

CAFE: Next Steps under EPCA

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March 17, 2015

Energy Policy and Conservation Act (EPCA)

- The source of general and specific Congressional direction regarding CAFE standards.
- Enacted 1975
- Requires Corporate Average Fuel Economy (CAFE) standards
- Requires DOT to set standards at maximum feasible levels separately for each fleet in each model year
- Requires DOT to enforce standards
- Amended 2007 (Energy Independence and Security Act EISA)



Average of Requirements Estimated in 2012



*Post-2021 standards subject to entirely new rulemaking; matching EPA/CARB standards subject to "mid-term review".



CAFE increases have already helped the U.S. conserve more than a trillion gallons of gasoline.



Next Round of Evaluation / CAFE Rulemaking

- Per EISA (2007), each CAFE rulemaking may cover at most 5 model years
 This is why the MY 2022 2025 standards in most recent CAFE final rule are "augural," not final
- To establish final standards for MYs 2022 and beyond, DOT must undertake new rulemaking
 - Cannot be simply "the augural standards are OK"
 - Must evaluate meaningful range of regulatory alternatives
 - Must prepare DEIS and go through NEPA process
 - Must set standards separately for passenger cars and light trucks at maximum feasible levels in each model year
- To help inform new rulemaking, DOT, EPA, and CARB plan for a joint Technical Assessment
- NHTSA's rulemaking will be concurrent with EPA decision on whether to revise matching 2022 - 2025 GHG standards



Average of Requirements Estimated in 2012



*Post-2021 standards subject to entirely new rulemaking; corresponding EPA/CARB standards subject to "mid-term review".



Fuel Economy Targets - Examples



MY2021 CAFE Requirements as Estimated in 2012

| | Light | | | | Light | | |
|--------------------|-------|--------|------|---------------------------|-------|--------|------|
| | Cars | Trucks | Ave. | | Cars | Trucks | Ave. |
| Aston Martin | 45 | | 45 | Lotus | 49 | | 49 |
| BMW | 46 | 36 | 43 | Mazda | 47 | 36 | 44 |
| Daimler (Mercedes) | 44 | 34 | 41 | Mitsubishi | 49 | 39 | 47 |
| Fiat Chrysler | 45 | 34 | 39 | Nissan | 46 | 33 | 42 |
| Ford | 46 | 30 | 38 | Porsche | 45 | 35 | 39 |
| Geely (Volvo) | 47 | 36 | 42 | Subaru | 48 | 40 | 45 |
| General Motors | 46 | 31 | 38 | Suzuki | 49 | 39 | 48 |
| Honda | 46 | 35 | 42 | Tata (Jaguar, Land Rover) | 44 | 36 | 39 |
| Hyundai | 46 | 37 | 45 | Toyota | 46 | 33 | 40 |
| Кіа | 48 | 35 | 46 | Volkswagen | 47 | 35 | 44 |
| | | | | Industry-Wide Average | 46 | 33 | 40 |

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Some Arithmetic



MY2025 Light Truck Market Share per DOE/EIA



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Light Truck Share and Fuel Prices per DOE/EIA



MY2025 Augural Standards: Reference and Low Oil Price Cases as Examined in 2012

| | Reference Case | Low Oil Prices | |
|------------------------|--|----------------|--|
| CY2025 Gasoline Price | \$3.84/gal. | \$2.48/gal. | |
| Est. Ave. Requirement | 48.7 mpg | 48.7 mpg | |
| Est. Ave. Fuel Economy | 44.6 mpg | 44.4 mpg | |
| Technology in MY2025 | Wide application of smaller boosted engines, advanced transmissions, mass reduction (ave. about 200 lb.). About 10% micro-hybrid and 10% ISG hybrid in reference case; about 15% micro hybrid and 5% ISG hybrid in low oil price case. | | |
| Price Impact in MY2025 | \$1,257 | \$1,150 | |
| Cost to MY2025 Buyers | \$26b | \$24b | |
| Benefits to Buyers | \$93b | \$62b | |
| MY2025 Cost to Society | \$21b | \$19b | |
| Benefits to Society | \$105b | \$72b | |

- 2012 analysis used same projected MY2025 fleet mix for both reference case and low oil price case.

- Impacts are vs. continuation of MY2016 standards.

