



Overview of the Greenhouse Gas Cap-and-Trade Program

January 28, 2010
California Air Resources Board

Scoping Plan Cap-and-Trade Measure

- Broad-based California cap-and-trade program to provide a fixed limit on emissions
- Link to the Western Climate Initiative (WCI)
- Complement health-based air quality programs and environmental justice policies
- Consider effects of the program on the California economy and public health
- Establish a panel of experts to provide recommendations on cap-and-trade allocation strategies and economic issues

Role of Cap-and-Trade Program in Scoping Plan

Recommended Reduction Measures	Reductions Counted Towards 2020 Target (MMTCO ₂ E)
ESTIMATED REDUCTIONS RESULTING FROM THE COMBINATION OF CAP-AND-TRADE PROGRAM AND COMPLEMENTARY MEASURES	146.7
California Light-Duty Vehicle Greenhouse Gas Standards	31.7
Energy Efficiency	26.3
Renewables Portfolio Standard (33% by 2020)	21.3
Low Carbon Fuel Standard	15
Regional Transportation-Related GHG Targets	5
Vehicle Efficiency Measures	4.5
Goods Movement	3.7
Million Solar Roofs	2.1
Medium/Heavy Duty Vehicles	1.4
High Speed Rail	1.0
Industrial Measures (for sources covered under cap-and-trade program)	0.3
<i>Additional Reductions Necessary to Achieve the Cap</i>	<i>34.4</i>
ESTIMATED REDUCTIONS FROM UNCAPPED SOURCES/SECTORS	27.3
High Global Warming Potential Gas Measures	20.2
Sustainable Forests	5.0
Industrial Measures (for sources not covered under cap and trade program)	1.1
Recycling and Waste (landfill methane capture)	1.0
TOTAL REDUCTIONS COUNTED TOWARDS 2020 TARGET	174

Public Process for Stakeholder Involvement

2009

- 21 public meetings on specific cap-and-trade program design elements
- Numerous stakeholder consultations
- Consideration of 100s of stakeholder comments
- Coordination with Western Climate Initiative
- Release of Preliminary Draft Regulation and public workshop

2010

- EAAC Recommendations released in January

Continued Opportunities for Stakeholder Involvement

- Staff is planning to solicit input on:
 - Cap-setting
 - Emissions leakage
 - Allocation of allowance value
 - Compliance pathways
 - Public health analysis
 - Amendments to mandatory reporting requirements

Upcoming Board Briefings in 2010

- Staff plans to update the Board throughout the year on the cap-and-trade program, including:
 - *February*: General discussion of offsets
 - *March*: Economic impact of the Scoping Plan and EAAC recommendations on allowance allocation and use of auction proceeds
 - *June*: General discussion of cap-setting and allowance allocation
 - *September*: Report on cap-and-trade rulemaking process to date

Preliminary Draft Regulation (PDR)

- Released for public review and comment in November 2009
 - Advances dialogue on regulatory design features
- Includes:
 - Preliminary regulatory language
 - Cap-and-trade process and structure
 - Narrative text and placeholders
 - Concepts for discussion where specific regulatory language isn't yet developed
 - Areas for future language to be included

What Is the Cap?

- Cap (annual allowance budget) is a statewide limit on greenhouse gas emissions from covered sources for a given year
 - There is no cap on individual covered entities
- The annual cap will decline over time to achieve an emission reduction goal
- PDR contains illustrative numbers for the annual budget from 2012 through 2020

