## Waste Reduction and Recycling Plan 2022-2025



#### Authorisation

The Director-General, Department of Energy and Public Works (EPW), approves this *Waste Reduction and Recycling Plan 2022-25* in line with the requirements of Clause 133 of the *Waste Reduction and Recycling Act 2011.* 

This plan sets the overall direction for waste management within the EPW.

Approved by

Paul Martyn

**Director-General** 

Date: 14 March 2023

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#### Purpose

The Department of Energy and Public Works (EPW) supports Queensland's <u>Waste Management and</u> <u>Resource Recovery Strategy</u> (the Strategy) through this *EPW Waste Reduction and Recycling Plan* (the *Plan*), and associated initiatives contained within the *EPW Waste Reduction and Recycling Action Plan* (the Action Plan).

The Action Plan will contribute to the state-wide strategic targets, address problem waste streams, strategic priorities, and waste reduction vision for Queensland.

EPW will assist in the transition to a circular economy by:

- adopting purchasing and consumption behaviours that help reduce waste and increase recycling and resource recovery
- considering what to purchase and what to do with products and materials that have reached the end of their current life cycle, including sorting and segregating wastes
- purchasing long-life products, and
- considering how procurement can stimulate demand for recycled material manufactured in Queensland.

Through improved waste management and a reduced landfill footprint, EPW and its clients will achieve cost savings by avoiding the Waste Levy that may be imposed by the Queensland Government on leviable waste.

EPW also contributes to the Strategy through whole-of-government policy setting in the areas of procurement policy, fleet management, office accommodation, building design, construction, and maintenance.

EPW has a broader responsibility for improving waste management across the government sector through the delivery of the whole-of-government procurement policies, office accommodation services and the design, construction, and maintenance of government assets.

This Plan provides the authority and direction to a range of planning groups and committees to develop subsequent initiatives and activities to support EPW's contribution to the Strategy.

EPW staff have a responsibility to ensure that, in carrying out their duties, they take all practicable and reasonable steps to minimise adverse environmental impacts.

EPW's Divisional responsibilities are outlined in the Appendix.

#### **Distribution**

The Plan is available to all departmental staff through the EPW intranet site and external stakeholders and interested parties on <u>EPW's website</u>.

#### Scope

The primary focus of the Plan is to develop an understanding of the types of waste generated through EPW's business activities and implement a range of initiatives to help improve the way the department manages and reduces waste.

Statutory authorities within the Minister for Energy, Renewables and Hydrogen and Minister for Public Works and Procurement's portfolio are not included in this Plan. Statutory authorities are responsible for their own waste reduction and reporting plans.

#### EPW's operational profile

#### **Overview**

EPW delivers services to Queenslanders in the areas of public works, building management and maintenance, fleet and asset management, procurement, and energy and building policy.

EPW staff work predominantly in office environments within Brisbane City and across QBuild's regional delivery offices. This currently encompasses approximately 1550 employees across 52 sites throughout Queensland.

The portfolio also includes the Office of the Queensland Government Architect and Office of the Chief Advisor, Procurement.

#### Waste generated by EPW

For the purposes of waste management, EPW's activities are divided into two broad categories:

- office-based waste
- non-office-based waste.

There is an underlying assumption that office-based functions generate a generic waste stream, irrespective of geographical location or functional support delivery. For example, an administration office in Robina on the Gold Coast is likely to produce the same types of waste products as one in Mount Isa or Mackay.

Alternatively, non-office-based functions are often unique in nature and, therefore, generate distinctive waste streams. Most of this waste is generated under construction and maintenance contracts managed by QBuild or Major Projects. QFleet also generates unique waste streams, predominantly used tyres.

#### Waste generated with EPW oversight

There are efficiencies to be gained from reviewing current office waste management systems and practices in place in office buildings occupied by EPW, including:

- more effective waste streaming
- reuse and recycling of paper products
- identifying opportunities for replacing paper-based procedures with online processes (reducing printer usage and paper consumption)
- encouraging and supporting digital business and facilitating implementation through initiatives, such as:
  - providing staff with the functionality and capability to transition from paper to digital information and records management
  - encouraging electronic provision of Right to Information (RTI) documents through a shared directory
  - continued support to assist EPW with using the Microsoft 365 collaboration tool.

