

# Proposal for Building Appliances Rebate Program

*January 31, 2024*



# Introduction

- South Coast AQMD is developing a program to help residents replace existing space and water heating equipment with zero-emission units
- Expecting program to launch in the second half of 2024
- Incentive program will be funded by Rule 1111 and Rule 1121 mitigation fees
- 75 percent of the funding will be allocated for overburdened communities



# Incentive Programs Needed to Meet 2022 AQMP Goals

Five control measures for building appliances adopted in 2022 AQMP

Zero-emission standards for space and water heating, cooking, and other appliances

Hurdles to implementation include costs (e.g., capital, installation, and operational) and consumer acceptance

Incentives can address cost for overburdened communities

# Previous Clean Air Furnace Rebate Program



**First phase (2018-2019)**  
incentivized early  
deployment of  
14 ng/J NOx furnaces

**Second phase (2020-2023)**  
incentivized all-electric  
heat pumps

- \$1,500 rebate per unit



**\$6.5 million allocated to  
rebate program**

25% funding reserved and  
spent for installations in  
disadvantaged and low-  
income areas



**Funding exhausted in  
2<sup>nd</sup> Quarter 2023**

2,400+ heat pumps installed

# Objectives of the Clean Air Appliances Rebate Program

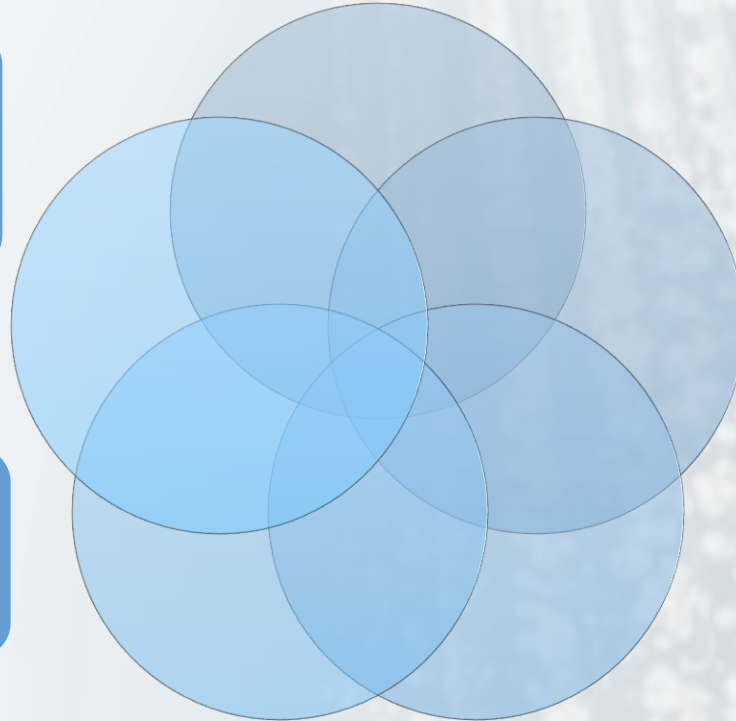
Dedicate significant percentage of funds to overburdened communities to increase zero-emission technology adoption

Maximize funding through collaborating with local, state, and utility programs

Incentivize consumers to replace NOx-emitting appliances with zero-emission appliances

Promote outreach to end users

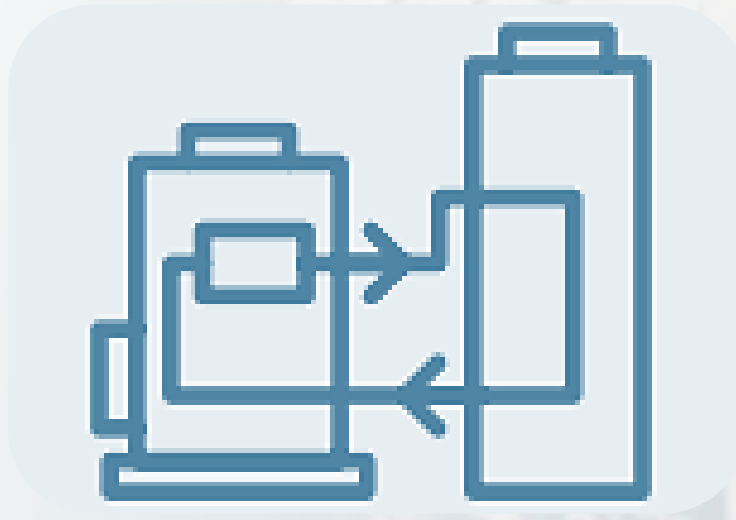
Explore opportunities to partner with other organizations to facilitate workforce training



