# Overview and Comparison of Offset Protocols

Derik Broekhoff
EPRI Offset Policy Dialogue - Workshop #6
July 30, 2009



## Why Do Results Differ?



- Differences in specificity
  - Framework standards vs. methodologies
- Differences in approach
  - Project-specific vs. standardized
  - Accounting boundaries
  - Methods to ensure permanence
- Differences in technical assumptions
  - Quantification methods, emission factors, other variables

## Differences in Specificity



- Framework Standards
  - General accounting rules
  - Apply to all project types
  - ISO 14064, Part 2;
     WRI / WBCSD GHG Protocol for Project Accounting
- Protocols
  - Detailed accounting rules
  - Apply to specific types of projects
  - CDM, RGGI, Climate Leaders, CAR, CCX, Alberta, ACR, etc.

## Degree of Standardization



Project-Specific

"Hybrid"

Standardized

Parameters & assumptions tailored for each project.

Some standard parameters & assumptions.

Mostly standard parameters & assumptions.

## Key Areas of Difference



- Project Definition / Eligibility Requirements
- Accounting Boundaries
- Additionality Determinations
- Baseline Estimation
- Quantification Methods
- Monitoring Requirements
- Methods to Address Permanence

## **Project Definition**



- How Is the Project Activity Defined? What Counts?
  - Just CH<sub>4</sub> destruction, or CH<sub>4</sub> + electricity?
  - All organic waste, or just food waste?
  - Etc.
- Other Eligibility Requirements
  - Promoting sustainable development
  - Practicing "natural forest management"
  - Etc.

## Accounting Boundaries



- What Actually Gets Quantified?
  - What potential effects of a project are considered significant or relevant?
- "Project" vs. "Assessment" Boundaries
  - How are spatial boundaries defined?
  - How do they relate to the accounting boundaries?
  - What counts as leakage?

## Additionality Determinations



- Case-by-Case Analysis...
  - Project-specific assessment of barriers,
     benefits, comparison to "common practice"
- ...or Standardized Criteria?
  - Performance threshold
  - Other objective eligibility criteria

#### **Baseline Estimation**



- Identifying a Baseline Scenario
  - Analysis of alternatives to identify a unique scenario?
  - Analysis of alternatives to confirm a default scenario (most CDM methodologies)?
  - Required use of default scenario (standardized protocols)?

#### **Baseline Estimation**



- Quantification
  - Ex-ante modeling of baseline scenario?
  - Use of measured values?
  - Use of default factors & assumptions?
  - Dynamic or static assumptions?
- Crediting Period
  - How long?
  - Single period, or renewable?

#### Quantification Methods



- Are Key Parameters:
  - Measured?
  - Estimated?
  - Assigned default values?
- What Models Are Used to Estimate Emissions or Sequestration?
- What Methods Are Used to Estimate Leakage?

## Monitoring Requirements



- What Gets Monitored?
- Direct or Indirect Measurements?
- What Precision is Required?
- How Frequently Must Data Be Collected?
- What QA/QC Measures Are Required?
- How to Treat Gaps in Data?
- How Is Data Verified?

## Addressing Permanence



- Discounting?
  - Discount issuance of credits based on risk of reversal
- Seller Liability + Insurance (Buffer Pool)?
  - Require project developers to compensate for reversals, set aside credits for insurance
- Expiring Credits (Buyer Liability)?
  - No discount or insurance, but all credits must be replaced by buyers

### Key Drivers of Outcomes



- Different Technical Approaches
  - Accounting boundaries
  - Quantification methods
  - Monitoring requirements
- Different Policy Decisions
  - Eligibility rules
  - Additionality rules
  - Baseline rules
  - Crediting periods
  - Methods to address permanence

# Key Policy Decision: How Much Standardization?



Project-Specific

"Hybrid"

Standardized

Parameters & assumptions tailored for each project.

Some standard parameters & assumptions.

Mostly standard parameters & assumptions.