CCUS: Legal issues

Seminar on Legal and Regulatory Framework of CO₂ Utilization (EOR) and Geological Storage, ACT ECO-BASE, Bucharest
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Agenda

• Legal frameworks
• CCUS regulatory framework - Selected topics
• Contractual issues
• Standards
Legal frameworks
CCUS Regulatory Framework

- Domestic/local Law
- Regional Law
- International Law
International law

• Binds states, mainly subject to agreement and ratification

• No global supranatural authority or law maker
  ➢ Global and regional

• Establishes principles, like e.g.:
  ➢ Precautionary principle
  ➢ polluter pays
  ➢ best available techniques
Regional law in Europe

EU Law
- International law – binds states
- Regulations, directives, decisions and case law
- The European Union vs. the European Economic Agreement
Domestic CCUS law in the EU

Member States’ law in the EU/EEA

• Based on and subject to the EU Directives - or direct implementation of Regulations

• May consist of both national and local laws and regulation

• May be stricter than the Directives, as they are often minimum requirements

• May grant greater rights and impose more responsibility than EU law

• Granting private entities more rights than provided for in the Directives may be illegal state aid
Case study: Norway

**International law***
- United Nations Convention on Climate Change (UNFCCC)
- KYOTO Protocol
- PARIS Agreement
- BASEL Convention
- LONDON Convention, 1972
- 1996 Protocol to the London Convention
- OSPAR Convention

**EU law***
- Monitoring and Reporting Regulations – Commission Regulations (EU) No 601/2012
- Trans-European Transport Network Regulations – Regulations (EU) No 1315/2013

**Norwegian Laws***
- The Continental Shelf Act
- The Petroleum Act
- Greenhouse Gas Emission Trading Act
- Act relating to CO₂ tax in the petroleum activity on the continental shelf
- The Pollution Control Act
- The Public Administration Act
- The Planning and Building Application Act

**Norwegian regulations***
- The Pollution Control Regulations
- Regulations for Transport and Storage
- The petroleum regulations
- The Greenhouse Gas Emission Trading Regulations
- The Environmental Impact Assessment Regulations
- The Planning and Building Application Regulations
- The Framework Regulations
- The Management Regulations
- The Technical and Operational Regulations
- The Activities Regulations
- The Facilities Regulations

*A selection of relevant regulatory framework*
CCUS regulatory framework – Selected topics
EU legal framework for CCUS – the basics

CCS Directive Article 1(1)
This Directive establishes a legal framework for the **environmentally safe geological storage** of carbon dioxide (CO₂) to contribute to the fight against climate change.

CCS Directive Article 2(1)
This Directive shall apply to the geological storage of CO₂ **in the territory** of the Member States, **their exclusive economic zones** and **on their continental shelves** within the meaning of the United Nations Convention on the Law of the Sea (Unclos).

CCS Directive Article 4
Member States shall retain the right to determine the areas from which storage sites may be selected **pursuant to the requirements of this Directive**. This includes the right of Member States **not to allow** for any storage in parts or in the whole of their territory.

CCS Directive Preamble Recital (20).
**EHR is not in itself included in the scope of this Directive. However, EHR is combined with geological storage of CO₂, the provisions of this Directive for the environmentally safe storage of CO₂ should apply.**

ETS Directive Article 12(3a)
An **obligation to surrender allowances shall not arise** in respect of emissions verified as captured and transported for permanent storage to a facility for which a permit is in force in accordance with Directive 2009/31/EC of the European Parliament and of the Council of 23 April 2009 on the geological storage of carbon dioxide.
Cross-Border Transportation

EU legal and policy frameworks encourage cross-border infrastructure for CCUS, e.g.:

- The Regulation (EU) No 1315/2013 on Union guidelines for the development of the trans-European transport network
  - Projects of Common Interest (PCI)
- CCS Directive Article 24 relates to transboundary cooperation

Identified barrier in the London Protocol Article 6

“Contracting Parties shall not allow the export of wastes or other matter to other countries for dumping or incineration at sea”

CO₂-EOR not subject to the London Protocol
Cross-Border Transportation

Legend
Green: Protocol Parties
Yellow: Convention Parties
Red: Non-Parties
Status as of 22 February 2019
CCUS infrastructure utilizing ship transportation

CCS Directive Article 3(22) ‘transport network’ means the network of pipelines, including associated booster stations, for the transport of CO₂ to the storage site.


Source: Equinor/Northern Lights
Permits and requirements for CCUS (storage)

CCS Directive
- Assessment of the storage capacity available, characterization and assessment (Article 4)
- **Exploration Permits** (Article 5), and **Storage Permits** (Articles 6 etc.)
- CO₂ stream acceptance criteria and procedures; “shall consist overwhelmingly of CO₂” (Article 12)
- **Monitoring** (Article 13), c.f. Annex II and ETS Directive Articles 14 and 23(2)); Monitoring plan
- **Reporting** (Article 14)
- Inspections (Article 15)
- Corrective measures (Article 16)
- Closure and post-closure obligations (Article 17)
- Financial security (Article 19)
- Financial mechanism (Article 20)
- Third-party access (Article 21)

ETS Directive
- Surrender allowances (Article 6(2)(e), c.f. Article 12(3a))
EU liability framework for CO₂ storage at a glance
Contractual issues
Legal aspects of contracts

- Technical (SoW)
- Commercial
- Rule of Law
Some topics for consideration

Contractual constellations and parties
- Third-party access and tie-in?
- Capture, transport or storage?

Ownership of technology – IP issues
- Patents and trade secrets are abundant
- Freedom to Operate (FtO) strongly recommended

Confidentiality vs. knowledge sharing

Risk and liability
- Transfer of risk and/or ownership of data like e.g. seismic data
- Transfer of risk and/or ownership of CO₂

The use of standards vs tailor-made contracts
- defining key parameters
- performance based v.s. specific deliveries
- fit for purpose
Standards
ISO standard for CO₂-EOR

- Standard for CO₂-EOR published 31 January 2019

- Provides important tools to
  - assuring containment
  - unlocking access to allowances under e.g. ETS and 45Q
  - replacing natural with anthropogenic CO₂

- Applies to quantification and documentation of total CO₂ being stored in association with CO₂-EOR

- Contains background data and information about CO₂-EOR globally

- Allows for quantification calculation of natural, anthropogenic and in-situ CO₂
Why are standards helpful for deployment of CCS and CCUS?

- Cost reduction
- Bench-marking
- Knowledge transfer
- Industry driven guidelines instead of an imposed policy-driven framework
- Enable incentive programs like CO₂ trading schemes
- Public-private risk sharing
- Unlock legal challenges
Further reading and back-up material

Cross-border CCS Infrastructure in Norway, the UK and the Netherlands

Cross-Border Transportation – A Key to Unlock Full-Scale CCS

International Standards Support Commercial Deployment of CCS and CO2-EOR

CCS—What Does it Take? Necessary Framework to Succeed with CCS