

Waste Reduction and Recycling Plan (2016 - 2021)

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Document control options

Departmental approvals

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Introduction

The Department of Transport and Main Roads has obligations under the *Waste Reduction and Recycling Act 2011* (the WRR Act) to prepare, adopt and implement a plan for managing waste in a way that best achieves the objectives of the WRR Act. The Act also sets out requirements for: compliance, scope, reporting and review. The Act is supported by the Queensland's *Waste Avoidance and Resource Productivity Strategy (2014-2024)*.

The Department of Transport And Main Roads has developed this *Waste Reduction and Recycling Plan* as stipulated in the Act, which provides the Departmental plan for:

- Establishment of waste reduction and recycling targets
- Undertaking waste reduction and recycling in all operations
- Monitoring of the Department of Transport And Main Roads' implementation of the Waste Reduction and Recycling plan
- Continuously improving waste management and recycling performance
- Reporting

Due to the size and complexity of the Department of Transport And Main Roads operations and the diverse waste streams this *Waste Reduction and Recycling Plan* will be supported by *Local Area Waste Management Plans*. *Local Area Waste Management Plans* will be managed within each local area by inclusion in business or operational plans.

1. Overview of our Organisation

The Department of Transport and Main Roads moves and connects people, places, goods and services safely, efficiently and effectively across Queensland. We plan, manage and deliver Queensland's integrated transport system to achieve sustainable transport solutions for road, rail, air and sea.

Our integrated transport planning approach ensures we contribute to:

- People's quality of life
- Queensland's economic wellbeing
- A sustainable environment.

2. What wastes are generated from the Department of Transport and Main Roads activities?

The Department of Transport And Main Roads operations are diverse and consequently the point of generation of waste streams can include stationary work sites (such as offices, works depots, and laboratories) as well as temporary work sites (such as mobile soils laboratories, fabrication yards, holding areas, and construction areas). The Department of Transport And Main Roads also enters into various contractual arrangements with a broad range of service providers who have both stationary and temporary work sites. Individual work sites will generate different waste streams and materials of different qualities and quantities.

The Department of Transport And Main Roads major waste streams include, but may not be limited to the following:

- Construction and demolition waste and green waste from transport, infrastructure construction and maintenance
- Commercial and industrial waste from department-owned and leased facilities, offices, depots, laboratories, commercial properties, residential properties, department-owned and leased residences, and departmental-owned and leased craft and vehicles
- Debris(for example, from flooding events or tidal processes)
- Refuse from the operation of the road and stationary work sites
- Littering and illegal dumping collection.

2.1 Out of Scope

- Public Sewage (from rest areas, toilets etc.)

- Ship-sourced sewage as detailed in the *Transport Operations (Marine Pollution) Act 1995* and the *Transport Operations (Marine Pollution) Regulation 2008*.
- RMPC waste in relation to activities performed in accordance with the *Road Maintenance Performance Contract Manual* that include waste generated outside of the Department of Transport And Main Roads operations, such as public littering.

3. Queensland Government Vision and Targets

3.1 Vision

The *Queensland Waste Avoidance and Resource Productivity Strategy 2014-2024* aims for Queensland to become a national leader in avoiding unnecessary consumption and waste generation—adopting innovative resource recovery approaches, and managing all products and materials as valuable and finite resources.

3.2 Targets

Table 1 outlines the measures and targets to be used to measure performance against the Queensland Governments Waste Management Strategy including an assessment of the relevance of the target to the Department of Transport And Main Roads.

