

THE CHALLENGE

Castle Towers is a major shopping and transport hub owned by QIC and situated in Castle Hill, a rapidly growing suburb 30km North-West of Sydney. With 112,000 square metres of lettable space, Castle Towers has 266 retail tenancies.

The centre has an impressive and recently renovated food court, but high rates of contamination in yellow commingled recycling bins saw contents frequently going to landfill. This is an issue no different to any large food court with high patronage, but Castle Towers were keen to find a solution. As QIC Portfolio Operations Manager Deb Palmer says, *"At this scale, recovering recyclable material is not viable without additional labour to separate waste. Our focus is landfill diversion; however, due to high contamination, food court bin contents were ultimately sent to landfill. Despite measures such as improved signage and modified bin openings, recycling rates did not improve."*

Castle Towers Centre Management worked closely with their managed services partner Remondis who presented the Charopy solution. This was following on from the success of implementing Charopy at another QIC site involving Remondis - Canberra Centre in the ACT. At Castle Towers, 11 bins were identified as being susceptible to high rates of contamination, with high foot traffic and proximity to food outlets. These bins would benefit most from the Charopy technology being retrofitted to existing bin surrounds. Hearing of the potential to recover significant container deposit scheme volumes currently lost to the scheme, Coca Cola Europacific Partners lent their support to the project.



THE SOLUTION

Charopy bins are designed to operate where signage and public awareness alone do not deliver an acceptable rate of contamination free Container Deposit Scheme (CDS) matter for recycling. The technology blocks the user from entering ineligible items, thereby removing human error, whilst solving for poor education and laziness. Castle Towers did not want to refresh their entire existing bin range given the recent renovation but this was not an issue for Charopy. The technology can easily be retrofitted to a wide range of existing bin surrounds, including vertical front openings and angled horizontal openings - both were required for this site.

INITIAL SUCCESS

Since launching in November 2025, the 11 selected bins went from 0% recycling to a 100% clean stream of CDS material, consisting of glass, PET, aluminium, HDPE and liquid paperboard. Within only the first quarter of Charopy technology going live the centre managed to exceed 10,000 containers recovered in a single month for recycling. Their success only grew from that point. In the first six months these bins diverted 987kg from landfill - a significant improvement over what was being achieved previously.



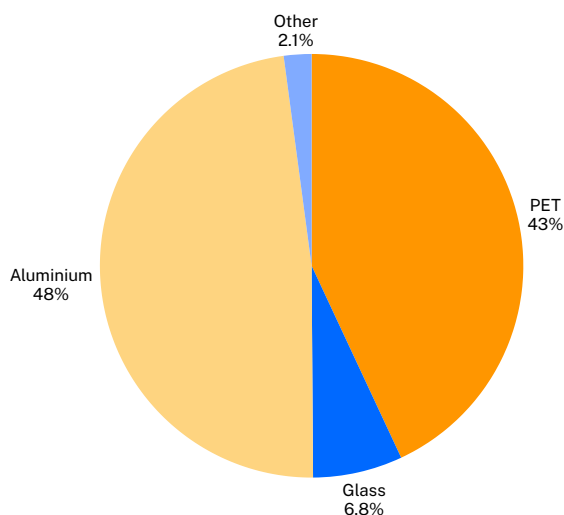


FORMULA FOR SUCCESS

The permanent signage on the front of each bin features a bright easily identifiable yellow background with clear simple step by step instructions for the user in a large accessible font. This signage allows users to clearly locate and comprehend the bin's functionality whilst relaxing seated in the foodcourt, minimising customers finding out about a new process only when they are leaving the food court. Additional signage was distributed on top and beside the bins for launch, making it abundantly clear to customers there was a new and improved method of recycling at Castle Towers - something patrons enthusiastically endorsed.



Castle Towers CDS Containers Collected
(by number of containers, not weight)



ENVIRONMENTAL IMPACT

Castle Towers have only continued to build on their early success. Since launch, the centre has managed to use their Charopy bins to collect for recycling 856 kg of PET, 1,157 kg of glass, 535 kg of aluminium, 29 kg of HDPE and 8 kg of liquid paper board. Using the NSW Return & Earn impact calculator from Scheme Co-ordinator Exchange for Change, the environment impact of this success equates to diverting fossil fuel emissions from the equivalent of a 63,000km drive, enough energy to power 194,000 hours of TV and the water consumption of 51,000 minutes of showering.

Speaking to the results from Castle Towers, Martin Collings, founder and CEO of Charopy said *"There is no doubt that Castle Towers is a template that any other major shopping centre should be following. Apart from the amazing sustainability results they have achieved, QIC have utilised with great effect our online dashboards showing real time transaction data, proactive alerts if any problems arise, and the ability to download raw data for further internal analysis, thereby enabling even greater success in future."*

QIC have been keen to maintain the momentum from Castle Towers success. Deb Palmer, Portfolio Operations Manager at QIC summed this up by saying *"Following the successful trial at Castle Towers, QIC rolled out the Charopy solution across several centres - Bathurst and Pittwater Place in NSW, Robina Town Centre and Forest Lake in Queensland, and Eastland and Watergardens in Victoria. We continue to identify opportunities to use this technology to improve recovery and recycling outcomes."*

If you manage a site with bins in high foot traffic, high visibility areas that are underdelivering on recycling outcomes you can read more at <https://www.charopy.com.au> or contact us at help@charopy.com.au