April 24, 2025

Illinois Pollution Control Board
Docket Number R24-17
Delivered electronically to: Don Brown\_Don.Brown@illinois.gov
Submitted by: American Petroleum Institute

RE: PROPOSED CLEAN CAR AND TRUCK STANDARDS: PROPOSED 35 ILL. ADM. CODE 242, R24-17

#### Introduction

Thank you for the opportunity to comment on the Illinois Pollution Control Board's ("Board") hearing to consider a proposal that the Board adopt a new Part 242 of its air pollution rules – which would consist of adoption of the California Air Resources Board's (CARB) Advanced Clean Cars II, Advanced Clean Trucks, and Heavy-Duty Engine and Vehicle Omnibus (ACCII/ACT/Omnibus) programs.<sup>1</sup>

The American Petroleum Institute (API) represents all segments of America's natural gas and oil industry, which supports more than 11 million U.S. jobs. Our nearly 600 members produce, process, and distribute the majority of the nation's energy. API and its members commit to delivering solutions that improve air quality and the goal of reduced emissions across the broader economy. We support global action that drives emissions reductions and economic development.

API's members are applying their abilities and resources to develop emission reduction policies in the transportation sector in a manner that allows consumers in Illinois, and throughout the U.S., 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.

As the Board goes through the process of soliciting and considering public input and feedback, API respectfully requests that the Board consider the following comments.

#### 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. Illinois 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 electric vehicles, hydrogen fuel cell vehicles, and hydrogen internal combustion engine vehicles. Technology-neutral policies create the most efficient and effective opportunities to

<sup>&</sup>lt;sup>1</sup> "Rule Proponents' Proposed Clean Car and Truck Standards: 35 Ill. Admin Code Part 242," June 27, 2024, available at: <a href="https://pcb.illinois.gov/documents/dsweb/Get/Document-110497">https://pcb.illinois.gov/documents/dsweb/Get/Document-110497</a>.

reduce GHG emissions in the transportation sector for 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 and renewable fuel blends; 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 CO<sub>2</sub>; 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.

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

California's ACC II and ACT rules do not consider the entire vehicle lifecycle emissions; consequently, they are biased to a single technology, electrification. Any vehicle transportation 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 methodology 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."<sup>2</sup>

In order to provide comprehensive evaluation of GHG impacts, the Board should undertake an analysis of the complete lifecycle emissions of vehicles from mine-to-wheel and well-to-wheel, to end-of-life of battery electric vehicles (BEV) and internal combustion engine vehicles, respectively.

#### Illinois has Unique Truck Needs

We encourage Illinois to consider that California's Advanced Clean Truck rule does not recognize the extremely diverse fleet of medium- and heavy-duty vehicles (MHDV) operating in the state. It has evolved and diversified over decades to meet a wide range of engineering, operating, and durability specifications tailored to the often-unique needs and requirements of many different end-use applications. For example, some vehicles are designed for short urban daily package delivery trips in fleet operations, others are used in inland port freight drayage operations, while still

<sup>&</sup>lt;sup>2</sup> 1 ConservAmerica, "Slow Down: The Case for Technology Neutral Transportation Policy," p. 1, December 2020, available at: https://conservamerica.org/wp-content/uploads/2024/08/ConservAmerica-The-Case-for-Tech-Neutral-Transportation-

Policy.pdf?ss\_source=sscampaigns&ss\_campaign\_id=66bcf0de190b921e7da9a95e&ss\_email\_id=66bcf981 8b67b127ab830b7e&ss\_campaign\_name=ConservAmerica+Files+Amicus+Brief+for+Ohio+v+EPA&ss\_campaign\_sent\_date=2024-08-14T18%3A38%3A19Z

others are engaged in utility maintenance operations, building and highway construction, urban and intercity passenger transit and freight hauling, as well as long-haul freight, to name just a few end-use vocational applications.

While some companies have announced plans to incorporate electric and zero emission vehicles (ZEV) into their operations, these technologies cannot currently meet the needs of all the end-uses for medium- and heavy-duty fleets. For instance, some cities are testing the use of battery electric buses (BEB) to determine if they can meet their needs depending on the terrain, weather, mileage of the route and the time available to charge. Some have found issues while others have been successfully deployed.

