Sixth Regional 3R Forum in Asia and the Pacific
"*3R as an Economic Industry - Next Generation 3R Solutions for a Resource Efficient Society and Sustainable Tourism Development in Asia and the Pacific*"
Malé, Maldives, 17-19 August 2015

Country Report

(Draft)

< Australia>

This country report was prepared by the Government of Australia as an input for the Sixth Regional 3R Forum in Asia and the Pacific. The views expressed herein do not necessarily reflect the views of the United Nations.

Country 3R Progress Report	**Name of the Country: Australia** **Name, Designation and Organization Respondent: Bruce Edwards, Assistant Secretary, Department of the Environment** **Other Ministries, Organizations, Agencies contributing to Country Report:** **Timeline of Submission: 17 JULY 2015 (**Email: 3R@uncrd.or.jp)

Progress and achievements towards implementation of the Ha Noi 3R Declaration
-Sustainable 3R Goals for Asia and the Pacific (2013-2023)-

With the objective of demonstrating renewed interest and commitment of Asia-Pacific countries towards realizing a resource efficient society, the Fourth Regional 3R Forum in Asia-Pacific in 2013 adopted the good-will and legally non-binding "***Ha Noi 3R Declaration – Sustainable 3R Goals for Asia and the Pacific 2013-23.***" The objective of the Country Reporting is to share among international community various initiatives launched and efforts made (such as new policy instruments, legislations, regulations, institutional arrangements, investments or financing, technological innovation or intervention, partnership mechanisms, such as PPPs, etc.) by the member countries of the Forum in addressing each of the underlined goals of the Ha Noi 3R Declaration. This would not only help the member countries to learn various 3R best practices in place across the region, but it would also help bi-lateral and multi-lateral development agencies, donors, development banks in assessing the sustainable needs and challenges to better devise their existing as well as future capacity building programmes and technical assistance in the areas of 3Rs and sustainable waste management.

We request you to kindly fill in the below table as much as possible with relevant data/information. If additional spaces are required, separate sheets could be attached.

Thank you very much for your kind cooperation.

Secretariat of the Regional 3R Forum in Asia and the Pacific
United Nations Centre for Regional Development (UNCRD)
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Voluntary Progress/Achievements/Initiatives in Implementing Ha Noi 3R Declaration (2013~2023)

Country Name: Australia

I. 3R Goals in Urban/Industrial Areas (3Rs in municipal solid waste)	
Goal 1	Significant **reduction** in the quantity of **municipal solid waste** generated, by instituting policies, programmes, and projects at national and local levels, encouraging both producers and consumers to reduce the waste through greening production, greening lifestyle, and sustainable consumption.

Q-1 What specific 3R policies, programmes and projects, are implemented to reduce the quantity of municipal solid waste?

In Australia, most waste management is the responsibility of state and territory governments, rather than the Australian Government. Therefore, information on some New South Wales (NSW) Government waste and recycling initiatives and approaches have been included as examples of state and territory approaches.

At the national level, the Australian Government supports better outcomes in this area by working collaboratively with industry and other governments.

The National Waste Policy: Less Waste, More Resources (2009), http://www.environment.gov.au/protection/national-waste-policy, is a policy of the Council of Australian Governments, made up of the Australian Government and all state and territory governments. The National Waste Policy identifies waste prevention and management priorities for the period of the policy (until 2020) and the level of government responsible for leading and performing work on each priority. Through this framework the Australian Government works with the States and Territories to support key national waste priorities.

Strategies in the National Waste Policy to reduce waste generation include reducing the amount of biodegradable material sent to landfill through implementing beneficial reuse (eg compost, soil conditioners biochar) and through the use of alternative waste treatment technologies, waste to energy plans and biodigesters.

The Australian Government, in collaboration with state and territory governments, industry and the community, is working 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 (APC) brings government, industry and community groups together to fund projects that address packaging sustainability issues. - http://www.environment.gov.au/protection/national-waste-policy/packaging-covenant

Through the *Waste Less Recycle More* initiative the NSW Government has provided $137.7 million in funding over five years to help councils recycle more and reduce illegal dumping and littering. This includes a $70 million Better Waste and Recycling Fund for councils to fund targeted and tailored infrastructure and programs for their local communities. It also includes the funding of regional coordinators to help groups of councils plan infrastructure and develop and deliver regional waste strategies.

NSW local governments also have access to $250 million in infrastructure grant funding under the initiative for the construction of infrastructure such as the community drop off centres for problematic household wastes (e.g. paints, batteries, gas bottles etc).

The *Love Food Hate Waste* NSW program encourages food waste avoidance through education. The program includes grants up to $70,000 for local councils and community groups to develop and deliver education projects. The NSW government cross promotes these behaviours as conditions of grant funding for other grants, including for home composting equipment and new or expanded organics kerbside collections.

Voluntary Progress/Achievements/Initiatives in Implementing Ha Noi 3R Declaration (2013~2023)

Country Name: Australia

I. 3R Goals in Urban/Industrial Areas (3Rs in municipal solid waste)	
Goal 1	Significant **reduction** in the quantity of **municipal solid waste** generated, by instituting policies, programmes, and projects at national and local levels, encouraging both producers and consumers to reduce the waste through greening production, greening lifestyle, and sustainable consumption.

Q-2 What is the level of participation of households in "source" segregation of municipal waste streams?

New South Wales

x Very High (> 90%) for provision of recycling bins to householders for common recyclables such as paper, glass and plastic

☐ High (>70%)

x Average (50-~70%) for provision of recycling bins to households for garden organics or food and garden organics

☐ Low or not satisfactory (< 50%)

☐ Does not exist

***Q-3 Total annual governmen*t expenditure per capita (US$ per capita) in municipal solid waste management in 2013-2014**

Challenges (policy/ institutional/ technological/ financial) faced in implementation:

Examples of pilot projects, master plans and/or policies developed or under development – include websites where relevant

New South Wales

The Waste Less Recycle More Initiative is a $456.7 million program over 5 years to decrease litter, illegal dumping and landfilling municipal, commercial and industrial waste.

The NSW Waste and Resource Recovery Strategy 2014-2021 sets targets to divert 75% of all waste from landfill by 2021

Important policies/programmes/projects/master plans the government plans to undertake within next five years (2015~2020)

Is this Goal relevant for your country*?* X Highly ☐ Partially ☐ Not at all

Voluntary Progress/Achievements/Initiatives in Implementing Ha Noi 3R Declaration (2013~2023)

Country Name: Australia

I. 3R Goals in Urban/Industrial Areas (3Rs in municipal solid waste)	
Goal 2	Full-scale utilization of the organic component of municipal waste, including food waste, as a valuable resource, thereby achieving multiple benefits such as the reduction of waste flows to final disposal sites, reduction of GHG emission, improvement in resource efficiency, energy recovery, and employment creation.

Q-1 Does the central government have policies or support to utilize or reduce the organic waste such as composting, energy recovery and improving efficiency in food processing?

National

As noted above, the National Waste Policy includes commitments by state and territory governments to reduce the amount of biodegradable material sent to landfill through implementing beneficial reuse (eg compost, soil conditioners biochar) and through the use of alternative waste treatment technologies, waste to energy plans and biodigesters.

The Australian Government's Emissions Reduction Fund provides positive incentives to businesses across the economy to reduce greenhouse gas emissions. Its aim is to reduce emissions at lowest cost and contribute towards Australia's 2020 emissions reduction target of five per cent below 2000 levels by 2020. The Emissions Reduction Fund includes opportunities for alternative waste treatment of organic waste and should soon cover activities to separate organic waste at the source.

New South Wales

The Waste Less Recycle More initiative in NSW includes $70 million for food waste avoidance, organics recycling collection services, organics processing and markets for recycled organics that would otherwise have been landfilled.

