

Public Meeting

Criteria for Compliance Offsets in a Cap-and-Trade Program

April 28, 2009

California Air Resources Board

California Cap-and-Trade Rulemaking Timeline

- Focus in 2009: work through implications of different issues and policy decisions
- Focus in 2010: finalize program design and develop regulatory language
- End of 2010: Board action on cap-and-trade regulation
- Extensive public process throughout

Purpose of Meeting

- Discuss preliminary approach for establishing rules in the California cap-and-trade program to determine whether offsets meet AB 32 requirements
- ARB would like to receive input on the preliminary thinking in this presentation
- Stakeholders are asked to provide written comments on this topic to ARB by May 21st (to ccworkshops@arb.ca.gov)

ARB Compliance Offset Development Process

Today

- Criteria for compliance offsets
 - Requirements for offset projects

Future Topics

- Protocol review and approval process
- Approval process for offset projects
 - Verification of offset projects
 - Issuance of offset credits
- International offsets and linkage

Meeting Agenda

- Opening Remarks (15 minutes)
- Staff Presentation (30 minutes)
- Round-Table Discussion (2 hours)
- Other Issues (15 minutes)
- Adjourn

Outline for Today's Presentation

- AB 32 Requirements
- Offsets in the Scoping Plan
- Defining a Compliance Offset
- Defining Criteria for Compliance Offsets

What is an Offset?

- In general, a GHG offset is a GHG emission reduction ...
 - beyond any reduction otherwise required by regulation or that otherwise would occur
 - that generates a credit that can be used to meet a regulatory compliance obligation or a voluntary commitment
 - that addresses emissions not included in a cap-and-trade program

What Does AB 32 require?

- Any reduction of greenhouse gas (GHG) emissions used for compliance purposes must be:
 - real, permanent, quantifiable, verifiable, enforceable and additional
HSC §38562(d)(1) and (2)

Scoping Plan: Compliance Offsets

- All offsets must meet high quality standards (AB 32 requirements)
- The majority of emission reductions must be met through action at capped sources
 - No more than 49% of reductions can come from offsets
- No geographic limits

Approaches for Defining Compliance Offsets

- The definition could:
 - Include all specific requirements or provisions for compliance offsets
 - Refer to further requirements of the offset system that may be defined elsewhere in the regulation or program design
 - Combine elements of both of these approaches

Approaches for Defining Compliance Offsets (cont'd.)

- Example elements of a compliance offset definition:
 - Tradable unit
 - Offset unit (e.g. reduction of 1 metric ton CO₂e)
 - AB 32 specified criteria (real, additional,...)
 - Types of emissions reductions
 - Geographic eligibility
 - Project eligibility date and vintage
 - Ownership rights

ARB Preliminary Staff Thinking: Defining a Compliance Offset

- Tradable unit
 - A compliance offset is a tradable and fungible unit within cap-and-trade program
- Offset unit
 - A compliance offset is equivalent to 1 metric ton CO₂e
- AB 32 specified criteria
 - A compliance offset must meet all criteria specified in the offset regulation

ARB Preliminary Staff Thinking: Defining a Compliance Offset (cont'd.)

- Types of emission reductions
 - Eligible: Direct emission reductions or removals that occur at the location where the reduction activity is implemented
 - Ineligible: Indirect emission reductions or removals that occur at a location other than where the reduction activity is implemented

ARB Preliminary Staff Thinking: Defining a Compliance Offset (cont'd.)

- Geographic eligibility
 - ARB would issue compliance offsets for projects in California or for projects implemented in a jurisdiction with an agreement with California
 - ARB would not approve offset projects for reductions in developed countries from sources that within California are covered by the cap-and-trade program*

*Western Climate Initiative Design Recommendations for the WCI Regional Cap-and-Trade Program. September 23, 2008, p. 11.

ARB Preliminary Staff Thinking: Defining a Compliance Offset (cont'd.)

- Geographic eligibility (cont'd.)
 - ARB would accept approved offset credits issued by other systems
 - Would need to meet all AB 32 criteria
 - ARB may establish added criteria to ensure similar rigor to CA approved/issued compliance offsets
 - ARB would need to develop process to assess which other systems would be eligible
 - ARB would need to determine how to enforce

ARB Preliminary Staff Thinking: Defining a Compliance Offset (cont'd.)

- Project eligibility date options:
 - SB 527-CCAR: 2001
 - AB 32: 2007
 - Start of mandatory reporting: 2008
 - Start of cap-and-trade program: 2012
 - Others?
- Eligible vintage date options:
 - Same as above

Other Considerations for Defining Compliance Offsets

- Ownership rights
 - Is the entity with operational control of an emission reduction project the owner of the offsets?
 - Should ownership of compliance offsets be freely transferable?
 - Which instrument should be used for tracking transfers of ownership?

AB 32 Specified Criteria for Compliance Offsets

- Real
- Quantifiable
- Permanent
- Verifiable
- Enforceable
- Additional

Are there others ARB should consider?

