



MEMORANDUM

June 20, 2023

TO: Members of the Subcommittee on Environment, Manufacturing, and Critical Materials

FROM: Committee Majority Staff

RE: Hearing entitled: “Driving Affordability: Preserving People’s Freedom to Buy Affordable Vehicles and Fuel”

I. INTRODUCTION

The Subcommittee on Environment, Manufacturing, and Critical Materials has scheduled a hearing on Thursday, June 22, 2023, at 10:00 a.m. (ET) in 2123 Rayburn House Office Building. The title of the hearing is “Driving Affordability: Preserving People’s Freedom to Buy Affordable Vehicles and Fuel.” Witnesses appear by invitation only.

II. WITNESSES

A. PANEL I

- **Joseph Goffman**, Principal Deputy Administrator, Office of Air and Radiation, U.S. Environmental Protection Agency

B. PANEL II

- **Chet Thompson**, President and CEO, American Fuel and Petrochemical Manufacturers
- **Neil Caskey**, CEO, National Corn Growers Association
- **Scott Lambert**, President, Minnesota Auto Dealers Association
- **Genevieve Cullen**, President, Electric Drive Transportation Association

III. BACKGROUND

A. America and the Car

The automobile was a key force for change in twentieth-century America, becoming one of the backbones of a consumer goods-oriented society,¹ providing upward mobility and personal freedom, spawning the growth of suburbs, and ending rural isolation from medical care

¹ https://www.history.com/topics/inventions/automobiles#section_1

and schools.² A total of 278,063,737 personal and commercial vehicles were registered to drivers in the U.S. in 2021; and 91.7 percent of households had at least one vehicle that same year.³

Yet, despite the reliance on the car to commute to work or school, handle personal or other employment obligations, and travel long distances; Americans have not settled for accepting just any model of vehicle. Affordable and reliable automobiles are a hallmark demand of Americans to help them meet their transportation needs. This demand dates to the first modern motor cars when the central problem of automotive technology was reconciling the advanced design of the 1901 Mercedes with the moderate price and low operating expenses of the Olds.⁴

Even as recently as 2021, data for light-duty vehicle registrations in the United States demonstrates that Americans chose a diversity of engine types and car classes to meet their needs. Specifically, 93.8 percent of these registrations were for cars powered by gasoline or ethanol/flex fuel, 0.33 percent operated on diesel or biodiesel, almost 0.02 percent were hybrid vehicles, and 0.008 percent were plug-in hybrid or battery electric vehicles.⁵

B. Statutory Authority for the Environmental Protection Agency under the Clean Air Act

Title II of the Clean Air Act (CAA) addresses mobile (transportation-based) sources of air pollution emissions via the tailpipe by seeking to reduce pollutants from both on-road and nonroad vehicles (vehicle emission standards) as well as transportation (gasoline & diesel) fuel (fuel controls). It calls for air pollutant emissions standards applicable to new motor vehicles and new motor vehicle engines as well as nonroad vehicles and nonroad engines - these address air pollutants including for example particulate matter (PM), nitrous oxide (NO_x), and greenhouse gases (GHGs).

1. Vehicle Standards

CAA Section 202 provides the Environmental Protection Agency (EPA) with the authority to set emission standards for new motor vehicles. Standards under section 202(a) take effect “after such period as the Administrator finds necessary to permit the development and application of the requisite technology, giving appropriate consideration to the cost of compliance within such period.” The EPA must consider issues of technological feasibility, the cost of compliance, and lead time.⁶ The EPA also may consider other factors, including the impacts of potential standards on emissions of air pollutants and associated public health and welfare effects, impacts on the automotive industry, impacts on the vehicle purchasers/consumers, oil conservation, energy security and other energy impacts, safety, and

² Id.

