

## China ventures into carbon capture

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[BEIJING] China and Australia will test a post-combustion capture (PCC) pilot plant in Beijing as part of a plan to cut carbon dioxide emissions from thermal power stations.

The plant, officially announced last week (31 July), is a collaboration between the China HuaNeng Group, the country's largest power producer, and Australia's Commonwealth Scientific and Industrial Research Organisation (CSIRO).

The PCC pilot project, designed by the Xi'an Thermal Power Research Institute and installed in a HuaNeng power plant in suburban Beijing, will be the first application of carbon dioxide removal from power stations in China and is expected to capture 3,000 tonnes of the gas annually.

PCC technology feeds gases from power stations through an absorbent solution that contains a chemical to capture carbon dioxide.

"This technology is important as it provides a way to reduce carbon dioxide emissions from existing power stations," David Brockway, head of CSIRO's energy technology division, told SciDev.Net. "Emission reductions will be in excess of 85 per cent. As coal is widely used in China, it is perhaps the only way to reduce emissions on a large scale."

China is the largest consumer of coal in the world. According to statistics from the China National Development and Reform Committee, in 2005, 69 per cent of the country's primary energy consumption was coal, used mainly for thermal power.

CSIRO successfully trialled PCC at the Loy Yang Power Station in Victoria State, Australia, in July this year.

But the technology leads to an increase in power generation costs, discouraging its application in power stations, especially those in China, where the price of electricity is controlled.

"There is still a long way to go. The carbon capture and storage technology is just in its early stage," says Zou Ji of Renmin University of China and a Chinese delegate of the Conference of Parties to the UN Framework Convention on Climate Change.

Zou told SciDev.Net that developed countries should give more support to developing countries, both technologically and financially, to help them develop locally applicable carbon emission reductions.

According to a CSIRO news release, the pilot project will initially focus on assessing the performance of PCC under Chinese conditions.

<http://www.scidev.net/en/news/china-ventures-into-carbon-capture.html#>