

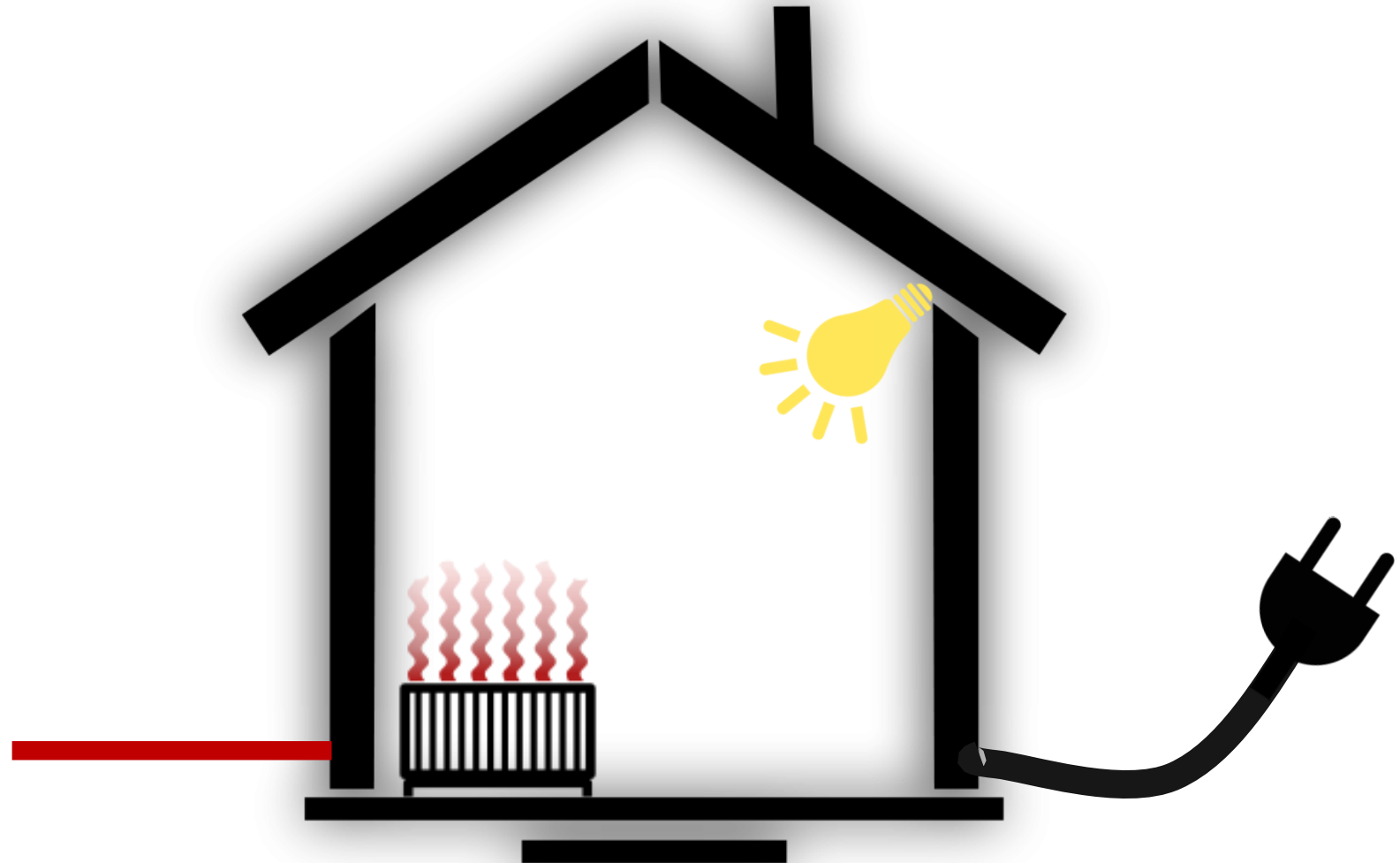


Local Governments Empowering Our Communities

Energy Efficiency and Existing Residential Buildings: Why Does It Matter?

