

CLIMATE LEADERS

SETTING THE STANDARD IN GREENHOUSE GAS MANAGEMENT

Using Offsets

Climate Leaders Monthly Webinar Series

June 24, 2009



Today's Agenda

- 1) EPA's Development of Offset Protocols
(Kimberly Klunich Todd, Climate Change Division)
- 2) Using Offsets to Achieve Climate Leaders Goals
(Susan Wickwire, Climate Leaders)
- 3) Q&A



EPA's Development of Offset Protocols

Fundamental concepts related to offsets

EPA Climate Leaders approach to offsets

Highlights of Climate Leaders Offsets
Guidance

Offset Terminology

Additionality

- The project-based GHG reductions must be beyond what would have happened anyway (i.e., in a “business-as-usual” scenario).

Baseline

- What would have occurred in the absence of the project?

Permanence

- Longevity/Stability of C stocks
- The GHG reductions must be permanent and can be backed by guarantees if they are reversed (e.g. re-emitted into the atmosphere)

Leakage

- Refers to the situation in which a C sequestration or emission reduction activity on one piece of land inadvertently, directly or indirectly, triggers an activity which, in whole or part, counteracts the carbon effects of the initial activity

Importance of Additionality

No Offset/No Cap



Landfill Emissions (without methane collection/combustion)



Power plant Emissions (no cap)



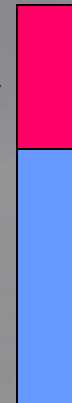
Offset/Cap



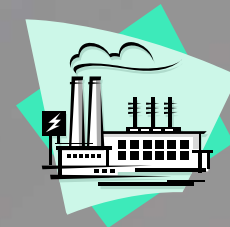
Landfill Reduction (with methane collection/combustion)



Power plant Emissions (with cap)



Cap



Additionality Defined - USEPA

Until a program or policy defines additionality it simply a theoretical discussion

- Would it have occurred?

Under a Performance Standard approach, proposed projects are required to demonstrate that they are additional by achieving a level of performance that, with respect to emission reductions or removals, or technologies or practices, is significantly better than business-as usual

- Additionality should be determined for each project type included in an offsets program
- Business-as-usual is determined by assessing performance of similar, recently undertaken or planned practices, activities or facilities in a relevant geographic area

Top-down, standardized methodology

- Set appropriate metrics for additionality, baseline, and monitoring options

Performance Standard Approach

“Additionality” based on an analysis of a relevant sector in a specific spatial area

- Data from (1) historic, (2) planned or (3) projections
- Proxy for barriers, financial decisions and “intent” tests

“Recent” historic performance is proxy for “near “ future performance

Performance standard is specific to project type

- Comprised of performance threshold (additionality determination) and baseline
- Emissions rate, practice standard, technology standard

Performance standard is periodically updated

- Reflects continuous performance improvements in sector (e.g., changes in regulations, market trends, and technology developments are reflected in updates)
- Adjustments made to “proposed projects,” not to existing

Advantages of Performance Standard Approach

Project developers are aware of the accounting “rules” in advance

- Methodologies prepared for specific set of project types
- Equations needed for estimating and calculating emissions and reductions/removals are provided

Reduces the complexity, cost and subjectivity of constructing individual project-specific arguments and subsequent review

In general, consistent with WRI/WBCSD GHG Project Protocol, CCAR, RGGI

Can be used for a variety of project types (sectors and geographic areas)

Minimizes risk of accepting a project that is not additional or rejecting a project that is additional

EPA Offset Methodology Steps

Clearly Define the Project Type

- Location, technology, size

Define Project Boundary

- Physical, GHG, temporal, leakage

Determine Regulatory Eligibility

- Federal, state and local

Develop and Apply the Performance Threshold and Emissions Baseline

- Determination of Additionality – performance threshold (emissions rate, technology, practice)
- Baseline for calculation – emission baseline

