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Environment, Communications, Information Technology and the Arts Legislation Committee

Kyoto Protocol Ratification Bill 2003 [No. 2]

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Chapter 1

Introduction

Referral and conduct of the inquiry

1.1 In its Report No. 15 of 2003 dated 26 November 2003 the Selection of Bills Committee recommended that the Kyoto Protocol Ratification Bill 2003 [No. 2] be referred to this Committee for inquiry and report by 4 March 2004.[1] The recommendation was adopted by the Senate later that day.

1.2 The Committee invited submissions on the Bill in an advertisement placed in *The Australian* on 17 December 2003, with a deadline of 30 January 2004. It also wrote direct to all submitters to the 1999-2000 inquiry into global warming by the Environment, Communications, Information Technology and the Arts References Committee.[2] Some 39 submissions were received, as listed at Appendix 1.

1.3 On 13 February 2004 the Committee held a public hearing in Canberra into the Bill, involving 18 witnesses from 15 organisations. A list of witnesses is included at Appendix 2.

1.4 Documents were tabled by witnesses both in the course of the hearing and subsequently. These exhibits are listed in Appendix 3.

1.5 The Kyoto Protocol itself is too voluminous for inclusion in this report. Persons wishing to refer to its contents should examine it at http://unfccc.int.

Background to the reference

1.6 Senator Brown introduced the Kyoto Protocol (Ratification) Bill 2002, a Bill for an Act to ratify the Kyoto Protocol to the United Nations Framework Convention on Climate Change, as a private senator's bill on 19 September 2002, but debate was adjourned after his second reading speech had been incorporated into the transcript.[3]

1.7 On 26 May 2003, Mr Kelvin Thompson MP, Shadow Minister for the Environment, introduced into the House of Representatives the Kyoto Protocol Ratification Bill 2003.[4] The Bill lapsed after its first reading.

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1 On 3 March 2004 the Senate agreed to extend the time for the presentation of the report to 25 March 2004. *Journals of the Senate*, 3 March 2004, p. 3070

2 *The Heat is On: Australia's Greenhouse Future*, November 2000.

3 *Senate Hansard*, 19 September 2002, p. 4455.

4 House of Representatives, *Votes and Proceedings,* 26 May 2003, p. 893.

1.8 A Bill in the same terms, the Kyoto Protocol Ratification Bill 2003 [No. 2], was introduced into the Senate on 30 October 2003 by Senator Lundy, on her own and Senator Brown's behalf.[5] The Bill was partially debated before being referred to the Committee for the current inquiry.

1.9 The Kyoto Protocol had previously been examined in detail by the Joint Standing Committee on Treaties, which released a discussion paper in April 2001.[6] It concluded:

> there are many difficult issues associated with the design, scope and implementation of the Protocol that have yet to be resolved. Until these issues are resolved it will not be possible to predict accurately the domestic impact of the emissions targets specified in the Protocol.

1.10 On 27 September 2001 the Joint Committee's Chairman, Mr Kerry Bartlett MP, made a statement noting that there was renewed international debate about whether the Kyoto Protocol was the best means of advancing the international response to climate change and that most Committee members were of the view that it would be imprudent to provide definitive advice to Parliament on whether Australia should ratify the Protocol.

Acknowledgments

1.11 The Committee wishes to thank all who contributed to its inquiry by preparing submissions and appearing at the hearings. Their contributions have been both informative and challenging.

5 Senate, *Journals*, 30 October 2003, p. 974.

6 Parliamentary Joint Standing Committee on Treaties, *The Kyoto Protocol – Discussion Paper,* Report 38, April 2001.

Chapter 2

Climate change and the Kyoto Protocol

Climate change

2.1 Human activities such as the burning of coal, oil and natural gas, the logging of forests, land clearance and industrial processes have increased emissions of carbon dioxide and other greenhouse gases, which in turn have contributed to global warming and climate change. Atmospheric levels of carbon dioxide are predicted to double from their pre-industrial levels during this century, if emissions continue at their current rate, and could triple by 2100 if no abatement measures are taken. This will lead to global warming of between 1.4 and 5.8 degrees Celsius over the next 100 years.

2.2 These are findings from the most recent generally accepted authoritative statement on climate change, issued in 2001 by the Intergovernmental Panel on Climate Change (IPCC).[1] Its Third Assessment Report states that climate change will result in large and possibly irreversible changes to the earth's systems. Human-induced climate change will lead to changing weather patterns, increased temperatures, more frequent droughts, sea level rise, more frequent extreme weather events and the wider distribution of certain insect-borne diseases.

2.3 Expert witnesses to the inquiry confirmed this assessment. The Bureau of Meteorology observed that 'there is a high level confidence in the expert climate community that a large part of the observed [global] warming is due to the enhanced greenhouse effect'. [2]

2.4 The potential impacts on Australia have been outlined in *Climate Change: an Australian Guide to the Science and Potential Impacts,* published in 2003. The Guide observes that Australia will be vulnerable to changes in temperature and precipitation projected for the next 50 to 100 years as it already has extensive arid and semi-arid areas, relatively high rainfall variability and existing pressures on water supplies in many areas. Greater frequency of droughts will impact adversely on agriculture. Warming of one degree Celsius would threaten coral reefs and alpine regions and endanger various species. There is a lack of consensus on the extent of future emissions, their effect on temperature, and the reversibility of climate change.

2.5 There is bipartisan support, however, for the proposition that the problem of global warming is real and one that cannot be ignored. The key question for the Committee to consider in this inquiry is the extent to which the ratification of the

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1 http://www.ipcc.ch

2 Bureau of Meteorology, Submission 15, p. 1.

Kyoto Protocol will contribute to the resolution of the problem of global warming and the mitigation of the future risks associated with climate change.

2.6 The Committee unequivocally accepts the need to reduce greenhouse gas emissions. It notes that the witnesses to its inquiry were unanimous in accepting the need to slow global warming, and the need to substantially reduce greenhouse gas emissions in order to stabilise atmospheric concentrations of those gases.[3]

2.7 It also notes evidence which suggests that such a reduction will take a very long time to effect. As the CSIRO observed:

> even if the Protocol were to come into force, it would represent just a small, first step towards slowing global warming. Thus the real issue is not whether or not we sign Kyoto, but whether or not there is a genuine commitment (nationally and globally) to curtail greenhouse gas emissions, and (in the long term) bring them down to levels significantly below current.[4]

2.8 In the remainder of this chapter, the Committee will outline the background to the Kyoto Protocol, what the Protocol entails, the key flexibility measures and operational details which have emerged from the Conferences of the Parties, and the Australian Government's response thus far.

The United Nations Framework Convention on Climate Change

2.9 The international community has long been aware of the dangers posed by climate change and has taken steps to address it. At the United Nations-organised Rio Earth Summit, the United Nations Framework Convention on Climate Change (UNFCCC), a non-binding overarching agreement to deal with climate change was adopted on 9 May 1992, and entered into force on 21 March 1994 following ratification by 50 parties, including Australia, which ratified on 30 December 1992.[5] There are now 188 parties to the Convention.

2.10 The central objective of the Convention is to achieve the 'stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system ... within a time-frame that is sufficient to allow ecosystems to adapt naturally to climate change, to ensure that food production is not threatened and to enable economic development to proceed

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3 See, for example, Submissions 35, 29, 23, 32, 31 and 36 from the Australian Chamber of Commerce and Industry, the Australian Aluminium Council, the Plastics and Chemicals Industries Association, the Minerals Council of Australia, and Woodside Energy Ltd, respectively.

4 CSIRO, Submission 16, p. 1

5 http://www.unfccc.int/

in a sustainable manner'.[6] The IPCC has an objective of 60 per cent reduction on 1990 emissions by 2100.

2.11 Targets and timetables for reducing greenhouse gas emissions under the UNFCCC have been the subject of negotiations via Conferences of the Parties to the Convention, and have been included through protocols to the Convention. The third Conference of the Parties (COP3) was held at Kyoto in 1997. At Kyoto, an implementation plan for reducing global greenhouse gas emissions was agreed upon, a plan known as the Kyoto Protocol.

The Kyoto Protocol

2.12 Under the Kyoto Protocol, developed nations and countries with economies in transition (the Annex 1 Parties) would accept binding greenhouse gas emission targets for the first commitment period (2008-2012), calculated as a percentage of their 1990 emission levels. Developing nations were exempted. While for the most part, targets were set at 95% of 1990 emissions, Australia was one of only three countries (the other two being Norway and Iceland) to negotiate an increased target, namely 108% over its 1990 levels. This was an acknowledgement of the fact that Australia was experiencing high population growth and was particularly dependent on carbon intensive technologies such as coal-fired electricity and hence would have to bear considerable economic cost to achieve greenhouse gas reductions. This 8% increase was about 30% below expected 'business as usual' emission levels.[7]

2.13 The specific policies to be used to reduce emissions were left to the discretion of each country. Reductions in excess of the commitment could be carried forward and used to count towards compliance in future periods. A failure to comply with the set emissions reduction target was to be penalised by a reduction in permitted emissions for the period following 2012 (for which emissions targets have not been set). Targets for the second and subsequent commitment periods will be the subject of negotiations starting in 2005.

2.14 For the Kyoto Protocol to come into force, it must be ratified by 55% of its signatories, and they must jointly account for at least 55% of 1990-level emissions from Annex 1, or developed, countries. To date, 120 parties have ratified, representing some 44% of developed country emissions. Only two countries, the USA (with some 36 % emissions) and Russia (with some 17.4% emissions) can influence whether the Kyoto Protocol comes into force, and its targets become legally binding under international law. President George W. Bush indicated, in March 2001, that the USA would not ratify the Kyoto Protocol. Thus, in practical terms, the Kyoto Protocol will only come into effect if Russia ratifies it. Australia, with only 2.1% of Annex 1

6 UNFCCC, Article 2.

7 Chamber of Commerce and Industry, Western Australia, Submission 28, p. 4.

greenhouse gas emissions, cannot affect the entry into force of the Protocol, whether it ratifies it or not.

Kyoto Protocol flexibility measures

2.15 Specific Protocol operational and compliance details continue to be worked through at each successive COP, as set out below.

Joint Implementation provisions (JI) (article 6)

2.16 Developed (or Annex 1) countries may transfer or acquire Emission Reduction Units (ERUs) between one another by investing in emissions reduction projects in another jurisdiction.

Clean Development Mechanism (CDM) (article 12)

2.17 Developed countries may earn Certified Emission Reduction Units (CERs) by undertaking emission-reducing projects in developing (non-Annex 1) countries, thus assisting those countries to achieve economic and social development with clean technology. A number of eligibility requirements are involved: for example, projects are only eligible to earn CERs if the resulting reductions in emissions are additional to any that would occur in the absence of the certified activity. The price of CERs is to be set by the market, and their use limited to 2.5% of party's initially assigned target. Nothing in the rules expressly excludes non-ratifying countries from participation as a project proponent but such countries *may* be discriminated against.

Emissions trading (article 17)

2.18 The 'least cost' emissions reduction scenario. To meet its Kyoto emissions target, each party has the choice of taking abatement action at home or purchasing extra emissions permits from countries which reduce their emissions below target and have excess permits to sell on the international market. Being so highly dependent on fossil fuel intensive industries, Australia could potentially benefit from an international emissions trading regime.

Carbon sinks (articles 3.3, 4)

2.19 Removal unit (RMUs) credits may accrue for 'sink' activities: afforestation, reforestation or land use change.

The Australian Government position on the Kyoto Protocol

2.20 Australia signed the Kyoto Protocol on 29 April 1998, thus signalling its support for the broad principle of global action to counter climate change. Since that time, the consequences of ratification have become clearer, as has the international response to the Protocol. On 5 June 2002, in response to a question without notice in the House of Representatives chamber, Prime Minister the Hon John Howard MP stated:

> It is not in Australia's interests to ratify the Kyoto protocol. The reason it is not in Australia's interests to ratify the Kyoto protocol is that, because the arrangements currently exclude-and are likely under present settings to continue to exclude-both developing countries and the United States, for us to ratify the protocol would cost us jobs and damage our industry. That is why the Australian government will continue to oppose ratification.[8]

2.21 In a joint media release by the Hon Dr David Kemp MP, Minister for the Environment and Heritage, and the Hon Alexander Downer MP, Minister for Foreign Affairs, on 15 August 2002, the Government stated its view that the Kyoto Protocol was not an effective response to climate change:

> [The Kyoto Protocol] will make only a modest contribution – around 1% - to reducing the growth of global emissions. Even as a first step, it does not provide a clear path towards developing countries' commitments and the US has indicated it will not ratify. Together, these countries already produce most of the world's greenhouse gas emissions.[9]

2.22 The Government is committed to meeting its Kyoto Protocol emissions target of 108% over 1990 levels, however, and in addressing climate change more broadly. Four elements underpin the Government's climate change strategy:

> Australia will strive for a more comprehensive global response to climate change;
>
> Australia will position itself to maintain a strong and internationally competitive economy with a lower greenhouse signature;
>
> Domestic policy settings will balance flexibility with sufficient certainty to allow key decisions on investment and technology development, and also emphasise cost effectiveness; and
>
> Australia will implement policies and programs that assist adaptation to the consequences of the climate change that is already unavoidable.[10]

2.23 In order to do this, the Government has contributed some $1 billion to greenhouse gas abatement measures. These measures are expected to deliver emission abatement of around 67 million tonnes by 2008-2012.[11] It supports work through the CSIRO program 'Energy Transformed' on, amongst other things, zero-emission coal

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8 House of Representatives *Hansard*, 5 June 2002, p. 3163.

9 Hon Dr David Kemp MP, Minister for the Environment and Heritage, and the Hon Alexander Downer MP, Minister for Foreign Affairs, Joint Media Release, 15 August 2002

10 Hon Dr David Kemp MP and Hon Ian Macfarlane MP, Joint Media Release, 14 April 2003.

11 Hon Dr David Kemp MP, Speech, *Australia's Domestic Climate Change Approach*, Renewable and Sustainable Energy Roundtable Side-event, COP 9, Milan, 9 December 2003, p. 2.

technologies involving gasification and geosequestration of greenhouse gas by-products. It also supports a greater role for the renewables sector, through the Mandatory Renewable Energy Target (MRET) scheme. A Climate Change Forward Strategy is in preparation.

Chapter 3

Arguments in favour of ratification

Australia needs to be, and be seen to be, a good global environmental citizen and to be seen to be serious about tackling greenhouse gas emissions

3.1 Groups in favour of ratification of the Kyoto Protocol point to the enormity of the climate change scenario facing the world and argue that, whatever the limitations of the Protocol, it represents a valuable first step in addressing climate change in the international arena. As the Climate Action Network Australia (CANA) indicated:

> Kyoto's role in establishing a reductions regime is essential in order to avoid overshooting the 450ppm mark, and in stabilising CO_2 emissions ... despite the modest targets there is great value in the Kyoto Protocol because it involves action being taken today.[1]

3.2 Greenpeace also stressed the urgency with which climate change action needs to be taken, stating that if the Kyoto Protocol failed to enter into force, international action to tackle this serious and alarming problem would be likely to be set back years, given it had taken over a decade for international negotiations to deliver the Protocol. The urgency of the need for international action was stressed by many business representatives as well, with Environment Business Australia indicating 'there is neither sufficient time or sufficient goodwill to develop an alternative to Kyoto'.[2]

3.3 CANA pointed out that Australia was out of step with the international community in its thinking on the Kyoto Protocol, the only agreed international instrument to address climate change, with Australia being one of only three developed countries not to have ratified. Friends of the Earth also stressed that, despite its providing only the beginning steps towards the deep cuts in emissions required, the Kyoto Protocol was the only international climate change treaty with legally binding mechanisms.[3]

3.4 As Government representatives pointed out, however, even if Australia were to ratify the Protocol, this would not be sufficient to bring it into effect, as our 2.1 per cent of emissions would not help reach the emissions threshold of 55 per cent as required under the Protocol.

