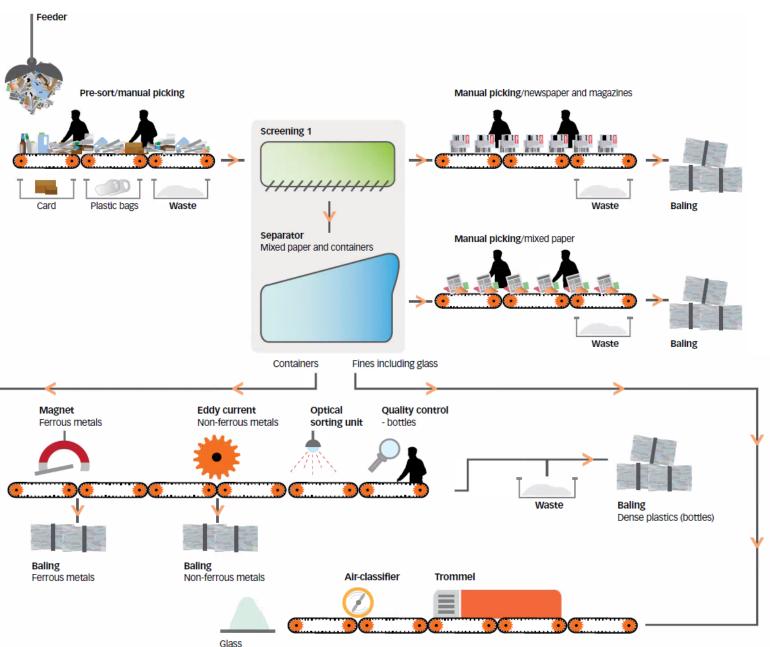
# WHAT HAPPENS TO YOUR RECYCLING



### The MRF process

Your recycling is collected and delivered to the Materials Recycling Facility (MRF).



The MRF sorts and separates the recycling into different valuable commodities for re-processing.



## Plastics: Natural HDPE bottles

#### **Examples:**

Milk bottles

#### **Overview:**

These items are sent for reprocessing into food grade recycled HDPE pellets in the UK.

The pellets are used to make new milk bottles with typically 30% recycled content.









# Plastics: Hard mixed plastics

#### **Examples:**

Large detergent bottles & plastic crates





#### **Overview:**

These items are supplied to a range of UK sorting specialists who sort the items into specific polymer types (such as PP & HDPE), then shred, wash and granulate the polymer to produce washed flakes.

The flakes are supplied to compounders who melt the flakes into pellets and send to manufacturers to make various rigid plastic products and packaging.











## **Plastics:**Natural PET Bottles

#### **Examples:**

Water bottles & fizzy drink bottles

#### **Overview:**

These items are supplied to PET re-processors in the UK, who process the bottles to produce washed flakes and food grade pellets.

These flakes and pellets can be used to manufacture new PET packaging (bottles and trays).







#### **Examples:**

Coloured plastic bottles, food trays & yoghurt pots

# Mixed Plastic: Bottles, pots, tubs & trays



#### **Overview:**

These items are made up of different types of polymers and require further sorting so are supplied to Plastics Recovery Facilities (PRFs) in the UK.

The PRFs use optical sorting technology (Near Infrared) to sort the items into single polymer types.

Each sorted polymer stream is sent to individual re-processors for the different polymers (HDPE, PP, PET) to make washed flakes and pellets for use in the manufacture of a range of products and packaging.







### Metals: Steel Cans

#### **Examples:**

Baked bean cans & pet food tins

#### **Overview:**

The steel cans are sent to re-processors within the UK. The cans are melted in a furnace and can be poured into a casting to make a desired shaped or made into slabs which are rolled into sheet steel.

Any undesired material is either vaporised in the furnace or comes out as slag which is re-processed where possible.









#### **Examples:**

Fizzy drink cans

## Metals: Aluminium Cans

#### **Overview:**

The cans are sent to smelting plants in the UK and Europe, where they are shredded and de-lacquered to remove the paint and then melted in a furnace.

The molten aluminium is poured into ingots ready to be rolled or cast into new products.

Any undesirable materials are skimmed off as dross at the point of melting and re-processed for further use.



## Glass: Glass bottles & jars

#### **Examples:**

Wine bottles & jam jars

#### **Overview:**

Glass is delivered to the re-processors in the UK and sorted further into fines, cullet and non-glass.

Glass fines are used in the production of aggregate.

Glass cullet is blown into new bottles and packaging or can be used to create glass fibre construction materials.

Any non-glass materials is re-processed to remove further recyclables.















#### **Examples:**

Cereal boxes & envelopes

## Fibre: Mixed paper & card



Mixed paper and cards is processed in paper mills in the UK. Here the material will be pulped to release the paper fibres, which are then re-bonded to create new cardboard and card packaging products.

Any non-desirable material is used for energy recovery.









## **Fibre:** Cardboard



#### **Examples:**

Cardboard boxes

#### **Overview:**

The cardboard processed in paper mills in the UK, Europe and globally.

Cardboard is pulped to release the paper fibres, which are larger than those from non-corrugated card, and even more so than paper.

These are then re-bonded into new packaging products.