American Petroleum Institute
Northeast Region

Michael S. Giaimo
giaimom@api.org
603.777.0467 (cell)

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Lynne Cayting
Chief
Mobile Sources Section, Bureau of Air Quality
Department of Environmental Protection
17 State House Station
Augusta, Maine 04333-0017

IN RE: Proposed Chapter 127 Advanced Clean Cars II Program

Submitted electronically to: rulecomments.dep@maine.gov

Introduction

The American Petroleum Institute (API)[1] appreciates Maine's desire to be a leader with respect to energy and environmental policies. While the Department of Environmental Protection (DEP) is proposing to adopt California's Advanced Clean Car II (ACC II) program to pursue those goals, API encourages Maine to retain state sovereignty and refrain from ceding authority to California by adopting its passenger vehicle emissions and related rules. API supports policies that provide customer choice with respect to vehicle purchases. Additionally, API believes markets that are allowed to function within technology-neutral policies should dictate the evolution of the passenger-vehicle fleet, which in turn can help address cost concerns.

Reliable and Affordable Energy is Needed

API's members are applying their abilities and resources to develop emission reduction policies in the transportation sector in a manner that allows Maine, and all consumers, the ability to choose the technology that best meets their needs. As the trade association representing the natural gas and oil industry, API is uniquely positioned to think about energy solutions, safety, and innovation for the next generation. API welcomes discussion on viable solutions to the dual challenge of ensuring reliable and affordable energy supplies to support economic growth and human prosperity, while advancing environmental progress.

All Technologies Should Compete to Reduce Transportation GHG Emissions

The free market has a proven track record of demonstrating that competition can achieve policy objectives and effectuate advanced technology at a reduced cost to the consumer. Maine should support policies that allow all technologies to compete including efficient gasoline and diesel vehicles operating with conventional and lower carbon intensity fuels, battery electric vehicles, hybrid vehicles, hydrogen fuel cell vehicles, and hydrogen internal combustion

[1] The American Petroleum Institute represents all segments of America's natural gas and oil industry, which supports more than ten million U.S. jobs and is backed by a growing grassroots movement of millions of Americans. Our nearly 600 members produce, process and distribute the majority of the nation's energy, and participate in API Energy Excellence, which is accelerating environmental and safety progress by fostering new technologies and transparent reporting. API was formed in 1919 as a standards-setting organization and has developed more than 700 standards to enhance operational and environmental safety, efficiency, and sustainability.

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vehicles. Technology-neutral policies create the most efficient and effective opportunities to reduce greenhouse gas (GHG) emissions in the transportation sector for both new vehicles as well as in the existing vehicle fleet.

API members have made and continue to make significant investments in new technologies that reduce carbon emissions in transportation, including: stand-alone production and coprocessing of bio-feedstocks to make renewable fuels; manufacturing of low-carbon ethanol; manufacturing of renewable natural gas from wastewater, landfill gas, and biodigesters at farms as fuel for compressed natural gas vehicles; production of blue and green hydrogen for transportation and stationary applications including building infrastructure; direct air carbon capture; carbon capture and sequestration of CO2; development of advanced plastics to meet auto industry standards and consumer expectations while mitigating environmental impact through emissions reduction and improved vehicle efficiency by light-weighting; and installation of electric vehicle charging stations.

To fully assess the environmental performance of different powertrains it is necessary to analyze the emissions generated during all phases of the vehicle.

A Lifecycle Assessment is Necessary to Understand the Best Options for Reducing Carbon Emissions

Any rule should be based on a full lifecycle analysis that considers that all vehicles have emissions across their life cycle from production, utilization, infrastructure, and disposal. Using this analytical method will provide the best opportunity to decarbonize the transportation sector. Simply analyzing tailpipe emissions is not a scientifically sound approach to assessing vehicle emissions. According to one study, "advanced internal combustion engine vehicles (ICEVs) and hybrid electric vehicles (HEVs) can produce comparable reductions in GHG emissions as similarly equipped, full battery electric vehicles."[2] In order to provide comprehensive evaluation of GHG impacts, DEP should undertake an analysis of the complete lifecycle emissions of passenger vehicles from mine-to-wheel and well-to-wheel of battery electric vehicles and internal combustion engine vehicles, respectively.

