



May 25, 2023

California Air Resources Board
1001 I Street
Sacramento, CA 95814

RE: Comments on Zero-Emission Standards for Appliances

Dear Board Members and Staff,

Thank you for the opportunity to provide these comments on the California Air Resources Board's Zero-Emission Standards for Appliances, submitted on behalf of Building Decarbonization Coalition, Earthjustice, Natural Resources Defense Council, RMI, Sierra Club California, and SPUR.

We appreciate CARB's commitment to develop zero-emission appliance standards as part of a broad portfolio of strategies to advance an equitable transition to non-polluting appliances. These comments respond to the three key questions posed by Staff in the May 10, 2023 Workshop on Zero-Emission Appliance Standards, and offer the following recommendations:

1. Engage environmental justice organizations and community voices and adopt their recommendations to inform the engagement process and rulemaking
2. Consult and work with industry and labor stakeholders to consider and include their input on labor and workforce needs and impacts
3. Clarify which agencies and authorities CARB will work with and how they will coordinate to advance necessary complementary actions before 2030
4. Conduct building stock and market segmentation studies for renters and multifamily dwellings
5. Include incentives, avoided costs, and recommendations in the cost analysis
6. Include other appliance end-uses in all analyses

(1) Engage environmental justice organizations and community voices and adopt their recommendations to inform the engagement process and rulemaking

In response to staff’s questions about an inclusive and equitable engagement process and values to incorporate in this rulemaking, CARB should outreach and incorporate input from environmental justice and community-based organizations, specifically those in disadvantaged communities.

Groups like the Building Energy, Equity and Power (BEEP) Coalition have made clear recommendations for an inclusive engagement process in various venues, including in previous comments to CARB.¹ For instance, in a letter submitted on August 18, 2022, 64 organizations – including the BEEP Coalition and other signatories of this letter – called on CARB to “convene a cross-sector working group to lead the process to carefully design and implement appliance emissions and pollution standards on newly sold appliances, particularly for existing buildings.”² This diverse stakeholder working group should help the state partner with other community-based organizations and address inclusive funding options, workforce needs and opportunities, and technical compliance pathways (see Appendix A for more detail). CARB should adopt this recommendation to bring together the expertise needed to address appliance pollution and advance an equitable transition to clean appliances statewide.

Further, throughout this rulemaking, CARB should also provide the additional resources necessary to support participation by communities, especially hard to reach communities. The BEEP Coalition provides recommendations for an equitable process and meaningful engagement in its Equitable Building Decarbonization report, previously submitted to CARB. Their recommendations include providing sufficient funding to local groups and community members, offering language translation services, and ensuring all relevant community members are part of the process from inception.³ We encourage CARB to prioritize the BEEP Coalition’s recommendations, as well as other suggestions from environmental justice and community-based organizations, as it considers how to ensure an equitable, inclusive public engagement process and which values to incorporate into its zero-emission appliance rulemaking.

We appreciate CARB’s commitment to equity and inclusion as part of the engagement process, but we hope its commitment to equity goes further and extends to the rulemaking process itself. CARB should use stakeholder engagement to ensure that community and environmental justice concerns are incorporated into the rule concepts being considered and that the robust engagement CARB aims to deploy results in equitable rule outcomes and implementation.

(2) Consult and work with industry and labor stakeholders to consider and include their input on labor and workforce needs and impacts

¹ [March 1, 2022 Building Energy, Equity and Power \(BEEP\) Coalition Letter to CARB re:Equitable Building Decarbonization - New Report](#) signed by Self-Help Enterprises; People Organizing to Demand Environmental and Economic Rights (PODER); The Greenlining Institute; Center on Race, Poverty, & the Environment; Central Valley Air Quality Coalition; Leadership Counsel for Justice and Accountability; Local Clean Energy Alliance; and Physicians for Social Responsibility - Los Angeles (PSR-LA).

² See Appendix A.

³ See Footnote 1.

In relation to the Market and Technology analysis that staff has planned, CARB should consider the labor and workforce needs and impacts of this rulemaking and its implementation. Meeting the appliance supply chain and installation demands of this rulemaking will have huge implications for jobs and workers in California and beyond our state. We encourage CARB to consult and work with relevant industry stakeholders, including appliance manufacturers, labor unions, the State Workforce Development Board (CWDB), workforce training providers, and other relevant parties to consider and include their input throughout the rulemaking process.

