

EPA GHG Standards for MYs 2023-2026

E.O. 12866 Meeting, RIN 2060-AV13

November 23, 2021, 10 am ET



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Information contained in the following slides reflects Auto Innovators' submissions provided to the docket during the public comment period found at [EPA-HQ-OAR-2021-0208-0571](#) and [NHTSA-2021-0053-1492](#).

Our Members

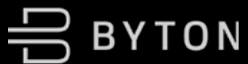


• APTIV •



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cruise

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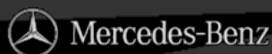
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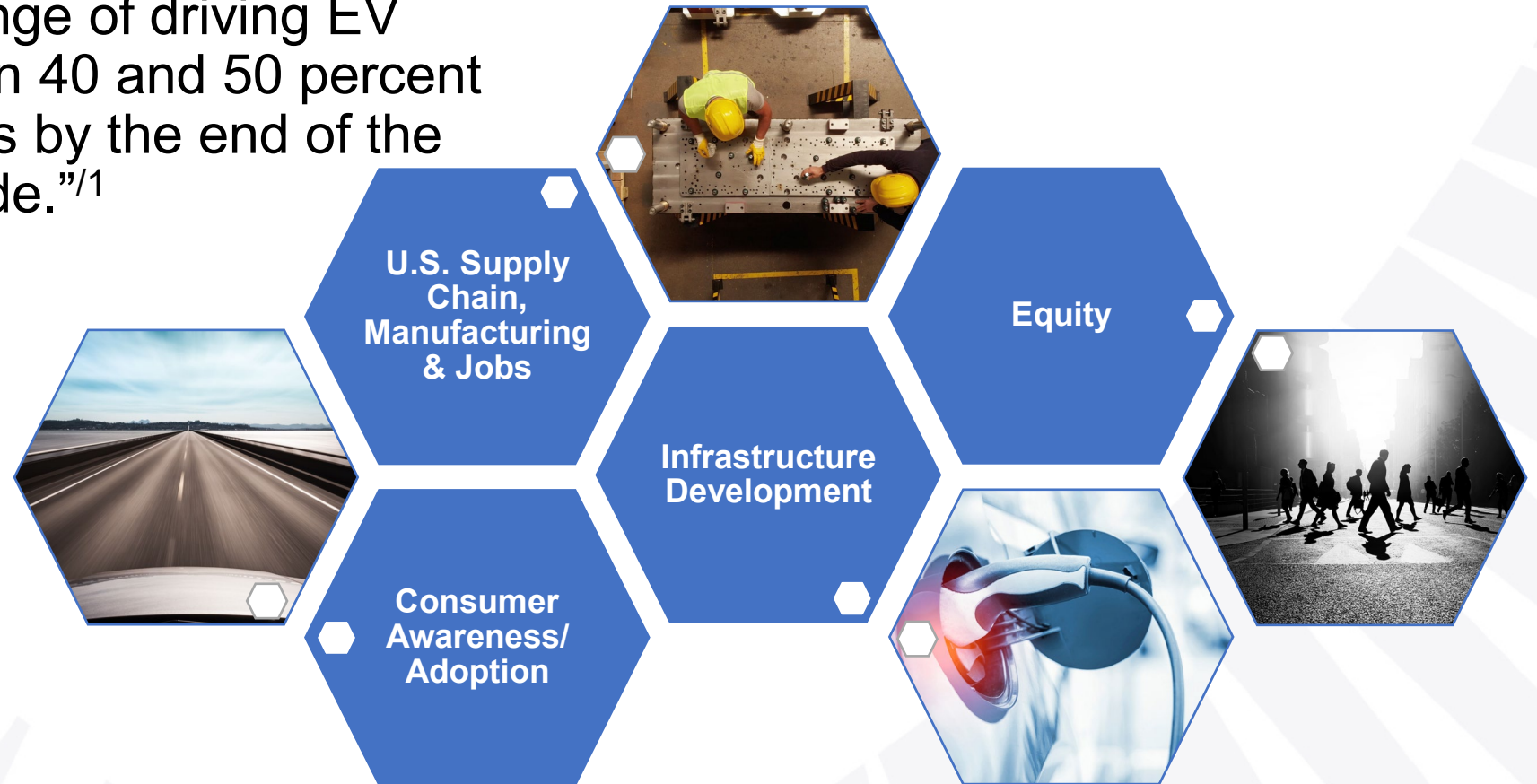


Overview

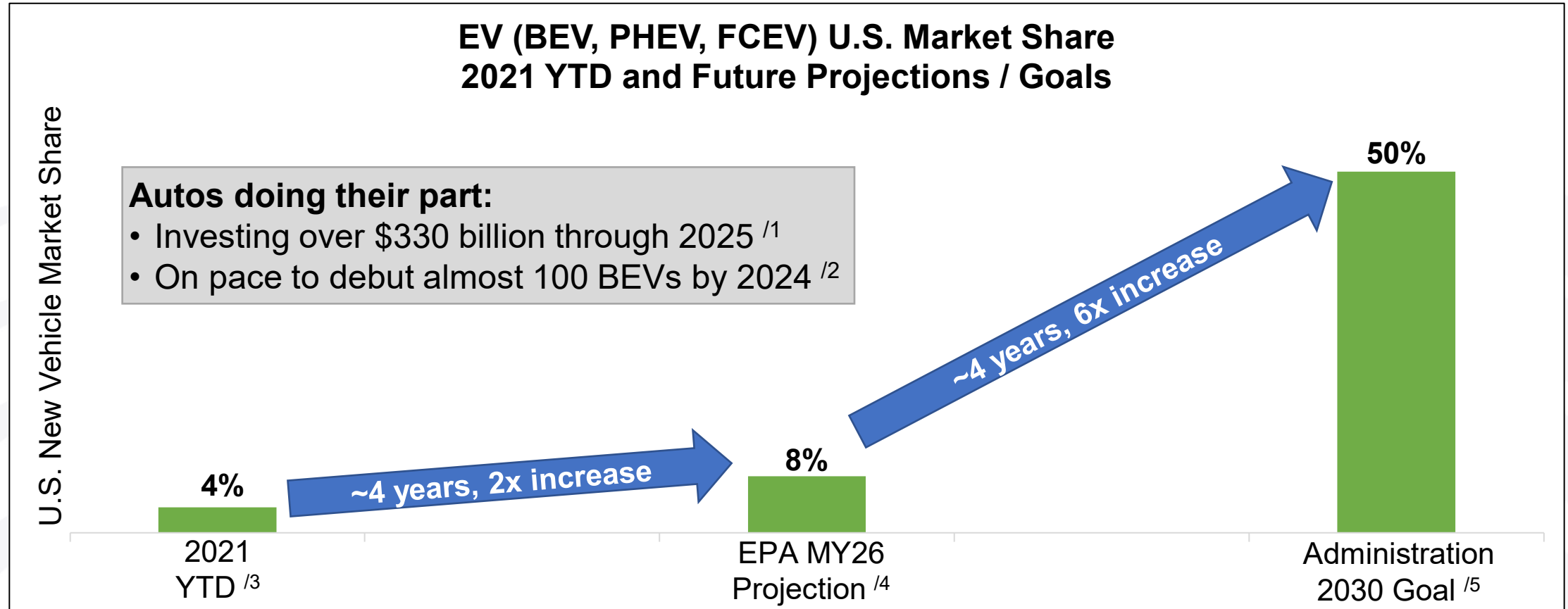
- **Long-Term Commitment to Electrification**
- **Near-Term Regulatory Balance to Significantly Reduce GHG Emissions and Prepare for Electrification**
- **EPA-NHTSA Harmonization to Support Regulatory Goals**

