

UPDATE TO THE CALIFORNIA CAP-AND-TRADE REGULATION

California Air Resources Board
May 28, 2014

Presentation Outline

- Cap-and-Trade Program Background and Goals
- Cap-and-Trade Program Milestones
- Overview of Amendments to the Cap-and-Trade Regulation
- Program Implementation Next Steps

What is Cap-and-Trade?

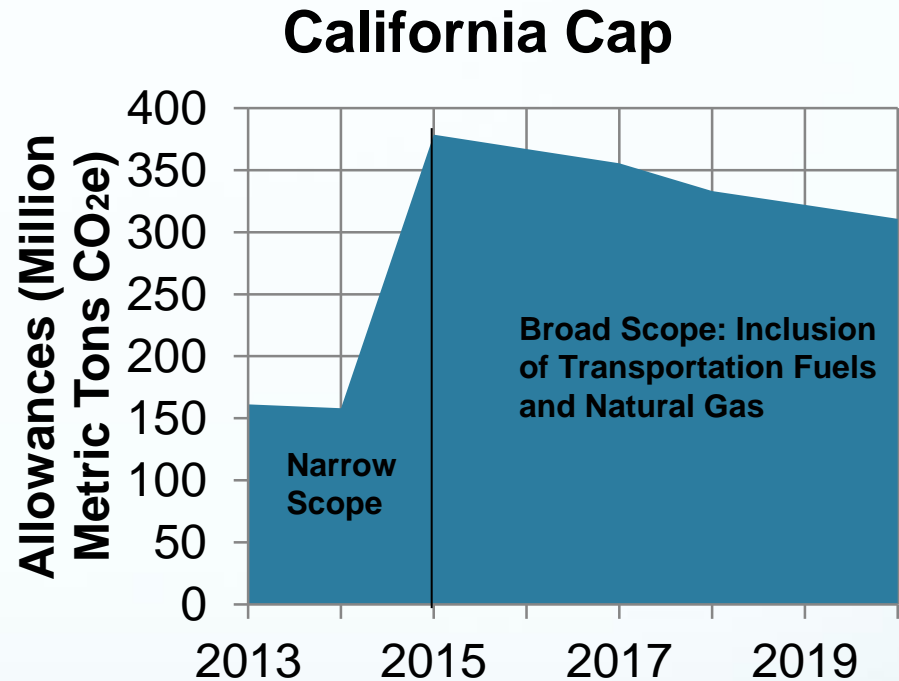
- Complements other measures to reduce greenhouse gas (GHG) emissions under AB 32
- The “cap” limits total GHG emissions from all regulated sources
- The “cap” declines over time—reduces emissions
- Participants are allowed to “trade” State-issued GHG emissions allowances—creates flexibility, reduces costs of compliance
- Works together with command-and-control measures (i.e., traditional regulation)

Program Goals

- Reduce GHG emissions
- Spur innovation in lower emissions and efficient technologies
- Complement existing programs to reduce smog and air toxics
- Ensure AB 32 reduction mandates for GHG are realized
- Flexible mechanism—allows covered entities to find most cost-effective reductions

What is the Cap?

- The cap is the aggregate limit on GHG emissions from covered sources from 2013–2020
 - The cap applies to all sources combined
 - Individual facilities do not have caps
- Cap covers 85% of California's GHG emissions
 - Large industrial sources
 - Electricity generation and imports
 - Transportation fuels (beginning in 2015)
 - Residential and commercial use of natural gas (beginning in 2015)



Cap-and-Trade Regulation Development

- Multi-year development and consultation process
- December 2010 – Board endorsed the proposed regulation with modifications
- October 2011 – Board adopted Final Regulation Order
- July 2012 – Board adopted implementation-related amendments
- April 2013 – Board adopted Québec linkage amendments
- April 2014 – Board adopted recent amendments

Milestones

- Seven quarterly auctions to date
- Allocations: November 2012 and 2013
- Compliance Obligation Began: January 1, 2013
- First Offset Issuance: September 2013
- Linkage with Québec: January 1, 2014
- First Compliance Obligation Due: November 1, 2014
 - Covered entities must surrender compliance instruments equal to 30% of their 2013 calendar year covered emissions

Regulatory Timeline

- September 6, 2013 – Staff released proposed amendments to the regulation with formal 45-day comment period
- October 25, 2013 – Board approved Resolution 13-44:
 - Consider the topics in Attachment A and make additional 15-day changes as appropriate
- March 21, 2014 – Staff released 15-day changes
- April 25, 2014 – Board adopted the proposed amendments, including the MMC Protocol
- July 1, 2014 – Expected effective date of the adopted amendments
- Formal and informal public process

Adopted Amendments: Allocation – Leakage Prevention

- Product Benchmarks
 - Move to product-based benchmarks for food sector and others
 - Modify existing benchmarks based on new data
 - Add benchmarks for covered sectors new to the program
- Leakage
 - Shifted assistance factors
- Other Technical Amendments
 - New entrants and opt-in covered entities
 - Allow limited borrowing with true-up allowances