(3) Clarify which agencies and authorities CARB will work with and how they will coordinate to advance necessary complementary actions before 2030

CARB rightly acknowledges that zero-emission appliance standards must be “part of a suite of equity-promoting and complementary building decarbonization policies,” and CARB has stated its commitment to collaborate with other agencies and entities to ensure an equitable transition to pollution-free appliances.⁴ However, it is essential that the State fulfill this commitment by pursuing an unprecedented level of cross-agency collaboration. As stated by 64 parties in previous comments on zero-emission appliance standards, the State must commit to a truly transformational approach that will require a paradigm shift in how it interacts with communities and across agencies.⁵ Business as usual will not yield a successful or equitable transition. It will take a concerted effort, led by CARB, to ensure each government agency’s independent processes are complementary, coordinated, and advancing complementary policies before the zero-emission standards take effect in 2030.

In pursuit of this collaborative effort, a necessary first step is for CARB to identify which agencies and authorities have a critical role to play in advancing an equitable transition to zero-emission appliances. This should include, but is not limited to, the state’s Public Utilities Commission (CPUC), Energy Commission (CEC), Strategic Growth Council (SGC), Office of Planning and Research (OPR), Housing and Community Development (HCD), Treasury, Housing and Urban Development, Housing Finance Agencies, Public Housing Authorities, Pacific Region Bureau of Indian Affairs, Department of Public Health (CPDH), Independent System Operator (CAISO), Workforce Development Board (CWDB), Governor’s Office, Legislature, regional Air Districts, and local municipalities. Many of these agencies also have advisory groups specifically to advise on issues impacting lower income and disadvantaged communities (e.g., CPUC has a Disadvantaged Community Advisory Group). As much as possible, agencies should bring relevant staff with varied expertise to ensure that the rulemaking process and future actions are closely coordinated across and within various agencies.

Once all entities and their respective roles are identified, CARB should clarify its plans for how the entities will collaborate in a way that yields meaningful outcomes informed by cross-collaboration from each responsible party. One example noted above is a cross-sector working group, which includes representatives from these agencies, as well as industry and community representatives.⁶

⁴ CARB, [2022 State Strategy for the State Implementation Plan](#), September 22, 2022, p 101.

⁵ See Appendix A.

⁶ See Appendix A.

It is important that CARB make explicit its plan for cross-agency collaboration to solidify its commitment to develop and implement zero-emission standards in an equitable manner. To that end, CARB should develop a strategic plan that outlines how each local authority and each state agency’s funding, complementary policies, or other assistance efforts will contribute to zero-emissions compliance, including a timeline for the finalization of each existing and nascent effort supporting zero-emissions regulations. The plan should involve these agencies and include specific timely agency actions, an engagement process for relevant stakeholders for each agency action and mechanisms to track progress of outlined actions. The success of these standards is highly dependent on the ability of entities to collaborate effectively and advance together. CARB should use its convening power to support the effective collaboration of statewide entities and ensure the success of these standards.

(4) Conduct building stock and market segmentation studies for renters and multifamily dwellings

A successful and equitable appliance standard will prioritize low-income and disadvantaged communities. For example, CARB should conduct building stock and market segmentation analyses focused on renters with significant energy and household cost burdens to determine the gaps in their needs in order to adopt non-pollution appliance technologies by 2030. A multifamily building stock analysis would help inform staff’s building readiness analysis characterizing the readiness of rental units to accommodate zero-emission appliances by collecting data such as existing appliance technology, fuel type and use, size, and location; current access to heating or cooling; panel size and panel headroom; and other key building characteristics. This assessment should also include directly learning from the experience of existing multifamily programs – including the Low-Income Weatherization Program (Multifamily program) housed at the Department of Community Services and Development, the multifamily portfolio in the TECH program, and the CPUC’s energy efficiency and low income programs.

A market segmentation analysis that focuses on the barriers that will hinder people from investing in clean appliances will also help CARB better understand these residents and tailor support and complementary policies to fit their unique needs. This may include a cross-jurisdictional analysis of local rent stabilization and anti-displacement policies currently in place throughout the state to ensure that such protections are supported, and not undermined, by retrofit policies that might trigger pass-throughs in the form of rent hikes, retaliation, or other displacement pressures on renters.

