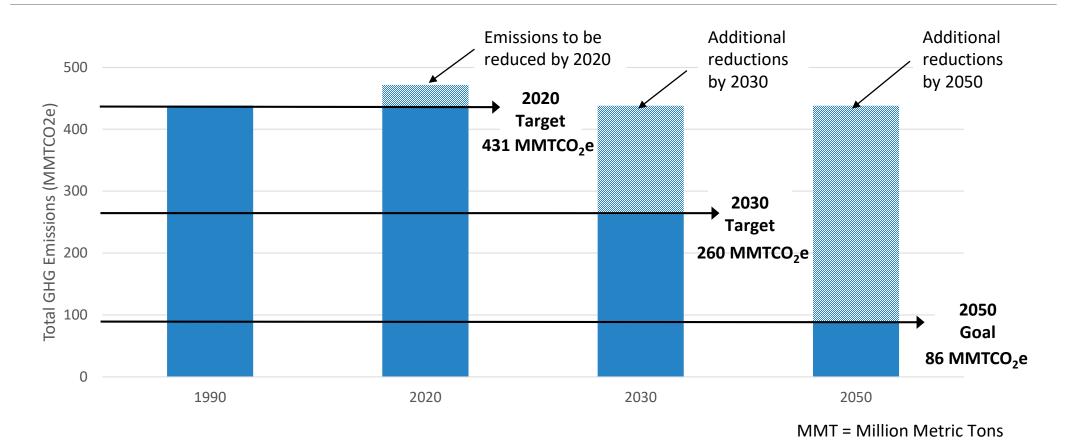
DOCKETED	
Docket Number:	19-IEPR-07
Project Title:	Electricity Sector
TN #:	229824
Document Title:	California's Climate Strategy and Carbon Neutrality
Description:	Presentation by Maureen Hand, California Air Resources Board
Filer:	Raquel Kravitz
Organization:	California Air Resources Board
Submitter Role:	Public Agency
Submission Date:	9/23/2019 4:04:08 PM
Docketed Date:	9/23/2019