September 18, 2019

Existing Residential Buildings



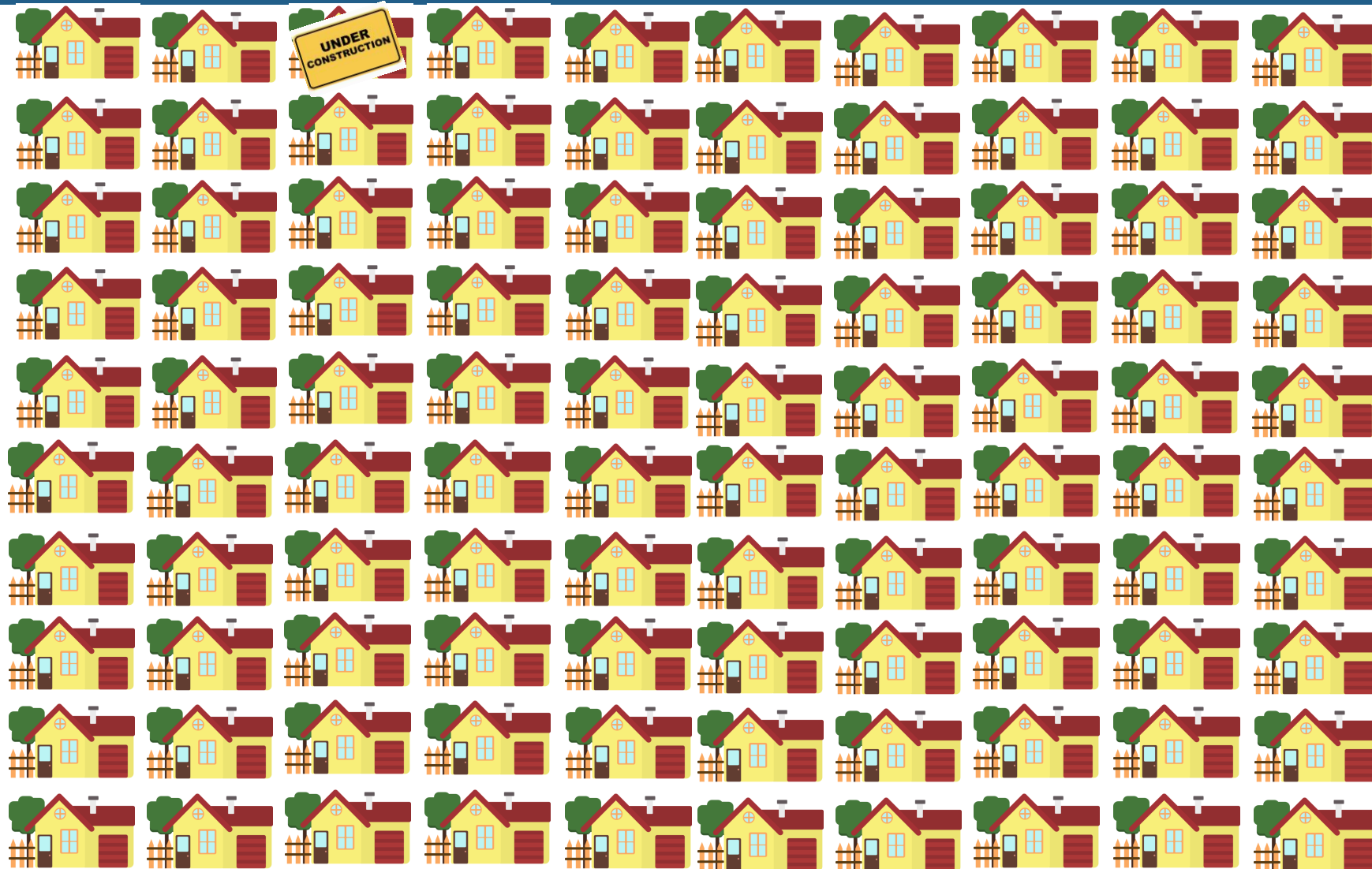
Existing Buildings = Old(er) Buildings