EPW also has influence over the disposal of construction and demolition waste created under contracts managed by it and through leasing arrangements, i.e. via 'Preferred Supplier' arrangements. This can include:

- adopting industry recognised targets and verification methodologies for the management of construction and demolition waste, such as the Green Star rating tools and by engaging with industry recyclers accredited under the Product Stewardship for Oil (PSO) Scheme
- active participation in the Sustainable Built Environment National Research Centre (SBEnrc) project 1.65 A National Economic Approach to Improved Management of Construction and Demolition Waste.

The *Waste Reduction and Recycling Act 2011* (the Act) requires 'all aspects of waste management for the entity are comprehensively addressed (by the Plan). This is read to include waste minimisation actions in third party activities it controls or influences through contractual arrangements and specifications.

External contractors undertake almost all construction, renovation, maintenance and demolition of government managed buildings and facilities on behalf of EPW or other asset-owning departments and agencies. Likewise, external service providers conduct all maintenance of the government's vehicle fleet.

Although EPW is not directly responsible for the associated waste generated in these activities, it proactively influences waste minimisation activities where possible. For example, through EPW's role as a contract manager, clients and contractors are encouraged to minimise or divert as much waste as possible from landfill to strategies such as the effective use, reuse and recycling of materials.

#### **Queensland's waste strategies**

#### **Queensland's Waste Management and Resource Recovery Strategy**

The Strategy provides the framework for a better way to manage waste in Queensland and includes the three following strategic priorities:

- reducing the impact of waste on the environment
- transitioning to a circular economy for waste
- building economic opportunity.

These strategic priorities can play a positive role to assist in the transition to an effective waste management strategy by:

- reducing the amount of waste disposed of to landfill
- guiding the transition to a more circular economy
- providing a more sustainable source of end-of-life products and materials to create new products.

The Strategy also prescribes reduction targets to drive market growth and deliver benefits associated with improved waste management. These targets apply to:

- municipal solid waste (MSW)
- commercial and industrial waste (CandI)
- construction and demolition waste (CandD).

Several waste streams have been identified within the Strategy which require increased action to improve their recycling performance. These 'problem wastes' include:

- food waste
- agricultural waste
- plastics
- e-waste electrical equipment and batteries
- glass
- paper and cardboard
- tyres
- textiles
- mechanical and workshop waste
- green waste e.g from land clearance, parks and gardens
- building waste including construction and demolition waste.

#### **Organic Waste Strategy and Action Plan**

In February 2022, the Department of Environment and Science (DES), released a complementary strategy and action plan to the *Waste Management and Resource Recovery Strategy* which focuses specifically on organic waste. The *Organic Waste Strategy and Action Plan* (OWSAP) recognises the additional greenhouse risk presented by organic waste through the production of methane.

Specific to this Plan, the OWSAP calls for the commercial sector to adopt organic waste streams and to support workers with educational and promotional programs. EPW oversees and collects data from a few buildings that provide organic waste streams. The most accurate data is currently available from the Property Management Team of 1 William Street in Brisbane where compostable paper towels are used and added to the organic waste stream to improve the rate of diversion of waste from landfill or incineration.

#### Waste and resource management hierarchy

The waste and resource management hierarchy is a framework that guides the order of preference for managing waste. Waste generation should be avoided as the first priority through appropriate procurement policies and management, followed by, in decreasing order of importance: reuse, recycling, recovery and disposal methods, as shown in Figure 1.



Figure 1: The waste and resource management hierarchy.

#### EPW's approach to waste management

The table below presents the principles to guide the operation of the Plan and decision making related to waste.