The *Circulate* NSW Environment Protection Agency Industrial Ecology program develops synergies with similar industries to identify waste re-use and recycling projects, increase efficiency, and save money by reducing waste sent to landfill.

Q-2 What is happening to country's organic waste?

National

In 2010–11, around 14 million tonnes (Mt) of organic waste (excluding paper and cardboard and primary production wastes) was generated nationally,of which:

- 6.63 Mt (47 per cent) were disposed of to landfill
- 6.14 Mt (44 per cent) were recycled
- 1.24 Mt (9 per cent) were used in energy recovery.

More information can be found at:
http://www.environment.gov.au/topics/environment-protection/nwp/reporting/organic-waste

New South Wales

Food and garden material is predominantly composted. Some garden material dropped off to landfills by householders is chipped, stockpiled or burnt however there is now encouragement to also compost this material.

Challenges (policy/ institutional/ technological/ financial) faced in implementation:

Examples of pilot projects, master plans and/or policies developed or under development – include websites where relevant

New South Wales

The NSW EPA manages a framework which facilitates and encourages the re-use of waste materials for land application where the use of these materials is beneficial. A focus of the framework over the last few years has been in facilitating the reuse of organics as soil amendments.

Important policies/programmes/projects/master plans the government plans to undertake within next

Voluntary Progress/Achievements/Initiatives in Implementing Ha Noi 3R Declaration (2013~2023)

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five years (2015~2020)	
Is this Goal relevant for your country*?* x Highly ☐ Partially ☐ Not at all New South Wales The NSW Waste Avoidance and Resource Recovery (WARR) Strategy 2014-21 target of 75% diversion of all waste from landfill by 2021 relies on increased organics recycling.	

Voluntary Progress/Achievements/Initiatives in Implementing Ha Noi 3R Declaration (2013~2023)

Country Name: Australia

I. 3R Goals in Urban/Industrial Areas (3Rs in municipal solid waste)

Goal 3

Achieve significant **increase in recycling rate** of recyclables (e.g., plastic, paper, metal, etc.), by introducing policies and measures, and by setting up financial mechanisms and institutional frameworks involving relevant stakeholders (e.g., producers, consumers, recycling industry, users of recycled materials, etc.) and development of modern recycling industry.

Q-1 What is the recycling rate of various recyclables? (Please check the appropriate cell & add more waste streams as relevant for the country)

National

Rate / Type	Very High (>90%)	High (>70%)	Average (50-~60%)	Poor (<50%)	Recycling does not exist	Definition of recycling rate*
Construction waste			X			Def 2

**Note: Please specify in the cell which of the following definitions(ie., 1 or 2 or 3) is followed for recycling rate*

Definition 1: (collected recyclable waste)/(estimated generation of waste)

Definition 2: (volume of utilized recyclable waste)/(volume of raw material)

Definition 3: (volume of utilized recyclable waste)/(volume of collected waste for recycling)

New South Wales

For C&I waste see http://www.epa.nsw.gov.au/resources/warrlocal/150209-disposal-audit.pdf and http://www.epa.nsw.gov.au/resources/warrlocal/150210-generator-site-audit.pdf

Q-2 What specific policies are introduced at local and national level for prevention or reduction of waste streams – paper, plastic, metal, construction waste, e-waste?

National

The Australian Government, in collaboration with state and territory governments, industry and the community, is working to better manage packaging to improve the use of resources, reducing the environmental impact of packaging design, enhance away from home recycling and reduce litter. The Australian Packaging Covenant (APC) brings government, industry and community groups together to fund projects that address packaging sustainability issues.
http://www.environment.gov.au/protection/national-waste-policy/packaging-covenant

The National Television and Computer Recycling Scheme was established in 2011 to provide Australian householders and small business with access to industry funded collection and recycling services for televisions and computers.

New South Wales

The *Circulate*, NSW EPA Industrial Ecology, program develops synergies with similar industries to identify waste re-use and recycling projects, increase efficiency, and save money by reducing waste sent to landfill.

The Major Resource Recovery Infrastructure Program aims to accelerate and stimulate investment in new waste and recycling infrastructure. The program is delivered through a partnership between the NSW Environment Protection Authority (EPA) and the NSW Environmental Trust. Infrastructure priorities are considered for:

- recovery of recyclables from sorted and unsorted waste from business and households
- reuse, recycling and reprocessing of recyclable materials from business and households such as plastics, timber, paper, cardboard, consumer packaging and tyres
- processing, stabilisation and energy recovery from residual business and household waste

The Resource Recovery Facility Expansion and Enhancement Program aims to increase recycling of household and business waste. Delivered through a partnership between the NSW Environment Protection Authority (EPA) and the NSW Environmental Trust, this program supports projects that stimulate and accelerate investment in new equipment and upgrades that will boost recycling processing capacity in NSW. This program funds only existing licensed facilities.

Voluntary Progress/Achievements/Initiatives in Implementing Ha Noi 3R Declaration (2013~2023)

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Goal 3	Achieve significant **increase in recycling rate** of recyclables (e.g., plastic, paper, metal, etc.), by introducing policies and measures, and by setting up financial mechanisms and institutional frameworks involving relevant stakeholders (e.g., producers, consumers, recycling industry, users of recycled materials, etc.) and development of modern recycling industry.

Q-3 What is the rate of resource recovery from various waste streams?

Rate / Type	Very High (>90%)	High (>70%)	Average (50-~60%)	Poor (<50%)	Recycling does not exist
Paper					
Plastic					
Metal					
Construction waste					

(Please check the appropriate cell & add more waste streams as relevant for the country)

Q-4 What is the level of existence of resource recovery facilities/ infrastructures in cities?

Level / Type	Every Major City	Few Major Cities only	Does not exist	Supportive policy or programmes exists	No supportive policy or programmes
Paper					
Plastic					
Metal					
Construction waste					

Voluntary Progress/Achievements/Initiatives in Implementing Ha Noi 3R Declaration (2013~2023)

Country Name: Australia

I. 3R Goals in Urban/Industrial Areas (3Rs in municipal solid waste)	
Goal 3	Achieve significant **increase in recycling rate** of recyclables (e.g., plastic, paper, metal, etc.), by introducing policies and measures, and by setting up financial mechanisms and institutional frameworks involving relevant stakeholders (e.g., producers, consumers, recycling industry, users of recycled materials, etc.) and development of modern recycling industry.
Challenges (policy/ institutional/ technological/ financial) faced in implementation:	
Examples of pilot projects, master plans and/or policies developed or under development – include websites where relevant	
Important policies/programmes/projects/master plans the government plans to undertake within next five years (2015~2020)	
Is this Goal relevant for your country? x Highly ☐ Partially ☐ Not at all	

Voluntary Progress/Achievements/Initiatives in Implementing Ha Noi 3R Declaration (2013~2023)

Country Name: Australia

I. 3R Goals in Urban/Industrial Areas (3Rs in municipal solid waste)	
Goal 4	Build **sustainable cities /green cities** by encouraging "**zero waste**" through sound policies, strategies, institutional mechanisms, and multi‐stakeholder partnerships (giving specific importance to private sector involvement) with a primary goal of **waste minimization**

Q-1 What specific waste management policies and programmes are introduced to encourage private sector participation in municipal waste management?

Most states and territories have waste strategies in place that aim to minimize waste generation and reduce waste going to landfill.

