



CAPCOA Greenhouse Gas Reduction Exchange (GHG Rx)

Briefing for C-AGG
March 5, 2014



Who We Are



The California Air Pollution Control Officers

Association (CAPCOA) is a non-profit association of the air pollution control officers from all 35 local air quality agencies throughout California. CAPCOA was formed in 1976 to promote clean air and to provide a forum for sharing of knowledge, experience, and information among the air quality regulatory agencies around the State. The Association promotes unity and efficiency, and strives to encourage consistency in methods and practices of air pollution control. It is an organization of air quality professionals — leaders in their field.



CAPCOA's Work on GHGs

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CEQA & Climate Change

Evaluating and Addressing Greenhouse Gas Emissions from Projects Subject to the California Environmental Quality Act

January 2008

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Model Policies for Greenhouse Gases in General Plans

A Resource for Local Government to Incorporate General Plan Policies to Reduce Greenhouse Gas Emissions

June 2009

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Quantifying Greenhouse Gas Mitigation Measures

A Resource for Local Government to Assess Emission Reductions from Greenhouse Gas Mitigation Measures

August, 2010



CAPCOA's GHG Work, cont'd.

- California Emission Estimator Model (CalEEMod), February, 2011
- Statewide land use emissions computer model
 - Calculate criteria and GHG emissions from construction and operation
 - Direct (vehicle and off-road equipment) & indirect emissions (energy use, solid waste disposal, vegetation planting and/or removal, and water use)
- Includes mitigation measures and quantification





The CAPCOA GHG Reduction Exchange

Mission Statement: *Our mission is to provide a trusted source of high quality California-based greenhouse gas credits to keep investments, jobs, and benefits in-state, through an Exchange with integrity, transparency, low transaction costs, and exceptional customer service.*



CAPCOA GHG Rx: Background & Purpose

- Developed to respond to requests from local governments and others in order to:
 - Encourage local generation and exchange of high quality GHG emission reduction credits
 - Facilitate mitigation for CEQA & other compliance obligations, climate action plan commitments, and other voluntary purposes
- Credits are generated from voluntary projects in CA
- Use not restricted, up to lead agencies and others to decide if appropriate



CAPCOA GHG Rx: Objectives

- Ensure availability of high quality credits
- Make it easy for buyers and sellers to find each other
- Keep transaction costs low
- Secure financial investments, air quality and other co-benefits in the local community



CAPCOA GHG Rx: Additional Benefits

- Accelerate local GHG reduction
- Stimulate local economy
- Create a “feasible” mitigation option for CEQA



GHG Rx Platform Elements

- Credit Project database
 - Credit projects shown in summary form with contacts and links to complete information
 - Searchable by district, project type, etc.
 - Districts validate (verify) credit projects prior to listing, track credit transactions, and update listings
 - Districts are not involved in financial transactions and do not set prices (encourage information to be posted, but voluntary)
- Bulletin Board listings
 - Buyers seeking credits
 - Parties seeking funds to develop projects
- Funding Opportunities listings



GHG Rx Anticipated Users

- Lead agencies
- CEQA project developers
- Land use consultants
- GHG reduction project implementers
- Private companies
- Individuals



GHG Rx Key Features

- Credits are derived from voluntary projects in California
- No membership required
- Costs are kept low
- Builds on decades of CA Air District expertise with criteria pollutant emission reduction credits



Participating Air Districts

- Bay Area AQMD
- Placer County APCD
- Northern Sonoma APCD
- Sacramento Metropolitan AQMD
- South Coast AQMD
- San Joaquin Valley APCD
- San Luis Obispo County APCD

Contact CAPCOA to list projects in other districts (916-441-5700)



Operation of the GHG Rx

- Participating Districts review & list credits
 - Engineering and scientific review of credit projects
 - Tracking of all credit data and transactions
 - Designated staff access and maintain central platform
 - Data entry, quality control, limited to their district's data
 - Unique passwords, all entries identifiable
- Central Platform operated by 'System Administrator'
 - SCAQMD for first 18 months
- Board level review committee meets quarterly
 - Review and assess program, including audits
 - Maintenance and improvements



GHG Rx “Rules of the Road”

- Binding and enforceable quality control mechanism
- Participating air districts sign MOU with CAPCOA, requiring them to:
 - Follow the administrative rules of the GHG Rx
 - Use CAPCOA-approved criteria and protocols to evaluate credits
 - Issue binding terms for credits approved



GHG Rx Administrative Guidelines

- Approved by the CAPCOA Board
- Govern the function of the GHG Rx
 - Establish roles & responsibilities
 - Identify credit tracking requirements
 - Set quality assurance procedures for data and projects
 - Provide common forms
 - Include Users' Guides