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1 Climate Action Network Australia, Submission 33, p. 2.

2 Environment Business Australia, Submission 24, attachment, p. 4.

3 Friends of the Earth, Submission 17, p. 2.

3.5 Australian representatives strenuously and successfully argued during the Kyoto negotiation period for the inclusion of a clause which effectively resulted in a fair target for Australia of 108 per cent of emissions over its 1990 level. Article 3(7) reads:

> Those Parties included in Annex I for whom land use change and forestry constituted a net source of greenhouse gas emissions in 1990 shall include in their 1990 emissions base year or period the aggregate anthropogenic carbon dioxide emissions by sources minus removals by sinks in 1990 from land use change for the purposes of calculating their assigned amount.

3.6 It has been suggested that, having achieved acquiescence from the international community on a point so favourable to Australia as the only Annex I party for which land use change in 1990 resulted in a net source of greenhouse emissions, Australia now runs the risk of being seen as an international pariah for its failure to ratify.[4] The Ambassador for the Environment, Mr Christopher Langman, who has been present at many COP negotiations, assured the Committee that this was not the case:

> It has been suggested sometimes that the government's decision not to ratify the protocol has diminished our international influence. I think the evidence is simply not there for that. My colleagues and I are on the floor of the negotiations in the UNFCCC and in other international forums, and I have not seen it.[5]

If it fails to ratify, Australia will be excluded from potential emissions trading and CDM benefits

3.7 It has been suggested that under the Protocol flexibility mechanisms, ratifying countries (including our major trading partners, competitors and emerging market forces such as India and China) would preferentially trade amongst themselves, thus effectively excluding Australia if it failed to ratify.[6]

3.8 This is a far from clear-cut situation. It has been suggested that multinational firms with subsidiaries located in countries that are Parties to the Protocol may have access to international emissions trading through those subsidiaries. Even firms based solely in Australia may be able to trade carbon credits through likely secondary markets. But as Ms Fiona Wain of Environment Business Australia told the Committee:

> We are very concerned ... that the mechanisms under the Kyoto protocol – the CDM, JI and trading – are going to be denied to Australian companies at some levels and very difficult to access in other ways. Most of our

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4 The Australia Institute, *Evidence*, p. 24. [Note: The term *Evidence* refers in this report to the Proof Committee Hansard of the Committee's public hearing on 13 February 2004]

5 Mr Christopher Langman, *Evidence*, p. 61.

6 See, for example, Environment Business Australia, Submission, p. 1.

> companies are small- to mid-sized companies. They will, frankly, not bother to jump through the hoops of going through third parties and fourth parties to access the CDM. We are going to lose opportunities.[7]

3.9 Anecdotal evidence has suggested that China is showing a preference for CDM investment from firms located in countries that are Parties to the Protocol, with Australian firms losing out to French competitors.[8] Similarly, Mr Ric Brazzale of the Australian Business Council for Sustainable Energy (BCSE) told the Committee of a renewable business export delegation to Brazil, which was effectively told that there was no point in dealing with Australian companies because of Australia's anti-Kyoto stance.[9]

3.10 Ms Libby Anthony of the Australian Wind Energy Association (AusWEA) suggested that it was important for Australia to ratify the Protocol in order to send a strong signal to the markets that we need to be tightening our belts with regard to energy efficiency. This would also pave the way towards developing a more robust market for renewables in Australia as well as facilitating a stronger move into export markets.[10]

3.11 It was also argued that the potential for inbound investment under the Protocol could also be threatened if Australia fails to ratify. Japan in particular has traditionally invested in carbon sequestration projects in Australia to offset its own emissions in Japan. One example cited is the Tokyo Electric Power Company's $120 million investment over ten years in 40,000 hectares of plantation on the NSW North Coast.[11] If Australia cannot provide the carbon credits, it is likely that this investment will go elsewhere.

If it fails to ratify, Australian industry will be adversely affected [and some firms may be driven offshore with consequent loss of Australian jobs and profits]

3.12 The industries which would stand to benefit most from Australia's ratification of the Kyoto Protocol or, conversely, have most to lose from Australia's failure to ratify, are those in the sustainable or renewable energy fields. Such businesses would have enhanced opportunities if Australia was able to participate fully in CDM projects. Equally, if Australia failed to ratify, it would impact on the international

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7 Ms Fiona Wain, *Evidence*, p. 12.

8 Kyoto Protocol Ratification Advisory Group, *Report: A Risk Assessment,* 2003, p. 23.

9 Mr Ric Brazzale, *Evidence*, p. 13.

10 Ms Libby Anthony, *Evidence*, p. 14.

11 Kyoto Protocol Ratification Advisory Group, *Report: A Risk Assessment,* 2003, p. 24.

competitiveness of Australian sustainable energy firms.[12] Environment Business Australia suggested that the European Union was seeking a 20% market share target for renewable energy by 2010, a market in which Australia would be unable to compete on an equal footing without ratification.[13]

3.13 Witnesses for the sustainable and renewable energy sector pointed to the jobs boost that would result from the growth in their industry following a ratification of the Protocol. Ms Anthony of AusWEA suggested that for every job in the coal industry, there were six jobs in the renewable industry.[14] Mr Brazzale of BCSE pointed to another advantage of renewable energy, namely that job opportunities are spread widely around Australia.[15]

3.14 In determining whether to ratify, the Australian Government has to look beyond sectoral interests, however. It has equally been suggested that, at least as far as jobs are concerned, the net effect of ratification would be a loss of jobs in Australia.[16]

Assuming that the Kyoto Protocol enters into force, and Australia fails to ratify, in accordance with Article 13(2) of the Protocol it will not be eligible to participate formally in the proceedings of any session of the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol, and will therefore not be eligible to participate formally in negotiations on the post-2012 period that occur within the meeting of the Parties to the Kyoto Protocol

3.15 Whilst this is factually correct, it is far from certain that the Kyoto Protocol will ever enter into force. Until such time as it is does come into effect, negotiations are continuing under the framework of the UNFCCC. Australia is a Party to the Convention and has a full decision-making role. As our Ambassador for the Environment observed, Australia is routinely asked to chair major negotiating groups and is asked to participate in a wide range of both formal and informal meetings.[17] Even if the Kyoto Protocol does eventually come into force, Australia will have Observer status under Article 13(2) of the Protocol. Although Australia would not have a formal decision-making role, it would be able to attend the meetings and work behind the scenes to influence outcomes.

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12 Renewable and Sustainable Energy Roundtable, Submission 19, p. 2.

13 Environment Business Australia, Submission 24, p. 2.

14 Ms Libby Anthony, *Evidence,* p. 21.

15 Mr Ric Brazzale, *Evidence,* p. 20.

16 Michael Hichens, Counting the cost of Kyoto, *Sydney Morning Herald,* 16 January 2004, p. 13.

17 Mr Christopher Langman, *Evidence*, p. 61.

3.16 In his evidence to the Committee, Mr Langman made clear that even if the Kyoto Protocol does enter force and Australia has not ratified it, Australia will be involved in any future negotiations on the arrangements post-2012:

> The Kyoto protocol itself suggests that the discussions and negotiations on the targets, the commitments, that would be in place in the second commitment period—that is, the period after 2012—should begin from no later than the end of 2005. There is some uncertainty about that date because there is some uncertainty about whether the protocol will enter into force. Having said that, to answer your question, it could be assumed that parties to the protocol—that is, countries that have ratified the protocol—will be involved in those discussions at one level. But there is no doubt that all parties would be involved.
>
> There is no sense, talking with any other country, that there is a desire to exclude Australia or to exclude the United States. That would make no sense in terms of the objectives of the countries that support the Kyoto protocol because they want to deal with climate change through that means. The objective of the European Union and Japan, and I am sure the other parties to the Kyoto protocol, is to make progress in addressing climate change. They know that it is critical … that there is a comprehensive and global response. It is hard to imagine such a response without the engagement of the United States and the developing countries in practical and meaningful mitigation actions. So I see no chance that we would be excluded. In fact, we have already been approached by many countries saying they very much hope Australia would be part of any discussion of future arrangements, whether it happens under the protocol or outside that framework.[18]

3.17 Mr Ian Carruthers from the Australian Greenhouse Office also made the following point:

> Just to remind the committee, Australia is a party to the UN Framework Convention on Climate Change. It is the framework convention that sets the long-term objective of the international community to deal with the global threat of climate change. As we look at climate change as a problem that will have to be confronted by an international response over a period of decades and through this century, Australia, as a party to the climate change convention, will be a full participant in the design of an effective long-term solution.[19]

18 Mr Christopher Langman, *Evidence*, p. 64.

19 Mr Ian Carruthers, *Evidence*, p. 65.

Ratification would allow Australia to meet its 108% emissions target at lower cost

3.18 The various efforts at economic modelling of the impacts on Australia of ratification or non-ratification of the Kyoto Protocol have all reached the same answer to this question, although they differ in degree. The most recent analysis, based on MMRF-GREEN modelling, for the Kyoto Protocol Ratification Advisory Group found that, if Australia ratified the Protocol, the economic costs of meeting our 108% target would be a drop in GDP of 0.11% ($875 million p.a.) against a non-ratification cost of -0.26% GDP ($2 billion). The lower cost figure is based on Australia having unfettered access to low cost abatement through the Protocol mechanisms, while the higher cost relates to our meeting our targets via domestic emissions trading.[20] This assumes, of course, that the Protocol will come into force.

3.19 In overview, both cost scenarios are relatively low for the first commitment period, so other factors should carry more weight in any decision on the Protocol.

3.20 Economic modelling is, of course, only as good as the scenarios on which it is based and it must be said that there are many uncertainties in this exercise. Ms Fiona Wain of Environment Business Australia was one witness to call for a better costing of externalities so as to firm up the data.[21]

If developed countries embraced the Protocol, developing countries would be more likely to accept emissions targets in commitment periods after 2012

3.21 Developing countries point to the fact that some 80% of our current concentration of greenhouse gases has come from the activities of developed countries from the industrial revolution onwards. Hence, they argue, the weight of responsibility for addressing the problem of climate change should fall on those who caused the problem in the first place. This argument was recognised in the Kyoto Protocol, which absolves developing countries from emissions targets for the first commitment period.

3.22 But while many developing countries have expressed a desire to engage in sustainable development, negotiations in the various Conferences of the Parties since Kyoto have given no indication that they are prepared to adopt specific emissions targets, with concomitant penalties built in, in any subsequent commitment period. In fact, there is persuasive evidence to the contrary. As Mr Langman told the Committee:

> India and China, and indeed the group of developing countries-the G77-have made it quite clear that they are not willing to accept or discuss anything that looks like a legally binding obligation to constrain their

20 Kyoto Protocol Ratification Advisory Group, *Report: A Risk Assessment,* 2003, p. 2.

21 Ms Fiona Wain, *Evidence*, p. 15.

> greenhouse gas emissions. Many developing countries are taking actions relevant to greenhouse. China have said publicly on many occasions that they do not believe it appropriate for them to take such constraints when they have such an urgent need for basic economic development and that they would not contemplate that for a very considerable period.[22]

Ratification need not be a permanent or irreversible commitment

3.23 Proponents of the treaty point out that ratification of the current Protocol would only commit Australia for the five year period of 2008-2012. Should unacceptable targets be forced upon Australia or other undesirable conditions determined as a result of negotiations for a second or subsequent commitment period, Australia could simply walk away. Another escape clause exists, in the form of the rule to allow an opt-out after three years. Such conduct would almost certainly draw greater international opprobrium on Australia than what is already claimed to exist, and accordingly might be best avoided.

22 Mr Christopher Langman, *Evidence*, p. 59.

Chapter 4

Arguments against ratification

Australia's ratification would make no difference to the coming into effect of the Kyoto Protocol

4.1 The Kyoto Protocol will come into effect under international law 90 days after a minimum of 55 countries, representing at least 55% of 1990-level greenhouse gas emissions of Annex I Parties (developed countries and economies in transition), have ratified it. While 120 countries have ratified the Protocol to date, their combined emissions at 1990 levels represent only 44.2% of emissions, well short of the required 55% emissions threshold. The only two countries whose emission levels would help meet the threshold are the United States, with 36.1%, or Russia, with 17.4% of Annex I Parties 1990 emissions. The United States has indicated it will not ratify the Protocol; Russia's position is said to be equivocal but at this stage Russia is opposed to ratification because of the adverse impact ratification would have on the Russian economy. Australia's total of 2.1% of 1990-level emissions will not assist in meeting the 55% threshold. If Australia were to ratify, it would be a symbolic gesture only.

Australia is already committed to meeting its emissions target, whether it ratifies or not

4.2 Australian Government representatives have advanced the argument that the main purpose of the Kyoto Protocol is to reduce global greenhouse gas emissions in order to limit climate change and its impacts. The Government is committed to meeting its Kyoto target (despite being under no legal obligation) and is on track to do so. Environment Minister, the Hon Dr David Kemp MP, has reiterated in Parliament that Australia is 'within striking distance' of this target.[1]

4.3 In his evidence to the Committee, Mr Ian Carruthers of the Australian Greenhouse Office (AGO) confirmed that this was the case:

> we can see from the latest and regularly published assessment of Australia's emissions trends that, by the time of the Kyoto target period, across a range of sectors greenhouse measures in Australia will have delivered emissions reductions of 67 million tonnes. To put that in context, at the time of Kyoto it was projected that Australia's emissions, without measures, would grow to 128 per cent above the 1990 level. With a 67 million tonnes reduction, the projection is that Australia will be around 110 per cent of 1990 levels. As the government has said, with the current measures we are within striking distance of achieving Australia's Kyoto target. With further actions, such as the government's focus on a good outcome on reductions in Queensland

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1 House of Representatives *Hansard,* 10 Feb 2004, p. 24195.

land clearing, there is every prospect for Australia to achieve its Kyoto target.[2]

4.4 In this context it is interesting to note that the European Union as a whole and 13 out of 15 of its member states are in danger of not meeting their Kyoto targets.

The Kyoto Protocol will not be effective in reducing global emission levels

4.5 It has been estimated that the Kyoto Protocol would reduce global emissions by about one per cent.[3] Faced with the enormity of the climate change challenge, this is an insignificant amount. The principal reason for this modest proposed outcome is that the treaty proposes legally binding emissions reduction targets only for developed countries and economies in transition. Developing countries, whose emissions are projected to constitute 47 per cent of global emissions by 2030, have no targets and are actively resisting the imposition of targets for future commitment periods.[4] This includes both China and India, the second and fifth largest emitters globally.[5] Emissions reductions by developed countries alone cannot prevent a dangerous accumulation of greenhouse gases in the atmosphere.