Q-2 What are the major waste management areas that have strong involvement of private and business sector? (Please check appropriate boxes and add other areas if not listed below)

x waste collection

x resource recovery

x waste recycling

x waste to energy, composting, etc.

x PPP projects in waste sector

Challenges (policy/ institutional/ technological/ financial) faced in implementation:

Examples of pilot projects, master plans and/or policies developed or under development – include websites where relevant

Important policies/programmes/projects/master plans the government plans to undertake within next five years (2015~2020)

Is this Goal relevant for your country*?* ☐ Highly x Partially ☐ Not at all

Voluntary Progress/Achievements/Initiatives in Implementing Ha Noi 3R Declaration (2013~2023)

Country Name: Australia

I. 3R Goals in Urban/Industrial Areas (3Rs in Industrial waste)	
Goal 5	Encourage the **private sector**, including small - and medium - sized enterprises (SMEs) to implement measures to increase **resource efficiency and productivity**, creation of decent work and to improve environmentally-friendly practices through applying environmental standards, clean technologies, and cleaner production.

Q-1 What are the major clean technology related policies aiming to increase energy and resource efficiency of SMEs?

The Water Efficiency Labelling and Standards scheme labels a range of household products for their water efficiency, helping individuals to choose products such as washing machines, dishwashers, taps, showers and toilets to save water and money. The website, www.waterrating.gov.au (link is external) also provides advice to plumbers, retailers, manufacturers, builders, architects and local governments on WELS requirements, registration, legislation, compliance and enforcement.

Some states and territories have programmes in place to encourage the private sector to increase energy and resource efficiency (eg water efficiency).

Q-2 What are the capacity building programmes currently in place to build the technical capacity of SMEs in 3R areas?

Challenges (policy/ institutional/ technological/ financial) faced in implementation:

Examples of pilot projects, master plans and/or policies developed or under development – include websites where relevant

Important policies/programmes/projects/master plans the government plans to undertake within next five years (2015~2020)

Is this Goal relevant for your country? ☐ Highly x Partially ☐ Not at all

Voluntary Progress/Achievements/Initiatives in Implementing Ha Noi 3R Declaration (2013~2023)

Country Name: Australia

I. 3R Goals in Urban/Industrial Areas (3Rs in Industrial waste)	
Goal 6	Promote the **greening of the value chain** by encouraging industries and associated suppliers and vendors in socially responsible and inclusive ways.

Q-1 What percent of companies and industries have introduced green accounting and voluntary environmental performance evaluation (Ref: ISO 14000)?

☐ Very High (> 90%)
☐ High (>70%)
☐ Average (50-~70%)
☐ Low or not satisfactory (< 50%)
☐ None

Q-2 What percent of companies and industries have introduced social accounting (Ref: SA 8000) in consultation with their workers?

☐ Very High (> 90%)
☐ High (>70%)
☐ Average (50-~70%)
☐ Low or not satisfactory (< 50%)
☐ None

Q 3 Does government have a programme for promoting greening of the value chain? What specific policies, programmes and incentives are introduced to promote greening of value chain?

Challenges (policy/ institutional/ technological/ financial) faced in implementation:

Examples of pilot projects, master plans and/or policies developed or under development – include websites where relevant

Important policies/programmes/projects/master plans the government plans to undertake within next five years (2015~2020)

Is this Goal relevant for your country? ☐ Highly ☐ Partially ☐ Not at all

Voluntary Progress/Achievements/Initiatives in Implementing Ha Noi 3R Declaration (2013~2023)

Country Name: Australia

I. 3R Goals in Urban/Industrial Areas (3Rs in Industrial waste)	
Goal 7	Promote **industrial symbiosis** (i.e., recycling of waste from one industry as a resource for another), by providing relevant incentives and support.

Q-1 Does your government have policies and programmes promoting industrial symbiosis in industrial parks or zones? What specific policies, programmes and incentives are introduced to promote industrial symbiosis?

New South Wales

The Circulate, NSW EPA Industrial Ecology, program develops synergies with similar industries to identify waste re-use and recycling projects, increase efficiency, and save money by reducing waste sent to landfill.

Q-2 How many eco-industrial parks or zones or the like, which is supported by the government, are there in the country?

Challenges (policy/ institutional/ technological/ financial) faced in implementation:

Examples of pilot projects, master plans and/or policies developed or under development – include websites where relevant

Important policies/programmes/projects/master plans the government plans to undertake within next five years (2015~2020)

Is this Goal relevant for your country? ☐ Highly ☐ Partially ☐ Not at all

Voluntary Progress/Achievements/Initiatives in Implementing Ha Noi 3R Declaration (2013~2023)

Country Name: Australia

I. 3R Goals in Urban/Industrial Areas (3Rs in Industrial waste)	
Goal 8	Build **local capacity** of both current and future practitioners, to enable the private sector (including SMEs) to obtain the necessary knowledge and technical skills to foster green industry and create decent, productive work.
Q-1 How many dedicated training facilities or centers are there to cater the needs of SMEs and practitioners in the areas of cleaner production, resource efficiency and environment-friendly technologies, etc.?	
Q-2 Please provide an indicative figure on annual government (US $) expenditure on building technical capacity of SMEs and practitioners in the areas of cleaner production, resource efficiency and environment-friendly technologies, etc.?	
Challenges (policy/ institutional/ technological/ financial) faced in implementation:	
Examples of pilot projects, master plans and/or policies developed or under development – include websites where relevant	
Important policies/programmes/projects/master plans the government plans to undertake within next five years (2015~2020)	
Is this Goal relevant for your country? ☐ Highly ☐ Partially ☐ Not at all	

Voluntary Progress/Achievements/Initiatives in Implementing Ha Noi 3R Declaration (2013~2023)

Country Name: Australia

I. 3R Goals in Urban/Industrial Areas (3Rs in Industrial waste)	
Goal 9	Develop proper **classification and inventory of hazardous waste** as a prerequisite towards sound management of such waste.

Q-1 Is there a systematic classification of hazardous waste? If so, please attach.

X Yes ☐ No

See http://www.environment.gov.au/protection/publications/improving-australias-reporting-hazardous-waste-basel-convention for the classifications used in Australia for hazardous wastes.

Q-2 What specific rules and regulations are introduced to separate, store, treat, transportation and disposal of hazardous waste?

For wastes not crossing our international boundary, states and territories implement their own individual regulations for how hazardous wastes are to be managed for the protection of human health and the environment. In general, the flow of liquid hazardous waste to landfill is either prohibited or minimized in most Australian jurisdictions. The focus of jurisdictional hazardous waste regulation in most cases is the prevention of harm to health and environment, rather than the efficient recovery of materials and resources.

Challenges (policy/ institutional/ technological/ financial) faced in implementation:

Knowledge on the specific industry sources of hazardous wastes, their amounts, types, pathways and fates has been limited in Australia until the last three years. Recent projects on hazardous waste data, reporting and infrastructure have produced major improvements in our hazardous waste knowledge. Data is now more publicly available than previously, as well.

Examples of pilot projects, master plans and/or policies developed or under development – include websites where relevant

A current large project, concluding in mid-2015, is an assessment of Australia's current and future hazardous waste infrastructure capacity and needs. This project has involved a major investigation into, and processing of, hazardous waste data against a standardized set of definitions and classifications. The results will inform regulatory, policy and infrastructure investment decisions in coming years.

Important policies/programmes/projects/master plans the government plans to undertake within next five years (2015~2020)

The infrastructure and data project highlighted the absence of a single set of agreed classifications for hazardous waste fate (ie. treatment) types in Australia. This will be a priority for further work.

For more detail and reports as they are published,

http://www.environment.gov.au/protection/hazardous-waste is the general website for hazardous waste reform work, including on consistent definitions and classifications pertaining to hazardous wastes.

Is this Goal relevant for your country? X Highly ☐ Partially ☐ Not at all

II. 3R Goals in Rural Areas	
Goal 10	**Reduce losses in the overall food supply chain** (production, post harvesting and storage, processing and packaging, distribution), leading to reduction of waste while increasing the quantity and improving the quality of products reaching consumers.

