



California's Climate Change Program

*California Air Resources Board
October 12, 2017*

AB 32 Background

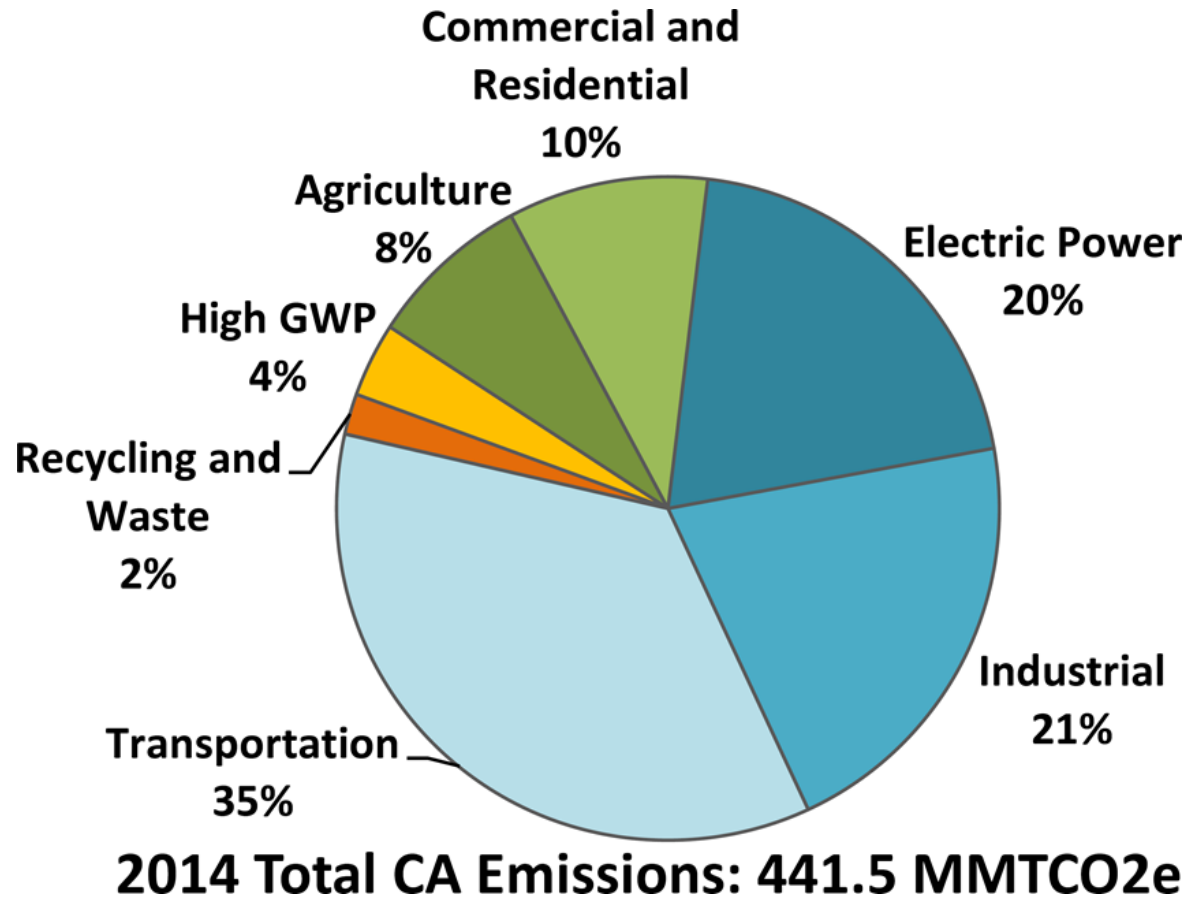
- ▣ Achieve 1990 emissions level by 2020
- ▣ Continue greenhouse gas (GHG) reductions beyond 2020
- ▣ Adopt GHG emission reporting regulation
- ▣ Adopt discrete early action measures
- ▣ Develop Scoping Plan and update it every five years
- ▣ Authority to adopt schedule of fees

AB 32 Implementation

- ▣ Initial Scoping Plan approved in 2008
- ▣ Includes complementary strategies that serve as a national and international model:
 - ▣ Direct measures or regulations
 - ▣ Incentive programs
 - ▣ Market-based mechanisms (e.g., cap-and-trade)
- ▣ Strategies reduce GHG emissions in every sector by improving efficiency and providing consumers with cleaner fuel choices
- ▣ Improved air quality and investments in CA clean economy

GHG Emission Sources by Sector

- Natural & Working Lands (NWL) are **not** included in the scope of the statewide limit
- ~898 MMT carbon in “live stocks” –forests, grasses, scrub