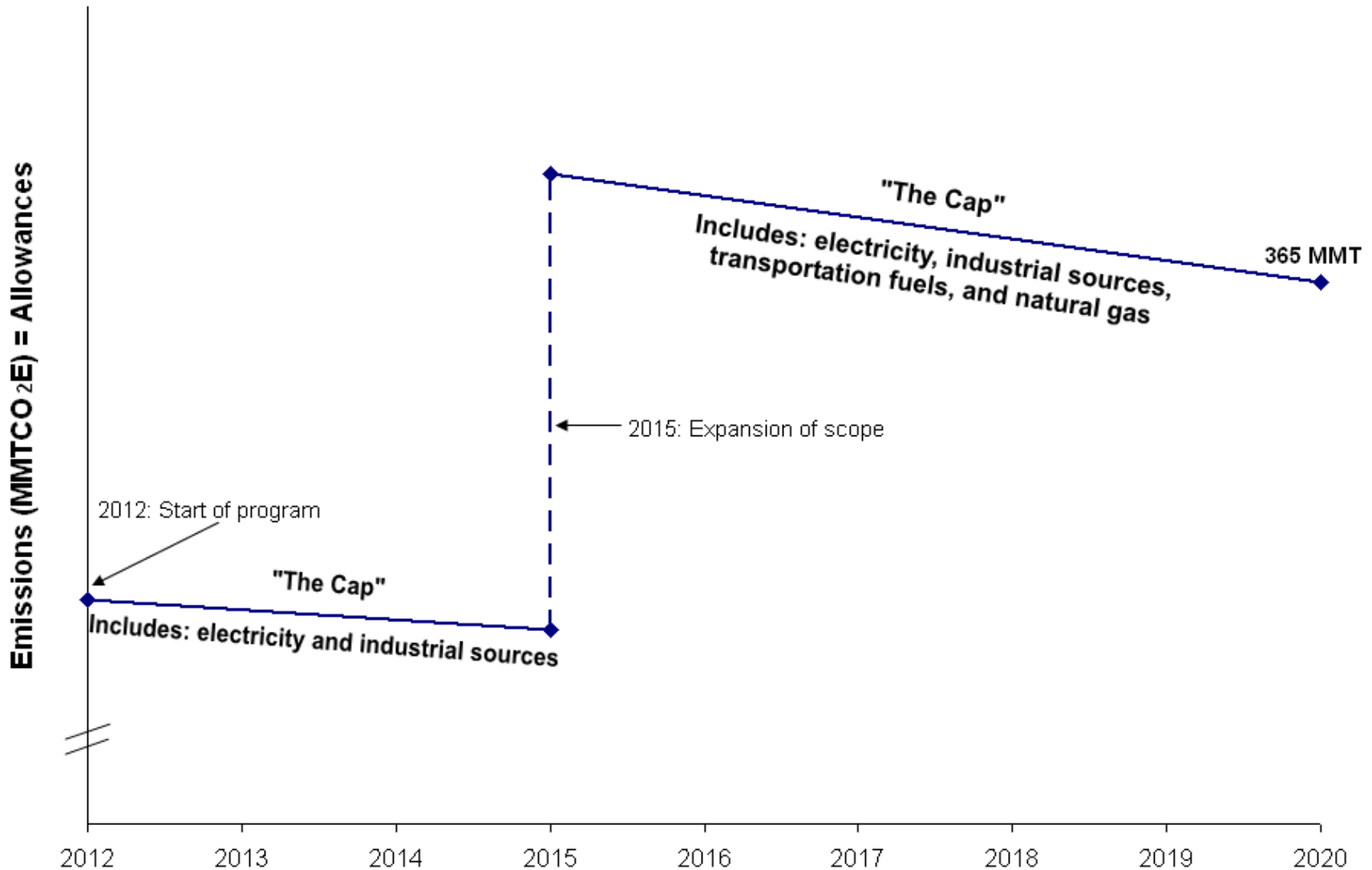
What Sources and Emissions Are Covered?

- CO₂ equivalent emissions from:
 - Large industrial sources (25,000 metric tons per year or greater)
 - Electricity delivered to California grid
 - Natural gas and propane distributors and providers
 - Transportation fuels providers
(Transportation and other fuels may be phased in starting in 2015)
- CO₂ equivalent emissions include:
 - CO₂, CH₄, N₂O, HFCs, PFCs, SF₆ and NF₃

What Are Allowances and Who Issues Them?

- Allowances are tradable permits that give one-time permission to emit a metric ton of greenhouse gases
- Each year, California will issue allowances equal to that year's cap
- Other cap-and-trade programs we link to (e.g., WCI partner programs) would also issue allowances that California sources can acquire to meet their compliance obligations

The Cap (CA Allowance Budget)



How Are Allowances Distributed?

- California will auction a portion of allowances
- California may also distribute some allowances for free
- Economic and Allocation Advisory Committee (EAAC) recommends primary reliance on auctions, with some allowances earmarked to address the program's possible effects on competitiveness for California's industries

What Are Offsets?

