



press release

Tel: 33 (0)1 40 57 65 54

Fax: 33 (0)1 40 57 65 59

IEA/PRESS(08)20
Paris, 20 October 2008

IEA urges a quick and global push to develop and deploy Carbon Capture and Storage (CCS) technologies

Carbon dioxide capture and storage (CCS) is one of the most promising technological solutions to curb greenhouse gas emissions and to salvage our climate. Still, many questions remain. To date, only four full-scale CCS projects exist in the world; none of these projects captures carbon dioxide (CO₂) from a coal-fired power plant. “The window of opportunity is closing for the global community to cost-effectively address climate change. CCS technologies must play a key role, but first they must be proven in the next decade”, said Nobuo Tanaka, Executive Director of the International Energy Agency (IEA) today in Paris, at the launch of *Carbon Dioxide Capture and Storage: A Key Carbon Abatement Option*.

This new IEA study demonstrates that CCS can deliver cost-effective emissions reductions, but governments and industry must come forward to finance large-scale CCS demonstrations and to work together more widely. “The IEA can help with this collaboration”, said Mr. Tanaka. “If we do not successfully demonstrate CCS soon, it will raise costs significantly for other climate mitigation options”.

Under current energy policies, greenhouse gas emissions are projected to grow rapidly, with a major contribution coming from fossil fuel combustion in power plants and industry. The IEA, in its 2008 *Energy Technology Perspectives (ETP)* study, projects that energy-related CO₂ emissions would grow by 130% until 2050 in the absence of new policies. This increase would largely be a result of increased fossil fuel usage. The 2007 Intergovernmental Panel on Climate Change (IPCC) *4th Assessment Report* indicates that such a rise in emissions could lead to a temperature increase in the range of 4-7°C, with major impacts on the environment and human activity. There is a large consensus that a halving of energy-related CO₂ emissions is needed by 2050 to limit the expected temperature increase to less than 3 degrees. Meeting this formidable challenge will take an energy technology revolution. The massive changes will involve enhanced energy efficiency, increased renewable energies and nuclear power, and the decarbonisation of power generation from fossil fuels.

In the power and industrial sectors alone, CCS could contribute nearly one-fifth of the reductions needed to halve back greenhouse gas emissions by 2050, and this at reasonable cost. “CCS is therefore essential to the achievement of deep emission cuts,” emphasised Mr. Tanaka. “Most of the major world economies recognise this and have CCS technology development programmes designed to achieve commercial deployment.” At the 2008 Hokkaido-Toyako summit, the G8 countries announced that 20 large-scale CCS demonstration projects must be committed by 2010, with a view to broad commercial deployment in 2020. Ministers asked the IEA to assess how much progress will have been made in terms of implementation by that time.

INTERNATIONAL ENERGY AGENCY

9, rue de la Fédération, 75739 Paris Cedex 15, France

www.iea.org

Carbon Dioxide Capture and Storage: A Key Carbon Abatement Option finds that current CCS spending and activity levels are nowhere near enough to achieve the G8 goals. CCS technology demonstration has been challenged by a global increase in costs and a lack of suitable financial mechanisms to support it. Foremost, the IEA believes that up to USD 20 billion is needed for near-term demonstrations, in addition to the plants base costs. It is also important to integrate CCS into greenhouse gas (GHG) regulatory and incentive schemes.

While progress is underway in some countries, no country has yet developed the comprehensive, detailed legal and regulatory framework that is necessary to govern effectively the use of CCS. Also, CCS is poorly understood by the general public with the result that there is a wide-spread lack of public support for this technology as compared to several other GHG mitigation options.

Next to an updated analysis on the potential, cost and performance of CCS technologies, the study discusses the financial incentive mechanisms that governments can use, and proposes a CCS Roadmap with the necessary technical, political, financial and international collaboration activities to achieve their emissions reduction goals. It is now time to act”, said Mr. Tanaka. “We hope that this study helps governments and industry to take immediate steps to make a major difference on climate change with CCS.”

Journalists may obtain review copies of *Carbon Dioxide Capture and Storage: A Key Carbon Abatement Option* from the IEA Communication and Information Office in Paris. E-mail: IEAPressOffice@iea.org

Carbon Dioxide Capture and Storage: A Key Carbon Abatement Option may be ordered from IEA Books, International Energy Agency, 9, rue de la Fédération 75739 Paris Cedex 15. Fax: + 33 (0) 1 40 57 65 59; e-mail: books@iea.org, www.iea.org/books

Carbon Dioxide Capture and Storage: A Key CO2 Abatement Option
pp. 264
(61 2008 011P1) ISBN 978 92 64 04140 0
Price: € 100

Press contact: Sylvie Stephan, Telephone +33 (0) 1 40 57 65 50; e-mail:
IEAPressOffice@iea.org

Have a look at our journalist's page:
<http://www.iea.org/journalists/index.asp>