

May 8, 2024

California Air Resources Board 1001 I Street #2828 Sacramento, CA 95814 *By Email and Online* 

#### Re: Equity Analysis for Zero-Emission Space and Water Appliance Standards Workshop

Dear Staff of the California Air Resources Board:

The Building Energy, Equity and Power (BEEP) Coalition intends to provide comments on the California Air Resources Board's (CARB) initial approach and questions for its Equity Analysis for the zero-emission space and water heater standards.

The BEEP Coalition includes representatives from Self-Help Enterprises; PODER; the Center on Race, Poverty & the Environment; the Central Valley Air Quality Coalition; Leadership Counsel for Justice & Accountability; Local Clean Energy Alliance; Physicians for Social Responsibility-Los Angeles; Central California Asthma Collaborative; and Emerald Cities Collaborative - Northern California. The BEEP Coalition represents environmental justice communities in various parts of the state. We formed for a simple reason: low-income communities and communities of color are being left behind in conversations about building decarbonization.

Members of BEEP attended the most recent workshop held on April 24 and were glad to see CARB undertaking a regional approach, as opposed to a singular statewide policy, and remaining open to ideas on how to conduct a comprehensive Equity Analysis to inform this approach. Our comments below will broadly offer a proposal for CARB's regional approach and responses to some of the questions raised in the April 24 workshop.

#### Proposed Regional Approach

Overall, BEEP proposes that CARB prioritize households that are <u>least ready</u> to comply with the zero-emission regulation and will benefit the most from the regulation, and support those communities to be able to comply. Historically, state and local governments have targeted energy efficiency and clean energy technologies to households most likely and ready to adopt. These households tend to be majority white and middle-to-high income, whereas the communities we represent are low-income and communities of color. We see a tremendous opportunity for CARB to address the chronic disinvestment and neglect of our communities by designing the regulation in a manner that enables these communities to immediately comply. To help achieve that end, CARB should take an approach to balance both building *and* community readiness to ensure community members are ready and empowered to comply with the regulation and capture the health, cost, and energy benefits from zero-emission appliances and any necessary upgrades.

The following recommendations detail a proposed regional approach that CARB can take to identify the households that need the most support to comply with the regulation.

- Define regions by utility service areas. This will allow CARB to create a more accurate estimate of available incentives, including those from local air districts or local governments. For a large service area (like PG&E), CARB should explore subdividing that service area into smaller regions that correspond to air district boundaries.
- 2. Identify the distribution system needs within each region, and how many households are potentially affected by having insufficient distribution capacity in their communities for full electrification. Include data on the demographics and income of those households.
  - a. Use distribution system hosting capacity maps prepared by investor-owned utilities (IOUs), such as <u>PG&E's Integration Capacity Analysis (ICA) and</u> <u>Distribution Investment Deferral Framework (DIDF)</u>, to identify the hosting capacity and grid needs of an IOU's electric distribution grid and the areas where electric grid capacity cannot yet accommodate electrification. *While this may not* be needed for the appliances in the current scope of the rule, CARB should still consider this analysis if the final rule includes other appliances and if CARB is committed to aligning with other state agencies on advancing full electrification.
- 3. Work with the California Public Utilities Commission (CPUC), relevant utilities, or local governments to identify the total number of households in each region, including the demographics and income level of those households.
  - a. Assess how many homes were built before 1978<sup>1</sup> that likely need electrical upgrades and insulation prior to complying with a zero-emission appliance standard.
  - b. Estimate by region the cost range for those upgrades.
  - c. Work with the CPUC, the California Energy Commission (CEC), local air districts and others to identify the incentives available by region to support households to become electrification-ready.
    - i. Identify any potential gap between the estimated costs of appliances and necessary upgrades, and the range of available incentives.
    - ii. Identify which of these incentives are rebate-based versus no-cost direct installation programs.
- Coordinate with the California Department of Housing and Community Development (HCD) and local governments on identifying areas with and without protections to prevent tenant displacement that may stem from the regulation and pursuing

<sup>&</sup>lt;sup>1</sup> Existing homes <u>built before 1978</u> when the state's first Building Energy Efficiency Standards were developed are likely to have energy upgrade needs.

anti-displacement solutions in concert with the regulation.

a. See this <u>White Paper on Anti-Displacement Strategy Effectiveness</u> by UC Berkeley and UCLA developed for CARB in 2021 and SAJE's <u>Decarbonizing</u> <u>California Equitably: A Guide to Tenant Protections in Building</u> <u>Upgrades/Retrofits Throughout the State</u>.

Once CARB has obtained or developed this data, staff should coordinate with the CPUC and CEC on prioritizing households with the greatest needs to become regulation and electrification-ready:

- Review <u>CPUC's Staff Proposal on Gas Distribution Infrastructure Decommissioning</u> <u>Framework in Support of Climate Goals</u> in Rulemaking 20-01-007 to align with CPUC's proposed phased approach to gas decommissioning by first prioritizing areas with the highest community burdens<sup>2</sup> and likelihood of seeing the highest benefits from decommissioning.
- Work with the CPUC and CEC to ensure increased electricity demand will not further harm frontline communities through expanded polluting infrastructure.
- Work with the CPUC to ensure decommissioning happens in a manner that does not exacerbate potential safety issues from reduced throughput on older lines, as identified in <u>Gridworks' "Gas System in Transition" report</u>.