Estimate Project Emission Reductions

- Software tool, Model or Equations

Implement Project, Monitor Emissions

- Limited set of acceptable monitoring approaches – direct metering, modeling

Quantify Project GHG Emissions Reductions

Prioritizing Methodology Development

Several factors considered when selecting project types for protocol development:

Monitoring methods

- Methods at national inventory level
- Project specific monitoring

Experience with the project type

- Monitor EPA voluntary programs and other programs to gain knowledge on potential project types as offsets

Data set availability

- Data needed to set performance threshold

Other issues specific to project type

- Practical, effective means to address permanence, leakage, environmental/social effects are needed for particular project types

Offsets Methodologies

Accounting methodologies:

- Commercial boiler
- Industrial boiler
- Landfill Methane
- Anaerobic digesters
- Transportation – Bus fleet
- Afforestation/Reforestation
- End-use of methane
- Forest management (in dev.)
- Coal-mine methane (in dev.)



Additional Project Types

Project proposals may be submitted for those project types without EPA protocols

Appendix C provides the Project Design Document template

The new accounting methodology must include:

- A description of the argument for additionality based on the EPA performance standard approach
 - Specific description of test that will be applied (emissions rate, technology standard, practice standard)
- All data, methodologies, and calculations used to establish additionality, set the baseline and estimate emissions reductions or C sequestration
- Description of the process that will be used to monitor the GHG reductions

Offsets Summary

Offset reductions must be additional

- If reductions aren't real, this negatively impacts the environmental integrity of the program

Under the Climate Leaders program, EPA applies a performance standard approach

The performance standard approach reduces complexity, cost and subjectivity

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Resources

Climate Leaders Offset Methodologies and Guidance
(www.epa.gov/stateply/resources/optional-module.html)

EPA economic analyses (Waxman-Markey, etc.)
(www.epa.gov/climatechange/economics/economica.html)



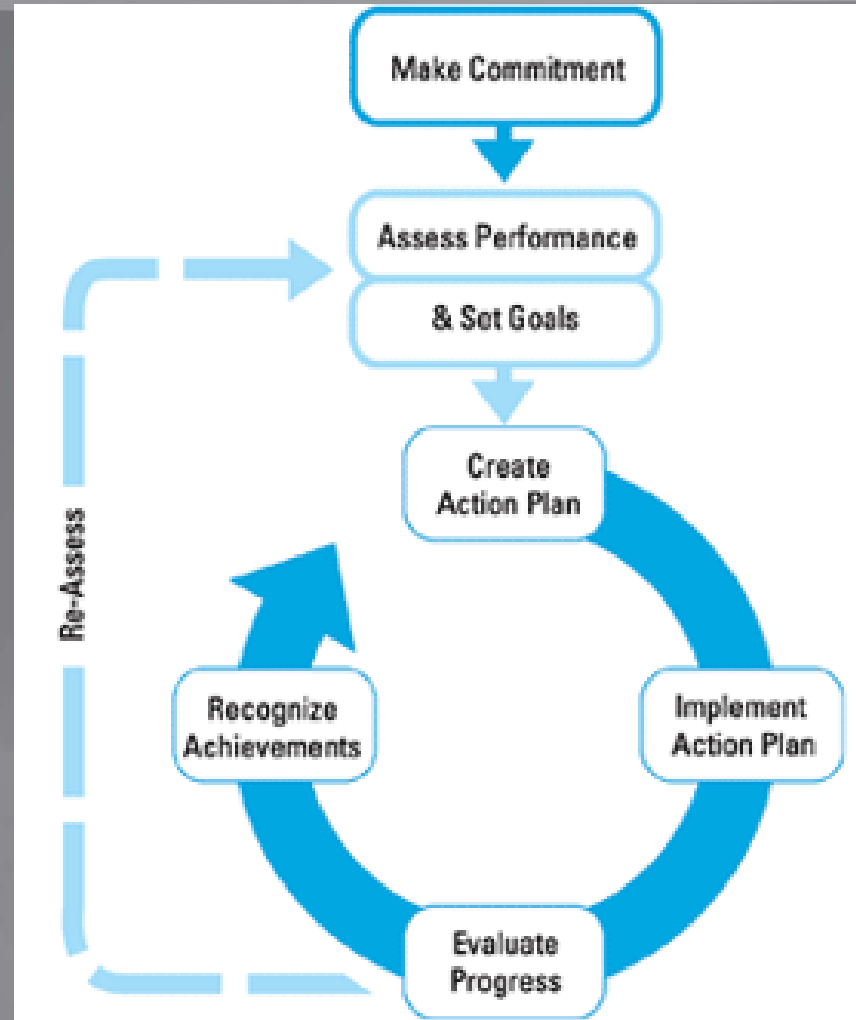
Using Offsets To Achieve Climate Leaders Goals

