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Cabinet Submission JH96/0134 - Climate change - approach to international negotiations - Decision
JH96/0134/CAB

C A B I N E T M I N U T E

**Submission JH96/0134 CLIMATE CHANGE : APPROACH
TO INTERNATIONAL
NEGOTIATIONS**

1. The Cabinet noted that the Second Conference of the Parties to the Framework Convention on Climate Change ('the Convention') would be held in Geneva from 8 to 19 July 1996.
2. The Cabinet agreed that:
 - (a) Australia's overall objective in climate change negotiations should be to safeguard our national trade and economic interests while advancing compatible outcomes that are environmentally and economically effective;
 - (b) as a party to the Convention, and consistent with the Convention's ultimate objective, Australia:
 - (i) supports the need for effective global action on climate change; and
 - (ii) recognises the importance of the Second Assessment Report of the Intergovernmental Panel on Climate Change:
 - (c) in relation to sub-paragraph (b)(i) above, Australia resist attempts to have the second Conference of the Parties to the Convention decide on specific levels of atmospheric concentrations of greenhouse gases which would constitute "dangerous interference with the climate system";
 - (d) Australia give effect to interpreting the Convention's current implied target in light of Australia's specific national circumstances by early 1997; and

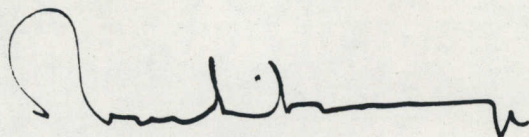
- (e) in the Berlin Mandate negotiations, Australia should restate its commitment to the Berlin Mandate and actively pursue an outcome which:
- (i) would not involve Australia taking action which would have net adverse economic impacts nationally or be detrimental to Australia's trade competitiveness;
 - (ii) does not contain targets which are legally binding;
 - (iii) applies to the shortest possible time frame (2005, or failing that, 2010);
 - (iv) covers all greenhouse gases, all sources of emissions and sinks;
 - (v) provides for equitable burden sharing among Annex I parties to the Convention through differentiated targets;
 - (vi) does not specify mandatory or internationally co-ordinated policies to limit greenhouse gas emission measures or include them in the outcome of the negotiations in a way which could provide the basis for trade discrimination;
 - (vii) on developing country commitments:
 - (A) provides for further negotiations on greenhouse gas emission limitation or reduction commitments which would apply to all parties to the Convention, consistent with their individual circumstances and their development needs;
 - (B) includes strong endorsement of Activities Implemented Jointly; and
 - (C) does not make implementation of the commitments of developing countries contingent on developed countries providing financial resources beyond those already committed under the Convention; and
 - (viii) does not derogate from the provisions of existing international agreements (in particular General Agreement on Tariffs and Trade/World Trade Organisation).

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3. The Cabinet also agreed that, during the Berlin Mandate negotiations:
- (a) Australia would need to position itself to allow Cabinet to decide, if necessary, that Australia's interests would be best protected by shifting focus from pursuing the objective set out in sub-paragraph 1(e)(v) above to minimising the impact of a uniform target applying to each of the Annex I parties to the Convention by pursuing caveats which would allow differences in individual country circumstances to be recognised in the interpretation of such a target;
 - (b) with reference to the objective set out in sub-paragraph 1(e)(vi) above, Cabinet would be ready to consider specific policies and measures to limit greenhouse gas emissions, which emerge in the negotiations, for inclusion in the Berlin Mandate outcomes, only if it could be demonstrated that such inclusion would not have an adverse impact, directly or indirectly, on Australia's economic and trade interests;
 - (c) in order to prepare for any future policy decisions on our international position on climate change the Minister for Foreign Affairs, the Minister for the Environment and the Minister for Resources and Energy develop an approach to provide the Australian community with information relevant to Australia's special circumstances, our national economic interests, our environmental initiatives that will assist in addressing greenhouse gas concentrations and the unfair burdens that uniform legally binding targets may impose on Australia; and
 - (d) the Minister for Foreign Affairs, the Minister for the Environment and the Minister for Resources and Energy review and update the inventory data which supports Australia's National Greenhouse Response Strategy, and report to Cabinet in due course on the outcome of the review.
4. The Cabinet noted that:
- (a) a further Submission for Cabinet consideration would be brought forward jointly by the Minister for Foreign Affairs, the Minister for the Environment and the Minister for Resources and Energy as negotiations progress, should Cabinet need to consider modifying Australia's negotiating approach; and

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- (b) the outcome of the Review of the National Greenhouse Response Strategy has important implications for Australia's domestic greenhouse performance and Australia's position in international climate change negotiations.



Secretary to Cabinet

JH96/0134/CAB

CABINET-IN-CONFIDENCE

FOR CABINET

Submission No. JH96/0134
Copy No. 55

Title	CLIMATE CHANGE: APPROACH TO INTERNATIONAL NEGOTIATIONS
Minister	The Hon. Alexander Downer MP, Minister for Foreign Affairs; Senator the Hon. Robert Hill, Minister for the Environment; Senator the Hon. Warwick Parer, Minister for Resources and Energy.
Purpose/Issues	To seek Cabinet agreement to Australia's approach to international negotiations on climate change, particularly in respect of the key issues expected to arise at the Second Conference of the Parties (COP2) to the United Nations Framework Convention on Climate Change, to be held in Geneva from 8 to 19 July.
Program Context	DFAT 1.7 Global issues DEST 1.1 Climate Change DPIE 2.4 Energy
Relation to existing policy	Pre-election policy statement on the environment: "Saving Our Natural Heritage"
Sensitivity/Criticism	Australia's position on climate change issues is sensitive for States and Territories, Australian industry, environmental groups and developing countries (in particular Pacific island countries).
Legislation involved?	No.
Priority: Critical/significant dates	Decision by Cabinet required to allow preparation of briefing for the Australian delegation to the Second Conference of the Parties to the Framework Convention on Climate Change to be held 8 -19 July 1996.
Consultation: Ministers/Depts consulted	Attorney-General's Department, Commonwealth Scientific and Industrial Research Organisation, Department of Finance, Department of Health and Family Services, Department of Industry, Science and Tourism, Department of the Prime Minister and Cabinet, Department of Transport and Regional Development, the Treasury.
• Is there agreement?	Yes - full comments at Attachment Q.
• Evaluation strategy agreed?	n.a.
Timing/handling of announcement	No announcement anticipated. However, attention will need to be given to development of a media strategy and presentation of Australia's position for COP2 and beyond.
Cost: • This fiscal year • year 2 • year 3 • year 4	nil nil nil nil



BACKGROUND

In June 1992, Australia signed the UN Framework Convention on Climate Change ("the Convention") and Australia ratified it in December 1992. The Convention entered into force in March 1994. The ultimate objective of the Convention is to stabilise greenhouse gas (GHG) concentrations in the atmosphere at a level that would prevent "dangerous anthropogenic interference" with the climate system. Attachment B outlines the Convention and Australia's past approach.

2. The Convention's principal commitments for "Annex I parties" (developed countries and economies in transition) are to adopt policies and measures to reduce GHG emissions, with the aim of returning to 1990 levels by 2000, subject to economic caveats that are of significance to Australia. Australia is meeting these commitments through the National Greenhouse Response Strategy (Attachment C). DEST/DPIE projections suggest that, with all current measures in place, Australia's emissions are likely to be about 6% above 1990 levels by 2000, although available methodology does not allow precise estimates. Most Annex I countries are also not expected to achieve the target (Attachment D).

3. Australia's participation in the Convention has been predicated on our accepting that human-induced climate change is a long term and global problem requiring action by all countries. Additional action to curb emissions by Annex I countries only, while having value in demonstrating that developed countries are taking the lead, will be of limited effect in addressing the global problem of climate change. This is indicated by the fact that developing country emissions will soon exceed those of the OECD countries and are increasing rapidly (Attachment N, page 71). There can be no effective global response to climate change without the progressive involvement of developing countries in emissions reduction activities, so this should be a key strategic objective for Australia.

4. The first Conference of the Parties (COP1) took place in Berlin in March-April 1995 and mandated negotiation of a new set of post-2000 (up to 2020) commitments for Annex I parties but no new commitments for developing countries. Australia held out for additional developing country commitments until it was isolated. For features of the "Berlin Mandate" see Attachment E, and a detailed commentary, Attachment F. Negotiations centre on new targets for emission reductions by Annex I countries and a possible set of coordinated and/or mandatory policies and measures.

5. These negotiations will have major implications for Australia's environmental, social, economic, trade and international relations interests (Attachments G, H and I). Australia's continued engagement and taking an effective role in these negotiations offer the best chance to defend these interests.

ISSUES

6. The next Conference of the Parties (COP2), to be held in Geneva from 8 to 19 July 1996, is expected to initiate substantive negotiations under the Berlin Mandate on a new legal instrument to be adopted at COP3 in the second half of 1997. COP2 is likely to produce a consensus Ministerial Statement that could well narrow down negotiating options. COP2 will also be giving the Parties' response to the recently released Second Assessment Report (SAR) of the Intergovernmental Panel on Climate Change (IPCC). The SAR updates climate change science. The short time frame to COP3 to deal with a complex set of issues means there will be considerable pressure for simple solutions and little room for manoeuvre.

7. COP2 will be a critical meeting because Australia can expect to be under pressure from the US, European Union (EU), most developing countries (including Pacific island countries) and environment groups to agree to develop legally binding targets and timetables for developed countries to reduce GHG emissions within the 2000-2020 time frame. The EU will also exert strong pressure for agreement to be reached on developing a set of mandatory policies and measures to be applied by all developed countries. This would narrow Australia's options considerably and preclude pursuit of some important objectives. Features of key country positions are at Attachment J.

Implications of scientific knowledge on climate change

8. The IPCC SAR states, for the first time, that the balance of evidence suggests a discernible human influence on global climate. The SAR also states that given the projected growth in atmospheric concentrations of GHGs, interference with the climate system will grow in magnitude, so that the likelihood of adverse impacts from climate change that could be judged 'dangerous interference' (in the sense used in the Convention) will become greater (see Attachment K).

9. The SAR does not specify what level of atmospheric GHG concentrations constitutes dangerous interference. The IPCC considers that this judgement is ultimately a matter for decision by policy makers. The SAR states that scientific uncertainties remain which are relevant to this judgement.

10. Pressures can be expected at COP2 for a political decision on what specific level constitutes dangerous interference and to specify appropriate paths to stabilisation short of such an atmospheric concentration. Such a decision would have a major influence on negotiations on targets and timetables and on policies and measures. Australia should resist such pressures as premature, noting that the Convention's Subsidiary Bodies have requested the IPCC to provide more specific information.

11. Nevertheless, the SAR presents a strong message to countries about the importance of effective global action to reduce GHG emissions. It will be essential for our credibility in the negotiations that at COP2 Australia maintains its support for the SAR's findings and adds its weight to the need for effective global action to address the threat of climate change.

Targets and timetables

12. The current commitments of developed countries to implement unspecified policies and measures with the aim of returning emissions to 1990 levels by 2000 are subject to a number of caveats. These include taking account of differences in countries' starting points, economic structures and resource bases, and the need to maintain strong and sustainable economic growth. However, the political reality is that all attention is concentrated on whether or not countries will meet the 'implied target'. The caveats provide scope for countries to interpret unilaterally the target in light of their national circumstances, and several Annex I countries have done so (Attachment L). The principle of interpreting Australia's implied target in light of our specific national circumstances should be endorsed and work undertaken to give effect to this by early 1997. In this context, Australia will be well placed to argue a good performance in working towards meeting the implied target.

Form of post-2000 targets and timetables

13. While the Berlin Mandate allows other options, the focus of the major players is exclusively on targets and timetables. To oppose targets and timetables at this stage would marginalise Australia and render us ineffective in pursuing our interests. A number of specific proposals on,

and possible approaches to, targets and timetables have been advanced in the negotiations (Attachment M). These include the long-standing uniform target proposal by the Alliance of Small Island States (AOSIS) for all Annex I countries to reduce carbon dioxide emissions by 20% relative to 1990 emissions by 2005. Other specific proposals involve uniform emission reductions from 1990 levels of 5% to 20% by 2005 or 2010. (ABARE projections indicate that Australian emissions for the energy sector - which account for over half our total emissions - are projected to be more than 30% above 1990 levels by 2010. Any reduction in net GHG emissions, allied with continued GDP growth, will only occur if the GHG-intensity of Australia's economy falls over time. The Government's National Vegetation Initiative offers an opportunity to reduce emissions significantly associated with land management.)

14. Uniform targets would generally impose significantly higher costs on Australia than on other OECD economies. This is due to the structure of our economy, the composition of our trade, our high rate of underlying emissions growth and our relatively high per unit cost of reducing emissions. An attempt by Australia to curb emissions growth by implementing measures which have net economic cost could have adverse trade impacts, erode our comparative advantage in energy intensive industries and encourage them to move offshore to developing countries not subject to similar commitments.

15. Australia has argued that a uniform target approach is inequitable. We have advanced an alternative "equitable burden sharing" approach (Attachment N) aimed at implementing the Convention's caveats by developing equity rules that can be applied to all parties as a basis on which to differentiate individual countries' targets (assessed according to such factors as cost-effectiveness, capacity to pay, rates of population growth and emissions embodied in trade). This approach would have all OECD countries bearing similar costs in reducing emissions. It would also enhance the Convention's viability over the long term by facilitating the gradual and equitable assumption of emissions commitments by developing countries.

16. However, our position has attracted little support, because of the difficulty of agreeing on specification and measurement of costs for arriving at differentiated targets for each Annex I party, and would result in no advantage for the EU and disadvantage the US. The EU, US and many developing countries are likely to form a 'critical mass' in favour of a uniform target approach and some will want to make it legally binding. The uniform target proposals on the table are expected to remain a key focus for negotiations on developed country targets and timetables.

Negotiating strategies for targets and timetables

17. An outcome involving differentiated targets is probably not achievable by COP3. Even so, it will be important for Australia to position itself by continuing to advance arguments for differentiation to demonstrate that Australia's national circumstances are different to other OECD countries' while making clear that Australia is prepared to make a fair and equitable contribution. This should be done in a way which allows us to shift focus to minimising the impact of a uniform target. We would do this by building on equity principles to provide sufficiently strong caveats to allow differences in individual country circumstances to be recognised in the interpretation of such a target, and working with like-minded countries to build coalitions.

18. The member states of the EU currently have, under the Convention, the benefit of an internal burden sharing arrangement in meeting the Convention's current target, and they expect this to continue. To ensure effective engagement of the EU in equity issues, Australia should develop strategies to place pressure on the EU in the negotiations. We should resist the rolling-over of the

internal burden sharing provision into the Berlin Mandate outcome unless there is equitable burden sharing for all Annex I parties, or the outcome includes the caveats described in paragraph 17.

19. In light of the uncertainties about the nature and impact of the target and the effectiveness of the caveats achievable, Australia should also pursue an outcome that is not legally binding and applies to the shortest possible time frame (i.e. 2005, or failing that, 2010).

Policies and measures

20. Some countries (in particular the EU) are advocating common or coordinated implementation of a set of policies and measures by OECD countries (Attachment O). The Berlin Mandate allows for these options and it could be argued that internationally coordinated implementation of policies and measures might carry benefits where specific policies and measures would not be implemented unilaterally by countries due to trade competitiveness or other economic concerns. To be acceptable, proposals for mandatory or coordinated policies and measures must satisfy the following: be compatible with Australia's economic and trade interests; be essential for the effectiveness of the policy or measure; and be critical to target achievement. More work needs to be done internationally before inclusion of specific policies and measures can be considered and analysis of options should span all sources of emissions and sinks for GHGs. This work will not be completed before the conclusion of the Berlin Mandate negotiations.

21. Inclusion of policies and measures in the manner proposed by the EU would raise significant trade policy concerns. Implementation of these measures by other Annex I parties could: have adverse effects on Australia's trade interests; discriminate against products from non-participating countries; be an important precedent for other environment agreements; and over time could undermine the effectiveness of the WTO's non-discrimination obligations. Different national circumstances of Annex I countries mean that the effectiveness and economic impact of specific policies and measures will vary between countries. Australia's highly carbon-intensive economy relative to other OECD countries means that policies and measures suitable for economies with lower levels of carbon intensity (e.g. a carbon tax) could have more severe adverse economic effects if implemented in Australia.

Negotiating strategies for policies and measures

22. Australia should only be prepared to consider inclusion of policies and measures in the Berlin Mandate outcome if it can be shown that such inclusion would not have an adverse impact, directly or indirectly, on Australia's economic and trade interests. Accordingly, Australia should work for an outcome that does not specify either mandatory or internationally coordinated policies and measures, but provides for further analysis and possible future negotiations. The outcome should allow individual countries to choose, in the context of meeting their emissions targets, the policies and measures most suited to their national circumstances.

23. A major review of the National Greenhouse Response Strategy is under way. It is essential that the revised Strategy constitutes an effective and internationally credible set of policies and measures taking account of opportunities and constraints for domestic action in Australia's environmental, economic and trade circumstances.

Advancing the implementation of developing country commitments

24. A priority in Australia's approach should be getting developing countries to undertake emission reduction commitments as soon as is feasible (Attachment P). To this end, there should be separate provision for further negotiations beyond the Berlin Mandate on GHG emission

commitments applying to all parties, including developing countries. In preparation for this, Australia should work to ensure the COP3 outcome includes strong endorsement of Activities Implemented Jointly (AIJ - where countries agree to cooperate in emission mitigation projects with the aim of increasing the cost-effectiveness of the overall global mitigation effort). This should encourage the pilot phase and provide a solid basis for developing the AIJ concept. However, there is no possibility that Annex I countries will receive credits for emission reductions under AIJ in the context of the Berlin Mandate outcome.

25. The Convention commits developed country parties to provide financial resources to developing countries to assist them in implementation of their commitments. Australia's contributions to the Global Environment Facility satisfy these obligations. Advancing the implementation of commitments by developing countries through the current negotiations should not be contingent, as some developing countries have sought to make it, on developed countries providing additional financial resources beyond those to which they are already committed under the Convention.

SENSITIVITY / CRITICISM

26. Climate change issues are one of the highest priorities for environmental groups. The Berlin Mandate outcome has significant potential to affect Australian industry. Business organisations accept the need to effectively address climate change on a global basis and support equitable burden sharing, but are strongly opposed to specific targets and timetables. States and Territories will be sensitive to the outcome, including the possibility that a legally binding outcome could give the Commonwealth increased authority to legislate on environmental issues. There are particular sensitivities on climate change issues in our relations with Pacific island countries.

RECOMMENDATIONS

27. We recommend that Cabinet agree that:

- (a) Australia's overall approach to climate change negotiations be based on the considerations set out in Attachment A;
- (b) as a party to the Framework Convention on Climate Change, and consistent with the Convention's ultimate objective, Australia supports the need for effective global action on climate change and recognises the importance of the Second Assessment Report of the Intergovernmental Panel on Climate Change
 - (i) Australia will resist attempts to have the second Conference of the Parties to the Convention decide on specific levels of atmospheric concentrations of greenhouse gases which would constitute "dangerous interference with the climate system";
- (c) Australia should give effect to interpreting the Convention's current implied target in light of our specific national circumstances by early 1997; and
- (d) in the Berlin Mandate negotiations, Australia should restate its commitment to the Berlin Mandate and actively pursue an outcome which:
 - (i) would not involve Australia taking action which would have net adverse economic impacts nationally or be detrimental to Australia's trade competitiveness;
 - (ii) does not contain targets which are legally binding;
 - (iii) applies to the shortest possible time frame (2005, or failing that, 2010);

- (iv) covers all greenhouse gases, all sources of emissions and sinks;
- (v) provides for equitable burden sharing among Annex I parties through differentiated targets
 - (A) recognising that this objective is probably not achievable in these negotiations and that Australia will need to position itself to allow Cabinet to decide, if necessary, towards the end of the negotiations in circumstances where consensus is emerging on a uniform target approach, that Australia's interests would be best protected by shifting focus to minimising the impact of a uniform target by pursuing caveats to allow differences in individual country circumstances to be recognised in the interpretation of any applicable targets;
- (vi) does not specify mandatory or internationally coordinated policies and measures or include them in the outcome of the negotiations in a way which could provide the basis for trade discrimination
 - (A) recognising that Cabinet would be ready to consider specific policies and measures for inclusion which might emerge in the negotiations if it could be demonstrated that such inclusion would not have an adverse impact, directly or indirectly, on Australia's economic and trade interests;
- (vii) on developing country commitments:
 - (A) provides for further negotiations on greenhouse gas emission limitation or reduction commitments which would apply to all parties to the Convention, consistent with their individual circumstances and their development needs;
 - (B) includes strong endorsement of Activities Implemented Jointly; and
 - (C) does not make implementation of the commitments of developing countries contingent on developed countries providing financial resources beyond those already committed under the Convention; and
- (viii) does not derogate from the provisions of existing international agreements (in particular the GATT/WTO).

28. We recommend that Cabinet note that:

- (a) further Submissions will be brought forward as the negotiations progress, should Cabinet need to consider modifying Australia's negotiating approach; and
- (b) the outcome of the Review of the National Greenhouse Response Strategy has important implications for Australia's domestic greenhouse performance and Australia's position in the international climate change negotiations.

MINISTER AND DATE

The Hon. Alexander Downer MP, Minister for Foreign Affairs	28 May 1996
Senator the Hon. Robert Hill, Minister for the Environment	28 May 1996
Senator the Hon. Warwick Parer, Minister for Resources and Energy	28 May 1996

LIST OF ATTACHMENTS

- A. Fundamental considerations in Australia's approach to international climate change negotiations
- B. Framework Convention on Climate Change: Background
- C. Australia's domestic response to Greenhouse
- D. The international context of Australia's performance on emissions
- E. Berlin Mandate: Background
- F. Commentary on the Berlin Mandate
- G. Australia's national interests: environmental
- H. Australia's national interests: economic and trade
- I. Australia's national interests: international relations
- J. Features of key country positions and negotiating objectives
- K. IPCC Second Assessment Report and its implications
- L. Unilateral interpretations of "equitable contribution"
- M. Negotiating options and proposals: targets and timetables
- N. Equitable burden sharing and differentiated targets
- O. Negotiating options and proposals: policies and measures
- P. Negotiating options and proposals: developing countries' commitments and comprehensive approach
- Q. Coordination comments

**FUNDAMENTAL CONSIDERATIONS IN AUSTRALIA'S APPROACH TO
INTERNATIONAL CLIMATE CHANGE NEGOTIATIONS**

As a party to the Convention, Australia supports its ultimate objective of stabilising "greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system ... within a time frame 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 in a sustainable manner".

2. Australia should continue its active involvement in the international climate change agenda on the basis that any outcome of the negotiations will have major implications for Australia's environmental, social, economic and trade interests.
3. Our overall objective should be to advance outcomes that are environmentally and economically effective and which safeguard our national trade and economic interests.
4. Australia has accepted that climate change is a global problem which requires solutions to be worked out on a global scale, with action required by all countries if solutions are to be effective.
5. Given Australia's unique national circumstances including its highly carbon-intensive, developed economy, Australia's special concern should be to ensure that all countries bear an equitable share of the global burden of addressing climate change.

FRAMEWORK CONVENTION ON CLIMATE CHANGE: BACKGROUND

Parties to the Convention are committed to take a range of actions aimed at achieving the Convention's ultimate objective of stabilising "greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system ... within a time frame 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 in a sustainable manner". All parties have accepted the following key requirements of the Convention:

- a. preparation of national inventories of greenhouse gas emissions by sources and removals by sinks;
- b. development and implementation of, and reporting on, national programs to mitigate and adapt to climate change;
- c. cooperation in the development, application and transfer of technologies, practices and processes that control, reduce or prevent emissions of greenhouse gases;
- d. promotion of sustainable development and the conservation and enhancement of sinks and reservoirs of greenhouse gases, including biomass, forests and oceans;
- e. taking climate change considerations into account to the extent feasible in their relevant social, economic and environmental policies and actions;
- f. promotion of, and cooperation in, research on the implications of climate change and various response strategies; and
- g. development of plans for coastal zone management, water resources and agriculture, and for the protection and rehabilitation of areas affected by drought and desertification, as well as floods.

2. In addition to these commitments, which apply to all parties, the Convention also requires developed countries to take the lead in combating climate change. Countries listed in the Convention's Annex I (member countries of the OECD and countries undergoing the process of transition to a market economy, i.e. the countries of Eastern Europe and the former Soviet Union) are required to "adopt national policies and take corresponding measures on the mitigation of climate change, by limiting [their] anthropogenic emissions of greenhouse gases and protecting and enhancing [their] greenhouse gas sinks and reservoirs". The Convention allows these parties to implement these measures individually or jointly with other parties. While the Convention does not contain specific targets and timetables, it contains a commitment by Annex I parties to provide information on policies and measures they have taken with the aim of meeting the Convention's implied emissions target (of returning their greenhouse gas emissions to 1990 levels by the year 2000) subject to certain caveats. The caveats detailed in the Convention include differences in parties' starting points and approaches, economic structures and resource bases, the need to maintain strong and sustainable economic growth, available technologies and other individual circumstances, as well as the need for equitable and appropriate contributions by each Annex I party to the global effort of meeting the ultimate objective of the Convention.

