

**SPEECH AT THE LAUNCH OF  
THE GLOBAL CARBON CAPTURE AND STORAGE INSTITUTE  
HOTEL REALM, CANBERRA  
BY THE PRIME MINISTER OF AUSTRALIA KEVIN RUDD MP**

**16 April 2009**

I am delighted to join you this morning for this inaugural meeting of members of the Global Carbon Capture and Storage Institute.

It's almost 18 months ago since Australians elected a new Government. The first act of that Government, after I was sworn into office, was to sign the instrument of ratification of the Kyoto Protocol.

We sent a clear message to Australia and to our friends around the world.

We made it clear that we would honour our commitment to end an era of denial about climate change and its impact on the world, our own nation, our own environment and on the economy.

And we made it clear that we would act on climate change, at home and abroad, because without one another, without acting with each other it's impossible to bring about real change. And we made it clear that Australia would begin to shift from being part of the global climate change problem to being part of the global climate change solution.

We have taken a number of steps forward in the past 18 months on each of the three pillars of the Government's response to climate change: reducing Australia's carbon pollution, helping to shape a global solution, and adapting to the impacts of climate change that we cannot avoid.

On the first pillar of this strategy, we have made extensive progress on our plans to reduce Australia's greenhouse emissions through a Carbon Pollution Reduction Scheme, to place a price on carbon. And by boosting renewable energies in Australia and by boosting energy efficiency measures, including investing in home insulation that will help reduce the carbon footprint in some 2.7 million Australian households.

On the second pillar of our approach, the Government's climate change strategy, we have worked extensively with other nations to advance a global agreement on reducing carbon emissions ahead of the summit in Copenhagen this December. This was a major item in my discussions with United States President Obama in Washington earlier this month.

And on the third pillar of climate change adaptation, we have invested significantly in initiatives to help those parts of Australia most exposed to the impacts of climate change – including our farming communities.

The Government's climate change strategy is being implemented step by step, recognising the urgency of the environmental and the economic imperative for action. The economic imperative is becoming clearer and clearer, as Australia is among the first nations in the developed world to feel the economic impacts of climate change.

The Government believes that the economic cost of inaction on climate change is far greater than the cost of action and that sustained inaction imperils our economy and the global economy.

That's why after a decade of inaction on climate change, this Australian Government is committed to a systematic program of action both at home and abroad. And that's why today we take another important step forward in the Government's response to climate change – as we launch this Global Carbon Capture and Storage Institute.

The GCCSI is a major initiative to drive global cooperation to deploy technologies that can play a very important part in our transition to the low carbon economy of the future. In just seven months, we have obtained the support for the GCCSI from 85 of the most significant governments, corporations and institutions around the world – supporting a project to deal with the reality of coal-fired electricity generation over the next decade and beyond.

This Institute recognises 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 per cent now to 44 per cent by 2030. This is a reality we have to deal with.

Australia therefore has a national and shared global responsibility to establish the workability of this technology and to establish it at scale. If we succeed together, 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.

That's why the time for coordinated, accelerated action on CCS has well and truly come. The world cannot afford to waste another year. That's why we must bring together governments and industry and relevant financial institutions together in this great economic and environmental enterprise. And that is the vision that underpins the Australian Government's support for this

Global Institute. And we emphasise the world global. I say again to each and every one of you in this room, together we can act, if we act simply separately we will not achieve the outcome the world needs.

The Institute will play an important role in two of the three pillars of the Government's climate change strategy. At home, this initiative is an important complementary measure to the Carbon Pollution Reduction Scheme. It aims to help us to reduce our carbon pollution by advancing technology that will capture and store emissions. And abroad, by building momentum for the deployment of CCS technology, the Institute will help shape an international solution to climate change.

To those of you who represent governments from around the world or from corporations headquartered in countries other than Australia, can I simply say this: in recent weeks and months as I've travelled around the world and spoken to various of your heads of Government about this Institute, 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.

And whether it's been at the APEC Summit in Lima, whether it was at the first G20 meeting in Washington last year or the recently concluded G20 meeting in London, and in other bilateral engagements I've had with heads of Government around the world, I would simply say to you that this is generally accepted as being an important initiative for us all.

Working closely with the International Energy Agency and the Carbon Sequestration Leadership Forum, our vision is to build an institute that will galvanise global efforts to demonstrate and deploy CCS technology.

