

CSLF Policy Group

Bob Pegler, SVP – Europe Global CCS Institute 7 October 2010

WHAT WE DO

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 by:

1. SHARING KNOWLEDGE

- Collecting information to create a central repository for CCS knowledge
- Creating and sharing information to fill knowledge gaps and build capacity

2. FACT-BASED ADVOCACY

- Informing and shaping domestic and international low carbon energy policies
- Increasing the awareness of the benefits of CCS and the role it plays within a portfolio of low carbon technologies

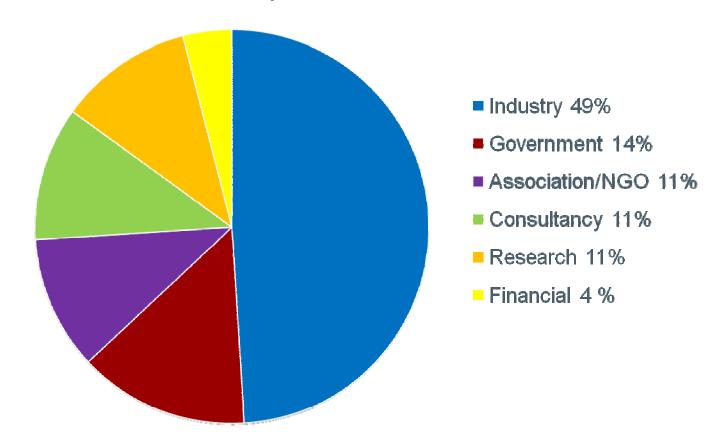
3. ASSISTING PROJECTS

- Tackling specific barriers, particularly amongst early movers
- Bridging knowledge gaps between demonstration efforts

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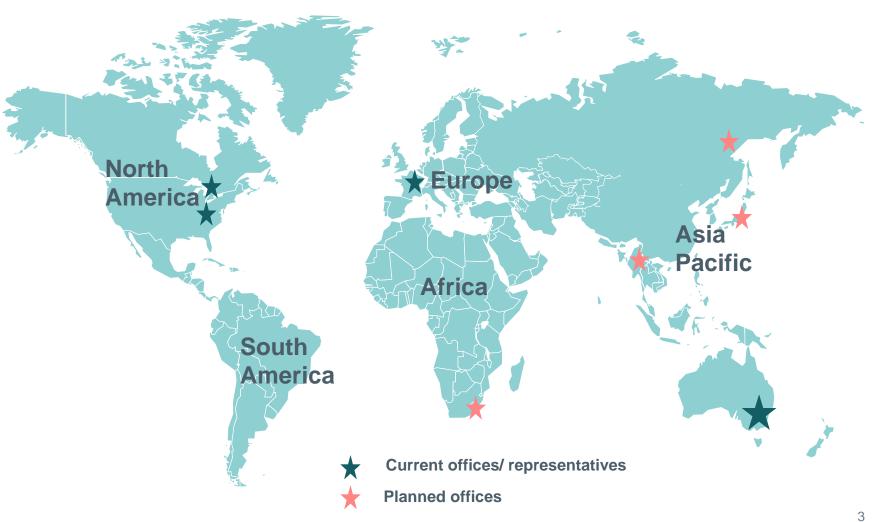
MEMBERSHIP BREAKDOWN

263 Members as of September 2010



 More than 80% of global GHGs are captured through the Institute's membership, which includes United States and China.

REGIONAL PROFILES AND GLOBAL SERVICES NETWORK



GLOBAL OUTCOMES

"Global CCS Institute approach - long-term outcomes supported by near-term targeted action"

2015 > 2020 > 2050

Relevant CCS demonstration projects underway Directly contribute to development of the IEA proposed 100 projects globally CCS an integral part of the suite of options to limit global temperature increases to 2 degrees 3400 projects globally

THE INSTITUTE IS A KNOWLEDGE SHARING ORGANISATION

OVERARCHING OBJECTIVE

"To accelerate the broad deployment of commercial CCS"

Regional Profiles and Global Services

ENABLING STRATEGIES

Policy/Regulatory

Financial/Commercial

Public Awareness

Technical

Capacity Building

PROJECTS STRATEGY

Strategic Analysis of Projects

Project Support Program

Thematic Focus Groups

KNOWLEDGE SHARING

MEMBERS

Services Model Member Charter

THE SIX KEY ENABLERS FOR CCS DEPLOYMENT

Policy, regulatory and legal

• Clear policies, legal and regulatory frameworks provide industry with the certainty they need to make investment decisions.

Financial and commercial

 Establishment of appropriate financial mechanisms and sufficient funding for CCS are needed to incentivise CCS and support large scale project deployment.

Public awareness

 Greater public awareness and understanding of CCS is needed to improve sentiments towards CCS technologies and reduce delays in project development.

Technical

 The long-term effectiveness of CCS will depend on the right technologies being available and competitive with other clean energy technology options.