Maine Should Conduct Further Analysis

Maine should retain jurisdiction over its policies to address its air quality rather than incorporate by reference California standards. This will prevent substantive changes from automatically taking effect in the state if California adopts those changes by amending existing sections of the California Code of Regulations that have been previously incorporated in Maine. What is best for California is not necessarily what is best for Maine. Further, by pursuing a ZEV mandate program like ACC II, Maine will be missing a significant opportunity to reduce GHG emissions from vehicles in the existing fleet and from those ICEVs that will continue to be sold in the future.

The Rulemaking Fact Sheet, posted in the rulemaking record, fails to provide a detailed analysis of DEP's evaluation of California's program and its consideration of all available facts. Rather, the Fact Sheet makes general statements that appear to assume positive impacts of the California program and greatly relies upon CARB's analysis and projected impacts for California.

Further, the Fact Sheet fails to show the significant impact that adoption of ACC II would have on individuals and small businesses who, when purchasing a new passenger vehicle, will have no option but to buy an electric car in Maine starting in 2035. Finally, it does not appear that DEP has reflected on the impact of this action in relation to energy security considering that moving to battery-powered electric vehicles (BEVs) will force the industry to rely on other

[2] ConservAmerica, "*Slow Down: The Case for Technology Neutral Transportation Policy,*" p. 1, December 2020.

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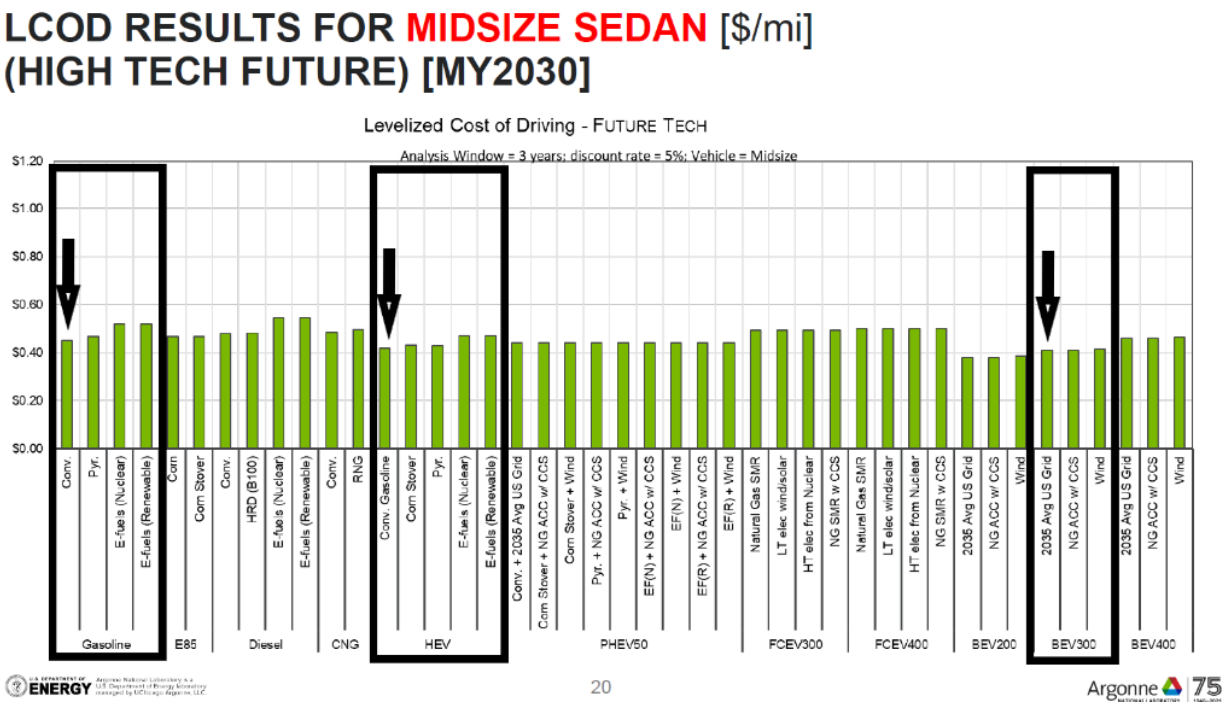
countries such as China for materials to manufacture BEVs. Maine also must consider challenges for the power sector and EV charging infrastructure. Thus, there are other issues to consider before adoption of ACC II.

