

Materials fact sheet

Glass

Energy savings in each bottle

The energy saved from recycling just one glass bottle is enough to power a computer for 25 minutes. Alternatively it could power a television for 20 minutes or a washing machine for 10 minutes¹.

So before tossing bottles in the waste bin, think of what you could save in terms of cost, energy and the environment. Glass can be recycled an infinite number of times. Clean recycled glass produces the same high quality products as virgin glass.

Your business will benefit from a reduced waste collection charge if you collect all clean glass jars and clear, green and brown bottles for recycling.



Glass is manufactured from a mix consisting largely of sand, silica and limestone that is melted in a furnace at around 1500°C to form virgin glass.

Recycling glass helps conserve the environment, saving raw materials from being sand mined or quarried unnecessarily. While

it takes 1.2 tonnes of raw materials to make 1 tonne of new glass, it takes just 1 tonne of recycled glass to make the same amount.

Manufacturing products from recycled glass requires less energy than making virgin glass products. It helps reduce carbon dioxide emissions that contribute to global warming.

Bars, hotels and other businesses can minimise occupational health and safety issues by better managing glass collecting and recycling programs.

Uses of recycled glass

Recycled glass is turned into a crushed glass material called cullet, which can be used to produce more glass products. However the amount of glass turned back into new glass bottles depends on how well the different colours and types of glass have been kept separate during the collection and recycling process.

While mixed colour crushed glass has a lower value than glass of a single colour this material is gaining acceptance as a replacement for sand in some building and construction areas. This glass is also being used in asphalt and as a component of road base.



Simple ways to save costs on glass

Think in terms of the waste hierarchy. How can you avoid, reduce, reuse or recycle glass?

Do we need it? Avoid

Reduce > Do we need so much?

Reuse \rightarrow Can we use it again?

Recycle

Can someone else use it or convert it into something new?

AVOID

If possible purchase liquids in bulk rather than using individual glass bottles. Buying liquids in plastic drums or other recyclable containers will avoid the obvious safety issues associated with using glass.

REDUCE

Weigh up the benefits of using recyclable plastic containers rather than serving beverages in glass containers. Depending on the environmental friendliness of these alternate containers, there could be advantages in safety and cleaning.

REUSE

Be creative in looking for ways to reuse glass items again. You could store anything from coffee to paper clips, from screws to pens in clean glass containers.

When ordering food or beverage products packed in glass, ask the suppliers if they can offer the products in containers made of alternative materials.

RECYCLE

Go to BusinessRecycling.com.au to find local recycling service providers who will take glass. Find out what types of glass they will accept and how it should be prepared.

Your recycling program will be more successful if you train employees about what types of glass can and cannot be recycled and how it should be prepared. Here are some tips:

- Light bulbs, mirrors or laboratory glass cannot be included in glass recycling bins.
- Plate glass that is commonly used for windows, glass doors, transparent walls and windshields has a different composition to the glass used to make bottles, so it cannot be put in the bottle glass recycling bin. But some recyclers will accept plate glass.
- Remove contaminants like metal or plastic lids, corks or straws before recycling glass. This avoids contaminated glass ending up in landfill. If possible lightly rinse glass containers to remove obvious food residues.
- Avoid breaking glass because larger pieces are easier to handle and sort.

Your business can help the environment by recycling glass.

For further information

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