

Saving money with recycled mixed plastic products

The durability of recycled mixed plastic products means they last longer and are less expensive over the long term.

Often the cheapest product does not offer the best value for money over the longer term.

Consider a simple product such as a bollard which is used to delineate an area such as a walkway or car park. Walkways and car parks are built as long term facilities and it is reasonable to expect support structures, such as bollards, to have a similar life span.

Timber bollards are cheaper to buy compared with recycled mixed plastic bollards, however they are like to require replacement or ongoing maintenance, to keep them serviceable.

Taking into account upfront cost, installation, maintenance and disposal cost over the project life, recycled mixed plastic products can offer the best value for money.



How long do recycled plastic product last?

With advances in UV protection and processing techniques, it is expected that modern recycled mixed plastic products could have a life span of 40 years or more.

There are many examples in Australia of recycled plastic seats that are still performing well after more than 15 years. These products would also have been made using older technology.

The seats on the left are at Kilsyth pool in Victoria, where the product is subject to harsh conditions including exposure to chlorine and high humidity.

The example on the right is an outdoor setting at a road side stop on the Hume Highway in Victoria.



How do the costs stack up?



Cost comparison

The following example compares a recycled mixed plastic product with an alternative product, both to be used in a project with a life of 20 years. The recycled mixed plastic product lasts the full 20 years and requires no maintenance. The alternative is cheaper to buy but only lasts 10 years and requires regular maintenance (painting).

	Recycled plastic	Alternative 'A'
Life expectancy	20 years	10 years
Upfront cost (<i>per product</i>)	\$40 (<i>once</i>)	\$20 (<i>twice</i>)
Installation (<i>per product</i>)	\$50	\$50 (<i>twice</i>)
Maintenance (<i>per year</i>)	\$0	\$5-10
Disposal (<i>per product</i>)	\$0	\$10 (<i>failed product</i>)
Total cost over 20 years	\$90	\$250-350

Life cycle costing calculator

A life cycle costing calculator has been developed to help determine which material offers the best value over the life of a project.

Project managers are encouraged to use their own data regarding costs and life expectancy, however indicative data has been included as a starting point. [Download the tool from our Recycled Mixed Plastics Purchasing Toolkit Page here: http://ecobuy.org.au/recycled-plastics-toolkit](http://ecobuy.org.au/recycled-plastics-toolkit)

These resources have been developed by ECO-Buy with the support of the Australian Packaging Covenant, Zero-Waste South Australia, and Sustainability Victoria in consultation with users and suppliers of recycled mixed plastic products.

For further information contact ECO-Buy <http://ecobuy.org.au/contact/>