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Rheem Manufacturing Company Comments on Equitable Building Decarbonization Direct Install Program

Additional submitted attachment is included below.



June 30, 2023

California Energy Commission
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RE: Rheem Manufacturing Company Response to CEC: Docket #22-DECARB-03

Rheem Manufacturing Company ("Rheem") appreciates the opportunity to submit the following comments to inform draft guidelines for the Equitable Building Decarbonization Direct Install Program.

Rheem is an industry leader for total heating, cooling, and water heating solutions and one of the few global brands with product offerings covering residential and commercial heating, cooling, conventional and hybrid storage water heaters, tankless water heaters, solar water heating systems, pool and spa heaters, commercial boilers, residential hydronic and geothermal systems, indoor air quality accessories, and replacement parts for all categories. Rheem, headquartered in Atlanta, Georgia, manufactures in Oxnard, California; Fort Smith, Arkansas; Montgomery, Alabama; Scottsboro, Alabama; and Waterbury, Connecticut, and operates distribution facilities throughout the US, Canada, and many other countries around the world.

Rheem supports the goals and objectives of the California Energy Commission's (Commission) Equitable Building Decarbonization Program to reduce greenhouse gas emissions and advance energy equity. Throughout the 2022 California State Legislative Session, Rheem engaged the California Legislature in support of a comprehensive building decarbonization plan and was pleased that the Legislature and Governor agreed to multi-year building decarbonization investments totaling more than \$1 billion. State investment combined with federal resources through the Inflation Reduction Act are critical to achieving California's climate goals and building decarbonization strategy deploying 6 million heat pumps statewide by 2030.¹

<u>Chapter 2, Statewide Direct Install Program</u> <u>8. Section I, Eliqible Measures</u>

Rheem supports the Direct Install Program guidelines that prioritizes replacement of existing gas-fired heating equipment with a heat pump for space heating and cooling and a gas-fired water heater with a heat pump water heater.

¹ https://www.gov.ca.gov/2022/07/22/governor-newsom-calls-for-bold-actions-to-move-faster-toward-climate-goals/



Heat pump for space heating and cooling

The program establishes eligibility details as meeting the highest efficiency tier (not including any advanced tier) established by the Consortium for Energy Efficiency (CEE). Rheem notes that there are regional criteria associated with this product type in the CEE Electric Equipment Specifications. California is clearly designated as being in the region "Southwest" in the CEE specification, therefore it is logical that only the criteria pertaining to *Air Source Heat Pump – South* would apply. Nevertheless, it would provide helpful clarity for the Commission to clearly state the applicable CEE region when providing eligibility criteria, lest the regions for funding allocations be mistakenly confused for region applicability of the CEE specification.

Heat Pump Water Heater (Unitary)

Rheem generally supports measure eligibility criteria included in the Commission's draft guidelines, table 4, and recommends utilization of existing Qualified Product Lists to enable streamlined eligible product identification. Additionally, the Commission should clarify that enumerated standard(s) and specifications NEEA, JA13 and CEE are all mandatory or noted to provide alternate pathways for eligibility.

Heat Pump Water Heater (Central)

Rheem recommends anchoring all central heat pump water heater criteria to the Commission's Central Heat Pump Water Heater Performance Map Certification List and removing the optionality of a non-listed central heat pump water heaters that use carbon dioxide as a refrigerant. Although we acknowledge central heat pump water heaters utilizing carbon dioxide, there is no reason to include this specific working fluid as a condition of product eligibility if the product is not also listed on the Commission's Performance Map.

Ineligible Measures

The program description indicates that "Any new system or equipment that uses natural gas, propane or any other fossil fuel" are not eligible for funding. Rheem would suggest that the Commission consider the necessity and efficiency of back-up gas furnaces to heat pumps and consider these systems eligible. In colder California climates and where cold climate heat pumps are not widely available, emergency heating could be necessary. Electric resistance is a much less efficient source of secondary heat.

<u>Chapter 2, Statewide Direct Install Program</u> <u>9. Section J, Pricing and Cost Caps</u>

A Direct Install Program that includes average electrical cost caps provides an opportunity to implement low-cost measures to electrify space and water heating, cooking and clothes drying. With the requirement to electrify at least two of the four eligible end uses and the imposition of an average per-home/unit cost cap for electrical and remediation measures, the Commission





should prioritize installation of electric appliances that do not require an electric panel upgrade.² The availability of dedicated as well as shared circuit 120-volt heat pump water heater models provide the functionality as a drop-in replacement for a gas storage water heaters without the need to upgrade electric panel service, safety or remediation costs. These products are well suited for most of the climate zones in California.

In a multifamily residential setting, such as an apartment complex, where the Commission pursues a zonal electrification plan, significant and substantial energy and climate benefits accrue from low-cost appliance upgrades to water heating and cooking equipment utilizing the unit or homes existing electrical panel. The application of these products is scalable enabling the Commission to accomplish the programs twin foundational goals of reducing greenhouse gas emissions and advancing energy equity. By bundling water heater electrification projects addressable from low-cost, plug-in heat pump water heaters, the Commission can select higher per-home/unit electrical remediation measures in more costly market segments and ensure that the Direct Install Program serves all housing types of low- and moderate-income Californians.

In conclusion, Rheem appreciates the opportunity to provide comments and is pleased that the State of California plans to move forward expeditiously in developing a statewide building decarbonization program.

Sincerely,

Matt Thornblad
Senior Public Policy and Communications Director
Rheem Manufacturing Company

CC: Karen Meyers



² Equitable Building Decarbonization Program Direct Install Program Draft Guidelines, May 4, 2023, page 12 (accessed June 28, 2023)