

PROPOSED AMENDMENTS TO THE CAP-AND-TRADE REGULATION

California Air Resources Board
April 25, 2014

Presentation Outline

- Cap-and-Trade Program Background and Goals
- Cap-and-Trade Program Milestones
- Public Process for the Proposed Amendments
- Proposed Amendments to the Cap-and-Trade Regulation
- CEQA Environmental Analysis
- Staff Recommendation

What is Cap-and-Trade?

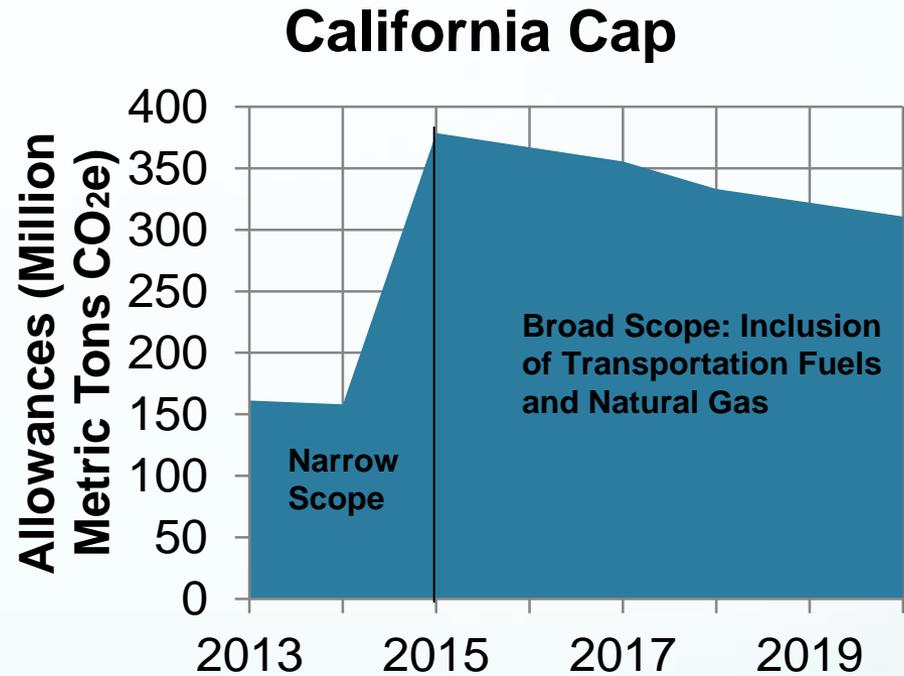
- Complements other measures to reduce greenhouse gas (GHG) emissions under AB 32
- The “cap” limits total GHG emissions from all regulated sources
- The “cap” declines over time—reduces emissions
- Participants are allowed to “trade” State-issued GHG emissions allowances—creates flexibility, reduces 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

Milestones

- Six 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

Previous Board Direction

- **Resolution 11-32**
 - Allocation
 - Resource Shuffling
 - Offsets
 - Waste-to-Energy Facilities
 - Military
 - Market Surveillance
 - Benchmarks
- **Resolution 12-33**
 - Allocation
 - Waste-to-Energy Facilities
 - Purchase Limits
- **Resolution 12-51**
 - Cost Containment
 - Leakage

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
 - Prepare an analysis of the potential impact of offsets on coal mine economics
 - Prepare written responses to environmental comments
- March 21, 2014 – Staff released 15-day changes
- April 14, 2014 – Staff posted responses to environmental comments for Board consideration
- Today – Board consideration of final regulatory package