Principle	Definition	Example of activities
Polluter pays	All costs associated with the management of waste should be borne by the persons or entity which generated the waste. Associated costs may include minimising the amount of waste generated; containing, treating and disposing of waste; and rectifying environmental harm caused by waste. A further cost may include the imposition of a waste levy, where the additional environmental costs of non-recyclable waste is a passed on to the generator of waste.	<ul> <li>EPW on-charges the waste cost to each tenant department occupying EPW leased or owned premises.</li> <li>Educating staff on the full implications of inappropriate waste activities, e.g. once a co-mingled recycling bin is contaminated, the contents of the whole bin will go to landfill resulting in an environmental cost as well as an added financial cost to the organisation.</li> </ul>
Proximity	Waste and recovered resources should be managed as close to the source of generation as possible.	• Reviewing waste management arrangements to ensure that EPW use local service providers where possible. Waste stream separation especially of recoverable materials is another strategy to minimise waste close to its source.
Circular economy	A whole-of-life view of the production and consumption of products and materials is promoted as a means to reduce or eliminate the need to send waste to landfill, ensuring that through design, procurement, and logistics, resources are reused or recycled to their maximum capacity.	<ul> <li>Procurement of sustainable carpet tiles: Woollen carpets and other natural materials for example are non-toxic and do not add to the presence of microplastic toxicity in the environment.</li> <li>Where possible, using reusable rather than disposable items is preferred.</li> <li>Where possible, purchasing items that are recyclable in preference to items that are not recyclable.</li> <li>Purchasing long-life products.</li> <li>Product care and maintenance programs to increase equipment lifetimes.</li> <li>Increase resource use productivity, e.g. double siding printing.</li> <li>ICT lifecycle management supplier of printers, screens, laptops, tablets and PCs managed by the Technology and Digital Solutions Group.</li> </ul>
Product stewardship	There is a shared responsibility between all persons or entities who are involved in the life cycle of a product for managing the environmental, social and economic impact of the product.	<ul> <li>Reviewing supply chain procurement practices and procedures.</li> <li>To be included on EPW's Standing Offer Arrangement (QF0717) for Tyres and</li> </ul>

Existing tools and standardsEPW can support established targets and or waste management.Associated Services, it is a mandatory requirement for suppliers to be accredited with Tyre Stewardship Australia. EPW recomment QF0717 be used for tyre replacement on government-owned vehicles.• QFleet to ascretain if 'Preferred Suppliers' are oil recyclers accredited under the Product Stewardship for Oil (PSO) Scheme encourages collection and environmentally sustainable management of used oil.• Establishment of stockpiles and exchanges for unwanted/surplus material and products.• Monitor use-by dates for materials and product to endure that these are used before they deteriorate.• Actions to increase resource use productivity, e.g. double-sided printing.• Ensure contract arrangements with waste handlers to ensure recovery.• Staff training (to facilitate appropriate behaviours).• Green Star rating tools.• Mational Australia Built Environment Rating System (NABERS) Waste Rating tool.• Global Green Tag product certification	Principle	Definition	Example of activities
<ul> <li>OFleet to ascertain if 'Preferred Suppliers' are oil recyclers accredited under the Product Stewardship for Oil (PSO) Scheme encourages collection and environmentally sustainable management of used oil.</li> <li>Establishment of stockpiles and exchanges for unwanted/surplus material and products.</li> <li>Monitor use-by dates for materials and products to endure that these are used before they deteriorate.</li> <li>Actions to increase resource use productivity, e.g. double-sided printing.</li> <li>Ensure contract arrangements with waste handlers to ensure recovery.</li> <li>Staff training (to facilitate appropriate behaviours).</li> <li>Green Star rating tools.</li> <li>National Australia Built Environment Rating System (NABERS) Waste Rating tool.</li> <li>Global Green Tag product certification</li> </ul>			Associated Services, it is a mandatory requirement for suppliers to be accredited with Tyre Stewardship Australia. EPW recommends QF0717 be used for tyre replacement on government-owned vehicles.
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<ul> <li>Actions to increase resource use productivity, e.g. double-sided printing.</li> <li>Ensure contract arrangements with waste handlers to ensure recovery.</li> <li>Staff training (to facilitate appropriate behaviours).</li> <li>Existing tools and verification methods for waste management.</li> <li>Green Star rating tools.</li> <li>National Australia Built Environment Rating System (NABERS) Waste Rating tool.</li> <li>Global Green Tag product certification</li> </ul>			<ul> <li>Monitor use-by dates for materials and products to endure that these are used before they deteriorate.</li> </ul>
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<ul> <li>Staff training (to facilitate appropriate behaviours).</li> <li>Existing tools and standards</li> <li>EPW can support established targets and verification methods for waste management.</li> <li>Green Star rating tools.</li> <li>National Australia Built Environment Rating System (NABERS) Waste Rating tool.</li> <li>Global Green Tag product certification</li> </ul>			Ensure contract arrangements with waste handlers to ensure recovery.
Existing tools and standardsEPW can support established targets and verification methods for waste management.• Green Star rating tools.• National Australia Built Environment Rating System (NABERS) Waste Rating tool.• Global Green Tag product certification			Staff training (to facilitate appropriate behaviours).
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#### Existing industry standards and tools

EPW can support established targets and verification methods in the areas of construction waste management, office waste management, and the selection of products that support the circular economy.

