	50.3	45.9	-4.4
2029	56.2	49.4	-6.8	57.1	47.0	-10.1	58.2	45.0	-13.2	54.7	47.4	-7.3
2030	61.1	51.0	-10.1	62.1	51.7	-10.4	63.3	48.4	-14.9	59.4	48.7	-10.7
2031	66.4	55.2	-11.2	67.5	51.3	-16.2	68.8	50.8	-18.0	64.6	50.3	-14.3

Table 740 - Required and Achieved CAFE Levels (mpg) for Domestic Car Fleet for Alternative PC6LT8

Required and Achieved CAFE Levels (mpg) for Domestic Car Fleet for Alternative PC6LT8												
Model Year	BMW			Ford			GM			Honda		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	0.0	0.0	0.0	43.4	45.5	2.1	44.3	41.2	-3.1	44.7	45.6	0.9
2023	0.0	0.0	0.0	44.1	45.8	1.7	45.0	41.7	-3.3	45.4	52.2	6.8
2024	0.0	0.0	0.0	47.9	66.6	18.7	48.9	54.7	5.8	49.4	52.6	3.2
2025	0.0	0.0	0.0	52.1	69.2	17.1	53.2	58.2	5.0	53.7	56.7	3.0
2026	0.0	0.0	0.0	57.9	69.2	11.3	59.1	62.7	3.6	59.6	59.6	0.0
2027	0.0	0.0	0.0	61.6	76.8	15.2	62.8	62.6	-0.2	63.4	61.4	-2.0
2028	0.0	0.0	0.0	65.5	73.2	7.7	66.9	61.1	-5.8	67.5	72.0	4.5
2029	0.0	0.0	0.0	69.7	69.9	0.2	71.1	65.8	-5.3	71.8	78.4	6.6
2030	0.0	0.0	0.0	74.1	67.0	-7.1	75.7	64.2	-11.5	76.4	79.4	3.0
2031	0.0	0.0	0.0	78.8	66.4	-12.4	80.5	67.0	-13.5	81.2	81.2	0.0

Table 741 - Required and Achieved CAFE Levels (mpg) for Domestic Car Fleet for Alternative PC6LT8

Required and Achieved CAFE Levels (mpg) for Domestic Car Fleet for Alternative PC6LT8												
Model Year	Hyundai			KIA			JLR			Karma		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	48.7	53.4	4.7	45.8	47.1	1.3	0.0	0.0	0.0	40.6	106.8	66.2
2023	49.5	2658.3	2608.8	46.5	47.2	0.7	0.0	0.0	0.0	41.1	106.8	65.7
2024	53.8	3125.8	3072.0	50.6	62.1	11.5	0.0	0.0	0.0	44.3	106.8	62.5
2025	58.4	3792.9	3734.5	55.0	61.9	6.9	0.0	0.0	0.0	48.1	106.8	58.7
2026	64.9	4821.9	4757.0	61.1	62.1	1.0	0.0	0.0	0.0	53.5	542.6	489.1
2027	69.1	674.6	605.5	65.0	61.9	-3.1	0.0	0.0	0.0	57.5	328.4	270.9
2028	73.5	425.3	351.8	69.1	61.2	-7.9	0.0	0.0	0.0	61.2	207.1	145.9
2029	78.2	310.5	232.3	73.6	88.8	15.2	0.0	0.0	0.0	65.1	151.2	86.1
2030	83.2	242.7	159.5	78.3	88.6	10.3	0.0	0.0	0.0	69.3	119.0	49.7
2031	88.5	239.8	151.3	83.2	90.2	7.0	0.0	0.0	0.0	73.7	119.0	45.3

Table 742 - Required and Achieved CAFE Levels (mpg) for Domestic Car Fleet for Alternative PC6LT8

Required and Achieved CAFE Levels (mpg) for Domestic Car Fleet for Alternative PC6LT8												
Model Year	Lucid			Mazda			Mercedes-Benz			Mitsubishi		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	40.6	742.5	701.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2023	41.1	742.5	701.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2024	44.3	742.5	698.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2025	48.1	742.5	694.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2026	53.5	742.5	689.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2027	57.5	394.4	336.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2028	61.2	248.6	187.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2029	65.1	181.5	116.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2030	69.3	142.9	73.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2031	73.7	142.9	69.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table 743 - Required and Achieved CAFE Levels (mpg) for Domestic Car Fleet for Alternative PC6LT8

Required and Achieved CAFE Levels (mpg) for Domestic Car Fleet for Alternative PC6LT8												
Model Year	Nissan			Stellantis			Subaru			Tesla		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	44.5	43.4	-1.1	41.4	28.7	-12.7	0.0	0.0	0.0	40.8	671.8	631.0
2023	45.2	44.6	-0.6	42.0	31.5	-10.5	0.0	0.0	0.0	41.4	671.8	630.4
2024	49.1	49.1	0.0	45.7	45.6	-0.1	0.0	0.0	0.0	45.0	671.8	626.8
2025	53.4	54.7	1.3	49.6	55.9	6.3	0.0	0.0	0.0	48.9	671.8	622.9
2026	59.3	62.2	2.9	55.1	57.1	2.0	0.0	0.0	0.0	54.4	671.8	617.4
2027	63.1	61.8	-1.3	58.7	55.5	-3.2	0.0	0.0	0.0	57.8	373.0	315.2
2028	67.2	61.1	-6.1	62.4	55.1	-7.3	0.0	0.0	0.0	61.5	235.1	173.6
2029	71.4	60.5	-10.9	66.4	56.7	-9.7	0.0	0.0	0.0	65.5	171.7	106.2
2030	76.0	65.6	-10.4	70.6	56.1	-14.5	0.0	0.0	0.0	69.6	135.2	65.6
2031	80.9	73.4	-7.5	75.1	62.6	-12.5	0.0	0.0	0.0	74.1	135.2	61.1

Table 744 - Required and Achieved CAFE Levels (mpg) for Domestic Car Fleet for Alternative PC6LT8

Required and Achieved CAFE Levels (mpg) for Domestic Car Fleet for Alternative PC6LT8												
Model Year	Toyota			Volvo			VWA			Total		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	43.1	43.2	0.1	42.3	45.3	3.0	41.4	34.1	-7.3	43.5	48.9	5.4
2023	43.7	43.9	0.2	42.9	49.2	6.3	42.0	34.2	-7.8	44.2	52.4	8.2
2024	47.5	49.4	1.9	46.7	49.7	3.0	45.7	40.2	-5.5	48.1	60.9	12.8
2025	51.7	55.5	3.8	50.7	55.0	4.3	49.6	40.3	-9.3	52.3	66.6	14.3
2026	57.4	57.3	-0.1	56.4	1119.7	1063.3	55.2	117.7	62.5	58.0	71.4	13.4
2027	61.1	58.4	-2.7	59.9	434.6	374.7	58.7	104.1	45.4	61.7	71.5	9.8
2028	65.0	59.4	-5.6	63.8	274.0	210.2	62.4	94.1	31.7	65.7	73.2	7.5
2029	69.1	60.8	-8.3	67.8	200.1	132.3	66.4	88.5	22.1	69.9	75.4	5.5
2030	73.5	76.3	2.8	72.2	157.5	85.3	70.7	82.2	11.5	74.3	76.5	2.2
2031	78.2	80.7	2.5	76.8	157.5	80.7	75.2	83.3	8.1	79.1	80.3	1.2

Table 745 - Required and Achieved CAFE Levels (mpg) for Imported Car Fleet for Alternative PC6LT8

Required and Achieved CAFE Levels (mpg) for Imported Car Fleet for Alternative PC6LT8												
Model Year	BMW			Ford			GM			Honda		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	43.3	37.8	-5.5	0.0	0.0	0.0	47.1	43.8	-3.3	44.9	30.4	-14.5
2023	44.0	42.2	-1.8	0.0	0.0	0.0	47.9	44.0	-3.9	45.6	31.2	-14.4
2024	47.8	51.8	4.0	0.0	0.0	0.0	52.0	52.9	0.9	49.6	31.3	-18.3
2025	52.0	54.7	2.7	0.0	0.0	0.0	56.5	56.6	0.1	53.8	31.7	-22.1
2026	57.7	60.9	3.2	0.0	0.0	0.0	62.8	65.1	2.3	59.8	427.4	367.6
2027	61.4	63.0	1.6	0.0	0.0	0.0	66.8	63.9	-2.9	63.7	242.0	178.3
2028	65.3	63.0	-2.3	0.0	0.0	0.0	71.1	62.9	-8.2	67.7	152.6	84.9
2029	69.5	62.4	-7.1	0.0	0.0	0.0	75.6	65.9	-9.7	72.0	111.4	39.4
2030	73.9	65.5	-8.4	0.0	0.0	0.0	80.5	68.7	-11.8	76.6	87.7	11.1
2031	78.7	69.8	-8.9	0.0	0.0	0.0	85.6	79.9	-5.7	81.5	87.7	6.2

Table 746 - Required and Achieved CAFE Levels (mpg) for Imported Car Fleet for Alternative PC6LT8

Required and Achieved CAFE Levels (mpg) for Imported Car Fleet for Alternative PC6LT8												
Model Year	Hyundai			KIA			JLR			Karma		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	44.1	45.1	1.0	44.4	47.0	2.6	43.2	30.6	-12.6	0.0	0.0	0.0
2023	44.8	47.3	2.5	45.0	50.6	5.6	43.8	68.6	24.8	0.0	0.0	0.0
2024	48.7	52.0	3.3	49.0	55.5	6.5	47.6	69.1	21.5	0.0	0.0	0.0
2025	52.9	52.9	0.0	53.2	58.7	5.5	51.8	69.2	17.4	0.0	0.0	0.0
2026	58.8	58.8	0.0	59.1	60.1	1.0	57.5	74.2	16.7	0.0	0.0	0.0
2027	62.6	64.9	2.3	62.9	59.9	-3.0	61.2	70.9	9.7	0.0	0.0	0.0
2028	66.6	63.8	-2.8	66.9	61.8	-5.1	65.1	66.2	1.1	0.0	0.0	0.0
2029	70.8	68.5	-2.3	71.2	62.0	-9.2	69.3	62.0	-7.3	0.0	0.0	0.0
2030	75.3	68.3	-7.0	75.7	71.9	-3.8	73.7	63.0	-10.7	0.0	0.0	0.0
2031	80.1	71.9	-8.2	80.6	81.0	0.4	78.4	64.9	-13.5	0.0	0.0	0.0

Table 747 - Required and Achieved CAFE Levels (mpg) for Imported Car Fleet for Alternative PC6LT8

Required and Achieved CAFE Levels (mpg) for Imported Car Fleet for Alternative PC6LT8												
Model Year	Lucid			Mazda			Mercedes-Benz			Mitsubishi		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	0.0	0.0	0.0	46.1	41.5	-4.6	41.8	35.5	-6.3	47.0	42.9	-4.1
2023	0.0	0.0	0.0	46.8	42.5	-4.3	42.4	45.3	2.9	47.7	43.3	-4.4
2024	0.0	0.0	0.0	50.9	55.6	4.7	46.1	47.9	1.8	51.9	61.2	9.3
2025	0.0	0.0	0.0	55.3	58.8	3.5	50.1	52.7	2.6	56.4	67.6	11.2
2026	0.0	0.0	0.0	61.5	61.5	0.0	55.6	71.3	15.7	62.7	67.7	5.0
2027	0.0	0.0	0.0	65.4	62.4	-3.0	59.2	71.8	12.6	66.7	65.3	-1.4
2028	0.0	0.0	0.0	69.6	63.3	-6.3	63.0	67.8	4.8	70.9	84.7	13.8
2029	0.0	0.0	0.0	74.0	79.3	5.3	67.0	65.8	-1.2	75.4	82.2	6.8
2030	0.0	0.0	0.0	78.7	79.7	1.0	71.3	64.0	-7.3	80.2	83.7	3.5
2031	0.0	0.0	0.0	83.8	82.7	-1.1	75.8	67.3	-8.5	85.4	86.5	1.1

Table 748 - Required and Achieved CAFE Levels (mpg) for Imported Car Fleet for Alternative PC6LT8

Required and Achieved CAFE Levels (mpg) for Imported Car Fleet for Alternative PC6LT8												
Model Year	Nissan			Stellantis			Subaru			Tesla		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	45.2	46.9	1.7	44.9	33.5	-11.4	46.0	38.3	-7.7	42.4	839.5	797.1
2023	45.9	68.7	22.8	45.5	35.8	-9.7	46.7	52.1	5.4	43.1	839.5	796.4
2024	49.9	72.0	22.1	49.5	45.1	-4.4	50.7	52.2	1.5	46.8	839.5	792.7
2025	54.3	72.7	18.4	53.8	55.1	1.3	55.1	65.4	10.3	50.9	839.5	788.6
2026	60.3	73.1	12.8	59.8	62.6	2.8	61.3	68.1	6.8	56.6	839.5	782.9
2027	64.1	70.8	6.7	63.6	60.9	-2.7	65.2	69.1	3.9	60.2	420.9	360.7
2028	68.2	81.0	12.8	67.7	59.0	-8.7	69.3	71.0	1.7	64.0	265.4	201.4
2029	72.6	78.1	5.5	72.0	57.1	-14.9	73.8	77.5	3.7	68.1	193.7	125.6
2030	77.2	76.5	-0.7	76.6	56.2	-20.4	78.5	80.3	1.8	72.4	152.6	80.2
2031	82.1	78.0	-4.1	81.5	57.5	-24.0	83.5	83.5	0.0	77.1	152.6	75.5

Table 749 - Required and Achieved CAFE Levels (mpg) for Imported Car Fleet for Alternative PC6LT8

Required and Achieved CAFE Levels (mpg) for Imported Car Fleet for Alternative PC6LT8												
Model Year	Toyota			Volvo			VWA			Total		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	45.3	48.0	2.7	43.2	78.9	35.7	45.3	40.7	-4.6	44.7	45.5	0.8
2023	46.0	54.8	8.8	43.9	80.4	36.5	46.0	42.3	-3.7	45.4	51.0	5.6
2024	50.0	56.1	6.1	47.7	83.6	35.9	50.0	49.9	-0.1	49.3	56.2	6.9
2025	54.3	58.2	3.9	51.8	90.0	38.2	54.4	54.4	0.0	53.6	59.4	5.8
2026	60.4	64.9	4.5	57.6	91.5	33.9	60.4	60.4	0.0	59.5	65.5	6.0
2027	64.2	65.0	0.8	61.2	84.8	23.6	64.3	61.2	-3.1	63.3	66.7	3.4
2028	68.3	67.3	-1.0	65.2	77.2	12.0	68.4	70.6	2.2	67.4	68.6	1.2
2029	72.7	69.2	-3.5	69.3	70.8	1.5	72.7	68.2	-4.5	71.7	69.9	-1.8
2030	77.3	73.9	-3.4	73.7	66.0	-7.7	77.4	67.6	-9.8	76.2	72.2	-4.0
2031	82.3	79.6	-2.7	78.4	66.2	-12.2	82.3	71.3	-11.0	81.1	77.0	-4.1

Table 750 - Required and Achieved CAFE Levels (mpg) for Imported Car Fleet for Alternative PC6LT8

Required and Achieved CAFE Levels (mpg) for Imported Car Fleet for Alternative PC6LT8												
Model Year	BMW			Ford			GM			Honda		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	43.3	37.8	-5.5	0.0	0.0	0.0	47.1	43.8	-3.3	44.9	30.4	-14.5
2023	44.0	42.2	-1.8	0.0	0.0	0.0	47.9	44.0	-3.9	45.6	31.2	-14.4
2024	47.8	51.8	4.0	0.0	0.0	0.0	52.0	52.9	0.9	49.6	31.3	-18.3
2025	52.0	54.7	2.7	0.0	0.0	0.0	56.5	56.6	0.1	53.8	31.7	-22.1
2026	57.7	60.9	3.2	0.0	0.0	0.0	62.8	65.1	2.3	59.8	427.4	367.6
2027	61.4	63.0	1.6	0.0	0.0	0.0	66.8	63.9	-2.9	63.7	242.0	178.3
2028	65.3	63.0	-2.3	0.0	0.0	0.0	71.1	62.9	-8.2	67.7	152.6	84.9
2029	69.5	62.4	-7.1	0.0	0.0	0.0	75.6	65.9	-9.7	72.0	111.4	39.4
2030	73.9	65.5	-8.4	0.0	0.0	0.0	80.5	68.7	-11.8	76.6	87.7	11.1
2031	78.7	69.8	-8.9	0.0	0.0	0.0	85.6	79.9	-5.7	81.5	87.7	6.2

Table 751 - Required and Achieved CAFE Levels (mpg) for Imported Car Fleet for Alternative PC6LT8

Required and Achieved CAFE Levels (mpg) for Imported Car Fleet for Alternative PC6LT8												
Model Year	Hyundai			KIA			JLR			Karma		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	44.1	45.1	1.0	44.4	47.0	2.6	43.2	30.6	-12.6	0.0	0.0	0.0
2023	44.8	47.3	2.5	45.0	50.6	5.6	43.8	68.6	24.8	0.0	0.0	0.0
2024	48.7	52.0	3.3	49.0	55.5	6.5	47.6	69.1	21.5	0.0	0.0	0.0
2025	52.9	52.9	0.0	53.2	58.7	5.5	51.8	69.2	17.4	0.0	0.0	0.0
2026	58.8	58.8	0.0	59.1	60.1	1.0	57.5	74.2	16.7	0.0	0.0	0.0
2027	62.6	64.9	2.3	62.9	59.9	-3.0	61.2	70.9	9.7	0.0	0.0	0.0
2028	66.6	63.8	-2.8	66.9	61.8	-5.1	65.1	66.2	1.1	0.0	0.0	0.0
2029	70.8	68.5	-2.3	71.2	62.0	-9.2	69.3	62.0	-7.3	0.0	0.0	0.0
2030	75.3	68.3	-7.0	75.7	71.9	-3.8	73.7	63.0	-10.7	0.0	0.0	0.0
2031	80.1	71.9	-8.2	80.6	81.0	0.4	78.4	64.9	-13.5	0.0	0.0	0.0

Table 752 - Required and Achieved CAFE Levels (mpg) for Imported Car Fleet for Alternative PC6LT8

Required and Achieved CAFE Levels (mpg) for Imported Car Fleet for Alternative PC6LT8												
Model Year	Lucid			Mazda			Mercedes-Benz			Mitsubishi		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	0.0	0.0	0.0	46.1	41.5	-4.6	41.8	35.5	-6.3	47.0	42.9	-4.1
2023	0.0	0.0	0.0	46.8	42.5	-4.3	42.4	45.3	2.9	47.7	43.3	-4.4
2024	0.0	0.0	0.0	50.9	55.6	4.7	46.1	47.9	1.8	51.9	61.2	9.3
2025	0.0	0.0	0.0	55.3	58.8	3.5	50.1	52.7	2.6	56.4	67.6	11.2
2026	0.0	0.0	0.0	61.5	61.5	0.0	55.6	71.3	15.7	62.7	67.7	5.0
2027	0.0	0.0	0.0	65.4	62.4	-3.0	59.2	71.8	12.6	66.7	65.3	-1.4
2028	0.0	0.0	0.0	69.6	63.3	-6.3	63.0	67.8	4.8	70.9	84.7	13.8
2029	0.0	0.0	0.0	74.0	79.3	5.3	67.0	65.8	-1.2	75.4	82.2	6.8
2030	0.0	0.0	0.0	78.7	79.7	1.0	71.3	64.0	-7.3	80.2	83.7	3.5
2031	0.0	0.0	0.0	83.8	82.7	-1.1	75.8	67.3	-8.5	85.4	86.5	1.1

Table 753 - Required and Achieved CAFE Levels (mpg) for Imported Car Fleet for Alternative PC6LT8

Required and Achieved CAFE Levels (mpg) for Imported Car Fleet for Alternative PC6LT8												
Model Year	Nissan			Stellantis			Subaru			Tesla		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	45.2	46.9	1.7	44.9	33.5	-11.4	46.0	38.3	-7.7	42.4	839.5	797.1
2023	45.9	68.7	22.8	45.5	35.8	-9.7	46.7	52.1	5.4	43.1	839.5	796.4
2024	49.9	72.0	22.1	49.5	45.1	-4.4	50.7	52.2	1.5	46.8	839.5	792.7
2025	54.3	72.7	18.4	53.8	55.1	1.3	55.1	65.4	10.3	50.9	839.5	788.6
2026	60.3	73.1	12.8	59.8	62.6	2.8	61.3	68.1	6.8	56.6	839.5	782.9
2027	64.1	70.8	6.7	63.6	60.9	-2.7	65.2	69.1	3.9	60.2	420.9	360.7
2028	68.2	81.0	12.8	67.7	59.0	-8.7	69.3	71.0	1.7	64.0	265.4	201.4
2029	72.6	78.1	5.5	72.0	57.1	-14.9	73.8	77.5	3.7	68.1	193.7	125.6
2030	77.2	76.5	-0.7	76.6	56.2	-20.4	78.5	80.3	1.8	72.4	152.6	80.2
2031	82.1	78.0	-4.1	81.5	57.5	-24.0	83.5	83.5	0.0	77.1	152.6	75.5

Table 754 - Required and Achieved CAFE Levels (mpg) for Imported Car Fleet for Alternative PC6LT8

Required and Achieved CAFE Levels (mpg) for Imported Car Fleet for Alternative PC6LT8												
Model Year	Toyota			Volvo			VWA			Total		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	45.3	48.0	2.7	43.2	78.9	35.7	45.3	40.7	-4.6	44.7	45.5	0.8
2023	46.0	54.8	8.8	43.9	80.4	36.5	46.0	42.3	-3.7	45.4	51.0	5.6
2024	50.0	56.1	6.1	47.7	83.6	35.9	50.0	49.9	-0.1	49.3	56.2	6.9
2025	54.3	58.2	3.9	51.8	90.0	38.2	54.4	54.4	0.0	53.6	59.4	5.8
2026	60.4	64.9	4.5	57.6	91.5	33.9	60.4	60.4	0.0	59.5	65.5	6.0
2027	64.2	65.0	0.8	61.2	84.8	23.6	64.3	61.2	-3.1	63.3	66.7	3.4
2028	68.3	67.3	-1.0	65.2	77.2	12.0	68.4	70.6	2.2	67.4	68.6	1.2
2029	72.7	69.2	-3.5	69.3	70.8	1.5	72.7	68.2	-4.5	71.7	69.9	-1.8
2030	77.3	73.9	-3.4	73.7	66.0	-7.7	77.4	67.6	-9.8	76.2	72.2	-4.0
2031	82.3	79.6	-2.7	78.4	66.2	-12.2	82.3	71.3	-11.0	81.1	77.0	-4.1

Table 755 - Required and Achieved CAFE Levels (mpg) for Imported Car Fleet for Alternative PC6LT8

Required and Achieved CAFE Levels (mpg) for Imported Car Fleet for Alternative PC6LT8												
Model Year	BMW			Ford			GM			Honda		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	43.3	37.8	-5.5	0.0	0.0	0.0	47.1	43.8	-3.3	44.9	30.4	-14.5
2023	44.0	42.2	-1.8	0.0	0.0	0.0	47.9	44.0	-3.9	45.6	31.2	-14.4
2024	47.8	51.8	4.0	0.0	0.0	0.0	52.0	52.9	0.9	49.6	31.3	-18.3
2025	52.0	54.7	2.7	0.0	0.0	0.0	56.5	56.6	0.1	53.8	31.7	-22.1
2026	57.7	60.9	3.2	0.0	0.0	0.0	62.8	65.1	2.3	59.8	427.4	367.6
2027	61.4	63.0	1.6	0.0	0.0	0.0	66.8	63.9	-2.9	63.7	242.0	178.3
2028	65.3	63.0	-2.3	0.0	0.0	0.0	71.1	62.9	-8.2	67.7	152.6	84.9
2029	69.5	62.4	-7.1	0.0	0.0	0.0	75.6	65.9	-9.7	72.0	111.4	39.4
2030	73.9	65.5	-8.4	0.0	0.0	0.0	80.5	68.7	-11.8	76.6	87.7	11.1
2031	78.7	69.8	-8.9	0.0	0.0	0.0	85.6	79.9	-5.7	81.5	87.7	6.2

Table 756 - Required and Achieved CAFE Levels (mpg) for Imported Car Fleet for Alternative PC6LT8

Required and Achieved CAFE Levels (mpg) for Imported Car Fleet for Alternative PC6LT8												
Model Year	Hyundai			KIA			JLR			Karma		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	44.1	45.1	1.0	44.4	47.0	2.6	43.2	30.6	-12.6	0.0	0.0	0.0
2023	44.8	47.3	2.5	45.0	50.6	5.6	43.8	68.6	24.8	0.0	0.0	0.0
2024	48.7	52.0	3.3	49.0	55.5	6.5	47.6	69.1	21.5	0.0	0.0	0.0
2025	52.9	52.9	0.0	53.2	58.7	5.5	51.8	69.2	17.4	0.0	0.0	0.0
2026	58.8	58.8	0.0	59.1	60.1	1.0	57.5	74.2	16.7	0.0	0.0	0.0
2027	62.6	64.9	2.3	62.9	59.9	-3.0	61.2	70.9	9.7	0.0	0.0	0.0
2028	66.6	63.8	-2.8	66.9	61.8	-5.1	65.1	66.2	1.1	0.0	0.0	0.0
2029	70.8	68.5	-2.3	71.2	62.0	-9.2	69.3	62.0	-7.3	0.0	0.0	0.0
2030	75.3	68.3	-7.0	75.7	71.9	-3.8	73.7	63.0	-10.7	0.0	0.0	0.0
2031	80.1	71.9	-8.2	80.6	81.0	0.4	78.4	64.9	-13.5	0.0	0.0	0.0

Table 757 - Required and Achieved CAFE Levels (mpg) for Imported Car Fleet for Alternative PC6LT8

Required and Achieved CAFE Levels (mpg) for Imported Car Fleet for Alternative PC6LT8												
Model Year	Lucid			Mazda			Mercedes-Benz			Mitsubishi		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	0.0	0.0	0.0	46.1	41.5	-4.6	41.8	35.5	-6.3	47.0	42.9	-4.1
2023	0.0	0.0	0.0	46.8	42.5	-4.3	42.4	45.3	2.9	47.7	43.3	-4.4
2024	0.0	0.0	0.0	50.9	55.6	4.7	46.1	47.9	1.8	51.9	61.2	9.3
2025	0.0	0.0	0.0	55.3	58.8	3.5	50.1	52.7	2.6	56.4	67.6	11.2
2026	0.0	0.0	0.0	61.5	61.5	0.0	55.6	71.3	15.7	62.7	67.7	5.0
2027	0.0	0.0	0.0	65.4	62.4	-3.0	59.2	71.8	12.6	66.7	65.3	-1.4
2028	0.0	0.0	0.0	69.6	63.3	-6.3	63.0	67.8	4.8	70.9	84.7	13.8
2029	0.0	0.0	0.0	74.0	79.3	5.3	67.0	65.8	-1.2	75.4	82.2	6.8
2030	0.0	0.0	0.0	78.7	79.7	1.0	71.3	64.0	-7.3	80.2	83.7	3.5
2031	0.0	0.0	0.0	83.8	82.7	-1.1	75.8	67.3	-8.5	85.4	86.5	1.1

Table 758 - Required and Achieved CAFE Levels (mpg) for Imported Car Fleet for Alternative PC6LT8

Required and Achieved CAFE Levels (mpg) for Imported Car Fleet for Alternative PC6LT8												
Model Year	Nissan			Stellantis			Subaru			Tesla		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	45.2	46.9	1.7	44.9	33.5	-11.4	46.0	38.3	-7.7	42.4	839.5	797.1
2023	45.9	68.7	22.8	45.5	35.8	-9.7	46.7	52.1	5.4	43.1	839.5	796.4
2024	49.9	72.0	22.1	49.5	45.1	-4.4	50.7	52.2	1.5	46.8	839.5	792.7
2025	54.3	72.7	18.4	53.8	55.1	1.3	55.1	65.4	10.3	50.9	839.5	788.6
2026	60.3	73.1	12.8	59.8	62.6	2.8	61.3	68.1	6.8	56.6	839.5	782.9
2027	64.1	70.8	6.7	63.6	60.9	-2.7	65.2	69.1	3.9	60.2	420.9	360.7
2028	68.2	81.0	12.8	67.7	59.0	-8.7	69.3	71.0	1.7	64.0	265.4	201.4
2029	72.6	78.1	5.5	72.0	57.1	-14.9	73.8	77.5	3.7	68.1	193.7	125.6
2030	77.2	76.5	-0.7	76.6	56.2	-20.4	78.5	80.3	1.8	72.4	152.6	80.2
2031	82.1	78.0	-4.1	81.5	57.5	-24.0	83.5	83.5	0.0	77.1	152.6	75.5

Table 759 - Required and Achieved CAFE Levels (mpg) for Imported Car Fleet for Alternative PC6LT8

Required and Achieved CAFE Levels (mpg) for Imported Car Fleet for Alternative PC6LT8												
Model Year	Toyota			Volvo			VWA			Total		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	45.3	48.0	2.7	43.2	78.9	35.7	45.3	40.7	-4.6	44.7	45.5	0.8
2023	46.0	54.8	8.8	43.9	80.4	36.5	46.0	42.3	-3.7	45.4	51.0	5.6
2024	50.0	56.1	6.1	47.7	83.6	35.9	50.0	49.9	-0.1	49.3	56.2	6.9
2025	54.3	58.2	3.9	51.8	90.0	38.2	54.4	54.4	0.0	53.6	59.4	5.8
2026	60.4	64.9	4.5	57.6	91.5	33.9	60.4	60.4	0.0	59.5	65.5	6.0
2027	64.2	65.0	0.8	61.2	84.8	23.6	64.3	61.2	-3.1	63.3	66.7	3.4
2028	68.3	67.3	-1.0	65.2	77.2	12.0	68.4	70.6	2.2	67.4	68.6	1.2
2029	72.7	69.2	-3.5	69.3	70.8	1.5	72.7	68.2	-4.5	71.7	69.9	-1.8
2030	77.3	73.9	-3.4	73.7	66.0	-7.7	77.4	67.6	-9.8	76.2	72.2	-4.0
2031	82.3	79.6	-2.7	78.4	66.2	-12.2	82.3	71.3	-11.0	81.1	77.0	-4.1

Regulatory Cost, Comparison

Table 760 - Regulatory Costs ($b) for Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC2LT002

Regulatory Costs ($b) for Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC2LT002			
Model Year	Total		
	No Action Alternative (Reference Baseline)	Alternative PC2LT002	Difference
2022	1.9	1.9	0.0
2023	7.6	7.6	0.0
2024	15.1	15.1	0.0
2025	19.8	19.8	0.0
2026	20.1	20.1	0.0
2027	17.8	19.8	1.9
2028	17.6	20.5	3.0
2029	17.2	21.5	4.3
2030	16.9	21.7	4.8
2031	17.2	23.0	5.8

Table 761 - Regulatory Costs ($b) for Passenger Car Fleet Between No Action Alternative (Reference Baseline) and Alternative PC2LT002

Regulatory Costs ($b) for Passenger Car Fleet Between No Action Alternative (Reference Baseline) and Alternative PC2LT002			
Model Year	Total		
	No Action Alternative (Reference Baseline)	Alternative PC2LT002	Difference
2022	0.8	0.8	0.0
2023	2.4	2.4	0.0
2024	4.7	4.7	0.0
2025	5.5	5.5	0.0
2026	5.3	5.3	0.0
2027	5.2	5.9	0.7
2028	4.8	6.0	1.2
2029	4.5	6.5	2.0
2030	4.3	6.3	2.1
2031	4.2	6.0	1.8

Table 762 - Regulatory Costs ($b) for Light Truck Fleet Between No Action Alternative (Reference Baseline) and Alternative PC2LT002

Regulatory Costs ($b) for Light Truck Fleet Between No Action Alternative (Reference Baseline) and Alternative PC2LT002			
Model Year	Total		
	No Action Alternative (Reference Baseline)	Alternative PC2LT002	Difference
2022	1.1	1.1	0.0
2023	5.2	5.2	0.0
2024	10.4	10.4	0.0
2025	14.3	14.3	0.0
2026	14.8	14.8	0.0
2027	12.7	13.9	1.2
2028	12.8	14.6	1.8
2029	12.7	15.0	2.3
2030	12.7	15.4	2.7
2031	13.0	17.0	4.1

Table 763 - Regulatory Costs ($b) for Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC2LT002

Regulatory Costs ($b) for Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC2LT002												
Model Year	BMW			Ford			GM			Honda		
	No Action Alternative (Reference Baseline)	Alternative PC2LT002	Difference	No Action Alternative (Reference Baseline)	Alternative PC2LT002	Difference	No Action Alternative (Reference Baseline)	Alternative PC2LT002	Difference	No Action Alternative (Reference Baseline)	Alternative PC2LT002	Difference
2022	0.2	0.2	0.0	0.1	0.1	0.0	0.5	0.5	0.0	0.0	0.0	0.0
2023	0.2	0.2	0.0	1.4	1.4	0.0	0.7	0.7	0.0	0.9	0.9	0.0
2024	0.4	0.4	0.0	2.7	2.7	0.0	3.6	3.6	0.0	0.9	0.9	0.0
2025	0.6	0.6	0.0	2.8	2.8	0.0	4.6	4.6	0.0	1.5	1.5	0.0
2026	0.5	0.5	0.0	2.9	2.9	0.0	4.4	4.4	0.0	1.6	1.6	0.0
2027	0.4	0.4	0.0	2.4	2.6	0.2	4.2	4.9	0.7	1.5	1.9	0.4
2028	0.3	0.4	0.0	2.3	2.8	0.5	4.1	4.9	0.8	1.5	1.9	0.4
2029	0.4	0.4	0.0	2.1	2.8	0.7	4.0	5.3	1.3	1.5	1.9	0.4
2030	0.4	0.4	0.0	1.9	2.6	0.7	3.8	5.4	1.5	1.5	1.8	0.3
2031	0.5	0.5	0.0	1.7	2.4	0.7	3.7	6.9	3.2	1.4	1.6	0.2

Table 764 - Regulatory Costs ($b) for Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC2LT002

Regulatory Costs ($b) for Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC2LT002												
Model Year	Hyundai			KIA			JLR			Karma		
	No Action Alternative (Reference Baseline)	Alternative PC2LT002	Difference	No Action Alternative (Reference Baseline)	Alternative PC2LT002	Difference	No Action Alternative (Reference Baseline)	Alternative PC2LT002	Difference	No Action Alternative (Reference Baseline)	Alternative PC2LT002	Difference
2022	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2023	0.2	0.2	0.0	0.1	0.1	0.0	0.1	0.1	0.0	0.0	0.0	0.0
2024	0.4	0.4	0.0	0.2	0.2	0.0	0.2	0.2	0.0	0.0	0.0	0.0
2025	0.8	0.8	0.0	0.3	0.3	0.0	0.2	0.2	0.0	0.0	0.0	0.0
2026	0.9	0.9	0.0	0.4	0.4	0.0	0.1	0.1	0.0	0.0	0.0	0.0
2027	0.8	1.0	0.2	0.4	0.4	0.0	0.1	0.1	0.0	0.0	0.0	0.0
2028	0.8	0.9	0.2	0.4	0.9	0.5	0.1	0.1	0.0	0.0	0.0	0.0
2029	0.7	1.0	0.3	0.4	1.1	0.7	0.1	0.1	0.0	0.0	0.0	0.0
2030	0.7	1.0	0.3	0.4	1.1	0.7	0.1	0.1	0.0	0.0	0.0	0.0
2031	0.8	1.1	0.3	0.4	1.1	0.7	0.1	0.1	0.0	0.0	0.0	0.0

Table 765 - Regulatory Costs ($b) for Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC2LT002

Regulatory Costs ($b) for Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC2LT002												
Model Year	Lucid			Mazda			Mercedes-Benz			Mitsubishi		
	No Action Alternative (Reference Baseline)	Alternative PC2LT002	Difference	No Action Alternative (Reference Baseline)	Alternative PC2LT002	Difference	No Action Alternative (Reference Baseline)	Alternative PC2LT002	Difference	No Action Alternative (Reference Baseline)	Alternative PC2LT002	Difference
2022	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.0	0.0	0.0	0.0
2023	0.0	0.0	0.0	0.2	0.2	0.0	0.3	0.3	0.0	0.0	0.0	0.0
2024	0.0	0.0	0.0	0.2	0.2	0.0	0.3	0.3	0.0	0.2	0.2	0.0
2025	0.0	0.0	0.0	0.2	0.2	0.0	0.4	0.4	0.0	0.3	0.3	0.0
2026	0.0	0.0	0.0	0.2	0.2	0.0	0.5	0.5	0.0	0.2	0.2	0.0
2027	0.0	0.0	0.0	0.2	0.2	0.0	0.5	0.5	0.0	0.2	0.2	0.0
2028	0.0	0.0	0.0	0.2	0.2	0.0	0.4	0.4	0.0	0.2	0.2	0.0
2029	0.0	0.0	0.0	0.3	0.3	0.0	0.4	0.4	0.0	0.2	0.2	0.0
2030	0.0	0.0	0.0	0.3	0.3	0.0	0.4	0.4	0.0	0.1	0.2	0.0
2031	0.0	0.0	0.0	0.3	0.2	0.0	0.4	0.4	0.0	0.1	0.1	0.0

Table 766 - Regulatory Costs ($b) for Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC2LT002

Regulatory Costs ($b) for Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC2LT002												
Model Year	Nissan			Stellantis			Subaru			Tesla		
	No Action Alternative (Reference Baseline)	Alternative PC2LT002	Difference	No Action Alternative (Reference Baseline)	Alternative PC2LT002	Difference	No Action Alternative (Reference Baseline)	Alternative PC2LT002	Difference	No Action Alternative (Reference Baseline)	Alternative PC2LT002	Difference
2022	0.0	0.0	0.0	0.7	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2023	0.7	0.7	0.0	1.5	1.5	0.0	0.4	0.4	0.0	0.0	0.0	0.0
2024	0.9	0.9	0.0	2.8	2.8	0.0	0.4	0.4	0.0	0.0	0.0	0.0
2025	1.2	1.2	0.0	4.1	4.1	0.0	0.5	0.5	0.0	0.0	0.0	0.0
2026	1.2	1.2	0.0	3.4	3.4	0.0	0.6	0.6	0.0	0.0	0.0	0.0
2027	1.5	1.5	0.0	2.7	3.2	0.5	0.7	0.7	0.0	0.0	0.0	0.0
2028	1.4	1.5	0.1	2.6	3.2	0.5	0.8	0.8	0.0	0.0	0.0	0.0
2029	1.3	1.5	0.2	2.6	3.2	0.6	0.9	0.8	0.0	0.0	0.0	0.0
2030	1.2	1.4	0.2	2.4	3.3	0.8	0.9	0.9	0.0	0.0	0.0	0.0
2031	1.2	1.4	0.1	2.5	3.2	0.7	1.0	0.9	-0.1	0.0	0.0	0.0

Table 767 - Regulatory Costs ($b) for Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC2LT002

Regulatory Costs ($b) for Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC2LT002												
Model Year	Toyota			Volvo			VWA			Total		
	No Action Alternative (Reference Baseline)	Alternative PC2LT002	Difference	No Action Alternative (Reference Baseline)	Alternative PC2LT002	Difference	No Action Alternative (Reference Baseline)	Alternative PC2LT002	Difference	No Action Alternative (Reference Baseline)	Alternative PC2LT002	Difference
2022	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.0	1.9	1.9	0.0
2023	0.6	0.6	0.0	0.0	0.0	0.0	0.4	0.4	0.0	7.6	7.6	0.0
2024	1.2	1.2	0.0	0.0	0.0	0.0	0.6	0.6	0.0	15.1	15.1	0.0
2025	1.5	1.5	0.0	0.2	0.2	0.0	0.7	0.7	0.0	19.8	19.8	0.0
2026	2.3	2.3	0.0	0.1	0.1	0.0	0.7	0.7	0.0	20.1	20.1	0.0
2027	1.6	1.6	0.0	0.1	0.1	0.0	0.5	0.6	0.0	17.8	19.8	1.9
2028	1.8	1.8	-0.1	0.1	0.1	0.0	0.5	0.6	0.1	17.6	20.5	3.0
2029	2.0	1.9	-0.1	0.1	0.0	0.0	0.5	0.7	0.2	17.2	21.5	4.3
2030	2.1	2.0	-0.1	0.0	0.1	0.0	0.6	0.8	0.3	16.9	21.7	4.8
2031	2.3	2.1	-0.2	0.0	0.0	0.0	0.7	0.9	0.2	17.2	23.0	5.8

Table 768 - Regulatory Costs ($b) for Passenger Car Fleet Between No Action Alternative (Reference Baseline) and Alternative PC2LT002

Regulatory Costs ($b) for Passenger Car Fleet Between No Action Alternative (Reference Baseline) and Alternative PC2LT002												
Model Year	BMW			Ford			GM			Honda		
	No Action Alternative (Reference Baseline)	Alternative PC2LT002	Difference	No Action Alternative (Reference Baseline)	Alternative PC2LT002	Difference	No Action Alternative (Reference Baseline)	Alternative PC2LT002	Difference	No Action Alternative (Reference Baseline)	Alternative PC2LT002	Difference
2022	0.1	0.1	0.0	0.0	0.0	0.0	0.2	0.2	0.0	0.0	0.0	0.0
2023	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.4	0.4	0.0
2024	0.3	0.3	0.0	0.3	0.3	0.0	0.5	0.5	0.0	0.4	0.4	0.0
2025	0.3	0.3	0.0	0.3	0.3	0.0	0.6	0.6	0.0	0.8	0.8	0.0
2026	0.2	0.2	0.0	0.2	0.2	0.0	0.5	0.5	0.0	0.7	0.7	0.0
2027	0.2	0.2	0.0	0.2	0.3	0.1	0.5	0.6	0.1	0.7	1.1	0.4
2028	0.2	0.2	0.0	0.2	0.3	0.1	0.5	0.5	0.1	0.6	1.0	0.4
2029	0.2	0.2	0.0	0.1	0.3	0.1	0.4	0.9	0.5	0.6	1.0	0.3
2030	0.2	0.2	0.0	0.1	0.2	0.1	0.4	1.0	0.6	0.6	0.9	0.3
2031	0.2	0.2	0.0	0.1	0.2	0.1	0.4	0.9	0.5	0.5	0.7	0.2

Table 769 - Regulatory Costs ($b) for Passenger Car Fleet Between No Action Alternative (Reference Baseline) and Alternative PC2LT002

Regulatory Costs ($b) for Passenger Car Fleet Between No Action Alternative (Reference Baseline) and Alternative PC2LT002												
Model Year	Hyundai			KIA			JLR			Karma		
	No Action Alternative (Reference Baseline)	Alternative PC2LT002	Difference	No Action Alternative (Reference Baseline)	Alternative PC2LT002	Difference	No Action Alternative (Reference Baseline)	Alternative PC2LT002	Difference	No Action Alternative (Reference Baseline)	Alternative PC2LT002	Difference
2022	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2023	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2024	0.4	0.4	0.0	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2025	0.3	0.3	0.0	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2026	0.5	0.5	0.0	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2027	0.5	0.6	0.2	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2028	0.4	0.6	0.2	0.2	0.5	0.4	0.0	0.0	0.0	0.0	0.0	0.0
2029	0.4	0.7	0.2	0.2	0.8	0.6	0.0	0.0	0.0	0.0	0.0	0.0
2030	0.4	0.6	0.2	0.2	0.8	0.6	0.0	0.0	0.0	0.0	0.0	0.0
2031	0.4	0.7	0.2	0.2	0.8	0.6	0.0	0.0	0.0	0.0	0.0	0.0

Table 770 - Regulatory Costs ($b) for Passenger Car Fleet Between No Action Alternative (Reference Baseline) and Alternative PC2LT002

Regulatory Costs ($b) for Passenger Car Fleet Between No Action Alternative (Reference Baseline) and Alternative PC2LT002												
Model Year	Lucid			Mazda			Mercedes-Benz			Mitsubishi		
	No Action Alternative (Reference Baseline)	Alternative PC2LT002	Difference	No Action Alternative (Reference Baseline)	Alternative PC2LT002	Difference	No Action Alternative (Reference Baseline)	Alternative PC2LT002	Difference	No Action Alternative (Reference Baseline)	Alternative PC2LT002	Difference
2022	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0
2023	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.0	0.0	0.0	0.0
2024	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.0	0.1	0.1	0.0
2025	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.0	0.1	0.1	0.0
2026	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.3	0.0	0.1	0.1	0.0
2027	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.0	0.1	0.1	0.0
2028	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.0	0.1	0.1	0.0
2029	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.0	0.1	0.1	0.0
2030	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.1	0.1	0.0
2031	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.1	0.0	0.0	0.1	0.0

Table 771 - Regulatory Costs ($b) for Passenger Car Fleet Between No Action Alternative (Reference Baseline) and Alternative PC2LT002

Regulatory Costs ($b) for Passenger Car Fleet Between No Action Alternative (Reference Baseline) and Alternative PC2LT002												
Model Year	Nissan			Stellantis			Subaru			Tesla		
	No Action Alternative (Reference Baseline)	Alternative PC2LT002	Difference	No Action Alternative (Reference Baseline)	Alternative PC2LT002	Difference	No Action Alternative (Reference Baseline)	Alternative PC2LT002	Difference	No Action Alternative (Reference Baseline)	Alternative PC2LT002	Difference
2022	0.0	0.0	0.0	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2023	0.4	0.4	0.0	0.2	0.2	0.0	0.2	0.2	0.0	0.0	0.0	0.0
2024	0.5	0.5	0.0	0.7	0.7	0.0	0.2	0.2	0.0	0.0	0.0	0.0
2025	0.7	0.7	0.0	0.7	0.7	0.0	0.2	0.2	0.0	0.0	0.0	0.0
2026	0.6	0.6	0.0	0.6	0.6	0.0	0.2	0.2	0.0	0.0	0.0	0.0
2027	0.8	0.7	0.0	0.5	0.5	0.0	0.2	0.2	0.0	0.0	0.0	0.0
2028	0.6	0.6	0.0	0.5	0.5	0.0	0.2	0.1	0.0	0.0	0.0	0.0
2029	0.6	0.7	0.1	0.5	0.5	0.1	0.1	0.1	0.0	0.0	0.0	0.0
2030	0.5	0.7	0.1	0.4	0.5	0.1	0.1	0.1	0.0	0.0	0.0	0.0
2031	0.5	0.7	0.1	0.4	0.5	0.1	0.1	0.1	0.0	0.0	0.0	0.0

Table 772 - Regulatory Costs ($b) for Passenger Car Fleet Between No Action Alternative (Reference Baseline) and Alternative PC2LT002

Regulatory Costs ($b) for Passenger Car Fleet Between No Action Alternative (Reference Baseline) and Alternative PC2LT002												
Model Year	Toyota			Volvo			VWA			Total		
	No Action Alternative (Reference Baseline)	Alternative PC2LT002	Difference	No Action Alternative (Reference Baseline)	Alternative PC2LT002	Difference	No Action Alternative (Reference Baseline)	Alternative PC2LT002	Difference	No Action Alternative (Reference Baseline)	Alternative PC2LT002	Difference
2022	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.8	0.8	0.0
2023	0.3	0.3	0.0	0.0	0.0	0.0	0.1	0.1	0.0	2.4	2.4	0.0
2024	0.5	0.5	0.0	0.0	0.0	0.0	0.3	0.3	0.0	4.7	4.7	0.0
2025	0.7	0.7	0.0	0.0	0.0	0.0	0.3	0.3	0.0	5.5	5.5	0.0
2026	0.8	0.8	0.0	0.0	0.0	0.0	0.3	0.3	0.0	5.3	5.3	0.0
2027	0.8	0.7	-0.1	0.0	0.0	0.0	0.3	0.3	0.0	5.2	5.9	0.7
2028	0.8	0.8	-0.1	0.0	0.0	0.0	0.3	0.4	0.1	4.8	6.0	1.2
2029	0.8	0.7	-0.1	0.0	0.0	0.0	0.3	0.4	0.1	4.5	6.5	2.0
2030	0.8	0.7	-0.1	0.0	0.0	0.0	0.3	0.4	0.1	4.3	6.3	2.1
2031	0.8	0.6	-0.2	0.0	0.0	0.0	0.3	0.4	0.1	4.2	6.0	1.8

Table 773 - Regulatory Costs ($b) for Light Truck Fleet Between No Action Alternative (Reference Baseline) and Alternative PC2LT002

