

Reconophalt

Soft plastics from approximately 173,600 plastic bags and packaging, and glass from approximately 82,500 glass bottle equivalents diverted from landfill to construct the first road in Tasmania utilising a combination of soft plastics and glass.

DEMONSTRATION SNAPSHOT

The road constructed in Snug with 330 tonnes of asphalt has a greater than 15% total recycled material content with approximately:

- 173,600 plastic bag and packaging equivalents
- 82,500 glass bottle equivalents
- Toner from 5,900 used printer cartridges
- 33 tonnes reclaimed road (asphalt).

Paving the way with soft plastics and glass



Overview

Downer has partnered with the Kingborough Council and Close the Loop to set a new benchmark in sustainability and innovation, constructing the first road in Tasmania utilising Reconophalt, an innovative asphalt product that contains a combination of soft plastics and glass. Downer is proud to take a lead role in repurposing soft plastics and glass in asphalt for road construction to create a sustainable, cost effective solution that has improved performance characteristics over conventional asphalt.

The road constructed in Snug with soft plastics and glass in asphalt demonstrates the economic, social and environmental value for products that otherwise end up in landfill, stockpiled, or as a pollutant in our natural environments.

More importantly, utilising soft plastics and glass in road construction proves that with thought leadership in sustainability and partnerships with progressive and environmentally conscious governments, suppliers and customers, we can continue to set new benchmarks in repurposing and recycling waste materials into new streams of use.



Recycled content breakdown

Every tonne of Reconophalt paved on the road will incorporate approximately:

- 526 plastic bag and packaging equivalents
- 250 glass bottle equivalents
- Toner from 18 used printer cartridges
- 100kg of Reclaimed Asphalt Pavement (RAP).



Local content

Based on the number of houses in Charlton Street, the road constructed in Snug will recycle:

- 5,900 plastic bag and packaging equivalents per house, an average of 96 weeks household consumption
- 2,750 glass bottle equivalents per house, an average of 196 weeks of household consumption
- Toner from 196 used printer cartridges per house.



Sustainability credentials

Reconophalt contains:

- Soft plastics and glass that otherwise end up in landfill, stockpiled, or as a pollutant in our natural environment
- Greater than 15% total recycled material content.



Innovative partnerships

- Downer partnered closely with resource recovery and recycling company Close the Loop to innovatively tailor the soft plastic product offering to suit a road construction application.



Improved performance

Compared to standard DSG and VicRoads specified asphalt, Reconophalt has shown:

- Significant improvement in fatigue for longer life pavements
- Superior deformation resistance for withstanding heavy vehicular traffic.