

DATE: February 22, 2023

TO: Energy Council

FROM: Jennifer West, Program Manager

SUBJECT: Decarbonization and Electrification update

SUMMARY

Decarbonization and electrification of buildings is one of the StopWaste Board's adopted legislative priorities, and a focus area of our externally-funded program work in the built environment. The majority of our electrification initiatives are funded through the Bay Area Regional Energy Network (BayREN), which is a collaboration of the Association of Bay Area Governments (ABAG) and public agencies representing the nine Bay Area counties. This work is important not only because it reduces greenhouse gas emissions, but also because it helps reduce indoor air pollution and stimulates investment in the local economy. At the February 22 Board meeting, staff will provide an overview of how electrification can create multiple benefits in communities, the role StopWaste plays in advancing this work, and also some of the challenges and barriers associated with accelerating the transition from gas to electricity in our buildings.

DISCUSSION

Building electrification and decarbonization has been a priority area for Energy Council programs and fund seeking since 2016. This work aligns with StopWaste's efforts to achieve multiple benefits for the communities we serve, including reduced greenhouse gas emissions, improved public health, and increased investment in our local economy. Decarbonization has three parts: maximize energy efficiency and reduce energy use, use a less polluting source of electricity (like renewables), and electrify all end uses possible.

The State of California has adopted aggressive policies and targets to reduce emissions, aiming for carbon neutrality by 2045. For example, the California Air Resources Board (CARB) adopted an update to the AB 32 Climate Change Scoping Plan in December 2022 requiring a planned phase out of sales of 80 percent of gas appliances by 2030. The state also announced its intention to end the sale of gas heaters and gas water heaters by 2030. Our efforts regionally and locally align with these policies, with a focus on providing incentives, market development assistance for contractors, and public outreach and education.

The purpose of electrification is to reduce the pollution from buildings that rely on fossil gas for heating and water heating, as well as other smaller gas uses. One example of building electrification is replacing a gas water heater with an electric heat pump water heater (HPWH). That HPWH is three to five times more efficient and it uses no gas. Policies and programs designed to advance electrification of buildings include incentive programs to lower the cost of new equipment and the cost of installations as we transition building systems from gas to electricity, providing model codes and standards directing new construction and alterations for existing buildings, outreach and education programs for contractors, outreach to consumers with demonstrations and loaner induction cooktops, training on new technologies for contractors, and sharing information about funding to support these efforts.

StopWaste contributes to advancing electrification in buildings by leading on program design and implementation for multifamily buildings and green labeling of homes. We administer a regional HPWH contractor incentive program that is funded by Community Choice Aggregators, including East Bay Community Energy. We support member agencies by providing support on policy development and code education, as well as conducting outreach to property owners about available incentives.

Below are StopWaste's key roles in advancing this work:

- Leading on BayREN's multifamily program, Bay Area Multifamily Building Enhancement (BAMBE), with incentives supporting electrification
- Adding an Electrification Checklist to the Home Energy Score program
- Conducting outreach to homeowners on electrification incentives for Home+, a single-family BayREN program
- Administering the Regional HPWH Contractor Incentive Program in six counties and one city
- Providing training opportunities for workforce through state and regional programs
- Tracking and supporting jurisdictions as they implement reach codes for all-electric or electric preferred buildings
- Convening our monthly Technical Advisory Group (TAG) meeting for peer to peer sharing on what jurisdictions in Alameda County are working on in terms of electrification

RECOMMENDATION

This item is for information only.