



Biological Sequestration through Greenhouse Gas Offsets: Identifying the Challenges and Evaluating Potential Solutions

April 28 & 29, 2009

Projects that increase carbon sequestration in the forest and agriculture sectors are likely to play a significant role in any national climate program in the United States and Canada. Most proposals to date include a significant forest and agriculture offsets component. Yet a number of significant technical challenges await the regulators who will design and implement such an offsets program. This Workshop brings regulators together with key experts to identify the challenges and evaluate potential solutions to those challenges.

This workshop will convene technical representatives of key U.S. and Canadian federal agencies, the Northeast Regional Greenhouse Gas Initiative (RGGI), the Western Climate Initiative (WCI), the Midwestern Greenhouse Gas Reduction Accord (MGGRA), and the Province of Alberta. A workshop paper will be produced to clearly document the challenges identified, the potential solutions evaluated, as well as the recommended next steps.

Location: The Fairfax at Embassy Row
2100 Massachusetts Avenue, N.W. Washington, DC 20008
Phone: 202 293-2100

Time: Tuesday, April 28th from 12:00 pm – 5:30 pm (lunch will be served), reception at 6:00 pm
Wednesday, April 29th from 8:00 am – 5:00 pm (breakfast and lunch will be served)

Participants: Representatives from the:

- U.S. Environmental Protection Agency;
- U.S. Department of Agriculture;
- Canadian Forest Service;
- Canadian Department of Agriculture and Agri-Food;
- Western Climate Initiative;
- Northeastern Regional Greenhouse Gas Initiative;
- Midwestern Greenhouse Gas Reduction Accord; and
- Academic and expert practitioners.

Materials: Workshop participants will be provided with several topical white papers for review before the conference.

Day 1 Agenda

12:00 **Lunch**

12:30 **Session 1.1 Welcome, Introductions, and Overview**

This session will provide an overview of the purpose, agenda and expected outcomes of the workshop.

Speakers: Nicholas Bianco (WRI)

1:00 **Session 1.2 Lessons from the Regional Programs**

A representative from each region will provide an overview of the status of the design and implementation of each regulatory offset programs with a particular focus on how each program addresses offset quality.

Format: Each speaker will be asked to give a 10-minute presentation. This will be followed by a 20-minute discussion.

Speakers: Chris Sherry (NJ DEP), Justin Brant (Washington Dept. Ecology), Ray Hammarlund (Kansas Corporation Commission), Andy Ridge (Alberta Environment)

Moderator: Judi Greenwald (Pew)

2:00 **Session 1.3 Developments on the National Level in the U.S. and Canada**

This session will provide an overview of federal agency activity related to GHG offsets, as well as a discussion of the offset provisions put forward in the recently proposed American Clean Energy and Security Act of 2009.

Format: 5 speakers will be asked to give 10-minute presentations.

Speakers: Dina Kruger (U.S. EPA; invited), Bill Hohenstein (USDA), Peter Graham (Canadian Forest Service), Brian McConkey (Canadian Department of Agriculture and Agri-Food), Alexia Kelly (WRI)

Moderator: Franz Litz (WRI)

2:50 **Break**

3:00 **Session 1.4 A Quick Review of the Science of Biological Sequestration Projects.**

This session will examine how carbon cycles through the environment, is sequestered, and will provide a brief overview of the estimated mitigation potential represented by forestry and agricultural sequestration.

Format: Two 15 minute presentations.

Speakers: Sarah Hines (US Forest Service) & Michael Lazarus (SEI)

Moderator: Alexia Kelly (WRI)

3:30 **Session 1.5 Biological Sequestration Offsets: Key Challenges and Potential Solutions**

This session will provide a brief overview of the key challenges to incorporating biological sequestration projects into a high quality offset program. In this session we will focus on the issues of:

- additionality,
- permanence,
- measurement,
- baselines,
- monitoring and verification, and
- leakage.

We will then provide a brief overview of policy options for addressing those challenges, and the economic implications of adopting those options.

Format: 30 minute overview followed by 15 minute overview of project finance. Remaining time (1 hour) open for discussion.

