Overview

- Assembly Bill 32 Objectives and Provisions
- Elements of the 2013 Scoping Plan Update
- 2013 Scoping Plan Update Schedule
- Progress toward 2020 Goal
- Inventory Update
- Post 2020 Activities
- Critical Focus Area Discussions
AB 32 Objectives

• Develop a balanced approach to address climate change
• Improve air quality and public health
• Provide a consistent policy approach to drive investment in clean technology
• Provide a model for future national and international climate change efforts
AB 32 Provisions

- Achieve 1990 emissions level by 2020
- Adopt greenhouse gas (GHG) emission reporting regulation
- Adopt discrete early action measures
- AB 32 Cost of Implementation Fee Regulation
- Collaborate with local, state and federal agencies, Western Climate Initiative, various advisory committees, and stakeholders
- Develop Scoping Plan and update it every five years
- Maintain and continue reductions in emissions of GHG beyond 2020
2008 Climate Change Scoping Plan

- Established new paradigm for climate mitigation
- First economy wide climate change plan
- Pioneered the concept of a market-based program supplemented with complementary measures
- Sector by sector approach
- Public outreach and education
Elements of 2013 Scoping Plan Update

- Climate science update
- Progress toward 2020 goal
  - 2008 Scoping Plan achievements
  - Inventory update
  - Economic update
  - Co-benefits
- Potential targeted near term measures
Elements of 2013 Scoping Plan Update (cont.)

- Post-2020 goals
  - 2050 Goal
  - Interim Progress Milestone
  - Coordination with Other Plans and Policies
  - Critical Focus Areas
  - Regional Overlay
2013 Scoping Plan Update Schedule

Kickoff Workshop
- June 13

Regional Workshops
- Diamond Bar (Los Angeles area) – June 26th
- Fresno – July 18th
- Bay Area – July 30th

Preliminary draft Scoping Plan Update
- Late Summer

Board Considers
- November 21-22
Environmental Justice Committee

- ARB required to consult with EJAC on Scoping Plan
- Formed by Board in 2007 for 2008 Scoping Plan
- Re-convened by Board for 2013 Scoping Plan Update
- First meeting June 18th in Sacramento
Progress Toward 2020 Goal
### 2008 Scoping Plan Achievements

**GHG Emissions and Reductions**

<table>
<thead>
<tr>
<th>Source of GHG Reductions</th>
<th>MMT</th>
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<tbody>
<tr>
<td>Cap &amp; Trade</td>
<td>18</td>
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<tr>
<td>Low Carbon Fuel Standard</td>
<td>15</td>
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<tr>
<td>Advanced Clean Cars</td>
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<td>SB 375 Sustainable Communities</td>
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<td>Renewables Portfolio Standard</td>
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<tr>
<td>High Global Warming Potential Gases</td>
<td>6</td>
</tr>
<tr>
<td>All Other Measures</td>
<td>11</td>
</tr>
</tbody>
</table>

- **Emissions to be Reduced:** 80 MMT
- **Remaining Emissions:** 427 MMT
2008 Scoping Plan Achievements
Key ARB Measures

- **Low Carbon Fuel Standard**
  - Requires a 10 percent reduction in carbon intensity of transportation fuels by 2020

- **Advanced Clean Cars**
  - Light-duty vehicles sold in 2025 will emit 75 percent less smog-forming pollution and 34 percent less GHG emissions

- **Cap-and-Trade Regulation**
  - Market-based regulatory program that reduces GHG emissions through a declining limit

- **SB 375 (Sustainable Communities Strategy)**
  - Integrated approach to regional transportation and land-use planning
2008 Scoping Plan Achievements
Other ARB Measures

- Shore Power*
- High Global Warming Potential Consumer Products*
- Heavy-Duty Trucks*
- Mobile Air Conditioners (“do-it-yourself” cans)*
- Semiconductor Manufacturing*
- SF6 Reductions from Non-Electrical sources*
- Tire Pressure Regulation*
- Landfill Methane Capture*
- Energy Efficiency Audits for Industrial Sources
- SF6 Leak Reduction in Electrical Appliances
- Refrigerant Management Program

* = Discrete Early Action Measure
2008 Scoping Plan Achievements
Other State Agency Measures

• 33% Renewable Portfolio Standard
• Building and appliance energy efficiency standards
• California Solar Initiative
  • Solar hot water heaters
  • Million Solar Roofs
• Water Efficiency
• Mandatory Commercial Recycling
• High Speed Rail
CA GHG Emissions 2000-2011

