The future of kerbside recycling

This Recycling Victoria report was prepared by Sustainable Resource Use

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Kerbside recycling is the central pillar of Australia’s recycling effort. Each year more than 2 million tonnes nationally are diverted from waste through this recycling pathway. Many changes have occurred since kerbside recycling was introduced. These changes encompass system operation, types of products plus range and ratio of materials produced by households. As technology, packaging and behaviour continues to change, kerbside systems will need to evolve to remain effective.

Over time, the kerbside service has been upgraded and extended from using a recycling bag plus tied and bundled paper, to recycling crates into a multiple bin collection.

The range of products collected has also changed. Steel packaging has been added and rigid plastic containers extended from individual polymers to all rigid plastic packaging. Alongside mixed recycling, food and garden organics, kerbside recycling has expanded diversion options. Most recently, a separate glass recycling bin has been introduced successfully in some areas and is set for wider rollout.

The range and ratio of materials generated by households has also been changing and kerbside systems need to evolve to reflect this in order to stay relevant and effective. Over the past 2 decades products such as newspapers and magazines have declined, and phone books have disappeared. Over this same period, the forms of packaging have changed markedly.

Rigid plastic packaging is now very common across many product lines and is largely limited to PET/HDPE/PP. We anticipate the full elimination of PVC/PS from consumer packaging soon.

The biggest change in packaging has been the surge in soft (flexible) plastic packaging. Dominated by PE and PP, the total quantity of soft plastics is now over 400,000 tonnes nationally. With a very low recycling rate, an increasing focus is on incorporating this material into kerbside mixed recycling. To align with the function of MRFs, consumers would be required to present soft plastics in a bag as occurs with supermarket drop off and kerbside trials.

Kerbside systems also need to focus on the growing quantity of packaging material from increased online sales. Fibre based online packaging should be readily incorporated into existing collection systems. Degradable plastic options are problematic to overall plastic recycling. The uncertain markets outcomes for liquid paperboard cartons remain unresolved.

Alongside soft plastics, a further product addition to kerbside collection could be plant pots. Almost entirely PP and with a strong local recycling market, kerbside collections could be a method to aggregate the 8,000 tonnes that is spread across ~~our~~ households.

All recycling systems work best if structured to be:

• clear – what can I recycle and what I cannot

• consistent – the same approach wherever I live

• convenient – it is as easy to recycle as not.

A key component of this is support systems with regular consumer education, including feedback on what our collective effort is achieving such as carbon reduction. This is particularly crucial in multi-unit developments (MUDs) where it can be more challenging to separate materials. Local recycling innovators, Reground have teamed with local government and site managers to make big gains in delivering success at these sites.

Kerbside recycling will continue to play a big role in waste reduction as it evolves and will lead to a dramatic cutback in residual waste quantity and allow reduction in landfill waste bin sizes and the frequency of collection.

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