Additional Public Process

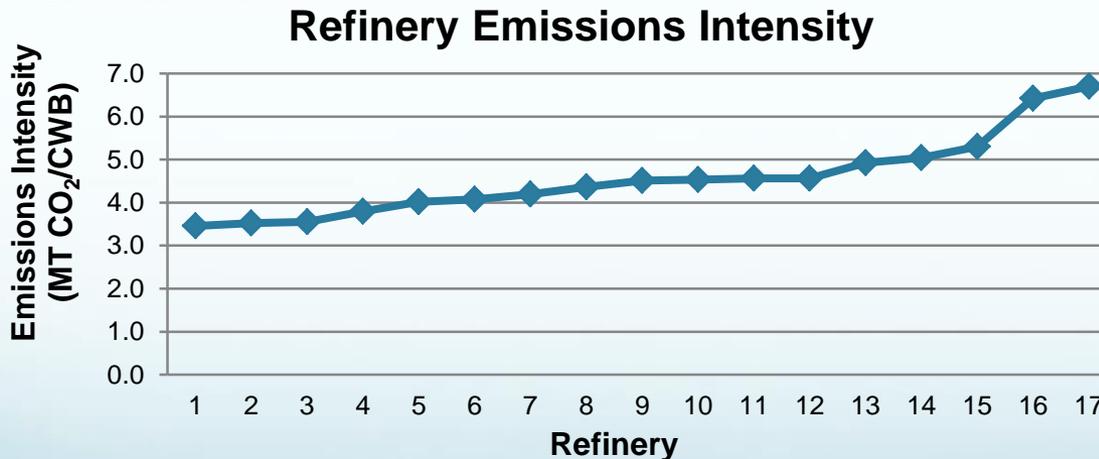
- 12 public workshops
 - Topics included leakage, refinery allocation, information sharing, offset protocols, natural gas allocation, universities, CHP, legacy contracts, and cost containment
- MMC Protocol
 - Public workshop and four technical working group meetings
- Numerous informal meetings with individual stakeholders on specific topics
- 3 informal discussion drafts:
 - Beyond requirements under Administrative Procedure Act
 - July 2013 – Release of first discussion draft regulation for informal public comment and workshop
 - August 2013 – Release of mine methane capture draft protocol and workshop
 - January 2014 – Release of second discussion draft regulation for informal public comment

Proposed 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

Proposed Amendments: Refinery-Related Allocation Changes*

- Refinery allowance allocation based on complexity-weighted barrels (CWB) as a proxy for production –in response to refinery sector consensus
 - Replacing CO₂-weighted tonne, the European Union Emissions Trading System's version of CWB
- Single benchmark proposed for all refinery CWB
 - Concluded that smaller, less-complex refineries are fairly treated by a single CWB benchmark



- Separate benchmarks for gaseous hydrogen, liquid hydrogen, and calcined coke

Proposed 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

Proposed 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
 - Presidential Executive Order requires GHG reductions
 - Return of allowance allocation in case of facility closure

Proposed Amendments: Waste-to-Energy

- Extend exemption for waste-to-energy facilities
 - 2013, 2014, and 2015 calendar years
 - ARB will retire allowances equivalent to the emissions obligation
- California's Department of Resources Recycling and Recovery (CalRecycle) study
 - Joint study with ARB to inform on most effective treatment of waste sector under Cap-and-Trade
- Scoping Plan Update
 - Appendix C – framework for achieving GHG reduction goals in waste sector

Proposed 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

Proposed 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

Proposed 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*

Proposed 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

Proposed 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

Proposed 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

CEQA Environmental Analysis

- Staff prepared an environmental analysis for the Proposed Amendments and Proposed Compliance Offset Protocol for Mine Methane Capture Projects
- Programmatic-level analysis concluded no adverse environmental impacts from the proposed amendments, except potential impacts to biological resources and cultural resources related to landscape disturbance at project sites associated with implementation of Mine Methane Capture Projects.
- Staff prepared Findings and Statement of Overriding Considerations for Board consideration

Implementation Next Steps

- Adaptive Management – ongoing
 - Update to Board by end of 2014
- Cement Border Carbon Adjustment – Fall 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

Staff Recommendation

- Approve the proposed Resolution which includes:
 - Approval of written responses to environmental comments
 - Adoption of CEQA Findings and Statement of Overriding Considerations
 - Adoption of Final Regulation Order
 - Adoption of Compliance Offset Protocol Mine Methane Capture Projects (MMC Protocol)
- The proposed Resolution also directs the Executive Officer to:
 - Finalize the Final Statement of Reasons and submit the completed regulatory package to the Office of Administrative Law