

MIXED RECYCLING - GLASS/CANS/PLASTIC BOTTLES

A Materials Recovery Facility (MRF) is a large factory where household recyclables are sorted into individual material streams, such as glass, plastic bottles and aluminium. After this process, the products are baled and transported for reprocessing.

1. **Delivery:** Recyclable materials arrive at our Materials Recovery Facility (MRF) where the collection vehicle empties the materials collected from households across Greater Manchester.



2. **Loading:** Materials are received and loaded into a 'hopper' where they begin the sorting process.



3. **Pre-Sort:** Materials are pre-sorted, any large non-recyclables including plastic bags and are removed and sent to landfill.



4. **Magnets:** Strong overband magnets remove the steel cans which can be reprocessed into new cans or other items, whilst other items continue on the conveyor belts.



5. **Glass breaker:** The glass breaker removes all mixed glass which is reprocessed into new glass or construction materials.
6. **Glass storage:** Glass is stored in large containers ready to be forwarded for recycling into new products.
7. **Eddy current separator:** A magnetic field is used to generate an electric current called an 'Eddy Current' in the aluminium. This current generates a secondary magnetic field in the aluminium that causes it to be pushed away from the other materials and separated. The aluminium is then also separated into foil/cans and is reprocessed into new cans or other aluminium items.

8. **Plastic Separator:** The plastic separator unit divides the remaining plastic into HDPE (High Density Polyethylene) and PET (Polyethylene Terephthalate).
9. **Baling:** Cans and plastics are baled using an automated baler.



10. **Recycling:** The bales are ready to be forwarded for recycling into new products.

