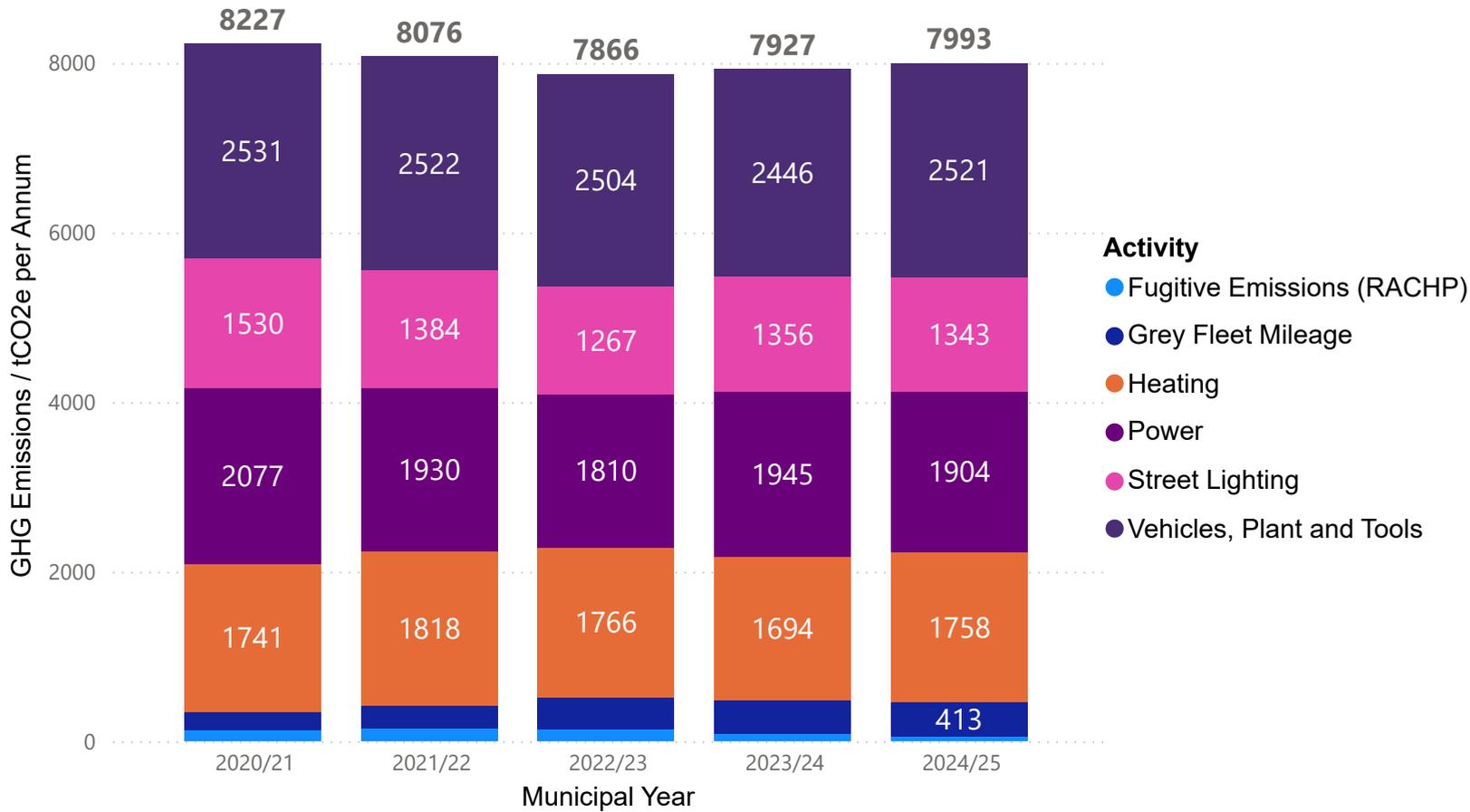


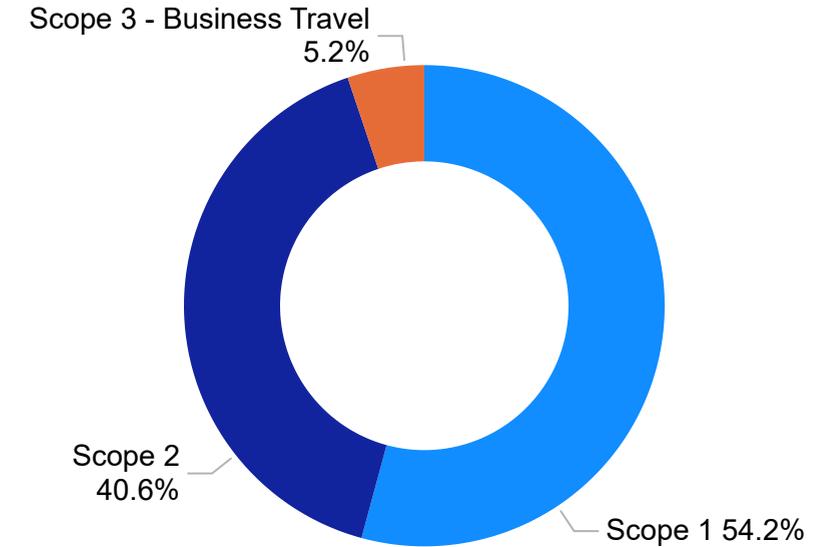
# Rotherham MBC NZ30 Greenhouse Gas Emissions: Municipal Years 2020 - 2025

## Greenhouse Gas Emissions within Scope of the Council's 'NZ30' Climate Change Target

Greenhouse gas reporting: conversion factors 2024, DESNZ.



## Emissions by Scope, 2024/25 Municipal Year



# 7993

2024/25 NZ30 Greenhouse Gas Emissions / tCO<sub>2</sub>e

• Scopes 1 and 2 and scope 3 emissions from business travel are the emissions considered within scope of the Council's 'Net Zero by 2030' climate change target, which emulates the scope boundary previously applied to government departments' mandatory emissions reporting. From the 2025/26 municipal year, departments no longer have to report their scope 3 emissions from business travel.

