

Australia's New Approach to Climate Change

By Ross STOCKALL

A New Government in Australia

In the November 2007 national election, the Australian Labor Party defeated the Liberal-National Party coalition that had been in power since 1996. The new prime minister, Kevin Rudd, pleased many concerned Australians by his first official act – ratification of the Kyoto Protocol. The former government had signed the Kyoto Protocol in 1998, but then Prime Minister John Howard refused to ratify it. Australia is now able to play a more constructive role in the round of negotiations for an international agreement post the Kyoto Protocol.

Although the Kyoto Protocol had not been ratified, Australia was the first country to establish a dedicated government organization to develop programs to reduce greenhouse gas emissions, the Australian Greenhouse Office, now part of the Department of the Environment and Heritage. Also, the Department of Climate Change has been established by the new government. The Rudd government's climate change policy focuses on three main areas: reducing Australia's emissions; adapting to climate change; and helping to develop a global solution.

Australia's Emission Targets

Australia's emissions represent only about 1.5% of the world's emissions. Under the Kyoto Protocol, Australia's target is 108% of 1990 emissions over the period 2008-2012. The combined effect of the emission reduction programs which have already been introduced by the Australian, state, territory and local governments is an expected reduction. According to the government's latest projections, Australia's annual emissions are expected to reach 599 million tons of carbon dioxide equivalent over 2008-2012, 108% of the 1990 level. Without abatement measures, emissions would reach 124% by 2008-2012. The new government has made a commitment to reduce Australia's emissions by 60% of 2000 levels by 2050.

Major Emission Abatement Programs

Domestic action to reduce emissions covers a wide range of measures for all sectors and emission sources.

The stationary energy sector is the largest emitter of greenhouse gases in Australia, representing about 48% of total emissions. About 70% of these emissions are from electricity generation and 80% of Australia's electricity is based on coal. Australia has been the world's largest coal exporter since 1989 and Japan is Australia's biggest customer, taking about 44% of total coal exports. At present, renewable energy accounts for less than 5% of total energy consumption in Australia. Given this background, several programs in Australia are aimed at reducing coal's impact, including:

- the Action on Energy Efficiency program that aims to increase

the uptake of cost-effective energy efficiency opportunities;

- a A\$500 million National Low Emissions Coal Initiative to assist the development of clean coal technologies; and
- a target of 20% of Australia's electricity supply from renewable energy sources by 2020. The target is to be achieved through an expanded national Mandatory Renewable Energy Target. A\$500 million is being invested in a Renewable Energy Fund to support renewable technologies.

Many other programs are operating or being introduced to assist in meeting the 2050 target, for example: funding to make homes, communities, appliances and equipment more energy-efficient; and a nationally coordinated program to enhance the environmental performance of the automotive sector; and measures to increase the availability of biofuels.

Cooperation with Japan

Japan and Australia have a long history of collaboration on climate change. The Japan-Australia Practical Collaboration on Climate Change was announced in May 2002 and in Tokyo on June 12, 2008, then Prime Minister Yasuo Fukuda and Rudd affirmed their commitment to cooperate on climate change issues. There are several bilateral and cooperative arrangements. For example, Antarctic scientists from both countries are cooperating on climate change science and Japan and Australia are investing in several clean coal technologies. Both Japan and Australia also cooperate in several international technological initiatives such as the Methane to Markets Partnership, the Renewable Energy and Energy Efficiency Partnership and the Carbon Sequestration Leadership Forum.

Australia has several programs to assist developing countries and has recently ratified the International Tropical Timber Agreement and signed forest carbon partnership agreements with Indonesia and Papua New Guinea. Japan has also moved in this direction with climate change-related assistance to developing countries, for example the US\$10 billion Cool Earth Partnership to assist developing countries to reduce emissions.

