2nd IEA / CSLF Workshop on Legal Issues of Carbon Capture and Storage: Summary of Key Issues Raised

Disclaimer

The issues included in this summary are views raised by individuals and do not represent consensus reached nor the views of governments, the IEA, the CSLF or their members.

Contractual Rights and Responsibilities including IP

- In order for projects to proceed we need NGO and government acceptance
- Need to consider whether to enact national or international agreements to cover issues such as liability and migration of CO_2
- Commercial concern that IP rights need to be recognised
- Weyburn

  - no IP issues in the first phase – joint ownership of IP with no patents filed

  - final agreement – IP jointly owned by operator and researcher

  - confidentiality agreements

  - lesson learned - agreements can be reached
- Projects technology risk adverse
- Important to identify the rights you wish to protect at the outset

- Protection available through copyright, trade marks, patents, know how/ trade secret
- IP rights are territorial - IP harmonisation will not be a reality within the next 10-20 years
- IP right creates monopoly and as such is insurance for companies that spend time/money on research
- Protect trade secrets through confidentiality agreements
- How to protect and enforce IP rights in developing countries?
- Non disclosure agreements are essential when transferring knowledge to developing countries
- Joint ventures not necessarily most effective method of deployment of CCS – however useful in developing countries
- IP rights well established in the area of capture
- Possibly nothing further we can do at this stage. Monitor what is being done
- Must monitor laws and react if change in law during project

- More focus needed on monitoring of storage site
- Need to formally protect storage IP?
- Nature of contracts that will exist between sites producing CO_2, pipeline and storage contractors? – new territory may give rise to new forms of contract. Issues may include various sources of CO_2 in the one storage site
- Need strategy to decide balance between protection and sharing
- Sleipner results and working documents are in the public domain. This promotes public awareness and acceptance. Snovit process will be the same
- Power companies need to diversify amongst storage sites in order to minimise risk
- Public good and commercial outcomes – need to be clear that these are not mutually exclusive
- Power generators will not necessarily employ other companies to facilitate CCS

SUMMARY

- CCS faces similar IP issues as the oil and gas sector
- Need to understand laws in jurisdiction where project is operating
- Need for practical solutions/immediate steps to overcome weaker protection in developing countries

National Legal and Regulatory Frameworks

- Uncertainty defers projects
- Two phased approach: initial focus on regime for demonstration projects and deferred full framework?
- Issues
  - is governmental assumption of liability the way forward?
  - consequences of liability if unexpected events occurs?
  - national uniformity important in countries such as US and Canada
  - permitting procedures
- EC in the process of developing a framework for CCS. Majority of issues being faced are similar to those in the discussion paper. However access and property rights are dealt with separately by each jurisdiction. Key issues being considered are:
  - managing environmental risks
  - liability
  - incentives
- If EC member state offered indemnity to project proponent would this be considered State Aid?
- Need to clarify CCS role within State Aid guidelines – EC currently reviewing

- Need to respect rights of existing title holders
- Coal and petroleum industries need to develop new risk assessment guidelines
- How to ensure petroleum and CCS rights can co-exist?
- Need for objective based legislation
- Need for legislation to be low cost and not act as disincentive
- Include sources of liabilities in discussion paper – eg tresspass, nuisance, negligence, statute and contracts
- In Australian model, long term liability passes to the government however the project proponent retains the common law element of negligence – what about other sources of common law liability? Project proponents may ask government for indemnity
- Governments need to consider what is the right level of assistance to provide to CCS project proponents
- Some jurisdictions need to consider ownership of CO_2 as well as actions that may give rise to liabilities
- Need for pre-defined site closure criteria
- Governments can mitigate liability through regulation and legislation

- Highlight in discussion paper that mining and environment laws are relevant to CCS projects and govern current projects
- Liability issues can create difficulty in aligning project participants
- R&D legislation may be used for small scale demonstration projects in some countries
- Need to consider what is realistic remediation
- Need to recognise concept of fit for purpose rather than perfect site
- Biggest concern for project proponent is the post closure phase
- Need for speedy legislation around project authorisation and management to ensure future projects can proceed
- Monitoring and reporting to include expected migration and leakage, uncertainties and mitigation plan
- Best practice guidelines for permitting process would be useful – this could be approved by international body
- It may be difficult to prove negligence of the project proponent if they have met all project criteria
- Public private partnership approach to encourage deployment of CCS

- Obstacles created when classify CO_2 as a waste
- Need incentives to encourage CCS – learn lessons from CDM projects
- Post closure liability – should consider what happens to people who financially benefit from CCS project if leakage occurs

SUMMARY

- Four key issues for further analysis
  - liability
    - pre closure and post closure liability issues
    - types of damages of which liability may be imposed - economic, human health, environmental resources
    - nature of the liability
    - who does liability issue impact on? – generators, transporters, operators
  - define framework for pre and post closure
  - how to strike a balance between facilitating projects and public protection
  - capacity building

