

# Recycling fact sheet: Steel

Steel is an alloy made from iron and carbon and small amounts of other trace elements. Steel is 100% recyclable, like aluminium, which means its lifecycle is potentially continuous.

All steel and tin cans can be recycled in your recycling bin at home. The recycle material can be used in many products including tins, aircraft, building materials and cars.

## Did you know?

- Every year Brisbane residents recycle around 1400 tonnes of steel, which is enough steel to build approximately 1850 new cars.<sup>1</sup>
- Steel is one of the world's most recycled products and is one of the world's most important engineering and construction materials.
- 17.5 million steel cans are recycled each week in Australia, which is equivalent to the amount of steel needed to build 900 family sedans.<sup>2</sup>

## Benefits of recycling

- Recycling significantly reduces the amount of waste going to landfill. Every year each Australian sends around 3.5 kilograms of steel cans to landfill, which is enough steel to rebuild the Sydney Harbour Bridge or make 40,000 fridges.<sup>3</sup>
- Recycling saves energy. Using recycled steel cans to produce new steel (rather than raw materials), uses up to 75% less energy.<sup>4</sup>
- Recycling saves non-renewable resources. Recycling one tonne of steel saves 1131kg of iron ore, 54kg of limestone and 633kg of coal.<sup>5</sup>

## How is steel recycled?

- The contents of recycling bins is collected from homes and businesses and taken to a materials recovery facility (MRF) to be recycled.
- The recyclable materials are sorted at the MRF. A magnet is used to separate steel from other recyclables.
- Cans are crushed into blocks called bales.
- Bales are transported to a refinery, where tin is removed from steel cans through reverse electroplating, before being melted down and turned into new products.
- The new products then start the loop again when they are bought, used and put into the recycling bin.

<sup>1</sup> Visy Brisbane City Council recycling report 2013-2014

<sup>2,3</sup> [www.cansmart.org](http://www.cansmart.org)

<sup>4</sup> [www.worldsteel.org/](http://www.worldsteel.org/)

<sup>5</sup> [www.sita.com.au](http://www.sita.com.au)