DOCKETED	
Docket Number:	22-DECARB-01
Project Title:	Heat Pump and Decarbonization Goals
TN #:	242597
Document Title:	Presentation - Rheem to CEC Staff Workshop
Description:	Presentation from Karen Meyers (Rheem)
Filer:	Gabriel Taylor
Organization:	Rheem
Submitter Role:	Public
Submission Date:	4/6/2022 3:17:18 PM
Docketed Date:	4/6/2022



# CALIFORNIA ENERGY COMMISSION | RHEEM

April 5, 2022

### RHEEM OVERVIEW

Rheem, founded nearly 100 years ago in 1925, is the only manufacturer in the world that produces heating, cooling, water heating, pool heating and commercial refrigeration products, and it is the largest manufacturer of water heating products in North America.



### SCOPE OF BUSINESS – UNITED STATES





### **Water Heating**

- Tankless
- Tanks
- Boilers
- Pool & Spa
- Solar
- Parts

### **Air Products**

- Gas Furnaces
- Outdoor AC/HP
- Ductless
- Indoor Coil
- Air Handler
- Residential Packaged
- Commercial Packaged





### **Refrigeration Products**

- Unit coolers
- Condensing Units
- Packaged Systems
- Air Cooled Condensers & Fluid Coolers
- Specialty

## Raypak Heat Pump Pool and Spa Heaters Oxnard California







### Air MARKET CHANNEL



Manufacturer

Production



**Local Distributor** 

Supports local market contractors



Contractor

Purchases from local distribution

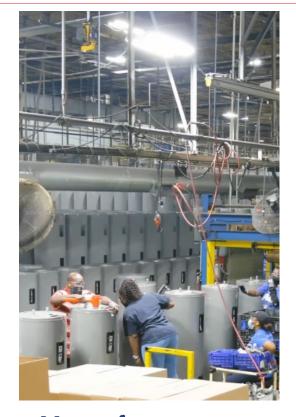


Builder

Bids project installs to local contractor



# Water Heating MARKET CHANNEL



Manufacturer Production



Local Distributors/Retailers

Supports local market contractors



Contractor

Purchases from local distribution



Builder

Bids project installs to local contractor



Focus of Program Design Recommendations



## RHEEM | CEC SHARED VISION



#### **ALIGNED GOALS**

- Energy Efficiency
- Emissions Reduction
- Early Action
- Consumer Choice and Affordability

#### SUPPORT NEEDED

- Include OEMs in the decarbonization conversation
- Allow pathways to state electrification goals (i.e. incentives, exceptions)
- Provide certainty for OEMs
- ✓ Heat pumps represent a path to these goals



### FUTURE STATE - ALL ELECTRIC WATER HEATING

### **Single Family Residential**

Other Solutions



**GAS TANKLESS** 



**GAS STORAGE ELECTRIC STORAGE** 







RESIDENTIAL HEAT PUMP



P Lowest EDR

Option

\$ Install Cost

Faster

Install

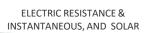
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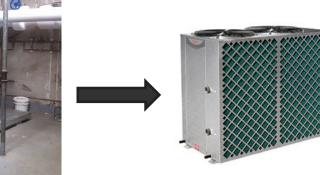
Cost





### **Multi Family Residential / Commercial**









Installer Driven Innovation







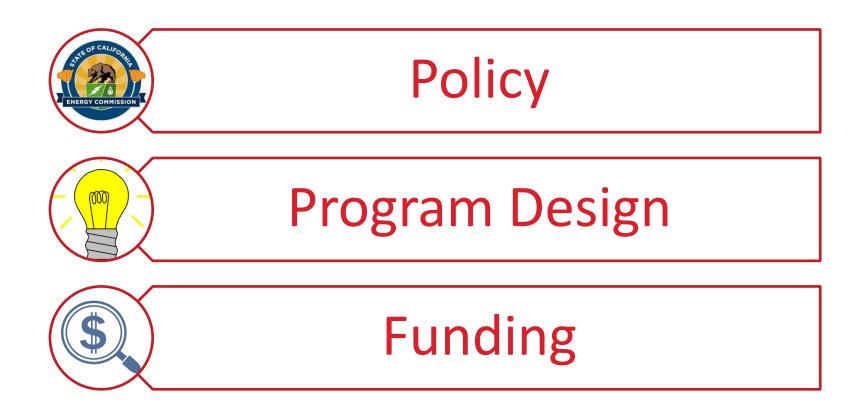
**COMMERCIAL SPLIT HEAT PUMP &** INTEGRATED HEAT PUMP





# Heat Pump Goals, Supply Chain and Programs

How can California meet its statutory obligations to reduce greenhouse gas emissions by 40% by 2030 and achieve the goal of installing 6 million heat pumps?





# Heat Pump Goals, Supply Chain and Programs | Policy

How can California meet its statutory obligations to reduce greenhouse gas emissions by 40% by 2030 and achieve the goal of installing 6 million heat pumps? Consistency of Policy To Support 6 Million

- Importance of long-term, consistent policy signal to support 6 Million HPs by 2030
- Substantial increase in HP and HPWH manufacturing capacity to meet CA + additional state electrification goals
- Codes & Title 24
  - Transition low-rise residential buildings to electric heat pumps
- Title 20 & Appliance Efficiency Regulations
- State electrification strategy preferred to AQMD and localized ordinances

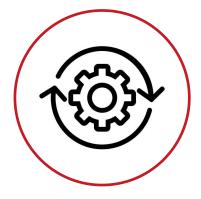


## Heat Pump Goals, Supply Chain and Programs | Program Design

- Characteristics of Successful HPWH Market and Program Design
  - Incentives flow down to consumer and contractor at mid-stream (wholesaler/retailer) and up-stream (manufacturer) at time of purchase
  - No market participant gaps
  - Consumer-friendly reporting requirements
- Gaps in the current CA HPWH Market
  - Missing retail points of distribution 500+ retail outlets
  - These retailers sell to contractors and consumers
- CA HPWH Program Design Recommendations
  - Incentives and stocking solutions for both wholesale and retail markets
  - Eliminate price differential between incumbent technology an new Heat Pump technology for accelerated market transformation



# Heat Pump Goals, Supply Chain and Programs | Funding



Dynamic market and scalable solution to secure CA HP installation goals



Close gaps in retail market incentive program to capture key consumer sale point

Fund and support installer and contractor training and "plumber as customer" programs



Scale Equitable Decarbonization Program to drive Market Transformation





THANK YOU