Existing analyses have very limited focus on building types (single family homes and their owners), and they exclude renters and residents that occupy other types of affordable housing. For the state’s low-income households, analysis of multifamily housing is especially salient given that half of California’s six million renter households are considered low income.⁷ CARB should conduct this analysis in an effort to fill any data gaps that would hinder their ability to effectively design a zero-emission appliance standard and complementary policies for tenants across the state.

(5) Include incentives, avoided costs, and recommendations in the cost analysis

⁷ California Housing Partnership, *How is California meeting the needs of low-income renters? California Affordable housing Needs Report Summary Page* (March 30, 2022); available at: <https://chpc.net/california-meeting-needs-of-low-income-renters/>

As staff quantifies the economic impacts of zero-emission appliance standards, it ought to take a holistic view of the cost impacts. It is important to consider the financial cost of the appliance transition to ensure the necessary financial support is in place for residents by 2030. Such a financial assessment should account for incentives that will help reduce or eliminate the upfront cost of zero-emission appliances.

It is also critical to assess the avoided costs associated with the appliance transition, such as the avoided health costs from removing polluting appliances from homes and businesses. Californians will no longer bear these public health costs because of this regulation, and it is important to acknowledge these societal benefits in the rulemaking process.

Staff should conclude its cost and affordability analysis with recommendations for how the State can better support residents and business owners in the transition to zero-emission appliances, especially disadvantaged communities, and use the recommendations to inform next steps for advancing complementary policies by the agencies participating in CARB's statewide collaboration effort. For example, the State should consider reassessing the appliance rebate structure to find an alternative way to get funds out quickly to underserved communities that may not have the means to pay out of pocket and wait for a rebate. The State should also make sure low-income and disadvantaged communities are prioritized to receive early rebates and incentives, especially as federal Inflation Reduction Act rebates become available. If CARB is not able to consider funding and financing recommendations in its initial cost assessment, it should identify an alternative near-term venue in which such recommendations will be identified by the State to allow time for solutions to be implemented before 2030.

(6) Include other appliance end-uses in all analyses

CARB's commitment to explore other end-uses in its zero-emission appliance rulemaking in addition to space and water heating allows the State to evaluate opportunities to maximize pollution reductions in buildings. As CARB conducts its various analyses on emissions and health, market and technology, building readiness, costs and affordability, regional assessment, and hopefully also workforce development, it should include all residential and commercial appliance categories. By including all end-uses in each initial analysis, CARB will have an apples-to-apples comparison of each appliance category to help it determine the appropriate timing and opportunity for zero-emission regulations for each appliance.

* * *

CARB's commitment to developing equitable zero-emission appliance standards demonstrates admirable ambition and national leadership. The co-signatories of this letter recognize the magnitude of this task and acknowledge that other agencies and entities across the state share the responsibility to ensure an equitable transition to non-polluting appliances. We look forward to supporting CARB and other agencies in the statewide pursuit of an equitable transition to pollution-free appliances by 2030.

Sincerely,

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(listed alphabetically by organization)

Appendix A



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August 18, 2022

Chair Liane Randolph
California Air Resources Board
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RE: In Preparation and Support for CA's Building Decarbonization Standards

We appreciate the opportunity to comment on the California Air Resources Board's (CARB) actions to reduce emissions from the building stock and deploy clean appliances, such as the proposals included in the State Implementation Plan (SIP) and Scoping Plan. We are supportive of these efforts, and recognize how groundbreaking they are in the building emissions space. **It is critical that the solutions improve public health and quality of life for environmental justice communities and frontline community representatives, produce good jobs and careers for Californians, and provide the consistency and certainty that is needed to create a healthy market for building decarbonization.**

To attain the public health and climate ambitions of these measures the State must commit to implementing and engaging in a truly transformational approach to the sector. The rate of change and the necessary measures for equitable and effective implementation requires a paradigm shift for how the government interacts with communities and stakeholders, and will require the State to invest at a level commensurate with its climate and clean air ambitions. Without a broader scope of

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complementary finance, workforce, and housing policies, CARB's emissions reductions policies for the building stock could miss a critical opportunity to foster these co-benefits.