³ <https://www.forbes.com/advisor/car-insurance/car-ownership-statistics/>

⁴ https://www.history.com/topics/inventions/automobiles#section_1

⁵ <https://afdc.energy.gov/vehicle-registration>

⁶ <https://www.govinfo.gov/content/pkg/FR-2023-05-05/pdf/2023-07974.pdf>

other relevant considerations.⁷

Examples of the EPA's use of this authority include "Tier 1" standards -- phased in over the 1994-1996 model years -- tightening emission standards for hydrocarbon and nitrogen oxide from cars, SUVs, minivans, and most pickup trucks;⁸ "Tier 2" standards, including the reduction of sulfur content in gasoline, were promulgated in February 2000, and phased in over the 2004-2009 model years;⁹ and "Tier 3" standards, finalized in April 2014, and phased in between 2017 and 2025, addressed vehicle standards (tailpipe emissions of Non-Methane Organic Gases (NMOG), NOx, PM) and, though not routine, fuel standards/fuel controls (gasoline sulfur standard).¹⁰

The CAA also imposes requirements on emissions allowed during refueling, on low temperature carbon monoxide emissions, on in-use performance over time, on warranties for the most expensive emission control components (8 years/80,000 miles for the catalytic converter, electronic emissions control unit, and onboard emissions diagnostic unit), and on certification or an auto's useful life (a figure set by regulation at 120,000 or 150,000 miles depending on the standards).

2. Fuels Controls and the Renewable Fuel Standard

To achieve reductions in certain air pollutants in major urban areas, CAA section 211 allows EPA to establish fuel controls - to address contributions to air pollution as well as address performance of emission control devices or systems. CAA section 211 also contains renewable fuel program authorities to set volume obligations and generate compliance credits for refined, blended, or imported transportation fuel sold or introduced into commerce in the United States.

CAA section 211(o) is the Renewable Fuels Standard (RFS). Enacted in 2005 but expanded in 2007, the RFS requires the use of renewable fuel in transportation fuel and contains sub-mandates for advanced biofuels (e.g., biomass-based diesel and cellulosic biofuel). More specifically, the statute calls for nine billion gallons of total renewable fuel in 2008, which increases to 36 billion gallons by 2022, with an increasing share coming from "advanced biofuels"—biofuels produced from feedstocks other than corn starch. After 2022, EPA has broad latitude to "set" volume obligations for renewable fuel.

Compliance with the RFS, pursuant to CAA section 211(o)(5)(B), is measured using credits – called Renewable Identification Numbers (RINs). CAA section 211(o)(5)(A) authorizes credits for persons that refine, blend, or import gasoline that is compliant with RFS requirements, for generating credits for biodiesel, and for generating credits by small refineries waiving their temporary exemption from the renewable fuel volume requirement. In practice, when qualifying biofuels are produced, each gallon is assigned a RIN — a number with digits corresponding to identifying data, including the year the RIN was generated, the producer of the fuel, and the type of fuel. Until the biofuels are sold as fuel or blended into conventional fuels,

⁷ Id.

⁸ <https://www.crs.gov/Reports/RL30853?source=search>

⁹ https://www.crs.gov/Reports/RL30853?source=search#_Toc114059879

¹⁰ Id.

the RINs are “attached” to the fuel. Once the biofuel has been blended or sold, the RINs are detached, and can then be bought and sold like other commodities.

Of note, in section 206 of the Energy Independence and Security Act of 2007 (EISA).¹¹ Congress authorized EPA to “conduct a study on the feasibility of issuing credits to electric vehicles powered by electricity produced from renewable energy sources” and “issue a report that describes the results of that study, including a description of existing programs and studies on the use of renewable electricity” to power electric vehicles. In addition, the report was required to describe “alternatives for designing a pilot program to determine the feasibility” and practicality of a program awarding RFS credits for “renewable electricity to power electric vehicles as an adjunct to the renewable fuels mandate.” The EPA has not yet completed the report, the EISA did not mandate this pilot program, and Congress has not amended CAA section 211(o) to introduce electricity into the RFS.

