

Renewable Propane in the Built Environment

Renewable Gas 360
November 3, 2021

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CONSOL

California Energy Code Background

1978 Warren Alquist Act = CEC

All cost effective energy efficiency options required by code (T-24, Part 6)

2006 - Global Warming Solutions Act (AB 32)

Reduce GHG to 1990 levels (Kyoto levels)

2015 – Gov. Brown Ex. Order – reduce GHG to 40% below 1990 by 2030

2008 - CA Long Term Strategic Energy Policy Plan

Big Bold Initiative => RNC Zero Net Energy (ZNE) by 2020

2009/2014 – Comprehensive Energy Efficiency Plan for Existing Buildings (AB 758)

ARRA/scoping; voluntary pathways; mandatory approaches

2018 – SB 100 – 100% Clean Energy Act

Zero-carbon electric system by 2045

2020 – 2022 Title 24 Update and EDR1

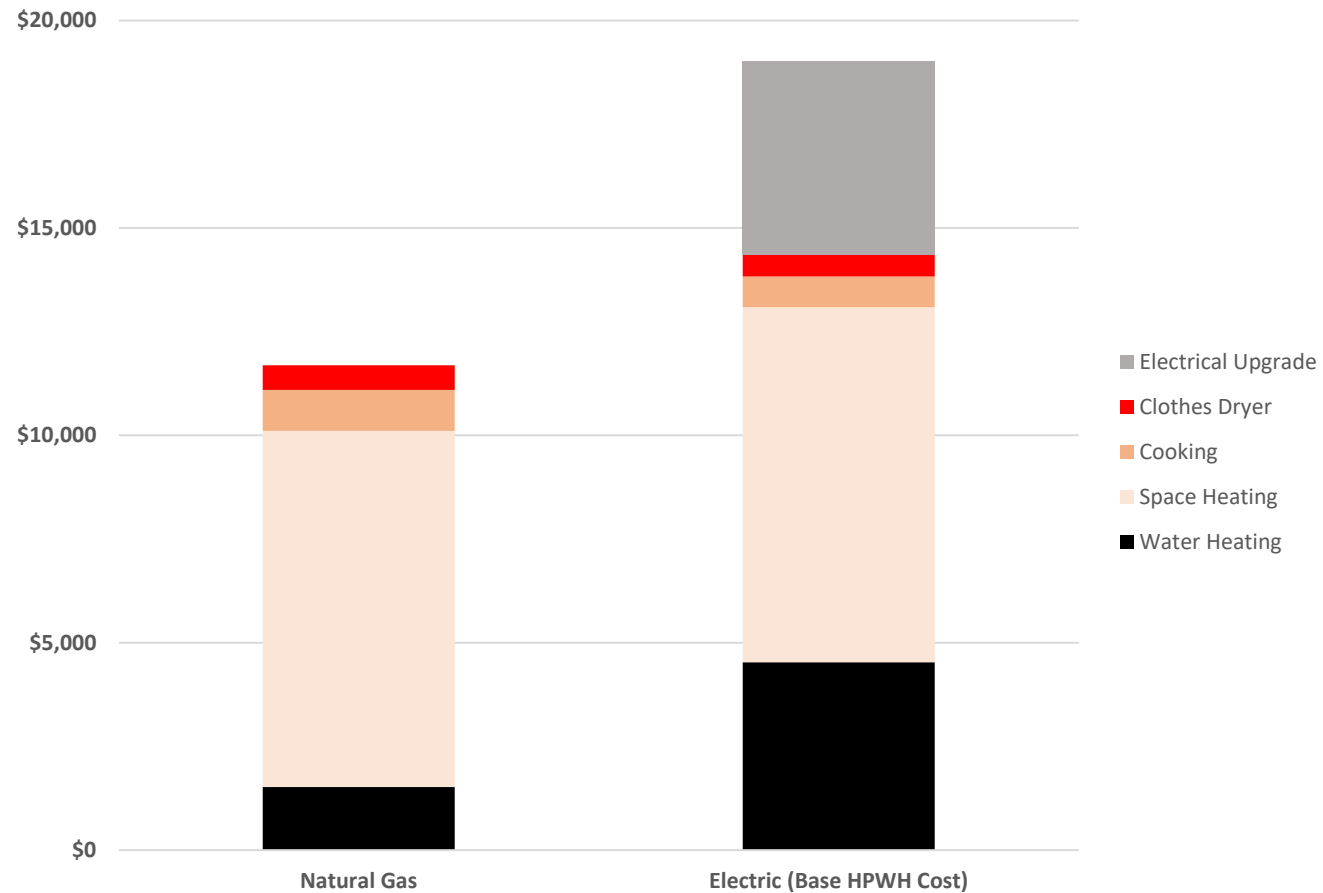
New metric established to limit carbon emissions from new buildings