We recommend that CARB convene a cross-sector working group to lead the process to carefully design and implement appliance emissions and pollution standards on newly sold appliances, particularly for existing buildings. Various stakeholders, including the Building Energy, Equity and Power (BEEP) Coalition, have been calling for such a working group.⁸ There is a clear need to convene a diverse collaborative of state and local agencies, labor representatives, manufacturers, distributors, home builders, developers, utilities, environmental stakeholders, and community-based organizations to address at least four primary topic areas: Inclusive Funding Options, Workforce Needs and Opportunities, Partnering with Community-Based Organizations, and Technical Compliance Pathways. **A working group offers an opportunity to bring together the multi-faceted perspectives and expertise needed to equitably address one of the largest sources of greenhouse gas emissions and local air pollution in California.**

CARB's authority as the responsible agency for SB32 goals offers a prime opportunity to convene cross-sector agencies and government entities including the state's Public Utilities Commission (CPUC), Energy Commission (CEC), Independent System Operator (CAISO), Workforce Development Board (CWDB), Governor's Office, Housing and Community Development (HCD), Department of Public Health (CPDH), Legislature, and others. These agencies should work with the aforementioned stakeholders and market actors to design complementary finance, workforce, and housing policies needed to equitably achieve climate goals. Community, environmental, and environmental justice stakeholders are already calling for these types of complementary policies in letters to local Air Quality Management Districts

⁸ [March 1, 2022 Building Energy, Equity and Power \(BEEP\) Coalition Letter to CARB re: Equitable Building Decarbonization - New Report](#) signed by Self-Help Enterprises; People Organizing to Demand Environmental and Economic Rights (PODER); The Greenlining Institute; Center on Race, Poverty, & the Environment; Central Valley Air Quality Coalition; Leadership Counsel for Justice and Accountability; Local Clean Energy Alliance; and Physicians for Social Responsibility - Los Angeles (PSR-LA).

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(AQMDs) and CARB, and we look to CARB to take a leadership role so that CARB and all AQMDs in the state move in the same direction with policies designed to meet local needs.^{9, 10, 11}

This letter outlines a set of recommendations that should be core to the implementation of any regulation to reduce emissions from the building stock and deploy clean appliances. The undersigned offer these recommendations as a starting point for further conversation and collaboration with CARB and the aforementioned cross-sector working group. The recommendations offered here reflect perspectives from conversations with and previous documents from the signatories below, including environmental and environmental justice stakeholders,^{12, 13} such as the Building Energy, Equity and Power (BEEP) Coalition's Preliminary Report¹⁴ and the California Environmental Justice Alliance's (CEJA) work on the Scoping Plan.

Implement Inclusive and Accessible Governance and Engagement Processes

To enable fair and equitable outcomes in building decarbonization, CARB should employ inclusive and accessible engagement processes to hear from impacted stakeholders, including environmental justice communities, frontline community representatives, workers, manufacturers, tenants, and others, so that the most marginalized and impacted communities are prioritized in the transition, and robust and

⁹ [October 15, 2021 Letter to Bay Area Air Quality Management District re: Regulation 9, Rule 4 & 6: Considerations to Center Equity](#) signed by Local Clean Energy Alliance, RMI, Menlo Spark, SPUR, Mothers Out Front Silicon Valley, Redwood Energy, GreenTown Los Altos, Hilary Bates Architecture, Pacifica Climate Committee, Carbon Free Silicon Valley, Marin/Sonoma Electrification Squad, Carbon Free Mountain View, San Francisco Climate Emergency Coalition, EHDD Architecture, DRAWDOWN Bay Area, Project Green Home, BeniSol LLEC, Climate Reality Project, Acterra, Peninsula Interfaith Climate Action, Sunnyvale Sustainability Commission, 350 Silicon Valley Palo Alto Climate Team, Natural Resources Defense Council, Sustainable Silicon Valley, Sierra Club, Earthjustice, CA Interfaith Power & Light, CALPIRG, Town of Fairfax Climate Action Committee, San Francisco Bay Physicians for Social Responsibility, San Carlos Green, Interfaith Climate Action Network of CCC, Climate Health Now, LWV Los Altos, and Silicon Valley Youth Climate Action.

¹⁰ [December 8, 2021 Letter to South Coast Air Quality Management District re: Comments on Proposed Draft NOx Stationary Source Measures for the 2022 Air Quality Management Plan \(AQMP\)](#) signed by People's Collective for Environmental Justice, Center for Community Action and Environmental Justice, California Environmental Voters, Coalition for Clean Air, RMI, Sierra Club, and Earthjustice, Comment letter 87 (pages 105-108).

