

CHAPTER 6: ENVIRONMENT PROTECTION

KEY POINTS

- The first National Environment Protection Measure, the National Pollutant Inventory (NPI), has been agreed to by the National Environment Protection Council. Measures are also being developed on ambient air quality, transboundary movement of controlled wastes, guidelines for the assessment of site contamination and used packaging materials. Proposals are being developed for possible measures on diesel emissions and ambient marine and estuarine water quality.
- The Commonwealth is facilitating increased eco-efficiency through government-industry partnerships, and in early 1999 will co-host with the Organisation of Economic Cooperation and Development (OECD) a workshop on eco-efficiency.
- Through the Natural Heritage Trust Waste Management Awareness Programme, the Commonwealth has committed \$900,000 over four years to 2000–01 to establish a Resource Recovery Centre for the Hunter Region.

Protecting the environment is a shared partnership between all levels of government, industry and the community. The Commonwealth plays a key coordination and leadership role in relation to environmental protection initiatives. Table 6.1 sets out major areas of Commonwealth expenditure.

NATIONAL ENVIRONMENT PROTECTION

BOX 6.1: NATIONAL POLLUTANT INVENTORY

The establishment and implementation of the National Pollutant Inventory (NPI) is a priority for the Government. In February 1998, the National Environment Protection Council (NEPC) agreed to establish the NPI as a National Environment Protection Measure (NEPM), the first such national measure. The first reporting year for the NPI will commence in July 1998. State, Territory and Commonwealth governments will work together to ensure the effective collection, collation and dissemination of NPI data. The inventory will assist government, industry and the community to make informed decisions about actions from human activity that affect the local and national environment.

The Commonwealth has allocated \$4 million programme funds each year in 1998-99 and 1999–2000 toward the implementation of the NPI.

The Commonwealth contributes to the operating costs of the National Environment Protection Council (NEPC), which develops National Environment Protection Measures (NEPMs), as well as contributing to the development costs of each NEPM. In February 1998, NEPC established the National Pollutant Inventory NEPM and in June 1998, the

Council is scheduled to consider making NEPMs for ambient air quality and the transboundary movement of controlled waste. In 1997–98 the Commonwealth provided over \$200,000 through its Waste Management Awareness Programme (see below) to develop a NEPM on used packaging materials, scheduled for completion in January 1999.

Table 6.1: Environment Protection — Programme and Tax Expenditure Estimates

Description	1997–98 \$m	1998–99 \$m	1999–00 \$m	2000–01 \$m	2001–02 \$m
PROGRAMME AND TAX EXPENDITURE ESTIMATES					
National Environment Protection					
National Environmental Protection Council (a)	0.9	1.0	1.0	1.0	1.0
National Pollutant Inventory	3.9	4.0	4.0	—	—
National Water Quality Management Strategy (b)	na	na	—	—	—
Noise Pollution					
Noise Amelioration Programme for Sydney Airport	70.0	69.9	69.9	54.0	—
Airport building controllers and airport environmental officers at leased airports	1.4	4.0	4.0	4.0	2.7
EIS process for second Sydney airport	—	0.1	—	—	—
Environment/Industry Initiatives					
Technology promotion (b)	..	na	na	na	na
EnviroNET Australia	0.2	0.2	0.2	0.2	0.2
International Environment Protection Programme	0.3	0.3	0.3	0.3	0.3
Waste Minimisation					
Industry waste reduction agreements (b)	na	na	—	—	—
Other waste reduction initiatives (b)	na	na	—	—	—
Waste management awareness programme	2.0	2.3	0.5	—	—
CRC for Waste Management and Pollution Control	1.9	3.0	2.5	2.0	1.0
Tax deduction for pollution prevention or remediation	na	na	na	na	na
Hazardous Materials and the Environment					
Chemicals management (c)	na	na	na	na	na
Environmental health assessment	0.7	0.7	0.7	0.7	0.7
Australian Dangerous Goods Code	0.1	0.1	..	..	..
Hazardous waste initiatives (Basel) (b)	na	na	—	—	—
Leaded petrol excise levy (d)	-110.0	-95.0	-85.0	na	na
Scheduled Wastes					
Persistent organic pollutant management plans (b)	—	na	—	—	—
Removal and destruction of stored organochlorines (b)	0.1	na	—	—	—
Environment and Health					
National Environmental Health Strategy	0.2	0.1	na	na	na
Electromagnetic energy programme	1.0	1.0	1.0	1.0	na
Australian Radiation Laboratory, electromagnetic radiation monitoring	0.1	0.1	0.1	0.1	—
International Development Cooperation					
International environment protection	70.0	na	na	na	na

— denotes nil; na denotes not available; .. denotes not zero but rounded to zero.

