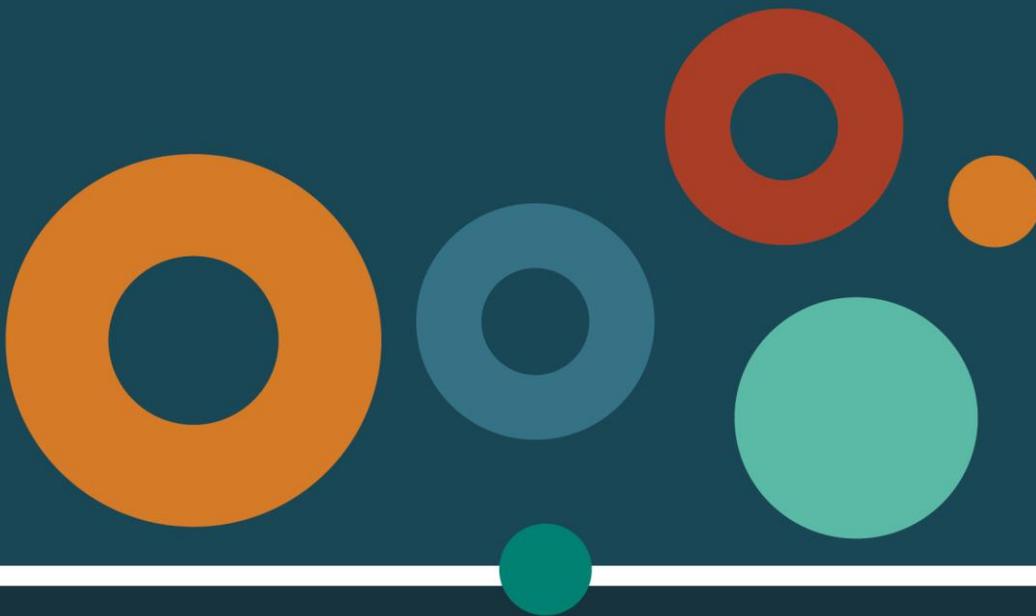


DNRME Waste Reduction and Recycling Plan

2018-2021



This publication has been compiled by Accommodation Services, Business and Corporate Partnership, Department of Natural Resources Mines and Energy.

© State of Queensland, 2018

The Queensland Government supports and encourages the dissemination and exchange of its information. The copyright in this publication is licensed under a Creative Commons Attribution 4.0 International (CC BY 4.0) licence.

Under this licence you are free, without having to seek our permission, to use this publication in accordance with the licence terms.



You must keep intact the copyright notice and attribute the State of Queensland as the source of the publication.

Note: Some content in this publication may have different licence terms as indicated.

For more information on this licence, visit <https://creativecommons.org/licenses/by/4.0/>.

The information contained herein is subject to change without notice. The Queensland Government shall not be liable for technical or other errors or omissions contained herein. The reader/user accepts all risks and responsibility for losses, damages, costs and other consequences resulting directly or indirectly from using this information.

Foreword

The Department of Natural Resources, Mines and Energy (DNRME) is a diverse organisation with a Queensland-wide footprint. As with any large organisation, it is inevitable that our varied functions will produce waste; waste that DNRME is committed to managing responsibly and effectively.

DNRME's vision is: Together, our land, water, mineral and energy resources deliver sustainable benefits for current and future generations of Queenslanders

DNRME's *Waste Reduction and Recycling Plan* is aligned with the 10-year *Queensland Waste Avoidance and Resource Productivity Strategy (2014-2024)* and commits us to more accurately measuring the waste we generate; continue to strengthen our management strategies to minimise waste through specific waste reduction and recycling activities; and committing to continuous improvement in the way we address waste management across DNRME.

Our goal through this Plan is to firmly embed waste management practices into our operations, to ensure we operate responsibly and with a strong sense of stewardship over the unique natural environment in which we work and live.

