

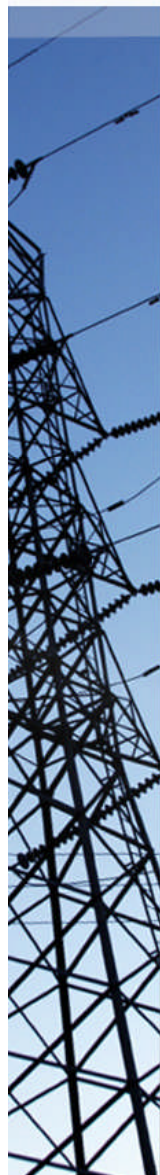
CLIMATE LEADERS

SETTING THE STANDARD IN GREENHOUSE GAS MANAGEMENT

Accounting for External Reductions Federal GHG Workshop – 1/15/08



Measuring GHG Emissions



Measuring GHG Reductions

- What counterbalances, counteracts, or compensates for those emissions?

It is a **VALUE JUDGEMENT!!**

- EPA Committed to Ensuring Real, Measurable Emissions Reductions from GHG Mitigation Projects
(1 real emission) – (1 real offset reduction) = 0 net emissions

Key Points on Offset Approach

- **Goal reporting** should be transparent and public
 - Need to track inventory data w/o netting goal tracking data
- **Four key criteria:**
 - **Real** – actual reductions that have occurred
 - **Additional** – beyond BAU (performance standard)
 - **Permanent** – or can be backed by guarantees
 - **Verifiable** – quantified, monitored & verified
- **May 1) develop/invest or 2) purchased GHG reductions**
 - EPA developed project accounting for 6 project types to date
 - Reforestation/Afforestation, Comm. & Ind. Boilers, Landfill Methane, Manure Management (Ag. Digester), Transportation (Bus Fleet Upgrade)
 - Partners may develop methods for types not yet developed
- **EPA review of project summary and data**

EPA Approach to Using External GHG Reductions to Achieve CL Goals

Fact Sheet:

Overview of Using External GHG Reductions to Help Climate Leaders Achieve Reduction Goals

(available on CL website)

Draft Guidelines for Developing or Investing in Offset Projects

- Program Design Parameters
- Protocols for Specific Project Types
- Generic Project Protocol Guidelines

(under development)

Draft Screening Criteria for Purchasing GHG Reductions

- Screening Criteria Checklist
- Detailed Guidance/Checklists for Specific Project Types (e.g. Green Power Purchases)

(under development)

