

National
Business
Leaders
Forum on
Sustainable
Development

**LEADING THE CHANGE:
SUSTAINABLE BUSINESS IN ACTION**

**21 & 22 MAY 2007
Customs House, Brisbane, Queensland**

**‘Action on climate change can help
business competitiveness and
economic growth’**

Executive Summary

(Full Report available at www.sustainableforum.com.au)

A call for leadership in supporting a ‘*Climate Change Framework for Australia*’ to participants of the ‘*8th National Business Leaders Forum on Sustainable Development*’

Developed by:



**The Natural Edge
P R O J E C T**

2006 in Context - An Historic Tipping Point on Climate Change

Since the 2006 National Business Leaders Forum for Sustainable Development, there has been a significant sea-change in attitude and understanding concerning climate change within business, government and the broader community. In fact, it could be argued that last year (2006) - with the launch of Al Gore's film *An Inconvenient Truth*¹ and the *Stern Review*² - may be seen by future generations as an historic tipping point; when Australians finally understood the seriousness of human induced climate change. Events like 'Cyclone Larry' (which hit Innisfail), crops failing, the worsening drought, the early start to and intensity of the 2006–2007 bushfire season, and the bleaching of the coral of the Great Barrier Reef are already giving Australians a tangible sense of what it will be like trying to adapt to climate change over the coming decades. The increased risks from climate change were shown during the 2006/07 Christmas period, when bushfires suddenly reduced Victoria's electricity capacity by a third, leading to rolling black-outs. John Howard warned on 19 April 2007 that there will be no water for irrigation for the farmers of the Murray Darling Basin unless heavy rain falls in the next two months. Numerous studies are underway to assess the security risks of climate change by august institutions like the UN Security Council and leading national government security and defence departments.³

The IPCC's 4th Assessment⁴ – A Call for Action

This recent remarkable shift in attitude has been followed by the launch in 2007 of the 4th assessment by the International Panel on Climate Change (IPCC). This latest Assessment by the IPCC has effectively ended debate concerning key aspects of the science of climate change providing an 'unequivocal' link between climate change and current human activities, especially burning fossil fuels, deforestation and land clearing, the use of synthetic greenhouse gases, and decomposition of wastes from landfill. In addition, the IPCC 4th Assessment has published reports which focus on specific nations. The IPCC's report for Australia, published on 6 April 2007 warned that, if no action was taken, climate change would cause the following to occur:⁵

- Damage to vulnerable ecosystems such as the Great Barrier Reef, south-west Australia, the Kakadu wetlands, rainforests and alpine areas, many of which are world heritage sites and tourist destinations. The Great Barrier Reef will be lost to bleaching within two decades.⁶
- A 10-25 percent reduction in run off in the Murray-Darling Basin by 2050. Production from agriculture and forestry by 2030-2050 is projected to decline over much of southern and eastern Australia.
- A serious loss of productivity from the world's oceans due to ocean acidification, damaging Australia's commercial and recreational fishing industries.⁷
- Reduction in the Australian ski season from 15 to as much as 100 days by 2050.
- Loss of 20-30 percent of species by 2050.

The IPCC Assessment is a significant call for action. As Liz Minchin reported in *The Age* newspaper on the 5th of May, '[The latest IPCC Working Group III report outlines that] *the world has less than eight years to arrest global warming or risk what many scientists warn could be catastrophic changes to the planet... Its conclusion that global emission cuts of between 50 to 85 per cent would be needed to stop the temperature rising beyond two degrees. It found that slashing greenhouse emissions by up to 85 percent could cost only 0.12 per cent of global gross domestic product a year to 2050.*'⁸

¹ Smith, M. and Hargroves, K. (2007) 'The Gore Factor: Reviewing the impact of An Inconvenient Truth', CSIRO ECOS, Australia. Available at www.publish.csiro.au/?act=view_file&file_id=EC134p16.pdf. Accessed 14 April 2007.