Municipalities are different and find that a combination of diesel and natural gas buses serve their municipal requirements while contributing to their GHG and other environmental goals. A study shows that there are 17 applications that account for 91 percent of the U.S. MHDV market and 94 percent of national MHDV emissions.<sup>3</sup> The rulemaking proponents' ("Proponents") "Proposed Clean Car and Truck Standards," with its proposed ZEV-centric regulatory approach, would place significant limitations on MHDV fleets whose needs cannot be served currently by ZEV technology.

Allowing Multiple Powertrains Creates More Opportunities to Reduce Emissions

API encourages the Board to allow private and public entities freedom to determine the powertrain technology that best meets their individual operational needs and that best fits within the constraints imposed by the economic requirements and management philosophy of their individual organizations. Such an approach will optimize capital and result in sustained reductions in carbon emissions. In further support of these arguments, we incorporate by reference our comments to CARB regarding its Advanced Clean Fleets proposal.<sup>4</sup>

California's Rules Have Steep Adoption Curves and Disregard Consumer Choice

According to Clean Air Act Section 177 (U.S. Code Sec. 7507), a state is required to adopt an identical version of California's rules and must give at least two years' lead time before the model year that is to be delivered.

If Illinois were to adopt ACT, it would be required to follow Table 1 below, keeping the two modelyear lead time requirement in mind. For the larger vehicle classes, especially Class 4-8, vehicles may not yet be available in sufficient quantity to meet the deployment schedule. More importantly,

<sup>&</sup>lt;sup>3</sup> "The Easiest and Hardest Commercial Vehicles to Decarbonize," by Guidehouse Insights, for the Fuels Institute, April 2022, available at: https://transportationenergy.org/wp-content/uploads/2022/10/FI\_Report\_Med-Heavy-Duty\_FINAL.pdf

<sup>&</sup>lt;sup>4</sup> See API Comments on California's Advanced Clean Fleets Regulation, submitted October 17, 2022, available at:

https://www.arb.ca.gov/lists/com-attach/263-acf2022-UjNRJ1M7UV1VMFQ7.pdf.

there is a lack of availability in charging infrastructure to support such vehicles – which could result in a severe reliability issue to require use of vehicles before charging infrastructure is available.

Further exacerbating the problem, it will also result in a reduction in the availability of new ICE trucks, as the percentage of ZEV truck sales impacts ICE truck sales. A number of states that previously adopted ACT and Omnibus recently issued implementation delays due to supply chain concerns<sup>5</sup> – including potential impacts to emergency vehicles.<sup>6</sup>

Model Year	Class 2b-3 Group	Class 4-8 Group	Class 7-8 Tractors Group
2024	5%	9%	5%
2025	7%	11%	7%
2026	10%	13%	10%
2027	15%	20%	15%
2028	20%	30%	20%
2029	25%	40%	25%
2030	30%	50%	30%
2031	35%	55%	35%
2032	40%	60%	40%
2033	45%	65%	40%
2034	50%	70%	40%
2035 and beyond	55%	75%	40%

Similarly, if Illinois were to adopt California's ACC II program, the state would have to adopt the implementation schedule shown in Table 2. Thus, if Illinois were to adopt the rule in 2025, the first year an original equipment manufacturer (OEM) would be required to offer electric vehicles for sale would be Model Year (MY) 2028 as they are already selling MY 2026 vehicles this year. As a result, the state would require OEMs to offer 51% of their new vehicles as zero emission vehicles, which are largely battery electric vehicles, at dealerships. Requiring such a large portion of the new vehicles to be ZEVs would likely be difficult for the OEMs to achieve and it is possible that they could choose a compliance strategy that resulted in reducing the number of internal combustion engine vehicles offered into the state versus increasing the number of ZEVs offered into the state. Ultimately the consumer is the one who must purchase the vehicle and if the consumer does not purchase enough ZEVs the number of ICEVs could need to be reduced.

<sup>&</sup>lt;sup>5</sup> Transport Topics, "Five States Seek CARB Delays When Regs Take Effect in 2025": <a href="https://www.ttnews.com/articles/states-delay-carb-regs">https://www.ttnews.com/articles/states-delay-carb-regs</a>.

<sup>&</sup>lt;sup>6</sup> Massachusetts (https://www.mma.org/massdep-adjusts-emissions-rules-for-medium-and-heavy-duty-trucks/); New York (https://dec.ny.gov/environmental-protection/air-quality/controlling-motor-vehicle-pollution/heavy-duty-vehicles).