Regulatory Costs ($b) for Light Truck Fleet Between No Action Alternative (Reference Baseline) and Alternative PC2LT002												
Model Year	BMW			Ford			GM			Honda		
	No Action Alternative (Reference Baseline)	Alternative PC2LT002	Difference	No Action Alternative (Reference Baseline)	Alternative PC2LT002	Difference	No Action Alternative (Reference Baseline)	Alternative PC2LT002	Difference	No Action Alternative (Reference Baseline)	Alternative PC2LT002	Difference
2022	0.0	0.0	0.0	0.1	0.1	0.0	0.3	0.3	0.0	0.0	0.0	0.0
2023	0.1	0.1	0.0	1.4	1.4	0.0	0.6	0.6	0.0	0.4	0.4	0.0
2024	0.1	0.1	0.0	2.5	2.5	0.0	3.1	3.1	0.0	0.5	0.5	0.0
2025	0.2	0.2	0.0	2.5	2.5	0.0	4.0	4.0	0.0	0.7	0.7	0.0
2026	0.2	0.2	0.0	2.7	2.7	0.0	3.9	3.9	0.0	0.9	0.9	0.0
2027	0.1	0.1	0.0	2.2	2.3	0.1	3.7	4.4	0.7	0.8	0.8	0.0
2028	0.1	0.2	0.0	2.1	2.5	0.4	3.6	4.3	0.7	0.9	0.9	0.0
2029	0.2	0.2	0.0	2.0	2.5	0.6	3.6	4.4	0.8	0.9	0.9	0.0
2030	0.2	0.2	0.0	1.8	2.4	0.6	3.5	4.4	0.9	0.9	0.9	0.0
2031	0.3	0.3	0.0	1.6	2.2	0.6	3.4	6.0	2.6	0.9	0.9	0.0

Table 774 - Regulatory Costs ($b) for Light Truck Fleet Between No Action Alternative (Reference Baseline) and Alternative PC2LT002

Regulatory Costs ($b) for Light Truck Fleet Between No Action Alternative (Reference Baseline) and Alternative PC2LT002												
Model Year	Hyundai			KIA			JLR			Karma		
	No Action Alternative (Reference Baseline)	Alternative PC2LT002	Difference	No Action Alternative (Reference Baseline)	Alternative PC2LT002	Difference	No Action Alternative (Reference Baseline)	Alternative PC2LT002	Difference	No Action Alternative (Reference Baseline)	Alternative PC2LT002	Difference
2022	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2023	0.0	0.0	0.0	0.1	0.1	0.0	0.1	0.1	0.0	0.0	0.0	0.0
2024	0.1	0.1	0.0	0.1	0.1	0.0	0.2	0.2	0.0	0.0	0.0	0.0
2025	0.5	0.5	0.0	0.1	0.1	0.0	0.2	0.2	0.0	0.0	0.0	0.0
2026	0.4	0.4	0.0	0.2	0.2	0.0	0.1	0.1	0.0	0.0	0.0	0.0
2027	0.4	0.4	0.0	0.2	0.2	0.0	0.1	0.1	0.0	0.0	0.0	0.0
2028	0.3	0.3	0.0	0.2	0.3	0.1	0.1	0.1	0.0	0.0	0.0	0.0
2029	0.3	0.4	0.1	0.2	0.3	0.1	0.1	0.1	0.0	0.0	0.0	0.0
2030	0.3	0.4	0.1	0.2	0.3	0.1	0.1	0.1	0.0	0.0	0.0	0.0
2031	0.4	0.4	0.1	0.3	0.4	0.1	0.1	0.1	0.0	0.0	0.0	0.0

Table 775 - Regulatory Costs ($b) for Light Truck Fleet Between No Action Alternative (Reference Baseline) and Alternative PC2LT002

Regulatory Costs ($b) for Light Truck Fleet Between No Action Alternative (Reference Baseline) and Alternative PC2LT002												
Model Year	Lucid			Mazda			Mercedes-Benz			Mitsubishi		
	No Action Alternative (Reference Baseline)	Alternative PC2LT002	Difference	No Action Alternative (Reference Baseline)	Alternative PC2LT002	Difference	No Action Alternative (Reference Baseline)	Alternative PC2LT002	Difference	No Action Alternative (Reference Baseline)	Alternative PC2LT002	Difference
2022	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2023	0.0	0.0	0.0	0.2	0.2	0.0	0.1	0.1	0.0	0.0	0.0	0.0
2024	0.0	0.0	0.0	0.2	0.2	0.0	0.1	0.1	0.0	0.0	0.0	0.0
2025	0.0	0.0	0.0	0.2	0.2	0.0	0.1	0.1	0.0	0.2	0.2	0.0
2026	0.0	0.0	0.0	0.2	0.2	0.0	0.2	0.2	0.0	0.1	0.1	0.0
2027	0.0	0.0	0.0	0.2	0.2	0.0	0.2	0.2	0.0	0.1	0.1	0.0
2028	0.0	0.0	0.0	0.2	0.2	0.0	0.2	0.2	0.0	0.1	0.1	0.0
2029	0.0	0.0	0.0	0.2	0.2	0.0	0.2	0.2	0.0	0.1	0.1	0.0
2030	0.0	0.0	0.0	0.2	0.2	0.0	0.2	0.2	0.0	0.1	0.1	0.0
2031	0.0	0.0	0.0	0.2	0.2	0.0	0.3	0.3	0.0	0.1	0.1	0.0

Table 776 - Regulatory Costs ($b) for Light Truck Fleet Between No Action Alternative (Reference Baseline) and Alternative PC2LT002

Regulatory Costs ($b) for Light Truck Fleet Between No Action Alternative (Reference Baseline) and Alternative PC2LT002												
Model Year	Nissan			Stellantis			Subaru			Tesla		
	No Action Alternative (Reference Baseline)	Alternative PC2LT002	Difference	No Action Alternative (Reference Baseline)	Alternative PC2LT002	Difference	No Action Alternative (Reference Baseline)	Alternative PC2LT002	Difference	No Action Alternative (Reference Baseline)	Alternative PC2LT002	Difference
2022	0.0	0.0	0.0	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2023	0.3	0.3	0.0	1.3	1.3	0.0	0.2	0.2	0.0	0.0	0.0	0.0
2024	0.3	0.3	0.0	2.1	2.1	0.0	0.2	0.2	0.0	0.0	0.0	0.0
2025	0.6	0.6	0.0	3.4	3.4	0.0	0.3	0.3	0.0	0.0	0.0	0.0
2026	0.5	0.5	0.0	2.8	2.8	0.0	0.4	0.4	0.0	0.0	0.0	0.0
2027	0.7	0.7	0.0	2.2	2.7	0.5	0.5	0.5	0.0	0.0	0.0	0.0
2028	0.8	0.8	0.0	2.1	2.6	0.5	0.6	0.6	0.0	0.0	0.0	0.0
2029	0.7	0.8	0.1	2.1	2.7	0.6	0.7	0.7	0.0	0.0	0.0	0.0
2030	0.7	0.8	0.1	2.0	2.7	0.7	0.8	0.8	0.0	0.0	0.0	0.0
2031	0.7	0.7	0.0	2.1	2.7	0.6	0.9	0.8	-0.1	0.0	0.0	0.0

Table 777 - Regulatory Costs ($b) for Light Truck Fleet Between No Action Alternative (Reference Baseline) and Alternative PC2LT002

Regulatory Costs ($b) for Light Truck Fleet Between No Action Alternative (Reference Baseline) and Alternative PC2LT002												
Model Year	Toyota			Volvo			VWA			Total		
	No Action Alternative (Reference Baseline)	Alternative PC2LT002	Difference	No Action Alternative (Reference Baseline)	Alternative PC2LT002	Difference	No Action Alternative (Reference Baseline)	Alternative PC2LT002	Difference	No Action Alternative (Reference Baseline)	Alternative PC2LT002	Difference
2022	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	1.1	1.1	0.0
2023	0.2	0.2	0.0	0.0	0.0	0.0	0.3	0.3	0.0	5.2	5.2	0.0
2024	0.7	0.7	0.0	0.0	0.0	0.0	0.3	0.3	0.0	10.4	10.4	0.0
2025	0.8	0.8	0.0	0.1	0.1	0.0	0.4	0.4	0.0	14.3	14.3	0.0
2026	1.5	1.5	0.0	0.1	0.1	0.0	0.4	0.4	0.0	14.8	14.8	0.0
2027	0.8	0.8	0.0	0.1	0.0	0.0	0.2	0.3	0.0	12.7	13.9	1.2
2028	1.0	1.0	0.0	0.0	0.0	0.0	0.2	0.3	0.0	12.8	14.6	1.8
2029	1.2	1.2	0.0	0.0	0.0	0.0	0.2	0.3	0.1	12.7	15.0	2.3
2030	1.3	1.3	0.0	0.0	0.0	0.0	0.3	0.4	0.1	12.7	15.4	2.7
2031	1.5	1.5	0.0	0.0	0.0	0.0	0.4	0.5	0.1	13.0	17.0	4.1

Technology Costs, Price Increases, Sales, and Labor Utilization

Table 778 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Total) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC2LT002

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Total) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC2LT002																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Reference Baseline)	Alternative PC2LT002	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC2LT002	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC2LT002	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC2LT002	Absolute	Percent
2022	0	0	0	0%	132	132	0	0%	14.4	14.4	0.0	0.0%	880	880	0.0	0.0%
2023	7	7	0	0%	503	503	0	0%	15.2	15.2	0.0	0.0%	937	937	0.0	0.0%
2024	15	15	0	0%	997	997	0	0%	15.1	15.1	0.0	0.0%	944	944	0.0	0.0%
2025	20	20	0	0%	1,362	1,362	0	0%	14.5	14.5	0.0	0.0%	915	915	0.0	0.0%
2026	20	20	0	0%	1,376	1,376	0	0%	14.6	14.6	0.0	0.0%	922	922	0.0	0.0%
2027	18	19	2	10%	1,185	1,314	129	11%	15.1	15.1	0.0	0.0%	946	949	2.8	0.3%
2028	18	20	3	15%	1,144	1,338	193	17%	15.4	15.4	0.0	-0.1%	966	969	3.0	0.3%
2029	17	21	4	22%	1,120	1,403	283	25%	15.4	15.3	0.0	-0.2%	966	969	3.2	0.3%
2030	17	21	4	24%	1,119	1,439	320	29%	15.1	15.1	0.0	-0.2%	951	955	3.4	0.4%
2031	17	23	6	32%	1,149	1,541	392	34%	14.9	14.9	0.0	-0.2%	940	946	5.8	0.6%

Table 779 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Total) Passenger Car Fleet Between No Action Alternative (Reference Baseline) and Alternative PC2LT002

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Total) Passenger Car Fleet Between No Action Alternative (Reference Baseline) and Alternative PC2LT002																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Reference Baseline)	Alternative PC2LT002	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC2LT002	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC2LT002	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC2LT002	Absolute	Percent
2022	0	0	0	0%	152	152	0	0%	5.5	5.5	0.0	0.0%	298	298	0.0	0.0%
2023	2	2	0	0%	434	434	0	0%	5.6	5.6	0.0	0.0%	305	305	0.0	0.0%
2024	5	5	0	0%	862	862	0	0%	5.5	5.5	0.0	0.0%	302	302	0.0	0.0%
2025	6	6	0	0%	1,093	1,093	0	0%	5.1	5.1	0.0	0.0%	281	281	0.0	0.0%
2026	5	5	0	0%	1,047	1,047	0	0%	5.0	5.0	0.0	0.0%	279	279	0.0	0.0%
2027	5	6	1	12%	1,007	1,143	135	13%	5.1	5.1	0.0	-0.1%	285	285	0.7	0.2%
2028	5	6	1	22%	924	1,151	227	25%	5.2	5.2	0.0	-0.3%	287	287	0.2	0.1%
2029	4	6	2	40%	866	1,264	398	46%	5.2	5.1	0.0	-0.6%	286	286	-0.5	-0.2%
2030	4	6	2	44%	836	1,249	413	49%	5.1	5.1	0.0	-0.6%	282	281	-0.2	-0.1%
2031	4	6	2	41%	834	1,191	357	43%	5.0	5.0	0.0	-0.3%	277	277	0.3	0.1%

Table 780 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Total) Light Truck Fleet Between No Action Alternative (Reference Baseline) and Alternative PC2LT002

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Total) Light Truck Fleet Between No Action Alternative (Reference Baseline) and Alternative PC2LT002																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Reference Baseline)	Alternative PC2LT002	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC2LT002	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC2LT002	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC2LT002	Absolute	Percent
2022	0	0	0	0%	119	119	0	0%	9.0	9.0	0.0	0.0%	583	583	0.0	0.0%
2023	5	5	0	0%	543	543	0	0%	9.6	9.6	0.0	0.0%	632	632	0.0	0.0%
2024	10	10	0	0%	1,074	1,074	0	0%	9.7	9.7	0.0	0.0%	642	642	0.0	0.0%
2025	14	14	0	0%	1,506	1,506	0	0%	9.5	9.5	0.0	0.0%	634	634	0.0	0.0%
2026	15	15	0	0%	1,548	1,548	0	0%	9.6	9.6	0.0	0.0%	643	643	0.0	0.0%
2027	13	14	1	9%	1,277	1,403	126	10%	9.9	9.9	0.0	0.0%	662	664	2.1	0.3%
2028	13	14	2	13%	1,257	1,432	176	14%	10.2	10.2	0.0	0.0%	679	682	2.7	0.4%
2029	13	15	2	16%	1,249	1,473	224	18%	10.2	10.2	0.0	0.1%	679	683	3.8	0.6%
2030	13	15	2	18%	1,263	1,534	272	22%	10.0	10.1	0.0	0.0%	670	674	3.6	0.5%
2031	13	17	4	30%	1,308	1,718	409	31%	9.9	9.9	0.0	-0.1%	663	668	5.5	0.8%

Table 781 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (BMW) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC2LT002

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (BMW) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC2LT002																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Reference Baseline)	Alternative PC2LT002	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC2LT002	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC2LT002	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC2LT002	Absolute	Percent
2022	0	0	0	0%	420	420	0	0%	0.4	0.4	0.0	0.0%	17	17	0.0	0.0%
2023	0	0	0	0%	524	524	0	0%	0.4	0.4	0.0	0.0%	18	18	0.0	0.0%
2024	0	0	0	0%	1,110	1,110	0	0%	0.4	0.4	0.0	0.0%	18	18	0.0	0.0%
2025	1	1	0	0%	1,576	1,576	0	0%	0.4	0.4	0.0	0.0%	18	18	0.0	0.0%
2026	0	0	0	0%	1,340	1,340	0	0%	0.4	0.4	0.0	0.0%	18	18	0.0	0.0%
2027	0	0	0	-1%	1,032	1,022	-10	-1%	0.4	0.4	0.0	-0.1%	18	18	0.0	0.0%
2028	0	0	0	4%	926	966	41	4%	0.4	0.4	0.0	-0.1%	19	19	0.0	0.1%
2029	0	0	0	5%	943	1,019	76	8%	0.4	0.4	0.0	-0.3%	19	19	0.0	0.1%
2030	0	0	0	5%	1,131	1,210	80	7%	0.4	0.4	0.0	-0.3%	19	19	0.0	0.0%
2031	0	0	0	1%	1,286	1,303	17	1%	0.4	0.4	0.0	-0.2%	19	19	0.0	-0.1%

Table 782 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Ford) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC2LT002

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Ford) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC2LT002																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Reference Baseline)	Alternative PC2LT002	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC2LT002	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC2LT002	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC2LT002	Absolute	Percent
2022	0	0	0	0%	73	73	0	0%	1.6	1.6	0.0	0.0%	139	139	0.0	0.0%
2023	1	1	0	0%	787	787	0	0%	1.7	1.7	0.0	0.0%	151	151	0.0	0.0%
2024	3	3	0	0%	1,570	1,570	0	0%	1.7	1.7	0.0	0.0%	152	152	0.0	0.0%
2025	3	3	0	0%	1,663	1,663	0	0%	1.7	1.7	0.0	0.0%	149	149	0.0	0.0%
2026	3	3	0	0%	1,694	1,694	0	0%	1.7	1.7	0.0	0.0%	151	151	0.0	0.0%
2027	2	3	0	8%	1,360	1,467	107	8%	1.8	1.8	0.0	0.0%	155	155	0.2	0.1%
2028	2	3	1	22%	1,266	1,549	283	22%	1.8	1.8	0.0	0.0%	158	159	0.6	0.4%
2029	2	3	1	33%	1,157	1,536	379	33%	1.8	1.8	0.0	0.0%	158	159	0.9	0.6%
2030	2	3	1	36%	1,059	1,443	385	36%	1.8	1.8	0.0	0.0%	156	157	0.8	0.5%
2031	2	2	1	41%	982	1,382	400	41%	1.8	1.8	0.0	-0.1%	154	154	0.7	0.5%

Table 783 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (GM) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC2LT002

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (GM) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC2LT002																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Reference Baseline)	Alternative PC2LT002	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC2LT002	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC2LT002	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC2LT002	Absolute	Percent
2022	0	0	0	0%	269	269	0	0%	1.8	1.8	0.0	0.0%	125	125	0.0	0.0%
2023	0	0	0	0%	358	358	0	0%	1.9	1.9	0.0	0.0%	134	134	0.0	0.0%
2024	4	4	0	0%	1,880	1,880	0	0%	1.9	1.9	0.0	0.0%	138	138	0.0	0.0%
2025	5	5	0	0%	2,440	2,440	0	0%	1.9	1.9	0.0	0.0%	136	136	0.0	0.0%
2026	4	4	0	0%	2,349	2,349	0	0%	1.9	1.9	0.0	0.0%	137	137	0.0	0.0%
2027	4	5	1	17%	2,160	2,538	378	17%	1.9	1.9	0.0	0.0%	141	142	1.1	0.8%
2028	4	5	1	18%	2,058	2,458	400	19%	2.0	2.0	0.0	-0.1%	144	145	1.1	0.8%
2029	4	5	1	27%	2,017	2,669	652	32%	2.0	2.0	0.0	-0.1%	144	145	1.4	1.0%
2030	4	5	1	28%	1,963	2,738	775	39%	2.0	2.0	0.0	-0.1%	142	143	1.3	0.9%
2031	4	7	3	79%	1,930	3,572	1,643	85%	1.9	1.9	0.0	-0.1%	140	144	4.1	2.9%

Table 784 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Honda) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC2LT002

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Honda) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC2LT002																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Reference Baseline)	Alternative PC2LT002	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC2LT002	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC2LT002	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC2LT002	Absolute	Percent
2022	0	0	0	0%	0	0	0	0%	1.5	1.5	0.0	0.0%	118	118	0.0	0.0%
2023	1	1	0	0%	560	560	0	0%	1.5	1.5	0.0	0.0%	125	125	0.0	0.0%
2024	1	1	0	0%	610	610	0	0%	1.5	1.5	0.0	0.0%	124	124	0.0	0.0%
2025	1	1	0	0%	1,040	1,040	0	0%	1.4	1.4	0.0	0.0%	119	119	0.0	0.0%
2026	2	2	0	0%	1,144	1,144	0	0%	1.4	1.4	0.0	0.0%	120	120	0.0	0.0%
2027	1	2	0	30%	1,001	1,301	300	30%	1.5	1.5	0.0	-0.1%	123	124	0.9	0.7%
2028	2	2	0	27%	1,013	1,285	272	27%	1.5	1.5	0.0	-0.1%	126	127	0.8	0.6%
2029	2	2	0	24%	1,007	1,254	247	25%	1.5	1.5	0.0	-0.3%	126	126	0.5	0.4%
2030	1	2	0	22%	1,001	1,221	221	22%	1.5	1.5	0.0	-0.3%	124	124	0.4	0.4%
2031	1	2	0	14%	985	1,127	142	14%	1.5	1.5	0.0	-0.2%	122	123	0.3	0.2%

Table 785 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Hyundai) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC2LT002

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Hyundai) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC2LT002																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Reference Baseline)	Alternative PC2LT002	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC2LT002	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC2LT002	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC2LT002	Absolute	Percent
2022	0	0	0	0%	0	0	0	0%	0.9	0.9	0.0	0.0%	21	21	0.0	0.0%
2023	0	0	0	0%	262	262	0	0%	0.9	0.9	0.0	0.0%	22	22	0.0	0.0%
2024	0	0	0	0%	458	458	0	0%	0.9	0.9	0.0	0.0%	21	21	0.0	0.0%
2025	1	1	0	0%	937	937	0	0%	0.9	0.9	0.0	0.0%	20	20	0.0	0.0%
2026	1	1	0	0%	1,000	1,000	0	0%	0.9	0.9	0.0	0.0%	21	21	0.0	0.0%
2027	1	1	0	19%	923	1,099	175	19%	0.9	0.9	0.0	-0.1%	21	21	0.0	-0.1%
2028	1	1	0	22%	839	1,027	188	22%	0.9	0.9	0.0	-0.1%	21	21	-0.1	-0.2%
2029	1	1	0	43%	775	1,112	337	43%	0.9	0.9	0.0	-0.3%	21	21	0.0	0.2%
2030	1	1	0	44%	798	1,155	357	45%	0.9	0.9	0.0	-0.3%	21	21	0.0	0.2%
2031	1	1	0	39%	875	1,218	343	39%	0.9	0.9	0.0	-0.2%	21	21	0.1	0.4%

Table 786 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (KIA) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC2LT002

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (KIA) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC2LT002																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Reference Baseline)	Alternative PC2LT002	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC2LT002	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC2LT002	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC2LT002	Absolute	Percent
2022	0	0	0	0%	0	0	0	0%	0.6	0.6	0.0	0.0%	24	24	0.0	0.0%
2023	0	0	0	0%	132	132	0	0%	0.6	0.6	0.0	0.0%	26	26	0.0	0.0%
2024	0	0	0	0%	375	375	0	0%	0.6	0.6	0.0	0.0%	26	26	0.0	0.0%
2025	0	0	0	0%	514	514	0	0%	0.6	0.6	0.0	0.0%	24	24	0.0	0.0%
2026	0	0	0	0%	677	677	0	0%	0.6	0.6	0.0	0.0%	25	25	0.0	0.0%
2027	0	0	0	-1%	639	705	66	10%	0.6	0.6	0.0	-0.1%	25	25	0.0	-0.1%
2028	0	1	0	107%	634	1,360	727	115%	0.6	0.6	0.0	-0.1%	26	26	0.0	0.1%
2029	0	1	1	191%	588	1,763	1,175	200%	0.6	0.6	0.0	-0.3%	26	26	0.0	0.2%
2030	0	1	1	189%	631	1,829	1,198	190%	0.6	0.6	0.0	-0.3%	25	25	0.1	0.3%
2031	0	1	1	158%	716	1,850	1,135	159%	0.6	0.6	0.0	-0.2%	25	25	0.1	0.5%

Table 787 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (JLR) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC2LT002

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (JLR) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC2LT002																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Reference Baseline)	Alternative PC2LT002	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC2LT002	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC2LT002	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC2LT002	Absolute	Percent
2022	0	0	0	0%	478	478	0	0%	0.1	0.1	0.0	0.0%	1	1	0.0	0.0%
2023	0	0	0	0%	1,565	1,565	0	0%	0.1	0.1	0.0	0.0%	1	1	0.0	0.0%
2024	0	0	0	0%	2,130	2,130	0	0%	0.1	0.1	0.0	0.0%	1	1	0.0	0.0%
2025	0	0	0	0%	2,156	2,156	0	0%	0.1	0.1	0.0	0.0%	1	1	0.0	0.0%
2026	0	0	0	0%	1,449	1,449	0	0%	0.1	0.1	0.0	0.0%	1	1	0.0	0.0%
2027	0	0	0	0%	980	978	-2	0%	0.1	0.1	0.0	0.0%	1	1	0.0	0.0%
2028	0	0	0	0%	850	850	0	0%	0.1	0.1	0.0	0.0%	1	1	0.0	0.0%
2029	0	0	0	0%	697	962	264	38%	0.1	0.1	0.0	0.1%	1	1	0.0	0.1%
2030	0	0	0	15%	749	1,135	386	52%	0.1	0.1	0.0	0.0%	1	1	0.0	0.0%
2031	0	0	0	17%	752	881	129	17%	0.1	0.1	0.0	-0.1%	1	1	0.0	-0.1%

Table 788 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Karma) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC2LT002

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Karma) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC2LT002																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Reference Baseline)	Alternative PC2LT002	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC2LT002	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC2LT002	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC2LT002	Absolute	Percent
2022	0	0	0	0%	0	0	0	0%	0.0	0.0	0.0	0.0%	0	0	0.0	0.0%
2023	0	0	0	0%	0	0	0	0%	0.0	0.0	0.0	0.0%	0	0	0.0	0.0%
2024	0	0	0	0%	0	0	0	0%	0.0	0.0	0.0	0.0%	0	0	0.0	0.0%
2025	0	0	0	0%	0	0	0	0%	0.0	0.0	0.0	0.0%	0	0	0.0	0.0%
2026	0	0	0	0%	-3,300	-3,300	0	0%	0.0	0.0	0.0	0.0%	0	0	0.0	0.0%
2027	0	0	0	0%	-3,693	-3,693	0	0%	0.0	0.0	0.0	0.0%	0	0	0.0	0.0%
2028	0	0	0	0%	-3,948	-3,948	0	0%	0.0	0.0	0.0	0.0%	0	0	0.0	0.0%
2029	0	0	0	0%	-4,296	-4,296	0	0%	0.0	0.0	0.0	-1.1%	0	0	0.0	-1.1%
2030	0	0	0	0%	-4,602	-4,602	0	0%	0.0	0.0	0.0	-1.1%	0	0	0.0	-1.1%
2031	0	0	0	0%	-4,776	-4,776	0	0%	0.0	0.0	0.0	-1.1%	0	0	0.0	-1.1%

Table 789 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Lucid) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC2LT002

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Lucid) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC2LT002																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Reference Baseline)	Alternative PC2LT002	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC2LT002	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC2LT002	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC2LT002	Absolute	Percent
2022	0	0	0	0%	0	0	0	0%	0.0	0.0	0.0	0.0%	0	0	0.0	0.0%
2023	0	0	0	0%	0	0	0	0%	0.0	0.0	0.0	0.0%	0	0	0.0	0.0%
2024	0	0	0	0%	0	0	0	0%	0.0	0.0	0.0	0.0%	0	0	0.0	0.0%
2025	0	0	0	0%	0	0	0	0%	0.0	0.0	0.0	0.0%	0	0	0.0	0.0%
2026	0	0	0	0%	0	0	0	0%	0.0	0.0	0.0	0.0%	0	0	0.0	0.0%
2027	0	0	0	0%	0	0	0	0%	0.0	0.0	0.0	-0.1%	0	0	0.0	-0.1%
2028	0	0	0	0%	0	0	0	0%	0.0	0.0	0.0	-0.3%	0	0	0.0	-0.3%
2029	0	0	0	0%	0	0	0	0%	0.0	0.0	0.0	-0.7%	0	0	0.0	-0.7%
2030	0	0	0	0%	0	0	0	0%	0.0	0.0	0.0	-0.7%	0	0	0.0	-0.7%
2031	0	0	0	0%	0	0	0	0%	0.0	0.0	0.0	-0.5%	0	0	0.0	-0.5%

Table 790 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Mazda) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC2LT002

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Mazda) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC2LT002																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Reference Baseline)	Alternative PC2LT002	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC2LT002	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC2LT002	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC2LT002	Absolute	Percent
2022	0	0	0	0%	0	0	0	0%	0.2	0.2	0.0	0.0%	2	2	0.0	0.0%
2023	0	0	0	0%	1,102	1,102	0	0%	0.2	0.2	0.0	0.0%	2	2	0.0	0.0%
2024	0	0	0	0%	1,198	1,198	0	0%	0.2	0.2	0.0	0.0%	2	2	0.0	0.0%
2025	0	0	0	0%	1,281	1,281	0	0%	0.2	0.2	0.0	0.0%	2	2	0.0	0.0%
2026	0	0	0	0%	1,354	1,354	0	0%	0.2	0.2	0.0	0.0%	2	2	0.0	0.0%
2027	0	0	0	1%	1,212	1,235	23	2%	0.2	0.2	0.0	0.0%	2	2	0.0	0.1%
2028	0	0	0	-2%	1,272	1,264	-8	-1%	0.2	0.2	0.0	0.0%	2	2	0.0	0.0%
2029	0	0	0	0%	1,316	1,318	3	0%	0.2	0.2	0.0	0.0%	2	2	0.0	0.1%
2030	0	0	0	0%	1,378	1,374	-3	0%	0.2	0.2	0.0	0.0%	2	2	0.0	0.0%
2031	0	0	0	-8%	1,436	1,323	-114	-8%	0.2	0.2	0.0	-0.1%	2	2	0.0	-0.1%

Table 791 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Mercedes-Benz) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC2LT002

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Mercedes-Benz) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC2LT002																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Reference Baseline)	Alternative PC2LT002	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC2LT002	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC2LT002	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC2LT002	Absolute	Percent
2022	0	0	0	0%	618	618	0	0%	0.3	0.3	0.0	0.0%	9	9	0.0	0.0%
2023	0	0	0	0%	925	925	0	0%	0.3	0.3	0.0	0.0%	9	9	0.0	0.0%
2024	0	0	0	0%	947	947	0	0%	0.3	0.3	0.0	0.0%	9	9	0.0	0.0%
2025	0	0	0	0%	1,358	1,358	0	0%	0.3	0.3	0.0	0.0%	9	9	0.0	0.0%
2026	0	0	0	0%	1,926	1,926	0	0%	0.3	0.3	0.0	0.0%	9	9	0.0	0.0%
2027	0	0	0	-7%	1,754	1,674	-80	-5%	0.3	0.3	0.0	-0.1%	10	10	0.0	0.0%
2028	0	0	0	-7%	1,442	1,344	-98	-7%	0.3	0.3	0.0	-0.1%	10	10	0.0	0.0%
2029	0	0	0	-8%	1,332	1,313	-19	-1%	0.3	0.3	0.0	-0.2%	10	10	0.0	0.1%
2030	0	0	0	1%	1,311	1,326	15	1%	0.3	0.3	0.0	-0.2%	10	10	0.0	0.0%
2031	0	0	0	-6%	1,561	1,470	-90	-6%	0.3	0.3	0.0	-0.2%	10	10	0.0	-0.4%

Table 792 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Mitsubishi) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC2LT002

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Mitsubishi) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC2LT002																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Reference Baseline)	Alternative PC2LT002	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC2LT002	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC2LT002	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC2LT002	Absolute	Percent
2022	0	0	0	0%	217	217	0	0%	0.1	0.1	0.0	0.0%	2	2	0.0	0.0%
2023	0	0	0	0%	233	233	0	0%	0.1	0.1	0.0	0.0%	2	2	0.0	0.0%
2024	0	0	0	0%	1,377	1,377	0	0%	0.1	0.1	0.0	0.0%	2	2	0.0	0.0%
2025	0	0	0	0%	2,723	2,723	0	0%	0.1	0.1	0.0	0.0%	2	2	0.0	0.0%
2026	0	0	0	0%	2,018	2,018	0	0%	0.1	0.1	0.0	0.0%	2	2	0.0	0.0%
2027	0	0	0	-1%	1,846	1,834	-12	-1%	0.1	0.1	0.0	-0.1%	2	2	0.0	-0.1%
2028	0	0	0	3%	1,616	1,660	44	3%	0.1	0.1	0.0	-0.1%	2	2	0.0	-0.1%
2029	0	0	0	3%	1,434	1,477	44	3%	0.1	0.1	0.0	-0.3%	2	2	0.0	-0.2%
2030	0	0	0	4%	1,279	1,328	49	4%	0.1	0.1	0.0	-0.3%	2	2	0.0	-0.2%
2031	0	0	0	8%	1,154	1,246	92	8%	0.1	0.1	0.0	-0.2%	2	2	0.0	-0.1%

Table 793 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Nissan) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC2LT002

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Nissan) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC2LT002																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Reference Baseline)	Alternative PC2LT002	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC2LT002	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC2LT002	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC2LT002	Absolute	Percent
2022	0	0	0	0%	33	33	0	0%	1.0	1.0	0.0	0.0%	59	59	0.0	0.0%
2023	1	1	0	0%	651	651	0	0%	1.0	1.0	0.0	0.0%	62	62	0.0	0.0%
2024	1	1	0	0%	825	825	0	0%	1.0	1.0	0.0	0.0%	62	62	0.0	0.0%
2025	1	1	0	0%	1,227	1,227	0	0%	1.0	1.0	0.0	0.0%	60	60	0.0	0.0%
2026	1	1	0	0%	1,176	1,176	0	0%	1.0	1.0	0.0	0.0%	60	60	0.0	0.0%
2027	1	1	0	-2%	1,464	1,458	-6	0%	1.0	1.0	0.0	-0.1%	61	61	-0.1	-0.1%
2028	1	1	0	1%	1,364	1,419	55	4%	1.0	1.0	0.0	-0.1%	62	62	0.0	-0.1%
2029	1	1	0	4%	1,254	1,457	203	16%	1.0	1.0	0.0	-0.3%	62	62	-0.1	-0.2%
2030	1	1	0	14%	1,233	1,413	181	15%	1.0	1.0	0.0	-0.3%	61	61	0.1	0.1%
2031	1	1	0	10%	1,238	1,362	124	10%	1.0	1.0	0.0	-0.2%	61	61	0.0	0.1%

Table 794 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Stellantis) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC2LT002

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Stellantis) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC2LT002																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Reference Baseline)	Alternative PC2LT002	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC2LT002	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC2LT002	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC2LT002	Absolute	Percent
2022	0	0	0	0%	446	446	0	0%	1.6	1.6	0.0	0.0%	90	90	0.0	0.0%
2023	1	1	0	0%	898	898	0	0%	1.7	1.7	0.0	0.0%	100	100	0.0	0.0%
2024	3	3	0	0%	1,659	1,659	0	0%	1.7	1.7	0.0	0.0%	103	103	0.0	0.0%
2025	4	4	0	0%	2,479	2,479	0	0%	1.6	1.6	0.0	0.0%	103	103	0.0	0.0%
2026	3	3	0	0%	2,028	2,028	0	0%	1.7	1.7	0.0	0.0%	103	103	0.0	0.0%
2027	3	3	0	16%	1,596	1,861	265	17%	1.7	1.7	0.0	0.0%	105	106	1.0	0.9%
2028	3	3	0	17%	1,492	1,795	303	20%	1.8	1.8	0.0	0.0%	107	108	1.0	1.0%
2029	3	3	1	21%	1,470	1,816	345	23%	1.8	1.8	0.0	0.0%	107	108	1.2	1.1%
2030	2	3	1	28%	1,406	1,881	475	34%	1.7	1.7	0.0	0.0%	105	107	1.5	1.4%
2031	3	3	1	26%	1,476	1,897	420	28%	1.7	1.7	0.0	-0.1%	104	106	1.4	1.3%

Table 795 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Subaru) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC2LT002

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Subaru) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC2LT002																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Reference Baseline)	Alternative PC2LT002	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC2LT002	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC2LT002	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC2LT002	Absolute	Percent
2022	0	0	0	0%	0	0	0	0%	0.7	0.7	0.0	0.0%	39	39	0.0	0.0%
2023	0	0	0	0%	460	460	0	0%	0.8	0.8	0.0	0.0%	42	42	0.0	0.0%
2024	0	0	0	0%	494	494	0	0%	0.8	0.8	0.0	0.0%	42	42	0.0	0.0%
2025	0	0	0	0%	638	638	0	0%	0.8	0.8	0.0	0.0%	40	40	0.0	0.0%
2026	1	1	0	0%	757	757	0	0%	0.8	0.8	0.0	0.0%	41	41	0.0	0.0%
2027	1	1	0	-3%	841	816	-25	-3%	0.8	0.8	0.0	0.0%	42	42	0.0	-0.1%
2028	1	1	0	-4%	970	935	-35	-4%	0.8	0.8	0.0	0.0%	43	43	-0.1	-0.1%
2029	1	1	0	-4%	1,059	1,020	-39	-4%	0.8	0.8	0.0	0.0%	43	43	-0.1	-0.1%
2030	1	1	0	-4%	1,154	1,108	-45	-4%	0.8	0.8	0.0	-0.1%	43	43	-0.1	-0.2%
2031	1	1	0	-10%	1,227	1,108	-120	-10%	0.8	0.8	0.0	-0.1%	42	42	-0.1	-0.3%

Table 796 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Tesla) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC2LT002

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Tesla) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC2LT002																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Reference Baseline)	Alternative PC2LT002	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC2LT002	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC2LT002	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC2LT002	Absolute	Percent
2022	0	0	0	0%	0	0	0	0%	0.5	0.5	0.0	0.0%	59	59	0.0	0.0%
2023	0	0	0	0%	7	7	0	0%	0.5	0.5	0.0	0.0%	60	60	0.0	0.0%
2024	0	0	0	0%	11	11	0	0%	0.5	0.5	0.0	0.0%	59	59	0.0	0.0%
2025	0	0	0	0%	16	16	0	0%	0.5	0.5	0.0	0.0%	55	55	0.0	0.0%
2026	0	0	0	0%	16	16	0	0%	0.5	0.5	0.0	0.0%	55	55	0.0	0.0%
2027	0	0	0	-99%	15	0	-15	-99%	0.5	0.5	0.0	-0.1%	56	56	-0.1	-0.1%
2028	0	0	0	-100%	15	0	-15	-100%	0.5	0.5	0.0	-0.2%	56	56	-0.2	-0.3%
2029	0	0	0	-100%	15	0	-15	-100%	0.5	0.5	0.0	-0.6%	56	56	-0.4	-0.6%
2030	0	0	0	-100%	15	0	-15	-100%	0.5	0.5	0.0	-0.5%	55	55	-0.3	-0.6%
2031	0	0	0	-100%	15	0	-15	-100%	0.5	0.5	0.0	-0.3%	54	54	-0.2	-0.3%

Table 797 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Toyota) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC2LT002

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Toyota) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC2LT002																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Reference Baseline)	Alternative PC2LT002	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC2LT002	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC2LT002	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC2LT002	Absolute	Percent
2022	0	0	0	0%	0	0	0	0%	2.4	2.4	0.0	0.0%	165	165	0.0	0.0%
2023	1	1	0	0%	234	234	0	0%	2.5	2.5	0.0	0.0%	173	173	0.0	0.0%
2024	1	1	0	0%	492	492	0	0%	2.5	2.5	0.0	0.0%	173	173	0.0	0.0%
2025	2	2	0	0%	644	644	0	0%	2.4	2.4	0.0	0.0%	166	166	0.0	0.0%
2026	2	2	0	0%	963	963	0	0%	2.4	2.4	0.0	0.0%	168	168	0.0	0.0%
2027	2	2	0	-3%	662	642	-20	-3%	2.5	2.5	0.0	0.0%	172	172	-0.1	-0.1%
2028	2	2	0	-4%	732	705	-26	-4%	2.5	2.5	0.0	-0.1%	176	176	-0.2	-0.1%
2029	2	2	0	-5%	798	766	-32	-4%	2.5	2.5	0.0	-0.2%	176	176	-0.4	-0.2%
2030	2	2	0	-4%	865	828	-37	-4%	2.5	2.5	0.0	-0.2%	174	173	-0.4	-0.3%
2031	2	2	0	-9%	928	849	-78	-8%	2.4	2.4	0.0	-0.2%	172	171	-0.5	-0.3%

Table 798 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Volvo) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC2LT002

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Volvo) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC2LT002																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Reference Baseline)	Alternative PC2LT002	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC2LT002	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC2LT002	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC2LT002	Absolute	Percent
2022	0	0	0	0%	0	0	0	0%	0.1	0.1	0.0	0.0%	3	3	0.0	0.0%
2023	0	0	0	0%	140	140	0	0%	0.1	0.1	0.0	0.0%	3	3	0.0	0.0%
2024	0	0	0	0%	195	195	0	0%	0.1	0.1	0.0	0.0%	3	3	0.0	0.0%
2025	0	0	0	0%	1,128	1,128	0	0%	0.1	0.1	0.0	0.0%	3	3	0.0	0.0%
2026	0	0	0	0%	1,041	1,041	0	0%	0.1	0.1	0.0	0.0%	3	3	0.0	0.0%
2027	0	0	0	-8%	677	622	-55	-8%	0.1	0.1	0.0	0.0%	3	3	0.0	-0.2%
2028	0	0	0	-10%	531	477	-54	-10%	0.1	0.1	0.0	-0.1%	3	3	0.0	-0.3%
2029	0	0	0	-15%	363	310	-53	-15%	0.1	0.1	0.0	-0.1%	3	3	0.0	-0.4%
2030	0	0	0	78%	219	390	171	78%	0.1	0.1	0.0	-0.2%	3	3	0.0	-0.4%
2031	0	0	0	124%	115	257	142	124%	0.1	0.1	0.0	-0.2%	3	3	0.0	-0.3%

Table 799 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (VWA) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC2LT002

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (VWA) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC2LT002																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Reference Baseline)	Alternative PC2LT002	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC2LT002	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC2LT002	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC2LT002	Absolute	Percent
2022	0	0	0	0%	283	283	0	0%	0.6	0.6	0.0	0.0%	8	8	0.0	0.0%
2023	0	0	0	0%	647	647	0	0%	0.6	0.6	0.0	0.0%	8	8	0.0	0.0%
2024	1	1	0	0%	946	946	0	0%	0.6	0.6	0.0	0.0%	8	8	0.0	0.0%
2025	1	1	0	0%	1,142	1,142	0	0%	0.6	0.6	0.0	0.0%	8	8	0.0	0.0%
2026	1	1	0	0%	1,138	1,138	0	0%	0.6	0.6	0.0	0.0%	8	8	0.0	0.0%
2027	1	1	0	4%	817	870	52	6%	0.6	0.6	0.0	0.0%	8	8	0.0	0.0%
2028	1	1	0	28%	776	997	221	28%	0.7	0.6	0.0	-0.1%	8	8	0.0	-0.1%
2029	0	1	0	34%	743	1,049	305	41%	0.7	0.6	0.0	-0.2%	8	8	0.0	-0.2%
2030	1	1	0	37%	875	1,283	408	47%	0.6	0.6	0.0	-0.2%	8	8	0.0	-0.2%
2031	1	1	0	31%	1,042	1,370	328	32%	0.6	0.6	0.0	-0.2%	8	8	0.0	-0.2%

Table 800 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Total) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC1LT3

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Total) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC1LT3																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Reference Baseline)	Alternative PC1LT3	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC1LT3	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC1LT3	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC1LT3	Absolute	Percent
2022	0	0	0	0%	132	132	0	0%	14.4	14.4	0.0	0.0%	880	880	0.0	0.0%
2023	7	7	0	0%	503	503	0	0%	15.2	15.2	0.0	0.0%	937	937	0.0	0.0%
2024	15	15	0	0%	997	997	0	0%	15.1	15.1	0.0	0.0%	944	944	0.0	0.0%
2025	20	20	0	0%	1,362	1,362	0	0%	14.5	14.5	0.0	0.0%	915	915	0.0	0.0%
2026	20	20	0	0%	1,376	1,376	0	0%	14.6	14.6	0.0	0.0%	922	922	0.0	0.0%
2027	18	20	2	12%	1,185	1,358	173	15%	15.1	15.0	0.0	-0.1%	946	949	2.2	0.2%
2028	18	21	3	19%	1,144	1,460	315	28%	15.4	15.3	0.0	-0.2%	966	968	2.4	0.2%
2029	17	22	4	26%	1,120	1,537	417	37%	15.4	15.3	0.0	-0.3%	966	969	3.3	0.3%
2030	17	22	5	31%	1,119	1,618	499	45%	15.1	15.1	0.0	-0.3%	951	955	3.2	0.3%
2031	17	24	7	39%	1,149	1,756	607	53%	14.9	14.9	0.0	-0.3%	940	945	5.1	0.5%

Table 801 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Total) Passenger Car Fleet Between No Action Alternative (Reference Baseline) and Alternative PC1LT3

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Total) Passenger Car Fleet Between No Action Alternative (Reference Baseline) and Alternative PC1LT3																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Reference Baseline)	Alternative PC1LT3	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC1LT3	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC1LT3	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC1LT3	Absolute	Percent
2022	0	0	0	0%	152	152	0	0%	5.5	5.5	0.0	0.0%	298	298	0.0	0.0%
2023	2	2	0	0%	434	434	0	0%	5.6	5.6	0.0	0.0%	305	305	0.0	0.0%
2024	5	5	0	0%	862	862	0	0%	5.5	5.5	0.0	0.0%	302	302	0.0	0.0%
2025	6	6	0	0%	1,093	1,093	0	0%	5.1	5.1	0.0	0.0%	281	281	0.0	0.0%
2026	5	5	0	0%	1,047	1,047	0	0%	5.0	5.0	0.0	0.0%	279	279	0.0	0.0%
2027	5	5	0	3%	1,007	1,079	72	7%	5.1	5.1	0.0	0.1%	285	285	0.6	0.2%
2028	5	5	0	5%	924	1,058	134	14%	5.2	5.2	0.0	0.3%	287	288	1.1	0.4%
2029	4	5	1	12%	866	1,078	212	25%	5.2	5.2	0.0	0.3%	286	288	1.4	0.5%
2030	4	5	1	14%	836	1,056	220	26%	5.1	5.1	0.0	0.5%	282	283	1.9	0.7%
2031	4	5	0	10%	834	1,002	168	20%	5.0	5.1	0.0	0.9%	277	280	2.6	0.9%

Table 802 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Total) Light Truck Fleet Between No Action Alternative (Reference Baseline) and Alternative PC1LT3

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Total) Light Truck Fleet Between No Action Alternative (Reference Baseline) and Alternative PC1LT3																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Reference Baseline)	Alternative PC1LT3	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC1LT3	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC1LT3	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC1LT3	Absolute	Percent
2022	0	0	0	0%	119	119	0	0%	9.0	9.0	0.0	0.0%	583	583	0.0	0.0%
2023	5	5	0	0%	543	543	0	0%	9.6	9.6	0.0	0.0%	632	632	0.0	0.0%
2024	10	10	0	0%	1,074	1,074	0	0%	9.7	9.7	0.0	0.0%	642	642	0.0	0.0%
2025	14	14	0	0%	1,506	1,506	0	0%	9.5	9.5	0.0	0.0%	634	634	0.0	0.0%
2026	15	15	0	0%	1,548	1,548	0	0%	9.6	9.6	0.0	0.0%	643	643	0.0	0.0%
2027	13	14	2	15%	1,277	1,503	226	18%	9.9	9.9	0.0	-0.2%	662	663	1.7	0.3%
2028	13	16	3	24%	1,257	1,666	410	33%	10.2	10.1	0.0	-0.4%	679	680	1.3	0.2%
2029	13	17	4	31%	1,249	1,772	523	42%	10.2	10.1	-0.1	-0.5%	679	681	1.9	0.3%
2030	13	17	5	36%	1,263	1,906	643	51%	10.0	10.0	-0.1	-0.7%	670	671	1.3	0.2%
2031	13	19	6	49%	1,308	2,144	835	64%	9.9	9.8	-0.1	-0.9%	663	665	2.5	0.4%

Table 803 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (BMW) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC1LT3

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (BMW) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC1LT3																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Reference Baseline)	Alternative PC1LT3	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC1LT3	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC1LT3	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC1LT3	Absolute	Percent
2022	0	0	0	0%	420	420	0	0%	0.4	0.4	0.0	0.0%	17	17	0.0	0.0%
2023	0	0	0	0%	524	524	0	0%	0.4	0.4	0.0	0.0%	18	18	0.0	0.0%
2024	0	0	0	0%	1,110	1,110	0	0%	0.4	0.4	0.0	0.0%	18	18	0.0	0.0%
2025	1	1	0	0%	1,576	1,576	0	0%	0.4	0.4	0.0	0.0%	18	18	0.0	0.0%
2026	0	0	0	0%	1,340	1,340	0	0%	0.4	0.4	0.0	0.0%	18	18	0.0	0.0%
2027	0	0	0	-2%	1,032	1,098	66	6%	0.4	0.4	0.0	0.0%	18	18	0.0	-0.2%
2028	0	0	0	4%	926	1,136	210	23%	0.4	0.4	0.0	-0.1%	19	19	0.0	-0.2%
2029	0	0	0	3%	943	1,226	284	30%	0.4	0.4	0.0	-0.1%	19	19	-0.1	-0.3%
2030	0	0	0	2%	1,131	1,444	314	28%	0.4	0.4	0.0	-0.1%	19	19	-0.1	-0.4%
2031	0	1	0	9%	1,286	1,485	199	15%	0.4	0.4	0.0	-0.1%	19	19	0.0	-0.2%

Table 804 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Ford) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC1LT3

