

Fourth Regional 3R Forum in Asia

“3Rs in the Context of Rio+20 Outcomes – The Future We Want”

Ha Noi, Viet Nam, 18-20 March 2013

Country Analysis Paper

(Draft)

<Australia>

This country analysis paper was prepared by Australia as an input for the Fourth Regional 3R Forum in Asia. The views expressed herein do not necessarily reflect the views of the United Nations.

COUNTRY ANALYSIS PAPER

Joint paper prepared by the Australian Government Department of Sustainability, Environment, Water, Population and Communities and the Department of Industry, Innovation, Science, Research and Tertiary Education.

Australia is the sixth largest country in the world and the largest country in the Asia-Pacific region, having a landmass of some 7,617,930 square kilometres and a coastline of 34,218 kilometres. Australia's population comprises 23 million people, with 89 percent of the population living in urban areas; making Australia one of the world's most urbanised countries. Australia has six states; New South Wales, Queensland, South Australia, Tasmania, Victoria and Western Australia; and two major mainland territories; the Australian Capital Territory and the Northern Territory.

In Australia, the three tiers of government; the Australian Government, state and territory governments, and local government; have a history of collaboration to deliver a range of policies and programs to manage resource efficiency, reduce waste and increase re-use and recycling. Each of these levels of government also has its own powers and responsibilities, allowing for the development and enforcement of comprehensive waste management policies, strategies and laws to be delivered at a national, state and local level. These powers originate in the Australian Constitution 1901, which is the supreme law that sets the rules for how the Australian Government operates, including its relationship to the other tiers of government.

Section 1: Major initiatives and achievements in the areas of 3R policies, program and institutional measures

The Australian Government is responsible for ensuring that Australia meets its' international waste and chemical management obligations, including international conventions in hazardous substances, persistent organic pollutants, ozone depleting substances and synthetic greenhouse gases. This is achieved through legislative mechanisms, national strategies and working with the state and territory governments.

The Australian Government also collaborates with the other two tiers of government to deliver national initiatives which focus on efficient and environmentally responsible approaches to waste management. The key national policy is the *National Waste Policy: Less Waste, More Resources* (www.environment.gov.au/wastepolicy). The National Waste Policy sets Australia's waste management and resource recovery direction to 2020. The aims of the National Waste Policy are to:

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

State and territory governments are primarily responsible under the Australian Constitution for managing waste reduction, re-use and recycling. Each state and territory government establishes their own legislative instruments to protect the environment and to conserve natural resources. The state and territory governments work collaboratively to ensure their legislative frameworks are consistent so that businesses operating in multiple jurisdictions can follow the same or similar laws.

State and territory governments have established reduce, re-use and recycle policies for their own jurisdiction. These policies generally focus on minimising harm to the environment and encouraging waste avoidance and resource recovery. Waste-to-landfill reduction targets have been set that encourage reuse and recycling. For example, South Australia has a waste management strategy which aims to avoid or reduce the amount of waste going into landfill by 35 percent by 2020, and to maximise the useful life of materials by making them last longer through re-use and recycling.

Australia has a third tier of government known as local government. This tier is concerned with community matters such as building regulations and development, local roads and footpaths. Local government plays an important role in providing household waste collection and recycling services and managing and operating waste management facilities. A key action undertaken by local government is the delivery of education and awareness programs to help local households and businesses to reduce, re-use and recycle. Information is provided through community meetings, information telephone lines and via the internet, with some local governments providing education officers who engage with the residents, businesses and schools to educate and encourage change.

Section 2: Major initiatives and achievements in promoting 3R technologies and infrastructure development

The Australian Government runs multiple programs to support major initiatives and achievements in promoting reduction, re-use and recycling technologies and infrastructure. Examples of some of these programs are below.

