CHAPTER 4

AUSTRALIA'S GREENHOUSE PERFORMANCE AND STRATEGY

The primary objective of all greenhouse policy has to be to deliver substantial, real and timely reductions in greenhouse gas emissions. This has to be the primary criterion for judging the performance of [Australia's greenhouse] programs.[1]

Australia's Abatement Challenge

4.1 Australia's agreed target under the Kyoto Protocol, to reduce greenhouse gas emissions to 108 per cent of 1990 levels, was granted in recognition of Australia's particular national circumstances.[2] Australia's target of 108 per cent is 13 per cent higher than most OECD countries. Australia successfully argued that, among developed nations, it faces a distinctive set of challenges which will make effective climate change abatement difficult and costly. This claim, of 'a special case' in relation to Kyoto emissions targets, has been discussed at length in chapter 3 of this Report.

4.2 As a percentage of total emissions by Annex 1 countries, only nine of a total of 34 countries recorded a higher level of CO_2 emissions in 1990 than Australia. Excluding the United States (responsible for 36.1 per cent of CO_2 emissions by Annex 1 countries), the average Annex 1 country emissions in 1990 were 1.9 per cent of the total emissions.[3] At 2.1 per cent Australia is an above average emitter.

4.3 On a global basis, Australia's output of greenhouse gas emissions in 1990 was 1.4 per cent of total global emissions.[4] However, Australia is the largest emitter of greenhouse gases per person in the industrialised world.[5] The National Greenhouse

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1 Greenpeace Australia, *Proof Committee Hansard*, Canberra, 23 June 2000, p 752.

2 United Nations General Assembly, *Executive Summary of the National Communication of Australia*, 26 October 1995, A/AC.237/NC/4, p 3. See also Department of Foreign Affairs and Trade, *Australia and Climate Change Negotiations*, An Issues Paper, September 1997, pp 4-6, at dfat.gov.au/environment/climate/accn/overview.html (02/02/00); Australian Greenhouse Office, Submission 169, p 1682; and *The National Greenhouse Strategy: Strategic Framework for Advancing Australia's Greenhouse Response*, 1998, p 100.

3 'Report of the Conference of the Parties on its Third Session', The Kyoto Protocol to the Convention on Climate Change, p 33.

4 According to the Australian Greenhouse Office, this percentage will fall as emissions from developing countries grow in association with economic growth (AGO, Submission 169, p 1682).

5 Using official totals for 1995, supplied to the UN by the 35 Annex B (industrialised) Parties to the Kyoto Protocol, the Australia Institute calculated that Australia had the highest emissions per capita at 26.7 tonnes: 'this is twice the level for all other wealthy countries (13.4 tonnes) and 25 per cent higher than emissions per person in the US (21.2 tonnes). While the US has higher emissions per capita from energy

Strategy (NGS) attributes Australia's national emissions profile to a number of key factors which distinguish it from other OECD countries. In summary, these include Australia's:

- above OECD average population growth;
- remoteness from overseas markets;
- widely dispersed natural resources and reliance on long-haul transport;
- lack of economically viable energy alternatives; and
- dominance of world coal markets and fossil fuel reserves which form the basis of export-oriented and energy-intensive industries such as steel and aluminium.[6]

4.4 Despite having achieved an emissions target which allows for an increase in emissions above 1990 levels, Australia's emissions *National Greenhouse Gas Inventory* (NGGI) for 1998 indicates that growth in domestic emissions remains largely unchecked. The NGGI shows that, in 1998, Australia was 16.9 per cent over 1990 levels (excluding emissions from land clearing).[7] Without a reversal in current trends, Australia is likely to be well beyond its Kyoto target at the beginning of the first commitment period in 2008. Australia could also be faced with an equivalent or greater *cut* to emissions in the second and subsequent commitment periods.

4.5 In 1998 Australia's total emissions (excluding land clearing) were 455.9 million tonnes (Mt) CO_2, nearly 17 per cent above the 1990 level of 389.8 million tonnes. An increase of 63.3 Mt CO_2 in energy emissions alone was almost as great as the overall increase of 66.1 Mt CO_2. This increase was reduced in part by falls in the industrial emissions and land clearing.[8] A summary of the 1990 and 1998 greenhouse gas emissions by sector is provided in the figure opposite.[9]

4.6 The Australian Greenhouse Office (AGO) estimates that the growth in Australia's *total* emissions, including all sources and sinks (except land clearing), and allowing for the effect of current greenhouse gas abatement measures, will be 71 Mt CO_2 -e (or 18 per cent) between 1990 and 2010, 10 per cent higher than our Kyoto

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(20.6 tonnes compared to Australia's 17.6 tonnes), Australia has much higher levels of emissions from agriculture and land-use change' (The Australia Institute, Submission 79, p 2).

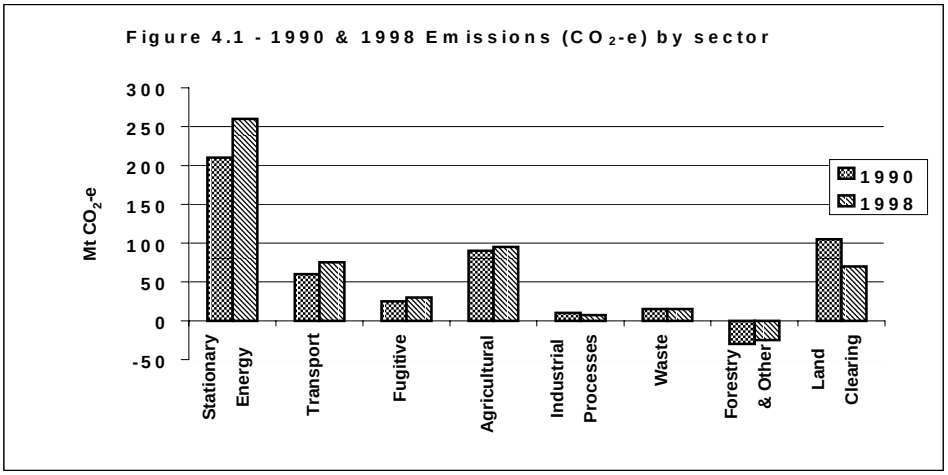
6 Australian Greenhouse Office, *The National Greenhouse Strategy: Strategic Framework for Advancing Australia's Greenhouse Response*, 1998, p 100.

7 Australian Greenhouse Office, *National Greenhouse Gas Inventory*, Fact Sheet 1, July 2000, p 1.

8 Australian Greenhouse Office, *National Greenhouse Gas Inventory 1998*, July 2000.

9 Australian Greenhouse Office, *National Greenhouse Gas Inventory*, Fact Sheet 1, July 2000, p 1.

commitment for 2008 to 2012.[10] In the absence of any abatement measures, emissions could reach 552 Mt CO_2 -e by 2010, a 43 per cent increase over 1990 levels.[11]



The National Greenhouse Gas Inventory

4.7 Under Article 4(1) and Article 12 of the UN Framework Convention on Climate Change (UNFCCC), Australia has committed to providing an annual greenhouse gas inventory which records Australia's annual contribution to global emissions in accordance with internationally accepted guidelines. The Australian NGGI captures all human induced greenhouse gases emitted from sources and removed by sinks. It also details the relative contribution of key industry sectors.

4.8 The NGGI is updated each year and Australia has produced an inventory for each year from 1990, the most recent inventory being 1998. The 1998 Inventory will allow Australia to establish a baseline from which it will be able to monitor and review response action and develop projections of greenhouse gas emissions.[12] As the analysis underpinning the inventory becomes more robust, it could prove potentially useful in identifying low-cost abatement options for each sector.[13]

4.9 At an international level, the NGGI contributes to a global picture of greenhouse gas emissions levels and allows Australia to compare its performance in achieving its international targets with that of other countries.

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10 Australian Greenhouse Office, *The National Greenhouse Strategy: Strategic Framework for Advancing Australia's Greenhouse Response*, 1998, p 99.

11 Australian Greenhouse Office, *The National Greenhouse Strategy: Strategic Framework for Advancing Australia's Greenhouse Response*, 1998, p 99.

12 Australian Greenhouse Office, Submission 169, p 1701.

13 Pacific Power, Submission 98, p 805.

4.10 The NGGI categorises emissions and sinks into six standard sectors set out by the Intergovernmental Panel on Climate Change (IPCC): Energy, Industrial Processes, Solvent and Other Product Use, Agriculture, Land Use Change and Forestry, and Waste.[14] It also presents emissions on a gas by gas and sector by sector basis.

4.11 The NGGI expresses the emissions of methane (CH_4), nitrous oxide (N_2O), perfluorocarbons (PFCs), hydrofluorocarbons (HFCs) and sulphur hexafluoride (SF_6) in terms of their 'carbon-dioxide equivalent' (CO_2-e). The concept of global warming potentials (GWPs) has been introduced to express equivalent units of emissions.[15]

4.12 The GWP is based on the potential for each type of emission to influence climate change processes. GWP figures are refined as new knowledge emerges on the relative impact of different types of emissions. GWPs also vary with the time horizon being considered and, by convention, a 100-year horizon is used in policy analysis.[16] Carbon dioxide has a GWP of one. All other emissions have a GWP value set at a multiple of one. Aggregate emissions are derived by summing the emissions of various greenhouse gases. The NGGI attributes a value of 21.1 for methane per unit of carbon dioxide, 310 for nitrous oxide, 6,500 for the PFC perfluoromethane (CF_4), 9,200 for the PFC perfluoroethane (C_2F_6) and 23,900 for sulphur hexafluoride (SF_6).[17]

4.13 The 1998 NGGI, released in July 2000, provides the most recent report on Australia's greenhouse gas emissions. The Committee notes the AGO's explanation that the total emissions reported in the NGGI do not represent Australia's true performance to date against the Kyoto Protocol, as the 1990 baseline is yet to be determined due to the uncertainties associated with emissions from the land use change and forestry sector; and the final guidelines for the compilation of inventories under the Kyoto Protocol are still under negotiation.[18]

4.14 The 1998 Inventory has incorporated improvements and changes to methodology and data and now includes: improved emissions estimates for the manufacturing and construction sector; the CO_2 content of distributed natural gas; improved estimates of animal numbers in the calculations of CH_4 and N_2O from livestock; and estimated resident population for all years.[19]

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14 The Australian methodology for estimating greenhouse gas emissions and sinks are consistent with the *Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories*, Intergovernmental Panel on Climate Change, 1997.

15 Australian Greenhouse Office, *National Greenhouse Gas Inventory 1998*, July 2000, p ix.

16 Australian Greenhouse Office, *National Greenhouse Gas Inventories, IPPC*, 1997.

17 Australian Greenhouse Office, *National Greenhouse Gas Inventory 1998*, July 2000, p ix.

18 Australian Greenhouse Office, *National Greenhouse Gas Inventory 1998*, 2000, p xii. See chapters 3 and 8 of this report for a further discussion of the Kyoto Protocol framework for accounting emissions and carbon sinks.

