## Recycling in the Cradle Coast

TASMANIA
Do you know what happens to your recyclables after you put them in the recycling bin?

You may think that putting a can or bottle in the recycling bin is the end of the story...but actually it's an important first step in a journey to convert them into new products and materials.

1. Recycling is collected by a truck from your yellow-lid kerbside recycling bin (or public place recycling bin).
2. The recyclable materials are transported to a Materials Recovery Facility. You can learn more about Materials Recovery Facilities from another fact sheet in this Rethink Waste series.
3. At the Materials Recovery Facility, the items are sorted by type (glass, metals, plastic, paper and cardboard) by a combination of machines and human operators.
4. The separated materials are then bundled together and sold to manufacturers where they are made into new products. Demand for different materials goes up and down, just like demand for other products used in manufacturing. The majority of Tasmania's recyclables are processed either in other Australian states or overseas.

## How is it recycled?

Glass is sorted through a screen and stockpiled. The glass is transported to the recycler in Tasmania where it is crushed and screened into a bedding sand material and used as a replacement material in bricks and asphalt.

Plastic is sorted and baled according to type. At the recycling plant it is washed, melted into a resin and pushed through an extruder. It is then cooled, pressed through a die and chopped or pelletised into granules which can be made into new products.

Recycled plastic can be made into plastic bottles, flooring, window frames, building insulation, DVD and CD cases, fencing, garden furniture, seed trays, fleeces, fibre filling for sleeping bags and a variety of other products.

Paper and Cardboard is separated into paper, cardboard and newsprint. It is then baled and taken to a paper mill where it is blended into a pulp slurry and screened for contaminates such as paperclips and staples.

The cleaned pulp is passed through mesh to draw out water, then flattened and dried to become paper. The finished paper is wound onto reels and sold to manufacturers. Recycled paper, cardboard and newsprint can be made into packaging, toilet paper, egg cartons, recycled cardboard, insulation, kitty litter and building products.

Metals are separated into steel and aluminium. Steel cans are taken to a refinery where they are assessed for their alloy makeup. Tin is removed through reverse electroplating and the cans are melted down to liquid metallic iron and used to produce new steel. Aluminium is crushed, shredded and melted down to be used in new aluminium products. Recycled steel and aluminium can be used in aircrafts, cars, bicycles, boats, computers, cookware, gutters, siding, wire, cans, buildings, tools, machines and appliances.

## Why use kerbside recycling?

- It reduces the amount of waste ending up in landfill and therefore not only reduces the environmental impacts, but also increases the lifespan of the landfill by saving space.
- The energy saved by recycling a single bottle could light a 15-watt low energy bulb for 24 hours.
- Making steel from recycled cans rather than raw materials uses 75\% less energy, reduces air emissions by $86 \%$ and reduces water pollution by $76 \%$.
- For every aluminium can recycled, enough electricity is saved to run a TV for 3 hours.
- Recycled cardboard uses only $75 \%$ of the energy needed to make new cardboard and reduces the emission of sulphur dioxide that is produced when making pulp from trees.
- Steel and aluminium are $100 \%$ recyclable and be recycled an infinite number of times, saving energy and raw materials.


## To find what recycling services exist in the Cradle Coast region, visit www.rethinkwaste.com.au and select your Council from the drop-down list.

Sources: Cleanup Australia, Halve Waste, Planet Ark, Envirobank, Visy, Planet Green Recycling, SITA Environmental Solutions and the Northern Tasmanian Waste Management Group.

