



# California's Cap-and-Trade Program



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# Cap-and-Trade Program

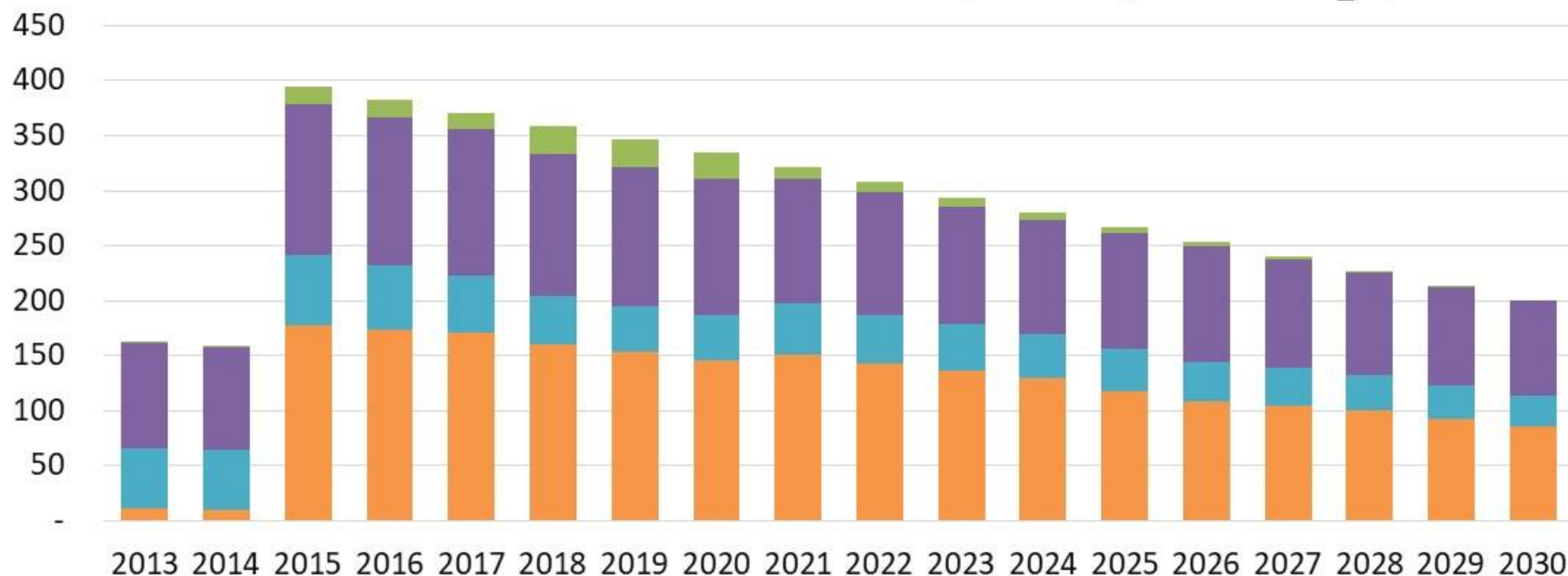
- ▣ Part of a suite of climate policies to achieve 40% below 1990 levels by 2030
- ▣ Ensure GHG targets are realized through a strict limit
- ▣ Provide compliance flexibility to achieve cost-effective reductions
- ▣ Allow price signals to motivate long-term investment in cleaner fuel and energy efficiency
- ▣ Complement existing programs to reduce smog and air toxics
- ▣ Facilitate integration of regional, national, and international GHG reduction programs
- ▣ Extended in 2017 in conjunction with legislation to focus efforts on neighborhood level air pollution (AB 617)

# Economy-wide Coverage

- ▣ Program covers about ~85% of State's Emissions
  - ▣ Stationary sources with emissions  $\geq 25,000$  metric tons of carbon dioxide equivalent (MTCO<sub>2</sub>e) per year
  - ▣ Importers of electricity
  - ▣ Emissions from the combustion of supplied fuels, including natural gas and transportation fuels
  - ▣ Carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O)

# Cap-and-Trade Program Allowance Budgets

## 2013–2030 Allowances by Year (MMTCO<sub>2</sub>e)



- Allowance Price Containment Reserve
- Allocation to Electrical Distribution Utilities and Natural Gas Suppliers
- Industrial and Other Allocation (estimate)
- State-Owned Allowances