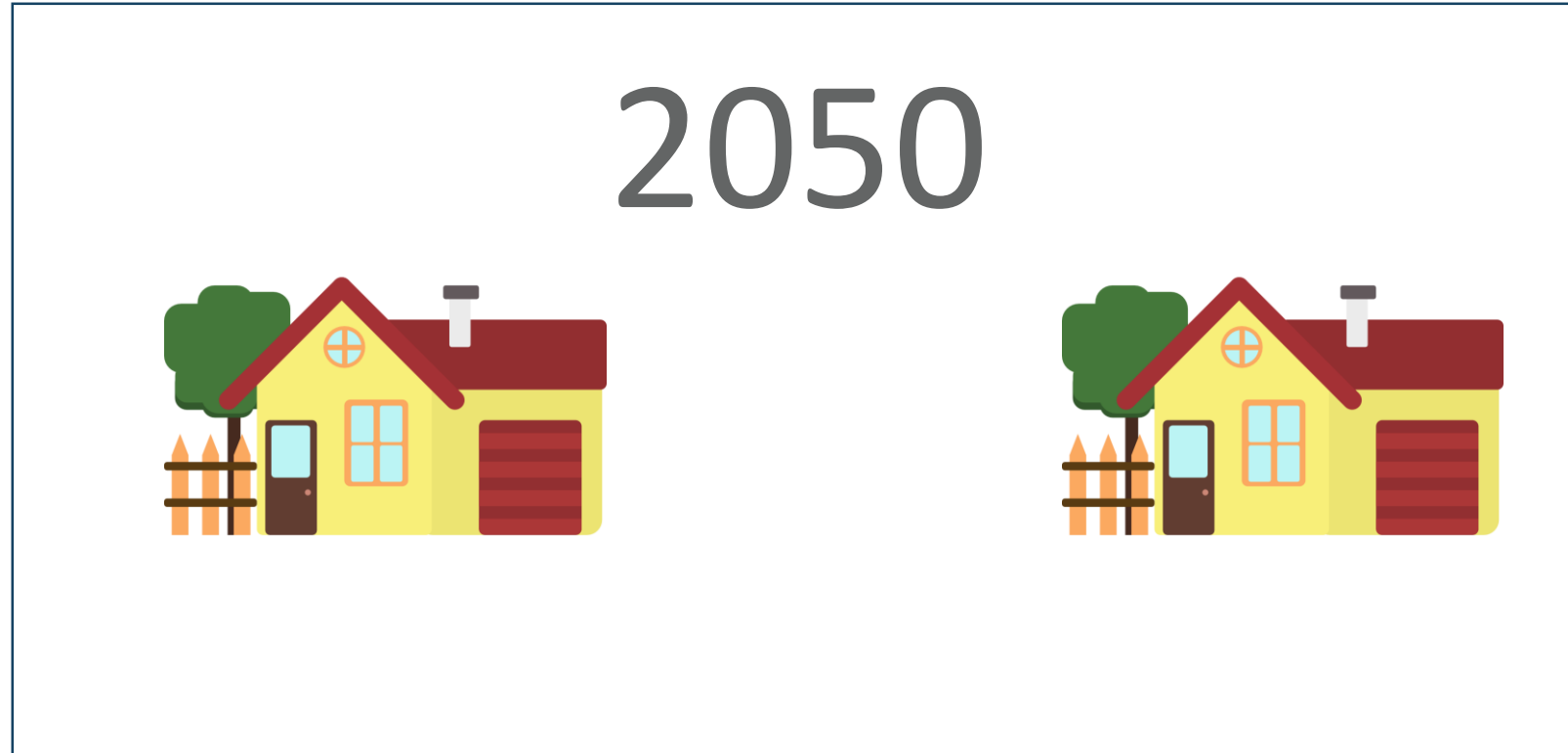
Old(er) Buildings use more energy



Existing Buildings = Slow to change (currently)

