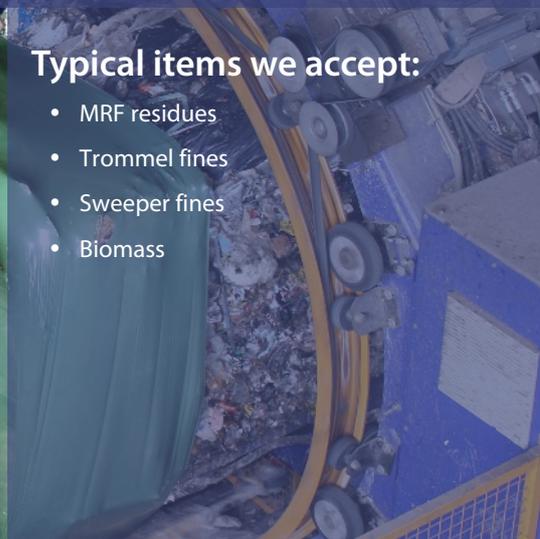




## Typical items we accept:

- MRF residues
- Trommel fines
- Sweeper fines
- Biomass



Waste materials which cannot be recycled or composted can often be used to generate energy. This is the recovery of renewable energy in the form of electricity and/or heat for the controlled incineration of residual waste. This offers a clean and renewable energy with reduced carbon emissions and less environmental impact than any other form of energy.

In 2010 a regulatory decision by the Environment Agency based on the UK Plan for Shipments of Waste, allowed the export of waste fractions for the first time. This gave Material Recycling Facility (MRF) operators access to the Waste-to-Energy (WtE) plants on the continent which could accept our mixed residues as fuel for Combined Heat and Power plants (CHP) and hence the term Refuse Derived Fuel (RDF) was coined.

## OUR RDF SOLUTION

We have invested heavily in the very latest technologies to develop one of the UK's most sophisticated facilities for processing RDF to generate energy. Consignments tipped at our Materials Recycling Facilities in Hackney and Barking are processed to extract any metallic or mineral items. The non-mineral residues are then bulked using bespoke, integrated cross wrap/baling plants into durable bales for safe and secure transportation to our partner of network of high efficient WtE processing facilities. Our system is fully compliant with all legal requirements (EA, TFS, Financial Bonds and Insurance).

At the WtE plants RDF is incinerated to produce electricity which is supplied to the local grid and steam for consumption by industrial and manufacturing businesses. The process is sustainable with a high energy yield. The combustion gases are only released after being cleaned by flue gas cleaning systems. The steam heats thousands of homes/businesses, the CO<sub>2</sub> provides fertiliser for greenhouses and horticulture. Ash residues are recycled and the remaining material is used in sustainable road and cement production. The residue recovery systems we have developed significantly reduce the carbon footprint of managing waste residues.

The waste we receive at our MRFs suitable for conversion into fuel will go through pre-treatment processes where any items that can be recycled are removed. We carry out ongoing chemical sampling tests to determine the quality of the fuel. We have a track record of producing results above expected due to our thorough pre-treatment separation techniques with inorganic content typically below recommended threshold levels.

Our digital data capture systems enable us to provide complete chain-of-custody reporting from collection to final destination. Electronic waste transfer notes are issued for all materials we manage in compliance with your Duty of Care obligations.

The McGrath Group is accredited to various trade bodies and accreditations including PAS 402:2013. We also operate an integrated management system which is certified against international standards OHSAS 18001 (Health & Safety), ISO 9001 (Quality) and ISO 14001 (Environmental) and ensures our products and services are supplied safely, consistently and sustainably.



## KEY FACTS

EWC Codes:  
19 12 10

The percentage we recycle:  
100%

Relevant regulations:  
1013/2006 (shipment of waste)

Average CO<sub>2</sub>(e) saving per tonne recycled:  
0.5kg (Defra)

