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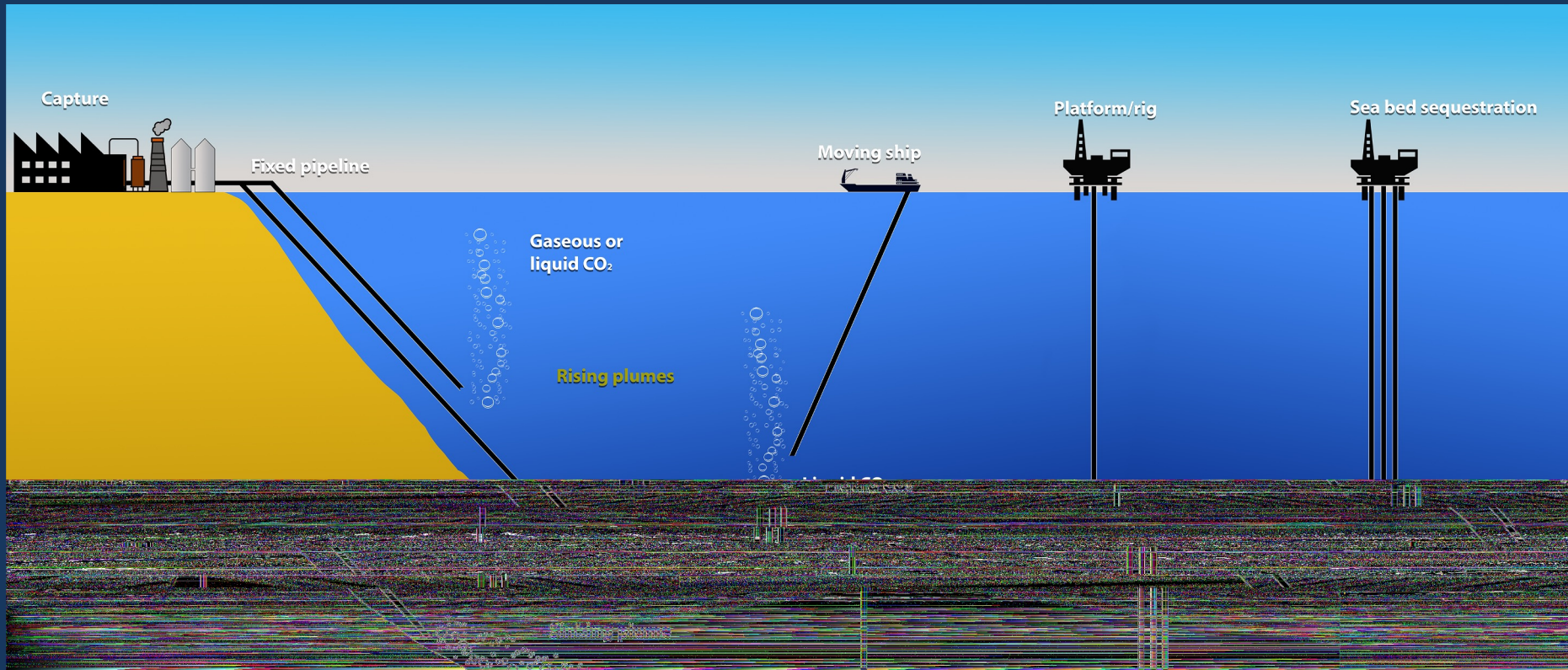
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Carbon Capture and Storage (CCS) Offshore. Liability issues.

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What is Carbon Capture and Storage?



<https://commons.wikimedia.org/w/index.php?curid=108304479> by The joy of all things - Own work, CC BY-SA 4.0

CCS and International Law.

- IMDG Code
- IGC Code
- London Convention on Dumping at Sea. 2006 amendments permit CO₂ streams from CC processes for storage to be considered for dumping.
- Cross border trade?
- 2019 Provisional application of 2009 amendment to Art VI.
- Basel Convention?

Regulatory requirements in the UK.

The Energy Act 2008, establishes a licensing regime for offshore CO2 storage activities

EU Directive 2009/31/EC.

2008 Act supplemented by the Carbon Dioxide (Licensing etc.) Regulations 2010 and the Carbon Dioxide (Closure of Licencing) Regulations 2011,

The Storage of Carbon Dioxide (Amendment and Power to Modify) (EU Exit) Regulations 2019, SI 2019/544. This makes changes to address failures of Retained EU law to operate effectively and other deficiencies arising from the withdrawal of the UK from the EU.

Note the possible effect of [Retained EU Law \(Revocation and Reform\) Bill](#)

- Operators seeking to undertake CCS activities within the EEZ are required to obtain a lease from The Crown Estate in addition to the licence required under the regulations. OGA initially the licensing body, but since 2022 renamed North Sea Transition Authority.
- The model lease contains a number of obligations on the operator relevant to potential environmental damage which could be enforced by leasehold law.

