

Department of the Environment
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The Department of Environment would like to acknowledge the publication of this Report was made possible owing to the cooperation and collaborative efforts of all Australian government jurisdictions.

While the Report provides a snapshot of effort it reflects a small part of the work undertaken by all Australian governments, industry and the community in resource recovery and the management of waste.

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INTRODUCTION

Overview

The National Waste Policy (NWP) Implementation Report 2012 and 2013 sets out progress against the NWP's five-year implementation plan. *The National Waste Policy: Less waste, more resources,* was agreed by environment ministers in November 2009 and endorsed by the Council of Australian Governments (COAG) in August 2010. This policy sets a clear direction for Australia as a nation, over a ten year period to 2020, toward producing less waste for disposal and managing waste as a resource to deliver economic, environmental and social benefits.

This Report highlights the significant work being undertaken, both collaboratively and individually, by Australian governments to better manage waste and improve resource recovery.

National Waste Policy

The NWP¹ provides the national framework for Australia's waste management and resource recovery from 2010 to 2020. The NWP's objectives are to:

- avoid the generation of waste, reduce the amount of waste (including hazardous waste) for disposal, manage waste as a resource, and ensure that waste treatment, disposal, recovery and re-use is undertaken in a safe, scientific and environmentally sound manner; and
- contribute to a reduction in greenhouse gas emissions, energy conservation and production, water efficiency and the productivity of the land.

This includes actions and activities to address hazardous wastes and substances in the municipal, commercial and industrial, construction and demolition waste streams and covers gaseous, liquid and solid wastes.

The policy has six key directions:

- 1. Taking responsibility
- 2. Improving the market
- 3. Pursuing sustainability
- 4. Reducing hazard and risk
- 5. Tailoring solutions
- 6. Providing the evidence

Building on these key directions, the NWP also identifies 16 priority strategies that benefit from a national or coordinated approach, to focus work across individual jurisdictions, and provide clarity and certainty for business and the community. The effective implementation of the NWP relies on partnerships, effective governance and multi-disciplinary and stakeholder initiatives.

Further information on the NWP, the NWP Implementation Plan, roles and responsibilities is available from http://www.environment.gov.au.

National Television and Computer Recycling Scheme Australian Government

What and Why

- The Scheme involves a combination of government regulatory support and industry action to take responsibility for the collection and recycling of waste televisions, computers, printers and computer products
- Electronic waste, including televisions and computers, is growing three times faster than any other type of waste in Australia
- The Scheme has boosted the recycling of televisions and computers from an estimated 17 per cent of waste generated in 2010 to a target of 30 per cent in 2012-13

How?

- Under the Scheme, householders and small business can drop-off items for free at designated access points, which may include permanent collection sites, take-back events or through a mail-back option
- The Scheme recycling targets will progressively increase each year, reaching 80 per cent of waste generated by 2021–22

- 482 television and computer collection services have been delivered around Australia in all states and territories, including 388 ongoing services and 94 short-term recycling events
- Five arrangement administrators have been approved to deliver on-ground operations and giving industry parties a choice in which administrator they join
- 100 per cent of industry parties met their obligation to join an approved arrangement for the 2012–13 target period
- For further information –
 http://www.environment.gov.au/topics/environment-protection/national-waste-policy/television-and-computer-recycling-scheme

1. TAKING RESPONSIBLITY

Shared responsibility for reducing the environmental, health and safety footprint of products and materials across the manufacture-supply-consumption chain and at end of life

Strategy 1 - Product Stewardship

Product stewardship framework legislation to allow the impacts of a product to be responsibly managed during and at end-of-life

Product stewardship is an approach that is designed to manage the impacts of different products and materials. All those involved in the production, sales, use and disposal of products are responsible for reducing the impacts of waste on human health and the environment.

National product stewardship legislation

The main objective of Strategy 1 was achieved with the commencement of the *Product Stewardship Act 2011* on 8 August 2011. The *Product Stewardship Act 2011* establishes the framework in which the environmental, health and safety impacts of products, and in particular those impacts associated with the disposal of products are managed, and includes voluntary, co-regulatory and mandatory product stewardship.

Further development of the framework has occurred over 2012 and 2013. Key initiatives in this area include:

- Consultation paper on the proposed model for accreditation of voluntary product stewardship arrangements² – February 2012 – released for public comment with 20 submissions received from a wide range of stakeholders in response to the paper and 42 interested parties attended public meetings held in Sydney, Canberra and Melbourne.
- Product Stewardship Regulation 2012 and Product Stewardship (Voluntary Arrangements) Instrument 2012³ – November 2012 – specifies the fees for the application of voluntary product stewardship arrangements and sets out the requirements for accreditation under the voluntary provisions of the Product Stewardship Act respectively.

- Product Stewardship List June 2013 the annual product list for 2013-14 was published and included the following classes of products:
 - Waste architectural and decorative paint
 - End-of-life handheld batteries (less than 2kg in weight)
 - Packaging (and subsets of packaging, such as consumer packaging and beverage packaging)
 - End-of-life air conditioners with small gas charges
 - End-of-life refrigerators with small gas charges
- Accreditation under the voluntary provision of the Product Stewardship Act 2011⁴
 June 2013 applications were opened via an online application process allowing applicants access to full step-by-step instructions conveniently.

