



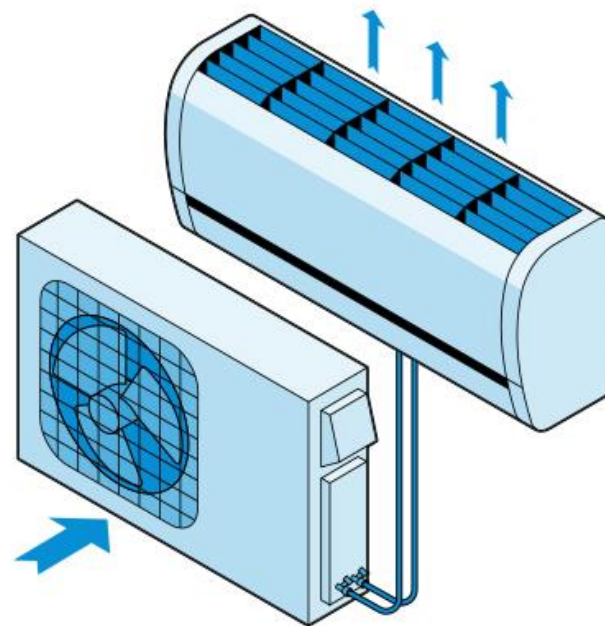
Building Decarbonization and the CPUC

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.

JOHN BELL, December 17, 1923

Of course it's clean -it's electric!

IF YOU THINK that 'what was good enough for mother is good enough for me', have a look at your neighbour's new electric cooker. The first thing you'll notice is that it's clean. Doubtful? Then make a simple test: look at the bottoms of her saucepans — they're spotless! There's no grime to soil and blacken pans. What's more, the surfaces of an electric cooker are smooth; a quick wipe with a damp cloth and they're sparkling!

It's the radiant heat that guarantees tender meat and full-bodied flavours. Electric heat is concentrated heat; it goes right under the saucepan and all around the food in the oven, so of course it cooks evenly right through. Natural juices stay in the food, so you get the full flavour.

Superb cooking is a matter of perfect heat control. That's where electric cookers really score — you get the exact heat you want. The modern automatic electric cooker switches itself on, cooks the meal and switches itself off — all while you're out of the kitchen or out of the house!

Just add up all the advantages of an electric cooker: superb, quick cooking; easy, exact control; a clean, cool kitchen; safety. There's nothing to beat an electric cooker. Come and see for yourself!

The electric cooker is one of the Four Foundations of Modern Living

ELECTRIC COOKER ELECTRIC REFRIGERATOR ELECTRIC WATER HEATER ELECTRIC WASHING MACHINE

Call in at your Electricity Service Centre... where you can see a wide variety of modern electric cookers and get helpful advice.

Issued by the Electrical Development Association



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 extent 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?