



California Energy Commission

Title: SPUR Digital Discourse Presentation

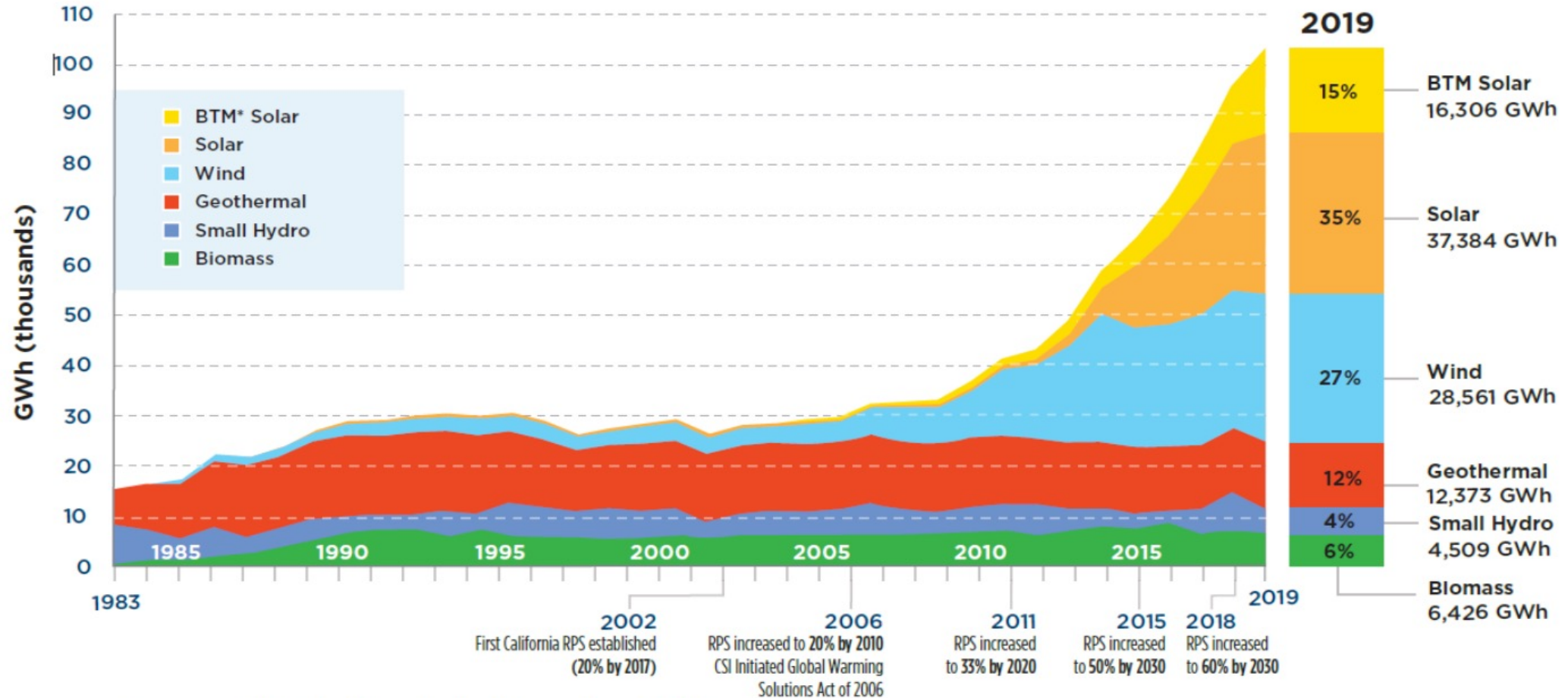
Presenter: Ken Rider, Chief Policy Advisor for Chair Hochschild

