



SPUR envisions a region where all people thrive.

The region is environmentally just and resilient to climate change



# Climate Change Will Affect Every Aspect of our Society and Economy

Increasingly frequent and severe droughts and floods

- Snowpack will decline by two-thirds by 2100
   Increasingly large and destructive fires
- Area burned statewide will increase 77% by 2100

More frequent heat waves

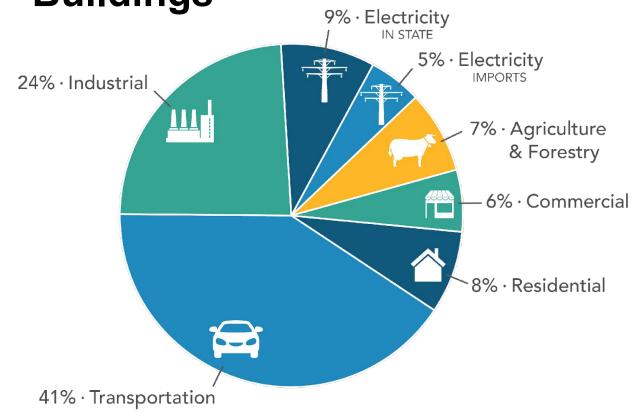
Avg. annual max. temperature will increase 6-9 deg

Sea level rise will inundate low-lying coastal areas

Displace 80,000 homes in the Bay Area



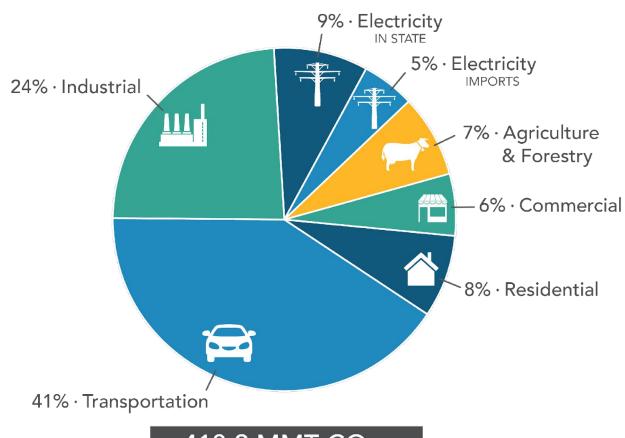
# The Biggest Sources Are Transportation, Industry, Electricity, and Buildings



418.2 MMT CO<sub>2</sub>e
2019 TOTAL CA EMISSIONS



# The Majority of Carbon Emissions are Driven By Choices Made at the Local Level



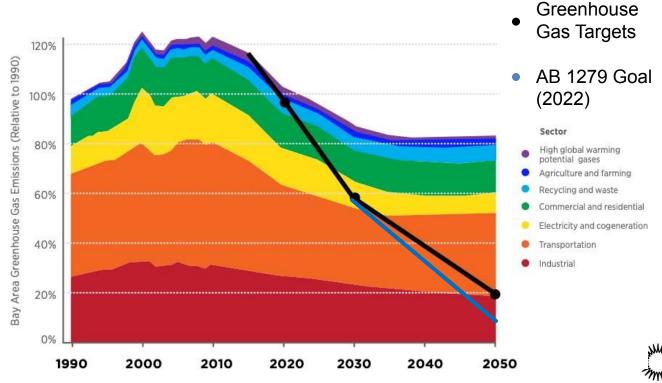
25% of emissions come from energy use in buildings

29% are from passenger vehicles

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#### California's Climate Goals

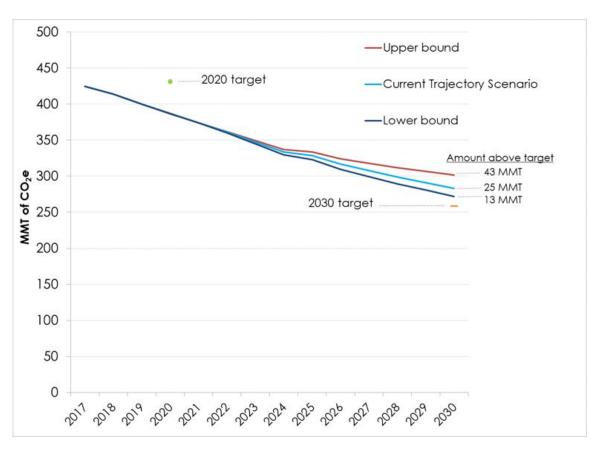
California's goals: Carbon neutral as soon as possible, but no later than 2045 Reduce emissions by 40% below 1990 level by 2030 Reduce emissions 85% below 1990 by 2045 (AB 1279)



Source: BAAQMD, 2015. Reproduced in SPUR report, Fossil Fuel Bay Area (2016).

## California is Off Track for its 2030 Target

On its current trajectory, California will miss its 2030 target by about 10%



Source: Busch and Orvis, Insights from the California Energy Policy Simulator (2020).

## Three Big Ideas for the Bay Area:

- 1. Consume less fossil fuel
- 2. Electrify most energy uses
- 3. Generate renewable energy



#### **Consume Less Fossil Fuel**

- Increase the energy performance of new buildings, and improve code enforcement
- Require systematic energy retrofits of existing buildings
- Control sprawl by protecting open space, supporting infill development, and increasing density in places served by transit





# **Electrify Most Energy Uses**

Electrify passenger vehicles and scale up electric vehicle infrastructure

**Electrify fossil fuel uses in buildings** 





## Convert to Renewable Energy Sources

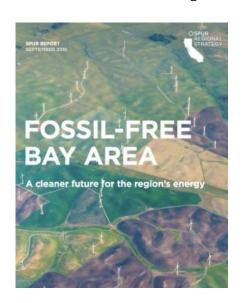
Convert all electricity to renewable sources

Decarbonize fuel sources that are hard to electrify

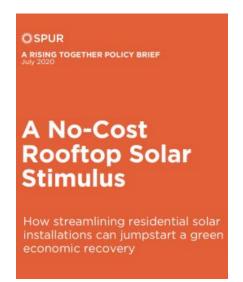




#### **SPUR Reports**















#### **Extra Slides**

# **Emissions Over Time by Sector**