Brenda Parker
Deputy Director-General

Contents

Foreword.....	1
1. DNRME Objectives.....	2
2. Wastes generated from DNRME operations.	2
Office vs non-office based operations	2
Waste generated from office-based operations	2
Waste generated from non-office based operations	2
Waste management achievements to date	3
3. DNRME's approach to Waste Management	3
The waste management hierarchy	3
Resource management principles	4
4. Long-term Objectives	5
5. Waste reduction and recycling targets	6
Waste generation target.....	6
Recycling target.....	6
6. Reporting	6

Introduction

The Queensland *Waste Reduction and Recycling Act 2011* (the Act) requires each State entity to prepare, adopt and implement a Waste Reduction and Recycling Plan that will contribute to the achievement of the 10 year statewide targets set in the *Queensland Waste Avoidance and Resource Productivity Strategy (2014-2024)* (the Strategy).

The DNRME Waste Reduction and Recycling Plan (the Plan) sets the overall direction for waste management within the department for the period 1 August 2018 to 30 June 2021 and follows from 2015 to 2018 Plan.

An overview of our organisation, the functions we perform and the types of waste generated as a result of the department's activities are provided in this Plan. The primary focus of the 2018-2021 Plan will be to provide continuous improvement, review and refinement of waste reduction and recycling activities.

In line with DNRME's culture of continuous improvement, the success of the department's Waste Reduction and Recycling Plan will be monitored to ensure its objectives are met.

1. DNRME Objectives

The Department of Natural Resources, Mines and Energy' (DNRME) will contribute to Queensland's capacity to create jobs and increase private sector investment through the responsible and equitable use of our land, water, mineral, and energy assets.

The Department will contribute to improved water quality and land and vegetation management, and utilise renewable energy resources. Also, the department will continue to develop strategies that mitigate the impacts of climate change.

DNRME's services will be tailored to, and developed with, communities so they are more transparent and easy to use, and remain effective and useful. DNRME will continue to strengthen our direct engagement with communities and other stakeholders, and increase opportunities for collaboration and partnerships.

The department contributes to the Queensland Government's objectives for the community by:

- Managing Queensland's land, water, mineral and energy resources to optimise sustainable development outcomes
- Delivering safe, secure, affordable and sustainable energy and water resources
- Engaging the combined expertise of Traditional Owners, community, industry and government to optimise the management and use of our natural resources
- Building a contemporary workforce that demonstrates high levels of expertise, innovation, collaboration and leadership to improve service quality and responsiveness to customers and communities

2. Wastes generated from DNRME operations.

A significant proportion of DNRME workforce is located in the Brisbane CBD. These sites present the greatest opportunity to improve our waste and recycling activities.

Office vs non-office based operations

For the purposes of waste management, DNRME operations have been divided into two broad categories: Office based and non-office based. The rationale behind this distinction is the underlying assumption that office based functions will generate a generic waste stream irrespective of the geographical location or the specific role performed. On the other hand, our non-office based activities generate waste streams very different to office-based operations.

Waste generated from office-based operations

The majority of the department's staff perform office-based functions. It is anticipated that DNRME's office-based waste stream will likely be consistent with the profile of waste generated in a typical office environment.

Implementation of this plan will focus on our tenanted sites that accommodate DNRME staff and presents the greatest opportunity to improve our waste and recycling management initiatives. These locations are:

- Brisbane CBD
- Regional Centres

It is important to note that these sites are in multi-tenanted buildings, and aggregated data is available for the waste generated by all the building tenants at these locations. Building managers do not collect waste data for individual tenants.

Waste generated from non-office based operations

The non-office based operations performed by DNRME occur at the following sites:

- explosives reserve operations at Helidon, Bajool, Brook Hill and Queerah
- mine testing and safety training operations at Redbank Plains
- workshop facility at Rocklea
- depot sites at various locations across regional Queensland.

Each of these operations generate a very low volume of waste with some small quantities of contaminated waste from the explosives reserves and Rocklea sites. The contaminated waste are removed off site and safely disposed by specialist waste contractors.