3. Preemption and the States

While CAA Title II generally preempts states from adopting their own emission standards for new motor vehicles or engines, CAA section 209(b) provides EPA, subject to three conditions, authority to grant a State’s vehicle emissions standards an exemption to federal preemption. As drafted, only one State (California) is eligible for the preemption waiver provided in CAA section 209(b), because California had adopted emission standards for new motor vehicles prior to enactment of the CAA. California has requested this waiver from Federal pre-emption more than 100 times.¹²

CAA section 177 allows other states to avoid preemption of their own vehicle emissions standards if, under certain conditions, they adopt California’s exact motor vehicle emission standards. States are not required to seek EPA approval under the terms of Section 177. There are 17 States and the District of Columbia that are referred to as “Section 177 states” that have adopted California’s Low-Emission Vehicle standards for light-duty vehicles.¹³

4. Addressing Greenhouse Gases

Beginning in 2010, EPA began to interpret CAA section 202 as providing the Agency authority to regulate Greenhouse Gases (GHGs) emissions from cars and trucks. CAA section 202 requires the EPA administrator to prescribe “standards applicable to the emission of any air pollutant from any class or classes of new motor vehicles or new motor vehicle engines,” which EPA believes “cause, or contribute to, air pollution which may reasonably be anticipated to endanger public health or welfare.” As mentioned above, between 2010 and the end of 2022, EPA had promulgated three rounds of GHG standards for light-duty vehicles, covering model years 2012-2026, and two rounds of GHG standards for medium- and heavy-duty trucks, covering model years 2014-2027.¹⁴

¹¹ Public Law 110-140

¹² <https://www.crs.gov/Reports/RL30853?source=search>

¹³ [§ 177 States \(5-13-2022\) \(NADA sales\) \(ca.gov\)](#)

¹⁴ <https://www.crs.gov/Reports/RL30853?source=search>

Moreover, the EISA requires RFS regulations to ensure that fuels must achieve a reduction in lifecycle GHG emissions as compared to a 2005 petroleum baseline.¹⁵ Specifically, biomass-based diesel must meet a 50 percent lifecycle GHG reduction; cellulosic biofuel must be produced from cellulose, hemicellulose, or lignin and must meet a 60 percent lifecycle GHG reduction; advanced biofuel can be produced from qualifying renewable biomass (except corn starch) and must meet a 50 percent GHG reduction; and renewable (or conventional) fuel typically refers to ethanol derived from corn starch and must meet a 20 percent lifecycle GHG reduction threshold.¹⁶

C. Regulatory Matters Implicating EPA Authority under the CAA

1. Proposed Rule: Multi-Pollutant Emissions Standards for Model Years 2027 and Later Light-Duty and Medium-Duty Vehicles

On April 12, 2023, EPA announced new, more ambitious standards to further reduce air pollutant emissions from light-duty and medium-duty vehicles starting with model year 2027.¹⁷ The proposal, published May 5, 2023, builds upon EPA's final standards for federal greenhouse gas emissions standards for passenger cars and light trucks for model years 2023 through 2026, and the proposed standards would phase in over model years 2027 through 2032.¹⁸ According to EPA, these "proposed standards are projected to accelerate the transition to electric vehicles"¹⁹ and the Agency "projects that EVs could account for 67% of new light-duty vehicle sales and 46% of new medium-duty vehicle sales in MY 2032."²⁰

2. Proposed Rule: Renewable Fuel Standard (RFS) Program: Standards for 2023-2025 and Other Changes

On December 1, 2022, EPA announced a proposed rule to establish required renewable volume obligations and percentage standards for biofuels for 2023, 2024, and 2025 under the RFS.²¹ The proposed rule also included regulatory changes to create a new program to outline how RINs from renewable electricity (eRINs) would be implemented and managed under the RFS program. This update to the RFS program would allow parties to register with EPA and generate eRINs produced from qualifying renewable biomass used as transportation fuel.²²

3. California's Advanced Clean Cars II (ACC II) regulation

¹⁵ <https://www.epa.gov/renewable-fuel-standard-program/overview-renewable-fuel-standard>

¹⁶ *Id.*

¹⁷ <https://www.epa.gov/regulations-emissions-vehicles-and-engines/regulations-greenhouse-gas-emissions-passenger-cars-and>

¹⁸ *Id.*

¹⁹ <https://www.epa.gov/newsreleases/biden-harris-administration-proposes-strongest-ever-pollution-standards-cars-and>

²⁰ *Id.*

²¹ <https://www.epa.gov/renewable-fuel-standard-program/proposed-renewable-fuel-standards-2023-2024-and-2025>

