

# Managing long-term liability for geologic storage of CO<sub>2</sub>

Joint IEA-GCCSI Workshop Paris, France 20-21 April 2015



### 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 CO<sub>2</sub> 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 CO*<sub>2</sub> *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.



## Outputs from the meeting

- Presentations hosted on an <u>IEA meeting page</u> 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



#### Be frank and open...

The meeting will be held under <u>Chatham House Rule</u>:

...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



## Today's agenda

09:30	Part 1: Latest findings on risks of geologic storage and permitting experiences	
	Recent research findings and implications for the risks of storage	Stuart Haszeldine, University of Edinburgh
	Experience in risk assessment for CO <sub>2</sub> storage	Jørg Aarnes, DNV GL
10:30	Coffee	
	Communicating risks to stakeholders	Ragnar Löfstedt, Kings College London
	US experience in permitting CO <sub>2</sub> storage activities	Maryrose Bayer, US EPA (via web)
12:30	Lunch	
09:30	Part 2: Latest findings on risks of geologic storage and permitting experiences	
	Economics of law and the nature of risk	Michael Faure, Maastrich University
	Economic efficiency and liability rules for geologic storage	Michael Faure, Maastrich University
10:30	Coffee	
	Options for compensation & roles for government	Michael Faure, Maastrich University
17:00	Day 1: Closing remarks	
	Points for further discussion and closing remarks	Sean McCoy, IEA & Ian Havercroft, GCCSI