4.6 Developing countries were spared emissions targets through a recognition of the fact that they had every right to pursue economic development and through a tacit acceptance of the fact that developed countries were primarily responsible for the climate situation in which we find ourselves. This situation is clearly untenable in the longer term. The International Energy Agency (IEA) predicts that energy demand in 2030 will have increased by two thirds over current usage, and that fossil fuels will continue to dominate energy production as they are relatively cheap and convenient. Modernisation of developing country economies depends on the provision of infrastructure for energy supply and the consequences of rapidly expanding energy demand will include increased emissions of greenhouse gases.[6]

4.7 Compounding the problem of the lack of targets for developing countries is the likelihood that some at least of the Annex I countries will fail to meet their proposed targets. A press release from the European Commission dated 2 December 2003, relating to a progress report on greenhouse gas emissions, concluded that 13 out of 15 member states would miss their emissions reduction targets.

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2 Mr Ian Carruthers, *Evidence*, p. 58.

3 Kyoto Protocol Ratification Advisory Group, *Report: A Risk Assessment,* 2003, p. 5.

4 ibid.

5 Trevor M. Power, *Issues and opportunities for Australia under the Kyoto Protocol*, (2003) EPLJ pp.459-60.

6 OECD/IEA, *World Energy Outlook,* Paris 2002.

The Kyoto Protocol will harm Australian industry

4.8 If Australia were to ratify the Kyoto Protocol, it would take on obligations not shared by its regional trading competitors. It has been speculated that if the Kyoto Protocol came into effect it would result in 'carbon leakage', with investments in smelters and refineries, mining and petrochemical projects going to developing nations not subject to emissions reduction targets.[7]

4.9 Much of Australian industry is highly dependent on the production of energy and greenhouse intensive goods. In evidence to the Committee, many representatives outlined how they might be affected should the Kyoto Protocol come into effect. Woodside Energy submitted:

> Australian trade-exposed, energy intensive industries would suffer competitive disadvantage from developing nations without emission targets under the Protocol and from the US which has elected not to ratify the Protocol. Competitors in these nations attract no additional production costs imposed by their governments to achieve compliance. This competitive disadvantage is illustrated clearly by the LNG export industry, in which almost all of Australia's competitors for new contracts are located in non-Annex B countries in Asia and the Middle East.[8]

4.10 The Australian Chamber of Commerce and Industry (ACCI) shared similar concerns. It submitted:

> A fundamental concern for Australian industry is that a number of our competitors do not have binding abatement targets under the current Kyoto Protocol rules. Consequently, these nations will not see a price signal within their domestic industries and will be able to enter global markets with lower cost structures. The scenario that Australian Governments must mitigate against is the situation where domestic greenhouse abatement policies introduce a price signal here that impedes our ability to remain internationally competitive.
>
> The marginal cost of abatement will cascade through supply chains – being passed on from supplier to supplier. Ultimately, there will be a point in the chain where certain trade-exposed domestic industries will be unable to pass on the marginal cost as imported products will be less costly.[9]

4.11 A similar theme was taken up by the Plastics and Chemicals Industries Association (PACIA), which referred to the energy intensive nature of the sector:

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7 Australian Chamber of Commerce and Industry, Submission 35, p. 5.

8 Woodside Energy Ltd, Submission 31, p. 2.

9 Australian Chamber of Commerce and Industry, Submission 35, p. 5.

> Changes to the cost of energy, and costs associated with emission controls, will affect competitiveness. Many competing suppliers are based in Asia and other developing countries where there has been substantial investment in recent years in larger plants which achieve scale economies not realisable in a market the size of Australia. A loss of competitiveness, even due to shorter term market changes, can result in long term loss of market share.[10]

4.12 The Australian Aluminium Council (AAC) also referred to the impact of ratification on the aluminium industry's international competitiveness:

> the world market price for aluminium will be dominated by the availability of metal from countries without obligations under the Kyoto Protocol (non-Annex 1) or countries that don't intend ratifying (at least the US) or countries who will be large sellers of 'hot air' (Russia and Eastern Europe). Consequently, any increase in energy prices to the aluminium industry in Australia as the result of policies to abate greenhouse emissions cannot be passed on to aluminium customers.[11]

Cost-benefit analyses suggest that the costs of the Kyoto Protocol exceed its benefits

4.13 This is an inherently complex issue. Assumptions about the rate of emissions growth depend on factors that are difficult to predict accurately: such as population growth, productivity growth within different industries, and fossil fuel prices. The Protocol takes the position that the risks posed by climate change are so great that emissions must be reduced at any cost. Not all agree. It has been asserted that the fear of taking on a disastrously expensive commitment was one of the reasons for the nearly unanimous opposition the Protocol faced in the US Senate.[12]

4.14 On this issue, analysts McKibbin and Wilcoxen concluded:

> the treaty implicitly adopted the position that the risks posed by climate change are so great that emissions must be reduced no matter what the cost. However, too little is known about the dangers posed by climate change, and about the costs of avoiding it, to draw that conclusion. Nor is there any evidence that the targets set by the protocol are the optimal levels of greenhouse gas emissions, either for an individual country or for the world as a whole. If anything, cost-benefit calculations based on studies to date tend to suggest that the costs exceed the benefits, at least in developed countries.[13]

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10 Plastics and Chemicals Industries Association, Submission 23, p. 2.

11 Australian Aluminium Council, Submission 29, p. 2.

12 Warwick J. McKibbin and Peter J. Wilcoxen, Estimates of the costs of Kyoto: Marrakesh versus the McKibbin-Wilcoxen blueprint, *Energy Policy,* 32, 2004, p. 471.

13 ibid.

4.15 Most analysts have not even attempted to consider the cost-benefits for Australia in a potential second commitment period, given the high degree of uncertainty about its nature and scope.

The volume of greenhouse gas emissions from a given country is not a good measure of that country's impact on global emissions

4.16 A perceived flaw in the Kyoto Protocol is that it contains no mechanism to recognise or reward actions which, although they may cause an increase in one country's emissions, bring about a net decrease in global emissions. The example frequently advanced was the recent Australian $25 billion LNG contract with China. This will add some one million tonnes of carbon dioxide annually to Australian greenhouse gas emissions, but will reduce China's emissions by some seven million tonnes by replacing coal-fired power.

The Protocol lacks credible compliance measures

4.17 Those opposed to the Protocol point to the lack of credible compliance measures as a major flaw in its design. The main penalty to be imposed on countries which fail to meet their emissions target is a reduction in emissions target for the post-2012 period – targets which remain to be negotiated and which could be subject to manipulation. The costs of independent monitoring of emissions levels could also be prohibitive.

Alternative mechanisms

4.18 The argument most frequently advanced for ratifying the Protocol is that it is the one international mechanism that is currently on the table, and that it must be supported, whatever its flaws, in the interests of being seen to be addressing the global warming crisis. This is simplistic. The Committee heard evidence that Australia was actively pursuing bilateral agreements, such as the Climate Action Partnership with the USA, in which the two countries will collaborate on climate change science, reduced-energy and renewable energy technology, capacity building in developing countries and greenhouse accounting in the forestry and agriculture sectors. Australia is also cooperating with the European Union, Japan, New Zealand and China on climate change initiatives and is assisting Pacific nations to build their capacity to adjust to the consequences of climate change.

4.19 While it is true that no alternative global approach to addressing climate change is on the table, the matter has certainly been considered. As Mr Langman told the Committee:

> We have certainly talked at length with a wide range of countries about how we can build a more global approach that will gradually draw in a larger number of emitters. We have had discussions on that topic with the European Commission and Japan. We participate in an informal process involving key countries – China, India, Brazil, the EC, the United States, Canada and others – that Japan has organised. There have been two

> meetings of that small group. We have discussed this topic with the United States and Canada. It is in some ways the key topic. In spite of all the formal processes and procedural issues we dealt with at the ministerial meeting in Milan, it is the topic that is on everybody's lips. It is what people are thinking about and talking about. There are no definitive and easy answers yet.[14]

Of course, there is the example of the Montreal Protocol.

Technological solutions

4.20 Part of the challenge in developing a response to climate change is to do so without threatening the living standards in developed nations while still accommodating the natural developmental aspirations of developing nations. Australia has rich resources of fossil fuels; its energy production is highly fossil-fuel dependent; and more than 80 per cent of our exports are greenhouse gas intensive. The clear imperative is to harness technology to enable us to continue to enjoy the benefits of these assets but to reduce or eliminate entirely their emissions. In this regard, the Government is supporting the work of the CSIRO Energy Transformed program which is developing zero-emission coal technologies involving gasification and geosequestration.

4.21 Many developing countries are also rich in fossil fuels and will use these resources as the most cost-effective that are readily available to them to provide basic energy services. As Mr Langman pointed out in evidence to the Committee:

> if there is a massive expansion of fossil fuel, coal based energy production in countries like India and China over the next 20 to 30 years, we will have a huge task in dealing with the potential climate change that could arise ... it seems critical that part of the long-term solution needs to be to work with those countries on the technologies that make a difference.[15]

Problems associated with Kyoto's flexibility measures

4.22 Emissions trading was devised as a way of making the cost of Kyoto compliance more palatable. In order to meet their emissions targets, ratifying countries with a high emissions load could buy carbon credits (or the right to emit an agreed amount of fossil fuel emissions) from countries with credits to spare, for example credits generated by a carbon sink such as a new forest. Traded volumes have been reckoned at about 71 million tonnes in 2003, with the market price of the right to emit a tonne of carbon dioxide or its equivalent ranging between $US 4-6.[16] The problem here is obvious. As Minister for Industry, Tourism and Resources, the Hon Ian Macfarlane

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14 Mr Christopher Langman, *Evidence*, p. 63.

15 Mr Christopher Langman, *Evidence*, p. 61.

16 Simon Grose, Irony, problems in emissions trading, *Canberra Times,* 17 Jan 04, p. B6.

MP, pointed out, 'Kyoto is fundamentally flawed and doesn't reduce emissions. It simply trades emissions between emitters'.[17]

4.23 The Australian Greenhouse Office worked on a national emissions trading scheme for some years but has recently desisted, on the grounds that it was uncertain that the Kyoto Protocol would be ratified.

17 *Australian Financial Review* 16 January 2004, p. 10.

Chapter 5

Conclusions and recommendation

Climate change

5.1 Notwithstanding climate change sceptics, there is a broad international scientific consensus that various human activities have increased greenhouse gas emissions, contributing to global warming and climate change. In Australia, there is bipartisan support for this view, and accordingly an acknowledgement that Australia has an obligation to take action to abate its greenhouse gas emissions.

5.2 It is noteworthy that none of the groups that made a submission to this Inquiry opposing ratification of the Kyoto Protocol attempted to cast doubt on climate change. All were united in the belief that climate change is a serious issue, warranting global attention, so that the impacts of climate change on humankind can be avoided or minimised. Like good corporate citizens, all of these groups are united in a belief that it is necessary and desirable to reduce greenhouse gas emissions. However, they do not believe that the Kyoto Protocol represents an effective response to climate change.

5.3 The Australian Chamber of Commerce and Industry (ACCI) said in its submission: 'It is important to re-iterate … that while ACCI is opposed to the ratification of the Kyoto Protocol, that does not mean we are opposed to reducing greenhouse gases or learning to adapt to climate change.'[1]

5.4 The Australian Aluminium Council (AAC) said that 'The AAC and its members share the global – and national – public concern, including the Parties supporting the Bill, over possible climate change and adverse global man-made impacts on the natural 'greenhouse' effect.'[2]

5.5 The Plastics and Chemicals Industries Association (PACIA) acknowledges the necessity to reduce greenhouse gas emissions. PACIA said that it 'has undertaken two specific projects under the Greenhouse Challenge program and five PACIA members have signed individual Greenhouse Challenge Agreements.'[3]

5.6 The Minerals Council of Australia (MCA) considers that:

> Climate change is an issue of significant international concern that should be addressed in the economic, environmental and social interests of humankind … The Minerals Council supports a global response to

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1 Australian Chamber of Commerce and Industry, Submission 35, p. 3

2 Australian Aluminium Council, Submission 29, p. 1.

3 Plastics and Chemicals Industries Association, Submission 23, p. 2

> managing climate change that will deliver real greenhouse gas emission abatement provided this does not undermine Australian industry's global competitiveness and promotes real business opportunities.[4]

5.7 Woodside Energy Ltd indicated in its submission that it:

> supports the 108% Kyoto target for Australia and is committed to playing its part to the achievement of that target and to reducing global greenhouse emissions through increased LNG exports. Woodside has been a member of the Greenhouse Challenge Program since 1997. Woodside operated projects have abatement actions either completed or planned which will reduce total greenhouse emissions by 40 million tonnes of CO2e over the period 2002-2022 (at a cost $195 million over 20 years). In addition, Woodside has also invested $50 million in sustainable and renewable energy technologies through its subsidiary company Metasource Pty Ltd.
>
> Since 1996, emissions per tonne of production from Woodside operated projects have declined by more than 50%. Two of the abatement initiatives (avoiding 730,000 tonnes of CO2e per annum) have won Institution of Engineers Australia/Australian Greenhouse Office awards for greenhouse abatement initiatives. The 4th LNG train, under construction on the North West Shelf project, will be 30% more greenhouse efficient than the existing LNG trains built in the early 1990s.[5]

5.8 Finally, Mr Lawrence Acton, Chair, Land and Vegetation Task Force, National Farmers Federation stated that 'I should have said up front that we do accept that there is a need to address greenhouse emissions.'[6]

Should Australia ratify the Kyoto Protocol?

5.9 The Kyoto Protocol represents a fundamentally flawed response to climate change and its ratification is not in Australia's national interest.

The Kyoto Protocol does not represent a genuinely global response to climate change

5.10 Climate change is a global issue, with repercussions for all nations, and accordingly it requires a genuinely global response. Unfortunately, the Kyoto Protocol falls woefully short of this. In no way does it represent a genuinely global response to climate change.

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4 Minerals Council of Australia, Submission 32, p. 1.

5 Woodside Energy Ltd, Submission 31, p. 1.

6 Mr Lawrence Acton, *Evidence*, p. 37.

5.11 The fundamental flaw of the Kyoto Protocol is that a mammoth 75 percent of global greenhouse gas emissions are excluded from its scope, severely limiting its efficacy.

5.12 The Kyoto Protocol aims to cut the greenhouse emissions of Annex 1 Parties by only five percent. The Australian Greenhouse Office points out that this comes nowhere near to reducing greenhouse gas emissions by the required amount. It says that the Protocol, 'will make only a modest contribution – around 1% - to reducing the growth of global greenhouse emissions.'[7] This compares to a need, based on the best science currently available, to reduce global emissions by some 60 percent by the end of the century.

