

# **PROPOSED AMENDMENTS TO THE CAP-AND-TRADE REGULATION**

California Air Resources Board  
October 25, 2013

# Presentation Outline

- Cap-and-Trade Program Background and Update
- Proposed Amendments to the Cap-and-Trade Regulation
- Proposed 15 Day Changes
- Next Steps
- Staff Recommendation

# Suite of AB 32 Measures

- Building and appliance energy efficiency standards
- Transportation
  - Tire Pressure Regulation
  - Low Carbon Fuels Standard
  - Heavy-Duty Trucks
  - Mobile Air Conditioners (DIY Cans)
  - High Speed Rail
  - SB 375
- Electricity
  - Renewable Portfolio Standard
  - California Solar Initiative
  - Combined Heat and Power
- High Global Warming Potential Gasses
  - High GWP Consumer Products
  - Refrigerant Management Program
  - SF6 Leak Reduction
- Stationary Sources
  - Shore Power
  - Semiconductor Manufacturing
  - Landfill Methane Capture
  - Energy Efficiency Audits for Industrial Sectors
- **Cap-and-Trade Program**

# What is Cap-and-Trade?

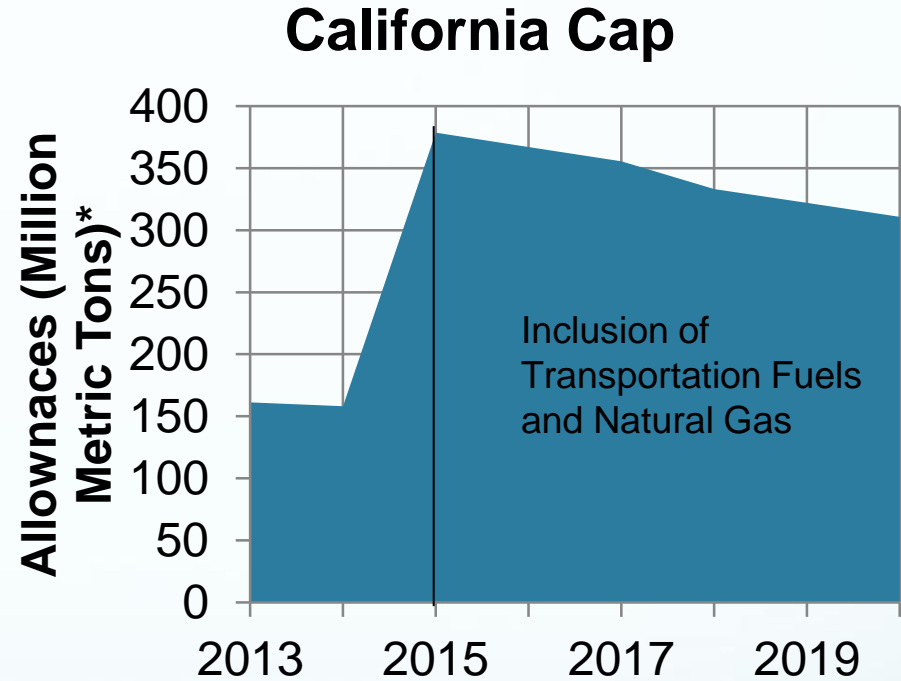
- Complements other measures to reduce greenhouse gas (GHG) emissions under AB 32
- The “cap” limits total GHG emissions from all regulated sources
- The “cap” declines over time—reduces emissions
- Participants are allowed to “trade” state-issued GHG emissions allowances—creates flexibility, reduces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

# Program Goals

- Reduce GHG emissions
- Spur innovation in low 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)



# Compliance Instruments

	<b>Allowances</b>	<b>Offset Credits</b>
Description	Authorization to emit 1 MTCO <sub>2</sub> e under the Cap-and-Trade Program	Represents a real and verifiable emission reduction of 1 MTCO <sub>2</sub> e outside of the Cap-and-Trade program sectors
Obtained from	Auction, free allocation, trades	Offset project developers, trades
Tradable (Can be sold to other facilities)	Yes	Yes
Bankable (Do not expire; Good until used)	Yes	Yes
Limits on use to meet compliance obligation	No limit	Limited to 8% of an entity's compliance obligation

# Cap-and-Trade Rule Development

- Three year development and consultation process
  - Dozens of meetings and workshops
  - Thousands of public comments
- 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 Quebec linkage amendments



# Milestones

- Auctions to Date: 2012 – November  
2013 – February, May, August
- First Allocation: November 2012
- Compliance Obligation Began: January 2013
- First Offset Issuance: September 2013
- Linkage Readiness Report: November 2013
- Implement Linkage with Quebec: January 2014
- First Compliance Date: November 2014

