Regulatory Precedence Crediting Small Source Reductions



Every household that replaces an incandescent bulb with a CFL or installs better insulation can help fight global warming. Various carbon crediting programs--as well as municipal climate action plans and CEQA mitigation projects--have laid the groundwork for rigorously quantifying small, dispersed reductions from end-use energy efficiency upgrades and building weatherization improvements. Several methods for crediting reductions in voluntary and compliance markets are summarized in the table.

<u>Method</u>	<u>Background</u>	<u>How It Works</u>	<u>Example</u>
Clean Development Mechanism Program of Activities	The Clean Development Mechanism (CDM) was established under the Kyoto Protocol to allow industrialized nations to meet their greenhouse gas reduction commitments by making investments in emission reduction projects in developing nations. ¹	The Program of Activities allows for multiple emission reduction projects to be registered as a single CDM project where appropriate baseline and monitoring methodologies have been approved. ²	Starting in November 2009, Australia's Cool NRG is delivering 30 million compact fluorescent light bulbs to low- and middle-income households across Mexico. ³ The project is expected to: • Reduce 7 million tons of global warming pollution over 10 years; • Save \$165 million in household utility bills; • Save \$200 million in government subsidy payments each year; • Avoid \$585 million in electricity generation infrastructure costs.
Clean Development Mechanism Energy Efficiency Protocols	[same as above]	There are several protocols to credit projects that improve building energy efficiency at multiple sites such as appliance and equipment upgrades as well as weatherization strategies. ⁴	The City of Cape Town in South Africa is using three different interventions to improve energy efficiency in low-income households, including installing ceiling insulation, solar water heaters and energy- efficient lighting. ⁵
Regional Greenhouse Gas Initiative Offsets for End-Use Efficiency	The Regional Greenhouse Gas Initiative is a utility sector cap and trade program among ten Northeast and Mid-Atlantic States in the U.S. ⁶ Participants have committed to reducing CO2 emissions by 10 percent by 2018. Each state has its own carbon trading program that links to the broader RGGI market where states can buy and sell permits.	As an alternative to reducing emissions from electric power generation, RGGI allows states to offset their emissions by implementing greenhouse gas reduction projects in other sectors. RGGI recognizes projects in five different categories including energy efficiency.	End-use energy efficiency projects that reduce on-site combustion of fossil fuels can include: • Installation of solar or geothermal water heaters or space heating equipment; • Improvements to thermal performance of building envelope. ⁸
Voluntary Carbon Standard Weatherization Protocol	The Voluntary Carbon Standard is an international registry and crediting organization for voluntary greenhouse gas reduction projects. VCS develops methodologies and programs to credit carbon offset projects. Credits can then be sold in the voluntary carbon market to buyers who want to offset their emissions or otherwise fund greenhouse gas reductions.	The Maine State Housing Authority has drafted a protocol for crediting weatherization improvements to existing buildings. 10 Weatherization projects that reduce energy load, heat or cooling load, or appliance plug load can be awarded offsets credits through VCS.	Improvements to weatherize a home, replace a mobile home or implement specific energy efficiency measures can include: • Improvements to the building envelope; • HVAC efficiency improvements; • Appliance upgrades.

Regulatory Precedence Crediting Small Source Reductions



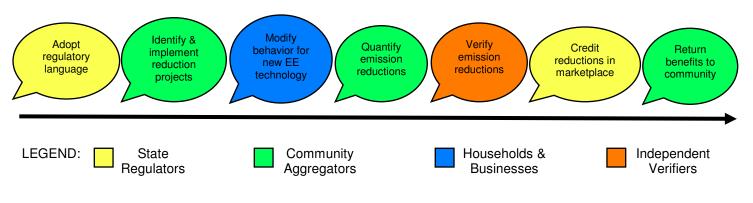
Paving the Way for Low-Income Weatherization and Energy Efficiency Reductions

These methods establish precedence for rigorous crediting rules within California's forthcoming greenhouse gas cap-and-trade program. The rules inspire investments by regulated entities and community organizations to help households and businesses implement greenhouse gas reductions. In particular, regulatory precedence provides templates for state regulators who seek to incentivize energy efficiency and weatherization through the carbon market.

Steps to Community Crediting in AB 32 Cap and Trade

- Evaluate existing methods to be adapted for prioritizing investments and reductions in low-income and historically polluted communities
- Work with stakeholders including municipal governments, community service organizations and independent verifiers to develop regulatory language for crediting community reductions in the AB 32 cap-and-trade market
- Provide guidance to local governments and community organizations that wish to implement programs

Timeline for Achieving Community Reductions



¹ United Nations Framework Convention on Climate Change Clean Development Mechanism, http://cdm.unfccc.int/about/index.html

² CDM Programme of Activities, http://cdm.unfccc.int/ProgrammeOfActivities/index.html

³ coolnrg, Luz Verde (CUIDEMOS Mexico), http://www.coolnrg.com/whatcdmcuidemos.html.

⁴ Methodology for "Demand-side energy efficiency activities for specific technologies," version 13, http://cdm.unfccc.int/methodologies/DB/UA3QLMFDUFFQ1P210L6EIK44O8U7XM/view.html; Methodology for "Energy efficiency and fuel switching measures for buildings," version 10, http://cdm.unfccc.int/methodologies/DB/9QDGY435JDVTB8HN3VMI61K9XBWY30/view.html.

⁵ Project 0079, Kuyasa low-cost urban housing energy update project, Khayelitsha, Project Design Document, registered 8/27/05, http://cdm.unfccc.int/Projects/DB/DNV-CUK1121165382.34/view.

⁶ Regional Greenhouse Gas Initiative, "About RGGI," http://www.rggi.org/about.

⁷ Ibid. "Offsets," http://www.rggi.org/offsets.

⁸ Ibid. "Energy Efficiency," http://www.rggi.org/offsets/categories/efficiency.

⁹ Voluntary Carbon Standard, "About the VCS," http://www.v-c-s.org/about.html.

¹⁰ Ibid. "Methodology Element Information," http://www.v-c-s.org/methodology mwsmfb.html.