3. The text of the Convention leaves many of the details of how to implement the Convention to be determined by the Conference of the Parties. The first session of the Conference of the Parties,

held in Berlin in March-April 1995, reached agreement on a range of implementation matters, including:

- a. a mandate (the "Berlin Mandate") for negotiation of a protocol or other legal instrument to strengthen Annex I party commitments for the period beyond the year 2000;
- b. setting up a pilot phase for Activities Implemented Jointly open to all parties on a voluntary basis. It also decided that credits would not be allocated during the pilot phase;
- c. a process of reviewing national communications including an in-depth review process to be undertaken through visits to Annex I parties by expert review teams; and a process and time frame for the preparation of first communications from non-Annex I parties;
- d. use of either the Intergovernmental Panel on Climate Change (IPCC) Guidelines, or nationally developed guidelines, for preparation of national inventories of greenhouse gas emissions and sinks;
- e. the role, functions and tasks of the Subsidiary Body for Scientific and Technological Advice (SBSTA) and the Subsidiary Body for Implementation (SBI);
- f. maintenance of the interim arrangements referred to in Article 21.3, which provides for the Global Environment Facility (GEF) to act as the interim operating entity of the financial mechanism for the next four years (to 1999); and
- g. preparation by the Secretariat of an inventory of technology available for transfer to developing countries and called for an itemised progress report on measures being taken by developed countries in arranging for the transfer of technologies to limit emissions.

Australia's Approach

4. Australia's active engagement in international efforts to develop an effective and equitable Convention was driven by the recognition that the effects of climate change could have significant adverse impacts on Australia. Australia's long coastline and its predominantly coastal settlement patterns, high biological diversity and the variable climate on which our agricultural sector depends, combine to make Australia potentially vulnerable to the possible impacts of global warming.
5. At the same time it was recognised that Australia could be vulnerable to the economic effects of some policies which could be adopted internationally to counter the threat of climate change. Factors making Australia sensitive to the impact of international climate change policy responses include: Australia's comparative advantage in fossil fuel resources and its dependence particularly on coal in the energy sector; our exports of energy materials and energy intensive products; our extensive geographical area and its associated transport requirements; and relatively high rate of population growth.
6. During the negotiations Australia argued for the adoption of targets and timetables linked to a comprehensive approach which addresses all greenhouse gases, sources and sinks. Australia also argued that the Convention should allow for flexible, diverse actions appropriate to the circumstances of each country. Underlying Australia's approach was the caveat that Australia would not proceed with the adoption of response measures which would have net adverse economic impacts nationally or on Australia's trade competitiveness in the absence of similar action by major

greenhouse gas emitting countries.

7. At that time, Australia's assessment of the Convention, in terms of its consistency with protection and advancement of Australia's environmental, economic and trade interests placed emphasis on several key provisions contained in the Convention, including:

- a. the ultimate objective of the Convention which, in accordance with the relevant provisions of the Convention, is to stabilise greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous human interference with the climate system;
- b. a commitment to taking a comprehensive approach (i.e. consideration of all greenhouse gases, all emissions sources and sinks, and all sectors);
- c. flexibility in the adoption of policies and measures to limit greenhouse gas emissions by taking account of parties' starting points and approaches, economic structures and resource bases, the need to maintain strong economic growth, available technologies and other individual circumstances (the Convention does not specify what policies and measures parties may adopt);
- d. the generalised obligation, in the assessment and review of the implementation of the Convention, to take into consideration the situation of parties with economies that are highly dependent on income generated from the production, processing and export, and/or consumption of fossil fuels and associated energy-intensive products (although how this consideration is to be undertaken is unspecified);
- e. an undertaking by all parties that measures taken to address climate change, including unilateral ones, should not constitute a means of arbitrary or unjustifiable discrimination or a disguised restriction on international trade; and
- f. the generalised requirement for parties to take precautionary measures to anticipate, prevent or minimise the causes of climate change and mitigate its adverse effects.

8. Australia signed the Convention on 4 June 1992 on the basis of the following assessment:

- a. it provided for the initiation of global action on climate change;
- b. it was broadly consistent with Australia's economic and foreign policy negotiating objectives for the Convention;
- c. it contained sufficient safeguards to protect Australia's economic interests; and
- d. it was considered that signature of the Convention would enhance our ability to influence future negotiations relating to the Convention in ways which advanced and protected our interests.

9. Following advice from Attorney General's that no new legislation was required to fulfil obligations under the Convention, DEST circulated a paper to NGOs setting out the implications to Australia of ratifying the Convention. The Business Council of Australia and the Australian Conservation Foundation agreed to ratification on behalf of respectively the business/industry and environment NGOs. The then Prime Minister wrote to Premiers and Chief Ministers in October 1992 announcing the Commonwealth's intention to ratify the Convention. States and Territories expressed no substantive objections and Australia ratified the Convention on 30 December 1992.

AUSTRALIA'S DOMESTIC RESPONSE TO GREENHOUSE

National Greenhouse Response Strategy (NGRS)

Australia's national greenhouse response effort is essentially contained in the National Greenhouse Response Strategy (NGRS), which was agreed by the Council of Australian Governments (COAG) in December 1992.

2. The key elements of the strategy comprise a set of general principles; a set of sectoral objectives and strategies; a phased plan of action; research and analysis; and mechanisms for monitoring and assessing performance.
3. Guiding implementation of the strategy is an interim planning target and an overall goal.
4. The interim planning target for Australia, set out in the strategy, is to reduce emissions to their 1988 level by 2000 and then further reduce them by 20% by 2005 ... subject, however, "to Australia not implementing response measures that would have net adverse economic impacts nationally or on Australia's trade competitiveness, in the absence of similar action by major greenhouse producing countries."
5. COAG agreed to the following goal for the strategy: "to contribute towards effective global action to limit greenhouse gas emissions and enhance greenhouse gas sinks; to improve knowledge and understanding of the enhanced greenhouse effect; and to prepare for potential impacts of climate change in Australia."
6. The strategy notes that governments agree that "actions in the first phase will concentrate on those of a 'no regrets' nature, that is those that have net benefits (or at least no net cost) in addition to addressing the enhanced greenhouse effect."
7. It is through the NGRS that Australia is meeting - and demonstrates that it is meeting - its principal international obligations under the Framework Convention on Climate Change. These obligations are centred on the commitment "to adopt national policies and take corresponding measures on the mitigation of climate change..."

Additional Commonwealth action in 1995

8. In the lead-up to the first Conference of the Parties (COP1) in Berlin in March-April 1995, the then Commonwealth Government announced, in March 1995, additional measures that it would introduce in an effort to bring Australia's performance closer to meeting the Convention's implied target. This set of measures was set out in a statement called *Greenhouse 21C*.

Emissions inventory projections as published in 1994 and 1995

9. At COP1, Australia reported that a 'business as usual' scenario implied a 14% rise in greenhouse gas emissions over the period 1990 to 2000. The previous Government estimated at that time that with NGRS measures, this would be reduced to a 7% rise while the additional *Greenhouse 21C* measures would further reduce emissions in 2000 to about 3% above the 1990 level.

New inventory data for 1990-1994

10. Revised inventory data has recently been compiled for 1990 and new data has been compiled

for 1991-1994. This material is expected to be published in May 1996.

11. All this inventory data uses updated methodologies and global warming potentials (i.e. the multiplier used to equate the global warming effect of other greenhouse gases to that of carbon dioxide). The changed global warming potentials have increased the carbon dioxide equivalent values of the other greenhouse gases, although the new inventory provides a lower total emissions figure of 563 million tonnes carbon dioxide equivalent values for 1990. This has come about principally because of new, lower methane levels attributed to waste and cattle. Note that in the absence of better data, the emissions level from land clearing for 1990 (although very uncertain) has been used as an interim value for all years from 1989 to 1994.

12. Inventory data for the years 1991-1994 was not previously available. The data for 1994 shows that emissions in 1994 were only 2.3% above those in 1990, which is substantially less than the trend previously projected. The unexpectedly slower growth in emissions was probably in large part due to the economic down-turn of the early 1990s. However the 1994 data does include the early effect of a some NGRS measures.

Revised projections to 2000

13. A comprehensively revised set of projections is being prepared for the next National Communication required by the Convention (due in April 1997). Preliminary DPIE/DEST estimates suggest that greenhouse gas emissions in the year 2000, taking into account all current measures, may be in the vicinity of 596 million tonnes carbon dioxide equivalent, i.e. about 6% above 1990 levels, instead of the 3% estimated in 1995. However, this still represents a greater than 7% reduction from the 'business as usual' scenario (see Graph 1).

14. A major reason why this projection is higher than those published earlier is that the effect of the one billion trees program is considered to have been over-estimated, owing to the fact that the growth rates of trees used in the earlier calculations are now judged to be too high for the planting situations, tree ages and species actually involved. The high projection comes about despite the slow rate of emissions growth from 1990 to 1994 because of assumed higher economic growth from 1995 to 2000.

Uncertainties in projections

15. There are considerable uncertainties in projecting greenhouse gas emissions and in estimating reductions in emissions attributable to response measures. For example, estimates of emissions from land clearing are uncertain by a factor of two. In the absence of better information, in Graph 1 it is assumed that the annual rate of land clearing remains constant out to 2000 at the rate estimated for 1990. It is also important to recognise the possibility of other significant systematic errors in emission factors which are difficult to estimate.

16. The projected overshoot of 6% quoted above includes assumptions about the uptake and effectiveness of measures and, therefore, is indicative only.

NGRS review

17. The NGRS is currently undergoing a major review for COAG consideration. As part of the review process, a first report, outlining key issues and seeking broad guidance on goals and objectives will be presented for COAG's consideration around July/August 1996. This first report

would seek COAG advice on the future direction and development of the strategy. The report will address such matters as the strategy's goal, objectives and principles; the interim planning target; and the nature and content of future response measures.

18. Following consultations within and between jurisdictions (including consideration by relevant ministers), the final report would be prepared for COAG in the first half of 1997. The final report is expected to put forward detailed proposals for new measures for consideration by COAG.

19. There is an important two-way interaction between the ongoing Berlin Mandate negotiations and the in-train review of the NGRS. The Berlin Mandate negotiations will inform the continuing development of the NGRS, while the revised NGRS, to be approved by COAG in the first half of 1997, is expected to encapsulate emissions reductions agreed by Commonwealth and State governments, and this will inform the development of Australia's international negotiating position.

20. The measures arising from the review process and from other policy processes (e.g. the White Paper process concerned with the development of sustainable energy policy) and the ensuing energy reforms, could have some impact on emissions by 2000. However, most of the impact of measures introduced in 1996-97 will occur beyond 2000.

International context of performance

21. There are several aspects relevant to assessing Australia's performance in an international context. While the Convention's implied target is not legally binding, it has set up a benchmark against which political judgements will be made about the performance of developed countries.

22. However, there are many caveats in the Convention that imply consideration needs to be given to the particular economic and trade circumstances of countries when assessing performance against the target.

23. Taking into account the many uncertainties in making comparisons between countries' performance, data available from national reports and other sources would suggest that, in terms of effort to reduce emissions from a projected business as usual scenario, Australia compares favourably with most developed countries. Some (e.g. Germany and the UK) can meet the Convention's implied target with a smaller percentage reduction than Australia has actually made. Estimates at this stage also indicate that most developed countries will fall short of meeting the Convention's implied target.

24. Against the background of the Convention's commitments and the caveats it contains, Australia will be well placed to argue a good performance in working towards meeting the implied target. Notwithstanding that, in the political dynamics of the on-going climate change negotiations, the implied target has become the key test as to whether developed countries have met their undertaking to take a lead role in climate change mitigation. The extent to which developed countries' measure up to this test will have a number of implications for their ability to influence developing countries in the negotiations and, in particular, to obtain their agreement to take a more active role in adopting response measures. This will be important in drawing in the newly industrialising countries and other major emitters.

DPIE projections to 2010

25. There are uncertainties associated with longer term growth rates in emissions which will

depend on a number of major factors, such as population and economic growth, and expansions in the energy intensive sectors of the economy. Emissions growth will also depend on the nature, extent and effectiveness of measures introduced to mitigate emissions.

26. In 1995, ABARE published forecasts of energy demand to 2010. Included in this publication were forecasts of greenhouse gas emissions from the energy sector. These greenhouse gas emission forecasts have been used as a guide in attempting to determine total greenhouse gas emissions to 2010. In the 1990 inventory, emissions from the energy sector accounted for some 53% of total emissions.

27. ABARE's forecasts of emissions from the energy sector possibly account for some effects of NGRS measures, but they were developed prior to the release of *Greenhouse 21C*.

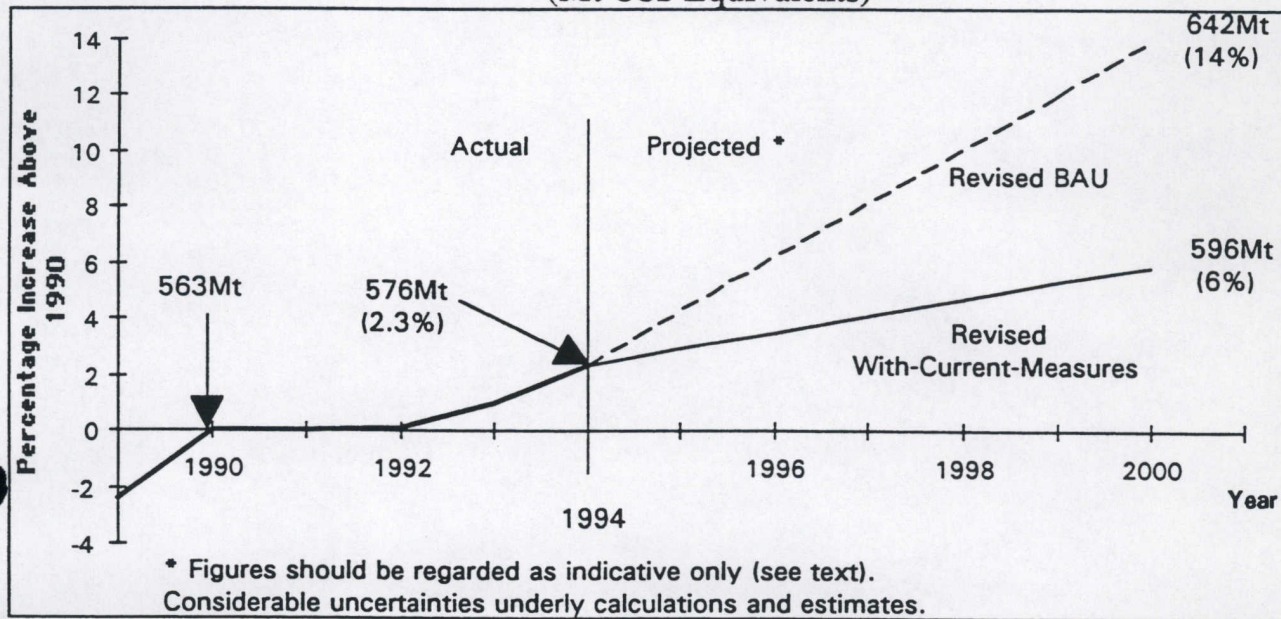
28. ABARE has projected that greenhouse gas emissions from the energy sector will increase by 34% over the period 1990 to 2010. This projection reflects a 21% increase from 1990 to 2000 and an 11% increase from 2000 to 2010. These estimates include only projects that were committed or at the final feasibility stage at the time the ABARE forecast was published. There are, therefore, uncertainties with these figures. For example, some projects have emerged since the forecast was published. In addition, it is likely that new projects would be initiated and commence during the period 2000 to 2010. These developments are likely to increase emissions in the energy sector above the ABARE forecasts.

29. There are no projections for emissions from other sectors, e.g. agriculture, similar to the ABARE energy projections. In order to obtain some idea of the possible pattern of overall emissions growth to 2010, it is necessary to make assumptions about non-energy emission growth rates. It could be assumed, for example, that non-energy emissions might grow at the same rate as energy emissions (a high scenario) or remain constant (a low scenario).

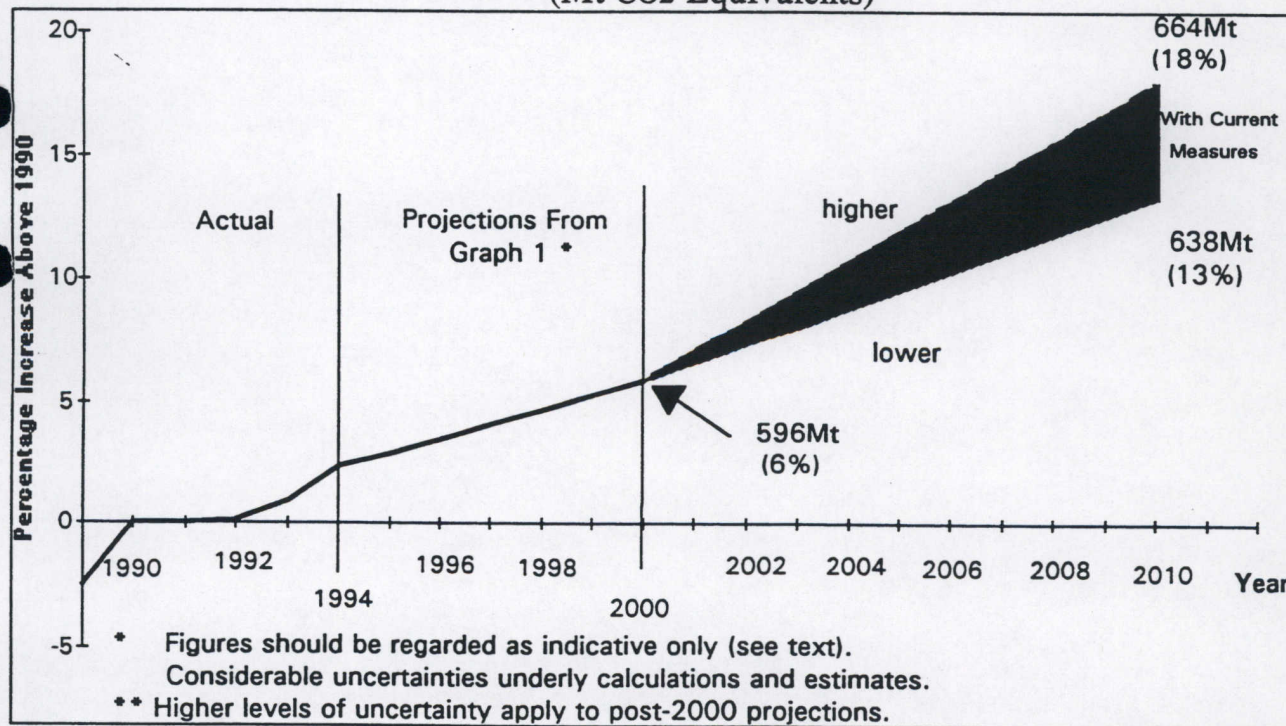
30. Using these scenarios for non-energy emissions and the ABARE projections for energy emissions, it emerges that overall emissions growth to 2010 could range from 13% to 18% above the 1990 level in 2010 (Graph 2). However, the starting point of these calculations is the projections to 2000, which may be too low if measures are less effective than estimated. Moreover, the calculations also utilise the 11% energy emissions growth rate from 2000 to 2010, which is likely to be low for the reasons outlined above. The overall growth of emissions could well be higher than the high scenario depicted in Graph 2.

31. Some of the increase in emissions could be offset by new measures as a result of the further development of the NGRS or intensifying current measures. There is some scope for reductions in methane over this period. New energy and transport measures, building on the current ones, might also contribute. The largest potential contribution could come from reductions in land clearing and the national vegetation initiative. Further analysis of the potential reductions, costs, social implications and political feasibility of measures would be required before estimates could be made.

Graph 1: DPIE/DEST Projections of Greenhouse Gas Emissions to 2000
(Mt CO2 Equivalents)



Graph 2: DPIE Projections of Greenhouse Gas Emissions to 2010
Illustrative Scenarios with Current Measures**
(Mt CO2 Equivalents)



DEST projections to 2010

32. Some of the increase in emissions could be offset by new measures as a result of the further development of the NGRS or intensifying current measures. There is some scope for reductions in methane over this period. New energy and transport measures, building on current ones, might also contribute. The largest potential contribution could come from reductions in land clearing and the National Vegetation Initiative.

33. It is possible to make some assessment of the potential impacts of key greenhouse response actions, including those outlined above. Preliminary analysis suggests that a reduction of up to 15% in emissions on 1990 is achievable by the year 2010. As these measures are largely no regrets and practicable, it could be feasible to bring 2010 emissions back to the 1990 levels, at little or no economic cost. As with emissions projections, there are uncertainties in this assessment, and further analysis of the potential reductions, cost, social implications and political feasibility of measures would be required before firmer estimates could be made.

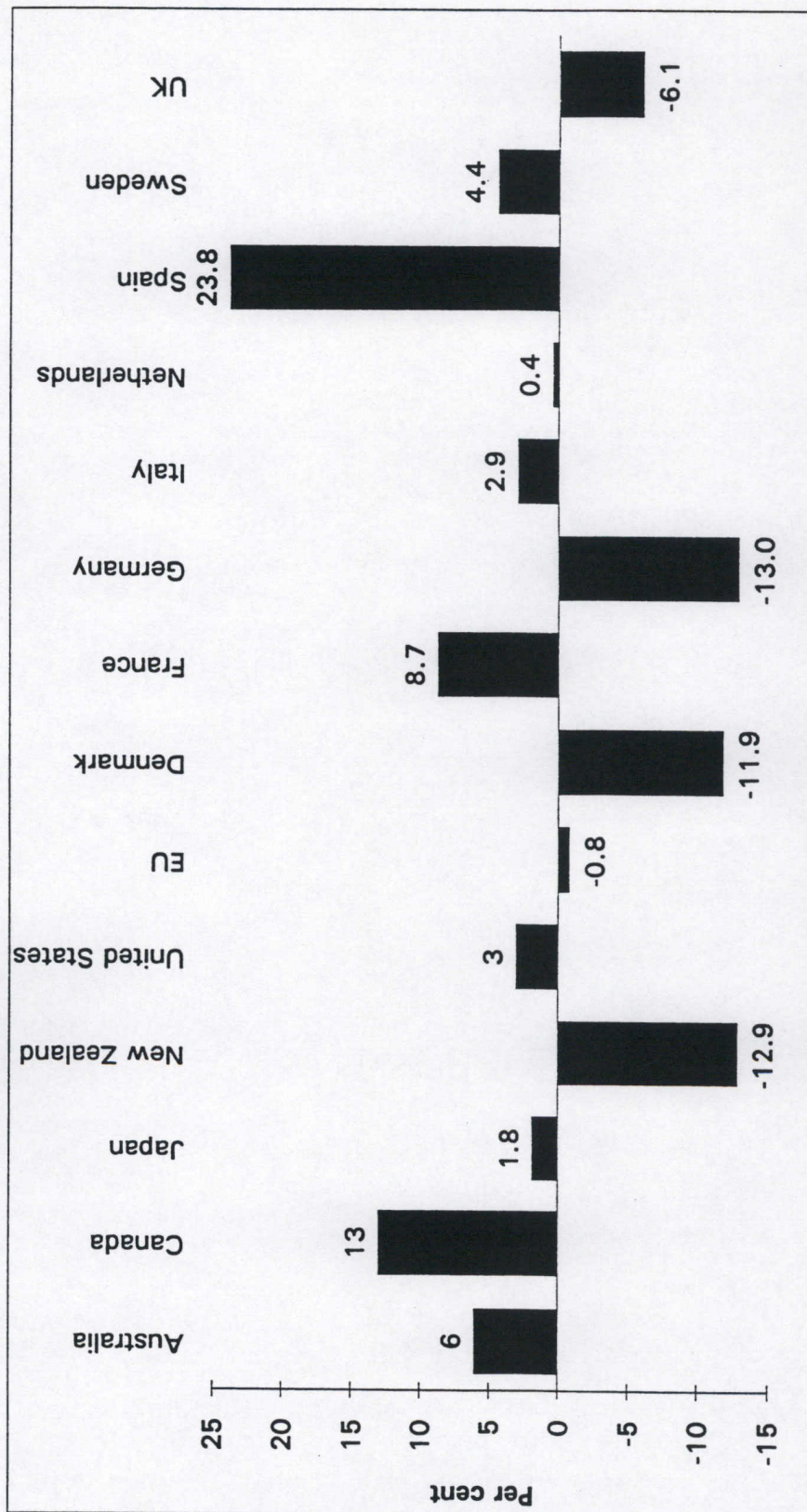
DPIE outlook to 2020

34. Longer range projections of both emissions and possible reductions are more difficult to make. In the absence of further response measures, emissions would continue to rise beyond 2010. There are additional measures that, if introduced in the near future, could have long term implications for greenhouse emissions, but would take a decade or more to yield significant emission reductions.

