



Waste Authority

Waste Avoidance and Resource Recovery Strategy Action Plan 2030

Western Australia's Waste Strategy



Introduction

The Waste Avoidance and Resource Recovery Strategy: 2030 (the waste strategy) is Western Australia's strategy to move our State towards becoming a sustainable, low-waste, circular economy in which human health and the environment are protected from the impacts of waste. It encourages Western Australians to work towards three objectives – avoid, recover and protect – and sets targets that underpin these objectives.

The waste strategy also sets a number of high level strategies which indicate the types of activities that need to be pursued to achieve these targets.

This action plan clarifies the specific actions, timelines, lead responsibilities and collaborations that will be progressed to achieve the objectives of the waste strategy.

Priority actions for the 2018-19 and 2019-20 financial years include:

- Develop a plan for the roll out of Food Organics and Garden Organics (FOGO) systems in Perth and Peel, and update the Better Bins funding program to support three bin FOGO adoption.
- Review the State Supply Commission's Sustainable Procurement Policy and Disposal of Goods Policy to reduce waste, increase recycling and increase use of recycled products through procurement.
- Pilot the use of 25,000 tonnes of recycled construction and demolition (C&D) waste as road base under the Roads to Reuse trial and, subject to trial success and funding support, use over 100,000 tonnes of recycled C&D material on selected projects.
- Provide relevant local governments with written notice of the requirement to develop waste plans and develop supporting model plans and guidance in consultation with local governments.
- Maintain, update and review the Own Your Impact initiative with a focus on achieving household behaviour change.
- In consultation with relevant stakeholders, undertake a review of the scope and application of the waste levy to ensure it meets the objectives of the waste strategy.
- Establish a schedule of future waste levy rates that provides a minimum five year projection.
- Undertake an audit of existing waste infrastructure and a needs analysis to determine the waste infrastructure required to meet the objectives and targets in the waste strategy.
- Develop, release and implement a waste data strategy.
- Implement new waste data reporting requirements and guidance under amendments to the *Waste Avoidance and Resource Recovery Regulations 2008*, and implement a supporting online reporting system by 2020.
- Establish a recycling infrastructure support program and identify priority areas for funding to support adoption of waste avoiding practices and/or resource recovery.
- Identify, communicate and support better practice approaches to avoidance, recovery and disposal covering all waste generators and streams.

Waste Avoidance and Resource Recovery Strategy 2030 – key elements

VISION	<i>Western Australia will become a sustainable, low-waste, circular economy in which human health and the environment are protected from the impacts of waste.</i>			<p>Supporting documents</p> <p>Other documents which align with or support this strategy <i>Waste Avoidance and Resource Recovery Strategy 2030</i> include the:</p> <ol style="list-style-type: none"> 1. <i>Waste Avoidance and Resource Recovery Strategy 2030 Action Plan</i> 2. Waste Authority position and guidance statements 3. State Waste Infrastructure Plan 4. Annual Business Plan 5. Waste Data Strategy
OBJECTIVES	<p>Avoid <i>Western Australians generate less waste.</i></p>	<p>Recover <i>Western Australians recover more value and resources from waste.</i></p>	<p>Protect <i>Western Australians protect the environment by managing waste responsibly.</i></p>	
TARGETS	<ul style="list-style-type: none"> 2025 – 10% reduction in waste generation per capita 2030 – 20% reduction in waste generation per capita 	<ul style="list-style-type: none"> 2025 – Increase material recovery to 70% 2030 – Increase material recovery to 75% From 2020 – Recover energy only from residual waste 	<ul style="list-style-type: none"> 2030 – No more than 15% of waste generated in Perth and Peel regions is landfilled. 2030 – All waste is managed and/or disposed to better practice facilities 	
HEADLINE STRATEGIES	<ul style="list-style-type: none"> • A consistent three bin kerbside collection system, which includes separation of food organics and garden organics from other waste categories, to be provided by all local governments in the Perth and Peel region by 2025 and supported by State Government through the application of financial mechanisms. • Implement local government waste plans, which align local government waste planning processes with the <i>Waste Avoidance and Resource Recovery Strategy 2030</i>. • Implement sustainable government procurement practices that encourage greater use of recycled products and support local market development. • Provide funding to promote the recovery of more value and resources from waste with an emphasis on focus materials. • Review the scope and application of the waste levy to ensure it meets the objectives of <i>Waste Avoidance and Resource Recovery Strategy 2030</i> and establish a schedule of future waste levy rates with the initial schedule providing a minimum five year horizon. • Develop state-wide communications to support consistent messaging on waste avoidance, resource recovery and appropriate waste disposal behaviours. • Review and update data collection and reporting systems to allow waste generation, recovery and disposal performance to be assessed in a timely manner. • Undertake a strategic review of Western Australia’s waste infrastructure (including landfills) by 2020 to guide future infrastructure development. 			