Electrification Challenge

“With the right complementary policies in place, the auto industry is poised to accept the challenge of driving EV purchases to between 40 and 50 percent of new vehicle sales by the end of the decade.”^{/1}



Electrification Challenge



^{/1} AlixPartners (Jun. 17, 2021)

^{/2} Consumer Reports (Sep. 9, 2021)

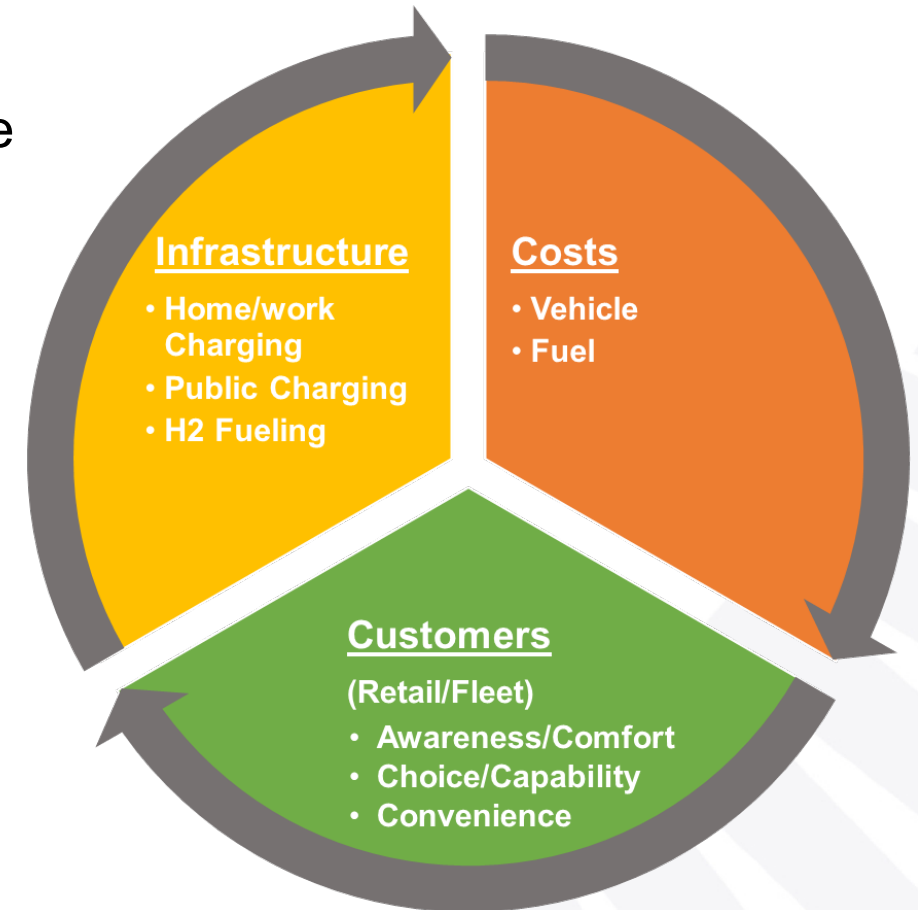
^{/3} Compiled by Alliance for Automotive Innovation using information provided by IHS Markit

^{/4} EPA NPRM

^{/5} Executive Order 14037

Achieving Success through Cooperation and Shared Responsibility

1. Reliable and convenient EV refueling infrastructure
2. Reducing upfront costs
3. Fleet purchase requirements
4. Development of EV supply chains
5. Low carbon fuel standards
6. EV and battery recycling
7. Increased public and private R&D
8. Consumer education
9. Improved availability and variety of EVs
10. Metrics and milestones aligned with sales targets

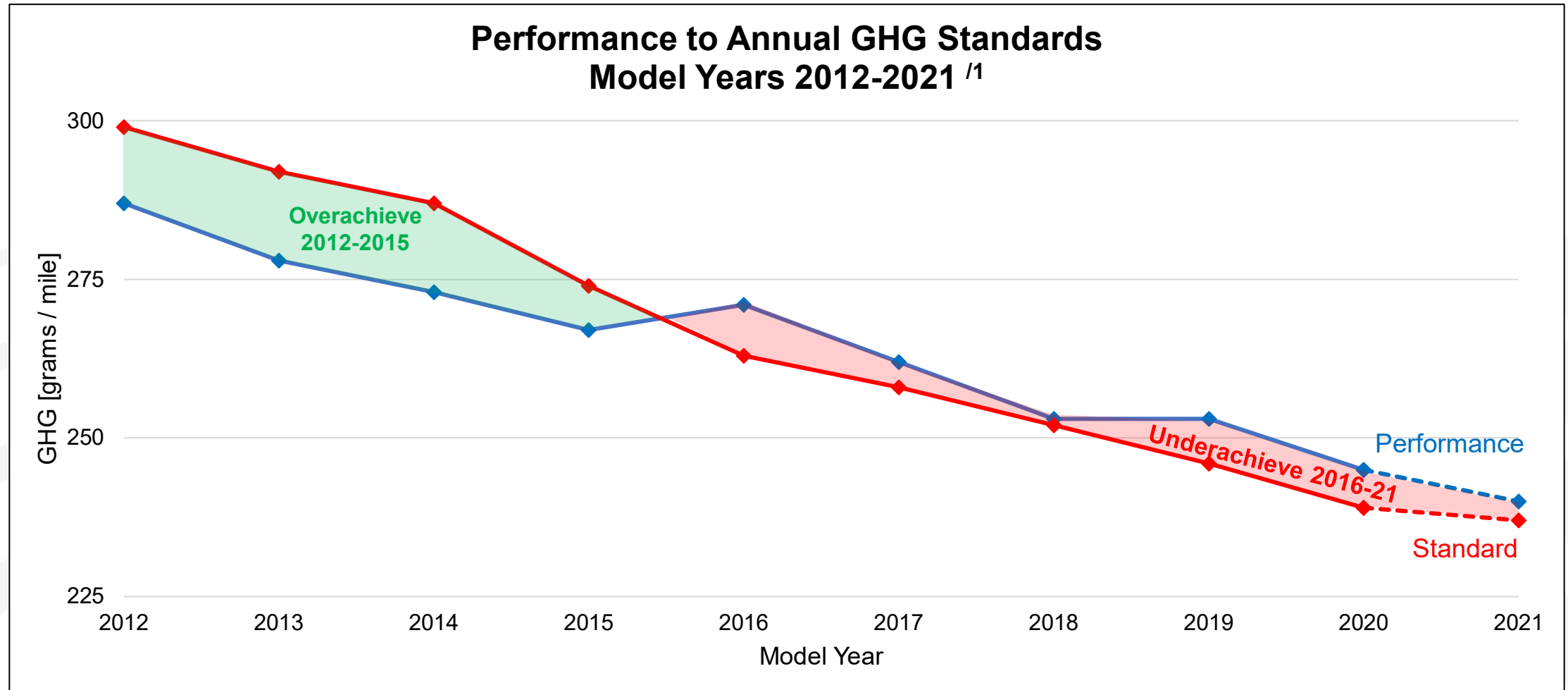


Action needed today to implement policies to grow EV sales significantly through MY 2026 and beyond

