

Global Carbon Capture and Storage Institute Launched in Canberra

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CANBERRA, Australia, April 16, 2009 (ENS) - Australian Prime Minister Kevin Rudd today formally launched the Global Carbon Capture and Storage Institute at the inaugural meeting of the institute's foundation members in Canberra.

The institute aims to accelerate the deployment of carbon capture and storage technology globally and the sharing of information to deal with the reality of coal-fired electricity generation, "the greatest single contributor to greenhouse gas emissions created by human activity, Prime Minister Rudd said at the launch.

"This institute recognizes the cold hard reality that coal will be the major source of power generation for many years to come – with the 2008 IEA World Energy Outlook forecasting that the share of electricity generation sourced from coal will rise from 41 percent now to 44 percent by 2030. This is a reality we have to deal with," said Rudd.

There is a long way to go, because currently there are no integrated industrial-scale carbon capture and storage projects anywhere in the world.

Carbon capture and storage involves capturing carbon dioxide from large sources such as fossil fuel power plants and refineries and permanently storing it away from the atmosphere, either in deep geological formations, in deep ocean masses, or in the form of mineral carbonates. Each of these possibilities is complicated by engineering and environmental challenges.

Australia is the world's fourth largest producer of hard coal, and the prime minister said today that Australia has a national and shared global responsibility to establish the workability of carbon capture and storage technology at a commercial scale.

"If we succeed together," said Rudd, "Australia and the world will benefit greatly in dealing with the challenge of climate change. If we fail through this and other shared enterprises around the world and establish that CCS cannot deliver the outcomes we need, then the challenge of global climate change action will be even greater than we currently contemplate. The stakes are very high in the gathering to which you have come here in Australia today."



**Prime Minister
Kevin Rudd** (Photo
courtesy Office of the Prime
Minister)



The Bayswater power plant in New South Wales is one of Australia's two largest coal-fired generating stations. (Photo courtesy Macquarie Generation)

The government announced the institute in September 2008 with annual funding of up to \$100 million. Two weeks ago, former World Bank chief James Wolfensohn was appointed to chair the institute's International Advisory Panel.

Rudd said today that when he discusses the institute with other government leaders, "it engages a level of interest and enthusiasm beyond the diplomatic and beyond the polite because governments around the world and the largest corporations around the world understand instinctively how critical this work is."

At last year's APEC Summit in Lima, and at both G20 meetings "this is generally accepted as being an important initiative for us all," the prime minister said.

"In July last year, the G8 group of leading economies endorsed an International Energy Agency and Carbon Sequestration Leadership Forum recommendation and committed to at least 20 fully-integrated, industrial-scale projects by 2010, in order to achieve the broad deployment of CCS by 2020," Rudd told the members, warning, "The clock is ticking."

Following the G8 decision, the Australian government commissioned the Boston Consulting Group to review the status of carbon capture and storage projects worldwide.

"That report found that although there are several important demonstrations of both capture and storage," said Rudd, "there are no integrated industrial-scale carbon capture and storage projects anywhere in the world."

The fledgling institute has received strong international support with 16 national governments and more than 40 major companies in the coal, oil and gas, electricity, technology, finance and research sectors signing on as foundation members and collaborating participants.

In addition to Australia, national government members include: Abu Dhabi, Canada, the European Commission, France, Germany, Indonesia, Italy, Japan, Mexico, Netherlands, New Zealand, Norway, Papua New Guinea, South Africa, South Korea, the United Kingdom and the United States. The government of China is a collaborating participant.



At Ketzin, just outside Berlin, Germany, CO2SINK is a joint project between 18 companies and institutes from nine countries developing the basis for CCS storage by injecting CO2 into a saline aquifer. (Photo courtesy [European Commission](#))

Five of Australia's state governments are foundation members, as are energy, manufacturing and mining corporations such as Chevron, ExxonMobil, Shell, Dow, General Electric, Hitachi, Nippon Steel, Mitsubishi, Toshiba, BHP Billiton, Rio Tinto, RWE Power AG, StatoilHydro, and Xstrata Coal, among others.

Influential organizations such as the Australian Coal Association, the World Coal Institute, the Japanese Coal Energy Center, the Clinton Foundation and the Climate Group are members, as are the Asian Development Bank, the Japan Bank for International Cooperation and the International Energy Agency. The World Bank is a collaborating participant.

More members are expected to join by July 1, 2009 when the institute will become a separate legal entity.

Rudd repeatedly warned that there is no time to lose. "Globally, the latency of greenhouse gas emissions means that for every day we delay global action on climate change, we intensify the long-term impacts of global warming," he said. "We face an enormous global challenge in reconciling the irresistible force of growing global demand for energy and the immovable reality that we must act to combat climate change."

"In the years to 2025 – a mere 16 years - the world's urban population is forecast to grow by 1.4 billion people. More than 60 percent of that population growth will occur in Asia alone. That means 840 million more people in Asia consuming electricity and fuel, as they move towards living standards that we in the developed world take for granted," he said.

"Of course, the two emerging giants are China and India, giants that are hungry for cheap energy to power their growth. Giants, therefore, hungry for coal and that between them, hold around one-fifth of the world's coal reserves," said Rudd. "By 2030 around one quarter of global electricity production will be from coal-fired power stations in China and India."

Australia is beginning to move towards carbon capture and storage solutions. At the end of March, the Rudd Government announced the world's first commercial release of greenhouse gas acreage for industry. Ten offshore areas were released as potentially viable greenhouse gas storage sites.

Rudd said today, "Carbon capture and storage is not the only answer to the climate change challenge. But it is a very important part of the global transition to a lower carbon global economy, a transformation of the global economy every bit as significant as the industrial revolution in the 18th century and the information revolution of recent times."