<sup>&</sup>lt;sup>7</sup> CARB Advanced Clean Trucks Final Regulation Order, Table A-1 to 13 CCR 1963.1, "ZEV Sales Percentage Schedule": <a href="https://ww2.arb.ca.gov/sites/default/files/2023-06/ACT-1963.pdf">https://ww2.arb.ca.gov/sites/default/files/2023-06/ACT-1963.pdf</a>.

#### Table 2. CARB ACC II ZEV Percentage Requirement table<sup>8</sup>

(B) Percentage Requirement. The table below identifies the percentage requirement to be used in the calculation of the Annual ZEV Requirement for the applicable model year.

Model Year	Percentage Requirement
2026	35%
2027	43%
2028	51%
2029	59%
2030	68%
2031	76%
2032	82%
2033	88%
2034	94%
2035 and subsequent	100%

Meeting a 51% requirement in MY 2028 could be difficult to achieve. In California, the state has only achieved an EV sales as a percentage of market share of 26.1% (2024 YTD) new electric vehicles. As of 2023 there were 1.25 million EVs registered in California, representing 3.4% of total light-duty vehicle registrations of nearly 37 million. These numbers were achieved after California provided very large incentives and grants (e.g., \$2,000 grants for all income levels, up to \$9,500 the certain qualified buyers), tied together with a potential for federal tax credits of up to \$7,500, and financial incentives for installing charging ports at the individuals' home. In contrast, for example New York adopted ACC II and has a requirement for OEMs to meet 35% new ZEV sales in MY 2026. They have an EV sales market share of 9.84% (2024 YTD), and total EV registrations of 0.13 million vehicles accounted for only 1.2% of total light-duty vehicle registrations. Illinois's EV sales market share reached 7.4% (2024 YTD) and total EV registrations of 0.1 million vehicles account for 0.99% of total light-duty vehicle registrations as of 2023.

#### Consumer Costs and Impacts of the Proposal are Not Fully Considered

The Proponents' proposal makes numerous statements regarding the purported benefits of ZEV sales requirements and rapid transition to EVs if Illinois were to adopt the California rules. However, EVs may not be practical for all consumers due to costs and the lack of charging infrastructure available for rural and multi-unit housing. For example, ACC II would require over half of new car deliveries in 2028 by auto manufacturers be ZEVs, and 100% by 2035. Thus, consumers who opt – or need.— to buy a new vehicle would have less ability and fewer choices to purchase an ICEV. The

<sup>&</sup>lt;sup>8</sup> CARB Advanced Clean Cars II Final Regulation Order, 13 CCR 1962.4(c)(1)(B), "Percentage Requirement" table: https://ww2.arb.ca.gov/sites/default/files/barcu/regact/2022/accii/acciifro1962.4.pdf.

<sup>&</sup>lt;sup>9</sup> Get Connected: Electric Vehicle Quarterly Report, 2024 Q3. <a href="https://www.autosinnovate.org/posts/papers-reports/get-connected-q3-2024">https://www.autosinnovate.org/posts/papers-reports/get-connected-q3-2024</a>

<sup>&</sup>lt;sup>10</sup> https://afdc.energy.gov/vehicle-registration

<sup>&</sup>lt;sup>11</sup> Tax Guide for Green Technology, Rebates, Credits, Vouchers, and Partial Exemption from Sales and Use Tax on the Purchase of Vehicles, <a href="https://cdtfa.ca.gov/industry/green-technology/vehicles.htm">https://cdtfa.ca.gov/industry/green-technology/vehicles.htm</a> (accessed February 3, 2025).

Board should undertake a detailed cost and charging infrastructure analysis that accounts for unique differences in Illinois vs. California

We highlight a recent study that shows NOx and PM2.5 vehicle emissions are incredibly low in today's ICEVs and when compared to an EV, they are nearly the same. Specifically, the Transportation Energy Institute study states with regards to NOx, "[c]omparing EPA NOx emission certification values for all 2019 vehicle models, GREET results indicate that both gasoline-fueled ICEVs' and EVs' NOx emissions will continue to decrease in the future, and all vehicle technology options' NOx reductions from a 1980 NOx level are within 1% of each other." 12

Examining the results of the authors' investigation into PM, they state "with the transition to ultra-low sulfur gasoline and diesel enabling higher efficiency catalytic converters on gasoline vehicles and the introduction of selective catalytic reactors to control diesel NOx emissions, ICEVs have reduced criteria emissions 97-99%." The study also states that "[a]ccording to GREET well-to-wheel (WTW) emission values, today's gasoline and diesel vehicles' tailpipe PM emissions are 98.3% - 100.3% lower than the average 1980 gasoline car and 97.3-99.4% lower on a well-to-wheel basis." In the case of both NOx and PM emissions, the Board should consider there is virtually no difference between EVs and ICEVs.

