



An Australian Government Initiative

The Global Carbon Capture and Storage Institute GCCSI

Initial Work Plan

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Foundation Members Meeting
Canberra
16 - 17 April 2009

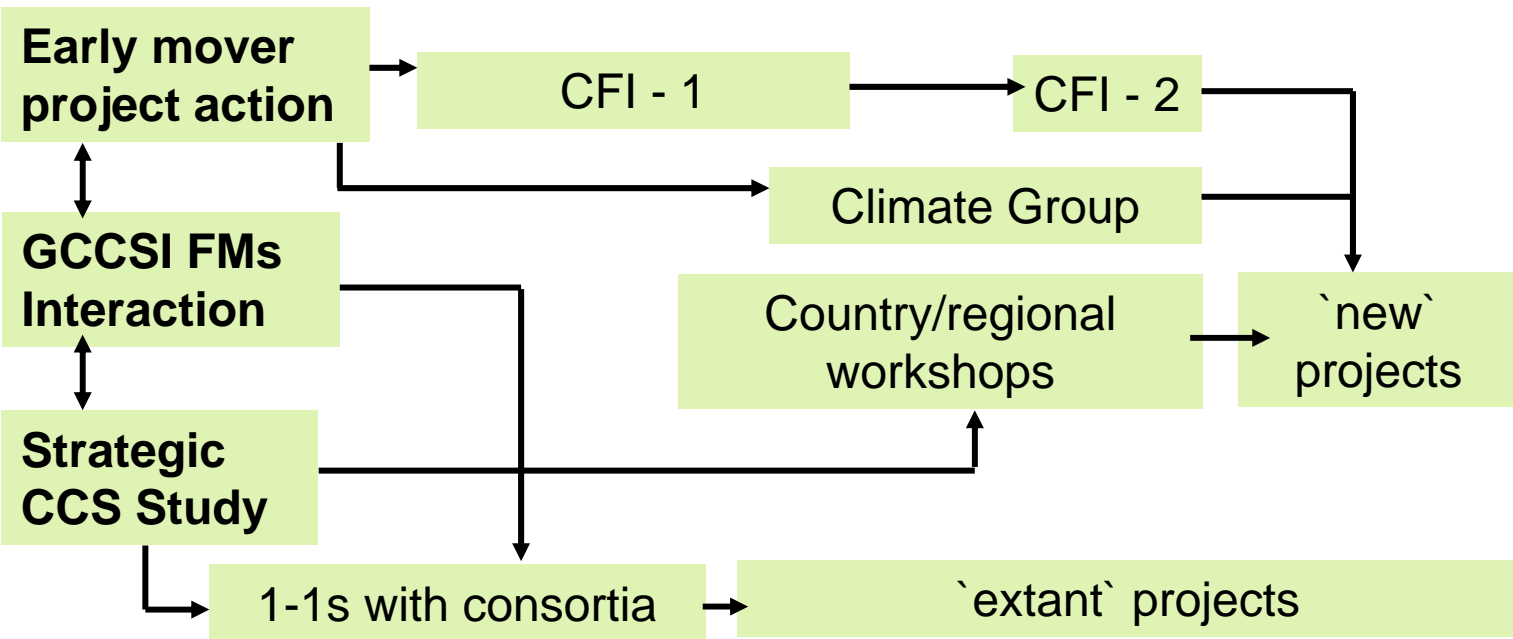
Mandate and objectives

- Acceleration of the global adoption of safe, commercially and environmentally sustainable CCS
- Drive co-operation to deliver a diverse portfolio of 20+ fully integrated industrial scale demonstration projects by 2020:
 - Across a range of emitters
 - Across a range of technologies
 - Along the entire capture, transport and storage chain
- Work in concert with existing bodies to overcome barriers to broad industrial scale deployment of CCS
- Be responsible for effective sharing of non-proprietary knowledge of CCS among shareholders and interested parties

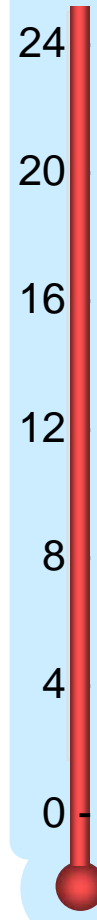
The GCCSI is a global action

Immediate Work Programme: Accelerating demonstration projects

Supporting and capacity building action



Nº of Projects



2009

2010

Initial GCCSI Work Programme

Three primary themes cutting across all areas of activity:

- Drive development of CCS demonstration projects
- Support CCS uptake globally
- Build CCS capability

Whatever is done now has to fit into the longer term framework
"setting the right trajectory for the GCCSI"

Theme: Drive development of CCS demonstration projects

- Developing partnerships to establish a portfolio of large scale projects globally
- Establishing a culture of 'learning by doing' and sharing of 'non proprietary information'
- Working with existing CCS programmes and developing rationale for supporting CCS projects
- Employing, developing and providing CCS expertise and advice to project participants
- Providing broad advice on regulatory, economic and public awareness aspects and implications for specific CCS demonstration projects

Theme: Support CCS uptake globally

- Developing links with national, international and regional bodies engaged in CCS activities
- Becoming a global information and knowledge broker around technical, environmental and economic issues
- Creating community outreach and public awareness activities to communicate to a wide range of stakeholders
- Identifying and supporting the necessary research on issues around geological storage potential, regulatory arrangements, financial and economic policy considerations

Theme: Build CCS capacity

- Becoming a global CCS expert and independent conduit for organisations and governments
- Advising CCS project proponents on best practice regulation, legal development and reform
- Understanding and developing the capacity to deliver on the long term goals of deploying CCS at the scale necessary to combat the impacts of climate change

So what will the GCCSI actually do?

