Foreword

The Department of Environment and Science (DES) 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 key objectives of this Plan are to:

- build on the learnings from waste plans of those former agencies and entities comprising DES
- establish key roles and networks
- map major departmental waste streams
- empower all staff to engagement in appropriate waste management behaviours
- empower local waste champions to agents for behavioural change
- develop targeted Action Plans aimed at
  - waste avoidance
  - waste reduction
  - maximising reuse and recycling where reduction is not an option
  - managing priority wastes
- integrate waste management in all operations of the department, and
- support transparency and continuous improvement.

These objectives are supported by detailed deliverables outlined in Section 9.

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 and specific deliverables.

Alignment to related initiatives

It is intended that this Plan will contribute to the implementation of Queensland’s state waste management strategy. The Plan will also align with related sustainability initiatives led by the department, including its contribution to the Queensland Climate Transition Strategy.

Timeframe

This Plan will be implemented over the six-year period from 1 July 2018 to 30 June 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. 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, with the aim of:
- protecting and sustainably managing Queensland’s environment and natural, cultural and heritage values
- safeguarding the state’s environmental values, and reducing any impacts from environmental harm, and
- promoting the development of, and engagement with, science, heritage and the arts.

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. museums, 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 of the former EHP and NPSR 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 within the former agencies during 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 certain 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 by the department’s Governance and Strategy branch (Corporate Services) 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. Governance and Strategy will be available to provide advice and assistance as required. 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. A template to use as a starting point for the development of Action Plans will be developed by Governance and Strategy.

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.

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. Reporting

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

### 8. Review of this Plan

As a component of annual reporting, Governance and Strategy will lead an annual review of the effectiveness of this Plan in collaboration with the DES Waste Reduction and Recycling Network and will identify lessons learnt and options for continuous improvement.