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Ford) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC1LT3																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Reference Baseline)	Alternative PC1LT3	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC1LT3	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC1LT3	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC1LT3	Absolute	Percent
2022	0	0	0	0%	73	73	0	0%	1.6	1.6	0.0	0.0%	139	139	0.0	0.0%
2023	1	1	0	0%	787	787	0	0%	1.7	1.7	0.0	0.0%	151	151	0.0	0.0%
2024	3	3	0	0%	1,570	1,570	0	0%	1.7	1.7	0.0	0.0%	152	152	0.0	0.0%
2025	3	3	0	0%	1,663	1,663	0	0%	1.7	1.7	0.0	0.0%	149	149	0.0	0.0%
2026	3	3	0	0%	1,694	1,694	0	0%	1.7	1.7	0.0	0.0%	151	151	0.0	0.0%
2027	2	3	1	36%	1,360	1,858	498	37%	1.8	1.8	0.0	-0.2%	155	156	1.0	0.6%
2028	2	4	1	64%	1,266	2,078	812	64%	1.8	1.8	0.0	-0.4%	158	160	1.3	0.8%
2029	2	4	2	88%	1,157	2,183	1,026	89%	1.8	1.8	0.0	-0.5%	158	160	1.7	1.1%
2030	2	4	2	94%	1,059	2,070	1,011	95%	1.8	1.8	0.0	-0.6%	156	157	1.4	0.9%
2031	2	3	2	101%	982	2,081	1,099	112%	1.8	1.8	0.0	-0.8%	154	155	1.2	0.8%

Table 805 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (GM) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC1LT3

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (GM) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC1LT3																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Reference Baseline)	Alternative PC1LT3	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC1LT3	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC1LT3	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC1LT3	Absolute	Percent
2022	0	0	0	0%	269	269	0	0%	1.8	1.8	0.0	0.0%	125	125	0.0	0.0%
2023	0	0	0	0%	358	358	0	0%	1.9	1.9	0.0	0.0%	134	134	0.0	0.0%
2024	4	4	0	0%	1,880	1,880	0	0%	1.9	1.9	0.0	0.0%	138	138	0.0	0.0%
2025	5	5	0	0%	2,440	2,440	0	0%	1.9	1.9	0.0	0.0%	136	136	0.0	0.0%
2026	4	4	0	0%	2,349	2,349	0	0%	1.9	1.9	0.0	0.0%	137	137	0.0	0.0%
2027	4	5	1	17%	2,160	2,650	490	23%	1.9	1.9	0.0	-0.1%	141	142	0.9	0.7%
2028	4	5	1	17%	2,058	2,733	675	33%	2.0	2.0	0.0	-0.3%	144	145	0.6	0.4%
2029	4	5	1	22%	2,017	2,915	898	45%	2.0	2.0	0.0	-0.4%	144	145	0.7	0.5%
2030	4	5	1	23%	1,963	3,058	1,095	56%	2.0	2.0	0.0	-0.5%	142	142	0.5	0.3%
2031	4	6	3	72%	1,930	3,906	1,976	102%	1.9	1.9	0.0	-0.5%	140	143	3.1	2.2%

Table 806 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Honda) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC1LT3

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Honda) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC1LT3																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Reference Baseline)	Alternative PC1LT3	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC1LT3	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC1LT3	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC1LT3	Absolute	Percent
2022	0	0	0	0%	0	0	0	0%	1.5	1.5	0.0	0.0%	118	118	0.0	0.0%
2023	1	1	0	0%	560	560	0	0%	1.5	1.5	0.0	0.0%	125	125	0.0	0.0%
2024	1	1	0	0%	610	610	0	0%	1.5	1.5	0.0	0.0%	124	124	0.0	0.0%
2025	1	1	0	0%	1,040	1,040	0	0%	1.4	1.4	0.0	0.0%	119	119	0.0	0.0%
2026	2	2	0	0%	1,144	1,144	0	0%	1.4	1.4	0.0	0.0%	120	120	0.0	0.0%
2027	1	2	0	4%	1,001	1,038	37	4%	1.5	1.5	0.0	0.0%	123	124	0.0	0.0%
2028	2	2	0	4%	1,013	1,055	43	4%	1.5	1.5	0.0	-0.1%	126	126	0.0	0.0%
2029	2	2	0	7%	1,007	1,075	68	7%	1.5	1.5	0.0	-0.1%	126	126	0.0	0.0%
2030	1	2	0	7%	1,001	1,072	72	7%	1.5	1.5	0.0	-0.1%	124	124	0.0	0.0%
2031	1	1	0	0%	985	988	3	0%	1.5	1.5	0.0	0.0%	122	122	-0.1	-0.1%

Table 807 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Hyundai) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC1LT3

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Hyundai) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC1LT3																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Reference Baseline)	Alternative PC1LT3	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC1LT3	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC1LT3	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC1LT3	Absolute	Percent
2022	0	0	0	0%	0	0	0	0%	0.9	0.9	0.0	0.0%	21	21	0.0	0.0%
2023	0	0	0	0%	262	262	0	0%	0.9	0.9	0.0	0.0%	22	22	0.0	0.0%
2024	0	0	0	0%	458	458	0	0%	0.9	0.9	0.0	0.0%	21	21	0.0	0.0%
2025	1	1	0	0%	937	937	0	0%	0.9	0.9	0.0	0.0%	20	20	0.0	0.0%
2026	1	1	0	0%	1,000	1,000	0	0%	0.9	0.9	0.0	0.0%	21	21	0.0	0.0%
2027	1	1	0	19%	923	1,094	171	19%	0.9	0.9	0.0	0.0%	21	21	0.0	-0.1%
2028	1	1	0	28%	839	1,076	236	28%	0.9	0.9	0.0	0.0%	21	21	0.0	-0.1%
2029	1	1	0	48%	775	1,145	370	48%	0.9	0.9	0.0	-0.1%	21	21	0.2	0.9%
2030	1	1	0	56%	798	1,245	448	56%	0.9	0.9	0.0	0.0%	21	21	0.2	0.9%
2031	1	1	0	52%	875	1,327	452	52%	0.9	0.9	0.0	0.1%	21	21	0.2	1.2%

Table 808 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (KIA) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC1LT3

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (KIA) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC1LT3																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Reference Baseline)	Alternative PC1LT3	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC1LT3	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC1LT3	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC1LT3	Absolute	Percent
2022	0	0	0	0%	0	0	0	0%	0.6	0.6	0.0	0.0%	24	24	0.0	0.0%
2023	0	0	0	0%	132	132	0	0%	0.6	0.6	0.0	0.0%	26	26	0.0	0.0%
2024	0	0	0	0%	375	375	0	0%	0.6	0.6	0.0	0.0%	26	26	0.0	0.0%
2025	0	0	0	0%	514	514	0	0%	0.6	0.6	0.0	0.0%	24	24	0.0	0.0%
2026	0	0	0	0%	677	677	0	0%	0.6	0.6	0.0	0.0%	25	25	0.0	0.0%
2027	0	0	0	-1%	639	768	129	20%	0.6	0.6	0.0	0.0%	25	25	0.0	-0.1%
2028	0	1	0	47%	634	1,026	393	62%	0.6	0.6	0.0	0.0%	26	26	0.0	0.0%
2029	0	1	0	68%	588	1,171	583	99%	0.6	0.6	0.0	-0.1%	26	26	0.0	0.0%
2030	0	1	0	109%	631	1,319	687	109%	0.6	0.6	0.0	-0.1%	25	26	0.2	0.9%
2031	0	1	0	97%	716	1,412	696	97%	0.6	0.6	0.0	0.0%	25	25	0.3	1.2%

Table 809 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (JLR) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC1LT3

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (JLR) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC1LT3																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Reference Baseline)	Alternative PC1LT3	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC1LT3	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC1LT3	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC1LT3	Absolute	Percent
2022	0	0	0	0%	478	478	0	0%	0.1	0.1	0.0	0.0%	1	1	0.0	0.0%
2023	0	0	0	0%	1,565	1,565	0	0%	0.1	0.1	0.0	0.0%	1	1	0.0	0.0%
2024	0	0	0	0%	2,130	2,130	0	0%	0.1	0.1	0.0	0.0%	1	1	0.0	0.0%
2025	0	0	0	0%	2,156	2,156	0	0%	0.1	0.1	0.0	0.0%	1	1	0.0	0.0%
2026	0	0	0	0%	1,449	1,449	0	0%	0.1	0.1	0.0	0.0%	1	1	0.0	0.0%
2027	0	0	0	0%	980	1,021	41	4%	0.1	0.1	0.0	-0.2%	1	1	0.0	-0.2%
2028	0	0	0	0%	850	1,239	389	46%	0.1	0.1	0.0	-0.4%	1	1	0.0	-0.4%
2029	0	0	0	0%	697	1,445	747	107%	0.1	0.1	0.0	-0.5%	1	1	0.0	-0.5%
2030	0	0	0	14%	749	1,719	970	130%	0.1	0.1	0.0	-0.7%	1	1	0.0	-0.7%
2031	0	0	0	317%	752	3,697	2,945	392%	0.1	0.1	0.0	-0.9%	1	1	0.0	-0.9%

Table 810 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Karma) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC1LT3

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Karma) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC1LT3																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Reference Baseline)	Alternative PC1LT3	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC1LT3	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC1LT3	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC1LT3	Absolute	Percent
2022	0	0	0	0%	0	0	0	0%	0.0	0.0	0.0	0.0%	0	0	0.0	0.0%
2023	0	0	0	0%	0	0	0	0%	0.0	0.0	0.0	0.0%	0	0	0.0	0.0%
2024	0	0	0	0%	0	0	0	0%	0.0	0.0	0.0	0.0%	0	0	0.0	0.0%
2025	0	0	0	0%	0	0	0	0%	0.0	0.0	0.0	0.0%	0	0	0.0	0.0%
2026	0	0	0	0%	-3,300	-3,300	0	0%	0.0	0.0	0.0	0.0%	0	0	0.0	0.0%
2027	0	0	0	0%	-3,693	-3,693	0	0%	0.0	0.0	0.0	0.0%	0	0	0.0	0.0%
2028	0	0	0	0%	-3,948	-3,948	0	0%	0.0	0.0	0.0	0.0%	0	0	0.0	0.0%
2029	0	0	0	0%	-4,296	-4,296	0	0%	0.0	0.0	0.0	0.0%	0	0	0.0	0.0%
2030	0	0	0	0%	-4,602	-4,602	0	0%	0.0	0.0	0.0	0.0%	0	0	0.0	0.0%
2031	0	0	0	0%	-4,776	-4,776	0	0%	0.0	0.0	0.0	0.0%	0	0	0.0	0.0%

Table 811 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Lucid) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC1LT3

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Lucid) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC1LT3																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Reference Baseline)	Alternative PC1LT3	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC1LT3	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC1LT3	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC1LT3	Absolute	Percent
2022	0	0	0	0%	0	0	0	0%	0.0	0.0	0.0	0.0%	0	0	0.0	0.0%
2023	0	0	0	0%	0	0	0	0%	0.0	0.0	0.0	0.0%	0	0	0.0	0.0%
2024	0	0	0	0%	0	0	0	0%	0.0	0.0	0.0	0.0%	0	0	0.0	0.0%
2025	0	0	0	0%	0	0	0	0%	0.0	0.0	0.0	0.0%	0	0	0.0	0.0%
2026	0	0	0	0%	0	0	0	0%	0.0	0.0	0.0	0.0%	0	0	0.0	0.0%
2027	0	0	0	0%	0	0	0	0%	0.0	0.0	0.0	0.1%	0	0	0.0	0.1%
2028	0	0	0	0%	0	0	0	0%	0.0	0.0	0.0	0.3%	0	0	0.0	0.3%
2029	0	0	0	0%	0	0	0	0%	0.0	0.0	0.0	0.3%	0	0	0.0	0.3%
2030	0	0	0	0%	0	0	0	0%	0.0	0.0	0.0	0.4%	0	0	0.0	0.4%
2031	0	0	0	0%	0	0	0	0%	0.0	0.0	0.0	0.7%	0	0	0.0	0.7%

Table 812 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Mazda) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC1LT3

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Mazda) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC1LT3																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Reference Baseline)	Alternative PC1LT3	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC1LT3	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC1LT3	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC1LT3	Absolute	Percent
2022	0	0	0	0%	0	0	0	0%	0.2	0.2	0.0	0.0%	2	2	0.0	0.0%
2023	0	0	0	0%	1,102	1,102	0	0%	0.2	0.2	0.0	0.0%	2	2	0.0	0.0%
2024	0	0	0	0%	1,198	1,198	0	0%	0.2	0.2	0.0	0.0%	2	2	0.0	0.0%
2025	0	0	0	0%	1,281	1,281	0	0%	0.2	0.2	0.0	0.0%	2	2	0.0	0.0%
2026	0	0	0	0%	1,354	1,354	0	0%	0.2	0.2	0.0	0.0%	2	2	0.0	0.0%
2027	0	0	0	1%	1,212	1,231	19	2%	0.2	0.2	0.0	-0.2%	2	2	0.0	-0.1%
2028	0	0	0	-3%	1,272	1,239	-33	-3%	0.2	0.2	0.0	-0.3%	2	2	0.0	-0.3%
2029	0	0	0	-2%	1,316	1,289	-26	-2%	0.2	0.2	0.0	-0.4%	2	2	0.0	-0.4%
2030	0	0	0	-2%	1,378	1,351	-27	-2%	0.2	0.2	0.0	-0.6%	2	2	0.0	-0.5%
2031	0	0	0	-10%	1,436	1,301	-135	-9%	0.2	0.2	0.0	-0.7%	2	2	0.0	-0.7%

Table 813 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Mercedes-Benz) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC1LT3

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Mercedes-Benz) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC1LT3																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Reference Baseline)	Alternative PC1LT3	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC1LT3	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC1LT3	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC1LT3	Absolute	Percent
2022	0	0	0	0%	618	618	0	0%	0.3	0.3	0.0	0.0%	9	9	0.0	0.0%
2023	0	0	0	0%	925	925	0	0%	0.3	0.3	0.0	0.0%	9	9	0.0	0.0%
2024	0	0	0	0%	947	947	0	0%	0.3	0.3	0.0	0.0%	9	9	0.0	0.0%
2025	0	0	0	0%	1,358	1,358	0	0%	0.3	0.3	0.0	0.0%	9	9	0.0	0.0%
2026	0	0	0	0%	1,926	1,926	0	0%	0.3	0.3	0.0	0.0%	9	9	0.0	0.0%
2027	0	0	0	-7%	1,754	1,778	24	1%	0.3	0.3	0.0	0.0%	10	10	0.0	-0.2%
2028	0	0	0	-2%	1,442	1,588	146	10%	0.3	0.3	0.0	-0.1%	10	10	0.0	0.2%
2029	0	0	0	-3%	1,332	1,600	268	20%	0.3	0.3	0.0	-0.2%	10	10	0.0	0.1%
2030	0	0	0	8%	1,311	1,627	316	24%	0.3	0.3	0.0	-0.2%	10	10	0.0	-0.1%
2031	0	0	0	-1%	1,561	1,765	205	13%	0.3	0.3	0.0	-0.1%	10	10	-0.1	-0.5%

Table 814 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Mitsubishi) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC1LT3

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Mitsubishi) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC1LT3																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Reference Baseline)	Alternative PC1LT3	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC1LT3	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC1LT3	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC1LT3	Absolute	Percent
2022	0	0	0	0%	217	217	0	0%	0.1	0.1	0.0	0.0%	2	2	0.0	0.0%
2023	0	0	0	0%	233	233	0	0%	0.1	0.1	0.0	0.0%	2	2	0.0	0.0%
2024	0	0	0	0%	1,377	1,377	0	0%	0.1	0.1	0.0	0.0%	2	2	0.0	0.0%
2025	0	0	0	0%	2,723	2,723	0	0%	0.1	0.1	0.0	0.0%	2	2	0.0	0.0%
2026	0	0	0	0%	2,018	2,018	0	0%	0.1	0.1	0.0	0.0%	2	2	0.0	0.0%
2027	0	0	0	-1%	1,846	1,833	-13	-1%	0.1	0.1	0.0	0.0%	2	2	0.0	0.0%
2028	0	0	0	1%	1,616	1,631	15	1%	0.1	0.1	0.0	0.0%	2	2	0.0	0.0%
2029	0	0	0	1%	1,434	1,448	14	1%	0.1	0.1	0.0	-0.1%	2	2	0.0	-0.1%
2030	0	0	0	1%	1,279	1,298	19	1%	0.1	0.1	0.0	-0.1%	2	2	0.0	0.0%
2031	0	0	0	2%	1,154	1,176	22	2%	0.1	0.1	0.0	0.0%	2	2	0.0	0.1%

Table 815 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Nissan) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC1LT3

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Nissan) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC1LT3																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Reference Baseline)	Alternative PC1LT3	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC1LT3	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC1LT3	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC1LT3	Absolute	Percent
2022	0	0	0	0%	33	33	0	0%	1.0	1.0	0.0	0.0%	59	59	0.0	0.0%
2023	1	1	0	0%	651	651	0	0%	1.0	1.0	0.0	0.0%	62	62	0.0	0.0%
2024	1	1	0	0%	825	825	0	0%	1.0	1.0	0.0	0.0%	62	62	0.0	0.0%
2025	1	1	0	0%	1,227	1,227	0	0%	1.0	1.0	0.0	0.0%	60	60	0.0	0.0%
2026	1	1	0	0%	1,176	1,176	0	0%	1.0	1.0	0.0	0.0%	60	60	0.0	0.0%
2027	1	1	0	-2%	1,464	1,544	80	5%	1.0	1.0	0.0	0.0%	61	61	0.0	-0.1%
2028	1	2	0	23%	1,364	1,675	311	23%	1.0	1.0	0.0	0.0%	62	63	0.4	0.6%
2029	1	2	0	28%	1,254	1,644	390	31%	1.0	1.0	0.0	-0.1%	62	63	0.3	0.6%
2030	1	2	0	33%	1,233	1,635	403	33%	1.0	1.0	0.0	-0.1%	61	62	0.4	0.7%
2031	1	2	0	25%	1,238	1,552	315	25%	1.0	1.0	0.0	0.0%	61	61	0.4	0.6%

Table 816 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Stellantis) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC1LT3

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Stellantis) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC1LT3																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Reference Baseline)	Alternative PC1LT3	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC1LT3	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC1LT3	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC1LT3	Absolute	Percent
2022	0	0	0	0%	446	446	0	0%	1.6	1.6	0.0	0.0%	90	90	0.0	0.0%
2023	1	1	0	0%	898	898	0	0%	1.7	1.7	0.0	0.0%	100	100	0.0	0.0%
2024	3	3	0	0%	1,659	1,659	0	0%	1.7	1.7	0.0	0.0%	103	103	0.0	0.0%
2025	4	4	0	0%	2,479	2,479	0	0%	1.6	1.6	0.0	0.0%	103	103	0.0	0.0%
2026	3	3	0	0%	2,028	2,028	0	0%	1.7	1.7	0.0	0.0%	103	103	0.0	0.0%
2027	3	3	0	13%	1,596	1,812	217	14%	1.7	1.7	0.0	-0.2%	105	106	0.6	0.6%
2028	3	3	0	15%	1,492	1,968	476	32%	1.8	1.7	0.0	-0.4%	107	108	0.5	0.4%
2029	3	3	1	24%	1,470	1,982	511	35%	1.8	1.7	0.0	-0.4%	107	108	0.8	0.8%
2030	2	3	1	32%	1,406	2,208	802	57%	1.7	1.7	0.0	-0.6%	105	106	1.0	1.0%
2031	3	3	1	29%	1,476	2,329	853	58%	1.7	1.7	0.0	-0.7%	104	105	0.8	0.8%

Table 817 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Subaru) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC1LT3

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Subaru) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC1LT3																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Reference Baseline)	Alternative PC1LT3	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC1LT3	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC1LT3	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC1LT3	Absolute	Percent
2022	0	0	0	0%	0	0	0	0%	0.7	0.7	0.0	0.0%	39	39	0.0	0.0%
2023	0	0	0	0%	460	460	0	0%	0.8	0.8	0.0	0.0%	42	42	0.0	0.0%
2024	0	0	0	0%	494	494	0	0%	0.8	0.8	0.0	0.0%	42	42	0.0	0.0%
2025	0	0	0	0%	638	638	0	0%	0.8	0.8	0.0	0.0%	40	40	0.0	0.0%
2026	1	1	0	0%	757	757	0	0%	0.8	0.8	0.0	0.0%	41	41	0.0	0.0%
2027	1	1	0	-3%	841	815	-26	-3%	0.8	0.8	0.0	-0.2%	42	42	-0.1	-0.2%
2028	1	1	0	-4%	970	934	-36	-4%	0.8	0.8	0.0	-0.3%	43	43	-0.2	-0.4%
2029	1	1	0	-4%	1,059	1,018	-41	-4%	0.8	0.8	0.0	-0.4%	43	43	-0.2	-0.5%
2030	1	1	0	-5%	1,154	1,105	-48	-4%	0.8	0.8	0.0	-0.6%	43	43	-0.3	-0.6%
2031	1	1	0	-11%	1,227	1,105	-123	-10%	0.8	0.8	0.0	-0.7%	42	42	-0.3	-0.8%

Table 818 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Tesla) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC1LT3

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Tesla) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC1LT3																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Reference Baseline)	Alternative PC1LT3	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC1LT3	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC1LT3	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC1LT3	Absolute	Percent
2022	0	0	0	0%	0	0	0	0%	0.5	0.5	0.0	0.0%	59	59	0.0	0.0%
2023	0	0	0	0%	7	7	0	0%	0.5	0.5	0.0	0.0%	60	60	0.0	0.0%
2024	0	0	0	0%	11	11	0	0%	0.5	0.5	0.0	0.0%	59	59	0.0	0.0%
2025	0	0	0	0%	16	16	0	0%	0.5	0.5	0.0	0.0%	55	55	0.0	0.0%
2026	0	0	0	0%	16	16	0	0%	0.5	0.5	0.0	0.0%	55	55	0.0	0.0%
2027	0	0	0	-99%	15	0	-15	-99%	0.5	0.5	0.0	0.1%	56	56	0.1	0.1%
2028	0	0	0	-100%	15	0	-15	-100%	0.5	0.5	0.0	0.3%	56	56	0.1	0.2%
2029	0	0	0	-100%	15	0	-15	-100%	0.5	0.5	0.0	0.3%	56	56	0.1	0.2%
2030	0	0	0	-100%	15	0	-15	-100%	0.5	0.5	0.0	0.4%	55	56	0.2	0.4%
2031	0	0	0	-100%	15	0	-15	-100%	0.5	0.5	0.0	0.8%	54	55	0.4	0.7%

Table 819 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Toyota) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC1LT3

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Toyota) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC1LT3																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Reference Baseline)	Alternative PC1LT3	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC1LT3	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC1LT3	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC1LT3	Absolute	Percent
2022	0	0	0	0%	0	0	0	0%	2.4	2.4	0.0	0.0%	165	165	0.0	0.0%
2023	1	1	0	0%	234	234	0	0%	2.5	2.5	0.0	0.0%	173	173	0.0	0.0%
2024	1	1	0	0%	492	492	0	0%	2.5	2.5	0.0	0.0%	173	173	0.0	0.0%
2025	2	2	0	0%	644	644	0	0%	2.4	2.4	0.0	0.0%	166	166	0.0	0.0%
2026	2	2	0	0%	963	963	0	0%	2.4	2.4	0.0	0.0%	168	168	0.0	0.0%
2027	2	2	0	-3%	662	641	-20	-3%	2.5	2.5	0.0	-0.1%	172	172	-0.2	-0.1%
2028	2	2	0	-1%	732	724	-8	-1%	2.5	2.5	0.0	-0.2%	176	176	-0.3	-0.2%
2029	2	2	0	2%	798	819	21	3%	2.5	2.5	0.0	-0.2%	176	176	-0.3	-0.2%
2030	2	2	0	6%	865	918	53	6%	2.5	2.5	0.0	-0.3%	174	173	-0.4	-0.2%
2031	2	2	0	0%	928	932	4	0%	2.4	2.4	0.0	-0.3%	172	171	-0.5	-0.3%

Table 820 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Volvo) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC1LT3

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Volvo) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC1LT3																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Reference Baseline)	Alternative PC1LT3	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC1LT3	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC1LT3	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC1LT3	Absolute	Percent
2022	0	0	0	0%	0	0	0	0%	0.1	0.1	0.0	0.0%	3	3	0.0	0.0%
2023	0	0	0	0%	140	140	0	0%	0.1	0.1	0.0	0.0%	3	3	0.0	0.0%
2024	0	0	0	0%	195	195	0	0%	0.1	0.1	0.0	0.0%	3	3	0.0	0.0%
2025	0	0	0	0%	1,128	1,128	0	0%	0.1	0.1	0.0	0.0%	3	3	0.0	0.0%
2026	0	0	0	0%	1,041	1,041	0	0%	0.1	0.1	0.0	0.0%	3	3	0.0	0.0%
2027	0	0	0	-8%	677	622	-55	-8%	0.1	0.1	0.0	-0.1%	3	3	0.0	-0.1%
2028	0	0	0	-10%	531	554	23	4%	0.1	0.1	0.0	-0.2%	3	3	0.0	-0.1%
2029	0	0	0	-15%	363	632	269	74%	0.1	0.1	0.0	-0.3%	3	3	0.0	-0.2%
2030	0	0	0	177%	219	609	390	178%	0.1	0.1	0.0	-0.4%	3	3	0.0	-0.1%
2031	0	0	0	312%	115	689	575	501%	0.1	0.1	0.0	-0.4%	3	3	0.0	0.0%

Table 821 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (VWA) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC1LT3

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (VWA) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC1LT3																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Reference Baseline)	Alternative PC1LT3	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC1LT3	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC1LT3	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC1LT3	Absolute	Percent
2022	0	0	0	0%	283	283	0	0%	0.6	0.6	0.0	0.0%	8	8	0.0	0.0%
2023	0	0	0	0%	647	647	0	0%	0.6	0.6	0.0	0.0%	8	8	0.0	0.0%
2024	1	1	0	0%	946	946	0	0%	0.6	0.6	0.0	0.0%	8	8	0.0	0.0%
2025	1	1	0	0%	1,142	1,142	0	0%	0.6	0.6	0.0	0.0%	8	8	0.0	0.0%
2026	1	1	0	0%	1,138	1,138	0	0%	0.6	0.6	0.0	0.0%	8	8	0.0	0.0%
2027	1	1	0	3%	817	938	120	15%	0.6	0.6	0.0	-0.1%	8	8	0.0	-0.1%
2028	1	1	0	17%	776	1,176	400	52%	0.7	0.6	0.0	-0.2%	8	8	0.0	-0.2%
2029	0	1	0	21%	743	1,317	573	77%	0.7	0.6	0.0	-0.2%	8	8	0.0	-0.2%
2030	1	1	0	41%	875	1,585	710	81%	0.6	0.6	0.0	-0.3%	8	8	0.0	-0.3%
2031	1	1	0	41%	1,042	1,658	616	59%	0.6	0.6	0.0	-0.3%	8	8	0.0	-0.3%

Table 822 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Total) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC2LT4

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Total) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC2LT4																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Reference Baseline)	Alternative PC2LT4	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC2LT4	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC2LT4	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC2LT4	Absolute	Percent
2022	0	0	0	0%	132	132	0	0%	14.4	14.4	0.0	0.0%	880	880	0.0	0.0%
2023	7	7	0	0%	503	503	0	0%	15.2	15.2	0.0	0.0%	937	937	0.0	0.0%
2024	15	15	0	0%	997	997	0	0%	15.1	15.1	0.0	0.0%	944	944	0.0	0.0%
2025	20	20	0	0%	1,362	1,362	0	0%	14.5	14.5	0.0	0.0%	915	915	0.0	0.0%
2026	20	20	0	0%	1,376	1,376	0	0%	14.6	14.6	0.0	0.0%	922	922	0.0	0.0%
2027	18	20	2	14%	1,185	1,410	225	19%	15.1	15.0	0.0	-0.1%	946	949	2.5	0.3%
2028	18	22	5	27%	1,144	1,594	449	39%	15.4	15.3	0.0	-0.3%	966	969	2.8	0.3%
2029	17	24	6	38%	1,120	1,738	618	55%	15.4	15.3	-0.1	-0.4%	966	969	3.5	0.4%
2030	17	26	9	53%	1,119	1,975	856	77%	15.1	15.1	-0.1	-0.6%	951	957	5.5	0.6%
2031	17	28	10	61%	1,149	2,141	992	86%	14.9	14.9	-0.1	-0.6%	940	947	7.0	0.7%

Table 823 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Total) Passenger Car Fleet Between No Action Alternative (Reference Baseline) and Alternative PC2LT4

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Total) Passenger Car Fleet Between No Action Alternative (Reference Baseline) and Alternative PC2LT4																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Reference Baseline)	Alternative PC2LT4	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC2LT4	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC2LT4	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC2LT4	Absolute	Percent
2022	0	0	0	0%	152	152	0	0%	5.5	5.5	0.0	0.0%	298	298	0.0	0.0%
2023	2	2	0	0%	434	434	0	0%	5.6	5.6	0.0	0.0%	305	305	0.0	0.0%
2024	5	5	0	0%	862	862	0	0%	5.5	5.5	0.0	0.0%	302	302	0.0	0.0%
2025	6	6	0	0%	1,093	1,093	0	0%	5.1	5.1	0.0	0.0%	281	281	0.0	0.0%
2026	5	5	0	0%	1,047	1,047	0	0%	5.0	5.0	0.0	0.0%	279	279	0.0	0.0%
2027	5	5	0	5%	1,007	1,135	127	13%	5.1	5.1	0.0	0.1%	285	285	0.5	0.2%
2028	5	6	1	16%	924	1,202	278	30%	5.2	5.2	0.0	0.2%	287	288	0.7	0.3%
2029	4	6	2	34%	866	1,337	471	54%	5.2	5.2	0.0	-0.1%	286	287	0.4	0.1%
2030	4	6	2	40%	836	1,342	506	61%	5.1	5.1	0.0	0.5%	282	284	2.3	0.8%
2031	4	6	2	36%	834	1,284	450	54%	5.0	5.1	0.0	1.0%	277	280	3.3	1.2%

Table 824 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Total) Light Truck Fleet Between No Action Alternative (Reference Baseline) and Alternative PC2LT4

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Total) Light Truck Fleet Between No Action Alternative (Reference Baseline) and Alternative PC2LT4																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Reference Baseline)	Alternative PC2LT4	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC2LT4	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC2LT4	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC2LT4	Absolute	Percent
2022	0	0	0	0%	119	119	0	0%	9.0	9.0	0.0	0.0%	583	583	0.0	0.0%
2023	5	5	0	0%	543	543	0	0%	9.6	9.6	0.0	0.0%	632	632	0.0	0.0%
2024	10	10	0	0%	1,074	1,074	0	0%	9.7	9.7	0.0	0.0%	642	642	0.0	0.0%
2025	14	14	0	0%	1,506	1,506	0	0%	9.5	9.5	0.0	0.0%	634	634	0.0	0.0%
2026	15	15	0	0%	1,548	1,548	0	0%	9.6	9.6	0.0	0.0%	643	643	0.0	0.0%
2027	13	15	2	18%	1,277	1,553	276	22%	9.9	9.9	0.0	-0.2%	662	664	2.0	0.3%
2028	13	17	4	31%	1,257	1,795	538	43%	10.2	10.1	-0.1	-0.5%	679	681	2.1	0.3%
2029	13	18	5	39%	1,249	1,942	694	56%	10.2	10.1	-0.1	-0.6%	679	682	3.1	0.5%
2030	13	20	7	57%	1,263	2,302	1,039	82%	10.0	9.9	-0.1	-1.2%	670	673	3.2	0.5%
2031	13	22	9	68%	1,308	2,585	1,277	98%	9.9	9.8	-0.1	-1.5%	663	666	3.6	0.5%

Table 825 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (BMW) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC2LT4

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (BMW) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC2LT4																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Reference Baseline)	Alternative PC2LT4	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC2LT4	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC2LT4	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC2LT4	Absolute	Percent
2022	0	0	0	0%	420	420	0	0%	0.4	0.4	0.0	0.0%	17	17	0.0	0.0%
2023	0	0	0	0%	524	524	0	0%	0.4	0.4	0.0	0.0%	18	18	0.0	0.0%
2024	0	0	0	0%	1,110	1,110	0	0%	0.4	0.4	0.0	0.0%	18	18	0.0	0.0%
2025	1	1	0	0%	1,576	1,576	0	0%	0.4	0.4	0.0	0.0%	18	18	0.0	0.0%
2026	0	0	0	0%	1,340	1,340	0	0%	0.4	0.4	0.0	0.0%	18	18	0.0	0.0%
2027	0	0	0	-1%	1,032	1,151	118	11%	0.4	0.4	0.0	-0.1%	18	18	0.0	-0.2%
2028	0	0	0	7%	926	1,240	314	34%	0.4	0.4	0.0	-0.2%	19	19	0.0	-0.2%
2029	0	0	0	7%	943	1,378	435	46%	0.4	0.4	0.0	-0.3%	19	19	-0.1	-0.3%
2030	0	0	0	7%	1,131	1,658	528	47%	0.4	0.4	0.0	-0.3%	19	19	-0.1	-0.7%
2031	0	1	0	13%	1,286	1,741	456	35%	0.4	0.4	0.0	-0.3%	19	18	-0.1	-0.6%

Table 826 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Ford) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC2LT4

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Ford) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC2LT4																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Reference Baseline)	Alternative PC2LT4	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC2LT4	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC2LT4	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC2LT4	Absolute	Percent
2022	0	0	0	0%	73	73	0	0%	1.6	1.6	0.0	0.0%	139	139	0.0	0.0%
2023	1	1	0	0%	787	787	0	0%	1.7	1.7	0.0	0.0%	151	151	0.0	0.0%
2024	3	3	0	0%	1,570	1,570	0	0%	1.7	1.7	0.0	0.0%	152	152	0.0	0.0%
2025	3	3	0	0%	1,663	1,663	0	0%	1.7	1.7	0.0	0.0%	149	149	0.0	0.0%
2026	3	3	0	0%	1,694	1,694	0	0%	1.7	1.7	0.0	0.0%	151	151	0.0	0.0%
2027	2	3	1	39%	1,360	1,889	529	39%	1.8	1.8	0.0	-0.2%	155	156	1.0	0.6%
2028	2	4	2	66%	1,266	2,109	842	67%	1.8	1.8	0.0	-0.5%	158	160	1.3	0.8%
2029	2	4	2	90%	1,157	2,213	1,056	91%	1.8	1.8	0.0	-0.5%	158	160	1.7	1.1%
2030	2	4	2	96%	1,059	2,226	1,167	110%	1.8	1.8	0.0	-1.0%	156	157	0.9	0.6%
2031	2	4	2	102%	982	2,442	1,460	149%	1.8	1.8	0.0	-1.2%	154	154	0.5	0.3%

Table 827 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (GM) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC2LT4

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (GM) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC2LT4																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Reference Baseline)	Alternative PC2LT4	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC2LT4	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC2LT4	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC2LT4	Absolute	Percent
2022	0	0	0	0%	269	269	0	0%	1.8	1.8	0.0	0.0%	125	125	0.0	0.0%
2023	0	0	0	0%	358	358	0	0%	1.9	1.9	0.0	0.0%	134	134	0.0	0.0%
2024	4	4	0	0%	1,880	1,880	0	0%	1.9	1.9	0.0	0.0%	138	138	0.0	0.0%
2025	5	5	0	0%	2,440	2,440	0	0%	1.9	1.9	0.0	0.0%	136	136	0.0	0.0%
2026	4	4	0	0%	2,349	2,349	0	0%	1.9	1.9	0.0	0.0%	137	137	0.0	0.0%
2027	4	5	1	17%	2,160	2,698	539	25%	1.9	1.9	0.0	-0.2%	141	142	0.9	0.6%
2028	4	5	1	17%	2,058	2,864	805	39%	2.0	2.0	0.0	-0.4%	144	144	0.5	0.4%
2029	4	5	1	27%	2,017	3,173	1,155	57%	2.0	2.0	0.0	-0.5%	144	144	0.6	0.4%
2030	4	5	1	27%	1,963	3,385	1,422	72%	2.0	1.9	0.0	-0.8%	142	142	0.0	0.0%
2031	4	7	3	77%	1,930	4,314	2,385	124%	1.9	1.9	0.0	-0.9%	140	142	2.6	1.8%

Table 828 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Honda) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC2LT4

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Honda) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC2LT4																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Reference Baseline)	Alternative PC2LT4	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC2LT4	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC2LT4	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC2LT4	Absolute	Percent
2022	0	0	0	0%	0	0	0	0%	1.5	1.5	0.0	0.0%	118	118	0.0	0.0%
2023	1	1	0	0%	560	560	0	0%	1.5	1.5	0.0	0.0%	125	125	0.0	0.0%
2024	1	1	0	0%	610	610	0	0%	1.5	1.5	0.0	0.0%	124	124	0.0	0.0%
2025	1	1	0	0%	1,040	1,040	0	0%	1.4	1.4	0.0	0.0%	119	119	0.0	0.0%
2026	2	2	0	0%	1,144	1,144	0	0%	1.4	1.4	0.0	0.0%	120	120	0.0	0.0%
2027	1	2	0	11%	1,001	1,108	107	11%	1.5	1.5	0.0	-0.1%	123	124	0.3	0.2%
2028	2	2	0	15%	1,013	1,172	159	16%	1.5	1.5	0.0	-0.2%	126	126	0.1	0.0%
2029	2	2	0	19%	1,007	1,197	190	19%	1.5	1.5	0.0	-0.3%	126	126	0.0	0.0%
2030	1	2	0	28%	1,001	1,287	286	29%	1.5	1.5	0.0	-0.3%	124	124	0.3	0.2%
2031	1	2	0	20%	985	1,184	200	20%	1.5	1.5	0.0	-0.3%	122	122	0.1	0.1%

Table 829 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Hyundai) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC2LT4

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Hyundai) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC2LT4																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Reference Baseline)	Alternative PC2LT4	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC2LT4	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC2LT4	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC2LT4	Absolute	Percent
2022	0	0	0	0%	0	0	0	0%	0.9	0.9	0.0	0.0%	21	21	0.0	0.0%
2023	0	0	0	0%	262	262	0	0%	0.9	0.9	0.0	0.0%	22	22	0.0	0.0%
2024	0	0	0	0%	458	458	0	0%	0.9	0.9	0.0	0.0%	21	21	0.0	0.0%
2025	1	1	0	0%	937	937	0	0%	0.9	0.9	0.0	0.0%	20	20	0.0	0.0%
2026	1	1	0	0%	1,000	1,000	0	0%	0.9	0.9	0.0	0.0%	21	21	0.0	0.0%
2027	1	1	0	38%	923	1,273	349	38%	0.9	0.9	0.0	-0.1%	21	21	0.0	-0.1%
2028	1	1	0	49%	839	1,252	413	49%	0.9	0.9	0.0	-0.1%	21	21	0.0	-0.2%
2029	1	1	1	81%	775	1,411	635	82%	0.9	0.9	0.0	-0.3%	21	21	0.2	0.9%
2030	1	1	1	87%	798	1,492	694	87%	0.9	0.9	0.0	-0.2%	21	21	0.2	1.0%
2031	1	1	1	77%	875	1,551	676	77%	0.9	0.9	0.0	-0.1%	21	21	0.2	1.0%

Table 830 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (KIA) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC2LT4

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (KIA) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC2LT4																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Reference Baseline)	Alternative PC2LT4	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC2LT4	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC2LT4	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC2LT4	Absolute	Percent
2022	0	0	0	0%	0	0	0	0%	0.6	0.6	0.0	0.0%	24	24	0.0	0.0%
2023	0	0	0	0%	132	132	0	0%	0.6	0.6	0.0	0.0%	26	26	0.0	0.0%
2024	0	0	0	0%	375	375	0	0%	0.6	0.6	0.0	0.0%	26	26	0.0	0.0%
2025	0	0	0	0%	514	514	0	0%	0.6	0.6	0.0	0.0%	24	24	0.0	0.0%
2026	0	0	0	0%	677	677	0	0%	0.6	0.6	0.0	0.0%	25	25	0.0	0.0%
2027	0	0	0	-1%	639	834	195	30%	0.6	0.6	0.0	-0.1%	25	25	0.0	-0.1%
2028	0	1	0	120%	634	1,583	950	150%	0.6	0.6	0.0	-0.2%	26	26	0.0	0.0%
2029	0	1	1	205%	588	2,138	1,550	264%	0.6	0.6	0.0	-0.3%	26	26	0.0	0.0%
2030	0	3	2	603%	631	4,517	3,886	616%	0.6	0.6	0.0	-0.3%	25	29	3.2	12.7%
2031	0	3	2	505%	716	4,340	3,624	506%	0.6	0.6	0.0	-0.2%	25	28	3.0	11.9%

Table 831 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (JLR) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC2LT4

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (JLR) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC2LT4																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Reference Baseline)	Alternative PC2LT4	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC2LT4	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC2LT4	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC2LT4	Absolute	Percent
2022	0	0	0	0%	478	478	0	0%	0.1	0.1	0.0	0.0%	1	1	0.0	0.0%
2023	0	0	0	0%	1,565	1,565	0	0%	0.1	0.1	0.0	0.0%	1	1	0.0	0.0%
2024	0	0	0	0%	2,130	2,130	0	0%	0.1	0.1	0.0	0.0%	1	1	0.0	0.0%
2025	0	0	0	0%	2,156	2,156	0	0%	0.1	0.1	0.0	0.0%	1	1	0.0	0.0%
2026	0	0	0	0%	1,449	1,449	0	0%	0.1	0.1	0.0	0.0%	1	1	0.0	0.0%
2027	0	0	0	0%	980	1,079	99	10%	0.1	0.1	0.0	-0.2%	1	1	0.0	-0.2%
2028	0	0	0	-1%	850	1,389	539	63%	0.1	0.1	0.0	-0.5%	1	1	0.0	-0.5%
2029	0	0	0	0%	697	1,665	967	139%	0.1	0.1	0.0	-0.6%	1	1	0.0	-0.6%
2030	0	0	0	14%	749	2,025	1,276	170%	0.1	0.1	0.0	-1.1%	1	1	0.0	-1.1%
2031	0	0	0	317%	752	4,106	3,355	446%	0.1	0.1	0.0	-1.4%	1	1	0.0	-1.4%

Table 832 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Karma) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC2LT4

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Karma) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC2LT4																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Reference Baseline)	Alternative PC2LT4	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC2LT4	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC2LT4	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC2LT4	Absolute	Percent
2022	0	0	0	0%	0	0	0	0%	0.0	0.0	0.0	0.0%	0	0	0.0	0.0%
2023	0	0	0	0%	0	0	0	0%	0.0	0.0	0.0	0.0%	0	0	0.0	0.0%
2024	0	0	0	0%	0	0	0	0%	0.0	0.0	0.0	0.0%	0	0	0.0	0.0%
2025	0	0	0	0%	0	0	0	0%	0.0	0.0	0.0	0.0%	0	0	0.0	0.0%
2026	0	0	0	0%	-3,300	-3,300	0	0%	0.0	0.0	0.0	0.0%	0	0	0.0	0.0%
2027	0	0	0	0%	-3,693	-3,693	0	0%	0.0	0.0	0.0	0.0%	0	0	0.0	0.0%
2028	0	0	0	0%	-3,948	-3,948	0	0%	0.0	0.0	0.0	0.0%	0	0	0.0	0.0%
2029	0	0	0	0%	-4,296	-4,296	0	0%	0.0	0.0	0.0	0.0%	0	0	0.0	0.0%
2030	0	0	0	0%	-4,602	-4,602	0	0%	0.0	0.0	0.0	0.0%	0	0	0.0	0.0%
2031	0	0	0	0%	-4,776	-4,776	0	0%	0.0	0.0	0.0	0.0%	0	0	0.0	0.0%

Table 833 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Lucid) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC2LT4

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Lucid) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC2LT4																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Reference Baseline)	Alternative PC2LT4	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC2LT4	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC2LT4	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC2LT4	Absolute	Percent
2022	0	0	0	0%	0	0	0	0%	0.0	0.0	0.0	0.0%	0	0	0.0	0.0%
2023	0	0	0	0%	0	0	0	0%	0.0	0.0	0.0	0.0%	0	0	0.0	0.0%
2024	0	0	0	0%	0	0	0	0%	0.0	0.0	0.0	0.0%	0	0	0.0	0.0%
2025	0	0	0	0%	0	0	0	0%	0.0	0.0	0.0	0.0%	0	0	0.0	0.0%
2026	0	0	0	0%	0	0	0	0%	0.0	0.0	0.0	0.0%	0	0	0.0	0.0%
2027	0	0	0	0%	0	0	0	0%	0.0	0.0	0.0	0.1%	0	0	0.0	0.1%
2028	0	0	0	0%	0	0	0	0%	0.0	0.0	0.0	0.1%	0	0	0.0	0.1%
2029	0	0	0	0%	0	0	0	0%	0.0	0.0	0.0	-0.2%	0	0	0.0	-0.2%
2030	0	0	0	0%	0	0	0	0%	0.0	0.0	0.0	0.4%	0	0	0.0	0.4%
2031	0	0	0	0%	0	0	0	0%	0.0	0.0	0.0	0.9%	0	0	0.0	0.9%

Table 834 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Mazda) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC2LT4

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Mazda) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC2LT4																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Reference Baseline)	Alternative PC2LT4	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC2LT4	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC2LT4	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC2LT4	Absolute	Percent
2022	0	0	0	0%	0	0	0	0%	0.2	0.2	0.0	0.0%	2	2	0.0	0.0%
2023	0	0	0	0%	1,102	1,102	0	0%	0.2	0.2	0.0	0.0%	2	2	0.0	0.0%
2024	0	0	0	0%	1,198	1,198	0	0%	0.2	0.2	0.0	0.0%	2	2	0.0	0.0%
2025	0	0	0	0%	1,281	1,281	0	0%	0.2	0.2	0.0	0.0%	2	2	0.0	0.0%
2026	0	0	0	0%	1,354	1,354	0	0%	0.2	0.2	0.0	0.0%	2	2	0.0	0.0%
2027	0	0	0	3%	1,212	1,257	45	4%	0.2	0.2	0.0	-0.2%	2	2	0.0	-0.1%
2028	0	0	0	-1%	1,272	1,285	13	1%	0.2	0.2	0.0	-0.4%	2	2	0.0	-0.3%
2029	0	0	0	19%	1,316	1,568	252	19%	0.2	0.2	0.0	-0.5%	2	2	0.0	-0.4%
2030	0	0	0	20%	1,378	1,667	289	21%	0.2	0.2	0.0	-0.9%	2	2	0.0	-0.9%
2031	0	0	0	10%	1,436	1,593	157	11%	0.2	0.2	0.0	-1.1%	2	2	0.0	-1.1%

Table 835 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Mercedes-Benz) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC2LT4

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Mercedes-Benz) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC2LT4																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Reference Baseline)	Alternative PC2LT4	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC2LT4	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC2LT4	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC2LT4	Absolute	Percent
2022	0	0	0	0%	618	618	0	0%	0.3	0.3	0.0	0.0%	9	9	0.0	0.0%
2023	0	0	0	0%	925	925	0	0%	0.3	0.3	0.0	0.0%	9	9	0.0	0.0%
2024	0	0	0	0%	947	947	0	0%	0.3	0.3	0.0	0.0%	9	9	0.0	0.0%
2025	0	0	0	0%	1,358	1,358	0	0%	0.3	0.3	0.0	0.0%	9	9	0.0	0.0%
2026	0	0	0	0%	1,926	1,926	0	0%	0.3	0.3	0.0	0.0%	9	9	0.0	0.0%
2027	0	0	0	-7%	1,754	1,818	64	4%	0.3	0.3	0.0	-0.1%	10	10	0.0	-0.2%
2028	0	0	0	-2%	1,442	1,671	229	16%	0.3	0.3	0.0	-0.2%	10	10	0.0	0.1%
2029	0	0	0	-3%	1,332	1,723	391	29%	0.3	0.3	0.0	-0.4%	10	10	0.0	0.0%
2030	0	0	0	7%	1,311	1,807	496	38%	0.3	0.3	0.0	-0.4%	10	10	0.0	-0.4%
2031	0	0	0	-1%	1,561	1,980	420	27%	0.3	0.3	0.0	-0.4%	10	10	-0.1	-1.0%

Table 836 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Mitsubishi) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC2LT4

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Mitsubishi) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC2LT4																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Reference Baseline)	Alternative PC2LT4	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC2LT4	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC2LT4	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC2LT4	Absolute	Percent
2022	0	0	0	0%	217	217	0	0%	0.1	0.1	0.0	0.0%	2	2	0.0	0.0%
2023	0	0	0	0%	233	233	0	0%	0.1	0.1	0.0	0.0%	2	2	0.0	0.0%
2024	0	0	0	0%	1,377	1,377	0	0%	0.1	0.1	0.0	0.0%	2	2	0.0	0.0%
2025	0	0	0	0%	2,723	2,723	0	0%	0.1	0.1	0.0	0.0%	2	2	0.0	0.0%
2026	0	0	0	0%	2,018	2,018	0	0%	0.1	0.1	0.0	0.0%	2	2	0.0	0.0%
2027	0	0	0	-1%	1,846	1,833	-13	-1%	0.1	0.1	0.0	-0.1%	2	2	0.0	-0.1%
2028	0	0	0	3%	1,616	1,662	46	3%	0.1	0.1	0.0	-0.2%	2	2	0.0	-0.1%
2029	0	0	0	3%	1,434	1,478	45	3%	0.1	0.1	0.0	-0.3%	2	2	0.0	-0.3%
2030	0	0	0	8%	1,279	1,387	108	8%	0.1	0.1	0.0	-0.3%	2	2	0.0	0.7%
2031	0	0	0	17%	1,154	1,353	199	17%	0.1	0.1	0.0	-0.2%	2	2	0.0	0.8%