35. Examples include increasing uptake of renewables, the benefits of better urban planning that reduces personal transport requirements, changes to the vehicle fleet, and the much greater use of natural gas (which would probably require construction of a pipeline from major sources such as the North West Shelf natural gas fields to south eastern urbanised areas of the continent). Also significant structural change in the economy could occur over this time frame, possibly lowering the energy-intensity of the economy.

36. As these projections are long term and linked to speculative developments, it is difficult to project even a preliminary range of estimates with any confidence. These projections would also require further analysis of their potential reductions, costs, social implications and political feasibility.

**The International Context of Australia's Performance on Emissions
(Emissions Relative to 1990 Levels)**



Note: The figures are not comparable due to different assumptions (e.g. fuel prices), methodologies (e.g. modelling techniques), and coverage (e.g. sources and sinks, gases and sectors). In addition, the projections reflect, to some extent, political adjustments. For example, after the EC 'corrected' member states' national projections, it found that the EU emissions would be around 5.5 per cent above 1990 levels rather than 0.8 per cent below 1990 levels as claimed by member states.

Source: Various National Communications and EC Second Evaluation of the National Greenhouse Programs

BERLIN MANDATE: BACKGROUND

The business of the first Conference of the Parties (COP1), held in Berlin from 28 March to 7 April 1995, was the review of the adequacy of current mitigation commitments under Articles 4.2 (a) and (b) of the Convention (i.e. only Annex I parties' commitments). There was general agreement that these commitments were inadequate to achieve the ultimate objective of the Convention (to stabilise global greenhouse gas concentrations in the atmosphere at a safe level).

2. COP1 agreed to a mandate for negotiation of a legal instrument by as early as possible in 1997, with a view to adopting the results at the third session of the Conference of the Parties, to strengthen commitments of Annex I parties (OECD and Eastern Europe) under the Convention. The main aims of the Mandate are:

- a. as a priority, elaborate policies and measures for Annex I parties (para 2 (a) of the Berlin Mandate);
- b. as a priority, set quantified emission limitation and reduction objectives (in other words 'targets') for Annex I parties, within specified timeframes, such as 2005, 2010 and 2020 (para 2 (a) of the Berlin Mandate);
- c. reaffirmation and continued advancement of the implementation of parties' existing commitments in Article 4.1 of the Convention, including non-Annex I parties (para 2 (b) of the Berlin Mandate);
- d. consideration of coordination among Annex I parties, as appropriate, of relevant economic and administrative instruments (para 2 (d) of the Berlin Mandate);
- e. consideration of scientific information and relevant technical, social and economic information (para 3 of the Berlin Mandate);
- f. analysis and assessment to identify possible policies and measures for Annex I parties and to identify environmental and economic impacts with regard to targets and timetables such as 2005, 2010 and 2020 (para 4 of the Berlin Mandate); and
- g. consideration of the AOSIS draft protocol and other proposals and documents submitted to the Berlin Mandate process (para 5 of the Berlin Mandate).

3. The Mandate states that the negotiating process will not introduce any new commitment for developing countries (non-Annex I parties). It reaffirms their existing commitments under Article 4.1 of the Convention. The Mandate does not, however, go as far as some countries (including Australia) were seeking. We wanted a mechanism for the gradual involvement of developing countries, which will be necessary to achieve a genuinely effective global response on climate change. Emissions from the rest of the world already exceed those of OECD countries and are projected to increase significantly.

Australia's acceptance of the Berlin Mandate

4. Australia's position at COP1 was that parties should agree on a mandate for negotiations and that all options should be on the table as a basis for negotiations and, in order to achieve a genuine effective global response on climate change, that these options should not be limited to Annex I countries. Australia also argued that any mandate for further commitments should be based on the

principles currently contained in the Convention.

5. The COP1 negotiations were characterised by intense and high profile differences between different country groupings and coalitions, each with its own particular objectives and different set of interests. The OPEC countries did not want new negotiations to start and sought to derail the process.
6. Other key countries within the developing country group (G77 plus China), particularly the increasingly significant greenhouse gas emitting countries such as China and India, argued for achievement by all Annex I parties of the Convention's existing implied stabilisation target before any consideration could be given to the issue of developing country mitigation commitments. These countries maintained that the OECD share of historical and present emissions placed the primary onus on OECD countries to curb their greenhouse gas emissions. They worked hard within the developing country group to ensure that there would be no new commitments applying to them as a result of the mandate negotiations.
7. Island developing countries, including the Pacific Island Countries (PICs) who belong to the Alliance of Small Island States (AOSIS) sought adoption of their draft protocol which would require Annex I parties to reduce their emissions of carbon dioxide to 20% below 1990 emissions by the year 2005, together with specific targets and timetables to limit or reduce other greenhouse gases.
8. Led by India, a majority of developing countries split the G77 from OPEC (which was left isolated) to support a mandate for further commitments by Annex I countries to apply post-2000, provided the mandate explicitly ruled out the possibility of any new commitments by developing countries. The EU supported a mandate for negotiations on this basis.
9. This left other developed countries in a minority seeking something more than this from developing countries in the mandate, including recognition that developing countries should be involved in new mitigation commitments, or at least for the mandate not to exclude that eventuality. Along with Australia, the strongest proponents were the United States, Canada and Japan. However, in the face of extreme political pressure, these countries accepted the developing country position. This resulted in Australia being isolated on the issue of securing a greater level of commitment by developing countries in the next phase of action towards achieving the Convention's ultimate objective.
10. The decision that Australia could accept the Berlin Mandate was taken in light of the fact that the delegation had pushed as far as was feasible on the issue and was not supported in the final instance by any other country. As such it represented the best result possible in the circumstances. The additional critical factors were that the delegation had secured a good outcome which protected Australia's interests in respect of the other elements of the Mandate, which protected Australia's other interests and a positive outcome on activities implemented jointly.
11. The provisions of the Mandate governing negotiation of Annex I country commitments accorded with Australia's objectives. They provide guidance for elaboration of policies and measures, and quantified limitation and reduction objectives within specified timeframes such as 2005, 2010 and 2020, taking into account a range of factors which are critical to Australia. These include taking into account differing starting points of developed countries, their different economic structures, and the need for equitable and appropriate contributions by these countries. This element of the Mandate has provided Australia with a basis to argue for specific provisions in the

outcome which "operationalise" or give practical effect to these factors and considerations which are recognised (but not given practical effect) in the Convention as part of the new set of Annex I country commitments.

Ad Hoc Group on the Berlin Mandate (AGBM)

12. COP1 also established a separate body for the negotiations, designated the "Ad Hoc Group on the Berlin Mandate".

13. The AGBM has met three times, with the main focus on analysis and assessment work to underpin the substantive negotiations and inputs to the negotiations. The meetings have addressed the scientific and analytical work necessary for the negotiations and examined negotiating options and proposals for elaborating policies and measures - e.g. measures in the transport, energy, industrial and agricultural sectors - and to setting emission objectives (in other words 'targets') to strengthen the commitments of Annex I parties.

14. The AGBM is drawing on inputs from intergovernmental bodies, such as the Intergovernmental Panel on Climate Change (IPCC), the Organisation for Economic Cooperation and Development (OECD), and the International Energy Agency (IEA), as well as national inputs. This has been aimed at providing for the full range of inputs to be considered in the analysis and assessment process (i.e. both top down modelling work and sectoral specific work being carried out internationally and at the national level examining the impact and effectiveness of policies and measures).

15. However, analysis and assessment of the full range of options and impacts has been regarded by some as holding up the commencement of substantive negotiation, leading to pressure to move to a more limited range of options for negotiating targets and approaches on policies and measures.

16. The European Union (EU) has staked out a strong leadership role in the negotiations and has tabled specific proposals. The EU has been supported by other European OECD members. Other OECD countries (US, Canada, Japan, New Zealand and Australia) have taken a cautious approach and have been concerned to ensure that the negotiations are soundly based and that there be full opportunity to analyse and assess the effectiveness - in environmental and cost effectiveness terms - of the specific proposals and possible options. The United States, which previously could be relied upon to counter-balance the EU, showed signs at AGBM3 of shifting its position in the negotiations, apparently to reinforce the Clinton Administration's pro-environment credentials in the lead up to the Presidential elections this November.

17. The focus of most developing countries has been on applying pressure to set new developed countries' targets, while ensuring that new commitments by developed countries do not adversely affect their economic interests. They have recently expressed concern about the potential trade impacts of the EU proposals and the need for commonly implemented policies and measures to be consistent with WTO obligations.

Commentary on the Berlin Mandate

(DECISION 1 OF COP 1 (FCCC/CP/1995/7/Add.1))

TEXT OF THE BERLIN MANDATE	COMMENT
<u>Preamble</u>	
The Conference of the Parties, at its first session	The Conference of the Parties (COP) is the supreme body of the Framework Convention on Climate Change (FCCC). The Ad Hoc Group on the Berlin Mandate (AGBM) is required to fulfil this negotiating Mandate (which was decided by the COP).
Having reviewed Article 4, paragraph 2(a) and (b) of the United Nations Framework Convention on Climate Change, and	This review was carried out pursuant to FCCC article 4.2 (d). A second review is required to be carried out not later than 31 December 1998.
Having concluded that these subparagraphs are not adequate	This phrase sets an important parameter for the AGBM by implicitly concluding that current commitments are inadequate to achieve the ultimate objective of the FCCC of stabilizing greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous human interference with the climate system (FCCC article 2).
Agrees to begin a process to enable it to take appropriate action for the period beyond 2000, including the strengthening of the commitments of the Parties included in Annex I to the Convention (Annex I Parties) in Article 4, paragraph 2 (a) and (b), through the adoption of a protocol or another legal instrument	<p>This language is drawn from FCCC article 4.2(d).</p> <p>The word "including" enables the Mandate to address both new commitments for Annex I Parties and commitments by all Parties under FCCC article 4.1. The Mandate has two central aspects (as reflected in Mandate paragraph II.2):</p> <ul style="list-style-type: none"> • strengthening the commitments of Annex I Parties; • continuing to advance the implementation of the commitments in FCCC article 4.1 (which are shared by all Parties). <p>Other key features of this paragraph are:</p> <ul style="list-style-type: none"> • action is limited to the period beyond 2000; • the outcome of the AGBM can be embodied in a protocol or another legal instrument. (This might include possibilities ranging from an amendment of the FCCC to a decision of the COP).
<u>Section I</u>	
1. The process shall be guided, <i>inter alia</i> , by the following:	The reference to "guided" establishes sign posts against which to assess proposals. The words "inter alia" provides for other principles and guides to be considered in the process. In this respect FCCC article 2 provides an important reference point as it sets out the 'ultimate objective' of the FCCC and of any related legal instruments that the Conference of the Parties may adopt. This objective is to: <i>"achieve, in accordance with the relevant provisions of the Convention, stabilisation of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system."</i>
(a) The provisions of the Convention, including	This explicitly establishes the relevance of all FCCC articles to the AGBM process.

<p>Article 3, in particular the principles in Article 3.1 which reads as follows:</p>	<p>The Mandate is guided by FCCC article 3, with particular attention to 3.1. Other parts of article 3 contain important principles which also guide the Mandate. The text of FCCC article 3 should therefore be referred to in its entirety during the Mandate process.</p>
<p>"The Parties should protect the climate system for the benefit of present and future generations of humankind, on the basis of equity and in accordance with their common but differentiated responsibilities and respective capabilities</p>	<p>This reference makes clear that the benefits of the Convention are intended not only for present generations, but also for future generations. This has implications for analysis of impacts of climate change.</p> <p>"Equity" is a key concept which is not defined in the FCCC - debate about the meaning of equity is likely to feature in the AGBM. Some guidance on equity can be gleaned from articles which detail special circumstances of Parties and other factors which could be interpreted as part of the equity concept: e.g.</p> <ul style="list-style-type: none"> . articles 3.1, 3.2, 3.3, and 3.4 . articles 4.7, 4.8, 4.9 and 4.10 . preambular paragraph 6 <p>The reference to "common" responsibilities indicates that all countries need to take part and allows the conclusion that the FCCC does not place sole responsibility on any particular group of Parties. The reference to 'differentiated responsibilities' provide for AGBM outcomes to potentially include party specific obligations.</p> <p>"Respective capabilities" provides a key measure for assessing action to be taken by Parties (i.e. those most capable should take action to protect the climate system). It has been used to justify developed/developing country distinctions, but could be used in a broader application to justify other distinctions (e.g. distinctions based on the capabilities of individual Parties).</p>
<p>Accordingly, the developed country Parties should take the lead in combating climate change and the adverse effects thereof."</p>	<p>This sentence; establishes a clear obligation on developed country Parties to take the lead.</p>
<p>(b) The specific needs and concerns of developing country Parties referred to in Article 4.8;</p>	<p>Article 4.8 is an example of the way the specific circumstances of a developing country party affect its implementation of commitments under the FCCC. The provision refers to small islands; countries with low-lying coastal areas; countries with arid and semi-arid areas, forested areas; countries with areas prone to natural disasters; areas liable to drought and desertification; high urban atmospheric pollution; fragile ecosystems, including mountainous ecosystems; economies highly dependent on income generated from the production, processing and export, and/or consumption of fossil fuels and associated energy - intensive products; land-locked and transit countries. There is unlikely to be a developing country which does not fit into one or more of these categories.</p> <p>Article 4.9 creates further distinctions between Parties, in this case that of least developed countries. This category is undefined, but the starting point would undoubtedly be the UN category of 'least developed'.</p> <p>This reference is one of key importance to Australia, because of the recognition it provides to Australia's particular circumstances as a party "vulnerable to the adverse effects of implementation of measures to respond to climate change". Australia (together with a number of developing country Parties) pressed for article 4.10 to be inserted into the Convention. Article 4.10 <i>"applies notably to Parties with economies that are highly dependent on income generated from the production, processing and export, and/or consumption of fossil fuels and associated energy-intensive products and/or the use of fossil fuels for which such Parties have serious difficulties in switching to alternatives."</i></p>

<p>the specific needs and special situations of least developed countries referred to in Article 4.9;</p> <p>and the situation of Parties, particularly developing country Parties, referred to in Article 4.10 of the Convention;</p>	<p>(Note also relevant language in FCCC preambular paragraph 20.)</p>
<p>(c) The legitimate needs of the developing countries for the achievement of sustained economic growth and the eradication of poverty, recognizing also that all Parties have a right to, and should, promote sustainable development;</p>	<p>This provision is similar to preambular paragraph 21 of the FCCC, except it omits the reference to 'priority' when referring to the needs of developing countries . This reference is also similar to parts of article 4.7 which states that implementation of commitments by developing country Parties "will take fully into account that economic and social development and poverty eradication are the first and overriding priority of the developing country Parties".</p> <p>This clause reiterates, <i>inter alia</i>, the first sentence of article 3.4 which represents a compromise outcome between developed countries who wanted to incorporate a requirement to work for sustainable development, and developing countries who wished to insert a right to development. Developed countries rejected the latter concept because they feared it would provide a basis for demands for financial assistance and because they were concerned that development may not be sensitive to environmental concerns. Developing countries were concerned that sustainability would be a new conditionality on financial assistance.</p>
<p>(d) The fact that the largest share of historical and current global emissions of greenhouse gases has originated in developed countries, that the per capita emissions in developing countries are still relatively low and that the share of global emissions originating in developing countries will grow to meet their social and development needs;</p>	<p>This provision reiterates preambular paragraph 3 of the Convention (which was the outcome of unsuccessful attempts by developing countries in the FCCC negotiations to insert a "main responsibility" provision to link historical contribution to emissions with exclusive developed country responsibility to remedy the problem).</p> <p>This clause continues preambular paragraph 3 of the FCCC. (During negotiation of the FCCC India argued that the FCCC should aim to promote the convergence of greenhouse gas emissions at a common per capita level. This argument was not incorporated into the FCCC. The reference to per capita emissions is a statement of fact.)</p> <p>This statement concludes preambular paragraph 3 of the FCCC. Its inclusion in the Mandate provides a further basis for developing countries to argue that they should not limit their emissions and indeed that their emissions should be allowed to grow. Notably, however, the reference is to "share" of global emissions and "developing countries" as a group. This could be interpreted as recognition that either developing countries as a whole will increase their emissions in absolute terms or that all individual developing country Parties will increase their emissions.</p> <p>It should be noted that the provisions of Mandate paragraph 2(d) are counterbalanced by 2(e) which appears below.</p>

<p>(e) The fact that the global nature of climate change calls for the widest possible cooperation by all countries and their participation in an effective and appropriate international response, in accordance with their common but differentiated responsibilities and respective capabilities and their social and economic conditions.</p>	<p>This reiterates preambular paragraph 6 of the FCCC. It revisits the notion that climate change is a global problem that requires a global solution. The constituent elements of this sub-paragraph are all of particular importance to Australia's approach to the negotiations. This clause also reiterates elements of article 3.1: i.e. "common but differentiated responsibilities" and "respective capabilities".</p>
<p>(f) Coverage of all greenhouse gases, their emissions by sources and removals by sinks and all relevant sectors;</p>	<p>This element reiterates parts of FCCC article 3.3. It reflects Australia's comprehensive approach to climate change. This is important because it broadens action over a range of possible measures and facilitates a least cost approach.</p>
<p>(g) The need for all Parties to cooperate in good faith and to participate in this process.</p>	
<p><u>Section II</u></p>	
<p>2. The process will, <u>inter alia</u></p>	<p>The word "process" is used in this clause, however it is clear from the negotiations at COP1 that this covers a 'negotiating process' as well as a wider activity including analysis and assessment. The words "inter alia" provide an opportunity to consider alternatives beyond those specified in sub-paragraphs (a) to (f) below.</p>
<p>(a) Aim, as the priority in the process of strengthening the commitments in Article 4.2 (a) and (b) of the Convention, for developed country / other Parties included in Annex I, both</p>	<p>The word 'aim' is significant as it reflects the defeat of attempts to predetermine the outcome of the negotiating process (i.e. the words 'result in' which were pressed by AOSIS in the negotiations of the Mandate are not reflected in the adopted text). Nonetheless the direction of negotiations is specified and prioritised.</p> <p>Articles 4.2(a) and (b) require Annex I Parties to adopt policies and measures to mitigate climate change by limiting their greenhouse emissions and to protect and enhance their greenhouse gas "sinks" and reservoirs. Contained within these provisions is an implied target for Annex I Parties to return emissions to 1990 levels by the year 2000.</p> <p>These requirements are however subject to:</p> <ul style="list-style-type: none"> • the need to take into account Parties' starting points and approaches, economic structures and resource bases, the need to maintain strong and sustainable economic growth, available technologies and other individual circumstances, as well as the need for equitable and appropriate contributions by each of these Parties to the global effort; (These words are of particular importance to Australia as they clearly specify differentiated treatment of Parties within the Annex 1 Group. These words are embodied in the Mandate (see below)). <p>In addition article 4.2(a) notes that these Parties may implement these policies and measures jointly and to assist other Parties in achieving the objective of the Convention; (These words are also important as they refer to joint implementation: one method of achieving lower cost emission reductions.)</p>

<p>- to elaborate policies and measures, as well as</p>	<p>The terms 'policies and measures' refer to the opening words of FCCC article 4.2 (a). In the context of the FCCC the words "policies and measures" have a broad meaning including all actions to address climate change.</p> <p>The verb "elaborate" in respect of policies and measures is important. "Elaborate" connotes working out the details of something, or producing something from its elements. Such elaboration would need to take place in the context of the aim of "strengthening the commitments in article 4.2(a) and (b) of the Convention".</p>
<p>- to set quantified limitation and reduction objectives within specified time-frames, such as 2005, 2010 and 2020, for their anthropogenic emissions by sources and removals by sinks of greenhouse gases not controlled by the Montreal Protocol,</p>	<p>The reference to both limitation and reduction objectives is significant as it requires consideration of both limitation and reduction objectives. This could include consideration of a range of options such as a common uniform target for all Annex 1 Parties, setting of limitation or reduction objectives for Annex I Parties as a group, or setting different objectives for each Annex I party).</p> <p>The timeframes used here came out of the negotiations on the "Green Group" (i.e. India plus 70 other developing countries) paper submitted at COP1 and are longer than anticipated. The implications of setting quantified limitation and reduction objectives for longer timeframes such as 2020 will need to be carefully considered and analysed.</p> <p>The use of the word "objective" as opposed to the use of "targets and timetables" is also significant. "Targets and timetables" are often equated with a common uniform target, such as proposed by the AOSIS draft Protocol. "Quantified limitation and reduction objectives" is open to a broader range of interpretation.</p>
<p>taking into account the differences in starting points and approaches, economic structures and resource bases, the need to maintain strong and sustainable economic growth, available technologies and other individual circumstances, as well as the need for equitable and appropriate contributions by each of these Parties to the global effort,</p>	<p>These words are drawn from the end of FCCC article 4.2 (a). They are important to Australia as they provide unequivocal support for treating each Annex I party differently according to its circumstances.</p> <p>The effect of the inclusion of this paragraph in the Mandate is to operationalise in the AGBM process the FCCC principles of taking into account different starting points of Annex I Parties, their different economic structures and the need for equitable and appropriate contribution by each Annex I party.</p> <p>Other examples of where equitable and appropriate treatment or other specific circumstances of Parties are provided for by the FCCC are found at:</p> <ul style="list-style-type: none"> . articles 3.1, 3.2, 3.3, and 3.4 . articles 4.7, 4.8, 4.9 and 4.10 . preambular paragraph 6
<p>and also the process of analysis and assessment referred to in section III, paragraph 4, below;</p>	<p>Together with Section III of the Mandate, this phrase indicates the importance of analysis and assessment to the AGBM process. These words tie the outcomes of the AGBM's analysis and assessment to the factors which need to be taken into account in the negotiation of objectives and policies and measures. This has the effect of fully integrating all the elements of the AGBM process which are to be reflected in the nature of the negotiated outcome.</p>

<p>(b) Not introduce any new commitments for Parties not included in Annex I, but reaffirm existing commitments in Article 4.1 and continue to advance the implementation of these commitments in order to achieve sustainable development, taking into account, Article 4.3, 4.5 and 4.7;</p>	<p>The clause "<i>Not introduce any new commitments for Parties not included in Annex I, but reaffirm existing commitments in Article 4.1</i>" explicitly rules out new commitments for non-Annex I Parties. It does reaffirm the obligations in FCCC article 4.1, which apply to all Parties - not just developing country Parties. Article 4.1 provides an alternative focus to pursue implementation of the FCCC, particularly bottom-up implementation measures. Article 4.1 is not premised on developed/developing country distinctions. Article 4.1 includes the commitment:</p> <ul style="list-style-type: none"> • To formulate, implement, publish and regularly update national programmes containing measures to mitigate climate change by addressing anthropogenic emissions by sources and removals by sinks of all greenhouse gases. (The obligation to formulate and implement programs (including bottom up measures) for climate change mitigation is important. The obligation of Annex I Parties in similar, except that Annex I Parties are required to "limit" emissions.) • To promote and cooperate in the application of technologies, practices and processes that control, reduce or prevent anthropogenic emissions of greenhouse gases. • To promote sustainable management and the conservation and enhancement, as appropriate, of sinks and reservoirs of all greenhouse gases. • To take climate change considerations into account, to the extent feasible, in their relevant social, economic and environmental policies and actions, and employ appropriate methods such as impact assessments with a view to minimising adverse effects of projects or measures to mitigate or adapt to climate change. <p>The phrase "<i>and continue to advance the implementation of these commitments in order to achieve sustainable development, taking into account, Article 4.3, 4.5 and 4.7</i>" is of key importance for progressing developing country implementation of the Convention. While developing countries will see it as according priority to their development concerns, the use of "sustainable" is significant here. The phrase "sustainable development" does not mean that implementation of article 4.1 is to take place solely to foster development in developing countries. Rather such development must be "sustainable". Principles 3 and 4 of the Rio Declaration are particularly relevant.</p> <p><i>Principle 3 The right to development must be fulfilled so as to equitably meet developmental and environmental needs of present and future generations.</i></p> <p><i>Principle 4 In order to achieve sustainable development, environmental protection shall constitute an integral part of the development process and cannot be considered in isolation from it.</i></p> <p>(Note: other Principles of the Rio Declaration are also relevant.)</p> <p>Articles 4.3, 4.5 and 4.7 provide for financial assistance, technology transfer and the priority of social development and poverty eradication, respectively.</p>
<p>(c) Take account of any results from the review referred to in Article 4.2(f), if available, and any notification referred to in Article 4.2(g);</p>	<p>Article 4.2(f) provides for the Parties to review the list of Parties in Annexes I and II by 31 December 1998. The suggested timing of this review makes it unlikely that it will have a significant bearing on the AGBM process. Furthermore article 4.2(f) requires the approval of the party concerned before its status in relation to the Annexes can be changed.</p> <p>Article 4.2(g) allows any party not included in Annex I to notify that it intends to be bound by article 4.2(a) and (b) of the FCCC. This provision has yet to be tested.</p>

