CHAPTER 1

INTRODUCTION

Background

1.1 On 11 August 1999, the Senate referred the global warming inquiry to the Environment, Communications, Information Technology and the Arts References Committee for inquiry and report by the first sitting week in August 2000. The full terms of reference may be found at page v.

1.2 On 22 September 1999, the Senate also agreed to a motion moved by Senator Bob Brown referring the Convention on Climate Change (Implementation) Bill 1999 to the Committee for inquiry and report in conjunction with its inquiry into the progress and adequacy of Australia's policies to reduce global warming.

1.3 The inquiry was an extensive one and the reporting date was subsequently extended to 8 November 2000.

Conduct of Inquiry

Advertising the inquiry

1.4 The Committee advertised its inquiry in each State capital city newspaper as well as in *The Australian* on 21 August 1999. Details of the inquiry were also placed on the Committee's homepage on the Internet. In addition, the Committee wrote to organisations with an interest in the inquiry.

Evidence to the inquiry

1.5 The Committee received 227 submissions which were published (except for the 4 whose authors made a request for confidentiality) and are publicly available through the Committee Secretariat. A list of the submissions is at appendix 1.

Course of the inquiry

1.6 The Committee conducted 13 public hearings as part of the inquiry: in Sydney, Melbourne, Canberra, Brisbane, Perth and Hobart. A round table discussion was also held in Canberra, with the Australian Bureau of Agricultural and Resource Economics, the Australia Institute and Sustainable Solutions.

1.7 During the course of the hearings, the Committee took evidence from 65 organisations, 19 State and Commonwealth Government Departments and heard evidence from 161 individual witnesses. They are listed at appendix 2.

1.8 The Committee also conducted site inspections to the CSIRO Energy Technology Centre at Lucas Heights and the CSIRO Climate Change Laboratory at Aspendale in March 2000.

1.9 *Hansard* recorded 933 pages of evidence. The transcripts of evidence are available at: http://www.aph.gov.au/hansard/senate/commttee/comsen.htm.

1.10 The Committee thanks all those who have organised the various tours and presentations to which the Committee was invited and which proved to be invaluable as part of the information gathering process necessary for an inquiry into such a broad and complex subject. The Committee also thanks all the witnesses, and the many individuals and organisations who have made submissions to its inquiry.

Structure of the Report

The Committee has structured the report into two main parts. The first part (chpaters 2-4) provides an overview of the global warming issue and Australia's role. The second part (chapters 5-10) details the adequacy of Australia's current and anticipated policies and programs.

Chapter 1 Introduction

This chapter provides an overview of the conduct of the inquiry and the structure of the report.

Chapter 2 The Potential Impacts of Global Warming

This chapter sets out the current state of knowledge about climate change, and scientific predictions of future climate change, including potential climate change in Australasia. The chapter discusses scientific opinion on the potential for stabilising the global climate system, including the level of emissions reductions that may be required to do so; the current areas of uncertainty in relation to the operations of the global climate system; and the predictive ability of climate change models. The chapter concludes with a discussion of the need for further research, particularly in relation to climate change in Australasia and its potential impact on Australia's environment, biodiversity and economy.

Chapter 3 The Framework Convention on Climate Change and the Kyoto Protocol

This chapter discusses the early developments in the negotiation processes for the United Nations Framework Convention on Climate Change and the Kyoto Protocol. It details Australia's role in the negotiations for the Kyoto Protocol and analyses the 'special case' argument put forward by the Australian Government; and the outcome of negotiations. The chapter continues with discussion of the role of developing countries and the Kyoto Protocol, the importance of the Clean Development Mechanism and concludes with a discussion on the ratification of the Protocol.

Chapter 4 Australia's Greenhouse Performance and Strategy

This chapter assesses Australia's emissions profile, highlighting the key challenges that Australia faces in meeting its Kyoto target and in developing sustainable solutions for managing the long term implications of climate change. The chapter draws on the National Greenhouse Gas Inventory of emissions to evaluate emerging trends in key areas of emissions production.

This chapter also develops a picture of the contemporary Australian response to global warming. It:

- provides an overview of the current national greenhouse policy framework;
- 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 National Greenhouse Strategy, and the barriers and issues hindering its effectiveness; and
- provides recommendations for future directions.

Chapter 5 Energy Use and Supply

The National Greenhouse Gas Inventory divides energy into two broad areas: 'transport' and 'stationary' energy. This chapter analyses the structure and market characteristics of Australia's stationary energy sector, and the debate over its transition to lower emissions sources and technologies.

Chapter 6 Transport Emissions and Solutions

This chapter analyses the structure of Australia's transport energy sector and the debate over its transition to lower emissions. It highlights the need for a national policy approach that integrates the diverse source of emissions with a framework that gives weight to the combined environmental impact of Australia's transport choices.

Chapter 7 Carbon and the Land

This chapter examines:

- the contribution of the land use change and forestry, and agricultural sectors to Australia's greenhouse gas emissions;
- the impact of current land management practices and policies on current and projected greenhouse emissions;
- action currently being undertaken to reduce emissions in these sectors and the potential for these sectors to contribute to greenhouse gas abatement; and
- the use of carbon sequestration through land based sinks as a greenhouse response measure and the issues and uncertainties associated with accounting for their use.

Chapter 8 The Greenhouse Challenge

This chapter critically evaluates the effectiveness of the Greenhouse Challenge Program as a major Government policy for meeting Australia's Kyoto target. It also assesses a number of concerns raised with the Committee about the current administrative framework of the Greenhouse Challenge Program, in particular, the extent to which the Government's relations with industry under the Program are accountable and transparent.

Chapter 9 Emissions Trading

This chapter discusses the potential introduction of national system of emissions trading within Australia. It assesses its potential as a market-based mechanism for reducing emissions and ensuring that the carbon emissions are priced within existing markets for energy, transport, agriculture and manufactures. The chapter also discusses the optimal timing for its introduction, the breadth of its coverage, the best way of allocating permits among emitters, credit for early action to reduce emissions, and other policies that may be needed to complement an emissions trading system.

Chapter 10 Convention on Climate Change (Implementation) Bill 1999

This chapter addresses the Convention on Climate Change (Implementation) Bill 1999. It is a Private Senator's Bill introduced into the Senate by Senator Bob Brown (Australian Greens) on 2 September 1999. The Bill proposes to implement Australia's obligations under the United Nations Framework Convention on Climate Change and the 1997 Kyoto Protocol by: establishing the Greenhouse Office; and providing for Greenhouse Impact Assessments and Industry Greenhouse Plans.