Climate Change
Proposed Scoping Plan:
A Framework for Change

November 20, 2008
California Air Resources Board
California's Leadership

- Pioneer a balanced approach to protect the environment
- Promote and grow a vibrant economy
- Improve public health
- Provide a model for future national and international climate change efforts
Coordination with Other Efforts
Regional and Federal

• Western Climate Initiative addressing greenhouse gas emissions through cap-and-trade program and complementary measures

• Federal activity
  – Federal Clean Air Act authority
  – Further legislation including cap-and-trade program expected under next administration
Coordination with Other Efforts

International

- International activity
  - Governor’s Global Climate Summit established international declaration to collaborate on sectoral policies and strategies
  - Focus on the United Nations Convention on Climate Change
  - California delegation to participate in Poznan, Poland meeting in December 2008
The Next Chapter

Adoption of Scoping Plan Measures

2009 2010 2011 2012 2013 **through** 2020

Return to 1990 Emissions

Adopt Scoping Plan by 1/1/09

Measure Implementation
Proposed Scoping Plan

- Comprehensive plan focused on greenhouse gas emission reductions
- Mix of strategies that combine market mechanisms, other regulations, voluntary measures, and fees
  - Incorporates early action measures
Scoping Plan Elements

- Broad-based cap-and-trade program
  - Electricity, industry, transportation, natural gas
- Complementary measures
  - Energy efficiency
  - Vehicle emission standards
  - High global warming potential measures
  - Renewables
  - Land-use planning
Common Goals, Many Viewpoints

• Broad support for goals of the Plan
• Diverse views about how to achieve those goals
  – Public workshops, community meetings, stakeholder meetings, conferences and events
  – Thousands of comments
  – Input from CAT, EJAC and ETAAC
Key Scoping Plan Requirements

• Include maximum technologically feasible and cost-effective emission reductions
• Evaluate costs and benefits to the economy, environment and public health
• Account for impacts on small businesses
Key Requirements for Regulations to Implement Plan

- Minimize costs and maximize total benefits
- Do not disproportionately impact low-income communities
- Complement existing programs to reduce smog and air toxics
- Minimize leakage and administrative burden
- Additional requirements for market-based compliance mechanisms
  - Consider direct, indirect and cumulative emissions including localized impacts
• Role of cap-and-trade program
• Measures
• Analyses
Role of Cap-and-Trade Program

• Balance of cap-and-trade program and complementary measures
• Reflects existing state programs and other policy objectives
Measures
Cap-and-Trade Program and Industry

• **Cap-and-Trade Program:**
  – 100 percent auction is a worthwhile goal; must evaluate timing of transition
  – Limit use of offsets to 49 percent of required emission reductions

• **Industrial sources:**
  – Variety of measures including cap-and-trade program, audit, and direct regulations
Measures
Land Use, Recycling and Forestry

• **Land use:**
  – Target is mid-range of studies
  – Market measures would provide additional reductions

• **Commercial recycling:**
  – Range of approaches, including potential regulations

• **Forestry:**
  – At a minimum, maintain carbon sequestration with sound accounting
  – Voluntary reductions with Forestry Protocol
Analyses

- Economic Analysis
- Public Health Analysis
Results – Additional Analysis
Economic Evaluation

- ARB analysis – net positive impact
- Additional work to refine results
- Public and peer review comments
- Updating analysis
- No significant change in results
Results – Additional Analysis
Near Term Economic Impacts

• Near-term costs
  – Measures phased-in
  – Most costs will be financed, spread over time

• Small business impacts
  – Energy prices
    • Energy rates will be higher, but
    • Energy use will be less, and bills lower for many
  – Generally small upfront investments
Results – Additional Analysis
Uncertainties in Economic Inputs to Plan

• Energy price forecast uncertainty
  – With 50% increase, Plan impacts still positive
  – With 50% decrease, Plan impacts are neutral

• Cost and/or savings uncertainty
  – Plan net impacts remain neutral; even if measure costs are increased by 25% and savings are decreased by 25%
Results – Additional Analysis
Role of Pavley Rules & Efficiency Measures

• Counting benefits of Pavley and efficiency measures toward the Plan
  – With Pavley savings and half of efficiency measures entirely discounted, Plan impacts still positive
Public Health Benefits

- Estimates of public health benefits updated
  - 770 avoided premature deaths statewide in 2020
  - Value of benefits estimated at $4.3 billion yearly

- Avoided premature deaths in 2020:

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<tr>
<th>Existing Air Quality Program and 2007 SIP</th>
<th>Scoping Plan</th>
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<td>12,000</td>
<td>770</td>
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Future Work Related to Public Health

• Currently using available information to analyze regulations

• Continuing to improve tools to:
  – Identify communities most impacted by air pollution (HSC §38570(b)(1))
  – Assess potential local and cumulative impacts of regulations, including cap-and-trade program
Staff Recommendation

- Staff recommends approval
- Scoping Plan is balanced approach to reduce California’s GHG emissions
- Meets all AB 32 requirements
  - Maximum technologically feasible and cost-effective emission reductions
  - Economic evaluation
  - Public health and environmental evaluation
• Moving ahead is imperative – the consequences of inaction are severe
• Implementing the Plan will be beneficial for both our economy and environment
• Our efforts will inspire others to move ahead and help the nation and the world take timely and effective action
CLIMATE CHANGE
PROPOSED SCOPING PLAN
a framework for change
OCTOBER 2008
Prepared to SB 32
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Prepared by the California Air Resources Board for the State of California

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