Waste management achievements to date

During the past few years, DNRME has taken a number of initiatives to improve the management of waste generated by its operations. These initiatives include:

- waste and recycling awareness being promoted through tenancy committee meetings and included the objectives of the “*Queensland Waste Avoidance and Resources Productivity Strategy (2014-2024)*” into its process for building refurbishment projects.
- the relocation of DNRME staff to buildings with very high environmental credentials e.g. 1 William Street. In these buildings DNRME has access to best practice principles in waste and recycling management provided by the building manager, comprising paper/cardboard, toner cartridges, batteries, co-mingled and landfill as a last resort
- the introduction of “print-on-demand” and default double-sided printing facilities as standard practice in for DNRME tenancies with printer functions
- Consolidating DNRME staff to 4 Brisbane CBD locations in 1 William Street, 275 George Street, 53 Albert Street and 317 Edward Street, will ensure the implementation of efficient waste reduction and recycling under the occupancy agreement, and
- through DHPW introducing a ‘market place’ initiative to facilitate the reuse of surplus office furniture and equipment.

The department’s Waste Reduction and Recycling Plan is designed to build upon these initiatives and to integrate sound waste management practices into day-to-day operations including continuing to rollout print on demand at new sites.

3. DNRME’s approach to Waste Management

DNRME’s vision is: Together, our land, water, mineral and energy resources deliver sustainable benefits for current and future generations of Queenslanders.

Our approach to waste management is guided by the principles set out below.

Understanding our waste profile

The Department of Housing and Public Works through its provision of office accommodation for government administers waste collection in this accommodation, provides waste management data for all government departments on an annual basis.

The waste management hierarchy

The waste and resource management hierarchy (Figure 1 below) sets the order of preference for options to manage waste—from avoiding, to re-using, recovering, treating and disposing of waste.

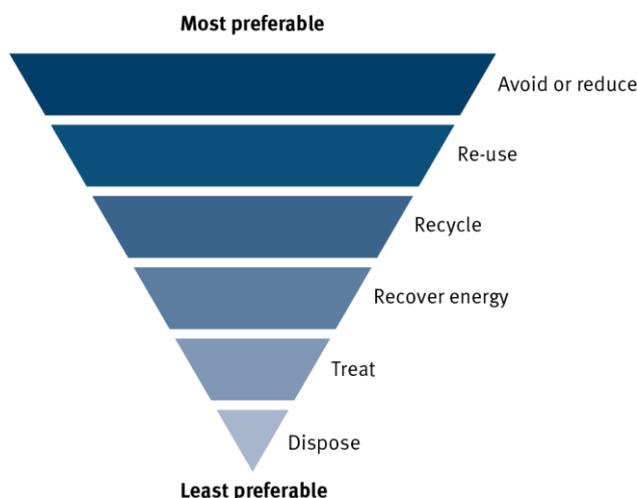


Figure 1: The waste and resource management hierarchy.

The hierarchy is a tool to help decision makers prioritise waste reduction and recycling activities. Where avoidance is not possible, options should be investigated for the reuse, and then the recycling of waste materials. As a next available option, waste could be used as a source of energy, if volumes are adequate. Disposal of waste should be the last resort.

The table below provides more detail on how DNRME will use the hierarchy in managing its waste.

Management Option	Definition	Examples of waste reduction and recycling activities¹
Avoid	<i>Avoid unnecessary resource consumption.</i>	Avoid the generation of paper waste by encouraging the use of electronic copies of documentation and introducing print-on-demand.
Reduce	<i>Reduce waste generation and disposal.</i>	Ensure all printers are set to double-sided printing as a default. DNRME has changed its policy to enable the use of e-copies as official records.
Reuse	<i>Reuse waste resources without further manufacturing.</i>	Continue with policies on the disposal of surplus IT (or other) equipment with a focus on identifying alternative uses or users. Utilise DHPW “market place” initiative for reuse of surplus furniture and equipment.
Recycle	<i>Turning waste resources into similar or different products.</i>	Provide recycling bins in offices and non-office work environments.
Disposal	<i>Dispose of waste only if there is no viable alternative.</i>	DNRME will ensure that our waste will only be disposed of at landfill facilities that are operated in accordance with prescribed legislation.

Resource management principles

The following principles will guide the decisions we make in the management of our waste.

Principle	Definition	Examples of waste reduction and recycling activities
The polluter pays principle	<i>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.</i>	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. This has an environmental cost as well as an added financial cost to the organisation.
The proximity principle	<i>Waste and recovered resources should be managed as close to</i>	Reviewing waste management arrangements to ensure that we use local

¹ Note that these are generic examples.