Knowledge management

 Capturing and disseminating CCS knowledge is critical for accelerating technology diffusion, innovation and cost reduction and for addressing the knowledge needs of all stakeholder groups.

Capacity and capability building

 Large scale deployment of CCS projects will depend on countries having access to the right skills, knowledge and capabilities.

A CRUCIAL ROLE AND DEFINITIVE PURPOSE

The Global CCS Institute has an aims to in reduce the impact of climate change and enhance energy security

Removing CCS barriers

Create an environment conducive to CCS deployment

Knowledge Broker

Provision of fact-based, evidence-based information & advice

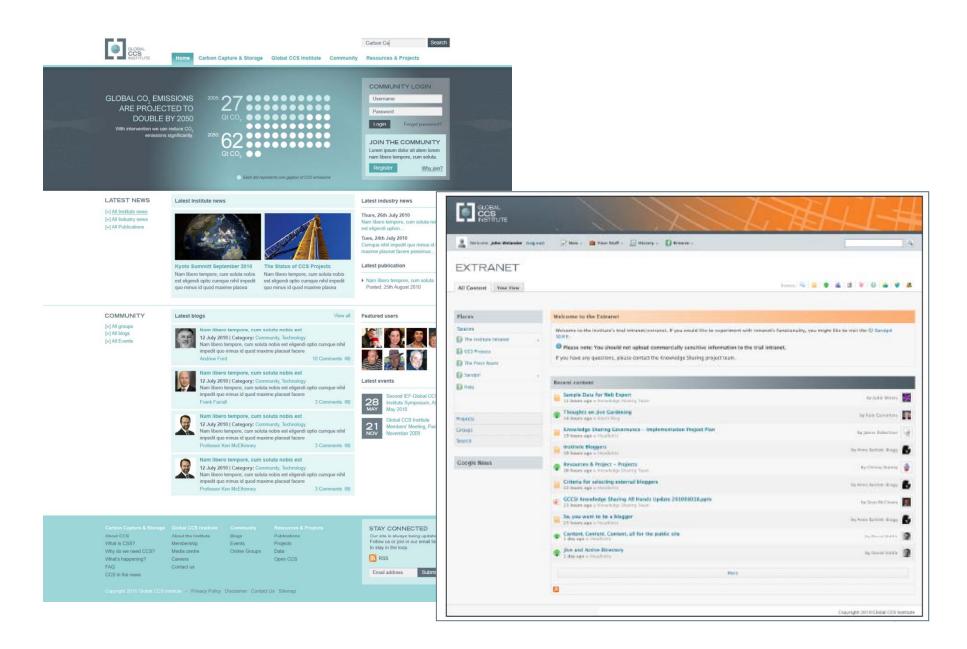
Key Global Influencer

Influence Governments, industry and CCS stakeholders

KEY ASPECTS OF THE GLOBAL CCS INSTITUTE'S APPROACH

- 1. <u>Stakeholder-oriented</u> knowledge sharing across a broad set of stakeholders
- 2. <u>Digital</u> an advanced platform to complement face-to-face knowledge sharing
- 3. Simplified standards for knowledge contracts and project reporting
- 4. <u>Accelerated</u> funding of projects and content providers to more quickly build a knowledge repository
- 5. People-centric a focus on engaging individuals more than knowledge products
- 6. Global providing the "global glue" to connect existing networks
- 7. Commercial making knowledge sharing a win-win
- 8. <u>Continuously improved</u> an ongoing focus on better solutions through member engagement

THE NEW WEBSITE AND EXTRANET GO LIVE OCTOBER 2010



WE HAVE AN ARRAY OF KNOWLEDGE FROM PROJECTS IN THE PIPELINE

Reports and case studies

- Methodologies for CO2 storage assessment
- Consortium and supply chain optimization
- Health, safety and environmental analyses
- Bridging the commercial gap for CCS
- Risk assessment of CO2 storage
- Socio-economic impact of integrated CCS projects
- Developments in MMV technology research
- Regulatory gaps for implementing CCS
- Bottlenecks and lessons learned

Papers

- approaches for public relations management
- enhanced oil recovery and deep saline sequestration alternatives

