

From: [Bill Hilton](#)
To: [PlanningCommission AP](#)
Subject: Reach Codes
Date: Monday, September 14, 2020 3:30:17 PM
Attachments: [PastedGraphic-2.png](#)
[PastedGraphic-3.png](#)
[PastedGraphic-4.png](#)

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To members of the Sunnyvale Planning Commission

I am writing to urge that you lead the City to adopt Reach Codes that include requirements for Electric Vehicle charging in Phase 1 in new residential construction—as recommended by Silicon Valley Clean Energy. The capability to charge EVs is especially critical for residents of multi-unit residences since many cannot connect to electricity directly from their apartment/condo.

SVCE's EV Reach Code as summarized in the attached slides from [PeninsulaReachCodes.org](#), addresses the biggest barrier to electric vehicle adoption, the lack of home charging by providing at least one outlet dedicated for an EV per residential unit. And, by providing options for either Level 1, Level 2 and or load sharing, the code does so in an extremely cost-effective manner.

When SVCE was drafting these Reach Codes, they were acutely aware of the difficulties of installing EV chargers in residential buildings particularly multifamily dwellings. Landlords (and condo associations) seldom spend money on anything unless they have to. To preempt the fight between tenants and the management to install chargers in “EV Capable” spaces (which to do so necessitates the services of an electrician, city permitting and more), SVCE would require each unit to have at least one space per unit be plug and play or “EV-Ready.”

While some may deem that the current EV adoption rate does not warrant this level of infrastructure deployment, by providing each unit with an EV-Ready parking space, the city addresses the chicken and egg problem. People are not going to acquire EVs unless they know where they are going to charge and home is simply the best place to do so.


Sincerely,

Bill Hilton

Bill Hilton
Cumberland Dr
Sunnyvale

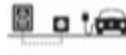
EV Terms, Readiness of Charging Station

EV Capable - Some Assembly Required
Panel **capacity**, raceway (**conduit**) only at critical areas (underground, pinch points, etc.) Definition is less stringent than CALGreen 2019




Peninsula Clean Energy 1

EV Ready - Plug & Play
Panel **capacity**, raceway (**conduit**), overcurrent protection device (**breaker**), **wire**, **receptacle** & signage. Can refer to Level 1 or Level 2



Peninsula Clean Energy 2

EV Charging Station (EVCS) - Level 2 Charge
Charging station fully installed. All the equipment needed to deliver electrical energy from an electricity source to the EV at Level 2




Peninsula Clean Energy 3


Electric Vehicle Terms - Background

Speed


Level 1
"Trickle Charging"



Level 2
"Standard Charging"




Level 3
"DC Fast / SuperCharging"




Readiness


EV Capable




EV Ready



EV Charging Station







Number



Percent of Parking Spaces

Peninsula Clean Energy 4

Electric Vehicles - Multifamily New Construction

	2016 CALGreen	2019 CALGreen	PCE/SVCE Proposed
Multi-Family	<p>Mandatory</p>  <p>3% Level 2 EV Capable for buildings with ≥17 units</p>	<p>Mandatory</p>  <p>10% Level 2 EV Capable</p>	 <p>100% EV Ready</p>  <p>25% Level 2 EV Ready</p> <p>≥20 dwelling units: One Level 2 EV Ready per dwelling</p> <p>>20 units: Of all dwelling units,</p> <ul style="list-style-type: none">• 25% Level 2 EV Ready (10% in affordable housing)• 75% are Level 1 EV Ready (90% in affordable housing)

From: [Guadalupe Friaz](#)
To: [PlanningCommission AP](#)
Subject: Pls support REACH codes
Date: Monday, September 14, 2020 4:35:02 PM

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Gas is not good for our environment.

Lupe

From: [Council AnswerPoint](#)
To: [Jennifer Nunez](#)
Cc: [Kent Steffens](#); [Teri Silva](#); [Trudi Ryan](#); [Deborah Gorman](#); [Suzanne Park](#); [CityClerk AP](#); [Ramana Chinnakotla](#); [Jody Badiei](#)
Subject: POLICY--FW: In Support of All-Electric Reach Code
Date: Tuesday, October 20, 2020 1:51:27 PM
Attachments: [All electric buildings current examples 8-25 6 up.pdf](#)
[200804 All-Electric Buildings Comments from Architects & Engineers.pdf](#)

Councilmembers,

Forwarding from the Council AP.

From: Scott Shell <Scott.Shell@ehdd.com>
Sent: Tuesday, October 20, 2020 12:04 PM
To: Council AnswerPoint <council@sunnyvale.ca.gov>
Subject: In Support of All-Electric Reach Code

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Dear Mayor and Councilmembers,

On behalf of the 70 architects and staff at EHDD Architecture we are writing in support of your proposed all-electric reach code. We have been designing all-electric buildings around the Bay Area for almost twenty years now and have found them robust, reliable, healthy, and cost-effective solutions for our clients.

As electric reach codes emerged two years ago, we met with our colleagues at other firms and our mechanical engineering partners and asked if the State of California was broadly ready to shift from gas to electric. The responses we got back were yes, with few exceptions the design and construction industry is ready for this transition as noted in their attached comments. We began collecting examples of all-electric projects of all building types from around the state which is also attached.

There are many robust studies showing the cost effectiveness of building electrification, and we have found that to be the case in our practice. A heat pump provides heating and cooling in one appliance which is lower cost than having two appliances--a gas furnace and electric air conditioner. This eliminates the gas service to the building, the meter, gas piping inside the building, and flues through the roof, all reducing cost. Going to a single utility does not reduce resilience since all modern gas appliances need electricity for electronic ignition and controls—they will not work in a power outage.

We have grown increasingly concerned about the very real health impacts of combusting fuel inside homes. The research shows that fossil fuel combustion inside living spaces is not safe and leads to NOx levels that exceed the outdoor legal limits. The warning labels clearly posted on camp stoves and portable generators to not use them indoors indicates the risks of combustion inside our homes. California tops the American Lung Association list of most polluted cities every year. Even though buildings use only slightly more gas than power plants in California, they emit seven times more NOx because unlike powerplants they have no pollution controls. All-electric buildings reduce indoor and outdoor air pollution.

We are especially concerned that continuing to build new fossil fuel infrastructure will then require expensive retrofits of relatively new buildings to meet California's legislated 2045 climate goals. This will saddle building

owners with disruptive renovations in occupied buildings--let's just build them right to start with. For the health, safety, climate benefits, and financial savings, we urge you to take approve a strong all-electric ordinance.

Sincerely,



Duncan Ballash, President
Jennifer Devlin, Principal
Scott Shell, Principal
Rebecca Sharkey, Principal
Brad Jacobson, Principal

Scott Shell FAIA, LEED® AP BD+C, CPHC®
Principal

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ehdd.