


9/28/2021

item 8




**City Council Hearing**

Item 21-1108

Introduction of an All-Electric Reach Code Ordinance, including Electric Vehicle (EV) Charging, that Amends Chapter 15.36 (Energy Code) and Chapter 15.38 (Green Building Code) of Title 15 (Buildings and Construction) of the Santa Clara City Code

**September 28, 2021**

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**City of Santa Clara**  
The Center of What's Possible

**Reach Codes**  
**What Are They, Why Adopt Them?**

**Emissions Reduction & Decarbonization**

- Addresses City CAP targets
- Enables EV adoption
- Supports State Carbon Neutrality by 2045
- Utilizes a cleaner energy grid with more renewables




**Health & Safety**

- Improves indoor air quality
- Reduces illness tied to indoor combustion
- Eliminates leading cause of home fires with transition to induction cooking


**Cost Savings**

- Lowers first costs without natural gas infrastructure
- Benefits to residents \$
- Improves economic & environmental performance



**Faster Recovery**

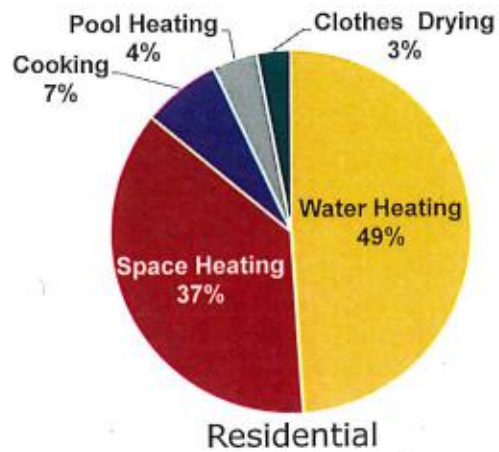
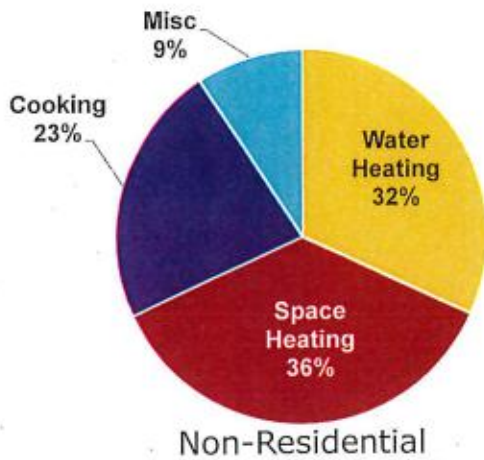
- Electric distribution recovers more quickly than natural gas



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## Thermal Energy Use in CA



2009 Residential Appliance Satisfaction Survey  
2006 California Commercial End Use Survey



## Amendment to CA Energy Code

### Proposed All-electric NEW Construction Ordinance

All-electric building

- No gas or propane plumbing within building
- No gas meter
- All-electric appliances

New Construction

- Newly constructed buildings
- Additions/improvements to existing buildings:
  - 50% exterior walls removed or
  - 50% of wall plate height raised





## Amendment to CA Energy Code Proposed All-electric NEW Construction Ordinance

### Applies to New:

- Single- & two-family, townhouses
- Multi-family residential
- Hotels & motels
- Offices and other non-residential

### Includes Solar-ready:

- Hotel/Motel Occupancies & High-rise Multifamily (10 stories)
- Nonresidential Buildings (3 stories)

### Includes Exceptions:

- Factories, hazardous materials facilities, laboratories
- Emergency operating centers
- Hotel laundry facilities (80 rooms)
- Commercial kitchens
- Infeasibility



## Amendment to CA Green Building Code

Code Element	Proposed Electric Vehicle (EV) Charging for NEW construction
Single and two-family & Townhouses	<ul style="list-style-type: none"> <li>• One Level 2 EV Ready per dwelling + Level 1 EV Ready if two spaces               <ul style="list-style-type: none"> <li>• 25% of all unassigned spaces - Level 2 EV Ready</li> <li>• 75% of unassigned spaces – Low Power Level 2 EV Ready</li> </ul> </li> </ul>
Multifamily & Multifamily Affordable	<ul style="list-style-type: none"> <li>• 20 or less dwelling units with parking - one Level 2 EV Ready per dwelling</li> <li>• Over 20 dwelling units with assigned parking:               <ul style="list-style-type: none"> <li>• First 20 dwellings - one Level 2 EV Ready per dwelling</li> <li>• 25% of all remaining units with assigned spaces - Level 2EV Ready</li> <li>• 75% of all remaining units with assigned spaces – Low Power Level 2 EV Ready</li> </ul> </li> <li>• Secured bicycle parking with 110v electrical outlets shall be provided</li> <li>• Affordable units with parking - 10% Level 2 EV Ready, 90% Level 1 EV Ready</li> </ul>
Hotels & Motels	<ul style="list-style-type: none"> <li>• 10% Level 2 Electric Vehicle Charging Station (EVCS)</li> <li>• 50% EV Capable</li> </ul>
Offices & Other Non-residential	<ul style="list-style-type: none"> <li>• 35% Level 2 Electric Vehicle Charging Station (EVCS)</li> <li>• 35% EV Capable</li> </ul>



## **Proposed Building Electrification and Electric Vehicle Reach Codes**

### **Recommendation**

Introduce electrification reach codes as written, to be established on January 1, 2022; to help reduce carbon emissions associated with new construction, reduce costs in new construction, improve indoor air quality and safety of our building stock, support affordable housing, and increase adoption of electric vehicles.

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