COMMENTS OF THE
MANUFACTURERS OF EMISSION CONTROLS ASSOCIATION
ON THE U.S. ENVIRONMENTAL PROTECTION AGENCY'S
PROPOSED RULE ON REVISED 2023 AND LATER MODEL YEAR
LIGHT-DUTY VEHICLE GREENHOUSE GAS
EMISSIONS STANDARDS

Docket ID No. EPA-HQ-OAR-20210208

September 27, 2021

The Manufacturers of Emission Controls Association (MECA) appreciates the opportunity to provide our written comments in support of EPA's Proposed Rule on the Revised 2023 and Later Model Year Light-Duty Vehicle Greenhouse Gas Emission Standards. MECA enthusiastically supports EPA's reconsideration of the 2023-2026 light-duty GHG standards and the agency's preferred alternative for standards through MY 2026. While suppliers continue to innovate and introduce new technologies, the uncertainty surrounding these standards over the past five years has limited investment and job creation in the U.S. We therefore urge EPA to set standards as soon as possible for MY2027 and beyond. Our members depend on long term regulatory certainty to justify their investments that will allow the U.S. to meet its national climate objectives and ensure that U.S. technology suppliers remain internationally competitive.

MECA is an industry trade association of the world's leading manufacturers of clean mobility technologies. Our members have nearly 50 years of experience and a proven track record in developing and commercializing clean mobility solutions including emission control, and powertrain technologies. MECA companies supply the full complement of electrified vehicle powertrain technologies from micro-hybrid start/stop, mild hybrid 48-volt systems, full hybrid, plug-in hybrid and full electric architectures, as well as, battery and fuel cell components and materials. In addition, MECA companies supply innovative catalytic and evaporative emissions controls, advanced fuel injection, turbochargers, cooled-EGR systems, cylinder deactivation, OBD systems, sensors and controls for advanced combustion ICE powertrains.

Over the past 50 years, mobile source emission reduction policies have not only delivered important health benefits but have also helped create an industry with a significant number of well-paying highly skilled jobs and a global economic reach. MECA companies represent over 70,000 of the nearly 300,000 North American jobs building the technologies that improve the fuel economy and reduce emissions of today's vehicles. This employment figure does not include the tens of thousands of additional jobs in automobile, truck, and off-road equipment assembly.

Our industry has played an important role in the environmental success story associated with mobile sources in the United States and around the world. MECA has supported EPA's efforts to develop innovative, technology-advancing, regulatory programs to deal with air quality and climate challenges.

Historically, the most stringent global standards have been enacted in the U.S. which have provided domestic suppliers with a competitive advantage through the early development, adoption and optimization of vehicle related technologies. The original 2012 light-duty GHG standards allowed suppliers to introduce new technologies to the market. Just a few years later, when EPA conducted their mid-term review, the pace and breadth of technology options for compliance grew and the cost reduced beyond the agency's initial projections. A few examples of technologies that have been deployed since the original 2012 standards were finalized include dynamic cylinder deactivation, variable compression ratio and electric boost.

The Proposed Standards are Attainable

MECA stresses that technology-neutral, performance-based regulations continue to be a proven strategy for meeting environmental goals through a diversity of competing, cost-effective technology solutions.

MECA agrees with staff's conclusion that the original LD GHG standards set in 2012, provide a basis for the proposed 2023-2026 standards. MECA concurs with the agency's conclusion that the broader deployment of commercially available technologies for combustion engines and electrified powertrains, in addition to those recently announced for market introduction can be used by manufacturers to attain compliance with the proposed standards.

Furthermore, MECA agrees with EPA that the costs of the technologies needed to comply with the proposed standards have remained approximately consistent or have declined since EPA first estimated them in 2012. Overall, MECA members have continued to commercialize engine and powertrain technologies to allow vehicle manufacturers to comply with the agencies Preferred Proposal (ca. 38.2 mpg real world average).

Advanced Technology Multiplier Credits

MECA has supported the early introductory use of incentives to promote innovative technologies that can be disadvantaged by lack of customer exposure and experience. However, in order for a technology to be a sustainable and successful solution, it must be competitive in cost and performance with other technologies to gain consumer acceptance. Indeed, this was recognized by the original EPA 2012 LD GHG rule, the Midterm Review and subsequent SAFE 2 LD GHG rules which all phased out advanced technology multiplier credits for PHEVs, BEVs and FCEVs in MY2022.

The phase-out of multiplier credits is justified as electrified vehicles have now been around for about 30 years and have matured to the point where almost every manufacturer is offering multiple hybridized and fully electric models, allowing consumers to make informed choices with respect

to advanced powertrain vehicles. A recent ICCT report[1] points out that similar to the latest EPA proposal, the California ZEV program forecasts only 8% EV penetration in 2025 due to credit multipliers. In their report, ICCT cautions that long term reliance on credit multipliers for ZEV technology may result in the unintended consequence of increasing real world emissions from the remaining non-ZEV portion of the fleet that is allowed to continue to emit at higher levels.