<p>(d) Consider, as provided in Article 4.2(e), the coordination among Annex I Parties, as appropriate, of relevant economic and administrative instruments, taking into account Article 3.5;</p>	<p>Relates to EU objectives to have internationally coordinated or harmonized policies and measures implemented by Annex I Parties as a result of the AGBM negotiations. The reference to "as appropriate" is important as it allows for an approach by which economic or administrative instruments can be assessed on a case-by-case basis in determining their appropriateness.</p>
<p>(e) Provide for the exchange of experience on national activities in areas of interest, particularly those identified in the review and synthesis of available national communications; and</p>	<p>The reference to "review and synthesis" relates to work that the Secretariat has already been undertaking and which it has been further authorised to pursue following COP1.</p> <p>This is considered by developed country Parties as an important element in the exchange of experience with assessment of policies and measures. It also allows for joint implementation to be factored in.</p> <p>At its first session the AGBM requested the secretariat to provide ABGM2 with a synthesised listing of policies and measures identified in the national communications of Annex I Parties. This paragraph suggests that some form of ongoing process of consultation may be required to be incorporated into the AGBM outcomes. Prior to COP1 the interim secretariat produced a "First review of Information Communicated by Each Party Included in Annex I to the Convention" (A/AC.237/81 - See volume 2 of the Brief for AGBM1). This review also attempted aggregation of information to present a global picture, an exercise we regard as having serious deficiencies because of lack of comparability of data and other problems. Decision 2/CP.1 provides for an in-depth review of each national communication of Annex I Parties and requests the secretariat to prepare a Second Compilation and Synthesis of First National Communications for COP2.</p>
<p>(f) Provide for a review mechanism</p>	<p>This clause allows for ongoing assessment and review of the outcome of the Berlin Mandate process.</p> <p>An important question is whether reviews should be confined to Annex I Parties or whether the review should extend also to the implementation of commitments in Article 4.1.</p>
<p><u>Section III</u></p>	
<p>3. The process will be carried out in the light of the best available scientific information and assessment on climate change and its impacts, as well as relevant technical, social and economic information, including <i>inter alia</i>, reports of the Intergovernmental Panel on Climate Change. It will also make use of other available expertise.</p>	<p>This provision reaffirms the full dimensions of the task to be undertaken by the AGBM, referring not only to the need to refer to the best available scientific information, but also to relevant "technical, social and economic information".</p> <p>The IPCC Second Assessment Report will be a key input to the AGBM process as well as other international (e.g. OECD/IEA) and national inputs.</p>

<p>4. The process will include in its early stages an analysis and assessment, to identify possible policies and measures for Annex I Parties which could contribute to limiting and reducing emissions by sources and protecting and enhancing sinks and reservoirs of greenhouse gases. This process could identify environmental and economic impacts and the results that could be achieved with regard to time horizons such as 2005, 2010, and 2020.</p>	<p>This paragraph refers to the importance of analysis and assessment activities in the Berlin Mandate process. AGBM1 decided that the purpose of analysis and assessment is to assist, in an iterative manner the negotiation of a protocol or another legal instrument. AGBM1 called for the integration of analysis and assessment with other AGBM processes to ensure they are mutually reinforcing and emphasised the importance of analysis and assessment to a successful and timely outcome from the AGBM process. AGBM 1 called for analysis and assessment to be:</p> <ul style="list-style-type: none"> • comprehensive; • focused on priorities • open and transparent. <p>It also specifically referred to assessment of both environmental and economic impacts and results for particular time horizons. These time horizons are most likely to operate in the context of possible quantified limitation and reduction objectives that might be set against those time frames. These references specifically identify environmental and economic implications (and thus cost-effectiveness of proposals) as aspects which should be analysed and assessed.</p>
<p>5. The protocol proposal of the Alliance of Small Island States (AOSIS), which contains specific reduction targets and was formally submitted in accordance with Article 17 of the Convention, along with other proposals and pertinent documents, should be included for consideration in the process.</p>	<p>The draft Protocol put forward by AOSIS is one of the specific proposals to be considered in the AGBM process, and was formally submitted to the Convention Secretariat in accordance with Article 17. It was initially presented as "the negotiating text" at COP1, but failed to gain endorsement as such. Nonetheless it remains on the table for AGBM consideration which is reflected by this paragraph and AOSIS continue to remain wedded to it, pushing strongly at AGBM1 for it to be central to the further work of the AGBM.</p> <p>A key provision of the AOSIS draft protocol is draft article 3(a) which proposes a 20 percent reduction of emissions of carbon dioxide by Annex I Parties (from 1990 levels) by the year 2005. The AOSIS Protocol also provides for: targets and timetables for other greenhouse gases to be set by the Parties to the Protocol, the targets to be reviewed on a five yearly basis, a coordination mechanism to be developed to consider coordination of bottom up measures and enhanced technology transfer obligations.</p> <p>The reference to "other proposals and pertinent documents" was intended to capture the German elements paper submitted prior to COP1, as well as other proposals and documents submitted to the AGBM process. At AGBM1, Germany made clear that it is only section II of its elements paper which remains on the table. This part of the German paper provides a detailed list of possible policies and measures that could be taken in respect of energy consumption, renewable energies, traffic and transport, forests, methane, nitrous oxide, fluorocarbons, and general policies and measures (such as economic instruments).</p>

6. The process should begin without delay and be conducted as a matter of urgency, in an open-ended ad hoc group of Parties hereby established, which will report to the second session of the Conference of the Parties on the status of the process. The sessions of this group should be scheduled to ensure completion of the work as early as possible in 1997, with a view to adopting the results at the third session of the Conference of the Parties.

This paragraph gives explicit recognition to the fact that COP1 agreed that a process to strengthen the provisions of the FCCC was urgently needed and that this process was to begin forthwith. The paragraph thereby outlines a specific timeframe for the Berlin Mandate process.

Views of the Department of Environment, Sport and Territories**AUSTRALIA'S NATIONAL INTERESTS: ENVIRONMENTAL**

Australia's decision to ratify the Convention reflected a recognition that human induced climate change is a long term global problem requiring action by all parties. Australia is vulnerable to the impacts of climate change and action to mitigate it. Therefore, in responding to climate change Australia needs to consider the environmental, economic and trade implications of climate change and of response actions, and international relations aspects. The views of the Department of Environment, Sport and Territories on Australia's environmental interests are discussed below.

2. Australia's vulnerability to climate change is a product of a unique combination of factors, including the facts that Australia:

- a. is the driest of the populated continents;
- b. has a very wide range of climate zones for a single country;
- c. has a history of extreme and regular climatic events (such as droughts, floods, tropical cyclones, severe storms, and bushfires);
- d. has the major proportion of its population living along a thin coastal zone; and
- e. has major agricultural and pastoral interests and associated infrastructure.

3. While some effects of global climate change may be beneficial, many areas are likely to experience the adverse effects, some of which will be potentially irreversible and recurring. Further scientific data has been commissioned, in particular, from the Intergovernmental Panel on Climate Change (IPCC) on, *inter alia*, the potential impacts of climate change at the regional level, but the factors listed above increase Australia's potential vulnerability and warrant action in line with the precautionary principle.

Agriculture

4. The potential vulnerability of Australia's agriculture to climate change is an area of particular concern given the importance of agricultural exports to our economy. An indication of the significance of the economic threat can be derived from the cost of the recent (1995) drought. It was estimated that \$1.3 billion was removed from the net value of farm production and economic growth was reduced by 0.8%. The IPCC has indicated that global warming will increase the prospects of more severe droughts and floods and other weather extremes.

5. Apart from direct effects, climate change can also impact on the agriculture sector indirectly. For example, Australian pests (including cattle tick, earth mite, wheat aphid, buffalo fly, locusts, budworm) currently reduce yields by \$3 billion and require a similar outlay in farm management costs. Recent research from ABARE's cattle economic model indicated that the change in the range of cattle tick in Australia due to climate change would incur an economic cost of up to \$192 million per annum. Each of the other pests identified are expected to incur similar economic penalties.

6. The productivity of stone fruits is dependent on adequate chilling conditions. Australia's minimum temperatures have been increasing over the past few decades. Future prospects for the industry are not bright under a climate change regime.

Range lands

7. Apart from the direct economic impact of land degradation and reduced earning capacity of pastoral and tourism industries, climate change will have an impact on biodiversity and the broader, historical and social values which Australians place on preserving and sustaining the outback. While pastoralists may find some opportunities to intensify production, they can also expect forage of lower nutritional quality and more woody weeds.
8. More variable rainfall is likely to increase management cost in a variety of sectors. For example, to deepen mining dams (and so reduce the risk of one failing) can cost around \$1-2 million per dam.

Coastal zone

9. Australia's largest cities and populations are located along its coasts. In the long term human induced climate change will exacerbate problems in these areas.
10. Changes in sea level, storm frequency and magnitude and coastal erosion and deposition are all possible consequences of climate change. With rise in sea levels, flooding, inundation of low lying developed lands and rise of water tables will follow. Periodic flooding can have consequences for the distribution and life cycles of vectors (e.g. mosquitos) transmitting human diseases, while the rise in water tables and disrupted sewerage flow may bring about increases in diarrhoeal diseases. Further impacts on the population dynamics of fish and their environmental requirements are also expected.
11. Coastal ecosystems particularly at risk include saltwater marshes, mangrove ecosystems, coastal wetlands, coral reefs and atolls (such as the Great Barrier Reef) and river deltas. Changes in these ecosystems would have major negative effects on tourism, freshwater supplies, fisheries and biodiversity.
12. Many areas of Australia will be vulnerable to further damage from the increased intensity and frequency of storms and cyclones. The insurance industry has already expressed concern over such impacts. While there are currently no firm estimates of the costs likely to arise as a result of climate change impacts, they are potentially substantial and would have serious flow-on effects to the Australian economy.

Natural ecosystems

13. Australia has many unique native species. Changes in climate which increase survival pressures on these species may result in their extinction. Recent research on 57 native species shows that about 90% would experience reduction or complete elimination of habitats suitable for their survival.

Human health

14. The Australian Medical Association has identified climate change as a major threat to human health.
15. Mortality due to cardiorespiratory attack and illness due to an anticipated increase in the intensity and duration of heat waves is expected to increase. Transmission of vector-borne infectious diseases (e.g. malaria, dengue, yellow fever and some viral encephalitis) will increase

resulting from extension of the geographical range and season of vector organisms. Australia has one of the world's highest rate of asthmatic disease and such respiratory and allergic disorders due to climate enhanced increases in some air pollutants, pollens and mould spore will increase.

Tourism

16. Climate change poses a significant threat to tourist attractions based on Australia's unique environment, biodiversity and coastline (e.g. the Great Barrier Reef and our beaches).

17. Small changes in temperature may also significantly reduce snow cover in the Australian Alps which would have significant economic impacts on the local tourism industry.

Urban flooding

18. Key international and national climate change science findings have cited increases in the frequency and extent of flooding in urban areas as one of the potentially dangerous and expensive consequences of climate change. It has been estimated that the 'one in 100 year' flood will become a 'one in 25 year' flood with a resultant substantial increase in the cost of flood damage to life, capital investment and commerce, and urban infrastructure.

Views of the Departments of Foreign Affairs & Trade and Primary Industries & Energy

AUSTRALIA'S NATIONAL INTERESTS: ECONOMIC AND TRADE

Australia's decision to ratify the Convention reflected a recognition that human induced climate change is a long term global problem requiring action by all parties. Australia is vulnerable to the impacts of climate change and action to mitigate it. Therefore, in responding to climate change Australia needs to consider the environmental, economic and trade implications of climate change and of response actions, and international relations aspects. The views of the Departments of Foreign Affairs and Trade and Primary Industries and Energy on Australia's economic and trade interests are discussed below.

2. There are three main reasons why the adverse economic impact of measures to mitigate climate change are likely to be particularly severe on Australia:
 - a. the structure of the Australian economy and our trade and trading patterns means that efforts by other OECD countries to reduce emissions will have a strong impact on Australia due to adverse movements in the terms of trade;
 - b. Australia's task of reducing emissions to historical levels is more onerous than for other countries due to our high underlying emissions growth; and
 - c. it is likely that the cost of mitigation will be higher for Australia than for other OECD countries.

The structure of the economy and terms-of-trade impacts

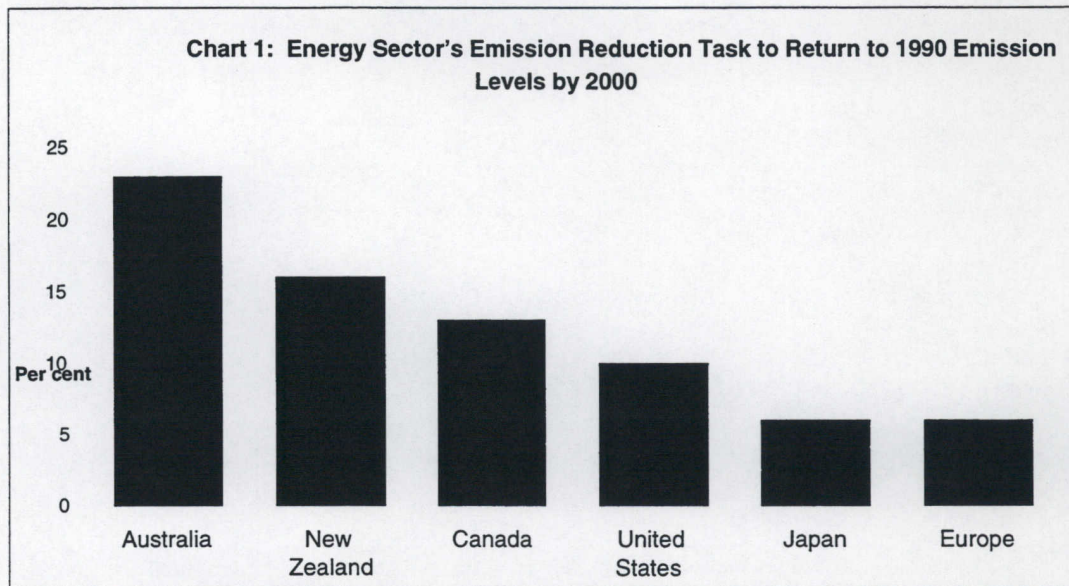
3. Australia has a relatively greenhouse gas (GHG) emission-intensive economy and trade due to its resource endowment, particularly in fossil fuels and agricultural land. Australia has an abundance of low cost fossil fuels (i.e. coal, oil and gas), resulting in our specialisation in energy intensive sectors such as petroleum products, basic metals and chemicals. Australia is the world's largest coal exporter, the third largest energy exporter among OECD countries and is also heavily dependent on the export of energy intensive processed primary products. Agriculture and livestock production is also a significant source of GHG emissions.
4. As a result of these features of the Australian economy, Australia's exports tend to be of much higher energy intensity than our imports. Over 85% of our merchandise export income is generated from the export of relatively GHG emission intensive goods - such as petroleum products, basic metals, minerals and resources, and agricultural commodities. In stark contrast, over 70% of our imports are relatively low emission intensive products including machinery, manufactures, transport equipment, textiles, clothing and footwear, alcohol, paper and wood products.
5. Given this economic structure, Australia is particularly vulnerable to efforts to address climate change. Emission reduction efforts by other Annex I countries will have a strong adverse impact on our terms of trade by reducing the price and demand for fossil fuels (particularly coal) and other emission intensive exports while increasing the price of imports into Australia. This adverse economic impact could be significant.

Australia's high underlying emission growth

6. Australia's underlying emission growth is higher than in other Annex I countries, and

consequently, Australia's task of returning emissions to a historical target (e.g. 1990 levels) is greater in real terms than for other Annex I countries (see Chart 1). The major reasons why Australia's underlying emission growth rate is higher than for other Annex I countries are:

a. population growth: Australia's historical population growth rate is substantially higher than that of other countries - particularly the EU (see Chart 2). While Australia's population is projected to grow by around 23% over the period 1990 - 2010, the EU's population will be relatively stable. Thus, stabilising emissions at 1990 levels would require Australia to reduce emissions by 23% per person, while the EU has only to maintain per capita emission levels.



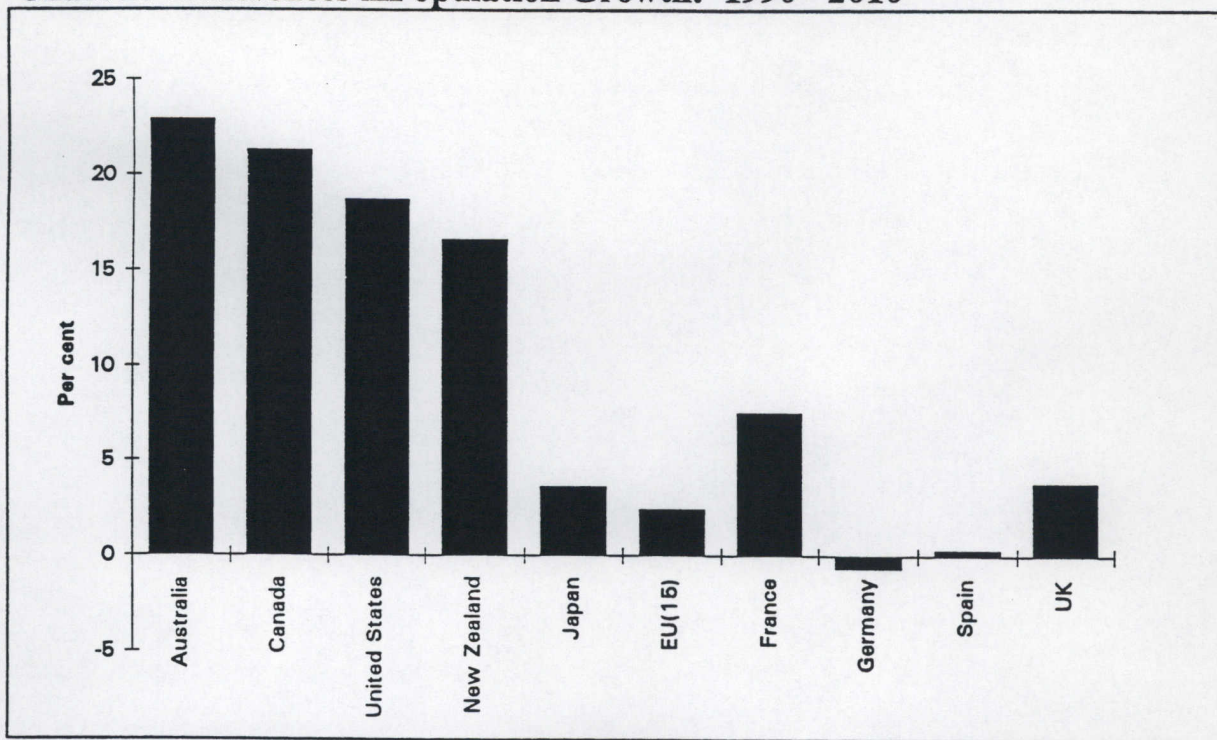
b. specialisation in energy intensive products: an important driver of Australia's high emissions growth is the strong export links with the fast growing Asia-Pacific region and their growing demand for our energy intensive exports. For example, mining exports grew 11.3% and resource processing and manufacturing by 12.5% per year during 1983 to 1992. Further international trade liberalisation will intensify Australia's specialisation in those sectors such as fossil fuels, energy intensive industry and emission intensive agriculture where we have a comparative advantage.

High cost of reducing energy emissions

7. There are three other major reasons why the cost of reducing emissions could be expected to be higher for Australia than for other OECD countries:

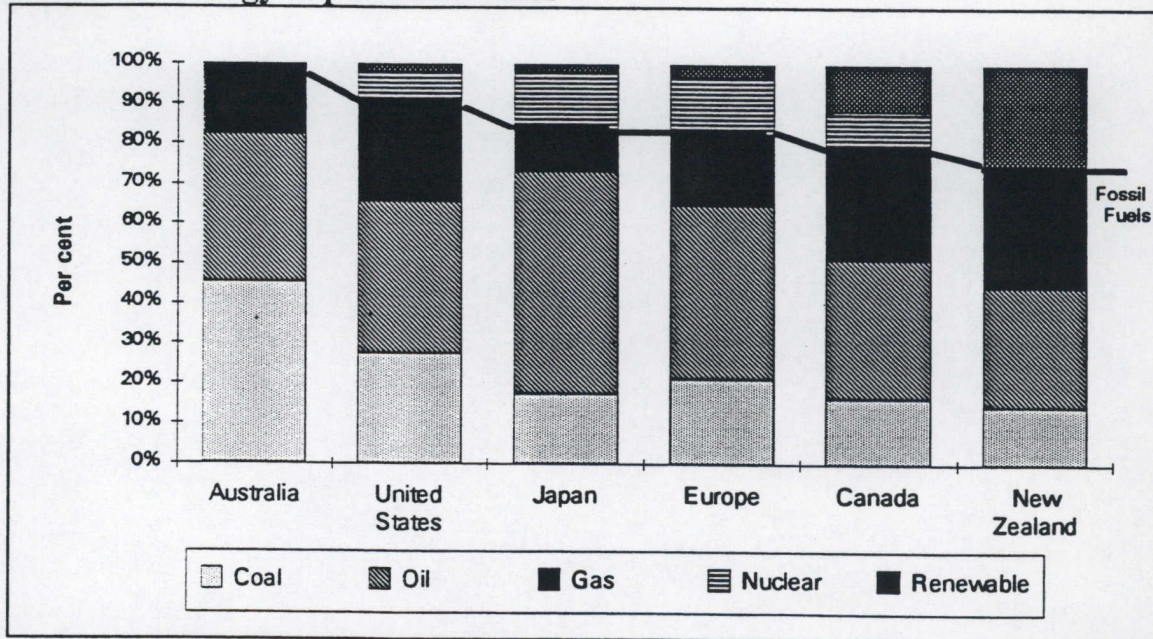
a. fewer opportunities for fuel switching: as a result of our resource endowment, Australia has a very strong comparative advantage in fossil fuel power generation, with few competitive alternative sources for electricity. Furthermore, with substantial coal reserves, coal fired power stations are particularly economic (see Chart 3). It is likely that switching to non-coal fired power generation stations would be relatively difficult and more expensive for Australia

Chart 2: Differences in Population Growth: 1990 - 2010



Source: World Population Projections 1994 -95 (World Bank)

Chart 3: Energy Input Fuel Mixes



Source: IEA: Energy Policies in IEA Countries - 1994

than for other countries, although microeconomic reform of the energy sector should, over the long term, promote increased penetration by gas fired stations.

b. carbon leakage: any attempt to meet our GHG commitments in Australia may place onerous requirements on industry and thereby erode our competitive advantage in energy intensive industries and encourage them to move offshore to developing country competitors who do not have greenhouse gas commitments ('carbon leakage'). Consequently, due to our greater specialisation in energy intensive sectors and the likelihood that specialisation will be increased by ongoing trade liberalisation, particularly with our APEC trading partners, Australia is likely to be affected more by such carbon leakage than other OECD countries. It is important to note that although carbon leakage will have adverse impacts on countries like Australia, there will be no benefit for the global environment: the emissions will originate in a developing country rather than in Australia.

i. A table compiled by Treasury lists around 90 capital projects in the resource and processing sectors, worth around A\$15 -20 billion, that are currently under construction or committed to commence by around 2000 (see Table 1 for an abridged listing). While it is impossible to assess which projects would be affected by Australia's mitigation policies, it is likely that the reduced competitiveness of some of Australia's industries could cause some companies to reassess their investment plans.

c. 'no regrets' opportunities: Australia's high emissions and low energy prices would suggest that there exists some scope for reducing emissions through no regrets actions (i.e. actions which have net benefits or at least no net costs). No regrets actions could include microeconomic reform of the electricity and transport sectors, proper pricing policies in electricity supply and use, and efforts to improve electricity efficiency by households and industry. For example, the aluminium industry has achieved a 2% efficiency improvement over the past five years, in a sector which accounts for a much larger share of Australia's carbon dioxide emissions than is the case for other OECD countries.

i. the Cooperative Agreements Program with industry provides a means for companies to demonstrate they are taking all practicable actions to reduce GHG emissions consistent with maintaining their growth and competitiveness. Such a program can make a useful contribution to emissions reductions and enhanced competitiveness, though on its own is unlikely to be able to provide the emission cuts necessary to meet any of the kinds of targets so far tabled in the Berlin Mandate negotiations.