Q-1 What specific policies, rules and regulations, including awareness programmes, are introduced to minimize food or crop waste?

New South Wales

Love Food Hate Waste is encouraging food waste avoidance through the targeted behaviours of menu planning, write a list, buy only what you need, store correctly and use up leftovers.

The Organics Infrastructure (Large and Small) program includes a funding stream for equipment like refrigerated vans, fridges, freezers etc for food relief charities. The funding aims to introduce new, or expand existing, food collection and redistribution services to reduce food waste going to landfill.

Q-2 Is there any continuing education services or awareness programmes for the farmers or agricultural marketing associations on reduction of crop wastes for increased food security?

Q-3 What is the average wastage of crops or agricultural produce between farms to consumers, if there is a study in your country?

☐ Very High (> 20~ 30%)
☐ High (10~20%)
☐ Medium (5~10%)
☐ Low (< 5%)
☐ Negligible (<1%)

Challenges (policy/ institutional/ technological/ financial) faced in implementation:

Examples of pilot projects, master plans and/or policies developed or under development – include websites where relevant

Important policies/programmes/projects/master plans the government plans to undertake within next five years (2015~2020)

Is this Goal relevant for your country? ☐ Highly ☐ Partially ☐ Not at all

II. 3R Goals in Rural Areas	
Goal 11	Promote full scale **use of agricultural biomass waste and livestock waste** through reuse and/or recycle measures as appropriate, to achieve a number of co‐benefits including GHG emission reduction, energy security, sustainable livelihoods in rural areas and poverty reduction, among others.

Q-1 How much amount of – (a) agricultural biomass waste and (b) livestock waste are grossly generated per annum?

Q-2 How are most of the agricultural biomass wastes utilized or treated? (Please check all appropriate boxes)

☐ as secondary raw material input (for paper, bioplastic, furniture, etc.)
☐ biogas/electricity generation
☐ composts/fertilizers
☐ mostly left unutilized or open dumped
☐ mostly open burned

Q-3 What specific policies, guidelines, and technologies are introduced for efficient utilization of agricultural biomass waste and livestock waste as a secondary material inputs towards full scale economic benefits? Relevant websites could be shared for additional information.

New South Wales

The NSW EPA manages a framework which facilitates and encourages the re-use of waste materials for land application where the use of these materials is beneficial. Details on the framework and documents pertaining to specific waste types can be found at http://www.epa.nsw.gov.au/wasteregulation/recovery-exemptions.htm

Challenges (policy/ institutional/ technological/ financial) faced in implementation:

Examples of pilot projects, master plans and/or policies developed or under development – include websites where relevant

Important policies/programmes/projects/master plans the government plans to undertake within next five years (2015~2020)

Is this Goal relevant for your country? ☐ Highly ☐ Partially ☐ Not at all

III. 3R Goals for New and Emerging Wastes	
Goal 12	Strengthen regional, national, and local efforts to address the issue of **waste, in particular plastics** in the marine and coastal environment.

Q-1 What specific policies and regulations are in place to address the issue of plastic wastes in coastal and marine environment?

National

Injury and fatality to vertebrate marine life caused by ingestion of, or entanglement in, harmful marine debris was listed as a key threatening process under Australia's national environment law, the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act), in 2003. Marine debris, including plastic waste, is recognized as impacting on a range of vertebrate marine life, including protected and threatened species of birds, sharks, turtles and marine mammals. A threat abatement plan was developed in response to the key threatening process listing and released in May 2009. The plan provides a national coordinated approach to the implementation of measures for prevention and mitigation of the harmful impacts of marine debris. The plan was reviewed in 2014 and was found to have made significant progress, but with areas requiring further attention.

Amendments to the International Maritime Organisation's International Convention for the Prevention of Pollution from Ships (MARPOL) Annex V came into force on 1 January 2013, providing significant in principle support for actions under the plan. The amendments prohibit the discharge of all garbage from ships into the sea (except under very specific circumstances). This reverses the presumption that garbage may be discharged into the sea based on defined distances from shore and the nature of the garbage. The amendments also list requirements for garbage management plans on ships and port reception facilities for receiving waste. MARPOL is implemented in Australia through the *Protection of the Sea (Prevention of Pollution from Ships) Act 1983*, in particular through *Marine Order 95 (Marine pollution prevention — garbage) 2013* under that Act. Australian states and the Northern Territory have implemented complementary MARPOL legislation to varying degrees. Where a state or territory does not have complementary legislation for a specific Annex of the Convention, the Commonwealth legislation applies.

New South Wales

The NSW Government is leading work in Australia for investigating options to reduce the impact of microplastics in the marine environment, which will give consideration to the introduction of bans on the inclusion of microbeads in cosmetic products. The NSW Government is also developing a container deposit scheme for implementation by 1 July 2017 to reduce the amount of littered beverage containers in waterways and examining national approaches to the impact of littered plastic bags.

Q-2 What extent issue of plastic waste is considered in integrated coastal zone management (ICZM)? *(Please check the appropriate box)*

☐ Very much ☐ Somehow ☐ Not at all

Q-3 Please provide a list of centre of excellences or dedicated scientific and research programmes established to address the impacts of micro-plastic participles (<5 mm) on coastal and marine species? If yes, please provide relevant websites.

Sydney Institute of Marine Sciences – www.sims.org.au

CSIRO: Sources, distribution and fate of marine debris - www.csiro.au/en/Research/OandA/Areas/Marine-resources-and-industries/Marine-debris

Challenges (policy/ institutional/ technological/ financial) faced in implementation:

The review of the implementation of the *Threat abatement plan for the impacts of marine debris on vertebrate marine life* from 2009-2014 found that over the life of the plan, new marine debris priorities have emerged. This includes a growing understanding of the impact of micro plastic and associated

III. 3R Goals for New and Emerging Wastes	
Goal 12	Strengthen regional, national, and local efforts to address the issue of **waste, in particular plastics** in the marine and coastal environment.

toxins on wildlife as well as factors such as the impact of weather balloons released for weather forecasting. Developments in waste management technology provide the potential for reduced waste inputs resulting from both sea and land sources.

Examples of pilot projects, master plans and/or policies developed or under development – include websites where relevant

The Department of the Environment's marine debris web page includes a range of links to online resources and programmes - www.environment.gov.au/marine/marine-pollution/marine-debris

Important policies/programmes/projects/master plans the government plans to undertake within next five years (2015~2020)

The Department of the Environment is currently revsing the *Threat abatement plan for the impacts of marine debris on vertebrate marine life* in consultation with key stakeholders and scientific experts. Once adopted, this revised threat abatement plan will guide future work on marine debris.

Is this Goal relevant for your country? X Highly ☐ Partially ☐ Not at all

Voluntary Progress/Achievements/Initiatives in Implementing Ha Noi 3R Declaration (2013~2023)

Country Name: Australia

III. 3R Goals for New and Emerging Wastes

Goal 13 Ensure **environmentally-sound management of e-waste** at all stages, including collection, storage, transportation, recovery, recycling, treatment, and disposal with appropriate consideration for working conditions, including **health and safety aspects** of those involved.

Q-1 How do people usually recycle their e-waste (waste electrical and electronic equipment)? (Please check the appropriate box in order of priority by filling in numbers like 1, 2, 3, 4,….etc., for example 1 => Highest priority)

Check if applicable	Number in priority order	
✓	1	Take to recycling center / resource recovery facilities
✓		Take to landfill
✓		Take to the retailer
✓		Take to local charity for re-use
✓		Take to second-hand shop for re-use
✓		Ship back to the manufacturer
		Recycle in another country
		Do not know how people dispose

Q-2 What specific policies and regulations are in place to ensure health and safety aspects of those involved in e-waste management (handling/sorting/resource recovery/recycling)?