International Environmental Protection Instruments

London Convention and London Protocol

- Definition of purity needs to be clarified – Greenpeace suggestion of 99.9% purity however definition needs to be realistic and single figure may be too simplistic
- Proposed amendment to London Protocol quite restrictive and relates only to CO_2 from waste streams
- Preference for a high degree of purity from CO_2 stream
- Need to update paper if/when amendments accepted
- Terminology may not be appropriate, consider greenhouse gases
- Consider referencing specific purpose of CCS in amendment eg mitigation measure to enhance environmental performance of industry
- Consideration needs to be given to the precedent that amendments may set to future amendments diluting the environmental protection aims of the convention – this should be avoided
- Consider including process of enhanced resource recovery in amendments and how this might affect CCS as a mitigation measure

- One view is that CO_2 can be considered as a waste as it is consistent with the aims of the convention
- Guidelines to clarify definitions may be useful – waste assessment guidelines for CCS are in development
- Need to strike the right balance between facilitating and regulating CCS
- Separating H2S from CO_2 would potentially make projects uneconomic
- Needs to be overarching framework to ensure that CCS acts as a global mitigation measure for climate change and ocean acidification
- IPCC Greenhouse Gas Inventory Guidelines 2006 provides guidance on inventory processes for CCS – this should be used by all countries

OSPAR

- Need for guidance on risk management of CO_2
- Legal task to prepare options to amend Convention or annexes

  - proposal from Norway is a starting point

  - requests to consider issues such as uniform/international frameworks, prohibition of CO_2 injection into the water column, liability, ownership of CO_2
- Why amend both London Protocol and OSPAR? – OSPAR is more restrictive because of common regional interests; both should be consistent to ensure industry knows where it stands

- Important to develop incentives under Kyoto Protocol
- Does Basel apply to CCS projects? CO_2 is not considered as a hazardous waste to the marine environment however if it is mixed with toxic substances it may be considered hazardous
- Customary international law liability – do we need a treaty to develop/confirm liability? Minimum requirements would be useful
- Regional conventions (other than OSPAR) – majority do not clearly apply to CCS because they do not mention the activity nor apply to below the sea bed
- Recognise global impacts of leakage even if leakage occurs within national borders
- Will regional treaties be developed specifically for CCS activities?
- Cautionary note – laws relating to liability should be developed nationally rather than through a treaty

- Important work likely to be done outside treaty text (difficulty to amend once treaty text). Non binding guidance and decisions at meetings may become more important but then issue of non-observance and lack of public confidence. How can governments give assurance/commitment?

SUMMARY

- Refinement of paper

  - move classification of CO_2 to national legal and regulatory frameworks chapter – keep waste issue in document

  - definitional issue of purity – perhaps this is more of a burning issue than classification of CO_2 as a waste or resource

  - guidance documents and scientific work could be included in paper

  - update chapter after London Protocol/OSPAR meetings

  - status of instruments and who is party to them

  - value in looking at international liability regimes – useful ideas on how to minimise liability (CRTD Convention, Oil Spill Conventions, Nuclear Conventions)

Creating a Level Playing Field for CCS

- Consistency across trading schemes is essential – global guidelines
- Schemes need to be underpinned by effective regulatory regimes
- Do incentives need to be increased in the short term to encourage CCS? Currently being considered by the EC
- EOR can provide a kick start to CCS projects
- Efficiency of tax scheme may decrease over time
- CDM Methodological Panel report related to the specific projects submitted rather than CCS in general – need to generally consider CCS place in the CDM
- Is the law responsible for the current imbalance of the playing field?
- Need for dialogue with Kyoto Protocol policy makers
- Incentive could be to avoid future litigation
- Need to eliminate double counting (differing views as to whether this exists)

- Site selection
- Level playing field for access to storage sites
- Permanence – liability issue that could be considered nationally
- Leakage not an issue – if it leaks you fix it
- M&V

SUMMARY

- Creating a level playing field issues are largely technical rather than legal

Public Awareness

- Who is “the public” – general public, local public, interested parties?
- What sort of awareness/acceptance are we looking for - enthusiasm, broad awareness of the technology, engaging key stakeholders?
- Who is trying to raise awareness – government, industry, environmental NGOs, scientists? Public perception of the messenger - trust/credibility issues
- Too often discussion of CCS are de-linked from climate change
- Communicate a vision of the future to people – highlight that CCS is a bridging technology
- It is human nature to resist the unknown
- Can’t be prescriptive with dialogue. Dialogue evolves differently depending on the group
- No quick fix to dialogue
- In the US there are efforts to engage the local community near demonstration projects
- Important to target information

- When designing a public awareness campaign you need a real and open dialogue including two way communication, conferences, hearings, role plays, educational materials – existing mechanisms can be used
- Consistent message to deliver to the media
- Once policies relating to CCS are in place, laws will follow
- Public outreach campaign must come from a credible source
- Currently dealing with columns 1 and 2 of the table in the discussion paper, need to branch out to other columns
- Need more participation from developing countries and NGOs
- Misconception that CO_2 storage is based on oil and gas operations however these current operations have not explored deep saline formations
- De-mystify public perceptions of CO_2

SUMMARY

- Suggested amendments to discussion paper

  - delete references to nuclear and delete references to CCS as a carbon free technology

  - include information on public participation conventions, EIA, access to justice in the discussion paper (EU - EIA directive, SEA directive, directive on public participation)