Credible Climate Strategy

Climate Leaders works with organizations to develop a long-term comprehensive GHG management strategy

- Road-tested with ~ 280 partners from every major sector across the country, representing 8% U.S. emissions and 11% U.S. GDP
- 3 critical components to credible strategy:
 - 1) Complete Corporate-Wide GHG Inventory
 - 2) Develop Inventory Management Plan (IMP)
 - 3) Set Aggressive Corporate-Wide GHG Reduction Goal
- Annual reporting to EPA creates lasting record of accomplishments and identifies agency as environmental leader
- EPA recognizes and publicizes progress in the program

Steps to Good Energy & Climate Management



Emphasis on internal reductions

“Lower Hanging Fruit”

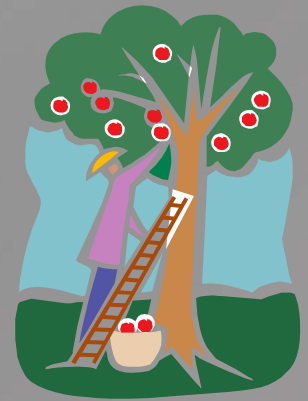
- Lighting Projects (sensors, CFL and high efficiency lights)
- Upgrade Cooling Systems (high efficiency units, system balance)
- Reduce Plug Load (high efficiency equipment)
- Variable Speed Systems for Air Handling and Product Distribution
- Mobile Sources (reduce idling, encourage public transit, increase video-conferencing)

“Higher Hanging Fruit”

- Combined Heat and Power (CHP)
- Landfill Gas Recovery
- Install Green Power (solar panels, micro turbines)

Other Approaches

- Renewable Energy Certificates (RECs)
- Eligible Project Offsets



Basics of Offset Guidance

- Performance standard methodology
- U.S. or international in scope
- Project implementation after 2/20/02 (unless exceptions apply)
- Project types/methodologies
- Project tons must align with goal period
- Examination of non-GHG impacts
- Verification not required but encouraged

Key Documents

- Overview Guidance
- *Appendix A* - Climate Leaders Offset Project Methodologies
- *Appendix B* - Sample Request for Proposals (RFP) for purchasing GHG reductions rather than developing or investing in own GHG mitigation project
- *Appendix C* - Guidelines and a project design document template for Partners that wish to develop and propose: new project methodology and/or data set
- *Appendix D* - Offset Project Submission Checklist for submission of information on each offset project

Documents on Climate Leaders website:

<http://www.epa.gov/climateleaders/resources/optional-module.html>


Review Procedures

- Partner may submit Checklist Items A-C for Initial Review (30 days)
 - Purpose is to flag any problematic elements
- Full Review of completed Checklist (60 days)
 - Final determination of acceptance
 - Must submit at least 3 months prior to applying GHG reductions toward goal achievement
- Reviews of proposed new project methodologies/data sets (60 days)
 - Must use Appendix C

Reporting Offsets for Goal Achievement

- Adjustment to emissions on Partner's Annual GHG Inventory Summary and Goal Tracking Form
- Transparently/publicly report use of offsets when announcing goal achievement
- Once reported – should not be used to make any other reduction claims

For questions on using offsets,
please contact me at:



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Thank you!