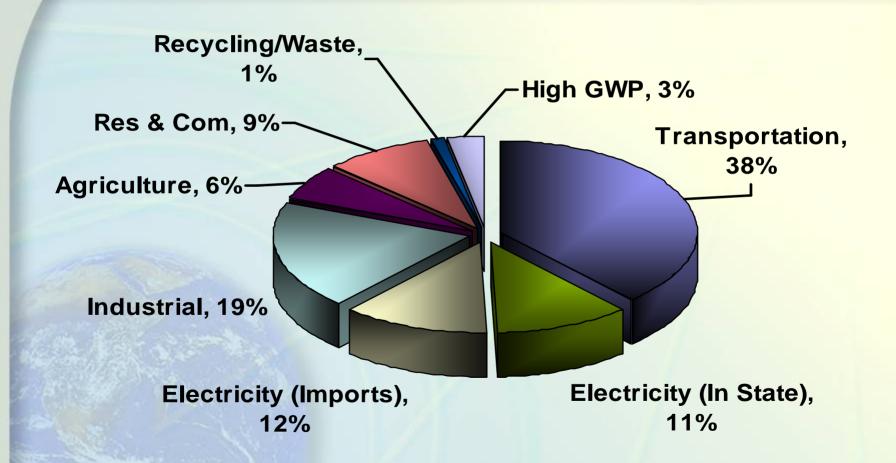
Climate Change Proposed Scoping Plan: A Framework for Change

December 11, 2008
Richard Varenchik

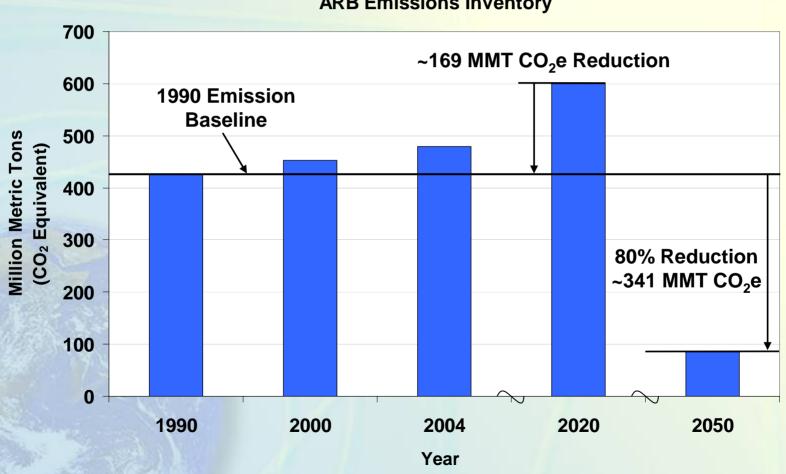
California Air Resources Board

2002-2004 GHG Emissions (469 MMTCO₂E)



Magnitude of the Challenge





Proposed Scoping Plan

- Comprehensive plan for GHG reductions
- Mix of strategies combining market mechanisms, other regulations, voluntary measures, energy efficiency, and fees
 - Incorporates early action measures

Coordination with Other Efforts

Regional and Federal

- Western Climate Initiative cap & trade program & complementary measures
- Federal activity
 - Federal Clean Air Act authority
 - Further legislation including cap-and-trade program expected under next administration
 - Pavley approval?

Coordination with Other Efforts

International

- International activity
 - Governor's Global Climate Summit established international declaration to collaborate on policies and strategies
 - Focus on the United Nations Convention on Climate Change
 - California delegation participated in 12/08
 Poznan, Poland meeting

The Next Chapters



Adopt Scoping Plan 12/11/08 Work Toward 2050

Scoping Plan Elements

- Broad-based cap & trade program
 - Electricity, industry, transportation, natural gas
- Complementary measures
 - Energy efficiency
 - Vehicle emission standards
 - High global warming potential measures
 - Renewables
 - Land-use planning
- Adopted Scoping Plan is the beginning...

Common Goals, Many Viewpoints

- Broad support for goals of the Plan
- Diverse views about achieving 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 lowincome 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

Measures

Land Use, Recycling and Forestry

Land use:

- Target is mid-range of (Berkeley) studies 5MMT
- Market measures would provide additional reductions
- Commercial recycling (With Waste Board):
 - Range of approaches, including potential regulations to reduce waste into landfills

Forestry:

- At a minimum, maintain carbon sequestration with sound accounting
- Voluntary reductions with Forestry Protocol

Scoping Plan Proposal for Cap & Trade

- GHG emissions from sources in these sectors capped
 - Industrial facilities (2012)
 - Electricity (including imports) (2012)
 - Commercial/residential fuel combustion (2015)
 - Transportation fuels (2015)
- Direct regulations/standards also will reduce most capped emissions
 - Clean cars and fuels, RPS, energy efficiency, refineries
- Limited use of offsets
 - Less than ½ of emission reductions allowed
- Cap set in 2012
- Cap declines to meet 2020 target; future decline to 2050