Speakers: Adam Diamant (Electric Power Research Institute) & Ricardo Bayon (EKO Assets)

Moderator: Janet Peace (Pew)

5:15 **Synthesis of Day 1 & Setting the Stage for Day 2**

Franz Litz (WRI) and Judi Greenwald (Pew)

5:30 **Adjourn**

6:00 **Reception at the Fairfax Hotel**

Day 2 Agenda

7:45 **Breakfast**

8:00 **Session 2.1 Agricultural Offsets: Addressing Uncertainty in Measurement and Monitoring**

In this session, we will examine issues of uncertainty, bias, and conservatism as they pertain to the measurement of carbon sequestration for agricultural projects. We will also examine what role various monitoring methodologies, such as remote sensing, could play in monitoring and verification of agricultural projects. Project types examined will include: 1) reduced-till and no-till agriculture, and 2) rangeland and cropland conversion.

Format: 30 minutes of presentation followed by 15 minute discussion

Speakers: Chuck Rice (Kansas State University) & Derik Broekhoff (Climate Action Reserve)

Moderator: Judi Greenwald (Pew)

8:45 **Session 2.2 Agricultural Offsets: Defining Additionality & Baselines**

This session will examine factors related to establishing eligibility for agricultural GHG reduction projects to generate GHG offsets. We will consider existing regulatory incentives and programs in the agriculture sector that could impact additionality and baseline determinations.

Format: Three 10 minute presentations followed by 30 minute discussion

Speakers: Carolyn Olson (USDA), Lydia Olander (Nicholas Institute) & Nicholas Bianco (WRI)

Moderator: Janet Peace (Pew)

9:45 **Break**

10:00 **Session 2.3 Leakage in Ag and Forestry Offsets: What do we really know?**

In this session we will examine the issue of leakage in greater depth as it relates to both agricultural and forestry offsets.

Format: 30 minute presentation followed by 30 minute discussion

Speaker: Brian Murray (Nicholas Institute)

Moderator: Gordon Smith (Ecofor)

11:00 **Session 2.4 Agricultural Projects: Developing a Workable Framework**

In this session we will discuss frameworks for sequestering carbon through 1) reduced-till and no-till agriculture and 2) rangeland and cropland conversion. This session will begin with a brief overview of how various regulatory and voluntary offset programs address the challenges of agricultural projects.

Format: 20 minute presentation followed by a 1 hour discussion

Speaker: Susan Capalbo (Oregon State University)

Moderator: Nicholas Bianco (WRI)

12:15 **Lunch**

Speaker: Derik Broekhoff (CAR), Additional Options for Obtaining GHG Abatement in the Ag and Forestry Sectors

Moderator: Sonia Hamel (Hamel Environmental Consulting)

1:00 **Session 2.5 Forestry Projects: Addressing Uncertainty in Measurement and Monitoring**

In this session, we will examine issues of permanence, uncertainty, bias, and conservatism as they pertain to the measurement of carbon sequestration for forestry projects. We will also examine what role various monitoring methodologies, such as remote sensing, could play in monitoring and verification of forestry projects. Project types examined will include: 1) reforestation & afforestation, 2) forest products, and 3) forest management.

Format: 30 minute presentation followed by 15 minute discussion

Speaker: Werner Kurz (Canadian Forest Service)

Moderator: Erica Stephan (UK FCO)

1:45 **Session 2.6 Forestry Projects: Additionality & Baselines**

This session will examine factors related to establishing eligibility for agricultural projects. We will consider regulatory incentives and market barriers to adoption.

Format: 30 minute presentation followed by 30 minute discussion

Speaker: Gordon Smith (Ecofor)

Moderator: Michael Lazarus (Stockholm Environment Institute)

2:45 **Break**

3:00 **Session 2.7 Forestry Projects: Developing a Workable Framework**

In this session we will discuss frameworks for sequestering carbon through 1) reforestation & afforestation, 2) forestry products, and 3) forest management. To facilitate these discussions we will begin with a brief overview of how various regulatory and voluntary offset programs address forestry projects.

Format: 3 half-hour segments focused on each of these project types. Each segment will commence with a 5 minute presentation followed by a 25 minute discussion.

Speaker/Moderator: Alexia Kelly (WRI)

4:30 **Wrap up and Next Steps**

Nicholas Bianco (WRI) & Janet Peace (Pew)

5:00 **Adjourn**