Session 5

Possible Policy Mechanisms for Emissions Reductions

Carbon Fees, Offsets, Incentives, and Other Mechanisms

Email questions to CCPlan@arb.ca.gov

Other Mechanisms

• In addition to traditional regulatory approaches and cap and trade, various other mechanisms are being evaluated for possible inclusion in the Scoping Plan, including:
  – Carbon fees
  – Offsets
  – Economic and other incentives

Carbon Fees

• A set fee per ton of emissions
  – Examples: Carbon fees in Norway, Finland, Quebec
• User fees
  – Examples: Residential solid waste pickup variable pricing; highway tolls
• Product charges
  – Example: Ewaste recycling fee

Comparison of Carbon Fee and Cap and Trade

• No price volatility with carbon fee
• Less certainty about emissions reductions from covered sectors
• Potentially less administrative overhead for covered entities and government
• No opportunities for market manipulation
• No allocation uncertainty
• Possibly simpler parallel operation with, or transition to, regional or federal system
Revenues

- From:
  - Auction of allowances
  - Carbon fees
  - Penalties for noncompliance
- If programs in Scoping Plan are expected to produce revenues, plan will also include recommendations for distribution

Revenue Distribution Questions

- If there are revenues from programs, what criteria should establish priorities for distribution?
- What advantages or disadvantages are there to particular uses of funds?
- What body or agency should administer distribution?

Offsets

A GHG offset is a GHG emission reduction …
- Beyond what otherwise would have happened because of regulation and common practice
- That generates a credit that can be used to meet a regulatory compliance obligation or a voluntary commitment

Offsets Overview

- What role should offsets play in California?
- Which projects should be eligible?
- What rules should govern the use of offset credits?
- What are some examples for an offsets program?
An Offsets Program

• General policies for offsets
  – Adopt protocols for voluntary reductions
  – Issue credits for recognized reductions
  – Accept offset credits from other programs

• Under AB 32, the reductions must be real, additional, quantifiable, permanent, verifiable and enforceable
  – H&S Code §38520(d)(1-2)
  – MAC recommended transparent and predictable rules

• Offsets are a possible alternative compliance mechanism for both market-based and direct regulation options

Offset Project Eligibility

• Project location (geography)
  – California only, WCI only, worldwide

• Project type
  – Forestry, dairy methane, etc.

• Project approval process
  – Standards-based vs. case-by-case approach

• Project timing
  – Start date and project length

Rules on Offset Use

• Limits on volume used for compliance
• Discounting and unit exchange rates
• Banking and borrowing of credits
  – Should rules on limits, discounting or banking vary over time or by project type?

Examples of Offsets

• EU ETS
  – No internal offsets; links to CDM and JI
  – Modest quantitative limits on offsets use

• CDM/JI
  – Case-by-case approach
  – Primarily focused on developing countries

• RGGI model rule
  – Standards-based approach; five project types
  – Primarily in-region; volume limit on credits for compliance

• MAC recommendation
  – Standards-based approach
  – No geographic or quantitative limits
Incentives and AB 32

- The Scoping Plan “shall identify and make recommendations on...potential monetary and nonmonetary incentives for sources and categories of sources that the state board finds are necessary or desirable to facilitate the achievement of the maximum feasible and cost-effective reductions of greenhouse gas emissions by 2020”
  - (H&S Code §38561(b))

Key Questions

- How should ARB use economic incentives to supplement other types of policy tools, such as direct regulation or a market?
- Which sectors would benefit most from economic incentive programs when looking at their overall options and policy mix?

Economic Incentives

- Economic Incentives:
  - May be direct (e.g. rebates) or indirect (e.g. information disclosure)
  - Use financial means to motivate emissions reductions
  - Rely on decentralized decision-making by allowing entities to act in their own self interest

Advantages of Economic Incentives

- Innovation
- Less intrusive than regulatory approach
- Cost control
  - Offer low-cost alternatives to direct regulation
  - Provide flexibility and technology choice
  - Reduce administrative costs and enable smaller and dispersed sources the opportunity to participate
- Can augment regulations
  - Provide incentives for more timely reductions
  - Provide incentives for over-compliance
Types of Economic Incentives

- Reward-Based
  - Rebate Programs
  - Subsidies
  - Feebates
- Public Disclosure of Information
  - Green Labeling
- Recognition

Rebate Programs

- Compensate individuals or entities that buy green products or invest in green technologies
- Examples
  - California Solar Initiative
  - California Emerging Renewables Program
  - Rebate Funds
  - Rebates for Driving Less (ETAAC)

Subsidies

- Use financial assistance provided by the government to encourage the purchase or production of certain goods or technologies
- Include grants, loan programs, tax benefits, and other government provided services

Examples of Subsidy Programs

- CSI Single Family Low Income Incentive Program
- Carl Moyer Program
- Innovative Clean Air Technologies (ICAT) Grant Program
- AB 118 Alternative and Renewable Fuel and Vehicle Technology Program
- On-Bill Financing (ETAAC)
- “Buy California” (ETAAC)
- Revolving Fund for technology demonstration projects (ETAAC)
Fees and rebates:
- Combine fees and rebates to promote transition to lower emitting technologies
- Could be applied to vehicles or home appliances among other categories
- Examples
  - AB 493 Clean Car Discount Bill

Public Disclosures of Information:
- Require the public disclosure of information in order to influence manufacturer/consumer behavior
- Examples
  - NEPA Environmental Impact Statements
  - California’s Proposition 65
  - California’s Hot Spots Act (emissions data collection)
  - US EPA Toxic Release Inventory

Green Labeling:
- Informs consumers of the influence of certain products on the environment through a uniform labeling system
- Examples
  - Endorsement Labels, e.g. Energy Star
  - Eco-Labels, e.g. Green Seal, Forest Stewardship Council, USDA Organic
  - OSHA Warning Labels
  - Green Fuels Labeling Standard (ETAAC)

Recognition for Voluntary Actions:
- Implementing methods of environmental protection for intangible rewards
- Examples
  - 1993 Climate Change Action Plan
  - U.S. EPA’s 33/50 Program
  - Negotiated Agreements, e.g. Project XL
  - Adopt-a-Highway Program
  - Voluntary Carbon Market
Next Steps

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Upcoming Events

- Economic analysis stakeholder workgroup
  - First meeting scheduled for morning of January 28
  - Tentative meetings scheduled for February 29 and March 17
- Mechanism design stakeholder workgroup being formed
  - First meeting being scheduled for early February
  - Following meetings February 29 and March 17
- Scenarios workshop in Sacramento April 4
- Many other meetings, workshops and events
- Release of Draft Scoping Plan in late June

Additional Information

- ARB Climate Change Website
  - http://www.arb.ca.gov/cc/cc.htm
  - Stay informed – sign up for list serve
- California Climate Change Portal
  - http://www.climatechange.ca.gov
- ARB and other agency contacts are available at
  http://www.arb.ca.gov/cc/contacts/contacts.htm

Questions and Comments?

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