

Recycling fact sheet: Glass

Glass is made by melting sand, soda ash and limestone together at extremely high temperatures of more than 1500 degrees Celsius. Glass is one of the oldest forms of packaging and was used by the Phoenicians more than 5000 years ago.

Only glass bottles and jars can be recycled in your recycling bin at home. Other glass and crockery, such as drinking glasses or plates, cannot be recycled and should **not** be placed in the recycling bin.

Glass containers are both reusable and 100% recyclable, which means that they can be recycled indefinitely.

Did you know?

- Every year Brisbane residents recycle approximately 29,312 tonnes of glass.¹ Most of this recycled glass is used for making new bottles and jars, but very finely crushed recycled glass is also widely used in the building industry and road construction. It may even end up in toothpaste, where it provides as a mild abrasive.
- Glass bottles can be recycled endlessly, because the glass never loses its quality through the recycling process.
- Most new glass made in Australia contains between 40% and 70% recycled glass.²

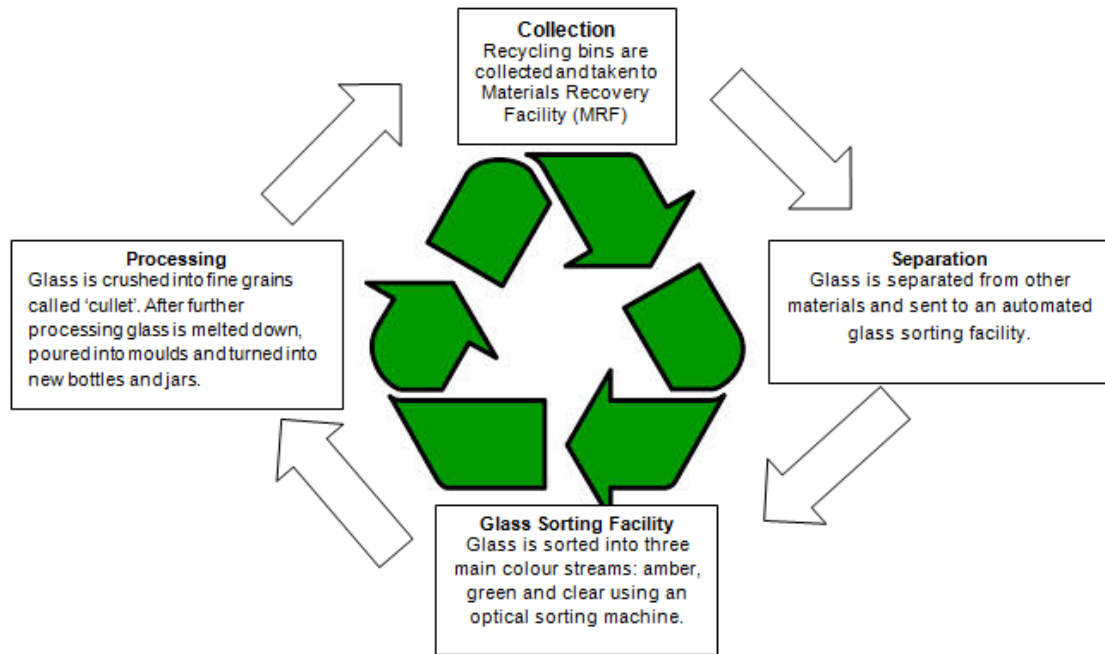
Benefits of recycling

There are lots of benefits to recycling glass, including those listed below.

- Recycling glass saves resources. Every tonne of crushed glass recycled saves more than one tonne of raw materials, including 650 kilograms (kg) of sand, 200kg soda ash, and 180kg of limestone.³
- Recycling glass saves energy. The amount of energy needed to melt recycled glass is 74% less than that needed to melt raw materials to make new bottles and jars. Recycling just one bottle will save enough energy to power a computer for 25 minutes.⁴
- Recycling glass helps reduce greenhouse gases. Recycling glass creates only half the greenhouse gas of making new glass from sand.⁵
- Recycling glass significantly reduces the amount of waste going to landfill and ensures valuable resources are not wasted.

How is glass recycled?

After recyclable materials are collected from your recycling bin at home, they are taken to a Material Recovery Facility. Glass is separated from other materials and sent to an automated glass sorting facility, which uses optical sorting to separate glass into three main colour streams: amber, green and clear. The different types of glass are then crushed into fine grains called 'culet'. After further processing, the glass is melted down, poured into moulds and turned into new bottles and jars.



1 The glass recycling process.

¹ Visy *Brisbane City Council recycling report 2013-2014*

² www.aci.com.au/

³ www.environment.about.com/od/recycling/a/benefits_of_glass_recycling.htm

⁴ www.berrymanglassrecycling.com/

⁵ www.halvewaste.com.au