AB 32: The California Global Warming Solutions Act of 2006

Scoping Plan Workshop
Policy Scenarios

May 19, 2008
California Air Resources Board
Workshop Overview

- Scoping Plan overview
- Policy criteria and evaluation plan
- Economic modeling status report
Overview of the Scoping Plan Process
Timeline

Nov 30, 2007  Scoping Plan Kick-Off Workshop
Dec 14, 2007  Sector Summary Workshop
Jan 16, 2008  Mechanisms Workshop
May 19, 2008  Policy Scenarios Workshop
June 26, 2008 Draft Scoping Plan released
Summer 2008  Workshops on draft Scoping Plan
              July 8: Diamond Bar
              July 14: Fresno
              July 17: Sacramento
              August: TBD
October 2008  Staff Final Scoping Plan released
November 20-21, 2008 Board Hearing on Scoping Plan
Plan Objectives

- Achieve the GHG emission target for 2020 and place California on the path to long-term reductions
- Maximize economic benefits and minimize economic harm
- Maximize societal benefits, including environmental and public health co-benefits
- Provide leadership and influence other governments
- Assure that emissions reductions required of each sector are equitable
ARB has followed two parallel paths in developing the options that will be presented in the Scoping Plan:
- Identify specific emission reduction measures
- Develop major program design options
• ARB has worked closely with other agencies in the Climate Action Team
• Teams have identified wide range of possible options for emission reductions, including
  – Strengthening existing programs
  – New regulatory measures
  – Voluntary programs and incentives
Measure Development

• The Scoping Plan will focus on measures that provide a path to meeting the 2020 target
  – Put on path toward 2050
• Core measures based on evaluation of the range of options
  – “Must do” measures
• Other emission reduction opportunities that could be used in a regulatory approach
• ARB will continue to work with the CAT teams to further develop options
Program Development

- Looking at many policy tools including:
  - Traditional regulations
  - Cap and trade
  - Fees and incentives
  - Voluntary actions
  - Offsets

- Scoping Plan will likely include a mix of tools
Comparison of Policy Tools

• Traditional regulations
  – Well understood
  – History of successful use by ARB
  – Would require numerous regulatory proceedings

• Cap and trade
  – Cap offers certainty on emission reductions
  – Trading offers flexibility and may reduce direct costs
  – Regional/federal/international cap and trade programs
  – Significant work needed to create effective market

• Carbon fee
  – Uncertainty about level of emission reductions
  – Would require greater analysis to determine the appropriate fee level
Voluntary Actions

• ARB encourages early voluntary reductions
  – Board adopted policy in February 2008
  – ARB working with local districts and CCAR on quantification

• Voluntary reductions may play a role in the AB 32 program going forward
  – Offsets could provide flexibility in regulatory or cap and trade programs
Draft Scoping Plan

• Strong regulatory foundation
  – Early Action Measures
  – “Core” measures
• Staff recommendations on key elements of overall approach
• Preliminary evaluations
Draft Scoping Plan: Core Measures

• Draft Plan will recommend core measures, including:
  – Tailpipe emission regulations
  – Low carbon fuel standard
  – Reducing vehicle miles traveled
  – Increased energy efficiency
  – Renewable resource development
  – High global warming potential measures
Draft Scoping Plan: Remaining Tons

- Three approaches for achieving additional emission reductions:
  - Additional regulatory measures
  - Cap and trade program
  - Carbon fees
Draft Scoping Plan: Evaluation Status

• Delays in economic modeling
  – More detail on status this afternoon
• Non-economic analysis in progress
• Evaluation will continue through the summer to support the October Scoping Plan
• Evaluation supplement released Summer ‘08
  – Workshop on the supplemental evaluations
Questions?

Comments?

