

# When going green is gold for Australia

*There are myriad business and environmental benefits in expanding our use of recycled materials.*

Recycled plastic bottles are being used to resurface Australia's roads, build railways and improve drainage systems thanks to the technological expertise of local manufacturer Geofabrics Australasia.

"Using waste plastic that was otherwise destined for landfill not only reduces the cost of road repair and construction, but also increases the strength and durability of our roads," says Dennis Grech, CEO and managing director. "Our mission is to provide smarter infrastructure solutions for our clients, and by using this new technology we can revolutionise the way we look at recycled plastic."

Only a third of Australia's plastic packaging is recycled each year, leaving more than 600,000 tonnes of plastic to end up in landfill or polluting waterways.

However, with China having banned the importation of Australian recycled materials in 2017, and with the Federal Government stopping the export of mixed plastics from July 2021, local manufacturers have found innovative ways to both recycle plastic and put it to good use locally.

"There's not only an opportunity for Australian industries to move to a sustainable business model, but also a responsibility to do so," Grech says.

"There is no doubt in my mind that there is a momentum building for Australian manufacturers to increasingly use recycled materials."

Founded more than 40 years ago, and with a strong presence in regional Australia, Geofabrics specialises in the research, design and production of geosynthetics, which are a key product found in Australia's capital infrastructure. The company's products are used to build everything from roads to railways, sports fields, mine rehabilitation and coastal protection systems.

Launched this year, the company's Sealmac Green and bidim Green geotextiles are made with recycled plastic PET bottles collected from Australian recycling bins. In addition, Megafto Green launched just this month, is the only Australian-made panel drain made from 100 per cent recycled HDPE, the plastic most commonly used in milk bottles.

"We're paving the way to prevent those bottles from polluting our waterways or ending up in landfill, and in the process



Geofabrics CEO Dennis Grech: the company's innovative products are helping keep plastic waste out of landfill and waterways.

finding solutions for some of Australia's big problems," says Grech.

The production process uses recycled plastic waste to replace what was 500 to 1000 tonnes of new plastic material, known as virgin plastic polymer. Plastic polymer is largely imported into Australia, and Grech notes that in turning to more sustainable alternatives, Australian manufacturers are also gaining more control over supply chains, creating a win-win for the environment and local jobs.

"We must embrace and be proud of local manufacturing. In my 30-plus years of experience, I recall times when there was a strong push to seek offshore manufacturing, as a beacon to profitability. But, in my thinking, it's a bit of a false economy."

Other benefits of local manufacturing include greater quality control and more oversight of supply chains. But most of all, Grech says re-shoring leads to greater local innovation.

"We are re-shoring back into Australian manufacturing a supply chain that is ours, that's using recycled material sourced in Australia. And we're solving big problems of

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DENNIS GRECH

waste going to landfill, and plastics in our waterways. I take that responsibility at Geofabrics very seriously."

While it's all very well to recycle plastic material, Grech notes a key technical challenge is ensuring that the quality of the recycled materials is the same as that of the original polymers, particularly important when dealing with infrastructure. To help this process, Geofabrics has a dedicated Geosynthetic

Centre of Excellence based in Queensland, where researchers test breakthroughs and solve problems for customers.

"Geofabrics is not just a supplier or manufacturer," Grech adds. "A key part of our business is the Geosynthetic Centre of Excellence. Our business is largely an R&D business that solves problems for customers."

"We have been very careful in ensuring that anything in our recycled product range is in fact comparable, if not superior to, a product that uses imported virgin-sourced material. We have a stringent product-testing regime that's part of Geofabrics' DNA, and that's what we do every day."

With political and business will growing not just to develop the local recycling industry, but to re-shore supply chains, Grech notes there is a key role for Australian manufacturing to support local jobs and create long-term sustainability solutions.

"Our mandate is to make it in Australia, for Australia, by Australians. That is a central premise to what Geofabrics will be doing, in 2020 and beyond. Sustainability is at the heart of that theme."

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