Table 837 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Nissan) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC2LT4

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Nissan) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC2LT4																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Reference Baseline)	Alternative PC2LT4	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC2LT4	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC2LT4	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC2LT4	Absolute	Percent
2022	0	0	0	0%	33	33	0	0%	1.0	1.0	0.0	0.0%	59	59	0.0	0.0%
2023	1	1	0	0%	651	651	0	0%	1.0	1.0	0.0	0.0%	62	62	0.0	0.0%
2024	1	1	0	0%	825	825	0	0%	1.0	1.0	0.0	0.0%	62	62	0.0	0.0%
2025	1	1	0	0%	1,227	1,227	0	0%	1.0	1.0	0.0	0.0%	60	60	0.0	0.0%
2026	1	1	0	0%	1,176	1,176	0	0%	1.0	1.0	0.0	0.0%	60	60	0.0	0.0%
2027	1	1	0	-2%	1,464	1,578	114	8%	1.0	1.0	0.0	-0.1%	61	61	-0.1	-0.1%
2028	1	2	0	29%	1,364	1,809	445	33%	1.0	1.0	0.0	-0.2%	62	63	0.4	0.7%
2029	1	2	0	36%	1,254	1,916	662	53%	1.0	1.0	0.0	-0.3%	62	63	0.3	0.6%
2030	1	2	1	60%	1,233	1,979	746	61%	1.0	1.0	0.0	-0.3%	61	62	0.7	1.2%
2031	1	2	1	52%	1,238	1,879	641	52%	1.0	1.0	0.0	-0.1%	61	61	0.6	1.0%

Table 838 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Stellantis) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC2LT4

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Stellantis) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC2LT4																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Reference Baseline)	Alternative PC2LT4	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC2LT4	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC2LT4	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC2LT4	Absolute	Percent
2022	0	0	0	0%	446	446	0	0%	1.6	1.6	0.0	0.0%	90	90	0.0	0.0%
2023	1	1	0	0%	898	898	0	0%	1.7	1.7	0.0	0.0%	100	100	0.0	0.0%
2024	3	3	0	0%	1,659	1,659	0	0%	1.7	1.7	0.0	0.0%	103	103	0.0	0.0%
2025	4	4	0	0%	2,479	2,479	0	0%	1.6	1.6	0.0	0.0%	103	103	0.0	0.0%
2026	3	3	0	0%	2,028	2,028	0	0%	1.7	1.7	0.0	0.0%	103	103	0.0	0.0%
2027	3	3	0	18%	1,596	1,900	304	19%	1.7	1.7	0.0	-0.2%	105	106	0.9	0.9%
2028	3	3	1	20%	1,492	2,133	641	43%	1.8	1.7	0.0	-0.4%	107	108	0.7	0.6%
2029	3	3	1	29%	1,470	2,209	739	50%	1.8	1.7	0.0	-0.5%	107	108	1.1	1.0%
2030	2	3	1	36%	1,406	2,518	1,112	79%	1.7	1.7	0.0	-1.0%	105	106	0.8	0.8%
2031	3	3	1	34%	1,476	2,689	1,213	82%	1.7	1.7	0.0	-1.2%	104	105	0.6	0.5%

Table 839 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Subaru) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC2LT4

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Subaru) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC2LT4																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Reference Baseline)	Alternative PC2LT4	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC2LT4	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC2LT4	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC2LT4	Absolute	Percent
2022	0	0	0	0%	0	0	0	0%	0.7	0.7	0.0	0.0%	39	39	0.0	0.0%
2023	0	0	0	0%	460	460	0	0%	0.8	0.8	0.0	0.0%	42	42	0.0	0.0%
2024	0	0	0	0%	494	494	0	0%	0.8	0.8	0.0	0.0%	42	42	0.0	0.0%
2025	0	0	0	0%	638	638	0	0%	0.8	0.8	0.0	0.0%	40	40	0.0	0.0%
2026	1	1	0	0%	757	757	0	0%	0.8	0.8	0.0	0.0%	41	41	0.0	0.0%
2027	1	1	0	-3%	841	815	-26	-3%	0.8	0.8	0.0	-0.2%	42	42	-0.1	-0.2%
2028	1	1	0	-3%	970	949	-21	-2%	0.8	0.8	0.0	-0.4%	43	43	-0.2	-0.5%
2029	1	1	0	-2%	1,059	1,047	-12	-1%	0.8	0.8	0.0	-0.5%	43	43	-0.2	-0.5%
2030	1	1	0	1%	1,154	1,174	20	2%	0.8	0.8	0.0	-0.9%	43	42	-0.3	-0.8%
2031	1	1	0	-6%	1,227	1,167	-61	-5%	0.8	0.8	0.0	-1.1%	42	42	-0.5	-1.1%

Table 840 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Tesla) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC2LT4

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Tesla) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC2LT4																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Reference Baseline)	Alternative PC2LT4	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC2LT4	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC2LT4	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC2LT4	Absolute	Percent
2022	0	0	0	0%	0	0	0	0%	0.5	0.5	0.0	0.0%	59	59	0.0	0.0%
2023	0	0	0	0%	7	7	0	0%	0.5	0.5	0.0	0.0%	60	60	0.0	0.0%
2024	0	0	0	0%	11	11	0	0%	0.5	0.5	0.0	0.0%	59	59	0.0	0.0%
2025	0	0	0	0%	16	16	0	0%	0.5	0.5	0.0	0.0%	55	55	0.0	0.0%
2026	0	0	0	0%	16	16	0	0%	0.5	0.5	0.0	0.0%	55	55	0.0	0.0%
2027	0	0	0	-99%	15	0	-15	-99%	0.5	0.5	0.0	0.1%	56	56	0.0	0.0%
2028	0	0	0	-100%	15	0	-15	-100%	0.5	0.5	0.0	0.1%	56	56	0.0	0.1%
2029	0	0	0	-100%	15	0	-15	-100%	0.5	0.5	0.0	-0.1%	56	56	-0.1	-0.2%
2030	0	0	0	-100%	15	0	-15	-100%	0.5	0.5	0.0	0.4%	55	56	0.2	0.4%
2031	0	0	0	-100%	15	0	-15	-100%	0.5	0.5	0.0	0.8%	54	55	0.4	0.8%

Table 841 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Toyota) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC2LT4

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Toyota) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC2LT4																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Reference Baseline)	Alternative PC2LT4	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC2LT4	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC2LT4	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC2LT4	Absolute	Percent
2022	0	0	0	0%	0	0	0	0%	2.4	2.4	0.0	0.0%	165	165	0.0	0.0%
2023	1	1	0	0%	234	234	0	0%	2.5	2.5	0.0	0.0%	173	173	0.0	0.0%
2024	1	1	0	0%	492	492	0	0%	2.5	2.5	0.0	0.0%	173	173	0.0	0.0%
2025	2	2	0	0%	644	644	0	0%	2.4	2.4	0.0	0.0%	166	166	0.0	0.0%
2026	2	2	0	0%	963	963	0	0%	2.4	2.4	0.0	0.0%	168	168	0.0	0.0%
2027	2	2	0	-3%	662	665	4	1%	2.5	2.5	0.0	-0.1%	172	172	-0.2	-0.1%
2028	2	2	0	19%	732	879	147	20%	2.5	2.5	0.0	-0.3%	176	176	0.1	0.0%
2029	2	2	0	23%	798	1,000	202	25%	2.5	2.5	0.0	-0.4%	176	176	-0.1	0.0%
2030	2	3	1	25%	865	1,149	284	33%	2.5	2.5	0.0	-0.5%	174	173	-0.3	-0.2%
2031	2	3	1	23%	928	1,151	223	24%	2.4	2.4	0.0	-0.6%	172	171	-0.3	-0.2%

Table 842 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Volvo) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC2LT4

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Volvo) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC2LT4																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Reference Baseline)	Alternative PC2LT4	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC2LT4	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC2LT4	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC2LT4	Absolute	Percent
2022	0	0	0	0%	0	0	0	0%	0.1	0.1	0.0	0.0%	3	3	0.0	0.0%
2023	0	0	0	0%	140	140	0	0%	0.1	0.1	0.0	0.0%	3	3	0.0	0.0%
2024	0	0	0	0%	195	195	0	0%	0.1	0.1	0.0	0.0%	3	3	0.0	0.0%
2025	0	0	0	0%	1,128	1,128	0	0%	0.1	0.1	0.0	0.0%	3	3	0.0	0.0%
2026	0	0	0	0%	1,041	1,041	0	0%	0.1	0.1	0.0	0.0%	3	3	0.0	0.0%
2027	0	0	0	-8%	677	622	-55	-8%	0.1	0.1	0.0	-0.1%	3	3	0.0	-0.2%
2028	0	0	0	-10%	531	652	121	23%	0.1	0.1	0.0	-0.3%	3	3	0.0	-0.3%
2029	0	0	0	-15%	363	803	440	121%	0.1	0.1	0.0	-0.4%	3	3	0.0	-0.4%
2030	0	0	0	224%	219	868	649	297%	0.1	0.1	0.0	-0.7%	3	3	0.0	-0.3%
2031	0	0	0	401%	115	1,008	893	778%	0.1	0.1	0.0	-0.8%	3	3	0.0	-0.2%

Table 843 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (VWA) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC2LT4

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (VWA) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC2LT4																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Reference Baseline)	Alternative PC2LT4	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC2LT4	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC2LT4	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC2LT4	Absolute	Percent
2022	0	0	0	0%	283	283	0	0%	0.6	0.6	0.0	0.0%	8	8	0.0	0.0%
2023	0	0	0	0%	647	647	0	0%	0.6	0.6	0.0	0.0%	8	8	0.0	0.0%
2024	1	1	0	0%	946	946	0	0%	0.6	0.6	0.0	0.0%	8	8	0.0	0.0%
2025	1	1	0	0%	1,142	1,142	0	0%	0.6	0.6	0.0	0.0%	8	8	0.0	0.0%
2026	1	1	0	0%	1,138	1,138	0	0%	0.6	0.6	0.0	0.0%	8	8	0.0	0.0%
2027	1	1	0	4%	817	1,011	193	24%	0.6	0.6	0.0	-0.1%	8	8	0.0	-0.1%
2028	1	1	0	29%	776	1,365	589	76%	0.7	0.6	0.0	-0.3%	8	8	0.0	-0.3%
2029	0	1	0	34%	743	1,513	769	104%	0.7	0.6	0.0	-0.4%	8	8	0.0	-0.4%
2030	1	1	0	50%	875	1,882	1,007	115%	0.6	0.6	0.0	-0.5%	8	8	0.0	-0.5%
2031	1	1	0	49%	1,042	2,016	974	93%	0.6	0.6	0.0	-0.6%	8	8	0.0	-0.6%

Table 844 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Total) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC3LT5

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Total) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC3LT5																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Reference Baseline)	Alternative PC3LT5	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC3LT5	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC3LT5	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC3LT5	Absolute	Percent
2022	0	0	0	0%	132	132	0	0%	14.4	14.4	0.0	0.0%	880	880	0.0	0.0%
2023	7	7	0	0%	503	503	0	0%	15.2	15.2	0.0	0.0%	937	937	0.0	0.0%
2024	15	15	0	0%	997	997	0	0%	15.1	15.1	0.0	0.0%	944	944	0.0	0.0%
2025	20	20	0	0%	1,362	1,362	0	0%	14.5	14.5	0.0	0.0%	915	915	0.0	0.0%
2026	20	20	0	0%	1,376	1,376	0	0%	14.6	14.6	0.0	0.0%	922	922	0.0	0.0%
2027	18	21	3	18%	1,185	1,487	302	25%	15.1	15.0	0.0	-0.2%	946	949	2.5	0.3%
2028	18	23	6	32%	1,144	1,726	581	51%	15.4	15.3	-0.1	-0.4%	966	968	2.5	0.3%
2029	17	25	8	44%	1,120	1,935	815	73%	15.4	15.3	-0.1	-0.6%	966	968	2.8	0.3%
2030	17	28	11	66%	1,119	2,314	1,195	107%	15.1	15.0	-0.1	-0.9%	951	955	3.9	0.4%
2031	17	31	14	81%	1,149	2,575	1,426	124%	14.9	14.8	-0.2	-1.0%	940	946	6.4	0.7%

Table 845 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Total) Passenger Car Fleet Between No Action Alternative (Reference Baseline) and Alternative PC3LT5

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Total) Passenger Car Fleet Between No Action Alternative (Reference Baseline) and Alternative PC3LT5																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Reference Baseline)	Alternative PC3LT5	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC3LT5	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC3LT5	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC3LT5	Absolute	Percent
2022	0	0	0	0%	152	152	0	0%	5.5	5.5	0.0	0.0%	298	298	0.0	0.0%
2023	2	2	0	0%	434	434	0	0%	5.6	5.6	0.0	0.0%	305	305	0.0	0.0%
2024	5	5	0	0%	862	862	0	0%	5.5	5.5	0.0	0.0%	302	302	0.0	0.0%
2025	6	6	0	0%	1,093	1,093	0	0%	5.1	5.1	0.0	0.0%	281	281	0.0	0.0%
2026	5	5	0	0%	1,047	1,047	0	0%	5.0	5.0	0.0	0.0%	279	279	0.0	0.0%
2027	5	6	1	13%	1,007	1,254	246	24%	5.1	5.1	0.0	-0.2%	285	285	-0.1	0.0%
2028	5	6	1	26%	924	1,379	455	49%	5.2	5.2	0.0	-0.1%	287	287	0.2	0.1%
2029	4	7	2	48%	866	1,589	724	84%	5.2	5.2	0.0	-0.5%	286	286	-0.4	-0.1%
2030	4	7	3	60%	836	1,648	812	97%	5.1	5.1	0.0	0.4%	282	284	2.5	0.9%
2031	4	7	3	70%	834	1,682	848	102%	5.0	5.1	0.0	0.8%	277	281	4.3	1.5%

Table 846 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Total) Light Truck Fleet Between No Action Alternative (Reference Baseline) and Alternative PC3LT5

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Total) Light Truck Fleet Between No Action Alternative (Reference Baseline) and Alternative PC3LT5																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Reference Baseline)	Alternative PC3LT5	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC3LT5	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC3LT5	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC3LT5	Absolute	Percent
2022	0	0	0	0%	119	119	0	0%	9.0	9.0	0.0	0.0%	583	583	0.0	0.0%
2023	5	5	0	0%	543	543	0	0%	9.6	9.6	0.0	0.0%	632	632	0.0	0.0%
2024	10	10	0	0%	1,074	1,074	0	0%	9.7	9.7	0.0	0.0%	642	642	0.0	0.0%
2025	14	14	0	0%	1,506	1,506	0	0%	9.5	9.5	0.0	0.0%	634	634	0.0	0.0%
2026	15	15	0	0%	1,548	1,548	0	0%	9.6	9.6	0.0	0.0%	643	643	0.0	0.0%
2027	13	15	2	20%	1,277	1,608	330	26%	9.9	9.9	0.0	-0.2%	662	664	2.6	0.4%
2028	13	17	4	34%	1,257	1,903	646	51%	10.2	10.1	-0.1	-0.5%	679	681	2.3	0.3%
2029	13	18	5	43%	1,249	2,111	862	69%	10.2	10.1	-0.1	-0.6%	679	683	3.2	0.5%
2030	13	21	9	68%	1,263	2,658	1,395	111%	10.0	9.9	-0.2	-1.5%	670	671	1.5	0.2%
2031	13	24	11	84%	1,308	3,039	1,730	132%	9.9	9.7	-0.2	-1.9%	663	665	2.1	0.3%

Table 847 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (BMW) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC3LT5

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (BMW) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC3LT5																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Reference Baseline)	Alternative PC3LT5	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC3LT5	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC3LT5	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC3LT5	Absolute	Percent
2022	0	0	0	0%	420	420	0	0%	0.4	0.4	0.0	0.0%	17	17	0.0	0.0%
2023	0	0	0	0%	524	524	0	0%	0.4	0.4	0.0	0.0%	18	18	0.0	0.0%
2024	0	0	0	0%	1,110	1,110	0	0%	0.4	0.4	0.0	0.0%	18	18	0.0	0.0%
2025	1	1	0	0%	1,576	1,576	0	0%	0.4	0.4	0.0	0.0%	18	18	0.0	0.0%
2026	0	0	0	0%	1,340	1,340	0	0%	0.4	0.4	0.0	0.0%	18	18	0.0	0.0%
2027	0	0	0	0%	1,032	1,186	154	15%	0.4	0.4	0.0	-0.2%	18	18	0.0	-0.2%
2028	0	0	0	10%	926	1,346	420	45%	0.4	0.4	0.0	-0.3%	19	19	0.0	-0.3%
2029	0	0	0	10%	943	1,620	677	72%	0.4	0.4	0.0	-0.6%	19	19	-0.1	-0.4%
2030	0	0	0	18%	1,131	1,956	826	73%	0.4	0.4	0.0	-0.6%	19	19	-0.2	-1.0%
2031	0	1	0	22%	1,286	2,075	789	61%	0.4	0.4	0.0	-0.6%	19	18	-0.2	-1.0%

Table 848 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Ford) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC3LT5

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Ford) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC3LT5																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Reference Baseline)	Alternative PC3LT5	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC3LT5	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC3LT5	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC3LT5	Absolute	Percent
2022	0	0	0	0%	73	73	0	0%	1.6	1.6	0.0	0.0%	139	139	0.0	0.0%
2023	1	1	0	0%	787	787	0	0%	1.7	1.7	0.0	0.0%	151	151	0.0	0.0%
2024	3	3	0	0%	1,570	1,570	0	0%	1.7	1.7	0.0	0.0%	152	152	0.0	0.0%
2025	3	3	0	0%	1,663	1,663	0	0%	1.7	1.7	0.0	0.0%	149	149	0.0	0.0%
2026	3	3	0	0%	1,694	1,694	0	0%	1.7	1.7	0.0	0.0%	151	151	0.0	0.0%
2027	2	3	1	40%	1,360	1,902	542	40%	1.8	1.8	0.0	-0.2%	155	156	1.0	0.6%
2028	2	4	2	67%	1,266	2,121	855	68%	1.8	1.8	0.0	-0.5%	158	160	1.2	0.8%
2029	2	4	2	91%	1,157	2,225	1,068	92%	1.8	1.8	0.0	-0.6%	158	160	1.6	1.0%
2030	2	4	2	97%	1,059	2,516	1,457	138%	1.8	1.8	0.0	-1.4%	156	156	0.3	0.2%
2031	2	4	2	102%	982	2,835	1,854	189%	1.8	1.7	0.0	-1.7%	154	154	-0.2	-0.1%

Table 849 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (GM) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC3LT5

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (GM) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC3LT5																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Reference Baseline)	Alternative PC3LT5	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC3LT5	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC3LT5	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC3LT5	Absolute	Percent
2022	0	0	0	0%	269	269	0	0%	1.8	1.8	0.0	0.0%	125	125	0.0	0.0%
2023	0	0	0	0%	358	358	0	0%	1.9	1.9	0.0	0.0%	134	134	0.0	0.0%
2024	4	4	0	0%	1,880	1,880	0	0%	1.9	1.9	0.0	0.0%	138	138	0.0	0.0%
2025	5	5	0	0%	2,440	2,440	0	0%	1.9	1.9	0.0	0.0%	136	136	0.0	0.0%
2026	4	4	0	0%	2,349	2,349	0	0%	1.9	1.9	0.0	0.0%	137	137	0.0	0.0%
2027	4	5	1	17%	2,160	2,764	604	28%	1.9	1.9	0.0	-0.2%	141	142	0.9	0.6%
2028	4	5	1	17%	2,058	3,017	958	47%	2.0	2.0	0.0	-0.5%	144	144	0.4	0.3%
2029	4	5	1	26%	2,017	3,356	1,339	66%	2.0	2.0	0.0	-0.6%	144	144	0.5	0.3%
2030	4	5	1	27%	1,963	3,713	1,750	89%	2.0	1.9	0.0	-1.1%	142	141	-0.5	-0.4%
2031	4	7	3	87%	1,930	4,862	2,932	152%	1.9	1.9	0.0	-1.3%	140	142	2.6	1.8%

Table 850 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Honda) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC3LT5

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Honda) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC3LT5																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Reference Baseline)	Alternative PC3LT5	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC3LT5	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC3LT5	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC3LT5	Absolute	Percent
2022	0	0	0	0%	0	0	0	0%	1.5	1.5	0.0	0.0%	118	118	0.0	0.0%
2023	1	1	0	0%	560	560	0	0%	1.5	1.5	0.0	0.0%	125	125	0.0	0.0%
2024	1	1	0	0%	610	610	0	0%	1.5	1.5	0.0	0.0%	124	124	0.0	0.0%
2025	1	1	0	0%	1,040	1,040	0	0%	1.4	1.4	0.0	0.0%	119	119	0.0	0.0%
2026	2	2	0	0%	1,144	1,144	0	0%	1.4	1.4	0.0	0.0%	120	120	0.0	0.0%
2027	1	2	1	38%	1,001	1,386	385	39%	1.5	1.5	0.0	-0.2%	123	124	0.4	0.3%
2028	2	2	1	46%	1,013	1,483	470	46%	1.5	1.5	0.0	-0.3%	126	126	0.2	0.2%
2029	2	2	1	47%	1,007	1,509	502	50%	1.5	1.5	0.0	-0.6%	126	126	0.1	0.1%
2030	1	2	1	60%	1,001	1,607	607	61%	1.5	1.5	0.0	-0.6%	124	124	0.5	0.4%
2031	1	2	1	49%	985	1,475	491	50%	1.5	1.5	0.0	-0.6%	122	122	0.2	0.1%

Table 851 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Hyundai) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC3LT5

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Hyundai) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC3LT5																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Reference Baseline)	Alternative PC3LT5	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC3LT5	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC3LT5	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC3LT5	Absolute	Percent
2022	0	0	0	0%	0	0	0	0%	0.9	0.9	0.0	0.0%	21	21	0.0	0.0%
2023	0	0	0	0%	262	262	0	0%	0.9	0.9	0.0	0.0%	22	22	0.0	0.0%
2024	0	0	0	0%	458	458	0	0%	0.9	0.9	0.0	0.0%	21	21	0.0	0.0%
2025	1	1	0	0%	937	937	0	0%	0.9	0.9	0.0	0.0%	20	20	0.0	0.0%
2026	1	1	0	0%	1,000	1,000	0	0%	0.9	0.9	0.0	0.0%	21	21	0.0	0.0%
2027	1	1	0	53%	923	1,416	493	53%	0.9	0.9	0.0	-0.2%	21	21	0.0	0.1%
2028	1	1	1	68%	839	1,414	575	69%	0.9	0.9	0.0	-0.3%	21	21	0.0	0.0%
2029	1	2	1	126%	775	1,763	987	127%	0.9	0.9	0.0	-0.5%	21	22	0.3	1.3%
2030	1	2	2	239%	798	2,738	1,940	243%	0.9	0.9	0.0	-0.4%	21	21	0.3	1.4%
2031	1	3	2	259%	875	3,250	2,375	271%	0.9	0.9	0.0	-0.4%	21	21	0.4	1.8%

Table 852 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (KIA) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC3LT5

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (KIA) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC3LT5																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Reference Baseline)	Alternative PC3LT5	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC3LT5	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC3LT5	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC3LT5	Absolute	Percent
2022	0	0	0	0%	0	0	0	0%	0.6	0.6	0.0	0.0%	24	24	0.0	0.0%
2023	0	0	0	0%	132	132	0	0%	0.6	0.6	0.0	0.0%	26	26	0.0	0.0%
2024	0	0	0	0%	375	375	0	0%	0.6	0.6	0.0	0.0%	26	26	0.0	0.0%
2025	0	0	0	0%	514	514	0	0%	0.6	0.6	0.0	0.0%	24	24	0.0	0.0%
2026	0	0	0	0%	677	677	0	0%	0.6	0.6	0.0	0.0%	25	25	0.0	0.0%
2027	0	0	0	-1%	639	925	285	45%	0.6	0.6	0.0	-0.2%	25	25	-0.1	-0.2%
2028	0	1	0	120%	634	1,745	1,111	175%	0.6	0.6	0.0	-0.3%	26	26	0.0	-0.1%
2029	0	1	1	216%	588	2,442	1,854	315%	0.6	0.6	0.0	-0.6%	26	26	0.0	-0.1%
2030	0	3	2	628%	631	4,847	4,216	668%	0.6	0.6	0.0	-0.5%	25	29	3.2	12.6%
2031	0	3	2	546%	716	4,691	3,976	556%	0.6	0.6	0.0	-0.5%	25	28	3.1	12.3%

Table 853 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (JLR) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC3LT5

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (JLR) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC3LT5																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Reference Baseline)	Alternative PC3LT5	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC3LT5	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC3LT5	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC3LT5	Absolute	Percent
2022	0	0	0	0%	478	478	0	0%	0.1	0.1	0.0	0.0%	1	1	0.0	0.0%
2023	0	0	0	0%	1,565	1,565	0	0%	0.1	0.1	0.0	0.0%	1	1	0.0	0.0%
2024	0	0	0	0%	2,130	2,130	0	0%	0.1	0.1	0.0	0.0%	1	1	0.0	0.0%
2025	0	0	0	0%	2,156	2,156	0	0%	0.1	0.1	0.0	0.0%	1	1	0.0	0.0%
2026	0	0	0	0%	1,449	1,449	0	0%	0.1	0.1	0.0	0.0%	1	1	0.0	0.0%
2027	0	0	0	0%	980	1,151	172	18%	0.1	0.1	0.0	-0.2%	1	1	0.0	-0.2%
2028	0	0	0	-1%	850	1,539	688	81%	0.1	0.1	0.0	-0.5%	1	1	0.0	-0.5%
2029	0	0	0	-1%	697	1,902	1,205	173%	0.1	0.1	0.0	-0.6%	1	1	0.0	-0.6%
2030	0	0	0	14%	749	2,363	1,614	216%	0.1	0.1	0.0	-1.5%	1	1	0.0	-1.5%
2031	0	0	0	314%	752	4,518	3,766	501%	0.1	0.1	0.0	-1.9%	1	1	0.0	-1.9%

Table 854 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Karma) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC3LT5

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Karma) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC3LT5																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Reference Baseline)	Alternative PC3LT5	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC3LT5	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC3LT5	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC3LT5	Absolute	Percent
2022	0	0	0	0%	0	0	0	0%	0.0	0.0	0.0	0.0%	0	0	0.0	0.0%
2023	0	0	0	0%	0	0	0	0%	0.0	0.0	0.0	0.0%	0	0	0.0	0.0%
2024	0	0	0	0%	0	0	0	0%	0.0	0.0	0.0	0.0%	0	0	0.0	0.0%
2025	0	0	0	0%	0	0	0	0%	0.0	0.0	0.0	0.0%	0	0	0.0	0.0%
2026	0	0	0	0%	-3,300	-3,300	0	0%	0.0	0.0	0.0	0.0%	0	0	0.0	0.0%
2027	0	0	0	0%	-3,693	-3,693	0	0%	0.0	0.0	0.0	0.0%	0	0	0.0	0.0%
2028	0	0	0	0%	-3,948	-3,948	0	0%	0.0	0.0	0.0	0.0%	0	0	0.0	0.0%
2029	0	0	0	0%	-4,296	-4,296	0	0%	0.0	0.0	0.0	-1.1%	0	0	0.0	-1.1%
2030	0	0	0	0%	-4,602	-4,602	0	0%	0.0	0.0	0.0	-1.1%	0	0	0.0	-1.1%
2031	0	0	0	0%	-4,776	-4,776	0	0%	0.0	0.0	0.0	-1.1%	0	0	0.0	-1.1%

Table 855 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Lucid) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC3LT5

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Lucid) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC3LT5																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Reference Baseline)	Alternative PC3LT5	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC3LT5	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC3LT5	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC3LT5	Absolute	Percent
2022	0	0	0	0%	0	0	0	0%	0.0	0.0	0.0	0.0%	0	0	0.0	0.0%
2023	0	0	0	0%	0	0	0	0%	0.0	0.0	0.0	0.0%	0	0	0.0	0.0%
2024	0	0	0	0%	0	0	0	0%	0.0	0.0	0.0	0.0%	0	0	0.0	0.0%
2025	0	0	0	0%	0	0	0	0%	0.0	0.0	0.0	0.0%	0	0	0.0	0.0%
2026	0	0	0	0%	0	0	0	0%	0.0	0.0	0.0	0.0%	0	0	0.0	0.0%
2027	0	0	0	0%	0	0	0	0%	0.0	0.0	0.0	-0.2%	0	0	0.0	-0.2%
2028	0	0	0	0%	0	0	0	0%	0.0	0.0	0.0	-0.2%	0	0	0.0	-0.2%
2029	0	0	0	0%	0	0	0	0%	0.0	0.0	0.0	-0.6%	0	0	0.0	-0.6%
2030	0	0	0	0%	0	0	0	0%	0.0	0.0	0.0	0.2%	0	0	0.0	0.2%
2031	0	0	0	0%	0	0	0	0%	0.0	0.0	0.0	0.7%	0	0	0.0	0.7%

Table 856 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Mazda) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC3LT5

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Mazda) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC3LT5																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Reference Baseline)	Alternative PC3LT5	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC3LT5	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC3LT5	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC3LT5	Absolute	Percent
2022	0	0	0	0%	0	0	0	0%	0.2	0.2	0.0	0.0%	2	2	0.0	0.0%
2023	0	0	0	0%	1,102	1,102	0	0%	0.2	0.2	0.0	0.0%	2	2	0.0	0.0%
2024	0	0	0	0%	1,198	1,198	0	0%	0.2	0.2	0.0	0.0%	2	2	0.0	0.0%
2025	0	0	0	0%	1,281	1,281	0	0%	0.2	0.2	0.0	0.0%	2	2	0.0	0.0%
2026	0	0	0	0%	1,354	1,354	0	0%	0.2	0.2	0.0	0.0%	2	2	0.0	0.0%
2027	0	0	0	10%	1,212	1,362	149	12%	0.2	0.2	0.0	-0.2%	2	2	0.0	0.0%
2028	0	0	0	6%	1,272	1,397	125	10%	0.2	0.2	0.0	-0.5%	2	2	0.0	-0.3%
2029	0	0	0	47%	1,316	1,946	630	48%	0.2	0.2	0.0	-0.6%	2	2	0.0	-0.4%
2030	0	0	0	49%	1,378	2,084	707	51%	0.2	0.2	0.0	-1.3%	2	2	0.0	-1.1%
2031	0	0	0	36%	1,436	1,981	544	38%	0.2	0.2	0.0	-1.6%	2	2	0.0	-1.4%

Table 857 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Mercedes-Benz) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC3LT5

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Mercedes-Benz) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC3LT5																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Reference Baseline)	Alternative PC3LT5	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC3LT5	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC3LT5	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC3LT5	Absolute	Percent
2022	0	0	0	0%	618	618	0	0%	0.3	0.3	0.0	0.0%	9	9	0.0	0.0%
2023	0	0	0	0%	925	925	0	0%	0.3	0.3	0.0	0.0%	9	9	0.0	0.0%
2024	0	0	0	0%	947	947	0	0%	0.3	0.3	0.0	0.0%	9	9	0.0	0.0%
2025	0	0	0	0%	1,358	1,358	0	0%	0.3	0.3	0.0	0.0%	9	9	0.0	0.0%
2026	0	0	0	0%	1,926	1,926	0	0%	0.3	0.3	0.0	0.0%	9	9	0.0	0.0%
2027	0	0	0	-7%	1,754	1,860	106	6%	0.3	0.3	0.0	-0.2%	10	10	0.0	-0.2%
2028	0	0	0	-2%	1,442	1,756	314	22%	0.3	0.3	0.0	-0.4%	10	10	0.0	0.1%
2029	0	0	0	-2%	1,332	1,870	538	40%	0.3	0.3	0.0	-0.6%	10	10	0.0	-0.1%
2030	0	0	0	10%	1,311	2,039	728	56%	0.3	0.3	0.0	-0.7%	10	10	-0.1	-0.8%
2031	0	0	0	1%	1,561	2,260	700	45%	0.3	0.3	0.0	-0.7%	10	10	-0.1	-1.4%

Table 858 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Mitsubishi) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC3LT5

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Mitsubishi) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC3LT5																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Reference Baseline)	Alternative PC3LT5	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC3LT5	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC3LT5	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC3LT5	Absolute	Percent
2022	0	0	0	0%	217	217	0	0%	0.1	0.1	0.0	0.0%	2	2	0.0	0.0%
2023	0	0	0	0%	233	233	0	0%	0.1	0.1	0.0	0.0%	2	2	0.0	0.0%
2024	0	0	0	0%	1,377	1,377	0	0%	0.1	0.1	0.0	0.0%	2	2	0.0	0.0%
2025	0	0	0	0%	2,723	2,723	0	0%	0.1	0.1	0.0	0.0%	2	2	0.0	0.0%
2026	0	0	0	0%	2,018	2,018	0	0%	0.1	0.1	0.0	0.0%	2	2	0.0	0.0%
2027	0	0	0	-1%	1,846	1,834	-12	-1%	0.1	0.1	0.0	-0.2%	2	2	0.0	-0.2%
2028	0	0	0	9%	1,616	1,768	152	9%	0.1	0.1	0.0	-0.3%	2	2	0.0	-0.2%
2029	0	0	0	10%	1,434	1,582	149	10%	0.1	0.1	0.0	-0.5%	2	2	0.0	-0.4%
2030	0	0	0	29%	1,279	1,661	382	30%	0.1	0.1	0.0	-0.5%	2	2	0.1	3.0%
2031	0	0	0	40%	1,154	1,630	475	41%	0.1	0.1	0.0	-0.5%	2	2	0.1	3.0%

Table 859 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Nissan) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC3LT5

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Nissan) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC3LT5																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Reference Baseline)	Alternative PC3LT5	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC3LT5	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC3LT5	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC3LT5	Absolute	Percent
2022	0	0	0	0%	33	33	0	0%	1.0	1.0	0.0	0.0%	59	59	0.0	0.0%
2023	1	1	0	0%	651	651	0	0%	1.0	1.0	0.0	0.0%	62	62	0.0	0.0%
2024	1	1	0	0%	825	825	0	0%	1.0	1.0	0.0	0.0%	62	62	0.0	0.0%
2025	1	1	0	0%	1,227	1,227	0	0%	1.0	1.0	0.0	0.0%	60	60	0.0	0.0%
2026	1	1	0	0%	1,176	1,176	0	0%	1.0	1.0	0.0	0.0%	60	60	0.0	0.0%
2027	1	1	0	-2%	1,464	1,612	148	10%	1.0	1.0	0.0	-0.2%	61	61	-0.1	-0.2%
2028	1	2	0	30%	1,364	1,952	589	43%	1.0	1.0	0.0	-0.3%	62	63	0.4	0.6%
2029	1	2	0	36%	1,254	2,152	898	72%	1.0	1.0	0.0	-0.6%	62	62	0.2	0.4%
2030	1	2	1	72%	1,233	2,220	987	80%	1.0	1.0	0.0	-0.5%	61	62	0.7	1.2%
2031	1	2	1	68%	1,238	2,143	905	73%	1.0	1.0	0.0	-0.4%	61	61	0.7	1.1%

Table 860 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Stellantis) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC3LT5

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Stellantis) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC3LT5																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Reference Baseline)	Alternative PC3LT5	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC3LT5	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC3LT5	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC3LT5	Absolute	Percent
2022	0	0	0	0%	446	446	0	0%	1.6	1.6	0.0	0.0%	90	90	0.0	0.0%
2023	1	1	0	0%	898	898	0	0%	1.7	1.7	0.0	0.0%	100	100	0.0	0.0%
2024	3	3	0	0%	1,659	1,659	0	0%	1.7	1.7	0.0	0.0%	103	103	0.0	0.0%
2025	4	4	0	0%	2,479	2,479	0	0%	1.6	1.6	0.0	0.0%	103	103	0.0	0.0%
2026	3	3	0	0%	2,028	2,028	0	0%	1.7	1.7	0.0	0.0%	103	103	0.0	0.0%
2027	3	3	1	21%	1,596	1,978	382	24%	1.7	1.7	0.0	-0.2%	105	106	1.1	1.0%
2028	3	3	1	22%	1,492	2,292	800	54%	1.8	1.7	0.0	-0.5%	107	108	0.8	0.8%
2029	3	3	1	32%	1,470	2,442	971	66%	1.8	1.7	0.0	-0.6%	107	108	1.2	1.1%
2030	2	3	1	38%	1,406	2,854	1,449	103%	1.7	1.7	0.0	-1.3%	105	106	0.6	0.5%
2031	3	3	1	36%	1,476	3,099	1,623	110%	1.7	1.7	0.0	-1.6%	104	105	0.3	0.2%

Table 861 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Subaru) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC3LT5

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Subaru) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC3LT5																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Reference Baseline)	Alternative PC3LT5	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC3LT5	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC3LT5	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC3LT5	Absolute	Percent
2022	0	0	0	0%	0	0	0	0%	0.7	0.7	0.0	0.0%	39	39	0.0	0.0%
2023	0	0	0	0%	460	460	0	0%	0.8	0.8	0.0	0.0%	42	42	0.0	0.0%
2024	0	0	0	0%	494	494	0	0%	0.8	0.8	0.0	0.0%	42	42	0.0	0.0%
2025	0	0	0	0%	638	638	0	0%	0.8	0.8	0.0	0.0%	40	40	0.0	0.0%
2026	1	1	0	0%	757	757	0	0%	0.8	0.8	0.0	0.0%	41	41	0.0	0.0%
2027	1	1	0	-3%	841	816	-25	-3%	0.8	0.8	0.0	-0.2%	42	42	-0.1	-0.3%
2028	1	1	0	6%	970	1,031	61	6%	0.8	0.8	0.0	-0.5%	43	43	-0.2	-0.5%
2029	1	1	0	14%	1,059	1,220	161	15%	0.8	0.8	0.0	-0.6%	43	43	-0.2	-0.5%
2030	1	1	0	21%	1,154	1,417	264	23%	0.8	0.8	0.0	-1.3%	43	42	-0.3	-0.6%
2031	1	1	0	14%	1,227	1,421	194	16%	0.8	0.8	0.0	-1.5%	42	42	-0.4	-1.0%

Table 862 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Tesla) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC3LT5

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Tesla) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC3LT5																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Reference Baseline)	Alternative PC3LT5	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC3LT5	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC3LT5	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC3LT5	Absolute	Percent
2022	0	0	0	0%	0	0	0	0%	0.5	0.5	0.0	0.0%	59	59	0.0	0.0%
2023	0	0	0	0%	7	7	0	0%	0.5	0.5	0.0	0.0%	60	60	0.0	0.0%
2024	0	0	0	0%	11	11	0	0%	0.5	0.5	0.0	0.0%	59	59	0.0	0.0%
2025	0	0	0	0%	16	16	0	0%	0.5	0.5	0.0	0.0%	55	55	0.0	0.0%
2026	0	0	0	0%	16	16	0	0%	0.5	0.5	0.0	0.0%	55	55	0.0	0.0%
2027	0	0	0	-99%	15	0	-15	-99%	0.5	0.5	0.0	-0.2%	56	56	-0.1	-0.2%
2028	0	0	0	-100%	15	0	-15	-100%	0.5	0.5	0.0	-0.2%	56	56	-0.1	-0.2%
2029	0	0	0	-100%	15	0	-15	-100%	0.5	0.5	0.0	-0.5%	56	56	-0.3	-0.5%
2030	0	0	0	-100%	15	0	-15	-100%	0.5	0.5	0.0	0.3%	55	55	0.1	0.3%
2031	0	0	0	-100%	15	0	-15	-100%	0.5	0.5	0.0	0.6%	54	55	0.3	0.6%

Table 863 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Toyota) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC3LT5

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Toyota) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC3LT5																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Reference Baseline)	Alternative PC3LT5	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC3LT5	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC3LT5	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC3LT5	Absolute	Percent
2022	0	0	0	0%	0	0	0	0%	2.4	2.4	0.0	0.0%	165	165	0.0	0.0%
2023	1	1	0	0%	234	234	0	0%	2.5	2.5	0.0	0.0%	173	173	0.0	0.0%
2024	1	1	0	0%	492	492	0	0%	2.5	2.5	0.0	0.0%	173	173	0.0	0.0%
2025	2	2	0	0%	644	644	0	0%	2.4	2.4	0.0	0.0%	166	166	0.0	0.0%
2026	2	2	0	0%	963	963	0	0%	2.4	2.4	0.0	0.0%	168	168	0.0	0.0%
2027	2	2	0	-3%	662	720	58	9%	2.5	2.4	0.0	-0.2%	172	172	-0.4	-0.2%
2028	2	2	0	19%	732	982	251	34%	2.5	2.5	0.0	-0.4%	176	176	-0.2	-0.1%
2029	2	2	0	23%	798	1,177	379	47%	2.5	2.5	0.0	-0.6%	176	176	-0.4	-0.2%
2030	2	3	1	27%	865	1,376	511	59%	2.5	2.4	0.0	-0.8%	174	173	-0.7	-0.4%
2031	2	3	1	42%	928	1,458	530	57%	2.4	2.4	0.0	-0.9%	172	171	-0.1	0.0%

Table 864 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Volvo) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC3LT5

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Volvo) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC3LT5																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Reference Baseline)	Alternative PC3LT5	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC3LT5	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC3LT5	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC3LT5	Absolute	Percent
2022	0	0	0	0%	0	0	0	0%	0.1	0.1	0.0	0.0%	3	3	0.0	0.0%
2023	0	0	0	0%	140	140	0	0%	0.1	0.1	0.0	0.0%	3	3	0.0	0.0%
2024	0	0	0	0%	195	195	0	0%	0.1	0.1	0.0	0.0%	3	3	0.0	0.0%
2025	0	0	0	0%	1,128	1,128	0	0%	0.1	0.1	0.0	0.0%	3	3	0.0	0.0%
2026	0	0	0	0%	1,041	1,041	0	0%	0.1	0.1	0.0	0.0%	3	3	0.0	0.0%
2027	0	0	0	-8%	677	622	-55	-8%	0.1	0.1	0.0	-0.2%	3	3	0.0	-0.3%
2028	0	0	0	-10%	531	773	242	45%	0.1	0.1	0.0	-0.4%	3	3	0.0	-0.4%
2029	0	0	0	-15%	363	974	611	168%	0.1	0.1	0.0	-0.6%	3	3	0.0	-0.7%
2030	0	0	0	227%	219	1,119	900	411%	0.1	0.1	0.0	-1.0%	3	3	0.0	-0.5%
2031	0	0	0	411%	115	1,356	1,242	1082%	0.1	0.1	0.0	-1.1%	3	3	0.0	-0.5%

Table 865 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (VWA) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC3LT5

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (VWA) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC3LT5																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Reference Baseline)	Alternative PC3LT5	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC3LT5	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC3LT5	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC3LT5	Absolute	Percent
2022	0	0	0	0%	283	283	0	0%	0.6	0.6	0.0	0.0%	8	8	0.0	0.0%
2023	0	0	0	0%	647	647	0	0%	0.6	0.6	0.0	0.0%	8	8	0.0	0.0%
2024	1	1	0	0%	946	946	0	0%	0.6	0.6	0.0	0.0%	8	8	0.0	0.0%
2025	1	1	0	0%	1,142	1,142	0	0%	0.6	0.6	0.0	0.0%	8	8	0.0	0.0%
2026	1	1	0	0%	1,138	1,138	0	0%	0.6	0.6	0.0	0.0%	8	8	0.0	0.0%
2027	1	1	0	4%	817	1,093	276	34%	0.6	0.6	0.0	-0.2%	8	8	0.0	-0.2%
2028	1	1	0	35%	776	1,514	738	95%	0.7	0.6	0.0	-0.4%	8	8	0.0	-0.4%
2029	0	1	0	42%	743	1,747	1,003	135%	0.7	0.6	0.0	-0.6%	8	8	0.0	-0.6%
2030	1	1	0	55%	875	2,228	1,354	155%	0.6	0.6	0.0	-0.8%	8	8	-0.1	-0.8%
2031	1	1	0	55%	1,042	2,436	1,394	134%	0.6	0.6	0.0	-0.9%	8	8	-0.1	-0.9%

Table 866 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Total) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC6LT8

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Total) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC6LT8																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Reference Baseline)	Alternative PC6LT8	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC6LT8	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC6LT8	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC6LT8	Absolute	Percent
2022	0	0	0	0%	132	132	0	0%	14.4	14.4	0.0	0.0%	880	880	0.0	0.0%
2023	7	7	0	0%	503	503	0	0%	15.2	15.2	0.0	0.0%	937	937	0.0	0.0%
2024	15	15	0	0%	997	997	0	0%	15.1	15.1	0.0	0.0%	944	944	0.0	0.0%
2025	20	20	0	0%	1,362	1,362	0	0%	14.5	14.5	0.0	0.0%	915	915	0.0	0.0%
2026	20	20	0	0%	1,376	1,376	0	0%	14.6	14.6	0.0	0.0%	922	922	0.0	0.0%
2027	18	22	4	25%	1,185	1,725	540	46%	15.1	15.0	-0.1	-0.4%	946	947	0.7	0.1%
2028	18	25	8	44%	1,144	2,233	1,088	95%	15.4	15.2	-0.1	-0.9%	966	965	-0.5	-0.1%
2029	17	28	11	61%	1,120	2,724	1,604	143%	15.4	15.2	-0.2	-1.3%	966	963	-2.1	-0.2%
2030	17	32	15	89%	1,119	3,441	2,322	208%	15.1	14.9	-0.3	-1.9%	951	948	-3.1	-0.3%
2031	17	35	18	103%	1,149	3,951	2,802	244%	14.9	14.6	-0.3	-2.2%	940	938	-2.1	-0.2%

Table 867 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Total) Passenger Car Fleet Between No Action Alternative (Reference Baseline) and Alternative PC6LT8

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Total) Passenger Car Fleet Between No Action Alternative (Reference Baseline) and Alternative PC6LT8																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Reference Baseline)	Alternative PC6LT8	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC6LT8	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC6LT8	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC6LT8	Absolute	Percent
2022	0	0	0	0%	152	152	0	0%	5.5	5.5	0.0	0.0%	298	298	0.0	0.0%
2023	2	2	0	0%	434	434	0	0%	5.6	5.6	0.0	0.0%	305	305	0.0	0.0%
2024	5	5	0	0%	862	862	0	0%	5.5	5.5	0.0	0.0%	302	302	0.0	0.0%
2025	6	6	0	0%	1,093	1,093	0	0%	5.1	5.1	0.0	0.0%	281	281	0.0	0.0%
2026	5	5	0	0%	1,047	1,047	0	0%	5.0	5.0	0.0	0.0%	279	279	0.0	0.0%
2027	5	6	1	24%	1,007	1,544	537	53%	5.1	5.1	0.0	-0.6%	285	283	-1.3	-0.5%
2028	5	7	2	49%	924	1,996	1,072	116%	5.2	5.1	-0.1	-1.0%	287	286	-1.3	-0.5%
2029	4	8	4	85%	866	2,516	1,650	191%	5.2	5.1	-0.1	-1.6%	286	284	-2.6	-0.9%
2030	4	9	5	109%	836	2,872	2,036	244%	5.1	5.1	0.0	-0.9%	282	282	0.5	0.2%
2031	4	10	5	128%	834	3,137	2,303	276%	5.0	5.0	0.0	-0.5%	277	280	2.8	1.0%

Table 868 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Total) Light Truck Fleet Between No Action Alternative (Reference Baseline) and Alternative PC6LT8

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Total) Light Truck Fleet Between No Action Alternative (Reference Baseline) and Alternative PC6LT8																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Reference Baseline)	Alternative PC6LT8	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC6LT8	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC6LT8	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC6LT8	Absolute	Percent
2022	0	0	0	0%	119	119	0	0%	9.0	9.0	0.0	0.0%	583	583	0.0	0.0%
2023	5	5	0	0%	543	543	0	0%	9.6	9.6	0.0	0.0%	632	632	0.0	0.0%
2024	10	10	0	0%	1,074	1,074	0	0%	9.7	9.7	0.0	0.0%	642	642	0.0	0.0%
2025	14	14	0	0%	1,506	1,506	0	0%	9.5	9.5	0.0	0.0%	634	634	0.0	0.0%
2026	15	15	0	0%	1,548	1,548	0	0%	9.6	9.6	0.0	0.0%	643	643	0.0	0.0%
2027	13	16	3	26%	1,277	1,818	541	42%	9.9	9.9	0.0	-0.3%	662	664	2.0	0.3%
2028	13	18	5	42%	1,257	2,353	1,096	87%	10.2	10.1	-0.1	-0.8%	679	680	0.8	0.1%
2029	13	19	7	53%	1,249	2,829	1,581	127%	10.2	10.1	-0.1	-1.1%	679	680	0.5	0.1%
2030	13	23	10	82%	1,263	3,735	2,472	196%	10.0	9.8	-0.2	-2.4%	670	666	-3.6	-0.5%
2031	13	25	12	96%	1,308	4,373	3,065	234%	9.9	9.6	-0.3	-3.1%	663	658	-4.9	-0.7%