² Stern, N. (2006) *The Stern Review: The Economics of Climate Change*, Cambridge University Press, Cambridge. Available at www.hmtreasury.gov.uk/independent_reviews/stern_review_economics_climate_change/sternreview_index.cfm. Accessed 14 April 2007

³ Allard, T. (2007) 'The Climate Wars: Experts fear the possibility of a total breakdown in society as climate change takes hold', *Sydney Morning Herald*. Available at www.smh.com.au/news/environment/climate-wars/2007/04/13/1175971351656.html. Accessed 14 April 2007.

⁴ IPCC (2007) *Fourth Assessment Report. WG2: 'Climate Change 2007: Impacts, Adaptation & Vulnerability'*, IPCC. Available at <http://www.ipcc.ch/SPM6avr07.pdf>. Accessed 14 April 2007.

⁵ *ibid* Chapter 11

⁶ Dayton, L. (2007) 'Reef Gone in 20 Years If Warming Continues', *The Australian*. Available at <http://www.theaustralian.news.com.au/story/0,20867,21516991-601.00.html>. Accessed 14 April 2007.

⁷ Hobday, A., Okey, T.A., Poloczanska, E., Kunz, T. and Richardson, A. (2007) *Impacts of Climate Change on Australian Marine Life*, CSIRO Marine and Atmospheric Research report to the Australian Greenhouse Office, Department of Environment and Water Resources. Available at <http://www.greenhouse.gov.au/impacts/publications/pubs/marinelifelife-parta.pdf>. Accessed 14 April 2007.

⁸ Minchin, L. (2007) 'A Climate of Change', *The Age*, Australia. Available at <http://www.theage.com.au/news/national/a-climate-of-change/2007/05/04/1177788398904.html?page=fullpage#contentSwap1>. Accessed 5 May 2007.

Temp rise	Tourism	Water and Primary Industries	Infrastructure and Insurance
>4°C	<ul style="list-style-type: none"> - Most Australian vertebrates lose 90 to 100% of their core habitat 	<ul style="list-style-type: none"> - Extreme rainfall in Victoria increases by 25% 	<ul style="list-style-type: none"> - Peak electricity demand in Adelaide, Brisbane and Melbourne increases by 9 to 25% - 180 days a year above 35°C in SA and NT - '100-year' storm tides along Victoria's east coast 30% more frequent
>3°C	<ul style="list-style-type: none"> - Distribution of Great Barrier Reef species shrinks by 95% - 65% of Reef species lost in Cairns region - Snow-covered alpine area shrinks by 20 to 85% - '60 day' snow cover declines by 40 to 95% 	<ul style="list-style-type: none"> - 55% loss of Eucalyptus core habitat - Timber yields in southern Australia rise by 25 to 50%, but fall by same margin in North Qld and the Top End - Australian net primary production falls by 6% - Flow in the Murray-Darling falls by 16 to 48% 	<ul style="list-style-type: none"> - Dengue fever transmission zone reaches Brisbane and possibly Sydney - Temperature-related deaths of people over 65 rise by 144 to 200% - Oceania experiences a net loss of GDP
>2°C	<ul style="list-style-type: none"> - 97% of the Great Barrier Reef bleached - 80% of Kakadu freshwater wetlands lost 	<ul style="list-style-type: none"> - Pasture growth slows by 31% - Macquarie River Basin (NSW) flows fall by 5 to 35% - Livestock carrying capacity in native pasture systems falls by 40% 	<ul style="list-style-type: none"> - Temperature-related deaths of people over 65 rises by 89 to 123% - Road maintenance costs in Australia rise by 17%, despite a decline in South Australia - '100-year' storm tides along Victoria's east coast 15% more frequent - Tropical cyclone rainfall increases 20 to 30%, as wind speed increases 5 to 10% - Forest fire danger rises 10% across Australia
>1°C	<ul style="list-style-type: none"> - 81% of the Great Barrier Reef bleached - Vertebrates in the World Heritage Wet Tropics lose 90% of their core habitat. 	<ul style="list-style-type: none"> - Melbourne's water supply falls 7 to 35% - Murray-Darling flows fall 12 to 25% - Queensland fruit fly spreads south - 40% loss of Eucalyptus core habitat 	<ul style="list-style-type: none"> - Height of '100-year' storm surge at Cairns rises 22%, doubling the flooded area - Storm surge rises 25% along Victoria's east coast - Double the people exposed to flooding in Australia and New Zealand
<1°C	<ul style="list-style-type: none"> - Snow-covered alpine areas shrink by 10 to 40% - Vertebrates in the World Heritage Wet Tropics lose half their habitat 	<ul style="list-style-type: none"> - 14% of Victoria's marine invertebrates lose habitat - Droughts in NSW 70% more frequent and more widespread - Wheat production increases with temperature rises up to 3 to 4° C, if precipitation also increases; but export value declines. - Melbourne's water supply falls 3 to 11% 	<ul style="list-style-type: none"> - 18% more days above 35°C in SA - Extreme rainfall 10 to 20% more intense in NSW - Electricity infrastructure suffers 3% decrease in transmission efficiency - Demand for natural gas heating in Melbourne falls - Peak electricity demand in Melbourne and Sydney falls by up to 1%, and rises in Adelaide and Brisbane by 2 to 5%