Role of the action plan

This action plan has been prepared in consultation with State Government agencies. It is one of the documents that supports the waste strategy.

The intent of the action plan is to prioritise actions to deliver against the high level strategies outlined in the waste strategy.

The action plan provides information about the timing of actions, the different aspects of their implementation, and the waste strategy objectives and strategies to which they relate. It also outlines who will lead specific actions, including the Waste Authority, the Department of Water and Environmental Regulation (DWER) and other State Government agencies.

Each action in the action plan directly relates to one or more of the 50 strategies outlined in the waste strategy. However, not every strategy outlined in the waste strategy is addressed in this action plan as its focus is the highest priority strategies. The action plan will be reviewed annually.



The action plan will be a key reference document for the Waste Authority, to monitor the progress of the Waste Strategy, to inform allocation of resources from the Waste Avoidance and Resource Recovery Account (WARR Account) and inform its provision of advice to the Minister for Environment.

The waste strategy will be reviewed in five years, while the action plan will be reviewed at least annually. The progress of the action plan will be reported on annually, in the Waste Authority Annual Report (for actions led by the Waste Authority) and in the DWER Annual Report (for actions led by DWER as well as other State Government agencies).

Delivery of the action plan will be supported by an evaluation framework, which will guide the evaluation of actions. The framework will allow the degree to which actions are meeting the intent of the waste strategy to be evaluated and potential improvements to be identified. The framework will ensure an approach to evaluation that is consistent, transparent, consultative and evidence based.





Actions

The action plan is organised according to the eight headline strategies included in the waste strategy. These are:

- 1. Develop state-wide communications to support consistent messaging on waste avoidance, resource recovery and appropriate waste disposal behaviours.*
- 2. A consistent three bin kerbside collection system, which includes separation of food organics and garden organics from other waste categories, to be provided by all local governments in the Perth and Peel region by 2025 and supported by State Government through the application of financial mechanisms.*
- 3. Implement sustainable government procurement practices that encourage greater use of recycled products and support local market development.*
- 4. Implement local government waste plans, which align local government waste planning processes with the Waste Avoidance and Resource Recovery Strategy 2030.*
- 5. Review the scope and application of the waste levy to ensure it meets the objectives of the Waste Avoidance and Resource Recovery Strategy 2030 and establish a schedule of future waste levy rates with the initial schedule providing a minimum five year horizon.*
- 6. Undertake a strategic review of Western Australia's waste infrastructure (including landfills) by 2020 to guide future infrastructure development.*
- 7. Review and update data collection and reporting systems to allow waste generation, recovery and disposal performance to be assessed in a timely manner.*
- 8. Provide funding to promote the recovery of more value and resources from waste with an emphasis on focus materials.*

Each headline strategy is associated with actions which represent specific deliverables that have an associated delivery time frame. These are presented as a table, together with the action's lead agency and the strategy and objective which the action addresses.

The timeframes are identified as follows:

- **Ongoing:** activities which are currently under way and/or which will be continuously undertaken
- **Short term:** activities to commence within the next 1-2 years
- **Medium term:** activities to commence within the next 3-5 years
- **Long term:** activities to commence in more than five years.

01

Develop state-wide communications to support consistent messaging on waste avoidance, resource recovery and appropriate waste disposal behaviours.