• Scope 1 greenhouse gas emissions are emitted directly by the Council's operational activity e.g., as flue or exhaust gases from heating Council buildings or driving Council fleet vehicles; they may also be released by accident e.g., as leaks of refrigerant gases from Refrigeration, Air Conditioning and Heat Pump (RACHP) equipment, in which case they are described as 'fugitive' emissions.

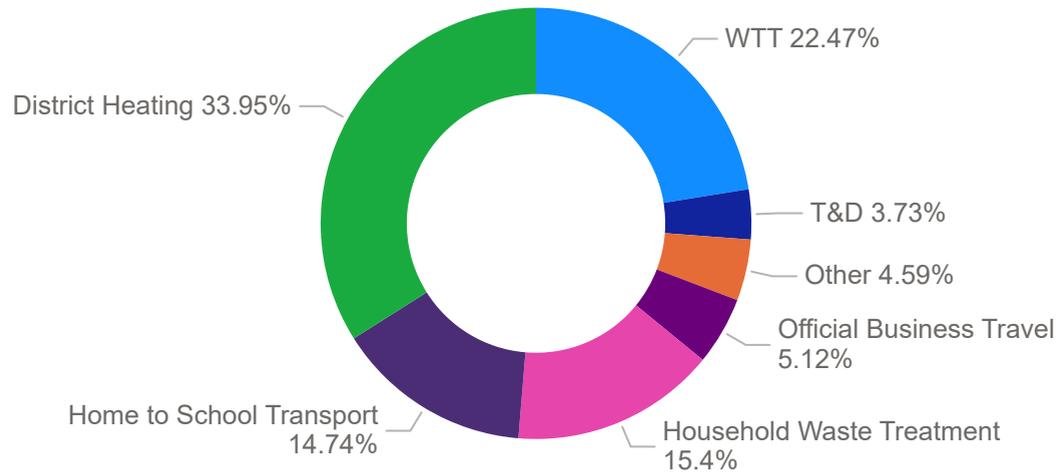
• Scope 2 emissions are from purchased energy: in the context of the Council's present emissions inventory, this refers exclusively to purchased electricity, principally for street lighting and diverse applications at Council sites, labelled 'Power' in the above chart.

