

A World of Carbon Capture and Storage Projects but more rapidly needed - shows Global CCS Institute report

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The Global Carbon Capture and Storage (CCS) Institute today released a report which shows that there is growing action being taken to achieve the G8 objective of deploying at least 20 commercial scale CCS projects globally by 2020. Despite this progress the report also showed that due to commercial, technical and regulatory hurdles there is the urgent need to rapidly identify and advance a larger and more diverse portfolio of projects to ensure success.

The report titled *'Strategic Analysis of the Global Status of Carbon Capture and Storage'* shows that the majority of advanced projects are focussed on coal-fired power generation, recognising the need to implement solutions that address the world's current and future use of coal in a carbon constrained environment.

The study reveals that in order to accelerate the deployment of CCS projects the world must exploit cost advantages that exist in advancing projects in developing countries such as China and India, and industries such as natural gas processing and fertiliser production in which CO₂ capture is inherent in their design. The study also confirms that greater efforts towards CCS need to be made within the cement, aluminium, iron and steel industries, given their significant contribution towards CO₂ emissions.

Global CCS Institute CEO Nick Otter said "We know that many of the CCS technologies are available today to be applied across a range of industries to help reduce emissions. This report demonstrates the need to not only deploy more projects, more quickly, but to deploy more types of projects, and in more places, so that we can learn how to design the best possible facilities, bring down costs and create a valid business case for CCS."

The Global CCS Institute – an initiative to accelerate the worldwide commercial deployment of at-scale CCS – commissioned a WorleyParsons-led consortium to undertake what is the most comprehensive review and analysis of the world's current CCS projects.

The research was undertaken to advance the understanding of the status of CCS projects, the costs involved, the status of supporting policy initiatives, the research and developments efforts being pursued, and the gaps and barriers to deployment at scale.



Key findings of the report which demonstrate the depth of the action currently being taken include:

- There are 213 active or planned projects with 101 of commercial scale – demonstrating the existence of a significant pipeline of potential projects being investigated around the world.
- There are 62 fully integrated, commercial scale projects each of which demonstrates every stage of the CCS process chain of CO₂ capture, transport and storage. Seven of these projects are already operating and 55 are at various stages of progress making them potential candidates for contributing to the G8 objective.
- The leading developers of fully integrated, commercial scale projects include participants in the Europe (37%), USA (24%), Australia (11%) and Canada (10%), with distribution throughout Asia, South America and Africa relatively low.

The report highlights that widespread take-up of CCS is faced with the stark risk of high project failure rates typical with the adoption of new technologies, but that this can be overcome by targeted project support, and appropriate incentives for development.

Recommendations put forward by the report call for governments to partner with industry to address the challenges facing project success. The recommendations suggest urgent action on three major fronts:

- Actively working with the 55 active or planned fully integrated projects to improve their likelihood of success.
- Developing national strategies where absent to provide incentives to innovate or invest in CCS technology.
- Establishing a regulatory framework that assigns a value to carbon, resolves long-term storage liabilities and underwrites critical infrastructure.

“The challenge is great but governments have a unique capacity to take the leadership required to secure the energy that is needed in a carbon constrained world,” said Nick Otter.

“The Global CCS Institute is taking on this challenge every day. We now have in place the most comprehensive database of CCS projects ever created, and with our partners we will use this knowledge to fast track key projects and provide support to allow all project proponents address the barriers facing development,” he said.

The complete report ‘*Strategic Analysis of the Global Status of Carbon Capture and Storage*’ can be found at www.globalccsinstitute.com.



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Notes to editors

About the Global CCS Institute:

- The Global CCS Institute is an initiative to accelerate the worldwide commercial deployment of at-scale CCS, whereby CO₂ is captured, transported and then injected deep underground for secure, long-term storage.
- The Global CCS Institute has unprecedented international support, with more than 20 national governments and over 120 leading corporations, non-government bodies and research organisations signed on as Members or Collaborating Participants.

About the report

- In May 2009 the Global CCS Institute commissioned a WorleyParsons-led consortium of Schlumberger, Baker McKenzie and the Electric Power Research Institute to undertake a comprehensive survey of the global status of CCS.
- The *Strategic Analysis* consists of a number of reports, the fifth of which is a synthesis report that summarises the four foundation reports, presents gaps and challenges assessment, risk analysis and CCS project analysis, as well as providing mitigation strategies and recommendations to the Global CCS Institute.