Since the Institute's formation was announced on September 19 last year, it has received strong and widespread support from governments and key industry groups around the world and today we are announcing the initial 85 members of this Institute.

National members of this important initiative will include the European Commission, the United States of America, Japan, Germany, China, the United Kingdom, France, Italy, Canada, Mexico, the Republic of Korea, The Netherlands, Indonesia, Norway, South Africa, New Zealand, the Emirate of Abu Dhabi, Papua New Guinea and others. And I acknowledge also the active support of all of the State Governments of Australia.

On the industry side, we also have members from the coal, oil and gas, electricity, technology, finance and research sectors, who have also become members of this Institute. And on behalf of the Government of Australia can I say to each of you as corporate leaders, I thank you very much

for being part of the solution.

The World Bank, the Asian Development Bank and the International Energy Agency are also major participants and I thank them for the credibility they bring to our table by virtue of their institutional engagement. And certainly in my discussions with the heads of a number of those institutions, most recently the President of the World Bank, I am confident that that institution together with others will be active supporters of this enterprise.

Two weeks ago I announced the appointment of the former head of the World Bank, Jim Wolfensohn, to chair the Institute's International Advisory Panel, which will provide strategic advice and direction to the Institute's global activities. Jim Wolfensohn brings vast experience and international influence and strategic vision to the Institute and we are delighted that he has agreed to accept this position.

And today I am pleased to confirm Mr Nick Otter as the interim CEO of the Institute. Nick has been doing a first class job in getting the Institute up and running since January, when he was seconded from his position as Director of Technology and External Affairs at Alstom Power. As an important priority, Nick will be working closely with the existing international and regional forums, particularly the International Energy Agency and the Carbon Sequestration Leadership Forum, in order to define their separate roles and responsibilities, so that we together can maximise the positive impact we can have together through the agency of this GCCSI.

Why is the GCCSI needed? The GCCSI will drive global cooperation on a key component of the solution to climate change. We know that the global community will only solve the challenge of climate change if it works together. Notwithstanding the impact of the global recession, our world is still riding an upward curve of greenhouse gas emissions, an upward curve that carries the threat of accelerating climate change impacts.

Coal is the greatest single contributor to greenhouse gases emissions created by human activity. The underlying demand for coal as a source of energy for electricity generation continues to grow. If we are to respond effectively to the enormous threat of climate change, across the world we must increase energy efficiency, diversify into less carbon-intensive energy sources and crucially we must reduce carbon emissions from fossil fuels. This will require investments across the world in research and in technology solutions that can reduce greenhouse gas emissions, while also ensuring energy security. But we need to develop those solutions fast. We do not have any more time to waste.

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. 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 per cent 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.

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. By 2030 around one quarter of global electricity production will be from coal-fired power stations in China and India.

There is no single solution to climate change. We need to act on every front to implement solutions to the challenge of climate change.

Given the trajectory of increased coal consumption in the decades ahead, carbon capture and storage is crucially important to solving the global challenge of climate change. It is therefore urgent that we drive an international portfolio of industrial scale CCS demonstration projects. Industrial scale demonstration CCS projects.

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. The clock is ticking.

Following the G8 decision, the Australian Government commissioned the Boston Consulting Group to review the status of CCS projects worldwide. That report found that although there are several important demonstrations of both capture and storage, there are at present no integrated industrial-scale CCS projects anywhere in the world. Our conclusion was that more, a lot more, needed to be done if the G8 goal is to be achieved.

I then announced the Australian Global CCS Institute in September and we commissioned Bostons to develop a business model for the Institute. The proposed business model was then tested at a preparatory meeting in London in November, where the basic structures were debated and agreed. Now, here in Canberra in April 2009, we are taking the Institute to the next stage with specific work plans and governance structures.

The task of this Institute – along with the International Energy Agency and the Carbon Sequestration Leadership Forum – is to work together to achieve this goal, alongside the IEA's

target of carbon capture and storage contributing one fifth of all global emissions reductions by 2050. We need to support the targeted research and development necessary to advance the commercialisation of this technology. And we need to create a regulatory environment that will encourage private investment in CCS.

I believe the Global Carbon Capture and Storage Institute will be a key driver in achieving each of these objectives globally. Getting large scale demonstration projects underway is not easy, I acknowledge that. It's hard work and in the context of a severe global recession, it has become much harder.