Workplace health and safety regulations are the responsibility of state and territory governments.

New South Wales

WorkCover NSW administers legislation relating to occupational health and safety issues in NSW. This includes e-waste recycling facilities.

Q-3 How much amount of e-waste is generated and recycled per year?

Type of e-waste	Estimated total volume generated (ton/year)	% of collected by permitted recycler	% of volume recycled in collected
Television	53,000 tonnes	50% target under the National Television and Computer Recycling Scheme; unknown % outside national scheme	100% under national scheme
Computer	75,000 tonnes	50% target under the National Television and Computer Recycling Scheme; unknown % outside national scheme	100% under national scheme
Mobile phone	80	45.6% annual collection rate under MobileMuster product stewardship scheme; unknown % outside MobileMuster	100% under Mobile Muster
Others…			

Challenges (policy/ institutional/ technological/ financial) faced in implementation:

III. 3R Goals for New and Emerging Wastes	
Goal 13	Ensure **environmentally-sound management of e-waste** at all stages, including collection, storage, transportation, recovery, recycling, treatment, and disposal with appropriate consideration for working conditions, including **health and safety aspects** of those involved.

Examples of pilot projects, master plans and/or policies developed or under development – include websites where relevant

The National Television and Computer Recycling Scheme was established in 2011 to provide Australian householders and small business with access to industry funded collection and recycling services for televisions and computers.

The recycling target is 50% of available waste in financial year (FY) 2015-16 and will increase incrementally to 80% by FY 2026–27. The scheme requires that 90% of the weight of materials from recycled products be made available for reuse. From 1 July 2016, all recycling under the scheme will need to be done by recyclers certified to Australian/New Zealand Standard 5377 on e-waste. See website at www.environment.gov.au/ewaste .

Important policies/programmes/projects/master plans the government plans to undertake within next five years (2015~2020)

Is this Goal relevant for your country? X Highly ☐ Partially ☐ Not at all

III. 3R Goals for New and Emerging Wastes	
Goal 14	Effective enforcement of established mechanisms for preventing illegal and inappropriate export and import of waste, including transit trade, especially of hazardous waste and e-waste.

Q-1 What specific policies and regulations are introduced to prevent illegal import and export of e-waste?

Australia is a signatory to the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal, which has established a procedure for dealing with the illegal traffic of hazardous waste.

Australia's obligations under the Basel Convention are implemented domestically via the Hazardous Waste (Regulations of Exports and Imports) Act 1989 (the Act). Criminal penalties apply to the movement of hazardous waste, including e-waste, without a permit under the Act.

In May 2015, the Conference of the Parties to the Basel Convention adopted, on an interim basis, 'Technical guidelines on transboundary movements of electronic and electrical waste and used electrical and electronic equipment, in particular regarding the distinction between waste and non-waste under the Basel Convention' (e-waste guidelines). The guidleines provide better definition on what is considered e-waste and hence will assist with education, compliance and enforcement efforts on addressing the illegal traffic in e-waste. Australia will be considering how to implement these e-waste guidelines domestically.

Q-2 Do you have required number of well-trained custom or other officials (for airport. sea-port, land border control, etc.) to track illegal export and import of e-waste?

x Yes ☐ No

The key mechanism used by Australia to detect violations of Basel Convention provisions is through the Australian Customs and Border Protection Service which identifies and refers shipments that may be considered hazardous waste to the Department of the Environment. The Australian Customs and Border Protection Service has border clearance processes that are fully electronic, in line with the best practice border clearance processes being used internationally. Intervention at the border is undertaken on a risk based, intelligence driven approach. Where exports or imports are identified as potentially breaching the Act (including via X-ray evidence and physical inspection) they are referred to the Department of the Environment for action.

These border control mechanisms are complemented by further compliance monitoring and assessment activities undertaken by the Department of the Environment as part of its legislated permit system for export, import and transit of hazardous wastes through Australia. These activities are focused on encouraging regulated entities to comply with regulatory requirements and include provision of information and guidance, assessing proposed movements, issuing permits and monitoring of compliance with permit conditions.

Challenges (policy/ institutional/ technological/ financial) faced in implementation:

Challenges include ensuring that:

- Adequate resources are dedicated to preventing the illegal export/import of hazardous waste.
- Legislation, policy and other institutional elements are effective and efficient in addressing the illegal export/import of hazardous waste.
- Knowledge is shared between countries on national controls that are in place which impact trade on hazardous wastes (eg. where national bans have been implemented that prevent import of particular hazardous wastes).

III. 3R Goals for New and Emerging Wastes	
Goal 14	Effective enforcement of established mechanisms for preventing illegal and inappropriate export and import of waste, including transit trade, especially of hazardous waste and e-waste.
Examples of pilot projects, master plans and/or policies developed or under development – include websites where relevant Developing a plan for the domestic implementation of the Basel Convention's technical guidelines on e-waste.	
Important policies/programmes/projects/master plans the government plans to undertake within next five years (2015~2020)	
Is this Goal relevant for your country? X **Highly** ☐ Partially ☐ Not at all	

Voluntary Progress/Achievements/Initiatives in Implementing Ha Noi 3R Declaration (2013~2023)

Country Name: Australia

III. 3R Goals for New and Emerging Wastes	
Goal 15	Progressive implementation of "**extended producer responsibility (EPR)**" by encouraging producers, importers, and retailers and other relevant stakeholders to fulfill their responsibilities for collecting, recycling, and disposal of new and emerging waste streams, in particular e-waste.

Q-1 What specific Extended Product Responsibility (EPR) policies are enacted or introduced? (If there is none, then skip Q-2 below)

National

The *Product Stewardship Act 2011* provides the framework to effectively manage the environmental, health and safety impacts of products, and in particular those impacts associated with the disposal of products. The framework includes voluntary, co-regulatory and mandatory product stewardship. The passage of the legislation delivers on a key commitment by the Australian Government under the National Waste Policy.

Q-2 Please provide a list of products and product groups targeted by EPR nationally?

Co-regulatory

On 3 November 2011 the Government made new regulations to support the National Television and Computer Recycling Scheme. The regulations require importers and manufacturers of televisions, computers and computer products to fund and implement recycling services for these products, and to meet a range of requirements.

Voluntary

Australian Government accreditation of a voluntary product stewardship arrangement provides an avenue for recognising and encouraging excellence in product stewardship. Attaining accreditation communicates to the public that the arrangement has been independently assessed as credible by the Australian Government. Accreditation also provides assurance to the community that voluntary product stewardship arrangements are achieving real and effective outcomes. Accreditation is valid for a five year period. Accredited product stewardship arrangements are able to use the Product Stewardship logo as an indication of their Australian Government accredited status.

The first round of applications for accreditation of voluntary product stewardship activities was held late in 2013. Two arrangements were accredited by the Australian Government: MobileMuster and FluoroCycle.

More information is at
http://www.environment.gov.au/protection/national-waste-policy/product-stewardship/voluntary-product-stewardship

There are a number of other, industry-led voluntary product stewardship schemes nationally, including for end-of-life tyres, vinyl products, agricultural chemicals and containers and agricultural plastics.

Challenges (policy/ institutional/ technological/ financial) faced in implementation:

Examples of pilot projects, master plans and/or policies developed or under development – include websites where relevant

Important policies/programmes/projects/master plans the government plans to undertake within next five years (2015~2020)

The *Product Stewardship Act 2011* will be reviewed in 2016.

Is this Goal relevant for your country? ☐ Highly X Partially ☐ Not at all

III. 3R Goals for New and Emerging Wastes

Goal 16 **Promote the 3R concept** in health-care waste management.

Q-1 What specific policies and regulations are in place for healthcare waste management?