Lead	Actions	Timing	Waste strategy objective and strategy number			
			Avoid	Recover	Protect	Foundation
Waste Authority	<p>1.1 WasteSorted communications toolkit</p> <p>Build on and maintain the existing local government communications toolkit for consistent messaging relating to better practice kerbside service delivery and to support FOGO implementation in Perth and Peel.</p>	Ongoing				
DWER	<p>1.2 Own Your Impact</p> <p>Maintain and enhance the Own Your Impact program to ensure that it is providing targeted up to date information and guidance to the community on key waste strategy initiatives. This will include delivery of key near-term campaigns prior to a subsequent behaviour change campaign.</p>	Short term				
	<p>1.3 Major behaviour change program</p> <p>Develop a business case and subsequently implement a major long-term behaviour change campaign covering social marketing, media, education and engagement, informed by:</p> <ul style="list-style-type: none"> social research to determine initial program focus based on community readiness and expectations and waste strategy priorities, including: <ul style="list-style-type: none"> food and garden organics waste recycling contamination in kerbside collection systems awareness of the benefits of recycling and using recycled products impacts of illegal dumping staged program design by specialist behavioural change and social marketing expertise. timing of potential future regulatory change and infrastructure provisions, to better enhance community behaviour change that is led by State Government. 	Short-long term	✓ 1, 4, 5, 6	✓ 11, 12	✓ 24	✓ 42

Lead	Actions	Timing	Waste strategy objective and strategy number			
			Avoid	Recover	Protect	Foundation
Dept. of Local Govt., Sport and Cultural Industries (DLGSC)	1.4 Environmental education Provide waste and other environmental education opportunities at state owned infrastructure, consistent with the waste strategy.	Medium term	✓	✓	✓	✓
	1.5 Perth Cultural Centre demonstration project Deliver a sustainability demonstration project at the Perth Cultural Centre.	Short term	1, 4, 5, 6	11, 12	24	42
	1.6 Support local government waste management Support local government to improve waste management through innovation and education.	Medium term				
Waste Authority	1.7 Guidance: Household Hazardous Waste Program In consultation with key stakeholders, review, update and publish <i>Guidelines for the design and operation of facilities for the acceptance and storage of household hazardous waste</i> , to support the Household Hazardous Waste Program.	Short term	✓	✓	✓	✓
	1.8 Update Waste Authority Position Statements Review and update Waste Authority Position Statements on waste to energy and the waste hierarchy.	Short term				
	1.9 Better practice uptake In consultation with all relevant stakeholders, identify better practice priorities and develop, trial and publish relevant better practice guidance documents, and encourage their adoption.	Short-medium term				
	1.10 Better practice local government waste services Develop and publish better practice guidance for food organics and garden organics (FOGO) kerbside services, vergeside waste collection services and drop-off facilities to support local government development of waste plans and their adoption of better practice.	Short-medium term				
DWER	1.11 Managing waste in regional/remote communities In consultation with relevant State Government agencies, local government and communities, develop pragmatic guidelines for the design, maintenance and management of waste services and infrastructure in regional/remote communities, including Aboriginal communities.	Short-medium term	2	10, 13	25, 26, 30	30

Lead	Actions	Timing	Waste strategy objective and strategy number			
			Avoid	Recover	Protect	Foundation
Waste Authority	<p>1.12 Waste Wise Schools (WWS) expansion</p> <p>Continue to extend the WWS program with a focus on:</p> <ul style="list-style-type: none"> developing more high school resources to provide more motivation for high schools to engage with the WWS program and increase their diversion of waste from landfill. extending the WWS program to more schools in regional areas through the establishment of regional partnerships to meet demand for face to face school support in regional areas. 	Medium term				
DLGSC	<p>1.13 Better Bins at sporting and cultural venues</p> <p>Require use of Better Bins infrastructure (where appropriate) and messaging in sporting and cultural venues.</p>	Medium term	✓	✓	✓	✓
Water Corporation	<p>1.14 Reduce waste from wastewater management</p> <p>Continue research and implementation of better practice actions aimed at recovering resources and removing waste/pollutants from wastewater, including:</p> <ul style="list-style-type: none"> Gross Pollutant Trap, and safety screens/trash racks on Perth drains Research into recovery of struvite from wastewater and magnesium from seawater desalination brine Research into self-supply of carbon dioxide Research with Royal Melbourne Institute of Technology for microplastics analysis. 	Ongoing	2	10, 13	25, 26, 30	30

02

A consistent three bin kerbside collection system, which includes separation of food organics and garden organics from other waste categories, to be provided by all local governments in the Perth and Peel region by 2025 and supported by State Government through the application of financial mechanisms.

