

IEA CSLF Workshop on Near Term Opportunities for Carbon Capture and Storage

Report to the Final Plenary Session

Legal and Regulatory Issues

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Preamble

Category	Issue
Urgency	1) Ensure legislators/regulators understand the sense of urgency
	2) Don't aim for 'perfect' regulation (i.e., shouldn't make projects wait)
Uniqueness of CCS	1) Recognition that CCS differs in scale of operations (both size and time) from analogues (e.g., AGI, natural gas storage)
Policies/regulations for early movers	1) Use of early movers to develop regulation
	2) Put legislation/regulation in place necessary to encourage likely, near-term projects
	3) In absence of regulation, can 'appropriate guidelines' be used?
	4) 'Temporary regulation may not be complied with
	5) Policy needs to be set before legislation can be derived
	6) Implementation of regulatory regimes that incentorize early adoption back-stopped by willingness to 'grandfather' early projects
	7) Discretion of regulators

Specific Opportunities Discussed

High concentration industrial sources

Hydrogen production

Enhanced oil recovery

Gas Production with CO₂ reinjection

“Capture ready” power plants and other facilities

Early demonstrations

Any others?

Projects in countries with CO₂ incentives (e.g., cap and trade system, carbon tax)

Capture of CO₂ from biofuels

Definitions

Priority	Definition
Critical	Progress on near-term opportunities cannot be made unless this issues is resolved.
Important	Progress can be made without fully resolving this issue, but lack of resolution could be a hurdle that could slow implementation.
Other	Resolution of this issue may be helpful, but not necessary at a critical or important level.

Critical Issues Identified (1)

Category	Issue	Priority
Ownership/liability issues	1) Need to account for liability along the CCS chain	Critical
	2) Retroactive liability	
	3) Insurance for earliest projects	
	4) State aid and its limitations	
Regulatory treatment of CO2	1) Compliance with applicable, existing regulation (if it exists)	Critical
	2) Possibility of CCS regulation under existing regulations	
	3) Tolerance for contaminants	
	4) Definition of CO2 as a waste or commodity (circumstantial)	
Monitoring/remediation issues	1) Need for system to be in place to monitor possible leakages/seepages over time	Critical
	2) Remediation	

Critical Issues Identified (2)

Category	Issue	Priority
Property rights/IP issues	1) Need for other resources (e.g., mineral) to be protected	Critical
	2) Need for regulation of geophysical trespassing	
	3) How to deal with ownership of resources (e.g., mineral, surface, water)	
	4) Ownership of pore space	
	5) Unitization of CO2 storage to make clear who stakeholders are and what their roles are	
	6) Need to address regulatory status of use and siting of transportation infrastructure	
	7) Intellectual property	
Jurisdictional issues	1) How to deal with competing laws in the case of transboundary issues	Important for national jurisdiction/ critical for some offshore projects
	2) Need to distinguish between national and sub-national jurisdiction for onshore projects versus international law for offshore projects	

Cross-Cutting Issues Matrix (1)

Category	Issue	Technical	Commercial / Financial	Legal/ Regulatory	Public Education/ Outreach	International Mechanisms
Liability	1) insurance for earliest projects	X amount of premium	X			
	2) state aid and its limitations		X			
	3) need to account for liability along CCS project chain		X			
Property rights/ IP	1) need to protect other resources (e.g., mineral);	X risk of CO2 seepage				
	2) need to address status of regulation re. use/siting of transportation infrastructure		X		X siting	
	3) intellectual property		X			
Impurities	1) tolerance for contaminants	X cost, and technologies to reduce				
Monitoring	1) need for system in place to monitor possible seepage over time	X			X	

Cross-Cutting Issues Matrix (2)

Category	Issue	Technical	Commercial / Financial	Legal/ Regulatory	Public Education/ Outreach	International Mechanisms
National institutional capacity	1) enforcement of laws/ regulations in some developing countries		X			
	2) potential for losing CDM/JI opportunities because of lack of sufficient capacity in particular countries					X
Ability of regulation to reflect latest state of science	1) need for regulation to cover technology development, and to be based on scientific knowledge	X				
	2) need for tight linkage between regulatory and technical programs	X				
International guidelines	1) use of IPCC national GHG inventory guidelines to enable CCS as mitigation project					X
	2) need for international standard for safety					X

Critical and Important Cross-Cutting Issues from Other Groups

Group	Category	Issue	Priority
Technical	IP issues	How is best/appropriate technology made widely available?	Important
	Reporting	Data availability	Important
Commercial/ Financial	Market Creation	Creating a market for carbon and commodity CO2	Critical
		Making the playing field level for CCS	Important

Stakeholder Issues and Concerns (1)

Category	Issue	Stakeholders
Ownership/liability issues	1) Need to account for liability along the CCS chain	Industry Insurance Companies Regulators Policy Makers Host Community
	2) Retroactive liability	
	3) Insurance for earliest projects	
	4) State aid and its limitations	
Regulatory treatment of CO2	1) Compliance with applicable, existing regulation (if it exists)	Regulators Industry Environmental NGOs Host Community Politicians Media Policy Makers
	2) Possibility of CCS regulation under existing regulations	
	3) Tolerance for contaminants	
	4) Definition of CO2 as a waste or commodity (circumstantial)	
Monitoring/remediation issues	1) Need for system to be in place to monitor possible leakages/seepages over time	Environmental NGOs Regulators Research Institutions Industry Insurance Host Community
	2) Remediation	

Stakeholder Issues and Concerns (2)

Category	Issue	Stakeholders
Property rights/IP issues	1) Need for other resources (e.g., mineral) to be protected	Industry Regulators
	2) Need for regulation of geophysical trespassing	Policy Makers
	3) How to deal with ownership of resources (e.g., mineral, surface, water)	Financial Investors Research Institutions
	4) Ownership of pore space	Investors Host Community
	5) Unitization of CO2 storage to make clear who stakeholders are and what their roles are	
	6) Need to address regulatory status of use and siting of transportation infrastructure	
	7) Intellectual property	
Jurisdictional issues	1) How to deal with competing laws in the case of transboundary issues	Industry Policy Makers
	2) Need to distinguish between national and sub-national jurisdiction for onshore projects versus international law for offshore projects	Regulators Environmental NGOs Financial Institutions Politicians Media