Transboundary (international) movements of healthcare waste are regulated through the *Hazardous Waste (Regulations of Exports and Imports) Act 1989*.

The movement and treatment of domestically-generated healthcare waste is managed through state and territory based policies and regulations, which vary from state to state. For example, the state of Victoria has healthcare waste policies that place obligations on waste generators to appropriately treat healthcare waste, so as to render it non-hazardous, before it is disposed of to landfill. These policies also include controls on the labeling, storage and transport of healthcare wastes. Victorian policies in relation to healthcare waste management are broadly reflective of policies adopted by most Australian states.

There is a joint Australian/New Zealand standard, AS/NZS 3816:1998 Management of Clinical and Related Wastes, which provides guidance to Australian states and territories in managing such wastes.

Q-2 What is the total annual government expenditure towards healthcare waste management (US$ per year)?

Q-3 List the agencies or authorities responsible for healthcare waste management.

Australian Government Department of the Environment
New South Wales Environment Protection Authority
Environment Protection Authority Victoria
Queensland Department of Environment and Heritage Protection
Environment Protection Authority South Australia
Western Australia Department of Environment Regulation
Environment Protection Authority Tasmania
Australian Capital Territory Environment and Planning Directorate
Northern Territory Envioronment Protection Authority

Q-4 What is the common practice for disposal of healthcare wastes?

(Please check the appropriate box and add if any other practice followed)

☐ open dumping (untreated)
☐ open burning (untreated)
☐ ordinary landfilling (untreated)
x sanitary landfilling (treated)
☐ Low cost small scale incineration (do not meet air emission standards)
x Highly controlled air incineration (dedicated/modern medical waste incinerators)
☐ Other methods (please specify names:)

Challenges (policy/ institutional/ technological/ financial) faced in implementation:

A number of states and territories within Australia may have insufficient infrastructure to adequately deal with the healthcare wastes they generate. Modelling indicates that the national capacity for the thermal treatment of healthcare wastes could be exceeded by 2024.

Examples of pilot projects, master plans and/or policies developed or under development – include websites where relevant

Victoria:
http://www.epa.vic.gov.au/our-work/publications/publication/2009/september/iwrg612-1
NSW: http://www.epa.nsw.gov.au/waste/clinical.htm

III. 3R Goals for New and Emerging Wastes	
Goal 16	**Promote the 3R concept** in health-care waste management.
QLD: http://www.ehp.qld.gov.au/era/clinical-and-related-waste-em1329.pdf	
Important policies/programmes/projects/master plans the government plans to undertake within next five years (2015~2020) No key initiatives planned at the present time.	
Is this Goal relevant for your country? ☐ Highly x Partially ☐ Not at all	

IV. 3R Goals for Cross-cutting Issues	
Goal 17	Improve **resource efficiency and resource productivity** by greening jobs nation‐wide in all economic and development sectors.
Q-1 What specific policies and guidelines are introduced for product standard (towards quality/durability, environment/eco-friendliness, labour standard)? ***Q-2 What specific energy efficiency schemes are introduced for production, manufacturing and service sector?*** ***Q-3 What specific policies are introduced to create green jobs in product and waste sector?***	
Challenges (policy/ institutional/ technological/ financial) faced in implementation:	
Examples of pilot projects, master plans and/or policies developed or under development – include websites where relevant	
Important policies/programmes/projects/master plans the government plans to undertake within next five years (2015~2020)	
Is this Goal relevant for your country*?* ☐ Highly ☐ Partially ☐ Not at all	

IV. 3R Goals for Cross-cutting Issues	
Goal 18	Maximize co-benefits from waste management technologies for local air, water, oceans, and soil pollution and global climate change.
Q-1 Please share how climate mitigation is addressed in waste management policies and programmes for co-benefits?	
Challenges (policy/ institutional/ technological/ financial) faced in implementation:	
Examples of pilot projects, master plans and/or policies developed or under development – include websites where relevant	
Important policies/programmes/projects/master plans the government plans to undertake within next five years (2015~2020)	
Is this Goal relevant for your country? ☐ Highly ☐ Partially ☐ Not at all	

IV. 3R Goals for Cross−cutting Issues	
Goal 19	Enhance **national and local knowledge base and research network on the 3Rs and resource efficiency**, through facilitating effective and dynamic linkages among all stakeholders, including governments, municipalities, the private sector, and scientific communities.
Q-1 What specific policies are introduced to encourage triangular cooperation between government, scientific & research institutions and private/business sector in 3R areas? ***Q-2 Please share the number and list of dedicated scientific institution, or coordinating centers in the areas of 3Rs (e.g., waste minimization technologies, eco-products, cleaner production, recycling technologies, industrial symbiosis, resource efficiency, etc.)?***	
Challenges (policy/ institutional/ technological/ financial) faced in implementation:	
Examples of pilot projects, master plans and/or policies developed or under development – include websites where relevant	
Important policies/programmes/projects/master plans the government plans to undertake within next five years (2015~2020)	
Is this Goal relevant for your country? ☐ Highly ☐ Partially ☐ Not at all	

Voluntary Progress/Achievements/Initiatives in Implementing Ha Noi 3R Declaration (2013~2023)

Country Name: Australia

IV. 3R Goals for Cross−cutting Issues	
Goal 20	Strengthen multi-stakeholder partnerships among governments, civil society, and the private sector in raising public awareness and advancing the 3Rs, sustainable consumption and production, and resource efficiency, leading to the behavioural change of the citizens and change in production patterns.

Q-1 Does central government have official dialogue with multi-stakeholders in the process to formulate 3R-related policies and regulations? Which stakeholders are involved in the dialogue?(Please check all applicable)

☐ NGOs ☐ Industrial Association

☐ Local Government ☐ Academic Institution

☐ Others, please add/specify ( )

Q-2 What is the level of NGOs' involvement in 3R, sustainable production and consumption, resource efficiency related promotional activities? (Please check the appropriate box)

☐ Very high ☐ Moderate ☐ Low ☐ Almost Negligible

Q-3 What is the level of citizens' awareness on beneficial aspects of 3R, sustainable production and consumption and resource efficiency. (Please check the appropriate box)

☐ Very high ☐ Moderate ☐ Low ☐ Almost Negligible

Challenges (policy/ institutional/ technological/ financial) faced in implementation:

Examples of pilot projects, master plans and/or policies developed or under development – include websites where relevant

Important policies/programmes/projects/master plans the government plans to undertake within next five years (2015~2020)

Is this Goal relevant for your country*?* ☐ Highly ☐ Partially ☐ Not at all

IV. 3R Goals for Cross−cutting Issues	
Goal 21	**Integrate the 3Rs** in formal education at primary, secondary, and tertiary levels as well as non-formal education such as community learning and development, in accordance with Education for Sustainable Development.

Q-1 Provide a list of formal programmes that addresses areas of 3R and resource efficiency as part of the academic curriculum?

Q-2 Please provide an overview of the Government policies and programmes to promote community learning and development (non-formal education) on 3R and sustainable waste management.

Q-3 Please provide a list of academic and research institutions offering PhD programmes in the areas of 3Rs and resource efficiency?

Q-4 Please provide a list of management institutions (offering BBA / MBA courses) which have integrated resource efficiency and life cycle assessment (LCA) as part of their curriculum or course development?