National product stewardship arrangements

The NWP sought to establish at least one product stewardship scheme within the first three years and to have a number of voluntary product stewardship schemes accredited and reporting within four years.

Key initiatives in this area include:

- Australian and New Zealand Standard for collection, storage, transport and treatment of electrical and electronic waste⁵ – February 2013 – provides guidance on undertaking electronic waste collection and recycling in a safe and environmentally appropriate manner.
- FluoroCycle Scheme for mercury-containing lamps⁶ July 2013 after three years of government funded operation, the Lighting Council Australia took over the Scheme as an industry-led and funded voluntary scheme that aims to increase the recycling of mercury containing lamps.
- Tyre Stewardship Australia⁷ In August 2013 guidelines for the operations of an industry-led tyre product stewardship scheme were finalised, following consultation with tyre and vehicle importers, retailers, fleet operators, local governments, collectors, recyclers and the mining industry. In April 2013 the Australian Competition and Consumer Commission granted conditional authorisation to the scheme for five years, paving the way for the tyre industry to establish Tyre Stewardship Australia, an independent, not-for-profit company to administer the scheme.

Strategy 2 – Sustainable Procurement

Governments as significant procurers of goods, services and infrastructure embody and promote sustainable procurement principles and practices within their own operations and delivery of programs and services to facilitate certainty in the market Sustainable procurement considers and aims to reduce the environmental, social and economic impacts of goods and services over their life. In this context, value for money is based on the true cost of a good or service from production and supply through to use and disposal, rather than initial cost alone.

Key initiatives in this area include:

- Sustainable Procurement Guide⁸ and the Guide to the sustainable procurement of services⁹ – February 2013 – to help Australian Government agencies incorporate sustainability considerations into procurement decisions.
- Sustainable Procurement in the Australian Government Report 2013¹⁰ June 2013 describes the Australian Government's overarching procurement framework and the role of sustainability within procurement, including key environmental and social policies.

Strategy 3 – Packaging

To better manage packaging to improve the use of resources, reduce the environmental impact of packaging design, enhance away from home recycling and reduce litter

The Australian Packaging Covenant is the voluntary arm of a co-regulatory arrangement to reduce the environmental impacts of packaging in Australia. Responsibility for delivering the Covenant's objectives is shared between all sectors of the packaging supply chain and government. The current Australian Packaging Covenant places an increased emphasis on improving packaging design, increasing recycling away from home and reducing litter.

Australian government signatories to the Covenant implement individual five-year action plans which identify activities to address the Covenant's objectives in reducing the environmental impacts of packaging, and report annually against their action plans

Key initiatives in this area include:

- Get it Right on Bin Night¹¹ June 2012 an education program to increase household recycling rates across metropolitan Melbourne launched by the Victorian Government and the Metropolitan Waste Management Group.
- Smarter Resources, Smarter Business program ¹² November 2012 helping Victorian medium-sized businesses to improve their resource efficiency by reducing packaging and better managing waste packaging.
- Packaging Impacts Consultation Regulation Impact Statement Consultation Summary Report¹³ – June 2012 – examines the key messages arising from public consultation undertaken on the Consultation RIS. The comments supported further action to address the impacts of packaging waste and litter.

Progressing the ACT Waste Management Strategy 2011-2025 Australian Capital Territory

What and Why

- The ACT Waste Management Strategy 2011-2025 set targets of over 85% resource recovery by 2020 and over 90% by 2025
- The Strategy includes the ACTSmart Business and Office Programs that facilitate on-site waste reduction and recycling by Canberra businesses
- Other strategies include an interim ban on lightweight shopping bags and improved management and recovery of electronic and commercial waste

How?

- A total of 633 sites across the ACT are participating in the ACTSmart Programs and many non-accredited sites have also achieved reductions in waste to landfill and increases in recycling
- The ACTSmart Business and Office programs are also delivered to businesses and offices in Queanbeyan through a cross border agreement with Queanbeyan City Council
- An Interim Review of the ban on lightweight shopping bags was undertaken in 2012 with the Report released in November 2012

- A total of 7,205 cubic metres of waste was diverted from landfill by the 203 accredited ACTSmart sites in 2012-13
- A survey taken as part of the Interim Review on the ban on lightweight shopping bags indicates that the ban has changed consumer behaviour with 84 per cent of primary shoppers now taking reusable bags always or most of the time when they go to the supermarket (against 44 per cent prior to the ban)
- In May 2012 the ACT became the first Australian jurisdiction to open free e-waste drop off centres under the National Television and Computer Recycling Scheme
- For further information http://www.tams.act.gov.au/recyclingwaste/reports_data_forms/ACT_Waste_Management_Strategy

2. IMPROVING THE MARKET

Efficient and effective Australian markets for waste and recovered resources, with local technology and innovation being sought after internationally

Strategy 4 - Classifications and Definitions

To introduce a national definition and classification system for waste (including hazardous and clinical waste) that aligns with definitions in international conventions, provides for when a material ceases to become a waste, and reflects these classifications in relevant policies and instruments

A consistent definition and classification system:

- will improve the measurement and management of all waste, including hazardous waste,
- provide consistency to enable better nationwide information and facilitate better policy and decision making, with data that will be compiled at local, State and national levels and
- ease the burden for business and governments through reporting.

