



CO₂ Capture Project

CO₂ Capture Project's Policies & Incentives Work Program 2005-2006

Arthur Lee

*CCP2 NGO Forum
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P&I Team Mission Statement

- **The Policy & Incentives Team provides information and advice to the CO2 Capture Project Executive Board on national and global policies, regulations and legislation, incentives and any other external developments that may impact or benefit the technology program being developed by the CO2 Capture Project.**



P&I Team Objectives

- **Update the survey of existing policies, regulations, and incentives that impact or benefit CO2 capture and injection and storage in geologic formations. (*Updating the 2003 study*)**
- **Continue the network monitoring function for the team and share information about proposed regulations, policies, and incentives that can affect the CO2 Capture Project. Through this monitoring function, identify potential opportunities to inform the debate on CO2 capture and geologic storage.**
- **Participate in international forums to discuss the formulations of policies and incentives in CO2 capture and storage technology.**
- **Make recommendations to the Executive Board of the CO2 Capture Project on appropriate actions to address issues identified.**
- **With team consensus and Board approval, provide written comments on select, significant proposed policies and incentives in CO2 capture and storage technology – “light” advocacy**



P&I Team Terms of Reference 2005-2006

- **Task 1. Follow up developments of the London Convention and OSPAR**
- **Task 2. Follow up the development of the EU ETS Monitoring and Verification Guidelines to include CO2 Capture and Storage.**
- **Task 3. Follow up the national developments of policies and regulations to treat potential emission credits from CO2 capture and storage.**
- **Task 4. Survey emerging monitoring and verification policies and regulations from other countries.**
- **Task 5. Follow up developments in the national implementations of the EU water directive and how such implementations may influence CO2 storage.**

P&I Team Tasks Have a Potential Component of “Light” Advocacy



P&I Team Terms of Reference 2005-2006

- **Task 6. Examine current decommissioning and field abandonment current practices, policies, and regulations in the oil and gas industry to obtain lessons learned about potential regulations (i.e., long term well integrity is identified as a critical issue).**
- **Task 7 Examine the potential effects of impurities in CO2 streams in the regulatory and policy development context.**
- **Task 8 Map regulatory issues and compare between countries**
- **Task 9. Follow up with specific developing countries in Latin America and the potential for Clean Development Mechanism projects in China, Algeria, Indonesia.**

P&I Team Tasks Have a Potential Component of “Light” Advocacy



“Light” Advocacy Elements

- ***Only in response to specific regulatory proposals or policy white papers from governments and multi-lateral bodies (e.g., Carbon Sequestration Leadership Forum, European Commission), the Policy & Incentives Team will:***
 - Provide information to correct or clarify facts
 - Offer options or approaches
 - Describe and explicitly recommend any approach or approaches preferred by the CO2 Capture Project
- **Draft submittals by the Policies and Incentives Team will be reviewed and approved by the Executive Board pursuant to the Board’s voting procedures.**



Creating Favorable Conditions for Technology and Commercial Developments

- **Consider what needs to be done.**
 - Understand the issues, barriers, opportunities for another key industry sector (i.e., electric power generation)
 - Create a positive public perception,
 - Ensure a balanced legal/regulatory framework, and
 - Enable eventual commercial financing
- **US, Europe, Other Regions**
- **Other Industries**



Key Issue Areas (1)

“Light” Advocacy entails response to regulatory proposals and policy white papers. Areas of key issues will likely focus on:

- **Promotion of CCS as a viable means of managing significant GHG emissions worldwide**
- **Acceptance of CCS within GHG emissions trading systems**
- **Acceptance of CCS within international conventions not originally contemplating CO₂ capture and storage**
- **Promotion of appropriate levels of environmental, health and safety protection for site evaluations and permitting of transport and storage structures.**
- **Regulations commensurate with the risk level associated with CCS**



Key Issue Areas (2)