**GHG Emissions Trend**

- **MMTCO2e**
- **Year**
- **2020 Target 427 MMT**

Scoping Plan Overview
California Greenhouse Gas Emissions By Sector

Year 2011

- Transportation: 38%
- Industrial: 21%
- Electric Power: 19%
- Commercial & Residential: 10%
- High-GWP: 7%
- Recycling & Waste: 3%
- Agriculture & Forestry: 2%

Total: 449 MMTCO2e

Year 2020

- Transportation: 35%
- Industrial: 21%
- Electric Power: 20%
- Commercial & Residential: 9%
- High-GWP: 6%
- Recycling & Waste: 7%
- Agriculture & Forestry: 2%

Total: 427 MMTCO2e
Post-2020 Activities
Coordination with Other Plans and Policies

- Governor’s Environmental Goals and Policies
- Climate Adaptation Strategies
- 2013 Zero Emission Vehicle Plan
- State Implementation Plan
- Vision 2050
- Sustainable Communities Strategies
- Sustainable Freight Strategy
- Integrated Energy Policy
- Department of Water Resources Climate Action Plan
- Caltrans Blueprint
Elements of Post 2020 Strategy

• Focus Areas
  • Energy (generation, transmission, and efficiency)
  • Transportation (fuels, infrastructure, and land use)
  • Agriculture
  • Water
  • Waste
  • Natural and Working Lands

• Sectors are unique and overlap one another
• Sectors may have competing objectives
• Role of Cap-and-Trade post-2020
Cap-and-Trade Post 2020

- ARB envisions Cap-and-Trade continuing beyond 2020
- Cap-and-Trade is an important part of Post-2020 climate change strategy
- Program specifics including the cap level must be defined considering many factors
  - Complementary policies
  - Uncapped sector measures
  - Long term climate change goals
Questions/Comments
Regional Public Workshop

2013 Update to AB 32 Scoping Plan
Air Quality Attainment Dates/ Climate Goals

- **Future Ozone Standard**: 2032 Attainment Year for 0.075 ppm 8-Hr Ozone Standard
- **2023/2025 Attainment Years for 8-Hr Ozone and PM2.5 Standards**
- **2050 Greenhouse Gas Emission Target**
- **2020 Greenhouse Gas Emission Target**
Examples Illustrating Process

Heavy-Duty Truck Scenario – South Coast NOx Emissions

Graph showing remaining emissions relative to 2010 from 2010 to 2050. Arrows indicate the 2023 and 2032 Ozone Targets.

South Coast Air Quality Management District

California Environmental Protection Agency

Southern California Association of Governments
2015 Air Quality Management Plan

- Primary Focus - 2008 8-Hr Ozone Attainment (by 2032)
- Consistency with Attainment of 1997 8-Hr Ozone Attainment and Recent 1-Hr Ozone Attainment Demonstration
- Maximize Co-Benefits with GHG Reductions
- Focus on Mobile Source NOx Reductions
- VOC Reductions Still Needed to Ensure All Subregions in Attainment (Air Toxics Co-Benefits)
- Linkages to Energy and Climate Goals
Coordinated Air Quality and Climate Planning: Key Concepts

- Need for Technology Transformation
- Early Actions
- Cleaner Combustion
- Multiple Strategies
- Federal Action
- Efficiency Gains
- Energy Transformation
Regional Public Workshop

2013 Update to AB 32 Scoping Plan

June 26, 2013
2012-2035 RTP/SCS

- Meets transportation conformity & exceeds GHG targets
- Bottoms up process integrating land use & transportation
- Sustainably accommodates future growth / high quality transit areas
- Innovative transportation financing
- Clean technology freight corridor
• Air Quality and Co-Benefit Outcomes
  o Exceeds SB375 per capita GHG reduction targets
  o Component of SIP commitments for health-based criteria pollutant standards
  o Positive outcomes: mobility, location efficiency, land consumption, energy, public health
  o Return on investment, job creation, household savings
RTP/SCS Implementation Initiatives
- Sustainability Call for Proposals
- CEO Regional Sustainability Working Group
- MOU with Los Angeles County Metro
- Regional PEV Infrastructure Planning
- Best Practices for Sustainable Development
- Facilitate Local Implementation Tools
Looking Ahead: 2016-2040 RTP/SCS

- Bottoms up planning process
- Enhanced technical tools for facilitating more effective scenario planning
- Continued enhancement of performance measures
- Collaboration with state and regional agencies
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