These approaches are in line with the views expressed by Noboru Hatakeyama (*Japan SPOTLIGHT*, May/June 2008, and *Japan Times*, July 5, 2008) that emphasize the importance of providing technical assistance to developing countries to improve energy efficiency. Japan is well placed to provide such assistance. For example, Japan has developed technology to improve the efficiency of coal-based power generation. It has been reported that if the same level of efficiency were to be applied across China, India and the United States, the total annual reduction in coal-related carbon dioxide emissions would be approximately equal to Japan's total annual CO₂ emissions. Japan has also developed several other environmental technologies for some of the most energy-intensive sectors such as steel, cement, chemicals, and pulp and paper.

TABLE 1

Australia's greenhouse gas emissions

Source	1990	2008-2012 average, with measures	
	a	a	b
Energy			
Stationary	196	304	156
Transport	62	88	142
Fugitive	29	37	126
Industrial processes	25	38	149
Agriculture	88	93	106
Waste	18	15	86
Land use change	136	44	32
Forestry	0	-21	c
TOTAL d	554	599	108

Source: Department of Climate Change, Canberra

- a Million metric tons (carbon dioxide equivalent)
- b Percentage of 1990
- c Not estimated
- d Differences between sum of individual figures and total are due to rounding.

Some Recent Developments...

The Australian government issued a Green Paper in July 2008, outlining its proposals for a Carbon Pollution Reduction Scheme (CPRS). Extensive consultations are being held with industry and the community, and the government plans to issue draft legislation in December 2008 with a view to commencing a comprehensive Emissions Trading Scheme (ETS) in 2010. The Green Paper sets out the government's preferred positions for emissions trading: the government will set a limit on carbon emissions from industry and will sell permits up to that limit and permits will be able to be bought and sold by companies. To prevent some industries from moving overseas in response to a carbon price, the government is proposing that some carbon-intensive companies will not have to pay for up to 90% of their permits. Companies that need to buy permits will pass the additional costs to customers. The Green Paper also covers options for assisting households and selected businesses adjust to the economic transformation following the introduction of a price for carbon.

The CPRS has been described as the most significant economic structural reform in Australia since the 1980s, so it could be expected that it would be subject to considerable debate. The current debate covers several issues. Some commentators have noted that the introduction of such a wide-ranging ETS is being formulated without a clear understanding of the total cost, of who will bear the costs and of whether there will be benefits, but the government's final proposals have not yet been announced. Others have been critical of the reliance the government appears to be placing on technological change to reduce emissions.

Major industry organizations have been attempting to convince the

government of the special needs of their members. The Business Council of Australia (BCA), which represents Australia's major companies, supports the introduction of a comprehensive ETS. However, the BCA has claimed that in the absence of a global carbon price, the government's draft proposals for compensation for many trade-exposed businesses are not sufficient to prevent them moving offshore or reducing their operations. This type of claim is not new and has been made by, for example, the aluminum smelting sector for many years. However, the Australia Institute has asked why we have one of the lowest levels of energy efficiency in the world if Australian industry is so concerned with the cost of energy.

The Australia Institute has also noted that recent modelling suggests that the economic costs of Australia's proposed emission reductions are small (in the order of 0.1% reduction in the rate of growth). The average error in the government budget forecasts of GDP growth over the past 12 years is 0.7%. Therefore the economic cost of the reduction impact would be dwarfed by errors in determining the base line and the likely impact of other internal and external shocks to the economy. The institute concludes that science, not economics, should underpin the setting of targets.

In mid-October 2008 there were calls for the Australian government to delay the introduction of its proposed ETS because of the global financial crisis, but the government is proceeding. However, Prime Minister Rudd has acknowledged that the financial problems would impact the ability for an international agreement to be reached to reduce emissions. **JS**

Ross Stockall is Managing Director, Stockall & Associates Pty Ltd. Formerly an Australian government bureaucrat involved in issues related to Japan, he now undertakes research for Japanese government agencies and is a visiting lecturer at Daito Bunka University, Japan.