Date: February 10, 2021



The Clean Energy Grid

Figure 6: Total Renewable Generation Serving California Load by Resource Type

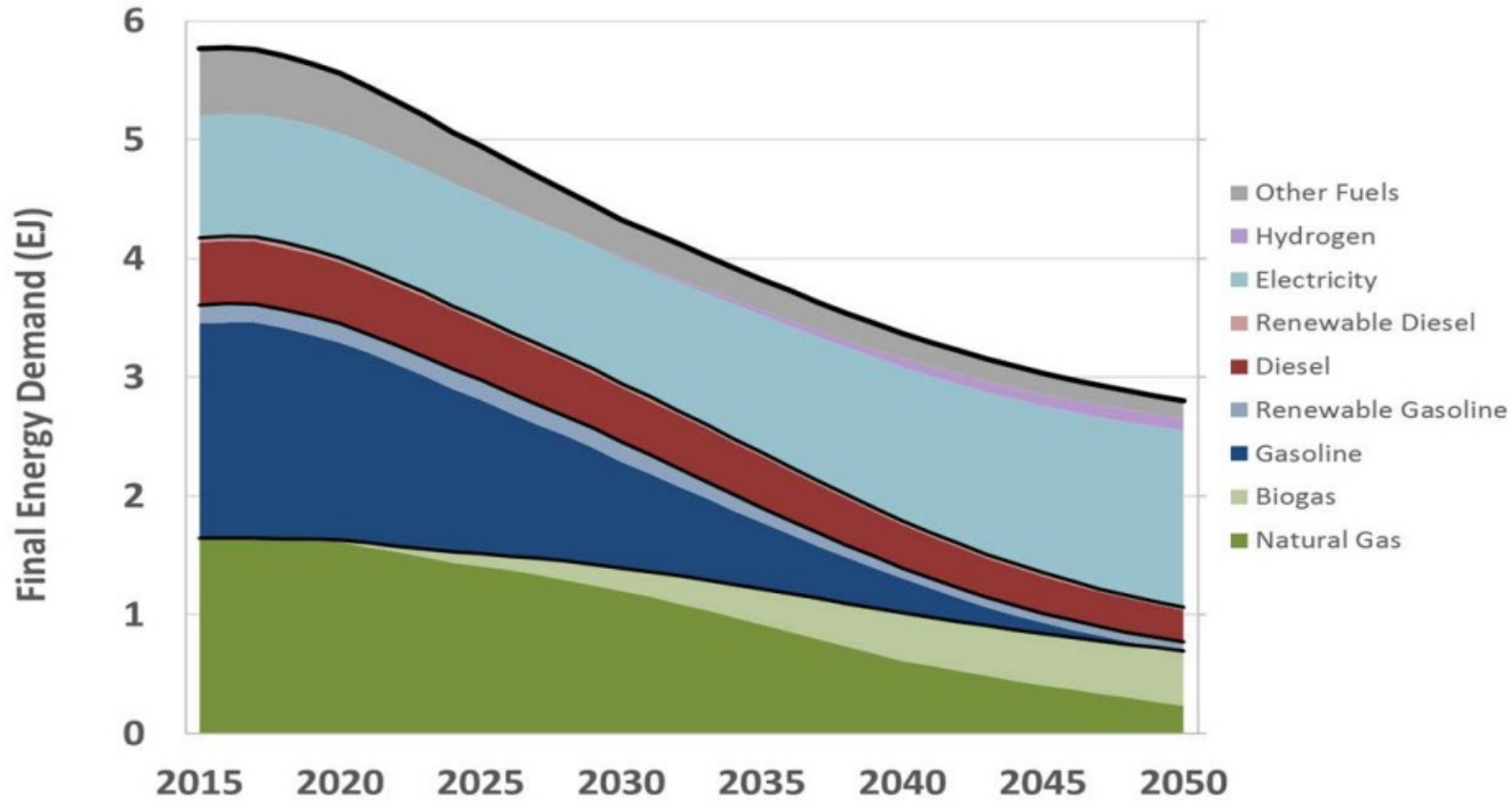


Source: CEC staff analysis, December 2019



Efficient Electrification