Table 1: Summary of climate change impacts on Australia across selected areas.
Source: CSIRO Marine & Atmospheric Research (2006)⁹

Australian Climate Change Leaders – Business and Government

Numerous corporate organisations have now committed to becoming climate neutral including high profile organisations like the News Limited, Australian Football League (AFL), Price Waterhouse Coopers, Westpac, Insurance Australia Group, Swiss Re, Bunnings Warehouse, KPMG Australia, and Channel Seven's Sunrise Breakfast TV Program. Virgin Airlines in Australia has launched a carbon offset option through which customers can choose to offset their emissions.¹⁰ Europcar Australia has partnered with Greenfleet to offset the carbon emissions of every new vehicle that is added to its fleet. Companies like BP, ACTEW/AGL, Origin Energy, and Virgin Airlines have already got low carbon/climate neutral products accredited with the AGO's 'Greenhouse Friendly' accreditation scheme.¹¹ Fuji Xerox Australia recently announced that it will soon run its company sites on 100 percent green power from renewable energy sources. Over the next four years the company will be increasing its use of renewable energy-based power by 25 percent annually, aiming to purchase 100 percent green electricity by the year 2010. Westpac has already reduced emissions by 45 percent.

⁹ Preston, B.L. and Jones R.N. (2006) *Climate Change Impacts on Australia and the Benefits of Early Action to Reduce Global Greenhouse Gas Emissions*, CSIRO. Available at <http://www.csiro.au/files/files/p6fy.pdf>. Accessed 3 January 2007.

¹⁰ Virgin Airlines (2007) *Offsets – Frequently Asked Questions*. Available at www.virginblue.com.au/carbonoffset/faq/. Accessed 14 April 2007.

¹¹ Australian Greenhouse Office (n.d.) *Greenhouse Friendly Accreditation*. Available at www.greenhouse.gov.au/greenhousefriendly/products/index.html. Accessed 14 April 2007.

With the increased severity of drought, likely due to climate change, organisations across the water services sector, which are directly affected, are also examining climate neutrality. Melbourne's water authorities are leading the way by all working towards becoming climate neutral. City West Water announced on 27 March, 2007 that it will become the first carbon-neutral water authority in Australia by June 2007. Other water authorities such as Melbourne Water, Yarra Valley Water and South East Water are also working towards it but are yet to set a target. A recent survey by Yarra Valley Water showed 74 per cent of its customers supported efforts to go carbon neutral, even if it meant water bills would cost more.