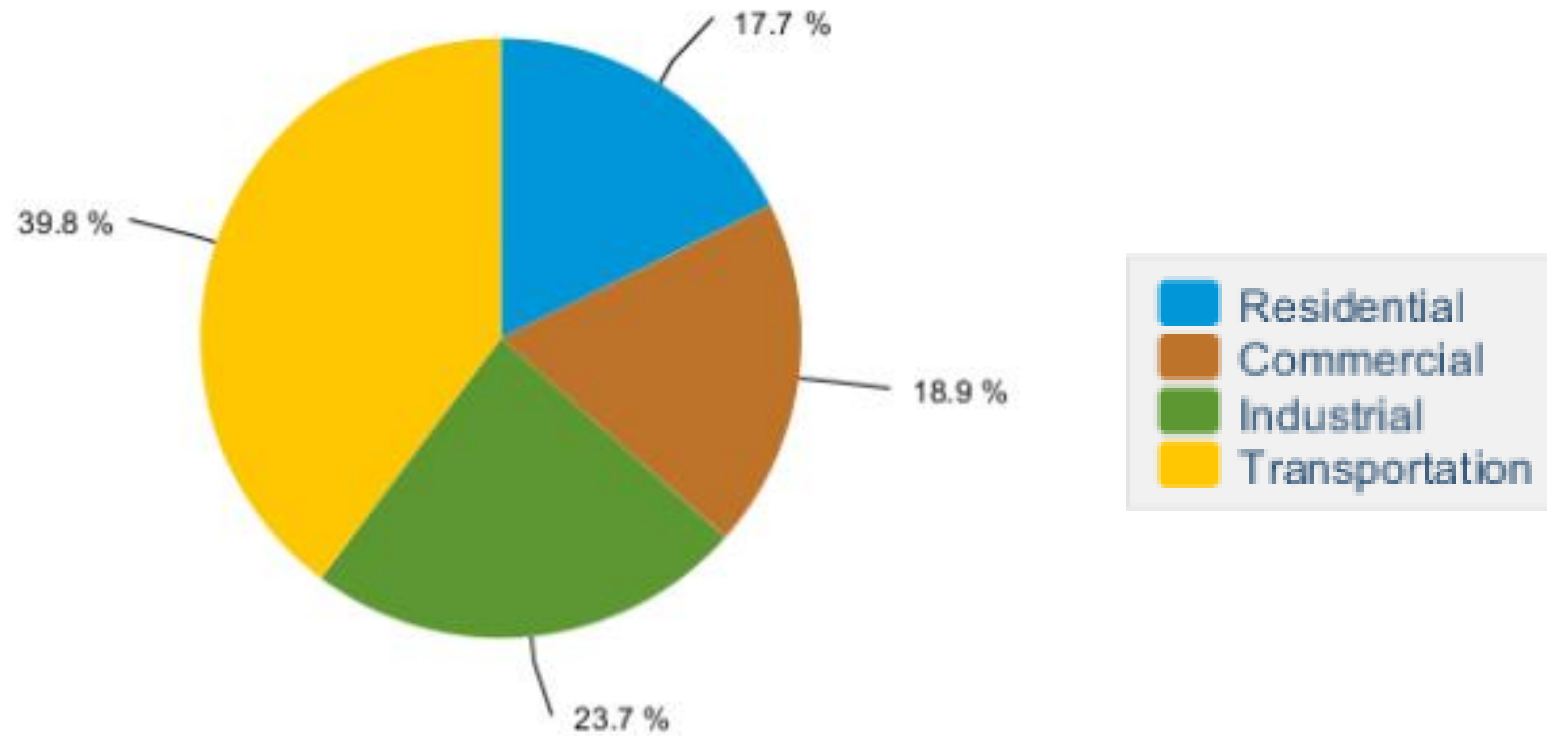


Existing Buildings = Long lasting



Energy Use by Sector

California Energy Consumption by End-Use Sector, 2016

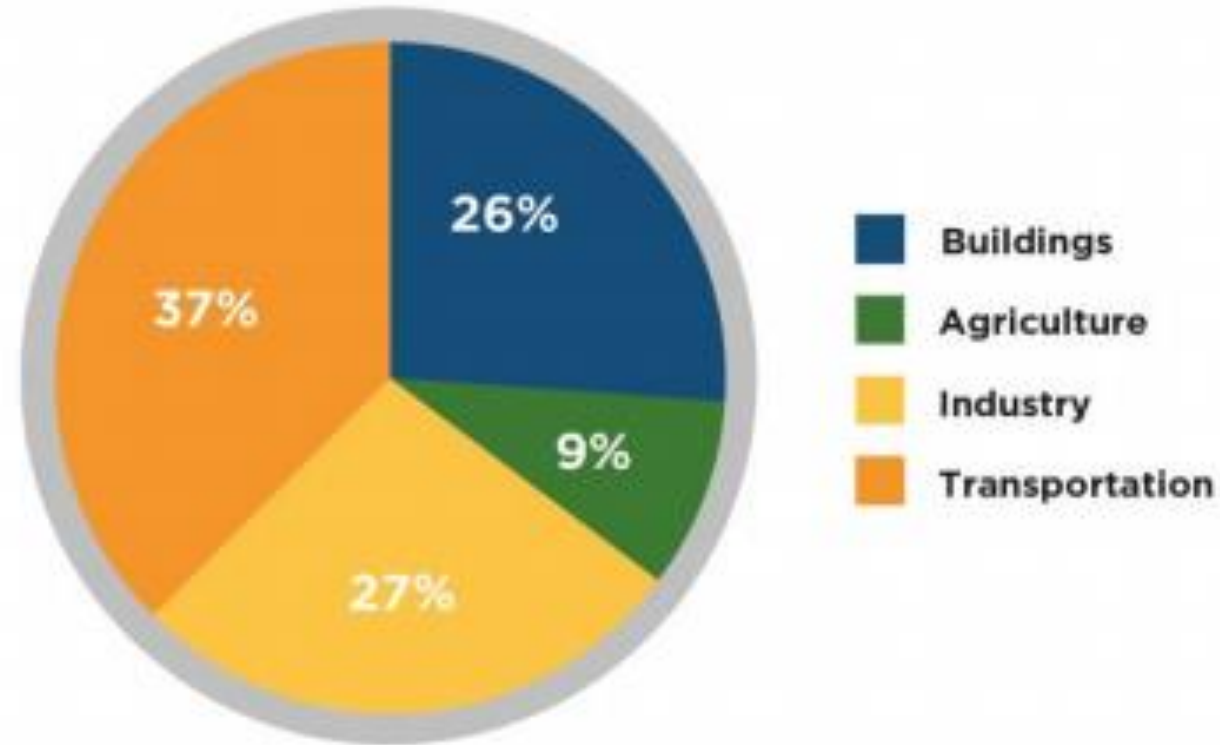


Source: Energy Information Administration, State Energy Data System

Excerpted from <https://www.law.berkeley.edu/wp-content/uploads/2019/06/Low-Income-High-Efficiency-June-2019.pdf>