Figure 7: Final Energy Demand by Fuel Type in the High Electrification Scenario

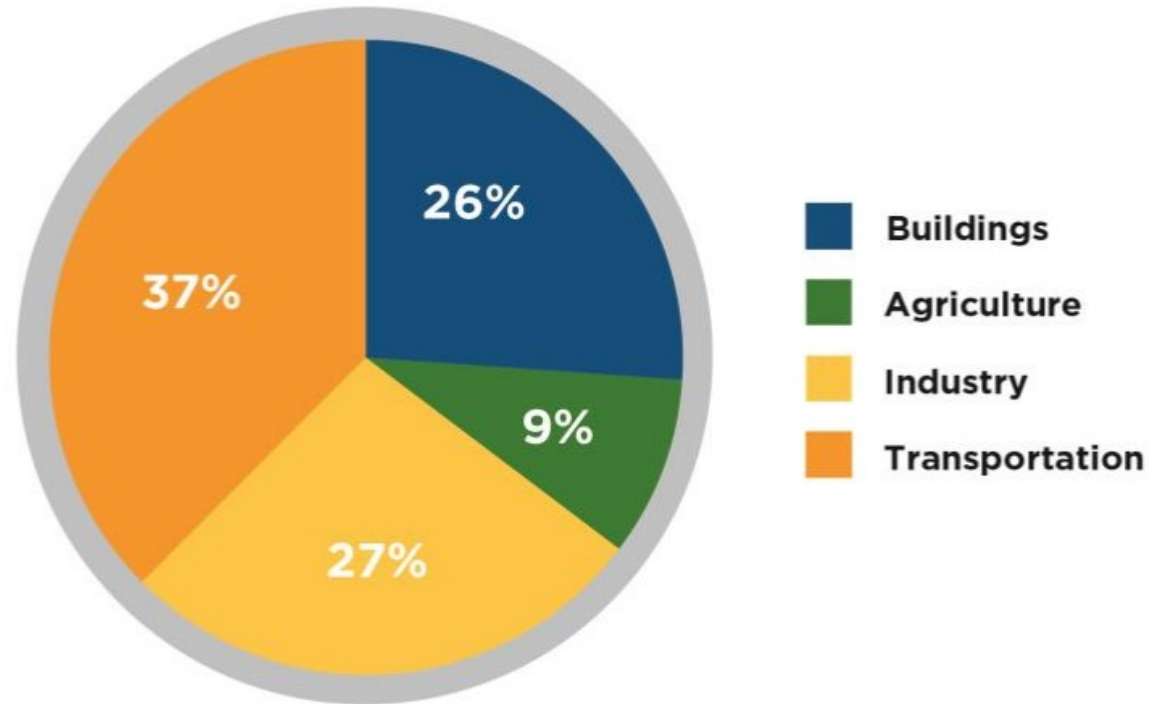


Source: E3



The Built Environment

GHG Emissions by Sector (Percentage of Carbon Dioxide Equivalent)