19 Australian Greenhouse Office, *National Greenhouse Gas Inventory 1998*, Fact Sheet 7, July 2000.

4.15 In addition to the NGGI, a five-year program to develop a National Carbon Accounting System (NCAS) was announced by the Prime Minister in November 1997. This initiative is being led by the AGO and will provide substantially improved estimates of national emissions for the land use change and forestry sector. Estimates for land use change and forestry are still considered highly uncertain. According to Dr Gary Richards, Manager of the NCAS, estimates used in earlier years of the NGGI carried a 70 per cent uncertainty. The NCAS aims to reduce this uncertainty to a 'within 10 per cent' range.[20] The AGO regards the development of the NCAS as critical to addressing the need for greater transparency of reporting and verification of data.[21]

The Performance of the National Greenhouse Strategy

4.16 The remainder of this chapter presents the Government's response to global warming. Consideration is given to emission abatement programs - their objectives, their outcomes and budgetary expenditure. It provides an overview of the current national greenhouse policy framework, and in particular:

- examines the role of the Commonwealth, state and territory governments, local governments and the broader community within that framework;
- examines current progress in the implementation of the NGS, and the barriers and issues hindering its effectiveness; and
- provides recommendations for future directions.

4.17 In November 1998 the Government released the National Greenhouse Strategy (NGS) to provide the strategic framework for advancing Australia's greenhouse response and to be the 'primary mechanism through which our international commitments will be met'.[22] The NGS also claims that 'implementation of the Strategy will forge major reductions in Australia's projected emissions growth, consistent with meeting our international competitiveness'.[23]

4.18 Two years after its release, implementation planning is yet to be finalised, the expected emissions reductions from the implementation of NGS measures remain unquantified, and the principles to guide its further development and implementation appear to have been compromised by recent Government statements aimed at pacifying industry concerns.

4.19 There is a considerable lack of information available regarding the measures under the NGS, which has made an assessment of its progress and success extremely

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20 Dr Gary Richards, *Proof Committee Hansard*, Canberra, 6 September 2000, p 926.

21 Australian Greenhouse Office, *National Greenhouse Gas Inventory 1998*.

22 Australian Greenhouse Office, *The National Greenhouse Strategy: Strategic Framework for Advancing Australia's Greenhouse Response*, 1998, piii.

23 Australian Greenhouse Office, *The National Greenhouse Strategy: Strategic Framework for Advancing Australia's Greenhouse Response*, 1998, piii.

difficult. While some information was made available to the Committee, in a number of areas information simply did not appear to exist. This was particularly true of measures that were the primary responsibility of the states and territories. An initial report to Parliament on the progress of the NGS is to be tabled in 2001, and a major review is scheduled for 2002.

4.20 The Committee acknowledges that, in many cases, the states and territories have begun worthwhile greenhouse initiatives. The states and territories are crucial to Australia's greenhouse abatement efforts, given their responsibility for policy decisions of great environmental significance across the whole-of-government. The Committee received submissions from New South Wales, South Australia, Western Australia and Tasmania, but representatives from Queensland, Tasmania, Victoria and South Australia declined to give evidence.

4.21 It is a matter of some regret to the Committee that they were not able to hear the views of all states and territories. While supporting the Commonwealth's role in setting greenhouse policy, the Committee has also recommended further efforts to assist, involve and consult with the states and territories.

Overview of the National Greenhouse Policy Framework

4.22 National action to address climate change began in 1992 with the National Greenhouse Response Strategy (NGRS). The NGRS represented a commitment made by the Commonwealth, state and territory governments, and was formally endorsed by the Council of Australian Governments (COAG). An interim planning target was agreed that Australian greenhouse gas emissions would be reduced by 20 per cent by 2005, based on 1988 levels. This target was subsequently overtaken by the later negotiations associated with the UNFCCC and the 1997 Kyoto Protocol which represents a less onerous target than that agreed to in 1992.

4.23 Priority measures in the NGRS included:

- preparation of a National Greenhouse Gas Inventory (NGGI);
- micro-economic reform in the electricity and gas sectors to promote competition between suppliers and the promotion of greenhouse-friendly energy sources;
- increased energy efficiency within the residential and commercial sectors through energy labelling and minimum energy performance standards; and
- more efficient transport systems through travel demand strategies and improved fuel consumption in the national vehicle fleet.

4.24 In 1995 the Commonwealth Government announced additional greenhouse measures in a statement called 'Greenhouse 21C'. The most significant of the new measures was the Greenhouse Challenge Program.[24]

24 The Australian Institute, Submission 79d, p 2299.

The 1997 Prime Minister's Package

4.25 In 1997, immediately prior to the Kyoto conference, the Prime Minister announced a $180 million, 5 year package of measures *Safeguarding the Future: Australia's response to climate change*. The Government argued that this package of measures represented a 'balanced and far sighted approach'[25] to answer the challenge of climate change and that the package would deliver a 'reduction of a third in our expected net emissions growth from 1990-2010… from 28 to 18 per cent in that period'.[26]

4.26 The package was developed on the principles of protecting Australia's national interests and reflected Australia's national circumstances:

> Those interests lie in both protecting Australian jobs and Australian industry whilst ensuring that Australia plays her part in the world wide effort needed to reduce greenhouse gas emissions.[27]
>
> The measures have been developed against the background of our national circumstances and our national interest. They also have been developed against achievements by Australia to date such as reform of our electricity and gas markets, halving the amount of waste going to landfill by the year 2000 compared to 1990 levels and the efforts of particular industries such as the aluminium industry which will reduce emissions by more than 20 per cent over the same period.
>
> The Government is seeking realistic, cost effective reductions in key sectors where emissions are high or growing strongly while also fairly spreading the burden of action across our economy.[28]

4.27 While the package's major focus is on cost effective 'no regrets' action, scope was included to go 'beyond no regrets' if required:

> We are prepared to ask industry to do more than they may otherwise be prepared to do, that is, to go beyond a 'no regrets', minimal cost approach where this is sensible in order to achieve effective and meaningful outcomes.[29]

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25 Statement by the Prime Minister of Australia, the Hon John Howard, *Safeguarding the Future: Australia's response to climate change*, 20 November 1997, p 2.

26 Statement by the Prime Minister of Australia, the Hon John Howard, *Safeguarding the Future: Australia's response to climate change*, 20 November 1997, p 3.

27 Statement by the Prime Minister of Australia, the Hon John Howard, *Safeguarding the Future: Australia's response to climate change*, 20 November 1997, p 1.

28 Statement by the Prime Minister of Australia, the Hon John Howard, *Safeguarding the Future: Australia's response to climate change*, 20 November 1997, p 4.

29 Statement by the Prime Minister of Australia, the Hon John Howard, *Safeguarding the Future: Australia's response to climate change*, 20 November 1997, p 4.

4.28 The package directed funding at both new or, substantially expanded, existing programs which included the following elements: [30]

Table 4.1

Australia's response to climate change

Measure	**Aim/commitment**	**Progress to date**
Establishment of the Australian Greenhouse Office (AGO)	Responsible for delivery of Commonwealth greenhouse programs, and to provide a central point of contact for industry and other stakeholder groups	Established as an executive agency within the environment portfolio to manage a whole-of-government approach to policy
Extending the voluntary Greenhouse Challenge Program	To promote greater uptake by industry; aim to have 500 Challengers by 2005	Current status - 366 challenge agreements
Accelerating energy market reform	Further economic, environmental and greenhouse benefits; and implement efficiency standards for fossil fuel electricity generation by the year 2000	Framework announced. Individual agreements for individual plant performance targets not expected to be completed for several years
Mandatory targets for increased renewable energy in the national electricity mix, and assistance for renewable energy technologies	To increase investment in and take-up of renewable energy	Renewable electricity legislation introduced into Parliament in July 2000.
New fuel efficiency standards through negotiation with the automotive industry	To secure a 15 per cent fuel efficiency improvement target by 2010 over business as usual - to include mandatory, model specific, fuel efficiency labelling	Mandatory fuel efficiency labelling not yet in place

30 Statement by the Prime Minister of Australia, the Hon John Howard, *Safeguarding the Future: Australia's response to climate change*, 20 November 1997.

Regulations covering strengthened national energy efficiency building codes and appliance standards	To accelerate the take-up of energy efficiency measures with enormous potential for emissions savings	Poor coordination between and territories and Commonwealth is slowing this process and standards are still well behind international best practice
Aiming to treble the Australian plantation estate by 2020	Remove impediments to the development of commercial plantations to facilitate the growth in plantation forestry and native revegetation to act as a sink for greenhouse gas	Steady progress, but rapid rates of land clearing result in overall continuing deforestation
Supporting the extensive uptake of the worldwide Cities for Climate Protection campaign by Australian local governments	Provides for councils to develop local emissions inventories, forecast energy use and emissions, and develop and implement local action plans	CCP in Australia began in 1998. Current progress is slow, with 45 councils having developed inventories, 8 set reduction targets and two developed local action plans
$6 million for facilitating Australian involvement in the Kyoto project-based mechanisms such as Clean Development Mechanisms (CDM) and Joint Implementation (JI)	To assist Non-Annex 1 countries to develop emissions reduction projects and develop Australian industry's ability to exploit Kyoto flexibility mechanisms	Additional measures have included $154 million in AusAID funding and $46 million for the Global Environment Facility

The National Greenhouse Strategy

4.29 The Commonwealth, state and territory governments commenced work on the NGS in 1996, finalising the Strategy in late 1998. The final Strategy was based on the outcomes of a review of the NGRS, the Prime Minister's 1997 package, the outcomes of the Kyoto negotiations, and a range of other 'factors that have emerged and evolved since 1992'.[31]

31 Australian Greenhouse Office, *The National Greenhouse Strategy: Strategic Framework for Advancing Australia's Greenhouse Response*, 1998, p 1.

4.30 The NGS has three key goals:

1. To limit net greenhouse gas emissions, in particular to meet our international commitments.

2. To foster knowledge and understanding of greenhouse issues.

3. To lay the foundations for adaptation to climate change.

4.31 The NGS includes eight modules of targeted measures designed to achieve the goals of the Strategy, and a framework for its further development and implementation. Measures contained in the Strategy are to be delivered through a variety of mechanisms including Ministerial Councils, or independently by state or Commonwealth governments. Implementation plans take the form of state and territory greenhouse strategies or nationally coordinated measure-specific plans.

4.32 Reports on the progress of the NGS are to be prepared every two years, with a first report by the end of 2000. The reports will discuss Australia's progress towards its target under the Kyoto Protocol, the progress of NGS measures, and the effectiveness of these measures to limit emissions and enhance carbon sinks. Performance indicators are being developed to assess this progress, although these were not available for scrutiny by the Committee.[32]

4.33 The NGS will be subject to periodic review, with the first review scheduled for 2002. Key factors in the reviews will include national emissions trends, international developments, progress in implementing the NGS, developments in greenhouse science, advice from stakeholders and the community, and findings from research about the opportunities, constraints, costs and benefits of given policy options.[33]

4.34 The NGS is a negotiated document and as such is limited by the outcome and success of negotiations, primarily between the Commonwealth and the states and territories, but also between government and industry. It is noted in the Strategy that a key consideration in its development was 'the need to integrate greenhouse and other policy objectives'[34] and that:

> In addition to the range of new and additional greenhouse measures outlined in the Strategy, greenhouse policy must also be integrated with that addressing other community concerns, particularly economic and trade policies, micro-economic reform agendas, competition policy reforms and

32 Australian Greenhouse Office, *The National Greenhouse Strategy: Strategic Framework for Advancing Australia's Greenhouse Response*, 1998, pp viii-ix.

