Suffolk energy-from-waste facility Annual report



In the eighth year of partnership between SUEZ and Suffolk County Council,



... generating enough electricity to power // 5 / 6 / homes*.

* Based on the mean consumption of all domestic meters in the East in 2021 being 3,869.8 kWh (<u>www.data.gov.uk</u>). This figure will fluctuate as the amount of electricity used by households changes year on year.



Putting Suffolk's waste to good use

Suffolk County Council and SUEZ recycling and recovery UK work in partnership to dispose of all of Suffolk's household waste left after recycling.

SUEZ recycling and recovery UK Suffolk energy-from-waste facility, Lodge Lane, Great Blakenham, Suffolk IP6 0JE

in numbers

INPUTS

Waste processed

Municipal waste 234,579 tonnes

Commercial waste 48,459 tonnes TOTAL 283,038 tonnes

Electricity imported 617 megawatt hours

Raw materials consumed

Lime (hydrated) 2,139 tonnes Powder activated carbon 84 tonnes Urea

754 tonnes Diesel

206,710 litres¹

OUTPUTS 7

Energy generated and exported

Electricity (generated) 199,434 megawatt hours

Electricity (exported) 177,090 megawatt hours

Waste recovered

Bottom ash (aggregate) 48,055 tonnes Ferrous metals

6,336 tonnes Non-ferrous metals 3,127 tonnes

Waste disposed

Air pollution control residue 7,046 tonnes Waste diverted to landfill 5,826 tonnes²

SAVINGS 21,250 tonnes fossil fuels

saved by exporting 177,090 megawatt hours of electricity, compared to natural gas power stations

LOCAL ECONOMY £680,360 spent with Suffolk suppliers

• 47 staff • 1 apprentice

BIODIVERSITY

- 5 beehives onsite, looked after by local beekeepers
- 6 varieties of newly planted fruit trees and edible hedges
- 2 adult peregrine falcons successfully hatched
- 4 chicks in purpose-built nesting box

¹ Diesel is used in the start-up and shut down of the facility to support the preheating and controlled cooling of the furnaces.

² During the annual shutdown of the facility some waste is diverted to landfill. Shutdown is required for routine maintenance.

COMPLIANCE

Environment (mg/m ³)	Permit Limit Daily average per line	Line one Daily average	Line two Daily average
Particulates	10	1.53	1.03
Total organic carbons	10	0.6	0.19
Hydrogen chloride	10	3.68	3.62
Carbon monoxide	50	1.81	1.21
Sulphur dioxide	50	34.1	30.6
Oxides of nitrogen	200	180.7	180.5

The energy-from-waste process is one of the most tightly regulated industrial processes in Europe.

At the Suffolk facility, both SUEZ and the Environment Agency monitor the facility to ensure it operates within the conditions set out by the environmental permit. Flue gas is treated throughout the process to ensure compliance with the permit limits.

Further information is available on our website www.suffolkefw.co.uk

Health and safety

SUEZ actively promotes safe behaviour and awareness though the work of its dedicated health and safety teams, training courses, safety auditing and the Safety in Mind (SIM) program.



COMMUNITY AND VISITOR CENTRE

• 3 community liaison group meetings

The community liaison group is made up of residents and councillors local to the facility. It is a forum to both share any concerns about our operations and to celebrate successes. The group has been integral to the facility's success.

- 57 visits, including open days
- 23 education / school / children visits
- 34 adult groups
- 839 total visitors
- **397** adults
- 442 children

SPONSORSHIP

- The facility donated over £900 to local groups including:
 - Claydon High School to support young carers fundraising event
 - Henley Pre-School to help cover the running costs of the summer fete
 - ⇔ Raffle prizes for Somersham Primary School and Claydon Primary School to support their summer fete
 - ↔ Home Start Suffolk at Christmas
 - Stowmarket Food Bank Christmas Appeal

• 13 outreach events

- The Suffolk Show, working with others from the Suffolk Waste Partnership
- 11 activities with schools, including STEM workshops and careers events

42 colleagues completed a 'Day a year to volunteer'

Supporting projects ranging from refurbishment at Kinetic Science in Claydon, building a shed at a local pre-school and a camp for Girl Guiding UK