## Rotherham MBC Scope 3 Greenhouse Gas Emissions: 2024/25 Municipal Year

Scope 3 greenhouse gas emissions are from sources which the Council neither owns nor controls, but which are a consequence of its activity e.g., business travel in employees' own vehicles, work done on the Council's behalf by a supplier or embodied in the production and transport of materials.

### Share of 2024/25 Scope 3 Greenhouse Gas Emissions by Source

*Activity-based scope 3 emissions only: excludes the majority of emissions under contract. Greenhouse gas reporting: conversion factors 2024, DESNZ.*



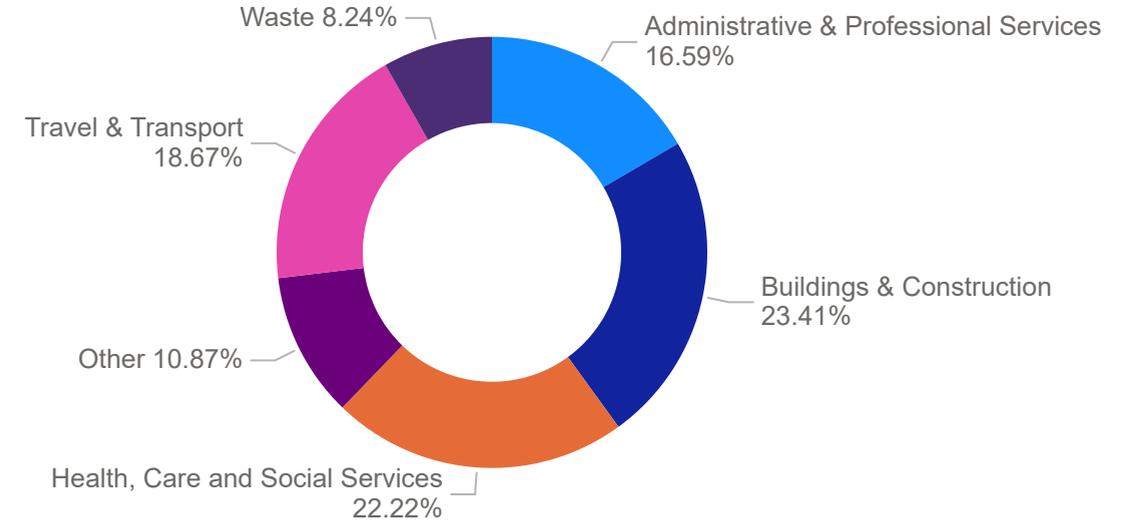
# 8,066

2024/25 Annual, Activity-Based Scope 3 Greenhouse Gas Emissions / tCO<sub>2</sub>e

- **WTT** indicates **well to tank** *i.e.*, greenhouse gas emissions from the production and supply of fuels. **T&D** indicates the greenhouse gas emissions associated with losses in the **transmission and distribution** of electricity.
- Where the Council holds sufficient data from its suppliers, it is possible to estimate scope 3 emissions from units of **activity** (e.g., units of energy, distance travelled, tonnes of material) in the same way as scope 1 and 2 emissions are calculated, by applying standard conversion factors.

### Share of 2024/25 Consumption-Based Emissions by SIC Code

*Suppliers' SIC codes are grouped into broad categories to aid interpretation. Conversion factors: Defra, 2025. UK and England's carbon footprint to 2022.*