For instance, Green Star rating tools for new buildings, office interiors and the performance of existing buildings provide ambitious but achievable targets, guidance on achieving targets, and industry recognised methodologies for monitoring and verifying targets. Irrespective of whether a new building or office fitout project is targeting a Green Star rating, the various criteria for achieving Green Star points may be incorporated into the specifications and contract documents for construction projects and soft maintenance contracts so that 'best practice' outcomes for waste management can be achieved. One of these initiatives will be the normal product care and maintenance programs which can be amended to prolong the longevity of equipment and materials.

Likewise, the NABERS Waste Rating tool can be specifically applied to waste management in existing facilities in a way that can provide industry recognised collection and reporting standards, as well as supporting the collection of waste data to a national database through a common portal.

The Global Green Tag product certification scheme is an Australian-developed, internationally recognised product assessment tool that assists in product selection for the construction and cleaning industries. Global

Green Tag assesses and rates products across a range of sustainability criteria, including to the extent that a product is made from recycled materials or is recyclable at end-of-life. The scheme provides guidance to designers in the selection of products that support the circular economy.

#### Action plan

EPW is committed to the continual identification of initiatives and targets aimed at improving waste management practices across EPW, based on four main strategies:

- 1. waste avoidance through procurement
- 2. waste avoidance through operations
- 3. waste management to improve reuse and recycling, and
- 4. planning, evaluation and reporting.

These waste management initiatives will assist EPW in monitoring its waste management activities and are to be updated at the completion of each year's annual report to DES.

The initiatives are contained in the associated document EPW Waste Reduction and Recycling Action Plan.

#### **Continuous improvement**

Building Policy will be responsible for:

- monitoring EPW's performance under its Waste Reduction and Recycling Plan
- reviewing the Plan, including the ability to update the Action Plan and make minor administrative changes
- coordinating annual progress reporting to the Department of Environment and Science (DES).

#### **Data quality**

A major issue facing the accurate reporting of waste is the quality of available data.

The current practice at most sites is to record the quantum of waste collected through the number of 'lifts' of particular sized bins by the waste service operator. This provides volumetric data, which is then converted to weight-based data. For instance, each lift of a 240-litre bin is recorded as a volume of 0.24 cubic metres with a weight of 65 kilograms, irrespective of the fullness of the bin or density of the waste material.

Recent analysis of government office waste data suggests that there is considerable variability between sites, which may result in over-servicing at some sites and over-payment of the Waste Levy. However, waste collected at 1 William Street in Brisbane is currently weighed on site and provides an accurate benchmark for waste data.

#### **Reporting requirements**

The Act requires all departments to report within two months after the end of each financial year (by 1 September) to DES on the status of their plans.

#### **More information**

Contact: Office of the Assistant Director-General Email: <u>OADG.BP@epw.qld.gov.au</u> Business Unit: Building Policy Division: Public Works

#### Glossary

Term	Description
Circular economy	<ul> <li>A circular economy aims to ensure that:</li> <li>products and materials are used efficiently to minimise the amount of waste created</li> <li>waste that is produced can be recovered and beneficially used to make other products and contribute to the economy</li> <li>products and materials keep circulating within the economy at their highest value for as long as possible, through remanufacturing, reuse and recycling.</li> </ul>
Commercial and industrial waste (Candl)	Is produced by business and commerce, and includes waste from schools, restaurants, offices, retail and wholesale businesses, and manufacturing industries. In this report, it includes green waste arising from commercial activities. It is a headline waste stream.
Construction and demolition waste (CandD)	Is non-putrescible waste (i.e. solid waste not capable of being decomposed by micro- organisms) arising from construction or demolition activity. It may include materials, such as concrete, asphalt, bricks, treated timber and steel. It is a headline waste stream.
Headline or general waste streams	Can be municipal solid waste, commercial and industrial waste, or construction and demolition waste, which are generated from everyday household and business activities. These wastes form the basis of state and federal waste targets and reporting. This category does not include hazardous or regulated wastes.
Municipal solid waste (MSW)	Is a combination of domestic waste and other wastes arising from council activities (such as the management of parks and gardens, and the collection of litter and illegally dumped waste). It is a headline waste stream.
Office waste (This definition is for use in this report only.)	Can comprise both non-recyclable and recyclable materials generated in the course of day-to-day office-based activities including paper, cardboard, printer cartridges, paper towels and organic waste generated in kitchens. It does not include e-waste (computers etc) and demolition and construction waste resulting from office fitouts.
Organic waste	Organic waste is a broad category of waste derived from material that was once living, excluding petroleum-based materials. This includes food (domestic and commercial), garden, biosolids, food processing wastes and agricultural by-products.
Recycling	Recycling is the process of extracting materials found in waste and converting them into useful products. For example, concrete may be extracted from the construction and demolition waste stream and converted into recycled aggregate suitable for use in road base as a virgin material substitute.
Waste	<ul> <li>Waste includes anything, other than an end of waste resource, that is:</li> <li>a. left over, or an unwanted by-product, from an industrial, commercial, domestic or other activity; or</li> <li>b. surplus to the industrial, commercial, domestic or other activity generating the waste.</li> <li><i>Example of paragraph (a)</i> — Abandoned or discarded material from an activity is left over, or an unwanted by-product, from the activity</li> </ul>