Cost to the Consumer of the Proposed Rule Not Fully Considered

The Fact Sheet indicates that "ZEV buyers are likely to realize as much as $7,900 in maintenance and operational savings over the first ten years of ownership", based on an analysis for individual vehicle owners conducted by the California Air Resources Board (CARB) for ACC II. The CARB analysis concludes that operational savings will offset incremental costs of the initial vehicle purchase – a BEV with a 300-mile range (BEV 300) will have initial annual savings in the first year (for 2026 model year technology), and for the 2035 model year technology, "the initial savings are nearly immediate and cumulative savings over ten years exceed $7,500."

However, this analysis was performed by CARB specific to vehicle owners in California. Costs of the proposed rule to consumers in Maine were not adequately addressed. Further as shown below, according to a United States Department of Energy Argonne National Labs presentation, the levelized cost of driving (LCOD) on a dollar per mile basis for a midsize sedan for a conventional gasoline-fueled vehicle is only slightly less cost efficient when compared to a BEV 300.[3] Similar results are identified for a Small SUV in the "high tech future." A hybrid electric vehicle is shown to have an even lower LCOD than the conventional gasoline vehicle. This more cost-effective solution is excluded by ACC II. The extracted charts below are provided for reference (note both charts include arrows and call-out boxes *added for emphasis*).



[3] Amgad Elgowainy, Ph.D, *Levelized Cost of Driving*, October 2021 Presentation.

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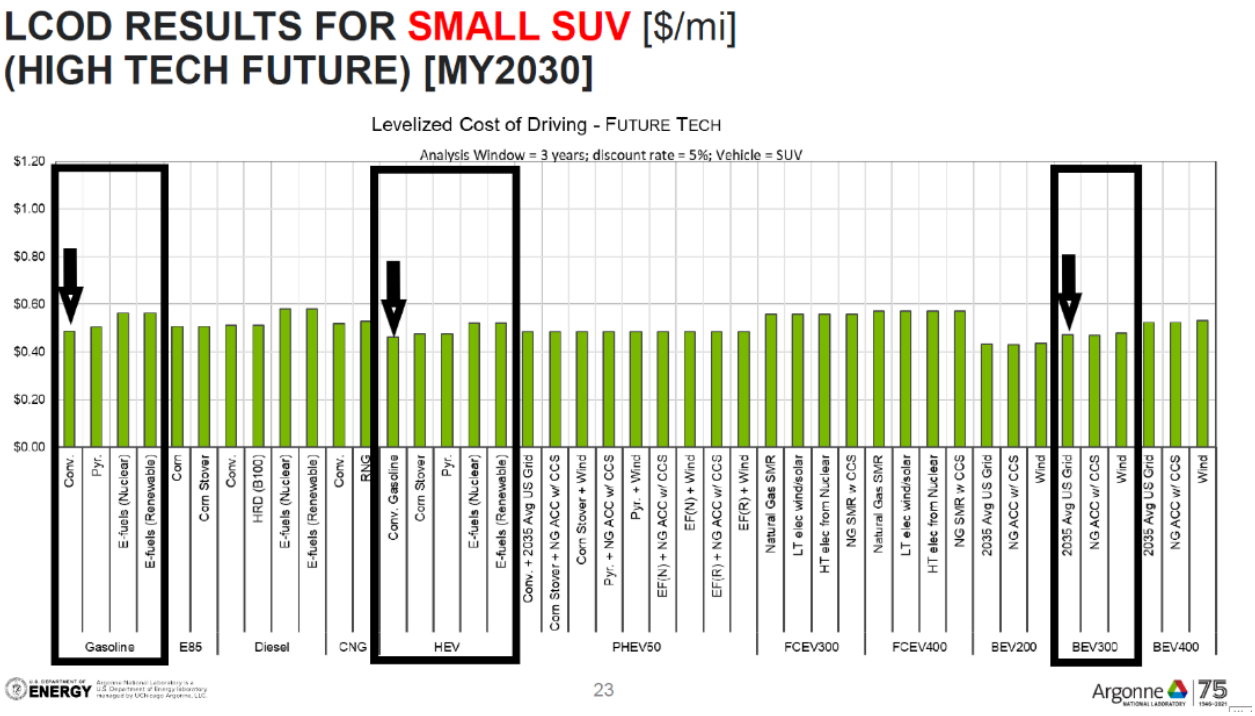