33 Australian Greenhouse Office, *The National Greenhouse Strategy: Strategic Framework for Advancing Australia's Greenhouse Response*, 1998, p viii.

34 Australian Greenhouse Office, *The National Greenhouse Strategy: Strategic Framework for Advancing Australia's Greenhouse Response*, 1998, p 2.

> the review of Commonwealth/State environmental roles and responsibilities.[35]

4.35 To date it would appear that the integration has primarily occurred in one direction, with existing policy agendas limiting greenhouse responses rather than greenhouse considerations influencing other relevant policy frameworks. Greenhouse policy has been subject to a great deal of scrutiny as to the potential cost to the economy and impacts on competitiveness. Yet, other policy agendas, such as energy market reform, have not taken greenhouse sufficiently into account, which has resulted in a significant increase in emissions from the electricity sector. These issues are discussed in more detail in chapters 5 and 9 of this Report.

4.36 It is also of some concern to the Committee that the NGS principles have been compromised by recent state and Commonwealth government statements. A key principle of the NGS is the 'pursuit of greenhouse action, consistent with equity and cost effectiveness, and with multiple benefits'[36] with the recognition that 'Australia should achieve compliance with the Kyoto Protocol in the *least cost way* to the national economy and with the *least effect* on competitiveness'.[37]

4.37 However, the Minister for Industry Science and Resources Senator the Hon Nick Minchin, recently announced that:

> The Government is committed to the pursuit of cost effective greenhouse gas abatement policies and measures in order to minimise the burden for business and the community so that Australian industry can remain competitive.[38]
>
> While the Government remains fully committed to honouring Australia's international greenhouse obligations, it also recognises the imperative of *maintaining* the competitiveness of Australian industry. Sacrificing economic growth and jobs is not in Australia's interests.[39]

4.38 The Committee also notes that the Western Australian Government's endorsement of the NGS was predicated on the following:

- maintenance of international competitiveness of Australian industry;

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35 Australian Greenhouse Office, *The National Greenhouse Strategy: Strategic Framework for Advancing Australia's Greenhouse Response*, 1998, p 2.

36 Australian Greenhouse Office, *The National Greenhouse Strategy: Strategic Framework for Advancing Australia's Greenhouse Response*, 1998, p 3.

37 Australian Greenhouse Office, *The National Greenhouse Strategy: Strategic Framework for Advancing Australia's Greenhouse Response*, 1998, p 3.

38 Media release: Senator, the Hon Nick Minchin, Minister for Industry Science and Resources, 23 August 2000.

39 Media release: Senator, the Hon Nick Minchin, Minister for Industry Science and Resources, 23 August 2000.

- differentiation fully reflecting variations in state circumstances within Australia so that there is a fair sharing of the compliance burden nationally;
- changes in assumptions made about the 1990 level of emissions to determine the basis for changes to states and territories' positions; and
- cost of achievement of greenhouse targets to be recognised in the implementation of the NGS.[40]

4.39 The Committee understands that a number of other states imposed similar qualifications on their endorsement. The Committee endorses the position of the NGS that 'Australia should achieve compliance with the Kyoto Protocol in the *least cost way* to the national economy and with the *least effect* on competitiveness'.[41]

More Recent Greenhouse Measures

Measures for a Better Environment

4.40 The *Measures for a Better Environment* package announced in May 1999 as part of the GST tax reforms in Australia taking effect from 1 July 2000, introduced a number of additional greenhouse initiatives: [42]

Table 4.2

Measures for a Better Environment

Measure	**Objective**	**Progress to date**
Greenhouse trigger	Agreement to consult with the states and territories on the possible application of a Commonwealth greenhouse trigger in relation to new projects under the *Environmental Protection and Biodiversity Conservation Act 1999*	Discussion paper developed. Federal Cabinet rejected putting forward an amendment to the EPBC Act to include a greenhouse trigger
Bringing forward the introduction of new petrol and diesel vehicle and fuel standards	Accelerate the achievement of new fuel efficiencies by the Australian road fleet to counteract the increased	Future measures include fuel efficiency labelling, consistency with international noxious

40 Western Australian Government, tabled documents.

41 Australian Greenhouse Office, *The National Greenhouse Strategy: Strategic Framework for Advancing Australia's Greenhouse Response*, 1998, p 3.

42 *Changes to the Goods and Services Tax, Measures for a Better Environment*, Media Release 31 May 1999, Prime Minister of Australia, pm.gov.au/media/pressrel/1999/changes3105.htm (02/08/00).

	incentives for consumption provided by the new tax system	emissions standards by 2006 and an accelerated phase-out of leaded petrol
Providing grants for CNG, LPG and other alternative 'clean' transport fuels	To maintain the price differential between them and diesel, when diesel excise was reduced for regional transport	Diesel and Alternatives fuels grants scheme, administered by the ATO
A subsidy program for conversion of CNG and LPG vehicles over 3.5 tonnes	Alternative Fuel Conversion Program	Commenced in January 2000 with $35 million over four years
100 per cent diesel excise credit for rail transport		Implemented
Grant program to meet half the cost of household photovoltaic electricity systems (solar panels)	Commonwealth Photovoltaic Rebate Program - to reduce cost barriers for householders and community organisations to solar conversions	Initial commitment of $31 million in January 2000, and these funds have quickly been exhausted. The Commonwealth has not yet committed funds for its further expansion
Commercialisation program for renewable energy projects	To offset the impact of GST on renewable energy industries	$30 million for the Renewable Energy Commercialisation Program (RECP)
Energy credit scheme		To commence in 2002
Renewable Remote Power Generation Program (RRPGP)	A grant scheme for off-grid electricity users to convert from diesel to renewable energy systems, to assist the uptake of renewable remote area power systems (RAPS)	Commenced 1 July 2000 and will be funded at $264 million over four years from diesel excise revenues

Greenhouse Gas Abatement Program

4.41 The Greenhouse Gas Abatement Program (GGAP) was announced as part of the *Measures for a Better Environment* package (May 1999) and arose from

negotiations with the Australian Democrats on the new tax system (ANTS) reform package.

4.42 The AGO reported that:

> The GGAP builds on the Prime Minister's $180 million package of greenhouse measures, which was announced in November 1997 and is currently being implemented. These funds, together with new allocations for renewable energy generation, alternative fuels use and household energy reduction initiatives, amount to nearly $1 billion over five years – the largest commitment of funding to address the challenge of climate change in Australia's history.[43]

4.43 The GGAP Program aims to:

- attain long lasting results that translate into sustained reduction in emissions during the period 2008 to 2012 and/or beyond;
- be cost effective with a least cost impact on economic activity;
- have consistency with ecologically sustainable development; and
- where appropriate, generate employment, the use of new technologies and innovative processes, support export opportunities, act as a catalyst for further non-government investment, and provide opportunities in rural and regional Australia.[44]

4.44 The GGAP commenced on 1 July 2000, with first round submissions closing in September 2000. $400 million has been allocated to the GGAP between 2000-01 and 2003-04.[45]

4.45 GGAP is targeting opportunities for large-scale, cost-effective and sustained abatement across the economy. GGAP will only support projects that will result in *quantifiable* and *additional* abatement not expected to occur in the absence of GGAP funding. Priority will be given to projects that will deliver abatement exceeding 250,000 tonnes of CO_2-e per annum.

Areas of Commonwealth Action

4.46 The Commonwealth is responsible for implementing the measures contained in the 1997 Prime Minister's package, the new greenhouse measures announced as part of the *Measures for a Better Environmen*t package, and has a lead/coordinating

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43 greenhouse.gov.au/ggap/internet/guidelines.htm (03/09/00).

44 Australian Greenhouse Office, Submission 169, p 1683.

45 Gwen Andrews, *Climate Change: The current status of Australia's response*, Outlook 2000, Proceedings of the National Outlook Conference, Natural Resources, Volume 1, 29 February - 2 March 2000, ABARE, Canberra, 2000, p 69.

role in a number of nationally focused measures under the NGS. Key programs/areas of expenditure and activity are listed below, and discussed in detail in later chapters.

Greenhouse science

4.47 Expenditure on research into climate change issues and greenhouse gas abatement has been undertaken through the Greenhouse Science Program, guided by the measures contained in the NGS and international commitments:

- The Government has committed, in the 1999 to 2000 budget, an additional $14 million over four years for the continuation of the Greenhouse Science Program. The Program contributes to improving global, national and regional understanding of climate change, its potential impacts on Australia and the region and options for adaptation and mitigation through basic and applied research and communication of findings.
- The Greenhouse Science Advisory Committee, which provides strategic advice on research directions and priorities, has prepared an interim Advancing Greenhouse Science Strategy and Business Plan 2000-2005 which argues for an additional $10 million a year to be devoted to scientific work. The Government has made no response to this recommendation.

4.48 In August 2000, the Government announced grants totalling $600,000 for 57 Antarctic research projects to contribute to a better understanding of climate change.[46]

Greenhouse Challenge Program

4.49 An initiative of the Prime Minister's package is 'extending the voluntary Greenhouse Challenge Program to allow a greater uptake by industry'.[47] The Greenhouse Challenge Program is a joint initiative between industry and the Commonwealth Government. Through the mechanism of cooperative agreements, the Program provides a framework for participants to undertake and report on actions to abate greenhouse gas emissions. Participation in the Greenhouse Challenge Program is voluntary.[48] Full details of the Greenhouse Challenge Program can be found in chapter 8 of this report.

Energy market reform

4.50 Another key initiative of the Prime Minister's package is 'accelerating energy market reform leading to further economic, environmental and greenhouse benefits, and implementing efficiency standards for fossil fuel electricity generation by the year

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46 Senator, the Hon Robert Hill, Opening Address to the Insurance Council of Australia's Canberra Conference, 10 August 2000, Department of the Environment and Heritage Media Release and Speeches, environment.gov.au/minister/env/2000/sp0aug00.html (13/08/00), p 1.

47 Statement by the Prime Minister of Australia, the Hon John Howard, *Safeguarding the Future: Australia's response to climate change*, 20 November 1997, http://www.greenhouse.gov.au/ago/safeguarding.html (17/07/00).

48 Australian Greenhouse Office, Submission 169, p 1683.

2000'.[49] The production and use of energy is the largest single source of Australia's greenhouse gas emissions. Chapter 5 examines the operation of Australian energy markets and supply in detail.

Renewable energy

4.51 Renewable energy is examined in detail in chapter 5. A Government initiative in 1997 aimed to establish 'targets for increased renewable energy and assistance for renewable energy technologies'.[50] To achieve this aim the Commonwealth Government has established a number of programs to:

- support the development and commercialisation of renewable energy technologies;
- accelerate the uptake of renewable energy;
- showcase leading edge renewable energy projects; and
- stimulate the development of an internationally competitive Australian renewable energy industry.