Public Works				
Queensland Government Accommodation Office	• Source and collate waste data generated in EPW occupied office accommodation.			
(QGAO)	Whole-of-government management responsibilities:			
	<ul> <li>Develop best practice guidelines for government office waste management and reporting</li> </ul>			
	<ul> <li>Assist agencies to access data to support their annual office waste reporting to DES.</li> </ul>			
QBuild	Whole-of-government management responsibilities:			
	Product and materials selection and specifications			
	Construction and demolition waste			
	Waste collection and cleaning service contracts			
	Maintenance contracts			
	Product stewardship			
	Product and material supply chains.			
Building Policy	Develop policies to support government sustainability objectives.			
	<ul> <li>Manage, monitor and report against the EPW Waste Plan.</li> </ul>			
	<ul> <li>Contribute to inter-government and industry policy.</li> </ul>			
Procurement				
QFleet	Whole-of-government management responsibilities:			
	Tyre stewardship			
	Maintenance contracts			
	Automotive supply chains.			
General Goods and	Development and maintenance of sustainable procurement guides			
Jei vices				
	desktons lantons monitors			
	office paper			
	printing services			
O anno 1 Darifalia O				
Corporate and Portfolio Strategy				
<ul> <li>Disposal and reuse of I</li> </ul>	CT equipment			
ICT supply chains				
<ul> <li>Support for 'paperless'</li> </ul>	office through technology and operational measures			
Promote practices to support 'paperless office'				

#### Appendix – EPW's divisional responsibilities

Note: Energy Division is an office-based unit; initiatives and reporting are captured under QGAO office waste reporting.

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### Waste Reduction and Recycling Plan 2022-2025

Action plan

March 2023



1. \	1. Waste avoidance through procurement						
Ref	Waste type	Strategy/Initiative	Lead area	KPI or measure	Target date	Contact area	
1.1	Building and construction	Review current construction specifications and material selection procedures to ensure products	Public Works Division (QBuild)	Review undertaken.	December 2022	QGAO Sustainability	
		where such products match conventional products in price and performance.		Specification upgraded.	March 2023	QBuild	
1.2	Lighting – hazardous fluorescent tubes – upgrades and fit-outs and disposal	Promote an ongoing replacement program of fluorescent tubes/lamps in buildings owned and leased by the Queensland Government. More sustainable (long-lived and less toxic) alternatives, such as LED lighting can be implemented in Queensland Government Accommodation Office (QGAO) buildings through the development of a best-practice guideline to be adopted by QGAO building managers and QBuild maintenance managers.	Public Works Division (QGAO/QBuild)	Develop Best Practice Guideline for Lighting Replacement and Disposal.	December 2023	QGAO Sustainability Team and QBuild	
1.3	Toxic (nickel cadmium) emergency and exit light batteries	Investigate options for suitable waste stream to divert toxic batteries from landfill / Ensure there are adequate and known disposal pathways for batteries/ensure provision of battery disposal options through standing offer arrangements (SOA).	Public Works Division (QGAO/QBuild)	EPW becomes signatory. Signatory obligations imbedded in contract documentation.	September 2022	QGAO Sustainability Team and QBuild	
1.4 1.5	Motor vehicle fleet waste materials	Maintain the whole-of-government Tyres and Associated Services SOA. Require all contracted tyre suppliers on the Tyres and Associated Services SOA to be members of <u>Tyre Stewardship Australia</u> . This scheme discourages the inappropriate dumping	Queensland Government Procurement (QFleet)	100% of SOA participants are members of Tyre Stewardship Australia.	Ongoing	Environment and Business Services or Procurement and Contract	