Challenges (policy/ institutional/ technological/ financial) faced in implementation:

Examples of pilot projects, master plans and/or policies developed or under development – include websites where relevant

Important policies/programmes/projects/master plans the government plans to undertake within next five years (2015~2020)

Is this Goal relevant for your country? ☐ Highly ☐ Partially ☐ Not at all

Voluntary Progress/Achievements/Initiatives in Implementing Ha Noi 3R Declaration (2013~2023)

Country Name: Australia

IV. 3R Goals for Cross-cutting Issues	
Goal 22	**Integrate the 3R concept** in relevant policies and programmes, of key ministries and agencies such as Ministry of Environment, Ministry of Agriculture, Forestry and Fisheries, Ministry of Industry, Ministry of Trade and Commerce, Ministry of Energy, Ministry of Water Resources, Ministry of Transport, Ministry of Health, Ministry of Construction, Ministry of Finance, Ministry of Labour, Ministry of Land and Urban Development, Ministry of Education, and other relevant ministries towards transitioning to a resource-efficient and zero waste society.

Q-1 Please list the name of the Ministries and major Government Agencies which are promoting 3R and resource efficiency as part of their policy, planning and developmental activities at local and national level.

Q-2 What type of coordination mechanism are there among ministries and agencies for a resource efficient economic development?

☐ Official regular coordination meeting among ministries and agencies
☐ Official ad-hoc coordination meeting among ministries and agencies
☐ Informal meeting among ministries and agencies
☐ Other coordination mechanisms (please add/specify)

Challenges (policy/ institutional/ technological/ financial) faced in implementation:

Examples of pilot projects, master plans and/or policies developed or under development – include websites where relevant

Important policies/programmes/projects/master plans the government plans to undertake within next five years (2015~2020)

Is this Goal relevant for your country? ☐ Highly ☐ Partially ☐ Not at all

IV. 3R Goals for Cross−cutting Issues	
Goal 23	Promote **green and socially responsible procurement** at all levels, thereby creating and expanding 3R industries and markets for environmentally-friendly goods and products.

Q-1 What specific policies are introduced to promote green and social responsible procurement?

Q-2 Please provide details of eco-labelling schemes of your country.

Q-3 Please provide a list of criteria for eco-labeled products and services in your country.

Q-4 Please provide the list of Ministries and major Government Agencies which have adopted green procurement policy.

Q-5 What % of municipalities have adopted the green procurement policy?

Challenges (policy/ institutional/ technological/ financial) faced in implementation:

Examples of pilot projects, master plans and/or policies developed or under development – include websites where relevant

Important policies/programmes/projects/master plans the government plans to undertake within next five years (2015~2020)

Is this Goal relevant for your country? ☐ Highly ☐ Partially ☐ Not at all

IV. 3R Goals for Cross−cutting Issues	
Goal 24	**Phase out harmful subsidies that favour unsustainable use of resources (raw materials and water) and energy**, and channel the freed funds in support of implementing the 3Rs and efforts to improve resource/energy efficiency.
Q-1 Are there any government subsidy programmes that directly or indirectly favour unsustainable use of resources (raw materials, water, energy)? If so, please provide a list of such programmes along with the responsible Ministry or Agency administering and implementing it.	
Challenges (policy/ institutional/ technological/ financial) faced in implementation:	
Examples of pilot projects, master plans and/or policies developed or under development – include websites where relevant	
Important policies/programmes/projects/master plans the government plans to undertake within next five years (2015~2020)	
Is this Goal relevant for your country? ☐ Highly ☐ Partially ☐ Not at all	

IV. 3R Goals for Cross−cutting Issues	
Goal 25	**Protect public health and ecosystems, including freshwater and marine resources by eliminating illegal** activities of open dumping, including dumping in the oceans, and controlling open burning in both urban and rural areas.

Q-1 Is waste management a public health priority in your country?

Q-2 What are the rules and regulations to prevent open dumping and open burning of waste?

Q-3 Rank the five most important rivers in terms of water quality (BOD values) passing through major cities and urban areas?

Q-4 What are the specific laws, rules and regulations in place to prevent littering in river and water bodies?

Q-5 What are the specific laws, rules and regulations in place to prevent marine littering?

Challenges (policy/ institutional/ technological/ financial) faced in implementation:

Examples of pilot projects, master plans and/or policies developed or under development – include websites where relevant

Important policies/programmes/projects/master plans the government plans to undertake within next five years (2015~2020)

Is this Goal relevant for your country? ☐ Highly x Partially ☐ Not at all

Voluntary Progress/Achievements/Initiatives in Implementing Ha Noi 3R Declaration (2013~2023)

Country Name: Australia

IV. 3R Goals for Cross−cutting Issues	
Goal 26	Facilitate the international circulation of re-usable and recyclable resources as well as remanufactured products as mutually agreed by countries and in accordance with international and national laws, especially the Basel Convention, which contributes to the reduction of negative environmental impacts and the effective management of resources.

Q-1 What are major recycling industries in your country?

Over the past twenty years there has been a significant change in the pattern of waste management in Australia. Resource recovery activities have grown significantly as a proportion of all waste generated. The main categories of materials recycled in Australia are:

- Masonry materials
- Metals (eg ferrous, non-ferrous)
- Organics
- Paper & cardboard
- Plastics
- Glass
- Other (Leather & textiles; Tyres & other rubber)
- Hazardous (Contaminated soil, Industrial waste, fly ash).

Q-2 Please specify the regulation on transboundary movement of hazardous waste.

The import, export or transit of hazardous wastes through Australia is controlled through a permitting scheme established under national legislation – the *Hazardous Waste (Regulation of Exports and Imports) Act 1989*. The Act can be accessed at the following link:
http://www.environment.gov.au/protection/hazardous-waste/about

Q-3 If your government has restriction on import of non-hazardous waste or quality control of non-hazardous waste, please list it up.

Australia does not have a restriction on import of non-hazardous wastes.

Q-4 Does your government restrict import of remanufactured goods?

The Australian Government has no specific restriction on the import of remanufactured goods.

Q-5 Does your government regard remanufactured goods as secondhand goods, and regulate it as secondhand goods?

Australia's legislation controlling transboundary movement of hazardous wastes relies on a definition of the term 'waste' and does not make use of the term 'remanufactured goods'. Remanufactured goods that are suitable for use, and not destined for disposal, would not be considered waste, irrespective of whether they were labeled second hand.

Challenges (policy/ institutional/ technological/ financial) faced in implementation:

Challenges that influence reuse and resource recovery rates include:

- Improving information about waste as a resource, including the opportunities available and the benefits and costs of maintaining or increasing recycling rates
- How materials are classified invokes a range of regulations for handling that can affect the market for resource recovery. This can be exacerbated by differences between various levels of government within a country
- Development of a coherent policy framework to manage waste and resources
- Increasing the market demand for recovered materials by identifying and addressing market impediments
- Ensuring that appropriate recycling infrastructure is available where the demand exists
- Development of new technologies to recover more recyclables.

IV. 3R Goals for Cross−cutting Issues	
Goal 26	Facilitate the international circulation of re-usable and recyclable resources as well as remanufactured products as mutually agreed by countries and in accordance with international and national laws, especially the Basel Convention, which contributes to the reduction of negative environmental impacts and the effective management of resources.

Examples of pilot projects, master plans and/or policies developed or under development – include websites where relevant

The Australian Government has a National Waste Policy that 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.

The policy articulates the outcome and principles to guide action, sets key directions and priority strategies for national waste management and resource recovery, and provides a mechanism for measuring progress and responding to change. A copy of the policy can be accessed at the following site:
http://www.environment.gov.au/protection/national-waste-policy/about

Important policies/programmes/projects/master plans the government plans to undertake within next five years (2015~2020)

At the national level in Australia, the key focus for the short to medium term will be on:

- Establishment of product stewardship arrangements to allow the impacts of a product to be responsibly managed during and at end-of-life
- Better packaging management
- National definition and classification system for wastes (including hazardous wastes) that aligns with international conventions
- Responsibility to meet international obligations; including reducing hazardous materials entering the waste stream; disposing of and moving waste (nationally and internationally) in an environmentally sound manner to appropriate facilities
- Assessment of existing waste infrastructure and future needs
- Publication of two yearly waste and resource recovery report, underpinned by a system that provides access to integrated national core data on waste and resource recovery.