5.13 Environment groups acknowledge that much more substantial cuts in emissions are required than those provided under the Kyoto Protocol if emissions are to be stabilised at a level that will prevent dangerous interference with the climate system. Greenpeace, for instance, states that, 'Much deeper cuts in greenhouse emissions are needed than those currently required under the Kyoto Protocol's first commitment period.'[8] However, there is currently no agreement on the targets that countries will be expected to meet after the expiration of the first commitment period in 2012, although these will be subject to talks in the near future. Strictly speaking, and this is a point Woodside makes in its submission,[9] it is incorrect to speak of a first commitment period because the Kyoto Protocol contains no agreement for subsequent commitment periods. The reality is that the proponents of ratification are asking Australia to sign up to a fatally flawed treaty that excludes 75 percent of global emissions, does not require developing nations to meet targets, and will deliver woefully inadequate global emissions abatement of around one percent. Given this, it is difficult to see how the Climate Action Network Australia (CANA) can justify saying that, 'CANA members believe that despite the modest targets there is great value in the Kyoto Protocol because it involves action being taken today.'[10]

5.14 As it is, the Protocol will make only a negligible contribution to abating greenhouse gas emissions. However, the basis of the treaty will be further undermined if those countries that have ratified it fail to meet their emission reduction targets. The European Union is a vociferous supporter of the Protocol, but in December 2003 it was revealed that without further abatement action the EU as a whole, and 13 out of its 15 member states will miss their targets.[11] Only the United Kingdom and Sweden

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7 www.greenhouse.gov.au/international/kyoto/index.html

8 Greenpeace, Submission 34, p. 2.

9 Woodside Energy Ltd, Submission 31, p. 6.

10 Climate Action Network Australia, Submission 33, p. 2.

11 European Commission, Media Release, *Climate change: More action required from Member States to cut greenhouse gas emissions*, 2 December 2003.

are on track to meet their targets.[12] EU Environment Commissioner, Margot Wallstrom, has said that:

> The figures in the report show that the policies and measures taken in the Member States so far will not be enough. Unless more is done, the EU as a whole and the majority of its Member States will miss their Kyoto emission targets. This is serious. Time is running out.[13]

5.15 In the absence of further abatement measures, Spain is projected to exceed its target by more than 30 percent, whilst Austria, Belgium and Ireland are projected to exceed their targets by 20 percent by 2010.[14]

The Kyoto Protocol does not require developing nations to meet targets

5.16 Unlike developed nations, the Kyoto Protocol does not require developing nations to commit to targets to reduce their greenhouse gas emissions. This is justified largely on social justice grounds and on the basis that developed nations are historically responsible for the increase in greenhouse gas emissions.

5.17 Greenpeace, for instance, says that:

> There are several reasons why developed countries should reduce emissions before developing countries:
>
> - Developed countries have the technical and financial capacity to reduce emissions.
> - Developing countries often have more pressing basic subsistence issues such as food, shelter, health etc.
> - Developed countries are responsible for approximately 80% of historical greenhouse emissions.[15]

5.18 Developing countries emissions are projected to exceed those of the developed world in this decade. This undermines the entire basis of the Kyoto Protocol. The objective of the Protocol is to stabilise greenhouse gas concentrations at a level that will prevent dangerous interference with the climate system. How can this be expected when developed nations cut their emissions, but at the same time developing nations go on increasing theirs?

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12 European Commission, Media Release, *Climate change: More action required from Member States to cut greenhouse gas emissions*, 2 December 2003.

13 ibid.

14 ibid.

15 Greenpeace, Submission 34, p. 5.

5.19 There is a logical inconsistency, in that the proponents of ratification argue that the consequences of climate change will be so dire that immediate action is required, but on the other hand they say that, at least in the first instance, developing nations should not be required to cut their greenhouse gas emissions. Surely, if the consequences of climate change are going to be so dire, it requires immediate action by all major emitters, regardless of whether or not they happen to be a developed or developing nation?

5.20 Moreover, the CSIRO says in its submission that 'The greater the reductions in emissions and the earlier they are introduced, the smaller and slower the projected warming.'[16] Surely, this must provide a powerful justification to environmental groups and other proponents of ratification, for the requirement that developing nations take action to reduce their greenhouse gas emissions?

5.21 Climate change does not discriminate on the basis of a country's level of industrialisation, and nor should the Kyoto Protocol. Climate change will impact on all countries throughout the globe, and accordingly all countries have an obligation to address climate change.

5.22 It is a serious weakness of the Kyoto Protocol that it does not even contain a pathway for the involvement of developing nations. If the Kyoto Protocol is to have any chance of making significant reductions in emissions, a means must be found to include developing nations in the Protocol.

5.23 As the Chamber of Commerce and Industry Western Australia notes:

> Unless developing countries are also part of an international strategy to reduce greenhouse emissions, that strategy will not work. And unless developing countries can be accommodated in an emissions reduction strategy in an equitable way which does not preclude them from achieving economic development, they will refuse to participate.[17]

5.24 Greenpeace states that 'Developing countries have indicated their willingness to take on targets once developed countries have reduced emissions.'[18] However, it is the case that many developing nations are very reluctant to even discuss the framework that must come into place after 2012. According to Environment Minister, Hon Dr David Kemp MP, 'China and India simply will not even begin discussing acceptance of Kyoto-style emission caps.'[19] Climate Change Backgrounder No. 3 of the Climate Change Issues website says that:

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16 CSIRO, Submission 16, p. 6.

17 Chamber of Commerce and Industry Western Australia, Submission 28, p. 1.

18 Greenpeace, Submission 34, p. 5.

19 Hon Dr David Kemp MP, 'Kyoto not the answer for Australia', *Australian Financial Review*, 16 December 2003, p. 47.

> At the World Summit on Sustainable Development in Johannesburg in September 2002 the EU tried to get acceptance for the idea of developing countries accepting targets in the future (after the Kyoto obligations expire in 2012). They were rejected. The EU tried again at the meeting of Parties the following October and got an even more public rejection.[20]

5.25 The reluctance of developing nations to take on targets was referred to at the hearing:

> **Senator LUNDY** – But the point is that the next round will pick up those countries that do not currently have obligations.
>
> **Mr Knapp** – I am sorry, Senator. The issue has been stated very categorically by those exact countries at COP8 and COP9 – that is, that they do not intend to take on commitments under the Kyoto protocol.
>
> **Mr Waller** – Or its successors.[21]

5.26 Mr Christopher Langman, Ambassador for the Environment, Environment Branch, Department of Foreign Affairs and Trade referred to the intransigence of developing nations when it comes to accepting targets. He stated that:

> in the past when industrialised countries like Australia, Japan and the United States and the European Union, have talked about actions that develop[ing] countries might take to constrain greenhouse gas emissions in the long term, it has always led to a breakdown of the discussions—to walking out—or to incredibly difficult, all-night discussions that produced very little.[22]

5.27 Mr Langman went on to say that:

> The point is that whenever in the Kyoto negotiation there was an effort to discuss how developing countries might contribute to the mitigation of greenhouse gas emissions within the framework of the protocol—or later on; say in the second commitment period—that led to a breakdown of the negotiations.[23]

5.28 At another point in the hearing Mr Langman made the observation that, 'India and China, and indeed the group of developing countries—the G77—have made it

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20 Climate Change Issues, *Climate Change Backgrounder No. 3: The Kyoto Protocol – On Shaky Ground*, www.climatechangeissues.com/cci-ccb3.php

21 *Evidence*, p. 46. [Note: The quote ascribed to Mr Waller will be shown in the final corrected transcript as having been made by Mr Michael Potter of the National Farmers Federation.]

22 Mr Christopher Langman, *Evidence*, p. 54. [Note: The proof transcript incorrectly refers to 'developed', not 'developing'.]

23 ibid., p. 55.

quite clear that they are not willing to accept or discuss anything that looks like a legally binding obligation to constrain their greenhouse gas emissions.'[24]

5.29 The Kyoto Protocol Ratification Advisory Group considers that if developing countries continue to resist targets, the future of the Kyoto Protocol will be jeopardised. The Group says that:

> if developing countries do not accept targets, the treaty is not likely to have a future. The Protocol cannot achieve its environmental objective and developed countries are unlikely to continue with measures that impose an inequitable cost on their economies.[25]

5.30 Mr Langman referred to a growing international view that the Kyoto Protocol does not represent an effective response to climate change. He said:

> I think we have to understand that certainly some countries have decided to use the Kyoto protocol to take some initial steps to address climate change but there is an increasing view in the international debate on climate change that this approach does not represent an effective way of dealing with this very large-scale long-term and important issue. The debate internationally—and you have had much discussion on this already—has focused on, amongst other things, the critical question of how we engage major developing country emitters in action to reduce those emissions over the longer term in a way that is consistent with their economic growth. I am sure we all agree that that economic growth is an imperative; it will happen. The question is: how can we engage India and China, where most of the growth in the global emissions will take place over the next several decades, in a way that is effective from an environmental point of view? At this time I have very little sense from the international negotiations that the protocol, and its approach of binding quantitative caps on emissions, is feasible in terms of engaging those countries.[26]

5.31 Not only are developing nations not required to meet targets, but the world's largest global emitter, the United States of America, responsible for one-quarter of carbon dioxide emissions globally, has said that it will not ratify the Kyoto Protocol. Russia is another major emitter, and it is sending conflicting signals as to whether or not it will ratify. China is the second largest global emitter and India is the fifth largest. As developing nations, they are not required to meet targets under the Kyoto Protocol. This means that three of the world's top five greenhouse gas emitters will not be required to meet emission reduction targets. Indeed, the Minerals Council of Australia makes the point that:

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24 Mr Christopher Langman, *Evidence*, p. 59.

25 Kyoto Protocol Ratification Advisory Group, *Report: A Risk Assessment*, p. 33.

26 Mr Christopher Langman, *Evidence*, p. 54.

> Currently of the top 21 'world emitters' (which together accounted for about 80 per cent of global emissions in 1996), only five (Japan, the European Union, Canada, Ukraine and Poland) have accepted binding emissions caps – and it is not clear that they are all on track to meet their commitments.[27]

5.32 The CSIRO acknowledges that it is for the Government to decide whether or not to ratify the Kyoto Protocol. However, it makes the observation that:

> even if the Protocol were to come into force, it would represent just a small, first step towards slowing global warming. Thus the real issue is not whether or not we sign Kyoto, but whether or not there is a genuine commitment (nationally and globally) to curtail greenhouse gas emissions, and (in the long-term) bring them down to levels significantly below current.[28]

5.33 What is needed is an effective and comprehensive response to climate change. Such a response must involve all major emitters in addressing climate change. The Australian Aluminium Council and the Minerals Council of Australia both contend that an effective global response to climate change must encompass 'all major emitters – current and potential.'[29]

5.34 Environment Minister, Hon Dr David Kemp MP, has said that a minimum requirement is that the top 6 emitters, the USA, the EU, Russia, China, Japan and India, who are collectively responsible for 70% of global emissions, be engaged in the process.[30] Ideally, the top 12 emitters (which include Australia), with global emissions of over 80%, should be included in the task.[31]

5.35 The Montreal Protocol on Substances that Deplete the Ozone Layer is a pertinent example of the merits of a truly global approach. It includes obligations for both developed and developing countries alike, whereas the Kyoto Protocol includes obligations only for developed nations. It covers 82 percent of global emissions of ozone depleting substances, whereas conversely the Kyoto Protocol excludes 75 percent of global greenhouse gas emissions from its coverage. Without the Montreal Protocol, ozone depletion would have reached at least 50 percent in the northern hemisphere's mid-latitudes and 70 percent in the southern mid-latitudes by the year 2050 – about 10 times worse than current levels. This is in stark contrast to the Kyoto Protocol.

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27 Minerals Council of Australia, Submission 32, p. 9.

28 CSIRO, Submission 16, p, 1.

29 Australian Aluminium Council, Submission 29, p. 4 and Minerals Council of Australia, Submission 32, p. 5.

30 Hon Dr David Kemp MP, Speech, *Australia's Domestic Climate Change Approach*, Renewable and Sustainable Energy Roundtable Side-event, COP 9, Milan, 9 December 2003, p. 2.

31 ibid.

The economic impact of ratification

5.36 Those groups that made submissions opposing ratification of the Kyoto Protocol made clear that because it is not a genuinely global agreement, it has the potential to impact adversely on the international competitiveness of Australian industry, and by extension Australia's national prosperity.

5.37 The Australian Chamber of Commerce and Industry refers to the fact that 'Australia is in the unique position of being a world leader in the production of energy and energy intensive products.'[32] Likewise, the Australian Industry Group (which did not make a submission) makes the point that 'Australia specialises in the production of energy and greenhouse intensive goods – more than 80% of our exports are greenhouse gas intensive.'[33] As the Chamber of Commerce and Industry Western Australia states in its submission 'The alternative sources of these products – and hence Australian businesses' competitors – are often from developing rather than developed economies.'[34]

5.38 Ratification of the Kyoto Protocol will burden Australian industries, most particularly our energy and energy intensive industries, with costs not faced by their competitors in countries that do not have Kyoto obligations. It is worth noting that Australia is in a region dominated by developing nations and that by ratifying we would be creating obligations for Australia that are not imposed on many of our regional trading competitors.

5.39 Woodside Energy Ltd put it this way:

> Australian trade-exposed, energy intensive industries would suffer competitive disadvantage from developing nations without emission targets under the Protocol and from the US which has elected not to ratify the Protocol. Competitors in these nations attract no additional production costs imposed by their governments to achieve compliance. This competitive disadvantage is illustrated clearly by the LNG export industry, in which almost all of Australia's competitors for new contracts are located in non-Annex B countries in Asia and the Middle East.[35]

5.40 Likewise, the Australian Chamber of Commerce and Industry contends that:

> A fundamental concern for Australian industry is that a number of our competitors do not have binding abatement targets under the current Kyoto Protocol rules. Consequently, these nations will not see a price signal within

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32 Australian Chamber of Commerce and Industry, Submission 35, p. 4.

33 Australian Industry Group, Fact Sheet, *Kyoto Protocol and Implications for Australia*, November 2000, p. 1.

34 Chamber of Commerce and Industry Western Australia, Submission 28, p. 2.

35 Woodside Energy Ltd, Submission 31, p. 2.

> their domestic industries and will be able to enter global markets with lower cost structures. The scenario that Australian Governments must mitigate against is the situation where domestic greenhouse abatement policies introduce a price signal here that impedes our ability to remain internationally competitive.
>
> The marginal cost of abatement will cascade through supply chains – being passed on from supplier to supplier. Ultimately, there will be a point in the chain where certain trade-exposed domestic industries will be unable to pass on the marginal cost as imported products will be less costly.[36]

5.41 The Plastics and Chemicals Industry Association (PACIA) referred to the energy intensive nature of the sector. It said that:

> Changes to the cost of energy, and costs associated with emission controls, will affect competitiveness. Many competing suppliers are based in Asia and other developing countries where there has been substantial investment in recent years in larger plants which achieve scale economies not realisable in a market the size of Australia. A loss of competitiveness, even due to shorter term market changes, can result in long term loss of market share.[37]

5.42 The Australian Aluminium Council also referred to the impact of ratification on the aluminium industry's international competitiveness. It said that:

> the world market price for aluminium will be dominated by the availability of metal from countries without obligations under the Kyoto Protocol (non-Annex 1) or countries that don't intend ratifying (at least the US) or countries who will be large sellers of 'hot air' (Russia and Eastern Europe). Consequently, any increase in energy prices to the aluminium industry in Australia as the result of policies to abate greenhouse emissions cannot be passed on to aluminium customers.[38]

5.43 The second related danger that ratification of the Kyoto Protocol poses to Australia is that of 'carbon leakage'. According to the Australian Chamber of Commerce and Industry 'There is a possibility that new investment in industries like aluminium or LNG production could move offshore in response to cheaper energy costs in developing countries that do not have emission reduction targets.'[39]

5.44 Ratification of Kyoto would jeopardise investments in smelters and refineries, and mining and petrochemical projects, which would be likely to go to developing nations not subject to Kyoto emission reduction targets. Mr Knapp of the Australian Aluminium Council put it this way:

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36 Australian Chamber of Commerce and Industry, Submission 35, p. 5.