EPA Approach to Offsets

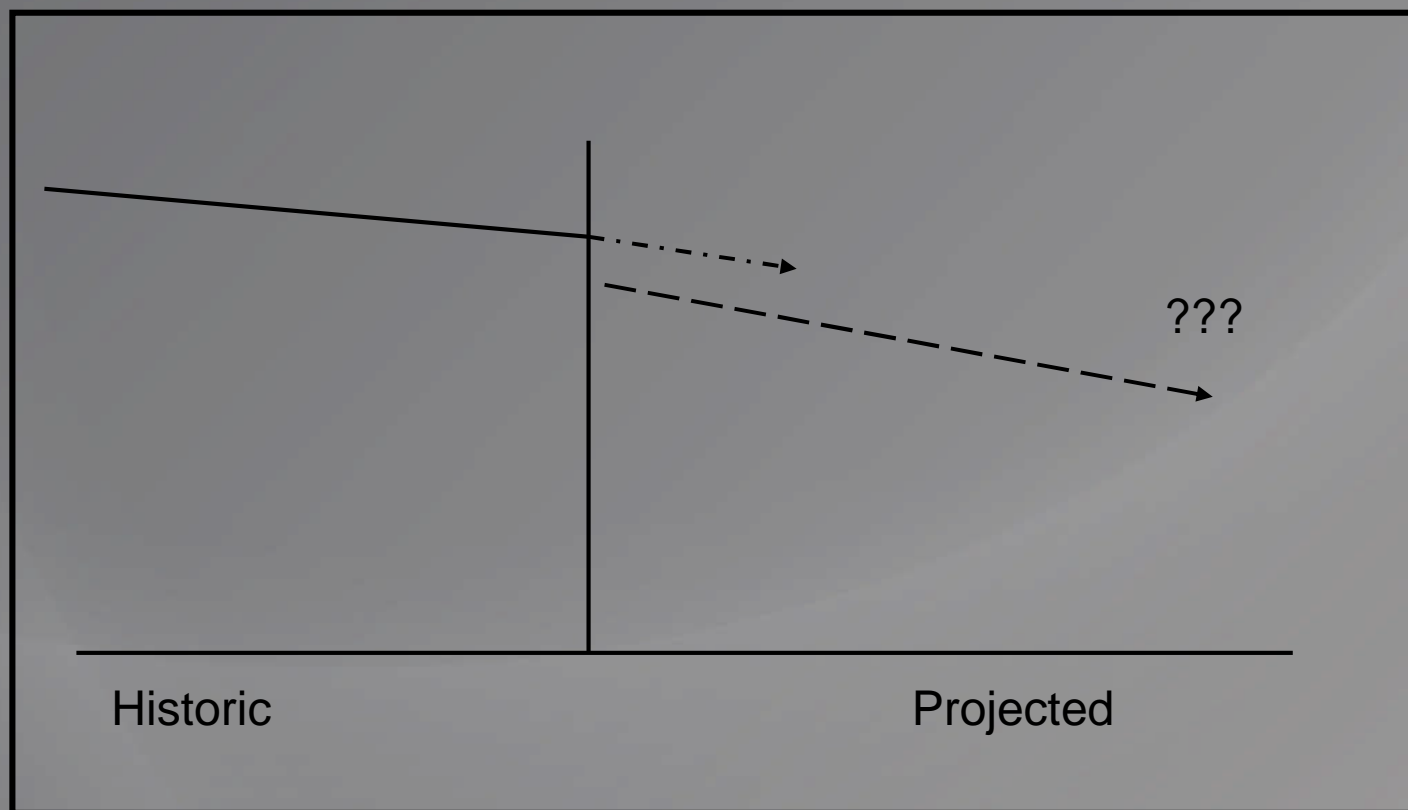
- Top-down, standardized methodology
 - Set appropriate metrics for additionality, baseline, and monitoring options
 - Includes a regulatory eligibility “screen” (surplus to regulation)
- Performance standard is specific to project type; comprised of performance threshold (to determine additionality) and baseline (for quantification) based on public data
- “Additionality” (beyond BAU) is based on an analysis of recent, similar activities in the relevant sector in a specific geographic area
 - May be emissions rate, technology standard or practice standard
- Continuous performance improvements
 - Periodically update the performance standard
 - Changes in regulations, market trends, and technology developments are reflected in periodic updates
 - “Pushes” technology improvements

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 regs, GHG caps
- **Develop and Apply the Performance Threshold and Emissions Baseline**
 - Determination of Additionality – performance threshold (emissions rate, technology, practice)
 - Clear baseline for emissions quantification
- **Implement Project, Monitor Emissions**
 - Limited set of acceptable monitoring approaches – direct metering, modeling
- **Quantify Project GHG Emissions Reductions**
- **Process for validation/verification (EPA review and approval)**
 - Provisions to address leakage, permanence, double-counting, *ex post*

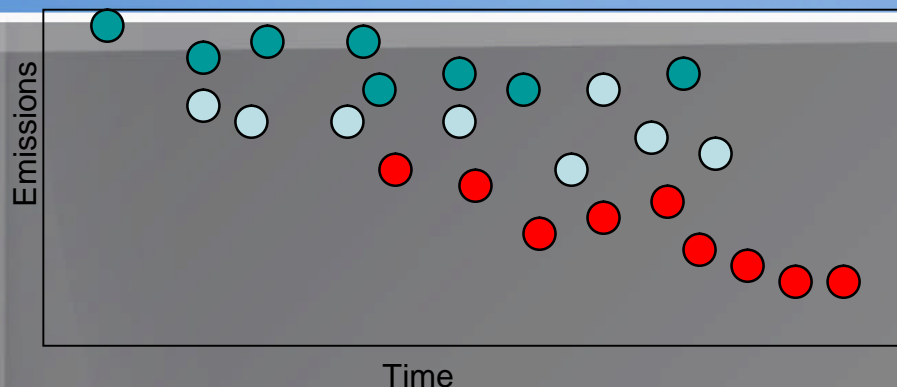
Historic Data as Surrogate for Future Performance (Additionality)