Key initiatives in this area has included a number of studies undertaken to clearly outline the existing definition and classification and data collection and reporting systems for wastes, the issues associated with existing systems, and in which areas a national system will be of most benefit to government, industry and communities. These include:

- Waste Classifications in Australia a comparison of waste classifications in the Australian Waste Database with current jurisdictional classifications¹⁴ – April 2012 – provides an overview of the reasons why jurisdictions use different waste classification systems and how waste-related data are collected within each jurisdiction.
- Australian Waste Definitions¹⁵ September 2012 is a compilation of waste definitions from the legislation, regulations, instruments, policy, and strategy documents of each jurisdiction to assist in clarifying the different definitions used and aid the development of harmonised definitions and reporting.

Strategy 5 - National Principles

To facilitate the development of a suite of agreed national principles, specifications, best practice guidelines and standards to remove impediments to the development and operation of effective markets for potential waste.

- Australian Recycling Sector¹⁶ and the supplementary report Data collection and reporting¹⁷ August 2012 provide an overview of the key characteristics of the Australian recycling sector, the environment in which it operates, and the social economic and environmental benefits of recycling.
- Beneficial reuse and resource recovery of waste materials: An inventory of
 Australian over-arching objectives and guiding principles¹⁸ September 2012 –
 identifies the objectives and guiding principles used by states and territories to
 promote beneficial reuse and recovery of waste to help to guide the development
 of an agreed set of principles which can be used to determine when a waste
 product ceases to be deemed a waste and termed a resource.
- A Stock-take of waste related standards, specifications and guidelines¹⁹ –
 January 2013 provides a stock-take and review of waste related standards,
 specifications and guidelines, including recording their source, publication date
 and purpose.
- Beneficial reuse and resource recovery of waste materials: inventory of Commonwealth and state and territory guiding principles²⁰ – January 2013 – documents the current Commonwealth and state and territory guiding principles that promote beneficial reuse and recovery of waste, and to provide a comparison of these principles with those in use by the states and territories.
- Getting full Value: the Victorian Waste and Resource Recovery Policy –
 April 2013 sets a 30 year vision for waste and resource recovery in Victoria with policy priorities that will guide actions over the next ten years in partnership with the NWP.

Strategy 6 - Knowledge Exchange

To provide access to knowledge and expertise in sustainable procurement and business practices

This strategy aims to establish effective mechanisms to facilitate the exchange of information across industry, governments and communities and provide better access to waste management and reprocessing technologies information, regulatory and institutional settings, research, business case information and consumer values.

Key initiatives in this area include:

- Smarter Resources, Smarter Business²¹ August 2012 the Victorian Government's program works with consumers to improve procurement and procurement policies.
- Sustainable Choice²² as at June 2013 an initiative that has engaged 78 NSW local councils and helps share and provides access to sustainable products and services with 1600 sustainable products and services registered.

Incentive based Litter Reduction and Recycling Northern Territory Container Deposit Scheme

What and Why

- On 3 January 2012 the Northern Territory (NT) Container Deposit Scheme was introduced to reduce beverage container litter and increase resource recovery across the NT
- The NT had a low rate of recycling by national standards approximately 3.5 per cent against the national rate of approximately 48 per cent
- Beverage containers are the most likely form of packaging to be consumed away from home, making them particularly prone to littering, easy for individuals to collect, handle and return to a depot for recycling

How?

- A 10 cent refundable deposit is provided on those containers returned to approved collection depots
- Collection depots return the collected containers to be reused, recycled or appropriately disposed
- Grants have been offered to government and non-government schools across the NT to purchase caged trailers for collection, storage and transport of beverage containers

- Approximately 90 million containers have been returned to depots across the NT in the first 18 months of operation
- 75 schools were awarded grants from Darwin (28), the Palmerston area (22), to Central Australia (17) and the Katherine region (7)
- An average 41% return rate since the commencement of the scheme in January 2012
- An increase of over 5 million in the number of containers redeemed on the same period in 2012
- For further information http://www.ntepa.nt.gov.au/container-deposits

3. PURSUING SUSTAINABILITY

Less waste and improved use of waste to achieve broader environmental, social and economic benefits

Strategy 7 – Biodegradable material in landfill

Building on existing commitments, continue to phase down the amount of biodegradable material sent to landfill

Biodegradable material sent to landfill is most likely to come from organic waste that originates from plant and animal sources. Recycling organics can reduce gas produced from landfill and produce valuable market products that include compost, biochar, soil conditioners and biogas.

Key initiatives in this area include:

- National Food Waste Assessment²³ March 2012 consolidates and summarises the information generated through 1,262 food waste studies.
- Love Food Hate Waste Program²⁴ 2012-13 provided 38 grants to NSW small
 and medium businesses in the hospitality and retail sectors to avoid food waste
 and to encourage donations of surplus, edible food to charity. Projects included a
 Love Food Hate Waste smart phone application, a film competition and
 supermarket information sessions.
- Melbourne Metropolitan Organics Plan²⁵ April 2012 the provision of processing services for organic waste. This contract covers some
 11 participating councils in the north and west of Melbourne and is designed to service the needs of participating communities for a 15 year period.
- Organics Recycling in Australia Industry Statistics 2011²⁶ May 2013 collates national and jurisdictional organics recycling data for 2010-11, including the composition of organic material and the types of recycled products sold to inform the National Waste Report 2013.

