

# Case study

## TONERPLAS®

Using 100% recycled content from toner cartridges and soft plastic waste, TonerPlas® revolutionises road infrastructure standards and has been used to increase road performance and longevity in major road projects across Australia.

Close the Loop are partnering with **state and local governments, civil contractors, and asphalt companies** to solve our waste crisis.

Government procurement guidelines are fast transforming to include the use of recycled content, and move towards a more circular economy.

Our long-term partner *Downer* were given an order & exemption from the NSW EPA for use of TonerPlas® in their Reconophalt road mix, proving the benefits that this technology has over traditional road standards while creating a more sustainable road and finding a use for complex mixed soft plastic waste that would otherwise go to landfill.

**Does using TonerPlas® increase the risk of microplastics getting into our waterways and ocean?**

**No.** The NSW EPA approved an Order & Exemption (O&E) for Reconophalt, asphalt produced by Downer including TonerPlas®. The O&E states that the road containing TonerPlas® poses no more risk of microplastics and leachate than a standard asphalt road.

The NSW EPA conducted the harshest test regime ever seen in the Australian roads industry to complete its report.



## BENEFITS OF TONERPLAS®

- Improved deformation resistance
- Improved fatigue life
- Reduced carbon footprint over the life of the asset
- Reduced whole-of-life cost
- Increased Material Circularity Index (MCI) leading to ISC innovation points
- 100% recycled content and 100% recyclable at end-of-life.
- Up to 1% by weight of total mix design
- Dry mix additive designed for bulk bag storage and mixed directly at asphalt plants
- No change to workability of asphalt
- No odours when creating or laying asphalt
- Reclaimed Asphalt Pavement (RAP) using TonerPlas® modified asphalt is 100% recyclable at eventual end of life
- No increased risk of micro plastics or leachate compared to standard road mixes
- Provides a much-needed end market for complex mixed soft plastic waste

