



# The European market for Refuse Derived Fuel continues to present opportunities for waste management companies in the UK explains Tara Donaghy of the McGrath Group

The amount of Refuse Derived Fuel (RDF) that the UK has been supplying to recovery facilities in mainland Europe has increased sharply since 2010. A focus on the quality of the RDF product is making it more widely accepted and helping more organisations in the UK achieve zero-to-landfill.

Refuse Derived Fuel or RDF is produced from waste that cannot be re-used or recycled, generally plastic and fibre waste with a high organic content that is then processed and baled for export. The RDF is shipped to facilities in mainland Europe where the energy is used to provide heat and light for local industry and housing, offsetting fossil fuels in the destination countries. There are currently no suitable waste-to-energy plants in the UK but there are environmental benefits to be had from exporting the wastes, notably the reduction of wastes going to landfill in the UK and the ability to transport the wastes by ship.

The RDF export market has been growing steadily since it was first allowed by the Environment Agency (EA) in June 2010 with the key drivers being the increase in UK landfill tax and the economic advantages of supplying facilities in mainland Europe. Currently, gate fees at continental facilities are deliberately set to undercut UK landfill costs, making export affordable. In fact the market has grown from less than 0.2 million tonnes in June 2010 to 2.4 million tonnes in 2014.

At the same time there has been a call from Defra for evidence that the waste hierarchy is followed in the production, use

and export of RDF and that only 'truly residual waste' is exported. This followed concerns that lower levels of

the waste hierarchy were being ignored.

The recent formation of the RDF Export Industry Group, of which the McGrath Group is a member, commissioned a report published in September 2015, looking at the issues and opportunities surrounding RDF. The report concludes that its export still offers considerable opportunities with the key to this being the flexibility it offers in terms of tonnage exported as well as the resulting reduction in the amount of waste sent to landfill and favourable carbon emission figures compared to processing the fuel in the UK.

The quality of the product is key. Ongoing sampling tests are carried out by McGrath to provide exact information on the contents of the fuel. This is required by regulators for export purposes and has the added benefit of providing information on where adjustments can be made to improve the quality of the product. The quality of fuel produced at the McGrath Barking facility is high with inorganic content being well below recommended threshold levels. The process is highly regulated which is fully compliant with the standards required by the EA and their equivalents in destination countries, Trans-Frontier Shipment (TFS) certificates

that are required to track waste, Financial Bonds and insurance.

Significant amounts of waste are still being sent to landfill waste operators and skip hire companies can reduce landfill tax bills and enhance their customers' environmental performance by tipping residues at McGrath's MRFs at Hackney and Barking. A full audit trail is provided and an advanced report provides a full breakdown of net and gross carbon emissions as well as the destinations of customers' wastes by hierarchy categories i.e. re-use, recycling, recovery and disposal making it fully compatible with the Waste Regulations.

The McGrath Barking facility is well positioned for shipping RDF bales to the continent as its riverside location has two wharfs which can accommodate 100m vessels. The ability to use wharf facilities drastically reduces the number of trucks on the road. It can cater for vessels with a 1700 tonne capacity, which is the equivalent of over 50 trucks carrying RDF. With the facilities in place, it will not be long before they are able to load vessels of up to 2500 tonnes, possibly more.

McGrath has invested heavily in state-of-the-art technology for baling and processing waste residues suitable for energy production. The process is totally sustainable – using RDF as a fuel reduces the burden on natural resources and minimises emissions of CO<sub>2</sub> and landfill gas.