



January 9, 2023

Via Electronic Submission to: airqualityregulations@dc.gov

Director of the Department of Energy and Environment
Air Quality Division
1200 First Street, N.E., 5th Floor
Washington, DC 20002
Attention: Joseph Jakuta

Re: Public Comments: Vehicle Emission Standards

To Whom It May Concern:

Please find below the comments from Valero on the *Proposed Rulemaking – Adoption of California Vehicle Emission Standards* published in the *District of Columbia Register* on December 9, 2022. Valero appreciates the opportunity to provide feedback on the proposed regulations.

Introduction

Valero Energy Corporation and its subsidiaries (collectively, “Valero”) are major suppliers of both traditional and low-carbon renewable fuels to the U.S. market. Valero is one of the largest renewable diesel producers in the world, and as such is credited with significant contributions toward meeting the declining carbon intensity targets under the California Low Carbon Fuel Standard. In accordance with commitments to shareholders to further reduce greenhouse gas (“GHG”) emissions, Valero is actively engaged in renewable diesel expansion projects and is pursuing carbon sequestration opportunities. As a fuel producer that is already playing a significant role in reducing GHG emissions from the transportation sector, we are keenly interested in the District of Columbia’s (“D.C.’s”) energy future and ensuring air pollution control regulations provide real GHG emissions reductions at the lowest cost to consumers.

Comments

a. Transportation sector decarbonization should embrace all technologies fit for purpose.

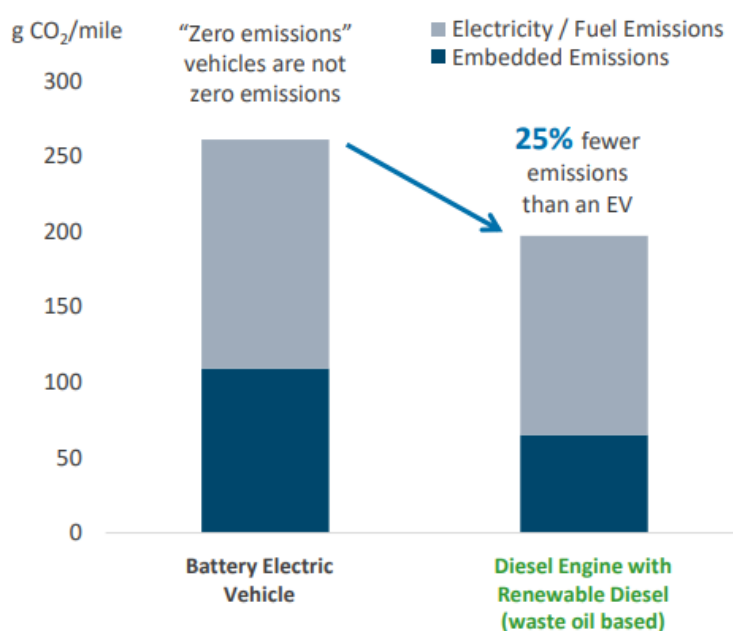
Valero recognizes the Department of Energy and Environment’s (“DOEE’s”) desire to expediently lower GHG emissions from the transportation sector. As a proud producer of the low-carbon liquid fuels that have been and will continue to be essential to the decarbonization of the transportation sector, Valero encourages DOEE to not limit its transportation sector planning to zero-emission vehicle (“ZEV”) technologies. While ZEVs may provide options to help reduce GHG emissions, exclusive reliance on those technologies ignores both the full lifecycle GHG emissions of ZEVs and the benefits of low-carbon liquid fuels and other emerging technologies.



DOEE should evaluate the merits of all fuels and vehicle technologies on a full lifecycle basis. The National Bureau of Economic Research has acknowledged that "...despite being treated by regulators as 'zero emission vehicles', EVs are not necessarily emissions free."¹

A lifecycle analyses conducted by Southwest Research Institute finds that GHG emissions from a light-duty internal combustion engine ("ICE") vehicle that runs on renewable diesel with a carbon intensity of 25 g/MJ results in 25% fewer lifecycle GHG emissions when compared to a battery electric vehicle ("BEV") using U.S. average grid electricity, as illustrated below.