Model Year 2023-2026 Standards

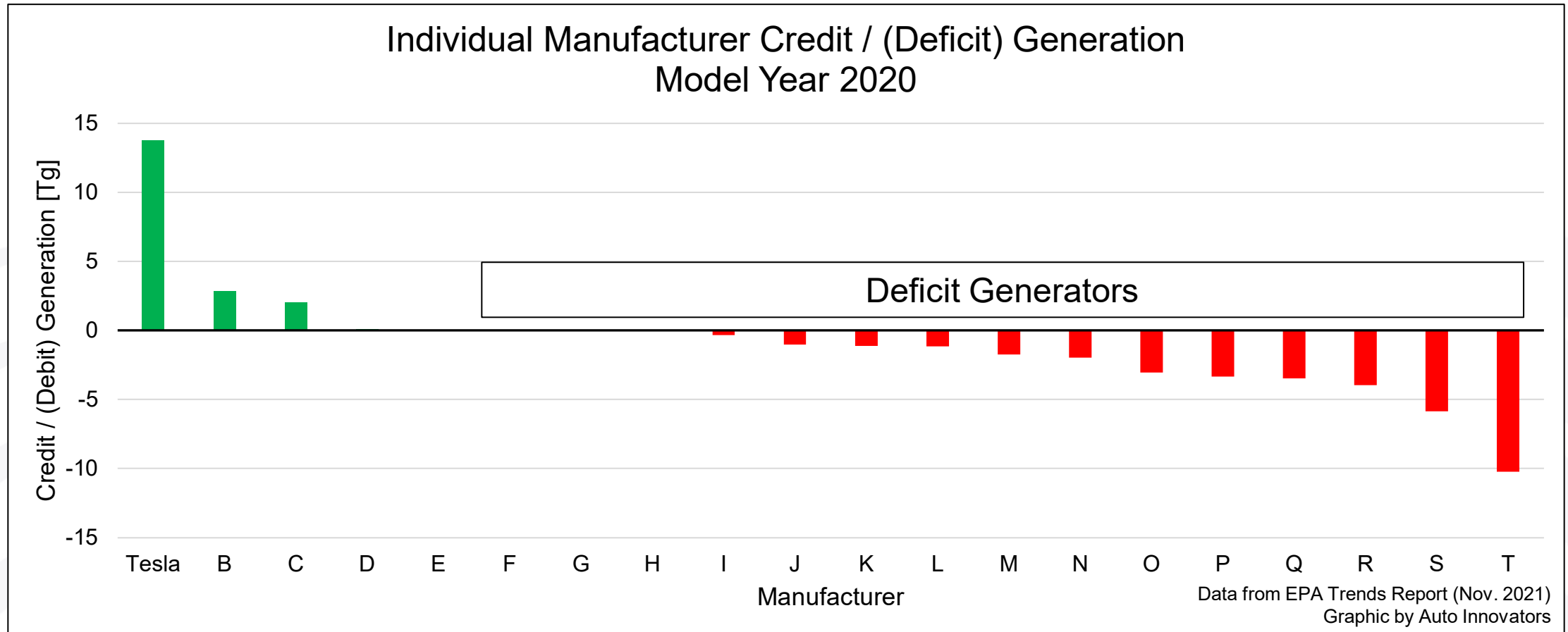
- **Auto Innovators generally supports the proposed standards with flexibilities**
 - Supports policy goals and intended emission benefits
 - Balances near-term challenges, investment shift to electrification, and path to EV future
 - Addresses some marketplace uncertainty
- **Auto Innovators, however, opposes more stringent alternatives**
 - Industry “all-in” on post-2026
 - Need bridge between current, proposed, and post-2026 years
 - Much uncertainty remains with electrification and supportive EV measures