Strategy 8 - Managing health and safety risks

Ensure the safety and health risks arising from landfill gas emissions are managed across all landfills through appropriate regulation and license requirements

Landfills can have impacts on air, water, soil and biota. Potentially hazardous substances can be released to the air from landfill and also migrate through the surrounding soil either directly, via leachate, or in landfill gas. Landfill gas is created by the decomposition of organic waste and consists mainly of methane and carbon dioxide, which are greenhouse gases.

- Closed landfill guidelines²⁷ December 2012 provides guidance to assist landfill operators with rehabilitation and aftercare management requirements for closed landfills, and assist with seeking necessary approvals for construction or augmentation of landfill caps.
- Model of Australian Landfills Project February 2013 a project to validate a
 model of landfills which will improve understanding of how chemicals and other
 substances persist and behave in landfill and landfill leachate, to be completed
 by June 2015.

Strategy 9 – Emissions from Landfill

To develop a strategy for measures to address emissions from disposal of waste to landfills and other waste activities and through these support the operation of the Clean Energy Act and Carbon Farming Initiative

Approximately 55% of landfill gas is methane which has a global warming potential over 20 times that of carbon dioxide and in 2008 emissions from the waste sector, including solid waste in landfill, were 2.5 per cent of Australia's national emissions of greenhouse gases. Measures to reduce or abate landfill emissions will contribute to the nation's emissions targets.

Key initiatives in this area include:

Transition Support to Improve Rural Landfill Infrastructure Program²⁸ –
June 2012 – \$3.87 million over 17 operators to help Victorian rural landfill
operators to transition to best practice standards. The funds cover the costs of
protective geomembranes and associated testing, installation and auditing.

Strategy 10 - Commercial and Industrial

To achieve major improvements in waste avoidance and reuse of key materials in the commercial and industrial waste stream

The commercial and industrial waste stream includes waste material generated from commercial office buildings, education facilities, shopping centres, public buildings and government facilities (other than from councils), sports facilities, and a range of industrial sites ranging from light industry (such as warehousing) through to heavy industry (such as manufacturing). It may include hazardous or potentially hazardous wastes.

- Bin Trim Program²⁹ a simple electronic tool and supporting education program
 that assists NSW small to medium businesses to measure their waste and gives
 tailored information to reduce, reuse and recycle materials. In 2011-12, the Bin
 Trim tool and assessment process was piloted in 105 businesses. On average
 each business recovered an additional 41 tonnes of recyclables each year.
- Driving Investment in New Recycling³⁰ June 2012 a Victorian Government \$5 million fund which targets small to medium scale processing infrastructure for mixed commercial and industrial waste and organics.
- Resource Recovery Infrastructure³¹ June 2012 a Victorian Government \$6.5m fund which aims to encourage development of large scale infrastructure (>100 000 tonnes per annum) to process commercial and industrial waste.
- Review of Waste Reduction and Recycling Programs Targeting the Commercial and Industrial Sector³² – 2012 – found that government programs in the commercial and industrial sector are generally perceived to be contributing to waste reduction, but this is not always verifiable due to a lack of data meaning the success of the program cannot be accurately measured.
- Beyond Waste Fund³³ September 2012 provides financial support for projects in Victoria from the commercial and industrial, and construction and demolition sectors that seek to avoid, reduce and reuse operational waste.
- Place-based approaches to commercial and industrial waste and recycling³⁴ –
 October 2012 assists governments and industry to implement place-based
 approaches that can reduce the generation of commercial and industrial waste,
 improve its recovery and minimise flows to landfill.

Strategy 11 - Construction and Demolition

All governments continue to encourage best practice waste management and resource recovery for construction and demolition projects

Construction and demolition waste is derived from residential, civil and commercial construction and demolition activities. Recycling of construction and demolition waste is largely driven by commercial factors.

Building materials account for about half of all materials used and about half the solid waste generated worldwide. They have an environmental impact at every step of the building process – extraction of raw materials, processing, manufacturing, transportation, construction and disposal at the end of a building's useful life.

- Waste and Resource Recovery Facilities Workers Manual³⁵ 2012 the updated Manual provides the basis for a successful training program for operators of waste and recycling facilities to improve environmental management, work health and safety and to increase the quality and quantity of materials recycled. The Waste Contractors and Recyclers Association of NSW deliver the training. The update included examples on the use of resource recovery exemptions, worker health and safety, de-construction of buildings, Business Recycling online directory and timber recovery initiatives.
 - Construction and demolition waste guide recycling and re-use across the supply chain³⁶ – January 2012 – helps develop effective markets for materials diverted or derived from the construction and demolition waste stream.
 - Guidelines for managing asbestos at construction and demolition waste recycling facilities³⁷ – November 2012 – provides guidance on measures that licensed construction and demolition recycling facilities in Western Australia will be required to follow to manage risk of asbestos contamination of feedstock and products to reduce risks to site workers and the community.