Figure 1: U.S. Light-Duty Vehicle Lifecycle Emissions (Sept. 2022 Valero Investor Relations Presentation)



Additionally, DOEE should remain open to emerging innovative approaches and new technologies for reducing GHG emissions from ICE vehicles, such as on-board carbon dioxide capture and subsequent sequestration.

There are other significant complexities associated with a singular transition to ZEVs that DOEE should consider, including:

- Significant environmental impacts arise from other aspects of the ZEV lifecycle, including raw material acquisition and processing, and battery production, transport, disposal, and recycling.²
- ZEVs are more expensive on average than their ICE vehicle counterparts and unaffordable for many households – in the first calendar quarter of 2022, the average

¹ See <http://www.nber.org/papers/w21291>.

² See Perry Gottesfeld, *Electric cars have a dirty little recycling problem—batteries*, CANADA'S NATIONAL OBSERVER, Jan. 22, 2021, <https://www.nationalobserver.com/2021/01/21/opinion/electric-cars-have-dirty-little-recycling-problem-their-batteries>.



- price of top-selling light-duty BEV in the U.S. was about \$20,000 more than the average price of top-selling ICE vehicles.³ The price disparity has not improved, with the average price of light-duty EVs near \$66,000 in August 2022 and continuing to rise.⁴
- A transition to ZEVs would expose D.C. residents to supply chain vulnerabilities largely beyond the control of regulators. For instance, by 2030, Wells Fargo projects a risk of shortages across all of the key components of EV batteries, except manganese,⁵ which is underscored by long lead times for the EV battery supply chains,⁶ and a reliance on geopolitical rivals who control those supply chains.⁷
 - Cold climate conditions like those experienced in D.C. have been shown to significantly reduce the battery range and efficiency of BEVs.⁸
- b. DOEE lacks the legal and legislative authority to adopt a transportation electrification mandate like California’s Advanced Clean Cars II (“ACC II”) standards.**

It is crucial that the policy guiding DOEE’s rulemaking actions be supported by law in order to avoid inefficient expenditures of time and resources, or worse, misleading the public by setting expectations regarding outcomes that are not within the DOEE’s authority to mandate. Section 177 of the Clean Air Act (“CAA”) provides that a state may only adopt “such standards [that] are identical to the California standards for which a waiver has been granted for such model year”.⁹ As of the date of this letter the U.S. Environmental Protection Agency (“EPA”) has not granted a preemption waiver under the CAA for California’s ACC II rules. Unless and until EPA grants such a preemption waiver, any state’s adoption of these rules is premature and inconsistent with the express terms of § 177.¹⁰

The measures contemplated by California’s ACC II are extraordinary. In considering their adoption in D.C., there is little to no legal analysis to confirm that the novel approaches and

³ Registration-weighted average retail price for the 20 top-selling BEVs and ICE vehicles in the U.S. S&P Global, *Tracking BEV prices – How competitively-priced are BEVs in the major global auto markets?*, May 2022.

⁴ Andrew J. Hawkins, *EV prices are going in the wrong direction*, THE VERGE, Aug. 24, 2022, <https://www.theverge.com/2022/8/24/23319794/ev-price-increase-used-cars-analysis-iseecars>; see also, Justin Banner, *The Cheapest Ford F-150 Lightning Pro Sees Another Price Increase to Nearly Sixty Grand*, MOTORTREND, Dec. 15, 2022, <https://www.motortrend.com/news/2023-ford-f-150-lightning-pro-price-increase-msrp/>.

⁵ Colin M. Langan, et al., *BEV Teardown Series: The Untold Electric Vehicle Crisis, Part 1: Tesla Model Y–The Pace Car*, WELLS FARGO, May 11, 2022.

⁶ IEA 2022 Global EV Outlook.