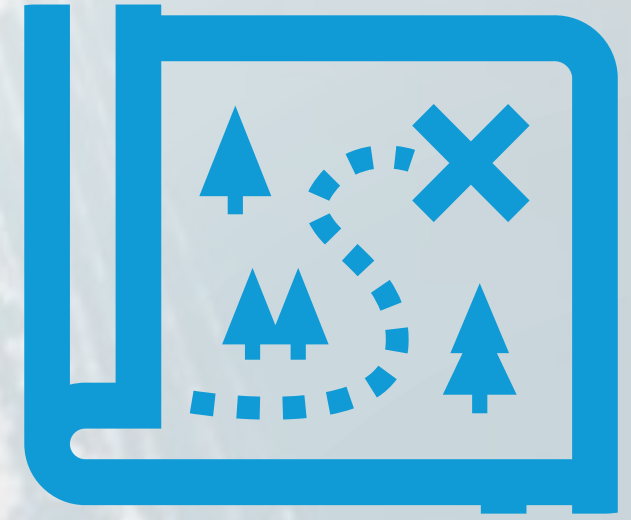
# Implementation Approach



Public meetings to gain stakeholder feedback on program details



Initial phase focused on all-electric heat pumps for space and water heating



Third-party contractor will administer the program

# Initial Concept for Phase One: Zero-Emission Space and Water Heating

75% funding for overburdened communities identified under SB 535 (based on CalEnviroScreen)

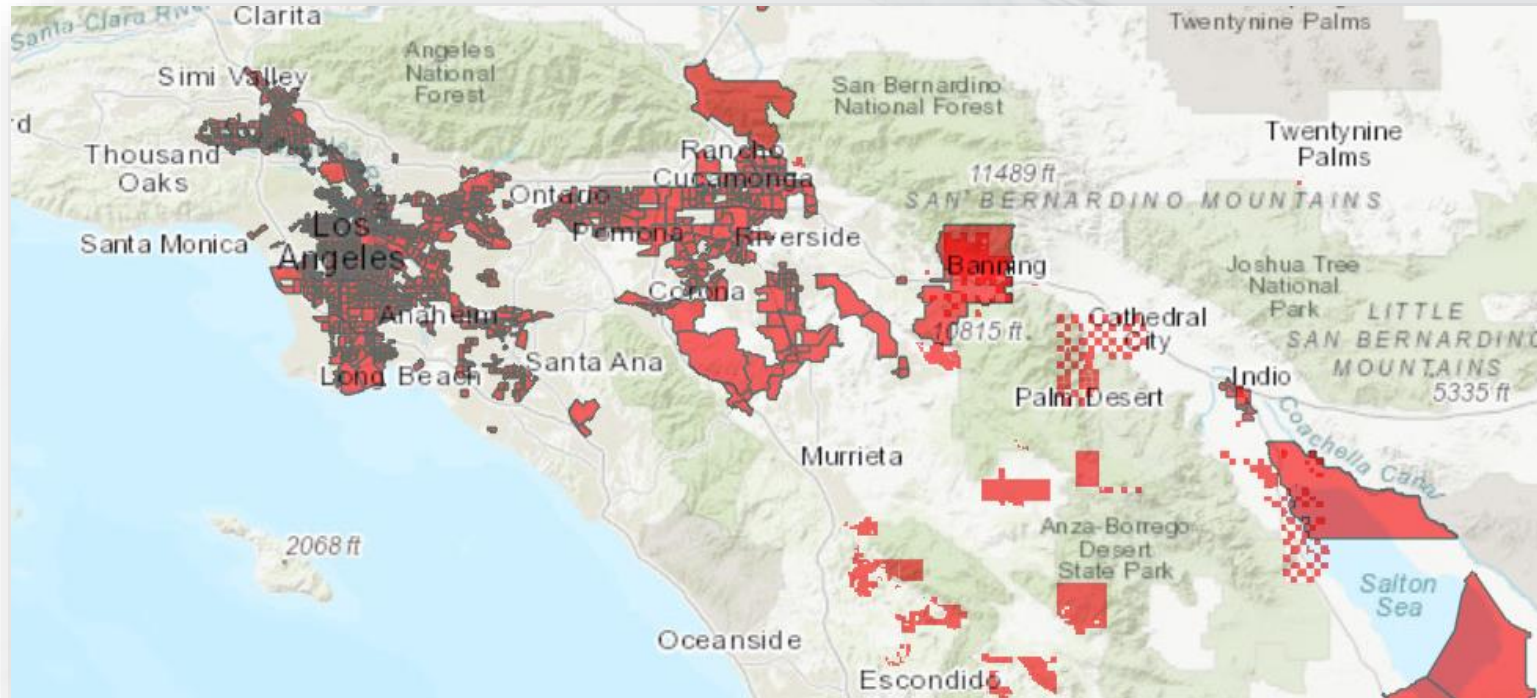
\$10 million initial funding  
Single family (\$8 million) &  
Multifamily (\$2 million)