Table 1 Queensland Waste Avoidance and Resource Productivity Strategy (2014-2024) Targets

Waste Stream	Measure	2012-2013 Baseline	2024 Target	Waste type applicable to the Department of Transport and Main Roads
All General waste	Reduction in per capita generation	1.9 tonnes general waste per person per year	Reduce (by 5%) to 1.8 tonnes per person per year**	✓
Municipal solid waste (domestic)	Improved recycling rate	33% State 37% Metropolitan 30% Regional	50% State 55% Metropolitan 45% regional Improved practices as much as practicable for remote areas	✗ Domestic
Commercial and Industrial waste	Improved recycling rate	42% State	55% State	✓

Waste Stream	Measure	2012-2013 Baseline	2024 Target	Waste type applicable to the Department of Transport and Main Roads
Construction & Demolition waste	Improved recycling rate	61% State	80% State	✓
Landfill diversion target	Reduction in the amount of waste going to landfill	4,675,000 tonnes	Reduce by 15% over life of Strategy (2014-2024)	✗ Local Government*
Problem or priority wastes	Improved management of each waste	Individual baselines to be developed	Individual measures to be developed	✓

* - The Department Of Transport And Main Roads actions such as waste reduction/recycling activities may be measured internally and indirectly affect this target, however the state landfill diversion target itself relates to reducing landfill tonnage.

**Currently the metric is tonnes per person however this may change in the future to suit current waste records

4. The Department of Transport And Main Roads' approach to Waste Management

4.1 Waste Hierarchy

The Department of Transport And Main Roads' approach to waste management is guided by the principles set out below:

