

# Natural Gas Use in New Construction

## Council Sustainability Committee

January 14, 2019



# THE SACRAMENTO BEE – January 5, 2019

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Op Ed Titled:

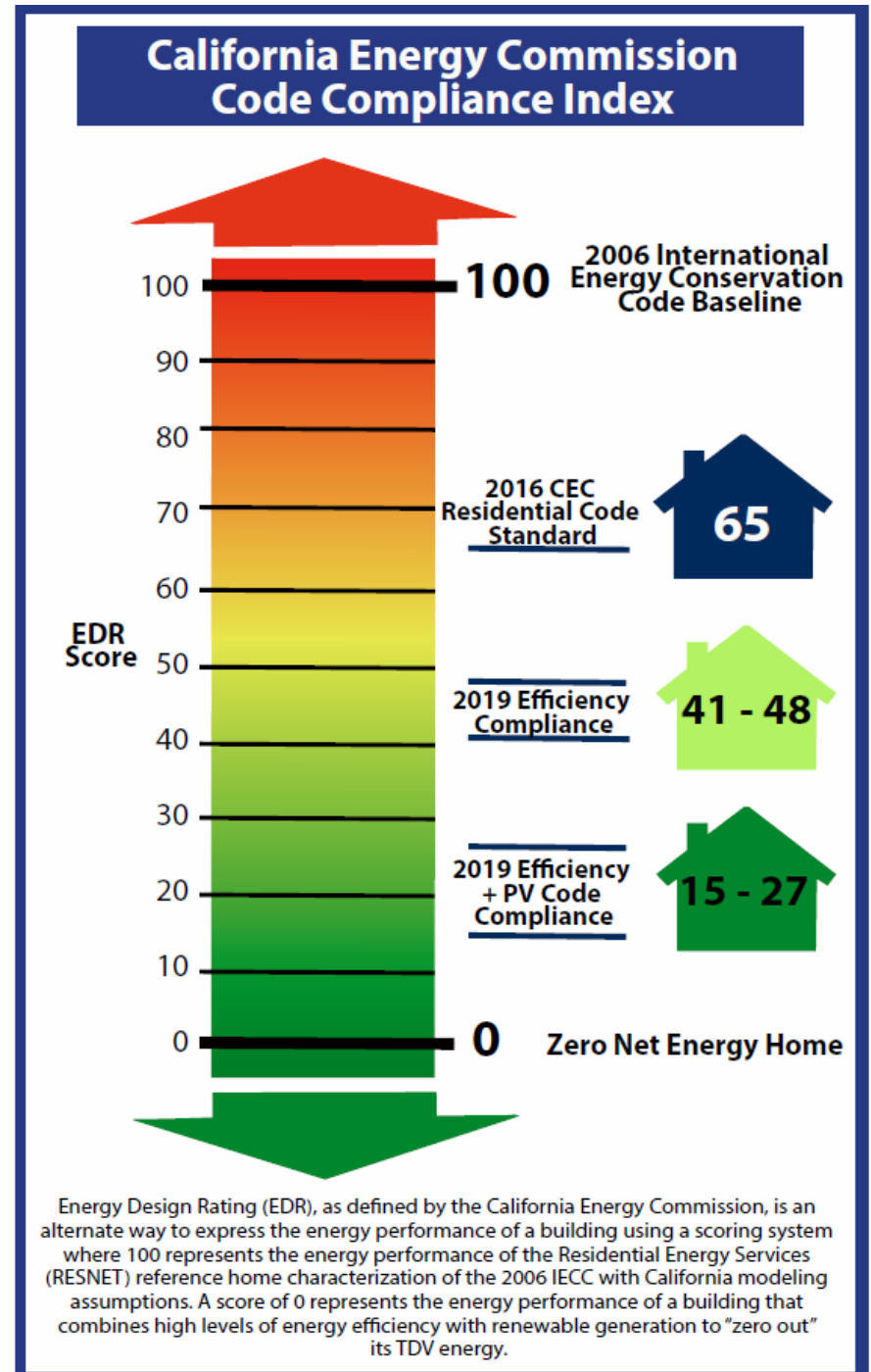
“To clean up climate pollution, get California’s buildings off of fossil fuels”

- “More than half of our building pollution comes from gas- and propane-powered appliances.”
- “Connecting a new home to gas lines and meters can cost between \$6,000 and \$20,000.”

