California Climate Program Update

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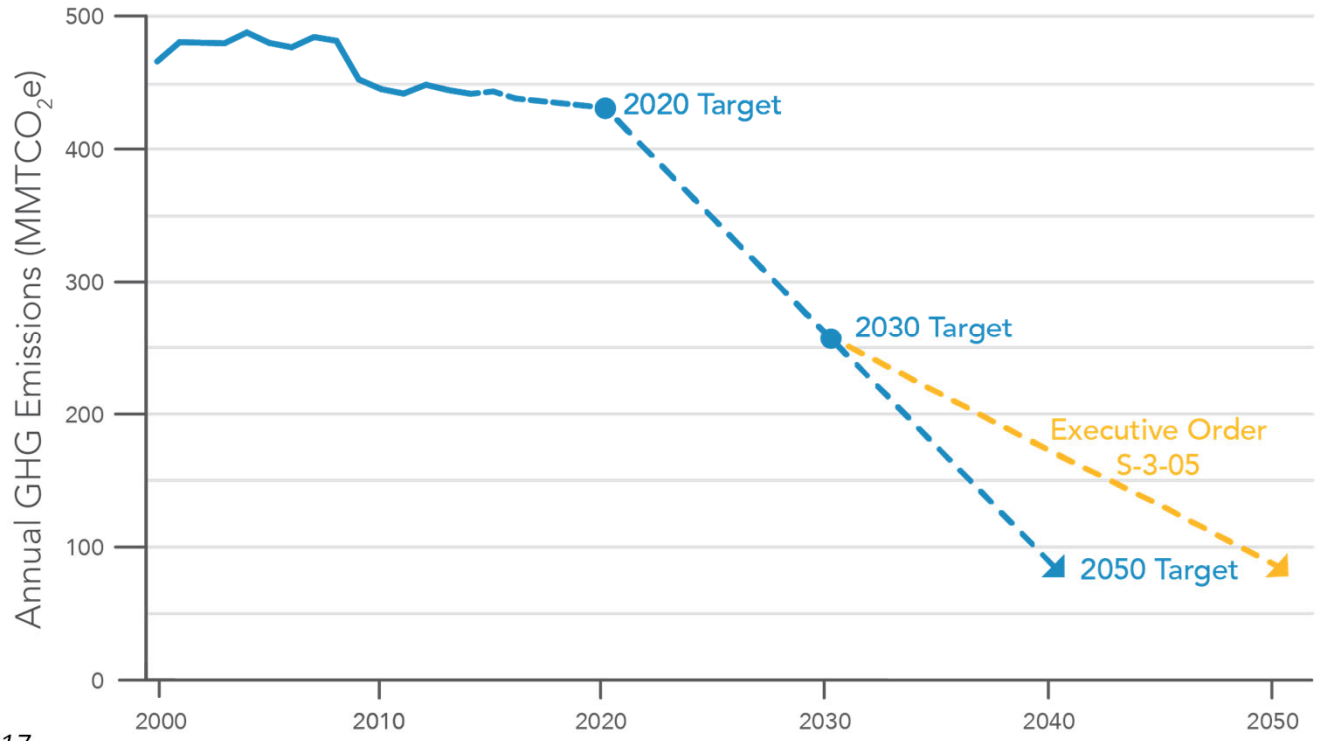
California GHG Emissions Reduction Targets