4.52 According to the Department of Industry, Science and Resources, approximately $387 million is being made available to support the renewable energy industry over the period 1998 to 2003.[51]

4.53 The suite of programs being funded includes: the Renewable Energy Action Agenda (REEA); the 2 per cent Renewables Program; the Renewable Energy Showcase Program (RESP); the Renewable Energy Commercialisation Program (RECP); the Renewable Energy Equity Fund (REEF); the Renewable Remote Power Generation Program (RRPGP); the Photovoltaic Rebate Program (PVRP); and the National Green Power Accreditation Program (NGAP).

Automotive industry fuel efficiency

4.54 An initiative of the Government is the introduction of 'new fuel efficiency standards through negotiation with the automotive industry to secure a 15 per cent fuel efficiency improvement target by 2010 over business as usual - to include mandatory,

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49 Statement by the Prime Minister of Australia, the Hon John Howard, *Safeguarding the Future: Australia's response to climate change*, 20 November 1997, http://www.greenhouse.gov.au/ago/safeguarding.html (17/07/00).

50 Statement by the Prime Minister of Australia, the Hon John Howard, *Safeguarding the Future: Australia's response to climate change*, 20 November 1997, http://www.greenhouse.gov.au/ago/safeguarding.html (17/07/00).

51 Department of Industry, Science and Resources, Action Agendas, isr.gov.au/agendas/Sectors/energy.html (19/07/00), p 2.

model specific, fuel efficiency labelling'.[52] A number of specific measures are outlined in chapter 6.

Building codes and appliance standards

4.55 The Commonwealth Government has committed to regulations covering strengthened national energy efficiency building codes and standards for housing and commercial buildings, appliances and equipment. [53] A more detailed discussion of energy efficiency and greenhouse gas abatement can be found in chapter 5 of this report.

4.56 Energy consumed by equipment and appliances is a major source of greenhouse gas emissions. According to the AGO, these emissions are responsible for more than a quarter of net greenhouse gas emissions in Australia (excluding land use change and forestry).[54]

4.57 The Commonwealth Government has introduced a National Appliance and Equipment Energy Efficiency Program. Through this Program, the Commonwealth, state and territory governments throughout Australia, and the New Zealand Government, are working cooperatively to develop and introduce measures that improve the energy efficiency of appliances and equipment used by households and business by extending and enhancing the effectiveness of existing labelling and minimum energy performance standards (MEPS).

International projects supported by the Australian Government, including the Clean Development Mechanism (CDM) and Joint Implementation (JI)

4.58 The Commonwealth Government's final initiative in the Prime Minister's 1997 statement is the provision of '$6 million for facilitating Australian involvement in the Kyoto project-based mechanisms such as the Clean Development Mechanism and Joint Implementation'.[55] This funding is largely focused on facilitating commercial involvement in projects in developing countries and meeting the additional costs incurred by business in undertaking such a project.[56]

4.59 The main discussion of the Clean Development Mechanism (CDM) and Joint Implementation (JI) mechanisms of the Kyoto Protocol is provided in chapter 3.

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52 Statement by the Prime Minister of Australia, the Hon John Howard, *Safeguarding the Future: Australia's response to climate change*, 20 November 1997, http://www.greenhouse.gov.au/ago/safeguarding.html (17/07/00).

53 greenhouse.gov.au/ago/safeguarding.html (17/07/00), p 6.

54 greenhouse.gov.au/energyefficiency/appliances/index.html (07/08/00).

55 Statement by the Prime Minister of Australia, the Hon John Howard, *Safeguarding the Future: Australia's response to climate change*, 20 November 1997, http://www.greenhouse.gov.au/ago/safeguarding.html (17/07/00).

56 Statement by the Prime Minister of Australia, the Hon John Howard, *Safeguarding the Future: Australia's response to climate change*, 20 November 1997, http://www.greenhouse.gov.au/ago/safeguarding.html (17/07/00).

The Performance of Commonwealth Measures Under the National Greenhouse Strategy

4.60 In evidence, Ms Lynette Thorstensen, of the Australian Consumers' Association, captured the inevitable gap between policies, programs and action. She argued that the voluntary NGS programs were not delivering adequate results, and that the credibility of some programs, such as the Greenhouse Challenge and the 2 per cent renewables energy target, was questionable:

> … we are urging a wide range of incentives for energy efficient products on both the supply and the demand sides. We would like to see more rebate schemes, we would like to see a vastly improved approach to minimum energy performance standards and we would like to see new building energy efficiency standards. We notice that there is a lack of credible national minimum standards in Australia … I suppose, if we have a general criticism of the National Greenhouse Strategy it is that the number of voluntary programs within the National Greenhouse Strategy just do not seem to be delivering the kinds of greenhouse gas savings we would like to see. Certainly we are highly critical of the Greenhouse Challenge Program and, in a general sense, we would like to see - particularly with respect to the two per cent renewable energy target, which we think is so small as to be almost meaningless - mandated credible national targets.[57]

4.61 The Electricity Supply Association of Australia (ESAA) also expressed reservations about the success of the NGS and criticism of the low level of spending on research into development of new greenhouse-benign capacity:

> The National Greenhouse Strategy response measures are generally pragmatic and sensible. However, lack of effective implementation, particularly on issues related to the end-use efficiency, should be of concern.
>
> … there needs to be a process for effective NGS implementation, particularly focusing on end-use efficiency where the most effective gains can be made.[58]
>
> Direct and indirect incentives offered to improve existing fossil fuel supply efficiency and new fossil fuel and renewable energy projects are inadequate, piecemeal and distortionary. A more coordinated national response is needed to ensure that greenhouse gas reduction benefits are maximised and costs minimised.[59]
>
> ESAA believes Australia should increase its support for industry-related greenhouse gas abatement research and development activities. Energy-related research spending is conspicuously low. Government is not contributing to even modest spending on the International Energy Agency's

57 *Official Committee Hansard*, Sydney, 22 March 2000, p 368.

58 Electricity Supply Association of Australia Limited, Submission 83, p 635.

59 Electricity Supply Association of Australia Limited, Submission 83, p 635.

> program on energy efficiency, wind technology, photovoltaic power systems, solar photovoltaic and chemical energy systems, and greenhouse energy research and development.[60]

4.62 Stanwell Corporation commented on greenhouse gas management in Australia and argued for reform of the regulatory framework when it stated that the following factors were crucial to the success of renewable energy projects. There must be:

- appropriate price signals to reflect the full cost of fossil fuelled energy;
- an end to the distorted investment signals in favour of generation using fossil fuels; and
- an end to the inappropriate network pricing framework.[61]

4.63 Great Southern Energy noted that initiatives taking industry beyond 'no regrets' were necessary and that there is a need for legal enforcement if industry is to go beyond 'no regrets' measures. The organisation indicated that mandatory requirements are likely to be accepted because of the certainty they provide to companies with long term time horizons as a basis for their operations and decision making:

> Great Southern Energy has considerable experience participating in Government greenhouse programs and developing emissions reduction measures. This experience provides a useful insight to the design of future programs. One of the key conclusions from this experience is that companies will not implement measures that go beyond a 'no regrets' approach, without legally binding requirements in place. In addition to enable sound commercial decision to be made companies require a framework that provides certainty, flexibility and time frames of at least ten years. Without such a framework major emission reduction measures are unlikely to be approved.[62]

4.64 In its submission, the Tasmanian Government pointed to the need for the AGO to place greater emphasis on informing stakeholders about its programs and claimed that a significant proportion of the Tasmanian community was unaware of the various loan support schemes available to assist greenhouse gas emissions reduction initiatives. [63]

4.65 In the Committee's view, the Commonwealth Government must send a clear message to business as to how it intends to address the issue of significant emissions reductions and provide a structural framework or industry plan which spells out its medium and long term objectives. It is clear that there are a range of perceived

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60 Electricity Supply Association of Australia Limited, Submission 83, p 636.

61 Stanwell Corporation Limited, Submission 91, pp 694-97.

62 Great Southern Energy, Submission 150, p 1550.

63 Tasmanian Government, Submission 185, p 1983.

problems associated with the NGS: the methods for implementing the programs, especially the efficacy of voluntary programs; the need to encourage or enforce action beyond 'no regrets' outcomes; the importance of educational support; and the need for equitable distribution of burdens. These issues are discussed in greater detail in the remainder of this report.

4.66 During the inquiry the Committee sought to gather specific information about the progress of specific initiatives under the NGS. In many cases it was difficult to do so, and a full accounting may be delayed until the completion of the major review of the NGS, currently planned for 2002. In the Committee's view, there are strong grounds for this review to be brought forward, and it emphasises that the review be comprehensive and transparent.

4.67 The Committee notes that the NGS contains a Measure (3.1) for Commonwealth, state and territorial governments to reduce emissions from their operations, including mandatory targets for government agencies, inventories of government emissions, independent verification, and minimum energy performance standards.[64] The Committee was unable to establish what progress has been made on this Measure.

4.68 In all these areas it became clear that a stronger commitment to a whole-of-government approach is required. The Committee notes that one of the declared principles underpinning the NGS is the 'integration' of greenhouse 'with other government commitments', specifically to ensure that government policymaking be 'consistent with the principles of ecologically sustainable development' and 'to promote the need for greenhouse goals and policies to be recognised in the development of other government policies'.[65]

4.69 However, while the NGS contains a Measure (3.2) to incorporate greenhouse issues into planning and decision making, the measure is limited in scope and worded vaguely. It is hard to see exactly what either the Commonwealth or the states and territories have committed to in this area, and there is no clear timetable applied to the measure.[66] The NGS contains no clear commitment to fully integrate greenhouse with other policy areas. A variety of evidence to the Committee shows that Commonwealth and state policies in regards to taxation, transport, energy and resources remain poorly integrated (and often simply not integrated) with greenhouse policy, even though they often have crucial effects on emissions outcomes.

Recommendation 11

64 Australian Greenhouse Office, *The National Greenhouse Strategy: Strategic Framework for Advancing Australia's Greenhouse Response*, 1998, p 32.

65 Australian Greenhouse Office, *The National Greenhouse Strategy: Strategic Framework for Advancing Australia's Greenhouse Response*, 1998, p 3.

66 Australian Greenhouse Office, *The National Greenhouse Strategy: Strategic Framework for Advancing Australia's Greenhouse Response*, 1998, p 32.

The Committee recommends that the first report on the progress of the National Greenhouse Strategy, which is to be tabled in Parliament in early 2001, should:

- **include an assessment of the progress, implementation and effectiveness of each measure;**
- **include an estimate of emissions reductions for each measure;**
- **clearly identify where information is lacking and progress remains unsatisfactory, and**
- **assess performance against prior pledges, including performance against expected emissions reductions.**

Recommendation 12

The Committee recommends that the major review of the National Greenhouse Strategy currently planned to be conducted during 2002 be brought forward to 2001 to immediately follow the release of the first report.