Three task areas have been identified as the basis for the way forward:

1. Development of demonstration projects
2. Knowledge Sharing and Community Acceptance
3. Underpinning and Supporting Actions

Task 1: Demonstration Projects

Set the 'real' baseline as of April 2009 taking into effect the financial turmoil of the last few months and identify 'targets':

- Undertake a strategic analysis of the Global Status of CCS
- Characterise a Global CCS portfolio of projects
- Methodology to identify CCS projects that the GCCSI should support (rationale for support)

Task 1.1: Analysis of the Global Status of CCS

(Baseline study)

Objectives

- Develop a comprehensive baseline report on the global status of CCS, identify challenges and opportunities for deployment of CCS and track progress towards the desired 20+ projects

Outputs - produce five reports on:

- Current status of CCS demonstration projects
- Cost structure of CCS technologies and projects
- Analysis of existing CCS policies globally
- The current CCS R&D networks including identification of technical gaps
- Comprehensive assessment of the gaps and barriers between existing CCS projects and the demonstration of large scale CCS projects

Tender closes: 4 May 09
Draft Report: due Jul 09
Final Report: due Sept 09

How Foundation Members can be involved:

- Provide direct access to CCS demonstration projects, information and peer review of outputs

Task 1.2: Global Portfolio Project

Objectives:

- Characterise a desired portfolio of CCS project types needed to give confidence in CCS globally and increase opportunities for learning across a range of CCS technologies
- Identify priority projects to receive financial and technical support from the GCCSI through identifying demonstration gaps (link with Strategic Analysis of the Global Status of CCS)

Outputs:

- Report detailing the desired portfolio of CCS project types
- Detailed rationale for support to assist the GCCSI in identifying priority CCS projects

How Foundation Members can be involved:

- Review of outputs

Tender closes: 10 May 09
Draft Report: due Jul 09
Final Report: due Aug 09

Task 1.3: Methodology for CCS Projects

Objectives:

- GCCSI will conduct workshops in strategic regions/countries through 2009-2010
- Aim of the workshops is to ascertain the progress of CCS projects and identify which ones face impediments

Outputs:

- Reports detailing the potential for the range of CCS project types in that area or industry
- The workshops would lead to a series of project support recommendations being put to a GCCSI board for approval

How Foundation Members can be involved:

- Engagement of Foundation Members essential. The workshops bring governments, industry and other stakeholders together to discuss specific CCS projects with a view to identifying specific projects and specific actions for GCCSI support.

Task 2: Knowledge Sharing and Acceptance

Enhance emerging actions internationally

- Develop a 'knowledge sharing' protocol, for non-proprietary information, to facilitate efficient and cost-effective collaboration
- Community outreach and public education activities to communicate the importance of CCS as a climate change mitigation strategy and the benefits and risks of CCS, particularly those nearby a CCS project.
- Knowledge sharing, community outreach and public education are vital issues for the future success of CCS projects - to ensure acceleration of, and community support for CCS
- Given the importance of these topics a separate session on them has been planned for later today

Task 3: Underpinning actions

Building CCS capacity

In support of the specific project related tasks, the GCCSI will also undertake CCS support related actions.

- Assist in defining 'CCS Ready'
- Establish a Global CO₂ Storage Atlas
- Participate in capacity building exercises

Task 3.1: Defining 'CCS Ready'

- Address issues between proponents, policy development and regulators – providing regulators and industry with some certainty
- Input to the IEA/CSLF 'CCS ready' work by:
 - Developing best practice guidelines
 - Assessing economic gains from CCS ready regulation
 - Exploring opportunities for a harmonised definition
 - Considering industrial plant issues
- Work closely with existing developments on 'CCS ready' by UK, EU, APEC...

Tender closes: late May 09
Draft Report: TBA
Final Report: end 2009

Task 3.2: Global CO₂ Storage Atlas

- Objectives
 - develop a comprehensive, global-scale resource on CO₂ storage opportunities
 - address shortfall in consistent global information on geological basins that may be suitable for CO₂ storage
 - integrate CO₂ storage information with other relevant factors such as emission nodes
- Outputs
 - A GIS-based system for the Atlas, developed, populated and maintained, including the addition of other relevant information (for example overlays of CO₂ sources)
 - Development of standard protocols for presenting information

Directions Paper: end Apr 09
Initial Outline: end 2009

Task 3.2: Global CO₂ Storage Atlas

- Foundation Members can take an active role in the development of the Atlas
 - Co-ordinate the assembly of regional geoscience and other information for the Atlas
 - Take part in training and information sessions
 - In consultation with lead contractors, upload local information to the Atlas
 - Provide comments and feedback to the development team

Task 3.3: Capacity Building

- The GCCSI will work with, and help fund, existing IEA and CSLF programmes
- The GCCSI will sponsor events in strategic regions to develop a greater awareness of the potential of CCS such as
 - EOR/CCS opportunities in the Middle East
 - CCS initiatives in South Africa
- Work with other countries to help set the way for CCS
 - Countries with large use of fossil fuels

Summary of key priority tasks

Details have been presented on the three Task Areas identified as the basis for the way forward:

1. Development of Demonstration Projects
2. Knowledge Sharing and Community Acceptance
3. Underpinning and Supporting Actions

...and so some questions...

Breakout Session: Questions

- How can current actions be improved/refined? What are the key bodies that need to be involved?
- Are there other key priorities that should be worked on now? Any important gaps?
- What should the GCCSI focus on following the delivery of these projects in 2009?



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