Climate change mitigation: economic impacts

8. While economic modelling results can help support intuitive reasoning and provide broad indications of the likely size and distribution of economic gains and losses associated with particular policy actions, their limitations are well accepted. The limitations of economic modelling of climate change response measures include:

a. most models only consider carbon dioxide emissions from energy use. This only accounts for around half of Australia's total emissions and does not include important emission sources such as agriculture, important gases including methane and the possibility of allowing for an enhancement of greenhouse sinks (i.e. forests);

- b. the class of models considered below do not allow for the possibility of market failure and hence assume no scope for emission reductions through no regrets action (i.e. action with no net adverse economic costs); and
- c. economic modelling does not deal with technological progress adequately; an important consideration given the long time frames necessary to properly consider climate change issues.

9. However, despite these limitations they can provide a useful, if broad, indication of the costs of action to reduce greenhouse gases. In the broad, they confirm the intuitive reasoning which suggests that the adverse economic impacts of measures to mitigate climate change are likely to be particularly severe on Australia.

10. For example, the 1995 DFAT/ABARE study (*Global Climate Change: Economic Dimensions of a Cooperative International Policy Response Beyond 2000*) estimated that the annual cost of stabilising emissions at 1990 levels would offset around half the reported annual gains to Australia from the Uruguay Round. The same study also found that the costs to Australia, at 0.3% of GDP annually, were roughly three times the cost to the EU, the United States and Japan. These losses would impact particularly strongly on emission intensive sectors of the economy, i.e. mining, agriculture and metals processing industries. For example, it is estimated that production of coal and primary non ferrous metals would fall by around one quarter by around 2010.

11. The estimated annual cost of mitigation rises steeply as emission abatement targets become more stringent. At the national level, econometric studies have estimated the costs of reducing emissions using a variety of modelling approaches, focusing on reducing emissions by around 20% below 1990 levels by 2005 to be between 0.5% and 2.1% of GDP (\$2.25 to \$9.5 billion per year). It is worth noting that as these studies assume unilateral action, they do not include the terms of trade impacts.

12. These studies have also highlighted the substantially greater cost to the mining and energy intensive manufacturing industries and job losses in blue collar occupations which rely heavily for employment on the manufacturing, mining and utilities industries.

13. The DFAT/ABARE study provided broad support for these results, considering OECD-wide rather than unilateral action to reduce greenhouse emissions by 20% from 1990 levels by 2020. While the Study includes the adverse impacts of terms of trade movements, it allows for a greater time over which the emissions reductions can be made. The study estimates the cost at around 1.4% of GDP (\$6.3 billion per year).

14. The study also provided a rough indication of the adverse terms of trade impact due to the action of other OECD countries on Australia. Assuming Australia undertook almost no mitigation action domestically, the impact of other OECD countries stabilising emissions at 1990 levels would result in an economic loss of around 0.1% of GDP (\$450 million per year) due to the adverse impacts on the terms of trade.

15. There are also likely to be some opportunities, both economic and financial in meeting obligations under the Convention. These opportunities include some activities which could create new and enhanced markets for Australian industry. For example, over time, Australia could receive significant export earnings from environmental products and services in areas such as renewable energy and energy efficiency.

16. There are also measures which could contribute to greenhouse objectives and at the same time provide other social and economic benefits. Such measures are of a 'no regrets' nature which means they can be justified in their own right. For example, by improving the energy efficiency of the economy, such measures contribute to improvements in Australia's productive efficiency, reduce costs and assist our international competitiveness.

17. However, such opportunities are unlikely to be significant when compared to the economic and trade costs to Australia of mitigating climate change at the pace of emissions reductions which would be required under a uniform target.

Table 1: Examples of Major Capital Projects under Consideration

Company	Expenditure (\$ million)	Location	Brief Description	Status	Possible start date
BHP Minerals	1,135	Port Hedland, WA	Hot briquetted iron plant (\$800 m) and associated infrastructure (\$335 m)	under construction	mid 1997
Korea Zinc	1,050	Townsville, Qld	Electrolytic zinc smelter and refinery (stage 1 & 2)	committed	1999
CRA	1,135	Qld	Development of Century zinc, lead and silver project and pipeline to Gulf of Carpentaria	committed	mid 1998
Comalco	1,000	Weipa, Qld	Weipa alumina refinery	consideration	n.a.
Australian Steel & Energy	1,200	Meekatharra, SA	Pig iron plant and energy project based on iron ore from Hawk's Nest and Meekatharra	consideration	1999
Mineralogy	3,400	WA	Steel plant	consideration	n.a.
Mineralogy	1,700	Dampier, WA	Magnetite pellet plant based on Fortescue iron ore deposits	consideration	n.a.
Compact Steel & others	1,500	Rockingham, WA	Steel mini-mill	consideration	n.a.
Kingstream Resources	900	Geraldton, WA	Midwest steel plant at Tallering Peak	consideration	n.a.
Coal & Allied Industries	500	Mt Pleasant NSW	Thermal/coking coal open cut project	consideration	2000
Wapet	5,000	Gorgon, WA	LNG project - proving reserves for possible separate \$9 billion project	consideration	n.a.
BHP Steel/Esso	720	Vic	Blackback/Terakihi and Turrum oil fields	consideration	n.a.
BHP Steel	650	Brisbane, Qld	New generation steel plant	possibility	n.a.
Aust. Steel & Energy	1,800	SA	Steelworks and power station - depends on success of the company's proposed pig iron project	possibility	n.a.
Kaiser Engineers & Chinese Govt	1,300	Pilbara, WA	Direct reduction iron plant	possibility	n.a.
Hammersley Iron CRA	1,000	Dampier, WA	Direct reduction iron plant	possibility	n.a.

Source: Listing compiled by Treasury from Pacific Power and Access Investment Monitor

Views of the Department of Foreign Affairs and Trade

AUSTRALIA'S NATIONAL INTERESTS: INTERNATIONAL RELATIONS

Australia's decision to ratify the Convention reflected a recognition that human induced climate change is a long term global problem requiring action by all parties. Australia is vulnerable to the impacts of climate change and action to mitigate it. Therefore, in responding to climate change Australia needs to consider the environmental, economic and trade implications of climate change and of response actions, and international relations aspects. The views of the Department of Foreign Affairs and Trade on Australia's international relations interests are discussed below.

International context

2. International environment issues are becoming an increasingly prominent feature of international relations. The post-Rio framework of multilateral environment conventions and the broader efforts towards implementation of Agenda 21 have focused attention on the challenging issues which global sustainable development poses.
3. The Framework Convention on Climate Change is perhaps the broadest ranging and the most important of the post-Rio multilateral environment agreements. The issues addressed in the Convention, the scientific uncertainties of climate change and the economic challenge presented by addressing it mean that negotiation and implementation of the Convention is an enormously complex task. The importance of the impacts of climate change on island and low-lying countries, tropical developing countries and the potential impacts on fossil fuel producing and fossil fuel dependent countries has meant that these negotiations have been of political significance to a large number of countries. Given the importance of this issue, Australia's position in the international climate change arena has implications for our bilateral and multilateral international relations.

United States

4. The US has been a key player in climate change negotiations and Australia has cooperated closely with the US on a range of mutually important issues. Australia and the US are members of the JUSCANZ group (non-EU OECD countries) and in addition meet regularly in an Asia-Pacific grouping of developed countries (US, Canada, Japan, Australia and New Zealand) to exchange views and to cooperate in the development of our positions.
5. Management of Australia-US relations on climate change will be critical for Australia over the course of these negotiations. US positions are closer to those of Australia than those of the EU, although the likelihood of a shift towards binding uniform targets raises concerns similar to those in relation to the EU. There is also the possibility that the US will take unilateral trade measures which could be detrimental to Australian interests if the Berlin Mandate outcome specifies policies and measures.
6. The 'greening' of US foreign policy in the lead-up to the November Presidential elections means that US Administration officials are seeking to distinguish the US position from those of its traditional allies on climate change issues. There is a danger that in order to secure a deal during this period the US Administration could reach an accommodation with the EU (in particular Germany and the Netherlands) over the level of a uniform target. If this were to eventuate, it would effectively cut off options for Australia and we will need to watch developments suggesting this

possibility closely.

7. In these circumstances pursuit of our objective of differentiated country targets could easily leave us at odds with the US as well as the EU, and create an irritant in the bilateral relationship as the US seeks to position itself on the high moral ground of its 'pro-environment' stance by criticising our stance of seeking to have our particular national circumstances recognised in the negotiations.

8. On the basis of past experience, Canada would fall into line with such a US stance, leaving Australia with few allies (perhaps only OPEC).

European Union

9. There is a strong possibility that Australian resistance to EU proposals on binding uniform targets and on international coordination of policies and measures could result in the EU and other European countries characterising Australia as seeking to obstruct achievement of an effective environmental outcome.

10. This could possibly have repercussions in other areas of the bilateral relationship with the EU at a time when we are seeking to broaden and deepen the relationship (now that the implementation of the Uruguay Round has removed many of the bilateral irritants that have plagued the relationship in the past).

Pacific Island Countries (PICs)

11. A number of PICs see mitigation of climate change, given the risks of sea level rise it presents, as a question of national survival - or at least anticipate dramatic adverse impact should sea level rise occur. During the negotiation of the Convention, Australia was supportive of PIC concerns. Australia has also been a strong contributor to efforts by PICs to address climate change, participating in projects such as the Sea Level Monitoring Project involving eleven PICs with a budget of more than \$13.5 million over ten years, Bureau of Meteorology training with a budget of over \$1 million and funding for a South Pacific Regional Environmental Program (SPREP) climate change officer.

12. Relationships with PICs suffered considerable strain, however, in the wake of the first Conference of the Parties to the Climate Change Convention (COP1) in March-April 1995. As members of the Association of Small Island States (AOSIS), PICs wanted COP1 to adopt the AOSIS draft Protocol. Australia argued that COP1's objective was to agree a mandate for negotiations on strengthening existing commitments and that the draft AOSIS protocol would be considered as one of a range of options during the process of negotiating future commitments. Pacific island countries (together with other members of AOSIS) were highly critical of Australia's stance at COP1, with some of the PICs expressing a sense of betrayal over Australia's inability to endorse the draft AOSIS protocol (which Australia had not rejected but in fact defended, as one of the proposals on the table to be taken into consideration).

13. Australia also played an active role in the negotiation and implementation of the Barbados Program of Action on Small Island Developing States. The outcome of COP1 may have resulted in the perception that expectations resulting from Barbados have been undermined by the position taken by Australia.

14. Following the meeting, Australian missions in the Pacific made representations at senior levels, setting out Australia's position on climate change (particularly on the position Australia took at COP1 on the need to involve significant developing country emitters in mitigation commitments), reaffirming that Australia supports PIC interests in the context of climate change, and that Australia is committed to and is taking action to reduce greenhouse gas emissions. Climate change has been a sensitive and difficult aspect of bilateral relations and at meetings of the South Pacific Forum since COP1, and will continue to require careful and sensitive handling.

Other developing countries

15. It is clear that additional steps by Australia and Annex I countries alone will be of limited value in addressing the global problem of climate change if they are not followed by actions by those developing countries which are becoming significant emitters. Emissions from the rest of the world already exceed those of the OECD countries and are increasing significantly (e.g. the International Energy Agency forecasts that over the period to 2010 the increase in annual carbon dioxide emissions in China will be more than the increase in the whole of the OECD.) Any long-term solution to the problems of climate change must therefore involve action to limit the emissions of those developing countries which are becoming significant emitters.

16. However, any attempt by developed countries to have developing countries assume commitments will be strongly resisted with use of the well-rehearsed arguments and rhetoric of the North-South debate. Any developed country taking a position too far ahead of other developed countries on this issue may be singled out for criticism.

17. The commitment of developing countries in Asia will be important in achieving effective greenhouse gas emission reductions in the longer term. In this context, Australia's position on climate change issues may be scrutinised at the upcoming ASEAN-Australia forum (25-26 June), the APEC Sustainable Development Ministers Meeting (9-12 July) and the APEC Energy Ministers Meeting (August).

Multilateral

18. Any disagreements on climate change issues may also spill over into other multilateral forums. In particular, it will be a focus at the special session of the UN General Assembly in June 1997 which will review follow-up to UNCED (the Convention comes under the UNCED umbrella).

FEATURES OF KEY COUNTRY POSITIONS AND NEGOTIATING OBJECTIVES

This attachment sets out the positions of the following key countries and country groupings on the main elements of the Berlin Mandate negotiations:

- I. European Union;
- II. Other OECD Europe;
- III. United States;
- IV. Canada;
- V. Japan;
- VI. New Zealand;
- VII. Alliance of Small Island States (AOSIS);
- VIII. Organisation of Petroleum Exporting Countries (OPEC);
- IX. G77 and China; and
- X. Economies in transition.

I. European Union

2. A recent European Commission report has concluded that EU carbon dioxide emissions will be around 5.5% above 1990 levels by 2000. Emissions are projected to fall in Germany (primarily due to the collapse of East German industry and improvements in energy efficiency after reunification), the UK (due mainly to the shift from coal to gas for power generation) and Luxembourg.

3. By way of comparison, under official projections, emissions will be 1% below 1990 levels in 2000. Environmental NGOs have been critical of this gulf between rhetoric and reality, highlighting the hypocrisy of the strong environmental position the EU has taken in the Berlin Mandate negotiations when it has been unwilling to take the steps necessary to meet the Convention's implied target.

4. Despite this the EU has been, and is likely to continue to be, the driving force behind the negotiations to strengthen the commitments of developed countries, and it has tabled a number of proposals on targets and timetables and policies and measures.

Targets and timetables

5. EU member states have suggested the following targets and timetables:

- a. UK: reduce greenhouse gas (GHG) emissions by 5-10% from 1990 levels by 2010; and
- b. Germany: reduce carbon dioxide emissions by 10% relative to 1990 levels by 2005 and an indicative target of around 15 - 20% by 2010.

6. Despite much internal debate, the EU has been unable to arrive at a consensus on an appropriate target and timetable. This has been due to their inability to agree on an internal burden sharing formula. Under the Convention, regional integration organisations (i.e. the EU) are

permitted to meet the commitment collectively rather than requiring each member state to meet the commitment on an individual basis. However, the EU has been unable to agree on burden sharing arrangements, with 'high performing' countries like Germany, UK and Denmark willing to share the burden with the less wealthy Southern EU members, but not with relatively wealthy 'non-performers' such as France.

7. In addition, the EU has yet to reach consensus on whether the targets should be legally binding or a target to be achieved on a best endeavours basis.

8. There also appears to be a difference of views on whether the target should be based on the comprehensive approach (i.e. including all gases, and sources and sinks) or whether different gas-by-gas targets should be adopted. For example, the UK proposal is based on the comprehensive approach (given the continuing reduction of UK coal mining, substantial reductions in methane are likely), while the German proposal is a carbon dioxide only target; with other targets to be established for other gases. Other European countries have supported gas-by-gas targets (the Netherlands, and Switzerland), particularly focusing on severely limiting perfluorocarbons (PFCs); a strong greenhouse gas produced by aluminium smelters, which could be of considerable interest to Australia as a major aluminium producer.

9. The EU has expressed a determination to resolve these internal difficulties and present an agreed EU position on targets and timetables for COP2 in July 1996. In the event this is not achievable, the EU will instead seek to focus attention on policies and measures.

Policies and measures

10. The EU is seeking agreement to a set of mandatory coordinated policies and measures to be applied by all OECD countries and has also tabled a list of possible policies and measures and proposed a structure for a protocol to this end.

Other issues

11. The EU has also supported lower (if unspecified targets) for the Economies in Transition (EITs) due to their substantially lower per capita income levels. The current expectation is that the EITs will join the EU in the 2000-2010 period. This may provide the EU greater scope to collectively achieve any AGBM target for the post-2000 period as, due to the collapse of their economies, the EITs are unlikely to reach their 1990 levels of emissions by 2005-2010.

II. Other OECD Europe

12. Other European developed countries (e.g. Switzerland and Norway) have taken a similar line to the EU on most issues including policies and measures and targets and timetables.

13. Switzerland has supported the gas-by-gas approach to targets and timetables and suggested the phase-out of PFCs.

14. Norway is looking for an accommodation within EU positions but with the added objective of achieving some form of burden sharing arrangement. Norway has also expressed concern about the possible disadvantage it may face in achieving any target due to the high level of emissions in their exports (particularly to the EU).

III. United States

15. At COP1 in Berlin, Australia worked closely with the US in efforts to ensure developing country involvement in efforts to mitigate climate change. In the Berlin Mandate negotiations to date, the US (and Australia) has favoured extending the process of analysis and assessment to delay commencement of substantive negotiations on the basis of proposals currently on the table because of their heavy emphasis on emissions limitation and reduction targets and timetables. As a result of Congressional and industry pressure, the US position has focused upon seeing thorough evaluation and assessment of options, particularly in respect of assessing the economic and environmental impact of policies and measures to achieve specific emission limitation objectives, prior to engaging in detailed negotiations.

16. However, the US has recently signalled a shift in its position, due to the Clinton Administration's view that the environment is a major election year issue. Climate change has been targeted as the major international environment issue. While it is still too early to predict the likely US approach to the negotiations, it is likely that the US will favour targets and timetables and resist coordinated policies and measures.

Targets and timetables

17. If early indications are any guide, the US is likely to favour relatively stringent emission reduction targets and timetables. The US is unlikely to support differentiated targets along the lines being advocated by Australia. It considers that any possible small gain to be made by advocating differentiated targets would weaken the Clinton Administration's green credentials and hence be inconsistent with its re-election strategy.

18. The US's strategy appears to be based on Clinton winning the November Presidential election and then carrying the Berlin Mandate outcome through domestically on a tide of pro-environment sentiment. An important factor in watering down or neutralising expected opposition from US industry could be having the outcome linked in some way to further development of Activities Implemented Jointly, in which the Annex I parties could gain credits for projects undertaken in developing countries.

19. At this stage it is too early to tell whether the US is in favour of legally binding targets and timetables. However, the US is likely to maintain its long-standing support for a comprehensive approach to targets and timetables (i.e. including all gases, sources and sinks).

Policies and measures

20. Congressional and industry pressure appears resolutely opposed to mandatory coordinated policies and measures. Consequently, the US is likely to focus on the need for thorough evaluation and assessment of all options, particularly in respect of assessing the economic and environmental impact and the need for coordination prior to engaging in detailed negotiations.

Other issues

21. In its report to COP1 on steps it had taken to implement the Convention, the US reported that its action plan, adopted in October 1993, projected a return to 1990 levels by 2000. However, faster than expected growth in the economy, a drop in oil prices and failure by the US Congress to provide full funding for the plan is likely to lead to a significant shortfall in emission cuts.

22. While modified projections are not yet available, US emissions grew by 4.4% in the period 1990 to 1994. This would suggest that the US is unlikely to achieve the Convention's implied target.

IV. Canada

23. Canada has broadly similar economic circumstances as Australia, including high population and emission growth and a relatively high cost of reducing emissions. As a consequence, the Canadian approach to the negotiations has been similar: they have argued for comprehensive analysis and assessment which would allow substantive negotiations to gradually build on that basis. Canada has also worked closely with Australia to promote a comprehensive approach (dealing with all greenhouse gases, and all greenhouse gas sources and possible gas sinks such as forests).

24. However, unlike Australia, most of Canada's trade is with other OECD countries (predominantly the US) and, consequently, it has less to lose from efforts to reduce emissions provided other OECD countries also participate in mitigation activity.

Targets and timetables

25. In its report to COP1, Canada indicated that with current policies in place, emissions in 2000 will be 11% higher than they were in 1990. The Canadian Liberal Government in its 1993 election platform undertook to meet all Canadian environmental commitments, and further promised to reduce greenhouse gas emissions by a further 20% by 2005. However, Canada seems now to have abandoned its 2005 target, as it will not even be able to meet its 2000 target.

26. In February 1995 at a meeting between the Federal Environment Minister and provincial environment Ministers, a national strategy to cut greenhouse gas emissions was adopted. This strategy does, however, fall short of the 2000 target, with emissions predicted to be 13% higher than 1990 levels. While specific details of the agreement are sketchy, it is known that the provinces have agreed upon the voluntary implementation of emission control policies, however, there is nothing binding on the provinces, in the new agreement, to pursue policies consistent/compatible with federal targets. The new agreement is nevertheless an advance from the positions adopted in previous meetings where some provinces rejected the notion that global warming posed a serious threat to Canada. The provinces of British Columbia and Ontario are planning provincial initiatives which go much further than those agreed to in the National Strategy. Both of these provinces have committed themselves to implementing a series of regulatory measures in addition to the voluntary steps agreed to by other provinces. Some provinces (notably oil rich Alberta) continue to reject the notion that global warming poses a serious threat to Canada.

Policies and measures

27. Canada has adopted a relatively low profile on this issue and followed the lead of the US.

V. Japan

28. Japan is heavily focused on its position as likely host of COP3 in 1997 and its desire that the meeting will be a success. Its strategy for the negotiations seems to be to minimize the complexity of negotiating issues in order to maximise chances of completing the negotiations within the time frame.

Targets and timetables

29. Latest indications are that Japan is likely to revert to the 1991 proposal it made for a "pledge and review" type of outcome which would give flexibility in terms of individual country commitments, making it easier for all countries to sign on, but with little basis for confidence about the effectiveness of such an outcome or basis for assessing equity. Japan is particularly concerned about the difficulty it would have in reducing emissions given their already very high level of energy efficiency and the need to ensure international competitiveness with developing countries in the Asia-Pacific region.

Policies and measures

30. In the negotiations thus far, the Japanese have continually promoted the 'menu' approach which would allow a country the flexibility to chose policies and measures in line with their national circumstances. However, due to its high energy prices, high energy efficiency and standards, the Japanese could support coordinated policies and measures - including harmonised international energy efficiency standards and carbon taxes - at little or no economic cost.

Other issues

31. In ratifying the Convention, Japan unilaterally interpreted the implied target to require Japan to return to 1990 emission levels by 2000 on a per capita basis. Given an expected population growth rate of 0.4% per year, this implied an increase in absolute emissions of around 4%. On current projections, Japan's emissions are expected to be around 1.8% above 1990 levels in 2000.

VI. New Zealand*Targets and timetables*

32. New Zealand remains strongly in favour of a comprehensive approach (i.e. which includes all sources and sinks). New Zealand is confident it can easily achieve, indeed exceed, any agreed new target and timetable by enhancing its sinks capacity (i.e. growing forests). Consequently, New Zealand has also strongly supported Activities Implemented Jointly, whereby other countries could invest in New Zealand forests and share in any resulting emission credits.

Policies and measures

33. New Zealand appears firmly committed to a harmonised OECD-wide carbon tax as the most economically efficient and environmentally effective approach to reducing greenhouse gas emissions.

Other issues

34. Mainly through enhancing its forests' capacity to act as sinks, New Zealand emissions are expected to be around 13% below 1990 levels in 2000.

VII. The Alliance of Small Island States (AOSIS)

35. AOSIS wants to see negotiations conducted on the basis of its draft protocol. AOSIS has argued in the Berlin Mandate negotiations that sufficient scientific material is already available and that new analysis would detract from the focus on negotiations. However, AOSIS has been unsuccessful in gaining endorsement for these positions and a reassessment of its approach can be

expected in seeking to attract wider developing country support for having the AOSIS draft protocol accepted as the basis for the negotiations.

Targets and timetables

36. AOSIS strongly favours emphasis on targets and timetables to ensure an environmentally effective set of commitments. The AOSIS draft protocol proposes all Annex I countries reduce carbon dioxide emissions by 20% relative to 1990 emissions by 2005. This is currently the most stringent target so far proposed.

VIII. Organisation of Petroleum Exporting Countries (OPEC)

37. OPEC countries can be expected to continue to argue that climate change has yet to be properly established and consequently any additional developed country commitments to reduce emissions are premature.

38. This long standing uncooperative approach has been based on the recognition that any efforts to reduce emissions by developed countries (either through policies and measures or targets and timetables) will inevitably reduce the demand and price of oil and hence have adverse impacts on their oil revenue.

IX. G77 & China

Targets and timetables

39. While there is no single view within the group, the majority of developing countries - particularly the major greenhouse emitters - could be expected to continue to support relatively stringent targets and timetables for two major reasons.