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

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

<table>
<thead>
<tr>
<th>Key actions</th>
<th>Lead</th>
<th>Support</th>
<th>Timing</th>
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</thead>
<tbody>
<tr>
<td><strong>Establish key roles and networks</strong></td>
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<tr>
<td>Establish a DES Departmental Waste Reduction and Recycling Network with representation from all divisions.</td>
<td>G&amp;S</td>
<td>Divisional heads</td>
<td>Nov 2018</td>
</tr>
<tr>
<td>Map DES staff locations to confirm staff numbers, the type of operating environment and the level of operational control over waste management activities.</td>
<td>G&amp;S</td>
<td>Accommodation Services, HPW Building Managers, Waste contractors</td>
<td>Jan 2019</td>
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<tr>
<td>Establish a network of local waste champions</td>
<td>G&amp;S</td>
<td>Divisional reps</td>
<td>Nov 18 onwards</td>
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<tr>
<td><strong>Map major departmental waste streams</strong></td>
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<tr>
<td>Consolidate information gathered by former agencies and identify data gaps.</td>
<td>G&amp;S</td>
<td>Waste leads from former agencies</td>
<td>Jan 2019</td>
</tr>
<tr>
<td>Determine typical waste profile for office-based activities.</td>
<td>G&amp;S</td>
<td>Local champions, Waste contractors</td>
<td>Feb 2018</td>
</tr>
<tr>
<td>Profile typical wastes generated from the department’s non-office-based activities.</td>
<td>G&amp;S</td>
<td>Divisional reps, Local champions</td>
<td>Mar 2019</td>
</tr>
<tr>
<td>Profile typical wastes generated by at public facilities operated by the department.</td>
<td>G&amp;S</td>
<td>Divisional reps, Local champions</td>
<td>Mar 2019</td>
</tr>
<tr>
<td>Identify those waste stream (or specific waste items) that can be addressed with universal, department-wide Action Plans and determine priorities for developing and implementing these.</td>
<td>G&amp;S</td>
<td>Local champions, Subject experts</td>
<td>Mar 2019 onwards</td>
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<tr>
<td><strong>Empower staff to engage in appropriate waste management behaviours</strong></td>
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<tr>
<td>Enhance staff access to appropriate, site-specific waste infrastructure, recycling facilities and opportunities for the reuse of resources.</td>
<td>Local champions</td>
<td>G&amp;S, Building managers</td>
<td>Ongoing</td>
</tr>
<tr>
<td><strong>Empower waste champions to be agents for behavioural change</strong></td>
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<tr>
<td>Develop tools for gauging current waste knowledge.</td>
<td>G&amp;S</td>
<td>Corporate communications, local champions</td>
<td>Mar 2019 onwards</td>
</tr>
<tr>
<td>Develop templates for user-friendly, site-specific waste signage and educational material.</td>
<td>G&amp;S</td>
<td>Corporate communications, local champions, building managers, waste contractors</td>
<td>Apr 2019 with ongoing review</td>
</tr>
<tr>
<td>Develop and roll out templates for waste awareness and education sessions that can be tailored to local operating environments</td>
<td>G&amp;S</td>
<td>Local champions, waste contractors, building managers</td>
<td>May 2019 with ongoing review</td>
</tr>
<tr>
<td>Key actions</td>
<td>Lead</td>
<td>Support</td>
<td>Timing</td>
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<tr>
<td>Develop and roll out a waste data collection toolkit that can be adapted to local circumstances.</td>
<td>G&amp;S</td>
<td>Local champions, waste contractors</td>
<td>Jun 2019 with ongoing review</td>
</tr>
<tr>
<td>Develop and roll out a waste checklist to enable local waste champions to undertake an annual self-audit of waste avoidance, reduction and recycling facilities and practices.</td>
<td>G&amp;S</td>
<td>Local champions, building managers</td>
<td>Jul 2019 with ongoing review</td>
</tr>
<tr>
<td><strong>Waste Reduction</strong></td>
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<tr>
<td>Plan and commence targeted educational campaigns across the department to encourage efforts to minimise wasteful practices relating to common priorities.</td>
<td>G&amp;S</td>
<td>Divisional reps, local champions</td>
<td>Ongoing to Jun 2024</td>
</tr>
<tr>
<td>Facilitate the sharing of innovative ideas on waste reduction</td>
<td>G&amp;S</td>
<td>Local champions, corporate communications</td>
<td>Ongoing</td>
</tr>
<tr>
<td><strong>Maximise re-use and recycling, where reduction is not an option</strong></td>
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<tr>
<td>Develop targeted Action Plans to promote reuse and recycling of specific waste streams.</td>
<td>Local champions</td>
<td>G&amp;S</td>
<td>Ongoing to Jun 2024</td>
</tr>
<tr>
<td>Promote the establishment of local stationary ‘swap shops’ at departmental office locations to maximise re-use of unwanted office items.</td>
<td>Local champions</td>
<td>G&amp;S, Corporate card holders, administration officers, local champions</td>
<td>Ongoing to Jun 2024</td>
</tr>
<tr>
<td>Influence swapping of end-of-use assets (e.g. equipment and furniture), within and between departments.</td>
<td>G&amp;S</td>
<td>Waste network</td>
<td>Ongoing to Jun 2024</td>
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<tr>
<td>Enhance visitor access to appropriate, site-specific waste and recycling infrastructure at public facilities managed by DES.</td>
<td>Local champions</td>
<td>G&amp;S, divisional reps, local champions</td>
<td>Ongoing to Jun 2024</td>
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<tr>
<td><strong>Develop targeted Action Plans for priority wastes</strong></td>
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<tr>
<td>These may include fluorescent lamps, e-waste and batteries</td>
<td>G&amp;S</td>
<td>Local champions, subject matter experts</td>
<td>Ongoing to Jun 2024</td>
</tr>
<tr>
<td><strong>Increase the recycled content of items purchased</strong></td>
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<tr>
<td>Investigate potential for incorporating sustainability principles into contracts/purchasing arrangements</td>
<td>G&amp;S</td>
<td>Procurement services, Waste network.</td>
<td>Jun 2020</td>
</tr>
<tr>
<td><strong>Integrate waste management in all operations of the department</strong></td>
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<tr>
<td>Facilitate a review of departmental policies and procedures to identify opportunities to integrate waste management principles, and liaise with policy owners to incorporate changes as appropriate.</td>
<td>G&amp;S</td>
<td>Policy owners</td>
<td>Ongoing to Jun 2024</td>
</tr>
<tr>
<td><strong>Key actions</strong></td>
<td><strong>Lead</strong></td>
<td><strong>Support</strong></td>
<td><strong>Timing</strong></td>
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<tr>
<td><strong>Support transparency and continuous improvement</strong></td>
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<tr>
<td>Review progress against the DES Waste Reduction and Recycling Plan and Action Plans and completion of annual waste avoidance, reduction and recycling checklists/self-audits, including analysis of data trends where available.</td>
<td>G&amp;S</td>
<td>Waste network</td>
<td>Annually by 30 June</td>
</tr>
<tr>
<td>Produce a Waste Reduction and Recycling Annual Report on behalf of the Department.</td>
<td>G&amp;S</td>
<td>Waste network</td>
<td>Annually by 31 August</td>
</tr>
<tr>
<td>Identify and incorporate lessons learnt into updated versions of the Waste Reduction and Recycling Plan 2018-2024, as required.</td>
<td>G&amp;S</td>
<td>Waste network</td>
<td>As required</td>
</tr>
<tr>
<td>Conduct a 3-year review of the Plan.</td>
<td>G&amp;S</td>
<td>Waste network</td>
<td>Jun 2021</td>
</tr>
</tbody>
</table>
Appendix 1 – Sample Waste Reduction and Recycling Network Terms of Reference

This Terms of Reference is provided as a sample only and may be amended to reflect emerging priorities.

Purpose: The formation of the Waste Reduction and Recycling Network reflects the department's commitment to enhancing waste avoidance, reduction and recycling outcomes. The Network provides a forum to:

- facilitate year-round discussion across the department on waste management issues
- encourage sharing of ideas, showcase achievements and encourage joint-problem solving across the department
- facilitate coordinated input into departmental-wide waste and resource management initiatives
- provide informal learning opportunities relating to waste avoidance, reduction and recycling.

Lead: Director, Business and Professional Services, Governance and Strategy (or delegate).

Membership: Representatives from each division across the department, Action Plan owners, as well as local waste champions. Members are those who can influence and coordinate the implementation of Waste Action Plans within their region, division, or branch.

Responsibilities:

Lead

- Lead and facilitate network activities as required.
- Champion the waste agenda within the department.
- Ensure timely escalation of issues to the relevant decision makers within the department as required.

Members

- Actively promote waste management objectives by communicating relevant information within their business areas.
- Collate and share ideas for improved waste avoidance, reduction and recycling.
- Effectively represent their regions, divisions and branches and attend meetings on a regular basis.
- Support Governance and Strategy in the implementation of the DES Waste Reduction and Recycling Plan deliverables.
- Develop Waste Action Plans and coordinate waste audits (data collection) as required.

Network activities:

Network activities will occur on an as-needs basis in response to identified business requirements. Activities may include (but are not strictly limited to) meetings, email communications, and formal or informal consultation.

Review:

The success of the Network will be reviewed 12 months from formation. The review will include (but not be limited to) the success of information sharing and collaboration in addressing shared challenges, as well as any proposed changes to the existing membership of the Network.