¹¹ [January 21, 2022 Letter to CARB re: 2022 Scoping Plan Update - Advance Energy Justice and Democracy in Building Decarbonization](#) signed by PSR-LA, PODER, Self-Help Enterprises, Leadership Counsel for Justice and Accountability, Esperanza Community Housing, The Greenlining Institute, Local Clean Energy Alliance, Communities for a Better Environment, and Central California Asthma Collaborative, filed by Colin Miller on 1/24/22, available at: <https://www.arb.ca.gov/lispub/comm2/bccommlog.php?listname=sp22-buildings-ws>.

¹² [January 7, 2022 Letter to CARB re: Comments on California Air Resources Board's Development of the 2022 Scoping Plan Update](#) signed by RMI, Natural Resources Defense Council, Asian Pacific Environmental Network, Sierra Club California, and Association for Energy Affordability.

¹³ [March 4, 2022 Letter to CARB re: Building Decarbonization and the 2022 State Implementation Plan](#) signed by Natural Resource Defense Council, Building Electrification Institute, Association for Energy Affordability, Earthjustice, RMI, Sierra Club, and New Buildings Institute.

¹⁴ See Footnote 1.

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sustainable markets for electrification are developed and maintained.^{15, 16} CARB should work through the cross-sector working group to create an easy and transparent process that enables all stakeholders to communicate their needs and suggested approaches for the implementation of regulations, such as a zero-emission appliance standard. This transparent process should support CARB's forthcoming rulemaking to further develop, refine, and guide implementation of the recommendations introduced herein, and determine the timeline to get clean appliances installed in all communities.

Invest in Environmental Justice and Frontline Communities First

The State must develop a building decarbonization investment and financing plan that sets the pathway to finance and fund the adoption and installation of clean appliances throughout California. The plan should address all communities with a particular focus on the solutions needed to support environmental justice and frontline communities. In agreement with comments from environmental justice stakeholders, a combination of financing and incentives should ensure that low-income households pay nothing out of pocket.¹⁷ We feel that a broad range of creative funding options should be employed, including direct community grants, equipment incentives, contractor training scholarships, tariffed on-bill financing, and others to accomplish this. These complementary financing options should be accessible via a centralized platform so that customers, contractors, builders, and manufacturers are able to access information and apply for incentives in a simplified and streamlined manner. To prioritize the most marginalized and impacted communities, state and local agencies — including, but not limited to, housing, public health, and energy agencies — should collectively bring forward cross-sector funding streams and financing options to dedicate to home upgrades in environmental justice and frontline communities.

The plan must ensure that decarbonization investments happen in environmental justice and frontline communities first.^{18, 19} Many homes in environmental justice and frontline communities need enough lead time to remediate hazards like mold and lead, install structural and electrical upgrades before they can invest in clean appliances and associated upgrades. For instance, homes and commercial buildings need weatherization upgrades to improve insulation and ventilation as well as panel and circuit upgrades to accommodate the expected increase in electric demand. Additionally, renters (representing 44% of Californians) have unique needs to enable access to clean energy upgrades (See Partnering with Community-Based Organizations section below).

The cross-sector working group should define the types of remediation and upgrades needed as well as the programs and funding appropriate to address the respective barriers. The Solar on Multifamily Affordable Housing (SOMAH) and Transformative Climate Communities (TCC) programs are informative examples where environmental justice communities, through community-based organizations, are centered in design and implementation processes.

¹⁵ See Footnote 4.

¹⁶ See Footnote 1.

¹⁷ See Footnote 1.

¹⁸ See Footnote 6.

¹⁹ See Footnote 1.

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Ensure a Fair and Responsible Transition to Clean Appliances for Workers and Ratepayers

The overarching transition to clean appliances has the potential, if done intentionally, to maintain and create tens of thousands of jobs and careers with family-sustaining wages.²⁰ CARB and the cross-sector working group should coordinate with the California Workforce Development Board to identify workforce opportunities, utilize a skilled and trained workforce ready to achieve our decarbonizing goals, and expand and prioritize workforce pathways for impacted workers and potential workers from environmental justice and frontline communities.²¹ The State must pursue decarbonization pathways that preserve high-quality jobs and draw from a skilled workforce to ensure that infrastructure and decarbonization measures will perform properly and that the State gets the full benefit of the efforts.

The State must create a policy framework that can support a responsible transition that maintains safety, reliability, and affordability for all ratepayers. An investment that facilitates and enables neighborhood-wide building decarbonization and building upgrades, rate reform generally and specifically for decarbonization measures, and other efforts including funding to pay for the aforementioned creative funding options will need to be considered by the working group.

