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# SCE Building Electrification Application Overview

CEC Efficiency Division Staff Workshop on Heat Pump Goals, Supply Chain, and Programs

## **Panel 2: Heat Pump Programs & Implementation**

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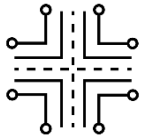
SCE filed a \$677M application with the CPUC in December seeking approval for new Building Electrification (BE) Programs

## Motivation and Priorities

### *The Building Gap*



BE Critical to CA GHG Reduction.  
Urgent action needed to avoid  
missing state climate goals



CPUC and IOUs can play critical  
role to facilitate nascent markets

### *Equity and Affordability*



Increase program access and  
adoption from environmental  
and social justice (ESJ)  
communities



Increased electrification improves  
overall affordability through  
downward rate pressure

## Application Highlights

### 4 Year Portfolio

- 2024-2027
- Retrofits:
  - 250k Heat Pumps
  - 65k Electric Panel/Circuit Upgrades

### Marketing and Outreach

- Cities and CBOs
- Equity communities
- Contractors and Installers
- Coordination with existing programs



### BE Ready Home & Catalina

SF and Small MF ( $\leq 20$  units)

#### BE Ready<sup>SM</sup> Home Assessment

Home Electrification Readiness  
Rate and Bill Impacts

#### Upgrade Subsidies

- Increased incentives for ESJ and LI customers

Heat Pumps  
Water Heaters  
Electric Panels & Circuits



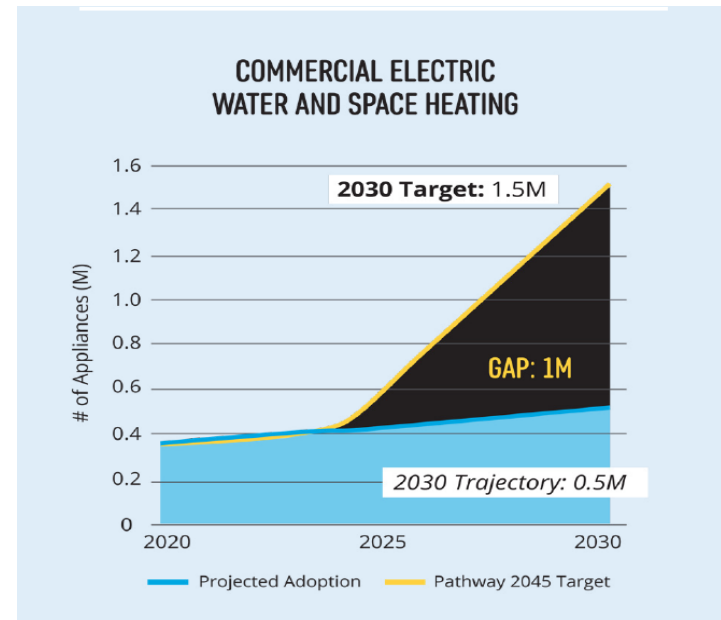
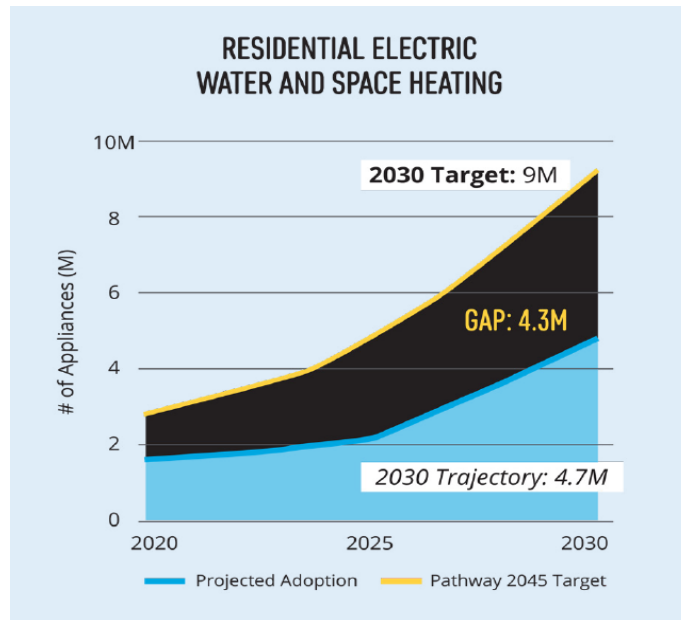
### BE Business