#### About the action plan

1. \	1. Waste avoidance through procurement							
Ref	Waste type	Strategy/Initiative	Lead area	KPI or measure	Target date	Contact area		
		of old tyres as well as encouraging their reuse/recycling.				Management QFleet		
1.6		Businesses applying to become a 'preferred supplier' of vehicle servicing and repair services to QFleet are requested to advise if they have an environmental waste management plan in place and secure arrangements with a registered waste management provider with the appropriate approvals.		All new suppliers requested to provide details on environmental waste management plans and approvals.				

2. W	2. Waste avoidance through operations								
Ref	Waste type	Strategy/Initiative	Lead area	KPI or measure	Target date	Contact area			
2.1	Office waste – Paper	<ul> <li>Identify opportunities for replacing paper-based procedures with online processes (reducing printer usage and paper consumption), encourage and support digital business and facilitate implementation through initiatives, including:</li> <li>providing staff with the functionality and capability to transition from paper to digital information and records management</li> <li>encouraging provision of right to information (RTI) documents electronically, through a shared directory</li> <li>continuing ongoing support to assist the department with utilising Microsoft 365 collaboration and tools.</li> <li>Simple practices to improve resource productivity including:</li> <li>printing on both sides of paper</li> <li>reusing scrap office paper.</li> </ul>	Corporate and Portfolio Strategy Division	Reduction in paper consumption.	5% reduction in paper consumption each year (as a percentage of departmental full-time equivalents (FTEs))	Office of the Deputy Director- General			
2.2	Office waste – Paper towels	Investigate the feasibility of replacing non- recyclable with recyclable paper towels in bathrooms and kitchens of EPW occupied office accommodation that provide recycled waste streams.	Public Works Division (QGAO)	Pilot program in one owned office building.	June 2023	QGAO Sustainability Team			

2. W	2. Waste avoidance through operations							
Ref	Waste type	Strategy/Initiative	Lead area	KPI or measure	Target date	Contact area		
2.3	Lighting – hazardous fluorescent tubes – maintenance	<ul> <li>Upgrade maintenance procedures to ensure that when fluorescent and incandescent tubes and bulbs reach end of life:</li> <li>Tubes or bulbs are replaced with equivalent output LED tubes or bulbs or</li> <li>Entire fittings are replaced with LED fittings of equivalent output and disposed of in accordance with Action 1.2.</li> </ul>	Public Works Division (QBuild)	Maintenance procedures updated.	December 2022	QGAO Sustainability Team and QBuild		
2.4	Clinical waste	Appropriate disposal of first aid, medical items, biohazards, testing kits in offices and outdoor sites. Most of the clinical waste might not be possible to recycle due to pathogenic contamination and strict protocols for disposal will need to be followed.	Corporate and Portfolio Strategy Division	ТВА	Ongoing	QGAO Sustainability Team		
2.5	Chemical waste	Specific disposal requirements apply to some chemical substances. Ensure adequate, known pathways exist for chemical waste disposal options through SOA. Investigate options for suitable waste stream to divert chemical waste from landfill. Identify alternatives for potential recycling of chemical by-products.	Public Works Division (QGAO, QBuild)	ТВА	Ongoing	QGAO Sustainability Team and QBuild		
2.6	Reusable products and equipment especially limited life products	Program of care and maintenance to increase equipment durability and design life and reduce ongoing replacement.	Corporate and Portfolio Strategy Division	Ascertain reduced capital costs through improved long-term planning and purchasing.	Ongoing	Office of the Deputy Director- General		

2. W	2. Waste avoidance through operations						
Ref	Waste type	Strategy/Initiative	Lead area	KPI or measure	Target date	Contact area	
2.7	Perishable and short shelf-life products	Avoid product obsolesce and deterioration. Monitor use-by dates for materials and products to endure that these are used before they deteriorate.	Corporate and Portfolio Strategy Division	Reduced recurrent costs due to improved consumption of materials efficiencies and waste minimisation.	Ongoing	Office of the Deputy Director- General	