Lead	Actions	Timing	Waste strategy objective and strategy number			
			Avoid	Recover	Protect	Foundation
Waste Authority	2.1 FOGO Position Statement Develop a Waste Authority Position Statement on Food Organics and Garden Organics (FOGO).	Short term				
	2.2 Revise Better Bins with a FOGO focus Review and update the Better Bins funding program and better practice guidelines for kerbside collection to include, and support the adoption of, three bin FOGO collection systems.	Short term		✓		
	2.3 Plan for three bin FOGO system roll out In consultation with local government, develop a plan for the phased introduction of three bin FOGO kerbside collection systems in Perth and Peel, including coverage requirements, processing and infrastructure needs, market scoping and development, mechanisms for transition from non-FOGO two and three bin services, and flexibility to allow for contractual transition.	Short term		18		
	2.4 Implement three bin FOGO system Implement three-bin FOGO systems across local governments in the Perth and Peel region, with funding support through the revised Better Bins program.	Short-medium term				

03

Implement sustainable government procurement practices that encourage greater use of recycled products and support local market development.

Lead	Actions	Timing	Waste strategy objective and strategy number			
			Avoid	Recover	Protect	Foundation
DWER	3.1 Identify options and priority actions to reduce waste through procurement In consultation with industry and State Government, identify priority sustainable government procurement measures, reporting requirements and policies, and engage with State Government agencies and obtain commitment to these within negotiated timeframes.	Short term				
	3.2 Implement reducing waste through procurement program Lead collaboration between State Government agencies and industry to implement sustainable government procurement measures and policies.	Short-medium term				
Department of Finance (DoF)	3.3 Develop better practice procurement framework Work with DWER to review the State Supply Commission’s Sustainable Procurement Policy and Disposal of Goods Policy to reduce waste, increase recycling and increase use of recycled products in goods and services procurement; and incorporate any new requirements into relevant guidance materials. Such work may seek to: <ul style="list-style-type: none"> • Streamline existing guidance materials; • Draw upon DWER and other agencies’ experience to incorporate examples of better practice; and • Develop a communications plan for the updated documents. 	Short term	✓ 3	✓ 9, 22		
	3.4 CUA update Review all relevant State Government Common Use Agreements as they fall due for renewal, to promote opportunities for agencies to reduce their purchase of disposable plastic based products and increase their purchasing of recycled and low-waste products.	Short-medium term				
	3.5 Mandatory requirements: Government construction projects Work with DWER to review current practices for recycled content use, including the recycling of DoF construction and demolition waste, and undertake research to establish a baseline and set appropriate targets.	Long term				
	3.6 Reporting protocol Establish a reporting protocol including thresholds for reuse, recycling, recovery and disposal.	Medium term				

Lead	Actions	Timing	Waste strategy objective and strategy number			
			Avoid	Recover	Protect	Foundation
Department of Communities (DoC)	3.7 DoC construction project targets Work with industry to establish targets for recycling and recycled material content to be used in construction projects over thresholds (to be determined).	Short-medium term				
	3.8 DoC project tendering Include in tender documentation provisions for consideration of waste avoidance and resource recovery.	Short-medium term				
Dept. of Local Govt., Sport and Cultural Industries (DLGSC)	3.9 DLGSC recycled content for building projects Require the use of recycled content and reporting for building projects/grants over certain thresholds (to be determined).	Short-medium term	✓ 3			
	3.10 DLGSC single use plastics Avoidance of single use plastics at all state owned culture and sport venues and advocacy for this at state sporting facilities managed by others.	Short-medium term		✓ 9, 22		
Main Roads Western Australia (MRWA)	3.11 Roads to reuse trial In 2019, MRWA will work with the Waste Authority and DWER to pilot Roads to Reuse on the Kwinana Freeway Northbound Widening Project from Russell Road to Roe Highway or a similar project, using approximately 25,000 tonnes of recycled construction and demolition (C&D) waste as road base.	Short term				
	3.12 Use of recycled C&D – 2019 Subject to ongoing DWER independent audit testing, MRWA to use over 100,000 tonnes of crushed recycled concrete on selected projects in 2019, with access to Roads to Reuse program funding as appropriate.	Short term				
	3.13 Use of recycled C&D – 2020 Subject to ongoing independent audit testing by DWER or the Waste Authority, MRWA to use over 200,000 tonnes of crushed recycled concrete on selected projects in 2020, with access to Roads to Reuse program funding as appropriate.	Short term				

