EARTHJUSTICE

January 21, 2026

California Air Resources Board
1001 I Street
Sacramento, CA 95814

Re: Comments on Zero-Emission Space and Water Heater Standards- Presented December 11, 2025

Dear California Air Resources Board Staff,

We appreciate this opportunity to comment on the California Air Resources Board (CARB) proposal for creating Zero-Emission Space and Water Heating Standards. California stands at a critical moment to take climate action, reduce air pollution, and deliver on its commitment to equitable decarbonization of our homes and buildings. A zero-emission space and water heater standard represents an important opportunity for the State to continue leading on the environment and climate action, where federal policy is increasingly retreating. We encourage CARB to adopt rules that meet commitments in the 2022 Scoping Plan.

The following comments outline key areas where the proposal must be strengthened to ensure it delivers real, measurable progress toward California's climate and public health goals.

I. Sales Targets Must Be More Aggressive and Align with the State's Prior Commitments

As currently proposed, the timeline for reducing allowable sales of emissive units is not aligned with the state's own statewide benchmarks as set out in the 2022 Scoping Plan. To set the right market signals, CARB's policy should require manufacturers to make a greater percentage of non-emitting units available sooner, not later.

We see no justification for the proposed Statewide Emissive Sales Limit that would maintain emissive units of 40% for space heating, and 60% for water and pool heating in 2030 when the State's own scoping plan calls for 90% of all residential space heating sales to be non-emissive by 2030 and 100% by 2035. Notably, this proposal even falls short of the multistate agreement CARB signed in 2024[1] to ensure that more zero-emission appliances enter the market sooner.

Targets that fall short of the State's own benchmarks and commitments undermine California's climate planning. More ambitious near-term targets are essential to avoid backsliding on emission reductions.

[1] NESCAUM, Nine State Pledge Joint Action to Accelerate Transition to Clean Buildings (February 2024), https://www.nescaum.org/documents/2.7.24-nescaum-mou-press-release.pdf. (Setting a shared multi-state goal for heat pumps to meet at least 65% of residential-scale space and water heating by 2030 and 90% by 2040).

CARB has not demonstrated how these proposed targets will meaningfully contribute to meeting statewide GHG reduction goals. Even its more stringent "Alternative 2" would fall short of meeting the scoping plan's commitment, but at least takes a more aggressive approach to space heating by setting emissive sales unit to 30% in 2030 and limiting to 10% in 2045.

We propose a more reasonable timeline for zero-emission appliance targets to meet or exceed the State's commitments. To meet these targets, the final rule should target capping emissive units on an aggressive timescale. We propose the following ranges to help set targets and push the market forward across all related categories (space/water/pool heating).

Target Dates	2027-2028	2029-2032	2033-2036	2037 and beyond
Emissive Units	40%	25%	10%	0%
Zero-emission Units	60%	75%	90%	100%

Zero-emission models for categories like water heating systems offer more predictable installation costs as they include available 120v configurations, eliminating the need for expensive electrical upgrades. The options for heat pumps have also improved in recent years, offering flexible configurations to meet design needs. In most scenarios, units can be easily implemented with appropriate regulatory signals, further speeding up the transition. Additionally, the State's policy should aim for a target of 100% zero emissions.

II. Credit Multipliers are Unnecessary and Risk Abuse

The credit multipliers proposed for refrigerants, equipment innovation, and larger capacity rooftop units unnecessarily add complexity to this rule without improving the emission outcomes needed. This proposal risks creating unnecessary loopholes that allow continued pollution through accounting maneuvers, including credit swapping, that could incentivize pay-to-pollute pathways toward compliance and easy off-ramps that maintain the status quo.

We agree with our colleagues from environmental organizations that have criticized innovation credits as being unnecessary. The market should be expected to innovate to comply with stronger standards, not rewarded for incremental changes that they are already contemplating to meet existing demand.

Moreover, crediting lower-threshold GHG refrigerants and refrigerant reclamation instead of simply supporting the establishment and enforcement of stricter standards is not the type of policy that will drive the strongest outcomes in the long run. We therefore discourage the use of these credits to incentivize refrigerant reclamation and the use of lower-GWP refrigerants when they can be used in a more targeted way to help address access disparities.

If credits are being considered, we agree that they should be specifically designed to support the State's commitment to equitable decarbonization goals. Policies that incentivize equipment donations and other contributions to assist low-income households during this transition would better align with the purpose of ensuring that all Californians can benefit from this shift.

III. Supporting Low-Income Households

Support for equitable decarbonization will be essential to meeting the State's priority for this rule. We encourage CARB to work with other State and local agencies, utilities, industry, and labor to target incentives toward low-income households to help with the transition to zero-emission.

Support should, at a minimum, include direct install programs, voucher funding, and rebates, as well as exploring zero-interest financing options for households who might otherwise face challenges to joining this transition to zero-emissions even after the market adjusts. We join members of the Building Energy, Equity & Power (BEEP) Coalition in calling for the creation of an interagency task force focused on advancing equitable decarbonization policies across the state and ask CARB to support these efforts.

IV. Panel Upgrade and Building Modification Needs are Overstated

CARB's analysis supporting a more moderate proposal overstates the need for panel upgrades and major electrical modifications. Recent data shows that across the state, many homes can accommodate zero-emission heating and water-heating technologies without incurring expensive upgrades. This includes research showing that even buildings with lower-amp panels are perfectly capable of accommodating heat pump water heaters and heat pump HVAC systems without the need for a panel upgrade.[2]

We urge CARB to reevaluate these assertions. Overstating the need for upgrades and retrofitting risks discouraging adoption of zero-emission technology and undermines public confidence in state and local policies that will ultimately save consumers and the State in the long run. A more accurate assessment would better support the policy's rollout and complement local and statewide efforts to advance a transition to zero-emissions solutions for the state's climate goals.

[2] Eric Daniel Fournier, Robert Cudd, Samantha Smithies & Stephanie Pincetl, *Quantifying the Electric Service Panel Capacities of California's Residential Buildings*¸ 196 Energy Pol'y 113129 (2024), p.9.; See also, SPUR, *Solving the Panel Puzzle* (May 14, 2024), Policy Brief available at https://www.spur.org/publications/policy-brief/2024-05-14/solving-panel-puzzle?utm_medium=redirect&utm_source=solvingthepanelpuzzle.

V. Conclusion

California cannot afford to set a rule that falls short of the scale and urgency needed to address the climate and public health challenges it faces. To the extent CARB is committed to a zero-emission space and water heater sales target to meet its goals, it must be strengthened to ensure it can deliver real, measurable emission reductions consistent with the State's climate commitments. This requires more ambitious targets for manufacturers that align with the 2022 Scoping Plan and the elimination of unnecessary crediting mechanisms that risk delaying meaningful progress and creating regulatory off-ramps.

We look forward to continuing to work with staff to strengthen this rule and implementation that will advance equity and accelerate the zero-emissions solutions the state needs.

Sincerely,

Fernando Gaytan
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Earthjustice