



# Cap-and-Trade Program Annual Update

*November 17, 2016*

# Presentation Outline

- ▣ Background
- ▣ Reporting and verification
- ▣ Major milestones
- ▣ General Program statistics
- ▣ Compliance statistics
- ▣ Offsets program
- ▣ Program linkage
- ▣ 2016 Rulemaking activities
- ▣ Next steps

# Program Background

- One of a suite of 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 to reduce emissions
- Participants are allowed to trade State-issued GHG emissions allowances
  - Provides flexibility and reduces costs of compliance
- Works together with command-and-control measures
- GHG and market data published to ensure transparency

# Program Goals

- ▣ Reduce GHG emissions
- ▣ Put a price on emissions to incentivize change
- ▣ Spur innovation in low-emission and efficient technologies
- ▣ Complement existing programs to reduce smog and air toxics
- ▣ Ensure AB 32 emissions goals for GHGs are realized through a strict limit
- ▣ Provide a flexible mechanism that allows covered entities to find the most cost-effective reductions
- ▣ Facilitate integration of regional, national, and international GHG reduction programs

# Mandatory Reporting Regulation

- ▣ Adopted in 2007 and in effect January 1, 2008
- ▣ 10,000 MT CO<sub>2</sub>e threshold for reporting only, and 25,000 MT CO<sub>2</sub>e threshold for inclusion in the Cap-and-Trade Program (reporting and verification)
- ▣ ~800 reporting entities
- ▣ Large emitters, importers and retail providers of electricity, and fuel suppliers

# GHG Reporting and Verification

- For 2015 data, about 800 reports were submitted to ARB
  - 516 reports required verification and all met verification deadlines
  - 2015 data was published on November 4, 2016
- Enforcement
  - Staff works proactively with stakeholders to prevent nonconformance with the Regulation
  - Formal enforcement is consistent and effective
  - Enforcement actions and settlement agreements are posted on ARB's website

# Cap-and-Trade Regulation

- Multi-year stakeholder process to develop well-designed program
- Covers 85% of statewide GHG emissions
- Must surrender allowances and limited offsets to match GHG emissions for each compliance period
- Comply with recordkeeping, market rules, verification, and other requirements
- Cap declined two percent annually in the first compliance period, and increases to a three percent annual decline in the subsequent compliance periods

# Major Milestones

- ▣ First auction: November 2012
- ▣ First compliance period began: January 2013
- ▣ Program linked with Québec: January 2014
- ▣ First joint auction with Québec: November 2014
- ▣ Compliance obligation for supplied fuels: January 2015
- ▣ First compliance period compliance event: November 2015
  - ▣ 99.8% compliance
- ▣ 2015 annual compliance event : November 2016
  - ▣ 100% compliance



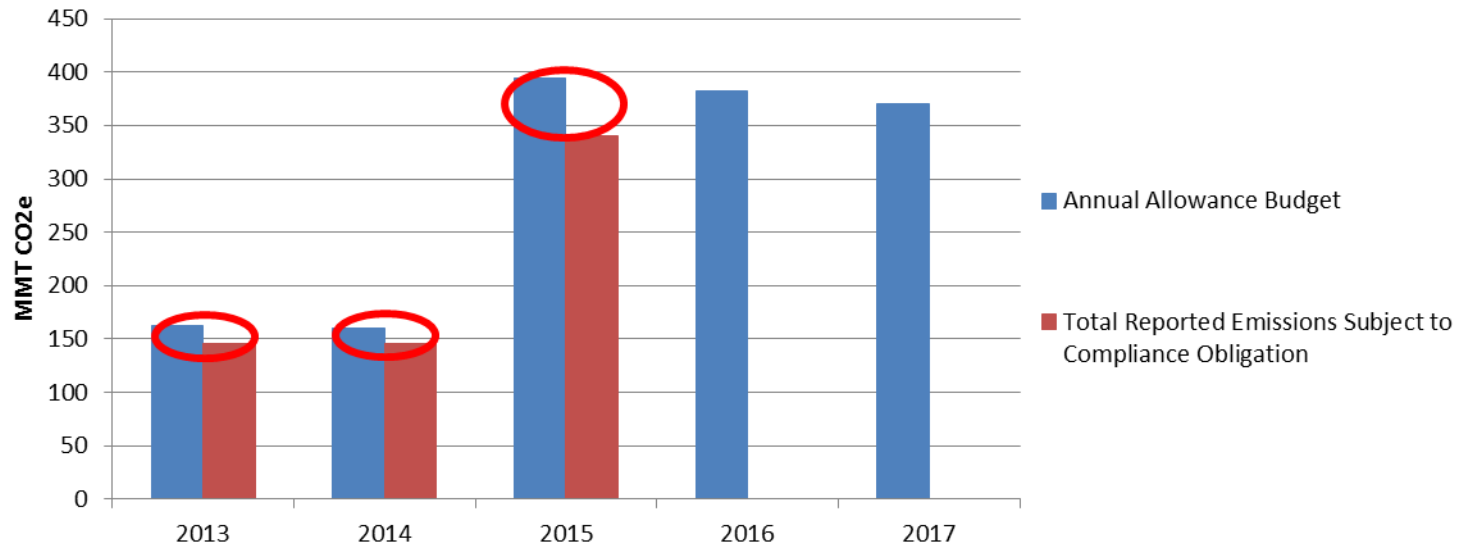
# General Program Statistics

- ▣ ~325 businesses are covered by the Program
- ▣ ~275 voluntary entities are in the Program
- ▣ ~855.2 million compliance instruments are held in private accounts
- ▣ August auction settlement price was \$12.73 per allowance
  - ▣ November auction settlement price will be released Tuesday, November 22, 2016 at noon
- ▣ Approximate market value of compliance instruments in circulation is \$10.9 billion

