

The Global Status of CCS

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CAGS Workshop

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OVERVIEW

CORPORATE UPDATE

- strategic objectives
- focus areas and organisational structure
- membership and funding

THE GLOBAL STATUS OF CCS 2010 REPORT

- opportunities and challenges
- PRIORITIES

STRATEGIC OBJECTIVES

To be a Centre of Excellence on CCS which contributes to the acceleration of development and deployment of CCS;

To be recognised as an effective advocate of CCS and to ensure CCS in one of the key low emission technologies;

To support and facilitate CCS projects to add to learning and to share knowledge; and

To collect, develop and disseminate CCS knowledge.

VALUES

To be globally collaborative, committed to engagement with Members and other stakeholders to share information and solutions; and

To be outcomes focused and measure through delivery of results.

KEY FOCUS AREAS

The Global CCS Institute connects parties around the world to solve problems, address issues and learn from each other to accelerate the deployment of CCS projects through:

SHARING KNOWLEDGE

- collecting information to create a central repository for CCS information; and
- creating and sharing information to fill knowledge gaps and build capacity.

FACT-BASED ADVOCACY

- to inform and influence domestic and international low carbon policies;
- to advance understanding of appropriate risk regimes, funding and financing solutions; and
- raising awareness of the benefits of CCS and its role within a portfolio of low carbon technologies.

ASSISTING PROJECTS

- bridging knowledge gaps between demonstration efforts; and
- developing project-specific solutions particularly amongst early movers.

MEMBERSHIP BREAKDOWN



The Institute's Membership accounts for over 80 per cent of the world's carbon dioxide emissions from energy and industrial sources.

MEMBERSHIP ACTIVITIES

 Consistent with the Institute's strategic direction the Membership communications program has been revised:

targeted series of workshops have recently been held in Australia, Japan and Korea with attendances of over 200 based on project sharing from North American supported projects and the Rotterdam CCS project;

extend these workshops in to North America and Europe; and

regional profiles completed for Europe, North Africa and Middle East.

 Capacity building programs in a number of member countries with a focus on Korea, India, Indonesia, Malaysia, Mexico and South Africa.

FUNDING

- Worked closely with the Australian Government to reduce uncertainty;
- Government announced funding to mid 2015 with a small amount (\$5m) in the two years after 2015.

THE GLOBAL STATUS OF CCS – 2010 REPORT

- Government Funding
- CCS Projects
- CO₂ Storage
- CO₂ Networks
- Legal and Regulatory Developments
- CCS Costs
- Knowledge Sharing Initiatives
- Public Engagement



CHALLENGES FOR CCS – PLANS BUT FEW ACTIVE PROJECTS



- Over 234 projects have been identified (at various stages of development).
- Since 2009, 63 large-scale integrated projects (LSIPs) have been newly identified, but 37 LSIPs were delayed or cancelled. Overall, 77 LSIPs among the total 234 projects.
- All eight of the operating LSIPs and further four in the execute stage are linked to the oil and gas sector.

ACTIVE AND PLANNED PROJECTS BY TECHNOLOGY MATURITY



- 102 projects (44 per cent) plan to use a commercially mature technology.
- 76 projects (32 per cent) are using technology considered at a demonstration level of maturity.
- Over 70 per cent of commercial scale projects are in the Planning stage.

Public funding support commitments to CCS by country

US\$bn) 1	2	3	4	5	6	7	8	9	10	11	12
United States	6.1						2.6					
Australia	0.9	4.0										
European Union	1.3	3.1										
Canada	3.0			0.3								
United Kingdom	1.6	1	10.0									
Norway	1.3											
South Korea	0.8											
Japan	0.4											
Netherlands	0.2											
	All	ocated										

Estimated funding support for additional three UK demonstration plants

LSIPs: AMOUNT OF POTENTIALLY STORED CO₂ PER ANNUM BY REGION



INSTITUTE SUPPORTED PROJECTS



4 in North America, 3 in Europe, 2 in Australia, 1 in Japan. Commitment from the Institute ~ AU\$32.2 million

ASSISTING PROJECTS - BENEFITS

In addition to reports and case studies, the agreements with Projects will also include:

- participation in technical panels and workshops;
- key Project personnel available for interviews; and
- ■involvement on the Institute's digital platform.



PRIORITIES – FACT-BASED ADVOCACY

- Publish the next Global Status CCS Report (October 2011)
- Work closely with IEA on legal and regulatory issues
- Roll-out regulatory toolkit
- Develop and release Storage Guidance Compendium
- Assist with development of effective CCS Ready policies
- Analyse issues associated with long term liability and permitting
- Further analysis on technology costs, including comparative costs
- Active program of capacity building in developing economies
- CCS inclusion in the Clean Development Mechanism (CDM)
- Program of subject-based workshops in all major regions
- Support Major Economies Forum Carbon Capture Use and Storage Group

PRIORITIES – KNOWLEDGE SHARING

- Connect existing knowledge sharing groups and act as the 'global glue' between regional efforts
- Manage knowledge investments (e.g. best practices from funded projects) to maximise value for Members
- Drive knowledge sharing among members and partners through digital and face-to-face interactions
- Embed knowledge sharing practices into projects to accelerate their delivery
- Enhance the digital knowledge platforms to suit Member requirements

PRIORITIES - ASSISTING PROJECTS

- Complete the first round of Project Support Program
- Develop mechanisms to share knowledge generated by support programs
- Establish member groups to address specific technical learning from projects:
 - Hub Development Challenges, in collaboration with the Clinton Foundation;
 - Managing Impacts of CO₂ Storage on Groundwater, in collaboration with IEAGHG;
 - Storage Learning from EOR Operations, in collaboration with IEAGHG; and
 - Project Integration Challenges, in collaboration with CSLF Technical Group.
- Public Engagement / acceptability learning issues to be disseminated through further development of the CSIRO/Institute Public Engagement Toolkit and related programs

CONCLUSION

The Global CCS Institute will:

- Further develop strong business planning and performance culture.
- Be a catalyst to address the challenges of development and deployment of large scale integrated projects.
- Be a robust advocate of CCS as a low emission technology.
- Work with all stakeholders (Governments, industry, research institutes, community groups, NGOs) to overcome barriers to CCS.
- Be globally collaborative and become the most comprehensive global reference library and knowledge sharing platform on CCS.



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