(a) This includes the Commonwealth's contribution to the National Environment Protection Council Service Corporation for its operational budget. The amount was \$400,000 in both 1997–89 and 1998–99.

(b) These initiatives will be funded under the Environment Protection Programme, for which \$1.7 million has been allocated in 1998–99 (see table below). Expenditure on discrete activities has yet to be determined. Negative amounts represent savings which must be found from other parts of Environment Australia's budget.

Description	1997–98 \$m	1998–99 \$m	1999–00 \$m	2000–01 \$m	2001–02 \$m
Environment Protection Programme Funds	2.0	2.2	-0.7	-0.7	-0.7

(c) The figures in last year's Environment Budget Statement included funds which were cost-recovered from industry. Cost-recovered funds are no longer specified for consistency with the remainder of the document.

(d) These funds flow from the price differential between leaded and unleaded petrol. Funds go to consolidated revenue.

Noise Pollution

The Government will maintain its focus on noise pollution amelioration in areas around the Sydney (Kingsford-Smith) Airport and the preferred site for the proposed second Sydney airport at Badgerys Creek.

The Commonwealth will spend \$69.9 million in 1998–99 on the Sydney Airport Noise Amelioration package which provides for insulation of noise-affected houses and other public buildings.

Environmental Management at Leased Airports

Commonwealth responsibilities for environmental management at leased airports are set out in the *Airports Act 1996* and related *Airports (Environment Protection) Regulations 1997*. The Government has contracted out to the private sector the statutory roles of Airport Environment Officer at most of these airports. These officers will be responsible for overseeing environmental regulation, clean-up and pollution prosecution actions. The Commonwealth is providing \$4 million for employment of Airport Environment Officers and Building Control Officers in 1998–99. This will be recovered through charges on airport owners and, where appropriate, users.

The Commonwealth has developed its regulations in accordance with best practice which provides for implementation of environment management systems and the emerging National Environment Protection Measures.

BOX 6.2: AUDIT OF EIS FOR SECOND SYDNEY AIRPORT

The Government appointed SMEC Australia Pty Ltd in November 1996 to conduct an independent audit of the Environmental Impact Statement for the proposal to construct a second major airport for Sydney at Badgerys Creek or Holsworthy. The decision to appoint an auditor was consistent with a recommendation of the 1995 Senate Select Committee on Aircraft Noise in Sydney. On 3 September 1997, the Government announced that Holsworthy had been eliminated as a potential site for the airport. This decision reduced the scope of the audit.

The Draft EIS for the proposal to construct an airport at Badgerys Creek was released for a 14-week public review period on 21 December 1997. The first audit report prepared by SMEC Australia was submitted to the Minister for the Environment on 16 January 1998. The report has since been tabled in the Parliament and released to the public in accordance with the requirements of the audit contract. SMEC is required to submit a second report to the Government following completion of the supplement to the Draft EIS, probably in the second half of 1998.

EIS for the Second Sydney Airport

The Government is committed to building a second major airport for Sydney to full international standards as a matter of priority, subject to the results of an Environmental Impact Statement (EIS). The EIS is putting before the community and the Government a detailed analysis of the benefits and environmental costs of the three options for the

construction of the airport at Badgerys Creek. No decision on the development of the airport will be taken until a thorough, objective and transparent EIS process is complete.

The Commonwealth has allocated \$100,000 in 1998–99 for the completion of an independent audit of the EIS process (see Box 6.2).

National Water Quality Management Strategy

The Commonwealth has maintained its involvement in the development and implementation of the National Water Quality Management Strategy, which aims to achieve sustainable use of the nation's water resources by protecting and enhancing their quality, at the same time facilitating economic and social development.

Work on the strategy includes the publication of effluent management guidelines for Australian wineries and distilleries in 1998. The Commonwealth is coordinating the revision of the Australian Water Quality Guidelines for Fresh and Marine Waters on behalf of two Commonwealth-State Ministerial Councils, the Australian and New Zealand Environment and Conservation Council (ANZECC) and the Agriculture and Resource Management Council of Australia and New Zealand (ARMCANZ). A draft document for public comment will be available by mid-1998. The Commonwealth is also coordinating completion of the monitoring and reporting guidelines of the strategy.

