

## Blochairn Materials Reclamation Facility (MRF)



The council manages approximately 23,000 tonnes (per annum) of commingled dry mixed recyclables (CDR), collected by the council from the 'blue bin' recycling collection service. The CDR consists of the following materials:

- Newspapers & magazines
- Mixed papers
- Cardboard
- Polyethylene Terephthalate (PET) plastic bottles
- High Density Polyethylene (HDPE) plastic bottles
- Steel cans
- Aluminium cans
- Non-target material (off-takes – waste fraction)

### **MRF Plant Throughput & Treatment Process**

Blochairn MRF utilises a range of mechanical and manual treatment processes to separate CDR into individual material streams which are then marketed to generate income for the council.

The mechanical process involves separating material into differently sized fractions which are then further separated into 3-dimensional (e.g. plastic bottles, cans) and 2-dimensional (e.g. paper and cardboard) material. Overband magnets and eddy current separators

separate steel and aluminium cans whilst optical sorters separate plastic bottles from the 3-dimensional material. A final clean-up of material is then undertaken by manual pickers.

The off-take waste products are sent for energy recovery to various processors to produce a Refuse Derived Fuel (RDF). RDF is a fuel produced by shredding and dehydrating municipal solid waste (MSW) with waste converter technology. Some off-take waste products are also sent to landfill.

## **Materials Marketing**

*Baled Aluminium Cans for Resale at Blochairn MRF*



Recyclables produced by the MRF are marketed by the council. These materials are typically purchased by the re-processing markets for further refinement and ultimately for use in the manufacturing industry as a replacement for virgin material.

## **Waste Minimisation & Quality Management**

There are many factors which influence the quality of recyclable materials extracted and the amount of off-take material produced at the MRF. Maintenance and calibration of processing equipment is vital to ensure an effective operation and the composition of input material is of critical importance since low quality material can both be difficult to process and degrades the overall quality of recyclables extracted.