Managing long-term liability for geologic storage of CO$_2$

Joint IEA-GCCSI Workshop
Paris, France
20-21 April 2015
Things Ian & Sean heard yesterday (1)

• To date, permitting has required extensive dialog between all parties in government and with the applicant
• General consensus that, regardless of regulatory framework, liability remains a critical issue
• Difference in perception of risks associated with storage and the reality
• Clear that 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
Things Ian & Sean heard yesterday (2)

• Uncertainties will exist in every project; however, existing projects have all faced different uncertainties

• At “closure”, active risk management should end; potentially, no need for monitoring (at least from a technical perspective)

• CCS communication has, by-and-large, ignored 40 years of research on risk perception and communication... Opportune time to start building on the basics.
Things Ian & Sean heard yesterday (3)

• Trust and voluntary/involuntary nature of risk are the two largest issues facing CCS
• Need for more proactive communication on CCS, but be wary of “educating” the public (and Marxist pensioners)
• Many options exist for liability rules and compensation schemes
• Different perspectives expressed on both rules and compensation mechanisms – need to clarify the choices to be made.
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*
Today: Turning theory into practice

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 CO$_2$ storage.
## Today’s agenda

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<tr>
<th>Time</th>
<th>Session</th>
<th>Speaker(s)</th>
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<tr>
<td>09:00</td>
<td>Day 2: Opening Remarks</td>
<td>Sean McCoy, IEA &amp; Ian Havercroft, GCCSI</td>
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<td>A review of Day 1</td>
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<tr>
<td>09:00</td>
<td>Part 3: Approaches to and experiences to date with liability and geologic storage</td>
<td>Ian Havercroft, GCCSI &amp; Richard Macrory, UCL</td>
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<td>A summary of case studies from around the world</td>
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<td>Alberta, Canada</td>
<td>Jason Toner, Alberta Energy</td>
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<td>10:30</td>
<td>Coffee</td>
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<td></td>
<td>Australia</td>
<td>Matthias Raab, CO2CRC</td>
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<td></td>
<td>United States</td>
<td>Jordan Kislear, US DOE</td>
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<td>12:30</td>
<td>Lunch</td>
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<td>Moderated discussion</td>
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<td>15:30</td>
<td>Closing Session: Trends, challenges and next steps</td>
<td>Sean McCoy, IEA &amp; Ian Havercroft, GCCSI</td>
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<td>Closing remarks</td>
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Outputs from the meeting

• Presentations hosted on an IEA meeting page with presenters consent

• Workshop report on that summarizes discussion over the following days 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