

A place for WtE in the UK

Tara Donaghy, Business Director of the McGrath Group, argues that there is a place for Waste to Energy in the UK but only for genuinely unrecyclable residual wastes.

The debate about the efficacy and probity of Waste-to-Energy (WtE) has heated up (pun intended) in recent years as more WtE plants have been developed and commissioned. There are now more than 90 facilities processing residual wastes into energy with a further 50 in-development.

In many ways this is a demonstration of the UK finally starting to catch-up with the approach that has been used throughout Scandinavia and parts of mainland Europe for over twenty years.

Energy from waste has a poor historical image in the UK. We have been very dependent on landfill and many of the early incinerators were disposal-only plants, which simply burned waste to reduce its volume. This historical image is persistent but outdated.

The McGrath Group specialises in processing refuse derived fuel (RDF) and has been supplying materials to recovery facilities since 2011. As early adopters of this technology, we understood that the process would divert more of the residual wastes from landfill and provide valuable low carbon energy.

Waste consignments tipped at McGrath's MRF in 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 Waste to Energy facilities. The system is fully



Tara Donaghy, Director of the McGrath Group

compliant with all legal requirements (EA, TFS, Financial Bonds and Insurance).

The technology whereby RDF and MRF residues are incinerated in a controlled fashion creating steam which provides heat and hot water for thousands of homes and businesses. Not only is new energy created but the ash residues also recycled with the remaining material used in sustainable road and cement production, acclaiming the entire process as vastly more sustainable than the previous last resort of landfill.

This developing WtE technology has still not been uniformly welcomed, far from it. A number of anti-incineration campaigns have been coordinated into the United Kingdom Without Incineration Network (UKWIN) established as far back as 2007 with the support of other Environmental Groups such as Friends of the Earth, with all increasingly vocal in their opposition to the WtE sector.

Their central argument is that most of the material currently incinerated in the name of WtE could in fact be recycled – a far more sustainable process. Indeed, many Local Authorities and waste companies, for reasons of cost and expediency send recyclable waste to WtE plants – as much as 80% according to a report published this year by Defra. Also, UKWIN contends

that the very act of incineration exacerbates climate change by releasing greenhouse gases. While the combustion gases are released only after being cleaned by flu gas cleaning systems, it is still estimated that incineration produces emissions equivalent to 250-600 kg CO₂e per tonne of waste processed, albeit this is offset by the fact that fossil fuels don't need to be burned.

While it is therefore difficult to argue with UKWIN's logic, we do believe there is a place for WtE technology but only for processing material streams that genuinely cannot be recycled in a viable manner. For example, our MRF in Barking produces residues, this is the waste that is left over when all the recycling possible has been done which consists of small items which are too small to sort into individual material streams. This generally means the environmental or economic costs of further separating and cleaning the waste are bigger than any potential benefit of doing so.

We have therefore welcomed the development of WtE technology in the UK as a way of reducing the considerable carbon footprint involved in this complex system.

However, we appreciate both sides of the WtE story and therefore rather than continuing with the current adversarial relationship we would recommend UROC members to find ways to work with UKWIN to lobby for greater regulation of the WtE sector.

The introduction of more testing/inspection of inbound consignments would ensure that only materials that cannot feasibly be recycled are processed.

Working together to improve such regulation can only benefit all involved in the ongoing WtE debate, ensuring that genuinely unrecyclable residual wastes are diverted from landfill for now and in the future.

