

Department of Environment and Science Waste Reduction and Recycling Plan 2018-2024

Updated in 2022

Prepared by: Corporate Services, Department of Environment and Science

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Foreword

The Department of Environment and Science plays an important role in keeping Queensland's environment clean and economy strong through robust and innovative waste management.

The department administers the state's *Waste Reduction and Recycling Act 2011* and Queensland's strategy for waste avoidance and resource productivity, as well as a range of other policies and programs to enhance waste management amongst industry and the community.

As a large and diverse organisation with operations spanning the state, the department generates different types of waste in providing services to the public. Avoiding or reducing this waste, or recycling it where possible, is a high priority.

The *Department of Environment and Science Waste Reduction and Recycling Plan 2018-2024* has been developed to guide actions over the next six years to manage the department's waste footprint and support state-wide objectives for waste reduction in Queensland.

Key to this approach will be a continued focus on avoiding waste, reducing unnecessary waste and managing unavoidable waste throughout the department.

Through these and other waste management actions, the department will continue working to protect Queensland's environmental values and contributing to healthier communities.

Jamie Merrick
Director-General
Department of Environment and Science

1. Purpose of plan

The Department of Environment and Science (DES) Waste Reduction and Recycling Plan (the Plan) sets the overall direction for waste management within the department.

The primary focus of the Plan is to implement a range of activities that will either avoid or reduce the waste generated by the department in the delivery of its functions or improve the way in which the department manages waste, thus contributing to the waste management strategy for the state.

The Plan aligns with Queensland's Waste Management and Resource Recovery Strategy (the Strategy) which provides the strategic framework for Queensland to become a zero-waste society, reducing waste, where waste is avoided, reused and recycled to the greatest possible extent.

The Strategy focuses on transitioning Queensland to achieve the principles of a circular economy to help retain the value of material in the economy for as long as possible. It provides the framework to help deliver coordinated, long-term and sustained growth for the recycling and resource recovery sector while reducing the amount of waste produced, and ultimately disposed of, by promoting more sustainable waste management practices for business, industry and households.

Within the Strategy, long-term targets for 2050 have been established:

- a. 25% reduction in household waste
- b. 90% of waste is recovered and does not go to landfill
- c. 75% recycling rates across all waste types

The Plan also takes into consideration the Queensland Organics Strategy and Action Plan which sets out the key strategies for avoiding, diverting and recycling organic and food waste product streams in Queensland. Targets under this strategy state that by 2030 Queensland will:

- a. Halve the amount of food waste generated
- b. Divert 80% of the organic material generated from landfill
- c. Achieve a minimum organic recycling rate of 70%

With these in mind, the key objectives of this Plan are to:

- re-establish key roles and networks
- empower all staff to engage in appropriate waste management behaviours
- drive behavioural change across the department
- develop targeted locally-based Action Plans aimed at
 - waste avoidance
 - waste reduction
 - maximising reuse and recycling where reduction is not an option
 - managing priority wastes
- support transparency and continuous improvement.

These objectives are supported by detailed deliverables outlined in Section 10 and will be implemented, monitored and reported on by Corporate Services.

2. Scope

This Plan applies to all divisions of the department. It outlines the guiding principles for waste management within the organisation and provides an overview of waste management in the context of the department's key business activities. Furthermore, this Plan sets out key objectives, specific deliverables and waste reduction and recycling targets.

Alignment to related initiatives

It is intended that this Plan will contribute to the implementation of Queensland's Waste Management and Resource Recovery Strategy. The Plan will also align with related sustainability initiatives led by the department, including its contribution to the Queensland Climate Action Plan.

Timeframe

This Plan will be implemented over the six-year period from 1 July 2018 to 30 June 2024. It has been reviewed and updated in 2022 with actions identified in section 10 updated to reflect DES' priorities for 2022-2024.

Limits to operational control

The department operates from several locations state-wide. In many of these locations the department has full operational control of the site and can make decisions on most – if not all – aspects of waste management.