Source: CARB, 2017

2017 Scoping Plan Portfolio Mix to Achieve 2030 Target

Double building efficiency

50% renewable power **

More clean, renewable fuels

Cleaner zero or near-zero emission cars, trucks, and buses

Walkable/bikeable communities with transit

Cleaner freight and goods movement

Slash potent "super-pollutants" from dairies, landfills and refrigerants

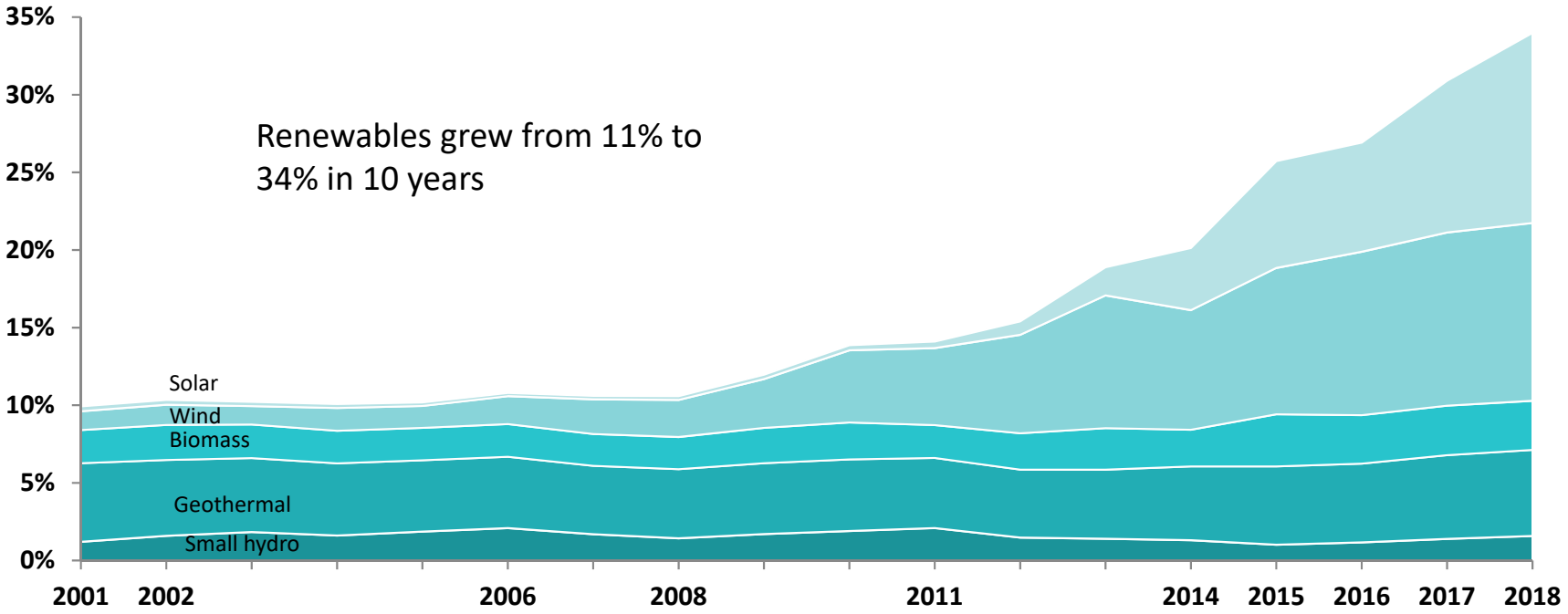
Cap emissions from transportation, industry, natural gas, and electricity