	<i>the source of generation as possible.</i>	service providers where possible. (Note: This will be particularly relevant to the management of waste in regional and remote locations.)
The product stewardship principle	<i>There is a shared responsibility between all persons who are involved in the lifecycle of a product for managing the environmental, social and economic impact of the product</i>	Sharing responsibility for avoiding unnecessary consumption and improving resource management.

Continuous Improvement

The diagram below illustrates how the activities that we propose for this Plan will align with a cycle of continuous improvement.

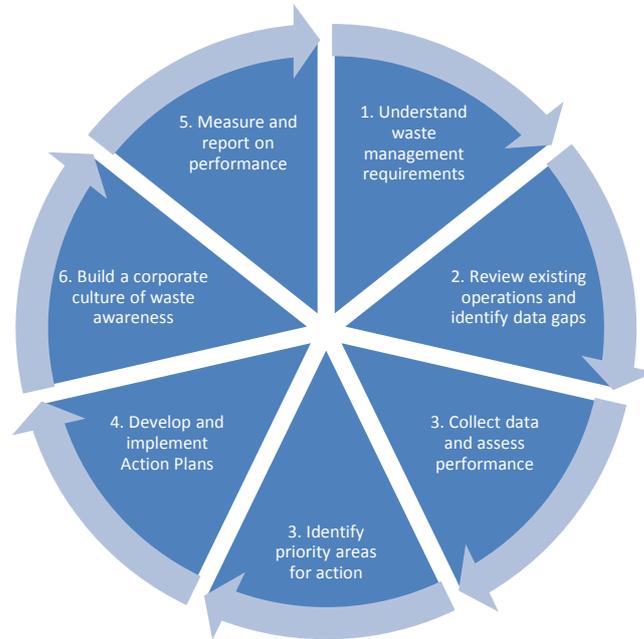


Figure 2: Cycle of continuous improvement in waste management

4. Long-term Objectives

Waste—Everyone’s responsibility: Queensland Waste Avoidance and Resource Productivity Strategy (2014–2024) (the State Strategy) sets a range of targets to be achieved by 2024. DNRME will contribute to these targets.

The State Strategy states that the Queensland Government will work with industry and the community to identify problem or priority wastes and determine the most appropriate management option for each waste stream. Actions recommended under the State Strategy will include methods for the improved management of Queensland’s priority wastes.

DNRME will continue to support the *Waste Avoidance and Resources Productivity Strategy (2014-2024)* in particular those wastes with high disposal impacts (such as toxicity or greenhouse gas emissions), social impacts (such as community concern or amenity), or whose recovery would present resource savings or business opportunities..

In addition to these priorities, DNRME’s approach over the period of this Plan will be to contribute to the 2024 statewide targets by:

- identifying and monitoring the department's waste profile
- adopting waste management and reduction practices that maximise DNRME's contribution to achieving the State targets, within the context of the wider public interest
- where appropriate, communicating the achievements.

The nine-year timeframe for realising the statewide targets provides for a trio of agency plans, each with a three year timeframe. Broadly speaking, it is envisaged that the three plans will take the following approaches:

Plan: 2015-2018 – Completed the baseline data collection, development and implementation of initial waste reduction and recycling activities

Plan: 2018-2021 – continuous improvement, review and refinement of waste reduction and recycling activities

Plan: 2021-2024 – further improvement and consolidation.

These plans will be integrated, with each plan building on the work of the previous one.

5. Waste reduction and recycling targets

The *Waste Reduction and Recycling Act (2011)* requires DNRME to set waste reduction and recycling targets for the waste generated by the department in carrying out its operations.

Waste generation target

In line with the State wide reduction target for all general waste, DNRME will strive towards best practice (as relevant in each of its locations) as a means of contributing towards a 5% reduction in statewide waste generation by 2024.

Recycling target

In line with the State wide target for commercial and industrial waste, DNRME will strive towards best recycling practice (as relevant to individual locations) as a means of contributing towards a statewide recycling rate of 55% in the commercial and industrial waste stream by 2024.

6. Reporting

DNRME will review this Plan at least every 3 years and with the assistance of the Department of Housing and Public Works produce an annual report on waste reduction and recycling in accordance with whole of government requirements.

Reporting will include progress made against the State Strategy targets and activities set out in this Plan.