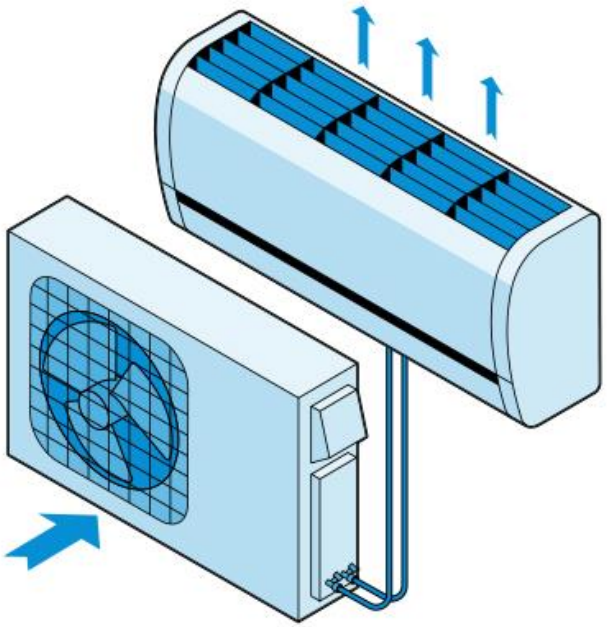
Building Decarbonization and the CPUC

March 20-21, 2019

Energy Efficiency Branch

Building Decarbonization Policy Context

- **AB 3232 (Friedman):** Requires CEC to produce plans (with CPUC) to reduce buildings emissions by 40% by 2030.
- **SB 1477 (Stern):** Allocates $50 million/year for BUILD and TECH programs, 1/3rd for low income customers. Administered by CPUC.
- **SB 350 (DeLeon):** Requires 50% RPS by 2030, doubling of energy efficiency
- **Governor Brown Executive Order** to decarbonize electricity by 2045



CPUC's Proceeding on Building Decarbonization

1. Implementation of SB 1477

- Authorizes the CPUC to select a program implementer for BUILD and TECH programs
  - A. BUILD = Building Initiative for Low Emissions Development
  - B. TECH = Technology and Equipment for Clean Heating

- May set rules and guidelines for program implementation, including design, participant eligibility, incentive levels, evaluation protocols

- 1/3rd of funds must target low income customers

Habitat for Humanity all electric, ZNE home, Santa Ana. Photos: Orange County Register

CPUC's Proceeding on Building Decarbonization

2. Pilot programs for post-fire rebuilding

- Considers consistent, unified statewide approach for fire victims to rebuild homes all electric
- CPUC approved a PG&E program in Sonoma and Mendocino counties for all electric rebuild, but only because a CCA (Sonoma Clean Power) is a partner.
- Sonoma Clean Power's funding not subject to 3-prong rule.

Photo: Sonoma Magazine

CPUC's Proceeding on Building Decarbonization

3. Building and Appliance codes and standards

- CPUC will consider specific program policies, procedures, and rules to incent builders to choose Title 24 compliance pathways that maximize GHG reductions.

4. Develop a Building Decarbonization Policy Framework

- Development of a coherent and comprehensive set of Commission rules, policies, and procedures to accelerate the reduction of GHG from buildings.

- Draw on lessons learned from the smaller-scale programs authorized by SB 1477 to scale up, including rate design.

Electrification Pilots

Advanced Energy Rebuild – Sonoma and Mendocino Counties

- For victims of the 2017 fires
- Up to $17,500 in incentives for all electric rebuilds for fire victims.
- One single point of contact, one application

Electrification Pilots

San Joaquin Valley

- In San Joaquin Valley, $50 million program focuses on 1,600 residents (11 communities) without natural gas.
- Homes reliant on propane or wood are incentivized to receive heat pump appliances.
- Project is an alternative to building new natural gas lines

Photo: Self Help Enterprises

Mobilehome Decarb Questions

- What data or information can you offer to the proceeding regarding the value and potential for increased use of electric technologies in MHPs?
  - Is it practical to shift MHPs to increased use of **electric water heaters**?
  - Is it practical to shift MHPs to increased use of **electric space heaters**?
  - To what extent do MHPs use **electric stoves**, and would it be practical to increase the use of electric stoves?
  - To what extend can mobilehomes use electric technologies developed for houses, and to what extent do mobilehomes need different electric technologies?

Mobilehome Decarb Questions (cont…)

- What is the potential for going all electric in mobile home parks?
  - If even one mobilehome in a park requires gas service, then a gas main is needed – would it be practical for mobilehome parks to be built in the future without gas main lines?
  - If the costs of all-electric mobilehome technology are high in the short term, is it possible that those costs would fall in the longer-term as the technologies are adopted more widely?
  - If the Commission directs future work on market transformation to prioritize electric technologies for mobilehomes (as per SB 1477), then could the costs of those technologies decline?
  - If special all-electric rates become available, then would it be more cost effective for MHPs to adopt all-electric technologies?

Mobilehome Decarb Pilot?

- Would it make sense to have an all-electric mobilehome pilot?
  - If so, how would you design that pilot?
  - How would you target that pilot?