AB 32 Scoping Plan: Measures

- Over 30 measures from 2008 Scoping Plan already developed and are being implemented by ARB, other State and local agencies*
- California has undertaken a number of notable groundbreaking climate change initiatives:
 - Cap-and-Trade Program
 - Low Carbon Fuel Standard
 - 33 Percent Renewable Portfolio Standard (RPS)
 - Advanced Clean Cars
 - Sustainable Communities (SB 375)
 - Short-Lived Climate Pollutants

*<http://www.arb.ca.gov/cc/ghgsectors/ghgsectors.htm>

Cap-and-Trade: Scope

- Program Coverage (~85%)
 - Stationary sources with emissions $\geq 25,000$ MT of CO₂e/year
 - Generators and importers of electricity
 - Emissions from the combustion of supplied fuels and natural gas
- Allowance Budget (Cap)
 - 370.4 MMTCO₂e (2017)
 - 334.2 MMTCO₂e (2020)
 - 200.5 MMTCO₂e (2030)

Cap-and-Trade: Milestones

Time	Event
November 2012	First auction
January 2014	Program linked with Québec
November 2014	First joint auction with Québec
January 2015	Compliance obligation for supplied fuels
November 2015	First compliance period compliance event (99.8%)
November 2016	2015 annual compliance event (100%)
January 2018	<i>Linkage with Ontario takes effect</i>
February 2018	<i>First three-jurisdiction joint auction (expected)</i>

Cap-and-Trade: by the Numbers

- ▣ > 600 program participants
 - ▣ ~53% Covered Entities/Opt-in Covered Entities
 - ▣ ~47% General Market Participants
- ▣ Allowance Auctions
 - ▣ 20 auctions held to-date (12 joint-auctions)
 - ▣ > 1.1 billion compliance instruments in private accounts (~\$15 billion in value)
 - ▣ > \$5.5 billion placed in Greenhouse Gas Reduction Fund

Cap-and-Trade: Offset Program

- Offset are tradable compliance instruments that represent verified emissions reductions or removal enhancements made outside of the Program
 - Up to 8% of compliance obligation
- Must meet AB 32 criteria: real, permanent, quantifiable, verifiable, enforceable, and additional
- 6 protocols adopted
 - U.S. Forest, Urban Forest, Livestock, Ozone Depleting Substances, Mine Methane Capture, Rice Cultivation
- > 83 million offset credits issued by ARB

Cap-and-Trade: Linkage

- ▣ Linkage: the process of approving compliance instruments issued by another jurisdiction's climate program
 - ▣ Linked External GHG ETS (ex: Québec/Ontario)
 - ▣ Jurisdictional Sector-Based Offset Program (none approved)
 - ▣ Retirement-Only Limited Linkage (none approved)
 - ▣ Retirement-Only Agreements (none approved)

Cap-and-Trade: SB 1018

- SB 1018 Requirements: Prior to linking with another jurisdiction, ARB must notify the Governor of the proposed link, and the Governor must issue the following findings:
 - The program is equivalent to or stricter than California's
 - State maintains legal authority to enforce AB 32
 - The linking jurisdiction has a legally enforceable program
 - Linking imposes no significant liability for the State

Cap-and-Trade: Proceeds

- \$5.6 billion in proceeds to State from auction of allowances
 - Additional \$5 billion benefit utility ratepayers
- Legislation requires 35% of State proceeds to be spent in/to benefit disadvantaged and low-income communities and households
- Projects include affordable housing in sustainable communities, healthy forests, EV vouchers, cleaner trucks, dairy digesters and energy efficiency upgrades, and more.

Recently Adopted Amendments for the Post-2020 Program

- Extend some provisions of the Cap-and-Trade Program beyond 2020
 - Establish framework for emissions caps beyond 2020
 - Continue linkage with Québec and Ontario
 - Enable the future auction and allocation of allowances
 - Streamline the Allowance Price Containment Reserve by collapsing current price tier structure
- Enable California compliance with the federal Clean Power Plan

AB 398 and AB 617

- July 17, 2017 legislature passed AB 398 and AB 617
 - AB 398 provides direction on a post-2020 Cap-and-Trade Program and updates to the ongoing Scoping Plan Update
 - AB 617 focuses on reducing exposure to criteria and toxic pollutants in California's most burdened communities
- Initiate a new rulemaking to design a post-2020 program that conforms to the requirements in AB 398
- Work underway to implement new community-focused air quality program including monitoring and emission reduction plans

Further Information

- ▣ Climate Change Scoping Plan
<https://www.arb.ca.gov/cc/scopingplan/scopingplan.htm>
 - ▣ October 12, 2017 - workshop to present updated modeling results reflecting the direction provided in AB 398 and discuss the schedule for finalization of the 2017 Scoping Plan
- ▣ Cap-and-Trade Regulation
<https://www.arb.ca.gov/cc/capandtrade/capandtrade.htm>
 - ▣ October 12, 2017 - workshop to discuss potential amendments to the Regulation
- ▣ Edie Chang – edie.chang@arb.ca.gov