Historic Performance to EPA GHG Standards



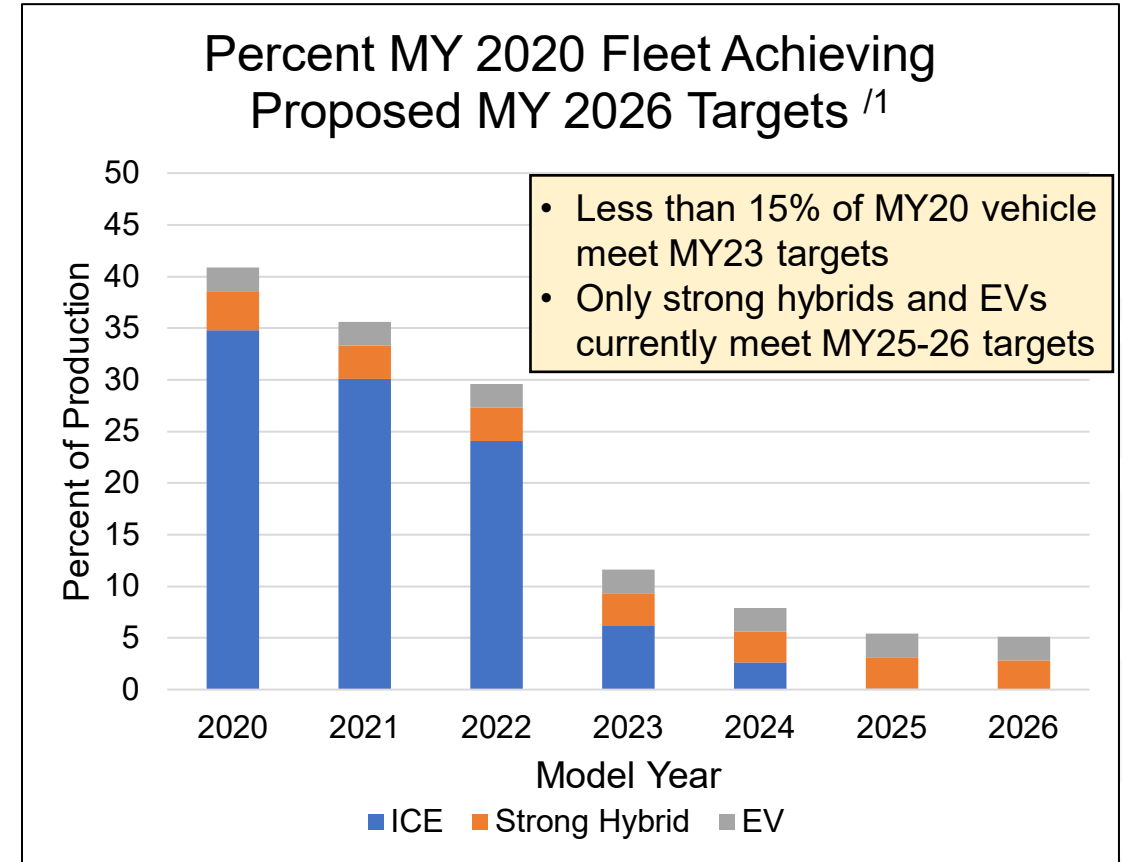
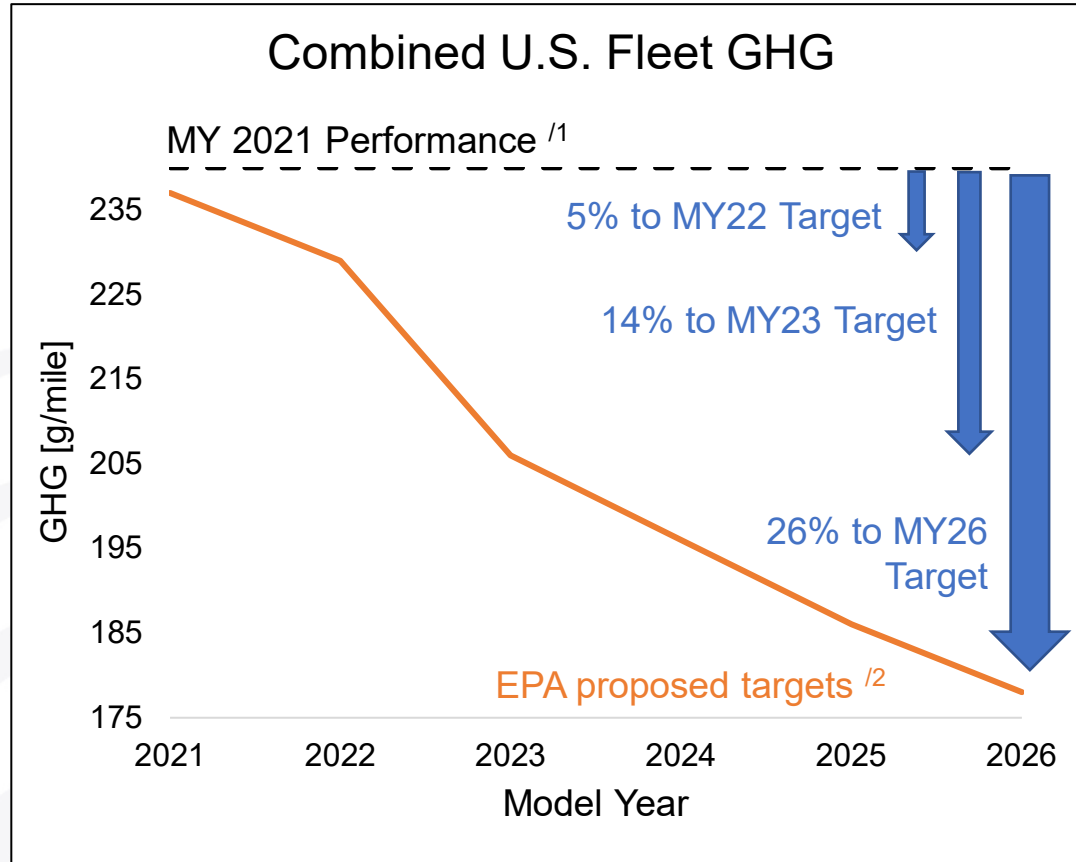
On average, industry has underachieved compared to annual targets since 2016

Model Year 2020 GHG Credit / (Debit) Generation



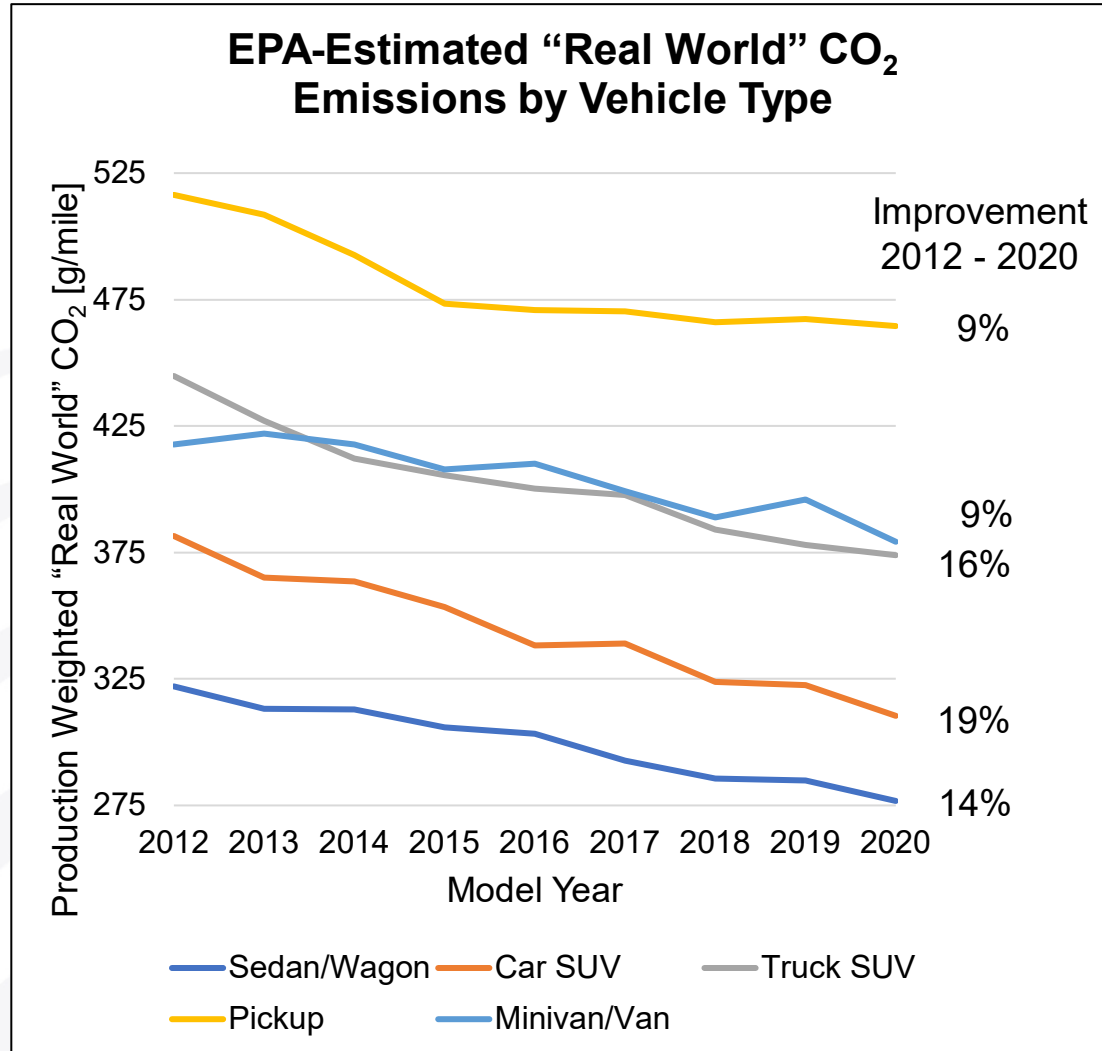
- 4 out of 5 manufacturers generated compliance debits in model year 2020
- Industry generated almost 20 Tg of debits in model year 2020