Lead	Actions	Timing	Waste strategy objective and strategy number			
			Avoid	Recover	Protect	Foundation
Main Roads Western Australia (MRWA)	3.14 Use of recycled C&D – beyond 2020 MRWA continue to work closely with DWER and the Waste Authority to aim to double these targets, whilst ensuring that independent audit testing and firm action achieve full compliance with maximum permissible limits of contaminants.	Medium term		✓		
	3.15 Use of crumbed scrap tyre rubber for asphalt projects MRWA to develop and implement alternative crumbed scrap rubber bituminous binders to double usage by MRWA and local governments to over 1200 tonnes per year by 2021.	Short term		9, 22		



04

Implement local government waste plans, which align local government waste planning processes with the Waste Avoidance and Resource Recovery Strategy 2030.

Lead	Actions	Timing	Waste strategy objective and strategy number			
			Avoid	Recover	Protect	Foundation
DWER Dept. of Local Govt., Sport and Cultural Industries (DLGSC)	4.1 Develop waste plan support and guidance In consultation with local government, develop model plans and guidance to support the development of local government waste plans that are consistent with the waste strategy and form part of the local government integrated planning process.	Short term				✓ 48
DWER	4.2 Notify local governments of waste plan requirements Provide relevant local governments with written notice of the requirements to develop waste plans.	Short term				
	4.3 Support local governments to meet waste plan requirements Provide local governments with support and assistance to meet ongoing waste plan preparation, review and reporting requirements.	Short-medium term				



05

Review the scope and application of the waste levy to ensure it meets the objectives of the Waste Avoidance and Resource Recovery Strategy 2030 and establish a schedule of future waste levy rates with the initial schedule providing a minimum five year horizon.

Lead	Actions	Timing	Waste strategy objective and strategy number			
			Avoid	Recover	Protect	Foundation
DWER	5.1 Waste levy review In consultation with relevant stakeholders, undertake a review of the scope and application of the waste levy to ensure it meets the objectives of the waste strategy.	Short term				
	5.2 Schedule of levy rates Establish a schedule of future waste levy rates that provides a minimum five year projection.	Short term				✓ 46
	5.3 Amend WARR Levy Regulations Update the <i>Waste Avoidance and Resource Recovery Levy Regulations 2008</i> to reflect any changes to the scope and application of the waste levy.	Medium term				
	5.4 Litter Strategy Implement the litter prevention strategy to reduce littering and manage its impacts in partnership with the Keep Australia Beautiful Council (KABC).	Ongoing				
	5.5 Illegal dumping strategies Implement actions to protect the environment from the impacts of illegal dumping: <ul style="list-style-type: none"> work with land owners/managers to build their capacity to tackle illegal dumping detect, investigate and prosecute illegal dumping. 	Short-medium term			✓ 28, 32, 33, 34	✓ 47
	5.6 Improved regulatory framework for waste Review and update the regulatory framework for waste to ensure it is appropriate, reduces the environmental impacts and risks from waste management, and facilitates adequate processing facilities to process collected materials.	Short-medium term				
	5.7 Improved regulatory compliance Review regulations and policies to create a reasonable risk of enforcement and ensure that entities that are compliant and apply better practice are not disadvantaged.	Medium term				
	5.8 Improved levy compliance Develop and implement mechanisms to reduce levy evasion and stockpiling of waste.	Medium term				

06

Undertake a strategic review of Western Australia’s waste infrastructure (including landfills) by 2020 to guide future infrastructure development.