Northern Tasmania Organics Collection Trial

Northern Tasmanian Waste Management Group

What and Why

- Evaluation of the potential for a kerbside collection system to divert food and garden organics from landfill
- A year-long trial was conducted in Northern Tasmania in order to identify local issues and knowledge gaps

How?

- The trial was undertaken by three local government areas in Northern Tasmania, and three separate trial areas were chosen
- 900 homes throughout parts of north and north-west Tasmania were selected and approximately 90% of the households participated in the 12 month trial
- Each household in the trial was provided with a 240L wheelie bin, a kitchen caddy and compostable bags
- The trial included measurement of organics tonnages captured, surveys of residents participating in the trial, and focus groups

- It is estimated that food and garden organics collection could divert at least 0.26 to 0.32 tonnes of waste from landfill per household annually across the three local government areas, with contamination levels expected to be low
- A majority of households expressed a positive acceptance of the initiative
- Following the trial, the Meander Valley Council selected the suburb of Blackstone Heights as the first locale for an ongoing fortnightly kerbside collection of green waste and food scraps in the municipality
- For further information http://www.meander.tas.gov.au/page.aspx?u=594

4. REDUCING HAZARD AND RISK

Reduction of potentially hazardous content of wastes with consistent, safe and accountable waste recovery, handling and disposal

Strategy 12 - Hazardous Waste

Responsibility to meet international obligations; reduce hazardous materials entering the waste stream; dispose of and move trans-boundary waste in an environmentally sound manner in appropriate facilities

Actions implemented under this strategy by the Australian Government have improved the monitoring of chemicals and hazardous substances; and therefore continue to strengthen Australia's capacity to meet its international responsibility to protect human health and the environment. The Australian Government and jurisdictions continue to engage effectively to progress shared responsibilities, to collaborate and take decisions collectively based on solid evidence and to focus efforts on activities that contribute to international responsibilities and support national consistency.

There is growing threat to human health and the environment posed by the increased generation and complexity and transboundary movement of hazardous wastes. As the generation of hazardous industrial and chemical wastes in particular continues to increase, they contain a variety of properties that pose significant risks to human health and/or the environment, from generation through their handling, movement and through to the final fates of these wastes. These wastes include materials and products containing hazardous substances are found in all waste streams and include medical waste, electronic waste, household chemicals, treated timber, floorings, plastics, paint, polymers, coatings, adhesives and solvents. These are wastes that cannot be disposed of in municipal landfill or the sewer. They are required to controlled, and tracked to special treatment and disposal facilities."

Key initiatives in this area include:

- Hazardous Waste Data Assessment³⁸ May 2013 provides a compilation of available data and information on hazardous waste volumes in Australia to increase the level of public information available regarding hazardous waste generated in states and territories. The report is in two parts:
 - Hazardous Waste Data Assessment compiles data and information on hazardous waste generation in Australia, including the hazardous waste that crosses state, territory or national borders and hazardous waste that remains within a single jurisdiction.
 - Hazardous Waste Data Summary provides further interpretation and analysis of the data presented in the Hazardous Waste Data Assessment, and draws out headline messages about hazardous waste generation in Australia.

Monitoring program for chemicals of concern

- A monitoring program has been established, which monitors chemicals of concern through the three core media types; air, blood and human breast milk.
- This project commenced in September 2010 and has established an operational air monitoring network across around 44 sites in Australia, representing a range of land use types. More than 150 passive air samplers and six active air samplers are installed and operational nationally. Many of the samples collected under this program are stored in the Specimen Bank (see further discussion below) with a small subset analysed for over 20 chemicals of concern, including mercury.
- The pilot program has provided valuable information regarding the sensitivity and robustness of data that can be obtained with different sampling strategies and equipment. This will go towards informing the design of a long term fully functional and robust national program that can detect trends to the necessary levels of accuracy over time.
- This project continues until 2015. The first stage of the project was the
 establishment of the monitoring program. The second stage of the project is to
 use the data collected to date, it will deliver a scientifically robust chemical
 transport model that can be used to investigate the sources (including regional
 sources), transportation and fate of the chemicals in ambient air throughout
 Australia. It is due to be completed in the first quarter of 2014.

Strategy 13 – Hazardous substances in products

Adoption of a system that aligns with international approaches to reduce hazardous substances in products and articles sold in Australia

A key reform is the establishment of a framework for developing and implementing nationally consistent standards to manage the environmental risks of industrial chemicals. All jurisdictions have been working collaboratively to develop policy options for a framework to manage the risks of chemicals in the environment.

Key initiatives in this area include:

 Consultation Regulation Impact Statement for Hazardous Substances in Products³⁹ – April 2013 – options for developing and implementing nationally consistent decisions to manage the environmental risks of industrial chemicals. This includes considering options to establish a national body to set environmental standards for chemicals, and assessing the costs and benefits of environmental labelling of chemicals.

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Solutions for Waste Management in Regional and Remote Australia Regional and Remote Australia Working Group

What and Why

- The Regional and Remote Australia Working Group, made up of all jurisdictions in Australia is responsible for implementing strategies under the key direction 'Tailoring solutions—increased capacity in regional and remote communities to manage waste and recover and re-use resources'
- Each regional and remote community is unique and there is no single solution for waste management
- To improve waste management, successful regional and remote communities have tailored solutions to meet their circumstances
- The Working Group was looking to share the knowledge, experience and learnings across the diverse and distributed communities of regional and remote Australia

How?