The revisions to the LD GHG standards for MY 2020 to MY 2026 created uncertainty for the supplier industry as well as our OEM customers. Furthermore, the proposed standards are scheduled to be implemented in a short time frame. Based on the agencies impact analysis and inclusion of the annual 2.5 g/mile cap on the use of the EV multiplier credits, we agree with the inclusion of the advanced technology multipliers for the limited number of years proposed because it offers some near-term compliance flexibility during this critical transition period for suppliers. However, for the reasons listed earlier in this section, we urge EPA to follow through with sunsetting these credit multipliers by MY 2025 and not grant further extensions in future LDV rulemakings.

Advanced Technology Credits for Pick-up Trucks

MECA supports EPA's proposal to reinstate the original 2012 rule's full-size pick-up truck incentive credits for strong (full) hybrids or similar performance technologies. Pick-up trucks, which are the second most popular light-duty vehicle segment in the North American market, are often identified as a greater technical and consumer acceptance challenge to higher efficiency standards. The presence of both electric, full hybrid and other advanced technology vehicle options in this segment is clearly beneficial to both consumers and the environment.

Unlike multiplier credits, the Advanced Technology Credits for pick-up trucks do require the use of additional full hybrid or other advanced technologies that deliver at least 20% better CO_2 reduction performance than the footprint-based target value in a minimum 10% of total model production volume. In particular, MECA feels the additional 20 g/mile CO_2 credit incentive is reasonable given that on average, pick-up trucks emit considerably more CO_2 per year and are almost twice as likely to reach 200,000 miles compared to vehicles in other LDV segments. Given that large SUVs also commonly utilize the same chassis and powertrains as pick-up trucks, we believe that EPA should consider extending these advanced technology truck credits to similarly powered SUVs as well.

Off-Cycle Technologies

MECA supports EPA's continuation and improvement of the off-cycle credit program with the higher credit cap in order to provide the benefit of verifiable, GHG emission reductions through

[1] Lutsey, N., "Integrating electric vehicles within U.S. and European efficiency regulations", International Council on Clean Transportation (ICCT) working paper 2017-07, 22 June 2017, https://theicct.org/sites/default/files/publications/Integrating-EVs-US-EU_ICCT_Working-Paper_22062017_vF.pdf.

all technological means to accelerate CO_2 reduction from all new vehicles. MECA recognizes the benefit to real-world CO_2 reductions via the off-cycle credit program as a policy to expand the available technologies that vehicle manufacturers can deploy to reduce the GHG contribution from transportation. A key factor in MECA's support is that off-cycle credits, unlike other flexibilities, such as technology multipliers, are only awarded for the inclusion of additional technologies that have been evaluated and found to represent additional CO_2 reductions for vehicles under real world operation.

Expanding the off-cycle credit process to include EPA, NHTSA and the California Air Resources Board may be one consideration in the post-2026 rulemaking to allow for resource sharing among the agencies for reviewing data and evaluating innovative technology pathways for CO_2 reduction. MECA looks forward to working with EPA to investigate the potential of verifying the climate benefit of advanced technologies through more rigorous technology definitions and testing in future rule development. We support the EPA's thinking, for a future rulemaking, of bringing as much technology evaluation "on-cycle" and therefore, increasing the transparency of the program and ensuring verification and compliance of real-world emission reductions.

OBD

MECA supports EPA's proposal to allow manufacturers to alternatively meet EPA OBD requirements if they can show that the vehicle meets newer CARB OBD regulations. This streamlining will provide additional flexibility to manufacturers while reducing costs by producing vehicles with one OBD system (software, calibration, and hardware) for all 50 states.

Post 2026 GHG Standards

MECA supports EPA's efforts to develop multipollutant standards, including criteria and GHG emission limits for MY 2027 and later light-duty vehicles which are vital to the attainment of long-term national environmental goals. Since most economic forecasts out to 2050 include scenarios that predict millions of cars will be sold with ICEs, including some limited sales in 2050, these standards should take into consideration technologies that can feasibly reduce the environmental footprint of all vehicles. In addition, MECA suggests that EPA consider the vehicle and fuel in a systems approach when developing the MY 2027+ standards in order to encourage that all powertrains and fuels are contributing to our national air quality and climate goals.

As electric vehicles become a more significant fraction of the on-road vehicle fleet in 2027 and beyond, MECA urges EPA to consider upstream emissions through a full lifecycle assessment for all vehicle powertrains and advanced vehicle fuels in EPA, NHTSA and DOE programs and regulations. With the growing emphasis on rapid real world emission reductions, it becomes increasingly important to consider all emissions and impacts to the environment, including upstream emissions related to fuels, vehicle production supply chains and supporting fueling infrastructures in a consistent, accurate and equitable manner. Historically, EPA's methodology has considered a balanced and equitable treatment of fuels and technologies to arrive at cost

effective regulations. Numerous studies have shown that in many parts of the country, the air quality benefits of transportation strategies are not uniform with regards to lifecycle emissions. In order to make sound incentive and investment decisions, there is a vital need to consider these additional factors to ensure the most environmentally equitable near-term CO_2 reductions that support the attainment of long-term national objectives.

In closing, MECA believes that EPA should continue to set performance-based standards that assess technology pathways based on delivering the intended emission reductions in all neighborhoods and communities. MECA members remain committed to delivering the necessary technology solutions on vehicles and working with EPA staff to develop innovative regulations that achieve our national environmental and climate objectives.

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