CLIMATE ACTION TEAM
Air Resources Board Working Group

Near-Term Implementation Plan
Scoping plan Measure: California Cap-and-Trade Program Linked to Western Climate Change Initiative Partner Jurisdictions

CAT Working Group Overview: ARB's cap-and-trade team focuses its efforts on developing a broad-based cap-and-trade program that will provide a firm limit on greenhouse gas (GHG) emissions. This team is also working with its regional partners in the Western Climate Initiative to develop a regional market-based system to achieve greater environmental and economic benefits for California.

Working Group Agencies: ARB; California Environmental Protection Agency (Cal/EPA); California Public Utilities Commission (CPUC); California Energy Commission (CEC); California Natural Resources Agency; Department of Forestry; Department of Public Health (CPH); Office of the Chief Information Officer.

Measure / Strategy

A) Description: The AB 32 Scoping Plan calls for a California GHG cap-and-trade program that links with other regional partner jurisdictions in the Western Climate Initiative (WCI) to create a regional market system. As such, cap-and-trade is one of the key measures that California will employ to reduce the State's impact on climate change. The Scoping Plan estimated that the cap-and-trade regulation will provide economy-wide emission reductions of about 34.4 million metric tons of CO_2e in 2020.

B) Agencies Involved: ARB multi-divisional technical and program staff form the core group of the team, which also includes staff from the CPUC, the CEC, the Attorney General's Office, and other State agencies.

C) Scoping Plan/Adaptation Plan Reference: California Cap-and-Trade Program Linked to Western Climate Initiative Partner Jurisdictions, in *Climate Change Scoping Plan* (ARB, December 2008).

D) Metrics: The metric for the cap-and-trade program is the annual emissions cap, defined in million metric tons CO_2e per compliance period. The program would begin on January 1, 2012 for those sectors included in that compliance period. ARB is considering compliance periods of three years in duration (e.g., 2012 to 2014, 2015 to 2017, and 2018 to 2020), while requiring entities to surrender a portion of their reported emissions each year during each compliance period.

   Covered entities in a cap-and-trade program must account for GHGs they emit. Permits to emit are called allowances and are issued by the state to program participants. Every year, the cap would decline and, as a result, fewer allowances would be issued. Limiting the number of allowances issued in this fashion ensures emissions continue to decline.

At the end of a compliance period, each covered entity would be required to surrender allowances, and a limited number of "offsets", equal to its total GHG emissions during that compliance period. Offsets are tradable credits that represent GHG emission reductions that are made in areas or sectors not covered by the cap-and-trade program. One offset credit would be equal to one metric ton of GHG emissions. Once allowances are surrendered, they would be permanently retired by ARB. Failure by a covered entity to surrender sufficient allowances to match its emissions would result in significant penalties.

Tasks and Deliverables:

Task 1: Cap-and-Trade Rule Development

Purpose: Achieve cost-effective greenhouse gas reductions from California industrial sources, natural gas, propane, and transportation fuel providers, and fossil-fired power plants, including from imported electricity generation.

1. Description: Under the staggered approach outlined in the Scoping Plan, entities would be phased into the program between 2012 and 2015 according to the following timelines:

   Starting in the first compliance period (2012):
   - Electricity generation, including imports
   - Large industrial sources and processes with emissions at or above 25,000 $MTCO_2e$

   Starting in the second compliance period (2015):
   - Suppliers of fuel combusted at industrial facilities with emissions below 25,000 MTCO2e, and suppliers of natural gas and propane combusted in the commercial and residential sectors
   - Suppliers of transportation fuels

2. Deliverables: A cap-and-trade regulation will be considered for adoption in late 2010 with a January 1, 2012 targeted effective date. At this time, we anticipate that the regulation will likely contain the following key elements:

   - **Program Scope, or Applicability**, which identifies eligibility thresholds and covered GHG emissions under the cap with implementation dates. The cap would begin in 2012 for industrial sources and electricity generation; the cap would increase in 2015 to account for upstream sources of transportation fuels and natural gas users in non-industrial categories. The cap would decline annually from 2015 to 2020.
   - **Allowances**, or permits to emit CO2e, that are distributed or sold at auction to both covered entities and opt-in participants e.g., traders, brokers, offset providers, verifiers and those wishing to voluntarily retire compliance instruments.
   - **Allowance budgets** that identify how the declining cap will be set for the program.
   - **Offsets** that covered entities may purchase and use to a limited extent in lieu of buying allowances or reducing emissions on site.
   - **Unlimited banking** of unused allowances or offsets from one compliance period to another.
   - **Linkage** to other GHG trading and offset crediting systems.