MAKING THE SWITCH TO ALL ELECTRIC APPLIANCES

Impact of Annual Utility Costs				
		Mixed Fuel	All Electric	
PG&E rate: TOU-B	CZ4	\$1,254	\$1,327	6% increase
	CZ12	\$1,429	\$1,533	7% increase
SCE rate: TOU 4-9 PM	CZ10	\$715	\$699	2% decrease
SDG&E rate: DR-SES	CZ7	\$1,209	\$1,346	11% increase

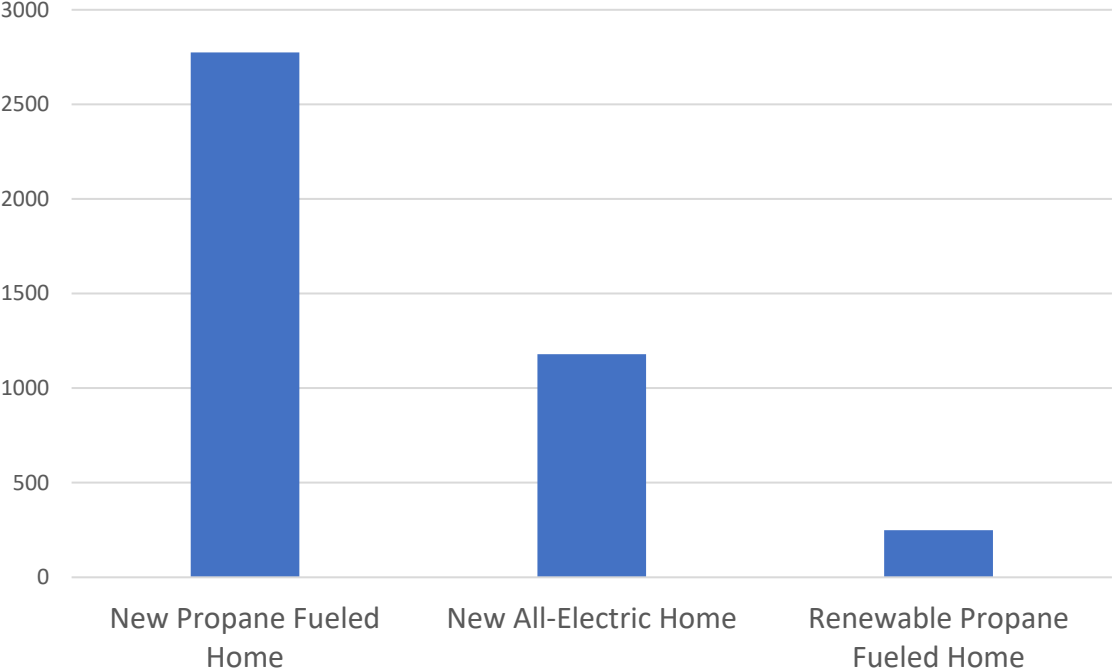
Converting to All-Electric is Expensive

Total Appliance Upgrade Costs in 2020 for Existing Single-Family Home

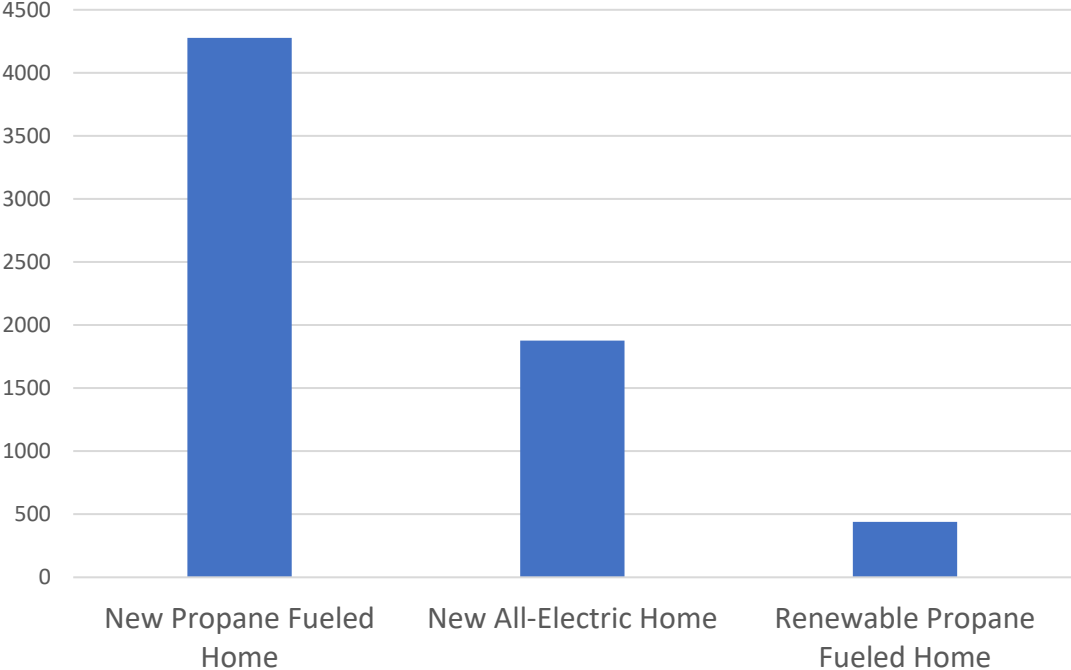


Renewable Propane Reduces Emissions Right Away

Climate Zone 12



Climate Zone 16



Energy Price Forecast

IEPR 2020

- PG&E: \$0.240 to \$0.329, or about an annual average increase of 3.7 percent
- SCE: \$0.217 to \$0.293, or about an annual average increase of 3.5 percent