⁷ *Id.*

⁸ See Jon Witt, *Winter & Cold Weather EV Range Loss in 7,000 Cars*; RECURRENT, Dec. 12, 2022, <https://www.recurrentauto.com/research/winter-ev-range-loss>; see also *20 popular EVs tested in Norwegian winter conditions*, NORWEGIAN AUTOMOBILE FEDERATION, Mar. 12, 2020, <https://www.naf.no/elbil/aktuelt/elbiltest/ev-winter-range-test-2020/>.

⁹ 42 U.S.C. § 7507(2).

¹⁰ 42 U.S.C. § 7507 (also cited by DOEE in its *Notice of Proposed Rulemaking and Public Hearing – Adoption of California Vehicle Emission Standards* dated December 9, 2022 at p.2).



requirements mandated under the regulations are within the authority of DOEE and do not offend principles of state or federal law. DOEE should consider whether the measures called for in the California ACC II rule conflict with or are otherwise preempted by the statutory mandates of federal legislation such as the Energy Policy and Conservation Act (“EPCA”); the federal CAA; the Energy Independence and Security Act (“EISA”), including the Renewable Fuel Standard (“RFS”).

ACC II will have vast nationwide political and economic significance. Requirements that mandate a shift from ICE to ZEV sales will significantly impact supply chains, consumer costs, electric power infrastructure, domestic energy security, and interstate commerce.

Additionally, ACC II includes measures that may violate other constitutional provisions and principles. These include, but likely are not limited to, the Dormant Commerce Clause, which prohibits state regulations that improperly discriminate against out-of-state commercial interests or that unduly burden interstate commerce; the dormant foreign affairs preemption doctrine under the Supremacy Clause, which preempts state laws that intrude on the exclusive federal power to conduct foreign affairs; the Takings Clause of the Fifth Amendment, which precludes the taking of private property (or the elimination of entire industries) for public use without just compensation; and the equal sovereignty doctrine, which constrains the federal government from treating states disparately.

Because the measures called for under ACC II are unprecedented in their scope and reach, D.C. should conduct sufficient legal review to confirm that the recommended actions are authorized under applicable law and that they are not preempted or precluded as a matter of federal law before establishing a recommendation for rulemaking.

c. California’s struggles present a cautionary tale for D.C.

DOEE should consider the implications that a strategy focused on a singular technology may have on community decision-making, consumer choice, and the unintended consequences that reliance on electrification may present, including foreign supply chain disruptions and forced labor in the production of the raw materials needed to manufacture batteries.¹¹

California policymaking is hardly an unqualified success story. Its climate policies—like the ZEV sales mandates which DOEE is proposing to adopt—have had major inflationary impacts on gasoline and energy prices, as well as negative impacts on jobs in certain industries that are directly related to traditional fuels and vehicles.¹² While often lauded as the measuring stick for GHG emission reduction policies, California’s transportation fuel prices are now the highest in the nation, averaging approximately \$5.25 per gallon of gasoline.¹³ According to a 2021 Report from the California Public Utilities Commission, “it is already cheaper to fuel a conventional ICE

¹¹ See U.S. Department of Energy, *2022 List of Goods Produced By Child Labor or Forced Labor*, at 50-51, https://www.dol.gov/sites/dolgov/files/ILAB/child_labor_reports/tda2021/2022-TVPRA-List-of-Goods-v3.pdf.

¹² California Legislative Analyst’s Office, *Assessing California’s Climate Policies – An Overview* (Dec. 21, 2018).

¹³ AAA, *California Average Gas Prices – Month Ago Avg.*, <https://gasprices.aaa.com/?state=CA> (accessed Dec. 21, 2022).



vehicle than it is to charge an EV” in the San Diego Gas & Electric Co. service area.¹⁴ The California Energy Commission projects that both commercial and residential electricity prices will continue to rise, reaching over \$8/gasoline gallon equivalent (GGE) by 2026 for the residential sector and nearly \$7/GGE for the commercial sector.¹⁵ If environmental justice is truly a commitment for D.C., it should carefully consider the criticisms of California’s climate approach, such as those leveled by The Two Hundred, which point out the disproportionate impacts to working and minority communities.¹⁶

As California has faced rolling blackouts and historic energy prices, Governor Newsom in his May 2022 state budget proposal, has pivoted to the use of traditional fuel infrastructure to ensure system reliability to protect against outages.¹⁷

Moreover, unworkable ZEV sales mandates put D.C. at risk of missing out on real carbon reductions available through incentivizing low-carbon liquid fuels and by encouraging the development of emerging carbon removal technologies.

d. DOEE should provide for a transparent and reasoned impact analysis specific to the District.