- Seeking public input on funding allocation
- Funding source: Rules 1111 and 1121 space and water heater mitigation fees
  - Current balance of \$77 million (as of October 2023)
- Consider bifurcating single family and multifamily rebate programs

Although unknown until the Request for Proposal bids are received for third-party administration, the admin cost is expected to range between 5-20% of funding

# Overburdened Communities

Communities identified under SB 535, based on CalEnviroScreen



<https://oehha.ca.gov/calenviroscreen/sb535>



# Cost of Heat Pumps

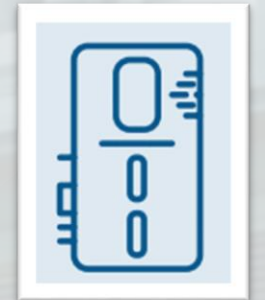
## Heating, Ventilation, and Air Conditioning (HVAC)

- Incremental cost for heat pump ranges from cost savings of \$1,000 (for heat pump replacing furnace and AC) to cost of \$9,000 (for heat pump replacing only furnace)\*



## Water Heating

- Incremental cost for heat pump ranges from under \$1,000 to \$3,000\*



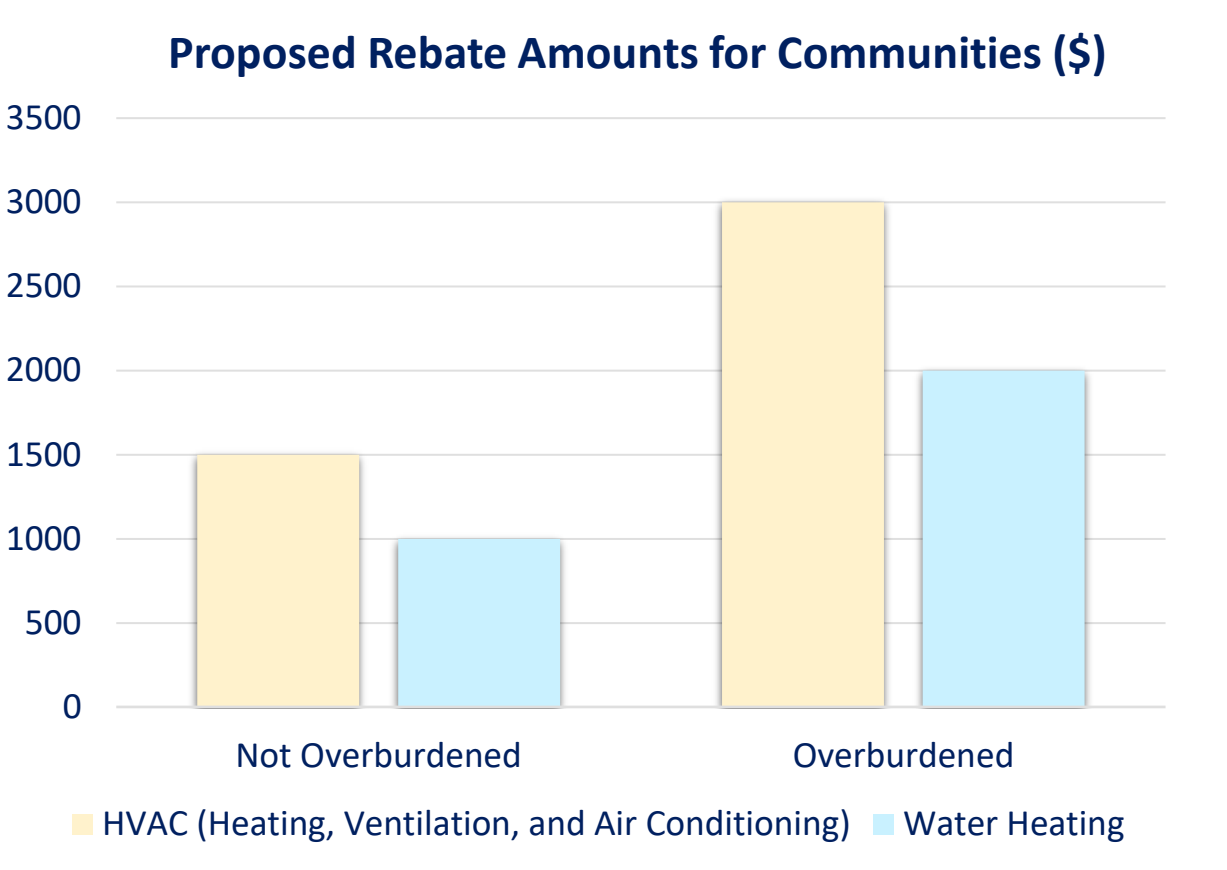
Appliance	Heat Pump*	Conventional Unit**
HVAC	\$18,500	\$10,000***
Water Heater	\$5,700	\$2,700