37 Plastics and Chemicals Industry Association, Submission 23, p. 2.

38 Australian Aluminium Council, Submission 29, p. 2.

39 Australian Chamber of Commerce and Industry, Submission 35, p. 5.

> **Mr Knapp** – Just a second – the real issue is that you are not going to see new investment coming to this country. In the aluminium industry we are talking about companies that are globally oriented, and they have a choice of putting their next smelter in Australia, South Africa, Brazil, Canada or Iceland, and their competitors are also going into other countries, such as those in the Middle East or China. It is not a case of seeing somebody leaving your shores tomorrow – they are locked in; they have a plant here. You do not close a $3 billion aluminium plant and walk away; you run that plant until the end of its life –
>
> **Senator LUNDY** – So it is about people coming here.
>
> **Mr Knapp** – and the end of its life may come sooner through economics.[40]

5.45 As the Environment Minister, Hon Dr David Kemp MP, has said, if the Parliament were to ratify the Kyoto Protocol it would be sending the message that it is:

> prepared to impose legal obligations and significant costs on our industries that they may not face in the longer term if they were to transfer their operations to countries which have rejected such obligations, and which for the most part have so far shown no interest in moving to such a regime post-Kyoto.[41]

5.46 To this extent, what the Kyoto Protocol will essentially involve is exporting greenhouse gas emissions from a developed nation (Australia) to developing nations. Mr Mitchell Hooke of the Minerals Council said that, 'It is a shame that Senator Brown has left the room; his concentration on per capita, on Australia and on developed economies will only serve to export emissions to countries that are not constrained and limited by the target disciplines of the Kyoto protocol.'[42] In all likelihood, these developing nations will not have the same stringent environmental standards as Australia. PACIA makes the point in its submission that:

> Were these economies [developing countries economies] not to be included in international efforts to reduce or abate emissions, the reality of the market would accelerate the trend toward investment and production growth in these economies. The longer term outcome would then be not only that Australian industry would reduce or cease production, but that replacement products would come from economies which are not emission constrained … On this basis, the impact on Australia would be the loss of industries, and employment, in industry sectors which were efficient and have growth

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40 *Evidence*, p. 47.

41 Hon Dr David Kemp MP, Speech: to the IPA: *Australia's Approach to Climate Change*, 28 February 2003, p. 5.

42 Mr Mitchell Hooke, *Evidence*, p. 45.

> potential, and no reduction – or even increases in – global greenhouse gas emissions.[43]

5.47 The National Farmers Federation also states that 'In many cases, the movement of industry from Australia to other countries would actually increase global greenhouse gas emissions, as Australia is an efficient, low emission producer of many products.'[44]

5.48 Renewable and sustainable energy groups are strongly in favour of ratifying the Kyoto Protocol. They refer to the substantial business opportunities and industry development that ratification would offer. The argument of the Renewable and Sustainable Energy Roundtable, the Australian Business Council for Sustainable Energy, and Environment Business Australia is that ratification of the Kyoto Protocol will allow Australian companies to have unfettered access to the flexibility mechanisms of the Kyoto Protocol.

5.49 The Renewable and Sustainable Energy Roundtable says in its submission that:

> If Australia does not ratify the Kyoto Protocol, access by Australia's renewable and sustainable energy companies to flexibility mechanisms (such as international emissions trading, the Clean Development Mechanism or Joint Implementation) will be restricted. This is likely to significantly impact on the international competitiveness of Australian firms as well as the continued growth and development of renewable and sustainable energy. In order to capitalise on the significant opportunities for the export of both technology and expertise that will result from participation in these markets, it is essential that Australia participate.[45]

5.50 Similarly, the Australian Business Council for Sustainable Energy states that:

- Not ratifying the Kyoto Protocol reduces opportunities for Australian companies to sell emission permits to other developed countries that do not have the abatement opportunities that we have; and

- Not ratifying reduces export opportunities for Australian businesses, particularly to developing economies. This makes it more difficult to develop globally competitive industries – particularly in sustainable energy and environment industries.[46]

5.51 It is correct that in order to be able to participate in the flexibility mechanisms of the Kyoto Protocol Annex 1 Parties must first have ratified the Kyoto Protocol.

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43 Plastics and Chemicals Industry Association, Submission 23, p. 4.

44 National Farmers Federation, Submission 36, p. 9.

45 Renewable and Sustainable Energy Roundtable, Submission 19, p. 2.

46 Australian Business Council for Sustainable Energy, Submission 30, p. 2.

Therefore, as a non-Party to the Protocol, the Australian Government cannot participate directly in the Kyoto mechanisms, but this does not mean that Australian companies are unable to participate. According to the Australian Greenhouse Office 'the rules agreed at Marrakesh in November 2001 do not discriminate between firms from countries that have and have not ratified the Protocol.'[47] The AGO adds that:

> Australian industries are world leaders in greenhouse action and have much to contribute to the international effort on climate change response. Given this expertise, Australian businesses may wish to participate in international greenhouse projects under the Kyoto market-based mechanisms.[48]

5.52 The Minerals Council and Woodside Energy Ltd have also both indicated that their understanding is that Australia does not need to ratify the Kyoto Protocol in order for Australian companies to be able to participate in the flexibility mechanisms. In particular, Woodside states that:

> there is a strong expectation that Australian companies can still access the Kyoto mechanisms with ease on the 'buy' side and slightly more complexity on the 'sell' side, thus ratification does not appear to be necessary for eventual access to the market in Kyoto mechanisms.[49]

5.53 Woodside also casts doubt on the claims that have been made about industry development and job opportunities in the renewable and sustainable energy sector arising from ratifying the Kyoto Protocol. It says that:

> There are advocates of ratification who claim that jobs and investment will flow from Kyoto ratification and that firms will be able to participate in emissions trading, CDM and JI projects. This argument is only true to the extent that credit investments inside Australia will result in cheaper 'credits' when compared with other sources of ERU's, AAU's or RMUs globally, particularly when Russian and Eastern European 'hot air' credits are considered. Additionally, with Australia meeting its Kyoto target there is little logic for the case that investments in credit generating assets and jobs will be driven by Australian companies before the end of the Kyoto compliance period (because of the short-term expectation of no carbon impost).[50]

5.54 This is a view shared by the Minerals Council, which says that based on research by International Trade Strategies, 'assertions that ratifying the Kyoto Protocol would

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47 Australian Greenhouse Office, *Australian firms and the market-based mechanisms of the Kyoto Protocol*, 2003, p. 2.

48 ibid., pp. 1-2.

49 Woodside Energy Ltd, Submission 31, p. 3.

50 ibid., pp. 2-3.

create significant business opportunities for Australian companies participating in the Protocol's 'flexibility mechanisms' are highly speculative and overstated.'[51]

5.55 The real question is whether the jobs created by participation in the flexibility mechanisms will outweigh those lost via ratification. Woodside considers that there is a need to perform a cost/benefit analysis.[52]

5.56 In an article in the *Sydney Morning Herald*, Mr Michael Hitchens, an adviser to industry and governments, contends that:

> It is true that ratifying the protocol and joining an emission trading scheme that would be dominated by Europe, Japan, Ukraine and perhaps Russia should create jobs for a lucky few in forestry, renewable energy and emissions trading financial services. It should also make the very few shareholders of companies engaged in these industries wealthy. It would, no doubt, also be a new windfall source of taxation revenue for governments. But this is the sum total of the potential economic rewards. The prospective economic costs are many, many times greater and would be inflicted on every Australian.[53]

The practical affect of Australian non-ratification

Australian non-ratification will have no practical affect on the Kyoto Protocol's entry into force

5.57 Australian non-ratification of the Kyoto Protocol will have no practical affect on its entry into force. Article 25 of the Protocol provides that it will only enter into force and become legally binding after at least 55 countries, representing at least 55% of Annex 1 Parties 1990 emissions (the threshold) have ratified it. So far, 120 parties have ratified the Protocol, representing 44.2 percent of Annex 1 Parties emissions.[54] Australia's greenhouse gas emissions represent 2.1 percent of Annex 1 Parties emissions.[55] The USA's emissions represent 36.1 percent of Annex 1 Parties emissions and Russia's represent 17.4 percent.[56] Consequently, only the United States of America or Russia is capable of ratifying the Kyoto Protocol to bring it above the 55 percent threshold, so that it can enter into force.

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51 Minerals Council of Australia, Submission 32, p. 9.

52 Woodside Energy Ltd, Submission 31, p. 3.

53 Michael Hitchens, 'Counting the cost of Kyoto, inflicted upon every Australian', *Sydney Morning Herald*, 16 January 2004, p. 13.

54 http://unfccc.int/resource/kpthermo.html

55 http://unfccc.int/resource/kpco2.pdf

56 ibid.

5.58 The USA has decided not to ratify the Kyoto Protocol, which means that its entry into force hinges on Russian ratification. Russia's intentions are best described as uncertain, at this stage, with some equivocal statements having been made. Russia was previously regarded as a certainty to ratify the Protocol but serious reservations have been expressed regarding the potential economic impact of ratification. Indeed, Russia has a number of concerns over the Kyoto Protocol including that it will impact adversely on its economic growth, the rules on joint implementation projects, and because Russia wants to receive credits earlier than 2008.[57] The Russian Presidential Economic Adviser, Andrey Illarionov, has complained that countries with much higher rates of greenhouse gas emissions than Russia are not required by the Kyoto Protocol to reduce their emissions.[58] He has expressed concern that the treaty will severely constrain Russia's economic growth, saying that 'Adhering to the provisions of the Kyoto Treaty and achieving economic growth are incompatible.'[59]

5.59 However, the Russian Prime Minister, Mikhail Kasyanov, reportedly said in December last year that Russia will ratify the Protocol, adding that 'it will take longer than expected.'[60] There is speculation that Russia will ratify the Kyoto Protocol in return for the European Union softening its demands on energy pricing in relation to Russia's proposed membership of the World Trade Organisation. There is a view that '[t]he EU may moderate demands that Russia stop regulating gas prices and split up Gazprom's $16 billion export market should Russia agree to sign the treaty.'[61] However, in the absence of an authoritative statement from the Russian President, Vladimir Putin, outlining Russia's intention, speculation is likely to continue.

Australia is a relatively small global emitter of greenhouse gases

5.60 Australia is a relatively small greenhouse gas emitter, responsible for just 1.5 percent of global emissions.[62] Hence, even if Australia did nothing to abate its greenhouse gas emissions (which is by no means the case) it would have a negligible impact on global emissions. As a number of witnesses pointed out, it is true that Australia has some of the highest per capita emissions in the world. However, this is a product of a number of unique factors.

5.61 Australia has a comparatively small population of just 20 million people. This has to be placed in the context of a high rate of population growth in comparison to other developed nations. The Chamber of Commerce and Industry of Western

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57 'Kyoto's future up in air', *The Age*, 14 December 2003 and 'Kasyanov: A Kyoto Plan in the Works', *The Moscow Times*, 15 December 2003.

58 'Presidential Advisor: Kyoto Treaty discriminates against Russia', *Pravda*, 6 October 2003.

59 ibid.

60 'Kasyanov: A Kyoto Plan in the Works', *The Moscow Times*, 15 December 2003.

61 ibid.

62 Kyoto Protocol Ratification Advisory Group, *Report: A Risk Assessment,* 2003, p. 9.

Australia mentions that 'Over the past 20 years Australia has experienced the third fastest population growth in the OECD (after Turkey and Mexico, neither of which are Annex 1 countries).'[63]

5.62 In 2001 emissions from the energy sector comprised almost 70 percent of Australia's total greenhouse gas emissions.[64] Australia's economy is strongly focused on energy and energy-intensive products, which make up the great majority of our exports. For example, nearly 70 percent of Australia's energy production is exported.[65] To this extent, those countries that import these products from Australia benefit in the form of a lower emissions profile than if they were produced domestically. The Chamber of Commerce and Industry Western Australia makes the point that 'A large proportion of Australia's exports are sold to non Annex 1 countries. The Kyoto Protocol makes no provision for credits for activities which generate emissions in Australia but also lead to a reduction in emissions in the countries to which it exports.'[66] Australia's Liquid Natural Gas (LNG) export industry illustrates this point nicely. Woodside states that:

> relative to other fossil fuels such as coal and oil, LNG has low lifecycle emissions but high production emissions, due to the energy required to cool and liquefy the gas for transport overseas. Under the Kyoto Protocol, LNG contributes to Australia's emissions inventory but reduces our customer's national inventories to the extent it replaces other fossil fuels. As Kyoto considers each country in isolation, it penalises Australia for producing LNG, most of which is used to lower emissions in other developed countries. That is, Kyoto takes no account of global benefits of cleaner fuels or more efficient production.[67]

5.63 For instance, Australia's exports of LNG to Japan result in significantly less greenhouse gas emissions than if Japan used coal to generate electricity. The $25 billion LNG contract with China will add around one million tonnes of carbon dioxide annually to Australia's emissions, but by replacing coal fired power in China it will reduce China's emissions by around 7 million tonnes annually, so that on a global basis greenhouse gas emissions will be reduced by around six million tonnes – a substantial net reduction in global emissions.

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63 Chamber of Commerce and Industry of WA, *The Kyoto Protocol and Greenhouse Gas Emissions*, November 1999, p. 17.