DOEE has failed to prepare any impact analysis or cost model with respect to the proposed regulations. Without doing so, DOEE cannot adequately consider alternatives that emphasize affordability alongside emissions reductions. The lack of analysis also fails to convey to D.C. residents the consequences and difficulties associated with the major technology transformation required under the proposal, such as quantifying costs of compliance versus net benefits, and impacts to D.C.’s job market.

DOEE cannot merely rely on and extrapolate from California’s data and analysis without adequately considering differences in scale, climate, terrain, and regional economies that will have profound impacts on D.C.’s adoption and experience implementing ACC II. District-specific and regional factors are material and must be considered. In sum, due to DOEE’s urgency to expediently adopt ACC II to stay on California’s implementation schedule, DOEE is rushing its consideration and the passage of the California rules without performing an independent analysis to ensure the proposed rules are properly and thoroughly vetted for application in D.C.

As discussed above, California has felt the real-world implications of its climate policy with rolling blackouts and sky-high energy prices. DOEE can and should present a transparent, technology-neutral approach that allows for innovation that would better serve D.C.’s most vulnerable communities. For example, D.C.’s 2022 NEVI Plan prepared by the District Department of Transportation (DDOT) includes maps providing the location of disadvantaged communities (DACs) in the District (*Figure 18*) as well as a map of existing locations of EV

¹⁴ CPUC, *Utility Costs and Affordability of the Grid of the Future: An Evaluation of Electric Costs, Rates, and Equity issues Pursuant to P.U. Code § 913.1*, at 116-117 (May 2021).

¹⁵ CEC, “Presentation - Transportation Energy Demand Forecast,” 21-IEPR-03 (Dec. 14, 2021).

¹⁶ See Plaintiffs’ Complaint, *The Two Hundred for Homeownership, et al. v. California Air Resources Board, et al.*, No. 1:22-CV-01474.

¹⁷ See <https://www.ebudget.ca.gov/2022-23/pdf/Revised/BudgetSummary/ClimateChange.pdf>.



charging infrastructure along the District's alternative fuel corridors (ACFs) (*Figure 10*).¹⁸ A comparison between these figures highlights the disparity and practical challenges inherent to D.C.'s adoption of ACC II, as there is a lack of existing EV charging infrastructure available to D.C.'s disadvantaged communities. DOEE falls short in communicating such challenges associated with singular reliance on electrified transport with the absence of any assessment regarding its proposed regulations.

D.C. stakeholders should have an opportunity to evaluate the data, costs, and assumptions underlying such an alternatives analysis before the DOEE finalizes its proposed rulemaking. It is critical from the outset to design D.C.'s transportation program to minimize the potential for price shocks and supply disruptions.

Conclusion

D.C. should support and foster technological innovations in the transportation sector by embracing technology-neutral approaches to decarbonization. Decarbonizing the transportation sector will require multiple technologies competing in an open market that rewards technologies based on emissions reductions and costs. Valero is prepared to work with DOEE to help ensure its GHG reduction goals are achieved.

* * *

Valero appreciates the opportunity to comment and would welcome the opportunity to have additional discussions on these issues. Please do not hesitate to contact me with any questions or if Valero or I can otherwise be of assistance.

Sincerely,

A handwritten signature in blue ink that reads 'Mandy Garrahan'.

Mandy Garrahan
Executive Director Strategic Planning & Public Policy

¹⁸ District of Columbia Department of Transportation (DDOT), *District NEVI Plan 2022*, at 21 & 38, <https://nevi.ddot.dc.gov/documents/DCGIS::district-nevi-plan-2022/explore>.