

Nov. 5, 2021

Chair Liane Randolph and California Air Resources Board Members
California Air Resources Board
1001 I Street
Sacramento, CA 95814

RE: Oct. 13 ACCII Workshop – Expert Letter for Stronger ZEV Standards

Chair Randolph and members of the California Air Resources Board,

We the undersigned 166 scientists and experts in air quality, climate change, economics, energy, public health, and transportation urge the California Air Resources Board to adopt the strongest possible Advanced Clean Car II (ACCII) rule. This rule is vital to ensuring a rapid transition from gasoline-powered vehicles to cleaner, zero-emissions vehicles (ZEVs) as soon as possible.

Climate change, driven by anthropogenic emissions, is a clear threat to both California and the global community. The latest assessment by the Intergovernmental Panel on Climate Change (IPCC) lays out in stark detail the dangerous path we are on to much higher temperatures and long-term disruption of key natural systems¹, with the need to immediately lower emissions to avoid the worst outcomes. And those of us living in California are acutely aware of the evidence of climate change we can already see, with heat waves, drought, and wildfire impacting virtually everyone in the state.²

Across the United States, transportation is responsible for more heat-trapping emissions than any other sector.³ In California, almost 40 percent of the state's total emissions come from transportation. And within the sector, more than 70 percent of transportation emissions come from passenger vehicles (more than one quarter of the total emissions in the state).⁴ Analysis

¹ IPCC, 2021: Climate Change 2021: The Physical Science Basis. Contribution of Working Group I to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change [Masson-Delmotte, V., P. Zhai, A. Pirani, S.L. Connors, C. Péan, S. Berger, N. Caud, Y. Chen, L. Goldfarb, M.I. Gomis, M. Huang, K. Leitzell, E. Lonnoy, J.B.R. Matthews, T.K. Maycock, T. Waterfield, O. Yelekçi, R. Yu, and B. Zhou (eds.)]. Cambridge University Press. In Press.

² Bedsworth, Louise, Dan Cayan, Guido Franco, Leah Fisher, Sonya Ziaja. (California Governor's Office of Planning and Research, Scripps Institution of Oceanography, California Energy Commission, California Public Utilities Commission). 2018. Statewide Summary Report. California's Fourth Climate Change Assessment. Publication number: SUM- CCCA4-2018-013.

³ U.S. Environmental Protection Agency. 2021. Fast Facts: U.S. Transportation Sector GHG Emissions.

⁴ California Air Resources Board. 2021. California Greenhouse Gas Emissions for 2000 to 2019: Trends of Emissions and Other Indicators.

done for California's Air Resources Board (ARB) shows that to achieve the state's net-zero emissions by 2045 goal, sales of gasoline-powered passenger vehicles need to stop by 2035.⁵ The IPCC indicates even more rapid reductions in emissions may be needed to avoid the worst impacts of climate change.⁶ Unlike some transportation sectors such as maritime and aviation, where it may be more difficult to avoid combustion engines, ZEVs are a proven technology and are among the most urgent solutions needed to limit global warming.

Eliminating tailpipe emissions by setting steadily stronger ZEV sales targets and retiring gasoline cars and trucks will also protect public health through improved air quality. Achieving 100 percent ZEVs on road as quickly as possible will reduce emissions of reactive organic gases and nitrogen oxides that lead to the formation of fine particulate matter, which is associated with the greatest proportion of adverse health effects related to air pollution in the United States. And in California, while all will benefit from reduced exposure to air pollution from cars and trucks, prioritizing deployment of ZEVs in pollution-burdened communities of color and low-income communities is critical to improving health and in reducing inequities in pollution exposure.⁷⁸

We urge the ARB to use their power under the federal Clean Air Act to require ZEV sales consistent with the demands of the climate crisis. ARB needs to set an ambitious but achievable start point for the ZEV regulation; ARB's proposal, released earlier this year, requires about 25 percent of model year 2026 cars to be qualifying ZEVs. This is clearly inadequate and will allow far too many gasoline-powered vehicles to be sold between 2025 and 2030, ensuring significant emissions well past 2035. A low target also will fail to push existing gasoline manufacturers to move as quickly as they are in places with higher environmental standards (such as the European Union).⁹ The agency also is not requiring over 50 percent ZEV sales until model year 2030, which is not rapid enough to meet emissions reduction targets. ARB must revise the proposed Advanced Clean Cars II regulations to require more ZEV sales earlier to protect the health and safety of all

⁵ Energy and Environmental Economics. 2020. Achieving Carbon Neutrality in California: PATHWAYS Scenarios Developed for the California Air Resources Board.

⁶ IPCC, 2018: Summary for Policymakers. In: Global Warming of 1.5°C. An IPCC Special Report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty [Masson-Delmotte, V., P. Zhai, H.-O. Pörtner, D. Roberts, J. Skea, P.R. Shukla, A. Pirani, W. Moufouma-Okia, C. Péan, R. Pidcock, S. Connors, J.B.R. Matthews, Y. Chen, X. Zhou, M.I. Gomis, E. Lonnoy, T. Maycock, M. Tignor, and T. Waterfield (eds.)]. World Meteorological Organization, Geneva, Switzerland.

⁷ Reichmuth, David. 2019. Inequitable Exposure to Air Pollution from Vehicles in California.

⁸ Pinto de Moura, Maria Cecilia and David Reichmuth, 2019. Inequitable Exposure to Air Pollution from Vehicles in the Northeast and Mid-Atlantic, <https://www.ucsusa.org/resources/inequitable-exposure-air-pollution-vehicles>

⁹ Abnett, Kate 2021. Reuters. "Electric car sales surge as Europe's climate targets bite", <https://www.reuters.com/business/sustainable-business/electric-car-sales-surge-europes-climate-targets-bite-2021-06-29/>

Californians and to regain the state's leadership role in the United States and abroad on climate action.

The California ARB has a history and a responsibility of leadership in setting bold environmental standards that improve our health and quality of life. Only California has the power to set standards that other ambitious states can adopt. ARB's failure to meet this moment with aggressive action to cut climate warming emissions will slow the transition to clean vehicles for everyone in the country. Please restore your leadership and put us all on a faster path to 100 percent ZEVs.

Sincerely,

Institutional affiliations are listed as provided by signers for identification purposes only, and do not imply endorsement of the letter by those institutions.

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