- SDG&E: \$0.302 to \$0.443, or about an annual average increase of 4.7 percent
- Propane and Natural Gas Forecasted to increase similar or equal to inflation (1.9%)

PG&E Rate Case For July 2021 forecasts 5% increase per year 2021-26

Propane and Natural Gas Forecasted to increase similar or equal to inflation (1.9%)

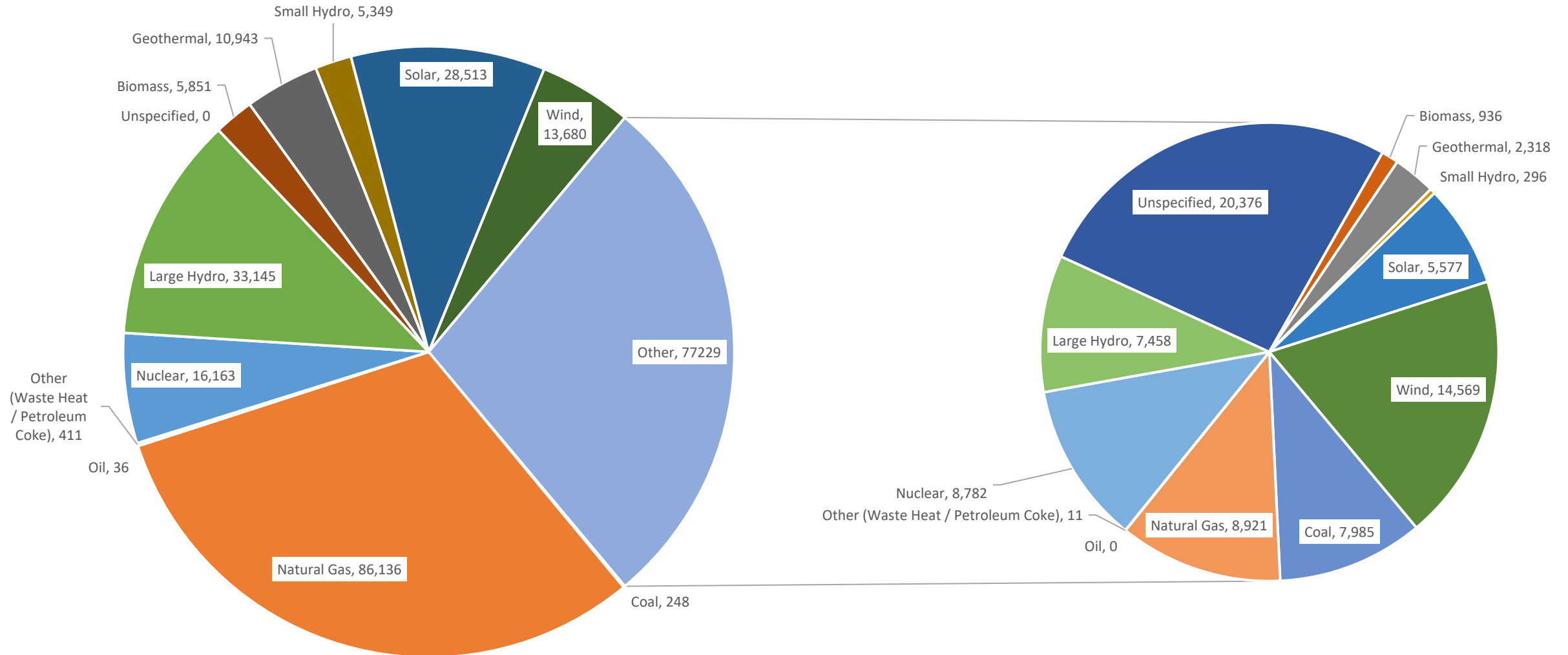
Policy for Existing Homes

Likely to be incentive based, with a focus on equipment “burn-out”

Multiple sources of influence:

- Municipalities and other local jurisdictions
- Community choice aggregators (CCAs)
- Investor-owned utilities (IOUs)
- Publicly owned utilities (POUs)
- Legislative funding pools

California Electricity Mix 2019



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