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Federal Member for Wills

OFFSHORE PETROLEUM AMENDMENT (GREENHOUSE GAS STORAGE) BILL 2008
OFFSHORE PETROLEUM (ANNUAL FEES) AMENDMENT (GREENHOUSE GAS STORAGE) BILL 2008
OFFSHORE PETROLEUM (REGISTRATION FEES) AMENDMENT (GREENHOUSE GAS STORAGE) BILL 2008
OFFSHORE PETROLEUM (SAFETY LEVIES) AMENDMENT (GREENHOUSE GAS STORAGE) BILL 2008
17/09/08 Second Reading

[Mr KELVIN THOMSON](#) (Wills) (11.24 a.m.)—One of the bills now before the House, the Offshore Petroleum Amendment (Greenhouse Gas Storage) Bill 2008, will enable carbon dioxide to be stored safely and securely in geological storage formations deep underground in Australian offshore waters under Commonwealth jurisdiction. The bill's amendments will make available storage formations in offshore waters that will have the potential to securely store hundreds of millions of tonnes of carbon dioxide for many thousands of years. This represents a substantial quantity of Australian greenhouse gas emissions. The bill will achieve this by allowing exploration for greenhouse gas injection and storage sites through the release of areas in Commonwealth offshore waters. The bill will provide an underlying framework within which detailed regulations will be drafted specific to greenhouse gas injection and storage, which will provide a management system that ensures storage is safe and secure. Environmental concerns will continue to be covered through legislation such as the Environment Protection and Biodiversity Conservation Act 1999 and the Offshore Petroleum Act management of the environment regulations.

Carbon dioxide capture and geological storage—often referred to these days as CCS, which is easier to pronounce than 'geosequestration'—is an important means by which carbon dioxide and other greenhouse gas emissions can be prevented from being released into the atmosphere. The importance of CCS has been demonstrated by the Australian upstream oil and gas industry, which for some time has undertaken successful carbon storage in this country. The Australian Petroleum Production and Exploration Association collectively accounts for companies that produce around 98 per cent of Australia's oil and gas. It is these companies and the technology and know-how in carbon storage of Australia's oil and gas industry that will be the key to Australia's realising its ambitions to be a world leader in carbon capture and storage. For decades this

industry has been injecting CO₂ into the ground all around the world as a means for enhancing the recovery of hydrocarbons.

The oil and gas industry has considerable expertise in utilising and developing the technologies that are required for CCS both in Australia and on the international stage. In Australia this has been driven through the former Australian Petroleum Cooperative Research Centre, under its GEODISC program, and the current Cooperative Research Centre for Greenhouse Gas Technologies, which is often referred to as the CO₂CRC. It is Australia's proposed Gorgon LNG project that is set to become the world's largest commercial carbon sequestration project. It is the Australian gas company Santos, in conjunction with Australian companies Beach Petroleum and Origin Energy, that is progressing the commercial Moomba carbon storage project, a project that could eventually store up to 20 megatonnes of CO₂-equivalent per year and one billion tonnes of it over the life of the project. It is the Browse LNG project joint venture partners who are currently examining a range of geosequestration options in north-west Western Australia. Anzon is also planning, as part of the innovative development of the Basker Manta Gummy petroleum project in the Gippsland Basin, to make available the infrastructure, after depletion, for storage of carbon captured from Latrobe Valley coal-fired power stations. So it is the Australian gas production industry that is one of the keys to the ultimate success of carbon sequestration in this country. This is a very important reason why we must ensure that our climate change policies enable the gas industry to help us realise our ambitions for carbon capture and storage.

As I have mentioned in the parliament before, we have around 140 trillion cubic feet of offshore gas reserves. Australia's natural gas reserves have the unique potential, in both the short term and the long term, to significantly reduce greenhouse gas emissions domestically through greater penetration of natural gas in the domestic market, and also in the Asia-Pacific region through increased LNG exports. The vast reserves of natural gas located in close proximity to growing Asia-Pacific markets make Australia well placed to positively assist in meeting the global climate change challenge while substantially contributing to Australia's economic growth.

On latest life cycle figures, for every tonne of greenhouse gas emissions associated with Australia's production of LNG, four tonnes are avoided in Japan and between 5½ and 9½ tonnes are avoided in China, making the LNG industry one of Australia's key clean global contributors. Australia's vast natural gas resources have a vital role to play in reducing greenhouse gas emissions in the region. Clean-burning natural gas provides a vital stepping stone on the path to low-emission economies. I am told that every extra tonne of cooled gas that the LNG industry can export to China will help avoid global greenhouse emissions of up to 6.8 tonnes in net terms. In the region in general, the growth of this industry would assist in reducing greenhouse gases to the tune of 120 million tonnes.

Clearly, there is an opportunity for Australia to generate significant additional national economic, environmental and social benefits from its substantial natural gas reserves, and this indeed needs to include the creation of a less carbon intensive national electricity market. Natural gas fired power stations produce 50 to 70 per cent less greenhouse gas emissions than equivalent coal-fired power stations and can use as little as one per cent of the water. This creates an enormous opportunity to respond to the growing public demand for cleaner energy. An expansion in the use of gas in resource processing could reduce the carbon intensity of the resource-processing sector. Furthermore, natural gas as

an alternative transport fuel would enhance supply reliability and reduce our exposure to oil shocks, giving us greater energy independence. The lower carbon intensity of gas as a transport fuel will help diminish the incidence of respiratory illness, asthma and the like, and, in addition to its more greenhouse-friendly nature, natural gas represents a cost competitive energy source. This is particularly so when you consider the generation costs of natural gas compared to other energy generation technologies.