- The Commonwealth Scientific and Industrial Research Organisation (CSIRO) is Australia's national science agency. The CSIRO partners with industry and research institutions to tackle technological challenges of reducing waste from industry. Recovery strategies include extracting and recycling materials from waste and using waste as a source of energy. CSIRO also manages the Australian Waste Database project that collects information on waste quantities and composition in order to monitor the achievement of waste reduction targets and objectives in Australia. More information the CSIRO waste management solutions is available at: www.csiro.au.
- AusIndustry's innovation programs help Australian businesses develop new process and technologies to address waste management, including the *Clean Technology Investment Program* and the *Clean Technology Food and Foundries Investment Program*. These programs invest in energy efficient capital equipment and low emission technologies, processes and products. More information on AusIndustry is available at: www.ausindustry.gov.au.
- The *National Enabling Technologies Strategy* (NETS) helps Australian industries capitalise on growth opportunities and ensure Australia can benefit from the technologies while addressing potential risks to health, safety and the environment. More information is available at: www.innovation.gov.au.
- The Clean Technology Innovation Centre aims to enhance the capabilities of small and medium enterprises involved in a range of clean tech related areas including; equipment supply, services and technologies to reduce waste, materials utilisation and resource recovery. More information is available at: www.ausicom.com/clean-energy-innovation-centre.

As previously discussed, each state and territory government have waste management and resource recovery policies. A number of state and territory governments provide funding for new innovations and infrastructure, which are funded from a waste levy system. The waste levies in Australia are paid by households and businesses to dispose of municipal, commercial, industrial and prescribed wastes at licensed waste management facilities. As an example, the New South Wales government has recently announced a waste and recycling infrastructure package which commits funding to the development of drop-off centres, food and garden organics processing facilities, new and renovated infrastructure, recycling innovation programs and support for businesses to increase on-site recycling.

Section 3: Examples of specific policy initiatives or measures in dealing with new emerging waste streams

E-waste

As discussed previously, the National Waste Policy is Australia's key national framework on which all tiers of government collaborate. A key achievement of the National Waste Policy is the establishment of the *Product Stewardship Act 2011* (the Act). The Act is a flexible and practical approach to the regulation of product stewardship in Australia and recognizes that each product, material and industry is unique. Information on the Act is available at: www.environment.gov.au/product-stewardship.

Televisions and computers were the first products to be covered under the Act, with the National Television and Computer Recycling Scheme (the Scheme) commencing operations in May 2012. The Scheme is funded and run by the television and computer industry and regulated by the Australian Government. It allows

householders and small business to access free collection and recycling services for televisions and computers, printers and computer products (such as keyboards, mice and hard drives) regardless of their brand and age. As with many countries, in Australia e-waste is growing faster than any other type of waste. Televisions and computers make a significant contribution to the Australian waste stream. In 2007-8, an estimated 106,000 tonnes of televisions and computers reached their end of life, which is close to 5 kilograms per Australian. In that same year, an estimated 10,000 tonnes, or 10 percent, of end of life televisions and computers were recycled. Under the Scheme, by 2021-22, 80 percent of all these products reaching their end of life will be recycled. This target is one of the highest recycling rates internationally. More information is available at www.environment.gov.au/ewaste.

On 18 February 2013, the first standard for safe and environmentally sound handling of electrical and electronic waste in Australia and New Zealand was released. The standard matches international best practice and was developed in collaboration between governments, product manufacturers, recyclers, industry association and community and environmental groups. It builds on existing environmental protections and international agreements, setting up processes to promote reduction, re-use and recycling. The standard also complements the National Television and Computer Recycling Scheme.

Plastics in marine environments

Plastic materials washed or blown from the land into the sea is classified as harmful marine debris impacting Australia's marine environment. The Australian Government works with international organisations and state, territory and local government to address the issue of ocean pollution and marine debris. Australia has a unique and diverse marine life including protected species of birds, sharks, turtles and mammals and several initiatives are already in place to manage waste entering the ocean.