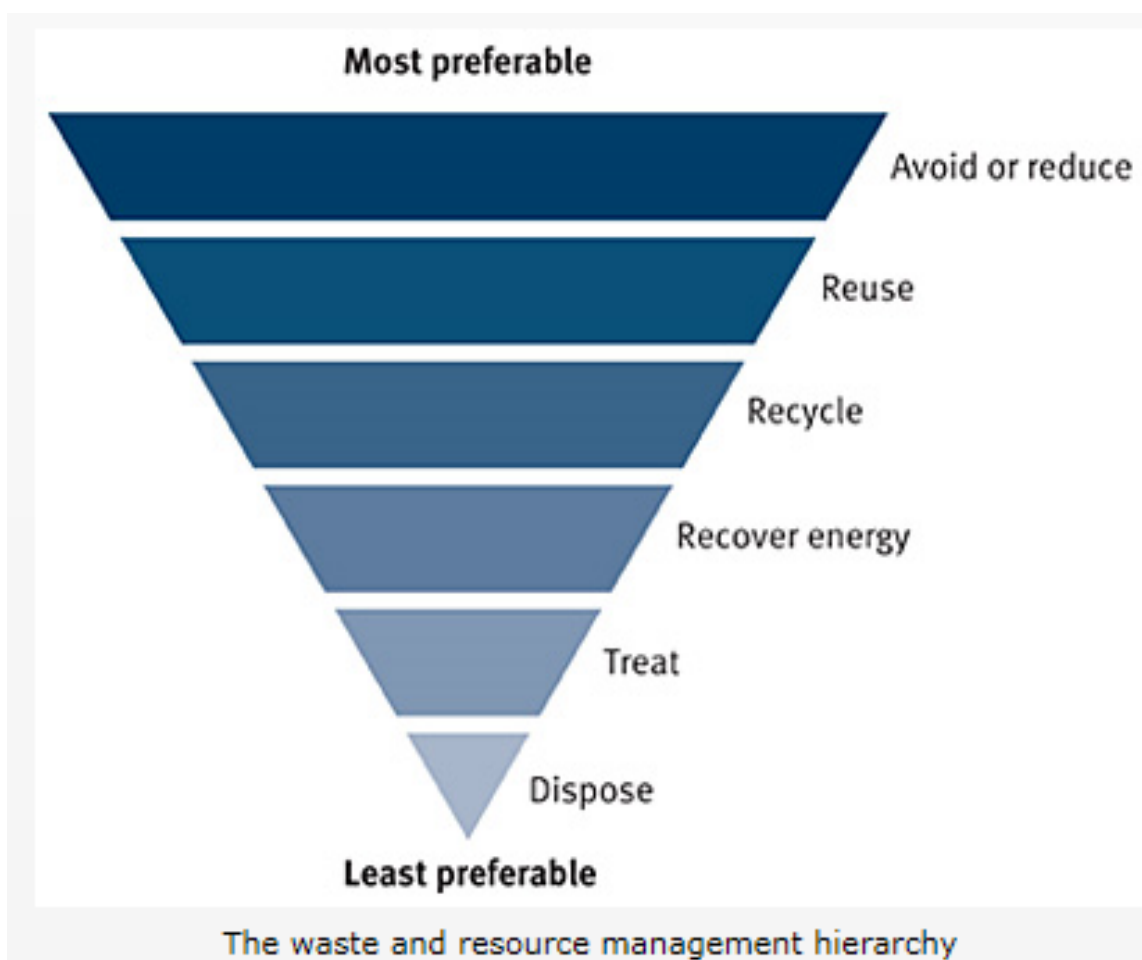







Table 2 Waste Management Options

Management Option	Definition	Examples
Avoid 	Avoid unnecessary resource consumption	Avoid the generation of paper waste by encouraging the use of electronic copies of documentation.
Reduce 	Reduce waste generation and disposal	Select materials with increased product life reducing overall amount of material sent to landfill Designing for maximum use of resources on sites
Reuse 	Reuse waste resources without further manufacturing	Review policies on disposal of obsolete equipment or products with a focus on identifying alternate uses or users. Investigate beneficial reuse of materials
Recycle 	Turning waste resources into similar or different products	Increase staff awareness in order to maximise co-mingled recycling and avoid contamination of recycling bins. Use of recycled materials in raw aggregates, such as rubber
Disposal 	Dispose of waste only if there is no viable alternative	Ensure that waste is only disposed of at landfill facilities operated in accordance with prescribed legislation after the above hierarchy options have been investigated.

4.2 The Department of Transport And Main Roads Waste Management Objectives

The Department Of Transport And Main Roads' Waste Reduction and Recycling Plan sets the path for greater awareness, monitoring and continuous improvement of waste management across the Department of Transport And Main Roads in accordance with the Queensland Government objectives.

Table 3 The Department of Transport And Main Roads Waste Management Objectives

State Objective*	THE DEPARTMENT OF TRANSPORT AND MAIN ROADS Objective
<p>Driving Cultural Change</p> <p><i>All stakeholders recognise their role in meeting the vision of the waste strategy, and are informed and empowered to participate achieving its goals and objectives</i></p>	<p>All the Department of Transport and Main Roads staff and contractors are aware of the Department of Transport And Main Roads' obligations to reduce waste generation and disposal to landfill.</p> <p>All the Department of Transport and Main Roads staff and contractors can identify the wastes they produce on behalf of the Department of Transport And Main Roads.</p> <p>All the Department of Transport And Main Roads staff and contractors can identify the actions in this plan that they are responsible for implementing.</p> <p>Local Area Waste Management Plans prepared, implemented and monitored in each geographical area.</p>
<p>Avoidance and Minimisation</p> <p><i>Queensland will realise all opportunities from maximising sustainable consumption and production</i></p>	<p>The Department of Transport and Main Roads staff identify key waste generation streams through waste reporting.</p> <p>The Department of Transport and Main Roads staff investigate cost-effective strategies for waste avoidance and minimisation. This is to be particularly applied to key waste generation streams.</p> <p>Implement program of waste avoidance and minimisation strategies.</p>
<p>Reuse, Recovery and Recycling</p> <p><i>Queensland will optimise economic benefits from reuse, recovery and recycling.</i></p>	<p>The Department of Transport and Main Roads to identify and maximise opportunities for beneficial use of construction and demolition wastes.</p> <p>The Department of Transport and Main Roads to lead industry performance in waste reuse, recovering and recycling through the Department of Transport and Main Roads specifications for materials, products, services and research.</p>
<p>Management, Treatment and Disposal</p> <p><i>Queensland will reduce the impact of waste on human health and the environment through improved waste practices.</i></p>	<p>The Department of Transport and Main Roads will reduce generation of regulated wastes through use of feasible alternate materials, technologies, products and/or services that do not generate regulated waste.</p>

* Queensland Waste Avoidance and Resource Productivity Strategy 2014-2024

4.3 Resource Management Principles

The following principles will guide the waste management decisions made by the department.

Table 4 Principles of Resource Management

Principle	Definition
Polluter Pays	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.
Proximity	Waste and recovered resources should be managed as close to the source of generation as possible.
Product Stewardship	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.