Recommendation 13

The Committee recommends that the Commonwealth Government incorporate the reduction of greenhouse emissions as a central objective across the whole-of-government and in all policy formulation. All relevant areas of Government, including transport and treasury, should be required to include greenhouse abatement in policy development and report on progress in their annual reports.

Recommendation 14

The Committee recommends that all agencies of the Commonwealth Government be required to develop quantified emissions reduction targets for all emissions from their operations.

Recommendation 15

The Committee recommends that performance against emissions targets should be monitored, independently and transparently assessed, and reported in annual reports.

Recommendation 16

The Committee recommends that government develop greenhouse accounting tools for the private sector and provide tangible recognition and encouragement to those organisations which apply in-house mechanisms such as emissions trading or de-facto carbon taxes.

Australian Democrats Recommendation 3

The Australian Democrats recommend that the Commonwealth Government apply a tax on all energy used within its departments at the rate of $10/tonne of CO_2. These funds should be allocated to investments in emissions reduction for Government operations. Agencies could be allowed to determine how they spend those funds, or unallocated funds be allocated to the Australian Greenhouse Office to invest in the most cost- and greenhouse-effective manner. The Australian Democrats recommend that state and local governments be encouraged to match this measure.

State and Territory Programs - Overview

4.70 As described above, many state and territory initiatives, linked to the NGS, occur within the cooperative framework of the NGS with national and local government. Most state and territory governments in Australia have developed, or are developing, detailed greenhouse strategies:

- Australian Capital Territory Greenhouse Strategy 2000[67]
- New South Wales Greenhouse Action Plan 1998[68]
- Northern Territory Action Plan[69]
- Queensland Implementation Plan for the National Greenhouse Response Strategy 1999[70]
- South Australian Government Greenhouse Gas Target Program[71]
- Tasmanian Greenhouse Statement 1999[72]
- Victorian Greenhouse Strategy (Discussion Paper 2000)[73]
- Western Australian Draft State Implementation Plan for the NGS (2000).[74]

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67 Environment ACT, *ACT Greenhouse Strategy: The ACT's commitment to reduce the threat of global warming*, 1999.

68 NSW Government, *Position Statement: Emissions Trading*, November 1998 (NSW Government Submission 198, p 2100).

69 Northern Territory Government, Land Planning and Environment, Environment & Heritage Division, lpe.nt.gov.au/enviro/Contact.htm (04/09/00).

70 env.qld.gov.au/environment/environment/green/n.html (31/08/00), p 2.

71 Environment Protection Authority Annual Report 1998/99; anddenr.sa.gov.au/epa/pdfs/annualreport9899.pdf (04/09/00).

72 Department for Primary Industries, Water and Environment, *Tasmanian Greenhouse Statement*, Tasmanian Government, July 1999.

73 Victorian Government, *Victorian Greenhouse Strategy: Discussion Paper*, Department of Natural Resources and Environment, 2000.

4.71 States and territories are also required, under the NGS, to submit detailed greenhouse plans outlining their strategies for implementing agreed measures. It is of some concern to the Committee that, to date, the ACT and NSW are the only state and territory to have submitted a plan satisfactory to the Commonwealth.

Key issues

4.72 A number of key issues are the focus of state and territory government initiatives on greenhouse gas reduction:

- efficient and sustainable energy use and supply - Green Power programs;
- efficient transport and sustainable urban planning;
- greenhouse sinks and sustainable land management; and
- greenhouse best practice in industrial processes and waste management.

Efficient and sustainable energy supply and use

4.73 Green Power is the generic name given to electricity which is generated from clean, renewable energy sources, instead of from fossil fuels, such as coal. Green Power programs have existed in many countries through the late 1990s, with the US being one of the founding countries. The main purpose of Green Power is to pursue economic opportunities to maximise the output of renewable energy sources.[75]

4.74 In Australia, the New South Wales Government established the Sustainable Energy Development Authority (SEDA) in 1995. SEDA launched the Green Power Accreditation Program in April 1997 and it has since spread to other states and territories.[76] The Program aims to facilitate the installation of new renewable energy projects thereby increasing the contribution of renewable energy to the electricity mix.

4.75 Mr Christopher Dunstan, from SEDA (NSW), explained that SEDA is focused on leadership, maximum use of available resources, and market transformation to remove barriers to sustainable change:

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74 WA Greenhouse Council, Background Paper (Submissions Vol 11: 2700): Dr Bryan Jenkins, *The role of Western Australia in the National Greenhouse Strategy*.

75 Environment ACT, *ACT Greenhouse Strategy: The ACT's commitment to reduce the threat of global warming*, 1999, p 14; Department for Primary Industries, Water and Environment, *Tasmanian Greenhouse Statement*, Tasmanian Government, July 1999, p 10 and pp 12-14; Victorian Government, *Victorian Greenhouse Strategy: Discussion Paper*, Department of Natural Resources and Environment, 2000, pp 19-20; Government of South Australia, *South Australia: Reducing the greenhouse effect*, EPA, January 2000, pp 7-8; *Proof Committee Hansard*, Perth, 17 April 2000, pp 465-66; and Queensland Government, *Queensland Energy Policy*, May 2000.

76 See appendix 5 of this report which provides a table of distributors of Green Power in Australia.

> The overall approach that SEDA takes can be characterised primarily in terms of partnership… through our Green Power Program, we accredit over 15 electricity retailers across Australia.[77]

4.76 Changes to the NSW *Electricity Supply Act 1995* require licensees to develop emissions reduction plans, distributors to investigate demand management options prior to expanding their capacity, and the NSW Independent Pricing and Regulatory Tribunal (IPART) to use appropriate pricing policies to protect the environment, and support research into new technologies.

4.77 In NSW, electricity retailers are regulated by way of a revenue cap, which is set by the IPART. In 1996, IPART decided that revenues from future green pricing products would be excluded from the retailers' revenue cap. This provided a clear financial incentive and signalled IPART's support. Many utilities quickly saw the potential for green electricity products to assist in meeting these conditions at minimum cost.

4.78 SEDA noted that, by October 1999, 11 power companies were offering green power and about 52,000 residential and business customers, including many large corporate businesses, had joined the various schemes around the country.[78] The level of take-up by consumers of the program varies from retailer to retailer and may be the result of inadequate promotion by individual retailers or the lack of a nationally focused promotion effort. Green Power is discussed in more detail in chapter 5.

4.79 The ACT is currently reforming the regulations and standards that govern electricity (and other) utilities operating in the Territory.[79] Under the new regime, each licence holder will be required to develop and implement a plan for energy efficiency, demand management and sustainable energy sourcing. ACTEW's domestic and small business customers are able to purchase electricity generated from accredited renewable sources.

4.80 The Australia and New Zealand Solar Energy Society (ANZSES) (Queensland Branch) urged the Queensland Government to develop a long term Queensland sustainable energy policy, greater support for energy efficiency, further urgent reform in the electricity market, and the introduction of carbon emissions trading. The Society noted that Queensland has the greatest potential of any state for the cost-effective development of renewable energy sources and has recently established an 'Energy Innovation Fund', which can support renewable energy.[80]

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77 *Official Committee Hansard*, Sydney, 22 March 2000, p 268.

78 Sustainable Energy Development Authority, *Green Power Report*, October 1999.

79 Environment ACT, *ACT Greenhouse Strategy – the ACT's commitment to reduce the threat of global warming*, 1999, p 14.

80 Australia and New Zealand Solar Energy Society – Queensland Branch, *Comments on the 1999 Queensland Implementation Plan for the National Greenhouse Response Strategy (1998)*, 16 July 1999, Australia and New Zealand Solar Energy Society, Submission 75, p 555.

However, the Society commented adversely on the draft 1999 Queensland Plan for the NGS[81] and noted that the current $1 million per annum funding is rather insignificant.

4.81 In May 2000, the Queensland Government released an energy policy which has been developed under a Cleaner Energy Strategy. The Premier, Peter Beattie stated that the key objective included:

> A requirement for electricity retailers in Queensland to source 15 per cent of their power sold in the State from alternative energy sources - at least 13 per cent from gas and the remainder from renewable sources - from January 1, 2005.[82]

4.82 The Queensland Government also announced that generation licences for new coal-fired power stations would not be granted unless there was a clear and demonstrated need by the State.[83] However, the more than 2000 MW of new coal-fired generation capacity at the planned Callide C, Tarong North, Millmerran and Kogan Creek power stations, has been exempted from this policy, which will clearly undermine its effectiveness.[84] Many witnesses, including the Commonwealth Environment Minister and other energy market players, were very critical of Queensland's approval for these new power stations. Their views are discussed in more detail in chapter 5.

4.83 A major feature of the Victorian Government Greenhouse Strategy was the establishment of a Sustainable Energy Authority with responsibility to encourage and promote an economically viable renewable energy industry in Victoria.[85] The Government committed funding of $17.5 million over four years to promote the development of renewable energy options, and a Solar Hot Water Systems grants program, worth $15 million over three years.[86] The Authority will build on existing initiatives such as the Government's Energy Smart Companies programs, facilitate improved energy efficiency in design and construction of housing and commercial buildings, and provide energy information and advisory services.

4.84 However, Ms Esther Abram, Director of the NGO, Environment Victoria, pointed to the perverse effects of privatisation of the State Electricity Commission in Victoria. Ms Abram explained that privatisation meant that a price cap was put in place on electricity prices and that:

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81 Australia and New Zealand Solar Energy Society – Queensland Branch, *Comments on the 1999 Queensland Implementation Plan for the National Greenhouse Response Strategy (1998)*, 16 July 1999, Australia and New Zealand Solar Energy Society, Submission 75, p 543.

82 Queensland Government, *Queensland Energy Policy: A Cleaner Energy Strategy*, May 2000.

83 Queensland Media Statements, *Energy Policy Delivers For Far North*, 26 May 2000, statements.cabinet.qld.gov.au/ (31/08/00).

84 Queensland Government, *Queensland Energy Policy: A Cleaner Energy Strategy*, May 2000, p 9.

85 The Sustainable Energy Authority was established under the Renewable Energy Authority Victoria (Amendment) Bill 2000.

86 Department of Natural Resources and Environment, nre.vic.g…/ (16.08.00), p 1.

> This means that electricity prices are kept low, and for retailers to increase their profits they have to sell more electricity. This has led to retailers selling airconditioning systems, thereby promoting the sale of goods that are high on consumption of electricity.[87]

4.85 Ms Abram concludes that demand management appears to be low on the agenda in Victoria, with a $60 rebate being given to all households on their winter electricity bills.[88]

4.86 The New South Wales Government was also concerned about price capping. It highlighted the point that, with price capping in place, utilities have a strong incentive to increase both the number of kilowatt-hours supplied and the amount of energy consumed by the customer.[89] NSW has replaced price capping in relation to electricity network businesses with hybrid revenue capping under which utilities can only increase profits by reducing costs.[90] This provides the incentive for utilities to reduce the amount of electricity supplied to customers and, to this end, to encourage customers to use energy more efficiently.[91]

4.87 Tasmania's energy situation was claimed to be unique in Australia because of the State's relatively high reliance on renewable energy sources.[92] Consequently, the Tasmanian Government called for more support for renewable energy industries. The Government felt that:

> Existing industry programs and policies are insufficient to achieve the magnitude of required emissions reductions, and do not permit many industry operators to invest in new renewable energy projects, particularly in regional areas such as Tasmania.[93]
>
> …
>
> It would be beneficial to Tasmanian industry, and presumably industry in other regional areas, if the guidelines for applications under Federal programs did not impose, as mandatory, minimum limits for grants or industry backing.[94]

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87 *Proof Committee Hansard*, Melbourne, 20 March 2000, p 163.