# Previous Board Direction

- Resolution 11-32
  - Allocation
  - Resource Shuffling
  - Offsets
  - Waste-to-Energy
  - Military
  - Market surveillance
  - Benchmarks
- Resolution 12-33
  - Allocation
  - Waste-to-Energy
  - Purchase Limits
- Resolution 12-51
  - Cost containment
  - Leakage

# Public Process for Proposed Amendments

- 11 public workshops
  - Topics included leakage, refinery allocation, information sharing, offset protocols, natural gas allocation, universities, CHP, legacy contracts, and cost containment
- July 2013 – Release of draft regulation for informal public comment and workshop
- August 2013 – Release Mine Methane Capture draft protocol and workshop

# Proposed Amendments: Allocation – Leakage Prevention

- Product Benchmarks
  - Move to product-based benchmarks for food sector and others
  - Modify existing benchmarks based on new data
- Refinery Allocation
  - Change refinery allowance allocation basis from “Carbon-Dioxide Weighted Tonne” to “Complexity-Weighted Barrels”
- Leakage
  - Shifted assistance factor
- Technical Amendments
  - New entrants and opt-ins
  - Allow limited borrowing with true-up allowances

# Proposed Amendments: New or Increased Allocation

- Natural Gas Suppliers
  - Natural gas suppliers receive free allocations 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
  - Redistribute allowances from industrial counterparties
- University and Public Service Facilities
  - Require to report to ARB on use of allowance value
- Public Wholesale Water Entities

# Proposed Amendments: Covered Entities

- Added Sectors
  - Lead acid battery recyclers
  - Liquefied natural gas production facilities
  - Importers of liquefied natural gas
- Exempt Sectors
  - But-for Combined Heat and Power (CHP)
    - First Compliance Period only
    - ARB will retire allowances equal to exempt emissions
  - Waste to Energy Facilities
    - First Compliance Period only
    - ARB will retire allowances equal to exempt emissions
  - Extend exemption to National Security Facilities
  - Return of allowance allocation in case of facility closure

# Proposed Amendments: Electricity Generation

- Resource Shuffling
  - Clarified activities that constitute resource shuffling and activities that are not resource shuffling (“safe harbors”)
  - Based on the guidance issued in November 2012
  - Resource shuffling still prohibited but no requirement of attestation
- Technical Amendments
  - Voluntary Renewable Energy (VRE) REC retirement criteria
  - Imported Electricity RPS adjustment and specified sources

# Proposed Amendments: Offsets

- Proposed new offset protocol
  - Mine methane capture (discussed later in presentation)
- Streamline and clarify review process
- New provisions to allow air districts multiple roles
- Strengthen and clarify conflict of interest requirements
- Harmonize invalidation requirements across all project types
  - 15-day change to forestry invalidation to ensure environmental integrity



# Proposed Amendments: Compliance Implementation

- Compliance
  - Annual Compliance
    - Compliance check, not retirement
      - Meant to address stakeholder concerns
      - 15-day changes to address stakeholder concerns about “lost” offsets
  - Triennial retirement specified 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

# 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
- Information disclosures on allowance and offset transfers
  - Knowing the terms under which compliance instruments are traded helps monitor for market manipulation
- Trading Prohibitions
  - Specific types of trading is prohibited to ensure trading transparency
- Expect 15-day changes after further stakeholder outreach

# Proposed Amendments: Cost Containment

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

# 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 new mines or mine operation expansions
- Potential domestic offset supply of 60 million metric tons (MMtCO<sub>2</sub>e)
- A protocol does not preclude future regulation

# CEQA Environmental Analysis

- Staff prepared an environmental analysis (EA) 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.

# Regulation Next Steps

- 15 day changes
  - Finalize new and revised benchmarks
  - Refinery Allocation amendments
  - Legacy Contracts
  - Trading Rules
  - Information Reporting to Support Market Oversight
  - Exemption for “but-for” CHP

# Implementation Next Steps

- Adaptive Management
  - A process to monitor and respond to unintended and unanticipated adverse impacts from Cap-and-Trade
  - Working with air districts, universities, and other experts to identify monitoring methods and response procedures for unanticipated localized air quality and forest impacts
- Linkage Readiness Report to Governor (Nov 1)
- Rice Protocol
  - To be completed in 2014

# Staff Recommendation

- Approve the proposed resolution that directs staff to:
  - Continue to work with stakeholders to address specific areas with 15-day amendments
  - Prepare written responses to comments raising significant environmental issues
  - Bring the final regulator language back to the Board at a subsequent hearing with staff's written responses to environmental comments for consideration of approval