# 85,033

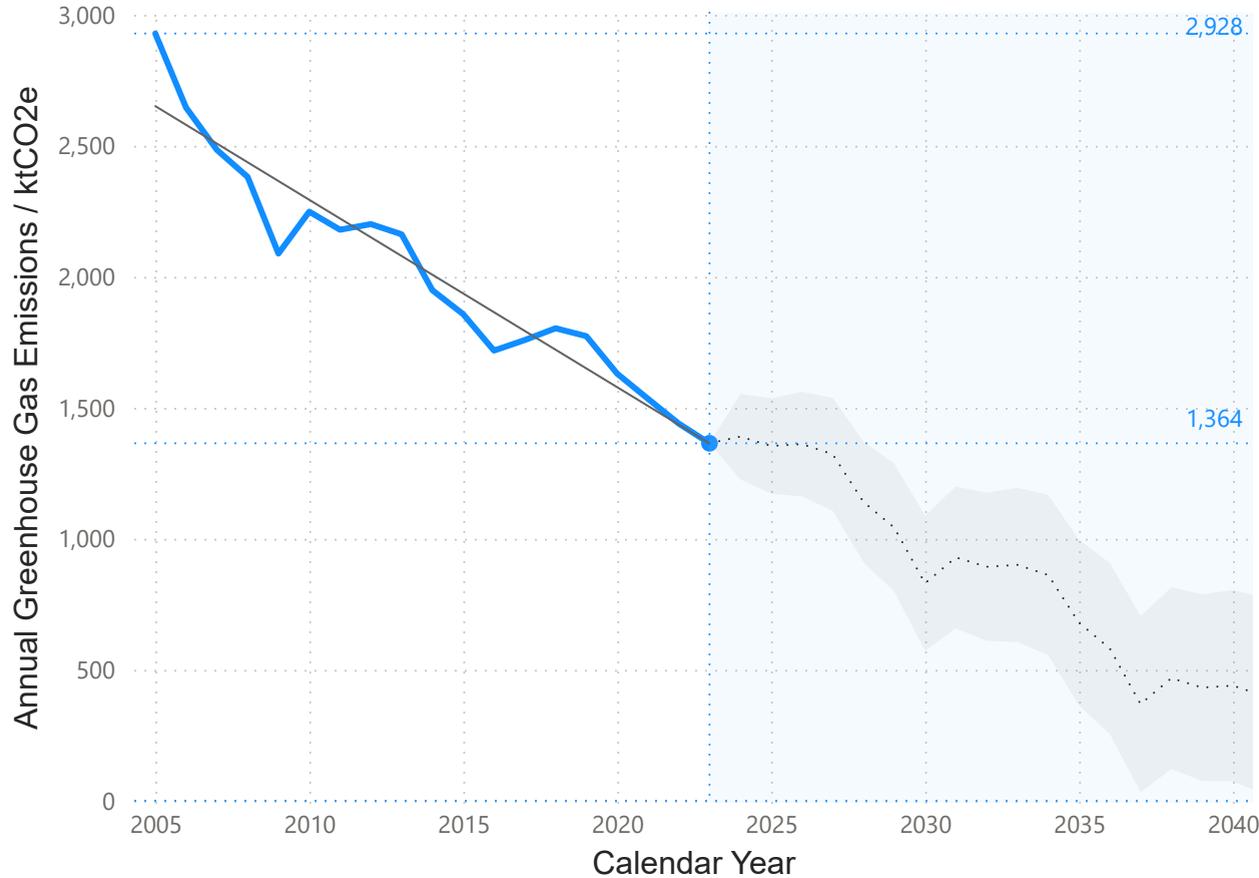
2024/25 Annual, Consumption-Based Greenhouse Gas Emissions / tCO<sub>2</sub>e

- Activity data are not available to estimate scope 3 emissions from the majority of the Council's procurement and commissioning activity. **Spend-based** conversion factors yield indicative estimates, which can help to prioritise data collection in carbon-intensive or high-spending sectors, for more accurate monitoring.
- Spend-based conversion factors for different sectors, as classed by SIC (standard industrial classification) codes, are published by Defra alongside [UK and England consumption accounts](#) and applied to the Council's annual procurement spend.