Ensure Utilities and the State Invest in Large-scale Infrastructure Upgrades and Electric Grid Modernization

While building decarbonization is not the sole driver for grid modernization, the success of building decarbonization initiatives requires a concrete approach to large-scale electric infrastructure upgrades and ensuring electricity service reliability. Historical inequitable practices and disinvestment – as well as ongoing lack of investment – mean that rural communities and some environmental justice and frontline communities are already in need of electric infrastructure upgrades to enable them to switch from propane and other heating fuels, as well as to improve quality and reliability of electricity service.²² Interagency coordination on grid modernization is critical as many communities also need electric transmission and distribution infrastructure upgrades so they can invest in clean technologies.

State agencies and the Legislature need to ensure that there is funding allocated for broad infrastructure upgrades, to be implemented at the community-level, to achieve the vision set forth in *California's Electricity System of the Future*.²³ CARB, CAISO, and CPUC must bear in mind the unpredictable impact of rare and catastrophic weather events on the grid, and work with cities and utilities to plan for not just reliability, but resiliency of the electrical system. Partnerships with manufacturers, distributors, city agencies, and utilities are critical to ensure that California's grid is modernized to be climate-resilient in the face of extreme weather and wildfire events. The State must bring forward diverse grid modernization funding streams and ensure that costs included in the rate base are recovered equitably.

Reform Electric Rates to Ensure Long-term Sustainability of a Decarbonized Future

²⁰ Jones, B., Karpman, J., Chlebnikow, M., Goggans, A. (2019). [California Building Decarbonization Workforce Needs and Recommendations](#).

²¹ See Footnote 1.

²² See Footnote 1.

²³ Newsom, G. (2021). [California's Electricity System of the Future](#).

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While CARB is not responsible for electric rate oversight, electric rate reform is critical to achieving the decarbonization goals set within CARB's authority. CARB should work through the cross-sector working group to ensure that rate reform is implemented and beneficial to all customers, especially those who are low-income and energy-burdened. Existing electric rate options are not well-suited for an affordable all-electric future, and although there are various ways building decarbonization, such as the replacement of old heating and air conditioning systems with new efficient heat pumps, can decrease energy burden, it's important to ensure that electrification doesn't harm already energy-burdened residents. These existing structures must be reformed to more accurately reflect cost of service and equitably allocate costs across customer classes, while also ensuring that environmental justice and frontline communities are reaping the benefits of clean appliances.²⁴ The CPUC is already considering rate reform proposals and the need to ensure affordability and that utilities are in the process of designing all-electric rates. There should be a proper analysis of proposed rate reforms and recommended solutions for rate reform put forth *before* enforcement of any new emissions standard.

Partner with Community-based Organizations in Implementation and Enforcement Activities

As outlined in previous comment letters to CARB, community-based organizations can have an important role to fulfill in the transition to clean appliances and more resilient homes.^{25, 26} They are trusted advisors in the communities they serve, making them integral to supporting community engagement, program enrollment, technical assistance, and customer protection.

The Health and Safety Code should already protect tenants from costs and potential displacement related to space and water heating requirements. Additionally, existing California law prescribes certain habitability and anti-harassment protections for tenants. While these policies are not directly related to emissions reductions policies, they are necessary complements to ensure that tenants can stay in their homes with affordable rents as homes are upgraded to improve efficiency and install clean appliances. To this end, building decarbonization can provide the state a clear opportunity to implement solutions to gentrification and displacement.

The cross-sector working group can identify ways to combine emissions reductions with strengthened enforcement of tenant protections such as:

- Tenant education and awareness,
- Mechanisms to prevent cost pass-through to tenants, and
- Tenant anti-harassment statutes.²⁷

The San Joaquin Valley Affordable Energy Pilots, the SOMAH program, and the phased approach for New York's Local Law 97 provide examples of how tenant protections can be implemented in future

²⁴ See Footnote 6.

²⁵ See Footnote 1.

²⁶ See Footnote 6.

²⁷ Kirk, C. (2021). [Los Angeles Building Decarbonization Tenant Impact and Recommendations](#).