Public fact sheets

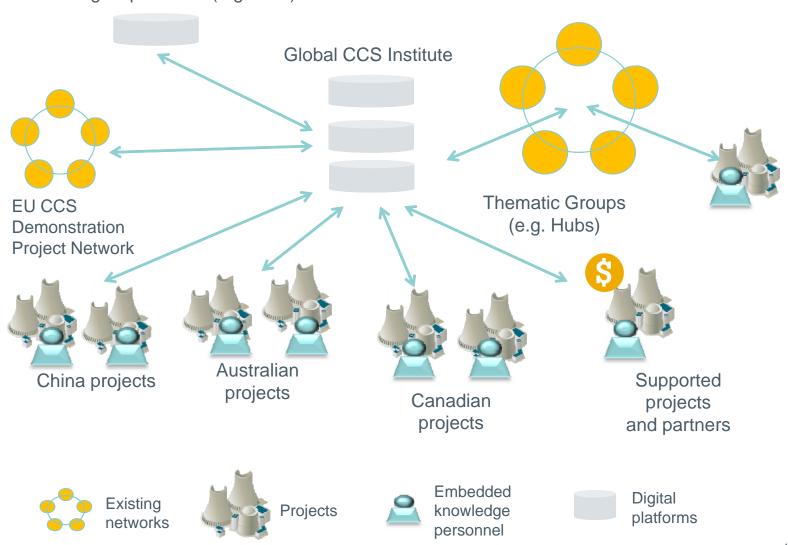
- transportation of CO2
- enhanced oil recovery
- Geosequestration
- CO2 capture technologies

Expert workshops

- CCS System Integration
- Risk management for CCS projects

WE WILL DRIVE KNOWLEDGE CREATION THROUGH FUNDING, RESOURCES AND CONNECTING EXISTING NETWORKS GLOBALLY

Other digital platforms (e.g. DoE)



PROJECTS STRATEGY

Strategic Analysis of Projects

Maintain a comprehensive, global view of Project progress and challenges.

Project Support Program

Directly support member activities which address key Project barriers.

Knowledge Sharing

Share knowledge created from CCS demonstration to address the diverse needs of different stakeholder groups .

PROJECTS INITIAL WORK PLAN

Strategic Analysis of the Global Status of CCS

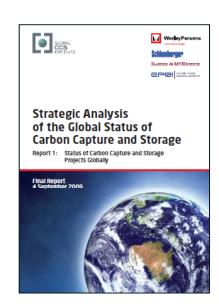
- Regular comprehensive review ('stock take') of CCS worldwide
- The Institute is currently supporting the report to the G8 and leading the Major Economies Forum report on CCS status

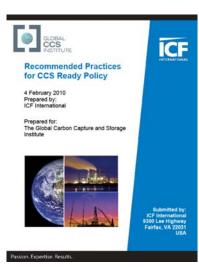
Portfolio of CCS Projects

- A `desired` CCS portfolio
- Spanning the range of different technologies, industrial sectors and geographic regions

Preparing the way for CCS Projects

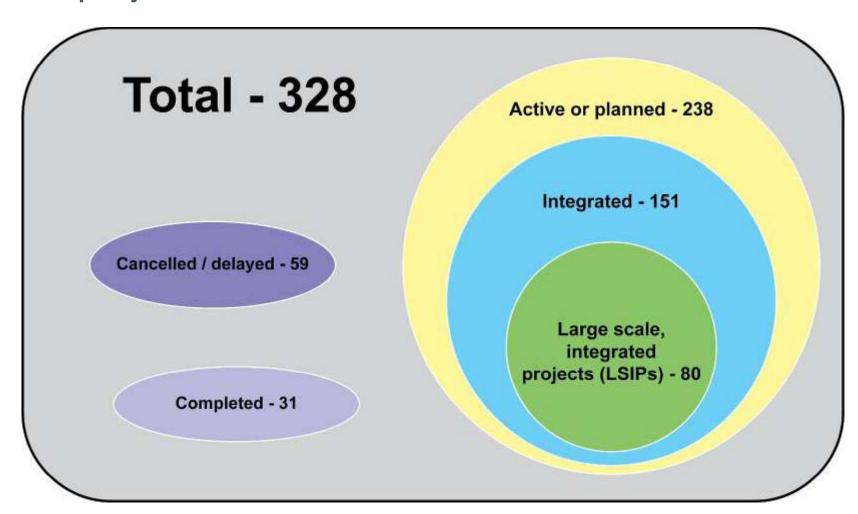
- Project Support Program
 - Directed at reducing barriers to implementation
 - > Initiated December 2009
- CCS Ready Reports
 - Development of a 'CCS ready' definition and recommended practices for policymakers.





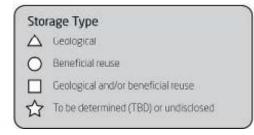
2010 CCS PROJECT UPDATE RESULTS:

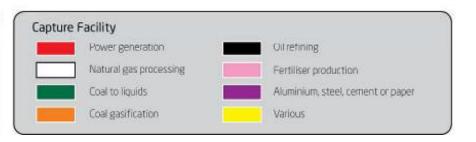
328 projects identified worldwide in 2010



GLOBAL REPRESENTATION OF PROJECTS







KEY CONCLUSIONS FROM PROJECT STOCK TAKE

- Significant project development activity especially for CCS in coal-fired power generation.
- Other large stationary emissions sources such as steel and cement production significantly under-represented.
- Clusters of projects in Nth America, Europe and Australia.
- In terms of a "balanced portfolio"- significant underrepresentation in developing countries.
- Key challenges remain –financing, policy uncertainty, public acceptance.