- Draw together case studies from regional and remote communities in a variety of geographical and demographic contexts, ranging from projects undertaken in small remote communities to those in larger regional centres
- The case studies capture a range of solutions that have been tried and tested, and also include projects that have not been successful but have nevertheless provided valuable learnings

- The publication of "Solutions for Waste Management in Regional and Remote Australia" a compilation of some 32 case studies from across Australian regional and remote communities
- It is also envisaged that the case studies will foster the establishment of waste management networks between communities throughout Australia who share similar challenges due to their remote locations
- For further information –
 http://www.wasteauthority.wa.gov.au/media/files/documents/regional-remote-case-studies.pdf

5. TAILORING SOLUTIONS

Increased capacity in regional, remote and Indigenous communities to manage waste and recover and re-use resources

Strategy 14 - Regional and Remote Waste and Resource Recovery

To identify regional and remote waste and resource recovery actions to build capacity and ensure an appropriate suite of services is available to communities.

Key initiatives in this area include:

Aboriginal lands clean-up program⁴⁰ – 2012-13 – is an initiative to support NSW Aboriginal Communities, in partnership with their local council, to manage and prevent illegal dumping on Aboriginal owned land through education and training to up-skill the community to better manage their land in a sustainable manner and protect their land from further illegal dumping incidents. Five Local NSW Aboriginal Land Councils were awarded funds for clean ups being held in 2012-13.

Strategy 15 - Indigenous Audit

To undertake an audit of existing waste infrastructure and local capability in selected remote Indigenous communities as part of a larger municipal and essential services audit under the Council of Australian Governments' National Partnership on Remote Indigenous Housing.

- The audit of municipal and essential services was undertaken in 70 remote Indigenous communities under the auspices of the Council of Australian Governments' National Partnership on Remote Indigenous Housing.
- As part of the Audit, a review of national and jurisdictional guidelines, frameworks, and regulations was undertaken. Base level waste standards were agreed by the Commonwealth and all jurisdictions and issued on 10 December 2009. Results of the Audit are informing further work on revised arrangements for the delivery of municipal and essential services.

Compaction Equipment for the recovery of Expanded Polystyrene New South Wales

What and Why

- The provision of grants totalling \$1 million to purchase and operate recycling equipment for Expanded Polystyrene the type of packaging that comes with fresh food packaging, white goods, televisions and other electronic goods
- Expanded Polystyrene is seen as hard to recycle with less than 10 per cent recycled in 2011 and more than 12,000 tonnes disposed of in landfill each year

How?

- Grants of up to \$50,000 each were made to seven local councils, eight businesses and four not-for-profit organisations to provide recycling services to local communities
- The Grants were for installing compactors, shredders and storage cages to recycle the Expanded Polystyrene so that it can be re-used in local manufacturing processes or transported to international markets
- Each 15kg block of general purpose polystyrene is worth about \$7.50, making it valuable enough to transport to buyers in Sydney or even overseas

- As of May 2013 grant recipients were recycling a total of 25 tonne (~2,500 loose m3) per month, a figure expected to grow to 50 tonnes per month by the end of 2013
- While the cost of compaction and transport is generally higher than the market value of the general purpose polystyrene, the value of the landfill space means that every tonne recycled saves a landfill owner between \$1,500 and \$2,500
- Some grant recipients have started using existing arrangements for recovered computers and televisions (e-waste) to transport EPS to a central location for compaction and increase the efficiency of recycling
- Further information http://www.epa.nsw.gov.au/waste/EPSrecycling.htm

6. PROVIDING THE EVIDENCE

Decision makers have access to meaningful, accurate and current national waste and resource recovery data and information to measure progress and educate and inform the behavior and the choices of the community

Strategy 16 – Reporting and Data System

Publish a three yearly waste and resource recovery report, underpinned by a system that provides access to integrated national core data on waste and resource recovery

In late 2012, the Department commenced work on the National Waste Report 2013. The 2013 report will build on the information presented in the National Waste Report 2010, showing changes over time with updated data relating to a number of measures. New data sets will be included to show a more complete picture of waste and recycling in Australia. The National Waste Report 2013 is scheduled to be completed in late 2013 and released in early 2014. The 2013 report, data workbooks and interactive mapping will be available online.

In addition, overall 27 studies have been commissioned between 2010 and 2012 that will provide information to support the development of the second National Waste Report. These studies bring together data and statistics work in relation to waste generation and resource recovery in Australia, hazardous waste, organics, the Australian recycling sector, construction and demolition and commercial and industrial. In addition, many studies have been commissioned to gather information to feed into the National Waste Report 2013. These reports and studies have also assisted in establishing baseline data and developing a comprehensive account of waste issues, which can be used by industry, government and the community to make informed and timely decisions. This has assisted in clarifying waste and resource recovery data and information sources and the need for access to integrated national core data.

