



Request for Proposals to Develop an Issue Paper for a Prospective Offset Project Type

July 1, 2011

Background

The Climate Action Reserve (Reserve) is a national offsets program working to ensure integrity, transparency and financial value in the U.S. carbon market. It does this by establishing regulatory-quality standards for the development, quantification and verification of greenhouse gas (GHG) emissions reduction projects in North America; issuing carbon offset credits known as Climate Reserve Tonnes (CRT) generated from such projects; and tracking the transaction of credits over time in a transparent, publicly-accessible system. Adherence to the Reserve's high standards ensures that emissions reductions associated with projects are real, permanent and additional, thereby instilling confidence in the environmental benefit, credibility and efficiency of the U.S. carbon market.

To date, the Reserve has developed standards (referred to as "protocols") for nine different project categories. All of these protocols apply to projects in the United States. Two protocols, the Landfill Project Protocol and Livestock Project Protocol, have been adapted for use in Mexico. In addition, the Reserve is currently developing three new protocols for U.S.-based projects in the agriculture sector, and one new protocol for Mexico-based projects in the forestry sector. The Reserve regularly researches and assesses prospective project types for the development of new project protocols. When a project type is identified to show particular promise for the development of a new project protocol, the Reserve will often contract for the development of an issue paper.

Project Overview

The issue paper is meant to substantiate and add depth to the Reserve's own initial assessment of a particular project type and to serve as the basis for discussion about this project type with a variety of stakeholders. Respondents to this request for proposal must propose to develop an issue paper that covers everything in the Scope of Work. Proposals that cover only a portion of the Scope of Work will not be considered.

The project activities to be evaluated herein include two different methods of controlling methane emissions from the decay of organic waste in landfills. The issue paper should address each project type independently on its own merits, as well as the possibility of combining the

two project types into one comprehensive project protocol. The geographic scope of the analysis should be limited to the United States.

Project Type	Description
Anaerobic Bioreactor	A bioreactor is created by recirculating leachate and other liquids back into the waste mass, thereby increasing the moisture content and accelerating the decay of organic matter. This results in increased generation of methane, which is typically destroyed through a landfill gas capture and control system. Decay that would usually take place over decades is thus achieved in a much shorter timeframe.
In-Situ Composting	The installation of a system of wells, blowers, and vents allowing the forced aeration of a closed landfill cell. The introduction of oxygen into the waste mass stops the anaerobic decomposition of organic matter and stimulates aerobic decay processes, thereby eliminating the generation of methane. This activity also results in an advanced rate of decay, thereby avoiding future methane emissions.

Scope of Work

The issue paper will reflect and summarize existing research, data, and quantification methodologies based on a review of current literature and consultation with sector experts. Little to no primary research should be undertaken for the issue paper. After completion, the paper will be reviewed and further edited by the Reserve in anticipation of being publicly distributed. The paper may also be used to inform public stakeholder discussions in the development of one or more protocols for quantifying and crediting emission reductions.

The issue paper should include a discussion of the following topics:

1. Literature review including a summary of existing quantification methodologies

- Are existing methodologies appropriate for use in the United States?
- Are existing methodologies based on modeling, emission factors, or direct measurement?
- How much uncertainty is there with the existing quantification methodologies and what would be required to reduce that uncertainty?
- Review should include UN Clean Development Mechanism AM0083 and Alberta Environment Quantification Protocol for Aerobic Landfill Bioreactor Projects.

2. Quantifiability and scientific uncertainty

- Discuss the state of scientific understanding around methods for quantifying emissions reductions associated with the potential project activities.
- How accurate are existing measurement or quantification methods?
- What measurement options are available and what are their associated costs?
- What are the likely ranges of uncertainty?

3. Performance standard development

- Does the project type easily lend itself to a standardized, performance-based approach for estimating baselines and/or determining additionality?
- Evaluate the technologies and practices for these emission-reducing project activities, and identify trends within specific regions and timeframes. What are

the current drivers (if any) behind the adoption of these technologies and practices?

4. Additionality

- Evaluate existing and pending state and national regulations related to potential project activities to determine if they are or may be required by regulation.
- Evaluate financial, technical, institutional and/or other barriers and drivers for potential project activities that would affect project additionality.
- How easy or hard might it be to distinguish between additional and non-additional projects?