Adopted Amendments: New or Increased Allocation

- Natural Gas Suppliers
 - Natural gas suppliers receive free allocation for most of their compliance obligations
 - Natural gas IOU's are required to consign portion to auction
 - 25% in 2015 increases by 5% annually
- Legacy Contracts
 - Allocate to legacy contract generators through the second compliance period
 - Redistribute allowances from industrial counterparties
- Universities and Public Service Facilities
- Public Wholesale Water Entities

Adopted Amendments: Covered Entities

- Added Sectors
 - Lead acid battery recyclers
 - Importers and producers of liquefied natural gas
- Exempt Sectors
 - “But-for” combined heat and power and district heating facilities
 - First, second, and third compliance periods
 - Extend exemption to national security facilities
 - First, second, and third compliance periods
 - Extend exemption for waste-to-energy facilities
 - Until January 1, 2016
- Return of allowance allocation in case of facility closure

Adopted Amendments: Electricity Generation

- Resource Shuffling
 - Clarified activities that constitute resource shuffling and activities that are not resource shuffling
 - Regulatory amendments are based on the guidance issued in November 2012
 - Resource shuffling is still prohibited, but an attestation is no longer required
- Technical Amendments
 - Voluntary renewable energy Renewable Energy Certificate retirement criteria
 - Imported electricity Renewable Portfolio Standard adjustment and specified sources

Adopted Amendments: Offsets

- New Compliance Offset Protocol Mine Methane Capture Projects
 - Provides additional cost containment for the program
 - Incentivizes additional emissions reductions in furtherance of AB 32 goals
- Streamline and clarify project review process
- New provisions to allow air districts multiple roles in the offset program
- Clarify roles for consultants and verification bodies and strengthen conflict-of-interest requirements
- Harmonize invalidation requirements across all project types
 - Amend forestry invalidation requirements to ensure environmental integrity

Adopted Amendments: Compliance Implementation

- Specified retirement order
 - Order is used to remove offsets and reserve allowances first from compliance accounts to retire compliance instruments that cannot be auctioned if account is closed
- Annual offset limit
 - Maximum usage limit of 8% of all emissions in the compliance period
 - Maximum retirement of 8% of annual emissions in offsets during annual surrender

Application of the 8% Offset Usage Limit

- Annual (example 2013 emissions = 100,000 MT CO₂e)
 - November 1, 2014: compliance obligation = 30,000 MT CO₂e
 - Max offsets retired = $.08 \times 100,000$ (8,000)
- End of Compliance Period (2014 emissions = 85,000 MT CO₂e)
 - November 1, 2015: compliance obligation = 185,000 MT CO₂e
 - Max offsets for compliance period = $.08 \times 185,000$ (14,800)
 - Max offset retired = 6,800 (14,800 – 8,000)
- Alternate – Entity does not use max limit for annual
 - Annual offsets retired in 2014 = 1,000
 - End of compliance period in 2015 = 13,800 (14,800-1,000)

Adopted Amendments: Market Oversight

- Ensures fair and equitable access to compliance instruments for all market participants
- Information disclosure on auction advisors and contractors
 - Knowing who has access to market information helps to monitor for potential points of collusion or market manipulation
 - Does not require entity to tell ARB the specific advice received
 - All disclosures treated as confidential information
- Information disclosure on allowance and offset transfers
 - Knowing the terms under which compliance instruments are traded helps monitor for market manipulation
- Trading prohibitions
 - Ensure that contracts that hide true ownership of allowances are prohibited

Adopted Amendments: Cost Containment

- Borrow future allowances through 2020 to enhance ability of reserve to contain prices
- Ensures allowance price does not exceed the highest price tier of the Allowance Price Containment Reserve (Reserve) over a reasonable range of future conditions
- Increases the number of allowances available at the highest price tier of the Reserve by 206.7 million
- Borrowed allowances are eligible for sale only at the Reserve sale immediately preceding each November 1 compliance obligation
- Maintains environmental integrity

Adopted Mine Methane Capture Compliance Offset Protocol

- Capture and destruction of fugitive mine methane, a short-lived, high global warming potential greenhouse gas
- Offsets represent real, rigorously quantified, additional greenhouse gas emissions reductions
- DOES NOT incentivize continued mining, expansion of existing mining operations, or development of new mines that is not otherwise economically viable
- Potential domestic offset supply of 60 million metric tons carbon dioxide equivalent
- A protocol does not preclude any future national regulation

Implementation Next Steps

- Effective date of amended Regulation anticipated to be July 1, 2014
 - Currently undergoing OAL review
- MMC Protocol verifier training
- Adaptive Management – ongoing
 - Update to Board by end of 2014
- Rice Protocol – Fall 2014
- First annual surrender of compliance instruments for covered entities:
 - Deadline: November 1, 2014
 - Surrender compliance instruments equal to 30% of 2013 covered emissions

Additional Information

- ARB's Cap-and-Trade website:
 - <http://www.arb.ca.gov/cc/capandtrade/capandtrade.htm>
- OAL Cap-and-Trade website:
 - <http://www.arb.ca.gov/regact/2013/capandtrade13/capandtrade13.htm>
- April 2014 Adopted Regulation:
 - http://www.arb.ca.gov/cc/capandtrade/ct_oal_april2014.pdf
- Staff Lead
 - Sara Nichols snichols@arb.ca.gov
- Cap-and-Trade contacts:
 - http://www.arb.ca.gov/cc/capandtrade/contacts/capandtrade_contacts.htm