Table 869 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (BMW) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC6LT8

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (BMW) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC6LT8																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Reference Baseline)	Alternative PC6LT8	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC6LT8	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC6LT8	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC6LT8	Absolute	Percent
2022	0	0	0	0%	420	420	0	0%	0.4	0.4	0.0	0.0%	17	17	0.0	0.0%
2023	0	0	0	0%	524	524	0	0%	0.4	0.4	0.0	0.0%	18	18	0.0	0.0%
2024	0	0	0	0%	1,110	1,110	0	0%	0.4	0.4	0.0	0.0%	18	18	0.0	0.0%
2025	1	1	0	0%	1,576	1,576	0	0%	0.4	0.4	0.0	0.0%	18	18	0.0	0.0%
2026	0	0	0	0%	1,340	1,340	0	0%	0.4	0.4	0.0	0.0%	18	18	0.0	0.0%
2027	0	0	0	0%	1,032	1,307	275	27%	0.4	0.4	0.0	-0.5%	18	18	-0.1	-0.4%
2028	0	0	0	11%	926	1,785	859	93%	0.4	0.4	0.0	-0.9%	19	19	-0.1	-0.6%
2029	0	0	0	11%	943	2,463	1,520	161%	0.4	0.4	0.0	-1.4%	19	19	-0.2	-1.0%
2030	0	0	0	18%	1,131	3,189	2,059	182%	0.4	0.4	0.0	-1.7%	19	18	-0.4	-1.9%
2031	0	1	0	31%	1,286	3,591	2,305	179%	0.4	0.4	0.0	-1.8%	19	18	-0.3	-1.9%

Table 870 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Ford) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC6LT8

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Ford) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC6LT8																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Reference Baseline)	Alternative PC6LT8	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC6LT8	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC6LT8	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC6LT8	Absolute	Percent
2022	0	0	0	0%	73	73	0	0%	1.6	1.6	0.0	0.0%	139	139	0.0	0.0%
2023	1	1	0	0%	787	787	0	0%	1.7	1.7	0.0	0.0%	151	151	0.0	0.0%
2024	3	3	0	0%	1,570	1,570	0	0%	1.7	1.7	0.0	0.0%	152	152	0.0	0.0%
2025	3	3	0	0%	1,663	1,663	0	0%	1.7	1.7	0.0	0.0%	149	149	0.0	0.0%
2026	3	3	0	0%	1,694	1,694	0	0%	1.7	1.7	0.0	0.0%	151	151	0.0	0.0%
2027	2	3	1	39%	1,360	1,902	542	40%	1.8	1.8	0.0	-0.4%	155	156	0.8	0.5%
2028	2	4	2	66%	1,266	2,412	1,145	90%	1.8	1.8	0.0	-0.8%	158	159	0.7	0.5%
2029	2	4	2	90%	1,157	2,807	1,650	143%	1.8	1.8	0.0	-1.1%	158	159	0.7	0.5%
2030	2	4	2	95%	1,059	3,557	2,498	236%	1.8	1.8	0.0	-2.3%	156	155	-1.1	-0.7%
2031	2	3	2	100%	982	4,230	3,248	331%	1.8	1.7	-0.1	-2.8%	154	152	-2.0	-1.3%

Table 871 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (GM) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC6LT8

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (GM) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC6LT8																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Reference Baseline)	Alternative PC6LT8	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC6LT8	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC6LT8	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC6LT8	Absolute	Percent
2022	0	0	0	0%	269	269	0	0%	1.8	1.8	0.0	0.0%	125	125	0.0	0.0%
2023	0	0	0	0%	358	358	0	0%	1.9	1.9	0.0	0.0%	134	134	0.0	0.0%
2024	4	4	0	0%	1,880	1,880	0	0%	1.9	1.9	0.0	0.0%	138	138	0.0	0.0%
2025	5	5	0	0%	2,440	2,440	0	0%	1.9	1.9	0.0	0.0%	136	136	0.0	0.0%
2026	4	4	0	0%	2,349	2,349	0	0%	1.9	1.9	0.0	0.0%	137	137	0.0	0.0%
2027	4	5	1	17%	2,160	2,938	778	36%	1.9	1.9	0.0	-0.4%	141	141	0.7	0.5%
2028	4	5	1	17%	2,058	3,492	1,434	70%	2.0	2.0	0.0	-0.8%	144	144	0.0	0.0%
2029	4	5	1	26%	2,017	4,095	2,078	103%	2.0	2.0	0.0	-1.2%	144	144	-0.3	-0.2%
2030	4	5	1	26%	1,963	4,818	2,855	145%	2.0	1.9	0.0	-2.1%	142	140	-1.8	-1.3%
2031	4	7	3	86%	1,930	6,269	4,340	225%	1.9	1.9	0.0	-2.5%	140	141	0.9	0.7%

Table 872 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Honda) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC6LT8

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Honda) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC6LT8																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Reference Baseline)	Alternative PC6LT8	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC6LT8	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC6LT8	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC6LT8	Absolute	Percent
2022	0	0	0	0%	0	0	0	0%	1.5	1.5	0.0	0.0%	118	118	0.0	0.0%
2023	1	1	0	0%	560	560	0	0%	1.5	1.5	0.0	0.0%	125	125	0.0	0.0%
2024	1	1	0	0%	610	610	0	0%	1.5	1.5	0.0	0.0%	124	124	0.0	0.0%
2025	1	1	0	0%	1,040	1,040	0	0%	1.4	1.4	0.0	0.0%	119	119	0.0	0.0%
2026	2	2	0	0%	1,144	1,144	0	0%	1.4	1.4	0.0	0.0%	120	120	0.0	0.0%
2027	1	2	1	37%	1,001	1,638	637	64%	1.5	1.5	0.0	-0.5%	123	124	0.1	0.1%
2028	2	3	1	66%	1,013	1,933	920	91%	1.5	1.5	0.0	-0.9%	126	126	0.3	0.2%
2029	2	3	1	81%	1,007	2,272	1,265	126%	1.5	1.5	0.0	-1.4%	126	126	-0.1	-0.1%
2030	1	3	1	91%	1,001	2,424	1,424	142%	1.5	1.5	0.0	-1.7%	124	124	-0.1	-0.1%
2031	1	3	1	78%	985	2,555	1,571	160%	1.5	1.4	0.0	-1.8%	122	122	-0.7	-0.6%

Table 873 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Hyundai) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC6LT8

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Hyundai) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC6LT8																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Reference Baseline)	Alternative PC6LT8	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC6LT8	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC6LT8	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC6LT8	Absolute	Percent
2022	0	0	0	0%	0	0	0	0%	0.9	0.9	0.0	0.0%	21	21	0.0	0.0%
2023	0	0	0	0%	262	262	0	0%	0.9	0.9	0.0	0.0%	22	22	0.0	0.0%
2024	0	0	0	0%	458	458	0	0%	0.9	0.9	0.0	0.0%	21	21	0.0	0.0%
2025	1	1	0	0%	937	937	0	0%	0.9	0.9	0.0	0.0%	20	20	0.0	0.0%
2026	1	1	0	0%	1,000	1,000	0	0%	0.9	0.9	0.0	0.0%	21	21	0.0	0.0%
2027	1	2	1	119%	923	2,035	1,111	120%	0.9	0.9	0.0	-0.5%	21	21	0.0	-0.1%
2028	1	2	1	138%	839	2,415	1,575	188%	0.9	0.9	0.0	-0.9%	21	21	-0.1	-0.6%
2029	1	2	1	207%	775	2,925	2,150	277%	0.9	0.9	0.0	-1.4%	21	21	0.2	0.7%
2030	1	3	2	312%	798	4,459	3,661	459%	0.9	0.9	0.0	-1.5%	21	21	0.1	0.6%
2031	1	3	3	321%	875	5,181	4,306	492%	0.9	0.9	0.0	-1.7%	21	21	0.2	0.8%

Table 874 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (KIA) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC6LT8

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (KIA) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC6LT8																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Reference Baseline)	Alternative PC6LT8	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC6LT8	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC6LT8	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC6LT8	Absolute	Percent
2022	0	0	0	0%	0	0	0	0%	0.6	0.6	0.0	0.0%	24	24	0.0	0.0%
2023	0	0	0	0%	132	132	0	0%	0.6	0.6	0.0	0.0%	26	26	0.0	0.0%
2024	0	0	0	0%	375	375	0	0%	0.6	0.6	0.0	0.0%	26	26	0.0	0.0%
2025	0	0	0	0%	514	514	0	0%	0.6	0.6	0.0	0.0%	24	24	0.0	0.0%
2026	0	0	0	0%	677	677	0	0%	0.6	0.6	0.0	0.0%	25	25	0.0	0.0%
2027	0	0	0	-2%	639	1,181	542	85%	0.6	0.6	0.0	-0.5%	25	25	-0.1	-0.5%
2028	0	1	0	118%	634	2,317	1,684	266%	0.6	0.6	0.0	-0.9%	26	26	-0.2	-0.6%
2029	0	1	1	222%	588	3,264	2,676	455%	0.6	0.6	0.0	-1.4%	26	26	-0.2	-0.8%
2030	0	3	3	649%	631	5,815	5,184	821%	0.6	0.6	0.0	-1.6%	25	28	3.0	11.6%
2031	0	3	3	584%	716	5,730	5,014	701%	0.6	0.6	0.0	-1.7%	25	28	3.0	11.9%

Table 875 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (JLR) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC6LT8

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (JLR) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC6LT8																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Reference Baseline)	Alternative PC6LT8	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC6LT8	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC6LT8	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC6LT8	Absolute	Percent
2022	0	0	0	0%	478	478	0	0%	0.1	0.1	0.0	0.0%	1	1	0.0	0.0%
2023	0	0	0	0%	1,565	1,565	0	0%	0.1	0.1	0.0	0.0%	1	1	0.0	0.0%
2024	0	0	0	0%	2,130	2,130	0	0%	0.1	0.1	0.0	0.0%	1	1	0.0	0.0%
2025	0	0	0	0%	2,156	2,156	0	0%	0.1	0.1	0.0	0.0%	1	1	0.0	0.0%
2026	0	0	0	0%	1,449	1,449	0	0%	0.1	0.1	0.0	0.0%	1	1	0.0	0.0%
2027	0	0	0	-1%	980	1,369	389	40%	0.1	0.1	0.0	-0.3%	1	1	0.0	-0.3%
2028	0	0	0	-1%	850	2,018	1,167	137%	0.1	0.1	0.0	-0.8%	1	1	0.0	-0.8%
2029	0	0	0	-1%	697	2,670	1,972	283%	0.1	0.1	0.0	-1.1%	1	1	0.0	-1.1%
2030	0	0	0	13%	749	3,495	2,747	367%	0.1	0.1	0.0	-2.4%	1	1	0.0	-2.4%
2031	0	0	0	309%	752	6,001	5,249	698%	0.1	0.1	0.0	-3.0%	1	1	0.0	-3.0%

Table 876 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Karma) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC6LT8

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Karma) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC6LT8																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Reference Baseline)	Alternative PC6LT8	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC6LT8	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC6LT8	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC6LT8	Absolute	Percent
2022	0	0	0	0%	0	0	0	0%	0.0	0.0	0.0	0.0%	0	0	0.0	0.0%
2023	0	0	0	0%	0	0	0	0%	0.0	0.0	0.0	0.0%	0	0	0.0	0.0%
2024	0	0	0	0%	0	0	0	0%	0.0	0.0	0.0	0.0%	0	0	0.0	0.0%
2025	0	0	0	0%	0	0	0	0%	0.0	0.0	0.0	0.0%	0	0	0.0	0.0%
2026	0	0	0	0%	-3,300	-3,300	0	0%	0.0	0.0	0.0	0.0%	0	0	0.0	0.0%
2027	0	0	0	0%	-3,693	-3,693	0	0%	0.0	0.0	0.0	-1.1%	0	0	0.0	-1.1%
2028	0	0	0	0%	-3,948	-3,948	0	0%	0.0	0.0	0.0	-1.1%	0	0	0.0	-1.1%
2029	0	0	0	0%	-4,296	-4,296	0	0%	0.0	0.0	0.0	-2.1%	0	0	0.0	-2.1%
2030	0	0	0	0%	-4,602	-4,602	0	0%	0.0	0.0	0.0	-2.1%	0	0	0.0	-2.1%
2031	0	0	0	0%	-4,776	-4,776	0	0%	0.0	0.0	0.0	-2.2%	0	0	0.0	-2.2%

Table 877 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Lucid) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC6LT8

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Lucid) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC6LT8																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Reference Baseline)	Alternative PC6LT8	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC6LT8	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC6LT8	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC6LT8	Absolute	Percent
2022	0	0	0	0%	0	0	0	0%	0.0	0.0	0.0	0.0%	0	0	0.0	0.0%
2023	0	0	0	0%	0	0	0	0%	0.0	0.0	0.0	0.0%	0	0	0.0	0.0%
2024	0	0	0	0%	0	0	0	0%	0.0	0.0	0.0	0.0%	0	0	0.0	0.0%
2025	0	0	0	0%	0	0	0	0%	0.0	0.0	0.0	0.0%	0	0	0.0	0.0%
2026	0	0	0	0%	0	0	0	0%	0.0	0.0	0.0	0.0%	0	0	0.0	0.0%
2027	0	0	0	0%	0	0	0	0%	0.0	0.0	0.0	-0.6%	0	0	0.0	-0.6%
2028	0	0	0	0%	0	0	0	0%	0.0	0.0	0.0	-0.9%	0	0	0.0	-0.9%
2029	0	0	0	0%	0	0	0	0%	0.0	0.0	0.0	-1.6%	0	0	0.0	-1.6%
2030	0	0	0	0%	0	0	0	0%	0.0	0.0	0.0	-0.9%	0	0	0.0	-0.9%
2031	0	0	0	0%	0	0	0	0%	0.0	0.0	0.0	-0.6%	0	0	0.0	-0.6%

Table 878 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Mazda) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC6LT8

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Mazda) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC6LT8																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Reference Baseline)	Alternative PC6LT8	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC6LT8	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC6LT8	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC6LT8	Absolute	Percent
2022	0	0	0	0%	0	0	0	0%	0.2	0.2	0.0	0.0%	2	2	0.0	0.0%
2023	0	0	0	0%	1,102	1,102	0	0%	0.2	0.2	0.0	0.0%	2	2	0.0	0.0%
2024	0	0	0	0%	1,198	1,198	0	0%	0.2	0.2	0.0	0.0%	2	2	0.0	0.0%
2025	0	0	0	0%	1,281	1,281	0	0%	0.2	0.2	0.0	0.0%	2	2	0.0	0.0%
2026	0	0	0	0%	1,354	1,354	0	0%	0.2	0.2	0.0	0.0%	2	2	0.0	0.0%
2027	0	1	1	335%	1,212	5,348	4,136	341%	0.2	0.2	0.0	-0.4%	2	2	0.1	5.4%
2028	0	1	1	298%	1,272	5,265	3,993	314%	0.2	0.2	0.0	-0.8%	2	2	0.1	4.6%
2029	0	1	1	427%	1,316	7,018	5,703	433%	0.2	0.2	0.0	-1.2%	2	3	0.1	5.4%
2030	0	2	1	542%	1,378	9,040	7,662	556%	0.2	0.2	0.0	-2.2%	2	2	0.1	3.7%
2031	0	1	1	453%	1,436	8,310	6,874	479%	0.2	0.2	0.0	-2.8%	2	2	0.1	2.4%

Table 879 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Mercedes-Benz) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC6LT8

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Mercedes-Benz) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC6LT8																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Reference Baseline)	Alternative PC6LT8	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC6LT8	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC6LT8	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC6LT8	Absolute	Percent
2022	0	0	0	0%	618	618	0	0%	0.3	0.3	0.0	0.0%	9	9	0.0	0.0%
2023	0	0	0	0%	925	925	0	0%	0.3	0.3	0.0	0.0%	9	9	0.0	0.0%
2024	0	0	0	0%	947	947	0	0%	0.3	0.3	0.0	0.0%	9	9	0.0	0.0%
2025	0	0	0	0%	1,358	1,358	0	0%	0.3	0.3	0.0	0.0%	9	9	0.0	0.0%
2026	0	0	0	0%	1,926	1,926	0	0%	0.3	0.3	0.0	0.0%	9	9	0.0	0.0%
2027	0	0	0	-6%	1,754	1,997	244	14%	0.3	0.3	0.0	-0.4%	10	10	0.0	-0.4%
2028	0	0	0	-2%	1,442	2,041	599	42%	0.3	0.3	0.0	-0.9%	10	10	0.0	-0.3%
2029	0	0	0	0%	1,332	2,413	1,081	81%	0.3	0.3	0.0	-1.3%	10	10	-0.1	-0.6%
2030	0	0	0	13%	1,311	3,216	1,906	145%	0.3	0.3	0.0	-1.7%	10	10	-0.2	-1.7%
2031	0	0	0	4%	1,561	3,727	2,167	139%	0.3	0.3	0.0	-1.9%	10	10	-0.3	-2.6%

Table 880 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Mitsubishi) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC6LT8

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Mitsubishi) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC6LT8																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Reference Baseline)	Alternative PC6LT8	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC6LT8	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC6LT8	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC6LT8	Absolute	Percent
2022	0	0	0	0%	217	217	0	0%	0.1	0.1	0.0	0.0%	2	2	0.0	0.0%
2023	0	0	0	0%	233	233	0	0%	0.1	0.1	0.0	0.0%	2	2	0.0	0.0%
2024	0	0	0	0%	1,377	1,377	0	0%	0.1	0.1	0.0	0.0%	2	2	0.0	0.0%
2025	0	0	0	0%	2,723	2,723	0	0%	0.1	0.1	0.0	0.0%	2	2	0.0	0.0%
2026	0	0	0	0%	2,018	2,018	0	0%	0.1	0.1	0.0	0.0%	2	2	0.0	0.0%
2027	0	0	0	-1%	1,846	1,942	96	5%	0.1	0.1	0.0	-0.5%	2	2	0.0	-0.5%
2028	0	0	0	70%	1,616	2,770	1,154	71%	0.1	0.1	0.0	-0.9%	2	2	0.0	-0.1%
2029	0	0	0	77%	1,434	2,574	1,140	80%	0.1	0.1	0.0	-1.4%	2	2	0.0	-0.6%
2030	0	0	0	106%	1,279	2,676	1,396	109%	0.1	0.1	0.0	-1.6%	2	2	0.1	3.1%
2031	0	0	0	130%	1,154	2,708	1,554	135%	0.1	0.1	0.0	-1.8%	2	2	0.1	2.9%

Table 881 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Nissan) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC6LT8

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Nissan) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC6LT8																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Reference Baseline)	Alternative PC6LT8	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC6LT8	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC6LT8	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC6LT8	Absolute	Percent
2022	0	0	0	0%	33	33	0	0%	1.0	1.0	0.0	0.0%	59	59	0.0	0.0%
2023	1	1	0	0%	651	651	0	0%	1.0	1.0	0.0	0.0%	62	62	0.0	0.0%
2024	1	1	0	0%	825	825	0	0%	1.0	1.0	0.0	0.0%	62	62	0.0	0.0%
2025	1	1	0	0%	1,227	1,227	0	0%	1.0	1.0	0.0	0.0%	60	60	0.0	0.0%
2026	1	1	0	0%	1,176	1,176	0	0%	1.0	1.0	0.0	0.0%	60	60	0.0	0.0%
2027	1	1	0	-2%	1,464	1,790	326	22%	1.0	1.0	0.0	-0.5%	61	61	-0.3	-0.5%
2028	1	2	0	35%	1,364	2,507	1,143	84%	1.0	1.0	0.0	-0.9%	62	62	0.1	0.2%
2029	1	2	1	41%	1,254	2,968	1,714	137%	1.0	1.0	0.0	-1.4%	62	62	-0.2	-0.3%
2030	1	2	1	77%	1,233	3,277	2,044	166%	1.0	1.0	0.0	-1.6%	61	62	0.2	0.2%
2031	1	2	1	85%	1,238	3,600	2,363	191%	1.0	1.0	0.0	-1.7%	61	61	0.3	0.4%

Table 882 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Stellantis) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC6LT8

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Stellantis) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC6LT8																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Reference Baseline)	Alternative PC6LT8	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC6LT8	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC6LT8	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC6LT8	Absolute	Percent
2022	0	0	0	0%	446	446	0	0%	1.6	1.6	0.0	0.0%	90	90	0.0	0.0%
2023	1	1	0	0%	898	898	0	0%	1.7	1.7	0.0	0.0%	100	100	0.0	0.0%
2024	3	3	0	0%	1,659	1,659	0	0%	1.7	1.7	0.0	0.0%	103	103	0.0	0.0%
2025	4	4	0	0%	2,479	2,479	0	0%	1.6	1.6	0.0	0.0%	103	103	0.0	0.0%
2026	3	3	0	0%	2,028	2,028	0	0%	1.7	1.7	0.0	0.0%	103	103	0.0	0.0%
2027	3	3	1	21%	1,596	2,194	599	38%	1.7	1.7	0.0	-0.4%	105	106	1.0	0.9%
2028	3	3	1	22%	1,492	2,766	1,274	85%	1.8	1.7	0.0	-0.8%	107	108	0.5	0.5%
2029	3	3	1	31%	1,470	3,182	1,712	116%	1.8	1.7	0.0	-1.2%	107	108	0.7	0.6%
2030	2	3	1	36%	1,406	3,947	2,541	181%	1.7	1.7	0.0	-2.2%	105	105	-0.4	-0.4%
2031	3	3	1	35%	1,476	4,521	3,045	206%	1.7	1.7	0.0	-2.8%	104	103	-1.0	-1.0%

Table 883 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Subaru) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC6LT8

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Subaru) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC6LT8																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Reference Baseline)	Alternative PC6LT8	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC6LT8	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC6LT8	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC6LT8	Absolute	Percent
2022	0	0	0	0%	0	0	0	0%	0.7	0.7	0.0	0.0%	39	39	0.0	0.0%
2023	0	0	0	0%	460	460	0	0%	0.8	0.8	0.0	0.0%	42	42	0.0	0.0%
2024	0	0	0	0%	494	494	0	0%	0.8	0.8	0.0	0.0%	42	42	0.0	0.0%
2025	0	0	0	0%	638	638	0	0%	0.8	0.8	0.0	0.0%	40	40	0.0	0.0%
2026	1	1	0	0%	757	757	0	0%	0.8	0.8	0.0	0.0%	41	41	0.0	0.0%
2027	1	1	0	-3%	841	1,007	166	20%	0.8	0.8	0.0	-0.4%	42	42	-0.2	-0.4%
2028	1	1	0	39%	970	1,479	509	52%	0.8	0.8	0.0	-0.8%	43	43	-0.3	-0.6%
2029	1	2	1	79%	1,059	1,914	855	81%	0.8	0.8	0.0	-1.2%	43	43	-0.1	-0.1%
2030	1	2	1	102%	1,154	2,384	1,231	107%	0.8	0.8	0.0	-2.2%	43	43	0.1	0.3%
2031	1	2	1	80%	1,227	2,277	1,050	86%	0.8	0.8	0.0	-2.7%	42	42	-0.2	-0.5%

Table 884 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Tesla) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC6LT8

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Tesla) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC6LT8																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Reference Baseline)	Alternative PC6LT8	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC6LT8	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC6LT8	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC6LT8	Absolute	Percent
2022	0	0	0	0%	0	0	0	0%	0.5	0.5	0.0	0.0%	59	59	0.0	0.0%
2023	0	0	0	0%	7	7	0	0%	0.5	0.5	0.0	0.0%	60	60	0.0	0.0%
2024	0	0	0	0%	11	11	0	0%	0.5	0.5	0.0	0.0%	59	59	0.0	0.0%
2025	0	0	0	0%	16	16	0	0%	0.5	0.5	0.0	0.0%	55	55	0.0	0.0%
2026	0	0	0	0%	16	16	0	0%	0.5	0.5	0.0	0.0%	55	55	0.0	0.0%
2027	0	0	0	-99%	15	0	-15	-99%	0.5	0.5	0.0	-0.6%	56	55	-0.3	-0.6%
2028	0	0	0	-100%	15	0	-15	-100%	0.5	0.5	0.0	-1.0%	56	56	-0.6	-1.0%
2029	0	0	0	-100%	15	0	-15	-100%	0.5	0.5	0.0	-1.6%	56	55	-0.9	-1.6%
2030	0	0	0	-100%	15	0	-15	-100%	0.5	0.5	0.0	-1.0%	55	55	-0.5	-1.0%
2031	0	0	0	-100%	15	0	-15	-100%	0.5	0.5	0.0	-0.7%	54	54	-0.4	-0.7%

Table 885 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Toyota) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC6LT8

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Toyota) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC6LT8																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Reference Baseline)	Alternative PC6LT8	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC6LT8	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC6LT8	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC6LT8	Absolute	Percent
2022	0	0	0	0%	0	0	0	0%	2.4	2.4	0.0	0.0%	165	165	0.0	0.0%
2023	1	1	0	0%	234	234	0	0%	2.5	2.5	0.0	0.0%	173	173	0.0	0.0%
2024	1	1	0	0%	492	492	0	0%	2.5	2.5	0.0	0.0%	173	173	0.0	0.0%
2025	2	2	0	0%	644	644	0	0%	2.4	2.4	0.0	0.0%	166	166	0.0	0.0%
2026	2	2	0	0%	963	963	0	0%	2.4	2.4	0.0	0.0%	168	168	0.0	0.0%
2027	2	2	0	-3%	662	886	225	34%	2.5	2.4	0.0	-0.4%	172	172	-0.8	-0.5%
2028	2	2	0	24%	732	1,429	697	95%	2.5	2.5	0.0	-0.9%	176	175	-0.9	-0.5%
2029	2	3	1	29%	798	1,946	1,147	144%	2.5	2.5	0.0	-1.3%	176	174	-1.6	-0.9%
2030	2	3	1	54%	865	2,477	1,612	186%	2.5	2.4	0.0	-1.8%	174	172	-1.9	-1.1%
2031	2	4	2	75%	928	2,825	1,898	205%	2.4	2.4	-0.1	-2.1%	172	170	-1.4	-0.8%

Table 886 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Volvo) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC6LT8

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Volvo) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC6LT8																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Reference Baseline)	Alternative PC6LT8	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC6LT8	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC6LT8	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC6LT8	Absolute	Percent
2022	0	0	0	0%	0	0	0	0%	0.1	0.1	0.0	0.0%	3	3	0.0	0.0%
2023	0	0	0	0%	140	140	0	0%	0.1	0.1	0.0	0.0%	3	3	0.0	0.0%
2024	0	0	0	0%	195	195	0	0%	0.1	0.1	0.0	0.0%	3	3	0.0	0.0%
2025	0	0	0	0%	1,128	1,128	0	0%	0.1	0.1	0.0	0.0%	3	3	0.0	0.0%
2026	0	0	0	0%	1,041	1,041	0	0%	0.1	0.1	0.0	0.0%	3	3	0.0	0.0%
2027	0	0	0	6%	677	720	43	6%	0.1	0.1	0.0	-0.4%	3	3	0.0	-0.6%
2028	0	0	0	7%	531	1,144	613	115%	0.1	0.1	0.0	-0.8%	3	3	0.0	-1.0%
2029	0	0	0	27%	363	1,551	1,188	327%	0.1	0.1	0.0	-1.3%	3	3	0.0	-1.4%
2030	0	0	0	251%	219	2,166	1,947	889%	0.1	0.1	0.0	-2.0%	3	3	0.0	-1.6%
2031	0	0	0	455%	115	2,761	2,646	2307%	0.1	0.1	0.0	-2.4%	3	3	0.0	-1.7%

Table 887 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (VWA) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC6LT8

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (VWA) Total Fleet Between No Action Alternative (Reference Baseline) and Alternative PC6LT8																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Reference Baseline)	Alternative PC6LT8	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC6LT8	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC6LT8	Absolute	Percent	No Action Alternative (Reference Baseline)	Alternative PC6LT8	Absolute	Percent
2022	0	0	0	0%	283	283	0	0%	0.6	0.6	0.0	0.0%	8	8	0.0	0.0%
2023	0	0	0	0%	647	647	0	0%	0.6	0.6	0.0	0.0%	8	8	0.0	0.0%
2024	1	1	0	0%	946	946	0	0%	0.6	0.6	0.0	0.0%	8	8	0.0	0.0%
2025	1	1	0	0%	1,142	1,142	0	0%	0.6	0.6	0.0	0.0%	8	8	0.0	0.0%
2026	1	1	0	0%	1,138	1,138	0	0%	0.6	0.6	0.0	0.0%	8	8	0.0	0.0%
2027	1	1	0	4%	817	1,344	527	64%	0.6	0.6	0.0	-0.4%	8	8	0.0	-0.4%
2028	1	1	0	44%	776	1,915	1,139	147%	0.7	0.6	0.0	-0.9%	8	8	-0.1	-0.9%
2029	0	1	0	51%	743	2,532	1,789	241%	0.7	0.6	0.0	-1.3%	8	8	-0.1	-1.3%
2030	1	1	0	62%	875	3,404	2,529	289%	0.6	0.6	0.0	-1.8%	8	8	-0.1	-1.8%
2031	1	1	0	59%	1,042	3,967	2,925	281%	0.6	0.6	0.0	-2.1%	8	8	-0.2	-2.1%

CAFE Compliance Credits

Table 888 - CAFE Compliance Credits (in millions) Earned by Manufacturers, Total Fleet by Model Year for No Action Alternative (Reference Baseline)

CAFE Compliance Credits (in millions) Earned by Manufacturers, Total Fleet by Model Year for No Action Alternative (Reference Baseline)										
Manufacturer	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
BMW	-10	-1	5	5	9	13	9	9	13	22
Ford	-6	16	71	36	14	52	40	40	24	23
GM	-35	-41	42	75	34	21	11	8	0	7
Honda	14	80	29	30	7	22	53	74	95	135
Hyundai	15	496	564	629	777	1,260	161	79	52	65
KIA	10	24	31	19	3	5	2	0	2	11
JLR	-3	4	5	2	2	2	1	0	0	3
Karma	0	0	0	0	1	1	0	0	0	0
Lucid	27	28	27	25	24	24	11	6	4	4
Mazda	-2	17	15	10	6	7	9	11	14	19
Mercedes-Benz	-12	7	1	-2	13	19	18	14	10	17
Mitsubishi	-2	-3	5	14	7	7	13	11	9	9
Nissan	-3	45	38	33	23	24	26	20	32	47
Stellantis	-52	-31	-3	62	4	10	1	18	12	35
Subaru	7	43	37	33	14	34	50	65	80	106
Tesla	3,401	3,534	3,476	3,249	3,206	3,114	1,375	815	533	525
Toyota	48	104	117	79	75	76	104	140	173	238
Volvo	15	19	16	18	140	134	56	34	22	21
VWA	-13	-2	23	18	17	17	13	5	8	20
Total	3,489	4,435	4,596	4,427	4,466	4,932	1,999	1,375	1,096	1,321

Table 889 - CAFE Compliance Credits (in millions) Earned by Manufacturers, Total Fleet by Model Year for Alternative PC2LT002

CAFE Compliance Credits (in millions) Earned by Manufacturers, Total Fleet by Model Year for Alternative PC2LT002										
Manufacturer	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
BMW	-10	-1	5	5	9	7	3	-1	0	2
Ford	-6	16	71	36	14	55	59	52	22	2
GM	-35	-41	42	75	34	10	-4	-4	-27	-7
Honda	14	80	29	30	7	15	34	35	34	42
Hyundai	15	496	564	629	777	119	67	47	28	34
KIA	10	24	31	19	3	-3	2	3	4	7
JLR	-3	4	5	2	2	1	0	-1	-1	0
Karma	0	0	0	0	1	1	0	0	0	0
Lucid	27	28	27	25	24	12	7	4	3	3
Mazda	-2	17	15	10	6	6	7	7	7	9
Mercedes-Benz	-12	7	1	-2	13	13	11	4	1	4
Mitsubishi	-2	-3	5	14	7	5	11	8	5	4
Nissan	-3	45	38	33	23	10	8	-5	6	9
Stellantis	-52	-31	-3	62	4	6	-3	6	-10	-3
Subaru	7	43	37	33	14	26	38	42	45	55
Tesla	3,401	3,534	3,476	3,249	3,206	1,581	900	574	381	370
Toyota	48	104	117	79	75	45	58	61	64	83
Volvo	15	19	16	18	140	56	33	20	14	12
VWA	-13	-2	23	18	17	8	14	0	0	4
Total	3,489	4,435	4,596	4,427	4,466	2,046	1,286	873	587	640

Table 890 - CAFE Compliance Credits (in millions) Earned by Manufacturers, Total Fleet by Model Year for Alternative PC1LT3

CAFE Compliance Credits (in millions) Earned by Manufacturers, Total Fleet by Model Year for Alternative PC1LT3										
Manufacturer	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
BMW	-10	-1	5	5	9	5	-1	-6	-7	1
Ford	-6	16	71	36	14	61	59	62	22	-7
GM	-35	-41	42	75	34	-6	-38	-47	-75	-67
Honda	14	80	29	30	7	6	21	28	31	41
Hyundai	15	496	564	629	777	113	62	42	29	36
KIA	10	24	31	19	3	-5	-3	-7	0	5
JLR	-3	4	5	2	2	0	-2	-4	-4	-3
Karma	0	0	0	0	1	1	0	0	0	0
Lucid	27	28	27	25	24	12	7	5	3	3
Mazda	-2	17	15	10	6	3	2	1	1	1
Mercedes-Benz	-12	7	1	-2	13	12	10	2	0	2
Mitsubishi	-2	-3	5	14	7	4	9	6	3	2
Nissan	-3	45	38	33	23	7	20	7	15	16
Stellantis	-52	-31	-3	62	4	0	-29	-18	-39	-44
Subaru	7	43	37	33	14	16	17	18	18	24
Tesla	3,401	3,534	3,476	3,249	3,206	1,587	909	586	395	387
Toyota	48	104	117	79	75	33	33	39	43	60
Volvo	15	19	16	18	140	55	31	18	13	11
VWA	-13	-2	23	18	17	4	0	-15	-10	-3
Total	3,489	4,435	4,596	4,427	4,466	1,980	1,145	736	448	473

Table 891 - CAFE Compliance Credits (in millions) Earned by Manufacturers, Total Fleet by Model Year for PC2LT4

CAFE Compliance Credits (in millions) Earned by Manufacturers, Total Fleet by Model Year for PC2LT4										
Manufacturer	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
BMW	-10	-1	5	5	9	4	-3	-9	-11	-6
Ford	-6	16	71	36	14	61	49	42	-9	-48
GM	-35	-41	42	75	34	-14	-57	-71	-109	-102
Honda	14	80	29	30	7	3	17	17	28	27
Hyundai	15	496	564	629	777	123	67	49	29	30
KIA	10	24	31	19	3	-8	-7	-10	1	6
JLR	-3	4	5	2	2	0	-3	-5	-6	-5
Karma	0	0	0	0	1	1	0	0	0	0
Lucid	27	28	27	25	24	12	7	5	3	3
Mazda	-2	17	15	10	6	3	0	3	2	1
Mercedes-Benz	-12	7	1	-2	13	10	7	-2	-6	-5
Mitsubishi	-2	-3	5	14	7	4	9	5	1	0
Nissan	-3	45	38	33	23	2	12	-6	18	12
Stellantis	-52	-31	-3	62	4	-1	-39	-36	-66	-78
Subaru	7	43	37	33	14	12	10	7	6	7
Tesla	3,401	3,534	3,476	3,249	3,206	1,583	902	575	383	373
Toyota	48	104	117	79	75	19	22	20	14	30
Volvo	15	19	16	18	140	54	30	15	11	8
VWA	-13	-2	23	18	17	1	-1	-20	-19	-15
Total	3,489	4,435	4,596	4,427	4,466	1,941	1,060	598	281	245

Table 892 - CAFE Compliance Credits (in millions) Earned by Manufacturers, Total Fleet by Model Year for PC3LT5

CAFE Compliance Credits (in millions) Earned by Manufacturers, Total Fleet by Model Year for Alternative PC3LT5										
Manufacturer	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
BMW	-10	-1	5	5	9	2	-5	-14	-15	-12
Ford	-6	16	71	36	14	55	34	18	-43	-94
GM	-35	-41	42	75	34	-25	-77	-101	-150	-146
Honda	14	80	29	30	7	1	13	4	12	0
Hyundai	15	496	564	629	777	125	63	53	27	28
KIA	10	24	31	19	3	-12	-14	-13	1	8
JLR	-3	4	5	2	2	-1	-4	-7	-8	-7
Karma	0	0	0	0	1	1	0	0	0	0
Lucid	27	28	27	25	24	12	7	4	3	3
Mazda	-2	17	15	10	6	3	-1	5	4	2
Mercedes-Benz	-12	7	1	-2	13	9	4	-6	-10	-12
Mitsubishi	-2	-3	5	14	7	3	9	4	2	0
Nissan	-3	45	38	33	23	-4	3	-22	4	-1
Stellantis	-52	-31	-3	62	4	-6	-52	-58	-100	-118
Subaru	7	43	37	33	14	7	5	4	7	7
Tesla	3,401	3,534	3,476	3,249	3,206	1,577	894	564	371	357
Toyota	48	104	117	79	75	6	-5	-24	-39	-9
Volvo	15	19	16	18	140	53	28	13	8	4
VWA	-13	-2	23	18	17	-2	-5	-28	-32	-30
Total	3,489	4,435	4,596	4,427	4,466	1,875	934	415	49	-15

Table 893 - CAFE Compliance Credits (in millions) Earned by Manufacturers, Total Fleet by Model Year for Alternative PC6LT8

CAFE Compliance Credits (in millions) Earned by Manufacturers, Total Fleet by Model Year for Alternative PC6LT8										
Manufacturer	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
BMW	-10	-1	5	5	9	-4	-18	-34	-43	-44
Ford	-6	16	71	36	14	30	-20	-69	-164	-252
GM	-35	-41	42	75	34	-52	-137	-200	-286	-322
Honda	14	80	29	30	7	-25	11	6	-24	-73
Hyundai	15	496	564	629	777	115	35	7	-39	-59
KIA	10	24	31	19	3	-23	-38	-44	-32	-23
JLR	-3	4	5	2	2	-2	-6	-11	-14	-15
Karma	0	0	0	0	1	1	0	0	0	0
Lucid	27	28	27	25	24	12	7	4	3	2
Mazda	-2	17	15	10	6	5	-2	12	6	-2
Mercedes-Benz	-12	7	1	-2	13	6	-5	-20	-30	-37
Mitsubishi	-2	-3	5	14	7	1	17	9	4	1
Nissan	-3	45	38	33	23	-22	-24	-71	-69	-83
Stellantis	-52	-31	-3	62	4	-31	-106	-144	-219	-273
Subaru	7	43	37	33	14	-6	-4	18	31	1
Tesla	3,401	3,534	3,476	3,249	3,206	1,562	869	530	327	301
Toyota	48	104	117	79	75	-34	-84	-149	-169	-178
Volvo	15	19	16	18	140	52	24	6	-2	-9
VWA	-13	-2	23	18	17	-13	-23	-59	-78	-92
Total	3,489	4,435	4,596	4,427	4,466	1,641	529	-194	-793	-1,156

Consumer Impacts

Table 894 - Average Impacts to Consumers Relative to Alternative 0 (Reference Baseline) for the Total Fleet, Alternative PC2LT002 at a 3% Discount Rate (dollars), per Vehicle Model Year

Average Impacts to Consumers Relative to Alternative 0 (Reference Baseline) for the Total Fleet, Alternative PC2LT002 at a 3% Discount Rate (dollars), per Vehicle Model Year										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Price Increase	0	0	0	0	0	129	193	283	320	392
Implicit Opportunity Cost	0	0	0	0	0	0	0	0	0	0
Increase in Financing Cost	0	0	0	0	0	0	0	0	0	0
Increase in Insurance Cost	0	0	0	0	0	12	19	28	31	37
Increase in Taxes/Fees	0	0	0	0	0	7	11	16	18	22
Lost Consumer Surplus	0	0	0	0	0	0	0	0	0	0
Total Consumer Cost	0	0	0	0	0	148	223	328	369	451
Fuel Savings	4	4	4	4	4	-170	-259	-349	-419	-639
Mobility Benefit	0	0	0	0	0	12	20	28	35	44
Reallocated Benefit	3	3	4	4	4	5	5	6	7	8
Refueling Benefit	0	0	0	0	0	-11	-16	-21	-24	-37
Total Consumer Benefit	-2	-1	-1	0	0	242	346	449	527	818
Net Consumer Benefit	-2	-1	-1	0	0	94	123	121	158	367
Payback	0.0	0.0	0.0	0.0	0.0	0.7	1.0	0.3	0.3	0.0

Table 895 - Average Impacts to Consumers Relative to Alternative 0 (Reference Baseline) for the Passenger Car Fleet, Alternative PC2LT002 at a 3% Discount Rate (dollars), per Vehicle Model Year

Average Impacts to Consumers Relative to Alternative 0 (Reference Baseline) for the Passenger Car Fleet, Alternative PC2LT002 at a 3% Discount Rate (dollars), per Vehicle Model Year										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Price Increase	0	0	0	0	0	135	227	398	413	357
Implicit Opportunity Cost	0	0	0	0	0	0	0	0	0	0
Increase in Financing Cost	0	0	0	0	0	0	0	0	0	0
Increase in Insurance Cost	0	0	0	0	0	13	21	38	39	34
Increase in Taxes/Fees	0	0	0	0	0	7	12	22	23	20
Lost Consumer Surplus	0	0	0	0	0	0	0	0	0	0
Total Consumer Cost	0	0	0	0	0	156	261	458	474	411
Fuel Savings	4	3	3	3	3	-213	-289	-423	-486	-548
Mobility Benefit	0	0	0	0	0	14	20	29	35	41
Reallocated Benefit	2	2	2	3	3	3	4	4	5	5
Refueling Benefit	0	0	0	0	0	-14	-19	-26	-29	-31
Total Consumer Benefit	-2	-2	-1	0	0	282	367	517	586	656
Net Consumer Benefit	-2	-2	-1	0	0	126	107	59	112	245
Payback	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	1.0	0.0

Table 896 - Average Impacts to Consumers Relative to Alternative 0 (Reference Baseline) for the Light Truck Fleet, Alternative PC2LT002 at a 3% Discount Rate (dollars), per Vehicle Model Year

Average Impacts to Consumers Relative to Alternative 0 (Reference Baseline) for the Light Truck Fleet, Alternative PC2LT002 at a 3% Discount Rate (dollars), per Vehicle Model Year										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Price Increase	0	0	0	0	0	126	176	224	272	409
Implicit Opportunity Cost	0	0	0	0	0	0	0	0	0	0
Increase in Financing Cost	0	0	0	0	0	0	0	0	0	0
Increase in Insurance Cost	0	0	0	0	0	12	17	21	26	39
Increase in Taxes/Fees	0	0	0	0	0	7	10	12	15	22
Lost Consumer Surplus	0	0	0	0	0	0	0	0	0	0
Total Consumer Cost	0	0	0	0	0	144	202	258	312	470
Fuel Savings	5	5	5	5	5	-149	-250	-327	-398	-690
Mobility Benefit	0	0	0	0	0	10	20	28	35	45
Reallocated Benefit	4	4	4	5	5	6	6	7	8	9
Refueling Benefit	0	0	0	0	0	-10	-15	-19	-22	-40
Total Consumer Benefit	-1	-1	-1	0	0	224	341	430	510	905
Net Consumer Benefit	-1	-1	-1	0	0	79	139	172	198	435
Payback	0.0	0.0	0.0	0.0	0.0	1.0	1.0	0.0	0.0	0.0

Table 897 - Average Impacts to Consumers Relative to Alternative 0 (Reference Baseline) for the Total Fleet, Alternative PC2LT002 at a 7% Discount Rate (dollars), per Vehicle Model Year

Average Impacts to Consumers Relative to Alternative 0 (Reference Baseline) for the Total Fleet, Alternative PC2LT002 at a 7% Discount Rate (dollars), per Vehicle Model Year										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Price Increase	0	0	0	0	0	129	193	283	320	392
Implicit Opportunity Cost	0	0	0	0	0	0	0	0	0	0
Increase in Financing Cost	0	0	0	0	0	0	0	0	0	0
Increase in Insurance Cost	0	0	0	0	0	10	16	23	26	31
Increase in Taxes/Fees	0	0	0	0	0	7	11	16	18	22
Lost Consumer Surplus	0	0	0	0	0	0	0	0	0	0
Total Consumer Cost	0	0	0	0	0	146	220	323	364	445
Fuel Savings	3	3	3	3	3	-133	-202	-273	-327	-496
Mobility Benefit	0	0	0	0	0	9	15	22	27	34
Reallocated Benefit	1	2	2	2	3	3	3	4	5	5
Refueling Benefit	0	0	0	0	0	-9	-13	-17	-19	-29
Total Consumer Benefit	-1	-1	-1	0	0	198	279	360	420	655
Net Consumer Benefit	-1	-1	-1	0	0	52	59	37	57	210
Payback	0.0	0.0	0.0	0.0	0.0	0.3	0.7	1.0	0.3	0.7

Table 898 - Average Impacts to Consumers Relative to Alternative 0 (Reference Baseline) for the Passenger Car Fleet, Alternative PC2LT002 at a 7% Discount Rate (dollars), per Vehicle Model Year

Average Impacts to Consumers Relative to Alternative 0 (Reference Baseline) for the Passenger Car Fleet, Alternative PC2LT002 at a 7% Discount Rate (dollars), per Vehicle Model Year										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Price Increase	0	0	0	0	0	135	227	398	413	357
Implicit Opportunity Cost	0	0	0	0	0	0	0	0	0	0
Increase in Financing Cost	0	0	0	0	0	0	0	0	0	0
Increase in Insurance Cost	0	0	0	0	0	11	18	31	32	28
Increase in Taxes/Fees	0	0	0	0	0	7	12	22	23	20
Lost Consumer Surplus	0	0	0	0	0	0	0	0	0	0
Total Consumer Cost	0	0	0	0	0	153	257	452	468	405
Fuel Savings	2	2	2	2	2	-166	-225	-331	-380	-429
Mobility Benefit	0	0	0	0	0	11	15	23	27	32
Reallocated Benefit	1	1	1	2	2	2	2	3	3	4
Refueling Benefit	0	0	0	0	0	-11	-15	-20	-22	-25
Total Consumer Benefit	-2	-1	-1	-1	0	227	294	411	465	520
Net Consumer Benefit	-2	-1	-1	-1	0	74	37	-40	-3	115
Payback	0.0	0.0	0.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0

Table 899 - Average Impacts to Consumers Relative to Alternative 0 (Reference Baseline) for the Light Truck Fleet, Alternative PC2LT002 at a 7% Discount Rate (dollars), per Vehicle Model Year

Average Impacts to Consumers Relative to Alternative 0 (Reference Baseline) for the Light Truck Fleet, Alternative PC2LT002 at a 7% Discount Rate (dollars), per Vehicle Model Year										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Price Increase	0	0	0	0	0	126	176	224	272	409
Implicit Opportunity Cost	0	0	0	0	0	0	0	0	0	0
Increase in Financing Cost	0	0	0	0	0	0	0	0	0	0
Increase in Insurance Cost	0	0	0	0	0	10	14	18	21	32
Increase in Taxes/Fees	0	0	0	0	0	7	10	12	15	22
Lost Consumer Surplus	0	0	0	0	0	0	0	0	0	0
Total Consumer Cost	0	0	0	0	0	142	199	254	308	464
Fuel Savings	3	3	3	3	3	-117	-195	-255	-310	-534
Mobility Benefit	0	0	0	0	0	8	15	22	27	35
Reallocated Benefit	2	2	2	3	3	3	4	5	5	6
Refueling Benefit	0	0	0	0	0	-8	-12	-15	-17	-31
Total Consumer Benefit	-1	-1	-1	0	0	184	276	346	407	727
Net Consumer Benefit	-1	-1	-1	0	0	42	76	91	100	263
Payback	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	0.0	1.0

Table 900 - Average Impacts to Consumers Relative to Alternative 0 (Reference Baseline) for the Total Fleet, Alternative PC1LT3 at a 3% Discount Rate (dollars), per Vehicle Model Year