That's why cooperation between governments and industry participants is more urgent than ever before and that's why this GCCSI is such an important initiative for the environment, the economy, for industry and for jobs.

The GCCSI was built on the excellent work already being done in many of the member countries represented in this room and by many of the companies and organisations that are here today as well. Australia will be making a strong contribution as the host of the GCCSI, as a major driver of CCS projects.

Last year the Australian Parliament passed the world's most comprehensive legal framework for carbon capture and storage – the Offshore Petroleum and Greenhouse Gas Storage Act. The establishment of an effective regulatory regime for the allocation of storage sites is an important step forward in advancing the commercial application of the CCS technology.

As the Institute scales up its activities, projects for carbon capture and storage are also advancing around the world and around Australia. Agencies such as Geoscience Australia, the Cooperative Research Centre for Greenhouse Technologies, the Centre for Low Emission Technology and the Commonwealth Scientific and Industrial Research Organisation, the CSIRO, have a wide range of research projects underway.

At the end of last month, the Australian Government announced the world's first commercial release of greenhouse gas acreage for industry. Ten offshore areas have been released to allow industry to undertake further assessment of potentially viable greenhouse gas storage sites. Australia is also working with other stakeholders to undertake world-class CCS research, development and demonstration.

The Cooperative Research Centre for Greenhouse Gas Technologies has commenced a project demonstrating that up to 100,000 tonnes of CO<sub>2</sub>, extracted from a nearby natural accumulation, can be safely piped, injected and stored.

At Callide in Queensland, construction is underway on a demonstration project that involves the world's first conversion of an existing coal fired generator to capture CO<sub>2</sub> using oxyfuel combustion. This project is being undertaken by a consortium from Australia and Japan and I thank our Japanese friends for their help.

The government has also provided funding to the Commonwealth Scientific Industrial and Research Organisation, the CSIRO, to undertake Post Combustion Capture trials at two power stations in Australia and two in China. And I thank the cooperation from our friends in China on this project as well. The first of the China trials commenced at Beijing's Gaobeidian power station in August last year. There is work underway in Australia, we are working already with projects abroad but this, my friends and colleagues, is but the beginning.

To conclude, 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.

Australia's leadership in establishing the GCCSI reflects the importance of coal to our economy. Australia has a major stake in the fossil fuel industries, as do many of the Institute's members. Australia is the world's largest exporter of coal and the fifth largest exporter of LNG. We have just below one-tenth of the world's known coal reserves. Coal has been a major contributor to our nation's prosperity and that of many of our trading partners. But with that prosperity also comes a responsibility.

The GCCSI shows Australia is acting on this responsibility. Acting on this responsibility and also preparing for one of the greatest long-term challenges facing Australia and facing our global community, our global environment and our global economy.

Australia's leadership in establishing the GCCSI reflects the importance of coal to our economy. But the Institute is not just about coal, it is about capturing CO<sub>2</sub> from any fossil fuel source and permanently removing it from the atmosphere. It's also important for oil and gas and I acknowledge the participation from companies in this sector as well, in particular Chevron's plans for north-western Australia.

To each of you participating in the work of the Institute, I want you to know that your work is important, vitally important. Important for the prosperity and livelihoods of millions of people around the world now and vitally important for those who will come after them.

When we announced this initiative some seven months ago, I said that it had two components; a Global Institute and a commitment to invest in CCS demonstration projects in Australia. And I

confirm to each and every one of you in this room today at this important international conference, that this Government will honour those commitments - to the Global Institute, to its future operations and to invest in CCS demonstration projects.

That is why the Australian Government has advanced significant funding for this Institute already. But this Australian initiative will not succeed unless we are working seamlessly with the world. Together we can achieve great things. Together we can achieve great things. Separately we will not achieve nearly as much.

That's why I appeal to each and every one of you to get behind this Institute, to bring your energy, your talents, your expertise, your networks and collective efforts to make this Institute, this initiative a success. Enormous responsibility rests on the shoulders of those of you in this room today. Governments can go so far and this Government, the Government of Australia can take this project so far. It is only by the active, personal, political, diplomatic, corporate, financial, technology-based expertise and the enormous networks represented in this room that we can turn this vision into a reality. There is therefore an enormous weight of responsibility on your collective shoulders and I am confident that you will rise to that challenge.

Together therefore let us resolve to throw our every effort at making a lasting and real difference on climate change through this critical technology; for the future of our planet, the future of our economy and the future of the peoples of the world.