- For example, the lease provides that the operator must not perform any act or exercise any right under the lease which
- ‘(a) maybe, becomes or may cause a danger, nuisance, damage or injury to the Commissioners or any other person or premises; or (b) may cause or contribute to Pollution’.
- The operator is obliged under the lease to take steps to abate the nuisance and remedy any damage caused, and the Crown Estate may require the operator to carry out all works and operations as a result of the pollution.
- The model lease also contains indemnity provisions should the Crown Estate be liable to a third party as a result of migration of CO₂

The 2009 CCS Directive and the 2003 ETS Directive

The CCS Directive is linked to the EU Emissions Trading Directive and, following 2009 amendments to the Emissions Trading Directive, provides that a CCS storage site permitted under the CCS Directive must be registered under the Emissions Trading scheme

A registered emitter has no obligation to surrender allowances in respect of emissions which are verified as captured and transported by **pipeline** to a storage facility, authorised in accordance with the CCS Directive.

- Channelling the ETS liability on the storage operator until post-closure transfer to the State. The CCS storage operator must be registered and account for any emissions from the storage site, by purchasing allowances to match subsequent leakages, up till closure and transfer of the site to the State.
- Directive requires Member States to ensure storage operators provide adequate financial security for these liabilities before the commencement of injection

Environmental remediation costs

- the Environmental Damage (Prevention and Remediation) Regulations 2015 which implements the EU Directive on Environmental Liability (Directive 2004/35/EC) amended through the Offshore Safety Directive in 2013 to cover marine waters.
- Pollution from ships. Strict liability. Annex III. Pollution from pipelines. Fault liability. Annex 1.
- In UK SOSREP already had wide intervention powers in respect of pollution prevention or reduction from ships and oil installations for up to 200 nautical miles, and for safety issues up to 12 nautical miles.

Transfer of liability post closure

- Article 18(1) of the EU CCS Directive requires that after a storage site has been closed in accordance with the terms of its operating permit and the tasks in an approved post-closure plan have been fulfilled, the following conditions be met before any transfer of responsibility for the site can take place:
- ‘all available evidence’ indicates that the stored CO₂ will be completely and permanently contained;
- a minimum period determined by the authority has elapsed, with that minimum being no less than twenty years unless the authority is convinced before that that the first condition has been met;
- a defined financial contribution towards the authority’s post-transfer costs has been provided; and
- the site has been sealed and the injection facilities removed
- ‘claw-back’ provisions allowing the Government to recover costs from the operator in case of fault. Any transfer will not take place at least twenty years after cessation of operations by the authority prior to the termination of the licence.

UK provisions on transfer of leakage liabilities

- UK. The Storage of Carbon Dioxide (Termination of Licence) Regulations 2011 provide first that on surrender of the licence, the obligations contained in Article 18 are transferred to the Secretary of State (regulation 14).
- The Regulations then provide that there will also be transfer of any ‘leakage liabilities’ incurred, broadly defined as ‘any liabilities, whether future or present, actual or contingent, arising from leakage from the storage complex to which the relevant licence relates and includes liabilities for personal injury, damage to property and economic loss’.
- Would include third party tort claims.

- UK. Section 16 of the Termination of Licence Regulations transposes the Directive's claw-back provisions, by providing that the authority may recover costs 'to the extent that such costs arise due to fault on the part of the operator
- “Clawback” applies not just apply to the obligations and liabilities under the EU Directive which are transferred, but extend to all the other leakage liabilities (such as those arising out of tort) which are transferred.

Liabilities.

Leaks in transit – pipelines, ships

- injection into well**
- Escape from the well.**

Who will be claiming and how?

The Crown Estates – under the lease

The SOSREP – prevention and remediation powers

Private parties -tort

Who will be liable?

Tort

Rylands v Fletcher (but not in Scotland)

Private nuisance

Public nuisance

Negligence.

Pure economic loss?

Calculating physical loss from carbon leakage?

Quantification of loss

**Limitation of liability. Ships. LLMC. But not pipelines/storage sites.
HNS Convention 2010 Protocol – if and when it comes into force.**

Jurisdiction. 1998 Petroleum Act s3 and 3A

Choice of law. Rome II. Art 4 and 7.

Sunset exemptions on liability

Brexit and the EU

- Uncertain whether ETS exemptions possible for transfer of Captured Carbon to a site in a non-member state.
- For both UK and EU the exemption currently applies only where the Carbon is transferred by pipeline.
- European Taxonomy delegated regulation adopted in 2021 mentions that all modes of CO₂ transportation to permanent geological storage – pipeline, ship, barge, train, truck – should be allowed for the transport for CO₂.
- The revision of the TEN-E regulation published in the EU Official Journal on 3 June 2022 mentions that CO₂ transport and storage projects between an EU member state and a non-EU country can receive the status of ‘Projects of Mutual Interest’ (PMI) and be eligible for EU funding.

An uncomfortable truth?

Does CCS on a whole lifecycle basis emit more CO₂ than it sequesters?

<https://cleantechnica.com/2022/01/27/global-witness-exposes-the-lie-behind-the-carbon-capture-scam/>