Average Impacts to Consumers Relative to Alternative 0 (Reference Baseline) for the Total Fleet, Alternative PC1LT3 at a 3% Discount Rate (dollars), per Vehicle Model Year										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Price Increase	0	0	0	0	0	173	315	417	499	607
Implicit Opportunity Cost	0	0	0	0	0	0	0	0	0	0
Increase in Financing Cost	0	0	0	0	0	0	0	0	0	0
Increase in Insurance Cost	0	0	0	0	0	16	28	38	45	54
Increase in Taxes/Fees	0	0	0	0	0	9	16	22	26	31
Lost Consumer Surplus	0	0	0	0	0	0	0	0	1	1
Total Consumer Cost	0	0	0	0	0	198	361	477	570	693
Fuel Savings	8	8	8	8	9	-241	-412	-559	-675	-895
Mobility Benefit	0	0	0	0	0	20	34	47	58	67
Reallocated Benefit	6	7	8	8	9	10	11	12	13	15
Refueling Benefit	0	1	1	1	1	-12	-21	-28	-33	-46
Total Consumer Benefit	-2	-2	-1	-1	0	305	501	669	800	1,092
Net Consumer Benefit	-2	-2	-1	-1	0	108	140	191	230	399
Payback	0.0	0.0	0.0	0.0	0.0	0.7	1.0	1.0	0.7	0.7

Table 901 - Average Impacts to Consumers Relative to Alternative 0 (Reference Baseline) for the Passenger Car Fleet, Alternative PC1LT3 at a 3% Discount Rate (dollars), per Vehicle Model Year

Average Impacts to Consumers Relative to Alternative 0 (Reference Baseline) for the Passenger Car Fleet, Alternative PC1LT3 at a 3% Discount Rate (dollars), per Vehicle Model Year										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Price Increase	0	0	0	0	0	72	134	212	220	168
Implicit Opportunity Cost	0	0	0	0	0	0	0	0	0	0
Increase in Financing Cost	0	0	0	0	0	0	0	0	0	0
Increase in Insurance Cost	0	0	0	0	0	7	13	20	21	16
Increase in Taxes/Fees	0	0	0	0	0	4	7	12	12	9
Lost Consumer Surplus	0	0	0	0	0	0	0	0	1	1
Total Consumer Cost	0	0	0	0	0	83	154	244	254	193
Fuel Savings	7	6	6	6	6	-116	-164	-254	-273	-300
Mobility Benefit	0	0	0	0	0	10	14	20	22	25
Reallocated Benefit	4	5	5	6	6	7	8	9	10	11
Refueling Benefit	0	1	1	1	1	-6	-9	-14	-15	-16
Total Consumer Benefit	-3	-2	-1	-1	0	139	195	297	319	352
Net Consumer Benefit	-3	-2	-1	-1	0	56	41	53	66	158
Payback	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	0.0	0.0

Table 902 - Average Impacts to Consumers Relative to Alternative 0 (Reference Baseline) for the Light Truck Fleet, Alternative PC1LT3 at a 3% Discount Rate (dollars), per Vehicle Model Year

Average Impacts to Consumers Relative to Alternative 0 (Reference Baseline) for the Light Truck Fleet, Alternative PC1LT3 at a 3% Discount Rate (dollars), per Vehicle Model Year										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Price Increase	0	0	0	0	0	226	410	523	643	835
Implicit Opportunity Cost	0	0	0	0	0	0	0	0	0	0
Increase in Financing Cost	0	0	0	0	0	0	0	0	0	0
Increase in Insurance Cost	0	0	0	0	0	21	39	49	61	79
Increase in Taxes/Fees	0	0	0	0	0	12	22	29	35	46
Lost Consumer Surplus	0	0	0	0	0	0	0	0	1	1
Total Consumer Cost	0	0	0	0	0	259	471	602	740	960
Fuel Savings	9	9	9	10	10	-299	-523	-697	-856	-1,165
Mobility Benefit	0	0	0	0	0	25	45	61	76	89
Reallocated Benefit	7	8	9	10	11	11	12	14	15	16
Refueling Benefit	0	1	1	1	1	-15	-27	-36	-43	-62
Total Consumer Benefit	-2	-1	-1	-1	0	384	641	841	1,021	1,436
Net Consumer Benefit	-2	-1	-1	-1	0	125	170	240	281	476
Payback	0.0	0.0	0.0	0.0	0.0	1.0	1.0	1.0	1.0	1.0

Table 903 - Average Impacts to Consumers Relative to Alternative 0 (Reference Baseline) for the Total Fleet, Alternative PC1LT3 at a 7% Discount Rate (dollars), per Vehicle Model Year

Average Impacts to Consumers Relative to Alternative 0 (Reference Baseline) for the Total Fleet, Alternative PC1LT3 at a 7% Discount Rate (dollars), per Vehicle Model Year										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Price Increase	0	0	0	0	0	173	315	417	499	607
Implicit Opportunity Cost	0	0	0	0	0	0	0	0	0	0
Increase in Financing Cost	0	0	0	0	0	0	0	0	0	0
Increase in Insurance Cost	0	0	0	0	0	13	24	32	37	45
Increase in Taxes/Fees	0	0	0	0	0	9	16	22	26	31
Lost Consumer Surplus	0	0	0	0	0	0	0	0	1	1
Total Consumer Cost	0	0	0	0	0	195	356	471	563	684
Fuel Savings	5	5	5	5	6	-187	-320	-434	-524	-693
Mobility Benefit	0	0	0	0	0	16	27	37	45	52
Reallocated Benefit	3	4	4	5	6	6	7	8	9	11
Refueling Benefit	0	0	0	0	1	-10	-16	-22	-26	-36
Total Consumer Benefit	-2	-1	-1	-1	-1	241	393	524	625	861
Net Consumer Benefit	-2	-1	-1	-1	-1	46	37	53	63	177
Payback	0.0	0.0	0.0	0.0	0.0	0.3	0.7	1.0	0.7	0.7

Table 904 - Average Impacts to Consumers Relative to Alternative 0 (Reference Baseline) for the Passenger Car Fleet, Alternative PC1LT3 at a 7% Discount Rate (dollars), per Vehicle Model Year

Average Impacts to Consumers Relative to Alternative 0 (Reference Baseline) for the Passenger Car Fleet, Alternative PC1LT3 at a 7% Discount Rate (dollars), per Vehicle Model Year										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Price Increase	0	0	0	0	0	72	134	212	220	168
Implicit Opportunity Cost	0	0	0	0	0	0	0	0	0	0
Increase in Financing Cost	0	0	0	0	0	0	0	0	0	0
Increase in Insurance Cost	0	0	0	0	0	6	10	17	17	13
Increase in Taxes/Fees	0	0	0	0	0	4	7	12	12	9
Lost Consumer Surplus	0	0	0	0	0	0	0	0	1	1
Total Consumer Cost	0	0	0	0	0	82	152	241	250	191
Fuel Savings	4	4	4	4	4	-91	-128	-199	-213	-235
Mobility Benefit	0	0	0	0	0	8	11	16	18	20
Reallocated Benefit	2	3	3	3	4	4	5	6	7	8
Refueling Benefit	0	0	0	0	1	-5	-7	-11	-12	-13
Total Consumer Benefit	-2	-2	-1	-1	0	108	152	231	249	275
Net Consumer Benefit	-2	-2	-1	-1	0	26	0	-10	-1	84
Payback	0.0	0.0	0.0	0.0	0.0	1.0	0.0	1.0	0.0	0.0

Table 905 - Average Impacts to Consumers Relative to Alternative 0 (Reference Baseline) for the Light Truck Fleet, Alternative PC1LT3 at a 7% Discount Rate (dollars), per Vehicle Model Year

Average Impacts to Consumers Relative to Alternative 0 (Reference Baseline) for the Light Truck Fleet, Alternative PC1LT3 at a 7% Discount Rate (dollars), per Vehicle Model Year										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Price Increase	0	0	0	0	0	226	410	523	643	835
Implicit Opportunity Cost	0	0	0	0	0	0	0	0	0	0
Increase in Financing Cost	0	0	0	0	0	0	0	0	0	0
Increase in Insurance Cost	0	0	0	0	0	18	32	41	50	65
Increase in Taxes/Fees	0	0	0	0	0	12	22	29	35	46
Lost Consumer Surplus	0	0	0	0	0	0	0	0	1	1
Total Consumer Cost	0	0	0	0	0	256	464	593	730	947
Fuel Savings	5	6	6	6	7	-232	-406	-541	-665	-902
Mobility Benefit	0	0	0	0	0	20	35	47	60	69
Reallocated Benefit	4	5	5	6	6	7	8	9	11	12
Refueling Benefit	0	0	0	0	1	-12	-21	-28	-34	-48
Total Consumer Benefit	-2	-1	-1	-1	-1	304	504	660	799	1,135
Net Consumer Benefit	-2	-1	-1	-1	-1	48	40	67	69	188
Payback	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	1.0	1.0

Table 906 - Average Impacts to Consumers Relative to Alternative 0 (Reference Baseline) for the Total Fleet, Alternative PC2LT4 at a 3% Discount Rate (dollars), per Vehicle Model Year

Average Impacts to Consumers Relative to Alternative 0 (Reference Baseline) for the Total Fleet, Alternative PC2LT4 at a 3% Discount Rate (dollars), per Vehicle Model Year										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Price Increase	0	0	0	0	0	225	449	618	856	992
Implicit Opportunity Cost	0	0	0	0	0	0	0	0	0	0
Increase in Financing Cost	0	0	0	0	0	0	0	0	0	0
Increase in Insurance Cost	0	0	0	0	0	21	41	57	78	89
Increase in Taxes/Fees	0	0	0	0	0	12	24	33	45	52
Lost Consumer Surplus	0	0	0	0	0	0	0	1	2	2
Total Consumer Cost	0	0	0	0	0	258	515	710	981	1,136
Fuel Savings	16	16	16	17	17	-288	-522	-698	-895	-1,148
Mobility Benefit	0	0	0	0	1	25	44	60	77	89
Reallocated Benefit	11	13	14	15	17	18	20	22	25	27
Refueling Benefit	1	1	1	1	2	-14	-26	-35	-44	-58
Total Consumer Benefit	-6	-4	-3	-2	-2	368	636	837	1,061	1,391
Net Consumer Benefit	-6	-4	-3	-2	-2	110	121	128	79	255
Payback	0.0	0.0	0.0	0.0	0.0	0.7	1.0	1.0	1.0	1.0

Table 907 - Average Impacts to Consumers Relative to Alternative 0 (Reference Baseline) for the Passenger Car Fleet, Alternative PC2LT4 at a 3% Discount Rate (dollars), per Vehicle Model Year

Average Impacts to Consumers Relative to Alternative 0 (Reference Baseline) for the Passenger Car Fleet, Alternative PC2LT4 at a 3% Discount Rate (dollars), per Vehicle Model Year										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Price Increase	0	0	0	0	0	127	278	471	506	450
Implicit Opportunity Cost	0	0	0	0	0	0	0	0	0	0
Increase in Financing Cost	0	0	0	0	0	0	0	0	0	0
Increase in Insurance Cost	0	0	0	0	0	12	26	44	48	42
Increase in Taxes/Fees	0	0	0	0	0	7	15	26	28	25
Lost Consumer Surplus	0	0	0	0	0	0	0	1	2	2
Total Consumer Cost	0	0	0	0	0	146	320	542	584	519
Fuel Savings	14	13	12	12	12	-164	-250	-390	-456	-503
Mobility Benefit	0	0	0	0	0	14	21	31	37	42
Reallocated Benefit	7	8	9	10	11	13	14	16	18	20
Refueling Benefit	1	1	1	1	2	-8	-13	-21	-25	-27
Total Consumer Benefit	-7	-5	-4	-2	-1	199	299	457	534	590
Net Consumer Benefit	-7	-5	-4	-2	-1	53	-20	-85	-50	71
Payback	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	1.0	1.0

Table 908 - Average Impacts to Consumers Relative to Alternative 0 (Reference Baseline) for the Light Truck Fleet, Alternative PC2LT4 at a 3% Discount Rate (dollars), per Vehicle Model Year

Average Impacts to Consumers Relative to Alternative 0 (Reference Baseline) for the Light Truck Fleet, Alternative PC2LT4 at a 3% Discount Rate (dollars), per Vehicle Model Year										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Price Increase	0	0	0	0	0	276	538	694	1,039	1,277
Implicit Opportunity Cost	0	0	0	0	0	0	0	0	0	0
Increase in Financing Cost	0	0	0	0	0	0	0	0	0	0
Increase in Insurance Cost	0	0	0	0	0	26	51	65	98	120
Increase in Taxes/Fees	0	0	0	0	0	15	29	38	57	70
Lost Consumer Surplus	0	0	0	0	0	0	0	1	2	2
Total Consumer Cost	0	0	0	0	0	317	619	798	1,196	1,470
Fuel Savings	18	18	19	19	20	-346	-647	-846	-1,087	-1,434
Mobility Benefit	0	0	0	0	1	31	57	75	98	114
Reallocated Benefit	14	15	17	18	20	21	23	26	28	30
Refueling Benefit	1	1	1	1	2	-18	-33	-43	-54	-75
Total Consumer Benefit	-5	-4	-3	-2	-2	448	794	1,022	1,297	1,756
Net Consumer Benefit	-5	-4	-3	-2	-2	131	175	224	101	286
Payback	0.0	0.0	0.0	0.0	0.0	1.0	1.0	1.0	1.0	1.0

Table 909 - Average Impacts to Consumers Relative to Alternative 0 (Reference Baseline) for the Total Fleet, Alternative PC2LT4 at a 7% Discount Rate (dollars), per Vehicle Model Year

Average Impacts to Consumers Relative to Alternative 0 (Reference Baseline) for the Total Fleet, Alternative PC2LT4 at a 7% Discount Rate (dollars), per Vehicle Model Year										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Price Increase	0	0	0	0	0	225	449	618	856	992
Implicit Opportunity Cost	0	0	0	0	0	0	0	0	0	0
Increase in Financing Cost	0	0	0	0	0	0	0	0	0	0
Increase in Insurance Cost	0	0	0	0	0	17	34	48	65	74
Increase in Taxes/Fees	0	0	0	0	0	12	24	33	45	52
Lost Consumer Surplus	0	0	0	0	0	0	0	1	2	2
Total Consumer Cost	0	0	0	0	0	254	508	700	968	1,121
Fuel Savings	9	10	10	10	11	-225	-407	-544	-696	-891
Mobility Benefit	0	0	0	0	0	19	34	47	60	69
Reallocated Benefit	6	7	8	9	10	11	13	15	17	19
Refueling Benefit	1	1	1	1	1	-11	-21	-28	-34	-45
Total Consumer Benefit	-4	-3	-3	-2	-2	289	498	655	828	1,094
Net Consumer Benefit	-4	-3	-3	-2	-2	35	-10	-46	-141	-27
Payback	0.0	0.0	0.0	0.0	0.0	0.3	1.7	1.3	1.7	1.7

Table 910 - Average Impacts to Consumers Relative to Alternative 0 (Reference Baseline) for the Passenger Car Fleet, Alternative PC2LT4 at a 7% Discount Rate (dollars), per Vehicle Model Year

Average Impacts to Consumers Relative to Alternative 0 (Reference Baseline) for the Passenger Car Fleet, Alternative PC2LT4 at a 7% Discount Rate (dollars), per Vehicle Model Year										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Price Increase	0	0	0	0	0	127	278	471	506	450
Implicit Opportunity Cost	0	0	0	0	0	0	0	0	0	0
Increase in Financing Cost	0	0	0	0	0	0	0	0	0	0
Increase in Insurance Cost	0	0	0	0	0	10	22	37	40	35
Increase in Taxes/Fees	0	0	0	0	0	7	15	26	28	25
Lost Consumer Surplus	0	0	0	0	0	0	0	1	2	2
Total Consumer Cost	0	0	0	0	0	144	315	535	576	512
Fuel Savings	9	8	8	8	8	-128	-196	-305	-357	-394
Mobility Benefit	0	0	0	0	0	11	16	24	29	33
Reallocated Benefit	4	5	5	6	7	8	9	11	13	14
Refueling Benefit	1	1	1	1	1	-7	-11	-16	-19	-21
Total Consumer Benefit	-5	-4	-3	-2	-2	154	233	356	417	461
Net Consumer Benefit	-5	-4	-3	-2	-2	10	-82	-179	-159	-51
Payback	0.0	0.0	0.0	0.0	0.0	1.0	1.0	2.0	1.0	1.0

Table 911 - Average Impacts to Consumers Relative to Alternative 0 (Reference Baseline) for the Light Truck Fleet, Alternative PC2LT4 at a 7% Discount Rate (dollars), per Vehicle Model Year

Average Impacts to Consumers Relative to Alternative 0 (Reference Baseline) for the Light Truck Fleet, Alternative PC2LT4 at a 7% Discount Rate (dollars), per Vehicle Model Year										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Price Increase	0	0	0	0	0	276	538	694	1,039	1,277
Implicit Opportunity Cost	0	0	0	0	0	0	0	0	0	0
Increase in Financing Cost	0	0	0	0	0	0	0	0	0	0
Increase in Insurance Cost	0	0	0	0	0	22	42	54	82	100
Increase in Taxes/Fees	0	0	0	0	0	15	29	38	57	70
Lost Consumer Surplus	0	0	0	0	0	0	0	1	2	2
Total Consumer Cost	0	0	0	0	0	313	610	787	1,180	1,449
Fuel Savings	10	11	11	12	13	-270	-504	-658	-845	-1,111
Mobility Benefit	0	0	0	0	0	24	44	59	76	89
Reallocated Benefit	7	8	9	10	12	13	15	17	19	21
Refueling Benefit	0	1	1	1	1	-14	-26	-33	-42	-58
Total Consumer Benefit	-3	-3	-2	-2	-2	353	623	799	1,013	1,383
Net Consumer Benefit	-3	-3	-2	-2	-2	41	12	12	-167	-67
Payback	0.0	0.0	0.0	0.0	0.0	0.0	2.0	1.0	2.0	2.0

Table 912 - Average Impacts to Consumers Relative to Alternative 0 (Reference Baseline) for the Total Fleet, Alternative PC3LT5 at a 3% Discount Rate (dollars), per Vehicle Model Year

Average Impacts to Consumers Relative to Alternative 0 (Reference Baseline) for the Total Fleet, Alternative PC3LT5 at a 3% Discount Rate (dollars), per Vehicle Model Year										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Price Increase	0	0	0	0	0	302	581	815	1,195	1,426
Implicit Opportunity Cost	0	0	0	0	0	0	0	0	0	0
Increase in Financing Cost	0	0	0	0	0	0	0	0	0	0
Increase in Insurance Cost	0	0	0	0	0	28	54	77	109	130
Increase in Taxes/Fees	0	0	0	0	0	16	31	44	63	75
Lost Consumer Surplus	0	0	0	0	0	0	1	2	4	6
Total Consumer Cost	0	0	0	0	0	347	668	938	1,372	1,637
Fuel Savings	26	27	26	27	28	-303	-561	-767	-1,016	-1,343
Mobility Benefit	0	0	1	1	1	28	49	67	88	105
Reallocated Benefit	18	20	21	23	26	28	31	35	38	41
Refueling Benefit	1	2	2	2	2	-15	-28	-38	-49	-66
Total Consumer Benefit	-10	-8	-6	-5	-4	396	691	929	1,211	1,625
Net Consumer Benefit	-10	-8	-6	-5	-4	49	23	-9	-161	-12
Payback	0.0	0.0	0.0	0.0	0.0	1.0	1.3	1.3	2.0	1.7

Table 913 - Average Impacts to Consumers Relative to Alternative 0 (Reference Baseline) for the Passenger Car Fleet, Alternative PC3LT5 at a 3% Discount Rate (dollars), per Vehicle Model Year

Average Impacts to Consumers Relative to Alternative 0 (Reference Baseline) for the Passenger Car Fleet, Alternative PC3LT5 at a 3% Discount Rate (dollars), per Vehicle Model Year										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Price Increase	0	0	0	0	0	246	455	724	812	848
Implicit Opportunity Cost	0	0	0	0	0	0	0	0	0	0
Increase in Financing Cost	0	0	0	0	0	0	0	0	0	0
Increase in Insurance Cost	0	0	0	0	0	23	43	68	77	80
Increase in Taxes/Fees	0	0	0	0	0	13	25	40	44	46
Lost Consumer Surplus	0	0	0	0	0	0	1	2	4	6
Total Consumer Cost	0	0	0	0	0	283	524	833	937	980
Fuel Savings	23	21	20	20	20	-184	-304	-492	-623	-758
Mobility Benefit	0	0	1	1	1	17	26	39	51	62
Reallocated Benefit	11	13	14	16	18	20	22	25	28	30
Refueling Benefit	1	2	2	2	2	-9	-15	-25	-33	-39
Total Consumer Benefit	-13	-10	-7	-5	-4	229	368	581	734	889
Net Consumer Benefit	-13	-10	-7	-5	-4	-54	-156	-252	-204	-91
Payback	0.0	0.0	0.0	0.0	0.0	1.0	2.0	2.0	2.0	1.0

Table 914 - Average Impacts to Consumers Relative to Alternative 0 (Reference Baseline) for the Light Truck Fleet, Alternative PC3LT5 at a 3% Discount Rate (dollars), per Vehicle Model Year

Average Impacts to Consumers Relative to Alternative 0 (Reference Baseline) for the Light Truck Fleet, Alternative PC3LT5 at a 3% Discount Rate (dollars), per Vehicle Model Year										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Price Increase	0	0	0	0	0	330	646	862	1,395	1,730
Implicit Opportunity Cost	0	0	0	0	0	0	0	0	0	0
Increase in Financing Cost	0	0	0	0	0	0	0	0	0	0
Increase in Insurance Cost	0	0	0	0	0	31	61	81	132	163
Increase in Taxes/Fees	0	0	0	0	0	18	35	47	76	94
Lost Consumer Surplus	0	0	0	0	0	0	1	2	4	6
Total Consumer Cost	0	0	0	0	0	380	743	992	1,608	1,994
Fuel Savings	28	30	30	31	33	-363	-684	-904	-1,179	-1,591
Mobility Benefit	0	0	0	1	1	33	61	82	107	128
Reallocated Benefit	21	24	26	28	31	33	36	40	44	47
Refueling Benefit	1	2	2	2	2	-18	-35	-45	-58	-82
Total Consumer Benefit	-8	-7	-6	-4	-4	481	848	1,103	1,417	1,951
Net Consumer Benefit	-8	-7	-6	-4	-4	101	104	111	-191	-43
Payback	0.0	0.0	0.0	0.0	0.0	1.0	1.0	1.0	2.0	2.0

Table 915 - Average Impacts to Consumers Relative to Alternative 0 (Reference Baseline) for the Total Fleet, Alternative PC3LT5 at a 7% Discount Rate (dollars), per Vehicle Model Year

Average Impacts to Consumers Relative to Alternative 0 (Reference Baseline) for the Total Fleet, Alternative PC3LT5 at a 7% Discount Rate (dollars), per Vehicle Model Year										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Price Increase	0	0	0	0	0	302	581	815	1,195	1,426
Implicit Opportunity Cost	0	0	0	0	0	0	0	0	0	0
Increase in Financing Cost	0	0	0	0	0	0	0	0	0	0
Increase in Insurance Cost	0	0	0	0	0	24	45	64	91	108
Increase in Taxes/Fees	0	0	0	0	0	16	31	44	63	75
Lost Consumer Surplus	0	0	0	0	0	0	1	2	4	6
Total Consumer Cost	0	0	0	0	0	342	659	925	1,353	1,615
Fuel Savings	15	16	16	16	18	-238	-439	-599	-792	-1,044
Mobility Benefit	0	0	0	0	1	21	38	52	68	82
Reallocated Benefit	9	11	12	13	15	17	20	23	26	29
Refueling Benefit	1	1	1	1	2	-12	-22	-30	-38	-52
Total Consumer Benefit	-7	-6	-5	-4	-3	311	540	726	945	1,276
Net Consumer Benefit	-7	-6	-5	-4	-3	-31	-118	-199	-409	-339
Payback	0.0	0.0	0.0	0.0	0.0	0.3	2.0	2.3	2.7	2.7

Table 916 - Average Impacts to Consumers Relative to Alternative 0 (Reference Baseline) for the Passenger Car Fleet, Alternative PC3LT5 at a 7% Discount Rate (dollars), per Vehicle Model Year

Average Impacts to Consumers Relative to Alternative 0 (Reference Baseline) for the Passenger Car Fleet, Alternative PC3LT5 at a 7% Discount Rate (dollars), per Vehicle Model Year										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Price Increase	0	0	0	0	0	246	455	724	812	848
Implicit Opportunity Cost	0	0	0	0	0	0	0	0	0	0
Increase in Financing Cost	0	0	0	0	0	0	0	0	0	0
Increase in Insurance Cost	0	0	0	0	0	19	36	57	64	66
Increase in Taxes/Fees	0	0	0	0	0	13	25	40	44	46
Lost Consumer Surplus	0	0	0	0	0	0	1	2	4	6
Total Consumer Cost	0	0	0	0	0	279	517	822	924	966
Fuel Savings	14	13	13	13	13	-145	-239	-386	-489	-595
Mobility Benefit	0	0	0	0	1	13	20	31	40	49
Reallocated Benefit	6	7	8	9	11	12	14	16	19	21
Refueling Benefit	1	1	1	1	2	-7	-12	-20	-26	-31
Total Consumer Benefit	-8	-7	-6	-4	-3	178	286	453	573	697
Net Consumer Benefit	-8	-7	-6	-4	-3	-101	-230	-368	-351	-270
Payback	0.0	0.0	0.0	0.0	0.0	1.0	2.0	3.0	2.0	2.0

Table 917 - Average Impacts to Consumers Relative to Alternative 0 (Reference Baseline) for the Light Truck Fleet, Alternative PC3LT5 at a 7% Discount Rate (dollars), per Vehicle Model Year

Average Impacts to Consumers Relative to Alternative 0 (Reference Baseline) for the Light Truck Fleet, Alternative PC3LT5 at a 7% Discount Rate (dollars), per Vehicle Model Year										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Price Increase	0	0	0	0	0	330	646	862	1,395	1,730
Implicit Opportunity Cost	0	0	0	0	0	0	0	0	0	0
Increase in Financing Cost	0	0	0	0	0	0	0	0	0	0
Increase in Insurance Cost	0	0	0	0	0	26	51	68	109	136
Increase in Taxes/Fees	0	0	0	0	0	18	35	47	76	94
Lost Consumer Surplus	0	0	0	0	0	0	1	2	4	6
Total Consumer Cost	0	0	0	0	0	374	733	978	1,585	1,966
Fuel Savings	16	17	18	19	20	-286	-535	-706	-919	-1,235
Mobility Benefit	0	0	0	0	1	26	47	63	83	100
Reallocated Benefit	11	13	14	16	18	20	23	26	30	33
Refueling Benefit	1	1	1	1	2	-14	-27	-35	-46	-64
Total Consumer Benefit	-6	-5	-4	-4	-3	379	664	863	1,106	1,534
Net Consumer Benefit	-6	-5	-4	-4	-3	4	-69	-116	-479	-433
Payback	0.0	0.0	0.0	0.0	0.0	0.0	2.0	2.0	3.0	3.0

Table 918 - Average Impacts to Consumers Relative to Alternative 0 (Reference Baseline) for the Total Fleet, Alternative PC6LT8 at a 3% Discount Rate (dollars), per Vehicle Model Year

Average Impacts to Consumers Relative to Alternative 0 (Reference Baseline) for the Total Fleet, Alternative PC6LT8 at a 3% Discount Rate (dollars), per Vehicle Model Year										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Price Increase	0	0	0	0	0	540	1,088	1,604	2,322	2,802
Implicit Opportunity Cost	0	0	0	0	0	0	0	0	0	0
Increase in Financing Cost	0	0	0	0	0	0	0	0	0	0
Increase in Insurance Cost	0	0	0	0	0	51	103	152	216	260
Increase in Taxes/Fees	0	0	0	0	0	30	60	88	125	150
Lost Consumer Surplus	0	0	0	0	0	1	4	9	20	28
Total Consumer Cost	0	0	0	0	0	622	1,255	1,854	2,684	3,241
Fuel Savings	50	50	49	50	53	-290	-646	-932	-1,244	-1,607
Mobility Benefit	0	1	1	1	2	30	59	84	109	129
Reallocated Benefit	36	40	43	47	53	57	62	69	75	80
Refueling Benefit	3	3	4	4	5	-14	-32	-46	-59	-78
Total Consumer Benefit	-16	-12	-9	-6	-4	411	820	1,151	1,505	1,954
Net Consumer Benefit	-16	-12	-9	-6	-4	-211	-434	-703	-1,178	-1,286
Payback	0.0	0.0	0.0	0.0	0.0	2.0	2.7	3.7	4.3	5.0

Table 919 - Average Impacts to Consumers Relative to Alternative 0 (Reference Baseline) for the Passenger Car Fleet, Alternative PC6LT8 at a 3% Discount Rate (dollars), per Vehicle Model Year

Average Impacts to Consumers Relative to Alternative 0 (Reference Baseline) for the Passenger Car Fleet, Alternative PC6LT8 at a 3% Discount Rate (dollars), per Vehicle Model Year										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Price Increase	0	0	0	0	0	537	1,072	1,650	2,036	2,303
Implicit Opportunity Cost	0	0	0	0	0	0	0	0	0	0
Increase in Financing Cost	0	0	0	0	0	0	0	0	0	0
Increase in Insurance Cost	0	0	0	0	0	51	101	156	192	217
Increase in Taxes/Fees	0	0	0	0	0	29	59	90	111	126
Lost Consumer Surplus	0	0	0	0	0	1	4	9	20	28
Total Consumer Cost	0	0	0	0	0	618	1,235	1,905	2,359	2,674
Fuel Savings	42	39	36	35	35	-191	-520	-824	-1,084	-1,321
Mobility Benefit	1	1	1	1	1	19	44	67	89	109
Reallocated Benefit	23	26	29	32	36	40	44	48	52	56
Refueling Benefit	3	3	4	4	4	-8	-26	-42	-54	-65
Total Consumer Benefit	-21	-15	-10	-6	-2	259	634	981	1,278	1,550
Net Consumer Benefit	-21	-15	-10	-6	-2	-359	-601	-924	-1,081	-1,124
Payback	0.0	0.0	0.0	0.0	0.0	2.0	4.0	5.0	5.0	5.0

Table 920 - Average Impacts to Consumers Relative to Alternative 0 (Reference Baseline) for the Light Truck Fleet, Alternative PC6LT8 at a 3% Discount Rate (dollars), per Vehicle Model Year

Average Impacts to Consumers Relative to Alternative 0 (Reference Baseline) for the Light Truck Fleet, Alternative PC6LT8 at a 3% Discount Rate (dollars), per Vehicle Model Year										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Price Increase	0	0	0	0	0	541	1,096	1,581	2,472	3,065
Implicit Opportunity Cost	0	0	0	0	0	0	0	0	0	0
Increase in Financing Cost	0	0	0	0	0	0	0	0	0	0
Increase in Insurance Cost	0	0	0	0	0	51	103	149	233	289
Increase in Taxes/Fees	0	0	0	0	0	30	60	86	135	167
Lost Consumer Surplus	0	0	0	0	0	1	4	9	20	28
Total Consumer Cost	0	0	0	0	0	622	1,264	1,825	2,860	3,550
Fuel Savings	54	57	57	59	63	-346	-714	-997	-1,295	-1,703
Mobility Benefit	0	0	1	1	2	36	67	93	120	140
Reallocated Benefit	43	48	52	56	62	66	72	79	86	92
Refueling Benefit	3	3	3	4	5	-16	-35	-48	-62	-86
Total Consumer Benefit	-13	-11	-8	-6	-4	496	919	1,249	1,590	2,111
Net Consumer Benefit	-13	-11	-8	-6	-4	-127	-345	-576	-1,270	-1,439
Payback	0.0	0.0	0.0	0.0	0.0	2.0	2.0	3.0	4.0	5.0

Table 921 - Average Impacts to Consumers Relative to Alternative 0 (Reference Baseline) for the Total Fleet, Alternative PC6LT8 at a 7% Discount Rate (dollars), per Vehicle Model Year

Average Impacts to Consumers Relative to Alternative 0 (Reference Baseline) for the Total Fleet, Alternative PC6LT8 at a 7% Discount Rate (dollars), per Vehicle Model Year										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Price Increase	0	0	0	0	0	540	1,088	1,604	2,322	2,802
Implicit Opportunity Cost	0	0	0	0	0	0	0	0	0	0
Increase in Financing Cost	0	0	0	0	0	0	0	0	0	0
Increase in Insurance Cost	0	0	0	0	0	43	86	127	180	216
Increase in Taxes/Fees	0	0	0	0	0	30	60	88	125	150
Lost Consumer Surplus	0	0	0	0	0	1	4	9	20	28
Total Consumer Cost	0	0	0	0	0	613	1,237	1,828	2,647	3,197
Fuel Savings	29	30	30	32	34	-231	-508	-731	-973	-1,252
Mobility Benefit	0	0	1	1	1	23	46	65	85	100
Reallocated Benefit	19	22	24	28	32	36	40	45	51	57
Refueling Benefit	2	2	2	3	3	-11	-26	-37	-47	-61
Total Consumer Benefit	-12	-10	-8	-6	-5	321	640	899	1,175	1,531
Net Consumer Benefit	-12	-10	-8	-6	-5	-292	-597	-930	-1,473	-1,666
Payback	0.0	0.0	0.0	0.0	0.0	1.7	4.3	6.3	10.0	12.0

Table 922 - Average Impacts to Consumers Relative to Alternative 0 (Reference Baseline) for the Passenger Car Fleet, Alternative PC6LT8 at a 7% Discount Rate (dollars), per Vehicle Model Year

Average Impacts to Consumers Relative to Alternative 0 (Reference Baseline) for the Passenger Car Fleet, Alternative PC6LT8 at a 7% Discount Rate (dollars), per Vehicle Model Year										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Price Increase	0	0	0	0	0	537	1,072	1,650	2,036	2,303
Implicit Opportunity Cost	0	0	0	0	0	0	0	0	0	0
Increase in Financing Cost	0	0	0	0	0	0	0	0	0	0
Increase in Insurance Cost	0	0	0	0	0	42	84	129	160	181
Increase in Taxes/Fees	0	0	0	0	0	29	59	90	111	126
Lost Consumer Surplus	0	0	0	0	0	1	4	9	20	28
Total Consumer Cost	0	0	0	0	0	609	1,218	1,879	2,327	2,638
Fuel Savings	26	25	23	23	24	-152	-409	-648	-852	-1,039
Mobility Benefit	0	1	1	1	1	15	34	53	70	86
Reallocated Benefit	12	14	16	19	22	25	28	32	37	40
Refueling Benefit	2	2	2	3	3	-7	-21	-33	-43	-52
Total Consumer Benefit	-15	-12	-9	-6	-4	199	494	766	1,001	1,215
Net Consumer Benefit	-15	-12	-9	-6	-4	-410	-725	-1,113	-1,326	-1,422
Payback	0.0	0.0	0.0	0.0	0.0	3.0	5.0	11.0	14.0	12.0

Table 923 - Average Impacts to Consumers Relative to Alternative 0 (Reference Baseline) for the Light Truck Fleet, Alternative PC6LT8 at a 7% Discount Rate (dollars), per Vehicle Model Year

Average Impacts to Consumers Relative to Alternative 0 (Reference Baseline) for the Light Truck Fleet, Alternative PC6LT8 at a 7% Discount Rate (dollars), per Vehicle Model Year										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Price Increase	0	0	0	0	0	541	1,096	1,581	2,472	3,065
Implicit Opportunity Cost	0	0	0	0	0	0	0	0	0	0
Increase in Financing Cost	0	0	0	0	0	0	0	0	0	0
Increase in Insurance Cost	0	0	0	0	0	42	86	124	194	240
Increase in Taxes/Fees	0	0	0	0	0	30	60	86	135	167
Lost Consumer Surplus	0	0	0	0	0	1	4	9	20	28
Total Consumer Cost	0	0	0	0	0	614	1,246	1,800	2,821	3,501
Fuel Savings	31	33	34	36	40	-276	-561	-781	-1,011	-1,323
Mobility Benefit	0	0	1	1	1	27	52	72	93	109
Reallocated Benefit	22	26	29	32	37	41	46	52	59	65
Refueling Benefit	1	2	2	2	3	-13	-28	-38	-49	-67
Total Consumer Benefit	-10	-9	-7	-6	-5	389	718	975	1,239	1,655
Net Consumer Benefit	-10	-9	-7	-6	-5	-225	-528	-825	-1,582	-1,847
Payback	0.0	0.0	0.0	0.0	0.0	1.0	4.0	4.0	8.0	12.0

Environmental Impacts

Table 924 - Incremental Change in Criteria Emissions Relative to Alternative 0 (Reference Baseline) from the MY 2031 Total Fleet in Calendar Year 2035, by Alternative (1,000 metric tons)

Incremental Change in Criteria Emissions Relative to Alternative 0 (Reference Baseline) from the MY 2031 Total Fleet in Calendar Year 2035, by Alternative (1,000 metric tons)					
Alternative	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Fleetwide Change in Upstream Emissions					
CO Upstream	-0.1	-0.2	-0.2	-0.3	-0.4
VOC Upstream	-0.9	-1.2	-1.5	-1.8	-2.2
NOx Upstream	-0.2	-0.3	-0.4	-0.5	-0.7
SO2 Upstream	0.0	0.0	-0.1	-0.1	-0.1
PM Upstream	0.0	0.0	0.0	0.0	-0.1
Fleetwide Change in Tailpipe Emissions					
CO Tailpipe	-3.3	-2.6	-2.7	-2.9	-4.0
VOC Tailpipe	-0.2	-0.2	-0.2	-0.2	-0.3
NOx Tailpipe	-0.1	-0.1	-0.1	-0.1	-0.1
SO2 Tailpipe	0.0	0.0	0.0	0.0	0.0
PM Tailpipe	0.0	0.0	0.0	0.0	0.0
Fleetwide Change in Total Emissions					
CO Total	-3.4	-2.7	-2.9	-3.2	-4.4
VOC Total	-1.1	-1.4	-1.7	-2.0	-2.5
NOx Total	-0.3	-0.4	-0.5	-0.6	-0.8
SO2 Total	0.0	0.0	-0.1	-0.1	-0.1
PM Total	0.0	0.0	0.0	0.0	-0.1

Table 925 - Incremental Change in Criteria Emissions Relative to Alternative 0 (Reference Baseline) from the MY 2031 Passenger Car Fleet in Calendar Year 2035, by Alternative (1,000 metric tons)

Incremental Change in Criteria Emissions Relative to Alternative 0 (Reference Baseline) from the MY 2031 Passenger Car Fleet in Calendar Year 2035, by Alternative (1,000 metric tons)					
Alternative	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Fleetwide Change in Upstream Emissions					
CO Upstream	0.0	0.0	0.0	0.0	-0.1
VOC Upstream	-0.2	-0.1	-0.2	-0.3	-0.5
NOx Upstream	-0.1	0.0	-0.1	-0.1	-0.2
SO2 Upstream	0.0	0.0	0.0	0.0	0.0
PM Upstream	0.0	0.0	0.0	0.0	0.0
Fleetwide Change in Tailpipe Emissions					
CO Tailpipe	-0.3	0.5	0.7	0.8	0.6
VOC Tailpipe	0.0	0.0	0.1	0.1	0.0
NOx Tailpipe	0.0	0.0	0.0	0.0	0.0
SO2 Tailpipe	0.0	0.0	0.0	0.0	0.0
PM Tailpipe	0.0	0.0	0.0	0.0	0.0
Fleetwide Change in Total Emissions					
CO Total	-0.4	0.5	0.7	0.7	0.5
VOC Total	-0.3	0.0	-0.1	-0.2	-0.5
NOx Total	-0.1	0.0	0.0	-0.1	-0.2
SO2 Total	0.0	0.0	0.0	0.0	0.0
PM Total	0.0	0.0	0.0	0.0	0.0

Table 926 - Incremental Change in Criteria Emissions Relative to Alternative 0 (Reference Baseline) from the MY 2031 Light Truck Fleet in Calendar Year 2035, by Alternative (1,000 metric tons)

Incremental Change in Criteria Emissions Relative to Alternative 0 (Reference Baseline) from the MY 2031 Light Truck Fleet in Calendar Year 2035, by Alternative (1,000 metric tons)					
Alternative	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Fleetwide Change in Upstream Emissions					
CO Upstream	0.0	-0.1	-0.2	-0.2	-0.3
VOC Upstream	-0.7	-1.1	-1.4	-1.5	-1.7
NOx Upstream	-0.1	-0.3	-0.4	-0.5	-0.5
SO2 Upstream	0.0	0.0	-0.1	-0.1	-0.1
PM Upstream	0.0	0.0	0.0	0.0	0.0
Fleetwide Change in Tailpipe Emissions					
CO Tailpipe	-3.0	-3.1	-3.4	-3.7	-4.6
VOC Tailpipe	-0.2	-0.2	-0.2	-0.3	-0.3
NOx Tailpipe	-0.1	-0.1	-0.1	-0.1	-0.1
SO2 Tailpipe	0.0	0.0	0.0	0.0	0.0
PM Tailpipe	0.0	0.0	0.0	0.0	0.0
Fleetwide Change in Total Emissions					
CO Total	-3.0	-3.3	-3.6	-3.9	-4.9
VOC Total	-0.9	-1.3	-1.6	-1.8	-2.0
NOx Total	-0.2	-0.4	-0.5	-0.6	-0.7
SO2 Total	0.0	0.0	-0.1	-0.1	-0.1
PM Total	0.0	0.0	0.0	0.0	0.0

Table 927 - Incremental Change in Criteria Emissions Relative to Alternative 0 (Reference Baseline) from the MY 2031 Total Fleet in Calendar Year 2040, by Alternative (1,000 metric tons)

Incremental Change in Criteria Emissions Relative to Alternative 0 (Reference Baseline) from the MY 2031 Total Fleet in Calendar Year 2040, by Alternative (1,000 metric tons)					
Alternative	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Fleetwide Change in Upstream Emissions					
CO Upstream	-0.1	-0.1	-0.2	-0.2	-0.3
VOC Upstream	-0.7	-0.9	-1.1	-1.3	-1.7
NOx Upstream	-0.2	-0.2	-0.3	-0.4	-0.5
SO2 Upstream	0.0	0.0	-0.1	-0.1	-0.1
PM Upstream	0.0	0.0	0.0	0.0	0.0
Fleetwide Change in Tailpipe Emissions					
CO Tailpipe	-3.1	-2.4	-2.5	-2.6	-3.6
VOC Tailpipe	-0.2	-0.2	-0.2	-0.2	-0.3
NOx Tailpipe	-0.1	-0.1	-0.1	-0.1	-0.1
SO2 Tailpipe	0.0	0.0	0.0	0.0	0.0
PM Tailpipe	0.0	0.0	0.0	0.0	0.0
Fleetwide Change in Total Emissions					
CO Total	-3.1	-2.5	-2.6	-2.8	-3.9
VOC Total	-0.9	-1.1	-1.3	-1.5	-1.9
NOx Total	-0.2	-0.3	-0.4	-0.5	-0.7
SO2 Total	0.0	0.0	-0.1	-0.1	-0.1
PM Total	0.0	0.0	0.0	0.0	0.0

Table 928 - Incremental Change in Criteria Emissions Relative to Alternative 0 (Reference Baseline) from the MY 2031 Passenger Car Fleet in Calendar Year 2040, by Alternative (1,000 metric tons)

Incremental Change in Criteria Emissions Relative to Alternative 0 (Reference Baseline) from the MY 2031 Passenger Car Fleet in Calendar Year 2040, by Alternative (1,000 metric tons)					
Alternative	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Fleetwide Change in Upstream Emissions					
CO Upstream	0.0	0.0	0.0	0.0	-0.1
VOC Upstream	-0.2	-0.1	-0.1	-0.2	-0.4
NOx Upstream	-0.1	0.0	0.0	-0.1	-0.1
SO2 Upstream	0.0	0.0	0.0	0.0	0.0
PM Upstream	0.0	0.0	0.0	0.0	0.0
Fleetwide Change in Tailpipe Emissions					
CO Tailpipe	-0.3	0.5	0.7	0.7	0.6
VOC Tailpipe	0.0	0.0	0.0	0.1	0.0
NOx Tailpipe	0.0	0.0	0.0	0.0	0.0
SO2 Tailpipe	0.0	0.0	0.0	0.0	0.0
PM Tailpipe	0.0	0.0	0.0	0.0	0.0
Fleetwide Change in Total Emissions					
CO Total	-0.3	0.5	0.7	0.7	0.5
VOC Total	-0.2	0.0	-0.1	-0.2	-0.4
NOx Total	-0.1	0.0	0.0	-0.1	-0.1
SO2 Total	0.0	0.0	0.0	0.0	0.0
PM Total	0.0	0.0	0.0	0.0	0.0

Table 929 - Incremental Change in Criteria Emissions Relative to Alternative 0 (Reference Baseline) from the MY 2031 Light Truck Fleet in Calendar Year 2040, by Alternative (1,000 metric tons)

Incremental Change in Criteria Emissions Relative to Alternative 0 (Reference Baseline) from the MY 2031 Light Truck Fleet in Calendar Year 2040, by Alternative (1,000 metric tons)					
Alternative	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Fleetwide Change in Upstream Emissions					
CO Upstream	0.0	-0.1	-0.1	-0.2	-0.2
VOC Upstream	-0.5	-0.8	-1.0	-1.1	-1.3
NOx Upstream	-0.1	-0.2	-0.3	-0.3	-0.4
SO2 Upstream	0.0	0.0	0.0	-0.1	-0.1
PM Upstream	0.0	0.0	0.0	0.0	0.0
Fleetwide Change in Tailpipe Emissions					
CO Tailpipe	-2.7	-2.9	-3.1	-3.3	-4.2
VOC Tailpipe	-0.2	-0.2	-0.2	-0.2	-0.3
NOx Tailpipe	-0.1	-0.1	-0.1	-0.1	-0.1
SO2 Tailpipe	0.0	0.0	0.0	0.0	0.0
PM Tailpipe	0.0	0.0	0.0	0.0	0.0
Fleetwide Change in Total Emissions					
CO Total	-2.8	-3.0	-3.3	-3.5	-4.4
VOC Total	-0.7	-1.0	-1.2	-1.4	-1.6
NOx Total	-0.2	-0.3	-0.4	-0.4	-0.5
SO2 Total	0.0	0.0	0.0	-0.1	-0.1
PM Total	0.0	0.0	0.0	0.0	0.0

Table 930 - Incremental Change in Criteria Emissions Relative to Alternative 0 (Reference Baseline) Over Lifetimes of Vehicles Through 2031 for the Total Fleet, by Alternative (1,000 metric tons)

Incremental Change in Criteria Emissions Relative to Alternative 0 (Reference Baseline) Over Lifetimes of Vehicles Through 2031 for the Total Fleet, by Alternative (1,000 metric tons)					
Alternative	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Fleetwide Change in Upstream Emissions					
CO Upstream	-3.1	-7.3	-9.7	-10.9	-13.2
VOC Upstream	-39.1	-53.7	-66.2	-72.2	-83.1
NOx Upstream	-7.3	-15.1	-19.7	-22.0	-26.2
SO2 Upstream	0.9	-2.0	-3.1	-3.7	-4.7
PM Upstream	-0.5	-1.1	-1.4	-1.6	-1.9
Fleetwide Change in Tailpipe Emissions					
CO Tailpipe	-121.2	9.3	124.8	261.2	575.0
VOC Tailpipe	-12.3	-0.4	10.7	24.1	51.5
NOx Tailpipe	-3.2	-0.3	1.8	4.3	10.3
SO2 Tailpipe	-0.6	-0.9	-1.0	-1.1	-1.3
PM Tailpipe	-0.4	-0.2	0.0	0.2	0.5
Fleetwide Change in Total Emissions					
CO Total	-124.2	2.1	115.1	250.4	561.8
VOC Total	-51.5	-54.1	-55.4	-48.1	-31.6
NOx Total	-10.5	-15.4	-17.9	-17.6	-15.9
SO2 Total	0.3	-2.9	-4.1	-4.8	-6.0
PM Total	-0.9	-1.3	-1.4	-1.4	-1.4

Table 931 - Incremental Change in Criteria Emissions Relative to Alternative 0 (Reference Baseline) Over Lifetimes of Vehicles Through 2031 for the Light Truck Fleet, by Alternative (1,000 metric tons)