Proposed Targets



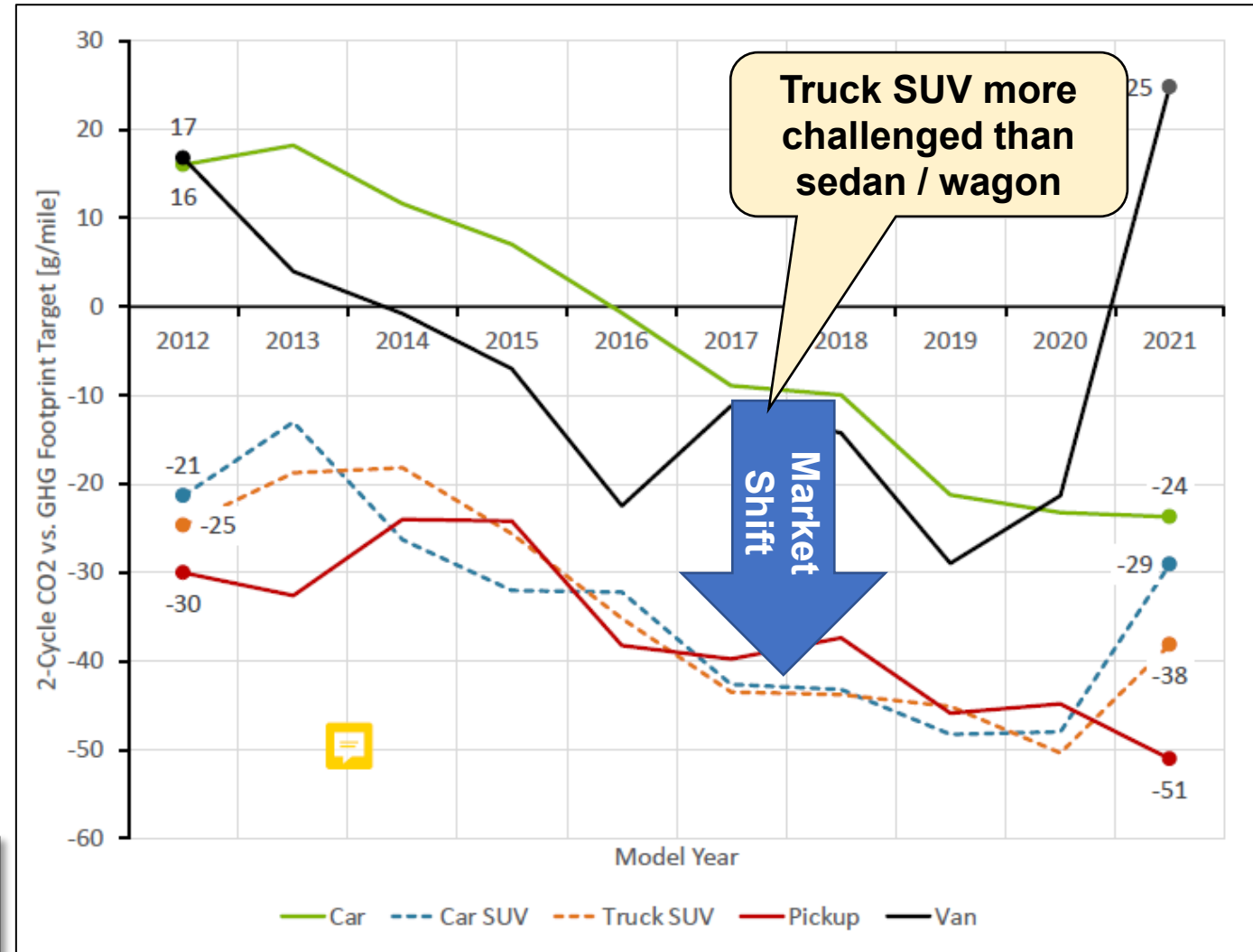
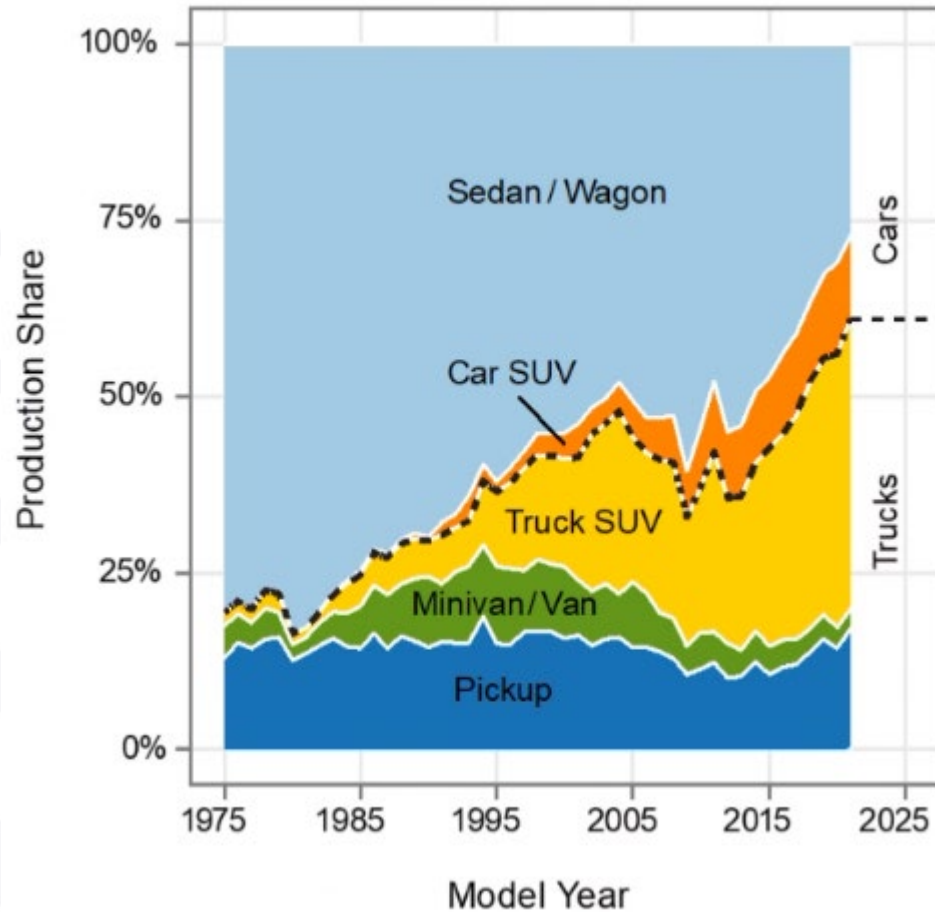
Proposed standards will be challenging; Manufacturers expect standards to drive significant electrification