In government, climate leaders in Australia include: Newcastle City Council - which has already reduced emissions by over 50 percent throughout its operations since the mid 1990s; and the City of Melbourne - which is working hard to achieve its goal of being climate neutral by 2020.¹² Other local governments to commit to becoming climate neutral include Moreland City Council¹³, Maribyrnong City Council¹⁴ and the Yarra Ranges Shire Council¹⁵. Councils such as Townsville City Council are focused on practical programs such as the national Solar Cities program to assist constituents to reduce energy demand and shift to renewable options. This level of business and political will for action will only grow further now that Al Gore has committed to leading a global concert lasting 24 hours, 'Live Earth' of some of the biggest stars in the entertainment industry on seven continents on the 7th of July 2007 (7 7 07).

The Call for a National Emissions Trading Scheme

One of the signs of the shift in Australian business and political circles is the almost universal agreement that Australia needs a long term 'cap and trade' emissions trading scheme to harness the market to help business find the most cost effective ways forward. The Business Council of Australia (BCA), for example, has stated 'market mechanisms' as the basis for a global solution to climate change in their submission¹⁶ to the Prime Minister's Emissions Trading Taskforce and the BCA's climate change policy statement and report.¹⁷ All heavyweight business organisations, such as The Australia Industry Group,¹⁸ are now discussing what principles an emissions trading scheme should be based upon and the state governments of Australia have committed to bringing in such an emissions trading scheme by 2010.

What Should the Targets be for a National Emissions Trading Scheme?

The debate has now shifted to discussing what form this emissions trading scheme should take¹⁹ and what targets should be set. This summary report and the full version of this report does not address the form the trading scheme should take but rather the key matter of what the target should be for Australia's emissions trading scheme. By definition a cap and trade emissions trading scheme requires targets, short and longer term, to work. Currently the recommended model for a national emissions trading scheme by business groups like the Business Council of Australia (and other major business groups in Australia) does not commit to a clear target by a certain date. The Business Council of Australia is right to make the point that targets should not be pulled out of the air, however, there is an accepted criteria upon which to decide the target. Since 1988 the IPCC has been making the same recommendation of 60 percent reductions by 2050 to prevent dangerous climate change. Paul Kelly, Chief political editor of *The Australian* newspaper, suggested in a major article on the emissions trading scheme²⁰ that the reason why the Business Council of Australia is yet to commit to a specific target and date for reductions is because of lack of confidence that Australia could achieve 60 percent reductions by 2050.

¹² The Climate Group (2007) *Low Carbon Leader: Cities*. Available at http://theclimategroup.org/assets/resources/low_carbon_leader_cities.pdf. Accessed 14 April 2007.

¹³ See Moreland City Council Climate Change Announcement at <http://www.moreland.vic.gov.au/news/mr170407.htm>. Accessed 2 May 2007.

¹⁴ See Maribyrnong City Council Commitment to Becoming Climate Neutral at <http://www.beyondzeroemissions.org/files/Maribyrnong-carbon-neutral.pdf>. Accessed 2 May 2007.

¹⁵ See Yarra Ranges Shire Council Climate Change Announcement at http://www.yarraranges.vic.gov.au/Page/Page.asp?Page_Id=2797. Accessed 2 May 2007.

¹⁶ Business Council of Australia (2007) *Market Mechanisms: the Basis for a Global Solution to Climate Change*, BCA Submission, Business Council of Australia. Available at www.bca.com.au/Content.aspx?ContentID=100982. Accessed 14 April 2007.

¹⁷ Business Council of Australia (2007) *Strategic Framework for Emissions Reduction*, Business Council of Australia. Available at www.bca.com.au/Content.aspx?ContentID=101011. Accessed 14 April 2007.

¹⁸ The Australia Industry Group (2007) *Climate Change Policy Principles*. Available at <http://www.aigroup.asn.au/scripts/cgiip.exe/WService=aigroup/ccms.r?pageid=3493>. Accessed 14 April 2007.

¹⁹ This question is covered in another discussion paper for the National Business Leaders Forum for Sustainable Development that Alan Tate is developing

²⁰ Kelly, P. (2007) *Saved by The Market*. *The Australian* April 7th, 2007. Available at <http://www.theaustralian.news.com.au/story/0,20867,21515264-601,00.html>. Accessed 14 April 2007.