Injury and fatality to vertebrate marine life caused by ingestion of, or entanglement in, harmful marine debris is listed as a key threatening process under Australia's *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). In June 2009, the Australian Government introduced the *Threat Abatement Plan for the Impacts of Marine Debris on Vertebrate Marine Life* (the Plan) under the EPBC Act, which is being implemented in close cooperation with state and territory governments. The Plan provides a framework with timeframes and actions to ensure a coordinated national approach on the issues. More information on the Plan is available at: www.environment.gov.au/coasts/pollution/marine-debris/.

The Plan complements the National Waste Policy and existing activities to mitigate the impacts of marine debris, such as national, state and territory projects that address litter at its source, by reducing waste, increasing recycling and encouraging industry to take responsibility for their products. The National Packaging Covenant is an example of a successful product stewardship scheme where governments at all levels and industry have worked together to reduce the environmental impacts of packaging.

Hazardous and chemical wastes

Australia has obligations under the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal to take appropriate measures to ensure that the generation of hazardous and other wastes (including household wastes) is reduced to a minimum; that adequate disposal facilities exist for the environmentally sound management of wastes; and that waste management take steps to prevent pollution due to waste. The Australian Government implements our obligations through the *Hazardous Waste (Regulation of Exports and Imports) Act 1989*. In addition, as a signatory to the Stockholm Convention on Persistent Organic Pollutants, Australia has further requirements to restrict, and ultimately eliminate, the production, use, trade, release and storage of dangerous long-lasting chemicals.

At a community level, state and territory governments take a lead role in managing the safe and scientifically sound disposal of hazardous wastes in households and businesses. For example, in Victoria the state and local government collaborate to provide a *Detox your Home* household chemical disposal service. The service collects a range of household chemicals; including aerosol cans, insect spray, cleaners, batteries, paint and fertilisers; for safe, responsible disposal or recycling. More information is available at: www.sustainability.vic.gov.au.

Organics

The Australian Government, in consultation with state and territory governments, is considering new ways to improve the sustainability of organic waste through the National Waste Policy. In May 2011 the National Food Waste Assessment was completed. This project documents Australian food waste knowledge, the quality of that knowledge, and who holds it. In June 2011 work commenced on developing consistent benchmarks for supermarket food waste performance consistent with the National Australian Built Environment Rating System (NABERS).

Most state and territory governments have policies and programs aimed at reducing the amount of organic waste sent to landfill. For example, in New South Wales the government launched the *Love Food Hate Waste* program in May 2010. The program aims to raise awareness about the environmental and financial impacts of food waste in the state and to reduce the amount of 'good' food being sent to landfill. A website (www.lovefoodhatewaste.nsw.gov.au) and supporting resources have been established to promote easy and practical solutions for buying, cooking and storing food.

Section 4: Specific policy initiatives or strategies for promotion of 3Rs in industry and business sectors, including small and medium size enterprises (SMEs)

Working with industry and businesses has been a long-standing approach to policy and program development and implementation for governments in Australia. Waste reduction, re-use and recycling strategies and programs often relies on the engagement of industry and business in order to succeed. Collaboration has resulted in a number of highly successful initiatives which benefit all stakeholders.

The Australian Packaging Covenant (APC) commenced operation in 1999. The APC is the primary mechanism for managing the environmental impacts of packaging in Australia, run in partnership between government and industry, and underpinned by legislation. The APC represents collaboration between businesses along the supply chain, all tiers of governments and community organisations. It promotes reduction, re-use and recycling and has been integral in building household kerbside recycling services, building recycling infrastructure, and more recently, sustainable design of packaging, recycling at work and in public places, and reducing packaging litter. Since its commencement, the national recycling rate for packaging has increased from 39% to 63.1% in 2011. Information is available at: www.packagingcovenant.org.au.

In December 2011 the National Waste Policy Knowledge Store was launched. It provides a platform for all tiers of Australian government, industry, business and the community to showcase their efforts towards the recycling, reuse, avoidance and reduction of waste. The Knowledge Store can be accessed at: www.environment.gov.au/wastepolicy/knowledge-store.

