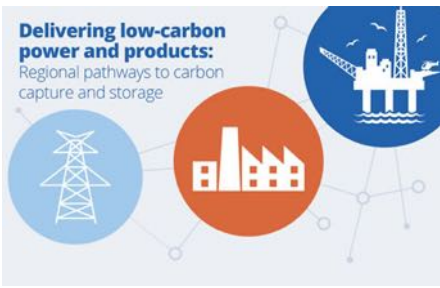




# Delivery of CCS infrastructure using Projects of Common Interest (PCIs)

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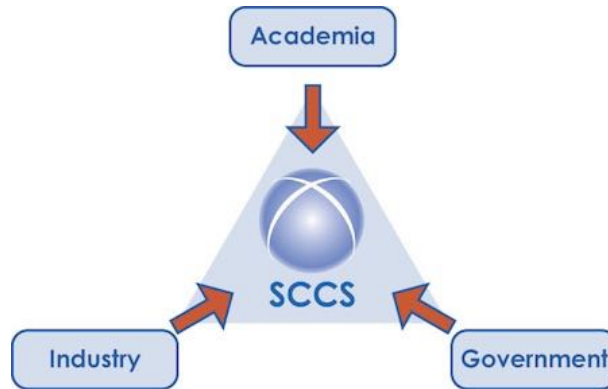
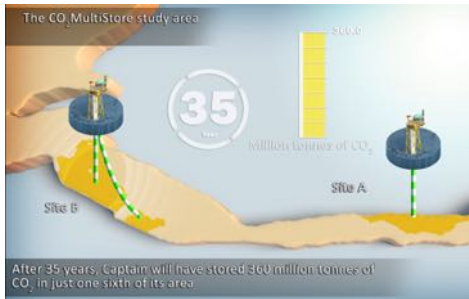


# Scottish Carbon Capture and Storage

[www.sccs.org.uk](http://www.sccs.org.uk)



SCCS is the largest Carbon Capture and Storage (CCS) research group in the UK. Our internationally renowned researchers provide connected strength across the full CCS chain. With our unique position SCCS is able to act as the conduit between academia, industry and government. We provide a single point of coordination for all aspects of CCS research ranging from capture engineering and geoscience, to social perceptions and environmental impact, through to law and petroleum economics.

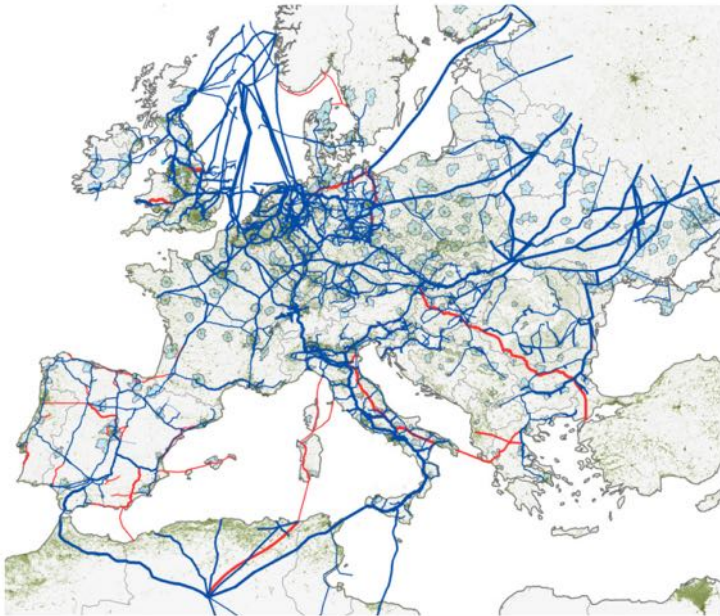


### Abstract:

CO<sub>2</sub> transport pipeline and facilities is eligible for support as an EU Project of Common Interest (PCI). PCIs benefit from accelerated planning and permitting and access to financial support from Connecting Europe Facility funds. This talk will cover the logic behind CO<sub>2</sub> transport PCIs, their structure and possible conditions for eligibility, and on-going activity by the North Sea Basin Task Force to support their development.