64 Australian Government, *Tracking to the Kyoto Target 2003*, September 2003, p. 5.

65 National Greenhouse Strategy, http://ngs.greenhouse.gov.au/action_plans/module4/index.html

66 Chamber of Commerce and Industry of WA, *The Kyoto Protocol and Greenhouse Gas Emissions*, November 1999, p. 17.

67 Woodside Energy Ltd, Submission 31, p. 2.

5.64 Australia has a high dependence on fossil fuels. According to the National Greenhouse Strategy, 'Australia's reliance on coal (at over 40% of the energy mix) is double that of the OECD average.'[68]

5.65 Stationary energy emissions comprised about 50 percent of Australia's national emissions in 2001.[69] Electricity generation represents approximately 70 percent of stationary energy emissions.[70] Australia has plentiful reserves of black coal and has a high dependence on coal-fired electricity. According to the Australian Coal Association 'Combined, black and brown coal accounts for over 85 per cent of Australia's electrical power.'[71] By way of contrast, coal accounts for just 27 percent of electricity generation in the European Union.[72] This is a reflection of the fact that Australia makes no use of nuclear power to generate electricity, whereas in the European Union nuclear power supplies one-third of its electricity needs.[73] For example, in 2001, France had 59 reactors, accounting for 77% of total electricity generation; Sweden had 11 reactors, accounting for 44 percent of its electricity needs; the United Kingdom had 33 reactors, generating 22 percent of its electricity needs; and Germany had 19 reactors, meeting 31 percent of its electricity demands.[74] In a European Commission report, *Energy: Let us overcome our dependence*, it was noted that 'Nuclear energy makes a positive contribution to the Union's energy supply security. It produces only a negligible quantity of CO2, and thus helps in the fight against climate change.'[75] The EU is responsible for 14 percent of the globe's greenhouse gas emissions, and to the extent that it makes use of nuclear energy, its greenhouse gas emissions are lower than if it was to make use of fossil fuels instead.[76]

5.66 Australia has substantial reserves of uranium. Indeed, according to the Uranium Information Centre, 'Australia has over 40% of the world's lowest-cost uranium resources (under US$ 40/kg).'[77] If Australia made use of these reserves to generate

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68 National Greenhouse Strategy, http://ngs.greenhouse.gov.au/action_plans/module4/index.html

69 Australian Government, *Tracking to the Kyoto Target 2003*, September 2003, p. 5.

70 ibid., p. 6.

71 Australian Coal Association, www.australiancoal.com.au/electricity.htm

72 World Coal Institute, *Coal Facts – 2003 Edition*, http://wci.rmid.co.uk/uploads/CoalFacts03.pdf

73 www.europa.eu.int/comm/energy/nuclear/index_en.html

74 International Atomic Energy Agency, http://www pub.iaea.org/MTCD/publications/PDF/cnpp2002/Documents/Documents/Annex%20II%20.pdf

75 European Commission, *Energy: Let us overcome our dependence*, 2002, p. 21.

76 ibid., p. 15.

77 Uranium Information Centre Ltd, Nuclear Issues Briefing Paper 1, *Australia's Uranium and Who Buys It*, February 2004, www.uic.com.au/nip01.htm

electricity, like the EU does, Australia's greenhouse profile would be significantly lower than is currently the case. Of course, nuclear energy presents challenges in terms of safety and the production and storage of radioactive waste that are not presented by fossil fuels.

5.67 Australia's abundant fossil fuel reserves underpin the nation's economic prosperity. Developing cleaner emissions technologies will be an important means of abating Australia's greenhouse gas emissions. Through Australia's clean coal strategy, COAL 21, there are a number of clean coal technologies being researched and tested, including ultra clean coal, integrated gasification combined cycle, oxy-fuel combustion, drying of brown coal, coal bed methane and geological sequestration. For example, there is an ultra clean coal pilot plant in Newcastle delivering emissions of less than one percent per tonne of coal. In order to promote global collaboration on zero emissions technology, on 18 February 2004, Minister for Industry, Tourism and Resources, the Hon Ian Macfarlane MP, launched the Australian Technology Roadmap. According to the Minister, 'The Roadmap sets out a definitive program for seeing the Australian deployment of new zero emission technologies within 15 years and evolution to a hydrogen economy within 30 years.'[78]

5.68 Australia's rate of economic growth has been the envy of the developed world. Higher rates of economic growth translate into higher energy consumption. Between 1992 and 2002, Australia's rate of economic growth has averaged 3.7 per cent per annum. Conversely, the average rate of economic growth across the OECD in the same period has been 2.5 percent per annum.[79]

5.69 It is important to note that Australia's greenhouse gas emissions per capita are, 'projected to decline by 12% over the period from 1990 to 2012 (from 32 tonnes per capita to 28 tonnes per capita).'[80]

Australia is committed to meeting its Kyoto Target and is on track to do so

5.70 Irrespective of whether or not the Kyoto Protocol is ratified, the Federal Government is committed to Australia meeting its Kyoto Protocol target of limiting growth in greenhouse gas emissions to 8 percent above 1990 levels over the period 2008-2012. Minister for Environment and Heritage, Hon Dr David Kemp MP, has said that 'The Howard Government is committed to achieving its Kyoto target while maintaining the competitiveness of Australian industry and protecting Australian jobs.'[81] Given the various factors outlined above, Australia's Kyoto target is fair.

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78 Ian Macfarlane MP, Media Release, *Energy Sector Must Take on New Emission Technology*, 18 February 2004.

79 Parliamentary Library, *Monthly Economic and Social Indicators E-Data,* unpublished.

80 Australian Government, *Tracking to the Kyoto Target 2003*, September 2003, p. 12.

81 Hon Dr David Kemp MP, Media Release: *Australia Moves Closer to Kyoto Target*, 18 September 2003.

5.71 The Government's greenhouse gas abatement programs and policies have been effective in reducing the rate of growth of Australia's greenhouse gas emissions. Despite a strong and sustained period of economic growth, the 2001 National Greenhouse Gas Inventory (the latest available) found that Australia's emissions are at 1990 levels and Australia is on track to meet its Kyoto Protocol target. On the latest projections, Australia's emissions will be 10% over 1990 levels by the end of this decade. To reach the 8 percent target, further emissions abatement of 13 Mt per annum is required. Reducing land clearing rates in Queensland will be an important step in meeting the 8% target.

5.72 Without the suite of abatement measures, Australia's greenhouse emissions would have been 23% above 1990 levels by the end of the decade. It is expected that our current greenhouse programs will deliver annual emissions abatement of 67 million tonnes by 2008-2012. To put this into perspective, this is the equivalent of taking all of today's cars, trucks and buses off the road. Importantly, Australia's emissions per unit of GDP are projected to decline markedly, by 44 percent from 1990 to 2012, and by 2020 they are expected to be 52 percent below 1990 levels. Greenhouse gas emissions per capita are also projected to fall by 12 percent from 1990 to 2012.

Australia's greenhouse gas abatement programs and policies

5.73 Australia has a long-term climate change agenda, with four key elements. Firstly, Australia will seek a much more comprehensive global response to climate change than that provided by the Kyoto Protocol, encompassing all major emitters, regardless of the whether they are developed or developing nations.

5.74 The Government is firmly of the view that future global action must acknowledge the different circumstances and economic and social priorities of different nations. In particular, it is important that ways be found for developing nations to reduce their greenhouse emissions without affecting their rates of economic growth.

5.75 Australia is collaborating with the United States of America in addressing climate change via the Australia-US Climate Action Partnership. We are also co-operating with the European Union, Japan, New Zealand and China on climate change. Details of these bilateral partnerships are attached at Appendix 4. We have increased our level of climate change-related financial assistance to developing nations and pledged $68.2 million to the Global Environment Facility. Australia is also assisting Pacific nations to build their capacity to adjust to the consequences of climate change. This puts the lie to claims that Australia has withdrawn from international efforts to address climate change. In its submission, for instance, the Climate Action Network Australia claimed that, 'Instead of adopting Kyoto, the Australian Government has chosen to disengage from international processes.'[82] This

82 Climate Action Network Australia, Submission 33, p. 3.

statement also ignores that Australia has been an active and vocal participant at the Conference of the Parties to the United Nations Framework Convention on Climate Change, most recently at Milan in December 2003, which Australia's Environment Minister attended.

5.76 Mr Langman responded to assertions that Australia's decision not to ratify the Kyoto Protocol has adversely affected Australia's international standing and influence by saying that:

> I think the evidence is simply not there for that. My colleagues and I are on the floor of the negotiations in the UNFCCC and in other international forums, and I have not seen it. At the last climate change conference of the parties in Milan in December, Australia was asked to chair two of the major negotiating groups. Australia was successful in taking forward the two major practical outcomes from the meeting that were not related to rules issues. Australia is asked to participate in an extremely wide range of formal meetings on climate change and, importantly, in an extremely wide range of informal meetings.[83]

5.77 Secondly, Australia must achieve a lower greenhouse signature, whilst at the same time maintaining a strong and internationally competitive economy. In the Committee's view, the most important step the Australian Government can take with regard to the Kyoto Protocol is to show its commitment domestically to greenhouse gas abatement, yet without destroying the Australian economy. It is tempting to conclude that that is a price the professional environmental lobby is prepared to pay, because it is rarely them who is paying the price

5.78 Thirdly, domestic policy settings must be flexible but with sufficient certainty to allow decisions on investment and technology development, with an emphasis on cost effectiveness.

5.79 Lastly, where the consequences of climate change are already unavoidable, the Government will implement policies which assist with adaptation.

5.80 The Government has contributed around $1 billion to greenhouse gas abatement measures. In particular, technology innovation will drive significant gains in emissions reductions and the Government is encouraging the development of low emission technologies. The Government harbours strong hopes for technologies that clean up emissions from fossil fuels, particularly sequestration of carbon dioxide. For example, the CSIRO, through its Energy Transformed program, is working on zero-emissions coal technologies involving gasification and geo-sequestration of greenhouse by-products. It has been estimated that up to 180 million tonnes of carbon dioxide could be geo-sequestered (such as in saline aquifers) in Australia annually.[84]

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83 Mr Christopher Langman, *Evidence*, p. 61.

84 Australian Greenhouse Office, *Greenhouse News*, Spring 2003, Vol 7, p. 6.

5.81 In the longer term, the development of the hydrogen economy holds out great hope for the achievement of substantial reductions in greenhouse gas emissions. The Government investigated the potential of hydrogen through a National Hydrogen Study, which released its report in October 2003, and the Government is currently considering its recommendations.

5.82 In order to promote the development of renewable energy, the Government has directed $10 million to the Renewable Energy Showcase Program, $56 million to the Renewable Energy Commercialisation Program, $31 million to the Photovoltaic Rebate Program, $17 million for the Renewable Energy Equity Fund and $180 million for the Rural and Remote Power Generation Program.

5.83 The Government's Mandatory Renewable Energy Target will generate an additional 9,500 gigawatt hours of electricity from renewable sources each year, including wind, solar and hydro, by 2010. To put this into perspective, this equates to two new Snowy Mountains hydro-electric schemes and is enough power to meet the residential electricity needs of four million people. This will result in the abatement of 6.7 million tonnes of greenhouse gases per annum by 2010.

5.84 Approximately 190 renewable energy power stations have been accredited and wind power has grown at 30% per annum over recent years.

5.85 To encourage the development and take-up of alternative fuels, the Government has introduced the $75 million Alternative Fuel Conversion Program to provide subsidies for the conversion of vehicles over 3.5 tonnes to alternative, less polluting fuels.

5.86 The Government is also working in partnership with the community, other levels of government and with industry to secure reductions in greenhouse gas emissions. It has been working with fossil fuel electricity generators to encourage them to implement Generator Efficiency Standards to improve the efficiency of their power plants. As at February 2003, 14 out of 18 medium to large generators have signed up to the Standards, and the remaining 4 have committed to doing so. This represents coverage of around 85 percent of Australia's electricity generating capacity. It is expected that the Standards will result in abatement of 4 million tonnes of greenhouse gases annually. Via the Greenhouse Challenge, the Government has been encouraging industry to reduce its greenhouse emissions by improving efficiency in both industrial processes and energy use. Over 800 organisations have signed-up to this initiative. The Cities for Climate Protection program is assisting 180 Local Councils to reduce both their own greenhouse gas emissions and also those within their communities.

5.87 The Government has also introduced measures to increase the energy efficiency of buildings and appliances. Via the Natural Heritage Trust and the National Action Plan for Salinity and Water Quality, the Government has been encouraging the preservation and rehabilitation of natural vegetation and the development of farm forestry. The Bush for Greenhouse Program is encouraging investment in greenhouse sinks and under the Plantations for Australia: the 2020 Vision, the Government has a

vision for the establishment of two million hectares of plantation forest by 2020, effectively trebling commercial forest plantations.

5.88 The $400 million Greenhouse Gas Abatement Program aims to deliver large-scale and cost-effective abatement measures across all sectors of the economy. It is aiming to cut greenhouse gas emissions by 27.5 million tonnes during 2008-2012. As of May 2003, 15 projects have been granted funding. For example, Envirogen has been offered $13 million to install generators to burn methane from waste coal mine gas that would otherwise be released into the atmosphere, to generate electricity at sites in NSW and Queensland. This will reduce carbon dioxide emissions by around 2.25 million tonnes. The La Trobe Valley Generators Group has been offered $11 million to improve the energy efficiency of brown coal before using it to generate electricity, resulting in abatement of 1.11 million tonnes of carbon dioxide.

5.89 It is expected that the Ozone Protection and Synthetic Greenhouse Gas Management legislation will result in greenhouse gas abatement of up to six million tonnes of carbon dioxide annually by 2010.

5.90 The Government is currently developing a Climate Change Forward Strategy.

5.91 Proponents of the Kyoto Protocol hold the view that Australia's ratification of the Protocol would show the world that it was a model citizen, serious about addressing the issue of climate change. The Government believes that its practical adaptation measures and other policies to reduce our greenhouse signature are a sufficient proof of its environmental credentials – it does not feel the need for symbolic gestures when its track record is indicative of its serious intent.

5.92 The following table is extracted from *Tracking to the Kyoto Target 2003* and gives an indication of greenhouse abatement measures by sector.

Sector	**Programs delivering emission savings**
Stationary Energy	Government/Industry/Community Partnerships: Greenhouse Challenge, Cities for Climate Protection, Household Greenhouse Action Energy Markets: Energy Market Reform, Programs supporting the uptake of Renewable Energy in Power Supplies (including the Mandatory Renewable Energy Target, Green Power and others), Generator Efficiency Standards, New South Wales Greenhouse Benchmarks Scheme, Queensland Cleaner Energy Strategy Energy Efficiency: Minimum Energy Performance Standards for Appliances, Energy Efficiency Provisions for Buildings, Energy Efficiency Best Practice Other: Greenhouse Gas Abatement Program, Greenhouse

	Friendly Program, other various State and Territory measures, Local and Australian Government greenhouse reduction actions
Transport	Environmental Strategy for the Motor Vehicle Industry, Alternative Fuels Program, Greenhouse Gas Abatement Program, other various State and Territory measures
Fugitive	Projects under Greenhouse Challenge directed at capturing waste coal mine methane for electricity generation, Greenhouse Gas Abatement Program, Greenhouse Friendly Program
Industrial Processes	Projects under Greenhouse Challenge primarily directed toward reducing usage of perfluorocarbons in the aluminium industry and the new Ozone Protection and Synthetic Greenhouse Gas Management Legislation
Waste	A range of initiatives including electricity generation from landfills
Agriculture	A range of initiatives including development of livestock rumen modifiers
Land Use Change and Forestry	A range of initiatives including Plantations 2020 and Bush for Greenhouse
GGAP	Projects under the Greenhouse Gas Abatement Program occur in a range of sectors

Source: Australian Government, *Tracking to the Kyoto Target 2003*, September 2003, p. 14.

5.93 To sum up, Australia should not ratify the Kyoto Protocol because it is not in Australia's national interest. The Protocol represents a flawed response to climate change that excludes three-quarters of global greenhouse gas emissions from its scope,

will deliver global greenhouse gas reductions of only around one percent, does not require developing nations to meet binding targets, and is potentially damaging to Australian industries international competitiveness. What is required is a genuinely global response to climate change that will deliver meaningful reductions in greenhouse emissions. Unfortunately, the Kyoto Protocol falls woefully short of this.

