



Energy from Waste in Lincolnshire



CASE STUDY

Moving towards a circular economy can see materials, or other benefits, being recovered from products that are no longer suitable for use rather than just being scrapped – paving the way for a more sustainable society.

That is why energy from waste (EfW) initiatives could prove so important as the energy transition gathers place, as illustrated by several projects in Lincolnshire. FCC Environment's EfW facility in North Hykeham has been operational for ten years and was borne from a 25-year partnership with Lincolnshire County Council.

The North Hykeham EfW facility has processed 1.78 million tonnes of waste since 2014, producing 830,000MWh of energy in return, as well as 215,000 tonnes of incinerator bottom ash. This ash contains the sort of metal that can be extracted, and the aggregate can then be used in the construction of roads.

The waste comes from the Lincoln area, as well as from five transfer stations in Boston, Gainsborough,

Grantham, Louth and Sleaford, arriving on 10 and 25 tonne collection vehicles. The facility is expected to save the council £30 million over its lifetime.

There are other projects, too, further showcasing the potential of a circular economy – such as Biotech4's anaerobic digestion plant in Hemswell. Anaerobic digestion involves microorganisms breaking down sewage or other organic waste material to make biogas energy.

Hemswell Biogas is capable of recycling and processing 140,000 tonnes of food waste and organic materials each year, producing bio-fertiliser that can be used on fields and crops, while also generating 17MW of renewable biogas.

[Credit: https://energysavingtrust.org.uk/generating-energy-waste-how-it-works/#:-:text=There%20are%20number%20of%20ways,digestion%20and%20landfill%20gas%20recovery.](https://energysavingtrust.org.uk/generating-energy-waste-how-it-works/#:-:text=There%20are%20number%20of%20ways,digestion%20and%20landfill%20gas%20recovery.)

<https://lincolnshire.fccenvironment.co.uk/lincolnshire-energy-from-waste/>

<https://www.lincolnshire.gov.uk/news/article/1806/energy-from-waste-plant-celebrates-10-year-anniversary>

<https://www.clean-tech.eu/>

<https://biotech4.co.uk/hemswell-biogas/>