There are however several locations where the department's operational control is limited. Examples include sites where the department is

- a tenant in a government-owned building
- a tenant in a privately leased premise, or
- an occupant in a premise owned by another state entity.

In these locations, departmental staff are expected to comply with waste arrangements put in place by building management. Notwithstanding, the department will further the objectives of this Plan by contributing to improvements in the waste management practices of the responsible organisation.

3. Authority

The *Waste Reduction and Recycling Act 2011* (the Act) requires that each State entity prepare, adopt and implement a Waste Reduction and Recycling Plan. This Plan addresses the specific requirements of Part 3 of the Act.

4. Waste generated by departmental activities

The department performs a diverse range of functions on behalf of Queenslanders, including:

- conserve and restore Queensland's unique biodiversity, heritage and protected areas
- enable job creation, and the growth of new industries and environmental markets
- protect World Heritage areas including the Great Barrier Reef
- empower Queensland's youth
- strengthen and harness Queensland's scientific excellence
- deliver a world class environmental, heritage and biodiscovery regulatory system.

To deliver its services effectively, the department has a geographically diverse workforce established across the state. Approximately half of all departmental staff are located in the Brisbane CBD.

The department's broad range of operations leads to the generation of very diverse waste streams. Furthermore, the geographical dispersion of operations requires a tailored approach: regional waste management arrangements should consider the recycling and resource recovery networks and infrastructure available locally.

For the purposes of waste management, the department's activities have been divided into three broad categories: office-based work environments, non-office based work environments, and facilities used by the general public.

Office-based activities generate a number of typical waste streams regardless of geographical location (e.g. paper, cardboard, stationery, e-waste and kitchen waste from meals and drinks consumed by staff during the work day).

By contrast, non-office based activities (e.g. work undertaken at scientific facilities and in national parks) generate distinctive waste streams depending on the geographical location and functions undertaken at each site.

The department also manages a range of public-facing services and facilities across the State (e.g. national parks and visitor centres) each with differing levels of operational control over the waste behaviour of members of the public. Accordingly, the waste streams generated by each facility differ, requiring a tailored approach to waste management.

In light of the department's varied waste profile, this Plan focusses on the feasible avoidance and reduction of the most common waste streams across the department and provides templates and tools to support the development of targeted Waste Reduction and Recycling Action Plans based on division, location or function-specific priorities.

5. Background of Plan

This Plan replaces and builds on the Waste Reduction and Recycling Plans of the former departments which collectively comprise DES since December 2017.

This Plan largely draws on waste data and insights gleaned from waste audits conducted in large office locations from 2015 to 2017, which produced an understanding of the typical types and quantities of wastes being generated in office-based settings. While the findings of these audits are limited to the respective agencies and time period, they provide reliable indications of typical waste streams and waste separation behaviours and highlights opportunities for improvement.

This Plan also aims to build on other accomplishments achieved in the period 2015—2018, which include (but are not limited to):

- an improved understanding of the waste behaviours of staff
- the development of user-friendly, site-specific waste signage
- the successful delivery of staff awareness and education sessions
- improvements in segregation practices
- centralisation of waste bins within a number of office locations
- the establishment of a stationery 'swap shop' to reuse surplus items, and
- the roll-out of the lessons learnt from operations in large office locations in the Brisbane CBD to other locations around the state.

6. Approach

Enhancing outcomes via targeted Waste Reduction and Recycling Action Plans

Where appropriate, targeted Waste Reduction and Recycling Action Plans (Action Plans) will be developed to complement the specific deliverables outlined in this Plan. Action Plans will be aimed at addressing specific waste management issues, such as:

- a particular waste stream (e.g. reducing paper waste)
- location-specific waste management (e.g. educating staff at location x on the appropriate use of their recycling facilities)
- a particular departmental function (e.g. reducing the amount of waste generated from a particular function)
- a particular departmental activity (e.g. avoiding or reducing waste from meetings and events), or
- a combination of the above.