All Vehicle Types Improving GHG Emissions



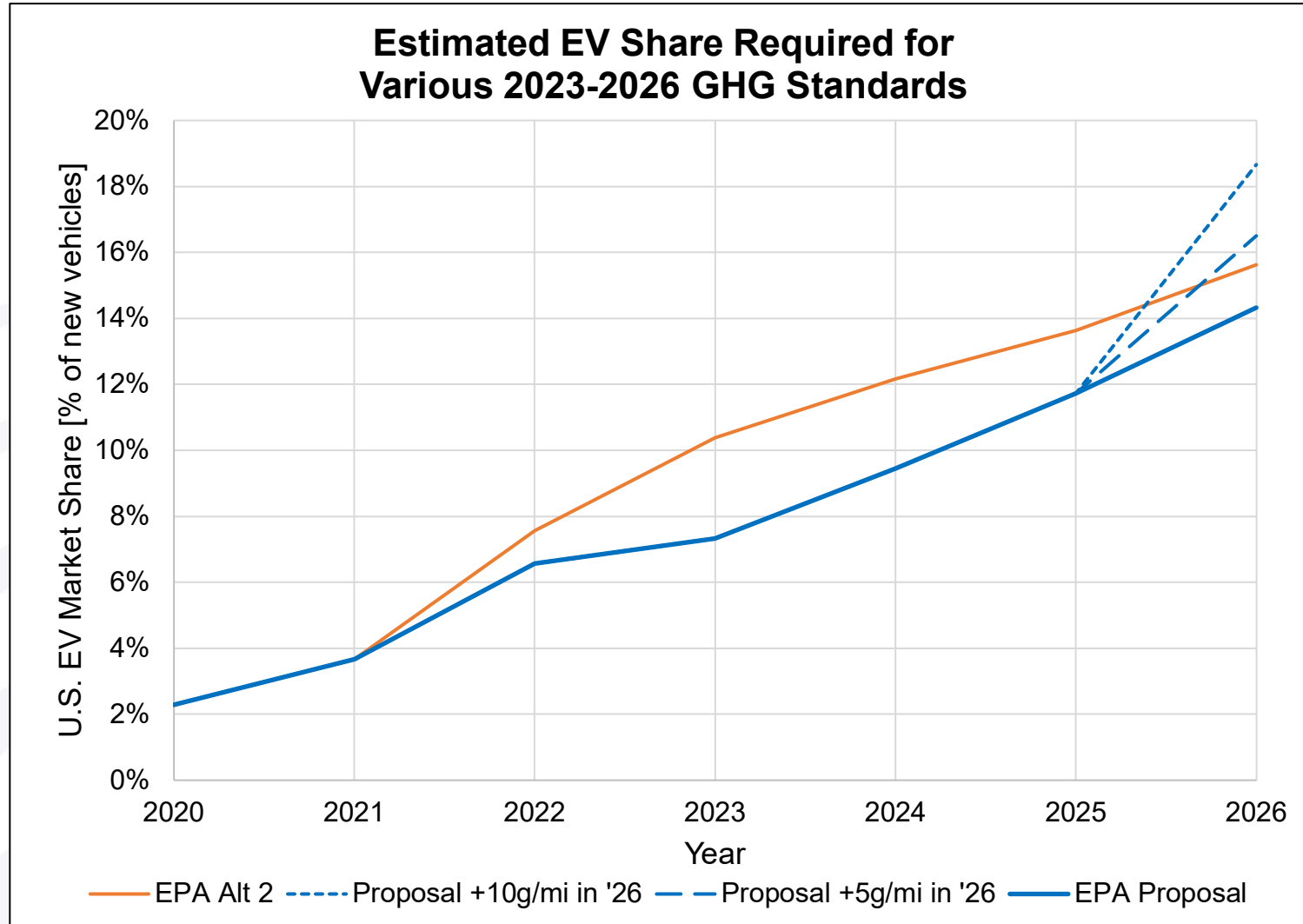
- CO₂ emissions have been reduced in every segment of the fleet
- Sedan/wagon, car SUV, and truck SUV have reduced tailpipe emissions at similar rates – about 2% per year

Fleet Mix Changes Impacting Compliance



Market generally shifting from sedan/wagon to truck SUV

Estimate of EV Share Needed for Compliance



- Base proposal likely to drive more electrification (14%) than EPA estimated (8%)
- 5-10 g/mile stringency increase beyond proposal requires even greater electrification
- EPA Alt 2 (more stringent than proposal) significantly reduces market lead-time for electrification
- **Uncertain EV market growth given few supportive measures**

Flexibilities Support Policy Direction and Benefits

- **Flexibilities Critical for Achieving Proposed Standards**
 - Address EV market / supportive action uncertainty
 - Many reduce compliance costs while providing real-world emissions benefits
- **EV Multipliers – Meaningful Policy Action to Encourage Greater Near-Term EV Production**
 - EV market remains small (about 4% in 2021)
 - EVs remain costly relative to conventional vehicles
 - Auto Innovators supports EV multipliers through 2026 and higher caps to provide meaningful incentive
 - Also support hybrid pickup truck credits
- **Other Flexibilities Also Important and Provide Real-World Emission Benefits**
 - Off-cycle technology credits – generated by application of GHG-reducing technologies
 - Cap should increase as technologies are added
 - Timing and impacts of technology definition changes are a concern
 - Enhanced credit banking provisions – real emission benefits from prior years should be recognized

Proposed flexibilities important and necessary

Coordination and Harmonization

- **Goal: One fleet to comply**
- **Auto Innovators is seeking coordination between EPA and NHTSA and near-term harmonization of standard stringency^{/1}**
 - Coordination between agencies on rulemaking activities (e.g., modeling and cost benefit analysis)
 - Supportive of policy outcomes and Administration initiatives (i.e., up to 50% EVs by 2030)
 - Other pending regulatory efforts should also be considered with these rules

