



Public Meeting to Discuss the Updated AB 32 Economic Analysis

November 16, 2009
California Air Resources Board

Purpose of Meeting

- To provide an update on the status of the ARB AB 32 Economic Analysis
- To present preliminary results from Energy 2020 modeling work
- To present plans for economic analysis of the cap-and-trade regulation

Meeting Agenda

- Opening Remarks (5 minutes)
- Staff Presentation (20 minutes)
- ICF Presentation (1 hour)
- Questions (2 hours)
- Adjourn

Scoping Plan Resolution

The resolution adopting the Scoping Plan directs staff to:

- Report to the Board on an updated economic analysis by the end of 2009
- Seek expert input on analysis (EAAC)
- Coordinate with WCI analysis
- Foster opportunities for other economic analyses by interested parties

ARB Economic Update Timeline

- Scoping Plan Updated Economic Analysis Report to be released in December 2009
- Results to be presented to the Board in January 2010
- Economic analysis to support the cap-and-trade rulemaking in 2010 will build on this work

Economic and Allocation Advisory Committee (EAAC)

- EAAC appointed by CalEPA and ARB to recommend allocation approach, uses of allowance value and provide expert input on updated AB 32 economic analyses
- The Economic Impacts subcommittee of the EAAC is working with ARB to provide feedback on assumptions, analytic tools and interpretation of results
- Weekly calls among subcommittee and ARB staff to discuss measure analysis and updated modeling effort

Key Elements of the Updated Economic Analysis

- Energy 2020 Analysis
- E-DRAM Macroeconomic Analysis
- GHG Reduction Measures Update
- Impact on Small Business
- Collaborative Modeling Exercise
- Comparison of Existing Analyses

Energy 2020

- Energy 2020 is an integrated model of the North American economy
- Delays in assembling a Reference Case prevented use of Energy 2020 in Scoping Plan Analysis
- Used for the economic analysis of the Western Climate Initiative (WCI) program
- Continuing to update model inputs as information becomes available and evaluate the effects of Cap and Trade and other Scoping Plan policies
- ARB contract with ICF/SSI to perform modeling (presentation to follow)

E-DRAM

- E-DRAM is a computable general equilibrium model of the California economy
- E-DRAM will be used to evaluate how the costs and savings estimated by Energy 2020 affect the California economy
- E-DRAM will be used to evaluate how the updated Scoping Plan measures affect the California economy

Measures Update

- Analyses include updated cost and savings for major policies:
 - Pavley II: Under development at ARB
 - LCFS: Sensitivity analysis including changes in assumptions of input costs
 - Energy Efficiency: New estimates of cost effective efficiency from CEC 2009 IEPR
 - Renewable Energy: Incorporating E3 modeling for CPUC analysis of 33% RPS

Analysis of Small Business Impacts

- Use E-DRAM outputs to quantify industry specific impacts
- Use Employment Development Department data to evaluate employment share in industries with substantial concentration of small business
- Use Department of Finance data to evaluate share of sales in industries with substantial concentration of small business

Collaborative Modeling

- Efforts will evaluate updated Scoping Plan policies with different modeling tools using common assumptions to the extent possible
- Charles River Associates
- David Roland-Holst (University of California, Berkeley)
- Results anticipated in early 2010

Comparison of Existing Analyses

- ARB staff is reviewing and comparing existing analyses of the economic impacts of various climate policies
- Comparison of key indicators:
 - Measure cost effectiveness
 - GDP/GSP
 - Household disposable income
 - Employment

Economic Analysis of Cap-and-Trade

- Additional economic analysis to support cap-and-trade rulemaking will continue in 2010
 - Sensitivity analyses
 - Compliance pathway analysis
 - Emissions leakage analysis

C&T Compliance Pathway

As part of the economic analysis in support of the cap-and-trade rulemaking staff is:

- Developing a common framework for estimating cost and reduction potential of various abatement strategies
- Constructing marginal abatement cost curves to present possible compliance pathways based on reduction goals and estimates of future allowance price

Emissions Leakage Assessment

As part of the economic analysis support of the cap-and-trade rulemaking, staff is undertaking analysis of emissions leakage

- Define emissions leakage and evaluate methodologies to identify sectors that are exposed to leakage (Spring 09)
- Propose methodology to identify leakage exposed sectors (December 09)
- Identify leakage exposed sectors based on the finalized methodology after EAAC recommendation (~Q1/2010)
- Determine how to address leakage (~Q2/2010)

For More Information...

- EAAC Web Page
 - <http://www.climatechange.ca.gov/eaac>
- ARB's Cap-and-Trade Web Site
 - <http://www.arb.ca.gov/cc/capandtrade/capandtrade.htm>
- To stay informed, sign up for the Cap-and-Trade listserv:
 - http://www.arb.ca.gov/listserv/listserv_ind.php?listname=captrade
- Western Climate Initiative
 - <http://www.westernclimateinitiative.org>