

ET Summit 2024

Presented by



California Single Family Housing Electrification Readiness

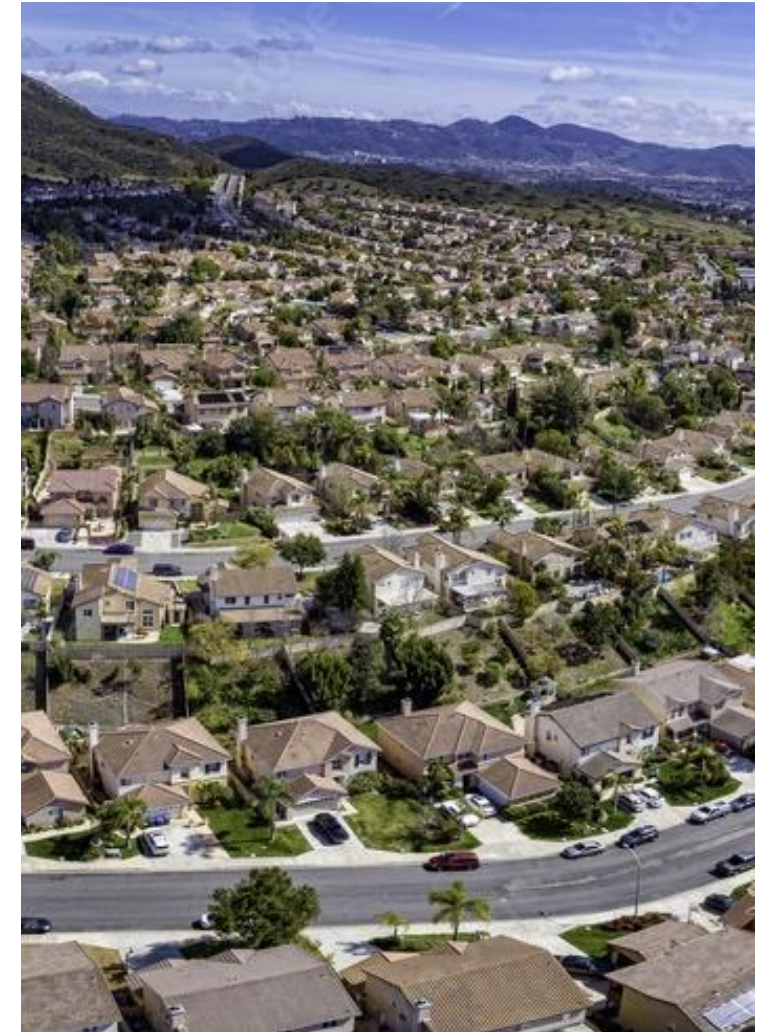
A Look At Over 100 Years Of Home Building



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Single Family Housing Stock At A Glance

- 8.2 million single family homes
- 59% were built before Title 20/Title 24
- 75% have gas appliances that need replacing to decarbonize
- Oldest homes are the most expensive to retrofit
- 1.3 million gas floor/wall heaters still in use
- 35% are heating only homes (no AC)



Electrification Challenges By Category

Panels/Wiring

- Service panel size
- Additional circuits

Repairs

- Walls
- Floors

New Installation Air Flow

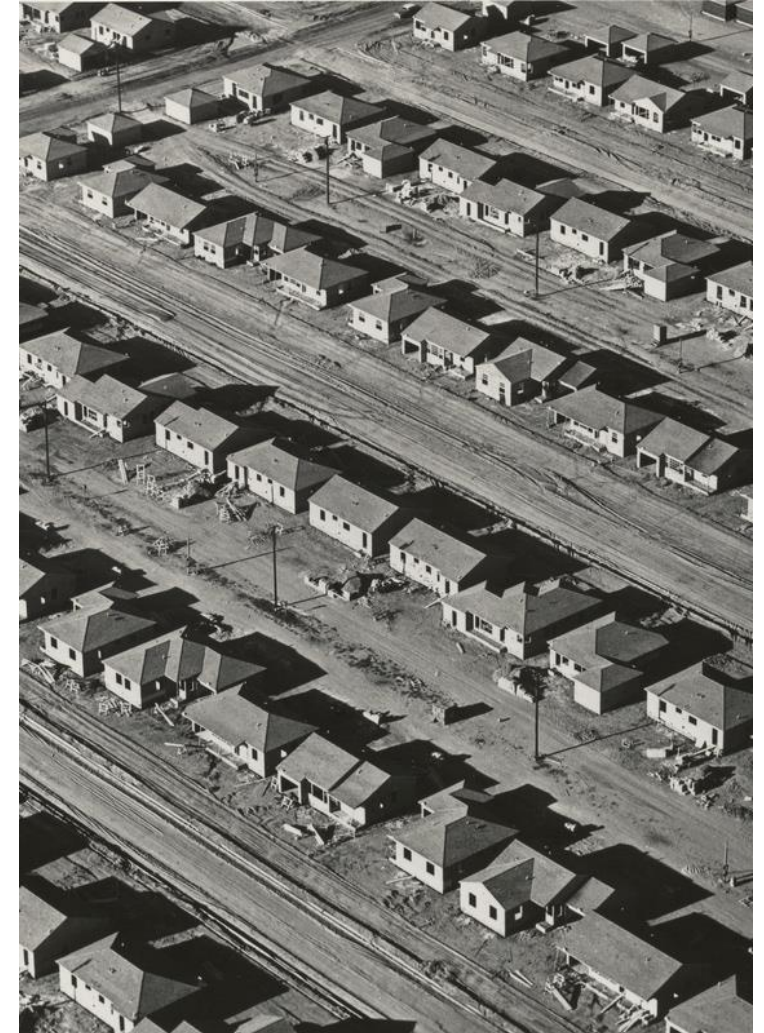
- New ductwork
- New registers/returns

Replacement/Relocation

- Water heaters
- Old ductwork/returns

Biggest Challenges

- **Heating only homes**
 - Retrofit issues
 - Adding new load
- **Former redlined neighborhoods**
 - Lack a history of owner investment
- **Rates**
 - Electric rates make projects not pencil
- **Rentals**
 - Spilt incentive issue



Why LI Heating Only Homes Are A Problem

Issues



No AC to gain bill efficiencies from

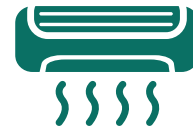


Heating load happens mostly overnight, during off peak



Off peak = no solar generation to meet demand

Solves



Ductless heads

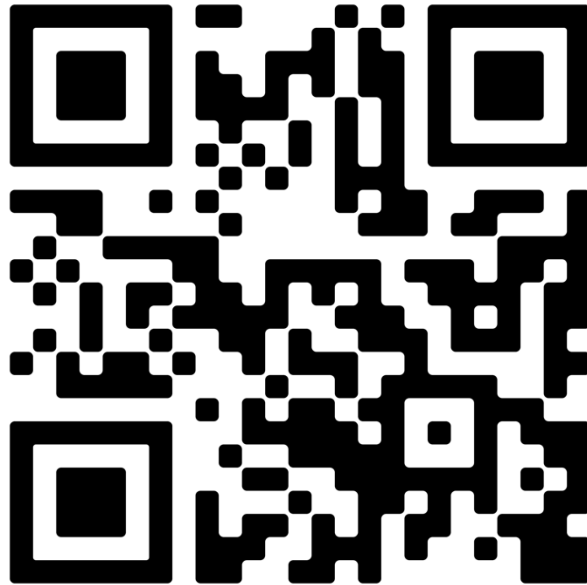


Solar + battery storage



Rates

Download the CARB Housing Stock Briefing Paper from techcleanca.com:



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