Action Plans may be developed for implementation across the department or a whole function. Alternatively, Action Plans may be developed by local waste champions and their divisional heads for implementation at a specific location or for a specific business function. This approach enables the department to be flexible in responding to emerging priorities and to facilitate continuous improvement throughout the life of this Plan.

Action Plans will be developed in consultation with local stakeholders and the DES Waste Reduction and Recycling Network.

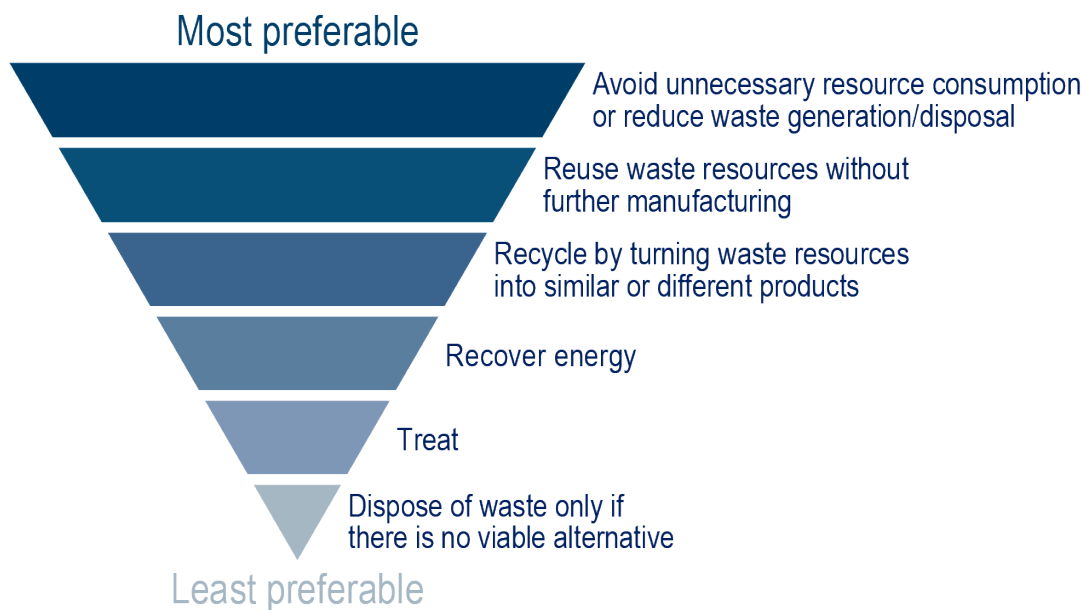
Guiding principles

Section 134 of the Act states that the Plan should be developed with regard to –

- the waste and resource management hierarchy, and
- waste and resource management principles.

Waste and resource management hierarchy

The **Waste and Resource Management Hierarchy** provides a clear order of preference for waste and resource management activities.



Moving towards a circular economy

A circular economy is one in which products and materials keep circulating within the economy at their highest value for as long as possible through reuse, repair, remanufacturing, delivering products as services sharing products and recycling.

The process forms a productive cycle that involves collecting end-of-life products and materials, sorting and separating them into material types, reprocessing specific materials to become clean feedstock for the manufacture of new products, and the subsequent purchase and use of the new products by consumers.

The circular economy represents a shift away from the linear 'take-make-use-dispose' and can be applied to many of the waste streams generated by DES through the department's typical operations including, but not limited to, paper and cardboard, food waste, e-waste and plastic waste.

The Plan sets out a strategy for DES building the concept of the circular economy into our waste management and end-of-life product and materials operations.

Waste and resource management principles

The ***polluter pays principle*** states that all costs associated with the management of waste should be borne by the persons who generated the waste. The costs associated with the management of waste may include the costs of minimising the amount of waste generated; containing, treating and disposing of waste, and rectifying environmental harm caused by waste.

The ***proximity principle*** states that waste and recovered resources should be managed as close as possible to the source of generation.