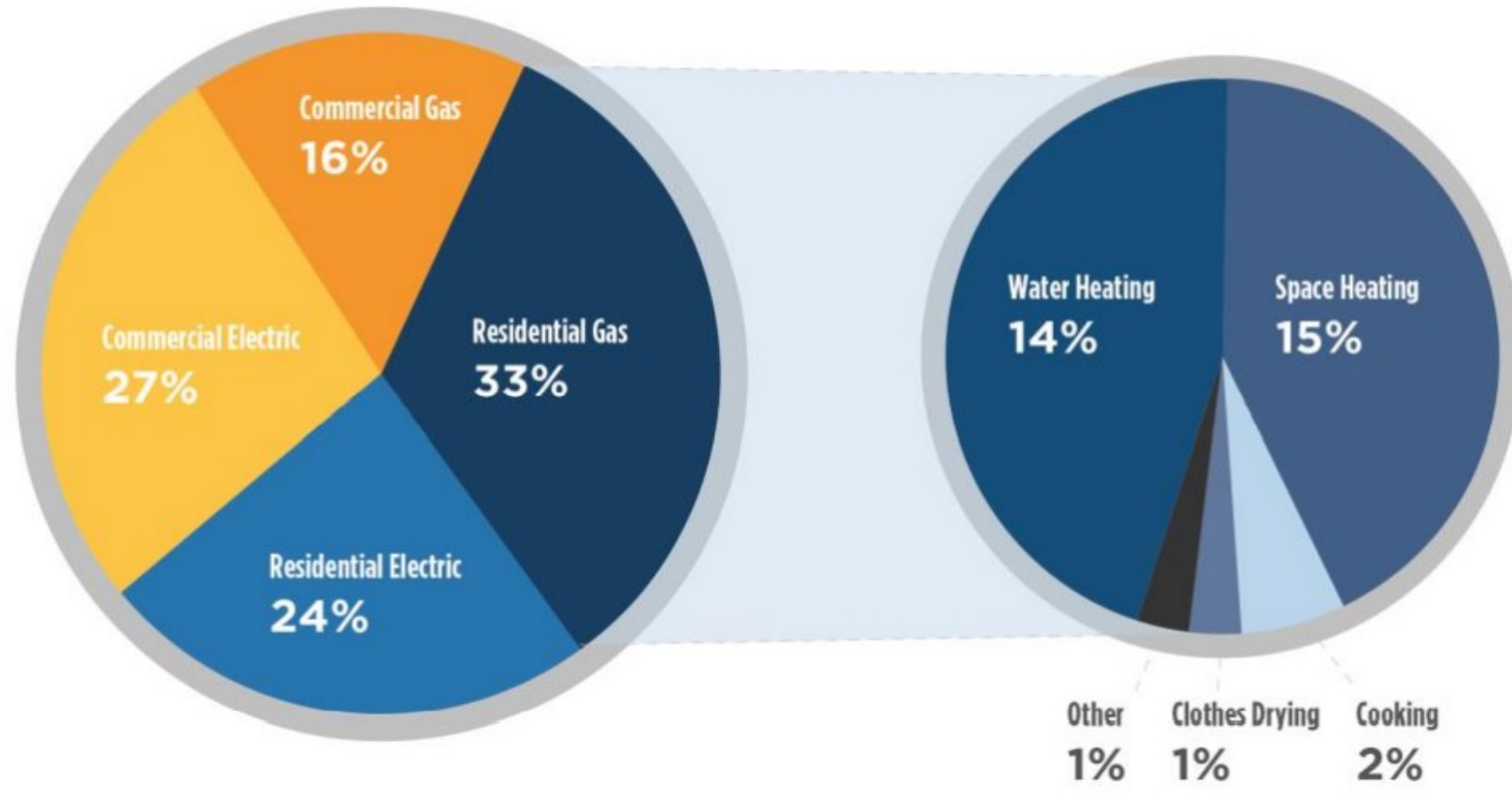


Source: California Energy Commission using data from the California Air Resources Board 2018 GHG Inventory and the *2017 IEPR Electricity Demand Forecast*