ENVIRONMENTAL INDUSTRY INITIATIVES

Without the availability, and application, of new and environmentally friendly technologies, systems and services, environmental degradation is bound to continue. The Government sees great potential for industry investment and research in key areas of environmental technologies. This will result in a more competitive Australian export industry, in environmental improvements here in Australia, and will increase opportunities for employment growth in the many small-to-medium-sized environmental companies and enterprises.

Eco-efficiency

The Commonwealth is committed to an 'eco-efficiency' approach to improving environment protection in the industry and community sectors. This involves increasing efficiency in the provision of goods and services and increasing environmental performance. In this way businesses can become more competitive while protecting the environment. To this end the Commonwealth will continue to develop mechanisms in cooperation with industry and the community to encourage the uptake of eco-efficiency.

Australia and the OECD will co-host a workshop on eco-efficiency in Australia in early 1999. The workshop, which has a budget of \$100,000, will address barriers to eco-efficiency and practical responses to encourage industry to implement eco-efficiency approaches.

The Commonwealth has begun developing environment management systems for the operations of the Department of the Environment with a view to applying for certification to ISO 14001.

A further element of the Commonwealth's eco-efficiency programme is the development, through ANZECC, of the National Strategy for Cleaner Production. Due to be finalised in 1998, the strategy will provide a framework for future actions by governments and industry to adopt cleaner production. The Commonwealth will continue to provide cleaner production case study information through the National Cleaner Production Directory on the Internet (part of *EnviroNET Australia* — see below).

Technology Promotion

The Commonwealth is promoting new approaches to environment protection through helping develop innovative environmental technologies.

Information on new environmental technologies, services and integrated management systems is disseminated to the Australian and international communities through *EnviroNET Australia*, available on the Internet. The network has been allocated \$200,000 each year over four years from 1998–99 for maintenance and promotion. The site aims to promote environmental awareness and better environmental behaviour in the community and provide Australian companies with a suitable vehicle for promotion of their goods and services to domestic and export markets.

The Sydney 2000 Olympics provide an opportunity to showcase Australian environmental technologies and systems in almost every aspect of infrastructure development and conduct. The Commonwealth will cooperate with the New South Wales Government and other groups to promote Australia internationally as a supplier of environmental technology, services and management solutions to urban environmental problems. To ensure continuing community involvement, the Commonwealth will continue funding for Green Games Watch 2000, an environmental non-government organisation.

The Commonwealth will continue to address environment management issues on the World Heritage listed Lord Howe Island, a popular tourist destination. During 1998 a new biowaste management facility will be opened on the Island to treat solid waste and septage, diverting these waste streams away from landfill. The facility will be jointly funded by the Commonwealth and New South Wales Governments, and will serve as a model for how other small remote communities can address similar problems.

Promotion of Best Environmental Industry Practice

The Commonwealth will continue to work with industry and the community to promote the voluntary adoption of best-practice environmental management in the mining industry, both domestically and internationally. To complement this approach, the Commonwealth will develop a national mining stakeholder network to formulate environmental sector policy, promote best industry practice and facilitate opportunities for exporters of Australian technology, services and integrated management systems (also see Chapter 4).

Based on the success of these programmes, similar approaches are being considered in other important industry sectors, notably the transport, energy, tourism and

urban/construction sectors. The Government continues to encourage private sector industry to develop their own codes of environmental conduct.

International Environment Protection Programme

The Commonwealth is providing \$300,000 each year over four years from 1998–99 for the International Environment Protection Programme to assist in the growth of Australia's environmental goods and services industries and to support environment protection in our region. The programme provides for joint public-private sector initiatives aimed at accessing new, and improving existing, export markets for Australian environmental goods and services. Typical activities include capacity building programmes, commercially-based technology transfer, staff exchanges, business development strategies and business missions.

WASTE MINIMISATION

Reducing the amount of waste going to landfill is the major objective of the Commonwealth's waste minimisation policy. The National Waste Minimisation and Recycling Strategy sets a national target of reducing waste going to landfill by 50 per cent by the year 2000 (based on 1990 per capita levels). The Commonwealth, working through the Australian and New Zealand Environment and Conservation Council (ANZECC), has initiated and developed waste minimisation programmes in the packaging (see Box 6.3), construction and demolition (see Box 6.4), and government sectors of the waste stream. The Commonwealth is also working towards the development of markets for recovered materials.