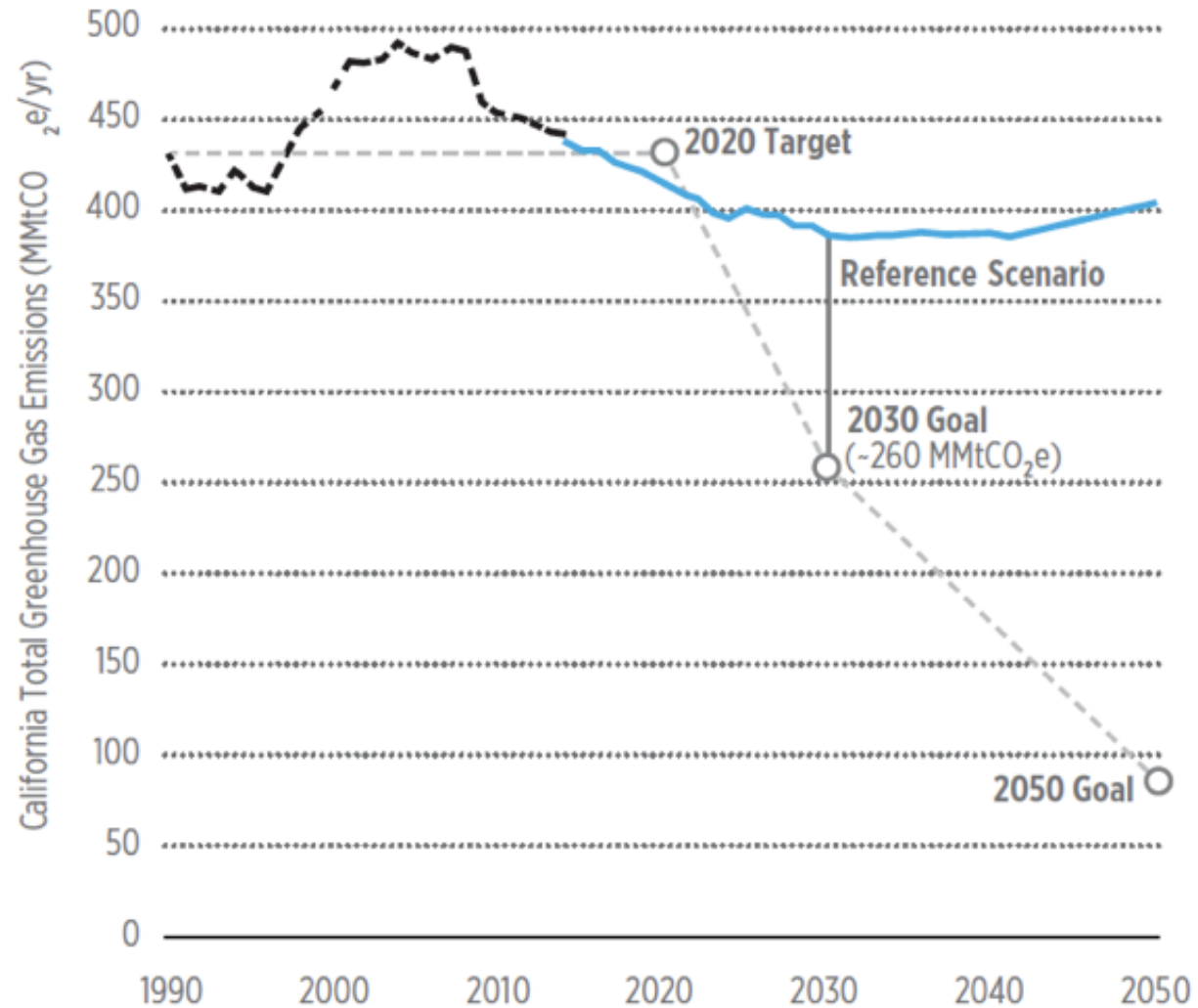


GHG emissions by Sector



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

Improving existing buildings is necessary to achieve California's GHG reduction goals



Energy efficient buildings use less energy

Less energy use means:

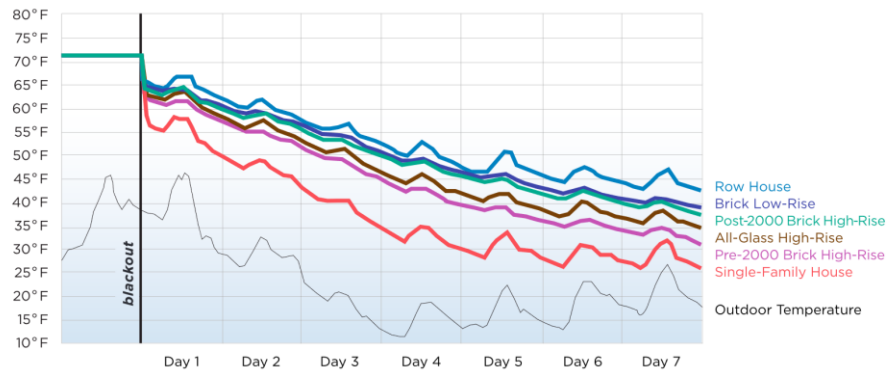
- Saving money in the long run
- Less impact on energy infrastructure/peak loads



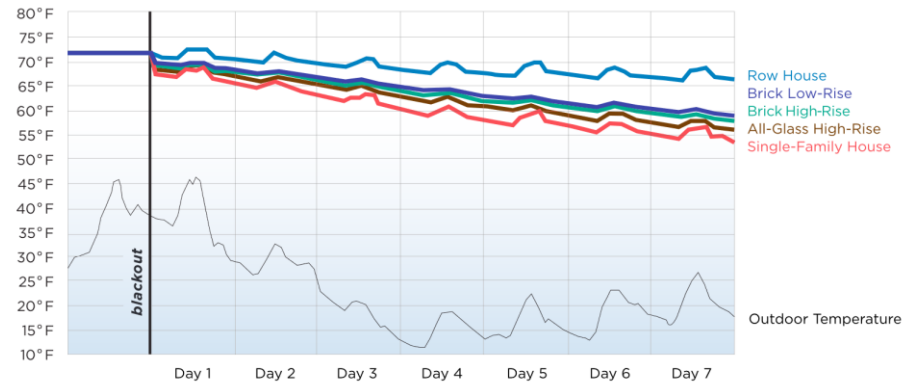
Energy efficient buildings are more resilient

