

Happiness is a railway sleeper that's hungry for waste plastic!

Integrated Recycling Mildura Factory

We were thrilled to have a visit from the Hon. Lily D'Ambrosio, Minister for Energy, Environment and Climate Change to our Mildura factory. General Manager Stephen Webster conducted a tour of our facility and illustrated how large scale infrastructure products like Duratrack are driving the use of waste plastic in Australia's circular economy.

IR has developed the science to transform waste plastics into a tough and extremely durable material called Polytensilate. Made from about 85% polyethylene and polystyrene plastics, Polytensilate is used to make the Duratrack railway sleeper and the Envire parkscape range. Polytensilate products are low in carbon emissions to manufacture and fully recyclable. So, when they reach the end of their 1st, 2nd or 3rd life, they can be upcycled all over again.

The rail industry is looking for viable and sustainable alternatives to replace traditional timber sleepers. Quality timber suitable for rail use has become scarce as old forests are diminished and protected. There are approximately 11 million timber sleepers installed on Australian rail networks, which on average, are replaced every 15 years due to pest and water rot damage. This means approximately 75,000 trees are needed for timber sleepers every 15 years.

Duratrack substitutes waste plastic for trees. For every kilometre of Duratrack sleepers laid (1,500 sleepers approx.) up to 99 tonnes of recycled plastics is used. Now that's hungry for waste plastic!

A global consciousness of our planet's finite resources is accelerating the use of sustainable materials. Backed by governments, industry sectors are rethinking how materials are designed, sourced, produced, used, and dealt with at the end of their life. Integrated Recycling has developed its core ideology and business model by living in the circular economy and developing solutions which utilise and upcycle waste plastics. We believe that collaboration is essential and have partnered with government, industry, universities and rail authorities to achieve this circular economy solution.

Duratrack is propelling a broad and long-lasting impact on sustainability in the rail industry.



At left: The Hon. Lily D'Ambrosio, Minister for Energy, Environment and Climate Change touring our Mildura factory with Stephen Webster GM Integrated Recycling.