“Light” Advocacy entails response to regulatory proposals and policy white papers. Areas of key issues will likely focus on:

- **Consistency in regulations between jurisdictions as possible and appropriate**
- **Consistency in regulations regardless of source or location of CO₂ emissions**
- **Government incentives for pre-commercial CCS technology development without promoting a particular technologic solution (i.e. government should not pick the winner)**
- **Government partnership in CCS technological development and public education/outreach**
- **Opportunity for industry involvement in public policy development**
- **Facilitation of technology transfer to developing countries**



Technical Issues

There will be technical issues in these areas:

- **Decommissioning and long term liability**
- **Addressing impurities**
- **Siting and permitting requirements**

Develop position papers to inform the actions of the CO2 Capture Project.



Multi-Industry Discussions and Initiative (2 March 2005)

Opportunity Statement

A collaborative initiative to shape public perception and advocate policy effectively on CO2 capture and storage (CCS) technology can be achieved through:

- Networking to establish common ground between multiple industries
- Developing proactively cross-industry led solutions rather than delayed and fragmented response to government mandated solutions
- Sharing of best practices and lessons learned
- Conveying consistent messages for raising public awareness and education, with emphasis on key decision and policy makers
- Advocating publicly acceptable policy principles for the siting, permitting, financing and monitoring of CCS projects, which streamlines jurisdictional overlaps
- Designing a framework, which defines CO2 ownership, roles and responsibility
- Developing a model for financing early projects that adequately reflects the technology development and commercialization risks
- Promoting technology development and demonstration projects



Current Members

- **Dag Christensen (Norsk Hydro)**
- **William Veerkamp(Shell)**
- **Arthur Lee (Chevron) – Team Lead**
- **Georgia Callahan (Chevron, alternate)**
- **Tony Espie (BP)**
- **Stephen Kaufman (Suncor)**
- **Bruce Wilcoxon (ConocoPhillips)**
- **Sue Young (ConocoPhillips)**
- **Paulo Cunha (Petrobras)**
- **ERM consultants (led by Lee Solsbery, Paul Zakkour, Greg Cook)**



Background Material



Key Messages (1) – 2002-2003 Study

- **Clear momentum exists as projects are being deployed and technology continues to be researched and developed.**
- **The London Dumping Convention and the OSPAR Convention (“Oslo Paris Convention) may apply to CO₂ capture and storage deployment offshore in geologic formations. Issues for clarification may require several years of intergovernmental negotiations in order to accommodate such deployment.**
- **In general, there is little policy and regulatory development specifically addressing CO₂ capture and storage in individual countries.**
- **Specific countries (Netherlands, Norway, Canada, United Kingdom (UK), United States (US)) are moving in the direction of policy development specific to CO₂ capture and storage.**
- **Public awareness is low to non-existent. Some NGOs will likely play key role in public acceptance of the technology.**



Key Messages (2) – 2002-2003 Study

- **Some non-government organizations (NGOs) and the public in the European Union are becoming slightly less skeptical of the technology. However, it is still too early to assess the level of public skepticism, which will become clearer when specific projects are reviewed for permitting or licensing.**
- **Existing and emerging financial incentives in Australia, Canada, the European Union, Denmark, Germany, Italy, Netherlands, Norway, the United Kingdom, and the United States are focused principally on research and development. Such incentives are needed to improve the cost-effectiveness for deploying CO₂ capture and storage technology.**
- **CO₂ capture and storage technology is becoming recognized and credited in some regulatory regimes, though it is not yet widely recognized nor credited. A monitoring and verification framework is needed to achieve wide recognition and crediting.**



The Challenge

- Carbon Capture and Storage (CCS) may become critical to our companies.
 - As a cost-effective way to reduce CO₂ emissions.
 - The technology is developing.
- But:
 - Commercial readiness with widespread deployment is a long way off, and
 - A favorable business climate needs to be in place prior to need.

How can that favorable business environment be created?