Allocation Method

- How should allowances be distributed?
- What the Plan recommends:
 - Minimum of 10% auction in 2012
 - Minimum of 25% auction in 2020
 - 100% auction is recommended by many groups
 - Will seek input from public, stakeholders and a broad range of experts
- Cap & Trade Goes To The Board in Late 2010

Energy Efficiency

- Plan includes aggressive energy efficiency goals
- Meeting the goals in the Scoping Plan will require
 - Expanded utility-based energy efficiency programs
 - More stringent building and appliance standards
 - Green buildings and waste reduction
 - Innovative strategies that go beyond traditional approaches
- Plan relies on expanded efforts by the CEC and CPUC

Analyses show Benefits

- Economic Analysis overall positive
- Public Health Analysis positive

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

Energy prices

- Energy rates will be higher, but
- Energy use will be less, and bills lower for many
- Utilities offering incentive funding and other help
- Generally small upfront investments

Small Business

- -Small Business Liaison:
- -Kyra Naumoff 916 324-0664
- -knaumoff@arb.ca.gov
- Developing small business tool kit
- Climate Change Web Page Sectors -Land Use & Local – Local Actions – Strategies for Small Business

Public Health Benefits

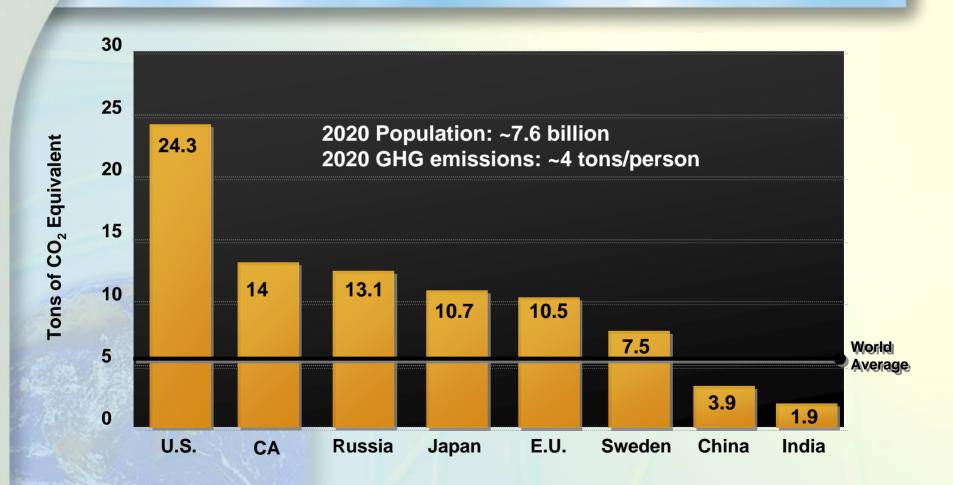
- Estimates of public health benefits updated
 - 770 avoided premature deaths statewide in 2020
 - Value of benefits estimated at \$4.3 billion yearly
- Avoided premature deaths in 2020:

Existing Air Quality Program and 2007 SIP	Scoping Plan
12,000	770

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
 - Assess potential local and cumulative impacts of regulations, including cap & trade program

GHG Emissions Per Person



Reduce CA to 9.6 Tons Per Person by 2020

Implementation of the Plan

- Through 2010: develop regulations to implement the Plan, including the cap-and-trade program
- ARB will establish a formal structure to elicit public input in the regulatory process
 - Regulatory development will follow normal public process
 - Extensive stakeholder outreach and involvement
 - Close and ongoing coordination will CEC and CPUC
- Expect more details and many meetings starting in early 2009
- Regulations & other Protocols into effect 1/1/2012

Scoping Plan Schedule

- Dec. 11, 2009 Board Adoption Meeting
- 2009 Begin Working on Measures
- Jan. 1, 2011 Deadline for all Measures
- Jan. 1, 2012 Reduction Measures Operative
- 2020 hit 1990 level reduction goal
- Then, Keep Moving Toward 2050 & 80% reduction goal

Summary

- Moving ahead is imperative the consequences of inaction are severe
- Implementing the Plan will be beneficial for our economy and environment
- Our efforts will inspire others to move ahead and help the nation and the world take timely and effective action

For Additional Information:

 ARB Climate Change Web Site: www.arb.ca.gov/cc/cc.htm

Or Google California Air Resources Board (To stay informed, sign up for list serve)

- California Climate Change Portal: www.climatechange.ca.gov
- ARB Office of Climate Change Richard Varenchik: 626 575-6730
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