4.4 Continuous Improvement

The Department of Transport and Main Roads is committed to continuous improvement in the area of waste reduction and recycling following a Plan, Do, Check, Act cycle. This will be demonstrated by:



Monitoring performance against the Department of Transport and Main Roads' Waste Reduction and Recycling Plan;



Review of waste data to identify key waste streams and compliance with reporting;

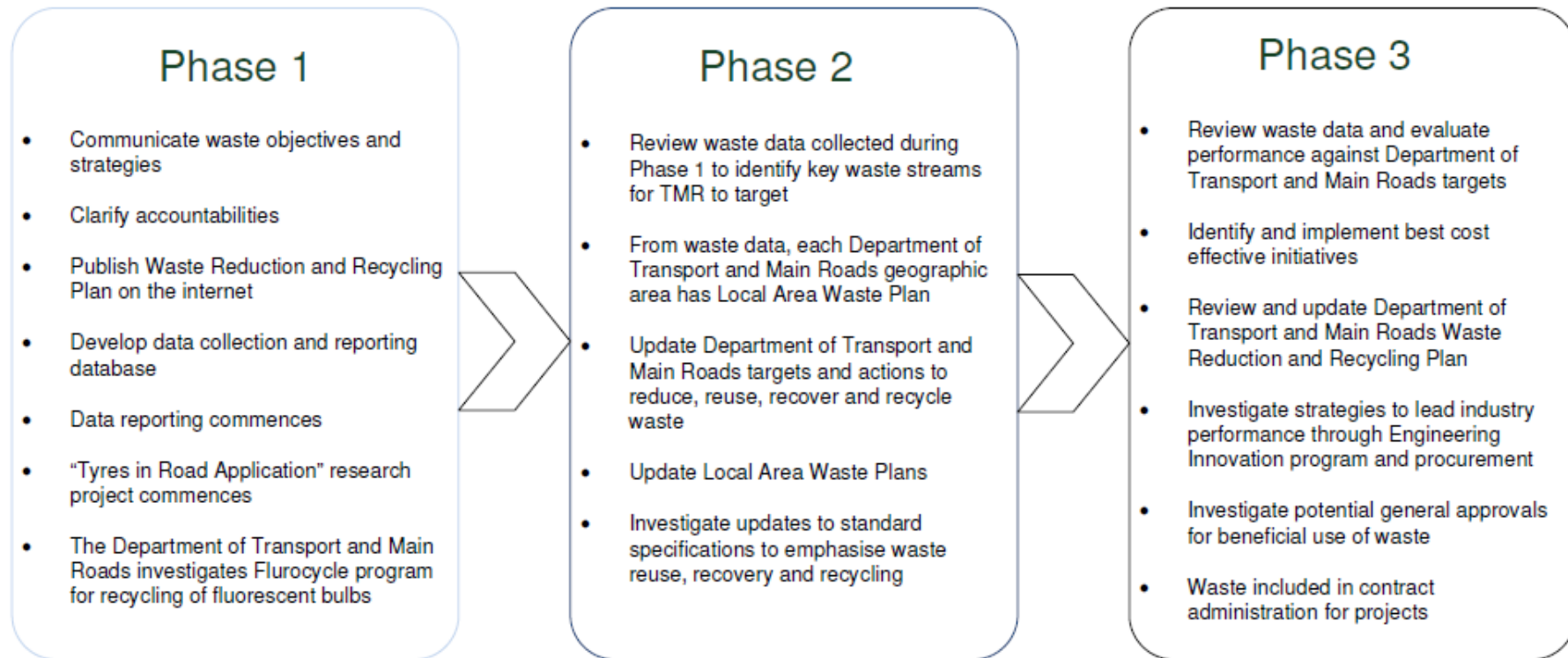


Regular update of waste targets to ensure that the Department of Transport and Main Roads has practical and feasible waste targets.

The Department of Transport And Main Roads recognises that waste reduction and recycling is a long-term strategy. The Department will continue to strive for improvements in waste reduction and assist the broader industry by leading performance where possible.