88 *Proof Committee Hansard*, Melbourne, 20 March 2000, p 163.

89 New South Wales Government, Submission 198, p 2196.

90 New South Wales Government, Submission 198, p 2196; see also *Official Committee Hansard*, Sydney, 22 March 2000, p 281.

91 New South Wales Government, Submission 198, p 2196.

92 Department for Primary Industries, Water and Environment, *Tasmanian Greenhouse Statement*, Tasmanian Government, July 1999, p 10.

93 Tasmanian Government, Submission 185, p 1978.

94 Tasmanian Government, Submission 185, p 1983.

4.88 The South Australian Government expressed concern that the Commonwealth Government's policy on the development of renewable energy will be likely to channel new investment into a few existing technologies. The South Australian Government explained that this would inhibit development of potentially more beneficial renewable sources and limit the geographical development of the renewable energy industry (eg the use of bagasse (sugar cane waste) is limited to Queensland and northern New South Wales and this could result in an inequitable distribution of benefits that might arise from national investment in renewable energy).[95]

4.89 The South Australian Government, being concerned about equitable distribution of costs and benefits, added:

> The 2 per cent increase in the renewable share is effectively a tax on electricity reinvested in renewable energy and the costs and benefits of this measure should be spread equitably across the states.[96]

4.90 In terms of energy use it is noted that the household sector accounts for almost one fifth of Australia's total greenhouse gas emissions.[97] State initiatives in this sector complement the Federal Government's Household Greenhouse Action Program.

4.91 The 'Live Energy Smart' Program, is an initiative of the NSW Government's SEDA [98] and has been designed to educate consumers about products that will reduce their energy bills and household greenhouse gas emissions, such as whitegoods, showerheads, and insulation. Similar programs exist in Victoria, South Australia and Tasmania. [99]

4.92 The ACT Government has also introduced and implemented legislation, incorporating energy efficiency ratings, to reduce emissions within the residential and commercial sectors.[100] The *Energy Efficiency Ratings (Sale of Premises) Act 1997*, requires the energy ratings of dwellings to be disclosed to potential buyers when sold; and the *Residential Tenancies (Amendment) Act 1997*, requires the disclosure of existing energy ratings to prospective tenants. It is a mandatory requirement for all new dwellings to achieve a minimum 4-star energy efficiency rating and for insulation to be installed in major extensions to existing dwellings; and design and siting

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95 South Australian Government, Submission 199, p 2116.

96 South Australian Government, Submission 199, p 2116.

97 http://www.greenhouse.gov.au/household/ (3.9.2000).

98 energysmart.com.au/WES.html (07/08/00).

99 Department for Primary Industries, Water and Environment, *Tasmanian Greenhouse Statement*, Tasmanian Government, July 1999, pp 11-12; Government of South Australia, *South Australia: Reducing the greenhouse effect*, EPA, January 2000, p 6; and Victorian Government, *Victorian Greenhouse Strategy: Discussion Paper*, Department of Natural Resources and Environment, 2000, pp 23-24.

100 *ACT Greenhouse Strategy: The ACT's commitment to reduce the threat of global warming*, Environment ACT, 1999, pp 115-18.

requirements for residential buildings, which include restrictions on overshadowing, to encourage passive solar building design.

4.93 In parallel with the Commonwealth initiative previously discussed in this chapter, some states and territories (specifically mentioned were South Australia, Tasmania and the ACT) are trying to promote their leadership in the application of energy efficiency within government.[101]

Greenhouse best practice in industrial processes and waste management

4.94 Greenhouse gas emissions from industrial activities are a by product of various production processes, and exclude emissions from the combustion of fuels.[102] The National Strategy for Cleaner Production has been designed to assist industry to improve environmental performance in the design, production and delivery of products and services, and assist with reductions in the discharge of waste water and organic materials that contribute to greenhouse emissions.[103] States and territories have taken part in various initiatives related to this Strategy and have also introduced their own policies and programs.[104] For example, the Tasmanian Government has established a waste exchange register through the Waste into Wealth Strategy.[105]

4.95 Greenhouse gases are emitted from a range of activities associated with the generation, management, recycling and disposal of waste in landfills and wastewater treatment facilities. A number of state and territory initiatives have been developed in this area.[106]

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101 Department for Primary Industries, Water and Environment, *Tasmanian Greenhouse Statement*, Tasmanian Government, July 1999, pp 10-11; Government of South Australia, *South Australia: Reducing the greenhouse effect*, EPA, January 2000, p 3; and Environment ACT, *ACT Greenhouse Strategy: The ACT's commitment to reduce the threat of global warming*, 1999, pp 19-20.

102 Department for Primary Industries, Water and Environment, *Tasmanian Greenhouse Statement*, Tasmanian Government, July 1999, p 19.

103 Department for Primary Industries, Water and Environment, *Tasmanian Greenhouse Statement*, Tasmanian Government, July 1999, p 19; The Industry and Waste Technical Panel, *Report to the Western Australian Greenhouse Council*, (The Western Australian Government, Submission 210, p 2550 ff); and Victorian Government, *Victorian Greenhouse Strategy: Discussion Paper*, Department of Natural Resources and Environment, 2000, p 35.

104 Victorian Government, *Victorian Greenhouse Strategy: Discussion Paper*, Department of Natural Resources and Environment, 2000, p 38; Environment ACT, *ACT Greenhouse Strategy: The ACT's commitment to reduce the threat of global warming*, 1999, p 25-26; Department for Primary Industries, Water and Environment, *Tasmanian Greenhouse Statement*, Tasmanian Government, July 1999, pp 17-19; and The Queensland Government, *1999 Queensland Implementation Plan: National Greenhouse Strategy*, Queensland Environmental Protection Agency, Module 7, p 59.

105 Department for Primary Industries, Water and Environment, *Tasmanian Greenhouse Statement*, Tasmanian Government, July 1999, p 19.

106 Victorian Government, *Victorian Greenhouse Strategy: Discussion Paper*, Department of Natural Resources and Environment, 2000, p 38; Environment ACT, *ACT Greenhouse Strategy: The ACT's commitment to reduce the threat of global warming*, 1999, p 25-26; and Department for Primary Industries, Water and Environment, *Tasmanian Greenhouse Statement*, Tasmanian Government, July 1999, pp 17-19.

4.96 To reduce waste being disposed of in landfill, the ACT Government has introduced a No Waste to Landfill by 2010 Management Strategy.[107] The ACT Government has also encouraged the development of methane capture and electricity generation and, under the Waste Management Development Control Code, requires acceptable waste management plans to be submitted before development is approved.

4.97 The Tasmanian Government has accepted two goals to address landfill waste reduction.[108] The first of these is designed to encourage the reduction of domestic waste disposed of through landfill and instead through reuse and recycling. Action involves the implementation of the Australia and New Zealand Environment and Conservation Council (ANZECC) Green and Organic Waste Management Strategy and a Strategic Plan for Education and Promotion of Waste and Promotion of Waste Minimisation and Recycling. The Government is developing Waste Minimisation and Management legislation and a comprehensive Landfill Code of Practice. The second goal is designed to improve management of landfill sites to reduce and/or capture greenhouse gas emissions. Tasmania's Solid Waste Management Policy and Landfill Code of Practice will play a role in achieving this goal.

4.98 Similarly, the Victorian Environment Protection Authority has prepared a Best Practice Management Guideline and is working with Ecocycle Victoria to develop a Green Waste Action Plan.[109]

The Performance of the States and Territories

4.99 The Committee is encouraged by the initiative of some states and territories in developing greenhouse strategies. Initiatives like SEDA and Green Power have been national leaders, and state governments obviously have a crucial role to play in regard to energy infrastructure, forest management, transport infrastructure and services. Many policies with national greenhouse implications remain solely under the purview of the states and territories. However, the Committee is concerned by the slow pace of state and territory greenhouse policy, and its haphazard development and integration with the real work of the states and territories. Greenhouse is yet to be fully integrated with all areas of state and territory policy, particularly in the energy and transport areas.

4.100 In an August 2000 speech, the Federal Environment Minister, Senator the Hon Robert Hill expressed considerable concern about the performance of state and territory governments. He argued that deadlines have passed, information for assessing program effectiveness has been lacking, and that plans have not been provided on time:

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107 Environment ACT, *ACT Greenhouse Strategy: The ACT's commitment to reduce the threat of global warming*, 1999, p 25.

108 Department for Primary Industries, Water and Environment, *Tasmanian Greenhouse Statement*, Tasmanian Government, July 1999, pp 17-18.

109 Victorian Government, *Victorian Greenhouse Strategy: Discussion Paper*, Department of Natural Resources and Environment, 2000, p 38.

> One area which does require a significant lift,… is the performance of state and territory governments. The state and territory governments supported the Commonwealth's negotiating position in the lead-up to Kyoto and they applauded the outcome we achieved. It was clearly understood that to meet that target would require effective action from all levels of government.
>
> This led state and territory governments in 1998 to endorse the National Greenhouse Strategy in which they agreed to deliver major cuts in Australia's projected emissions growth. Actions by the states were expected to deliver savings in emissions of the order of 2-to-3 per cent.
>
> Unfortunately their performance to date so far has been so abysmal that the Australian Greenhouse Office advises me that on current information available they will be lucky to achieve half of that target.[110]

4.101 Senator Hill praised the ACT Government's commitment to an action plan, but was critical of a lack of progress by other states and territories:

> I should note that the exception to this situation has been the ACT Government which has established a credible action plan and committed funding to support it. However, no other jurisdiction has finalised a clear action plan to achieve specified carbon savings, supported by a detailed budget for the work.
>
> Under the National Greenhouse Strategy, states and territories were to develop implementation plans by June 1999. The plans were supposed to identify new actions to be taken to reduce emissions, not simply restate measures already being taken. They were also supposed to quantify the expected emission reductions and detail funding commitments to achieve those reductions. This process was supposed to move the states and territories beyond vaguely worded intentions to a detailed action plan against which their performance could be openly and transparently judged.[111]

4.102 'Only the Commonwealth and New South Wales', said Senator Hill, 'met the June 1999 deadline':

> We have since received finalised plans from the ACT, Queensland, South Australia and Tasmania, with Western Australia, Victoria and the Northern Territory still outstanding. The Australian Greenhouse Office advises that the quality of information in the plans received to date varies greatly and does not readily allow emissions savings to be estimated. For example a number of the Queensland, South Australia and Tasmanian plans for priority

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110 Senator the Hon Robert Hill, *Opening Address to the Insurance Council of Australia's Canberra Conference*, 10 August 2000, Department of the Environment and Heritage, Media Release and Speeches, environment.gov.au/minister/env/2000/sp10aug00.html (13/08/2000), pp 5-6.