Is this Goal relevant for your country? X Highly ☐ Partially ☐ Not at all

IV. 3R Goals for Cross−cutting Issues

Goal 27 Promote data collection, compilation and sharing, public announcement and application of statistics on wastes and the 3Rs, to understand the state of waste management and resource efficiency.

Q-1 Please give an overview on availability of various data and information on material flow and waste management by checking (X or ✓) the appropriate boxes. (Please respond on both "Data Availability" and Monitoring Base")

Data Type	Data Availability			Monitoring Base	
	Good	Very limited	No data exist	Good	Not good
Waste generation	X				
Material flow		X			
Cyclical use		X			
Amount of final disposal	X				
Disposal to land	X				
Direct disposal to water	X				
Import of waste		X			
Export of waste		X			
Total landfilled waste	X				
Import of recyclables		X			
Export of recyclables		X			
Hazardous waste generation (solid, liquid, sludge, etc.)	X				

(Please add any other date type relevant to your country)

Q-2 What are the current and planned government policies and programmes to strengthen data and information availability in waste sector?

National

States and territories, with the assistance of the Australian Government, have been working collectively for a number of years to harmonise waste data classifications and to streamline national level reporting under the National Waste Policy.

The National Waste Data Classification and Reporting System (NWDCRS) develops a core national waste data set and will improve the understanding of Australian waste and resource recovery data. This approach works towards national harmonisation through 'translation' of jurisdictional waste data to agreed 'best –fit' classifications, definitions, methodologies, and data format and reporting arrangements. The NWDCRS will align and integrate with existing reporting obligations and tools. It will leave jurisdictions' waste management and waste data systems in-situ while also providing capacity at the national level to undertake analysis, to track trends and accommodate future policy settings, and enable international reporting obligations to be met.

Challenges (policy/ institutional/ technological/ financial) faced in implementation:

Each state and territory currently has its own approach to collecting data in the waste sector.

IV. 3R Goals for Cross−cutting Issues	
Goal 27	Promote data collection, compilation and sharing, public announcement and application of statistics on wastes and the 3Rs, to understand the state of waste management and resource efficiency.
Examples of pilot projects, master plans and/or policies developed or under development – include websites where relevant	
Important policies/programmes/projects/master plans the government plans to undertake within next five years (2015~2020)	
Is this Goal relevant for your country*?* ☐ Highly ☐ Partially ☐ Not at all	

IV. 3R Goals for Cross−cutting Issues	
Goal 28	Promote heat recovery (waste-to-energy), in case wastes are not re-usable or recyclable and proper and sustainable management is secured.

Q-1 What are the government policies and programmes, including incentives, for waste-to-energy programmes?

Regulations and programmes covering waste-to-energy are the responsibility of state and territory governments. Most states and territories have now implemented policies that allow for the development of waste-to-energy projects.

Challenges (policy/ institutional/ technological/ financial) faced in implementation:

Examples of pilot projects, master plans and/or policies developed or under development – include websites where relevant

Important policies/programmes/projects/master plans the government plans to undertake within next five years (2015~2020)

Is this Goal relevant for your country? ☐ Highly x Partially ☐ Not at all

IV. 3R Goals for Cross−cutting Issues	
Goal 29	Promote overall regional cooperation and multi-stakeholder partnerships based on different levels of linkages such as government-to-government, municipality-to-municipality, industry-to-industry, (research) institute-to-institute, and NGO-to-NGO. Encourage technology transfer and technical and financial supports for 3Rs from developed countries to less developed countries.
Q-1 Please provide a list of on-going bilateral/multi-lateral technical cooperation in 3R areas? ***Q-2 What actions are being taken to promote inter-municipal or regional cooperation in areas of waste exchanges, resource recovery, recycling, waste-to-energy and trade of recyclables?***	
Challenges (policy/ institutional/ technological/ financial) faced in implementation:	
Examples of pilot projects, master plans and/or policies developed or under development – include websites where relevant	
Important policies/programmes/projects/master plans the government plans to undertake within next five years (2015~2020)	
Is this Goal relevant for your country? ☐ Highly ☐ Partially ☐ Not at all	

Voluntary Progress/Achievements/Initiatives in Implementing Ha Noi 3R Declaration (2013~2023)

Country Name: Australia

IV. 3R Goals for Cross−cutting Issues	
Goal 30	Pay special attention to issues and challenges faced by developing countries including SIDS in achieving sustainable development.
Q-1 Please describe any past and on-going cooperation with SIDS (Small Island Developing States) countries in 3R areas.	
Q-2 Please list 3R related projects linked to climate change, biodiversity, disaster management and sustainable tourism. (This is <u>to be reported by SIDS countries only</u>)	
Challenges (policy/ institutional/ technological/ financial) faced in implementation:	
Examples of pilot projects, master plans and/or policies developed or under development – include websites where relevant	
Important policies/programmes/projects/master plans the government plans to undertake within next five years (2015~2020)	
Is this Goal relevant for your country? ☐ Highly ☐ Partially ☐ Not at all	

Voluntary Progress/Achievements/Initiatives in Implementing Ha Noi 3R Declaration (2013~2023)

Country Name: Australia

IV. 3R Goals for Cross−cutting Issues	
Goal 31	Promote 3R + "Return" concept which stands for Reduce, Reuse, Recycle and "Return" where recycling is difficult due to the absence of available recycling industries and limited scale of markets in SIDS, especially in the Pacific Region.
Q-1 What specific policies, programme, including pilot projects, are implemented to promote 3R+ "Return" concept? (This is to be reported by SIDS countries only)	
Challenges (policy/ institutional/ technological/ financial) faced in implementation:	
Examples of pilot projects, master plans and/or policies developed or under development – include websites where relevant	
Important policies/programmes/projects/master plans the government plans to undertake within next five years (2015~2020)	
Is this Goal relevant for your country? ☐ Highly ☐ Partially ☐ Not at all	

IV. 3R Goals for Cross−cutting Issues	
Goal 32	Complete elimination of illegal engagement of children in the **informal waste sector** and gradually **improve** the working conditions and livelihood security, including **mandatory provision of health insurance**, for all workers.

Q-1 What is the approximate market size (in US$) of the informal waste sector?

Q-2 Number of annual labor inspections in waste sector?

Q-3 Is health insurance a mandatory to all informal workers in waste sector by law?

Q-4 What specific policies and enforcement mechanisms are in place to prevent illegal engagement of children in waste sector?

Q-5 Number of landfill sites accessible to register waste pickers?

Q-6 Average life span of informal waste workers?

Q-7 Any government vaccination programmes for informal waste workers?

Q-8 Any public awareness programmes for informal waste workers on health and safety measures?

Challenges (policy/ institutional/ technological/ financial) faced in implementation:

Examples of pilot projects, master plans and/or policies developed or under development – include websites where relevant

Important policies/programs/projects/master plans the government plans to undertake within next five years (2015~2020)

Is this Goal relevant for your country? ☐ Highly ☐ Partially ☐ Not at all

IV. 3R Goals for Cross−cutting Issues	
Goal 33	Promote 3Rs taking into account gender considerations.
Q-1 Please give a brief assessment on how the national, provincial and municipal governments incorporate gender considerations in waste reduction, reuse and recycle.	
Challenges (policy/ institutional/ technological/ financial) faced in implementation:	
Examples of pilot projects, master plans and/or policies developed or under development – include websites where relevant	
Important policies/programmes/projects/master plans the government plans to undertake within next five years (2015~2020)	
Is this Goal relevant for your country*?* ☐ Highly ☐ Partially ☐ Not at all	