

**State of California
Air Resources Board
Board Item Summary**

**Item # 22-10-1: Public Hearing to Consider Proposed Advanced
Clean Cars II Regulations**

Staff Recommendation:

Staff recommend that the California Air Resources Board (CARB or Board) approve the proposed resolution, which adopts and amends new and proposed regulations and test procedures under the Low Emission Vehicle and Zero Emission Vehicle (ZEV) regulatory programs, comprising what is called the Advanced Clean Cars II Regulations. This is the second of two public hearings on this item. Pursuant to the Chair's direction and comments from the Board at the first hearing on June 9, 2022, staff proposed modifications to the original proposal and noticed those modifications for a 15-day public review and comment period. At the August 25th hearing, staff will present the revised proposal for Board consideration.

Discussion:

Mobile sources are the greatest contributor to emissions of criteria pollutants and greenhouse gases (GHG) in California, accounting for about 80 percent of ozone precursor emissions and approximately 50 percent of statewide GHG emissions, when accounting for transportation fuel production and delivery. Following the completion of the Advanced Clean Cars Midterm Review in 2017, the Board directed staff to develop the Advanced Clean Cars II (ACC II) Regulations for post-2025 model years.

Staff's proposal builds upon many decades of CARB regulations seeking to reduce emissions from light-duty passenger cars and trucks. The proposed ACC II Regulations aim to further curb criteria, toxic, and GHG emissions by increasing the stringency of the Low Emission Vehicle (LEV) program, which include requirements for internal combustion engine vehicles (ICEV), and by requiring automobile manufacturers to deliver increasing percentages of ZEVs as a portion of their overall product deliveries between model years 2026 and 2035. The ACC II Regulations' proposal to increase the sale of ZEVs would culminate in nearly 100 percent sales of ZEVs¹ and the cleanest-possible plug-in hybrid-electric vehicles by the 2035 model year as directed by Governor Newsom's Executive Order N-79-20. The proposed amendments to the LEV regulation would ensure emissions are reduced under real-world

¹ The proposal allows a small portion of sales to be plug-in hybrid electric vehicles (PHEVs), designed to prioritize their electric function and use their gas engines in limited circumstances, to meet demand for certain kinds of uses.

operating conditions and prevent the backsliding of emissions from ICEVs as the passenger vehicle fleet transitions to ZEVs.

Additionally, the proposed ACC II Regulations would make ZEVs more reliable, support the ZEV market, and protect the emission benefits of the ZEV regulation by establishing new minimum technical requirements and ZEV assurance measures. These ZEV assurance measures address warranty, durability, serviceability, streamlined charging, and battery labeling to help ensure consumers can successfully replace their ICEVs with new or used ZEVs that meet their transportation needs, including in the used vehicle market.

The proposed ACC II Regulations were developed in an open public process that included four virtual public workshops, one public listening session, workgroup meetings, and numerous individual meetings with automobile manufacturers, component suppliers, university researchers, non-governmental organizations, environmental justice and equity advocates, community-based organizations, trade associations, the United States Environmental Protection Agency, and other interested stakeholders. Workshop slide presentations, cost workbooks, draft regulatory documents, and event recordings were posted and available to the public where stakeholders were invited to provide comments. Through the public process, staff solicited feedback on various elements of the proposals and analyses, including feedback on the California Environmental Quality Act (CEQA) scope, alternatives to evaluate, and the data and methods used to develop cost impacts.

As part of the formal rulemaking process, staff also released an Initial Statement of Reasons (ISOR) staff report including proposed regulation orders, the purpose and rationale for the proposed amendments, a regulatory impact assessment, and a draft environmental analysis (Draft EA). The staff report was posted on April 12, 2022, for a 45-day comment period. At the ACC II hearing on June 9, 2022, the Board also heard public comments on the proposal.

The primary stakeholder comments surrounding the ACC II proposal heard at the Board hearing focused on the stringency and costs for ZEV deliveries, requirements for ZEV durability, and actions to further advance environmental justice. Environmental advocates emphasized a need for a higher stringency level, particularly near the mid-point of the program in 2030. Additionally, equity advocates argued that newly developed environmental justice values intended to encourage greater deployment of ZEVs in underserved communities should be mandatory or the use of flexibilities in the ZEV program should be conditioned on equity actions to provide higher certainty of improved ZEV access for underserved communities. In contrast, automakers cautioned that while technological advances may lower compliance costs, consumers may still not accept new technologies at the rates required by the regulation and stressed that complementary ZEV policies to facilitate the ZEV market are needed. Automakers also opposed the ZEV durability requirements as proposed. Other stakeholders representing business associations expressed concerns about ZEV affordability.

The Chair of the Board directed the Deputy Executive Officer to consider the oral and written comments on the proposed regulations, develop any appropriate related modifications to the proposed regulations, and make those modifications available for public comment. The Board specifically summarized modifications that staff should investigate after hearing public comment, including finding ways to encourage the use of the ZEV regulation

environmental justice provisions while not reducing overall stringency and providing more flexibility in the early years on battery durability. In response to that direction, staff updated the proposal to encourage manufacturers to use the ZEV regulation environmental justice provisions and by modifying the ZEV durability requirements in the first 4 years of the regulation. Staff's suggested 15-day changes were released on July 12, 2022, to address these concerns. The comment period for the 15-day modifications closed on July 28, 2022.

