

CHINA LEADING GLOBAL EFFORTS ON CLEAN COAL

China is come a step closer to capturing and storing its carbon emissions with the launch of the GreenGen coal gasification plant in Tianjin, according to a report in *Nature*.

Carbon capture and storage was highlighted by the leaders of the G8 group of nations in 2008, when they called for the development of 20 large-scale projects demonstrating carbon capture technologies by 2010. But with the exception of a few initiatives in Australia, Europe and the United States, many plans been delayed or cancelled.

As a result, even though the state-owned Huaneng Group's GreenGen project is more than a year behind schedule, its progress means that China is leading global efforts to exploit coal resources without releasing carbon dioxide.

The first phase of the US\$1.5 billion project is a 250-megawatt power plant that will convert coal into a mixture of carbon monoxide and hydrogen to produce electricity. Separating carbon dioxide from the waste outputs of such plants is easier than in conventional plants. It is due to be fired up during the northern hemisphere Spring.

Work has also begun on the second phase of the project, which will involve the development of a small pilot plant to produce electricity from hydrogen. Phase three, scheduled for completion by 2020, will be a 400-megawatt, fully functioning carbon capture and storage plant.

GreenGen represents both a high degree of technical sophistication and a real commitment on China's part to clean-energy technology, Julio Friedmann, head of the carbon-management programme at Lawrence Livermore National Laboratory in California, United States, told *Nature*.

There can be no doubt that China has achieved something remarkable.

Other countries, such as the United Kingdom, are trying to renew interest in carbon capture and storage. But Howard Herzog, a carbon storage expert at the Massachusetts Institute of Technology in the United States, says that the lack of a firm carbon policy to reward such initiatives makes turning a profit difficult.

The question is whether there is a CCS [carbon capture and storage] market anywhere in the world.

Source: <http://www.scidev.net/global/pollution/news/china-leading-global-efforts-on-clean-coal.html>