TMR's Waste 2 Resource Strategy

Resource efficiency through circular economy practices to minimise waste generation and maximise resource recovery

The Department of Transport and Main Roads (TMR) plans, manages and delivers Queensland's integrated transport system for road, rail and sea.

The Queensland Government has committed in the *Waste Management and Resource Recovery Strategy* to a more sustainable future, with a focus on a circular economy. The *Waste 2 Resource (W2R) Strategy* is how TMR will achieve this commitment.

TMR recognises that reducing Queensland's waste and ensuring all products and materials are managed as valuable and finite resources are shared responsibilities between government, industry and the community.

TMR's W2R Strategy sets the strategic direction and intent to minimise wastes and achieve a more sustainable use of resources across the department. The W2R Strategy sits under TMR's *Environmental Sustainability Policy*.

Queensland Government

Objectives

TMR will achieve its vision by setting the following four objectives:

1. Minimise disposal to landfill

2. Achieve resource efficiency through circular economy practices

3. Facilitate market growth

4. Reduce greenhouse gas emissions from waste generation and resource use

Strategy pillars

To achieve the four objectives in a focused, deliberate and systematic way, TMR will develop and deliver actions across the following five pillars:

1. **Specifications and processes**
   Enable the circular economy, focusing on the reuse of recycled materials through system change supported by research and development.

2. **Interagency engagement and internal collaboration**
   Work with internal and government partners to build consistent government frameworks that support better waste and resource management.

3. **Market engagement and transformation**
   Faciliate industry capacity and capability in recycled materials and circular economy principles.

4. **Procurement**
   Identify opportunities to encourage the use of recycled materials and to minimise resource consumption.

5. **Data collection and analysis**
   Monitor and evaluate performance in order to identify, create and act on opportunities and respond to constraints to the vision.

Action Plan

The W2R Strategy will be implemented through the W2R Action Plan which will identify specific actions to be undertaken by relevant areas of TMR across the five strategy pillars.

Initiatives across all divisions of TMR are anticipated to be developed, implemented and monitored via ongoing consultation with internal stakeholders.

Quick wins

TMR has undertaken some early actions to build a foundation for the W2R Strategy and to signal to industry its commitment to circular economy practices. These are:

1. **W2R Plan Tender Schedule S12** – a new tender schedule that requires tenderers to submit details of the quantities of recycled materials that they propose to use. It is a prompt for tenderers to consider the use of recycled materials and to provide continuous feedback to TMR about market conditions.

2. **TMR's W2R Calculator** – allows TMR to utilise data to monitor uptake and trends of recycled materials, resource efficiency and waste reduction.

3. **Partnerships** – between the Engineering and Technology, Program Delivery and Operations and RoadTek branches to undertake 'demonstration' projects where recycled materials are utilised to increase industry familiarity and confidence.

W2R Strategy in Transport Infrastructure

TMR prefers the use of recycled materials on transport infrastructure projects where they are:

- permitted in accordance with TMR's technical specifications
- cost competitive with conventional materials
- available in quantities applicable to the specific project.

The W2R Strategy does not mandate the use of recycled materials in transport infrastructure. When recycled materials are used the following principles apply:

- the end result provides as good, if not better, performance than conventional materials
- they do not harm the environment, the community or workers
- they do not cause operational issues in the longer term (such as contaminated land)
- they are 're-recyclable' at the end of life.