# Important Design Features

- ▣ Allocation to industrial sources to prevent leakage
- ▣ Multiyear compliance periods
- ▣ Banking
- ▣ Offsets
- ▣ Compliance Flexibility
- ▣ Allowance Price Containment Reserve
- ▣ Auction with price floor for carbon price discovery to inform investment and compliance decisions
- ▣ Allows market to identify lowest-cost GHG reductions

# How is Cap and Trade Enforced?

- ▣ Robust annual GHG emissions reporting and verification
  - ▣ Use consistent methods for reporting within a sector and across sectors
  - ▣ Third-party verification to ensure accurate reporting
- ▣ Offset projects must comply with CARB-adopted protocols and undergo third-party verification
- ▣ Automatic 4x increase in compliance obligation if an entity misses the compliance deadline

# Cap-and-Trade Program Facts and Figures

- ~450 covered entities in the Cap-and-Trade Program
- Program linked with Québec's cap-and-trade program on January 1, 2014, and will link with Ontario's program on January 1, 2018
- >1.1 billion compliance instruments held in private accounts (~\$16 billion in value)
- >\$6.4 billion generated for California Climate Investments
- High levels of compliance with Program requirements
- Carbon price is being incorporated into compliance, investment decisions, and electricity market

# What is Linkage?

- In the context of the California Cap-and-Trade Program, linkage refers to the process of approving compliance instruments issued by another jurisdiction's climate program (e.g., an emissions trading system) to be eligible for use by entities to meet compliance obligations under California's program
- Current linkage
  - Instruments from another ETS can be used in California and where California instruments can be used in the other ETS
  - Ex., Québec, Ontario
- Potential linkage to Sector-Based Offset Programs
  - Instruments from an approved sector-based offset program can be used in California, but California instruments would not be used in the sector-based offset program
  - Ex., Acre, Brazil



# SB 1018 Requirements

- ▣ The Governor must make all of the following findings:
  - ▣ Partner Jurisdiction has adopted program requirements for GHG reductions and offset credits which are equivalent to or stricter than California's
  - ▣ California has continued ability to enforce its laws and regulations
  - ▣ Partner Jurisdiction has ability to enforce its laws and regulations, and enforcement requirements are equivalent to or stricter than California's enforcement requirements
  - ▣ Proposed linkage does not impose any significant liability on California for any failure associated with the linkage

# SB 1018 Process to Propose Linkage

- ▣ Review potential partner jurisdiction's program (or proposed program if not yet adopted)
- ▣ Assess partner jurisdiction program against SB 1018 requirements
  - ▣ Stringency of GHG reduction requirement
  - ▣ Monitoring, Reporting, and Verification
  - ▣ Accuracy requirement
  - ▣ Program coverage (i.e., who is regulated)
  - ▣ Market/trading rules (if an ETS)
  - ▣ Offset provisions and requirements
  - ▣ Enforcement mechanisms within potential partner jurisdiction
- ▣ Develop recommendations and notification package to send to Governor

# Recent Legislation: AB 398

- ▣ Provides direction on a post-2020 Cap-and-Trade Program, including
  - ▣ Changes to the offset usage limit and requirements for instate benefits
  - ▣ Direction on allowance allocation
  - ▣ Establishing two price containment points and a price ceiling
- ▣ CARB in the process of evaluating changes to program design features
- ▣ Changes will be subject to a public process and coordinated with linked partners
- ▣ AB 398 requires that changes be in effect by January 1, 2021

# Additional Resources

- ▣ California Air Resources Board:  
<https://www.arb.ca.gov/homepage.htm>
- ▣ Cap-and-Trade Program:  
<https://www.arb.ca.gov/cc/capandtrade/capandtrade.htm>
- ▣ California's Climate Change Scoping Plan:  
<https://www.arb.ca.gov/cc/scopingplan/scopingplan.htm>
- ▣ Mandatory Greenhouse Gas Emissions Reporting:  
<https://ww2.arb.ca.gov/our-work/programs/mandatory-greenhouse-gas-emissions-reporting>
- ▣ ETS Linkage Information  
<https://www.arb.ca.gov/cc/capandtrade/linkage/linkage.htm>