



Workshop Summary: Managing longterm liability for geologic storage of CO₂

Presentation to 7th International CCS Regulatory Network
Meeting
Paris, France | 22 April 2015

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Workshop objectives

- 1. Review the latest findings on liability based on both research and actual project experience;
- 2. Re-evaluate the nature and magnitude of the problem and potential solutions; and,
- 3. Develop recommendations for governments that have yet to address liability for CO₂ storage



A workshop in four parts

Part 1: Latest findings on risks of geologic storage and permitting experiences

Review of current state of knowledge associated with storage and permitting frameworks

Part 2: An economics of law approach to liability

Examine how law and economic incentives interact to drive behavior

Part 3: Approaches and experiences to date with liability and geologic storage

Review the existing approaches managing liability associated with CO₂ storage

Part 4: Developing Recommendations

Draw conclusions based on the previous discussion



Constraints on the solution space

Recommendations must:

- Encourage safe and effective geologic storage operations;
- Enable CCS for emissions reductions;
- Minimize the social cost associated with managing liabilities associated with storage; and,
- Equitably share the cost between current and future generations.



Be frank and open...

The meeting was held under **Chatham House Rule**:

...participants are free to use the information received, but neither the identity nor the affiliation of the speaker(s), nor that of any other participant, may be revealed.

Caveat: The agenda for the meeting is publically available and identifies presenters



What Ian & Sean heard: General principles

- General consensus that, regardless of regulatory framework, liability remains a critical issue
- Difference in perception of risks associated with storage and the reality
- One of the main technical requirements to develop a project is contingency planning
- Many lessons learnt from permitting in US, and presumably elsewhere – including need for responsive (performance-based, adaptive) regulation
- Everything rests on good site selection a solid regulatory framework should drive use of the best sites.
- Regulatory frameworks should be coordinated with liability rules and compensation mechanisms
- Front-loading liability (e.g., putting it on their balance sheet) creates problems for finance of projects



What Ian & Sean heard: Stewardship

- Is a transfer (or indemnification?) appropriate?
- Rationale for limitations in time is public assurance, not a matter of liability
- Timing of transfer (or indemnification): time-bound, performance/outcome focus?
- Seeking an outcome: effective retention, negligible (zero?) impacts
- Timing of transfer is driven by balance between political, financial, practical constituencies
- Idea of this being a review of expert judgment, rather than the fundamental input/evidence, is preferable
- Allowance for "flexibility" in timing of a transfer: means of specifying the specific number should be considered.



What Ian & Sean heard: 3rd Party liability

- In common law countries, it is difficult to influence the outcome through legislation.
- Options are (relatively) limited someone pays damages if awarded.
- Divergent opinions on whether this is an important liability relative to administrative and climate.
- Nonetheless, flexibility in commercial contracting to channel/share liability is useful



What Ian & Sean heard: Climate liability

- A liability that is more difficult to understand and, potentially, manage than 3rd party
- Difference between deterrence (i.e., optimal care) due to climate liability and actual impact on the (cumulative) emissions budget.
- Post-closure and long-term are very different things: during operation, operator can be held liable for emissions.
- As a practical matter, whoever controls the site should hold the climate liability.



Outputs from the meeting

- Selected presentations hosted on the <u>IEA</u> meeting page
- Workshop report on that summarizes discussion during the meeting without explicit attribution
- Participants will be given the option to review the meeting report prior to its publication
- IEA and GCCSI will use the recommendations emerging from the workshop to inform their communication with other stakeholders



Questions or comments?

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