# Rotherham Metropolitan Borough Greenhouse Gas Emissions

## Rotherham Local Area Emissions, 2005 - 2023

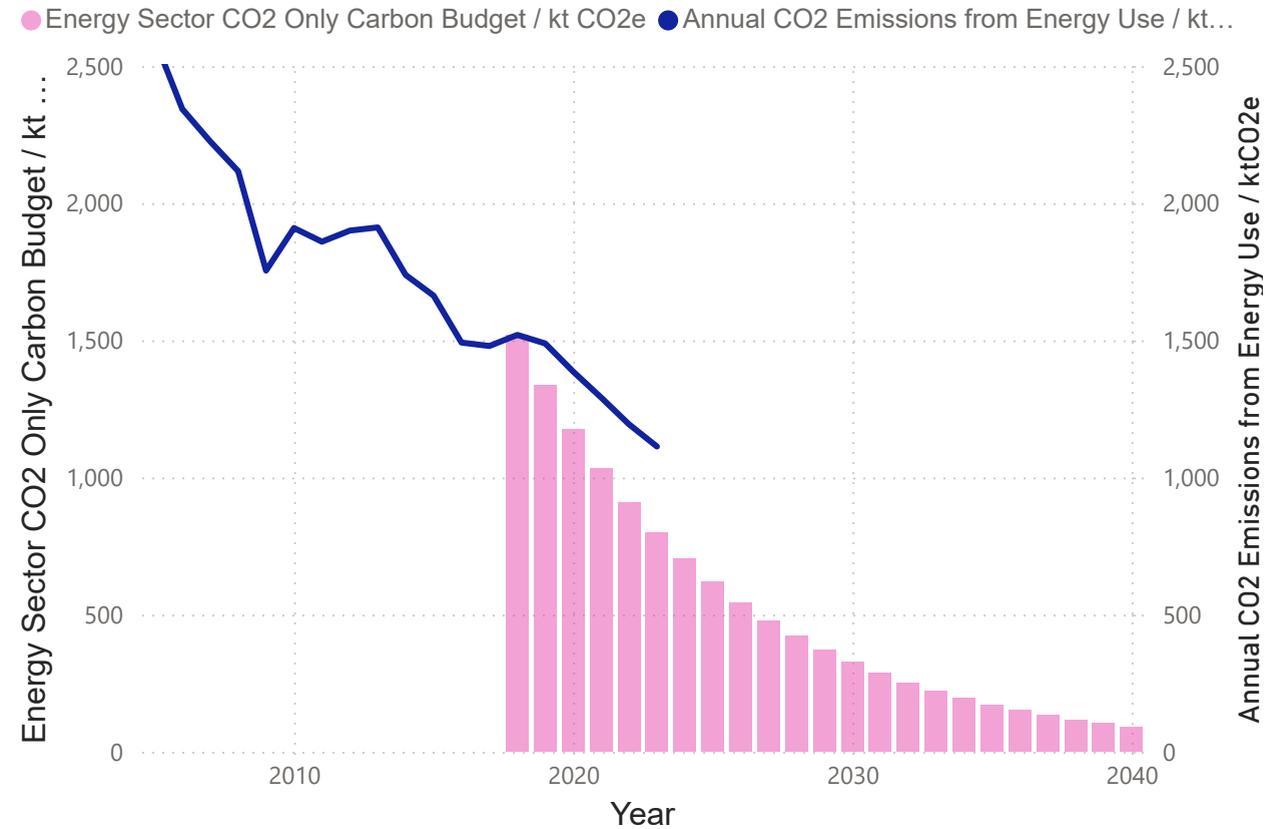
Source: DESNZ, 2025. UK local authority and regional greenhouse gas emissions statistics, 2005 to 2023.



Greenhouse gas emissions from sources and processes within Rotherham - including e.g., surface transport which may only pass through the Borough - have fallen **53.4%** over the last two decades. In its March 2020 policy statement *Responding to the Climate Emergency*, the Council declared its ambition for Rotherham to be a 'Net Zero Borough' by 2040. **2023** is the latest year for which local authority greenhouse gas emissions statistics are available - but it also marks the halfway point between 2005, the first year in the data series and 2040, when the Council's 'NZ40' target matures. *An indicative forecast, based solely on local area emissions to date, is also presented.*

## Rotherham Energy-Only Carbon Dioxide Emissions, 2005 - 2023, versus an Annualised, Recommended Carbon Budget

Source: DESNZ, 2025. UK local authority and regional greenhouse gas emissions statistics, 2005 to 2023.