# 2015 Compliance Event

- ▣ Total covered emissions were ~340 million MT CO<sub>2</sub>e in 2015
- ▣ 30% due for annual surrender
- ▣ Compliance instruments were surrendered for 100% of the annual surrender obligation amount
- ▣ Instruments surrendered:
  - ▣ 92.1% allowances
  - ▣ 7.9% offsets
- ▣ Covered entities now include considerations of GHG emissions/compliance obligations in their long-term financial planning

# Cap-and-Trade Program GHG Emissions



- Emissions in covered sectors have declined more rapidly than expected
- Not shown: 50 million MT CO<sub>2</sub>e of offset credits issued for emissions reductions outside of the cap

# Offsets Program

- ▣ Six offset protocols have been adopted:
  - ▣ U.S. forest
  - ▣ Urban forest
  - ▣ Livestock digesters
  - ▣ Ozone depleting substances (ODS)
  - ▣ Mine methane capture (MMC)
  - ▣ Rice cultivation

# Offsets Program

- Early Action ended August 31, 2016
- 130 compliance projects and 117 early action projects have received ARB offset credits
- Over 50 million offsets have been issued to date
- 71 offset project verifiers to conduct rigorous and independent third party reviews of project prior to ARB review and offset credit issuance

Project type	U.S. Forest	Urban Forest	Livestock Digesters	ODS	MMC	Rice Cultivation
Compliance	17,384,601	0	1,174,769	6,770,370	694,160	0
Early action	13,276,494	0	1,695,029	6,336,710	2,879,684	0

# Program Linkage

- California Program linked with Québec January 2014
  - Nine joint auctions held to date
  - 100% compliance in first compliance period for 55 reporters in Québec
- Ontario has developed a cap-and-trade program with a launch in 2017
  - Proposing to link program with California/Québec in January 2018
  - Ongoing collaboration on reporting, market rules, and offset requirements to support linkage as part of the existing rulemaking considered by the Board in September 2016
  - Governor's SB 1018 linkage findings required before final Board vote

# Timing of 2016 Amendments with the Scoping Plan Update

- Provides certainty for financial planning purposes for onsite investment in clean and efficient technology to achieve expected reductions toward 2030 limit
- Ensures smooth transition to post-2020 Program if approved in 2030 Target Scoping Plan Update
- Enables linkage with Ontario beginning 2018
- California's draft compliance plan for CPP requires a post-2020 Program
  - Federal CPP default compliance program is a trading program

# Key Objectives of Proposed 2016 Regulatory Amendments

- ▣ Continue the Cap-and-Trade Program beyond 2020
- ▣ Improve Program efficiency where possible
  - ▣ Streamline Regulation requirements and implementation
  - ▣ Remove unnecessary requirements
- ▣ Reflect latest data and information
  - ▣ Leakage study results
  - ▣ Global warming potentials
  - ▣ Experience from other emissions trading programs
- ▣ Maintain environmental and market integrity



# Proposed 2016 Regulatory Amendments: 3<sup>rd</sup> Compliance Period

- ▣ Streamlining offsets program
- ▣ Streamlining auctions
- ▣ Streamlining management of information
- ▣ Updates to industrial allocation (esp. benchmarks and leakage risks) to reflect changed and new sectors and to correct inaccurate benchmarks
- ▣ Clarification on use of allocated allowance value for utilities
- ▣ Linkage with Ontario, Canada

# Proposed 2016 Regulatory Amendments: Post-2020 Program

- ▣ Post-2020 caps on emissions and program scope
- ▣ Changes to cost-containment and market oversight provisions
- ▣ Modifications so that the Program can be used to comply with U.S. EPA's Clean Power Plan (CPP)
- ▣ Post-2020 allowance allocation
- ▣ Continue linkage with Québec and potentially Ontario

# Proposed 2016 Regulatory Amendments: Public Process

- Major comments from September Board hearing
  - Environmental Justice (EJ) issues
  - Process issues – specifically lack of post-2020 allocation data
- Staff addressed these issues in previous workshops and will continue to work with stakeholders
  - Previous 2016 workshops on allocation, emissions cap, leakage, cost-containment measures
  - October 21, 2016 workshop
    - Discussed EJ, AB197, market data transparency, compliance obligations, and post-2020 allowance allocation
    - Staff released details on a proposal for post-2020 allocation advance of workshop to inform future 15-day changes

# Cap-and-Trade Program: Next Steps

- ▣ Continue to implement the Program
- ▣ Continue to discuss potential changes to the design of the program in response to AB 197
- ▣ Continue coordination with development of the 2030 Target Scoping Plan Update and the plan for compliance with the U.S. EPA's Clean Power Plan
- ▣ Continue public process for 2016 amendments
  - ▣ Second Board hearing in Spring 2017
  - ▣ Regulation becomes effective in October 2017
  - ▣ Ontario linkage by January 1, 2018

# Cap-and-Trade Program Annual Update: Questions?