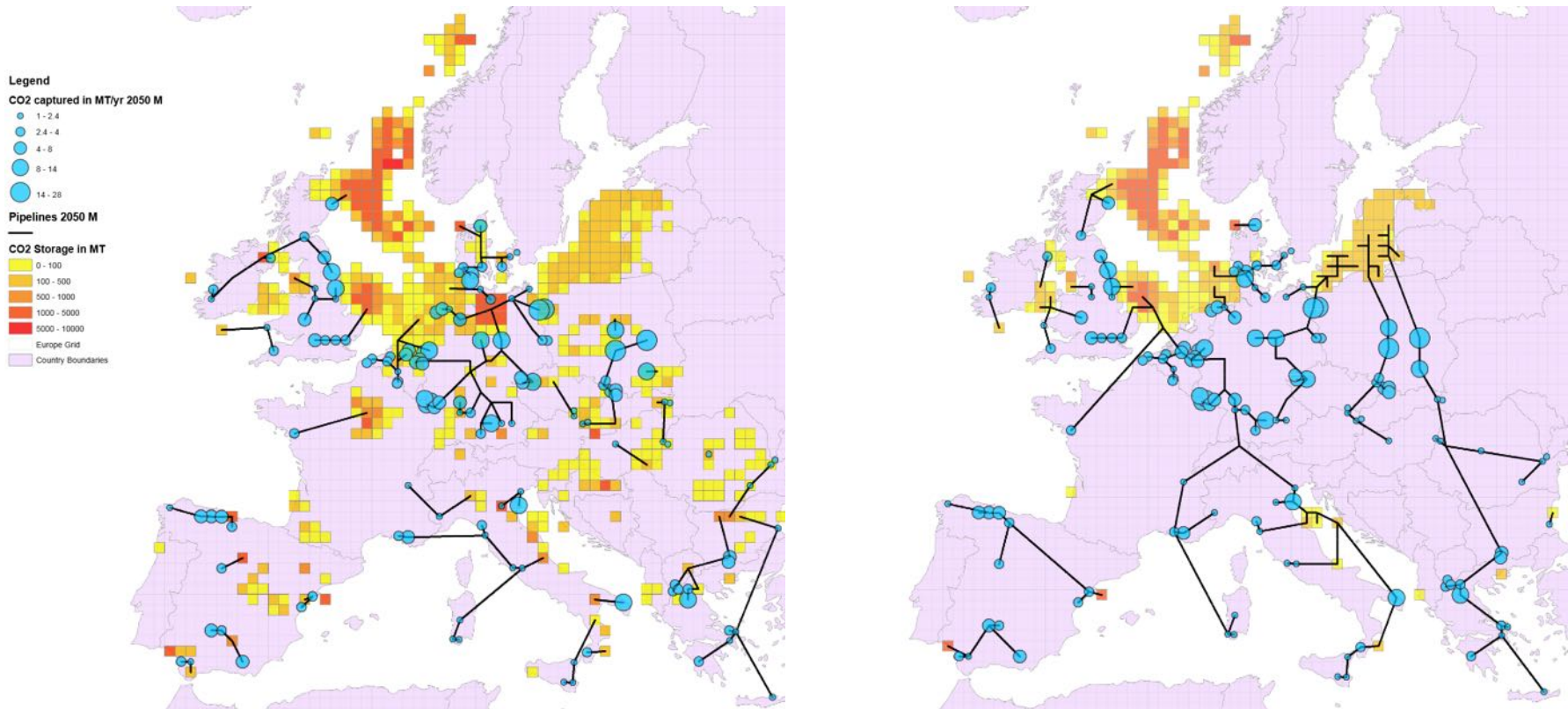
# European energy geographies



Gas, electricity

-> how to integrate existing markets & infrastructures to cost-efficiently deliver energy & supply security, reduce emissions and best-realise advantages of regional resources?

# European CCS – geographies and geologies



[ARUP-SCCS for DG ENER 2011 [https://ec.europa.eu/energy/sites/ener/files/documents/2010\\_10\\_co2\\_infrastructures.pdf](https://ec.europa.eu/energy/sites/ener/files/documents/2010_10_co2_infrastructures.pdf)]

European CCS infrastructure needs to be trans-boundary:

- Regional CCS development actions have EU-wide benefit.
- Explicit need for European coordination from outset.

# Projects of Common Interest

PCIs: “primary European tool to accelerate deployment of infrastructure necessary for completion of the European energy market and ensure EU meets its goals of affordable, secure and sustainable energy.”

“The Connecting Europe Facility shall enable Projects of Common Interest to be prepared and implemented within the framework of the trans-European networks policy in the sectors of transport, telecommunications and energy.”

Energy (budget ~€5.85 billion) to support Electricity Grid, CH<sub>4</sub> and Oil Distribution, **CO<sub>2</sub> Transport** to promote internal energy market, security of supply, sustainable development and environmental protection.