Lead	Actions	Timing	Waste strategy objective and strategy number			
			Avoid	Recover	Protect	Foundation
DWER	6.1 State waste infrastructure audit Undertake an audit of existing waste infrastructure and a needs analysis to determine the waste infrastructure required to meet the objectives of the waste strategy.	Short term				
	6.2 State Waste Infrastructure Plan In consultation with State Government agencies, local government, and the waste industry, develop the State Waste Infrastructure Plan which addresses: <ul style="list-style-type: none"> different waste infrastructure options and technologies available to meet the objectives of the waste strategy land use planning instruments and issues environmental, planning and licence approvals processes. 	Short-medium term		✓ 16	✓ 27	✓ 44, 49, 50
	6.3 Guidance for waste infrastructure planning Work with the Department of Planning, Lands and Heritage to develop the planning instruments and guidance for local government and developers necessary to facilitate appropriate siting and design of waste facilities (including landfills).	Medium term				
	6.4 Options for improving waste infrastructure planning Investigate options for developing a ‘needs based’ approach to planning, environmental and licensing approval of new landfills and other waste infrastructure that supports a State Waste Infrastructure Plan, in consultation with the Department of Planning, Lands and Heritage.	Medium-long term				

07

Review and update data collection and reporting systems to allow waste generation, recovery and disposal performance to be assessed in a timely manner.

Lead	Actions	Timing	Waste strategy objective and strategy number			
			Avoid	Recover	Protect	Foundation
Waste Authority	7.1 Waste Data Strategy Develop, release and implement the Waste Data Strategy.	Ongoing				
DWER	7.2 Mandatory reporting of waste and recycling data Implement new reporting requirements under amendments to the <i>Waste Avoidance and Resource Recovery Regulations 2008</i> and develop reporting guidance to provide support to local governments, recyclers and landfill operators.	Short term				
	7.3 Online system for waste reporting Implement an online reporting system for waste data by 2020.	Short term				
	7.4 Improved waste data Review and update waste data reporting systems and methodology, and develop new metrics, in order to improve data accuracy and eliminate identified gaps in waste data. Initial focus will be on: <ul style="list-style-type: none"> • monitoring progress towards achieving objectives and targets of the waste strategy • monitoring and prosecuting illegal dumping • materials that are reused • waste tracking and stockpiling • focus materials • measuring the impact of communication initiatives, including those focused on kerbside recycling 	Short-Medium term		✓ 15	✓ 23	✓ 37, 38, 41
Dept. of Local Govt., Sport and Cultural Industries (DLGSC)	7.5 MyCouncil: Reporting waste data In collaboration with DWER, report local government waste data on the MyCouncil website to provide increased transparency around local government waste and recycling performance and encourage benchmarking and improved performance.	Short term				

08

Provide funding to promote the recovery of more value and resources from waste with an emphasis on focus materials.

Lead	Actions	Timing	Waste strategy objective and strategy number			
			Avoid	Recover	Protect	Foundation
DWER	<p>8.1 Product stewardship Develop, support and implement measures to establish and maintain product stewardship schemes aligned with the State’s waste priorities, including implementation of a container deposit scheme and working with the Australian Packaging Covenant Organisation.</p>	Ongoing				
Waste Authority	<p>8.2 Facilitate waste avoidance and recovery Identify priority areas of need for funding, and establish a funding program(s) to support adoption of waste avoiding practices and behaviour and/or the recovery of resources from waste, with an emphasis on:</p> <ul style="list-style-type: none"> • focus materials • reuse and low-waste alternatives • community, government and industry initiatives that lead to waste avoidance and resource recovery • increasing the uptake of better practice approaches 	Short term	✓ 6, 7	✓ 16, 17, 19	✓ 29	✓ 43
	<p>8.3 Infrastructure support program Develop and implement a recycling infrastructure support program that delivers funding and other support for the development of local resource recovery infrastructure.</p>	Short term				
	<p>8.4 Reprocessing feasibility research Consider medium to long term options for reprocessing in Western Australia, taking into account known standards, technologies, viabilities and potential barriers.</p>	Short term				



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