

15 November 2023 – Visit to the Energy from Waste plant, Great Blakenham



Led by **Siobhan O'Dell**, Community Liaison Manager for Suez; and

Sarah Clarke, Information and Education Manager for FCC Environment

Report by Daniel Wareing, Secretary of the Greenprint Forum

9 of us attended this visit which was arranged to give us an insight into certain aspects of waste management in the county of Suffolk.

First we received a talk from Sarah Clarke who told us about the Recycling Centres that FCC Environment operate on behalf of the Waste Disposal Authority, Suffolk County Council. There are eleven of them distributed around the county. [Recycling centres - Suffolk County Council](#)

As well as being places to which residents can bring their household waste and recycling, for recycling via any of 32 different streams for different categories of wastes, all 11 Recycling Centres also have a donation point at which items that may still have a usable life can be placed for reuse.

These items donated for reuse will then be checked for safety and if found to be safe can end up on sale in one of the two Reuse Shops run by the Benjamin Foundation at two of the Recycling Centres, those at Foxhall and Bury St Edmunds. [Stores \(benjaminfoundation.co.uk\)](#)

Whilst the Recycling Centres themselves operate on the basis of booking in advance, anyone can visit the Reuse Shops anytime during their opening hours without having to book their visit.

Then we were kitted out with Personal Protective Equipment ready for our tour of the Energy from Waste Plant led by Siobhan O'Dell. [SUEZ Suffolk \(suffolkefw.co.uk\)](#)

This EfW plant, located in Great Blakenham about 7 km north-west of the centre of Ipswich, is the destination for the waste placed by residents across the county into their bins for non-recyclable waste.

The facility has a capacity to receive up to 295,000 tonnes of waste per year, mostly domestic waste from all households across Suffolk as well as some waste from Norfolk and Essex, plus some business waste.

The system consists of two parallel lines. In order to ensure a reasonable consistency of the rubbish entering the furnaces, waste discharged by articulated lorries or refuse collection vehicles is mixed mechanically by grabber cranes prior to being discharged into hoppers which feed the furnaces.

The steam produced by the combustion of our rubbish drives two turbines with a maximum output of 26 MW. The EfW exports around 20 MW to the Grid, which is sufficient to power the equivalent of 40,000 homes (or a town approximately the size of Lowestoft).



The exhaust gases from the combustion are channelled through bag houses inside which are suspended fine filtration “socks” several metres long, through which the gases are forced to remove pollutants including NOx, CO, SO2, Hydrogen Chloride, TOCs and particulates prior to venting via the two chimneys which are 81.5 m tall. Monitoring of emissions is continuous and reporting of relevant emissions is made hourly and daily and published on their website a few days later: [SUEZ Suffolk | Emissions monitoring \(suffolkefw.co.uk\)](https://www.suffolkefw.co.uk) .

Whilst metals that enter the system are recovered at the end from the ash, it was stressed that the plant would prefer not to receive any metals as the process of combustion degrades the quality of the metals. Materials of mineral original e.g. ceramics, tiles etc are also recovered from the ash and destined for use as aggregate.

A key message to share with everybody is therefore that, whilst metals are recovered from the ash at the end of this process, the combustion does scorch the metals meaning that the quality is affected, so **metals should always instead be recycled via the dedicated channels** available to use (our [kerbside recycling bins](#) for food and drinks cans and tins, aerosol cans, and foil) or the [Recycling Centres](#) (for all other metals e.g. scrap metal, saucepans, baking trays, bicycles, garden tools etc).



The plant also accommodates nature on site, with a pair of peregrine falcons making use of the exterior to raise their chicks, and the site also hosts a wetland habitat, wildflower meadow, pond, and several bee hives.

The site only exists to deal with the waste that we all generate that cannot have been avoided in the first place, or if unavoidable, recycled or composted instead.

Residual waste per household had been increasing, particularly during the Covid-19 pandemic when people spent much more time at home which can be seen in the 2020/21 and 2021/22 figures. The decline in residual waste in 2022/23 may be due to less home working, some improvement in reject levels of kerbside recycling, as well as the effects of high inflation and cost of living crisis since the end of 2022.

Financial year	2019/20	2020/21	2021/22	2022/23
Total residual household waste per household in Suffolk (kg/hh)	575 kg/hh	589 kg/hh	601 kg/hh	563.32 kg/hh

If you would like to book your own visit to the EfW for your own group of adults or for your school, you are welcome to do so via [SUEZ Suffolk | Book a visit \(suffolkefw.co.uk\)](https://www.suffolkefw.co.uk)