111 Senator the Hon Robert Hill, *Opening Address to the Insurance Council of Australia's Canberra Conference*, 10 August 2000, Department of the Environment and Heritage, Media Release and Speeches, environment.gov.au/minister/env/2000/sp10aug00.html (13/08/2000), pp 5-6.

> emission reduction measures identify further planning and development of options rather than delivery of action. They also lack information about expected outcomes. In other words, they are really action plans which commit the relevant government to develop further action plans.
>
> The AGO is also concerned that detailed information on financial commitment to the implementation of state and territory measures has not been provided.[112]

4.103 Griffith University's Professor Ian Lowe also criticised the inconsistency in state and territory requirements for the takeup of renewable energy, and the time lag involved with implementing policy at the national level:

> The ACT and cities like Brisbane, Adelaide and Melbourne now have local targets to limit greenhouse gas emissions. You would probably be aware that the State of Queensland released two days ago an energy policy that requires 15 per cent of its electricity to come from gas or renewables and increases the Government's use of Green Power from 2 per cent of its overall needs to 5 per cent. At the national level, nearly a decade has now elapsed since the release of the ESD Energy Use Working Group report and the consequent National Greenhouse Response Strategy in 1992, and you would have to say that little or no progress has been made on the recommendations of those reports, even though they followed widespread consultation and had broad community agreement.[113]

4.104 The Committee urges the states and territories to accelerate the development and implementation of their greenhouse strategies, and to integrate greenhouse emissions reduction objectives into all areas of government. The Committee also urges all states and territories to develop specific emissions reduction strategies for transport and energy, and to adopt the reduction in the greenhouse intensity of energy supply and transport as a key criteria in the assessment of new energy and transport infrastructure projects.

Recommendation 17

The Committee recommends that the states and territories set out emissions reduction benchmarks and objectives for all relevant areas of government. Areas such as energy use, buildings and planning, transport and vehicle fleets, and administrative services should be a priority. Performance against such benchmarks should be regularly, transparently and independently assessed.

Recommendation 18

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112 Senator the Hon Robert Hill, *Opening Address to the Insurance Council of Australia's Canberra Conference*, 10 August 2000, Department of the Environment and Heritage, Media Release and Speeches, environment.gov.au/minister/env/2000/sp10aug00.html (13/08/2000), pp 5-6.

113 *Proof Committee Hansard*, Brisbane, 26 May 2000, p 549.

The Committee recommends that state and territory governments adopt the reduction of the greenhouse intensity of energy supply and transport as a key criteria in the assessment of new projects.

Recommendation 19

The Committee recommends that states and territories with outstanding implementation plans submit them to the Commonwealth by the end of 2000. The plans should, at a minimum, outline the measures they will implement under the National Greenhouse Strategy, any additional measures they will undertake, progress towards and timelines for their completion, and estimates of the emissions savings from the measures.

Recommendation 20

The Committee recommends that the states and territories support their greenhouse plans with adequate levels of budgeted funding.

Recommendation 21

The Committee recommends that the Commonwealth take a leadership role in facilitating the states and territories, industries and other key groups to set clearer directions on greenhouse abatement, based on what their 'fair share' of emissions limits under Kyoto and subsequent commitments is, and in particular:

- **to assist parties to improve monitoring and accountability of greenhouse abatement performance, to identify trends and to evaluate performance against benchmarks (such as greenhouse gas emissions as a proportion of Gross State Product); and**
- **to assist industry to achieve 'world's best' emissions levels per unit while preparing for a carbon constrained future.**

Problems in State and Commonwealth Cooperation

4.105 The Committee acknowledges the importance of cooperative arrangements between different levels of government to Australia's national abatement effort. This is particularly crucial given that states and territories have primary carriage of many initiatives under the NGS and control policy and planning decisions of national environmental significance.

4.106 However, the AGO emphasised that the Federal system created difficulties in developing, coordinating and implementing a national approach to abatement. Its Chief Executive, Ms Gwen Andrews told the Committee:

> The dialogue between the Commonwealth and the states is a very complex one because it crosses a number of issues in a number of sectors. In some areas the Commonwealth may feel that perhaps it is not getting from state

> governments the kinds of responses we would like, for example, with regard to their detailed plans for implementation of their responsibilities under the National Greenhouse Strategy. But I am very well aware that it is a process that requires continuing dialogue and engagement at both bureaucratic and political levels.[114]

4.107 Mr Keith Orchison, representing the Electricity Supply Association of Australia Ltd, addressed the issue of cooperation between levels of government with some concern:

> We put to you that the government at all levels has to produce an integrated and economically viable program for the longer term, starting with research and development and ending with end-user efficiency. In all of those areas at the moment there are deficiencies.[115]

4.108 Mr David Coutts, Executive Director of the Australian Aluminium Council, also looked to cooperation between governments at different policy levels to resolve greenhouse issues, and expressed his preferred view that:

> We would prefer the Commonwealth to take leadership. We feel it has been doing that but there are clearly at this stage things happening in some of the states which are not necessarily meshing completely with that. We feel it would be better if the Commonwealth and the states work together on that.[116]

4.109 In support of this argument, and the need for coordinated policy to avoid contradictory, overlapping and inefficient approaches to greenhouse gas abatement initiatives, the Electricity Supply Association of Australia (ESAA) also submitted that:

> A number of programs pursued in isolation by state governments would be more effective if nationally managed. Federal energy improvement programs, however, are often too piecemeal, poorly co-ordinated and lacking in effective co-ordination with state and territory jurisdictions.[117]

4.110 Boral, acknowledging the comprehensive range of policies and measures developed under the NGS, expressed concern about:

> The lack of integration of the policies into a cohesive Federal/State strategy which can be clearly translated into a system whereby the externalities associated with Greenhouse gas emissions are costed into decision-making processes. From an industry perspective, there is significant value in a coordinated national response to the Kyoto Protocol to minimise uncertainty

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114 *Proof Committee Hansard*, Canberra, 9 March 2000, p 18.

115 *Official Committee Hansard*, Sydney, 22 March 2000, p 333.

116 *Proof Committee Hansard*, Canberra, 10 March 2000, p 49.

117 Electricity Supply Association of Australia Ltd, Submission 83, p 636 and see also p 631.

> which in turn impacts on investor confidence. It is our opinion that all policies, measures and flexible mechanisms must be evaluated in a concerted process to determine the least cost response that complements the national interest.[118]

4.111 In relation to one specific program, Boral suggested that consistency in requirements for Green Power schemes would better serve the attempt to promote alternatives to fossil fuels:

> As an electricity retailer operating in most Australian states, Boral would also advocate for greater consistency in regulatory compliance requirements across the states and for greater cohesion in the development of eligibility criteria for 'Green Power' schemes.[119]

4.112 However, in contrast, the South Australian Government questioned the effective management of Commonwealth and state relations in programs at the national level (with particular reference to energy efficiency). South Australia recognised the key role that the Commonwealth Government should play in coordination of policies and programs between states and territories, but also felt that the states and territories should be given greater powers to integrate projects and that this would facilitate better outcomes:

> The Commonwealth has a key role in the overall strategic coordination of the programs [Demand Management Programs for energy efficiency]. However, if the states, through being fully accountable for the funding arrangements, were allowed a greater level of integration at the management level, this would more effectively utilise the state's resources to initiate and manage individual projects in their own jurisdictions to the benefit of the programs' national outcomes.[120]

4.113 The South Australian Government also expressed concern about economic impacts of the measures adopted to address global warming, especially on regional employment and economic growth:

> The Commonwealth will need to work closely with the states in thoroughly investigating and devising a regime that minimises these impacts, including the administrative burden and costs, and equitably distributes any revenues.[121]

4.114 The Western Australian Government advised the Committee that it found itself in a unique position in relation to greenhouse gas abatement. Dr Bryan Jenkins, Chief Executive Officer of the Department of Environmental Protection (WA), commented:

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118 Boral Limited, Submission 184, p 1960.

119 Boral Limited, Submission 184, p 1962.

120 South Australian Government, Submission 199, p 2115.

121 South Australian Government, Submission 1999, p 2113.

> There is also the issue of differentiation within Australia. In state implementation we need to consider population and GDP growth and the emission intensity of the economy in looking at how the burden will be borne across Australia.[122]

4.115 Six technical panels, set up under the Western Australia Greenhouse Council to advise Cabinet on the implementation of the NGS in that State, have attempted to undertake systematic cost-effective analysis of greenhouse gas reduction measures.[123] General implications of the findings of the technical panels suggested, rather pessimistically, that there were a number of issues that would impede success in greenhouse gas abatement in Western Australia:

- use of energy demand reduction in Western Australia was limited - because of the projected 150 per cent increase in energy-intensive industry and 50 per cent increase in population;
- opportunities for fuel switching are limited because the economic conversions of coal or oil to gas have already occurred;
- process efficiency improvements are limited as Western Australia is already low in CO_2 produced per tonne of product and only limited cogeneration remain;
- there are few low cost options for renewable energy; and
- the sooner sink creation is started the larger will be the offset available in the first commitment period.[124]

4.116 On behalf of the regional economies, the Tasmanian Government also pointed out that, although the relative impacts and incentives of these programs are applied equitably across all regions,[125] government policies and programs might be more effective if the AGO could provide a presence 'on the ground' in regional areas:[126]

> The work of the AGO may be more effective if it were to consider a regional presence, possibly through cooperative agreements with the states in order to extend existing outreach capabilities and access industry.[127]

4.117 The comments referred to above lead to the conclusion that relationships between different levels of government remain a critical component in the final delivery of Australia's Kyoto targets for the first commitment period and beyond.

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122 *Proof Committee Hansard*, Perth, 17 April 2000, p 454.

123 Western Australia Greenhouse Council, Background Paper (Submissions Vol 11: 2700): and Dr Bryan Jenkins, *The role of Western Australia in the National Greenhouse Strategy*, pp 2700-01.

124 Western Australia Greenhouse Council, Background Paper (Submissions Vol 11: 2700): and Dr Bryan Jenkins, *The role of Western Australia in the National Greenhouse Strategy*, p 2708.

125 The Tasmanian Government, Submission 185, p 1978.

126 The Tasmanian Government, Submission 185, p 1979.

127 The Tasmanian Government, Submission 185, p 1978.

There is a need to consider both the development of a comprehensive, integrated governmental framework for addressing greenhouse gas issues, as well as the need to develop similar standards for specific programs (such as Green Power) to encourage best practice standards and equitable outcomes between parties.

4.118 The Committee notes the diversity of views on the questions of the appropriate balance of Commonwealth and state/territory responsibilities and roles, and on the appropriate sharing of the national abatement burden.

4.119 Australia has a national responsibility to meet its Kyoto commitments for 2008 to 2012. It is widely recognised that lowest cost abatement will only be achieved by a national spread of abatement measures and actions which raises important considerations of equity. The Committee does not accept that one state or industry should be substantially exempted from action to help meet Australia's Kyoto commitments. Mandatory measures such as emissions trading do have scope for the differential treatment of some emitters, which is discussed in chapter 9.