²² *Id.*

On August 25, 2022, the California Air Resources Board (CARB) voted to approve its ACC II regulation.²³ This regulation, which became effective on November 30, 2022, and will need an EPA waiver under CAA section 209(b), is two-pronged. First, requires an increasing number of zero-emission vehicles, including battery-electric, hydrogen fuel cell electric and plug-in hybrid electric-vehicles, to meet air quality and GHG emissions standards.²⁴ Second, it effectively bans the sale of new internal combustion engine (ICE) cars and light trucks by 2035 in favor of “zero-emission vehicles,” like plug-in hybrid, full battery-electric, and hydrogen fuel cell vehicles.²⁵

IV. LEGISLATION

A. H.R. 1435, the Preserving Choice in Vehicle Purchases Act

H.R. 1435 amends CAA section 209(b) -- the conditions under which EPA can grant a waiver to a State (i.e., California) for a motor vehicle emissions standard. Specifically, H.R. 1435 adds an additional requirement that must be satisfied for EPA to provide a State a waiver for its vehicle emissions standards: the State directive cannot “directly or indirectly” limit the sale or use of new motor vehicles with an ICE. H.R. 1435 also prevents EPA from considering State standards amended after the date of enactment of this bill as having qualified under an existing waiver. Finally, H.R. 1435 revokes any CAA section 209(b) waivers California received between January 1, 2022, and the date H.R. 1534 becomes law if the California motor vehicle standard receiving a waiver “directly or indirectly” limited the sale or use of new motor vehicles with an ICE.

B. H.R. 3337, the Fuels Parity Act

H.R. 3337 has two distinct pieces to it related to the definition of “advanced biofuel” in the RFS under CAA section 211(o)(1)(B). First, it allows “ethanol derived from corn starch” to qualify for RFS volume requirements as a “renewable fuel” and an “advanced biofuel.” Second, because the definition of “advanced biofuel” requires a determination by EPA that the fuel has lifecycle GHG emissions “that are at least 50 percent less than baseline lifecycle GHGs,” H.R. 3337 requires EPA, 90 days after enactment and then every 5 years, to update its methodology for analyzing lifecycle GHG emissions from ethanol derived from corn starch and biomass-based diesel. For the first iteration, H.R. 3337 requires EPA to use the most recent Greenhouse Gases, Regulated Emissions, and Energy Use in Transportation model (“GREET model”) GREET is a tool developed by the Department of Energy’s Argonne National Laboratory to examine the lifecycle impacts for any given energy and vehicle system; it can calculate total energy consumption (non-renewable and renewable), emissions of air pollutants, emissions of greenhouse gases, and water consumption.²⁶

²³ <https://ww2.arb.ca.gov/our-work/programs/advanced-clean-cars-program/advanced-clean-cars-ii>

²⁴ *Id.*

²⁵ <https://ww2.arb.ca.gov/our-work/programs/advanced-clean-cars-program/about>

²⁶ <https://www.energy.gov/eere/bioenergy/articles/greet-greenhouse-gases-regulated-emissions-and-energy-use-transportation>

C. Discussion Draft, the No Fuels Credits for Batteries Act

This bill that clarifies that EPA is not authorized to use credits for electricity generated from renewable fuel to satisfy the volume of renewable fuel that needs to be contained in transportation fuel for purposes of the RFS. The legislation also prohibits the use or transfer of any eRINs credits generated before the date of enactment (to address any gap with EPA's December 1, 2022, proposal). Finally, it defines "renewable fuel" and "transportation fuel" using their RFS definitions.

D. Discussion Draft, the Choice in Automobile Retail Sales (CARS) Act

This legislation has two parts. First, it prohibits the EPA from finalizing, implementing, or enforcing its proposed rule titled "Multi-Pollutant Emissions Standards for Model Years 2027 and Later Light-Duty and Medium-Duty Vehicles" that was published in the Federal Register on May 5, 2023. Second, it amends CAA section 202(a)(2) to prevent any regulations previously issued with this authority from mandating the use of any specific technology or resulting in the limited availability of new motor vehicles based on that vehicle's engine type. It also gives EPA two years to update those regulations that mandate the use of a specific technology or result in the limited availability of new vehicles based upon that vehicle's engine.

V. STAFF CONTACTS

If you have any questions regarding this hearing, please contact Jerry Couri, Sarah Alexander, or Mary Martin of the Committee staff at (202) 225-3641.