



Cap-and-Trade Health Impact Assessment Overview

CAT Public Health Workgroup Meeting
December 17, 2009

California Air Resources Board

California Environmental Protection Agency
 **Air Resources Board**



What is the Proposed Cap-and-Trade Program?

- Establishes a limit on emissions that declines over time
- Includes:
 - Monitoring, reporting and enforcement rules
 - Prevent any increase in the emissions of toxic air contaminants or criteria air pollutants to the extent feasible (HSC §38570(b))

California Environmental Protection Agency
 **Air Resources Board**

Preliminary Draft Regulation (PDR)

- Requires sources of GHG emissions to manage their emissions under a statewide declining emissions cap
- Begins in 2012 with:
 - ~600 of the state's largest GHG-emitting stationary sources (i.e. industrial sources and electricity generators)
 - Electricity imports
- By 2015 would also include:
 - All commercial and residential combustion of natural gas and propane
 - Transportation fuels

PDR, *continued*

- Requires minimum number of allowances to be auctioned at program start
- Allows limited use of high quality offsets outside of capped sectors to cover a portion of the overall emissions reductions
- Establishes clear rules for emissions trading, monitoring, and enforcement

Ongoing Cap-and-Trade Evaluation Efforts

- Health Impact Assessment (early 2010)
 - Draft method to identify disadvantaged communities
- Update of Economic Analysis of Scoping Plan (Feb 2010)
- Staff report (required as part of regulation)
 - Includes public health, environmental and economic analyses

Why do a Health Impact Assessment?

- Board resolution
- Stakeholder interest
- Help inform the cap-and-trade rule development
- Explore potential mechanisms to achieve:
 - Toxic and criteria pollutants emission reductions
 - Other health co-benefits
- Will supplement ARB staff analyses underway
- Conducted jointly by CA DPH and ARB

How will the HIA process be tailored to meet ARB's regulatory requirements & timeline?

- Process based on HIA Guidelines
- HIA schedule driven by cap-and-trade regulatory timeline
- Academic Advisory Group convened
- CAT Public Health workgroup input
- Preliminary HIA concepts and findings presented in a public meeting(s) prior to finalizing the HIA

What is the anticipated HIA work product?

- The HIA will:
 - Focus on aspects of cap-and-trade program design most likely to influence public health
 - Delineate pathways in order to assess potential impacts
 - Quantify where feasible and appropriate

Types of Analysis Expected in HIA

- Quantitative
 - Plan to be quantitative where possible
 - Additional quantitative analysis in local impact assessment
 - Will need to consider available data
 - Will need to carefully consider utility of quantitative information
- Qualitative
 - Included when not possible to quantify

What is the HIA baseline?

- Entire Scoping Plan, including Cap-and-Trade
 - Cap-and-Trade Preliminary Draft Regulation (11/24/09)
 - No program design elements are incorporated into the cap-and-trade baseline to maximize co-benefits
 - No allowance value is invested in projects, programs or communities to decrease pollution from criteria air pollutants or toxics
- Existing Federal and State programs reduce criteria and toxic pollutants

HIA Baseline

Parameters	Bounds
Allowances	At least 10% to be auctioned at program start
Offsets	Covered entities are allowed to use offsets for up to 4% of what it surrenders at the end of a compliance period
Geographic Scope	California
Compliance Period	3 years (2012-2014, 2015-2017, 2018-2020)

HIA Baseline, *cont.*

Parameters	Bounds
Covered sectors	~600 of the state's largest GHG-emitting stationary sources, including fossil-fired electricity generators (including imported electricity) with direct and process emissions of at least 25,000 MTCO ₂ e per year; natural gas and propane that are combusted by sources below the stationary source threshold; transportation fuels (latter two sectors would be regulated upstream)
Pollutants	Carbon dioxide (CO ₂), methane (CH ₄), nitrous oxide (N ₂ O), sulfur hexafluoride (SF ₆), perfluorocarbons (PFCs) and hydrofluorocarbons (HFCs), nitrogen trifluoride (NF ₃)

Considerations

- Possible program design elements to consider are:
 - Incentive Programs
 - Trading Restrictions (determined by facility and/or community characteristics or a geographic area) for:
 - Allowances
 - Offsets
 - Revenue Distribution to:
 - Disadvantaged communities in high pollution areas
 - All high pollution areas
 - Projects, programs or research to improve co-benefits
 - Projects, programs or research to improve public health
 - Other activities pursuant to EAAC recommendations
- Evaluation of program design elements likely to be qualitative