40. First, the impact of climate change is expected to be most severe on developing countries, with the Intergovernmental Panel on Climate Change estimating that the costs of no action could reduce developing country income by as much as one-tenth, compared with 1-3% in developed countries. This issue is particularly important for developing countries in regions expected to be particularly severely affected by climate change, e.g. AOSIS countries, Bangladesh and other low lying countries and much of Sub-Saharan Africa.

41. Second, and more cynically, stringent action by developed countries to reduce emissions could provide a competitive advantage to industries in developing countries, including by encouraging energy intensive industries in developed countries to move offshore to developing countries in order to avoid any climate change related constraints (e.g. regulations or taxes).

Policies and measures

42. Developing countries are particularly concerned to ensure that any policies and measures implemented as a result of the Berlin Mandate negotiations not impact adversely on them. This view was strongly expressed in reaction to the EU proposal on policies and measures, with a diverse group of countries - including China, Republic of Korea, Egypt and India - arguing strongly that any policies and measures adopted must conform with provisions of the international trading system and not constitute new barriers to trade.

43. The issue of the impact of developed country policies and measures on developing countries

is expected to gain importance during the ongoing negotiations.

X. Economies in transition

Targets and timetables

44. Russia and the Eastern European countries, who are included as Annex I countries under the Convention, have indicated that they will be seeking to ensure a differentiated level of commitment compared with OECD Annex I countries. This reflects the fact that while depressed economic activity in these countries has reduced greenhouse gas emissions during the period of the Convention's implied target (up to 2000), as the reform process continues, activity and growth after that period will see these countries substantially increase their emission levels. It is not, however, certain whether these countries will reach 1990 emissions until significantly after 2000.

IPCC SECOND ASSESSMENT REPORT AND ITS IMPLICATIONS

Intergovernmental Panel on Climate Change (IPCC)

The IPCC was jointly established by the World Meteorological Organisation and the UN Environment Programme in 1988. Its task is to assess available scientific, technical and socio-economic information relating to the various components of the climate change issue, including potential impacts and mitigation options.

2. The IPCC does not make policy recommendations.

Second Assessment Report (SAR)

3. The IPCC's SAR, released in December 1995, is internationally accepted as representing the current state of knowledge in relation to climate change science, impacts, mitigation technologies and economics.

Climate change science

4. The key scientific findings of the SAR are that:
 - a. greenhouse gas (GHG) concentrations have continued to increase;
 - b. anthropogenic aerosols (i.e. airborne particles resulting mainly from fuel combustion) tend to produce negative radiative forcings;
 - c. climate has changed over the past century;
 - d. the balance of evidence suggests a discernible human influence on global climate;
 - e. climate is expected to continue to change in the future; and
 - f. there are still many uncertainties.
5. The statement above about a "discernible human influence on global climate" is stronger than the IPCC has made before. Together, these findings confirm the basis of the concern which led to the negotiation of the climate change convention, and present a strong message to nations about the importance of effective global action to reduce greenhouse gas emissions.
6. The IPCC report presents a range of scenarios of future change: for mid-range emission scenarios, and including sulfate aerosols, the IPCC suggests a global mean surface temperature increase of 2°C, (with a range of 1.0-3.5°C) by 2100. The corresponding estimate for global mean sea-level is 50 cm (with a range of 15-95 cm). These estimates are 25-30% less than the previous best estimate, which did not include the effects of sulfate aerosol, produced in 1990.
7. The uncertainties limit our ability to detect unambiguously and to project climate change, particularly on regional scales. The report highlights the need to reduce these uncertainties through focused research and systematic monitoring of climate system variables.

Climate change impacts

8. Most impact studies to date have assessed how human and biological systems would respond to the climate change with a 2° to 3°C global warming, notionally corresponding to a doubling of

GHG concentrations. In summarising such studies, the IPCC finds:

- a. human-induced climate change represents an important additional stress, particularly to the many ecological and socio-economic systems already affected by pollution, increasing resource demands and non-sustainable management practices
 - i. systems typically are more vulnerable in developing countries where economic and institutional circumstances are less favourable;
- b. natural ecological systems, socio-economic systems and human health are all sensitive to both the magnitude and the rate of climate change;
- c. crop yields and changes in productivity due to climate change will vary considerably across regions and among localities, thus changing the patterns of production
 - i. productivity is projected to increase in some areas and decrease in others, especially the tropics and subtropics
 - ii. existing studies show that on the whole, global agricultural production could be maintained relative to baseline production in the face of climate change projected under doubled equivalent carbon dioxide equilibrium conditions (this conclusion takes into account the beneficial effects of carbon dioxide fertilisation but does not allow for changes in agricultural pests and the possible effects of changing climatic variability)
 - iii. however, focusing on global agricultural production does not address the potentially serious consequences of large differences at local and regional scales, even at mid-latitudes;
- d. the composition and geographic distribution of many ecosystems (e.g. forests, rangelands, deserts, mountain systems, lakes, wetlands, and oceans) will shift as individual species respond to changes in climate; there will likely be reductions in biological diversity and in the goods and services that ecosystems provide society
 - i. some ecological systems may not reach a new equilibrium for several centuries after the climate achieves a new balance; and
- e. assessments of the impact of climate change on any particular system at any particular location are difficult because the nature of regional scale climate change is still uncertain, our current understanding of many critical processes is limited and systems are subject to multiple climatic and non-climatic stresses, the interaction of which are not always linear or additive.

Climate change response measures

9. The IPCC SAR analyses many options for reducing greenhouse gas emissions with the help of both existing and emerging technologies and concludes that "significant reductions in net GHG emissions are technically possible and can be economically feasible, and that significant 'no regrets' opportunities are available in most countries". The literature indicates that the risk of net damage due to climate change, consideration of risk aversion and the precautionary approach provide rationales for action beyond no regrets.

10. The SAR also examines issues of timing and equity and concludes:

- a. early mitigation action can increase flexibility, but the ultimate choice of abatement paths involves balancing the risks of rapid abatement now against the corresponding risk of delay;
- b. given that countries differ substantially in vulnerability, wealth, capacity, resource endowments, and other factors, unless addressed explicitly, the costs of the damages, adaptation, and mitigation may be borne inequitably. Equity considerations are therefore an important aspect of climate change policy, and in ensuring the legitimacy of international agreements.

Climate change economics relating to targets and timetables

11. The costs of stabilising atmospheric concentrations of GHGs at levels and within a time frame that will prevent dangerous anthropogenic interference with the climate system will be critically dependent on the choice on emission time path.
12. There are very few comprehensive global estimates of the economic impact of damage due to climate change, and none published for Australia. The IPCC summarises the results of the few studies available. Aggregate estimates (of economic damage arising from total damages from 2° to 3°C warming - as a result of doubled carbon dioxide concentrations projected over the next century) tend to be a few percent of world GDP, with in general, considerably higher estimates of damage to developing countries as a share of their GDP. Damages from possible large scale catastrophes, such as major changes in ocean circulation, are not reflected in these cost estimates.
13. The many studies in OECD countries yield a wide range of estimates of the costs of response options. The wide range largely reflects significant differences in assumptions about the efficiency of energy and other markets, and about the ability of government institutions to address perceived market failures or imperfections:
 - a. macro-economic (top-down) analyses for OECD countries suggest that the cost of substantial reductions of emissions below 1990 levels (over the next decade or two) could be as high as several percent of GDP
 - i. in the specific case of stabilising emissions at 1990 levels, most studies estimate annual costs in the range of -0.5% of GDP (equivalent to a gain of about \$60 billion in total for the OECD at today's GDP levels) to +2.0% (equivalent to a loss of about \$240 billion) could be reached over the next several decades;
 - ii. however studies also show that appropriate timing of abatement measures and the availability of low-cost alternatives may substantially reduce the size of the overall bill;
 - b. engineering (bottom-up) studies show that the costs of reducing emissions by 20% in developed countries within two to three decades are negligible to negative.

Major policy implications of the SAR

Basis of concern

14. The findings of the IPCC on climate change and climate change impacts confirm the basis of the concern which led to the negotiation of the climate change convention, and present a strong message to nations about the importance of effective global action to reduce greenhouse gas emissions.

Dangerous anthropogenic interference

15. Article 2 of the Convention states:

"The ultimate objective of this Convention ... is to achieve ... stabilisation of GHG concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system. Such a level should be achieved within a time-frame 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 in a sustainable manner."

16. It is important to note that this objective implies that the rate of climate change needs to be considered as well as the level of GHG, in terms of what constitutes "dangerous".

17. The SAR does not specify what level of atmospheric GHG concentrations would constitute dangerous interference. The IPCC considers that this judgement is ultimately a matter for decision by policy makers.

18. The IPCC states that at this point in time:

"uncertainties remain which are relevant to judgement of what constitutes dangerous anthropogenic interference with the climate system and what needs to be done to prevent such interference."

19. The IPCC does state that given the projected growth in atmospheric concentrations of GHGs, interference with the climate system will grow in magnitude, so that the likelihood of adverse impacts from climate change that could be judged dangerous interference will become greater.

20. Many countries are expected to argue at COP2 that a doubling of carbon dioxide equivalent concentrations from pre-industrial levels would constitute a "dangerous anthropogenic interference with the climate system" in the sense of Convention Article 2. Their arguments are expected to be based on the impact studies assessed by the IPCC, some of which show some adverse impacts in some places from climate changes that may arise from such a concentration of GHGs. However, such a conclusion has not been definitively demonstrated on the basis of scientific studies because:

- a. the rate, timing and magnitude of global climate change is unclear;
- b. the nature of regional climate change is unclear; and
- c. the damages due to a particular rate, or magnitude of change are uncertain.

21. In particular a subsidiary body of the Convention meeting in March 1996 considered that the IPCC had not provided sufficient information on which to base a political judgement on this issue, and requested more specific information from the IPCC. In response to this request the IPCC has agreed to prepare technical papers by November 1996 on the following two topics:

- a. modelling of stabilisation scenarios towards addressing Article 2; and
- b. assessment of the implications of different emission limitation proposals on projected temperature increases, sea level rise and other changes in climate.

22. With this in mind it would be premature and inappropriate for COP2 to make any political

judgement about what numerical concentration would be "dangerous".

Stabilisation of atmospheric concentrations of GHGs

23. The physical effect of GHGs on climate depends directly on the total amount of GHG in the atmosphere (measured as a concentration). The concentration depends in turn on the annual emissions (i.e. flow into the atmosphere) and the rate of removal by sinks. "Any eventual stabilised concentration is governed more by the accumulated anthropogenic carbon dioxide emissions from now until the time of stabilisation, than by the way those emissions change over the period. This means that, for a given stabilised concentration value, higher emissions in early decades require lower emissions later on."

24. To draw out the implications of this, the IPCC examined a range of emission scenarios corresponding to a range of stabilised final concentrations of carbon dioxide (the GHG of primary concern) and found:

"if net anthropogenic carbon dioxide emissions were maintained at near current (1994) levels, they would lead to a nearly constant rate of increase in atmospheric concentrations for at least two centuries, reaching about 500 parts per million by the end of the 21st century."

25. This finding reflects the fact that carbon dioxide, once emitted, has a relatively long residence time in the climate system - of the order of a century or more. It also implies that some greenhouse-induced climate change is inevitable, since the present concentration is 355 parts per million and pre-industrial concentration was about 280 parts per million. The IPCC also found that "stabilisation of carbon dioxide concentrations at any level lower than 3 times present day levels would require emissions to eventually drop substantially below 1990 emissions."

26. However the time frame over which global emissions would have to make these substantial reductions ranges from several decades to over a century, depending on the final concentration sought.

Options for future pathways to achieve stabilisation

27. Decisions with respect to Article 2 of the Convention involve three distinct but interrelated choices: stabilisation level, net emissions pathway and mitigation technologies and policies. The report presents available scientific and technical information on these three choices. It also notes where uncertainties remain regarding such information. The long time scales involved in the climate system (e.g. the long residence times of GHG in the atmosphere) and in the replacement of infrastructure, and the lag by many decades to centuries between stabilisation of temperature and mean sea-level, indicate the importance of timely decision-making.

28. The IPCC has drawn attention to the significant no regrets opportunities that are available in most countries. The clear implication is that countries should act to avail themselves of the benefits of these 'no regrets' opportunities.

29. The path towards stabilisation becomes important from a cost/benefit point of view and is a key issue in designing action for the future. The SAR clearly shows that a delay of actions and an increase of emissions approximately along a 'business as usual' path for another decade or two implies a more rapid switch over to a reduction later. However, to enable such later, sharper

reductions in emissions requires that the necessary technologies and policies be at least under development, so that they will be available when required.

30. Moreover, for Australia, or indeed any individual country, to take action beyond no regrets would require careful consideration by government in the light of the possible economic cost, environmental benefit, the disparate time frames of the costs and benefits that would be involved, the actions proposed by other countries, and the evolving scope of no regrets as technology and economic structures evolve.

Australian position

31. Australia should endorse the work of the IPCC and the SAR.

32. Pressures may be expected at COP2 for a political decision on what constitutes dangerous anthropogenic interference and to specify appropriate paths to stabilisation. Such a decision would have a major influence on COP2 negotiations on targets and timetables and policies and measures. Australia should resist such pressures as premature, noting that the Convention's subsidiary bodies have requested the IPCC to provide more specific information.

UNILATERAL INTERPRETATIONS OF "EQUITABLE CONTRIBUTION"

The Convention provides for, but does not define or specify what constitutes, an equitable outcome and to some extent the interpretation has been left to individual countries. Following are examples of several Annex I countries which have unilaterally modified the implied Convention target of returning emission levels to 1990 levels by 2000 to reflect national circumstances:

- a. decisions in Japan and France to set targets to 2000 in terms of per person emissions of carbon dioxide, in recognition of the close correlation between population growth and growth in greenhouse gas emissions (Government of Japan 1994; International Energy Agency 1994);
- b. the introduction in Denmark and Finland of an import correctional factor to account for emissions from imported electricity on the grounds that base year emissions would have been higher if imports had been replaced by domestic production (International Energy Agency 1994; Ministry of the Environment, Denmark 1994). Adjustments of this type suggest the importance of so called 'emissions embodied in trade'. Further, they raise issues about whether emissions should be attributed on a production or consumption basis, or whether governments should be free to choose;
- c. in Sweden and The Netherlands, 1990 emission levels were adjusted to reflect the unusually mild northern winter that year, which led to below average emissions from fossil fuel generated space heating (Government of The Netherlands 1994; Ministry of the Environment and Natural Resources, Sweden, 1994). Adjustments of this type highlight how countries might be disadvantaged (or advantaged) by the choice of base years, or indeed end points, to achieve given targets; and
- d. the European Union's choice to meet a common target of stabilising greenhouse gas emissions ('bubble' arrangement) recognises that different member states have different development needs, scope for cost effective abatement and capacity to invest in emission reduction activities. This is reflected in the fact that Spain's emissions are projected to increase by 20-25% over the 1990s, while Germany is aiming to reduce emissions to 25-30% below 1987 levels by 2005 (International Energy Agency 1994; Federal Ministry of the Environment, Germany, 1993).

NEGOTIATING OPTIONS AND PROPOSALS: TARGETS AND TIMETABLES

This Attachment lays out the range of proposals which have been submitted and options canvassed in the Berlin Mandate negotiations relating to quantified emission limitation and reduction objectives (QELROs) and timetables.

2. The Berlin Mandate requires the negotiations to set 'quantified emission limitation and reduction objectives' for action by Annex I parties according to specified time frames, such as 2005, 2010 and 2020. The use of the word "objectives" as distinct from "targets and timetables" is significant, as "targets" are often equated with a common uniform target - the term "quantified limitation and reduction objectives" is open to a broader range of interpretations. The reference to both limitation and reduction objectives is also significant as it requires consideration of a range of options such as a common uniform target for all Annex I parties, setting of limitation or reduction objectives for Annex I parties as a group, or setting different objectives for each Annex I party.

Uniform targets

3. The following specific uniform targets have been suggested and remain the starting point for negotiations on developed country targets:

- a. Alliance of Small Island States (AOSIS) proposal: reduce carbon dioxide emissions by 20% relative to 1990 emissions by 2005;
- b. UK proposal: reduce greenhouse gas emissions by 5-10% relative to 1990 levels by 2010; and
- c. German proposal: reduce carbon dioxide emissions by 10% relative to 1990 levels by 2005 and 15-20% by 2010.

4. Each of these proposals establishes a uniform target to be met by each party in the target year expressed in terms of a historical base year. As the Convention's implied target requires parties to return greenhouse gas emissions to 1990 levels by the year 2000, another option which could emerge in the negotiations would be stabilisation of greenhouse gas emissions at 1990 levels (i.e. return and maintain emissions at 1990 levels).

Separate targets for different categories of parties

5. This approach has been suggested by some European countries to meet the special needs of the Eastern European Economies in Transition (EITs). At its simplest, this approach is likely to incorporate only two categories of countries, OECD and EIT countries, with different uniform emission targets for each group based on 1990 emissions. The EU proponents of this option would see OECD countries adopting uniform targets along the lines of options outlined in paragraphs 3 and 4 above. Those applicable to the EITs have not been addressed.

Differentiated targets within sub-groups of Annex I parties

6. A significant negotiating issue yet to be resolved is whether the Berlin Mandate outcome should continue to allow regional integration organisations (such as the European Union) to meet the commitment collectively rather than requiring each member state to meet the commitment on an individual basis. This gives the EU substantial internal flexibility about how it distributes the task of meeting the target, but this is not a flexibility available to others except if agreed as part of the

outcome.

Collective Annex I target with differentiated individual Annex I targets

7. Although advocated by a number of countries, including Australia in advancing our equity and differentiated targets objectives, other countries have argued that agreeing on an appropriate differentiation of commitments among all Annex I parties would be a complex and difficult issue to address. Only one practical approach to addressing the distributional complexities has, so far, been suggested in the negotiations. Under this approach, all Parties would be required to reduce emissions by a certain percentage from business-as-usual projections (i.e. 'without measures' projections), rather than returning emissions to 1990 levels as is currently the case.

Cumulative target approaches and emission budgets

8. A further approach suggested is to consider cumulative emission targets. The current approach requires countries to aim to return emissions to 1990 levels by a certain target year, 2000. The level of emissions during the intervening period, 1990 to 1999, have no bearing on whether the target is achieved. Under a cumulative approach, the emission target would relate to the entire period of the agreement, and not just to the target year.

9. Such an approach could, to some extent, address possible difficulties that arise from one-off factors impacting on the target or base year. For example, some countries have found it necessary to modify the 1990 (base) emission levels to account for factors such as unusually high levels of imported electricity or unusually mild winters.

10. Some countries have also suggested the possibility of emission banking approaches. Under such an approach, providing premiums for early action would encourage early emission reductions. Furthermore, by allowing countries to accrue emission credits and debits from one agreement period to the next, such an approach could lay the foundation for successive climate change agreements and provide countries the flexibility to adopt a long term view to reducing emissions consistent with the very long life of major investments (e.g. power stations). Such an approach could thus provide an environmentally and economically effective approach to setting emission reduction objectives.

Timetables

11. Preliminary consideration has so far been given to the issue of the appropriate timetable to apply for the Berlin Mandate outcome (e.g. 2005, 2010, and 2020). It has been recognised that the implications of setting targets for longer time frames such as 2020 will need to be carefully considered and analysed, as will the linkage to the outcome of negotiations on policies and measures.

12. Ideally long term targets are conducive to better planning but this only holds if there is sufficient degree of certainty concerning other key variables within the planning horizon. The implications for Australia of a long term target, such as 2020, are very difficult to assess as it is not clear what the costs of such a target would be. Some top-down econometric modelling studies show these economic costs to be significant with impact on our coal and resources sectors and aluminium and steel industries (e.g. the DFAT/ABARE study on Global Climate Change), while other studies particularly those involving bottom-up modelling show different results. On the other hand, there is the argument that long term targets can positively influence companies' investment

decisions through technology forcing (i.e. building into companies' and governments' expectations the need to limit greenhouse gas emissions and therefore forcing research and development).

Outlook for the negotiations on targets and timetables

13. Although parties have suggested many possible approaches to targets - some of which could well be superior in economic, environmental and equity terms - the established precedent and simplicity of a uniform target approach make it a probable outcome. It is this approach which is assessed as likely to attract the necessary support to be seriously negotiated within the time frame remaining of the Berlin Mandate.

14. Economies in transition are expected to support a uniform target approach provided there is a separate and lower target for them compared with developed countries.

Should the target be legally binding?

15. While the AOSIS proposal stipulates the need for legally binding targets (i.e. no caveats), the UK and German proposals are silent on this issue.

16. A major difficulty with accepting legally binding targets is that in view of the current uncertainty in estimating emissions and the lack of consistency in countries' reporting, it would be extremely difficult to ascertain at any particular time whether a party was complying with the legal instrument or was in breach of international law. In addition, if there were no flexibility built into targets, it would not be possible to allow for the impact of unforeseen developments, which could lead to parties being in breach of the legal instrument (and possibly subject to penalties) through no fault of their own.

17. On the other hand, if the targets were set in a way that ensured that they were sufficiently equitable and flexible, there could be advantages in making them legally binding. If they were binding, it is more likely that parties would comply with them and longer term targets would be more likely to survive shorter term variations to national policy. To the extent that many parties would be willing to take costly abatement action only if other parties would do the same, binding targets could provide an assurance that action could be taken by one country without the fear that the failure of other countries to do the same would disadvantage it economically. The degree of likelihood of compliance would, however, be influenced to a large extent by the legal consequences of non-compliance under the Agreement, including whether or not and if so, what, sanctions or penalties could be imposed. It is not yet clear whether the legal instrument resulting from the Berlin Mandate negotiations will stipulate consequences of non-compliance or will contain a dispute settlement mechanism different from that of the Convention.

18. The dispute settlement provisions of the Convention do not allow penalties to be imposed for non-compliance (unless a State agrees to compulsory adjudication or arbitration under Article 14(2)). A "recommendatory award" can be made following a conciliation process, but parties are not bound to comply with that award. Parties would still, however, be under political pressure, both domestically and internationally, to comply with binding obligations and a failure to do so (or be seen to do so) would have political consequences internationally.

Implications of continuing the EU's current internal flexibility

19. The EU is seeking a uniform target for OECD countries, with the target applying to the EU as a

whole (the so-called 'EU bubble'), not individual member states. It is a major negotiating issue as to whether the EU bubble should be allowed to operate in the post-2000 period. The current arrangement has the effect of eliminating equity or appropriate contributions among Annex I parties as a concern for a significant proportion of those parties: i.e. 16 (15 member states and the "European Economic Community") out of the 35 Annex I parties. Also, given the likelihood that "economies in transition" will have their special status acknowledged simply on the basis of that fact and constitute a further 11 of the Annex I parties, Australia remains one of a group of only eight countries potentially facing a situation of being denied an equitable and appropriate share of the Annex I burden.

What should be the timetable associated with the target?

20. The focus is expected to be on whether a single short or medium time frame would provide an appropriate Berlin Mandate outcome or, alternatively, whether a shorter term objective combined by a longer term indicative objective would provide a more appropriate framework for long term planning, investment decisions and research and development of new technologies.

Australian position

21. Australia should continue advancing its equity arguments in seeking a Berlin Mandate outcome that provides for 'equitable burden sharing' among Annex I parties, including differentiated targets assessed according to such factors as cost-effectiveness, capacity to pay, rates of population growth and emissions embodied in trade.

22. It is recognised that in the Berlin Mandate negotiations it is highly unlikely that Australia will achieve differentiation of targets to reflect, for example, different abatement costs in different countries or even differences in the rates of population growth. Even so, it will be important for Australia to position itself by continuing to advance arguments for differentiation to demonstrate that Australia's national circumstances are different to other OECD countries' while making clear that Australia is prepared to make a fair and equitable contribution. This should be done in a way which allows us to shift focus to minimising the impact of a uniform target. We would do this by building on the equity principles we have been advocating and ensure Australia retains the flexibility to unilaterally interpret the Berlin Mandate outcome to reflect our national circumstances and perceptions of equity (this would also be consistent with our approach to unilaterally interpreting the Convention's current implied target in light of national circumstances). The success of this strategy will require building a coalition of like-minded countries (most probably including Japan, the US, Canada, Norway and New Zealand).

23. The current uncertainty in estimating emissions, the potential impacts of unforeseen developments and the lack of consistency in countries' reporting suggest that legally binding targets would not be in Australia's interests. Accepting legally binding targets would, in the event of alleged non-compliance by Australia, enable other parties to take action against Australia under applicable international dispute settlement mechanisms. Irrespective of the merits of any such claim, Australia could be drawn into costly and politically damaging dispute settlement procedures. Therefore, Australia should pursue an outcome which does not involve legally binding targets.

24. Australia should resist acceptance of the Convention's current arrangement for burden sharing among EU member states as a means of gaining leverage on the issue of equitable burden sharing for all Annex I parties, or on the inclusion of sufficiently strong caveats to allow differences in

individual country circumstances to be exercised in the interpretation of a uniform target.