Tax Implications and the Need for More Analysis

API respectfully suggests that the Board 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 by both the federal and state governments to fund the construction and maintenance of bridges, roads, highways, and other transportation initiatives.

The federal tax on gasoline is 18.4 cents per gallon, <sup>14</sup> while Illinois adds 47 cents per gallon in state tax as of January 2025. <sup>15</sup> The federal tax on on-road diesel fuel is 24.4 cents per gallon and Illinois adds 54.5 cents per gallon as of January 2025. <sup>16</sup> In fiscal year 2024, Illinois distributed \$2.8 billion <sup>17</sup> in combined fuel tax distributions to municipalities and counties across the state.

This amount would likely be eroded under the Proponents' recommended proposal to adopt California's ACC II and ACT programs, especially when considering they would require new vehicles that are not powered by liquid fuels. Given that there is no federal tax on electricity and tax funds

<sup>&</sup>lt;sup>12</sup> "Decarbonizing Combustion Vehicles: A Portfolio Approach to GHG Reductions," Stillwater Assoc. for Transportation Energy Inst., July 2023, p. 69, available at: https://www.transportationenergy.org/wp-content/uploads/2023/07/Decarbonizing-Combustion-Vehicles\_FINAL.pdf

<sup>13</sup> Ibid, p. 64.

<sup>&</sup>lt;sup>14</sup> U.S. Energy Information Administration, "Petroleum Market Explanatory Notes," June 2024. https://www.eia.gov/petroleum/marketing/monthly/pdf/enote.pdf.

<sup>&</sup>lt;sup>15</sup> Illinois Department of Revenue "Motor Fuel Taxes and Fees", https://tax.illinois.gov/research/taxrates/motorfuel.html.

<sup>&</sup>lt;sup>16</sup> Ibid.

<sup>&</sup>lt;sup>17</sup> Illinois Department of Revenue, Annual Report Fiscal Year 2024, https://tax.illinois.gov/content/dam/soi/en/web/tax/research/taxstats/annualcollectionsdistributions/documents/fy24-annual-report.pdf.

generated from electricity are already allocated, the Board should consider the impacts of adopting California's rules on Illinois tax revenues and the programs those revenues fund.

Artificially requiring a certain percentage of light-duty vehicles to be sold in Illinois could result in significant reductions in state tax revenue as customers choose to hold onto the vehicles they have and repair them instead of purchasing new vehicles. Similarly, for medium- and heavy-duty vehicles it is possible that vehicle and fleet owners could choose to "pre-buy" older vehicles, or to instead invest in maintenance and repair of their existing vehicles.

#### Illinois is Unique from California

API respectfully suggests that Illinois policymakers recognize that their state is fundamentally distinct from California geographically and economically. Adopting ACC II, ACT, and Omnibus programs in Illinois that were developed by California regulators with California's singularly unique attributes is not the most prudent approach. In addition, California regulators have not done a critical analysis on alternative vehicle technologies beyond ZEVs that can reduce emissions now and even more into the future. Nor has a critical analysis of the uncertainties and ultimate feasibility of pushing forward the California programs been completed. Illinois must recognize that this lack of analysis could have a negative impact that significantly affects Illinois consumers and businesses.

The Board should undertake its own economic analysis and undertake a detailed, independent state-specific cost study that accounts for unique differences in Illinois vs. California (geography, weather, non-attainment issues, etc.) that may impact on the benefits or results from adopting California's ACC II, ACT, and Omnibus programs separately. Additionally, with respect to ZEVs, the economic analysis should include annual miles driven, costs associated with battery replacement, disposal at end-of-life, financing, recharging time, and historical performance in Chicago during severe cold weather events. <sup>19</sup> In addition to analysis of necessary grid improvements required for all BEVs, for the medium-and heavy-duty vehicles, the Board should undertake an analysis on the impact on truck utilization and Illinois trucking companies. In particular, the analysis should consider the additional road maintenance that would be required given the additional weight that similarly sized electric vehicles have as well as additional trips that might be taken by heavy/medium duty vehicles "weighting out" due to the additional weight of the battery.

