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CO2 Transportation for Storage: Regulatory Perspectives

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Overview

- > Introduction
- > EU Directive (2009/31/EC) on Geological Storage and CO2 transportation
- > Status of CO2 Transportation in the CCS Chain: a Comparison with the Energy Sector
- > Regulating Access to CO2 Pipelines
- > Conclusion



Introduction

- > Carbon Capture and Storage is a technique enabling a reduction of CO₂ emissions whilst continue to use fossil fuels.
- > The EU aims at reducing 20% CO₂ emissions in 2020. CCS is transitional instrument.
- > CCS Directive entered into force in June 2009. Aim: permanent geological storage of CO₂.
- > The Netherlands has ample storage facilities. Possibilities for being a EU CO₂ hub.
- > Groningen University is involved in CCS research. GCEL published in 2009 book on Legal Design of CCS and is involved in Cato2.



CCS Directive - General

- > CCS Directive governs the capture and permanent geological storage of CO₂.
- >As major point emitters and subsoil storages usually are not situated in the same place, the carbon needs to be transported. For the same reason Member States should facilitate cross-border CCS.
- >The Directive does not explicitly provide for piped transportation. It does implicitly as it requires an amendment of the EIA Directive and a thus an EIA for the construction and use of CO₂ pipelines.
- >The Directive also requires Member States to apply a system of open access to CO₂ pipelines.



CCS Directive – Qualification of CO2 Pipelines

- › Construction and use of CO2 pipelines is a matter of national legislation. National laws may differ.
- › How should Member States qualify these pipelines?
- › When comparing the CCS chain with the energy chain it seems that a CO2 pipeline can be considered as a reversed upstream pipeline:
 - in stead of a gas being extracted from a reservoir and transported to a treatment facility
 - a gas is “treated” (possibly during capture) and is injected in a (depleted) reservoir.
- › Advantage: CO2 pipelines are subject to upstream petroleum laws/safety regimes just as subsoil storage



CCS Directive – Open Access

- › The Directive provides that Member States need to ensure that interested parties can obtain access to storage facilities and pipelines. Access rules shall be transparent and non-discriminatory.
- › Member States may take into account:
 - available capacity
 - incompatibility of technical specifications
 - duly substantiated reasonable needs of owner
 - CO₂ reduction obligations to be met through CCS
- › These access rules are based on the essential facilities doctrine and similar to access regime to upstream pipelines (Gas Directive)



Conclusions

- › CO2 pipelines should be considered as reversed upstream pipelines. They connect a reservoir and a plant but the “gas” is being transported in reverse.
- › The access regime of the CCS Directive is also based on the principles applying to upstream gas pipelines. It means that access can be negotiated (most simple access regime); third parties can turn to competition authority in case of an abuse of market power.
- › The regulatory and safety regime of the upstream petroleum law/mining law can be applied: a proven regime with competent regulatory authorities. Also coherence with regulatory framework for CO2 storage



For further reading see:

>Martha M. Roggenkamp and Edwin Woerdman (eds),
*Legal Design of Carbon Capture and Storage –
Developments in the Netherlands from an International
and EU Perspective*, Intersentia 2009

>www.gcel.nl

>www.cato2.nl