In the interest of completeness, staff undertook a second 15-day public review and comment period that closed on August 23, 2022 to add to the rulemaking record and invite comments on additional documents relied upon in adopting the proposed regulations or that were incorporated by reference into the proposed regulations. Staff did not propose any modifications to the regulatory text as part of that package.

The Chair of the Board also directed the Deputy Executive Officer to evaluate all comments received during the public comment periods, including comments raising significant environmental issues, and prepare written responses to such comments as required by CEQA. Pursuant to that evaluation, the Deputy Executive Officer is presenting to the Board at this public hearing staff's written responses to environmental comments and the final environmental analysis for consideration for approval. The Deputy Executive Officer will also present the final proposal for consideration for adoption. In the Final Statement of Reasons, staff will respond to all comments received on the record during the comment periods.

Summary and Impacts:

The emission reductions from the final ACC II proposal presented at this hearing are critical to achieving carbon neutrality in California by 2045 and reducing emissions of oxides of nitrogen (NO_x) from passenger vehicles to attain the latest federal ambient ozone standards by 2037. When accounting for fuel production, the proposed ACC II Regulations will result in a cumulative reduction of 70,514 tons of NO_x, 4,553 tons of PM_{2.5}, and 395.1 million metric tons (MMT) of carbon dioxide equivalent (CO_{2-e}) emissions from 2026 to 2040. Based on these emission benefits, the proposal will lead to approximately 1,287 fewer cardiopulmonary deaths, 211 fewer hospital admissions for cardiovascular illness, 252 fewer hospital admissions for respiratory illness, and 647 fewer emergency room visits for asthma.

Between 2026 and 2040, the proposed ACCII Regulations are estimated to result in additional cumulative costs to manufacturers of \$29.9 billion, or \$2.0 billion on average per year, but costs to consumers as measured by the total cost of ownership (TCO) will result in overall savings to fleets, businesses, and individuals who purchase these vehicles. Between 2026 and 2040, the statewide TCO is estimated to be a net cost savings of \$92.9 billion, or \$6.2 billion on average per year, meaning the operational savings far outweigh the increased vehicle costs. Much of the TCO savings stem from reduced gasoline consumption, with gas prices conservatively assumed to remain relatively constant around \$4 per gallon, with even greater savings if prices remain at their current elevated levels or increase further. In 2040, the proposed ACC II Regulations are estimated to result in job gains of 24,996, primarily in the services, manufacturing, and construction sectors. Furthermore, while jobs continue to grow statewide, the proposal reduces that growth by about 65,810 jobs, predominantly in the retail and government sectors.

The net result of the proposed ACC II Regulations are estimated to be a cumulative net benefit to California of \$91.1 billion with a benefit-cost ratio of 1.43, meaning benefits are more than costs between 2026 and 2040.

CARB is the lead agency for the proposal and has prepared a Final Environmental Analysis (Final EA) pursuant to its certified regulatory program² to comply with the requirements of CEQA. The Final EA provides a programmatic environmental analysis of an illustrative, reasonably foreseeable compliance scenario that could result from implementing the proposal. CARB also prepared the Response to Comments on the Draft EA, which includes responses to CEQA-related comments received during the first public Board hearing, the 45-day comment period, and the 15-day comment period.

Implementation of the proposed ACC II Regulations could result in certain impacts, including, but not limited to: the construction and operation of new or expanded manufacturing facilities for ZEV technologies; the construction of supporting infrastructure, such as electric chargers and hydrogen fueling stations; increased demand for electricity and hydrogen fuel and therefore more electricity and hydrogen generation and distribution; the displacement of fossil fuel extraction, refinement, manufacture, distribution, and combustion; new or modified recycling or refurbishment facilities to accommodate battery and fuel cell refurbishment, reuse, and disposal; and increased demand for the extraction of raw minerals used in the production of batteries and fuel cells, such as lithium and platinum from source countries and states.

The Final EA concluded that implementing the proposed ACC II Regulations could result in beneficial, long-term impacts to air quality and greenhouse gas emissions; less than significant impacts, or no impacts, to energy demand, land use, mineral resources, population, housing, public services, recreation, and wildfire; and potentially significant adverse impacts to aesthetics, agricultural and forest resources, air quality (due to short-term construction-related emissions), biological resources, cultural resources, geology and soils, hazards and hazardous materials, hydrology and water quality, noise and vibration, transportation, tribal cultural resources, and utilities and service systems. Many of these adverse impacts could be reduced to less-than-significant levels through conditions of approval and mitigation measures applied to project-specific development; however, the authority to apply that mitigation lies with land use agencies or other agencies approving the development projects, not with CARB. Despite these potential adverse impacts, the proposed ACC II Regulations are needed to ensure the significant environmental and economic benefits are realized.

² Cal. Code Regs., tit. 17, § 60000 through 60008.