#### California is Changing its Regulations: Illinois Should Pause

Given California will be amending provisions of its ACC II, ACT, and Omnibus programs, API recommends that it would be most prudent for the Board to suspend consideration of the Proponents' proposal to adopt California's programs and reevaluate following those amendments.

On July 5, 2023, the California Air Resources Board (CARB) and heavy-duty truck and engine manufacturers announced the Clean Truck Partnership, an agreement which offers flexibility to

<sup>&</sup>lt;sup>18</sup> "The New Math of Driving Your Car Till the Wheels Fall Off," by Joe Pinsker, WSJ, May 1, 2024.

<sup>&</sup>lt;sup>19</sup> Electric.Car.Owners.Confront.a.Harsh.Foe; Cold.Weather?.New.York.Times?January.7**9**28680?available.at; https;—wwwjnytimes;com-8680-67-7**9**-business-tesla\_charging\_chicago\_cold\_weather;html;.

address both California's public health concerns and the needs of manufacturers that build the technology required for the transition to zero-emissions. <sup>20</sup> This partnership stemmed from known challenges with the feasibility of California's programs that were not addressed until after the programs were finalized. As a part of the Partnership, CARB committed to amending its Low NOx Omnibus and ACT programs. Amendments to the 2024-2026 standards of the Omnibus regulations were finalized and became effective in May 2024. <sup>21</sup> CARB also held a public workshop on amendments to the standards for 2027 and beyond in March 2024, during which they indicated that a second workshop would be held, and a rulemaking to formally propose the 2027+ amendments would be promulgated in 2025. <sup>22</sup> Amendments were proposed for the ACT program in 2024, with comments on the most recent set of amendments due to CARB in December 2024; these amendments have not yet been finalized. <sup>23</sup> In October 2023 CARB also launched a new effort to consider potential amendments to ACC II, and held a public workshop in June 2024 to "inform potential amendments to the Advanced Clean Cars (ACC) regulations". <sup>24</sup>

Accordingly, it is recommended that the Board consider CARB's proposed and expected amendments to the ACC II, ACT, and Omnibus regulations prior to its consideration of the proposal to adopt all of these programs. Approval of the Proponents' proposal to add a new code section, 35 Ill. Admin. Code 242, could incorporate obsolete provisions from the California Code of Regulations (CCR). Notably, the amendments in the proposal at Section 242.103 specify "[t]his Regulation incorporates and adopts by reference the sections of Title 13 of the California Code of Regulations identified in the table below. All reference to the California Code of Regulations in this Part mean the versions specified in the table." The table denotes specific date references (e.g., 5/31/24, 11/30/2022, 4/1/22, etc.), when those provisions were approved by the California Office of Administrative Law. Further, proposed Section 242.103 states "This regulation does not include any later amendments or editions of the regulations incorporated by reference." Thus, if the state of Illinois were to adopt these provisions, and any others based on California's current.regulations, it could render the Illinois regulations out of date if California amends those specific regulations in its current and upcoming rulemaking actions.

#### Illinois Should Conduct Further Analysis

Illinois should retain jurisdiction over its policies to address its air quality rather than incorporate by reference California standards. In essence, Illinois would be ceding its authority to California; and, as noted above, could create a situation where Illinois' regulations could be in conflict with the

<sup>&</sup>lt;sup>20</sup> Clean Truck Partnership Agreement, July 6, 2023, <a href="https://ww2.arb.ca.gov/sites/default/files/2023-07/Final%20Agreement%20between%20CARB%20and%20EMA%202023\_06\_27.pdf">https://ww2.arb.ca.gov/sites/default/files/2023-07/Final%20Agreement%20between%20CARB%20and%20EMA%202023\_06\_27.pdf</a>.

<sup>&</sup>lt;sup>21</sup> California Air Resources Board, "Heavy-Duty Engine and Vehicle Omnibus Regulation Amendments," <a href="https://ww2.arb.ca.gov/rulemaking/2023/hdomnibus2023">https://ww2.arb.ca.gov/rulemaking/2023/hdomnibus2023</a>.

<sup>&</sup>lt;sup>22</sup> California Air Resources Board, "Heavy-Duty Low NOx: Meetings & Workshops,"

https://ww2.arb.ca.gov/our-work/programs/heavy-duty-low-nox/heavy-duty-low-nox-meetings-workshops.

