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

2014 Total CA Emissions: 441.5 MMTCO2e

https://www.arb.ca.gov/cc/inventory/data/data.htm
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 ≥ 25,000 MT of CO$_2$e/year
  - Generators and importers of electricity
  - Emissions from the combustion of supplied fuels and natural gas

- Allowance Budget (Cap)
  - 370.4 MMTCO$_2$e (2017)
  - 334.2 MMTCO$_2$e (2020)
  - 200.5 MMTCO$_2$e (2030)
## Cap-and-Trade: Milestones

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