- **Emissions reporting** and third-party verification requirements to ensure the quantity of allowances and offset credits surrendered at the end of each compliance period are accurate.
- **Tracking and registration system** that identifies and defines registration and compliance instrument tracking requirements for covered entities and opt-in participants.
- **Surrender requirements** for covered entities of allowances and offsets to demonstrate compliance.
- **Potential uses of allowance value and proceeds from auctions .**
- **Auction design**

3. Agency Roles: ARB has the primary lead on developing the cap-and-trade regulation including developing offset protocols for use in the cap-and-trade program, GHG emissions reporting requirements, and enforcement procedures. The CPUC and the CEC provide analytical support relating to electricity generation and transportation fuels. The California Natural Resources Agency and the California Forestry Board also provide technical support in the analysis of potential offset protocols for forestry projects. ARB has also been consulting with the Attorney General's Office and various federal agencies over issues related to market oversight and enforcement. ARB has been working with DPH and the Climate Action Team Public Health Workgroup to develop an approach for the public health analysis of the cap-and-trade program. ARB shares lead agency responsibilities with Cal/EPA on WCI activities, including possible linkage of a California program with the regional partnership.

d. Timeline: The final draft rule package, including the environmental assessment, and economic and fiscal analysis will be released for public comment at least 45 days prior to the Board's consideration of a cap-and-trade regulation in late 2010.

4. Crosscutting Issues: ARB is working with the CPUC and the CEC on electricity calculation procedures for determining the emissions associated with imported unspecified power coming into the State, as well as emission factors that characterize different fuels used to generate electricity. Development of offset protocols for forestry projects will involve coordination with the California Natural Resources Agency and the California Forestry Board. Should the regulation include manure digesters for offset eligible project types, ARB will also continue working with the agricultural industry on the development of compliance grade offset protocols from manure digester projects. Moreover, while agriculture is not a capped sector, the industry would be indirectly affected through its use of energy and diesel fuel, and its affiliation with the food processing industry in the State. ARB continues to work with all of these sectors to ensure a program that increases productivity through energy efficiency, while helping to achieve AB 32 goals.

   Linkage with the WCI cap-and-trade program will involve close coordination with Cal/EPA which shares the lead agency role with ARB for California on the regional partnership. ARB is also working with DPH on a technical analysis of potential health related impacts associated with a cap-and-trade program in affected communities. Results from that analysis will be considered in the design of the program to avoid potential adverse impacts

associated with emissions, health exposure, and toxic risk. This analysis will be fed into the environmental assessment that supports rule development. ARB will also continue to work closely with affected stakeholders in the State and our WCI partners to ensure that neither a California nor a regional cap-and-trade program results in a loss of businesses and jobs to other locations due to program requirements.

Task 2: Market Tracking System Development and Implementation
Purpose: Consistent with the requirements in AB 32 and the Scoping Plan, ensure the California cap-and-trade program is operational on January 1, 2012.

1. Description: A Market Tracking System represents the operations side of the cap-and-trade program. It provides for registering market participants, retaining emissions reports and audits, managing regulatory oversight and enforcement data, and compiling market data necessary to operate, track, verify, and ensure program compliance.
2. Deliverables: Before development can begin on the Cap-and-Trade Market Tracking System, ARB must conduct a Feasibility Study Report (FSR) to comply with State Information Technology (IT) policy. The FSR will evaluate the needs, solutions, risks, and costs of the Market Tracking System. Based on this needs assessment, ARB will design and/or acquire a market tracking system capable of meeting program needs and requirements.
3. Agency Roles: ARB has the lead role in conducting the FSR; it will retain the lead during the procurement process for acquiring the tracking system, as well as the oversight role once the system is in place. The Office of the Chief Information Officer is responsible for approving the FSR and giving the go-ahead to proceed to the project procurement plan.
4. Timeline: Once the FSR is completed and approved, ARB will release an information technology procurement plan and request for proposal for the construction of the Market Tracking System. The system will be operational by the end of the third quarter of 2011 to allow for the first planned auction of trade permits in 2012.

SUMMARY TABLE:

Deliverable	Agencies	Deadline
Environmental Assessment, Economic and Fiscal Analysis, Public Health Analysis	ARB, Department of Public Health	Fall 2010
Draft Regulation	ARB	Fall 2010
Market Tracking System Feasibility Study Report	ARB	2010
Board consideration of regulation	ARB	Late 2010
Market Tracking System Design and Development	ARB	2010-2011
Registry and Market Tracking System	ARB	Mid-2011
Cap-and-Trade Program Initiation	ARB	January 1, 2012