\* Average Project Cost Per Residence (January 2024): <https://techcleanca.com/>

\*\* Multifamily gas unit installation costs from E3 2019 Residential Building Study

\*\*\* Gas furnace and air conditioning

# Heat Pump Rebates for Single-Family Homes



**Heating, Ventilation, and Air Conditioning (HVAC):**

- **\$1,500** rebate for HVAC
- **\$3,000** rebate for overburdened communities

**Water Heating:**

- **\$1,000** rebate for Water Heating
- **\$2,000** rebate for overburdened communities

# Incentives for Multifamily Units

Incentives can further encourage adoption of zero-emission technologies in overburdened communities

Heat pump rebates for multifamily:

- **\$1,500-\$2,000** per Heating, Ventilation, Air Conditioning Unit
  - **\$3,000** or more for overburdened communities
- **\$1,000-\$2,000** per Water Heating Unit
  - **\$2,000** or more for overburdened communities
- Total capped at **\$350,000 - \$500,000** for each property
- Multifamily: five or more apartments
- Consider measures to discourage owners from passing costs through to renters

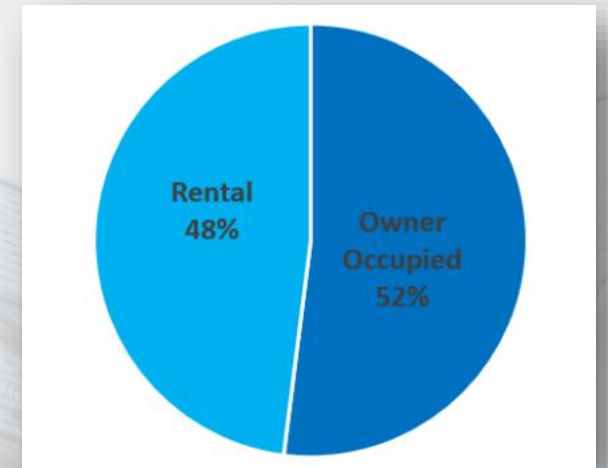
TECH Clean California, a state-wide program, launched an initial phase of multifamily rebates in June 2023 and exhausted over \$4 million in funding

TECH launched a second phase of multifamily rebates in September with over \$3 million in funding

# Challenges for Multifamily Incentives

Many residents live in tenant-occupied multifamily homes

- 48% percent of residential structures in our jurisdiction
- Property owners rather than tenants would make decisions to replace space or water heating equipment
  - Less motivated to choose zero-emission units
- Tenants could be impacted by increased rent due to the cost of replacing appliance
- Other challenges for multifamily incentives include:
  - Effective outreach to property owners
  - Communication on technology, program funding, and stacking rebates from different programs
  - Facilitating workforce development and training



*Figure 2 from 2022 AQMP Policy Brief on Residential and Commercial Building Appliances*

