# Permitting CCS projects

## Experiences and lessons learned

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# Outline of presentation

- Experiences and lessons learned from the Network, Olafr Røsnes, DNV
- How to obtain the necessary permits? Experiences from the ROAD project, Hans Schoenmakers

# Permits for a CCS project

## Power Plant

Permit to construct and operate power plant

Permit to modify existing plant

Environmental Permits

Water abstraction license

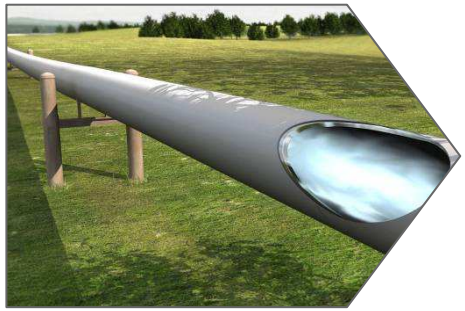
## Capture Plant

Building permit capture plant

Environmental Impact Assessment

Environmental Permits

## Transport

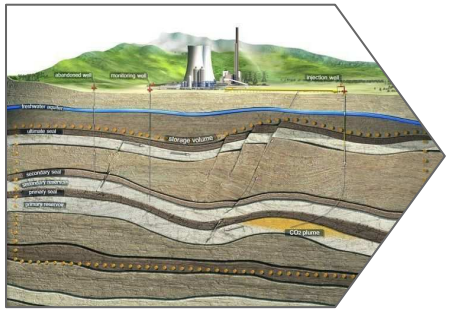


Assessment of pipeline routing

Consents from landowners

Pipeline Works Authorisation

## Storage



Exploration permit

Drilling permits

Environmental Impact Assessment

Storage permit

Consents from land owners

Is the project of national significance?

# Current status of CCS regulatory framework

- The legal and regulatory framework for CCS projects is under development
  - Transposition of Directive 2009/31/EC in Member States
- The Network member projects are the first CCS projects to be regulated by the new regulatory framework
- Building CCS specific regulatory competence among both project developers and regulators

# Current status of permitting CCS demonstration projects

- The CCS Demonstration projects are in the early permitting stages
- Projects are currently moving forward with the permitting process preparing applications for permits and consents
- The project developers have experience with permitting from other major infrastructure projects

# Country and project specific issues

## Differences

- Onshore vs offshore storage influences public awareness/acceptance
- Levels of government
- Differences in legal and regulatory traditions

## Similarities

- Government supporting CCS
- EU legislation
- Competent and experienced project developers

# Lessons learned so far: general process

- Understand the planning and permitting process as early as possible
  - Permitting Plan
- Based on experience from other infrastructure projects: Prepare for a longer permitting process than initially planned
- Other major infrastructure projects may influence the permitting process

# Lessons learned so far: consultations (1/2)

- Ensure that all potential stakeholders are heard and communicated with
- Local communities should be properly consulted early in the process
  - Identify and communicate benefits
- Ensure that all aspects of the project are communicated (holistic approach) – a project is more than technology

# Lessons learned so far: consultations (2/2)

- Prepare and present alternative options to stakeholders early in the project
- Analyse previous public acceptance issues locally, regionally and nationally
- Involve politicians, experts and local communities in information campaigns

# Lessons learned so far: interaction regulators and project developers

- Open communication with regulators as early as possible
- Build regulatory competence in the CCS project organisation
- Keep attention to elections – heated political debates may influence the permitting
- Communicate that CCS is a joint European action with EC, Member States, industry and other stakeholders

# Permitting process moving forward in 2011 (1/2)

Areas where project developers will gain more experience

- Preparing the necessary applications and supporting documents
  - Level of detail in documentation
- Cooperation with the regulators
  - Risk acceptance criteria
- Consultation with stakeholders
- Interaction between public engagement and permitting

# Permitting process moving forward in 2011 (2/2)

Developments in the regulatory framework

- Continued process of building experience among regulators
- Regulators to accommodate the project developers need for an efficient permitting process to meet the target of start-up by the end of 2015.

# Thank you for your attention