BOX 6.3: INDUSTRY WASTE REDUCTION AGREEMENTS

Voluntary initiatives such as the Industry Waste Reduction Agreements (IWRAs) negotiated with the milk carton, paper packaging, steel, newsprint and the liquid paperboard industries agree to specific waste diversion targets and a range of waste minimisation strategies including recycling, source reduction, 'lightweighting', and community education. It is estimated that these IWRAs will:

- remove 270 million plastic milk bottles from the waste stream every year;
- collect 200,000 tonnes of newspapers each year;
- manufacture over half of all paper packaging from recycled papers;
- recycle over 40,000 tonnes of steel cans each year;
- recycle over 500 million milk cartons each year by the year 2000.

The Commonwealth, through ANZECC, is currently negotiating with local government and industries to develop a National Packaging Covenant. The Covenant is a mechanism for companies to voluntarily reduce the amount of packaging waste, to increase the re-use and recycling of packaging products, and to stabilise and support the kerbside collection scheme.

The Commonwealth committed, through the Natural Heritage Trust Waste Management Awareness Programme, a total of \$5 million over four years from 1996–97 to address national issues in waste minimisation. A key issue is the lack of markets for recycled and recovered materials. A proportion of these funds (\$850,000 over four years from 1997–98) is being used to establish a Resource Recovery Centre for the Hunter Region. The Centre will stimulate the development of markets for recycled and recovered materials, and it is expected that the Centre's initiatives will also be applied in other areas of Australia.

BOX 6.4: WASTE MANAGEMENT IN THE CONSTRUCTION INDUSTRY

The ANZECC WasteWise programme, which pioneers and promotes best practice waste reduction in the construction and demolition industry, will be completed in 1998–99. Five major construction companies, Fletcher Construction, John Holland, Multiplex, Lend Lease (Civil and Civic) and Barclay Mowlem have been involved in the programme and a recent review highlighted the waste minimisation achievements made by each company. A report on the review will soon be published. The Commonwealth, on behalf of ANZECC, is currently implementing the recommendations from the review and it is expected that the WasteWise programme, with an increase in participants, will continue for a further three years.

The Commonwealth is also working with the building industry to develop the *Building Industry Waste Management Guidelines*.

Cooperative Research Centre for Waste Management and Pollution Control

In 1998–99 the Commonwealth will provide \$3 million to the CRC for Waste Management and Pollution Control for research into all aspects of the waste management, from waste minimisation through to treatment and disposal. The Centre investigates all elements of waste, including liquid and solid wastes, gaseous emissions and site contamination. A particular emphasis is placed on waste management practices that could assist Australian industry.

The CRC has recently made a significant advance in the treatment and clean up of wastewater with the identification of a naturally occurring bacteria which assists clean wastewater before it enters the environment. The bacteria, called *Nitrospira*, converts harmful nitrite in wastewaters to nitrate. The discovery also revolutionises scientific thinking about the biological breakdown of nitrogen in water.

HAZARDOUS MATERIALS AND THE ENVIRONMENT

Chemicals Management

Environmental Assessment for industrial chemicals is carried out under the National Industrial Chemicals Notification and Assessment Scheme (NICNAS), and for agricultural and veterinary chemicals under the National Registration Scheme (NRS). Assessment covers the whole life cycle of these chemicals and is carried out under 100 per cent cost recovery from industry. In 1998–99 the environmental component of the NICNAS assessments is expected to cost industry \$500,000 and the NRS is expected

to cost industry \$900,000. (Note: Last year's figures for NICNAS and NRS included funds which were cost-recovered from industry — 50 per cent in the case of NICNAS, and 100 per cent for NRS. Table 6.1 of this report does not specify cost-recovered funds for consistency with the remainder of the document.)

The Commonwealth also provides advice on the potential health effects of chemicals in the environment, including activities which relate to policies for national management of chemicals, and international harmonisation of chemical risk assessment and information exchange. Funding for these activities is \$700,000 each year.

Internationally, Australia has contributed to the development of a global treaty on 'prior informed consent' which aims to protect human health and the environment against potentially harmful impacts from certain hazardous chemicals in international trade. Agreement was reached in March 1998 on the new treaty, which will be opened for signature later this year. Also, in mid-1998 Australia will begin working with other governments to develop a new treaty to eliminate or reduce the use of certain persistent organic pollutants (POPs). Australia has already been involved in efforts to prepare for this convention at the regional level. The Commonwealth also contributes to the United Nations International Programme on Chemical Safety (see Table 2.2).