# Project of Common Interest

Project necessary to implement the energy infrastructure priority corridors and areas set out in Annex I of Regulation 347/2013 and which is part of the Union list of projects of common interest referred to in Article 3.

PCI general criteria:

1. Necessary for at least one of energy infrastructure priority corridors or areas
2. Potential overall benefits outweigh costs
3. Project is situated or has significant cross border impact in at least two MS (or 1 MS and EEA)

PCIs to receive:

- accelerated 'one-stop-shop' permitting,
- improved regulatory treatment,
- financial support from CEF (instruments and grants available).

Identification and selection by "regional groups" (Commission, MS, Project promoters) for proposal to list (next 2017).

# PCI funding

Provided project cannot be realised through market alone, CEF can provide:

- grants for studies\* to “minimise risk factors” – funding priority
- financial instruments (project or corporate funding)
- works funding (fill funding gaps for non-commercially realisable projects).

\*Study funding eligibility:

Those needed to prepare project implementation e.g. mapping, feasibility, evaluation including defining and developing project and deciding financing.

# CO<sub>2</sub> transport eligibility

- Dedicated pipelines (not upstream), used for CO<sub>2</sub> capture from more than 1 source for purpose of geological storage
- Facilities for liquefaction and buffer storage of CO<sub>2</sub> as part of transportation system (excludes final storage destination injection infrastructure)
- Equipment or installation essential for CO<sub>2</sub> transport system to operate inc. protection, monitoring and control systems.



# CO<sub>2</sub> PCI development timeline

April 2014: North Sea Basin Task Force (NSBTF) request to EU Commission 'to advance creation of CO<sub>2</sub> thematic group'.

Jan 2015: Initial meeting of MS Energy Attaches with EU Commission to nominate thematic group representatives.

March 2015: Milieu Ltd. contracted to undertake regulatory analysis of CO<sub>2</sub> PCI and develop draft criteria and processes for selection.

September 2015: Technical stakeholder workshop on CO<sub>2</sub>-PCI identification.

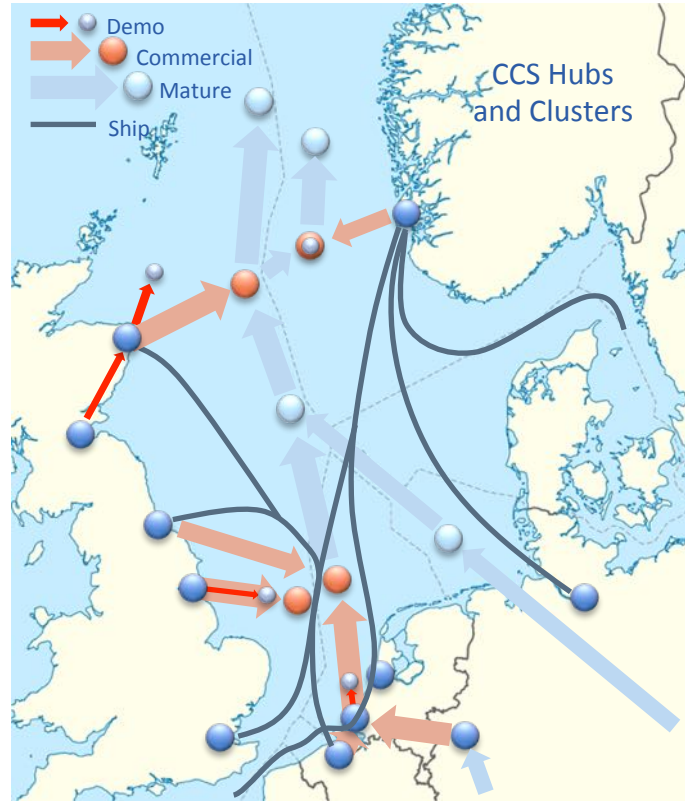
November 2015: Milieu legal analysis report published  
<http://bookshop.europa.eu/en/identification-of-future-co2-infrastructure-networks-pbMJ0416249/>.

April 2015: NSBTF CO<sub>2</sub> infrastructure plan drafted.

Q3/4 2016: Commission report on CO<sub>2</sub> PCI selection criteria + plan for identification.

2017: Adoption of next PCI list.

