Fast Track CO_2 Transport and Storage for Europe

European Zero Emission Technology and Innovation Platform

Objectives

The TWG Fast Track Transport and Storage was established to produce a framework for assessing the readiness for CCS projects

The report provides recommendations for industry and Governments to identify and fund key source-to-store CO_2 infrastructure links, whilst providing nations with open access to the information generated at each stage of the process, with the aim to save time and resources for first-of-a-kind projects.

The report highlights 8 key activity areas, identifying the actions required under each (including a number of immediate actions for 2017):

1. Open access to information
2. Storage appraisal
3. Strategic planning
4. Market Structure
5. Regulation
6. Incentives
7. Politics and communication
8. Technology

Recommendations

C =Capture/T=Transport/S=Storage

Open access to information (S): Data Management Organisations gather data, compare, rank, grant access to data, grow atlases, define duty of license holders once clear they hold a high-ranking storage site

Storage appraisal (S): Full appraisal of high ranking structures, who conducts, pays, certifies, to what standards. Operator intent to store → mothballing rights

Strategic planning (T/S): Plans by first mover MS's at regional, national, interregional and EC levels aligned with 2050 targets . Plans used to support e.g. PCI applications

Market Structure (T/S): National organisations, RDO's, Market Makers execute planning. Coordinate all T&S, Role of Govt to manage regulation, finance, governance to ensure delivery.

Regulation (T/S): Continually improve EC and national policy to enable Market Structure, Strategic Planning, Storage Appraisal, and Incentives.

Incentives (C/T/S): EC and Member States to support flagship projects through targeted funds. This will drive Pre-FID for storage appraisal, early transport, PCI feasibility and industrial cluster development plans.

Politics and communication (C/T/S): EC and MSs to communicate a single clear message, supported by industry

Technology (C/T/S): Share knowledge to accelerate innovation and commercial deployment.

Timeline to deliver recommendations

Zero emissions platform

Table 9: Summary of actions	Stage 1 (Commencing 2017)		Stage 2		Stage 3
1. Open access to information	Database model and responsible body for management indentified/created.	Database model implemented and management organisation launched.	Database made available centrally to regulator.	Database available to E&P licence-holders (for fee) and populated.	Database becomes open access.
2. Storage Appraisal	Prospect appraisal plan defined.	High ranking structures identified (as per activity 1) and storage play types mapped.		Licence-holders declare intent to store/waive rights.	Certification/mothballing support awarded.
3. Strategic planning	'First-mover' MS identified and coalition established.	Formalise planning responsibilities at European, interregional, national, and sub-national levels.		'First-mover' MS to produce European, regional, national, and sub-national plans.	Plans used to support PCIs And support 'off-plan' proposals from private companies.
4. Market Structure	MS establish 'Market Makers' - public/private partnerships - to deliver early projects and facilitate infrastructure development.	MS develop legislative and financial framework to support Market Makers.	Market makers manage development of pilot projects and primary CCS infrastructure on behalf of National Governments.	Capture decoupled from transport/storage.	Market scale allows private companies to develop pipelines, hubs and storage sites with specific government direction.
5. Regulation	Identify existing regulatory barriers to project delivery.	Continuous review of regulation (e.g. ETS and CCS Directives).		Regulate to avoid the creation of monopolies by Market Makers.	Light-touch regulation to maintain strategic direction and support private companies.
6. Incentives	Establish a working group comprising EC and MS to identify and review funding mechanisms for FOAK projects.		Implement incentive mechanisms, supporting FOAK projects as a balance between State support and managed competition. Regulation developed on a case-by-case basis.		Implement incentive mechanisms creating viable business opportunities for CCS (e.g. carbon price, low-carbon power premium, or incentive to store).
7. Politics and Communication	National Governments recognise and acknowledge benefits of CCS.	National Governments provide a supportive policy environment for CCS pilot projects.		National Governments support CCS 'Market Makers' and CCS pilot projects.	MS encourage private industry to develop CCS projects through relative policy support.
8. Technology	EU-wide information and technology sharing platforms established (as per activity 1).	FOAK application of existing technologies transferred from analogue industries.		Scaled up application of transferred technology Development of CCS specific technologies.	Market scale drives technological advancement.