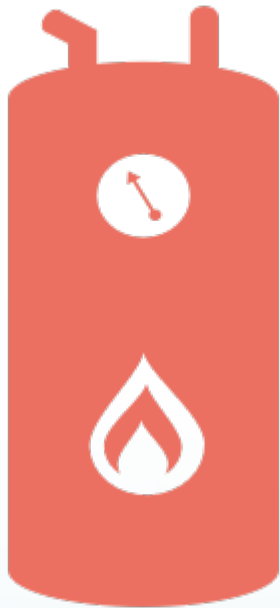
How Energy Is Used in Buildings

2016 Energy Use in California Buildings (MMBtu)

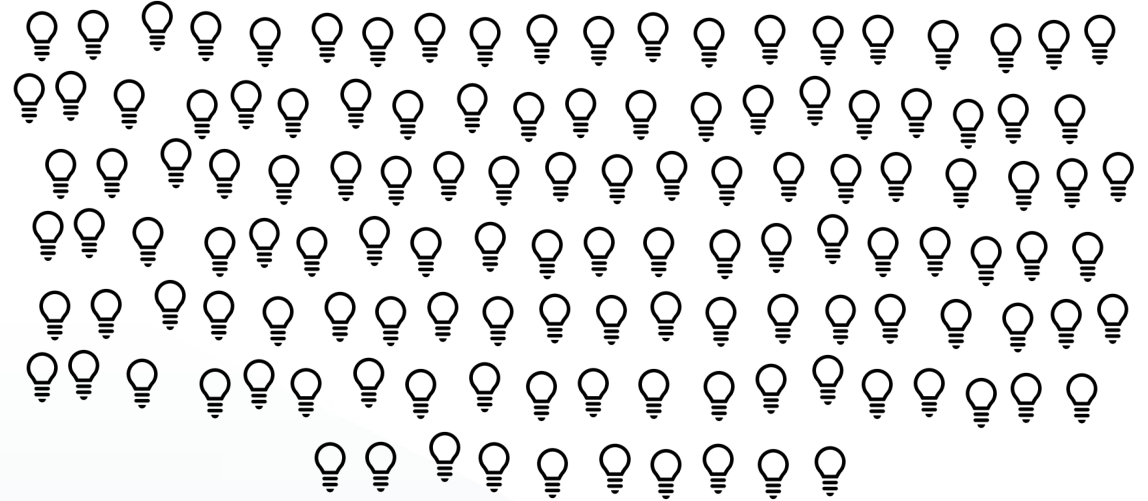




Efficient Electrification of Space and Water Heating means Heat Pumps



Replacing one standard tank gas water heater with a heat pump

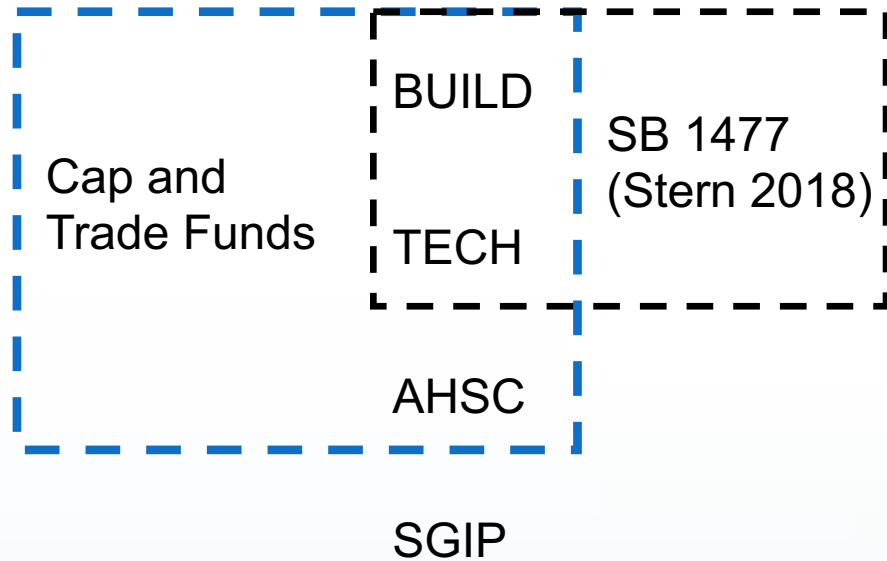


Is like replacing 130 incandescent bulbs with LEDs in energy saving equivalence



A Growing Ecosystem of State Efforts (not exhaustive)

Incentives



Regulations

Building Code

Refrigerant Standards

Roadmapping

AB 3232 (Friedman 2018)