If you’re watching the webcast, you can email questions or comments to: ccplan@arb.ca.gov
Policy Criteria & Evaluation Plan
• The Scoping Plan published in October will recommend a single preferred approach
  – Will include core measures (could be revised from the proposed core in June draft)
  – Likely to include some combination of regulatory and market approaches to get the additional reductions needed to meet the 2020 target
Criteria for Crafting a Preferred Approach

• Meet the key Scoping Plan objectives
  – Achieve the target for 2020
  – Maximize economic benefits and minimize economic harm
  – Maximize societal benefits, including environmental and public health co-benefits
  – Assure that emissions reductions required of each sector are equitable
  – Provide leadership and influence other governments
Additional Criteria

• Consider additional factors, such as:
  – Administrative simplicity
  – Ability to enforce reductions
  – Durability and flexibility in program implementation
Integrating with Regional Programs

• California actively participating in Western Climate Initiative
• Climate change program must comply with AB 32 requirements
  – Must pass all statutory “tests”
• Regional program could help address leakage concerns and encourage action by other governments
Possible Use of Market Mechanisms

- ARB allowed to employ market-based compliance mechanisms
- Regulations must ensure:
  - Reductions are real, permanent, quantifiable, verifiable, and enforceable
  - Reductions are in addition to any reduction that is required or would otherwise occur
  - Reduction is equivalent to direct emission reduction in timing and amount
Prior to inclusion of market-based approaches in regulations implementing AB 32, the Board must
  – Consider potential for cumulative and localized impacts
  – Prevent increase in criteria or toxic emissions
  – Maximize additional environmental and economic benefits
Cost Effectiveness

• AB 32 calls for the maximum technologically feasible and cost-effective greenhouse gas emission reductions
• ARB will evaluate the cost of reductions using the best methods and information available
• Cost effectiveness of GHG emission reductions will not be the only criterion for deciding what to include in the program
• Will also consider other factors such as:
  – Broader societal benefits
  – Complementary policy goals such as fuel diversity
  – Sector equity
Environmental, Public Health, and Societal Benefit Analyses

- ARB is evaluating the environmental, public health, and societal benefit implications of different policy options
- Approach includes analysis of
  - Individual measures
  - Emissions by sectors
  - Flexible compliance mechanisms
  - Societal benefits
  - Energy diversity
  - Impacts to low income communities
Measure Analyses

• Analysis will provide the Board with a policy perspective and understanding of potential impacts, including:
  – Co-benefits including increases or decreases in emissions of criteria and toxic air pollutants
  – Range of potential CEQA impacts
• Where feasible, this analysis will include quantitative estimates of potential impacts.
Sector Analyses

• More detailed impacts analysis for some sectors because of potential localized impacts
  – Refining
  – LCFS (including indirect land use issues)
  – Electricity

• ARB is coordinating with the CEC on the evaluation of the electricity sector
Flexible Compliance Mechanisms

- Staff will evaluate the potential for reduced co-benefits from facilities that use flexibility options or offsets rather than instituting measures to achieve GHG reductions onsite.
- Sector analysis will address the potential for foregone emission reductions when flexible compliance mechanisms are implemented.
- Evaluation will consider the distribution of costs and benefits.
Societal Benefits

- Qualitative analysis of the public health impacts of various policy approaches
- Use available data to perform a statewide or regional level evaluation consistent with past measures (e.g. diesel risk reduction measures)
Energy Diversity

- Use energy models to evaluate the impact of various policy alternatives on energy diversity and statewide air pollution co-benefits
- Estimate the total statewide reduction in fuel consumption resulting from the proposed measures to estimate statewide air pollution co-benefits
Impacts to Low-Income Communities

- Use E-DRAM to assess the impact of the policy alternatives on Californians by income level
- E-DRAM will help staff to evaluate the potential for disproportionate economic impact to low-income communities
• These evaluations and criteria …
  – are critical for choosing among approaches
  – will inform the design choices that ARB will make in developing the details of the approaches
Status

• Preliminary report of these analyses to be included in the Draft Plan
• Will continue to refine the analyses over the summer
• Evaluation supplement will include updates on these analyses
• ARB will complete further evaluations as part of the regulatory development process
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