

case study

Circulate, NSW EPA Industrial Ecology



‘Bridging the Gap’ to divert plasterboard from landfill and reduce project costs

Plasterboard is 100% recyclable. In the Newcastle, Hunter Valley and Central Coast regions there have been limited options for generators of plasterboard waste, or for collectors of mixed C&D waste streams, to recycle this material. Plasterboard is a costly and wasted resource when sent to landfill.

Background

Available data suggests there is an estimated 2,600 tonne of waste plasterboard being generated in the Newcastle, Hunter Valley and Central Coast regions from new dwelling constructions. The majority of this material still going to landfill.

Add in the volume of waste plasterboard generated from demolition, commercial fit-out, shop fit-out, major infrastructure and redevelopment projects, and the total tonnage that could be diverted from landfill is significantly higher.

Situation

As a facilitator under the Circulate, NSW EPA Industrial Ecology Program, Cross Connections undertook research and engaged stakeholders across the supply chain to understand the opportunities and challenges in diverting waste plasterboard from landfill. Industrial ecology is when one businesses waste or by-products become another businesses feedstock.

Landfill costs in NSW have increased significantly in recent years and that trend is expected to continue. In response, many businesses producing plasterboard waste in Sydney are redirecting this material (directly or via waste management companies) to Regyp, a Sydney based re-processor.

Regyp can accept plasterboard for recycling for a gate fee cost which is significantly less than current NSW landfill gate fee charges.

Regyp currently reprocesses mixed plasterboard into products that can be used in agricultural applications. This is done under existing NSW EPA resource recovery exemptions and provides a lawful pathway to recycle plasterboard.

As part of the research, Cross Connections identified that no local aggregation or recovery infrastructure/facilities existed in the Newcastle, Hunter Valley and Central Coast regions. A barrier to recovery has been the perceived cost, time and viability of separating, collecting and transporting plasterboard to facilities like Regyp.

Solution

Cross Connections has facilitated the establishment of aggregation points at five (5) NSW EPA licensed facilities. These facilities now accept either mixed and/or source separated end-of-life plasterboard and offcuts, for recycling. Located across the region to facilitate recovery of plasterboard, they are:

- Benedicts Recycling (Mayfield West)
- Central Waste Station (Kurri Kurri)
- Concrush (Teralba)
- Hunter Valley Skips (Tomago)
- Remondis (Thornton)

In addition to the Newcastle and Hunter Valley facilities, generators on the Central Coast now have a new local option with a waste management business providing separate bins for plasterboard collection.

Another option being explored is the on-site separation and collection of plasterboard material in bulk bags. This method of collection has been successful in both Melbourne and Sydney and it is envisaged this could provide a viable cost alternative for those wishing to source separate without the additional bin hire cost.

Businesses can now get assistance with:

- Reducing costs of sending waste to landfill
- Site waste management plans (SWMP)
- Accessing available funding for equipment

Outcomes

- Direct and immediate cost savings
- Improved environmental and sustainability outcomes
- New business model for aggregation and collection
- Waste plasterboard as a resource not a waste
- Improved data on wastage rates to assist in resource efficiency assessments.



Call 0423 943 100 if you are a generator, waste management or skip bin company still collecting mixed waste.

What role will you play in "Bridging the Gap" to reduce waste?



Cross Connections Consulting

The answers are changing when it comes to managing waste. Cross Connections Consulting is a Hunter based sustainability consultancy. We help businesses, councils and communities to rethink waste management and to achieve cost savings and improved operational and environmental outcomes. Services provided include resource efficiency assessments, strategic development and market intelligence.

Samantha Cross, Director of Cross Connections Consulting, is a NSW EPA appointed facilitator under the Circulate, Industrial Ecology Program and is current Chair of the Waste Management Association Australia (WMAA) Hunter Regional Group.



Contact

Samantha Cross
Cross Connections Consulting
T: 0423 943 100
E: samantha@crossconnections.com.au
www.crossconnections.com.au

Circulate, NSW EPA Industrial Ecology

Over four years, Circulate, NSW EPA Industrial Ecology seeks to engage with 1000 medium-to-large enterprises to establish approximately 100 industrial ecology projects. During this period the program is targeting 160,000 tonnes of landfill diversion and \$21 million dollars in additional income and/or savings for participating businesses. The program will focus on the recovery of wastes currently being sent to landfill.

Contact

Phillip Molyneaux,
T: 02 9995 6873
E: phillip.molyneaux@epa.nsw.gov.au
www.epa.nsw.gov.au

*This project is a NSW EPA
Waste Less, Recycle More initiative
funded from the waste levy.*