<https://www.sacbee.com/opinion/california-forum/article223908195.html>

# California Building Code

- Code is updated every 3 years
- 2019 Code effective Jan. 1, 2020
- Moving toward ZNE
- Energy Design Rating (EDR) moving toward 0



# Natural Gas Use in New Construction



## Electrified Buildings Have Lowest CO2 Emission Levels

2700 sf prototype, CZ12

### CO2 Impact of Housing Choices

**Metric Tons of  
CO2 Emitted/yr**

Mixed Fuel	2000 Compliant Building, No PV	6.5
Mixed Fuel	2016 Compliant Building, No PV	3.26
Mixed Fuel	2019 Standard Design, with 3.1 kW PV	2.29
All-Elect	2019, 3.1 kW PV	1.12
All-Elect	2019, 6 kW PV	0.46

Table is for a hypothetical 2,700-square-foot home in climate zone 12, which is located in the Central Valley.

# Bay Area Regional Energy Network

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- Local Codes can “reach” beyond state codes
- Reach Codes require CEC approval
- Reach Codes require cost-effectiveness study
- BayREN is developing studies & model code



# Timeline

February	Acquire Cost-effectiveness Study
March – April	Conduct Stakeholder Outreach & Refine Scope of Proposed Local Codes
May – July	Prepare Ordinance & Staff Report
September	Introduce & Adopt Ordinance
October – December	Obtain CEC Approval (must submit application by 9/30/2019)
December	File with California Building Standards Commission
January 1, 2020	Reach Code will be Effective

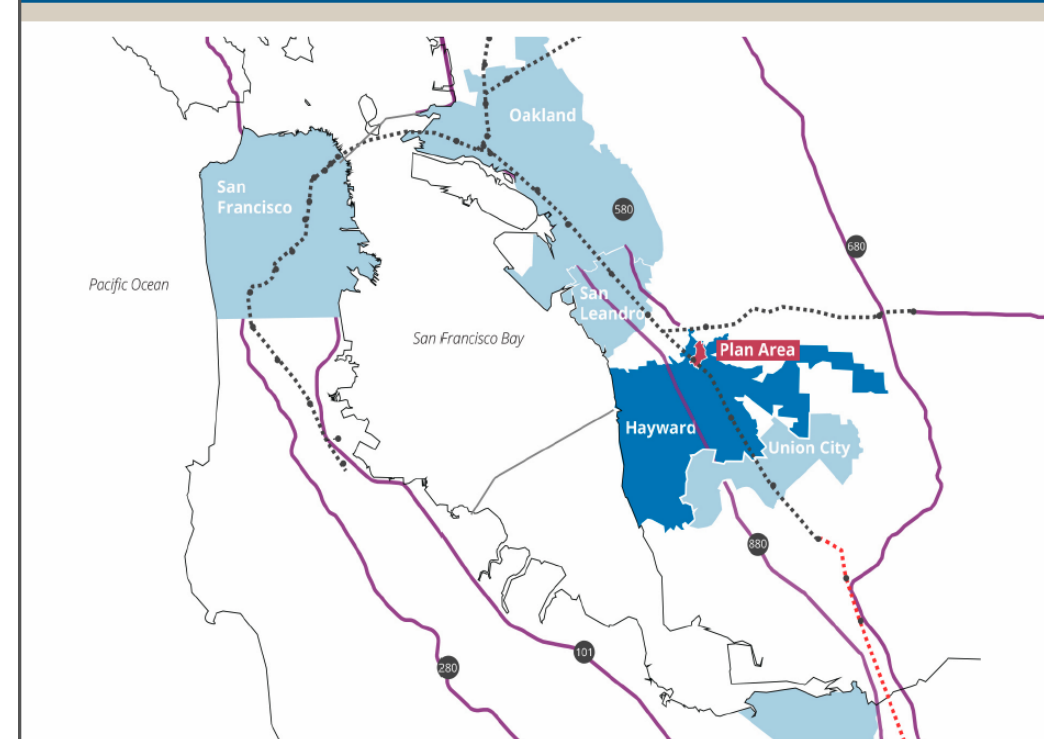
# Downtown Specific Plan

- Significant and unavoidable impact related to GHG emissions
- Included a mitigation measure:

“Multifamily Residential: All buildings will be all electric, meaning that electricity is the only permanent source of energy for water-heating, mechanical and heating, ventilation, and air conditioning (HVAC) (i.e., space-heating and space cooling), cooking, and clothes-drying and there is no gas meter connection.”

## HAYWARD DOWNTOWN SPECIFIC PLAN AND ASSOCIATED ZONING CODE UPDATE DRAFT EIR CITY OF HAYWARD

State Clearinghouse # 2018022054



# Questions

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