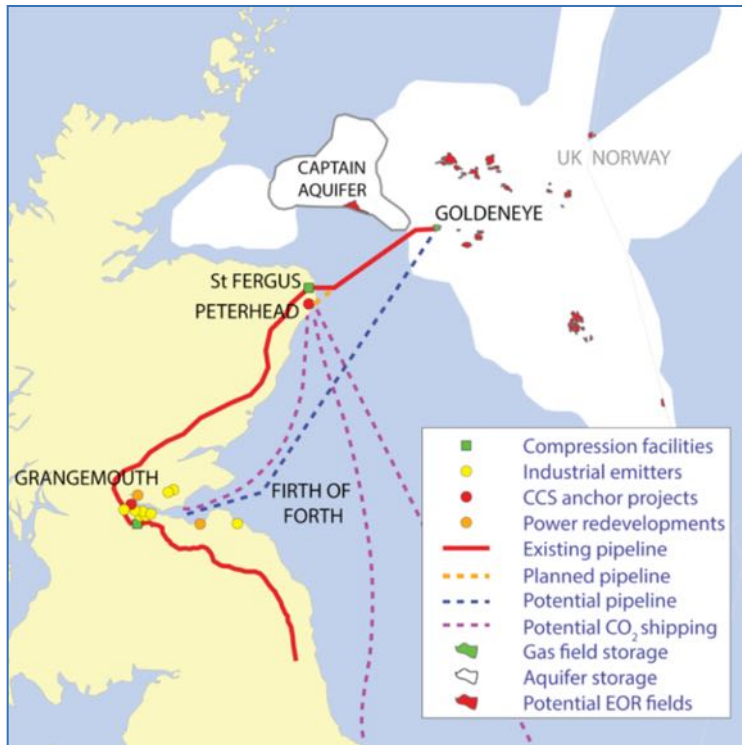
# NSBTF regional plan



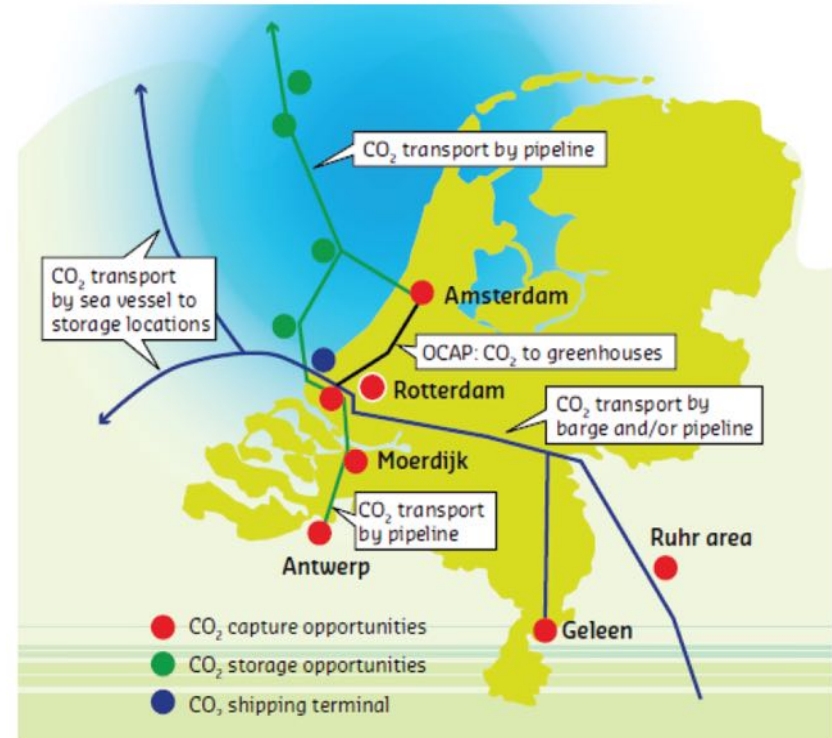
[Image: Chris Gittins, TAQA]

Recognises significance of North Sea in EU CCS delivery  
CO<sub>2</sub> network can be efficiently built up to provide North Sea access  
Clear agenda for network development support as PCIs.

# PCI concepts



[Image: SCCS]



Cross-border impact, multi-source, pipelines and/or CO<sub>2</sub> transportation facilities

# Conclusions and Future

- EU CCS delivery transboundary by necessity
- PCIs: “primary European tool to accelerate deployment of infrastructure necessary for completion of the European energy market and ensure EU meets its goals of affordable, secure and sustainable energy.”
- PCI funding: studies, financial instruments, project support.
- CO<sub>2</sub> transport: multi-source, cross-border impact, pipeline, processing facilities.

## Future:

- NSBTF regional plan supports project proposals
- PCI/CEF (+ Horizon 2020) = only unallocated existing EU CCS eligible funding
- “Enhanced role for PCIs” in 2030 Energy and Climate EU Council conclusions.