API also respectfully suggests that DEP analyze the impact on tax revenue generated from changes to gasoline and diesel fuel consumption and switching to increased consumption of electricity. Liquid transportation fuels are taxed at both the federal and state level to fund the construction and maintenance of bridges, roads, highways, and other transportation initiatives. State motor fuels (diesel fuel plus gasoline) tax revenue collections in Maine were over $222 million dollars for fiscal year ending June 2023.[4] The federal tax on gasoline is 18.4 cents per gallon,[5] while Maine adds 31.40 cents per gallon in state tax as of 2023.[6] Notably, the Four-Year Revenue and Expenditure Forecast prepared by the Department of Administrative & Financial Services projected a shortfall in the 2024 biennium of $712 million "representing a structural gap between revenues and expenditures that appears to be widening;" even with new motor vehicle taxes recently signed into law, a decrease in motor fuels taxes will exacerbate the infrastructure funding gap.[7] Additionally, about 95 percent of the federal excise tax is returned to the state where it is collected. This revenue must be accounted for when considering the adoption of new ZEV technology to ensure the continued revenue is available to fund the maintenance and construction of highway infrastructure.

Additional Considerations

As the DEP considers options to reduce transportation emissions, it should consider the other questions and how they might impact the consumers in Maine:

[4] Maine Department of Administrative and Financial Services, "Revenues – June 2023" Memorandum, *see* https://www.maine.gov/osc/sites/maine.gov.osc/files/inline-files/2023-06-Revenue%20Report.pdf.

[5] U.S. Energy Information Administration, "Petroleum Market Explanatory Notes," June 2023, https://www.eia.gov/petroleum/marketing/monthly/pdf/enote.pdf.

[6] https://www.api.org/-/media/files/statistics/state-motor-fuel-taxes-charts-january-2022.pdf.

[7] *See* https://www.ttnews.com/articles/maine-tax-highway-fund.

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- Is the electric grid capable of supporting the mandated number of vehicles? What infrastructure investments will need to be made to accommodate EV charging?
- How will low-income residents living in multi-unit housing be impacted?
- How will Maine's adoption of ACC II impact energy security? How much does the technology rely on China and other countries?
- What are the environmental impacts across the country and world in developing the necessary minerals to support the mandated volume of vehicles?
- Is it a realistic approach to mandate this technology?
- Are there less expensive and more efficient ways to reduce carbon emissions?
- What are the downsides of focusing on one technology?

Conclusion

In conclusion, DEP should refrain from adopting the California Advanced Clean Car II rule, which has not been approved by EPA, and consider alternatives that could result in achieving the societal goals of reducing carbon emissions in a way that is faster and more cost effective for the people of Maine.

API encourages state policy makers to exercise discretion and not make a significant and consequential policy change by virtue of the fact that 150 signatures were obtained. It would be prudent for the state to be deliberative and learn from the experiences of others before deferring its policies to another jurisdiction.

Respectfully submitted,

Michael S. Giaimo
Northeast Region Director