Incremental Change in Criteria Emissions Relative to Alternative 0 (Reference Baseline) Over Lifetimes of Vehicles Through 2031 for the Light Truck Fleet, by Alternative (1,000 metric tons)					
Alternative	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Fleetwide Change in Upstream Emissions					
CO Upstream	-1.2	-6.6	-8.5	-9.2	-9.9
VOC Upstream	-26.4	-49.8	-59.3	-62.8	-66.4
NOx Upstream	-3.5	-13.9	-17.5	-18.8	-20.1
SO2 Upstream	1.4	-1.8	-2.7	-3.0	-3.3
PM Upstream	-0.2	-1.0	-1.3	-1.4	-1.4
Fleetwide Change in Tailpipe Emissions					
CO Tailpipe	-113.8	-90.8	-41.1	21.4	151.0
VOC Tailpipe	-11.4	-9.4	-4.4	1.9	13.2
NOx Tailpipe	-2.8	-2.2	-1.1	0.2	3.2
SO2 Tailpipe	-0.4	-0.8	-0.9	-1.0	-1.0
PM Tailpipe	-0.3	-0.3	-0.2	-0.1	0.0
Fleetwide Change in Total Emissions					
CO Total	-115.0	-97.4	-49.7	12.2	141.1
VOC Total	-37.9	-59.1	-63.8	-60.9	-53.1
NOx Total	-6.3	-16.0	-18.6	-18.6	-16.9
SO2 Total	1.0	-2.6	-3.6	-4.0	-4.3
PM Total	-0.5	-1.3	-1.5	-1.5	-1.4

Table 932 - Incremental Change in Criteria Emissions Relative to Alternative 0 (Reference Baseline) Over Lifetimes of Vehicles Through 2031 for the Passenger Car Fleet, by Alternative (1,000 metric tons)

Incremental Change in Criteria Emissions Relative to Alternative 0 (Reference Baseline) Over Lifetimes of Vehicles Through 2031 for the Passenger Car Fleet, by Alternative (1,000 metric tons)					
Alternative	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Fleetwide Change in Upstream Emissions					
CO Upstream	-1.9	-0.6	-1.1	-1.6	-3.2
VOC Upstream	-12.7	-4.0	-6.8	-9.4	-16.7
NOx Upstream	-3.8	-1.2	-2.2	-3.2	-6.1
SO2 Upstream	-0.6	-0.2	-0.4	-0.6	-1.4
PM Upstream	-0.3	-0.1	-0.2	-0.2	-0.4
Fleetwide Change in Tailpipe Emissions					
CO Tailpipe	-7.4	100.1	166.0	239.8	424.0
VOC Tailpipe	-0.9	9.0	15.1	22.2	38.3
NOx Tailpipe	-0.4	1.9	3.0	4.1	7.0
SO2 Tailpipe	-0.2	-0.1	-0.1	-0.1	-0.3
PM Tailpipe	-0.1	0.2	0.2	0.3	0.5
Fleetwide Change in Total Emissions					
CO Total	-9.3	99.5	164.8	238.2	420.7
VOC Total	-13.6	5.0	8.3	12.8	21.5
NOx Total	-4.2	0.7	0.7	0.9	0.9
SO2 Total	-0.8	-0.3	-0.5	-0.7	-1.7
PM Total	-0.4	0.1	0.0	0.1	0.1

Table 933 - Total Criteria Emissions from the MY 2031 Total Fleet in Calendar Year 2035, by Alternative (1,000 metric tons)

Total Criteria Emissions from the MY 2031 Total Fleet in Calendar Year 2035, by Alternative (1,000 metric tons)					
Alternative	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Fleetwide Change in Upstream Emissions					
CO Upstream	3.6	3.6	3.5	3.4	3.3
VOC Upstream	13.4	13.1	12.8	12.5	12.1
NOx Upstream	6.6	6.5	6.4	6.3	6.1
SO2 Upstream	2.2	2.1	2.1	2.1	2.0
PM Upstream	0.5	0.5	0.5	0.5	0.4
Fleetwide Change in Tailpipe Emissions					
CO Tailpipe	148.4	149.1	149.0	148.8	147.7
VOC Tailpipe	10.8	10.8	10.8	10.8	10.7
NOx Tailpipe	4.5	4.5	4.5	4.5	4.5
SO2 Tailpipe	0.2	0.2	0.2	0.2	0.2
PM Tailpipe	0.4	0.4	0.4	0.4	0.4
Fleetwide Change in Total Emissions					
CO Total	152.1	152.7	152.5	152.3	151.0
VOC Total	24.2	23.9	23.6	23.3	22.8
NOx Total	11.1	11.0	10.9	10.8	10.6
SO2 Total	2.4	2.3	2.3	2.3	2.2
PM Total	0.9	0.9	0.9	0.9	0.8

Table 934 - Total Criteria Emissions from the MY 2031 Passenger Car Fleet in Calendar Year 2035, by Alternative (1,000 metric tons)

Total Criteria Emissions from the MY 2031 Passenger Car Fleet in Calendar Year 2035, by Alternative (1,000 metric tons)					
Alternative	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Fleetwide Change in Upstream Emissions					
CO Upstream	1.0	1.0	1.0	1.0	0.9
VOC Upstream	3.1	3.3	3.2	3.1	2.8
NOx Upstream	1.8	1.8	1.8	1.7	1.6
SO2 Upstream	0.6	0.6	0.6	0.6	0.6
PM Upstream	0.1	0.1	0.1	0.1	0.1
Fleetwide Change in Tailpipe Emissions					
CO Tailpipe	41.4	42.3	42.5	42.5	42.4
VOC Tailpipe	3.0	3.1	3.1	3.1	3.1
NOx Tailpipe	1.2	1.3	1.3	1.3	1.3
SO2 Tailpipe	0.0	0.0	0.0	0.0	0.0
PM Tailpipe	0.1	0.1	0.1	0.1	0.1
Fleetwide Change in Total Emissions					
CO Total	42.4	43.3	43.5	43.5	43.3
VOC Total	6.1	6.3	6.3	6.2	5.9
NOx Total	3.0	3.1	3.0	3.0	2.9
SO2 Total	0.6	0.6	0.6	0.6	0.6
PM Total	0.2	0.2	0.2	0.2	0.2

Table 935 - Total Criteria Emissions from the MY 2031 Light Truck Fleet in Calendar Year 2035, by Alternative (1,000 metric tons)

Total Criteria Emissions from the MY 2031 Light Truck Fleet in Calendar Year 2035, by Alternative (1,000 metric tons)					
Alternative	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Fleetwide Change in Upstream Emissions					
CO Upstream	2.6	2.6	2.5	2.5	2.4
VOC Upstream	10.3	9.8	9.6	9.4	9.2
NOx Upstream	4.9	4.7	4.6	4.6	4.5
SO2 Upstream	1.6	1.5	1.5	1.5	1.4
PM Upstream	0.4	0.3	0.3	0.3	0.3
Fleetwide Change in Tailpipe Emissions					
CO Tailpipe	107.0	106.8	106.6	106.3	105.3
VOC Tailpipe	7.8	7.8	7.7	7.7	7.6
NOx Tailpipe	3.3	3.3	3.2	3.2	3.2
SO2 Tailpipe	0.2	0.2	0.1	0.1	0.1
PM Tailpipe	0.3	0.3	0.3	0.3	0.3
Fleetwide Change in Total Emissions					
CO Total	109.7	109.4	109.1	108.8	107.8
VOC Total	18.0	17.6	17.3	17.1	16.9
NOx Total	8.2	8.0	7.9	7.8	7.7
SO2 Total	1.8	1.7	1.6	1.6	1.5
PM Total	0.7	0.6	0.6	0.6	0.6

Table 936 - Total Criteria Emissions from the MY 2031 Total Fleet in Calendar Year 2040, by Alternative (1,000 metric tons)

Total Criteria Emissions from the MY 2031 Total Fleet in Calendar Year 2040, by Alternative (1,000 metric tons)					
Alternative	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Fleetwide Change in Upstream Emissions					
CO Upstream	2.6	2.6	2.5	2.5	2.4
VOC Upstream	10.0	9.8	9.5	9.3	9.0
NOx Upstream	4.9	4.8	4.7	4.6	4.5
SO2 Upstream	1.6	1.6	1.6	1.6	1.5
PM Upstream	0.4	0.3	0.3	0.3	0.3
Fleetwide Change in Tailpipe Emissions					
CO Tailpipe	140.7	141.4	141.3	141.2	140.1
VOC Tailpipe	10.0	10.0	10.0	10.0	9.9
NOx Tailpipe	3.9	4.0	4.0	4.0	3.9
SO2 Tailpipe	0.2	0.1	0.1	0.1	0.1
PM Tailpipe	0.4	0.4	0.4	0.4	0.4
Fleetwide Change in Total Emissions					
CO Total	143.3	143.9	143.8	143.7	142.6
VOC Total	19.9	19.8	19.5	19.3	18.9
NOx Total	8.8	8.7	8.6	8.5	8.4
SO2 Total	1.8	1.7	1.7	1.7	1.6
PM Total	0.8	0.7	0.7	0.7	0.7

Table 937 - Total Criteria Emissions from the MY 2031 Passenger Car Fleet in Calendar Year 2040, by Alternative (1,000 metric tons)

Total Criteria Emissions from the MY 2031 Passenger Car Fleet in Calendar Year 2040, by Alternative (1,000 metric tons)					
Alternative	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Fleetwide Change in Upstream Emissions					
CO Upstream	0.7	0.7	0.7	0.7	0.7
VOC Upstream	2.3	2.4	2.4	2.3	2.1
NOx Upstream	1.3	1.3	1.3	1.3	1.2
SO2 Upstream	0.5	0.5	0.5	0.5	0.4
PM Upstream	0.1	0.1	0.1	0.1	0.1
Fleetwide Change in Tailpipe Emissions					
CO Tailpipe	39.5	40.3	40.5	40.5	40.4
VOC Tailpipe	2.7	2.8	2.8	2.8	2.8
NOx Tailpipe	1.0	1.0	1.0	1.0	1.0
SO2 Tailpipe	0.0	0.0	0.0	0.0	0.0
PM Tailpipe	0.1	0.1	0.1	0.1	0.1
Fleetwide Change in Total Emissions					
CO Total	40.2	41.0	41.2	41.2	41.0
VOC Total	5.0	5.2	5.2	5.1	4.9
NOx Total	2.3	2.3	2.3	2.3	2.2
SO2 Total	0.5	0.5	0.5	0.5	0.4
PM Total	0.2	0.2	0.2	0.2	0.2

Table 938 - Total Criteria Emissions from the MY 2031 Light Truck Fleet in Calendar Year 2040, by Alternative (1,000 metric tons)

Total Criteria Emissions from the MY 2031 Light Truck Fleet in Calendar Year 2040, by Alternative (1,000 metric tons)					
Alternative	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Fleetwide Change in Upstream Emissions					
CO Upstream	1.9	1.9	1.8	1.8	1.8
VOC Upstream	7.7	7.3	7.2	7.0	6.9
NOx Upstream	3.6	3.5	3.4	3.3	3.3
SO2 Upstream	1.2	1.1	1.1	1.1	1.1
PM Upstream	0.3	0.3	0.2	0.2	0.2
Fleetwide Change in Tailpipe Emissions					
CO Tailpipe	101.2	101.1	100.8	100.6	99.8
VOC Tailpipe	7.2	7.2	7.2	7.2	7.1
NOx Tailpipe	2.9	2.9	2.9	2.9	2.9
SO2 Tailpipe	0.1	0.1	0.1	0.1	0.1
PM Tailpipe	0.3	0.3	0.3	0.3	0.3
Fleetwide Change in Total Emissions					
CO Total	103.2	102.9	102.7	102.4	101.6
VOC Total	14.9	14.6	14.4	14.2	14.0
NOx Total	6.5	6.4	6.3	6.2	6.2
SO2 Total	1.3	1.3	1.2	1.2	1.2
PM Total	1.0	1.0	1.0	1.0	1.0

Electrification Costs

Table 939 - Incremental Electrification Costs for Manufacturer (Total), MY 2031 Total Fleet

Incremental Electrification Costs for Manufacturer (Total), MY 2031 Total Fleet					
	Alternative				
	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Retrievable Electrification Costs ($b)	0.3	2.3	4.2	7.1	22.8
Electrification Tax Credits ($b)	-11.4	-8.2	-2.5	3.7	23.4
Irretrievable Electrification Costs ($b)	-12.7	-10.8	-8.9	-7.5	-4.7
Total Electrification Costs ($b)	-36.1	-27.7	-19.8	-13.9	-2.8

Table 940 - Incremental Electrification Costs for Manufacturer (Total), MY 2031 Passenger Car Fleet

Incremental Electrification Costs for Manufacturer (Total), MY 2031 Passenger Car Fleet					
	Alternative				
	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Retrievable Electrification Costs ($b)	0.0	0.0	0.0	0.2	3.7
Electrification Tax Credits ($b)	-2.4	-3.3	-1.9	0.1	7.3
Irretrievable Electrification Costs ($b)	-2.7	-3.4	-2.7	-1.8	0.3
Total Electrification Costs ($b)	-3.0	-5.8	-3.2	0.4	8.7

Table 941 - Incremental Electrification Costs for Manufacturer (Total), MY 2031 Light Truck Fleet

Incremental Electrification Costs for Manufacturer (Total), MY 2031 Light Truck Fleet					
	Alternative				
	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Retrievable Electrification Costs ($b)	0.2	2.2	4.2	6.8	19.1
Electrification Tax Credits ($b)	-8.9	-4.9	-0.7	3.6	16.1
Irretrievable Electrification Costs ($b)	-10.0	-7.4	-6.2	-5.7	-5.0
Total Electrification Costs ($b)	-33.2	-21.9	-16.6	-14.3	-11.6

Table 942 - Total Electrification Costs for Manufacturer (Total), MY 2031 Total Fleet

Total Electrification Costs for Manufacturer (Total), MY 2031 Total Fleet					
	Alternative				
	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Retrievable Electrification Costs ($b)	0.3	2.3	4.2	7.1	22.8
Electrification Tax Credits ($b)	5.8	9.0	14.6	20.9	40.6
Irretrievable Electrification Costs ($b)	3.1	5.1	6.9	8.4	11.1
Total Electrification Costs ($b)	13.5	21.9	29.9	35.7	46.8

Table 943 - Total Electrification Costs for Manufacturer (Total), MY 2031 Passenger Car Fleet

Total Electrification Costs for Manufacturer (Total), MY 2031 Passenger Car Fleet					
	Alternative				
	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Retrievable Electrification Costs ($b)	0.0	0.0	0.0	0.2	3.7
Electrification Tax Credits ($b)	1.8	0.9	2.3	4.3	11.5
Irretrievable Electrification Costs ($b)	1.5	0.8	1.4	2.4	4.5
Total Electrification Costs ($b)	5.8	3.0	5.6	9.2	17.5

Table 944 - Total Electrification Costs for Manufacturer (Total), MY 2031 Light Truck Fleet

Total Electrification Costs for Manufacturer (Total), MY 2031 Light Truck Fleet					
	Alternative				
	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Retrievable Electrification Costs ($b)	0.2	2.2	4.2	6.8	19.1
Electrification Tax Credits ($b)	4.1	8.1	12.3	16.6	29.1
Irretrievable Electrification Costs ($b)	1.7	4.3	5.5	6.0	6.6
Total Electrification Costs ($b)	7.7	18.9	24.2	26.5	29.3

Fleet Characteristics

Table 945 - Changes in Fleet Characteristics for Model Years 2022-2031 for Alternative PC2LT002

Changes in Fleet Characteristics for Model Years 2022-2031 for Alternative PC2LT002												
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total	Avg.
Changes in Fleet Size, Usage and Fuel Consumption												
Changes in Fleet Size (m)	0.0	0.0	0.0	0.0	0.0	-0.1	-0.2	-0.4	-0.5	-0.4	-1.7	-0.2
Light Truck Share (%)	64%	65%	66%	67%	68%	68%	68%	69%	69%	69%	N/A	67%
Pass. Car Share (%)	36%	35%	34%	33%	32%	32%	32%	31%	31%	31%	N/A	33%
VMT from Rebound (b)	0.0	0.0	0.0	0.0	0.0	2.1	3.6	5.1	6.1	7.7	24.5	2.5
Fuel Volume - Total (b gallons)	0.0	0.0	0.0	0.0	0.0	-1.3	-2.0	-2.6	-3.0	-4.6	-13.4	-1.3
Fuel Volume - Lt. Truck (b gallons)	0.0	0.0	0.0	0.0	0.0	-0.8	-1.2	-1.5	-1.8	-3.4	-8.6	-0.9
Fuel Volume - Pass. Car (b gallons)	0.0	0.0	0.0	0.0	0.0	-0.5	-0.7	-1.1	-1.2	-1.3	-4.8	-0.5
Changes in Fatalities by Source												
Fatalities from Rebound Miles	0	0	0	0	0	9	16	23	27	35	111	11
Fatalities from Curb Weight Change	0	0	0	0	0	-1	-2	-2	-1	1	-4	0
Total Changes in Fatalities	5	5	5	5	5	9	9	8	10	22	83	8
Changes in Non-Fatal Safety Impacts												
Injuries from Rebound Miles (thousands)	0.0	0.0	0.0	0.0	0.0	1.5	2.5	3.6	4.3	5.4	17	2
Injuries from Curb Weight (thousands)	0.0	0.0	0.0	0.0	0.0	-0.1	-0.3	-0.3	-0.1	0.2	-0.6	-0.1
Total Change in Injuries (thousands)	0.7	0.8	0.8	0.8	0.8	1.4	1.4	1.3	1.6	3.4	12.8	1.3
Property Damage from Rebound Miles (thousands)	0.0	0.0	0.0	0.0	0.1	4.5	7.7	11.1	13.3	16.7	53.5	5.3
Property Damage from Curb Weight (thousands)	0.0	0.0	0.0	0.0	0.0	-0.3	-0.9	-0.8	-0.4	0.7	-1.7	-0.2
Total Property Damaged Vehicles (thousands)	1.7	1.9	1.9	2.0	2.1	4.0	4.0	3.7	4.9	10.5	36.7	3.7

Table 946 - Changes in Fleet Characteristics for Model Years 2022-2031 for Alternative PC1LT3

Changes in Fleet Characteristics for Model Years 2022-2031 for Alternative PC1LT3												
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total	Avg.
Changes in Fleet Size, Usage and Fuel Consumption												
Changes in Fleet Size (m)	0.0	0.0	0.0	0.0	0.0	-0.3	-0.6	-0.8	-1.0	-1.0	-3.7	-0.4
Light Truck Share (%)	64%	65%	66%	67%	68%	68%	68%	68%	68%	68%	N/A	67%
Pass. Car Share (%)	36%	35%	34%	33%	32%	32%	32%	32%	32%	32%	N/A	33%
VMT from Rebound (b)	0.0	0.0	0.0	0.0	0.0	3.4	5.9	8.2	9.8	11.2	38.6	3.9
Fuel Volume - Total (b gallons)	0.1	0.1	0.1	0.1	0.1	-1.8	-3.0	-4.1	-4.8	-6.4	-19.7	-2.0
Fuel Volume - Lt. Truck (b gallons)	0.0	0.0	0.0	0.0	0.0	-1.5	-2.7	-3.6	-4.3	-5.9	-17.8	-1.8
Fuel Volume - Pass. Car (b gallons)	0.0	0.0	0.0	0.0	0.0	-0.2	-0.3	-0.5	-0.5	-0.5	-1.9	-0.2
Changes in Fatalities by Source												
Fatalities from Rebound Miles	0	0	0	0	0	15	27	37	44	51	175	17
Fatalities from Curb Weight Change	0	0	0	0	0	2	-1	1	-2	0	-1	0
Total Changes in Fatalities	9	10	10	10	11	14	7	9	4	11	95	9
Changes in Non-Fatal Safety Impacts												
Injuries from Rebound Miles (thousands)	0.0	0.0	0.0	0.0	0.0	2.4	4.2	5.8	6.9	7.9	27	3
Injuries from Curb Weight (thousands)	0.0	0.0	0.0	0.0	0.0	0.2	-0.1	0.1	-0.4	0.0	-0.2	0.0
Total Change in Injuries (thousands)	1.3	1.5	1.5	1.5	1.7	2.2	1.1	1.4	0.7	1.7	14.7	1.5
Property Damage from Rebound Miles (thousands)	0.0	0.0	0.1	0.1	0.1	7.3	12.9	17.8	21.2	24.3	83.8	8.4
Property Damage from Curb Weight (thousands)	0.0	0.0	0.0	0.0	0.0	0.7	-0.4	0.2	-1.1	0.1	-0.5	0.0
Total Property Damaged Vehicles (thousands)	3.2	3.6	3.8	4.0	4.4	6.1	3.1	4.1	2.5	5.8	40.5	4.1

Table 947 - Changes in Fleet Characteristics for Model Years 2022-2031 for Alternative PC2LT4

Changes in Fleet Characteristics for Model Years 2022-2031 for Alternative PC2LT4												
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total	Avg.
Changes in Fleet Size, Usage and Fuel Consumption												
Changes in Fleet Size (m)	0.1	0.0	0.0	0.0	0.0	-0.4	-0.9	-1.2	-1.8	-1.9	-6.1	-0.6
Light Truck Share (%)	64%	65%	66%	67%	68%	68%	68%	68%	68%	68%	N/A	67%
Pass. Car Share (%)	36%	35%	34%	33%	32%	32%	32%	32%	32%	32%	N/A	33%
VMT from Rebound (b)	0.0	0.0	0.1	0.1	0.1	4.3	7.8	10.5	13.1	14.9	50.9	5.1
Fuel Volume - Total (b gallons)	0.1	0.1	0.1	0.1	0.1	-2.1	-3.9	-5.1	-6.5	-8.2	-25.2	-2.5
Fuel Volume - Lt. Truck (b gallons)	0.1	0.1	0.1	0.1	0.1	-1.8	-3.3	-4.2	-5.6	-7.3	-21.8	-2.2
Fuel Volume - Pass. Car (b gallons)	0.0	0.0	0.0	0.0	0.0	-0.3	-0.5	-0.9	-0.9	-0.9	-3.4	-0.3
Changes in Fatalities by Source												
Fatalities from Rebound Miles	0	0	0	0	1	19	35	48	59	67	230	23
Fatalities from Curb Weight Change	0	0	0	0	0	1	-2	-1	-3	-1	-6	-1
Total Changes in Fatalities	18	20	20	21	22	24	13	9	-13	-8	127	13
Changes in Non-Fatal Safety Impacts												
Injuries from Rebound Miles (thousands)	0.0	0.0	0.1	0.1	0.1	3.0	5.5	7.4	9.2	10.5	36	4
Injuries from Curb Weight (thousands)	0.0	0.0	0.0	0.0	0.0	0.2	-0.3	-0.1	-0.5	-0.2	-0.9	-0.1
Total Change in Injuries (thousands)	2.7	2.9	3.0	3.1	3.4	3.7	1.9	1.4	-1.9	-1.1	19.2	1.9
Property Damage from Rebound Miles (thousands)	0.1	0.1	0.1	0.2	0.2	9.2	16.9	22.9	28.4	32.3	110.3	11.0
Property Damage from Curb Weight (thousands)	0.0	0.0	0.0	0.0	0.0	0.5	-0.9	-0.3	-1.6	-0.5	-2.9	-0.3
Total Property Damaged Vehicles (thousands)	6.3	7.0	7.5	7.8	8.6	9.9	4.7	3.4	-6.1	-3.2	46.0	4.6

Table 948 - Changes in Fleet Characteristics for Model Years 2022-2031 for Alternative PC3LT5

Changes in Fleet Characteristics for Model Years 2022-2031 for Alternative PC3LT5												
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total	Avg.
Changes in Fleet Size, Usage and Fuel Consumption												
Changes in Fleet Size (m)	0.1	0.1	0.1	0.0	0.0	-0.5	-1.2	-1.7	-2.6	-2.9	-8.6	-0.9
Light Truck Share (%)	64%	65%	66%	67%	68%	68%	68%	68%	68%	68%	N/A	67%
Pass. Car Share (%)	36%	35%	34%	33%	32%	32%	32%	32%	32%	32%	N/A	33%
VMT from Rebound (b)	0.0	0.1	0.1	0.1	0.2	4.7	8.7	11.9	15.0	17.9	58.7	5.9
Fuel Volume - Total (b gallons)	0.2	0.2	0.2	0.2	0.2	-2.3	-4.2	-5.7	-7.5	-9.8	-28.4	-2.8
Fuel Volume - Lt. Truck (b gallons)	0.1	0.2	0.2	0.1	0.2	-1.8	-3.5	-4.5	-6.2	-8.3	-23.6	-2.4
Fuel Volume - Pass. Car (b gallons)	0.1	0.1	0.1	0.0	0.0	-0.4	-0.7	-1.2	-1.3	-1.5	-4.8	-0.5
Changes in Fatalities by Source												
Fatalities from Rebound Miles	0	0	1	1	1	21	39	54	68	81	265	27
Fatalities from Curb Weight Change	0	0	0	0	0	0	-1	0	-3	-3	-8	-1
Total Changes in Fatalities	30	32	33	34	36	32	17	9	-30	-33	160	16
Changes in Non-Fatal Safety Impacts												
Injuries from Rebound Miles (thousands)	0.0	0.1	0.1	0.1	0.1	3.3	6.1	8.4	10.6	12.5	41	4
Injuries from Curb Weight (thousands)	0.0	0.0	0.0	0.0	0.0	-0.1	-0.1	-0.1	-0.5	-0.4	-1.2	-0.1
Total Change in Injuries (thousands)	4.3	4.7	5.0	5.1	5.5	4.8	2.6	1.3	-4.7	-5.0	23.6	2.4
Property Damage from Rebound Miles (thousands)	0.1	0.1	0.2	0.3	0.3	10.2	18.7	25.8	32.6	38.7	127.1	12.7
Property Damage from Curb Weight (thousands)	0.0	0.0	0.0	0.0	0.0	-0.2	-0.4	-0.2	-1.5	-1.2	-3.5	-0.4
Total Property Damaged Vehicles (thousands)	10.1	11.3	12.0	12.5	13.8	11.7	5.5	1.8	-15.2	-15.5	48.1	4.8

Table 949 - Changes in Fleet Characteristics for Model Years 2022-2031 for Alternative PC6LT8

Changes in Fleet Characteristics for Model Years 2022-2031 for Alternative PC6LT8												
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total	Avg.
Changes in Fleet Size, Usage and Fuel Consumption												
Changes in Fleet Size (m)	0.2	0.1	0.0	-0.1	-0.1	-1.3	-2.5	-3.7	-5.4	-6.3	-19.2	-1.9
Light Truck Share (%)	64%	65%	66%	67%	68%	68%	68%	69%	68%	68%	N/A	67%
Pass. Car Share (%)	36%	35%	34%	33%	32%	32%	32%	31%	32%	32%	N/A	33%
VMT from Rebound (b)	0.1	0.1	0.2	0.3	0.3	5.0	10.5	14.8	18.6	21.6	71.5	7.1
Fuel Volume - Total (b gallons)	0.4	0.4	0.4	0.4	0.4	-2.4	-5.2	-7.4	-9.8	-12.4	-35.2	-3.5
Fuel Volume - Lt. Truck (b gallons)	0.3	0.3	0.3	0.3	0.3	-1.8	-3.8	-5.2	-7.3	-9.5	-26.2	-2.6
Fuel Volume - Pass. Car (b gallons)	0.1	0.1	0.1	0.1	0.1	-0.6	-1.4	-2.2	-2.5	-2.9	-9.1	-0.9
Changes in Fatalities by Source												
Fatalities from Rebound Miles	1	1	1	1	2	23	47	67	84	97	324	32
Fatalities from Curb Weight Change	0	0	0	0	0	-1	-1	0	-4	-2	-8	-1
Total Changes in Fatalities	56	60	62	63	67	35	-6	-44	-125	-157	10	1
Changes in Non-Fatal Safety Impacts												
Injuries from Rebound Miles (thousands)	0.1	0.1	0.2	0.2	0.2	3.5	7.4	10.5	13.1	15.1	50	5
Injuries from Curb Weight (thousands)	0.0	0.0	0.0	0.0	0.0	-0.1	-0.2	-0.1	-0.6	-0.4	-1.3	-0.1
Total Change in Injuries (thousands)	8.2	8.9	9.3	9.5	10.2	5.2	-1.0	-6.9	-19.3	-24.2	-0.2	0.0
Property Damage from Rebound Miles (thousands)	0.2	0.3	0.4	0.5	0.6	10.7	22.7	32.3	40.6	46.9	155.2	15.5
Property Damage from Curb Weight (thousands)	0.0	0.0	0.0	0.0	0.0	-0.3	-0.6	-0.2	-1.7	-1.0	-3.8	-0.4
Total Property Damaged Vehicles (thousands)	19.5	21.6	22.9	23.8	26.2	11.1	-7.1	-24.4	-60.3	-74.1	-40.9	-4.1

Liquid Fuel and Electricity Consumption

Table 950 - Change in Liquid Fuel Consumed (b Gallons), Total Fleet, Undiscounted Over the Lifetime of the Model Year

Change in Liquid Fuel Consumed (b Gallons), Total Fleet, Undiscounted Over the Lifetime of the Model Year											
Model Year	1983-2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Alternative PC2LT002	1268.9	0.0	0.0	0.0	0.0	-1.3	-2.0	-2.6	-3.0	-4.6	1255.5
Alternative PC1LT3	1269.4	0.1	0.1	0.1	0.1	-1.8	-3.0	-4.1	-4.8	-6.4	1249.6
Alternative PC2LT4	1270.2	0.1	0.1	0.1	0.1	-2.1	-3.9	-5.1	-6.5	-8.2	1245.0
Alternative PC3LT5	1271.3	0.2	0.2	0.2	0.2	-2.3	-4.2	-5.7	-7.5	-9.8	1242.7
Alternative PC6LT8	1274.2	0.4	0.4	0.4	0.4	-2.4	-5.2	-7.4	-9.8	-12.4	1238.5

Table 951 - Change in Liquid Fuel Consumed (b Gallons), Passenger Car Fleet, Undiscounted Over the Lifetime of the Model Year

Change in Liquid Fuel Consumed (b Gallons), Passenger Car Fleet, Undiscounted Over the Lifetime of the Model Year											
Model Year	1983-2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Alternative PC2LT002	481.5	0.0	0.0	0.0	0.0	-0.5	-0.7	-1.1	-1.2	-1.3	476.7
Alternative PC1LT3	481.7	0.0	0.0	0.0	0.0	-0.2	-0.3	-0.5	-0.5	-0.5	479.8
Alternative PC2LT4	482.2	0.0	0.0	0.0	0.0	-0.3	-0.5	-0.9	-0.9	-0.9	478.8
Alternative PC3LT5	482.7	0.1	0.1	0.0	0.0	-0.4	-0.7	-1.2	-1.3	-1.5	477.8
Alternative PC6LT8	484.2	0.1	0.1	0.1	0.1	-0.6	-1.4	-2.2	-2.5	-2.9	475.0

Table 952 - Change in Liquid Fuel Consumed (b Gallons), Light Truck Fleet, Undiscounted Over the Lifetime of the Model Year

Change in Liquid Fuel Consumed (b Gallons), Light Truck Fleet, Undiscounted Over the Lifetime of the Model Year											
Model Year	1983-2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Alternative PC2LT002	787.4	0.0	0.0	0.0	0.0	-0.8	-1.2	-1.5	-1.8	-3.4	778.8
Alternative PC1LT3	787.6	0.0	0.0	0.0	0.0	-1.5	-2.7	-3.6	-4.3	-5.9	769.8
Alternative PC2LT4	788.1	0.1	0.1	0.1	0.1	-1.8	-3.3	-4.2	-5.6	-7.3	766.2
Alternative PC3LT5	788.6	0.2	0.2	0.1	0.2	-1.8	-3.5	-4.5	-6.2	-8.3	764.9
Alternative PC6LT8	790.0	0.3	0.3	0.3	0.3	-1.8	-3.8	-5.2	-7.3	-9.5	763.6

Table 953 - Estimated Average Per Vehicle Fuel Costs ($) for MY 2031 Total Fleet, by Alternative

Estimated Average Per Vehicle Fuel Costs ($) for MY 2031 Total Fleet, by Alternative				
	Lifetime Fuel Expenditures		Lifetime Increase	
	7% Discount Rate	3% Discount Rate	7% Discount Rate	3% Discount Rate
No Action Alternative (Reference Baseline)	11,087	14,251	0	0
Alternative PC2LT002	10,590	13,612	-496	-639
Alternative PC1LT3	10,393	13,356	-693	-895
Alternative PC2LT4	10,196	13,103	-891	-1,148
Alternative PC3LT5	10,043	12,908	-1,044	-1,343
Alternative PC6LT8	9,834	12,644	-1,252	-1,607

Table 954 - Estimated Average Per Vehicle Fuel Costs ($) for MY 2031 Passenger Car Fleet, by Alternative

Estimated Average Per Vehicle Fuel Costs ($) for MY 2031 Passenger Car Fleet, by Alternative				
	Lifetime Fuel Expenditures		Lifetime Increase	
	7% Discount Rate	3% Discount Rate	7% Discount Rate	3% Discount Rate
No Action Alternative (Reference Baseline)	8,113	10,306	0	0
Alternative PC2LT002	7,684	9,758	-429	-548
Alternative PC1LT3	7,878	10,006	-235	-300
Alternative PC2LT4	7,719	9,803	-394	-503
Alternative PC3LT5	7,517	9,548	-595	-758
Alternative PC6LT8	7,074	8,985	-1,039	-1,321

Table 955 - Estimated Average Per Vehicle Fuel Costs ($) for MY 2031 Light Truck Fleet, by Alternative

Estimated Average Per Vehicle Fuel Costs ($) for MY 2031 Light Truck Fleet, by Alternative				
	Lifetime Fuel Expenditures		Lifetime Increase	
	7% Discount Rate	3% Discount Rate	7% Discount Rate	3% Discount Rate
No Action Alternative (Reference Baseline)	12,589	16,244	0	0
Alternative PC2LT002	12,055	15,554	-534	-690
Alternative PC1LT3	11,687	15,080	-902	-1,165
Alternative PC2LT4	11,478	14,811	-1,111	-1,434
Alternative PC3LT5	11,354	14,653	-1,235	-1,591
Alternative PC6LT8	11,266	14,541	-1,323	-1,703

Table 956 - Change in Electricity (G-Wh) Consumed, Total Fleet, Undiscounted Over the Lifetime of the Model Year

Change in Electricity (G-Wh) Consumed, Total Fleet, Undiscounted Over the Lifetime of the Model Year											
Model Year	1983-2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Alternative PC2LT002	98.1	0.0	0.0	0.0	0.1	11.6	11.8	11.6	11.3	26.3	170.9
Alternative PC1LT3	98.1	0.1	0.1	0.1	0.1	7.3	7.4	7.4	6.9	21.8	149.3
Alternative PC2LT4	98.2	0.1	0.2	0.2	0.2	7.4	7.4	7.2	6.4	21.1	148.2
Alternative PC3LT5	98.3	0.2	0.3	0.3	0.4	7.4	7.3	7.0	5.9	20.4	147.4
Alternative PC6LT8	98.5	0.3	0.5	0.5	0.7	7.3	6.7	5.8	4.0	19.1	143.4

Table 957 - Change in Electricity (G-Wh) Consumed, Passenger Car Fleet, Undiscounted Over the Lifetime of the Model Year

Change in Electricity (G-Wh) Consumed, Passenger Car Fleet, Undiscounted Over the Lifetime of the Model Year											
Model Year	1983-2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Alternative PC2LT002	66.9	0.0	0.0	0.0	0.0	2.2	2.0	1.5	1.4	1.5	75.6
Alternative PC1LT3	66.9	0.0	0.0	0.0	0.0	0.2	0.3	0.3	0.5	0.9	69.2
Alternative PC2LT4	67.0	0.1	0.1	0.1	0.1	0.2	0.2	0.0	0.5	1.0	69.2
Alternative PC3LT5	67.0	0.1	0.1	0.1	0.2	0.0	0.1	-0.2	0.5	1.1	69.0
Alternative PC6LT8	67.2	0.2	0.2	0.2	0.3	-0.2	-0.5	-1.1	-0.5	-0.1	65.8

Table 958 - Change in Electricity (G-Wh) Consumed, Light Truck Fleet, Undiscounted Over the Lifetime of the Model Year

Change in Electricity (G-Wh) Consumed, Light Truck Fleet, Undiscounted Over the Lifetime of the Model Year											
Model Year	1983-2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Alternative PC2LT002	31.2	0.0	0.0	0.0	0.0	9.4	9.8	10.1	9.9	24.8	95.3
Alternative PC1LT3	31.2	0.0	0.0	0.1	0.1	7.1	7.1	7.0	6.5	21.0	80.1
Alternative PC2LT4	31.2	0.0	0.1	0.1	0.1	7.2	7.2	7.1	5.9	20.0	79.0
Alternative PC3LT5	31.2	0.1	0.1	0.2	0.2	7.3	7.3	7.2	5.4	19.3	78.4
Alternative PC6LT8	31.3	0.1	0.2	0.3	0.4	7.5	7.2	6.9	4.5	19.2	77.6

Regulatory Costs per Vehicle, by Vehicle Type

Table 959 - Estimated Average Per Vehicle Regulatory Costs ($) for MY 2031, by Alternative for Manufacturer (Total)

Estimated Average Per Vehicle Regulatory Costs ($) for MY 2031, by Alternative for Manufacturer (Total)			
	Passenger Cars	Light Trucks	Total Fleet
No Action Alternative (Reference Baseline)	834	1,308	1,149
Alternative PC2LT002	1,191	1,718	1,541
Alternative PC1LT3	1,002	2,144	1,756
Alternative PC2LT4	1,284	2,585	2,141
Alternative PC3LT5	1,682	3,039	2,575
Alternative PC6LT8	3,137	4,373	3,951

Table 960 - Estimated Average Per Vehicle Regulatory Costs ($) for MY 2031, by Alternative for Manufacturer (BMW)

Estimated Average Per Vehicle Regulatory Costs ($) for MY 2031, by Alternative for Manufacturer (BMW)			
	Passenger Cars	Light Trucks	Total Fleet
No Action Alternative (Reference Baseline)	1,170	1,399	1,286
Alternative PC2LT002	1,155	1,448	1,303
Alternative PC1LT3	1,132	1,838	1,485
Alternative PC2LT4	1,449	2,036	1,741
Alternative PC3LT5	1,875	2,276	2,075
Alternative PC6LT8	3,327	3,857	3,591

Table 961 - Estimated Average Per Vehicle Regulatory Costs ($) for MY 2031, by Alternative for Manufacturer (Ford)

Estimated Average Per Vehicle Regulatory Costs ($) for MY 2031, by Alternative for Manufacturer (Ford)			
	Passenger Cars	Light Trucks	Total Fleet
No Action Alternative (Reference Baseline)	557	1,028	982
Alternative PC2LT002	1,204	1,401	1,382
Alternative PC1LT3	1,105	2,189	2,081
Alternative PC2LT4	1,658	2,529	2,442
Alternative PC3LT5	2,123	2,915	2,835
Alternative PC6LT8	3,516	4,310	4,230

Table 962 - Estimated Average Per Vehicle Regulatory Costs ($) for MY 2031, by Alternative for Manufacturer (GM)

Estimated Average Per Vehicle Regulatory Costs ($) for MY 2031, by Alternative for Manufacturer (GM)			
	Passenger Cars	Light Trucks	Total Fleet
No Action Alternative (Reference Baseline)	901	2,211	1,930
Alternative PC2LT002	2,219	3,942	3,572
Alternative PC1LT3	2,059	4,420	3,906
Alternative PC2LT4	2,856	4,723	4,314
Alternative PC3LT5	4,040	5,093	4,862
Alternative PC6LT8	5,406	6,512	6,269

Table 963 - Estimated Average Per Vehicle Regulatory Costs ($) for MY 2031, by Alternative for Manufacturer (Honda)

Estimated Average Per Vehicle Regulatory Costs ($) for MY 2031, by Alternative for Manufacturer (Honda)			
	Passenger Cars	Light Trucks	Total Fleet
No Action Alternative (Reference Baseline)	737	1,226	985
Alternative PC2LT002	993	1,257	1,127
Alternative PC1LT3	633	1,339	988
Alternative PC2LT4	622	1,745	1,184
Alternative PC3LT5	993	1,958	1,475
Alternative PC6LT8	2,326	2,784	2,555

Table 964 - Estimated Average Per Vehicle Regulatory Costs ($) for MY 2031, by Alternative for Manufacturer (Hyundai)

Estimated Average Per Vehicle Regulatory Costs ($) for MY 2031, by Alternative for Manufacturer (Hyundai)			
	Passenger Cars	Light Trucks	Total Fleet
No Action Alternative (Reference Baseline)	844	915	875
Alternative PC2LT002	1,329	1,074	1,218
Alternative PC1LT3	1,116	1,608	1,327
Alternative PC2LT4	1,281	1,911	1,551
Alternative PC3LT5	1,861	5,113	3,250
Alternative PC6LT8	4,213	6,479	5,181

Table 965 - Estimated Average Per Vehicle Regulatory Costs ($) for MY 2031, by Alternative for Manufacturer (KIA)

Estimated Average Per Vehicle Regulatory Costs ($) for MY 2031, by Alternative for Manufacturer (KIA)			
	Passenger Cars	Light Trucks	Total Fleet
No Action Alternative (Reference Baseline)	536	921	716
Alternative PC2LT002	2,334	1,298	1,850
Alternative PC1LT3	953	1,947	1,412
Alternative PC2LT4	2,337	6,690	4,340
Alternative PC3LT5	2,682	7,057	4,691
Alternative PC6LT8	3,837	7,955	5,730

Table 966 - Estimated Average Per Vehicle Regulatory Costs ($) for MY 2031, by Alternative for Manufacturer (JLR)

Estimated Average Per Vehicle Regulatory Costs ($) for MY 2031, by Alternative for Manufacturer (JLR)			
	Passenger Cars	Light Trucks	Total Fleet
No Action Alternative (Reference Baseline)	1,880	726	752
Alternative PC2LT002	1,972	856	881
Alternative PC1LT3	2,281	3,730	3,697
Alternative PC2LT4	2,727	4,139	4,106
Alternative PC3LT5	3,070	4,552	4,518
Alternative PC6LT8	4,253	6,042	6,001

Table 967 - Estimated Average Per Vehicle Regulatory Costs ($) for MY 2031, by Alternative for Manufacturer (Karma)

Estimated Average Per Vehicle Regulatory Costs ($) for MY 2031, by Alternative for Manufacturer (Karma)			
	Passenger Cars	Light Trucks	Total Fleet
No Action Alternative (Reference Baseline)	-4,776	0	-4,776
Alternative PC2LT002	-4,776	0	-4,776
Alternative PC1LT3	-4,776	0	-4,776
Alternative PC2LT4	-4,776	0	-4,776
Alternative PC3LT5	-4,776	0	-4,776
Alternative PC6LT8	-4,776	0	-4,776

Table 968 - Estimated Average Per Vehicle Regulatory Costs ($) for MY 2031, by Alternative for Manufacturer (Lucid)

Estimated Average Per Vehicle Regulatory Costs ($) for MY 2031, by Alternative for Manufacturer (Lucid)			
	Passenger Cars	Light Trucks	Total Fleet
No Action Alternative (Reference Baseline)	0	0	0
Alternative PC2LT002	0	0	0
Alternative PC1LT3	0	0	0
Alternative PC2LT4	0	0	0
Alternative PC3LT5	0	0	0
Alternative PC6LT8	0	0	0

Table 969 - Estimated Average Per Vehicle Regulatory Costs ($) for MY 2031, by Alternative for Manufacturer (Mazda)

Estimated Average Per Vehicle Regulatory Costs ($) for MY 2031, by Alternative for Manufacturer (Mazda)			
	Passenger Cars	Light Trucks	Total Fleet
No Action Alternative (Reference Baseline)	847	1,526	1,436
Alternative PC2LT002	1,191	1,343	1,323
Alternative PC1LT3	995	1,348	1,301
Alternative PC2LT4	1,191	1,656	1,593
Alternative PC3LT5	1,389	2,073	1,981
Alternative PC6LT8	8,118	8,340	8,310

Table 970 - Estimated Average Per Vehicle Regulatory Costs ($) for MY 2031, by Alternative for Manufacturer (Mercedes-Benz)

Estimated Average Per Vehicle Regulatory Costs ($) for MY 2031, by Alternative for Manufacturer (Mercedes-Benz)			
	Passenger Cars	Light Trucks	Total Fleet
No Action Alternative (Reference Baseline)	1,283	1,791	1,561
Alternative PC2LT002	1,106	1,772	1,470
Alternative PC1LT3	1,313	2,147	1,765
Alternative PC2LT4	1,516	2,375	1,980
Alternative PC3LT5	1,790	2,662	2,260
Alternative PC6LT8	3,037	4,315	3,727

Table 971 - Estimated Average Per Vehicle Regulatory Costs ($) for MY 2031, by Alternative for Manufacturer (Mitsubishi)

Estimated Average Per Vehicle Regulatory Costs ($) for MY 2031, by Alternative for Manufacturer (Mitsubishi)			
	Passenger Cars	Light Trucks	Total Fleet
No Action Alternative (Reference Baseline)	797	1,533	1,154
Alternative PC2LT002	941	1,569	1,246
Alternative PC1LT3	805	1,576	1,176
Alternative PC2LT4	875	1,873	1,353
Alternative PC3LT5	1,159	2,142	1,630
Alternative PC6LT8	2,151	3,314	2,708

Table 972 - Estimated Average Per Vehicle Regulatory Costs ($) for MY 2031, by Alternative for Manufacturer (Nissan)

Estimated Average Per Vehicle Regulatory Costs ($) for MY 2031, by Alternative for Manufacturer (Nissan)			
	Passenger Cars	Light Trucks	Total Fleet
No Action Alternative (Reference Baseline)	986	1,533	1,238
Alternative PC2LT002	1,212	1,538	1,362
Alternative PC1LT3	1,005	2,208	1,552
Alternative PC2LT4	1,239	2,650	1,879
Alternative PC3LT5	1,573	2,831	2,143
Alternative PC6LT8	3,248	4,024	3,600

Table 973 - Estimated Average Per Vehicle Regulatory Costs ($) for MY 2031, by Alternative for Manufacturer (Stellantis)

Estimated Average Per Vehicle Regulatory Costs ($) for MY 2031, by Alternative for Manufacturer (Stellantis)			
	Passenger Cars	Light Trucks	Total Fleet
No Action Alternative (Reference Baseline)	2,198	1,380	1,476
Alternative PC2LT002	2,652	1,796	1,897
Alternative PC1LT3	2,970	2,241	2,329
Alternative PC2LT4	3,399	2,592	2,689
Alternative PC3LT5	3,860	2,995	3,099
Alternative PC6LT8	5,270	4,418	4,521

Table 974 - Estimated Average Per Vehicle Regulatory Costs ($) for MY 2031, by Alternative for Manufacturer (Subaru)

Estimated Average Per Vehicle Regulatory Costs ($) for MY 2031, by Alternative for Manufacturer (Subaru)			
	Passenger Cars	Light Trucks	Total Fleet
No Action Alternative (Reference Baseline)	961	1,270	1,227
Alternative PC2LT002	842	1,150	1,108
Alternative PC1LT3	841	1,147	1,105
Alternative PC2LT4	841	1,220	1,167
Alternative PC3LT5	890	1,509	1,421
Alternative PC6LT8	1,298	2,438	2,277

Table 975 - Estimated Average Per Vehicle Regulatory Costs ($) for MY 2031, by Alternative for Manufacturer (Tesla)

Estimated Average Per Vehicle Regulatory Costs ($) for MY 2031, by Alternative for Manufacturer (Tesla)			
	Passenger Cars	Light Trucks	Total Fleet
No Action Alternative (Reference Baseline)	0	270	15
Alternative PC2LT002	0	0	0
Alternative PC1LT3	0	0	0
Alternative PC2LT4	0	0	0
Alternative PC3LT5	0	0	0
Alternative PC6LT8	0	0	0

Table 976 - Estimated Average Per Vehicle Regulatory Costs ($) for MY 2031, by Alternative for Manufacturer (Toyota)

Estimated Average Per Vehicle Regulatory Costs ($) for MY 2031, by Alternative for Manufacturer (Toyota)			
	Passenger Cars	Light Trucks	Total Fleet
No Action Alternative (Reference Baseline)	851	973	928
Alternative PC2LT002	652	966	849
Alternative PC1LT3	647	1,104	932
Alternative PC2LT4	683	1,435	1,151
Alternative PC3LT5	927	1,782	1,458
Alternative PC6LT8	2,821	2,828	2,825

Table 977 - Estimated Average Per Vehicle Regulatory Costs ($) for MY 2031, by Alternative for Manufacturer (Volvo)

Estimated Average Per Vehicle Regulatory Costs ($) for MY 2031, by Alternative for Manufacturer (Volvo)			
	Passenger Cars	Light Trucks	Total Fleet
No Action Alternative (Reference Baseline)	471	-27	115
Alternative PC2LT002	329	228	257
Alternative PC1LT3	482	773	689
Alternative PC2LT4	631	1,161	1,008
Alternative PC3LT5	880	1,551	1,356
Alternative PC6LT8	1,671	3,204	2,761