Building Decarbonization Proceeding

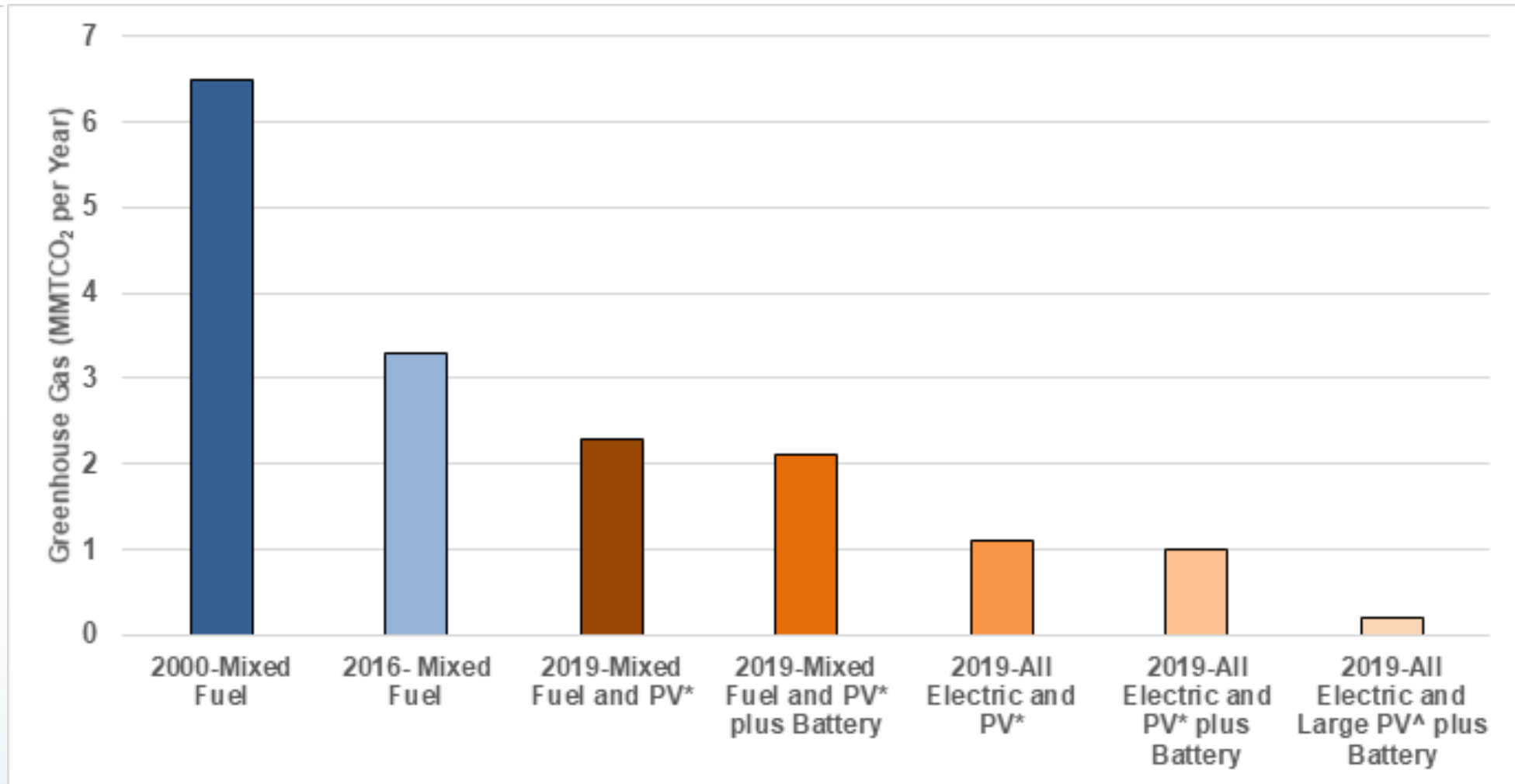
IEPR Process

AB 32 Climate Change Scoping Plan

BUILD = Building Initiative for Low-Emissions Development Program
 TECH = Technology and Equipment for Clean Heating Initiative
 AHSC = Affordable Housing and Sustainable Communities Program
 SGIP= Self-Generation Incentive Program



Building Codes



Source: CEC



2022 Building Code

- The current status is informal draft and is likely to be finalized and adopted this summer.
- Decarbonizing features being considered
 - Energy Efficiency improvements (focused on commercial buildings)
 - Solar and storage requirements for commercial buildings
 - Credit/incentive to build all-electric
 - Improved ventilation where gas cooking is selected
 - “Electric ready” features
 - Transitioning one main gas end use to electric as an assumption
 - New compliance metric that tracks well with GHG emissions
 - CALGreen code that could further encourage all-electric construction



Thank You!