Recommendation

5.94 The Committee recommends:

> **That the Kyoto Protocol Ratification Bill 2003 [No. 2] not be proceeded with.**

Alan Eggleston
Chairman

Dissenting Report by Australian Labor Party, Australian Democrats and Australian Greens

Why the Kyoto Protocol Should be Ratified

The Kyoto Protocol should be ratified

The Kyoto Protocol Ratification Bill 2003 [No.2] should be ratified because --

- Ratification will signal to business and the community that we must act urgently to reduce greenhouse gas emissions
- The Kyoto Protocol provides the only available framework for action now, rather than waiting years for a re-negotiated agreement
- If, as the government asserts, we intend to meet our Kyoto targets anyway, it is economically preferable to do so within the framework
- As participants in the ratified Protocol, we become players in the negotiations for future action, instead of observers
- Australia's international reputation is already damaged by the lengths to which it went to obtain special treatment under the Kyoto Protocol; having done so, failure to ratify is insulting to the nations who have ratified the Protocol
- The community supports ratification.

Critics of ratification, while universally agreeing that action is needed, failed to provide any alternative plan; Ratifying the Kyoto Protocol is the first essential step and the only truly collective international global response to halt global warming

Climate change

As the majority report admits, the evidence for global warming is compelling, and that global warming constitutes a major threat to our planet. Australia is particularly vulnerable to the effects of climate change and is predicted to become hotter and drier in coming decades, with more extremely hot days and fewer cold days and by 2030 over most of the continent the annual average temperature will be up to two degrees higher than in 1990.[1] There will be more extreme weather events, including more frequent and more severe droughts and floods, with severe consequences for our water supplies and agriculture; tourism will be affected, particularly in the snowfields and on the Great Barrier Reef; there will be sea level rises threatening our low-lying areas and our neighbouring island nations; and there will be probable health consequences in the form of wider distribution of insect-borne diseases.

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1 Dr Bryson Bates, *Evidence,* p. 2

In evidence to the Committee, expert witnesses from CSIRO Climate made it clear that most of the warming that has taken place over the last 50 years has been due to human activity. CSIRO also estimates that over the past 200 years, carbon dioxide concentrations have risen from a background level of around 280 parts per million to approximately 370 parts per million, and are increasing relentlessly. Only half of the carbon dioxide emitted by human activities is absorbed by the oceans and biosphere, leaving half in the atmosphere where it has a lifetime of between 50 and 100 years. To slow global warming, we will need to stabilise these atmospheric greenhouse gas concentrations. Stabilisation of carbon dioxide concentrations at 450 parts per million would require emission reductions of about 70 per cent by the year 2100.[2]

The question thus arises as to how best to address the challenge of global warming. The Government stance, as reflected in the majority report, is to increase our emission levels over our 1990 benchmark, to engage in a few bilateral agreements for research and technology exchange, and to modestly promote domestic abatement programs and alternative energy sources, while refusing to be party to the one significant international approach currently available to us. This response is clearly inadequate.

This dissenting report outlines these inadequacies and reaffirms that the only effective response to global climate change is the ratification of the Kyoto Protocol, as outlined in the legislation before the Senate.

In this dissenting report, we will address and refute some of the major reasons advanced in the majority report for the Government's refusal to ratify the Kyoto Protocol.

The Kyoto Protocol will be ineffective in reducing greenhouse gas emissions

It is widely accepted that the Kyoto Protocol, if it were to come into effect, would bring about a reduction in greenhouse gas emissions of about one per cent.[3] The majority report considers this to be an insignificant amount (para 4.5) and therefore not worth pursuing. However, without the Kyoto Protocol, emissions would increase dramatically[4]

Australia is a good example of this. Under a business as usual scenario, emissions would grow by well over 22%, yet our Kyoto target is to constrain emissions growth to 8% above 1990 levels.

More importantly however, the Kyoto Protocol is **a first step.** In the view of the Climate Action Network Australia, 'an absolutely crucial step'. It is critical to keep open the option of achieving a lower atmospheric concentration of greenhouse gases

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2 Dr Bryson Bates, *Evidence*, p. 2.

3 Kyoto Protocol Ratification Advisory Group, *Report: A Risk Assessment,* 2003, p. 5

4 http://www.grida.no/db/maps/collection/climate9/graph.cfm?countryiso=AU

earlier, and therefore a lower level of global temperature increase eventually.[5] Ms Reynolds, representing CANA, stressed that the importance of the Kyoto Protocol lay in its timing. It represents action, now, instead of possible renegotiations which could delay international action for years.[6] Or, as Dr Hamilton of The Australia Institute expressed it:

> To abandon the Kyoto protocol is effectively to say, 'Let's spend another 10 years trying to negotiate an alternative.' As we know from the science, turning around greenhouse gas emissions ... is like turning an ocean liner. It takes a very long time and we do not have time.[7]

A principal reason for the modest initial emissions reduction envisaged under the Kyoto Protocol is that developing countries have not been required to accept targets for the initial commitment period of 2008-12. The reason they have not been required to accept targets is because it is recognised that they are not responsible for the current high level of greenhouse gases in the atmosphere, which were brought about by 200 years of coal-powered industrialisation of Annex 1 countries. It is further recognised that they have the right to overcome poverty first of all, to develop and to enjoy the benefits of a reliable electricity supply, and the health and educational benefits that reliable electricity can bring. It is entirely inappropriate to criticise developing countries' failure to embrace emissions targets when they were quite specifically excluded from them for equity reasons for the first commitment period. Nor is it appropriate to reflect adversely on their preparedness to accept targets in the future, when Australia refuses to give a legally binding undertaking to meet the Kyoto targets.

As Friends of the Earth pointed out, there is no equity in the impacts of climate change. All nations will be affected, including non-polluting nations and those with low per capita greenhouse gas emissions. And poor countries will be more vulnerable, because of their lack of resources to adapt to climate change.[8]

A further reflection of the supposed ineffectiveness of the Kyoto Protocol is the emphasis placed in the majority report on the fact that many ratifying countries appear unlikely to meet their first commitment period emissions targets (para 4.7), which require on average a five per cent cut over 1990 levels However, unlike Australia, these countries are unable to rely on the so-called 'Australia clause'. As Dr Hamilton explained:

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5 Anna Reynolds, *Evidence*, p. 23.

6 Anna Reynolds, *Evidence*, p. 26.

7 *Evidence*, p. 27.

8 Friends of the Earth, Submission 17, p. 3.

> Whilst much has been made of recent declarations that Australia is on track to meet its Kyoto target, the fact remains that emissions from the most important sectors – transport and stationary energy – continue to grow rapidly, and it is possible to claim that Australia is on track to meet its commitment only because we have been playing our get out of jail free card – the famous, or notorious, Australia clause inserted in the Kyoto protocol literally in the last minute of negotiations, at 2 a.m. on Thursday, 11 December 1997.
>
> A month before the Kyoto conference, the government was publishing greenhouse gas emissions figures that excluded land clearing emissions in order to emphasise how rapidly Australia's emissions were growing. It did this at the time so it could argue to the rest of the world that cutting emissions would be especially costly for Australia. The trick worked at Kyoto, and Australia was given special concessions on the basis of these figures.[9]

The special concessions relating to the emissions accounting treatment of land clearing resulted in an emissions target for Australia of 108 per cent above 1990 levels, an overly generous target that Minister Kemp reiterates we are 'within striking distance' of meeting. If we do so, it will be thanks substantially to Queensland Premier Peter Beattie's unilateral promise to introduce legislation to end land clearing in that State, without federal assistance.

Australia's ratification would not bring the Kyoto Protocol into effect

As the majority report has indicated, (para 2.14) the Kyoto Protocol will only enter into force and become binding on the Parties to it when it has been ratified by 55 countries, representing 55 per cent of the 1990 emissions of Parties with targets under the treaty (the so-called Annex 1 nations). To date, the quantum of 1990-level emissions accounted for by current ratifiers is 44.2 per cent. With Australia's 1990 global emission level of 2.1 per cent, we cannot assist the reaching of the 55 per cent of global emissions threshold which will trigger the Protocol's enforceability under international law. Australia's ratification of the Kyoto Protocol would be principally a symbolic act, and one which showed the world that Australia was prepared to stand up and be counted amongst the developed nations which have shown their willingness to accept binding emissions targets – including the United Kingdom, Japan, France, Germany, Canada, New Zealand – in an effort to address a global problem. The only other developed countries which remain outside the Protocol are Russia and the United States; the former is still considering its position, while the latter is such a significant global force that it will not be ignored, whatever its stance on Kyoto.

The Australian Government has committed to meeting our 108 per cent emissions target and considers this sufficient to establish our environmental credentials on the world stage. In our view, the importance of the symbolism of ratification should not

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9 *Evidence,* p. 24.

be underestimated, whether or not the Protocol does eventually come into force. It is a clear indicator to the global community that we are prepared to tackle this most serious of problems in tandem with others, rather than criticising from the sidelines. Even in the event that the Protocol fails to reach the threshold emissions figure and come into force, our having taken a principled stand in ratifying the treaty will undoubtedly stand us in good stead in any future negotiations. In this context, Dr Hamilton's statement that 'in all my years of close involvement with policy formulation and analysis, I can think of no instance that represents a more egregious failure to protect the interests of this country than the refusal to ratify the Kyoto Protocol,'[10] is particularly poignant.

The hypocrisy of Australia's negotiating an excellent outcome for itself in the preliminary negotiations, signing the Kyoto Protocol in April 1998 and then failing to ratify the treaty has not been lost on other countries. As Dr Hamilton told the Committee,

> there is a tremendous amount of resentment against Australia as a result of what happened at Kyoto and our subsequent refusal to ratify. I think we will be lucky if we do not suffer payback as a result of that ... I have heard plenty of people say that Australia will suffer trade retaliation if we refuse to ratify, including senior officials from Europe. Japan has introduced a coal import tax. It is just inevitable that these issues will be tied to international trade issues.[11]

The Kyoto Protocol is a flawed treaty

The Kyoto Protocol, being the result of a long period of international negotiation, has resulted in more compromises than the purists would wish to see. In an attempt to make it more affordable, and hence more acceptable to developed countries, an elaborate scheme of emissions trading was developed. Emissions trading allows transfer of emissions from one location to another, allowing lowest cost abatement to be accessible to industry, and thus easing the transition to a carbon constrained future.

Other flexibility measures were also created, in the form of the Joint Implementation and Clean Development Mechanisms. A country could, for example, offset its own emissions by helping set up a wind farm or establish a tree plantation in another. Clearly it would be more desirable to have the emitter deal with its emissions on site, but in the interests of producing a 'sellable' treaty, flexibility has had to be adopted. Many witnesses acknowledged this, for example:

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10 *Evidence,* p. 25.

11 Dr Clive Hamilton, Evidence, p. 33

> While [the Kyoto Protocol] is not a perfect tool at the moment by any stretch of the imagination, it is the one global framework that we have to build on.[12]

In our view, it is preferable to join with the vast majority of developed countries in ratifying the Kyoto Protocol and working steadily, through successive Conferences of the Parties at which we would be full participants rather than mere observers, to improve its effectiveness. It is the one global framework we have to build on.

The majority report counters that we have the example of a truly global international treaty in the form of the Montreal Protocol on Substances that Deplete the Ozone Layer, and that we should be looking to something similar to handle climate change. The Montreal treaty was originally signed in 1987, and amended in 1990 and 1992, under the aegis of the United Nations Environment Program. It is true that it has the support of developing countries and covers 82 per cent of global emissions of ozone-depleting substances. However, as Dr Hamilton pointed out, it must be remembered that controlling ozone-depleting substances is, comparatively speaking, a relatively simple matter and alternative technologies were available at minimal cost.[13] Hence it is not a valid comparison with the climate change scenario.

The Kyoto Protocol would adversely affect our economic interests and jobs

A misleading argument sometimes used in support of non-ratification is that by imposing the costs of constraining our own emissions on our industries, we would hand a competitive advantage to our immediate trade competitors, including those in nearby developing countries. It has also been wrongly suggested that, in order to avoid the likely increased costs of operating in Australia under the Kyoto Protocol, companies might opt to relocate. However, neither of these arguments is persuasive.

Firstly, the Government has stated publicly it intends to meet Australia's Kyoto target of reducing greenhouse emissions to 108% of 1990 levels. Consequently, no additional costs should be imposed on industry if we ratify the Protocol. Indeed, as the economic modelling cited in the majority report suggests, (para 3.18) meeting Australia's 108 per cent emissions target for the first commitment period would be significantly less expensive under the ratification option. However, this is impossible to quantify for future commitment periods, given the uncertainties involved.

Secondly, if we ratify the Protocol and it comes into effect, the Australian Government will have opportunities to lower the costs of meeting the target. For example, Australian companies may be able to meet their obligations by undertaking low-cost abatement activities in developing countries. These opportunities will be lost if the Protocol does not enter into force.

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12 Ms Fiona Wain, *Evidence,* p. 12.

13 *Evidence,* p. 27.

Thirdly, if the Government ratified the Protocol, it would send a signal to industry of the need to reduce emissions, which in turn, would provide a stimulus to the renewable energy sector. Conversely, as Ms Anthony put it, '(n)ot signing the Kyoto protocol does not really send a signal to our domestic market that we need to be tightening our belts with regard to energy efficiency or fuel switching – moving towards cleaner fuels such as wind or solar. Therefore there is less incentive to do something about it.'[14]

Renewable energy industries tend to be more labour-intensive than fossil fuel based industries, so there are more jobs, more widespread jobs and, often, more satisfying jobs. Ms Anthony of the Australian Wind Energy Association asserted that 'for every job in the coal industry, there are six jobs in the renewable industry'.[15] At present, as Mr Brazzale pointed out, the cost of renewable technologies is roughly twice that of coal-fired electricity, but is coming down at the rate of some five per cent per annum. The accepted experience curve for emerging technologies such as solar and wind shows a cost reduction of between 15 and 20 per cent for every doubling of installed capacity.[16] If Australia ratified the Kyoto Protocol, it would give a significant boost to the sustainable and renewable industry sector, providing a significant domestic market to provide a base for sustainable manufacturing and assisting its export potential, with the competitive advantage of being able to utilise directly the JI and CDM flexibility mechanisms.

Fourthly, the claim that companies will relocated to countries that are not subject to binding emissions targets is unsubstantiated. Indeed, the evidence suggests countries with higher environmental standards have higher rates of investment and growth than countries with lower standards. While meeting the Kyoto targets may impose costs on some industries, these costs are likely to be offset by the economic climate, better infrastructure and political stability found in countries like Australia. As Ms Wain of Environment Business Australia stated:

> The important thing to bear in mind about a lot of companies threatening offshore relocation is that there are very few companies with a reputation to protect who are going to seek a licence to pollute from their shareholders, investors, customers, bankers and insurers and leave a very stable economic and political regime to seek a marginal decrease in energy cost – abandoning sunk assets at the same time ... the threat of companies going offshore because of the shadow cost of carbon cannot be taken seriously – it cannot.[17]

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14 *Evidence,* p. 14.

15 *Evidence,* p. 21.

16 *Evidence,* p. 15.