5. Baseline quantification

- How feasible and accurate would it be to apply standardized methods for estimating baseline emissions? What degree of standardization is possible?
- Is there sufficient data and information available to develop a standardized baseline for this project?

6. Potential reduction opportunity and cost of reductions

- Assess the technical and economically feasible reduction potential for project activities within the United States.
- Estimate the typical cost of achieving reductions for potential project activities (\$/tonne of CO₂e).

7. Project boundary

- How would boundaries for this project type be defined? Discuss both in terms of the physical boundary of the project and the GHG sources and sinks that should be assessed to determine the net change in emissions attributed to the project activity.
- Would this project boundary overlap with the project boundary for other Reserve project types and, if so, what are the accounting repercussions for both project activities?

8. Ownership

- Can ownership of the emission reductions be unambiguously established? If not, what are the key issues and how might a protocol address them?

9. Leakage

- Assess the potential for project activities to cause unintended increases in GHG emissions (e.g. at sources or sinks outside the physical project boundary).
- Discuss options for mitigating potential leakage, if it exists.

10. Other positive/negative environmental impacts

- Assess the potential for environmental co-benefits from the project activity, as well as potential negative consequences.
- Specifically regarding aerobic in-situ composting, does the introduction of oxygen into the waste mass increase the risk of landfill fires, and what can be done to satisfactorily mitigate this risk?
- Is there potential for the project activity to increase the risk of noncompliance with environmental regulations (unrelated to project additionality)?

11. Market interest

- Identify parties interested in the development of a project protocol for the project activity.
- What is the likelihood of utilization of this protocol?

12. Interaction with other Reserve project protocols

- Are there elements of existing Reserve protocols that could aid in the development of a new protocol for this project type?
- Are there areas of concern that have been identified in previous Reserve issue papers for other project types that could potentially apply to this project type?
- Would this project boundary overlap with the project boundary for other Reserve project types and, if so, what are the accounting repercussions for both project activities? Specifically, how would the initiation of one of these project types affect the baseline quantification for nearby Organic Waste Digestion or Composting projects?
- Would it be possible for either or both of these projects activities to be incorporated into an existing project protocol, such as the Landfill protocol, rather than being developed as a standalone protocol?

Timeline and Deliverables

Proposals due to the Climate Action Reserve	July 28, 2011
Contracts awarded	August 26, 2011
Completed issue paper delivered	November 18, 2011

Evaluation Criteria

The Reserve will evaluate proposals for this project based on the following factors:

- Knowledge of and experience working with the solid waste/organic waste industry
- Understanding of the Climate Action Reserve and other GHG/air emission programs
- Comprehensive knowledge of GHG emissions, inventory, measurement, and reporting issues
- Quality of written materials and technical documents
- Communication and organizational skills
- Competitiveness/value of project budget
- Proven ability to deliver projects on time

Application Process

Interested contractors must submit proposals to the Reserve by **5:00 PM PDT on Thursday, July 28, 2011**. No late or incomplete proposals will be considered. All proposals must include the following information:

- Brief cover letter (maximum 2 pages)
- Short proposal (maximum 5 pages) which must include:
 - Statement of qualifications
 - Proposed fixed price budget
 - Proposed schedule
 - Client references (at least three)
- Sample work product (work products will not be returned)

Contractors must bid to work on the entire scope of work contained within this request. Proposals for partial completion of the full suite of deliverables will not be considered.

Interested contractors are also expected to agree to the Reserve's Independent Contractor Services Agreement (available on the Reserve [Future Protocol Development webpage](#)). This should be reviewed by interested contractors and their lawyers prior to submitting a proposal.

Note: Contracts for this project will be awarded contingent upon available funding.

Proposals must be submitted via e-mail, fax or mail. Please submit proposals to:

Climate Action Reserve
Attn: Proposal for Issue Paper
523 W. 6th Street, #428
Los Angeles, CA 90014
FAX: (213) 623-6716

or

E-MAIL: policy@climateactionreserve.org
Please include "Proposal for Issue Paper" in the Subject line

Questions?

If you have any questions about the project or proposal process please contact Max DuBuisson at (213) 785-1233 or max@climateactionreserve.org.