Activities or Emissions Rate

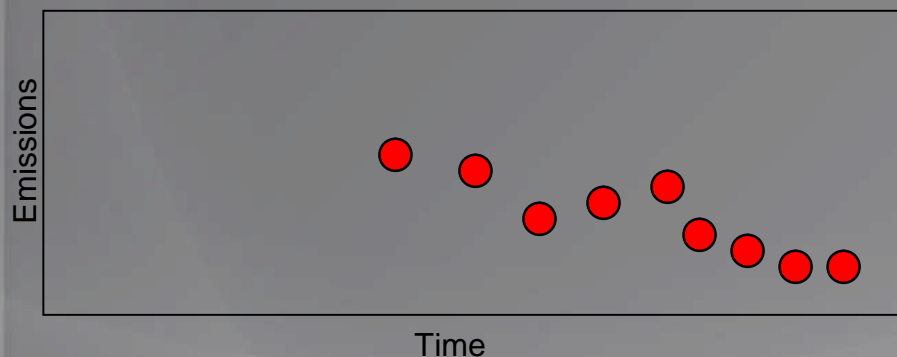


Sector/Project Type

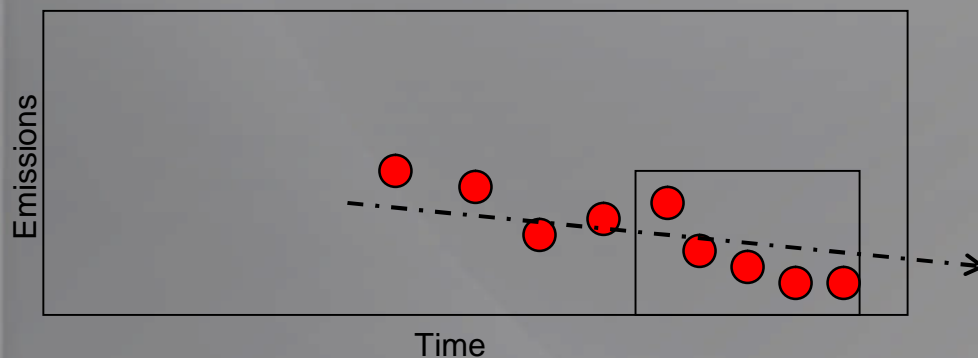
Setting a Performance Threshold



- = Region one data
- = Region two data
- = Region three data

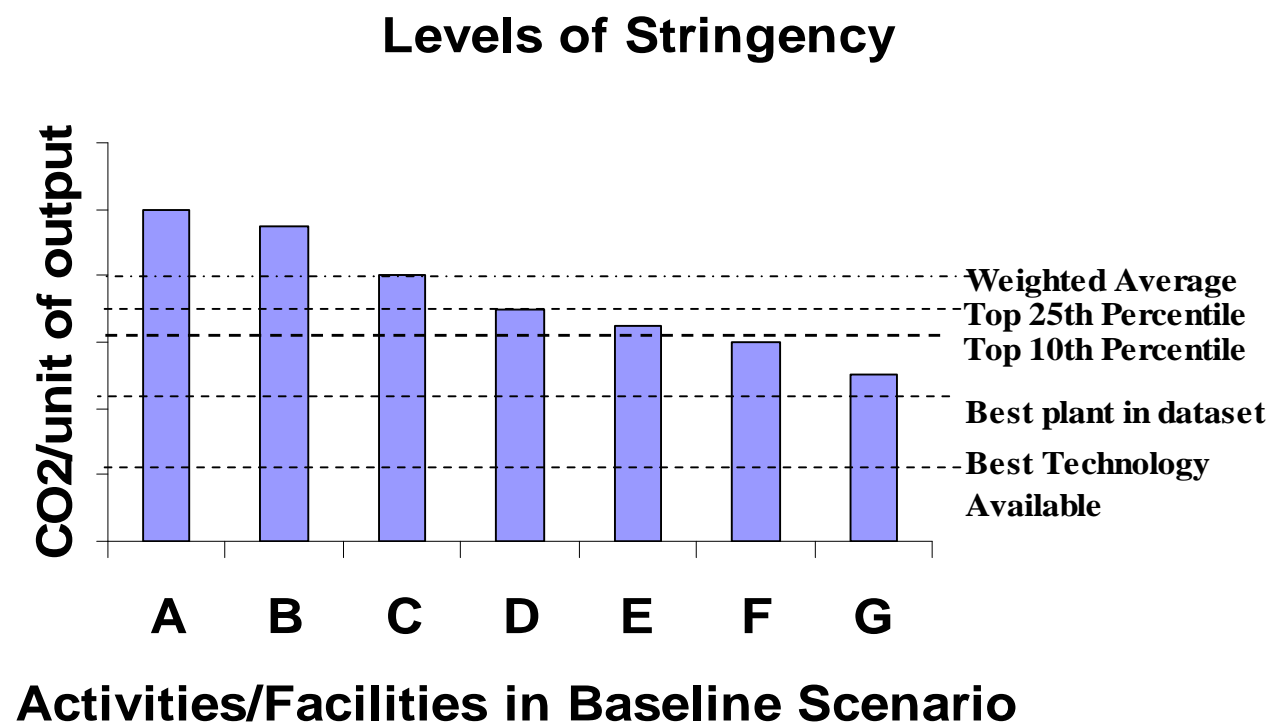


Decision that data differ regionally; only data from Region three are used



Data are examined for trends; improving trend so only recent data are used – surrogate for future trend

Performance Threshold/Baseline (Emissions Rate/Technology)



Performance Threshold (Practice Standard)

Percent of
Total of
Activities for
Each
Possible
Practice

?? - Additional

A

B

C

D

E

F

Suite of Possible Practices (A-F)

Performance Standard and Project Specific Approaches

Criteria	Approach	
	Performance Standard	Project-specific
Development cost	Low to developer, standard has already been approved; high initial cost to program.	High, developers bear all data collection and quantification costs.
Certainty	High, provided project is eligible and emissions are lower than the standard (or removals higher than the standard).	Low, developer does not know until reductions are quantified and the method is submitted to the program for approval.
Data requirements	High initially for program; low for developers - need to have sufficient project information to determine if standard is applicable.	High, developer collects data for test(s) on all baseline candidates to compare between them for each project.
Transparency	High, this assumes that external stakeholders have been engaged in the standard development and are satisfied with the data choice and quality.	Low, external stakeholders see a limited set of the data/decisions required to select the baseline. There may be confidentiality concerns about releasing financial information.