17 *Evidence,* p. 17.

Finally, whatever the costs, they need to be set against the as-yet unquantified costs of probable species loss, downturn in tourism from coral bleaching and lack of snow, higher incidence of insect-borne disease, insurance claims, and so forth brought about by climate change. This report also accepts the view of representatives of the renewable and sustainable energy industries who pointed out that it was impossible to compare the true cost of renewables to fossil fuels. The emerging technologies have all their up-front costs such as early market penetration, research and development and finance access to deal with, transparently, while the subsidies and preferential contracts associated with the fossil fuel industries are hidden from market view.[18]

We note that the federal Government's failure to take a strong lead in addressing climate change has resulted in unilateral action by some States. New South Wales, for example, has introduced mandatory emissions targets for electricity retailers.[19] While applauding the initiatives of those States, we call on the Government to work with the States to deliver national legislation and a regulatory framework to underpin emissions trading.

Technology can solve global warming and allow us to continue to exploit our fossil fuels (we can have our cake and eat it too)

Australia is remarkably rich in natural resources such as coal. Some 85 per cent of our electricity is generated from black and brown coal. Electricity generation in turn accounts for some 70 per cent of our stationary energy emissions.

While fossil fuels will continue to provide base load capacity for some time, the Government's failure to adequately support development of the renewable energy industry is condemned.

As the majority report points out, every effort is being directed at developing zero- or low-emission coal and geosequestration (the capturing and storing of greenhouse gases underground). As Ms Wain of Environment Business Australia stated:

> We like the concept of geosequestration and clean coal technology, but can it be brought in at a cost that is similar to or lower than renewable energy, with the incremental growth in markets and the scale of demand which will reduce the cost of renewable energy quite significantly? Personally, I do not see us being able to capture CO_2, store and compress CO_2, inject CO_2 underground or in deep ocean outfalls and maintain it there all for the same cost of developing renewable energies.[20]

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18 *Evidence,* p. 12.

19 Environment Business Australia, Submission 24, Attached report *Australia - A Sustainability Superpower*, p.11

20 Ms Wain, *Evidence,* p. 14.

It is noted that no evidence provided to the Committee supported a cost for zero emissions coal as low as the $10 per tonne of CO2 abated claimed by the Chief Scientist and the *Beyond Kyoto* report of the Prime Minister's Science, Engineering and Innovation Council.

Mr Ric Brazzale, representing the Australian Business Council for Sustainable Energy, commented further on the comparative costs. Technologies such as wind and solar are very low penetration, so cost is relatively high – roughly twice the wholesale price of coal-fired electricity. Costs are falling, between 15 and 20 per cent with every doubling of installed capacity. By comparison, he cited estimates from the International Energy Agency that advanced coal technology and geosequestration will cost from $40 to over $100 per tonne. He also pointed out that, while there was a global market for renewable energy, that was not the case with geosequestration:

> There are very few countries to which we can export 2,000-megawatt coal plants and billions of dollars of wells and infrastructure to bury the carbon. It may be an option in some places in Australia, but we do not think that it will be a major contributor to the global problem.[21]

Regardless of cost, other issues need to be considered:

> Even the advocates of geosequestration see that it will be a good 20 years before it can contribute in any major way. Of course, 20 years is too long to wait. From my perspective, to put all our eggs in the geosequestration basket, which seems to be the federal government's preference, thereby withdrawing funding from renewable energy and energy efficiency to invest in this highly speculative technology seems to me to be extreme folly[22]

Ms Reynolds also raised concerns of CANA members as to the safety of the technique.[23]

Technological innovation has been of inestimable benefit to Australia over the years, and has improved the efficiency of our industrial processes. It is of significant concern to us that policy decisions are being taken today based on unproven technology and uncertain cost, when other more realistic options are ignored.

We can meet our 108 per cent target and reduce growth in greenhouse gas emissions by domestic action and without the need to ratify the Kyoto Protocol

Prime Minister Howard has stressed the importance of domestic strategies as our response to global climate change:

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21 *Evidence,* p. 15.

22 Dr Hamilton, *Evidence*, p. 34.

23 *Evidence,* p. 34.

> [the government has agreed to] develop and invest in domestic programs to meet the target of limiting greenhouse gas emissions to 108 per cent of 1990 emissions over the period of 2008-2012. [24]

The Government's position is absurd. They say they will meet the target but not reap the benefits.

The Government's domestic strategies have involved an undertaking to invest one billion dollars on a suite of programs, including most importantly the Greenhouse Gas Abatement Program. Other programs initiated by the Government include the voluntary Greenhouse Challenge Program, the Renewable Remote Power Generation Program and the Alternative Fuels Conversion Program. The vast majority of these programs were forced upon the Government by the Australian Democrats during the GST negotiations.

As noted above, Australia appears likely to meet its 108 per cent target. However, this is largely attributable to the fortuitous unilateral land-clearing stance of Queensland Premier Peter Beattie. In relation to the Government's greenhouse programs, a recent performance audit by the Australian National Audit Office, *The Administration of Major Programs: Australian Greenhouse Office,* Audit Report No. 34, 2003-2004, has highlighted a number of serious issues about their implementation and effectiveness. The audit noted that the greenhouse funding was considerably underspent, partly because of the long lead times required to establish projects, and hence this raised serious doubts about the achievement of abatement results before the Kyoto commitment period. The audit also raised serious questions about whether the abatement claimed to be achieved by the programs was beyond 'business as usual' projections.

Support for the ratification of the Kyoto Protocol

The majority report fails to acknowledge the groundswell of public support for Australia's ratification of the Kyoto Protocol. In its submission to the Committee, Greenpeace cited the results of its opinion polls which showed between 71 per cent and 80 per cent support levels for ratification.[25]

Recommendation

In our view, the case against the ratification of the Kyoto Protocol has not been made out, whereas the case for ratification is not only self-evident but pressing. We recommend that:

> **the Kyoto Protocol Ratification Bill 2003 [No.2] should be proceeded with forthwith.**

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24 The Hon. J Howard, Strategic Leadership for Australia. Media Release November 2002, p. 41

25 Greenpeace, Submission 34, p. 5.

Senator Kate Lundy

ALP Senator for the ACT

Senator Sue Mackay

ALP Senator for Tasmania

Senator Andrew Bartlett

Australian Democrats Senator for Queensland

Senator Bob Brown

Australian Greens Senator for Tasmania

Appendix 1

List of Submitters

1	Mr Keith Rex
2	Mr Bob Foster
3	Dr Murray Rowden
4	The Wildlife Preservation Society of Queensland, Caloundra Area Inc.
5	Mr Bob Hewett
6	New South Wales Government, The Cabinet Office
7	Centre for Photovoltaic Engineering, University of New South Wales
8	Ms Margaret Zehntner
9	Railway Technical Society of Australasia, Engineers Australia
10	The Australian and New Zealand Solar Energy Society
11	Mr Michael Collisson
12	Dr Les Little
13	Ms Merelyn Theakstone
14	Mr Rick Calitz
15	Bureau of Meteorology
16	CSIRO
17	Friends of Earth Australia
18	Australian Council of Building Design Professions
19	Renewable and Sustainable Energy Roundtable
20	United Nations Youth Association
21	Australian Liquefied Petroleum Gas Association Ltd
22	Doctors for the Environment Australia
23	Plastics and Chemicals Industries Association
24	Environment Business Australia
25	Australian Wind Energy Association
26	Solar Heat and Power Pty Ltd
27	Mr Stuart Reeh
28	Chamber of Commerce and Industry WA
29	Australian Aluminium Council
30	Australian Business Council for Sustainable Energy
31	Woodside Energy Ltd
32	Minerals Council of Australia
33	Climate Action Network Australia
34	Greenpeace

35 Australian Chamber of Commerce and Industry
35a Australian Chamber of Commerce and Industry
36 National Farmers' Federation
37 Ms Rosalind Byass
38 Tasmanian Government
39 South Australian Government

Appendix 2

Witnesses at Public Hearing

13 February 2004 – Canberra

Commonwealth Scientific and Industrial Research Organisation

Dr Bryson Bates, Director, CSIRO Climate

Mr Paul Holper, Executive Officer, CSIRO Climate

Australian Business Council for Sustainable Energy

Mr Ricardo Brazzale, Executive Director

Members of Renewable and Sustainable Energy Roundtable

Mr Martin Thomas, Australian Institute of Energy

Ms Libby Anthony, Chief Executive Officer, Australian Wind Energy Association

Environment Business Australia

Ms Fiona Wain, Chief Executive Officer

Climate Action Network Australia

Ms Anna Reynolds

Australia Institute

Dr Clive Hamilton, Executive Director

Mineral Council of Australia

Mr Mitchell Hooke, Chief Executive

Woodside Energy

Mr Steven Waller, Greenhouse Opportunity Manager

Australian Aluminium Council

Mr Ronald Knapp, Executive Director, Secretary

National Farmers Federation

Mr Lawrence Acton, Chair, Land and Vegetation Task Force

Mr Michael Potter, Policy Manager, Economics

Australian Chamber of Commerce and Industry

Ms Karen Curtis, Director, Industry Policy

Department of Foreign Affairs and Trade

Mr Christopher Langman, Ambassador for the Environment, Environment Branch

Australian Greenhouse Office

Mr Ian Carruthers, Senior Executive Manager, International, Land and Analysis Division

Dr Greg Terrill, Head, International and Strategies Branch

Department of Industry, Tourism and Resources

Mr Bruce Wilson, General Manager, Environment Branch, Energy and Environment Division

Appendix 3

Exhibits

The Australia Institute

- Table entitled *Changes to Australia's greenhouse gas emissions, 1990-2001 (Mt Co_2-e)* and accompanying chart
- Australia Institute Media Release dated 27 October 1997 headed *Government Conceals Fall in Australia's Greenhouse Emissions*
- Australia Institute Media Release dated 11 December 1997 headed *Borbidge Holds Key to Meeting Australia's Greenhouse Gas Target*
- The Australia Institute Discussion Paper Number 51, *Missing the Target – An analysis of Australian Government greenhouse spending*, by Paul Pollard, January 2003

National Farmers Federation

- Government-Business Climate Change Dialogue, Report to the Commonwealth Government by the Agriculture and Land Management Working Group, *Implications of Climate Change and Greenhouse Policy for Rural and Regional Australia,* 2003

Australian Aluminium Council

- Set of 10 slides about the AAC's position on greenhouse emissions.

Australian Greenhouse Office*

- Government-Business Climate Change Dialogue, Report to Ministers by the Five Working Group Chairs, Overview, April 2003
- Government-Business Climate Change Dialogue, Cross-sectoral Working group submission to ther dialogue process, March 2003
- Government-Business Climate Change Dialogue, Energy Intensive Manufacturing Working Group report, March 2003
- Transport and Transport Infrastructure Working Group report, 11 March 2003
- Energy and Resources Working Group Final Report
- *Greenhouse Gas Abatement Policy Options - Comparison of key studies*, A report prepared for the Australian Greenhouse Office by ACIL Tasman, May 2003

Australian Business Council for Sustainable Energy*

- *Renewables: Powering Australian jobs*, EcoGeneration Magazine, February/March 2002, pp. 7 – 11

- *The Impact of Climate Change on Insurance against Catastrophes,* Tony Coleman, Chief Risk Officer & Group Actuary, Insurance Australia Group

Australian Wind Energy Association*

- *Driving Investment, Generating Jobs: Wind Energy as a Powerhouse for Rural & Regional Development in Australia,* A Report for the Australian Wind Energy Association by Dr Robert Passey, March 2003

- Paper entitled *Export Markets for Renewables – With a focus on wind energy*

- Paper entitled *Energizing China's Wind Power Sector, by Debra Lew and Jeffrey Logan*

- Web article entitled *Energy Pact Ties UK, Philippines,* 14 January 2003, Manila, Philippines [SolarAccess.com]

Renewable and Sustainable Energy Roundtable*

- Paper entitled *The External Environmental Costs of Energy Production in Europe*

- *Driving Investment, Generating Jobs: Wind Energy as a Powerhouse for Rural & Regional Development in Australia,* A Report for the Australian Wind Energy Association by Dr Robert Passey, March 2003

- Renewable and Sustainable Energy Roundtable *Background Notes,* prepared for the Committee's public hearing.

- Article entitled *Climate Collapse, The Pentagon's Weather Nightmare,* by David Stipp, 26 January 2004, Fortune Magazine

[Note: documents marked * were provided to the Committee after the hearing and were accepted as exhibits by the Committee.]

Appendix 4

Australia's Bilateral Partnerships on Climate Change

Australia is pursuing a multi-pronged international climate change strategy to build an effective global response to climate change. This strategy includes action at multilateral, regional and bilateral levels.

Bilateral partnerships can provide a framework to both engage at a high level on climate change policy issues and focus on practical and measurable outcomes that benefit both countries.

Australia is currently pursuing bilateral cooperation on climate change with the United States, Japan, New Zealand, the European Union and China.

United States - Australia Climate Action Partnership

The United States - Australia Climate Action Partnership (CAP) was announced on 27 February 2002. In July 2002, the Australian and United States governments announced a CAP work program that included 19 projects under six themes: climate change science and monitoring; stationary energy technologies; engaging with business - technology development; engaging with business – policies, tools and approaches; collaboration with developing countries to build capacity to deal with climate change; and greenhouse accounting in the forestry and agriculture sector.

Japan - Australia Practical Collaboration on Climate Change

Practical collaboration on climate change with Japan was initiated under the Japan-Australia Creative Partnership, announced by both countries' Prime Ministers in May 2002. Australian and Japanese environment officials are exploring cooperation under three thematic areas: ways to engage all countries in a response to climate change; measurement and accounting for greenhouse sinks; and energy and technologies. Work is under way to implement or further develop specific projects.

New Zealand - Australia Climate Change Partnership

In July 2003, the Australian and New Zealand Governments announced a New Zealand - Australia Climate Change Partnership, built around five themes: engaging with business and local government on technology development, policy design and implementation; building on existing cooperation on energy efficiency; measuring and reducing emissions from the agricultural sector; further enhancing climate change science and monitoring; and working together with our Pacific Island neighbours to address the regional challenges posed by climate change. The first projects undertaken under the Partnership were announced at UNFCCC COP9 in December 2003.

European Union - Australia Cooperation on Climate Change

Climate change was identified as an area for cooperation between the EU and Australia as part of a broader agenda for cooperation identified under the April 2003 Review of the Joint Declaration on Relations between the EU and Australia. Cooperation with the EU is being explored around four themes: technology development and deployment; climate science, impacts and adaptation; harmonisation of emissions monitoring, reporting, verification and certification procedures; and evolution of mitigations commitments.

China - Australia Climate Bilateral Cooperation on Climate Change

Officials from Australia and China held a workshop in Beijing in September 2003 where they agreed on a Joint Declaration on Bilateral Cooperation on Climate Change, which sets out cooperation in the following areas: climate change policies; climate change impacts and adaptation; national communications (greenhouse gas inventories and projections); technology cooperation; and capacity building and public awareness.

Source: Australian Greenhouse Office Fact Sheet February 2004 at http://www.greenhouse.gov.au/international/publications/pubs/fs-bilaterals.pdf