4.120 Where the states and territories have taken responsibility for the development of programs under the NGS, or have planning and policy jurisdiction over key emissions-producing actions such as transport, energy and land clearing, they should accelerate their performance and actions in these areas.

4.121 The Committee also urges the Commonwealth to devote adequate resources to ongoing efforts to coordinate with the states and territories, and to provide appropriate assistance with the design and implementation of greenhouse abatement policies. This could take the form of project-specific grants, better communication and consultation, the sharing of knowledge and expertise, and efforts to streamline consultative processes. Helpful initiatives in this regard would be efforts to assist smaller states and territories, and assistance with (or cooperative efforts in) identifying the cost-effectiveness and availability of abatement measures. Over the medium- to long-term, the Commonwealth could coordinate the facilitation of (and access to) a growing pool of technical and policy expertise in relation to greenhouse abatement trends and opportunities.

4.122 The Committee acknowledges that the Commonwealth has already made good efforts in regard to the states and territories. However, given the crucial role which the states and territories will play in Australia's national abatement efforts, further priority needs to be given to this area.

Recommendation 22

The Committee recommends that the Commonwealth Government make further efforts to assist smaller state and territory governments or regional communities develop greenhouse strategies and responses. The Committee recommends that the Commonwealth Government improve communications, dialogue and technical cooperation between the Commonwealth and the states and territories.

Local Government and Community Responses

4.123 Local governments have an enormous capacity to influence the level of greenhouse gas emissions and, in particular, further business responses to the issue. It has been reported that local governments directly or indirectly influence 50 per cent of Australia's greenhouse gas emissions through direct emissions of waste, and also in the more general urban planning issues of transport and energy efficiency.[128]

4.124 Professor Ian Lowe pointed out:

> The decisions being taken by local government about urban form, about transport systems, about building standards, are very significant determinants of energy use. There is an old saying that when the people lead, the leaders eventually have to follow. I think it is quite likely that we can achieve changes toward Kyoto targets by measures that come from the ground up, from local authorities, because the national consumption is the sum of the consumption of all of those local authorities. There are still national decisions and state decisions made, for example, to subsidise energy intensive industries or to have a carbon tax or not have a carbon tax, but there is potential for very large gains to be made by action at the local level.[129]

4.125 A substantial and growing number of councils around Australia have adopted policies and taken measures directed, at least in part, to addressing greenhouse emissions. These include: energy efficiency programs; improved waste management; land use/transport planning strategies; provision of cycleways and footpath networks; targeted building and development controls; support for vegetation conservation and tree planting programs.[130]

4.126 As discussed earlier in this chapter, the retail electricity market is progressively allowing customers to select their own power provider. Local governments can play an important role in influencing purchasing decisions by providing advice and preparing community reform in the market; buying all or part of their own power from renewable energy suppliers; and acting as brokers and influencers in the renewable energy market.[131]

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128 *Official Committee Hansard*, Sydney, 22 March 2000, p 295.

129 *Proof Committee Hansard*, Brisbane, 26 May 2000, p 559.

130 Australian Local Government Association (ALGA), *National Local Government Policy on Climate Change*, adopted at the 1997 National Assembly of Australian Local Government, alga.com.au/green.htm (14/08/00), p 1.

131 Australian Local Government Association (ALGA), *Cities for Climate Protection - Australia*, alga.com.au/cities.htm (14/08/00).

Cities for Climate Protection

4.127 International programs such as Cities for Climate Protection™ (CCP™)[132] are encouraging local councils to take greenhouse action in those areas over which they have direct control, and in more difficult areas such as urban planning where there is often a need for local, state and Federal cooperation. CCP is a major element of local government response to greenhouse.

4.128 CCP™ Australia is an ICLEI (International Council of Local Environment Initiatives) Program in collaboration with the AGO.[133] The Commonwealth Government has a funding commitment to the CCP™ in Australia for five years and Environs Australia conducts the Program for the AGO. The Program was started in Australia in 1998 and 96 Australian councils (out of approximately 700 councils throughout Australia) are involved in the Program.[134]

4.129 CCP™ provides local governments with a strategic milestone framework to reduce greenhouse gas emissions by assisting them to identify the emissions of their council and community, set a reduction target and develop and implement an action plan to reach that target. Participating councils are required to complete five Milestones:

1. conduct an energy and emissions inventory for council and the community;
2. forecast energy and emissions;
3. establish an emissions reduction target;
4. develop a Local Action Plan (outlining how targets are to be achieved); and
5. implement agreed policies and measures.[135]

4.130 45 councils out of a total of 96 in Australia have completed Milestone 1, 8 have set emissions reduction targets and 2 have developed Local Action Plans.[136] Participating local councils set a greenhouse emissions reduction target for their own operations and their community's activities.[137]

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132 See paragraphs XX.

133 greenhouse.gov.au/lgmodules/ (07/08/00).

134 http://www.greenhouse.gov.au/lgmodules/ (07/08/00); and iclei.org/org/ccp-au/currentfolder/current.htm (28/09/2000).

135 http://www.greenhouse.gov.au/lgmodules/ (12/09/00).

136 ICLEI Australia/New Zealand, Submission 108, p 940; and Newcastle City Council, Submission 73, p 530. Participation requires a $5,000 contribution from the Council with a $1,000 per year contribution to the International Council for Local Environmental Initiatives. The Federal Government Contribution is $7,000 per participating Council (Council of the City of Armidale, Submission 24, p 113).

137 Environment Australia, *Climate Change: Australia's Second National Report under the United Nations Framework Convention on Climate Change*, November 1997, p 42.

4.131 Council actions might include: reducing the energy used in facilities owned by local government such as street lighting, car fleets, swimming pools and town halls; capturing the methane from landfill sites; and incorporating energy efficiency into purchasing policies.

4.132 Local government initiated community actions can include: incorporating energy efficiency rating schemes into building approvals for new houses and commercial buildings; incorporating solar site maximisation; public and non-car transport into urban planning; providing a home and business energy advisory service and revolving loan scheme; and integrating sink and revegetation considerations into land use planning.[138]

4.133 The AGO is developing and delivering local action modules - packages of assistance that will enable councils to more easily identify and implement greenhouse reduction initiatives. For example, a module may include introductory workshop and workbook and feasibility study assistance.

4.134 Mr Wayne Wescott, Executive Director, ICLEI - Australia/New Zealand commented:

> One of the benefits of local governments is acting regionally and collectively. We have an enormous capacity in local governments to do that.[139]
>
> There is a lead time, and one has to try and encourage all those who are impatient for action to remember that. It takes some time to wind councils through this process. Our target is 200 councils as participants in the CCP campaign in Australia. That is our target, which is a very large one and one that we are committed to reach over the [next] five years.[140]

4.135 However, Newcastle City Council noted a number of significant problems relating to the absence or poor quality of, available data on energy consumption in local government areas. [141] This is described as the biggest hurdle to participation, along with the resource constraints faced by councils in need of such information. Newcastle City Council made the point that it is not enough to have to substitute state average data, in the absence of local government data, when dealing with energy providers. Adequate funding would appear to be an important prerequisite for program success at the local government level.

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138 Htttp:// www.greenhouse.gov.au/lgmodules/ (07/08/00).

139 *Proof Committee Hansard*, Melbourne, 21 March 2000, p 205.

140 *Proof Committee Hansard*, Melbourne, 21 March 2000, p 209.

141 Newcastle City Council, Submission 73, p 530. See also ICLEI Australia/New Zealand, Submission 108, p 940.

Other Local Government initiatives

4.136 In December 1998, Newcastle City Council established the Australian Municipal Energy Improvement Facility (AMEIF).[142] In partnership with the AGO and the CCP™ (Australia) and with state and Federal governments, the AMEIF has worked with at least 49 Australian councils and with the AMEIF Green Energy Learning Programs:

> [Newcastle City Council]… have established a simple computer software package that provides the opportunity for each of those council… general manager knows how much energy they are using each quarter compared with the two previous quarters. The graph that is then plotted indicates how they are going in terms of accumulated costs and consumption during that year. We are now adding a greenhouse graph so that people become familiar with what the emissions resulting from their energy use are. We have written a policy called 'Financial Loss Control - Energy' and the idea of that is to have the connotation that, if you do not doing this, you are losing money. 'Financial Loss Control - Energy' will be adopted as a formal policy by Newcastle City Council.[143]

4.137 The Council has also introduced initiatives which include: Greenhouse Action Showcase; Residential Energy Monitoring Program; Gas Milestone 1 Project; and Greenhouse Action in Newcastle Plan (GAIN Plan).

4.138 To demonstrate how local authorities can significantly reduce greenhouse gases, in November 1992, South Sydney City Council Steering Committee launched its 'Greenhouse Effect Policy Statement'.[144] The Strategy highlighted the importance of functions such as: regional and land use planning; transport planning; recycling facilities; drainage amplification works; control of air pollution emissions; energy-efficient building policies; and promotion of public awareness and understanding of the greenhouse gas effect.

4.139 Mr Alex Serrurier, Chief Environmental Health Officer, City of Ballarat, advised that progress was prospective at this stage:

> Our greenhouse policy in the City of Ballarat is not a formal one at this point. There is a move to have a cross-departmental environmental policy.[145]

4.140 Community organisations also adopt the adage 'act local and think global', with respect to environmental issues. There is large potential for individuals to make

142 Newcastle City Council, Submission 73, p 529.

143 *Official Committee Hansard*, Sydney, 22 March 2000, p 287.

144 City of Ballarat, Submission 138, p 1449.

145 *Proof Committee Hansard*, Melbourne, 21 March 2000, p 201.

a difference to greenhouse gas reduction through personal decisions relating to almost every aspect of their behaviour.

4.141 The role of the community has already been discussed in this chapter under schemes such as the National Household Greenhouse Action Program.[146] Other efforts have been made to involve the community in greenhouse gas abatement, through local government initiatives such as Bushcare and Landcare, waste management strategies, consumer purchasing decisions, and Greenfleet.

4.142 However, in his submission, Mr Peter Kinrade pointed out that:

> A third major deficiency with the NGS and related programs is lack of community input. As with its predecessor, the community played little part in the development of the NGS and the majority of the community are still largely unaware of the Strategy's existence.[147]

4.143 It can be concluded that a concerted and sustained local government and community greenhouse education campaign is required from all levels of government to help facilitate changes in personal behaviour which favour emissions reductions, especially in the areas of energy efficiency and current and future energy requirements.

4.144 The School of Physics at the University of Sydney concluded that:

> Given the important role that education plays in communicating pro-environmental consumer behaviour, it is essential that individual responsibility for climate change along with effective abatement strategies is adequately addressed in education materials.[148]

Recommendation 23

The Committee recommends that a clear strategy be developed and coordinated at the national level to effectively communicate the issues associated with greenhouse gas emissions and climate change to the broader community.

Recommendation 24

The Committee recommends that all levels of government take responsibility for raising awareness about climate change and current greenhouse gas abatement policies and programs.

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146 See paragraphs XX.

147 Mr Peter Kinrade, Submission 164, p 1652.

148 School of Physics, University of Sydney, Submission 124, p 1269.