GHG Rx Quality Criteria

- GHG Rx Quality Criteria Guidance
 - Establish criteria for approval of protocols for projects
 - Include protocol for making case-by-case approvals of projects
- Overarching criteria - emission reductions must:
 - Be real, additional/surplus, quantifiable, validated (verified), enforceable, permanent
 - Occur in California
 - Be after date specified in protocol



GHG Rx Protocols

- Biomass-to-energy
- Boiler Efficiency
- Organic Waste (Livestock)*
- Forest Management – I
- Forest Management – II*
- Forest Management – III*
- Case-by-case*



*Provisionally approved by CAPCOA Board



GHG Rx Protocols – cont'd

- Coordinating with ARB, other state agencies on key sectors
- Opportunities to Develop Protocols
 - ✓ Range Lands
 - ✓ Vineyards
 - ✓ Targeted Vegetation Strategies
 - ✓ Suggestions?





Ensuring Additionality – Capped Sectors

- All credits approved per rigorous criteria and protocols
 - Consider regulatory and fiscal additionality
 - Prohibit credits from capped sectors
- Specific Section Considerations:
 - Boiler efficiency: credits only until Jan. 1, 2015
 - Fuel switching: may be difficult to demonstrate additionality once upstream fuels are in cap and trade program



Ensuring Additionality – Capped Sectors, cont'd.

– Biomass to energy:

- Narrow applicability, includes fiscal test and demonstration that burning is common practice, including:
 - ✓ Biomass electricity and avoided pile burning would not have occurred otherwise
 - ✓ Idle capacity in industry
- RPS requirements being met without biomass to energy protocol
- Some early action projects occurred before cap and trade started, clearly additional
- Have not yet listed credits on the GHG Rx; ongoing discussions with state policymakers



Ensuring Additionality – Financial Aspect

- Protocols, including the Case by Case protocol include financial considerations
- The Biomass to Energy protocol requires detailed analysis of the financial cut-point for biomass conversion
- Additional documentation will be added to each case by case credit project to provide information on these listings



Public Process

- New or revised protocols go through a 30-day public review
- Case by case projects go through 30-day public review before credit issuance
 - Existing projects listed went through this process already
- CAPCOA encourages and will consider all comments on how to improve the GHG Rx



Interaction with Cap and Trade Program

- GHG Rx does not compete with cap and trade, but will coexist, like other exchanges
- GHG Rx has not applied to be a cap and trade registry, but could do so in the future
- Some protocols approved for use in both programs
- Some districts are verification bodies and/or have certified staff for CARB approved offset protocols



Interaction with Cap and Trade Program, con't

- GHG Rx credits or prices unlikely to affect cap and trade offset market
- GHG Rx credits can provide CEQA mitigation that might otherwise be from cap and trade market
- No GHG Rx credits from capped sectors
 - Specifically not allowed
 - Handled in protocols



How the GHG Rx Works

Step 1: Submitting a Project

Credit listing information:

- Listing entity information (name, address, etc.)
- Credit project information (project description, location, protocol followed, implementation and expiration dates, etc.)
- Quantity of mitigation (minimum listing = 10 tons; minimum sale = 1 ton)
- History of credits (have they been listed elsewhere?)

Supporting Information:

- Maps, photographs
- Calculations
- Demonstration of how project complies with a CAPCOA protocol
- Monitoring and/or validation (a.k.a. verification) schedule
- Other information, such as location in environmental justice areas



How the GHG Rx Works

Step 2: Air District Review

- Review application for completeness
- Determine if project meets basic Rx criteria (real, additional/surplus, quantifiable, verifiable, enforceable and permanent)
- Verify protocol requirements are met
- Evaluate baseline and reduction calculations
- Conduct field visit
- Prepare validation report
(GHG banking rules at participating air district can be substituted)



How the GHG Rx Works

Step 3: Issue Legally Binding Instrument

Air District issues credit certificate with terms:

- Attests that the credits described in the application have been reviewed and meet all CAPCOA criteria
- Requires the applicant notify the Air District of any sale, transfer or retirement of the credits
- Renders the credits invalid if the terms of the approval are not met



How the GHG Rx Works

Step 4: Listing Credits

- Air District posts credits and all documentation on the Rx
- Unique project number and serial numbers assigned
- Seller notifies Air District of any credits sold, transferred or retired
- Sold, transferred, retired credits recorded by the Air District and shown as transactions
- Controls in place to eliminate any fraudulent or inappropriate listings



How the GHG Rx Works

Step 5: Tracking Credits

- Issuing District tracks credits throughout their life
 - Initial validation and issuance, periodic reviews, changes in status
 - Updates information on GHG Rx
 - Each credit has a unique serial number: 100-BA-SC-BM-11-1-250
- Periodic audit of projects by
 - Participating Districts & CAPCOA



Contact Us

- CAPCOA GHG Rx:
 - www.ghgrx.org
- CAPCOA:
 - www.capcoa.org
 - (916) 441-5700