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programs.^{28, 29, 30} Further, this is an opportunity to provide community-based organizations much needed incremental funding to support tenants in understanding their rights and aiding enforcement of existing and future tenant protections.^{31, 32} Ultimately, tenants should be protected and be able to benefit from a transition to building decarbonization.^{33, 34, 35, 36, 37}

Provide Alternative Compliance Pathways for Infeasible Situations

While electrification is technically feasible in almost all California climate zones, building types, and vintages, there are scenarios that do not yet have zero-emission technology alternatives that can operate on par with existing technology. For instance, efficient zero-emission water heaters widely available on the market today have challenges meeting needs of commercial operations that have continuous demand for hot water. As part of developing regulations, CARB should conduct a full technology assessment that builds upon previous work to identify feasibility gaps and lay out technological advancements planned and already underway. This can help determine which end uses may need alternative compliance pathways that allow for hybrid technology configurations until stand-alone zero-emission solutions become market-ready in all applications. Through the cross-sector working group, CARB should consider alternative compliance standards that are limited in scope, building type, timeframe, and climate zone. Additionally, CARB should coordinate with the CPUC as it holds proceeding on the future of natural gas. This proceeding may also help CARB identify geographies, appliances, timeframes, and other considerations as CARB sets standards or timelines to re-evaluate the need for alternative compliance pathways as technology develops.

Summary of Considerations & Recommendations

- Regulations such as appliance standards should not stand alone without the complementary policies and investments to address a series of stakeholder and market concerns and challenges.
- CARB should convene and lead a cross-sector working group to address key issues related to development and implementation of emissions regulations such as appliance standards. Key

²⁸ Gridworks. (2021). [Lessons Learned \(So Far\) In Targeted Building Electrification](#).

²⁹ Hunter, E. (2019). [San Joaquin Valley Pilots: Tenant Protection Principles & SOMAH Case Study](#). (Presentation).

³⁰ See Footnote 19.

³¹ For additional detail on funding needs and opportunities, see BEEP's Preliminary Report.

³² [September 17, 2021 Letter to the Environmental Justice Advisory Committee \(EJAC\) re: 2022 Climate Change Scoping Plan Update, Scenario Input Questions](#) signed by Communities for a Better Environment; the Center on Race, Poverty & the Environment; Comite Civico del Valle; PSR-LA; PODER; Leadership Counsel for Justice and Accountability; Center for Community Action and Environmental Justice; Asian Pacific Environmental Network; Environmental Health Coalition; and Central Coast Alliance United for a Sustainable Economy (CAUSE).

³³ [Energy Justice Statement on Rooftop Solar & Distributed Generation in California](#) issued by CAUSE, Environmental Health Coalition, Asian Pacific Environmental Network, California Environmental Justice Alliance (CEJA), the Greenlining Institute, and Leadership Counsel for Justice and Accountability, dated September 20, 2021.

³⁴ See Footnote 2.

³⁵ See Footnote 4.

³⁶ See Footnote 6.

³⁷ See Footnote 19.

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topics include, at a minimum, Inclusive Funding Options, Workforce Needs and Opportunities, Partnering with Community-based Organizations, and Technical Compliance Pathways.

- CARB should engage stakeholders through an accessible and inclusive process through the cross-sector working group to further develop, refine, and guide implementation of the recommendations introduced herein. Specifically, the working group should develop and implement approaches for:
 - Inclusive and accessible governance and engagement processes.
 - Financial reforms and investments to lower capital and operating costs below the level of gas appliances.
 - Prioritizing investments in environmental justice, low-income, and frontline communities.
 - Ensuring that workers are included in a fair and responsible transition through a robust investment in programs and policy frameworks.
 - Collaborating with authorities like the CPUC, CAISO, Legislature, and the Governor's Office to establish funding streams for infrastructure expansion and modernization.
 - Implementing electric rate reform that more accurately reflects cost of service and equitably allocates costs across customer classes, while also ensuring that environmental justice and frontline communities are capturing the benefits of clean appliances.
 - Partnering with community-based organizations to support implementation and enforcement activities.
 - Defining alternative compliance pathways limited in scope, building type, timeframe, and climate zone needed until technical feasibility gaps are closed and zero-emissions equipment are market-ready.

We applaud CARB's efforts to help California achieve its climate and clean air goals. We recognize the great responsibility of the task and the fact that California's air quality and climate goals will require cross-sector solutions that no one agency is responsible for. The co-signatories on this letter are available to assist CARB and its sister agencies in ensuring that actions to reduce building emissions improve the quality of life of all California's communities while avoiding new and mitigating existing hardships.

Sincerely,

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