Scheduled Waste Management

Through the National Strategy for Scheduled Wastes and in conjunction with States and Territories, the Commonwealth has now completed a national plan for polychlorinated biphenyls (PCBs) and another for hexachlorobenzene (HCB) waste. Both plans are being progressively incorporated into legislation or regulations in the States and Territories. A third plan, for organochlorine pesticides, has been approved in principle by the Australian and New Zealand Environment and Conservation Council (ANZECC).

The Commonwealth is also working with States and Territories, and with industry, to reduce the risk to animal and human health posed by unwanted farm and household chemicals. Significant progress has already been made in developing a national strategy for the management of unwanted farm chemical containers, and attention is currently focused on a national collection scheme for unwanted rural pesticides.

Transport of Dangerous Goods

The Commonwealth is developing a new national uniform regime for the transport of dangerous goods by road and rail. A key element of this new regime is the sixth edition of the Australian Dangerous Goods Code, which has recently been published. The new regime is expected to be implemented by all jurisdictions progressively from the end of March 1998. The Commonwealth will spend \$65,000 in 1998–99 in implementing the new Code.

Hazardous Waste

The Commonwealth is improving the operation of the *Hazardous Waste (Regulation of Exports and Imports) Act 1989*. Information on the scope and requirements of the Act, which was amended in 1996 to control all Basel Convention wastes, is being further

developed in a series of advisory papers. The Commonwealth will codify into a formal strategy activities to ensure compliance with the Act.

Australia is participating in the work of the Basel Convention and also that of the OECD on hazardous wastes, with a view both to defining hazardous wastes more precisely and making them more easily identifiable in customs codes and data. The Commonwealth is seeking both to improve the management of hazardous wastes and to minimise duplication of functions among the various international bodies. Australia also seeks to improve the management of hazardous wastes in the Asia-Pacific region by providing support for the establishment of regional centres under the Basel Convention.

ENVIRONMENT AND HEALTH

The Commonwealth environmental health activities aim to reduce community exposure to environmental hazards from all media and settings, with particular emphasis on sensitive populations and disadvantaged groups.

Environmental health activities to be undertaken by the Commonwealth in 1998–99 include development of a National Environmental Health Strategy, rolling revision of the Australian Drinking Water Guidelines, health risk assessment for arsenic, environmental health impact assessment, and ground water quality assessment for Anangu Pitjantjatjara Lands. The 1998–99 Budget provides additional funding totalling \$78.8 million over the next four years to enhance Australia's public health capacity in a number of nationally significant areas. Environmental health will be one of the areas towards which these funds will be directed.

The Commonwealth will continue to contribute to the World Health Organization's project to assess the health and environmental effects of electromagnetic energy exposure, together with an independent Australian research programme concentrating on urban areas. The Commonwealth has provided funding of \$1 million for this programme in 1998–99.

The Commonwealth provides \$100,000 each year to the Australian Radiation Laboratory to make field measurements of radiofrequency electromagnetic radiation (EMR) in Australian cities. This is to assess exposure to EMR, particularly from increasing numbers of mobile phone base stations.

INTERNATIONAL DEVELOPMENT COOPERATION

The Australian aid programme assists a range of countries in the Asia-Pacific region in environment management. Assistance has been focused on establishing effective institutional frameworks, with a focus on capacity building. These activities have concentrated on institutional strengthening of key national environment protection agencies. The value of current major bilateral projects related to environment protection is estimated at \$70 million and is assisting countries including Pakistan, India, Indonesia, Philippines and Papua New Guinea. Some typical activities include developing environmental protection legislation, improving environmental impact assessment, transferring cleaner production technologies, and increasing community awareness and training.

BOX 6.5: PACIFIC WASTE MANAGEMENT PROJECT

In 1998, the Australian aid programme will commence the Pacific Waste Management POPs Phase 1 Project to assist 13 South Pacific countries to upgrade the regional capacity for management of chemicals, in order to eliminate the threat posed by Persistent Organic Pollutants (POPs) to the environment and human health. Assistance is provided to determine the types and quantities of POPs, contamination, storage facilities' requirements, improved handling, disposal and remediation procedures and developing legislation for effective chemicals management.