Invest in communities to reduce emissions

Protect and manage natural and working lands

**In 2018, SB 100 increased the Renewables Portfolio Standard to 60% by 2030

California Making Rapid Progress on Renewable Energy Generation



Source: California Energy Commission, Tracking Progress Report

California's ZEV Market

556,344
California EV sales

1,151,092
EV sales nationwide

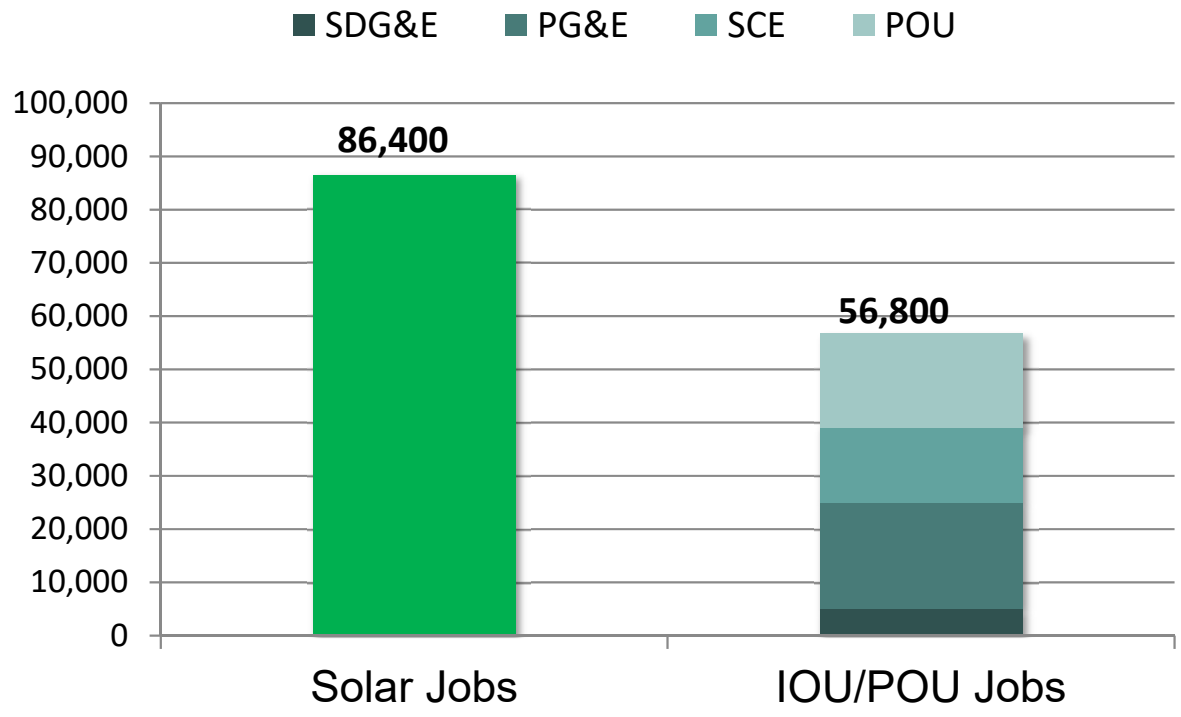
19,727
California charging plugs

39
California hydrogen stations

44
California models available

As of March 2019

More Californians Work in the Solar Industry Than for All Utilities Combined



Sources:

Solar Foundation, 2017 Solar Jobs Census

U.S. Securities and Exchange Commission, Form 10-K, 2014
http://www.sec.gov/edgar/searchedgar/companysearch.html

Lessons Learned

Thoughtfully designed programs have pushed clean technology and fuels

Revenues from carbon pricing continue to be important for addressing environmental justice and equity concerns

Exportable programs are necessary to address global emissions

Retirement and public funds (i.e. economic recovery and stimulus packages) need to be leveraged to support a sustainable future

Reductions in fossil transportation fuels and VMT remain a challenge. Current situation may provide data on how to implement existing programs

Protecting our Future

Key Considerations Moving Forward

- Strive for zero emissions from every sector
  - Technologically feasible, cost-effective, minimal impacts to households and jobs
  - What can maximize air-quality benefits for most vulnerable communities
- Reduce and replace fossil fuels
- Potential limits to electrification, best use of RNG and renewable hydrogen
- Maximum potential for sequestration in natural and working lands
- Lessons learned from current public health and economic situation to inform strategies and implementation of emissions reductions efforts
- As part of economic recovery efforts, supporting investments and economic stimulus packages critical for a sustainable future and not back to status quo

Mid-Century Carbon Neutrality (CO2e)

Step 1: Strive for zero emissions from all sources

Fossil Energy

Industrial Processes

Natural and working lands

Step 2: Maximize Sequestration

Carbon capture and sequestration

Direct air capture

Natural and working lands

Ongoing Multi-Agency Efforts

CARB interagency collaborations

- AB 74 - Transportation Carbon Neutrality
  - Studies will evaluate how to reduce demand for fossil fuels in the sector and how to manage the subsequent decline for supply
- SB 100 - Zero Carbon Electricity Retail Sales by 2045
- SB 1440 – Consideration of annual biomethane procurement targets for each gas corporation
- Continued efforts to reduce emissions from Natural and Working Lands

THANK YOU