## California's Climate Strategy and Carbon Neutrality



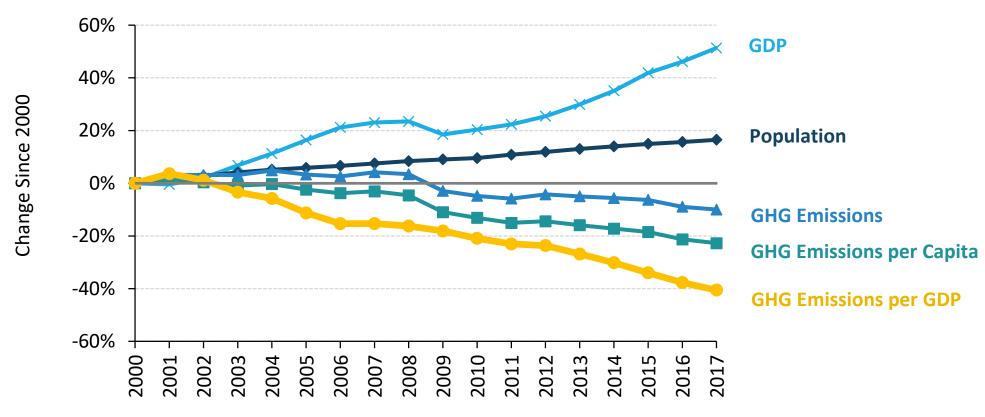
**SEPTEMBER 24, 2019** 

# California's GHG Emissions Reduction Targets



Source: CARB, 2018

## California Trends of Emissions and Indicators



Source: 2019 Edition, California Greenhouse Gas Emission Inventory: 2000-2017

## 2017 Climate Change Scoping Plan Policy Portfolio



Double building efficiency



Cleaner freight and goods movement



50% renewable power\*\*



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



More clean, renewable fuels



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



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



Invest in communities to reduce emissions



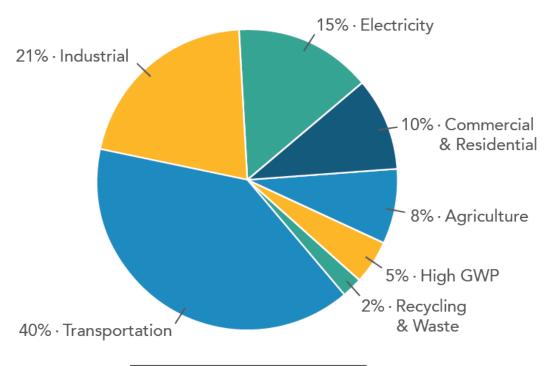
Walkable/bikeable communities with transit



Protect and manage natural and working lands

<sup>\*\*</sup>In 2018, SB 100 increased the Renewables Portfolio Standard to 60% by 2030

### Transportation Remains a Key Focus



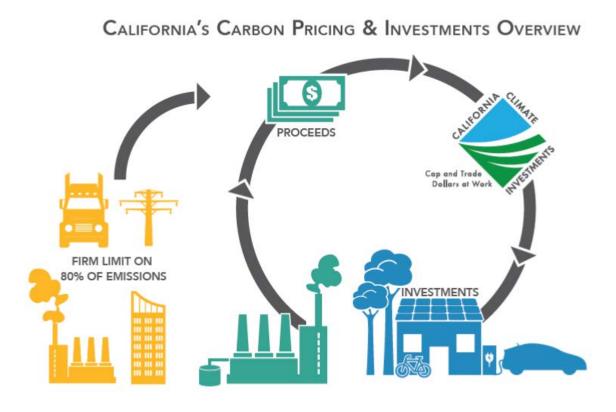
- In 2017, California was home to
  - Nearly 50% of all ZEVs sold in the U.S.
  - A total diesel blend that includes
    18% biomass-based fuel
  - 75% of U.S. venture capital investment in clean transportation

**424.1 MMTCO<sub>2</sub>e**2017 TOTAL CA EMISSIONS

Source: 2019 Edition, California Greenhouse Gas Emission Inventory: 2000-2017; 2018 California Green Innovation Index, 10th Edition

## Low Carbon Transportation Program Investments

- Clean Vehicle Rebate Program (CVRP)
- Clean Vehicle Assistance Program
- Transportation Equity Projects to Increase Access
- Clean Truck and Bus Voucher Incentive Project
- Freight projects: demonstrations and early commercial pilots for clean engines and facilities



## Framing the Path Forward

IPCC Report – Carbon neutrality by 2045 may hold global warming to 1.5°C



Some regions are net emitters; others are sinks





Sources



Sinks







### **Carbon Neutrality by 2045**



Reduce fossil energy and NWL emissions; evaluate potential sinks

## California Carbon Neutrality (CO<sub>2</sub>e)



**Today** 

Minimize emissions









Transition from source to sink



Both categories emit GHGs

No net GHG emissions

### 2019 Engagement

- Technical workshops to explore topic areas on achieving carbon neutrality
  - Energy demand and supply
  - Transformation across economic sectors (i.e., transportation, industrial)
  - Options and support for sequestration activities
- Continued collaboration
  - State and local agencies
  - Academics and researchers
  - International partners

## Scoping Plan Supporting Efforts

- Inter-agency Projects
  - Annual Integrated Energy Policy Report (IEPR)
  - SB100 Joint Report to Legislature
  - AB 74 Studies on Vehicle Emissions and Fossil Fuel Demand and Supply

### Thank You

- Climate Change Scoping Plan
  - https://ww3.arb.ca.gov/cc/scopingplan/scopingplan.htm
- Carbon Neutrality Workshops
  - https://ww3.arb.ca.gov/cc/scopingplan/meetings/meetings.htm