Appendix A: Working Groups

	onal Waste Policy Cluster Working Groups	Chair, Australian Caverament	
	uct Stewardship	Chair: Australian Government	
1	The Australian Government, with the support of state an framework underpinned by legislation to support voluntal stewardship and extended producer responsibility schemes responsibly managed during and at end of life.	ry, co-regulatory and regulatory product nes to provide for the impacts of a product being	
3	The Australian Government, in collaboration with state a community will better manage packaging to improve the impact of packaging design, enhance away from home re-	use of resources, reduce the environmental ecycling and reduce litter.	
Data	a and Classifications	Chair: Australian Government	
2	All governments as significant procurers of goods, services and infrastructure, will embody and promote sustainable procurement principles and practices within their own operations and delivery of programs and services to facilitate certainty in the market.		
4	The Australian Government, in collaboration with state a national definition and classification system for wastes (i aligns with definitions in international conventions, provid become a waste, and reflects these classifications in rele	ncluding hazardous and clinical wastes) that des for when a product or material ceases to	
5	The Australian Government, in collaboration with state a Environment Protection and Heritage Council, will facilitate principles, specifications, best practice guidelines and state development and operation of effective markets for potential of the control of t	ate the development of a suite of agreed national andards, to remove impediments to the ntial wastes.	
6	The Australian Government, in collaboration with state and territory governments, local governments, industry, business and the community, will provide access to knowledge and expertise in sustainable procurement and business practices.		
16	The Australian Government, in collaboration with state a publish a three-yearly current and future trends waste ar underpinned by a system that provides access to integra recovery that is accurate, meaningful and up-to-date and	nd resource recovery report. This will be ated national core data on waste and resource	
Lan	dfill Management	Chair: Victoria	
7	State and territory governments building on existing com		
-	the amount of biodegradable material sent to landfill.		
8	State and territory governments ensure the safety and health risks arising from landfill gas emission		
•	managed across all landfills through appropriate regulation and licence requirements.		
9	The Australian Government, in collaboration with state a		
	for measures to address emissions from disposal of was		
	these support the operation of a future Carbon Pollution		
Con	nmercial & Industrial, Construction & Demolition &	Chair: Western Australia	
	ernments	Oldin. Western Adstralia	
10	State and territory and local governments, in collaboration business, to achieve major improvements in waste avoid commercial and industrial waste stream.		
11	All governments continue to encourage best practice wa construction and demolition projects.	ste management and resource recovery for	
Red	ucing Hazard & Risk	Chair: Australian Government	
12	The Australian Government, in collaboration with state and territory governments, will ensure that: our international obligations are met; hazardous materials entering the waste stream are reduced; transboundary movement of hazardous waste is effectively, efficiently and legally undertaken within Australia and complies with international requirements; product stewardship is adopted to provide for the impacts of a product with potentially hazardous materials being responsibly managed during and at the end of life; and facilities are available to handle and dispose of hazardous substances that become wast in an environmentally sound manner.		
13	The Australian Government, with the support of state an aligns with international approaches, to reduce hazardou Australia that represent a potential risk during and at encenvironment.	us substances in products and articles sold in d of life to human health, safety or the	
Reg	ional & Remote Australia	Chair: Western Australia	
14	State and territory and local governments to work togeth resource recovery actions to build capacity and ensure a communities.	an appropriate suite of services is available to	
15	The Australian Government will undertake an audit of ex selected remote Indigenous communities as part of a lar Australian Governments' National Indigenous Housing P	ger essential services audit under the Council o	

Appendix B: Links to Relevant Websites

National Waste Policy	www.environment.gov.au/wastepolicy
Australian Government	Department of the Environment www.environment.gov.au
Australian Capital Territory	Environment and Sustainable Development Directorate www.environment.act.gov.au Territory and Municipal Services www.tams.act.gov.au
New South Wales	Office of Environment & Heritage www.environment.nsw.gov.au Department of Planning and Infrastructure www.planning.nsw.gov.au Environment Protection Authority www.environment.nsw.gov.au/epa/
Northern Territory	Department of Lands, Planning and Environment www.ntepa.nt.gov.au
Queensland	Department of Environment and Heritage Protection www.ehp.qld.gov.au
South Australia	Department of Environment, Water and Natural Resources www.environment.sa.gov.au Environment Protection Authority www.epa.sa.gov.au Zero Waste SA www.zerowaste.sa.gov.au
Tasmania	Department of Primary Industries, Parks, Water and Environment www.dpipwe.tas.gov.au Environment Protection Authority www.epa.tas.gov.au
Victoria	Department of Sustainability and Environment www.dse.vic.gov.au Environment Protection Authority www.epa.vic.gov.au Sustainability Victoria www.sustainability.vic.gov.au
Western Australia	Department of Environment and Conservation www.dec.wa.gov.au Environmental Protection Authority www.epa.wa.gov.au Waste Authority www.zerowaste.wa.gov.au

