



**North American
Carbon Atlas Partnership
(NACAP)**

**Second Meeting
Sheraton at Station Square
Pittsburgh, Pennsylvania
22-23 July 2009**



Policy Working Group

- **Frameworks for Collaboration**
 - North American Energy Working Group (NAEWG)
 - North American Security and Prosperity Partnership (SPP)
 - U.S.-Mexico Bi-lateral on Clean Energy and Climate Change
 - U.S.-Canada Clean Energy Dialogue (US-Canada CED)



U.S.-Mexico Bi-lateral Clean Energy and Climate Change

- **In April 2009 Obama announced a bi-lateral framework with Mexico on Clean Energy and Climate Change**
- **Currently fleshing out the possibility of including collaboration in CCS under the framework**



U.S.-Canada Clean Energy Dialogue

- **President Obama and Prime Minister Harper launched the U.S.-Canada Clean Energy Dialogue in February, 2009.**
- **It was created to encourage the development of clean energy technologies to reduce greenhouse gases and combat climate change in both countries, as well as to create clean energy jobs and enhance our energy security.**



US-Canada Clean Energy Dialogue

- **Three working groups**
 - Expanding clean energy research and development, with a focus on biofuels, clean engines, and energy efficiency;
 - Developing and deploying clean energy technology, with a focus on carbon capture and storage (CCS); and
 - Building a more efficient electric grid based on clean and renewable generation, with a focus on electricity grid/smart grid
- **Roundtable on 29-30 June 2009**



Canadian Participants in CCS

Boudreault	Felix	Environment Canada/Deputy Minister's Office
Breakwell	Dave	Alberta Dept. of Energy/Energy Policy
Carter	Jim	Carbon Capture Storage Council of Alberta, Canada (former President Syncrude, Canada)
England	Ken	Canadian Embassy
Fischer	Charlie	Retired CEO – Nexen, Inc.
Gauvin	Claude	Natural Resources Canada/Energy Sector
Goodman	Gordon	B.C. Dept of Energy, Mines and Petroleum Resources/Oil and Gas Division
Hegan	Larry	Natural Resources Canada/Energy Sector
Isaacs	Eddy	Alberta Energy Research Institute.
Kirby	Sue	Natural Resources Canada/Energy Sector [Canada Co-chair]
Lensink	Neil	Environment Canada/International Affairs Branch
McGovern	David	Environment Canada/International Affairs Branch
Mercier	Gilles	Natural Resources Canada/Energy Sector
Pourbaix	Alex	TransCanada Corporation
Wharton	Don	TransAlta Corporation
Wist	Floyd	Saskatchewan Energy and Resources/Energy Policy
Youzwa	Pat	SaskPower
Bloom	Doug	Spectra Energy



U.S. Participants in CCS

Carr	Tim	West Virginia University
Deutsch	Kathy	USDOE/Office of Policy & International Affairs
Ghorbi	Darian	USDOE/Office of Fossil Energy
Giffin	Gordon	Former Ambassador, McKenna Long
Kane	Bob	USDOE/Office of Fossil Energy
Karimjee	Anhar	USEPA/Office of Climate Change
Klara	Scott	USDOE/National Energy Technology Laboratory [U.S. Co-chair]
Kobelski	Bruce J	USEPA/Office of Ground Water and Drinking Water
Lappinen	Mauri	TMS, Inc.
McManus	Matt	Department of State/EEB
Middleton	Doug	USDOE/Office of Fossil Energy
Sheffield	Pete	Spectra Energy
Steadman	Ed	EERC/PCOR
Tombari	John	Schlumberger
VandeVenter	Chris	Basin Electric
Woodward	Nick	USDOE/ Office of Science
Wright	Bob	USDOE/Office of Fossil Energy
Ball	David	Battelle/MWRCSP
Blanchard	Jim	Former Ambassador, DLP Piper



Action Plan

1. North American Carbon Atlas

Efforts by both countries to analyse and map-out CO₂ sources and geological storage opportunities will be better integrated, culminating with a joint Atlas that expands on the existing *Carbon Sequestration Atlas of the United States and Canada*.

2. Next generation technologies

Links between Canada and U.S. researchers on the next generation of CCS technologies will be enhanced. Research institutes such as the U.S. Department of Energy-supported National Laboratory programs and the new Energy Frontier Research Centers, and Natural Resources Canada's CanmetENERGY laboratories, will advance collaboration opportunities such as exchanges of researchers and joint research projects in order to promote excellence in science and complementary research and development activities. Researchers at universities and in other research facilities will also be engaged.



Action Plan (continued)

3. **CO₂ injection and storage testing**

Existing collaborations between Canada and the U.S. in testing the underground injection of CO₂ and monitoring its fate, such as the Weyburn-Midale CO₂ Monitoring and Storage Project and the Fort Nelson project in North eastern British Columbia, will be expanded, and new opportunities explored.

4. **Collaboration on large-scale coal-fired power CCS demonstration**

A common 'forum' will be established to share and disseminate best practices and lessons learned from large-scale CCS demonstration projects at coal-fired power plants and at other sites of mutual interest.

5. **Strategies for public engagement**

Canada and the U.S. will share information and best practices, and where appropriate, coordinate on strategies for engaging and communicating with the public on CCS.



Action Plan (continued)

6. Working towards compatible rules, standards, and practices

Canada and the U.S. will work towards compatible CCS project rules, standards, and monitoring, verification, and accounting principles across jurisdictions, to facilitate future cross-border CCS projects, and minimize business barriers due to potential differences in regulatory requirements.

7. Bi-lateral national conference

To further this dialogue, an annual bilateral CCS conference will be instituted to share best practices related to large-scale CCS demonstrations, as well as for providing updates and sharing information on all of the above activities.



Schedule

- By the end of 2009, the U.S.-Canada CCS Collaboration will be formalized through a CCS Implementation Agreement under Trilateral Energy Science and Technology Agreement (TESTA), and details for the above activities, including timelines and mutual roles, will be developed.
- Where applicable, specific agreements will be developed for individual activities in early 2010.



Questions

