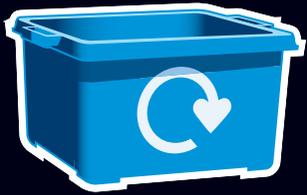


# What happens to my recycling?



Ever wondered what happens to all the different things you put in your recycling bins and boxes? This leaflet explains how materials are separated and what they are used for.



# Blue box

The life of a recyclable item such as a can, a newspaper or an apple core doesn't end in your recycling bin or box - in fact its life has only just begun!

This leaflet explains where recycling from containers in Hertsmere goes, how different materials are sorted and what they are used for.



1



Paper is recycled in the UK. The paper is unloaded and sent to drum pulpers that act like giant washing machines. Large, unwanted items are rejected here. The material is now known as 'stock'.

2



The stock enters centrifugal cleaners (like spin dryers) that remove smaller contamination like staples and grit. Ink is removed by pumping air into the water; the ink sticks to the bubbles which rise to the top forming a scum on the surface that is floated off. Any remaining glues are removed when hydrogen peroxide is added and the temperature raised.

3



The stock is sprayed onto rollers and trapped between two belts of fabric to squeeze out some of the water - this forms a wet sheet of paper. It passes over sets of heated rollers to dry out.

5



...made back into newsprint.

4



The finished paper is rolled onto large reels and the reels are barcoded and stored in a warehouse where they will be delivered to various companies and...



## Reel-y!

The reels of paper produced weigh about 35 tonnes - the same as 30 cars!



# Brown bin or black box

## Cardboard



Cardboard is removed by hand and machinery. It goes through a similar pulping process to paper and is used to make new cardboard.



## Glass



Glass is captured on the first part of the MRF as it is the heaviest material.

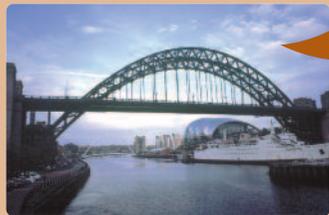


Mixed glass bottles and jars are taken to a mill where they are crushed and currently used as 'glasphalt' - a road resurfacing material. Glass which is colour separated at glass recycling banks is used to make new glass bottles or jars.

## Cans



Cans are separated from the conveyor belt using an overhead magnet for steel cans and an eddy current - a rotating drum with a negative magnetic force that repels aluminium cans into a separate skip.



Both steel and aluminium are melted down to make new products. Aluminium is generally used to make new drinks cans whilst steel can be used for anything from bridges to paperclips!



The contents of your brown bin is sent to a Materials Recycling Facility (MRF) where it is sorted into different materials.

## Cartons



Cartons are removed by hand then baled and sent for recycling. The plastic and foil components are used for a variety of new items and the cardboard is used in the corrugated bits of new cardboard.



## Plastic



Plastic items on the conveyor belt are sorted by infrared technology, a system that identifies the type of plastic and uses jets of air to separate them into different skips before they are baled. They are ground up before being reprocessed into new products. Plastic is a very versatile material - what started out as a plastic bottle could end up being a fleece. There are many other products too including outdoor furniture, piping, sleeping bags or just simply another plastic bottle.



## CAN you?



Recycling aluminium cans uses just 5% of the energy that would be required to make new cans from scratch. By recycling one can, you could save enough energy to power a lightbulb for four hours.



# Green bin

## Plastic

Plastic is not compostable and can take hundreds of years to break down in a landfill site, so please do not put plastic bags or black sacks in your green bin. The same applies to cardboard. Inks, sticky tape and labels cause too many problems in the composting process so cardboard is not accepted in your green bin. Please put cardboard and plastics in your brown bin.



1



The vehicle arrives at the composting facility where the contents is weighed and tipped into a reception building. The load is inspected and if there is too much contamination it may be rejected and sent to landfill.

2



A load that passes the inspection is shredded and broken down into smaller pieces that will compost more quickly.

3



It is then placed in a tunnel for two weeks where it has to reach temperatures of 60°C for two consecutive days in order to kill harmful bacteria.

4



The compost is then transferred onto a maturation pad and put into long rows called windrows. It needs turning regularly and takes six to eight weeks until it's ready.

5



Finally, the compost is sieved to remove any other contaminants and sold to local farmers across Hertfordshire. It is spread onto fields to improve soil fertility for growing crops.



## Help in the kitchen

To make it easier to collect food waste in the kitchen, the council supplies kitchen caddies and compostable liners. These liners are the only compostable bags which are compliant with the council's green bin scheme. Unfortunately plastic bags and other liners such as supermarket biodegradable or compostable bags cannot be accepted - they will be considered as contamination and your bin will not be emptied. For more information please contact us (details on the back page).



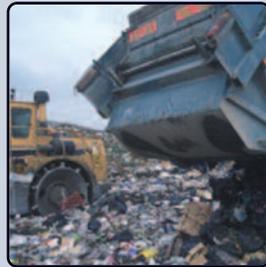
# Black bin



The contents of your black bin is either sent to Energy from Waste (EFW) facilities or to a landfill site.



EFW facilities burn waste to generate energy for local housing.



## Not much left to fill:

Space in landfill sites is running out and it's getting more and more expensive to dispose of waste in this way. New technologies are being developed but it's important we continue to improve recycling rates and divert waste from landfill.

At a landfill site the waste is dumped into a 'cell' in the ground and a large heavy vehicle drives over the material to compact it.

At the end of the day, a layer of soil is used to cover the waste to help reduce smells and litter, and prevent vermin and birds getting to it.

As it rots the waste produces greenhouse gases and toxic liquids. Both of these have to be monitored closely so as not to pose a hazard. Once a particular area of the site has been filled it is covered with a thicker layer of soil (the cap) and then landscaped and used as grassland or farmland.

## For more information about recycling in Hertsmere:



Visit: [www.hertsmere.gov.uk/recycling](http://www.hertsmere.gov.uk/recycling)

Email: [street.scene@hertsmere.gov.uk](mailto:street.scene@hertsmere.gov.uk)



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