3. V	3. Waste management to improve reuse and recycling							
Ref	Waste type	Strategy/Initiative	Lead area	KPI or measure	Target date	Contact area		
3.1	Office waste (general, comingle, paper/cardboard, organic)	Expand data collection arrangements from property managers and waste collection contractors for office waste.	Public Works Division (QGAO)	Percentage of properties/tenancies supplying data for whole-of-government (WoG) reporting.	75% of owned and leased properties/ tenancies - by area - by 30 June 2022	QGAO Sustainability Team		
3.2	3	Undertake a review of current office waste management systems and practices in place in office buildings occupied by EPW.	Public Works Division (QGAO)	Diversion of office waste from landfill (EPW occupied office buildings).	50% by August 2025	QGAO Sustainability Team		
3.3		Investigate feasibility of introducing organic waste streams to EPW occupied office accommodation as such services become available and economic.	Public Works Division (QGAO, QBuild)	Feasibility Report Finalised.	March 2024	QGAO Sustainability Team and QBuild		
3.4		Support education and behavioural change across EPW in accordance with the Queensland Organics Waste Strategy and Action Plan.	Public Works Division Corporate	Promotional material prepared.	December 2023	Office of the Deputy Director- General		
3.5		Investigate inclusion of waste stream monitoring and reporting arrangements within Green Lease Policy.	Public Works Division (QGAO)	Update of Green Lease Policy to include waste monitoring and reporting.	Ongoing	QGAO Sustainability Team		

3. V	3. Waste management to improve reuse and recycling							
Ref	Waste type	Strategy/Initiative	Lead area	KPI or measure	Target date	Contact area		
3.6	Office waste – Data quality	Liaise with waste collection contractors to encourage phase-out of volumetric based data and adoption of weight-based data.	Public Works Division (QBuild, QGAO)	Weight-based data provided for all EPW occupied sites (except where a Local Government-only service is available).	Ongoing	QGAO Sustainability Team and QBuild		
3.7		Apply comparative metrics to identify EPW occupied sites that may be over-serviced in terms of bin sizes, bin quantities, service frequency or mix of bin types.	Public Works Division (QGAO)	Number of over-serviced sites identified.	Ongoing			
3.8	.8 .9	Audit EPW sites identified as potentially over- serviced to review and adjust bin sizes, bin quantities, service frequency or mix of bin types.	Public Works Division (QBuild, QGAO)	Number of sites where waste data improves after audit and intervention.	June 2023			
3.9		Review cleaning contract practices at over- serviced EPW sites to ensure bin capacities are fully utilised at time of collection.	Public Works Division (QBuild, QGAO)	Number of sites where cleaning practices are modified.	June 2023			
3.10	Office waste –	Develop strategies to improve access to data	Public Works	Strategy developed.	June 2023	QGAO		
	waste	ccupied sites.	QBuild, QGAO)	Strategy implemented.	December 2023	Sustainability Team and QBuild		
3.11	Construction and demolition fit-out waste – Select 'low-hanging- fruit' products	Include specification clauses in all EPW fit-out projects managed by QBuild to set 100% diversion from landfill targets for carpet tiles, furniture, and plasterboard.	Public Works Division (QBuild, QGAO)	Specification clauses added to standard specification.	December 2022	QGAO Sustainability Team and QBuild		

3. Waste management to improve reuse and recycling						
Ref	Waste type	Strategy/Initiative	Lead area	KPI or measure	Target date	Contact area
3.12	Construction and demolition waste	Adopt industry recognised targets and verification methodology, such as those used in Green Star rating tools, for the management of construction and demolition waste.	Public Works Division (QBuild)	Percentage of projects where targets are met and verified.	100% by December 2022	QGAO Sustainability Team and QBuild
3.13		Actively participate in the <u>Sustainable Built</u> <u>Environment National Research Centre (SBEnrc)</u> <u>project 1.65 A National Economic Approach to</u> <u>Improved Management of Construction and</u> <u>Demolition Waste</u> .	Public Works Division (Asset Management Policy and Strategy)	Review and disseminate project findings to government stakeholders. KPI: 100%.	June 2022	Major Projects and QBuild
3.14	Lighting - Fixtures – Upgrades and Fit-out	Develop provision in contracts for lighting upgrade or fit-out projects within EPW occupied areas contain clauses requiring recycling of removed fixtures plus verification.	Public Works Division (QGAO, QBuild)	Proportion of contracts verified as compliant.	100% reported at end of each financial year.	QGAO Sustainability Team and QBuild
3.15	e-waste	Disposal by an ICT lifecycle management supplier of printers, screens, laptops, tablets and PCs managed by the Technology and Digital Solutions Group on behalf of the Department of Energy and Public Works Division and the Department of Communities, Housing and Digital Economy.	Corporate and Portfolio Strategy Division	Number of items sent for disposal by Technology and Digital Solutions Group that are classified as e-waste.		QGAO Sustainability Team
3.16	Refurbished furniture and equipment	Review equipment procurement and disposal protocols to explore end-of-life opportunities.	Corporate and Portfolio Strategy Division	Record number of items refurbished and re-used and any potential cost savings.	June 2023	QGAO Sustainability Team