Treatment of Additionality	Set by program as a rate, practice or technology standard based on project type, geographic region and specific timeframe. Applicable to all relevant projects.	Additionality test is generally only applicable to the project for which it was generated –generally a subjective test (barriers, investment, project-to-project comparison).
Applicability of the procedure	Procedure is applicable to most project types (specific vary by project type).	The procedure is applicable to all project types.
Verification costs	Low, verifier only needs to check the eligibility of the project against the previously standard and project emissions.	High, barriers and financial data must be verified on a project-specific basis.

Advantages of Performance Standard Approach

- Provides top-down guidance to project developers – bottom up option is available using approved methodology
- Reduces the complexity, cost and subjectivity of constructing individual project-specific arguments and review
- Improvement over subjective additionality tests
- Reflects Climate Leaders design principles
- Reflects EPA experience w/ performance benchmarking (ENERGY STAR)
- Consistent with WRI/WBCSD GHG Project Protocol
- Can be used for a variety of applications (sectors and geographic areas)
 - Climate Leaders
 - Corporate accounting
 - Voluntary programs
 - Other project-based efforts

Key Points for Workshop

- EPA has significant expertise on issues relating to GHG inventories, reduction goals, offsets and green power purchases
- EPA has released guidance on use of offsets and green power purchases for Climate Leaders
- EPA has released accounting methodologies to credibly calculate GHG reductions from 6 offset project types (with provisions to add more) and green power purchases
- Use of EPA methodologies should help add significant credibility
 - However, no provisions for external verification/certification for retail markets
 - No national registry of external GHG reductions in place