#### HVAC Incentives & Technical Assistance

Additional incentives for businesses in equity communities

# Progress on Building Electrification is Too Slow and Needs to Accelerate

- SCE's Pathway 2045, a strategic plan for carbon reduction, demonstrates the need for 30% penetration of electric heat pumps for water and space heating in California by 2030 and 70% by 2045
- SCE's analysis indicates that California will fall short of reaching the heat pump targets needed to meet the goals in SCE's Pathway 2045 if the state stays on its current trajectory



# Benefits of Building Electrification and this Application



## Equity to Vulnerable Populations

- Increased benefits for low-income and ESJ customers
- Carved out funds for ESJ



## Ready the Market

- Address 15% of BE gap
- Enable maturation and scale
- Catalyze production



## Local and Indoor Air

- Reduce NOx and fine particulate matter pollution
- Enable electrification benefits



## Consumer Savings

- \$3 per year decrease for residential customers after program
- \$510m in participant savings



## Economic Development

- Incremental electrification jobs
- Significant share in DACs per CEC estimates



## Climate



- Reduce GHG emissions
- Est. 3.5 mmt CO2 abatement over life of program



## Energy System

- Reduce electric peak demand by 18 MW
- Cut overall energy use

# Key Program Elements

SECTOR	PROGRAM	TARGET CUSTOMER	BARRIERS	PROGRAM OVERVIEW	GOALS/TARGETs
 <b>RESIDENTIAL</b>  88% of funding	BE Ready <sup>SM</sup> Home	<ul style="list-style-type: none"> <li>Single-family</li> <li>Multifamily Properties (<math>\leq 20</math> units)</li> <li>Disadvantaged Vulnerable Communities (DVCs)</li> <li>Low-Income Customers (200% FPG OR <math>\leq 60\%</math> of AMI)</li> </ul>	<ul style="list-style-type: none"> <li>Awareness – Preconceptions about electric equipment</li> <li>Inadequate Electric Panels –Approx. 75% of HHs in SCE service territory are pre-1978</li> <li>First Costs</li> </ul>	<ul style="list-style-type: none"> <li>Residential electrification readiness assessments or “BE Ready” retrofit assessments; Digital and In-Home</li> <li>Low- or no-cost electrical upgrades (electric panel, circuits, etc.)</li> <li>Midstream Equipment incentives for space and water heat pumps.</li> <li>Utilization of CBOs to engage equity communities.</li> <li>Higher Tier incentives for Equity customers</li> </ul>	<ul style="list-style-type: none"> <li>200K In-Home Assessments</li> <li>64K Electric Panel Upgrades</li> <li>66K HP HVAC installations</li> <li>131K HPWHs installations</li> </ul>
	BE Ready <sup>SM</sup> Catalina	<ul style="list-style-type: none"> <li>Single-family</li> <li>Multifamily</li> <li>Renters – ~76% of HHs</li> </ul>	<ul style="list-style-type: none"> <li>Access – limited replacement options on island</li> <li>Acquisition Cost – transporting equipment to island</li> <li>Hassle Factor</li> <li>Lack of appliance installers, plumbers</li> </ul>	<ul style="list-style-type: none"> <li>Midstream/Downstream Equipment incentives for HPWH, HP HVAC, Induction Cooking and Clothes Dryers</li> <li>Fuel Substitution Kickers</li> <li>Manufacturer/Reseller support <ul style="list-style-type: none"> <li>Logistical support for transporting and warehousing of equipment</li> <li>Consumer events bringing resellers, installers, and residents together</li> <li>Bulk purchases of equipment to increase of availability and reduce costs</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>1,259 HPWH installations</li> <li>630 HP HVAC installations</li> <li>378 Induction Range/Cooktops installations</li> <li>165 Clothes Dryers installations</li> </ul>
 <b>NON-RESIDENTIAL</b>  12% of funding	BE Non-Res	<ul style="list-style-type: none"> <li>Small-to-Med Business</li> <li>Large Commercial Customers</li> <li>Equity Communities</li> </ul>	<ul style="list-style-type: none"> <li>First Costs</li> <li>Lack of awareness</li> <li>Natural gas infrastructure status quo</li> <li>Resistance to new technologies</li> <li>Need of technical/design assistance</li> </ul>	<ul style="list-style-type: none"> <li>Incentives for fully technically ready, widely available HVAC heat pump equipment</li> <li>Simple, prescriptive incentives for high efficiency HP HVAC, amounts based on unity type and capacity</li> <li>Technical assistance and support for installers and building owners</li> <li>Higher Tier incentives for businesses that are in, serve or employ residents of DVCs.</li> </ul>	<ul style="list-style-type: none"> <li>~49K HP HVAC installations</li> <li>40% GHG reduction from eligible customer segments</li> </ul>



Questions?