In 2011-12, New South Wales launched a business extension of the *Love Food Hate Waste* program to support small and medium businesses in the hospitality and retail sectors to avoid food waste and to encourage donations of surplus, edible food to charity. The number of partners involved in the program has continued to grow with more than 130 currently involved.

There are a number of national voluntary, industry-led schemes and strategies currently operating in Australia which promote reduction, re-use and recycling. Voluntary schemes involve businesses or industry taking action to manage the impacts of different products and materials. Examples of voluntary, industry-run schemes and strategies include:

- drumMuster provides Australian agricultural and veterinary chemical (agvet) users with a recycling pathway for eligible empty agvet chemical containers. Established in 1998, drumMuster now has 762 sites across Australia and has recycled over 20 million containers. More information is available at: www.drummuster.com.au/.
- MobileMuster is an initiative funded and supported by the mobile phone industry to ensure that old mobiles and accessories are kept out of landfill and recycled in a safe, secure and ethical way. Since 1999, 7.27 million mobile handsets and batteries have been recycled. More information is available at: www.mobilemuster.com.au/.

- FluoroCycle aims to reduce the amount of mercury entering the environment from the disposal of waste mercury-containing lighting, and increase the recycling of these lamps. More information is available at: www.fluorocycle.org.au/.
- Australian Food and Grocery Council (AFGC), the peak industry organisation representing the food and grocery manufacturing industry, introduced a Sustainability Commitment Strategy in November 2011. The ten year strategy takes an industry-wide approach that builds on the existing achievements and engages small and medium enterprises as well as large companies. Under the commitment industry has agreed to significant sustainability targets in the areas of waste, energy, emissions, packaging and sustainable sourcing

Section 5: List specific policy initiatives or strategies for promotion of 3Rs in agriculture and rural sector in support of rural livelihood generation.

The rural sector is an important component of Australia's economy, making up approximately 12 percent of gross domestic product. To help support the viability of this sector, the Australian Government facilitates the development of self-reliant, profitable, competitive and sustainable Australian farm businesses and industries. The following Australian Government activities contribute to this goal by:

- developing and implementing policies and programs, in collaboration with industry that helps to assure product safety and integrity. Particular emphasis is placed on on-farm risk management that relates to food safety
- assisting producer's effective use of industry levies. For example, the National Residue Survey uses the levies of participating industries to facilitate access to international and domestic markets by providing residue testing services that meet market requirements, and
- working with the international Codex Alimentarius Commission to ensure food standards that help protect the health of consumers and assist in ensuring fair trade.

The Australian Government is developing Australia's first national food plan to help ensure that Australia's policy settings are appropriate for the short, medium and long-term. The aim of the national food plan is to foster a sustainable, competitive, resilient food supply that supports access to nutritious and affordable food.

The Australian Governments *Caring for our Country* initiative has provided funding for natural resource management, including Landcare activities. Landcare is a community-based approach that has played a major role in raising awareness, influencing farming and land management practices and delivering environmental outcomes across Australia since 1985. Landcare activities funded from Caring for our Country include:

- the Regional Landcare Facilitators initiative to promote the uptake of sustainable farm and land management practices
- the National Landcare Facilitators initiative to encourage information sharing, partnerships and networks across Landcare and natural resource management stakeholders
- ongoing support for Landcare Australia Limited to provide services to community Landcare including the Landcare Australia website, the Landcare directory of groups, National Landcare Awards, community service announcements, publications such as Landcare in Focus, Landcare week activities and to raise corporate and community awareness.

More information on Caring for our Country and Landcare is available at: www.nrm.gov.au/about/key-investments/landcare.html.

Grass-roots initiatives which support the rural and agricultural sector are also delivered through the state and territories governments who make provision for their own community funding arrangements. For example, in Western Australia community based and environmental groups and individuals can apply for the Community Grants Scheme, which offers support for the development of projects that address waste reduction, re-use and recycling, and environmental management issues.