Indoor Temperatures During a Winter Blackout

Typical Building

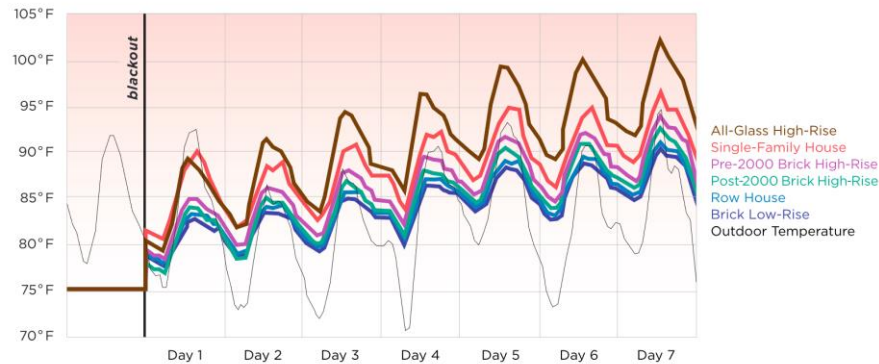


High-Performing Building

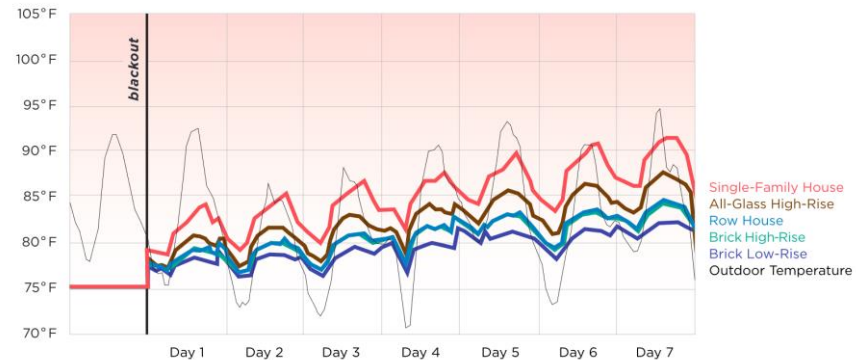


Indoor Temperatures During a Summer Blackout

Typical Building



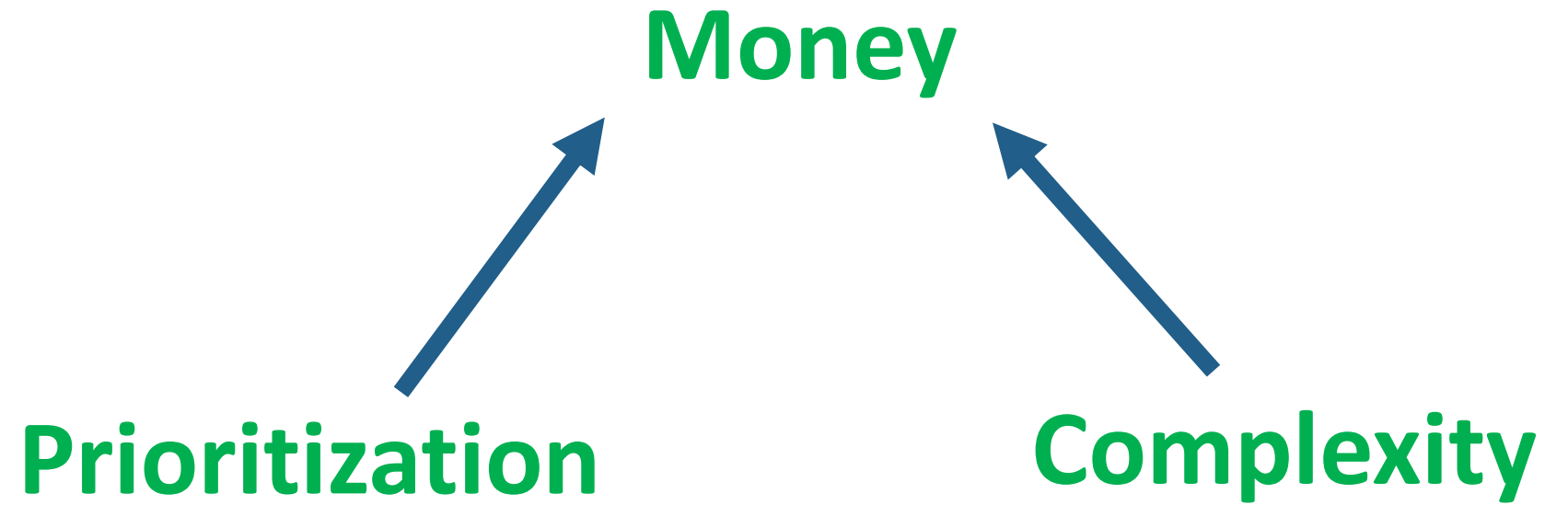
High-Performing Building



Why make buildings energy efficient?



Challenges



BayREN Codes and Standards Program

bayrencodes.org

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