Reductions of 60 Percent of Greenhouse Gas Emissions by 2050 are achievable

The full version of this report shows how and why such a target is ultimately achievable. The full version of this report discusses key results from eight studies from the UK, USA, Canada and Australia showing how to achieve 40-60 percent cuts to greenhouse gas emissions cost effectively by 2050 (See Further Reading Resources²¹). Out of the eight studies, the three which apply to Australia, show how to achieve 60 percent reductions or better for Australia.²² One of these studies, by the Clean Energy Futures Group has been expanded to now also provide specific studies for each of the states²³ of Victoria, NSW, Queensland and Western Australia. Collectively these studies show that it is possible for these states to achieve such targets. One of the reasons that such deep cuts can be achieved in Australia is because there are still many unrealised energy efficiency gains to be made in the Australian economy; specifically 30 percent more efficiency gains could be made with a four year or less pay back period, and up to 70 percent with an eight year or less pay back period. This is the finding of an important government report co-ordinated by the Australian National Framework for Energy Efficiency.²⁴ Interestingly, not one of these sustainable greenhouse gas reduction studies or these government studies on energy efficiency potential of the Australian economy was discussed or even referenced by any Australian business or industry group's work on emissions trading and climate change, with the notable exception of Environment Business Australia.

Fortunately many governments around the world are aware of these deep cut studies and have now committed to 60 percent reductions or better in CO₂ by 2050. This includes nations such as UK, France, Germany, Sweden and Austria. The Californian government in the USA has gone further and adopted a target of 80 percent by 2050 and New Zealand and Norway have recently committed to becoming climate neutral. In Australia, The Labor Party Federally has committed to 60 percent reductions in greenhouse gas emissions by 2050, as have the South Australian, Victorian and New South Wales Governments.²⁵ At the last COAG meeting in April 2007, it was widely reported that all state labour governments lobbied the Prime Minister to commit to the 60 percent by 2050 target suggesting that now all state labour governments have committed to the 60 percent target.

Leadership shown by the Australian Business Roundtable on Climate Change

The Australian Business Roundtable on Climate Change should be congratulated for its leadership and contribution to the climate change debate over the last year. Members have been very effective at communicating the benefits of early action on climate change. All sectors of the Australian economy will be directly or indirectly affected by climate change, emissions trading schemes and/or a carbon tax. Business is looking for certainty and significant business investment in Australia is being held back because of lack of certainty about future climate policy in Australia. For instance, The Energy Supply Association of Australia (ESAA) estimates that a AU\$30 billion investment is required in the electricity sector over the next decade. Lead times for base load generation are four to fifteen years (depending on the type of base load) and these assets have long lives. In the absence of carbon risk, these investments would be driven by well known factors. But climate change is now a key factor in the decision-making process for base load generation. The Roundtable Report stated that 'In the absence of a clear long-term framework on climate change, investor appetite for new large plant is likely to remain low due to potential sovereign risk'²⁶. The ESAA has stated that '*One of the biggest sovereign risk issues facing the energy sector is [the uncertainty surrounding] future Government policy and measures on emissions*'.²⁷

²¹ For a full list of these reports see the Further Reading Section of the full Report. The relevant Australian deep cut studies to date of note are: Australian Business Roundtable on Climate Change (2006) *The business case for early action*, ABRCC. Available at www.businessroundtable.com.au. Accessed 14 April 2007.

Saddler, H., Diesendorf, M. and Denniss, R. (2004) *A Clean Energy Future for Australia Energy Strategies*, WWF, Canberra Available at: <http://www.wwf.org.au/ourwork/climatechange/cleanenergyfuture/>. Accessed 14 April 2007.

Prime Minister's Science, Engineering and Innovation Council (2002) *Beyond Kyoto - Innovation and Adaptation*. Available at www.dest.gov.au/sectors/science_innovation/publications_resources/profiles/beyond_kyoto_innovation_and_adaptation.htm. Accessed 14 April 2007.