25. Consideration of a the appropriate timetable to apply to the Berlin Mandate outcome raises a range of complex issues. Australia's final position on this issue would be premised on the nature of the final package resulting from the negotiations. At this stage, given the uncertainties and potential economic costs for Australia, as well as Australia's position on providing for the involvement of developing countries in the next round of negotiations, Australia should seek an outcome which applies to the shortest possible time frame (i.e. 2005, or failing that, 2010). However, this does not preclude Australia from considering a longer time frame in the final stages of the negotiations if that is shown to be in Australia's interests.

EQUITABLE BURDEN SHARING AND DIFFERENTIATED TARGETS

This attachment outlines:

- I. Equity in the Convention and the Berlin Mandate;
- II. Australia's approach to equity;
- III. Other country positions;
- IV. Australia's future negotiating strategy; and
- V. Outlook for negotiations.

I. Equity in the Convention and the Berlin Mandate

2. The concept of equity is a key guiding principle in the Convention. The Convention stipulates that parties should:

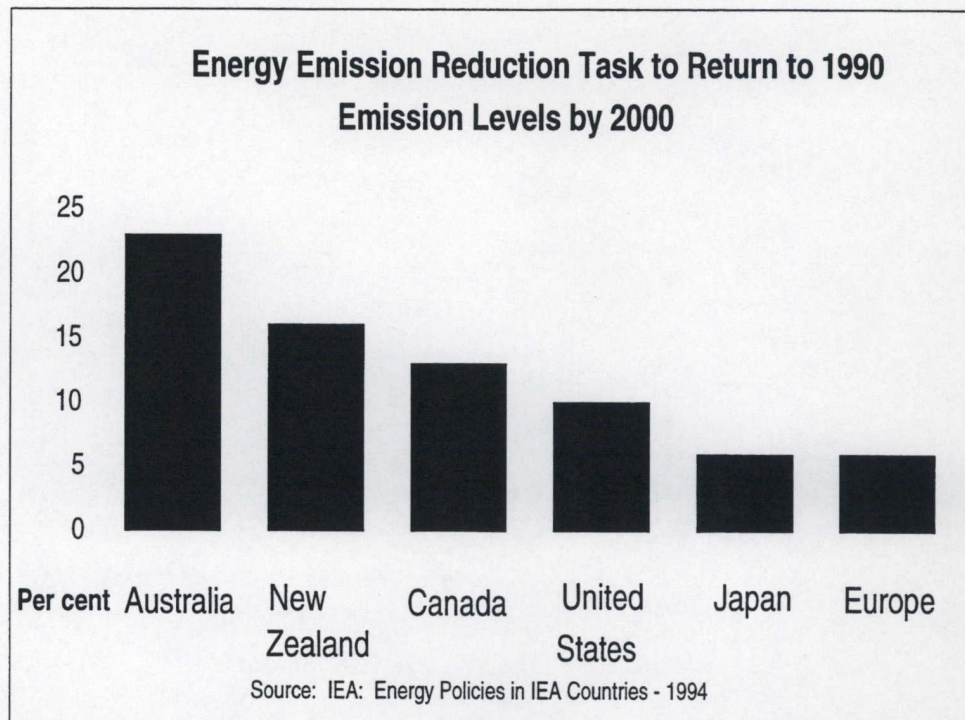
"protect the climate system for the benefit of present and future generations of humankind, on the basis of equity and in accordance with their common but differentiated responsibilities and respective capabilities." (Article 3.1).

3. The reference to "common but differentiated responsibilities" reflects the principle enshrined in the Convention that developed countries should take the lead in action to mitigate global warming because of their greater historical contribution to the enhanced greenhouse effect and the recognition that per capita emissions in developing countries are still relatively low and will grow to meet their 'overriding priorities to promote economic and social development and eradicate poverty'. This commitment by developed countries to take the lead in combating climate change was reaffirmed by the Berlin Mandate which precludes any additional commitments by developing countries in this current phase of negotiations.

4. In addition, both the Convention and the Berlin Mandate also require equity to be considered more narrowly within the Annex I group of countries. This requirement is made explicit by noting that efforts to reduce greenhouse gas emissions must take into account: differences in starting points and approaches; economic structures and resource bases; the need to maintain strong and sustainable growth; available technologies and other individual circumstances; as well as the need for equitable and appropriate contributions by each of these Annex I parties to the global effort to address climate change.

5. These caveats, although critically important, give little guidance to negotiators seeking to achieve equitable outcomes. This is the heart of the problem on equity. While all parties accept its importance as a concept, there is little agreement on what it means in practice.

6. Given the disproportionately large adverse economic consequences on Australia of adopting a uniform target, Australia has been at the forefront of advocating the need for equity to be an integral and fundamental element of ongoing negotiations under the Berlin Mandate.



II. Australia's Approach to Equity

7. Australia has argued that a uniform target approach is inequitable. For example, the per capita emission reduction task varies substantially depending on the population growth rate of countries. The inequity of uniform approaches is demonstrated in the graph which provides a measure of the emissions reductions required to return to 1990 levels when compared to projected emissions growth over the period 1990 to 2000. Australia has argued that while countries could cope with such inequities over the short term (i.e. 1990 to 2000), such inequities will grow over time and hence prejudice against the sustained global effort to mitigate climate change over the longer term.

8. This view is based on a recognition that:

a. the uniform target approach is not cost effective and does not recognise the fact that the cost of mitigation varies significantly across countries due to differences in resource endowments, underlying emission growth, the scope for changing the fuel mix in electricity generation, and efficiency in energy production and use

i. the static approach of basing emission objectives relative to a historical base year (i.e. 1990) accounts for country differences at the base year, 1990

ii. it does not, however, properly address or make allowances for changing circumstances of countries due to population, technological development, resource discoveries, changing trade patterns etc. Hence the inequity of the uniform approaches based on historical emission levels will grow over time. The DFAT/ABARE study, *Global Climate Change: Economic Dimensions of a Cooperative International Policy Response Beyond 2000* provides further demonstration that uniform approaches to limiting emissions based on historical emission levels will exacerbate the level of inequality

between countries over time both in respect of their required abatement and associated cost burdens;

- b. while the current approach of allowing countries to make corrections to the emission objectives to better reflect their national circumstances and perceptions of equity could adequately address these difficulties, they could equally result in the collective Annex I objective not being achieved and hence compromise the environmental objective; and
- c. in the absence of guidelines to define the extent of allowable divergences from a uniform target it could become more difficult over time for parties to continue to be assured of equitable treatment under such an approach, or to be assured collectively that the environmental objective would be realised.

9. Using these arguments, Australia has strongly argued that an explicit consideration of equity would serve to enhance the negotiated outcome. First, the environmental effectiveness of the Convention ultimately depends on securing the maximum participation and commitment of countries to achieving collective environmental outcomes. Perceptions of equity in efforts to limit emissions would bolster this process. Perceptions of unequal treatment, on the other hand, would achieve the opposite outcome by creating categories of winners and losers among countries. In other words, while perceptions of inequity can serve to bid down the environmental outcome, an equitable approach will be subject to the opposite dynamic: collective commitment by Annex I parties and explicit recognition of equity principles underpinning each Annex I party's contribution to achieving it would reinforce the imperative for the achievement of the collective objective and improve the overall environmental outcome.

10. Second, policies that promote equity can also promote economic efficiency (i.e. they can cost less). The cost of reducing emissions varies greatly between countries according to their dependence on fossil fuels in production, their underlying rate of growth in emissions, and the cost of substituting away from fossil fuels in the production of electricity. Uniform approaches to limiting emissions based on historical emission levels impose unnecessarily high costs on particular countries, as well as globally, because emission reductions are not made in their least cost locations.

11. A further important consideration for seeking an equitable Berlin Mandate outcome is that such an outcome could help facilitate the involvement of key developing countries over time.

12. If the Berlin Mandate outcome is perceived as producing an outcome which is inequitable between Annex I countries, developing countries may form the view that their participation in mitigation efforts would pose excessive and inequitable costs. Consequently, their reluctance to participate in the global efforts to address climate change could increase, as there would be no built-in guarantees that first steps by them would be in accordance with their individual circumstances, level of development and capacity to act.

13. By contrast, a Berlin Mandate outcome which explicitly incorporates equity within Annex I parties (including differences in income, population growth, economic structures and trading patterns) is more likely to demonstrate the commitment of Annex I parties to ensuring equitable and appropriate treatment for all parties, thus facilitating progressive developing country participation over the longer term (i.e. outside the time frame of the Berlin Mandate outcome).

14. Australia's approach in promoting equitable (and more efficient) outcomes from the Berlin

Mandate process has been to, as a first step, establish what determines equity. Australia has sought to gain support for the 'ability to pay' principle which lies at the heart of all taxation systems (i.e. horizontal and vertical equity):

- a. equitable contributions: all Annex I countries of comparable income should face broadly equivalent economic costs on a per person basis (net national economic cost - measured by GDP forgone - could be used to measure a country's emission abatement efforts); and
- b. appropriate contributions: Annex I countries, where individuals have, on average, greater capacity to pay, should contribute more as in various international fora (such adjustment could be made on the basis of per person GDP).

15. Based on these principles, equity in a climate change context could be defined as seeking to equate per person costs, defined as the percentage of GDP foregone, incurred through emission abatement efforts. In addition, adjustment should be made to allow for differences in a country's capacity to pay.

16. Australia has argued that this equity principle should be one of three fundamental criteria against which the appropriateness of any greenhouse gas emission target should be assessed: the other two criteria being environmental and cost effectiveness.

17. These arguments have been supported by the DFAT/ABARE study. The study found that different rules to promote equity produced widely different economic impacts across countries; that uniform target approaches appear to impose relatively more significant costs on countries like Australia, which have relatively fast projected population growth rates; and that differentiating targets for population growth would be relatively more equitable.

18. Further, the study estimated the annual cost of stabilising emissions at 1990 levels would offset around half the reported annual gains to Australia from the Uruguay Round. The study also found that the costs to Australia were roughly three times the cost to the EU, the United States and Japan. Finally the study found that alternative, more equitable approaches, would not only reduce the cost to Australia but also achieve more environmental and cost effective outcomes.

III. Other country positions

19. Although some countries - particularly Canada, New Zealand, Norway, the Netherlands and Iceland - have generally supported Australia's equity arguments, they have not considered it crucial to their national interests to try and force the issue. Other countries - particularly AOSIS and the EU led by Germany - although not rejecting the validity of these arguments, have taken the firm view that such an approach is not a feasible option in the limited time remaining for the Berlin Mandate negotiations to conclude. They are in favour of a uniform target approach because of its established precedence, simplicity and ease of negotiation.

20. The major reason for the lack of strong support from any other country is that, apart from Australia, countries have relatively little to lose from a continuation of the current approach.

21. The EU, as a regional economic integration organisation, is allowed to collectively meet the uniform target rather than have each EU member meet the target individually. The economic circumstances are such that the EU, as a whole, is favoured by a uniform target approach. Consequently, the EU's interests are best served by negotiating its burden sharing arrangements

internally rather than sharing the burden with other OECD countries (and accepting a greater collective commitment).

22. Japan is also not badly affected by the uniform target approach and has little to gain from supporting more equitable approaches.

23. The US, although concerned about the relatively low burden of the EU under the current approach, is unlikely to gain significantly from more equitable approaches. It sees the danger of differentiated targets resulting in the US being required to do more under a uniform target approach. The US's basic assessment is that it could not sell domestically an outcome involving differentiated targets for OECD countries which would allow Australia to increase its emissions but require a reduction in US emission levels. Furthermore, it considers that any possible (small) gains made by advocating alternative approaches could significantly damage the Clinton Administration's green credentials; an important consideration in an election year.

24. Canada, New Zealand and Australia have most to gain from equitable approaches. However, unlike Australia, most of Canada's trade is with other OECD countries (predominantly the US) and, consequently, it is less concerned about the implications of uniform approaches for its international competitiveness and the potential for its industry to move offshore to developing countries. New Zealand is confident that it could meet any uniform commitment by enhancing its 'sinks' (i.e. forests) capacity to absorb emissions to offset increases in emissions from other sectors.

25. The Economies in Transition also support the continuation of the uniform target approach provided the Berlin Mandate outcome contains a separate and lower target for them compared with developed countries.

26. While there is no single view among developing countries, the majority - particularly the major greenhouse emitters - could be expected to oppose further development of Australia's position on equity, as the successful development of an approach for negotiating equitable contributions in the Berlin Mandate outcome could make it more difficult for them to avoid mitigation commitments in future negotiating rounds.

IV. Australia's future negotiating strategy

27. It will be important for Australia to continue to develop and elaborate its equity arguments in the Berlin Mandate negotiations for at least the following two reasons:

a. First, continuing to focus on equity and differentiation should lay the basis for Australia to pursue more equitable approaches in future rounds of negotiations, including incremental steps for progressive participation by developing countries and progress towards the most economically efficient and equitable long term solution to mitigating climate change. A long term outcome which meets these objectives would be a tradable quota regime which involved an acceptable system of initial allocations.

b. Second, while Australia should continue to articulate the general case for equity in climate change negotiations and to set out specific ideas on equity, we recognise that in this round of negotiations it is highly unlikely that we will achieve differentiation of targets to reflect, for example, different abatement costs in different countries or even differences in the rates of population growth. At some stage in the negotiations, we will therefore need to shift our focus to minimising the impact of a uniform target by unilaterally interpreting the Berlin Mandate outcome to better reflect our national circumstances and perceptions of equity (this

would also be consistent with our approach to unilaterally interpreting the Convention's current implied target in light of national circumstances).

28. In line with this approach, departments are looking to develop a number of variants and approaches which may be worth pursuing in the Berlin Mandate negotiations.

Targets based on emission projections rather than historical emissions

29. Under the uniform target approach countries are required to return to emissions to historical emission levels (i.e. 1990) by a particular target year (i.e. 2000 in the case of the Convention). An alternative, possibly more equitable approach could be to require countries to reduce emissions by a certain percentage from the hypothetical future emission levels (i.e. business-as-usual projections where it is assumed no policy action has been taken to restrict greenhouse gas emissions).

30. Preliminary consideration suggests that such an approach could possibly come some way to achieving Australia's objectives in the Berlin Mandate negotiations: to achieve a sound environmental outcome; to distribute the costs equitably among Annex I countries; and to provide a dynamic flexible basis for successive climate change agreements including by incorporating dynamic factors (such as population growth and changing trade patterns). The value of the approach is that it puts emphasis on the real drivers of emissions growth - population growth, fossil fuel intensity, trade patterns and how they vary between countries.

31. An approach based on emissions projections could also prove attractive to developing countries laying the basis for their participation in future climate change agreements. Factors for which developing countries may want special consideration (such as high population and economic growth rates, increases in energy intensity as economies proceed from agrarian to industrial stages of development) are built into emissions projections. It would be highly unlikely for developing countries to agree to any emission reduction obligations which were based on historical emission levels and hence did not reflect the fact that per capita emission levels in developing countries are still relatively low.

32. Despite these arguments such an approach is likely to face strong opposition due to the recognition that the emissions for some countries - including Australia - will need to grow relative to 1990 levels. Other countries - particularly the EU - have also expressed strong opposition to such approaches; perhaps, reflecting the fact that this approach would require greater emission mitigation on their part. The opposition has been expressed in technical terms noting that such an approach would be difficult to negotiate given the perceived difficulties in achieving international agreement on emission projection methodologies, establishing their credibility and ensuring consistency across countries. Given the reductions in emission levels known to be required to achieve the objective of the Convention, an outcome based on the presumption of emissions growth is a more difficult message to sell environmentally than a message based on emissions reductions from 1990 levels.

Per capita emission targets

33. Adjusting targets for population growth recognises the fact that as population increases, greenhouse emissions will also increase (holding all other things constant). Countries with the highest population growth will therefore tend to have the highest underlying growth in emissions. France and Japan have expressed the Convention implied target in per capita terms.

34. Emission targets with population adjustments could also, over the longer term, help facilitate the graduation of developing countries. Developing countries typically have high population

growth rates and may be unwilling to accept Convention commitments which fail to account for their underlying growth in emissions. Making explicit allowance for population growth could avoid, or ameliorate, North/South polarisation along "inappropriate consumption versus excessive population growth" lines common in development and other forums.

Targets with corrections for emissions embodied in trade

35. The issue of traded emissions is important to Australia given the continued specialisation in energy intensive exports such as aluminium, steel and other energy intensive resources processing industries - specialisation which is expected to increase as a result of international trade liberalisation. Future growth in these sectors could be limited by negotiating proposals based on binding emission commitments that do not provide for corrections for trade. Furthermore, not adjusting for emissions embodied in trade would also allow countries to 'trade around' disciplines on emission limitations by scaling back their energy intensive industries and importing their requirements.

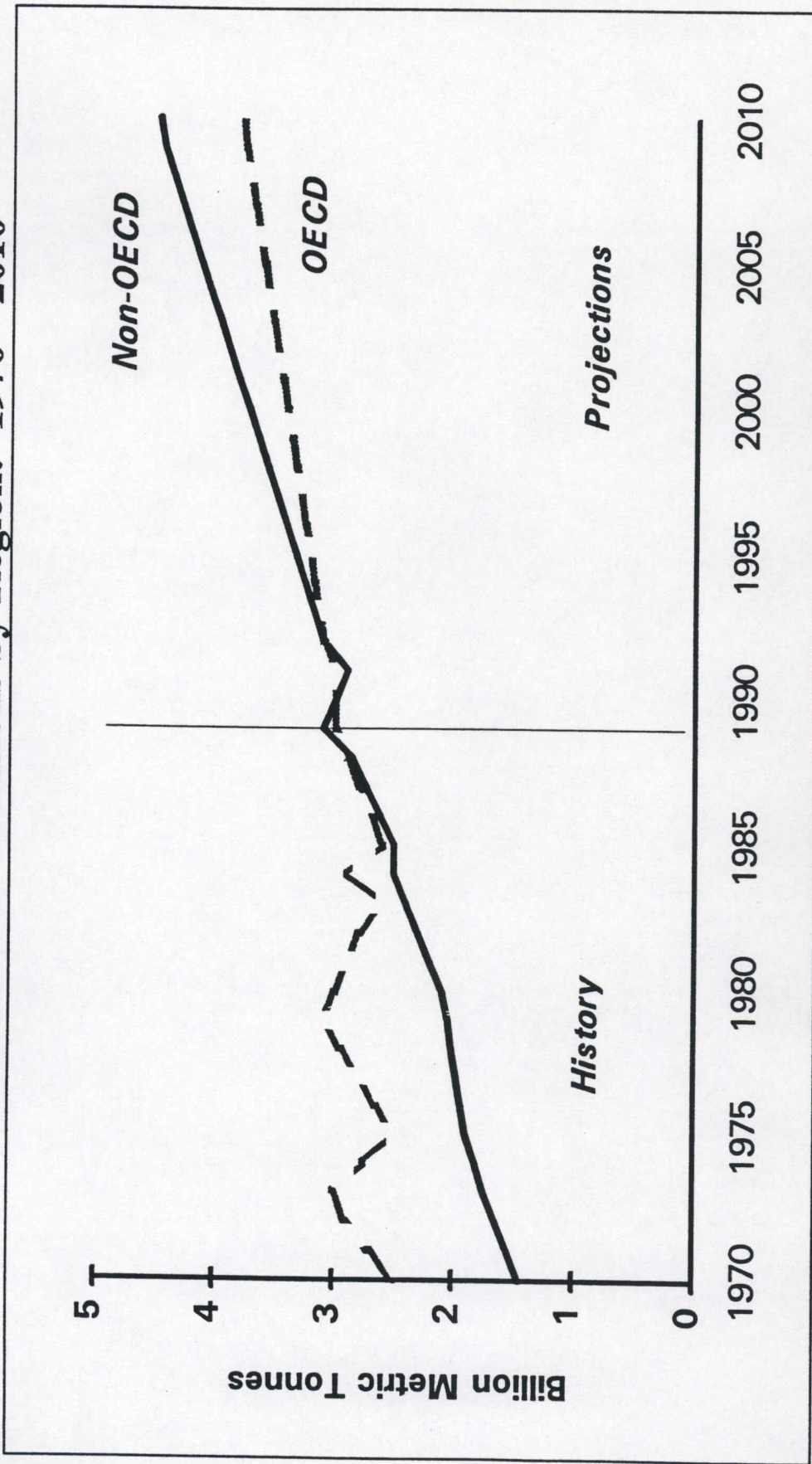
- a. The importance of trade is recognised in the Convention's requirement to take into account the situation of 'parties with economies that are highly dependent on income generated from the production, processing and export, and or consumption of fossil fuels and associated energy intensive products'.
- b. Other countries have raised the issue of trade in connection with greenhouse gas emissions include Denmark, Norway, the Netherlands and Canada.

V. Outlook for the negotiations

36. Countries like the US, EU and Japan have little to gain from moving away from undifferentiated approaches like returning to 1990 levels of emissions and holding at those levels beyond 2000, to more equitable approaches. If equity were to become a central element of the negotiations, it would greatly complicate them and would have the potential to extend negotiations beyond 1997. The US, the EU and Japan are anxious to achieve an outcome by the second half of 1997. Further, research to date, including by DFAT/ABARE, shows that some of these countries, the EU in particular, stand to derive more economic advantage from uniform target than from differentiated approaches. Against this background, it is highly unlikely that Australia will be able to achieve any of the three differentiated outcomes specified above.

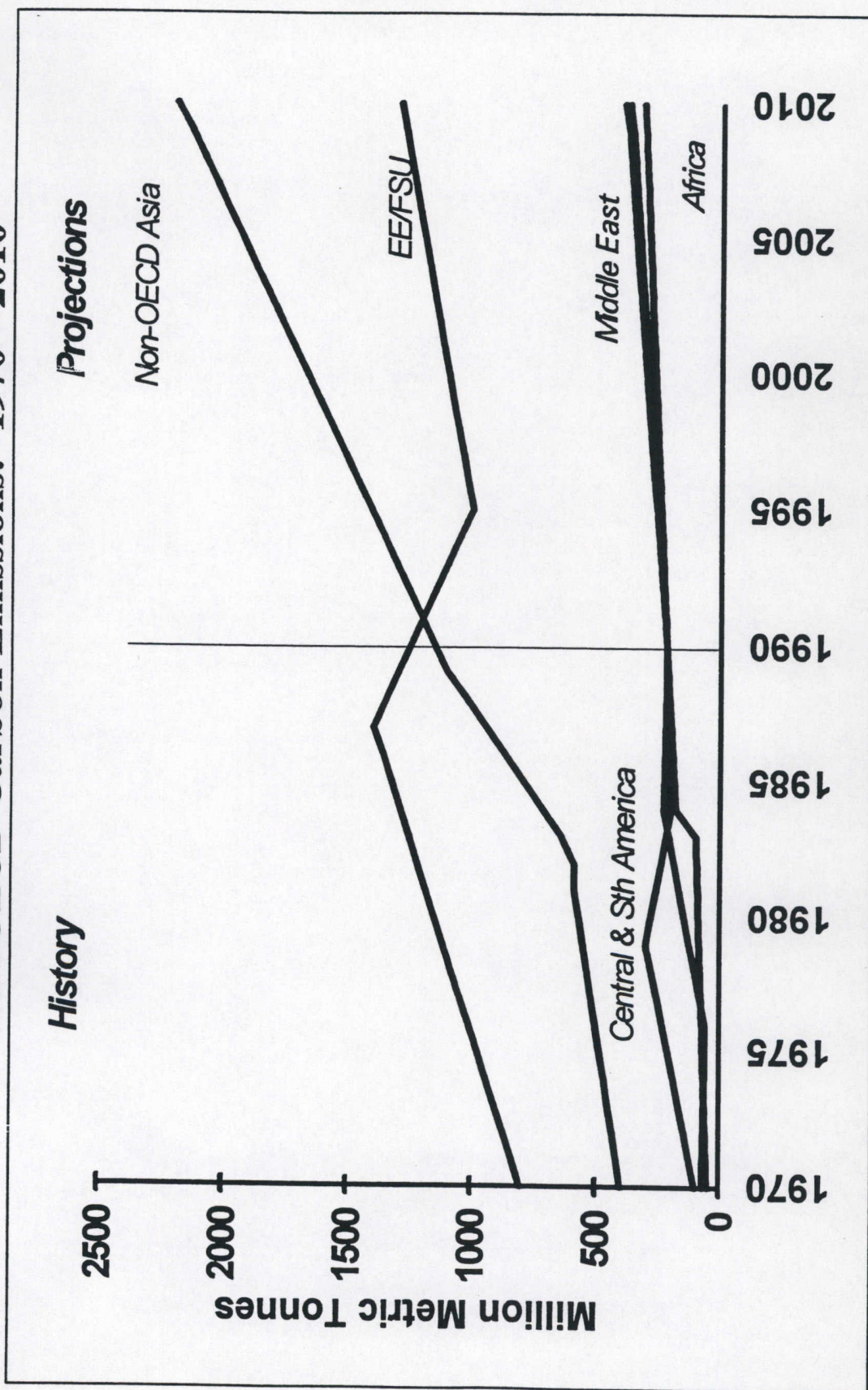
37. In these circumstances, perhaps the best outcome that could be secured in this round of negotiations would be some form of uniform target that could be interpreted unilaterally to reflect national circumstances (e.g. adjusting for the facts that our population is growing faster than the OECD average and we are a net and growing exporter of emissions). The target would need to be modest and short term (i.e. 2005, or failing that, 2010). Leaving Australia with this flexibility is incompatible with a system of fixed, legally binding targets. Given the importance of retaining as much flexibility as possible to interpret outcomes, it would not be in our interests to propose (or agree to) legally binding outcomes even in the highly unlikely case of the Berlin Mandate outcome taking the form of differentiated targets based on explicit equity principles. The danger would be that Australia's agreement to the principle of legally binding outcomes could have more weight and longevity than the favoured equity rules to which it applied.