Criteria: Real

- Typically understood to mean that all emission reductions or removals credited as compliance offsets genuinely took place
- Components of 'Real'
 - Conservative estimates
 - Sound quantification methodologies
 - Verified reductions
 - Reductions are permanent

ARB Preliminary Staff Thinking: Criteria: Real

- Account for uncertainty and accuracy in calculating emission reductions
 - Conservative estimates
- Account for emissions leakage
- Avoid double counting

Criteria: Quantifiable

- Typically understood to mean that reductions must be real and accurately quantified
- Components of quantifiable:
 - Calculation methodologies that are measurable, credible and replicable
 - Review of methodologies
 - Project specific variations

ARB Preliminary Staff Thinking: Criteria: Quantifiable

- Include scientifically sound and accurate methodologies
- Periodic review of methodologies
- Take variations into account
- Establish uniformity in quantification and monitoring procedures for each project type
- Comprehensive accounting of emission sources and sinks
- Provide some flexibility in choice of monitoring/measurement techniques meeting accuracy requirements

Criteria: Permanent

- Typically refers to the guarantee that GHG reductions or removals are not re-emitted into the atmosphere
- Risk of non-permanence is mostly associated with biologic and geologic sequestration projects

ARB Preliminary Staff Thinking: Criteria: Permanent

- For sequestration projects permanence requirement of 100 years
 - Considerations are made for the relative duration of anthropogenic CO₂ in atmosphere
- Possible approaches to ensuring permanence
 - Pre-issuance obligation: may require contracts, conservation easements, etc
 - Post-issuance obligation: may require third-party insurance or buffer accounts

Criteria: Verifiable

- Verifiable refers to the ability for auditor to assess the assertion that GHG reductions have occurred against program criteria
- Verification audits could be performed by regulator or third-party

ARB Preliminary Staff Thinking: Criteria: Verifiable

- To ensure verifiability it is important that the offset system include:
 - Clear and transparent quantification methods
 - Monitoring requirements
 - Reporting and documentation requirements

ARB Preliminary Staff Thinking: Criteria: Verifiable (cont'd.)

- No forward crediting (credits issued prior to verification of reductions)
 - Compliance offsets must be verified
- Third-party verification already required for emissions reporting

Criteria: Enforceable

- Need for ability to investigate and take action for violations or non-compliance
- Provides accountability
- Provides confidence that compliance offsets meet AB 32 requirements and achieve reductions

ARB Preliminary Staff Thinking: Criteria: Enforceable

- Offsets must be backed by regulations and tracking systems in order to:
 - Establish and track ownership
 - Ensure against double-counting of emission reductions and
 - Provide transparency
- Regulation could give ARB authority to investigate and take action for violations by offset users, project developers and/or any potential third-party verifiers

Criteria: Additional

- For additionality, ARB is starting with AB 32 provision:
 - The emission reduction must be “in addition to any greenhouse gas emission reduction otherwise required by law or regulation, and any greenhouse gas emission reduction that otherwise would occur” HSC §38562(d)(2)
- How do we ensure that all reductions meet this requirement?

Criteria: Additional (cont'd.)

Approaches to Additionality

- Project-specific assessment
 - CDM model
 - Administratively intensive
 - Allows for variability
- Standardized assessment
 - CAR model
 - Easier to administer
 - Allows less variability
- Hybrid
 - Combines elements of these two

Criteria: Additional (cont'd.)

Approaches to Additionality (cont'd.)

- Project specific additionality tests
 - Regulatory
 - Common practice
 - Financial (investment)
 - Technology
 - Barriers
 - Others?

Criteria: Additional (cont'd.)

- Options for establishing a baseline
 - Standardized methodology
 - Project-specific methodology
- Crediting period options
 - 5 – 10 years for non-sequestration type projects
 - 30-100 years for sequestration type projects
 - Possibility for renewal

Criteria: Additional (cont'd.)

- Future regulations
 - What happens if future regulations mandate reductions that have previously generated compliance offsets?
 - Projects could cease to be additional the date the new regulation enters into force
 - Projects could cease to be additional when a regulation is passed and it is established that it will go into effect

ARB Preliminary Staff Thinking: Criteria: Additional

- Hybrid approach to additionality
 - Focus on standardized assessments but include some project-specific tests
 - Regulatory
 - Funding source
 - Others?
- Hybrid approach to establishing baselines
 - Use standardized baseline methodologies but allow some project-specific factors to be accounted for

Other Criteria ARB Should Consider

- Transparency
 - Public participation process for projects
 - Disclosure of project information
- Minimize negative effects (no net harm)
- Co-benefits
- Others?

Comments

- Questions during the workshop can be sent to: ccworkshops@arb.ca.gov
- Written comments on preliminary staff thinking are requested by May 21st; please submit comments to: ccworkshops@arb.ca.gov

Team Leads for Cap & Trade Rulemaking

Sam Wade, Mary Jane Coombs	Cap setting and allowance distribution
Ray Olsson	Market operations and oversight
Brieanne Aguila	Offsets and cap-and-trade project manager
Claudia Orlando	Electricity
Joshua Cunningham	Transportation
Manpreet Mattu	Reporting Energy efficiency
Bruce Tuter, Mihoyo Fuji	Industrial sectors
Karin Donhowe	Natural gas for residential and commercial
Mihoyo Fuji	Marginal abatement costs and leakage related issues
David Kennedy, Stephen Shelby, Barbara Bamberger, Mihoyo Fuji, Jeannie Blakeslee, Judy Nottoli, Jerry Hart	Impact analyses (environmental, economic, localized, small business, public health)

For More Information...

- Mandatory Reporting Web Page
 - <http://www.arb.ca.gov/cc/reporting/ghg-rep/ghg-rep.htm>
- 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-ej
- Western Climate Initiative
 - <http://www.westernclimateinitiative.org>