Turton, H., Ma, J., Saddler, H. and Hamilton, C. (2002) *Long-Term Greenhouse Gas Scenarios: a pilot study of how Australia can achieve deep cuts in emissions*, Australia Institute Paper No 48. Available at http://www.tai.org.au/WhatsNew_Files/WhatsNew/DP48sum.pdf. Accessed 14 April 2007.

²² Ibid

²³ Saddler, H., Diesendorf, M. and Denniss, R. (2004) *A Clean Energy Future for Australia Energy Strategies*, WWF, Canberra Available at <http://www.wwf.org.au/ourwork/climatechange/cleanenergyfuture/>. Accessed 14 April 2007.

²⁴ Energy Efficiency and Greenhouse Working Group (2003) *Towards a National Framework for Energy Efficiency – Issues and Challenges Discussion Paper*. Available at http://www.nfee.gov.au/about_nfee.jsp?xcid=64. Accessed 14 April 2007.

²⁵ <http://www.deus.nsw.gov.au/Publications/NRET%20Explanatory%20Paper%20FINAL.pdf>

²⁶ Australian Business Roundtable on Climate Change (2006) *The business case for early action*, ABRCC. Available at www.businessroundtable.com.au. Accessed 14 April 2007

²⁷ Ibid

This issue highlights the need in Australia for clear and effective leadership from government on climate change to resolve what the future price on carbon will be and how it will be phased in to allow business to adapt accordingly. One of the major barriers to business and government committing to a carbon price signal (and to the sustainable cuts needed), has been the perception that the costs of a carbon price (and committing to targets of 60% GHG reductions by 2050) would be prohibitive to business and the economy. The Australian Business Roundtable on Climate Change's reports,²⁸ published in April 2006, found there is no justification for such fears and concerns. Formed in 2005, the Business Roundtable is made up of CEOs from BP, Insurance Australia Group, Origin Energy, Swiss Re, Visy Industries and Westpac with The Australian Conservation Foundation. They found that early action on climate change is far better for business than delaying it. They found that early action on climate change, to achieve a 60 percent reduction in greenhouse gas emissions by 2050, can still achieve strong economic growth. Specifically the economic modelling they commissioned found that:²⁹

- GDP still continues to grow 2.1 percent pa and by 2050 will increase from AU\$0.8 trillion in 2005 to AU\$2 trillion in 2050. This occurs while Australia reduces emissions by 60 percent. Australian Bureau of Agriculture and Resource Economics' (ABARE) modelling shows GDP continuing to grow by around 2.1-2.2 percent pa with a 15-40 percent reduction in emissions.
- Real income per person is more than AU\$15,000 higher than it was in 2005. Put another way, in 1984 Australian GDP per person was AU\$22,000 and it is now AU\$44,000. Even if we reduce emissions by nearly two thirds this would double again to AU\$88,000 by 2050.
- Employment would grow by 38.7 percent over the period of 2050 leading to the creation of 3.5 million jobs by 2050.
- Electricity costs would be lower as business invests earlier in low and zero emission technologies, when compared to taking delayed action. Future electricity price rises would be three times higher in the delayed action scenario in comparison with the early action scenario.

Conversely if action on climate change is delayed in Australia then the costs of adoption will be far greater to business and governments at all levels, leading to a major disruptive shock to the Australian economy. The Australian Business Roundtable found that GDP growth would be limited to an average of 1.9 percent pa to 2050, or AU\$1.84 trillion. Employment growth would only be 36.2 percent; 250,000 fewer jobs created than under early action.

