

Use of Offsets in Cap-and-Trade

**CEC Committee Workshop
Greenhouse Gas Emission Impacts
of Power Plants**

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AB 32 Global Warming Solutions Act and ARB Scoping Plan

- AB 32
 - Codifies 2020 greenhouse gas (GHG) limit at 1990 level
 - Mandates ARB adopt a Scoping Plan to achieve the “maximum feasible and cost effective reductions”
- Proposed Scoping Plan
 - Recommends measures to lower GHG emissions
 - Proposes cap-and-trade program that links to a US-Canadian regional market
 - All measures must be launched January 1, 2012

Cap-and-Trade

Key Elements

- Scope and threshold
 - Who and how large
- Setting the cap
 - How many allowances over time
- Distribution of allowances
 - Free distribution, auction, or hybrid
- Offsets
 - Tradable reductions from outside the cap
- Reporting, tracking, enforcement
 - Quantify and verify compliance
- Program equity
 - Fair use of revenues

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)
- Capped sources hold allowances equal to actual emissions
- Direct regulations/standards to 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

California Cap-and-Trade

What Is an Offset?

- Additional reductions from un-capped sectors beyond that required by direct regulation
 - Potential Examples: forests, manure management, landfills (methane collection)
- Has potential to provide lower cost reductions to market participants when allowances are scarce
- Cannot be used to avoid direct regulations within the cap

California Cap-and-Trade Rules Governing Use of Offsets

- Offsets must be
 - Real ---- reflect actual emission reductions/removals
 - Additional ---- beyond what otherwise have happened
 - Quantifiable ---- reliably measured or estimated
 - Verifiable ---- easily monitored and verifiable
 - Permanent ---- irreversible or backed up by a guarantee
 - Enforceable ---- adopted in full or by reference into regulation
- Limits on regional and local health-based pollutants may restrict use of offsets in some locations

Proposed Scoping Plan Voluntary Early Actions

- ARB must provide appropriate recognition or credit for voluntary early actions
(HSC § 38562 (B)(1), (2) and (3))
- Possible alternatives
 - Early action allowance set-asides
 - Account for early reductions in the allocations
 - Direct regulations could recognize or reward early actions

Proposed Scoping Plan Voluntary Early Actions

- Criteria should be comparable to offsets:
 - Real
 - Quantifiable
 - Additional (surplus)
 - Permanent
 - Verifiable
 - Enforceable
- If enforceable under cap-and-trade, similar criteria may be required
 - Additionality will be key for credit under AB 32

Proposed Scoping Plan Voluntary Early Actions Policy Statement

- Board adopted policy statement in Feb. 2008
 - ARB will evaluate methodologies to quantify early actions
 - Executive Order confirms the technical soundness of the methodologies

Voluntary Reductions

- Voluntary Offsets
 - Verified emission reduction projects not regulated, capped, or part of government incentive programs
 - Not for use in compliance market of cap-and-trade program unless first adopted as regulation
 - ARB has adopted several protocols for use in voluntary offset markets
 - Forest projects, urban forestry, manure digesters

Proposed Scoping Plan Schedule

- Draft Scoping Plan released - June 2008
- Workshops on Draft Scoping Plan
 - July and August 2008
- Proposed Scoping Plan released October 2008
- Board hearing on Scoping Plan in November
- Board action - December 2008

After Scoping Plan Approval Next Steps

- 2009-2010: Regulatory development of measures and policies
- End of 2010: Adopt GHG reduction measures and policies
- 2012: Measures and policies become enforceable

For Additional Information:

- ARB Climate Change Web Site:
www.arb.ca.gov/cc/cc.htm
(To stay informed, sign up for list serve)
- California Climate Change Portal:
www.climatechange.ca.gov
- ARB Office of Climate Change
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