Table 978 - Estimated Average Per Vehicle Regulatory Costs ($) for MY 2031, by Alternative for Manufacturer (VWA)

Estimated Average Per Vehicle Regulatory Costs ($) for MY 2031, by Alternative for Manufacturer (VWA)			
	Passenger Cars	Light Trucks	Total Fleet
No Action Alternative (Reference Baseline)	1,141	984	1,042
Alternative PC2LT002	1,585	1,244	1,370
Alternative PC1LT3	1,544	1,727	1,658
Alternative PC2LT4	2,026	2,009	2,016
Alternative PC3LT5	2,487	2,405	2,436
Alternative PC6LT8	3,930	3,989	3,967

Change in Safety Parameters

Table 979 - Vehicle-Mass-Related Fatality Impacts over the Lifetime of MY 1983-2031 for Total Fleet, Compared to Alternative 0 (Reference Baseline) - Fatalities Undiscounted, Dollars Discounted at 3% and 7%

Vehicle-Mass-Related Fatality Impacts over the Lifetime of MY 1983-2031 for Total Fleet, Compared to Alternative 0 (Reference Baseline) - Fatalities Undiscounted, Dollars Discounted at 3% and 7%					
Category	Regulatory Alternative				
	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Fatalities	153	224	366	531	760
Fatality Costs ($ Billion, 3% Discount Rate)	1.2	1.8	2.9	4.2	6.4
Fatality Costs ($ Billion, 7% Discount Rate)	0.7	1.1	1.8	2.5	4.0
Non-Fatal Crash Costs ($ Billion, 3% Discount Rate)	2.6	3.9	6.1	8.7	12.6
Non-Fatal Crash Costs ($ Billion, 7% Discount Rate)	1.5	2.3	3.7	5.1	7.8
Total Crash Costs ($ Billion, 3% Discount Rate)	3.8	5.7	9.1	13.0	19.0
Total Crash Costs ($ Billion, 7% Discount Rate)	2.2	3.4	5.4	7.6	11.8

Table 980 - Vehicle-Mass-Related Fatality Impacts over the Lifetime of MY 1983-2031 for Passenger Car Fleet, Compared to Alternative 0 (Reference Baseline) - Fatalities Undiscounted, Dollars Discounted at 3% and 7%

Vehicle-Mass-Related Fatality Impacts over the Lifetime of MY 1983-2031 for Passenger Car Fleet, Compared to Alternative 0 (Reference Baseline) - Fatalities Undiscounted, Dollars Discounted at 3% and 7%					
Category	Regulatory Alternative				
	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Fatalities	9	233	318	404	501
Fatality Costs ($ Billion, 3% Discount Rate)	0.1	1.8	2.5	3.2	4.2
Fatality Costs ($ Billion, 7% Discount Rate)	0.1	1.1	1.5	1.9	2.6
Non-Fatal Crash Costs ($ Billion, 3% Discount Rate)	0.2	4.1	5.5	6.9	8.7
Non-Fatal Crash Costs ($ Billion, 7% Discount Rate)	0.2	2.4	3.2	4.0	5.4
Total Crash Costs ($ Billion, 3% Discount Rate)	0.3	5.9	8.0	10.1	12.8
Total Crash Costs ($ Billion, 7% Discount Rate)	0.3	3.4	4.7	5.9	8.0

Table 981 - Vehicle-Mass-Related Fatality Impacts over the Lifetime of MY 1983-2031 for Light Truck Fleet, Compared to Alternative 0 (Reference Baseline) - Fatalities Undiscounted, Dollars Discounted at 3% and 7%

Vehicle-Mass-Related Fatality Impacts over the Lifetime of MY 1983-2031 for Light Truck Fleet, Compared to Alternative 0 (Reference Baseline) - Fatalities Undiscounted, Dollars Discounted at 3% and 7%					
Category	Regulatory Alternative				
	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Fatalities	144	-9	48	128	259
Fatality Costs ($ Billion, 3% Discount Rate)	1.1	0.0	0.4	1.1	2.2
Fatality Costs ($ Billion, 7% Discount Rate)	0.6	0.0	0.3	0.6	1.4
Non-Fatal Crash Costs ($ Billion, 3% Discount Rate)	2.4	-0.2	0.7	1.9	4.0
Non-Fatal Crash Costs ($ Billion, 7% Discount Rate)	1.4	0.0	0.5	1.1	2.4
Total Crash Costs ($ Billion, 3% Discount Rate)	3.5	-0.2	1.1	2.9	6.2
Total Crash Costs ($ Billion, 7% Discount Rate)	2.0	0.0	0.7	1.7	3.8

Table 982 - Vehicle-Mass-Related Fatality Impacts for CY 2039-2048 for Total Fleet, Compared to Alternative 0 (Reference Baseline) - Fatalities Undiscounted, Dollars Discounted at 3% and 7%

Vehicle-Mass-Related Fatality Impacts for CY 2039-2048 for Total Fleet, Compared to Alternative 0 (Reference Baseline) - Fatalities Undiscounted, Dollars Discounted at 3% and 7%					
Category	Regulatory Alternative				
	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Fatalities	242	374	494	620	858
Fatality Costs ($ Billion, 3% Discount Rate)	1.5	2.4	3.1	3.9	5.4
Fatality Costs ($ Billion, 7% Discount Rate)	0.7	1.0	1.4	1.7	2.4
Non-Fatal Crash Costs ($ Billion, 3% Discount Rate)	3.6	5.6	7.3	9.1	12.7
Non-Fatal Crash Costs ($ Billion, 7% Discount Rate)	1.6	2.4	3.2	4.0	5.5
Total Crash Costs ($ Billion, 3% Discount Rate)	5.1	7.9	10.4	13.1	18.1
Total Crash Costs ($ Billion, 7% Discount Rate)	2.2	3.4	4.5	5.7	7.8

Table 983 - Vehicle-Mass-Related Fatality Impacts for CY 2039-2048 for Passenger Car Fleet, Compared to Alternative 0 (Reference Baseline) - Fatalities Undiscounted, Dollars Discounted at 3% and 7%

Vehicle-Mass-Related Fatality Impacts for CY 2039-2048 for Passenger Car Fleet, Compared to Alternative 0 (Reference Baseline) - Fatalities Undiscounted, Dollars Discounted at 3% and 7%					
Category	Regulatory Alternative				
	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Fatalities	192	554	626	642	812
Fatality Costs ($ Billion, 3% Discount Rate)	1.2	3.5	3.9	4.0	5.1
Fatality Costs ($ Billion, 7% Discount Rate)	0.5	1.5	1.7	1.7	2.2
Non-Fatal Crash Costs ($ Billion, 3% Discount Rate)	2.9	8.2	9.2	9.5	12.0
Non-Fatal Crash Costs ($ Billion, 7% Discount Rate)	1.2	3.5	4.0	4.1	5.1
Total Crash Costs ($ Billion, 3% Discount Rate)	4.0	11.7	13.2	13.5	17.1
Total Crash Costs ($ Billion, 7% Discount Rate)	1.7	5.0	5.6	5.8	7.3

Table 984 - Vehicle-Mass-Related Fatality Impacts for CY 2039-2048 for Light Truck Fleet, Compared to Alternative 0 (Reference Baseline) - Fatalities Undiscounted, Dollars Discounted at 3% and 7%

Vehicle-Mass-Related Fatality Impacts for CY 2039-2048 for Light Truck Fleet, Compared to Alternative 0 (Reference Baseline) - Fatalities Undiscounted, Dollars Discounted at 3% and 7%					
Category	Regulatory Alternative				
	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Fatalities	50	-180	-131	-21	46
Fatality Costs ($ Billion, 3% Discount Rate)	0.3	-1.1	-0.8	-0.1	0.3
Fatality Costs ($ Billion, 7% Discount Rate)	0.2	-0.5	-0.3	0.0	0.2
Non-Fatal Crash Costs ($ Billion, 3% Discount Rate)	0.8	-2.6	-1.9	-0.3	0.7
Non-Fatal Crash Costs ($ Billion, 7% Discount Rate)	0.4	-1.1	-0.8	-0.1	0.3
Total Crash Costs ($ Billion, 3% Discount Rate)	1.1	-3.7	-2.7	-0.4	1.0
Total Crash Costs ($ Billion, 7% Discount Rate)	0.5	-1.6	-1.1	-0.1	0.5

Table 985 - Incremental Vehicle-Mass-Related Fatality Impacts by Model Year and Fleet, Alternative PC1LT3 Compared to Alternative 0 (Reference Baseline), Undiscounted

Incremental Vehicle-Mass-Related Fatality Impacts by Model Year and Fleet, Alternative PC1LT3 Compared to Alternative 0 (Reference Baseline), Undiscounted											
Model Year	1983-2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Passenger Cars	72	3	3	3	3	13	22	25	35	54	233
Light Trucks	66	6	7	7	8	1	-15	-16	-31	-43	-9
Total	138	10	10	10	11	14	7	9	4	11	224

Table 986 - Incremental Vehicle-Mass-Related Fatality Impacts by Model Year and Fleet, Alternative PC2LT4 Compared to Alternative 0 (Reference Baseline), Undiscounted

Incremental Vehicle-Mass-Related Fatality Impacts by Model Year and Fleet, Alternative PC2LT4 Compared to Alternative 0 (Reference Baseline), Undiscounted											
Model Year	1983-2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Passenger Cars	132	7	7	6	7	15	20	12	44	68	318
Light Trucks	125	12	13	14	16	9	-7	-2	-57	-76	48
Total	257	20	20	21	22	24	13	9	-13	-8	366

Table 987 - Incremental Vehicle-Mass-Related Fatality Impacts by Model Year and Fleet, Alternative PC3LT5 Compared to Alternative 0 (Reference Baseline), Undiscounted

Incremental Vehicle-Mass-Related Fatality Impacts by Model Year and Fleet, Alternative PC3LT5 Compared to Alternative 0 (Reference Baseline), Undiscounted											
Model Year	1983-2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Passenger Cars	205	12	12	11	11	9	14	3	51	76	404
Light Trucks	195	20	22	23	25	23	3	6	-81	-108	128
Total	401	32	33	34	36	32	17	9	-30	-33	531

Table 988 - Incremental Vehicle-Mass-Related Fatality Impacts by Model Year and Fleet, Alternative PC6LT8 Compared to Alternative 0 (Reference Baseline), Undiscounted

Incremental Vehicle-Mass-Related Fatality Impacts by Model Year and Fleet, Alternative PC6LT8 Compared to Alternative 0 (Reference Baseline), Undiscounted											
Model Year	1983-2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Passenger Cars	415	21	20	19	19	-2	-11	-34	14	40	501
Light Trucks	390	38	41	44	48	37	5	-10	-138	-197	259
Total	805	60	62	63	67	35	-6	-44	-125	-157	760

Table 989 - Incremental Vehicle-Mass-Related Fatality Costs ($ billion) by Model Year and Fleet, Alternative PC2LT002 Compared to Alternative 0 (Reference Baseline), 3% Discount Rate

Incremental Vehicle-Mass-Related Fatality Costs ($ billion) by Model Year and Fleet, Alternative PC2LT002 Compared to Alternative 0 (Reference Baseline), 3% Discount Rate											
Model Year	1983-2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Passenger Cars	0.3	0.0	0.0	0.0	0.0	0.0	0.0	-0.2	-0.1	0.0	0.1
Light Trucks	0.3	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.2	0.1	1.1
Total	0.6	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.2	1.2

Table 990 - Incremental Vehicle-Mass-Related Fatality Costs ($ billion) by Model Year and Fleet, Alternative PC1LT3 Compared to Alternative 0 (Reference Baseline), 3% Discount Rate

Incremental Vehicle-Mass-Related Fatality Costs ($ billion) by Model Year and Fleet, Alternative PC1LT3 Compared to Alternative 0 (Reference Baseline), 3% Discount Rate											
Model Year	1983-2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Passenger Cars	0.6	0.0	0.0	0.0	0.0	0.1	0.2	0.2	0.3	0.4	1.8
Light Trucks	0.5	0.0	0.1	0.1	0.1	0.0	-0.1	-0.1	-0.2	-0.3	0.0
Total	1.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	1.8

Table 991 - Incremental Vehicle-Mass-Related Fatality Costs ($ billion) by Model Year and Fleet, Alternative PC2LT4 Compared to Alternative 0 (Reference Baseline), 3% Discount Rate

Incremental Vehicle-Mass-Related Fatality Costs ($ billion) by Model Year and Fleet, Alternative PC2LT4 Compared to Alternative 0 (Reference Baseline), 3% Discount Rate											
Model Year	1983-2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Passenger Cars	1.1	0.1	0.1	0.0	0.0	0.1	0.2	0.1	0.3	0.5	2.5
Light Trucks	1.0	0.1	0.1	0.1	0.1	0.1	-0.1	0.0	-0.4	-0.5	0.4
Total	2.1	0.1	0.2	0.2	0.2	0.2	0.1	0.1	-0.1	0.0	2.9

Table 992 - Incremental Vehicle-Mass-Related Fatality Costs ($ billion) by Model Year and Fleet, Alternative PC3LT5 Compared to Alternative 0 (Reference Baseline), 3% Discount Rate

Incremental Vehicle-Mass-Related Fatality Costs ($ billion) by Model Year and Fleet, Alternative PC3LT5 Compared to Alternative 0 (Reference Baseline), 3% Discount Rate											
Model Year	1983-2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Passenger Cars	1.7	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.4	0.5	3.2
Light Trucks	1.6	0.1	0.2	0.2	0.2	0.2	0.0	0.0	-0.6	-0.8	1.1
Total	3.3	0.2	0.2	0.2	0.3	0.2	0.1	0.0	-0.2	-0.2	4.2

Table 993 - Incremental Vehicle-Mass-Related Fatality Costs ($ billion) by Model Year and Fleet, Alternative PC6LT8 Compared to Alternative 0 (Reference Baseline), 3% Discount Rate

Incremental Vehicle-Mass-Related Fatality Costs ($ billion) by Model Year and Fleet, Alternative PC6LT8 Compared to Alternative 0 (Reference Baseline), 3% Discount Rate											
Model Year	1983-2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Passenger Cars	3.5	0.2	0.2	0.1	0.1	0.0	-0.1	-0.3	0.1	0.3	4.2
Light Trucks	3.2	0.3	0.3	0.3	0.3	0.3	0.0	-0.1	-1.0	-1.4	2.2
Total	6.7	0.5	0.5	0.5	0.5	0.2	-0.1	-0.4	-0.9	-1.1	6.4

Table 994 - Incremental Vehicle-Mass-Related Fatality Costs ($ billion) by Model Year and Fleet, No Action Alternative (Reference Baseline) Compared to Alternative 0 (Reference Baseline), 7% Discount Rate

Incremental Vehicle-Mass-Related Fatality Costs ($ billion) by Model Year and Fleet, No Action Alternative (Reference Baseline) Compared to Alternative 0 (Reference Baseline), 7% Discount Rate											
Model Year	1983-2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Passenger Cars	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Light Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table 995 - Incremental Vehicle-Mass-Related Fatality Costs ($ billion) by Model Year and Fleet, Alternative PC2LT002 Compared to Alternative 0 (Reference Baseline), 7% Discount Rate

Incremental Vehicle-Mass-Related Fatality Costs ($ billion) by Model Year and Fleet, Alternative PC2LT002 Compared to Alternative 0 (Reference Baseline), 7% Discount Rate											
Model Year	1983-2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Passenger Cars	0.2	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	-0.1	0.0	0.1
Light Trucks	0.2	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.6
Total	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.7

Table 996 - Incremental Vehicle-Mass-Related Fatality Costs ($ billion) by Model Year and Fleet, Alternative PC1LT3 Compared to Alternative 0 (Reference Baseline), 7% Discount Rate

Incremental Vehicle-Mass-Related Fatality Costs ($ billion) by Model Year and Fleet, Alternative PC1LT3 Compared to Alternative 0 (Reference Baseline), 7% Discount Rate											
Model Year	1983-2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Passenger Cars	0.4	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.2	1.1
Light Trucks	0.3	0.0	0.0	0.0	0.0	0.0	-0.1	-0.1	-0.1	-0.2	0.0
Total	0.7	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	1.1

Table 996- Incremental Vehicle-Mass-Related Fatality Costs ($ billion) by Model Year and Fleet, Alternative PC2LT4 Compared to Alternative 0 (Reference Baseline), 7% Discount Rate

Incremental Vehicle-Mass-Related Fatality Costs ($ billion) by Model Year and Fleet, Alternative PC2LT4 Compared to Alternative 0 (Reference Baseline), 7% Discount Rate											
Model Year	1983-2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Passenger Cars	0.7	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.2	0.3	1.5
Light Trucks	0.6	0.1	0.1	0.1	0.1	0.0	0.0	0.0	-0.2	-0.3	0.3
Total	1.3	0.1	0.1	0.1	0.1	0.1	0.0	0.0	-0.1	0.0	1.8

Table 997 - Incremental Vehicle-Mass-Related Fatality Costs ($ billion) by Model Year and Fleet, Alternative PC3LT5 Compared to Alternative 0 (Reference Baseline), 7% Discount Rate

Incremental Vehicle-Mass-Related Fatality Costs ($ billion) by Model Year and Fleet, Alternative PC3LT5 Compared to Alternative 0 (Reference Baseline), 7% Discount Rate											
Model Year	1983-2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Passenger Cars	1.1	0.1	0.1	0.0	0.0	0.0	0.1	0.0	0.2	0.3	1.9
Light Trucks	0.9	0.1	0.1	0.1	0.1	0.1	0.0	0.0	-0.3	-0.4	0.6
Total	2.0	0.1	0.1	0.1	0.1	0.1	0.0	0.0	-0.1	-0.1	2.5

Table 998 - Incremental Vehicle-Mass-Related Fatality Costs ($ billion) by Model Year and Fleet, Alternative PC6LT8 Compared to Alternative 0 (Reference Baseline), 7% Discount Rate

Incremental Vehicle-Mass-Related Fatality Costs ($ billion) by Model Year and Fleet, Alternative PC6LT8 Compared to Alternative 0 (Reference Baseline), 7% Discount Rate											
Model Year	1983-2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Passenger Cars	2.3	0.1	0.1	0.1	0.1	0.0	-0.1	-0.1	0.1	0.1	2.6
Light Trucks	1.9	0.2	0.2	0.2	0.2	0.1	0.0	-0.1	-0.6	-0.7	1.4
Total	4.2	0.3	0.3	0.3	0.3	0.1	-0.1	-0.2	-0.5	-0.6	4.0

Table 999 - Change in Safety Parameters from Alternative 0 (Reference Baseline) for MY 1983-2031 for Total Fleet, 3% Percent Discount Rate, by Alternative

Change in Safety Parameters from Alternative 0 (Reference Baseline) for MY 1983-2031 for Total Fleet, 3% Percent Discount Rate, by Alternative					
Alternative	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Fatalities					
Fatalities From Mass Changes	-4	-1	-6	-8	-8
Fatalities from Rebound Effect	111	175	231	266	325
Fatalities from Sales/Scrappage	46	50	141	273	443
Total Changes in Fatalities	153	224	366	531	760
Fatality Costs ($b)					
Fatality Costs From Mass Changes	0.0	0.0	0.0	-0.1	-0.1
Fatality Costs From Rebound Effect	0.8	1.3	1.7	2.0	2.4
Fatality Costs from Sales/Scrappage	0.4	0.5	1.3	2.3	4.0
Total - Fatality Costs ($b)	1.2	1.8	2.9	4.2	6.4
Non-Fatal Crash Costs ($b)					
Non-Fatal Crash Costs From Mass Changes	-0.1	0.0	-0.1	-0.1	-0.1
Non-Fatal Crash Costs From Rebound Effect	1.9	3.0	4.0	4.6	5.6
Non-Fatal Crash Costs from Sales/Scrappage	0.8	0.8	2.3	4.3	7.1
Total - Non-Fatal Crash Costs ($b)	2.6	3.9	6.1	8.7	12.6
Property Damage Costs ($b)					
Property Damage Costs From Mass Changes	0.0	0.0	0.0	0.0	0.0
Property Damage Costs From Rebound Effect	0.3	0.5	0.6	0.7	0.8
Property Damage Costs From Sales/Scrappage	0.0	0.0	0.0	0.1	0.1
Total - Property Damage Costs ($b)	0.3	0.4	0.6	0.8	0.9
Societal Crash Costs ($b)					
Crash Costs from Mass Changes	-0.1	0.0	-0.2	-0.2	-0.2
Crash Costs from Rebound Effect	3.0	4.8	6.3	7.3	8.9
Crash Costs from Sales/Scrappage	1.2	1.3	3.6	6.7	11.3
Total - Societal Crash Costs ($b)	4.1	6.1	9.7	13.8	19.9

Table 997 - Change in Safety Parameters from Alternative 0 (Reference Baseline) for MY 1983-2031 for Passenger Car Fleet, 3% Percent Discount Rate, by Alternative

Change in Safety Parameters from Alternative 0 (Reference Baseline) for MY 1983-2031 for Passenger Car Fleet, 3% Percent Discount Rate, by Alternative					
Alternative	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Fatalities					
Fatalities From Mass Changes	2	1	0	9	11
Fatalities from Rebound Effect	42	32	49	66	107
Fatalities from Sales/Scrappage	-35	200	269	328	383
Total Changes in Fatalities	9	233	318	404	501
Fatality Costs ($b)					
Fatality Costs From Mass Changes	0.0	0.0	0.0	0.1	0.1
Fatality Costs From Rebound Effect	0.3	0.2	0.4	0.5	0.8
Fatality Costs from Sales/Scrappage	-0.2	1.6	2.1	2.6	3.3
Total - Fatality Costs ($b)	0.1	1.8	2.5	3.2	4.2
Non-Fatal Crash Costs ($b)					
Non-Fatal Crash Costs From Mass Changes	0.0	0.0	0.0	0.2	0.2
Non-Fatal Crash Costs From Rebound Effect	0.7	0.6	0.9	1.2	1.9
Non-Fatal Crash Costs from Sales/Scrappage	-0.6	3.5	4.6	5.6	6.6
Total - Non-Fatal Crash Costs ($b)	0.2	4.1	5.5	6.9	8.7
Property Damage Costs ($b)					
Property Damage Costs From Mass Changes	0.0	0.0	0.0	0.0	0.0
Property Damage Costs From Rebound Effect	0.1	0.1	0.1	0.2	0.3
Property Damage Costs From Sales/Scrappage	-0.1	0.4	0.5	0.6	0.5
Total - Property Damage Costs ($b)	0.0	0.5	0.7	0.8	0.9
Societal Crash Costs ($b)					
Crash Costs from Mass Changes	0.1	0.0	0.0	0.3	0.3
Crash Costs from Rebound Effect	1.2	0.9	1.4	1.8	2.9
Crash Costs from Sales/Scrappage	-0.9	5.5	7.3	8.8	10.4
Total - Societal Crash Costs ($b)	0.3	6.4	8.6	10.8	13.7

Table 998 - Change in Safety Parameters from Alternative 0 (Reference Baseline) for MY 1983-2031 for Light Truck Fleet, 3% Percent Discount Rate, by Alternative

Change in Safety Parameters from Alternative 0 (Reference Baseline) for MY 1983-2031 for Light Truck Fleet, 3% Percent Discount Rate, by Alternative					
Alternative	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Fatalities					
Fatalities From Mass Changes	-6	-2	-6	-17	-20
Fatalities from Rebound Effect	69	143	182	200	218
Fatalities from Sales/Scrappage	81	-150	-128	-55	60
Total Changes in Fatalities	144	-9	48	128	259
Fatality Costs ($b)					
Fatality Costs From Mass Changes	0.0	0.0	0.0	-0.1	-0.1
Fatality Costs From Rebound Effect	0.5	1.1	1.3	1.5	1.6
Fatality Costs from Sales/Scrappage	0.6	-1.0	-0.9	-0.3	0.7
Total - Fatality Costs ($b)	1.1	0.0	0.4	1.1	2.2
Non-Fatal Crash Costs ($b)					
Non-Fatal Crash Costs From Mass Changes	-0.1	0.0	-0.1	-0.3	-0.3
Non-Fatal Crash Costs From Rebound Effect	1.2	2.5	3.1	3.4	3.8
Non-Fatal Crash Costs from Sales/Scrappage	1.3	-2.6	-2.4	-1.3	0.5
Total - Non-Fatal Crash Costs ($b)	2.4	-0.2	0.7	1.9	4.0
Property Damage Costs ($b)					
Property Damage Costs From Mass Changes	0.0	0.0	0.0	0.0	-0.1
Property Damage Costs From Rebound Effect	0.2	0.4	0.5	0.5	0.6
Property Damage Costs From Sales/Scrappage	0.2	-0.5	-0.5	-0.5	-0.4
Total - Property Damage Costs ($b)	0.3	-0.1	-0.1	0.0	0.1
Societal Crash Costs ($b)					
Crash Costs from Mass Changes	-0.2	0.0	-0.2	-0.5	-0.5
Crash Costs from Rebound Effect	1.9	3.9	4.9	5.4	5.9
Crash Costs from Sales/Scrappage	2.1	-4.1	-3.7	-2.1	0.8
Total - Societal Crash Costs ($b)	3.8	-0.3	1.0	2.9	6.2

Table 999 - Change in Safety Parameters from Alternative 0 (Reference Baseline) for MY 1983-2031 for Total Fleet, 7% Percent Discount Rate, by Alternative

Change in Safety Parameters from Alternative 0 (Reference Baseline) for MY 1983-2031 for Total Fleet, 7% Percent Discount Rate, by Alternative					
Alternative	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Fatalities					
Fatalities From Mass Changes	-4	-1	-6	-8	-8
Fatalities from Rebound Effect	111	175	231	266	325
Fatalities from Sales/Scrappage	46	50	141	273	443
Total Changes in Fatalities	153	224	366	531	760
Fatality Costs ($b)					
Fatality Costs From Mass Changes	0.0	0.0	0.0	0.0	0.0
Fatality Costs From Rebound Effect	0.5	0.7	0.9	1.1	1.3
Fatality Costs from Sales/Scrappage	0.3	0.4	0.8	1.4	2.7
Total - Fatality Costs ($b)	0.7	1.1	1.8	2.5	4.0
Non-Fatal Crash Costs ($b)					
Non-Fatal Crash Costs From Mass Changes	0.0	0.0	-0.1	-0.1	-0.1
Non-Fatal Crash Costs From Rebound Effect	1.1	1.7	2.2	2.6	3.1
Non-Fatal Crash Costs from Sales/Scrappage	0.5	0.6	1.5	2.7	4.7
Total - Non-Fatal Crash Costs ($b)	1.5	2.3	3.7	5.1	7.8
Property Damage Costs ($b)					
Property Damage Costs From Mass Changes	0.0	0.0	0.0	0.0	0.0
Property Damage Costs From Rebound Effect	0.2	0.3	0.3	0.4	0.5
Property Damage Costs From Sales/Scrappage	0.0	0.0	0.0	0.1	0.1
Total - Property Damage Costs ($b)	0.2	0.3	0.4	0.5	0.6
Societal Crash Costs ($b)					
Crash Costs from Mass Changes	-0.1	0.0	-0.1	-0.1	-0.1
Crash Costs from Rebound Effect	1.7	2.7	3.5	4.0	4.9
Crash Costs from Sales/Scrappage	0.8	1.0	2.4	4.2	7.5
Total - Societal Crash Costs ($b)	2.4	3.7	5.8	8.1	12.3

Table 1000 - Change in Safety Parameters from Alternative 0 (Reference Baseline) for MY 1983-2031 for Passenger Car Fleet, 7% Percent Discount Rate, by Alternative

Change in Safety Parameters from Alternative 0 (Reference Baseline) for MY 1983-2031 for Passenger Car Fleet, 7% Percent Discount Rate, by Alternative					
Alternative	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Fatalities					
Fatalities From Mass Changes	2	1	0	9	11
Fatalities from Rebound Effect	42	32	49	66	107
Fatalities from Sales/Scrappage	-35	200	269	328	383
Total Changes in Fatalities	9	233	318	404	501
Fatality Costs ($b)					
Fatality Costs From Mass Changes	0.0	0.0	0.0	0.0	0.0
Fatality Costs From Rebound Effect	0.2	0.1	0.2	0.3	0.4
Fatality Costs from Sales/Scrappage	-0.1	0.9	1.3	1.6	2.1
Total - Fatality Costs ($b)	0.1	1.1	1.5	1.9	2.6
Non-Fatal Crash Costs ($b)					
Non-Fatal Crash Costs From Mass Changes	0.0	0.0	0.0	0.1	0.1
Non-Fatal Crash Costs From Rebound Effect	0.4	0.3	0.5	0.6	1.0
Non-Fatal Crash Costs from Sales/Scrappage	-0.3	2.0	2.7	3.3	4.2
Total - Non-Fatal Crash Costs ($b)	0.2	2.4	3.2	4.0	5.4
Property Damage Costs ($b)					
Property Damage Costs From Mass Changes	0.0	0.0	0.0	0.0	0.0
Property Damage Costs From Rebound Effect	0.1	0.0	0.1	0.1	0.2
Property Damage Costs From Sales/Scrappage	-0.1	0.3	0.3	0.4	0.3
Total - Property Damage Costs ($b)	0.0	0.3	0.4	0.5	0.5
Societal Crash Costs ($b)					
Crash Costs from Mass Changes	0.0	0.0	0.0	0.1	0.2
Crash Costs from Rebound Effect	0.7	0.5	0.8	1.0	1.6
Crash Costs from Sales/Scrappage	-0.4	3.2	4.3	5.2	6.7
Total - Societal Crash Costs ($b)	0.3	3.7	5.1	6.4	8.5

Table 1001 - Change in Safety Parameters from Alternative 0 (Reference Baseline) for MY 1983-2031 for Light Truck Fleet, 7% Percent Discount Rate, by Alternative

Change in Safety Parameters from Alternative 0 (Reference Baseline) for MY 1983-2031 for Light Truck Fleet, 7% Percent Discount Rate, by Alternative					
Alternative	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Fatalities					
Fatalities From Mass Changes	-6	-2	-6	-17	-20
Fatalities from Rebound Effect	69	143	182	200	218
Fatalities from Sales/Scrappage	81	-150	-128	-55	60
Total Changes in Fatalities	144	-9	48	128	259
Fatality Costs ($b)					
Fatality Costs From Mass Changes	0.0	0.0	0.0	-0.1	-0.1
Fatality Costs From Rebound Effect	0.3	0.6	0.7	0.8	0.9
Fatality Costs from Sales/Scrappage	0.4	-0.5	-0.4	-0.1	0.5
Total - Fatality Costs ($b)	0.6	0.0	0.3	0.6	1.4
Non-Fatal Crash Costs ($b)					
Non-Fatal Crash Costs From Mass Changes	-0.1	0.0	-0.1	-0.2	-0.2
Non-Fatal Crash Costs From Rebound Effect	0.7	1.4	1.7	1.9	2.1
Non-Fatal Crash Costs from Sales/Scrappage	0.8	-1.4	-1.2	-0.6	0.5
Total - Non-Fatal Crash Costs ($b)	1.4	0.0	0.5	1.1	2.4
Property Damage Costs ($b)					
Property Damage Costs From Mass Changes	0.0	0.0	0.0	0.0	0.0
Property Damage Costs From Rebound Effect	0.1	0.2	0.3	0.3	0.3
Property Damage Costs From Sales/Scrappage	0.1	-0.3	-0.3	-0.3	-0.2
Total - Property Damage Costs ($b)	0.2	-0.1	0.0	0.0	0.0
Societal Crash Costs ($b)					
Crash Costs from Mass Changes	-0.1	0.0	-0.1	-0.3	-0.3
Crash Costs from Rebound Effect	1.0	2.2	2.8	3.0	3.3
Crash Costs from Sales/Scrappage	1.2	-2.2	-2.0	-1.0	0.8
Total - Societal Crash Costs ($b)	2.2	-0.1	0.7	1.7	3.8

Table 1002 - Change in Safety Parameters from Alternative 0 (Reference Baseline) for CY 2039-2048 for Total Fleet, 3% Percent Discount Rate, by Alternative

Change in Safety Parameters from Alternative 0 (Reference Baseline) for CY 2039-2048 for Total Fleet, 3% Percent Discount Rate, by Alternative					
Alternative	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Fatalities					
Fatalities From Mass Changes	1	-20	-26	-39	47
Fatalities from Rebound Effect	256	424	556	696	911
Fatalities from Sales/Scrappage	-14	-29	-35	-37	-99
Total Changes in Fatalities	242	374	494	620	858
Fatality Costs ($b)					
Fatality Costs From Mass Changes	0.0	-0.1	-0.2	-0.2	0.3
Fatality Costs From Rebound Effect	1.6	2.7	3.5	4.4	5.7
Fatality Costs from Sales/Scrappage	-0.1	-0.2	-0.2	-0.2	-0.6
Total - Fatality Costs ($b)	1.5	2.4	3.1	3.9	5.4
Non-Fatal Crash Costs ($b)					
Non-Fatal Crash Costs From Mass Changes	0.0	-0.3	-0.4	-0.6	0.7
Non-Fatal Crash Costs From Rebound Effect	3.8	6.3	8.3	10.4	13.5
Non-Fatal Crash Costs from Sales/Scrappage	-0.2	-0.4	-0.6	-0.7	-1.6
Total - Non-Fatal Crash Costs ($b)	3.6	5.6	7.3	9.1	12.7
Property Damage Costs ($b)					
Property Damage Costs From Mass Changes	0.0	0.0	-0.1	-0.1	0.1
Property Damage Costs From Rebound Effect	0.6	0.9	1.2	1.5	2.0
Property Damage Costs From Sales/Scrappage	0.0	0.0	-0.1	-0.1	-0.2
Total - Property Damage Costs ($b)	0.5	0.8	1.1	1.3	2.0
Societal Crash Costs ($b)					
Crash Costs from Mass Changes	0.0	-0.5	-0.6	-0.9	1.1
Crash Costs from Rebound Effect	6.0	9.9	13.0	16.3	21.3
Crash Costs from Sales/Scrappage	-0.3	-0.7	-0.9	-1.0	-2.4
Total - Societal Crash Costs ($b)	5.7	8.8	11.5	14.4	20.0

Table 1003 - Change in Safety Parameters from Alternative 0 (Reference Baseline) for CY 2039-2048 for Passenger Car Fleet, 3% Percent Discount Rate, by Alternative

Change in Safety Parameters from Alternative 0 (Reference Baseline) for CY 2039-2048 for Passenger Car Fleet, 3% Percent Discount Rate, by Alternative					
Alternative	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Fatalities					
Fatalities From Mass Changes	36	34	49	100	181
Fatalities from Rebound Effect	108	76	116	157	288
Fatalities from Sales/Scrappage	47	444	460	385	343
Total Changes in Fatalities	192	554	626	642	812
Fatality Costs ($b)					
Fatality Costs From Mass Changes	0.2	0.2	0.3	0.6	1.1
Fatality Costs From Rebound Effect	0.7	0.5	0.7	1.0	1.8
Fatality Costs from Sales/Scrappage	0.3	2.8	2.9	2.4	2.1
Total - Fatality Costs ($b)	1.2	3.5	3.9	4.0	5.1
Non-Fatal Crash Costs ($b)					
Non-Fatal Crash Costs From Mass Changes	0.5	0.5	0.7	1.5	2.7
Non-Fatal Crash Costs From Rebound Effect	1.6	1.1	1.7	2.3	4.3
Non-Fatal Crash Costs from Sales/Scrappage	0.7	6.6	6.8	5.6	5.0
Total - Non-Fatal Crash Costs ($b)	2.9	8.2	9.2	9.5	12.0
Property Damage Costs ($b)					
Property Damage Costs From Mass Changes	0.1	0.1	0.1	0.2	0.4
Property Damage Costs From Rebound Effect	0.2	0.2	0.3	0.3	0.6
Property Damage Costs From Sales/Scrappage	0.1	1.0	1.0	0.8	0.8
Total - Property Damage Costs ($b)	0.5	1.2	1.4	1.4	1.9
Societal Crash Costs ($b)					
Crash Costs from Mass Changes	0.8	0.8	1.2	2.3	4.2
Crash Costs from Rebound Effect	2.5	1.8	2.7	3.7	6.8
Crash Costs from Sales/Scrappage	1.1	10.3	10.7	8.9	8.0
Total - Societal Crash Costs ($b)	4.5	12.9	14.6	14.9	19.0

Table 1004 - Change in Safety Parameters from Alternative 0 (Reference Baseline) for CY 2039-2048 for Light Truck Fleet, 3% Percent Discount Rate, by Alternative

Change in Safety Parameters from Alternative 0 (Reference Baseline) for CY 2039-2048 for Light Truck Fleet, 3% Percent Discount Rate, by Alternative					
Alternative	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Fatalities					
Fatalities From Mass Changes	-36	-55	-76	-139	-134
Fatalities from Rebound Effect	148	348	440	539	622
Fatalities from Sales/Scrappage	-62	-473	-495	-422	-442
Total Changes in Fatalities	50	-180	-131	-21	46
Fatality Costs ($b)					
Fatality Costs From Mass Changes	-0.2	-0.3	-0.5	-0.9	-0.8
Fatality Costs From Rebound Effect	0.9	2.2	2.8	3.4	3.9
Fatality Costs from Sales/Scrappage	-0.4	-3.0	-3.1	-2.6	-2.8
Total - Fatality Costs ($b)	0.3	-1.1	-0.8	-0.1	0.3
Non-Fatal Crash Costs ($b)					
Non-Fatal Crash Costs From Mass Changes	-0.5	-0.8	-1.1	-2.0	-2.0
Non-Fatal Crash Costs From Rebound Effect	2.2	5.2	6.5	8.0	9.3
Non-Fatal Crash Costs from Sales/Scrappage	-0.9	-7.0	-7.3	-6.3	-6.6
Total - Non-Fatal Crash Costs ($b)	0.8	-2.6	-1.9	-0.3	0.7
Property Damage Costs ($b)					
Property Damage Costs From Mass Changes	-0.1	-0.1	-0.2	-0.3	-0.3
Property Damage Costs From Rebound Effect	0.3	0.8	1.0	1.2	1.4
Property Damage Costs From Sales/Scrappage	-0.2	-1.0	-1.1	-1.0	-1.0
Total - Property Damage Costs ($b)	0.1	-0.4	-0.3	-0.1	0.1
Societal Crash Costs ($b)					
Crash Costs from Mass Changes	-0.8	-1.3	-1.8	-3.2	-3.1
Crash Costs from Rebound Effect	3.5	8.1	10.3	12.6	14.6
Crash Costs from Sales/Scrappage	-1.4	-11.0	-11.5	-9.9	-10.4
Total - Societal Crash Costs ($b)	1.2	-4.1	-3.0	-0.5	1.1

Table 1005 - Change in Safety Parameters from Alternative 0 (Reference Baseline) for CY 2039-2048 for Total Fleet, 7% Percent Discount Rate, by Alternative

Change in Safety Parameters from Alternative 0 (Reference Baseline) for CY 2039-2048 for Total Fleet, 7% Percent Discount Rate, by Alternative					
Alternative	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Fatalities					
Fatalities From Mass Changes	1	-20	-26	-39	47
Fatalities from Rebound Effect	256	424	556	696	911
Fatalities from Sales/Scrappage	-14	-29	-35	-37	-99
Total Changes in Fatalities	242	374	494	620	858
Fatality Costs ($b)					
Fatality Costs From Mass Changes	0.0	-0.1	-0.1	-0.1	0.1
Fatality Costs From Rebound Effect	0.7	1.2	1.5	1.9	2.5
Fatality Costs from Sales/Scrappage	0.0	-0.1	-0.1	-0.1	-0.2
Total - Fatality Costs ($b)	0.7	1.0	1.4	1.7	2.4
Non-Fatal Crash Costs ($b)					
Non-Fatal Crash Costs From Mass Changes	0.0	-0.1	-0.2	-0.2	0.3
Non-Fatal Crash Costs From Rebound Effect	1.7	2.7	3.6	4.5	5.9
Non-Fatal Crash Costs from Sales/Scrappage	-0.1	-0.2	-0.2	-0.3	-0.7
Total - Non-Fatal Crash Costs ($b)	1.6	2.4	3.2	4.0	5.5
Property Damage Costs ($b)					
Property Damage Costs From Mass Changes	0.0	0.0	0.0	0.0	0.0
Property Damage Costs From Rebound Effect	0.2	0.4	0.5	0.7	0.9
Property Damage Costs From Sales/Scrappage	0.0	0.0	0.0	-0.1	-0.1
Total - Property Damage Costs ($b)	0.2	0.4	0.5	0.6	0.8
Societal Crash Costs ($b)					
Crash Costs from Mass Changes	0.0	-0.2	-0.3	-0.4	0.5
Crash Costs from Rebound Effect	2.6	4.3	5.6	7.1	9.2
Crash Costs from Sales/Scrappage	-0.1	-0.3	-0.4	-0.4	-1.0
Total - Societal Crash Costs ($b)	2.5	3.8	5.0	6.2	8.7

Table 1006 - Change in Safety Parameters from Alternative 0 (Reference Baseline) for CY 2039-2048 for Passenger Car Fleet, 7% Percent Discount Rate, by Alternative

Change in Safety Parameters from Alternative 0 (Reference Baseline) for CY 2039-2048 for Passenger Car Fleet, 7% Percent Discount Rate, by Alternative					
Alternative	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Fatalities					
Fatalities From Mass Changes	36	34	49	100	181
Fatalities from Rebound Effect	108	76	116	157	288
Fatalities from Sales/Scrappage	47	444	460	385	343
Total Changes in Fatalities	192	554	626	642	812
Fatality Costs ($b)					
Fatality Costs From Mass Changes	0.1	0.1	0.1	0.3	0.5
Fatality Costs From Rebound Effect	0.3	0.2	0.3	0.4	0.8
Fatality Costs from Sales/Scrappage	0.1	1.2	1.2	1.0	0.9
Total - Fatality Costs ($b)	0.5	1.5	1.7	1.7	2.2
Non-Fatal Crash Costs ($b)					
Non-Fatal Crash Costs From Mass Changes	0.2	0.2	0.3	0.6	1.1
Non-Fatal Crash Costs From Rebound Effect	0.7	0.5	0.7	1.0	1.9
Non-Fatal Crash Costs from Sales/Scrappage	0.3	2.8	2.9	2.4	2.2
Total - Non-Fatal Crash Costs ($b)	1.2	3.5	4.0	4.1	5.1
Property Damage Costs ($b)					
Property Damage Costs From Mass Changes	0.0	0.0	0.1	0.1	0.2
Property Damage Costs From Rebound Effect	0.1	0.1	0.1	0.2	0.3
Property Damage Costs From Sales/Scrappage	0.1	0.4	0.4	0.4	0.3
Total - Property Damage Costs ($b)	0.2	0.5	0.6	0.6	0.8
Societal Crash Costs ($b)					
Crash Costs from Mass Changes	0.4	0.3	0.5	1.0	1.8
Crash Costs from Rebound Effect	1.1	0.8	1.2	1.6	2.9
Crash Costs from Sales/Scrappage	0.5	4.4	4.6	3.8	3.4
Total - Societal Crash Costs ($b)	1.9	5.5	6.2	6.4	8.1

Table 1007 - Change in Safety Parameters from Alternative 0 (Reference Baseline) for CY 2039-2048 for Light Truck Fleet, 7% Percent Discount Rate, by Alternative

Change in Safety Parameters from Alternative 0 (Reference Baseline) for CY 2039-2048 for Light Truck Fleet, 7% Percent Discount Rate, by Alternative					
Alternative	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Fatalities					
Fatalities From Mass Changes	-36	-55	-76	-139	-134
Fatalities from Rebound Effect	148	348	440	539	622
Fatalities from Sales/Scrappage	-62	-473	-495	-422	-442
Total Changes in Fatalities	50	-180	-131	-21	46
Fatality Costs ($b)					
Fatality Costs From Mass Changes	-0.1	-0.1	-0.2	-0.4	-0.3
Fatality Costs From Rebound Effect	0.4	0.9	1.2	1.5	1.7
Fatality Costs from Sales/Scrappage	-0.1	-1.3	-1.3	-1.1	-1.2
Total - Fatality Costs ($b)	0.2	-0.5	-0.3	0.0	0.2
Non-Fatal Crash Costs ($b)					
Non-Fatal Crash Costs From Mass Changes	-0.2	-0.3	-0.5	-0.9	-0.8
Non-Fatal Crash Costs From Rebound Effect	1.0	2.2	2.8	3.5	4.0
Non-Fatal Crash Costs from Sales/Scrappage	-0.4	-3.0	-3.2	-2.7	-2.8
Total - Non-Fatal Crash Costs ($b)	0.4	-1.1	-0.8	-0.1	0.3
Property Damage Costs ($b)					
Property Damage Costs From Mass Changes	0.0	-0.1	-0.1	-0.1	-0.1
Property Damage Costs From Rebound Effect	0.1	0.3	0.4	0.5	0.6
Property Damage Costs From Sales/Scrappage	-0.1	-0.4	-0.5	-0.4	-0.4
Total - Property Damage Costs ($b)	0.0	-0.2	-0.1	0.0	0.0
Societal Crash Costs ($b)					
Crash Costs from Mass Changes	-0.4	-0.5	-0.7	-1.4	-1.3
Crash Costs from Rebound Effect	1.5	3.5	4.5	5.5	6.3
Crash Costs from Sales/Scrappage	-0.6	-4.7	-4.9	-4.2	-4.4
Total - Societal Crash Costs ($b)	0.6	-1.7	-1.2	-0.1	0.6

Table 1008 - Change in Non-Fatal Safety Parameters from Alternative 0 (Reference Baseline) for MY 1983-2031 for Total Fleet, by Alternative

Change in Non-Fatal Safety Parameters from Alternative 0 (Reference Baseline) for MY 1983-2031 for Total Fleet, by Alternative					
Alternative	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Non-Fatal Injuries					
Non-Fatal Injuries From Mass Changes	-561	-152	-937	-1,190	-1,282
Non-Fatal Injuries from Rebound Effect	17,289	27,257	35,916	41,445	50,661
Non-Fatal Injuries from Sales/Scrappage	5,647	4,963	16,554	33,749	52,113
Total Changes in Non-Fatal Injuries	22,374	32,068	51,534	74,004	101,492
Property Damaged Vehicles					
Property Damaged Vehicles From Mass Changes	-1,681	-478	-2,858	-3,534	-3,799
Property Damaged Vehicles from Rebound Effect	53,527	83,904	110,458	127,347	155,719
Property Damaged Vehicles from Sales/Scrappage	3,851	-7,858	2,767	23,898	9,746
Total Changes in Property Damaged Vehicles	55,697	75,568	110,367	147,710	161,666

Table 1009 - Change in Non-Fatal Safety Parameters from Alternative 0 (Reference Baseline) for MY 1983-2031 for Passenger Car Fleet, by Alternative

Change in Non-Fatal Safety Parameters from Alternative 0 (Reference Baseline) for MY 1983-2031 for Passenger Car Fleet, by Alternative					
Alternative	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Non-Fatal Injuries					
Non-Fatal Injuries From Mass Changes	364	139	10	1,485	1,803
Non-Fatal Injuries from Rebound Effect	6,574	4,998	7,675	10,307	16,695
Non-Fatal Injuries from Sales/Scrappage	-6,181	29,810	39,330	47,071	51,727
Total Changes in Non-Fatal Injuries	757	34,947	47,015	58,864	70,224
Property Damaged Vehicles					
Property Damaged Vehicles From Mass Changes	1,170	477	92	4,697	5,679
Property Damaged Vehicles from Rebound Effect	20,475	15,505	23,762	31,885	51,780
Property Damaged Vehicles from Sales/Scrappage	-24,889	80,742	99,095	109,251	92,202
Total Changes in Property Damaged Vehicles	-3,245	96,725	122,949	145,833	149,661

Table 1010 - Change in Non-Fatal Safety Parameters from Alternative 0 (Reference Baseline) for MY 1983-2031 for Light Truck Fleet, by Alternative

Change in Non-Fatal Safety Parameters from Alternative 0 (Reference Baseline) for MY 1983-2031 for Light Truck Fleet, by Alternative					
Alternative	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Non-Fatal Injuries					
Non-Fatal Injuries From Mass Changes	-925	-291	-947	-2,675	-3,085
Non-Fatal Injuries from Rebound Effect	10,715	22,260	28,241	31,138	33,966
Non-Fatal Injuries from Sales/Scrappage	11,828	-24,847	-22,775	-13,322	387
Total Changes in Non-Fatal Injuries	21,617	-2,879	4,519	15,141	31,268
Property Damaged Vehicles					
Property Damaged Vehicles From Mass Changes	-2,851	-955	-2,950	-8,231	-9,479
Property Damaged Vehicles from Rebound Effect	33,052	68,398	86,696	95,461	103,940
Property Damaged Vehicles from Sales/Scrappage	28,740	-88,600	-96,328	-85,353	-82,456
Total Changes in Property Damaged Vehicles	58,942	-21,157	-12,582	1,877	12,005