World Carbon Emissions by Region: 1970 - 2010



Note: Non-OECD Countries include the Economies in Transition
Source: International Energy Outlook, 1995 (US Department of Energy)

Non-OECD Carbon Emissions: 1970 - 2010



Source: International Energy Outlook 1995 (US Department of Energy)

NEGOTIATING OPTIONS AND PROPOSALS: POLICIES AND MEASURES

This Attachment lays out the range of proposals which have been submitted and options canvassed in the Berlin Mandate negotiations relating to policies and measures.

2. All parties under the Convention are required to implement and report on national programs containing measures to mitigate climate change. The Convention does not specify which policies and measures parties should implement to mitigate climate change. However, the Convention requires that policies and measures to mitigate climate change, including unilateral ones, "should not constitute a means of arbitrary or unjustifiable discrimination or a disguised restriction on international trade". Relevant policies and measures implemented by Annex I parties are listed in their national communications.
3. The Berlin Mandate requires parties to aim, as one of the priorities in the process of strengthening Annex I parties commitments, to "elaborate" policies and measures. There were many motives for inclusion of this element in the mandate. It was felt by many that targets alone were not sufficient to ensure implementation of the policies and measures necessary to achieve them.
4. The following two broad approaches have been suggested for elaborating policies and measures in the Berlin Mandate outcome:
 - a. Menu approach: one or more lists of possible policies and measures, from which Annex I parties would be committed to select those that best suited their national circumstances whether implemented individually or under a coordinated approach
 - b. Mandatory approach: a mandatory set of specific policies and measures to be implemented by all Annex I parties - under this option, policies and measures could be implemented in either a uniform or differentiated manner.
5. The only definite proposals to date on policies and measures have been tabled by the EU. The EU is strongly in favour of the Berlin Mandate outcome including binding commitments on policies and measures, including policies and measures to be coordinated among OECD countries. High among some EU member state objectives is a carbon tax harmonised among OECD countries.
6. The EU has circulated a draft structure for a protocol which envisages three annexes in which policies and measures would be listed:
 - a. a list of policies and measures to be adopted and implemented by all Annex I parties;
 - b. a list of policies and measures to be given high priority consideration for inclusion in the national programs of Annex I parties and for early coordination; and
 - c. a list of policies and measures to be given priority consideration, as appropriate, by Annex I parties for inclusion in their national programs.
7. The EU has also tabled a list of policies and measures proposed for coordinated implementation by all Annex I parties:
 - a. renewable energy sources;

- b. energy efficiency standards, labelling and other product-related measures;
- c. carbon dioxide emissions from the transportation sector;
- d. economic instruments (e.g. carbon tax);
- e. energy policies;
- f. industrial sector emissions (including voluntary agreements);
- g. agricultural sector emissions;
- h. forests;
- i. hydrofluorocarbons and perfluorocarbons; and
- j. actions at local level in the urban environment.

The EU proposals vary in the amount of detail provided, and the possible status of each item on the list has not been specified in terms of the EU's three-annex protocol proposal.

8. The EU envisages that the annexes would be frequently reviewed and up-dated in light of further analysis and assessment, technological progress and agreements reached on coordination of instruments in the Ad Hoc Group on the Berlin Mandate (AGBM) and other fora. Further policies and measures could be added to the annexes over time and existing ones further specified or amended. The EU is expected to submit a further list of policies and measures which it proposes for binding common or coordinated commitments in the Berlin Mandate outcome.

9. The OECD/International Energy Agency (IEA) has also been a contributor to development of thought about how policies and measures could be coordinated internationally. Australia is represented on the OECD/IEA "Annex I Expert Group" which is studying policies and measures that may be suitable for common action. The purpose of the Common Action Study by the OECD/IEA Annex I Expert Group is to examine policies and measures which are potential candidates for common or coordinated implementation by OECD countries with the objective of reducing greenhouse gas emissions. The following nine studies represent the first of two tranches, and will be submitted to:

- a. Sustainable transport: carbon dioxide emissions from vehicles (covers both national packages for achieving targets and specific measures - vehicle sales taxes, fuel economy standards)
- b. Energy market reform: market barriers/market access (deregulation of energy markets and identification of barriers to trade in electricity)
- c. Energy market reform: full cost pricing (taxes for emissions of non-GHG pollutants in the power generation sector)
- d. Economic / fiscal instruments: subsidy removal for the electricity and transport sectors
- e. Economic / fiscal instruments: taxation (carbon / energy taxes)
- f. Demand-side efficiency: voluntary agreements with industry (with industry in key sectors, e.g. iron and steel, aluminium)

- g. Demand-side efficiency: product efficiency standards for home appliances and office equipment
- h. Sustainable agriculture / forestry: development of options for best practice in greenhouse gas reduction
- i. Other: financing energy efficiency in the Economies in Transition

10. Consideration of the above studies is likely to give added impetus to negotiations on common or coordinated policies and measures. Work is also under way on the second tranche of studies, which includes:

- a. Energy market reform: incentives for utility demand side management and energy service companies
- b. Energy market reform: conversion efficiency standards for thermal power plants and other electricity system equipment
- c. Research and development for renewable energy
- d. Voluntary Agreements: electricity utilities
- e. Sustainable transport: (pricing, e.g. congestion pricing; regulation, e.g. to encourage combined transport; and removal of subsidies/price distortions)
- f. Sustainable transport: incentives to introduce alternative fuels in the transport sector (fuel specifications; Government procurement; and tax incentives)
- g. Economic / fiscal instruments: bunker fuel tax (marine and aviation)
- h. Other: financing for infrastructure development in Annex I countries, in particular countries with economies in transition

Outlook for the negotiations on policies and measures

11. Further negotiations on policies and measures will focus on their incorporation into the legal instrument which contains the outcome of the Berlin Mandate process. Pressure may intensify for the AGBM to narrow down its focus to a few specific policies and measures (e.g. carbon taxes, energy efficiency standards and fuel efficiency standards for motor vehicles) on the basis of their potential for coordinated action in achieving emissions reductions.

12. Proposals for incorporation of specific policies and measures in the legal instrument will require careful consideration by Australia: not only in determining whether Australia should participate in the coordinated adoption of any such policies and measures; but also in assessing the implications for Australia of other countries adopting such policies and measures (which could have trade impacts and could potentially discriminate against products from non-participating countries on the basis of their not meeting prescribed environmental standards).

13. Even under the non-binding 'menu approach', the specification of policies and measures in an international legal instrument implies international acceptance and agreement to adoption of such policies and measures as necessary to achieve the Convention's objectives. Such specification of policies and measures could therefore be interpreted as meeting or superseding the existing

requirement in the Convention to ensure that these policies and measures do not constitute a means of arbitrary or unjustifiable discrimination or a disguised restriction on international trade.

14. This would have significant trade policy implications as it would mark a major development in the trade and environment debate. Currently, trade measures included in multilateral environment agreements have been trade bans or limitations on specific products. Inclusion of policies and measures in the form envisaged by the EU and OECD/IEA would provide very broad scope for application of measures to restrict trade (on multilaterally sanctioned environment grounds) across a broad spectrum of electrical goods, mechanical and industrial machinery, motor vehicles and, ultimately, commodity trade.

Australian position

15. Any provision in the Berlin Mandate outcome which specifies particular policies and measures would have major implications on both the trade and environment fronts. Inclusion of policies and measures in the outcome in the manner so far proposed raises significant trade policy concerns, as well as specific trade concerns in terms of the possible adverse trade impact that coordinated implementation of these measures could have on Australian export interests if adopted by other Annex I parties. Given the wide scope of economic activities involved in addressing climate change, it could have impact across virtually all economic sectors that are significant greenhouse gas producers. The issue is therefore one which has broader implications than the specific provisions of the Berlin Mandate outcome, and Australia should accordingly adopt a cautious approach

16. From a trade policy perspective, inclusion of these policies and measures as proposed by the EU would be establishing significant precedent about the nature of the relationship between international trade rules and action to protect the environment. The rationale for common or co-ordinated adoption has been that unilateral adoption is not feasible for trade competitiveness reasons. Measures adopted collectively, with built-in penalties to deal with "free riders" who do not participate would establish a multilaterally sanctioned basis on which to discriminate against the trade of non-participants. This could have impact across a wide range of economic sectors. It could serve as a precedent for other international agreements and could possibly conflict with existing obligations (e.g. the non-discrimination rules in the WTO). Measures so far proposed depend on being able to discriminate in this way for their effectiveness and feasibility. If realised, over time this could provide a significant basis on which to undermine the applicability and effectiveness of the most-favoured nation non-discrimination rule on which the WTO is based.

17. It could be argued that internationally coordinated implementation of certain policies and measures might carry benefits where specific policies and measures, which would be effective in reducing greenhouse gas emissions, would not be implemented unilaterally by countries due to trade competitiveness or other economic concerns. Where coordinated action made their implementation possible without adverse economic effect, considerable environmental benefits could be realised.

18. Australia would, for example, be a strong supporter of coordinated action to address energy subsidies. However, as Australia has found in negotiations in the Uruguay Round on subsidies and on German and British coal subsidies and under the Energy Charter Treaty, effective multilateral action to address energy subsidies would involve a major multilateral negotiation in itself. Given

our trading pattern and competitiveness concerns, Australia would need any such negotiation to be based on the premise of comprehensive concerted action by all Parties and not just for selective coordinated action by Annex I Parties alone. Our position in the AGBM should therefore reflect this underlying set of interests. At the same time, we should be looking to ensure that any future action under the Convention auspices on energy subsidies be on the basis of a full multilaterally agreed mandate and that any action would be developed in conjunction with and fully consistent with WTO and other related international agreements (e.g. the Energy Charter).

19. In these circumstances, Australia should actively work in the AGBM for a full analysis of policies and measures proposed for adoption and seek further guidance from Ministers of any policies and measures which would not have an adverse impact, directly or indirectly, on Australia's economic or trade interests.

20. The different national circumstances of Annex I countries mean that the effectiveness and economic impact of specific policies and measures will vary between countries. Australia's economy is the most carbon-intensive in the OECD. This means that policies and measures suitable for economies with lower levels of carbon-intensity (e.g. a carbon tax) may have significant adverse economic effects if implemented in Australia. For this reason it is important that the Berlin Mandate outcome allow individual countries to choose, in the context of meeting their emissions targets, the policies and measures most suited to their national circumstances. To ensure that countries have flexibility, any consideration of policies and measures should be comprehensive and include all sources of emissions and sinks of greenhouse gases.

21. On the basis of measures so far proposed, Australia's position should be that we strongly favour an Berlin Mandate outcome that does not specify policies and measures in the manner proposed by the EU but provides for ongoing analysis and possible future negotiations on policies and measures under the Convention involving all Parties. The outcome should allow individual countries to choose, in the context of meeting their emissions targets, the policies and measures most suited to their national circumstances. Australia should resist any inclusion of policies and measures in the Berlin Mandate outcome which would provide a basis for trade discrimination

22. In line with this, Australia should only consider inclusion of policies and measures in the AGBM outcome if it can be shown that such inclusion would not have an adverse impact, directly or indirectly, on Australia's economic and trade interests. The debate so far suggests that more work needs to be done internationally before inclusion of specific policies and measures can be considered. This work is unlikely to be completed before the conclusion of the Berlin Mandate negotiations.

23. Australia should seek as far as possible to build support in seeking such an outcome from other key countries, including the US, which have signalled their opposition to the inclusion of binding commitments on policies and measures in the Berlin Mandate outcome. This should include developing countries also, particularly those that have expressed concerns about the potential for adverse economic and trade effects of particular policies and measures which developed countries may adopt. Some developing countries do not see policies and measures as the central issue to be addressed in the Berlin Mandate process, preferring to concentrate on achieving binding targets for developed country emissions.

NEGOTIATING OPTIONS AND PROPOSALS: DEVELOPING COUNTRIES' COMMITMENTS AND COMPREHENSIVE APPROACH

This Attachment lays out the range of proposals which have been submitted and options canvassed in the Berlin Mandate negotiations relating to:

- I. Developing countries' commitments; and
- II. Comprehensive approach.

I. Developing countries' commitments

2. The involvement of developing countries in mitigation commitments was the most contentious issue in the negotiation of the Berlin Mandate. The issue proved so divisive that since then, all countries have refrained from reopening this issue and accepted that there will be no new commitments for developing countries resulting from AGBM negotiations. Attention has concentrated on both confidence-building activities (e.g. the establishment of a pilot phase on Activities Implemented Jointly will allow some opportunities to engage developing countries in cooperative mitigation activities) and establishing the basis for developing countries' involvement in future rounds of negotiations.

3. Technical work has concentrated on engaging developing countries in advancing their commitments under Article 4.1 of the Convention. Some useful progress has been made in elaborating guidelines and preparations for developing countries' national communications. Work is also under way on technology transfer, capacity building and information exchange which is aimed at facilitating further action by non-Annex I parties under Article 4.1.

4. Developing countries have reiterated that fulfilment of the Berlin Mandate should not involve them in new commitments. They have also argued that the extent of their effort to implement their commitments under Article 4.1 would be conditional on Annex I countries providing financial and technical assistance in line with the Convention's requirements. Developing countries have strongly registered their concern with both the amount of financial resources committed by developed countries and also the operations of the Global Environment Facility (which administers these funds) which they regard as controlled by developed countries and weighted against their interests. Developing countries have also argued that implementation of their Article 4.1 commitments would be dependent on developed countries meeting the implied target of returning their emissions to 1990 levels by 2000.

Australian position

5. Australia's strategic approach should be aimed at getting developing countries, particularly those which are becoming significant emitters, to undertake mitigation commitments in the next round of negotiations to strengthen the Convention. There is clear and mounting evidence that the ultimate objective of the Convention - to stabilise greenhouse gas concentrations in the atmosphere at a safe level - cannot be achieved without the involvement of those developing countries. Therefore the set of commitments resulting from the Berlin Mandate process should be consistent with the objective of encouraging and facilitating developing countries' involvement in the next round of mitigation commitments.

6. It is clear that developing countries would not be able to take on uniform emission targets. In

developing alternative approaches, Australia should concentrate on developing an approach to differentiated targets in accordance with each individual country's capacity to undertake mitigation commitments. This would represent the best approach to bringing developing countries on board over time, in a way which is consistent with their individual circumstances and development needs.

7. Australia should work to ensure the COP3 outcome includes strong endorsement of Activities Implemented Jointly.

8. Australia's focus in respect of the specific element of the Berlin Mandate relating to advancing the implementation of developing countries' existing commitments, should concentrate on the technical work relating to Article 4.1. Advancing the implementation of commitments by developing countries through the AGBM should not be contingent, as some developing countries have sought to make it, on developed countries providing additional financial resources beyond those to which they are already committed under the Convention.

II. Comprehensive approach

9. Climate change is caused by a range of gas emissions - carbon dioxide, methane and nitrous oxides being the principal ones. Also climate change can be tackled in two ways: reducing emissions, or creating sinks (e.g. forests) which absorb emissions. Most analytical work has focused on emissions and only on one gas: carbon dioxide. Those countries which depend on fossil fuels and have large landmasses in comparison to their population (such as Australia, Canada, US and Norway) have emphasised the importance of the Berlin Mandate negotiations addressing other gases and sinks. New Zealand is also strongly supportive of ensuring sinks are included, given the absorptive potential of its forests. This will ensure that the most cost effective means of reducing climate change are available to parties in addressing climate change.

10. A 'comprehensive approach' is embedded in the Convention (Articles 3.3, 4.1 and 4.2) and in the Berlin Mandate (Paragraph 1(f)). Moreover, the Second Assessment Report of the IPCC recognises the possibility and feasibility of greenhouse gas mitigation through implementing policies and measures based on the comprehensive approach. It will be important to guide the analysis and assessment of any proposals by considering the threshold questions of ensuring an effective environmental outcome is achieved in a cost effective manner which takes account of differences in national circumstances and ensures equity between Annex I countries. Practical issues relating to the implementation of various approaches, including methodological issues, would also need to be identified and analysed.

11. The EU continues to advocate an approach which gives priority to limiting emissions of carbon dioxide. It has concerns about the inclusion of other greenhouse gases, particularly methane in view of its heavy use of fertilisers and intensive animal rearing practices. An AGBM outcome which focuses solely on carbon dioxide would ignore the significant impact of other greenhouse gases, particularly methane, on global warming and would limit the ability of non-energy intensive countries to contribute to the solution to the problem.

Australian position

12. Australia should continue advocating adherence to the comprehensive approach (i.e. consideration of all greenhouse gases, all emissions sources and sinks, and all sectors).

COORDINATION COMMENTS**ATTORNEY GENERAL'S DEPARTMENT**

The Attorney-General's Department supports the recommendations made in the Submission. In particular, it notes the recommendation in paragraph 27(d)(ii) that Australia should pursue an outcome which does not contain targets which are legally binding. That recommendation is the subject of elaboration in Attachment M paragraphs 15-18 and 23. It is also consistent with the sensible position that obligations binding as a matter of international law should not be negotiated or accepted if there is some possibility that Australia (and other countries) will not be able to meet those obligations.

**COMMONWEALTH SCIENTIFIC & INDUSTRIAL RESEARCH ORGANISATION
(CSIRO)**

2. With respect to those parts of the Submission for which CSIRO has competence and interest to comment, the Submission is acceptable in its current form.

DEPARTMENT OF FINANCE

3. Finance strongly supports the overarching strategy that outcomes of negotiation not involve Australia taking action which would have net adverse economic impacts nationally or be detrimental to Australia's trade competitiveness. Finance considers that this particular strategy should be interpreted as set out in the 'no regrets' principle under the National Greenhouse Response Strategy. Finance considers that any deviations from the strategy will need to be brought forward for Cabinet consideration before changes are made.

4. Finance considers that paragraph 27(d)(iii), which recommends that Australia should seek the shortest possible time frame on outcomes regarding targets and timetables, should not preclude a longer time frame if it is in Australia's interests and if the short-timeframe targets are not achievable.

5. Finance notes that there are no budgetary costs arising from the proposed negotiating positions. Should the question of financial commitments arise, Finance considers that any such proposal will need to be brought forward for Cabinet consideration before any commitments are made.

DEPARTMENT OF HEALTH AND FAMILY SERVICES

6. The Department of Health and Family Services has no comments on the draft Cabinet Submission.

DEPARTMENT OF INDUSTRY, SCIENCE AND TECHNOLOGY

7. DIST supports the submission recognising the need for Australia to fully participate in and influence negotiations leading up to the Third Conference of Parties in view of our international obligations and our vulnerability to decisions which do not take account of our particular circumstances. In this regard we strongly support the recommendation at paragraph 27(a) outlining fundamental considerations upon which our climate change negotiations should be based.

8. DIST shares the concern of many in industry about the need to pursue an outcome which provides for genuinely equitable burden sharing among Annex I parties including through

differentiated targets and even differentiated commitments. DIST notes the assessment at Attachments M and N, that it is highly unlikely that Australia will ultimately achieve a differentiation of targets to reflect things like different abatement costs, different rates of population growth or emissions embodied in trade. We agree that, at some stage in the negotiations, it is likely that we will need to shift our focus to minimising the impact of a uniform target by a unilateral interpretation of available caveats. The uniform targets if invoked would have a deleterious economic impact on Australian industry which would be contrary to the spirit and intent of the Convention. In this respect we endorse the recommendation at paragraph 27(d) (v) (A) that this matter be brought before Cabinet if such circumstances arise. As industry ultimately delivers almost all emission abatement it will be essential to consult closely with industry during such a process.

9. DIST believes that the recommendation at paragraph 27(d) (vi), (Australia should pursue an outcome which does not specify mandatory or internationally coordinated policies and measures or include them in the outcome of the negotiations in a way which could provide the basis for trade discrimination) should include a reference to the effect that such policies and measures should also not have the effect of adverse distortion of the domestic economy. We see this as consistent with the negotiating considerations outlined in attachment A.

DEPARTMENT OF THE PRIME MINISTER AND CABINET

10. The Department of the Prime Minister and Cabinet supports the approach taken in the submission.

11. The Department has serious concerns regarding the Framework Convention on Climate Change. The dominance to date of 'north/south' negotiating blocs has worked against effective and economically efficient global action to limit greenhouse gas emissions. The Convention, and the Berlin mandate, currently excludes major greenhouse gas producing developing economies from taking emissions limitation action. Developing economies will dominate greenhouse gas emissions in the early part of the 21 century and progressively will need to take on responsibilities.

12. The Department believes that Australian representatives should consistently emphasise that, in due course, policy responses to climate change will require full involvement by relevant developing countries, and that the Convention will then need to accommodate this reality.

13. That said, the Department notes that the proposal for a negotiating position under the Berlin mandate (recommendation 27 (d)) will let Australia play a constructive role in this round of negotiations, working for marginal gains to defend our special interests as a carbon-intensive, developed economy with significant agricultural production. We are conscious that Australia's withdrawal from, or isolation within, the mandate negotiations would not prevent the outcome from having a serious economic effect on us, as it will encompass all our major trading partners.

14. We note that the negotiating position does not presuppose any particular final position by Australia and that Cabinet will consider any significant policy implications after the July 1996 second Conference of the Parties to the Convention (COP2). Final consideration of the Berlin mandate outcomes will also be subject to the National Interest Assessment under the new treaty provisions.

15. The Department strongly supports early action by Australia to take advantage of the

Convention's flexibility in interpreting our obligations (recommendation 27 (c)). The Department notes that several countries interpret the current implied target, of returning to 1990 levels by the year 2000, according to specific national circumstances. These include Japan, Denmark, Sweden, the Netherlands, Finland and France.

16. The Department notes the importance of a clear public articulation of Australia's position in the lead up to COP2 and urges early development of a media strategy.

DEPARTMENT OF TRANSPORT AND REGIONAL DEVELOPMENT

17. The Department of Transport and Regional Development (DTRD) supports the recommendations of the Submission, particularly the proposed approach to climate change negotiations set out in recommendation (a). The principles set out in recommendation (d) (i)-(iv) are strongly supported.

18. DTRD notes that recent work by the Bureau of Transport and Communications Economics shows that reduction of greenhouse gas emissions in the transport sector would be less cost effective than greenhouse reduction in some other economic sectors. In particular the creation of additional greenhouse sinks through afforestation would be far more cost effective than reducing transport emissions directly. Therefore we are particularly concerned that Australia not agree to sector specific greenhouse gas emissions targets or measures and support the principles set out in recommendation (d)(v) and (vi).

19. DTRD also is concerned over the long term economic impact of potential international climate change arrangements on the coal industry in regional Australia. DTRD is therefore particularly supportive of any approach which ensures an equitable sharing of the carbon emissions burden.

20. DTRD proposes that Attachment A, para 5, sentence 2, be amended by deleting the words "special concern should be to" and replacing them with "negotiating position should".

THE TREASURY

21. Treasury supports the recommendations of the Submission. The Submission acknowledges Australia's significant economic and trade interests and the impact that this has on our negotiating position.

22. Treasury notes that the Submission argues for Australia to continue to be involved in the international negotiations in order to further our interests. We note that climate change raises many complex policy issues and that further analysis and assessment is required in order to understand fully their potential ramifications. Australia should be wary to commit to additional commitments before such analysis is considered fully.

23. We believe that recommendation 27.(d)(iii) may be too unequivocal. We understand the desire to conclude the Berlin Mandate process as soon as possible. However, other things being equal, the shorter the timeframe for a given emission reduction, the more onerous is any emission reduction. Therefore, we believe a more cautious tone may be appropriate and any package of targets and timeframes should be subject to rigorous analysis and assessment to determine its compatibility with Australia's overall interests.