Factors Affecting Harmonization

- **Statutory differences:**

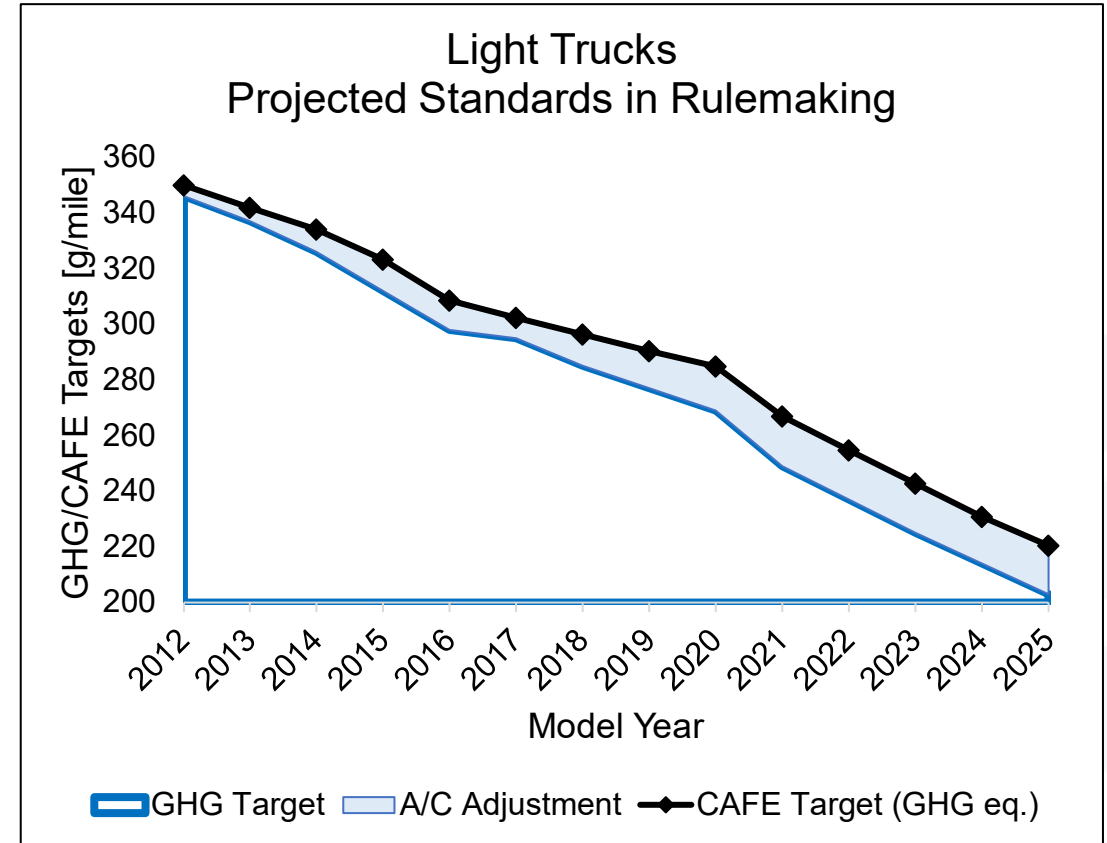
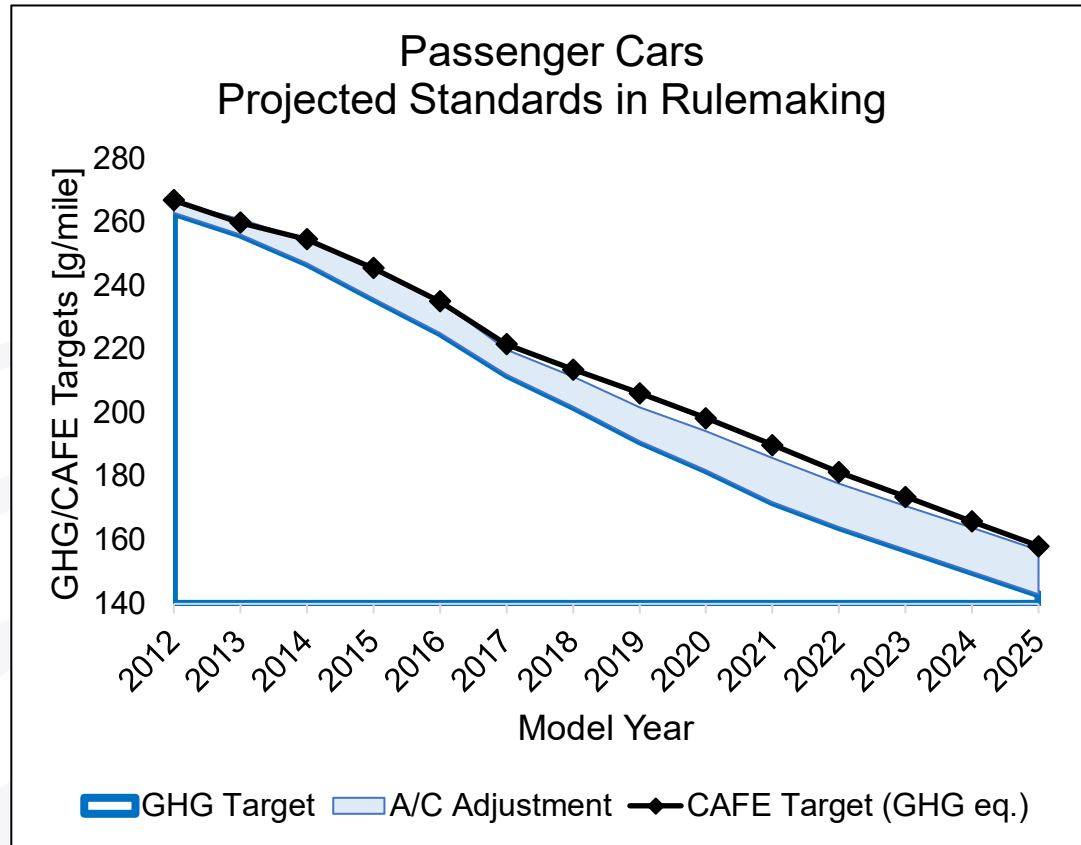
- EPA focus on emissions reductions; NHTSA focus on energy conservation
- NHTSA statutes prohibit consideration of EVs in standard setting

- **Program elements:**

- Direct A/C emissions credits (not in CAFE program)
- EV compliance calculations (0 g/mile vs. PEF)
- EV multiplier (not in CAFE program)
- CAFE minimum domestic car standard (additional requirement, less flexibility)
- CAFE credit transfers between compliance fleets capped (less flexibility)
- CAFE credit carry-forward limitations (less flexibility)
- CAFE separate import and domestic car fleets (further limit on credit transfers)