3. Waste management to improve reuse and recycling							
Ref	Waste type	Strategy/Initiative	Lead area	KPI or measure	Target date	Contact area	
3.17	Recycled concrete and asphalt	Adopt industry recognised targets and verification methodology, such as those used in Green Star rating tools, for the management of asphalt and concrete as specific high value waste.	Public Works Division (QGAO, QBuild)	Percentage of projects where targets are met and verified.	December 2023	QGAO Sustainability Team and QBuild	
3.18	Recycled mineral oil	Recycled mineral oil is high value waste which can be reused. QFleet should ascertain whether 'Preferred Suppliers' are oil recyclers under the Product Stewardship for Oil (PSO) Scheme which encourages collection and environmentally sustainable management of used oil.	Queensland Government Procurement (QFleet)	Percentage of oil products processed by PSO- accredited suppliers.	June 2023	Environment and Business Services or Procurement and Contract Management QFleet	
3.19	Durable goods and products	Establish stockpiles and exchanges for unwanted/surplus material and products.	Corporate and Portfolio Strategy Division	Develop Best Practice Guideline for creating and managing inventory of materials and products.	Ongoing	QGAO Sustainability Team	
3.20	Recyclable products (including packaging)	Disposal should be part of standard recyclable product recovery by the entity.	Corporate and Portfolio Strategy Division	Included as line item as a proportion of total waste products.	Ongoing	QGAO Sustainability Team	
3.21	Food waste	Food waste is compostable or biodegradable and is often included as part of general office waste. Greater efficiencies can be achieved through developing a specific food waste stream.	Corporate and Portfolio Strategy Division	Diversion percentages and end-use reporting.	June 2023	QGAO Sustainability Team	

3. Waste management to improve reuse and recycling						
Ref	Waste type	Strategy/Initiative	Lead area	KPI or measure	Target date	Contact area
3.22	Green waste (e.g. from land clearance, and from parks and gardens)	Outdoor operational, e.g. QBuild will have a particular role in this area of waste management with strategies developed to use composted organics obtained from in-house operations and on government construction and other projects.	Public Works Division (QBuild, QGAO)	Quantification of green waste volumes and reporting.	Ongoing	QGAO Sustainability Team and QBuild

4. Reporting and promotion							
Ref	Strategy/Initiative	Lead area	KPI or measure	Target date	Contact area		
4.1	Ensure EPW's Waste Reduction and Recycling Plan is reviewed at least every three years or as required.	Public Works Division (Building Policy)	Waste Reduction and Recycling Plan reviewed.	By 31 September each financial year	Building Policy		
4.2	Undertake implementation progress reporting (on behalf of EPW) to the Department of Environment and Science (DES).	Public Works Division (Building Policy)	Annual waste and recycling report provided from EPW to DES.	By 31 September each financial year	Building Policy		
4.3	Continue to work with business units to identify specific waste streams and, where practicable, develop quantifiable measures for waste generated, recycled, or disposed of (particularly for non-office waste), with a view to establishing initiatives, baselines and future targets.	Public Works Division (Building Policy)	Number of quantifiable measures for specific waste streams identified/implemented.	Annual Update of the EPW Waste and Recycling Action Plan	Building Policy		
4.4	Promote Queensland engagement with national policy initiatives around circular economy and embodied carbon, e.g. NABERS Waste Rating and Materials and Embodied Carbon Leaders Alliance (MECLA).	Public Works Division (Building Policy)	Attendance and contribution to national meetings.	Ongoing	Building Policy		