The Australian upstream oil and gas industry has set itself a number of growth targets over the next decade, which include: first, increasing exports to 50 to 60 million tonnes per year from the current volume of 15½ million tonnes per year; second, doubling the use of natural gas use in resource processing; and, third, a more competitive electricity market where 70 per cent of all new electricity generation capacity installed in Australia over the next decade is gas-fired. If these targets are met, I am told, global emissions avoided could total at least 180 million tonnes of CO2 equivalent per year by 2017. Reaching these targets would also have significant economic and social benefits for Australia, with economic modelling suggesting: first, an increase of between \$13 billion and \$55 billion in GDP in net present value terms, which is equivalent to adding between 0.24 and 0.31 percentage points to Australian GDP growth in 2017; second, an increase in real consumption of between \$500 million and \$21 billion in net present value terms over the period to 2017; third, an additional \$10 billion a year of tax revenue; fourth, an increase in Australian exports, leading to an improvement in our trade balance of \$1.6 billion by 2017; fifth, increased employment in the oil and gas sector and service industries; sixth, the diversification of Australia's energy economy with increased penetration of gas in the domestic manufacturing industry; and, finally, a major boost to remote regional economies, particularly in Western Australia, Queensland and the Northern Territory.

Given the significant and sustained greenhouse and broader environmental and economic benefits that flow directly from a strong, vibrant and growing Australian upstream oil and gas industry, it is important that Australia's greenhouse policy response encourages the further use of natural gas both domestically and in the region. The need for prompt action in addressing global warming is apparent, and the bills before the House make a significant contribution in promoting and developing one of the available methods of reducing greenhouse gas emissions. The Labor government recognises that new clean energy technologies, including both fossil fuels and renewable energy sources, are a key to sustainable climate change solution. The government is providing leadership and policies that reduce or eliminate greenhouse gas emissions but at the same time seek to ensure that we continue to prosper from our abundant energy reserves. In this context and as a fossil fuel dependent economy, the Australian government has a pivotal role to play in driving technology outcomes that reduce or eliminate greenhouse gas emissions, and a key part of this effort is the need to establish a framework to allow for the capture and geological storage of greenhouse gases emitted from fossil fuel use both domestically and internationally.

This bill indicates yet again that there is only one side of the House which is serious about tackling climate change. Whether you are talking about the Kyoto protocol and our international efforts, whether you are talking about emissions trading and carbon trading, whether you are talking about support for renewable energy or whether you are talking about carbon capture and storage, as we on this side of the House are, the government has been fair dinkum about tackling global warming and climate change. The other side of the House has had to be dragged kicking and screaming to even understand the nature of the problem. The former Leader of the Opposition, for whom in many respects I have a lot of

sympathy, was of the view that Australia should not be prepared to engage in carbon trading unless and until the rest of the world was doing the same thing. As I have said before, this reminds me of some kind of student frat house where the residents of the house say, 'I'm not going to clean up my room until everyone else does theirs.' No-one does the dishes, no-one puts out the garbage, no-one does the laundry and pretty soon the house becomes a pigsty. Or you might like to think of a boat headed for Niagara Falls being rowed by a hundred canoeists. They work out that they are headed for Niagara Falls, but each of them keeps on rowing, saying, 'I'm not going to change direction until everyone else does.' That is a foolish approach.

We need to understand that climate change is a major problem affecting us now and that all the scientific evidence for Australia, as well as for the rest of the world, is of very severe impacts in the form of drought, bushfires, loss of snow cover, increased vulnerability to tropical diseases, impacts on the Great Barrier Reef and Kakadu—you name it! There is scientific evidence on what is happening with the North Pole: the Arctic melt during the summer months and the pressures that that is placing on the Greenland ice sheet and the melting of the West Antarctic ice sheet. All of these things suggest a crisis which needs to be handled with the kind of urgency with which we approached the Second World War. But the other side of politics has no understanding of this and simply wants to talk about what the costs will be. This issue has been measured by well-respected economists, such as Nicholas Stern and Ross Garnaut, who have informed us that the costs of doing nothing will be greater than the costs of acting.

A few days ago the Australian Food and Grocery Council put out some information expressing concern that a carbon trading scheme could lead to an increase in the price of food. But everyone needs to understand that if we do not act to resolve this problem our water supplies in southern Australia, for example, will diminish. There is no doubt that reduced water supplies will act to increase the price of food. We need to understand what the costs of failure to act will be.

I support this legislation. It establishes access and property rights for the safe and secure injection and storage of greenhouse gases into stable, subsurface geological reservoirs in Commonwealth waters more than three nautical miles offshore. It will provide project developers with the certainty required to commit to major low-emission energy projects involving carbon capture and storage. It will allow for the establishment of an effective regulatory framework to ensure that projects meet health, safety and environmental requirements. It is good, well thought through legislation and I commend it to the House.