

# IEA CCS Regulators Network Meeting

## CCS Legal and Regulatory Developments in the UK

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### Why is UK Interested in CCS?

- Legal objective to reduce CO2 emissions by 80% by 2050, and established interim targets
- Requires decarbonisation of electricity by 2050.
- Significant new investment required in electricity generation over next decade. £100 - £200bn by 2020.
- Fossil fuels – coal and gas – likely to remain important for security of supply and to back up intermittent renewable generation, particularly wind.
- CCS is the only technology capable of allowing fossil fuels to remain part of a low-carbon electricity mix. Therefore central to government energy and climate change policy.

### Key Government action to promote/enable CCS.

- **Legal and operational framework to permit storage.**
- **Early action to implement EU CCS Directive.**
- Announced support for one of the first full scale demonstrations of CCS – 2014 target operational date.
- Confirmed the intention to support 3 further (4 total) demonstration projects.
- Announced intention to place a levy on electricity supplies to pay for demonstration.
- Argued for reform of EU Emissions Trading Scheme (ETS) to include CCS. Provides long-term economic incentive for investing in CCS.
- New fossil fuel power stations must be Carbon Capture Ready (CCR).
- New coal fired power stations must demonstrate CCS on at least 300MW capacity. Demonstration funded by levy. Full retrofit expected by 2025. Retrofit funded either by ETS or levy.

### Legal and Operational Framework

- Reviewed existing legislative base. Storage the main gap.
- Legislation to:
  - Permit **offshore** storage and created enforcement regime – UK/Scotland
  - Vest property in the Crown.
  - Extend offshore decommissioning requirements
  - Power for government to assume liabilities
- Accepted that Government will assume long-term responsibility for stored carbon dioxide.
- Consulted on some high level operational issues
  - Transition from petroleum production to storage, and competing uses of the seabed
  - Transfer arrangements and financial security
  - Regulator
  - Structure and Content of Permit
- Original consultation during negotiation of EU CCS Directive. Just followed-up for implementing legislation.

## Transition from Petroleum to Storage, and Competing Uses

### Transition Proposals – Must Respect Prior Rights

Storage only	[Competitive allocation of storage rights]
Petroleum -> EOR -> storage	[Preference for prior rights holder]
Petroleum -> Storage	[Option for prior right holder]

### Competing Uses

UK sub-seabed an important resource for:

- Oil and gas production
- Gas Storage
- CO2 Storage

Priority for oil and gas production and gas storage. Because:

- UK mature hydrocarbon province
- CO2 storage sites thought to be plentiful
- Production and gas storage are temporary

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## Transfer Arrangements and Financial Security

### Transfer Arrangements

- Government will underwrite any liabilities of the Crown.
- Transfer arrangements must not compromise long-term integrity
- CCS Directive requires transfer to take place when available evidence indicates permanent containment. Key test for UK.
- Subject to any guidance to be issued by the Commission the UK expects to treat the 20 year limit in the Directive as an initial reference point only
- Transfer decisions therefore taken on a case by case basis.

### Financial Security

EU Directive requires financial security for defined liabilities.

- Liabilities – financial security requiring full provision.
- Contingent liabilities – work to be done on the scale and form of security.

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## Regulator

UK expects to licence storage alongside petroleum licensing activities.

- Main offshore activity is petroleum based
- Skills match
- Competing use of geological space
- Environment agencies do not generally work offshore

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## Structure and Content of Permit

Proposing to follow structure of existing petroleum permits

- Licence that conveys a general permission to conduct intrusive exploration and a time limited right to apply for a storage permit
- Storage permit which conveys permission to construct facilities, control the injection process and ensure decommissioning
- Just completed consultation on this structure and outline of the licence. Next step is to implement in law. This will transpose majority of EU Directive

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## What's Next

Model is almost complete. Detail to fill in everywhere, particularly

- Transfer and financial guarantee arrangements
- Regulatory Guidance to support licensing arrangement
- Lease allocation and commercial arrangements