5. The Department of Transport and Main Roads Implementation Plan

As the Department of Transport and Main Roads has a wide range of possible waste streams including linear infrastructure project construction wastes, office wastes, laboratory, R&D projects, depots and waste from members of the public; the implementation of a Department waste plan is a significant task that will be progressed in a number of planned stages. Implementation of the plan will be broken into phases to ensure actions are practical, logical and achievable and phases may overlap. Phase 1 will commence in July 2016, Phase 2 will commence in July 2017 and Phase 3 will commence in August 2018 following adoption.



6. Data Collection and Reporting

The Department of Transport and Main Roads will develop and implement a system for data collection and collation on waste generated and waste reduced, reused, recovered or recycled. This data collection will commence in Phase 1 with Baseline data collection. The data collection database will also capture the information required to be reported for the *Waste Reduction and Recycling Act 2011*.

These are:

- Types of waste generated
- Amount of each type of waste generated, recycled or disposed of
- Actions taken by the Department of Transport and Main Roads to reduce the amount of waste generated
- Actions taken to recover and reuse or recycle waste
- Actions taken to increase the use of recycled material as part of the Department of Transport and Main Roads services, products or operations
- Progress made by the Department of Transport and Main Roads towards:
 - Performance indicators identified in plan
 - Performance indicators under a Regulation (where applicable)
- The Department of Transport and Main Roads' contribution to State's targets and strategies.

The Department of Transport and Main Roads will report to the Department of Environment and Heritage Protection about the operation of the *Waste Reduction and Recycling Plan* within 2 months after the end of each financial year. Auditing of the implementation of the *Department of Transport and Main Roads Waste Reduction and Recycling Plan* and progress made towards targets will be incorporated into annual audits.

7. Plan Availability

A current version of the Waste Reduction and Recycling Plan will be published on the Department of Transport and Main Roads website. The *Waste Reduction and Recycling Plan* may be inspected during office hours at 313 Adelaide Street, Brisbane. A copy of the *Department of Transport and Main Roads Waste Reduction and Recycling Plan* is available to the public at no cost, upon request.

8. Plan Review

The *Department of Transport and Main Roads Waste Reduction and Recycling Plan* will be in effect for 3 years, with a review period in the subsequent 4th year.

Glossary

Term	Description
<p>Construction and Demolition Waste</p> <p>C & D Waste (WRRR 2011)</p>	<p>construction and demolition waste—</p> <p>(a) means waste generated as a result of carrying out building work within the meaning of the <i>Building Act 1975</i>, section 5; and</p> <p>(b) without limiting paragraph (a), includes waste generated by building, repairing, altering or demolishing infrastructure for roads, bridges, tunnels, sewage, water, electricity, telecommunications, airports, docks or rail.</p>
<p>Commercial and Industrial Waste</p> <p>C & I Waste (EPR 2008)</p>	<p>commercial waste means waste, other than green waste, recyclable waste, interceptor waste or waste discharged to a sewer, produced as a result of the ordinary use or occupation of commercial premises.</p> <p>industrial waste means—</p> <p>(a) interceptor waste; or</p> <p>(b) waste other than the following—</p> <ol style="list-style-type: none"> i. commercial waste; ii. domestic waste; iii. domestic clean-up waste; iv. green waste; v. recyclable waste; vi. recyclable interceptor waste; vii. waste discharged to a sewer.
<p>Producer (WRRR 2011)</p>	<p>Waste Reduction and Recycling Act 2011, s 74A producer, of a product, includes any of the following —</p> <p>(a) the manufacturer of the product;</p> <p>(b) a person who imports the product into Queensland;</p> <p>(c) a person who supplies the product in Queensland;</p> <p>(d) a person who has a legal or equitable interest in the name under which the product is supplied in Queensland.</p>
<p>Regulated Waste</p>	<p>Waste generated from non-domestic sources that is listed in Schedule 7 of the <i>Environmental Protection Regulation 2008</i></p>
<p>Waste (WRRR 2011)</p>	<p>See - Environmental Protection Act 1994 – Section 13.</p>