# Residents Could Stack Federal and State Incentives with South Coast AQMD Rebates

Federal Tax Credits – Available Through 2032

Federal Rebates – Forthcoming mid-2024

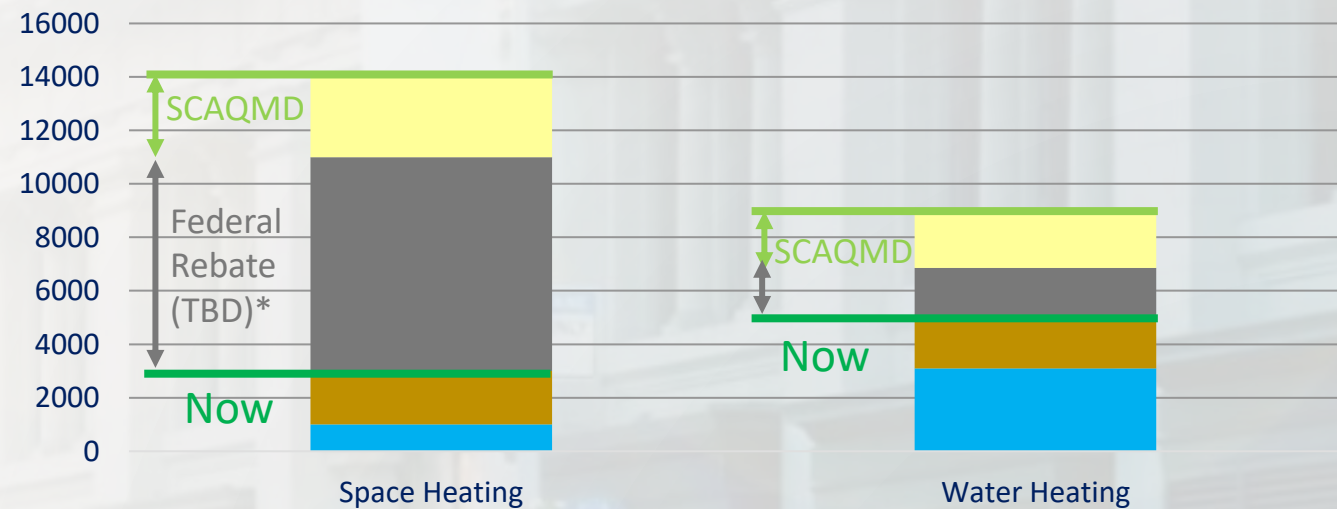
State Rebates – Available Now

Stacking South Coast funding with forthcoming federal rebates will help residents adopt zero-emission technology earlier:

- More incentives for overburdened
- Up to \$14,000 for space heating
- Over \$8,000 for water heating

\*Assuming California will set the federal rebate amounts at the maximum U.S. DOE allows

Proposed South Coast AQMD Rebate will Increase Available Incentives



- Proposed South Coast AQMD Rebate
- Federal Rebate (IRA, forthcoming, amount TBD, layering uncertain)
- Federal Tax Credit (IRA)
- State Rebate (TECH Clean California)

# Overview of Other State and Federal Incentives

## Federal Incentives: Inflation Reduction Act (IRA)

- Rebates up to \$8,000 for heat pumps anticipated Summer 2024
- Tax Credits available now through 2032
  - \$2,000 or 30% of cost (including installation), whichever amount is lower

## State Incentives: TECH Clean California Rebates – Current Phase

- \$100 million for single-family heat pumps since April 2023, around half for equity customers
- \$2.8 million for multifamily heat pumps in September 2023, \$360,000 cap per property owner

Unit Serving	Multifamily Rebate
Per apartment	Up to \$2,000
Electrical upgrade	\$2,000

Unit Serving	Single-Family Rebate
HVAC	\$1,000
Water Heating	\$3,100

# State and Utility Incentive Programs

## State GoGreen Financing for Low-Income Communities

- Financing/loans for energy upgrades in single-family and multifamily homes
  - Residents can finance heat pump HVAC or water heater

<https://www.gogreenfinancing.com/>

## Southern California Edison

- Electricity discounts to customers who qualify for bill assistance through Family Electric Rate Assistance (FERA) or California Alternate Rates for Energy (CARE)

<https://www.sce.com/residential/assistance/fera-care>

- Due to high demand, LADWP sunset their AC Optimization Program rebates for HVAC system replacements in August 2023

# Next Steps

Further develop details of rebate program through public process



Seek Board approval to:

- Fund pilot program with \$10 million
- Issue RFP for third-party contractor to administer program in phases

Tentative Date	Anticipated Action
January-February 2024	Hold at Least Two Public Meetings
March 2024	Stationary Source Committee Meeting
April 2024	Release RFP
July 2024	Anticipated Program Launch



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