



March 4, 2022

California Air Resources Board  
1001 I Street  
Sacramento, CA 95814

**Re: 2022 State Implementation Plan**

Dear CARB Staff:

The State Implementation Plan (SIP) is the California Air Resources Board's (CARB) best chance to phase out the use of fossil fuels and transition to zero emission technologies. Given the Intergovernmental Panel on Climate Change's (IPCC) dire warning earlier this week and the fact that a large population of Californians continue to breathe air that is out of attainment with federal air quality standards, this transition away from combustion is particularly critical.

Overall, we appreciate CARB's efforts in the Draft SIP to prioritize zero emission technologies in every sector.

We will focus these comments on two specific proposals in the Draft SIP.

**I. Zero Emission Truck Measure**

We would like to express our appreciation to CARB for including the Zero Emissions Trucks Measure in the Draft SIP.

California must continue to drive down toxic air pollutants from fossil fueled heavy duty trucks to meet its statutory air quality obligations. The combined effect of the Advanced Clean Trucks (ACT) and proposed Advanced Clean Fleets (ACF) rules will only transition **about 50% of California's two million trucks to zero emission vehicles by 2045.**

One million polluting medium- and heavy- duty vehicles would still be on California roads in 2045 when the governor ordered vehicles everywhere feasible to be zero-emission<sup>1</sup>. The proposed Zero Emission Trucks Measure acknowledges this gap and seeks to close it. We strongly support the objectives of this measure.

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<sup>1</sup> <https://www.gov.ca.gov/wp-content/uploads/2020/09/9.23.20-EO-N-79-20-Climate.pdf>

The proposed Zero Emission Trucks Measure seeks to give CARB new authorities that enable tools such as differentiated registration fees and the implementation of indirect source rules state-wide. While we would certainly support CARB gaining these authorities, CARB should move forward with authorities it has now.

CARB currently has the authority to implement a requirement for the retirement of medium- and heavy-duty vehicles when they hit their minimum lifetime of 18 years or 800,000 miles established under SB 1 (Beall, 2017). CARB staff ran a scenario where California trucks were replaced with ZE trucks at the end of their useful life. NOx emission reductions from this fleet turnover scenario were 33 tons per day in 2031 for 140,000 vehicles. This would be nearly 40% more than what the Advanced Clean Trucks and Heavy-Duty Omnibus rules together would accomplish.

We strongly recommend that CARB add enforceable truck retirement language in this measure. By including this objective now, it will send a strong signal disincentivizing the continuing purchase of new combustion vehicles while increasing the replacement of retiring combustion trucks with zero emission vehicles.

Finally, since medium- and heavy-duty vehicles will start hitting their SB 1, 18-year useful life beginning in 2028, we recommend that this proposal begin in 2028 instead of being delayed to 2030. This change will bring two additional years of greenhouse gas and NOx emission reductions.

## **II. Zero Emission Space and Water Heaters**

We express strong support for CARB's proposal to require that 100 percent of new space and water heaters sold in 2030 meet a zero greenhouse gas (GHG) emissions (zero-emissions) standard. This standard is not only important for mitigating the climate crisis, but also offers a lifeline to Californians impacted by indoor NOx pollution and associated respiratory side effects, including elevated risk of asthma.<sup>2</sup>

We want to emphasize the urgency of adopting zero-emissions standards for electric appliances. The recent IPCC report warns that without immediate and drastic action to curb GHG emissions, we will see the acceleration of climate-related impacts.<sup>3</sup> California is at the tip of the spear of such disasters, already experiencing extreme heat, drought, and wildfires. Residential and commercial buildings make up nearly 25 percent of GHG emissions in California.<sup>4</sup> But decarbonization efforts thus far have fallen far short of California's legal mandate to reduce emissions to 40 percent below 1990 levels by 2030. To achieve 2030 climate goals, California needs to reduce emissions at 4.3 percent per year, nearly three times the current

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<sup>2</sup> See California Air Resource Board, Resolution 20-32, California Indoor Air Quality Program Update (Nov. 19, 2020), available at <https://ww3.arb.ca.gov/board/res/2020/res20-32.pdf>.

<sup>3</sup> <https://www.ipcc.ch/2022/02/28/pr-wgii-ar6/>

<sup>4</sup> California Air Resources Board, Building Decarbonization Program Information, available at <https://ww2.arb.ca.gov/our-work/programs/building-decarbonization#:~:text=Residential%20and%20commercial%20buildings%20are,consumed%20onsite%20and%20electricity%20demand> (last accessed Feb. 22, 2022).

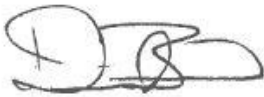
rate.<sup>5</sup> CARB is taking an imperative step in accelerating decarbonization by requiring the sale of zero-emissions space and water heaters by 2030. In doing so, it is sending a market signal to space and water heater manufacturers to ramp up production and a regulatory signal to municipal governments and state regulators to do their part in removing NOx and GHG emissions from buildings.

We urge CARB to work to ensure that low-income and environmental justice communities not only reap climate and public health benefits from the zero-emissions appliance standard, but also are equal economic participants in the transition away from natural gas. We continue to recommend that CARB work with public and private stakeholders to create a policy roadmap that lays out complementary policies to ensure that environmental justice communities are prioritized in electrification. In doing so, we urge CARB to empower low-income and environmental justice communities, by letting them lead in crafting policies that will make electric appliances affordable to low-income Californians and protect tenants from rent spikes and evictions.

We applaud CARB's leadership in decarbonizing building appliances and ask that the 2030 zero-emissions appliance standard is adopted without delay.

Thank you for the opportunity to provide input and we look forward to working with you to advance a 100% zero emission future.

Sincerely,



Daniel Barad  
Sierra Club California



Nihal Shrinath  
Sierra Club

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<sup>5</sup> Next10, Carbon Economy, available at <https://greeninnovationindex.org/2021-edition/carbon-economy/> (last accessed Feb. 22, 2022).