The UK Stern Review's conclusions on the effect of climate change on economic growth align well with the findings of the Australian Business Roundtable on Climate Change. The key message from the UK Stern Review, as with the Roundtable, is that climate change poses a significant risk to the world economy and it will be cheaper to proactively address the problem than to deal with the consequences of inaction. Specifically the Stern Review concludes that one percent of global gross domestic product (GDP) per annum is required to be invested in order to avoid the worst effects of climate change, and that if we do not act, this could risk global GDP being up to twenty percent lower than it otherwise might be.³⁰

The Australian Business Roundtable on Climate Change found that delayed action on climate change would put significant sectors of the Australian economy at risk, wreaking havoc with major tourist destinations, and hitting agriculture and forestry sectors hard with increasing risks of regular bush fires, and decrease in water flows. This has been corroborated by the IPCC's recent national assessment of Australia.³¹ To date, no one has costed comprehensively such risks of delayed action to the Australian economy. Professor Ross Garnaut has been commissioned by the Australian Labour Party to undertake Australia's own Stern Review. Professor Garnaut will release a draft report in 30 June, 2008.

²⁸ Ibid

²⁹ Ibid

³⁰ Stern, N. (2006) *The Stern Review: The Economics of Climate Change, Executive Summary* Cambridge University Press, Cambridge, p10. Available at http://www.hm-treasury.gov.uk/media/8AC/F7/Executive_Summary.pdf. Accessed 14 April 2007

³¹ IPCC (2007) *Fourth Assessment Report. WG2: Climate Change 2007: Impacts, Adaptation & Vulnerability*. IPCC. Available at <http://www.ipcc.ch/SPM6avr07.pdf>. Accessed 14 April 2007.

Early Action on Climate Change can help Business Competitiveness and Economic Growth

The other major fear from business and government is that early action on climate change would harm business competitiveness, especially within trade exposed industries. The UK government working with UK industry has shown how such issues can be effectively addressed. The UK was one of the first countries to implement a national emissions trading scheme and a carbon tax, and they have done so in such a way that it has helped business competitiveness overall rather than harming it. In the UK, heavy energy using companies can apply to sign a Climate Change Agreement (CCA) Program³² whereby a company agrees to commit to achieving a certain carbon reduction target or improving their energy efficiency, and in return receives exemption from 80 percent of the carbon tax. Over 12,000 large energy using UK companies have³³ performed far better than expected in cutting emissions of carbon dioxide. In 2002, thousands of companies achieved cuts totalling nearly three times above the agreed targets. The CCAs have been very successful in improving energy efficiency in the existing sectors. In aggregate they have beaten their targets by the equivalent of 1 million tons of carbon (MtC) a year in the first target period (to 2002) and by 1.4 MtC a year in the second target period (to 2004).³⁴ Through this process these businesses in the UK are saving over US\$650 million from reducing greenhouse gas emissions.³⁵ Economic modelling by the UK Treasury department has found that the UK's sophisticated approach to addressing climate change which has encouraged business to become more energy efficient has helped economic growth rather than harmed it.

A Climate Change Framework for Australia

The community is looking for leadership from Australia's business community on these issues. There is an opportunity here for the National Business Leaders Forum for Sustainable Development to lead by publicly recommending that: '*Governments at all levels in Australia adopt the target of at least 60 percent reductions to greenhouse gas emissions below 1990 levels by 2050 in accord with IPCC recommendations; and government and the business community publicly support recommendations of the Australian Business Leaders Roundtable on Climate Change*'. One year ago The Australian Business's Roundtable on Climate Change's six CEOs recommended the following:³⁶

Design a 'long, loud and legal' framework to establish a price signal

1. Set a long-term goal for Australia [such as 60 percent] to significantly reduce greenhouse gas emissions as our contribution to a global effort designed to avert dangerous climate impacts.
2. Set a short-term binding target for Australia in 2020 [such as 20 percent] to facilitate a smooth transition to a low-carbon economy and as a milestone towards achieving the long-term goal.
3. Introduce a national market-based carbon pricing mechanism to deliver cost-effective emission reductions:
 - Clearly signal a framework by 2007.
 - Design the mechanism to deliver comprehensive national coverage by 2013.
 - Link the mechanism to the binding 2020 target and the long-term goal.
 - Design the mechanism to allow for international linkages.
 - Until international linkages are established, employ transparent policies to maintain international competitiveness of trade-exposed sectors.
 - Re-state the 'no disadvantage' principle for early action to reduce emissions.

