

## Paris climate change targets cannot be met without CCS: COP23

**Bonn: Embargoed to 15.30 (CET) Monday 13 November, 2017:** Policy parity and the rapid acceleration of carbon capture and storage (CCS) facilities are imperative to meeting Paris climate change targets, climate experts heard today.

Launching its Global Status of CCS Report: 2017 today at the 23<sup>rd</sup> Conference of the Parties (COP23) in Bonn, Global CCS CEO, Brad Page, said renewables alone would not meet international climate change targets, and expert opinion was conclusive that CCS must be part of a suite of clean technologies needed achieve below 2 degree targets.

“In the past year, we have seen significant advances in the number of facilities being deployed and awareness of CCS as a pivotal climate change solution is the highest it has ever been.

“Two large-scale facilities came onstream in the United States, eight moved into various stages of development in China, and in Europe, we have seen realisation that CCS is the only technology capable of decarbonising industry and creating a new energy economy - including hydrogen, bioenergy and 2°C re-use applications.

“However, the challenge still remains to ensure that CCS receives the same consideration and incentivisation as other clean technologies, particularly renewables.”

Also speaking at the launch, Lord Nicholas Stern, Chair of the Grantham Research Institute on Climate Change and the Environment at the London School of Economics and Political Science, pointed out that the Paris Agreement had been drafted, signed and ratified to date by 169 countries at an unprecedented rate but that there was still a significant gap between the collective national commitments to cut emissions and the goals of the Agreement.

He said: “Most serious analysis has concluded that it will be very difficult to achieve the Paris goals without carbon capture and storage or use.”

“We must pursue low-carbon and zero-carbon growth across the board in our cities, infrastructure and land use. Carbon capture and storage or use can play a key role in the transition to low-carbon economic growth and development in many parts of the world.”

Echoing these comments, Energy Future Initiative Distinguished Associate, Dr Julio Friedmann, said current policies in most jurisdictions were biased and short-sighted.

“All the benefits commonly cited for renewables and nuclear, such as native industrial support, cost reduction, and emissions reduction, apply to CCS/CCUS as well. Attention must be paid, and speed is needed.”

The Global Status of CCS: 2017, includes a commentary from Australia’s Ambassador for the Environment, Patrick Suckling, who says we must pull all levers to implement the Paris Agreement.

“Without CCUS, the IPCC says the cost of meeting global targets will double and the IEA says the energy transition would cost US\$3.5 trillion more.

Achieving the Paris Agreement's goals will require a renewed focus on international CCS/CCUS collaboration. A renewed push would provide governments with the confidence to develop technology neutral energy and climate change policies that provide incentives to all emissions reduction technologies, including CCUS. This will help to ensure our energy and industrial sectors are affordable and reliable as we transition to a lower emissions future."

Also writing in the Report, the Father of the phrase "global warming", Columbia University Professor, Wallace Smith Broecker, said the dependence on fossil fuels will come to an end and the world will be powered by renewables.

"But as this energy utopia lies many decades in the future, by the time we arrive there, we will be saddled with an atmosphere laden with excess CO<sub>2</sub>. Garbage brought disease to our streets. We learned to dispose of it. Sewage poisoned our waters. We learned to treat it. CO<sub>2</sub> threatens to change our climate. Hence, we must learn how to capture and bury it."

Key highlights from the Global Status of CCS: 2017 are:

- To reach Paris climate targets:
  - more than 2000 CCS facilities will be needed by 2040
  - 14 per cent of cumulative emissions reductions must be derived from CCS;
- There are now 17 large-scale CCS facilities operating globally, with four more coming onstream in 2018;
- Current CO<sub>2</sub> capture is 37 million tonnes per annum (Mtpa) – equivalent to removing eight million cars from the road each year;
- CCS is the only clean technology capable of decarbonising industry – steel, chemicals, cement, fertilisers, pulp and paper, coal and gas-fired powered generation;
- To date, more than 220 million tonnes of anthropogenic CO<sub>2</sub> has been safely and permanently injected deep underground;
- In Asia and the Pacific (APAC), 11 CCS facilities are in varying stages of development including eight in China;
- In Europe, Middle East and Africa (EMEA), four large scale facilities are operating successfully (two in Norway and two in the Middle East), with two more in early development in the United Kingdom);
- Twelve of the 17-large scale facilities in operation are located in the United States and Canada and two of those came onstream in the past twelve months (Petra Nova and Illinois Industrial);
- CCS is now proving its versatility across five industrial sectors in the United States – natural gas processing, power, fertiliser, hydrogen and biofuels;
- On a like-for-like basis, CCS is cheaper than intermittent renewables and costs continue to fall.

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**About the Global CCS Institute:** The Global CCS Institute is an international membership organisation. Our mission is to accelerate the deployment of carbon capture and storage (CCS), a vital technology to tackle climate change and provide energy security.

Working with and on behalf of our Members, we drive the adoption of CCS as quickly and cost effectively as possible by sharing expertise, building capacity and providing advice and support so that this this vital technology can play its part in reducing greenhouse gas emissions.

Our diverse international membership consists of governments, global corporations, small companies, research bodies and nongovernment organisations, committed to CCS as an integral part of a low-carbon future. We are headquartered in Melbourne, Australia with regional offices in Washington DC, Brussels, Beijing and Tokyo. For more information, visit [www.globalccsinstitute.com](http://www.globalccsinstitute.com)