<sup>&</sup>lt;sup>23</sup> California Air Resources Board, "Advanced Clean Trucks,"

https://ww2.arb.ca.gov/rulemaking/2024/advancedcleantrucks.

<sup>&</sup>lt;sup>24</sup> California Air Resources Board "Meetings and Workshops for Advanced Clean Cars II Amendments," <a href="https://ww2.arb.ca.gov/our-work/programs/advanced-clean-cars-program/meetings-workshops">https://ww2.arb.ca.gov/our-work/programs/advanced-clean-cars-program/meetings-workshops</a>.

California regulations upon or shortly after adoption given the fact that changes to California's programs are ongoing.

The Proponents' proposal fails to show all impacts to Illinois, rather it appears to focus only on assumed positive impacts of the California program. However, what is best for California is not necessarily what is best for Illinois. Further, their proposal fails to show the significant impact that adoption of California's programs would have on individuals and small businesses who, when purchasing new vehicles, will have very limited options for buying their vehicle of choice in Illinois. Additionally, it does not appear that the Proponents have reflected on the impact of this action in relation to energy security considering that moving to BEVs will force the industry to rely on other countries such as China for critical materials to manufacture BEVs.

Illinois also must consider challenges associated with the power sector and electric vehicle (EV) charging infrastructure. In a study commissioned by the Coordinating Research Council (CRC), <sup>25</sup> the authors report "as the EV market expands, access to home charging is likely to decrease over time" because "most early EV adopters live in detached homes where it is relatively easy to install a home charger, and have relied on low-cost, overnight, at-home charging for their primary charging needs." Additionally, modelling of a policy that is less stringent than ACC II showed that nearly 1.2 million charging ports (eig., private and shared access and public direct-current fast chargers) will be required by 2030 and nearly 3 million by 2040. Thus, there are other issues to consider before adoption of the ZEV requirements included in ACC II. Additional research by the National Renewable Energy Laboratory<sup>26</sup> and supported by CRC indicates that hybrid powertrain technology may be a more efficient use of battery materials and resources than full-battery electrification, especially in the near term where it is not feasible for BEVs to replace all ICEVs. Additionally, collaborative research<sup>27</sup> by the CRC (automotive/petroleum industries) indicates significant GHG reductions are possible by reducing the carbon intensity of gasoline in the U.S. fleet.

#### Conclusion

In conclusion, the Board should refrain from adopting the following California programs: Advanced Clean Cars II, Advanced Clean Trucks, and Heavy-Duty Engine and Vehicle Omnibus. The Board should instead 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 Illinois.

API members are applying their abilities to solve the complex challenges of emissions reductions in the transportation sector in a manner that will provide affordable and reliable products that allow

<sup>&</sup>lt;sup>25</sup> "Assess the Battery-Recharging and Hydrogen-Refueling Infrastructure Needs, Costs and Timelines Required to Support Regulatory Requirements for Light-, Medium-, and Heavy-Duty Zero-Emission Vehicles." by ICF for Coordinating Research Council, Inc., January 2025, available at: <a href="https://crcao.org/wp-content/uploads/2025/02/CRC\_Infrastructure\_Assessment\_Report\_ICF\_01222025.pdf">https://crcao.org/wp-content/uploads/2025/02/CRC\_Infrastructure\_Assessment\_Report\_ICF\_01222025.pdf</a>.

<sup>&</sup>lt;sup>26</sup> Analyzing Potential Greenhouse Gas Emissions Reductions from Plug-In Electric Vehicles: Report for CRC Project, "Carbon Return on Investment for Electrified Vehicles," National Renewable Energy Laboratory, Technical Report 5400-89174, December 2024, available at: https://crcao.org/wp-content/uploads/2024/12/SM-E-20-NREL-Report.pdf.

<sup>&</sup>lt;sup>27</sup> "Evaluation of the Potential for Significant GHG Emission Reductions from ICEs Operated on Liquid Fuels," Report for Coordinating Research Council, Project No. 0634565, July 2024, available at: https://crcao.org/wp-content/uploads/2024/08/FINAL-SM-1-Report-072224.1.pdf.

consumers in Illinois, and nationwide, the ability to choose the transportation mode that meets their needs while meeting the policy objectives of reducing transportation emissions. To that end, 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.

Respectfully submitted,

Jim Watson Executive Director American Petroleum Institute watsonj@api.org

Jen Baptist Associate Director American Petroleum Institute baptistj@api.org