Appendix C: Resources

- 1 National Waste Policy http://www.environment.gov.au/topics/environment-protection/national-waste-policy
- 2 Consultation paper on the proposed model for accreditation of voluntary product stewardship arrangements http://www.environment.gov.au/settlements/waste/product-stewardship/consultation/voluntary.html
- 3 Product Stewardship Regulation 2012 and Product Stewardship (Voluntary Arrangements) Instrument 2012 http://www.environment.gov.au/topics/environment-protection/national-waste-policy/product-stewardship/legislation
- 4 Accreditation under the voluntary provision of the Product Stewardship Act 2011 http://www.environment.gov.au/topics/environment-protection/national-waste-policy/product-stewardship
- 5 Australian and New Zealand Standard for collection, storage, transport and treatment of electrical and electronic waste standardsaustralia.org.au
- 6 FluoroCycle Scheme for mercury-containing lamps http://www.fluorocycle.org.au
- 7 Tyre Stewardship Australia http://tyrestewardship.org.au
- 8 Sustainable Procurement Guide http://www.environment.gov.au/wastepolicy/publications/sustainable-procurement-guide.html
- 9 Guide to the sustainable procurement of services http://www.environment.gov.au/wastepolicy/publications/sustainable-procurementservices.html
- 10 Sustainable Procurement in the Australian Government Report 2013 http://www.environment.gov.au/wastepolicy/publications/sustainable-procurement-2013.html
- 11 Get it Right Bin night http://www.getitrightbinnight.vic.gov.au/
- 12 Smarter Resources, Smarter Business http://www.sustainability.vic.gov.au/www/html/3601-smarter-resources-smarter-business-program.asp
- 13 Packaging Impacts Consultation Regulation Impact Statement Consultation Summary Report -

http://www.scew.gov.au/consultation/packaging-impacts-consultation-regulation-impact-statement-ris

- 14 Waste Classifications in Australia a comparison of waste classifications in the Australian Waste Database with current jurisdictional classifications http://www.environment.gov.au/wastepolicy/publications/pubs/waste-classifications-comparisons.pdf
- 15 Australian Waste Definitions: http://www.environment.gov.au/wastepolicy/publications/pubs/australian-waste-definitions.pdf

16 Australian Recycling Sector -

http://www.environment.gov.au/wastepolicy/publications/pubs/australian-recycling-sector.pdf

17 Data collection and reporting through licensing arrangements - http://www.environment.gov.au/wastepolicy/publications/pubs/data-collection-and-reporting.pdf

18 Beneficial reuse and resource recovery of waste materials: An inventory of Australian over-arching objectives and guiding principles - http://www.environment.gov.au/wastepolicy/publications/reuse-resource-recovery.html

19 A stock-take of waste related standards, specifications and guidelines - http://www.environment.gov.au/wastepolicy/publications/stocktake-standards.html

20 Beneficial reuse and resource recovery of waste materials: inventory of Commonwealth and state and territory guiding principles - http://www.environment.gov.au/wastepolicy/publications/beneficial-reuse-principles.html

- 21 Smarter Resources, Smarter Business http://www.sustainability.vic.gov.au/Services-and-Advice/Business/Smarter-Resources-Smarter-Business
- 22 Sustainable Choice http://www.lgnsw.org.au/member-services/sustainable-choice
- 23 National Food Waste Assessment http://www.environment.gov.au/wastepolicy/publications/pubs/food-waste.pdf
- 24 Love Food Hate Waste Program http://www.lovefoodhatewaste.nsw.gov.au/business/home.aspx
- 25 Melbourne Metropolitan Organics Plan http://www.sustainability.vic.gov.au/www/html/3295-melbourne-metropolitan-organics-plan.asp
- 26 Organics Recycling in Australia Industry Statistics 2011 http://www.environment.gov.au/wastepolicy/publications/organics-recycling.html
- 27 Closed Landfill Guidelines http://www.epa.vic.gov.au/~/media/Publications/1490.pdf
- 28 Transition support to improve rural landfill infrastructure http://www.sustainability.vic.gov.au/www/html/3248-transition-support-to-improve-rural-landfill-infrastructure.asp
- 29 Bintrim Program http://www.epa.nsw.gov.au/bintrim/
- 30 Driving Investment for New Recycling http://www.sustainability.vic.gov.au/Services-and-Advice/Funding/Driving-Investment-for-New-Recycling
- 31 Resource Recovery Infrastructure fund http://www.sustainability.vic.gov.au/www/html/3635-resource-recovery-infrastructure-fund.asp

32 Review of Waste Reduction and Recycling Programs Targeting the Commercial and Industrial Sector -

http://www.zerowaste.wa.gov.au/media/files/documents/SLR_Final_Report7Sep12.pdf

- 33 Beyond Waste Fund http://www.epa.vic.gov.au/waste/docs/EPASVMWMG-funds-background.pdf
- 34 Place-based approaches to commercial and industrial waste and recycling http://www.environment.gov.au/wastepolicy/publications/pubs/place-based-approaches.pdf
- 35 Waste and Resource Recovery Facilities Workers Manual http://www.wcra.com.au/files/WARR%20Manual%20low%20res.pdf
- 36 Construction and demolition waste guide recycling and re-use across the supply chain http://www.environment.gov.au/resource/construction-and-demolition-waste-guide-recycling-and-re-use-across-supply-chain
- 37 Guidelines for managing asbestos at construction and demolition waste recycling facilities http://www.dec.wa.gov.au/search.html?searchword=asbestos&searchphrase=all
- 38 Hazardous Waste Data Assessment www.environment.gov.au/wastepolicy/publications/hazardous-waste-data.html
- 39 COAG Consultation Regulation Impact Statement Hazardous Substances in Products
- 40 Aboriginal lands clean-up program http://www.environment.nsw.gov.au/grants/alcup.htm