³² House of Commons Environment, Food and Rural Affairs Committee (2004–2005) *Climate Change: looking forward*, Ninth Report of Session. Available at www.publications.parliament.uk/pa/cm200405/cmselect/cmenvfru/130/130i.pdf. Accessed 14 April 2007.

³³ Kirby, A. (n.d.) 'UK Industry Succeeding: UK Beats Greenhouse Gas Targets', *BBC News Online*. Available at www.defra.gov.uk/environment/ccl/pdf/cca_aug04.pdf. Accessed 14 April 2007.

³⁴ UK Government (2006) *Explanatory Memorandum to the Climate Change Agreements (eligible facilities) (amendment) Regulations*. Available at http://www.opsi.gov.uk/SI/em2006/ukxiem_20061931_en.pdf. Accessed 14 April 2007.

³⁵ Kirby, A. (n.d.) 'UK Industry Succeeding: UK Beats Greenhouse Gas Targets', *BBC News Online*. Available at www.defra.gov.uk/environment/ccl/pdf/cca_aug04.pdf. Accessed 14 April 2007.

³⁶ Australian Business Roundtable on Climate Change (2006) *The business case for early action*, ABRCC. Available at <http://www.businessroundtable.com.au/html/recommendations.html>. Accessed 14 April 2007

4. Make a public statement that government will not provide an indemnity against future carbon risk and investors will be required to fully manage their own exposure.
5. Accelerate efforts to manage energy and reduce GHG emissions:
 - Build on the National Framework for Energy Efficiency process by mandating best practice performance standards for buildings, vehicles, fuels and appliances.
 - Develop one clear framework for GHG emission and abatement reporting among all governments to better identify opportunity and risk.
 - Coordinate a national consumer awareness program on climate change in line with other successful campaigns such as water conservation.

Encourage innovation and investment in emerging and breakthrough technologies

6. Engage with business and the community to expand fiscal incentives to encourage deployment of emerging and breakthrough technologies for power generation and transport to build scale and reduce costs, such as tax credits, accelerated depreciation and programs like the Low Emission Technology Demonstration Fund.
7. Build modelling capacity in Australia sufficient to estimate the full economic cost of climate change and provide a cost-benefit analysis for future mitigation and adaptation actions.
8. Create a stronger science and technology culture through targeted school and university campaigns, and increased funding for centres of excellence to support the development and deployment of breakthrough technologies in Australia. Build national resilience to the impacts of climate change.
9. Develop, fund and implement a national strategy to build resilience and reduce vulnerability to climate impacts by fully integrating adaptation into development and planning processes to address, for example, building codes, water resources, health responses, biodiversity, heritage areas and climate-dependent industries.

Conclusion

The full version of this report provides evidence to support the National Business Leaders Forum for Sustainable Development adopting such a statement. Specifically the full report provides the following:

- i) A more detailed overview of the business and economic case for achieving 60 percent cuts to GHGs by 2050 featuring more on climate leaders in business and government.
- ii) Overview of the recent reports and studies which address how Australia can achieve sustainable cuts to greenhouse gas emissions.
- iii) Overview of sophisticated policies that can ensure Australia achieves ambitious greenhouse gas target goals and helps business competitiveness and economic growth.
- iv) Reference to key documents that outline effective policy options to help build consensus on what is the best policy mix to achieve sustainable cuts to greenhouse gas emissions.

By considering these four topics in the accompanying full report we hope to help you, whether you are a CEO or Government Minister, identify new win-win opportunities on this critical issue.

The Natural Edge Project (TNEP) is a partnership for research on innovation for sustainable prosperity. TNEP's mission is to contribute to and succinctly communicate leading research, case studies, tools and strategies for achieving sustainable prosperity across government, business and civil society. TNEP initiatives are not-for-profit. TNEP activities include research, creating education material and producing publications, which are supported by grants, sponsorship (both in-kind and financial) and donations. In addition TNEP delivers short courses, and workshops, and works with our consulting associates as we seek to test and improve the material and strategies. All support and revenue raised is invested directly into project work and the development of future initiatives.

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