



are you
in the loop?



what happens when
aluminium
drink cans are
recycled

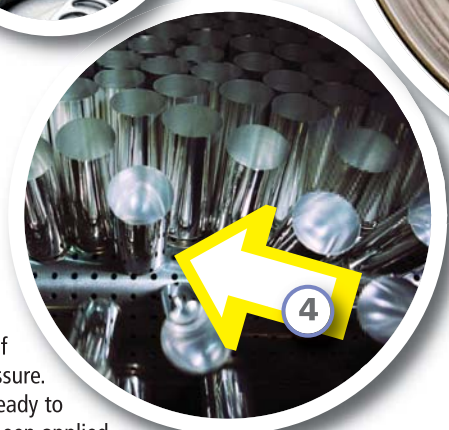
the aluminium can recycling loop

Every year 5 billion aluminium drink cans are sold in the UK. Each one can be recycled to make another drink can, over and over again. This is called 'closed loop' recycling. Recycling aluminium cans saves energy and natural resources, and reduces pressure on landfill sites for waste disposal.

6 SELLING - The final stage of the loop – or is it the beginning? The cans are delivered to the retailer ready for you to buy, drink and recycle all over again. This could be your local supermarket, corner shop or a vending machine in your office or leisure centre.

5 FILLING - The cans are cleaned using high pressure air and water. The air is extracted and at the same time the can is filled with Carbon dioxide (CO₂) and the liquid contents. The can ends are mechanically attached and sealed. Around 2000 cans are produced and filled by this process every minute.

4 CAN MAKING - The recycled aluminium sheet is fed through a 'cupping press' which stamps out thousands of shallow cups. The can shape is created by ramming the cups through a series of smaller and smaller rings at high pressure. They are then trimmed and washed ready to be printed. After the decoration has been applied the cans are dried and passed through a necker/flanger to prepare them to take the can end.



Here's how it works -

① **RECYCLING – it's easy!** You can recycle your cans in a number of ways:

Can banks – find them at supermarkets and council-run recycling sites. Look out for recycling banks in offices, shopping centres and leisure facilities too.

Kerbside recycling – use the doorstep collections offered by your council.

Cash for cans centres – exchange your cans for cash to raise funds for a good cause.

Once collected the cans are sorted, checked for contaminants and baled. They are then delivered to the Novelis plant in Warrington. This is Europe's only dedicated aluminium can recycling plant.

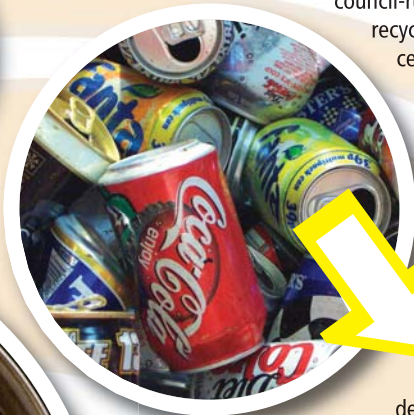
② **REPROCESSING** - The bales of

cans are broken up and shredded into small pieces, about the size of a 50p coin. Hot air (approx. 500°C) is blown through the shreds to remove the printed decoration. The clean shreds are then melted in a furnace heated to 750°C.

The molten metal flows into moulds and is cooled by a curtain of water. As it cools the metal hardens, and an ingot is formed. Each ingot is nine metres long, weighs 27 tonnes and contains 1.5 million recycled drink cans.

③ **ROLLING** - The ingots are transported to the rolling mill where they are pre-heated to 600°C and undergo their first 'hot rolling'. They are then 'cold rolled' to the exact thickness required by the can maker.

So now you KNOW how it works - it's up to us to keep the aluminium can recycling loop going!



Did you know?

- The aluminium drink can is the world's most recycled packaging container.
- Novelis is the world's leading recycler of aluminium drink cans. We operate six dedicated can recycling plants around the world, which together recycle over 38 billion drink cans every year.
- The Novelis recycling plant in Warrington, Cheshire has the capacity to recycle every single aluminium drink can sold in the UK, every year for the foreseeable future. Currently around half of these are still ending up in landfill sites, so a valuable resource is being wasted.
- It can take around 60 days for a used aluminium can to be recycled, remade, refilled and returned to the shops for sale again.
- Recycling aluminium drink cans saves 95% of the energy needed to make aluminium from raw materials.
- Not only that, recycling the cans also cuts greenhouse gas emissions by 95%.
- Recycling 1kg of aluminium saves up to 6kg of bauxite, 4kg of chemical products and 14 kWh of electricity.
- Making one aluminium drink can from raw materials uses the same amount of energy that it takes to recycle 20.
- Don't forget it's not just aluminium cans that can be easily recycled – many local authorities also provide facilities to collect household container foil too. This can also be recycled endlessly.

More Useful information

To find out more about Novelis and aluminium can recycling visit our website: www.thinkcans.com

For information on aluminium can and foil recycling contact Alupro – the Aluminium Packaging Recycling Organisation: 0845 722 7722 or online at: www.alupro.org.uk

For general information on recycling and to find out about services available in your local area visit: www.recyclenow.com