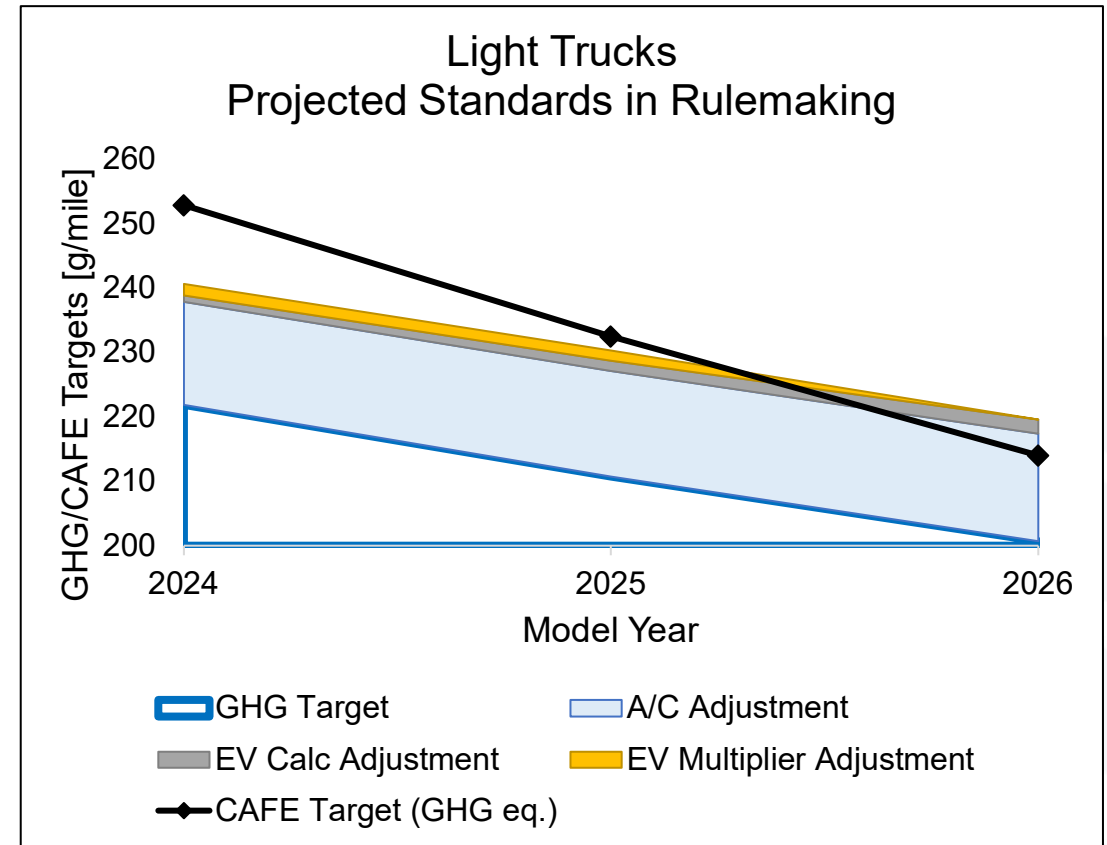
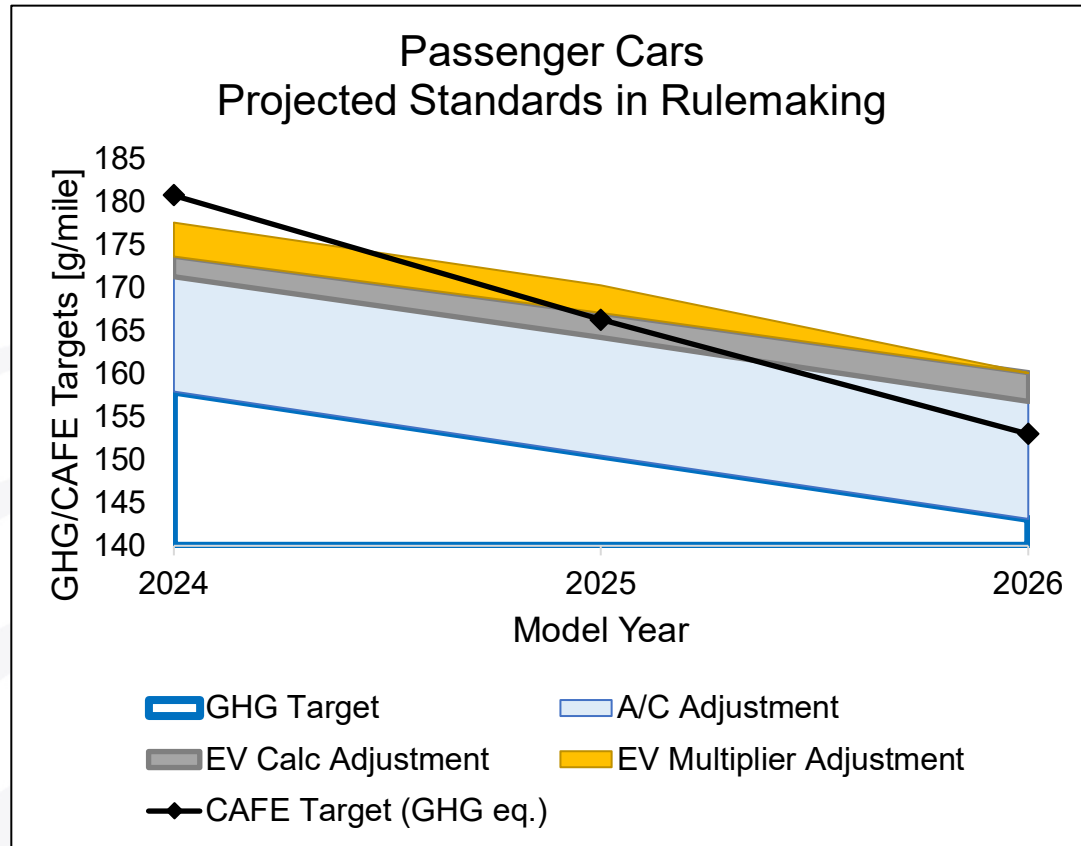
**Reduced flexibility increases CAFE stringency;
Differences suggest lower numeric stringency than proposal for CAFE program**

Harmonization in Obama Administration Rules



Obama Administration CAFE standards were generally harmonized to GHG standards, primarily based on A/C credit differences

Lack of Harmonization - 2021 CAFE vs. GHG Proposals



**Treatment of EVs becoming more important;
By MY 2025, NHTSA's proposed standards are not harmonized**

Data source: NHTSA modeling for CAFE NPRM; GHG targets recalculated to reflect EPA proposal; EV calculation and multiplier impacts based on CAFE NPRM projected electrification

Key Takeaways

- Auto Innovators supports the goal of 40-50% EV sales by 2030 (including battery electric, plug-in hybrid electric, and fuel cell electric vehicles), but action is needed today to implement specific policies to grow EV sales significantly through MY26 and beyond.
- Auto Innovators generally supports EPA's proposed GHG standards with appropriate and necessary flexibilities included in the program.
- Auto Innovators opposes the adoption of the more stringent and/or less flexible alternatives discussed in the proposed rule.
- Coordination between EPA and NHTSA, and harmonization of stringency of respective GHG and CAFE standards, is critical to reducing unnecessary burdens that distract from the common goals of reduced GHG emissions and fuel consumption.



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