

**Comments by Nobuo Tanaka, Executive Director, IEA,
at the Launch of *CO₂ Capture and Storage: A Key Carbon Abatement Option*
IEA, Paris, 20 October 2008**

Thank you for joining us today for the launch of this publication, a very important contribution to the pursuit of a cleaner, smarter energy future through carbon dioxide capture and storage.

Another recent IEA publication, *Energy Technology Perspectives*, indicates that existing energy policies will see CO₂ emissions increase by 130% between now and 2050. The IPCC's 4th assessment report indicates that such an increase in this and related GHG emissions would lead to an average temperature rise in the range of 4-7 degrees Celsius.

This emissions increase is mainly the result of higher levels of fossil fuel consumption. As such, an energy technology revolution is needed. In particular, we must increase energy efficiency, decarbonise the power sector and revolutionise transportation. If we can do this, we will be able to cut global CO₂ emissions by 50% by 2050 – in other words, we could reach a level of 14 Gt of CO₂ per year in 2050 instead of the currently projected 62 Gt per year in 2050. This would see us close to the IPCC's suggested atmospheric GHG stabilisation scenario of 450 ppm.

CO₂ capture and storage – or CCS – is one of the most vital options for revolutionising power generation, with CCS projected to deliver 20% of the total CO₂ savings needed to cut global emissions by 50% by 2050. In particular, CCS holds great potential for coal- and gas-fired power plants, as well as for some activities in the industrial sector, such as cement, steel and chemical production. However, significantly more work is needed to progress CCS technologies, accelerate their deployment and reduce costs.

During the last G8 Summit, in Hokkaido in July 2008, G8 Leaders called for 20 CCS demonstration projects to be committed by 2010. Given the lead time involved in plant construction and site assessment, this would mean that those plants should be operational between 2015 and 2020.

Among other key findings, the IEA publication that we are here to launch today projects that the total additional investment needed for those demonstration projects would be 20 billion dollars (above the plant 'base cost' without CCS). However, when considering these costs, we must bear in mind that without CCS, emissions abatement to the levels required would be much more costly.

There are today only four large-scale size CCS projects in the world. If we are to reach the 50% CO₂ reduction goal by 2050, the total combined size of these projects should be multiplied by more than one thousand. So we must step up our CCS efforts immediately to ensure that the CCS 'window of opportunity' is not lost, whereby we would see a 'carbon lock-in', with most power plants being built without CCS.

In order to accelerate deployment and minimise unnecessary duplication, the IEA is calling for international collaboration to agree on the demonstration and deployment of important CCS technologies. The IEA Greenhouse Gas R&D programme and the CSLF, alongside the IEA itself, have been seeking to coordinate international efforts in this regard. The challenge now is for all actors to take CCS efforts to the next level, and here the IEA can continue to help. This publication is one of the steps in that process and I thank you all for joining us today for its launch.