Statewide issues that will be consistent across regions - such as inadequate transmission infrastructure, lack of funding for non-electrical upgrades or remediation, or inadequate protections to prevent tenant displacement - should be identified and solutions pursued in partnership with other agencies and the California Legislature.

# Responses to Select Workshop Feedback Questions

#### Modeling Assumptions

Do you have recommended approaches for estimating non-service panel related readiness factors, for which there is little statewide data?

- 1. Overall, BEEP recommends taking a holistic home approach that targets not only energy and GHG reduction benefits but also health, safety, comfort, and affordability.
  - a. Assess pre-1970 homes built before strict regulations on lead or asbestos were broadly implemented to determine readiness based on the home and health upgrades needed before installing new clean energy technology.
  - b. Review RMI and AEA's <u>assessment</u> of multifamily housing stock (pages 4-5) through the <u>REALIZE-CA project</u>.

<sup>&</sup>lt;sup>2</sup> The Staff Proposal characterizes community burdens as environmental and health burdens, economic burden, affordability, and gas usage, and uses CalEnviroScreen and the CPUC's Environmental and Social Justice (ESJ Action Plan).

- c. Review local governments' Housing Elements to better understand housing needs and county-level plans for preserving and improving housing.
- d. Leverage the CEC's <u>Equity Map</u> as a starting point to identify where energy efficiency and clean energy investments have been distributed. Where energy efficiency investment and participation has been low, one could infer that those homes are in need of retrofit.
- e. Consider the health risks and benefits of any eligible appliance in the final rule. For example, see the <u>2019 Residential Appliance Saturation Survey (RASS)</u> for information about evaporative cooler adoption in CA and energy use (Tables 14-16) and the potential risk of worsening indoor air quality.

# Air Pollution and Health Impacts

Any recommended studies or data sources to supplement our discussion of health impacts from a potential measure, especially the potential benefits for historically overburdened communities?

- 1. Review the studies considered in the BAAQMD's health impacts analysis of its appliance rules 9-4 and 9-6.
  - a. <u>Assessing Ambient Air Quality and Health Impacts from Natural Gas Appliances</u> <u>in the Bay Area: Supplemental Information for Proposed Amendments to</u> <u>Regulation 9, Rule 4 and Rule 6</u> by BAAQMD
  - b. <u>Draft Amendments to Building Appliance Rules Regulation 9, Rule 4: Nitrogen</u> <u>Oxides from Fan Type Residential Central Furnaces and Rule 6: Nitrogen Oxides</u> <u>Emissions from Natural Gas-fired Boilers and Water Heaters by BAAQMD</u>
  - c. RMI's <u>brief on building appliance air pollution</u>. The slides are attached <u>here</u>.

# **Energy Availability**

What additional data sources, case studies, and/or reports should staff consider to characterize energy availability? Recommended data sources for describing access to electricity and/or gas distribution infrastructure?

- 1. Look into utilities' interconnection maps, which show where solar and renewable energy can be installed to meet the demand of electricity, such as Southern California Edison's <u>Distributed Energy Resources interconnection map</u>.
- Review the <u>Kevala Electrification Impact Study</u> for distribution grid needs based on transportation electrification goals and the California Public Advocate's Office <u>Distribution System Study</u> as a response to the Kevala Study.
- 3. Relatedly, CARB should consider how appliance standards implementation will coordinate grid needs with transportation electrification.

# **Displacement Risk & Policy Protections**

Sources for case studies on anti-displacement policy effectiveness and enforcement?

1. See this <u>White Paper on Anti-Displacement Strategy Effectiveness</u> by UC Berkeley and UCLA developed for CARB in 2021 and SAJE's <u>Decarbonizing California Equitably: A</u> <u>Guide to Tenant Protections in Building Upgrades/Retrofits Throughout the State</u>.

### Other Demographic Indicators

How should other demographic indicators be included in our regional equity analysis? What questions would be meaningful for us to report on?

1. Include disability and customers enrolled in the Medical Baseline program.

### **Case Studies**

What other case studies would you encourage us to include? Can you share data related to these cases?

- 1. Mobile home residents in a rural neighborhood with high cooling needs to combat extreme heat days.
- 2. Emergency replacement scenario in a low-income home with elderly and/or disabled residents who cannot afford the upfront costs of the necessary upgrades needed to accommodate the technology and cannot vacate their home for an extended period time during construction.

BEEP again appreciates CARB staff's commitment to advancing equity in its appliance standards regulation and their willingness to integrate input from our coalition and other stakeholders as we see aspects of our input reflected in the development of the regulation. We look forward to continuing to work with CARB to ensure the regulation provides benefits and does not perpetuate harm in the communities we represent.

If you have any questions about our position, please do not hesitate to reach out to us. Thank you for your time and consideration of these comments.

Sincerely:

**BEEP** Coalition