The ***product stewardship principle*** states that there is a shared responsibility between all persons who are involved in the life cycle of a product for managing the environmental, social and economic impact of the product.

Finally, waste management initiatives within the department are to reflect:

- an **evidence-based** approach, led by the best available information
- a **risk-based approach**, reflective of the highest priorities within the department (informed by the insights of Waste Reduction and Recycling Network and divisional heads)
- **flexibility of approach**, so that the department is able to respond to new information and changing priorities
- **sound** planning, monitoring and reviewing of outcomes, and
- **balance** between benefits to the environment and the appropriate use of departmental resources, so that activities are sustainable and complement the implementation of other business-critical work programs and/or the wider public interest.

7. Waste reduction and recycling targets

The Act requires DES to set waste reduction and recycling targets for the waste generated by the department in carrying out its operations. These targets are as follows:

- the amount of waste generated per DES officer decrease from 55.5 kilograms (in the 2020-21 financial year) to 50 kilograms per person by June 2024
- for offices where DES occupies the majority of the building, a minimum waste diversion rate of 40% or more will be achieved by June 2024
- the average recycling per person will increase from the current rate of 26% (in 2020-21 financial year) to 35% by June 2024

These targets will assist in DES contributing to the 2050 municipal solid waste targets specified in the Queensland Government *Waste Management and Resource Recovery Strategy* of a waste reduction of 25%, waste diversion of 90% and recycling rate of 75%.

Further, by reducing the quantity of waste and increasing recycling, DES may be able to realise co-benefits including a reduction in greenhouse gas emissions, a reduction in costs for waste to be transferred and stored in landfill and a reduction in odour and noise with waste placed in landfill.

8. Reporting

The department will produce an annual report on its waste management activities in accordance with the requirements of section 148 of the Act.

9. Review of this Plan

In accordance with section 136 of the Act, this Plan will be formally reviewed every three years (at a minimum) and will be amended on an as-needs basis to accommodate emerging priorities and operational changes.

10. Key deliverables 2022-2024

The following table outlines the key objectives and deliverables of the department under this Plan.

Action	Waste reduction outcome			Timeframe for delivery
	AVOID	DIVERT	RECYCLE	
Activate the DES Community of Practice for all major tenancies, with the aim of: <ul style="list-style-type: none"> - Ensuring a high level of awareness of DES ambitions to minimise waste and increase recycling - Fostering behavioural change within the department - Driving ground-level innovation in regards to waste avoidance, diversion and recycling through the sharing of ideas and development of new targeted waste strategies. - Identifying options to increase our contribute to the circular economy. - Assist with the implementation of waste strategies including the provision of real-time feedback. 	✓	✓	✓	30 June 2022
Review DES' major tenancies to ensure there is appropriate waste infrastructure to enable of recycling of waste streams and improve DES' diversion rates. This will include the provision of organic waste bins for all kitchen areas as required.		✓	✓	30 September 2022

<p>Working with a site representative in each of DES' major tenancies:</p> <ul style="list-style-type: none"> - Identify waste streams within that building - Identify and implement locally based strategies to reduce waste to landfill and increase recycling - Measure and review the outcomes and refine strategies in a cycle of ongoing improvement - Review the <i>Waste Reduction and Recycling Plan</i> to reflect on lessons learnt and update actions. 	✓	✓	✓	Ongoing
<p>Develop and implement a targeted education campaign to raise the profile of waste management and enact behavioural change across DES. The campaign may include:</p> <ul style="list-style-type: none"> - Refreshed signage - Internal communications - Competitions and incentives - Survey of DES waste behaviours <p>DES will evaluate campaign outcomes and implement lessons arising.</p>	✓	✓	✓	Ongoing
<p>Review progress against the DES Waste Reduction and Recycling Plan and Action Plans.</p>				Annually by 30 June
<p>Produce a Waste Reduction and Recycling Annual Report on behalf of the Department.</p>				Annually by 31 August