- An offset is a credit for a verified emission reduction from a source outside the cap-and-trade program
- ARB ensures offsets are high quality by establishing methodologies (protocols) for quantifying emission reductions, avoidance, or greenhouse gas sequestration from a project
 - Reductions must be real, additional, quantifiable, permanent, verifiable and enforceable

What Is the Role of Offsets?

- Help spur emission reductions in sectors not easily reached through the cap-and-trade program or other regulatory means
- Help reduce the cost to comply with the cap-and-trade program by offering an additional supply of compliance instruments that may cost less than allowances
- Staff will brief the Board on this subject in more detail in February

What's Tradable in the Program?

- “Compliance Instruments” that can be traded include:
 - Allowances issued by California
 - Offsets issued by California
 - Allowances and offsets from linked programs, e.g., WCI

Who Can Participate in Trading?

- Covered entities
- Offset providers whose projects and credits are approved for use in California
- Other participants, e.g., wholesale marketers, individuals who register in the tracking system could also buy, sell, or retire allowances and offsets

Where and How Could Trades Occur?

- All traders must first register in the cap-and-trade tracking system
- Persons trading on exchanges (e.g., NYMEX) must also register in ARB's system before they can hold allowances for trading
- Trade data publication rules are being developed to maximize transparency to the public and provide safeguards to prevent market manipulation

How Is The Integrity of the Cap Maintained?

- Registration and reporting requirements apply to all covered entities, including third-party emissions verification
- Covered entities must surrender allowances and offsets equal to their emissions
- The tracking system provides a chain of custody for allowances and offset credits that can be used in the program
- A covered entity can cover no more than 4% of emissions using offsets

Why Limit the Use of Offsets?

- The Scoping Plan calls for a limited use of offsets in the cap-and-trade program
 - Need to maintain a strong incentive for emission reductions from covered entities in California
 - Ensure California transitions to a clean-energy, low-carbon economy

How Would the Limit on Offsets Work?

- Scoping Plan Policy Goal:
 - Achieve most reductions from capped sources by limiting offsets to no more than 49% of emission reductions from cap-and-trade
- Preliminary Draft Regulation established method to enforce this limit
 - Limit would apply to each facility
 - Cap-and-trade program requirements for individual facilities based on *emissions*, not *emission reductions*
 - The limit of no more than 49% of *emission reductions* translates to allowing no more than 4% of a facility's *emissions* to be covered by offsets

What Do Covered Entities Need to Do?

- Register with ARB
- Report GHG emissions annually in compliance with mandatory reporting
- Acquire compliance instruments (allowance and offsets) equivalent to reported emissions
- Surrender allowances and offsets to match emissions at the end of each compliance period
- Comply with record-keeping, market rules, verification and other requirements in the regulation

How Would the Program Address Enforcement?

- Penalty provisions would remove any financial incentive for non-compliance
- Provisions would define what constitutes a violation
- Methods would be specified for calculating the number of violations

What Agencies Would Be Involved in Enforcement?

- A robust enforcement program will be vital
- ARB has had ongoing discussions with other State and federal enforcement agencies, including:
 - California Attorney General's Office
 - Cal/EPA
 - California Energy Commission
 - California Public Utilities Commission
 - U.S. Department of Justice
 - U.S. EPA
 - Commodity Futures Trading Commission
 - Securities and Exchange Commission
 - Federal Energy Regulatory Commission

Going Forward

- Provisions for allocation of allowances through auction and free distribution
- Setting the cap using allowance budgets
 - Final budgets to be included in the October 2010 proposed draft regulation
- Address results of the health impact assessment underway if potential co-pollutant impacts are identified

Going Forward (cont'd.)

- Technical analyses to inform regulatory development
 - Economic analysis
 - Public health analysis
 - Evaluation of potential for localized emission impacts
 - Environmental analysis (CEQA)
 - Market monitoring/enforcement discussions with Attorney General's Office, federal government, etc.
 - Compliance pathway analysis

2010 Timeframe for Cap-and-Trade Rulemaking

- **Spring 2010**: 2nd draft regulation released for public comment and public workshop
- **September 2010**: 45-day public review begins with publication of public notice and release of staff's formal regulation proposal
- **October 2010**: Board consideration of cap-and-trade regulation