# Overview of Climate Action Reserve and Protocol Development Process

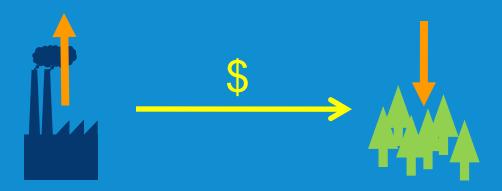


Teresa Lang Policy Associate Green Vision Project Workshop September 15, 2011

#### What Is A GHG Offset?



- General: A reduction in GHG emissions (or increase in C sequestration) achieved to compensate for emissions somewhere else
- In a Carbon Market: A permit to emit greenhouse gases issued when a reduction is achieved at an unregulated source



#### **Ensuring Integrity of Offsets**

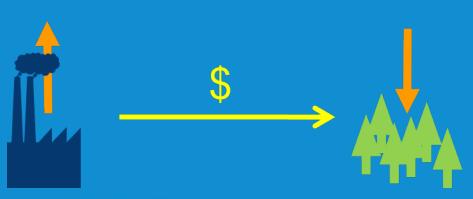


#### Real

- It is not an artifact of inaccurate or incomplete accounting
- Represents emission reductions that actually occurred

#### Additional

- Not required under a regulation
- Would not happen without the incentive of the GHG market
- Permanent
- Verifiable
- Enforceable



#### The Climate Action Reserve



- Chartered by California state legislation in 2001
  - Initially focused on emission reporting and reductions by member organizations in California
- The "Reserve" launched in 2008
  - North American program focused on emission reduction projects generating offsets
- Today's Mission and Vision Statements:

Promote the reduction of greenhouse gas emissions by pioneering credible market-based policies and solutions

Work collaboratively with government, business, environmental and other interests to be a respected and valued resource for GHG emissions accounting and climate change action

#### What We Do



- Develop High Quality GHG Offset Protocols
  - Convene stakeholders and lead development of standardized protocols for carbon offset projects
- Manage Independent Third Party Verification
  - Training and oversight of independent verification bodies
- Operate a Transparent Registry System
  - Maintain registry of approved projects
  - Issue and track serialized credits

### Listed and Registered Projects

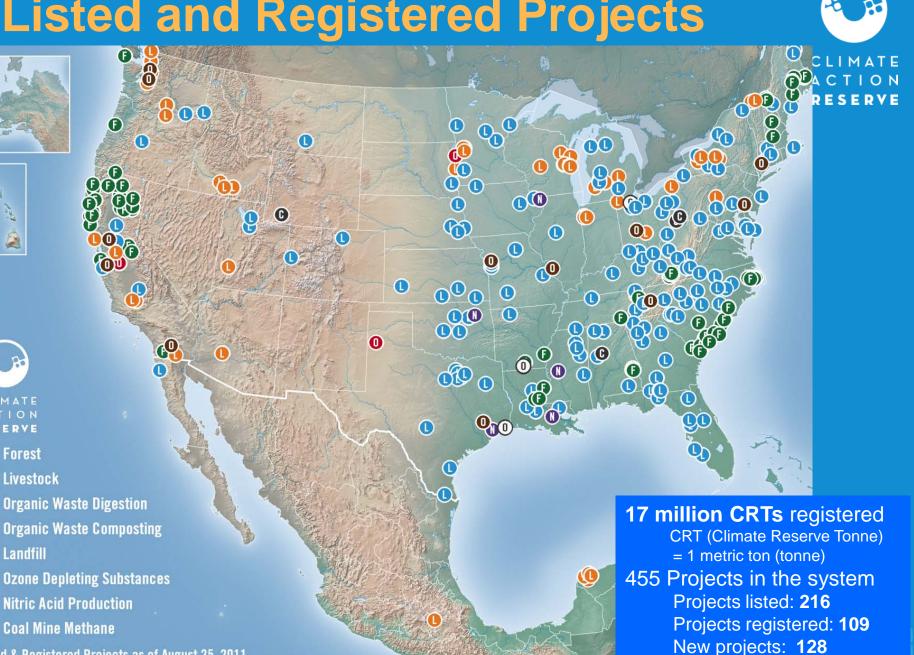
**Forest** Livestock

Landfill

**Nitric Acid Production** 

Listed & Registered Projects as of August 25, 2011

**Coal Mine Methane** 



### **Protocols Under Development**



- Three Agricultural Protocols
  - Nutrient Management
  - Rice Cultivation
  - Cropland Management
- Mexico Forestry Protocol

## **Protocol Development Process**



- 1. Internal research and scoping
- 2. Public scoping meeting(s)
- 3. Multi-stakeholder workgroup formation and meetings
- The Reserve drafts a preliminary protocol
- 5. Draft protocol considered by workgroup
  - Provides technical expertise and practitioner experience
  - Period meetings and individual consultation when needed
- 6. Revised draft protocol released for public comment
- Public workshop
- 8. Final version adoption by Reserve board in public session

### **Protocol Development Goals**



- Develop a standardized approach for quantifying, monitoring and verifying GHG reductions
  - Research industry trends in adoption of GHG reducing practices
  - Set criteria and reference points based on industry trends
  - Provide specific tools for quantifying emissions
  - Detailed and specific monitoring requirements
  - Train verifiers with a consistent set of protocol-specific standards
- Maintain consistency with or improve upon existing methodologies
- Balance accuracy, conservativeness, and practicality

#### **Criteria for Protocol Development**



- Are proposed project GHG reductions:
  - Outside of proposed U.S. caps on GHG emissions? Outside of CA cap?
  - Direct or Indirect?
  - Likely to be additional?
- Is there significant U.S. potential for reducing GHG emissions?
- Are standardized additionality and baseline determinations are possible?
- Are high quality data available for quantification and establishing additionality thresholds?
- Are well-developed quantification methodologies available?
- Are accurate and cost-effective measurement and monitoring techniques available?
- Would projects have positive or negative environmental & social coeffects?

#### **Key Challenges**



- Determining additionality: upfront research requires extensive dataservi on implementation of practices
  - Are data available to develop standardized additionality and baseline determinations?
  - Can we discern why practices haven't been adopted?
- Accounting for reversals: occur when carbon stored to offset CO<sub>2</sub> is released back to the atmosphere
  - An issue for carbon stored in soils and biomass
  - Can result from natural causes (e.g. fire) and management decisions
- Availability of accurate and practical approaches to quantify baseline and project GHG emissions and carbon sequestration
  - Requires a complete understanding of the net effect of project activities on GHGs over time (e.g., fire regimes introduce complexity)

#### Other Related Methodologies



- No methodologies to-date on Avoided Conversion or Restoration of Coastal Sage Scrub, Chaparral, etc. but some related methodologies exist:
  - Sustainable Grassland Management (VCS)
  - Improved Grassland Management (VCS)
  - Adoption of Sustainable Grassland Management through Adjustment of Fire and Grazing (VCS)
  - Ducks Unlimited Avoided Grassland Conversion Project in the Prairie Pothole Region (CCBS)
  - Climate Action Reserve Forest Protocol (Avoided Conversion, Improved Forest Management, Reforestation)

# Submission of Protocol Development Ideas



- The Reserve welcomes project protocol concept suggestions from interested stakeholders
- Stakeholders submit "Project Concept" forms, which are reviewed monthly by staff
  - http://www.climateactionreserve.org/how/protocols/future-protocol-development/
- If the concept looks promising and enough preliminary resources appear to be available, staff may perform initial scoping and internal review to inform a decision to move forward with protocol development