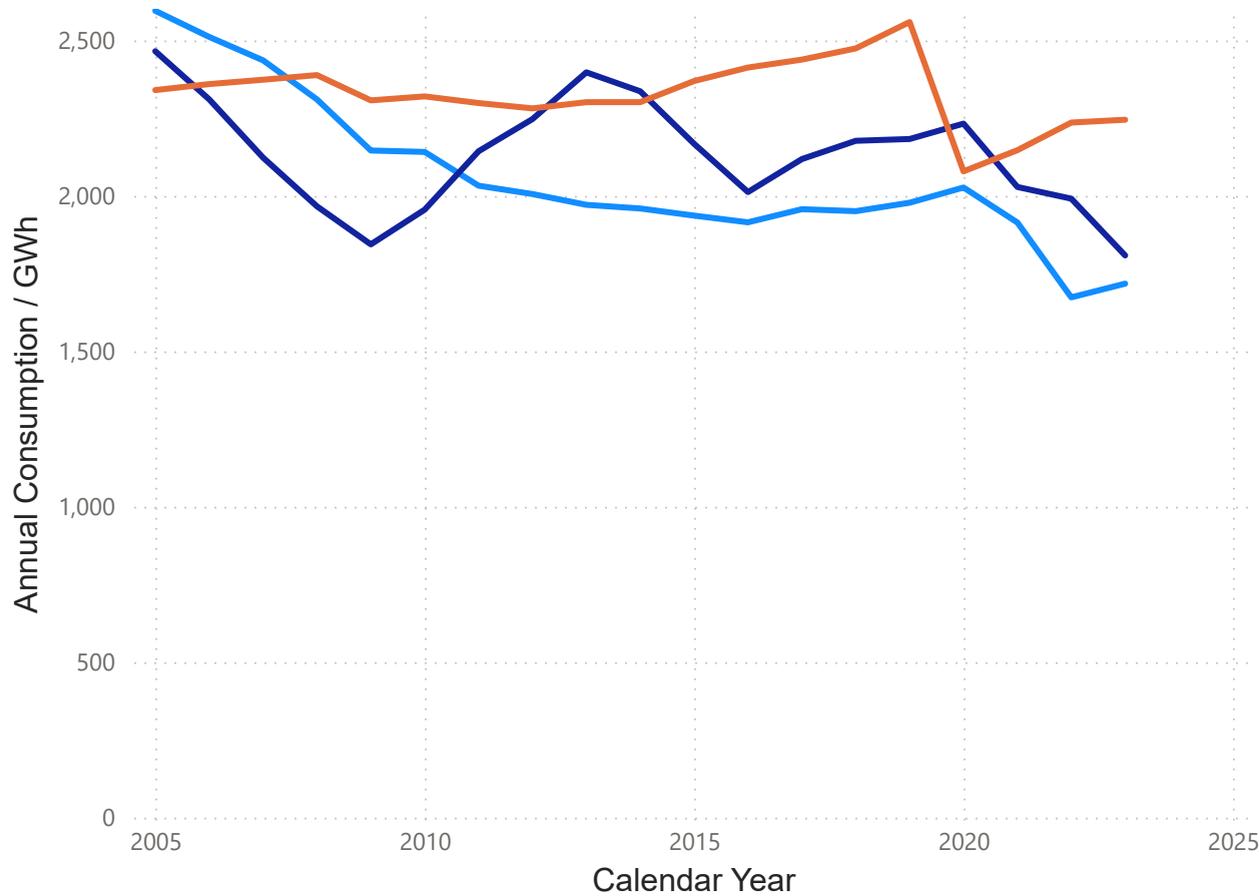
Recommended carbon budgets for local authorities, originally published by the Tyndall Centre for Climate Change Research (Kuriakose *et al.*, 2019), were a key reference for the Council as it adopted a 'Net Zero by 2040' (NZ40) climate change target for Rotherham Metropolitan Borough. Recommended carbon budgets were determined with reference to the Paris Agreement, by which 195 parties to the United Nations Framework Convention on Climate Change (UNFCCC) are committed to 'holding the increase in the global average temperature to well below 2°C above pre-industrial levels', translating this international commitment into climate action at the local scale.

# Rotherham Metropolitan Borough Total Energy Consumption

## Local Energy Consumption by Sector

Source: DESNZ, 2025. Total final energy consumption at regional and local authority level: 2005 to 2023.

Sector (groups) ● Domestic ● Industrial, Commercial and Other ● Transport

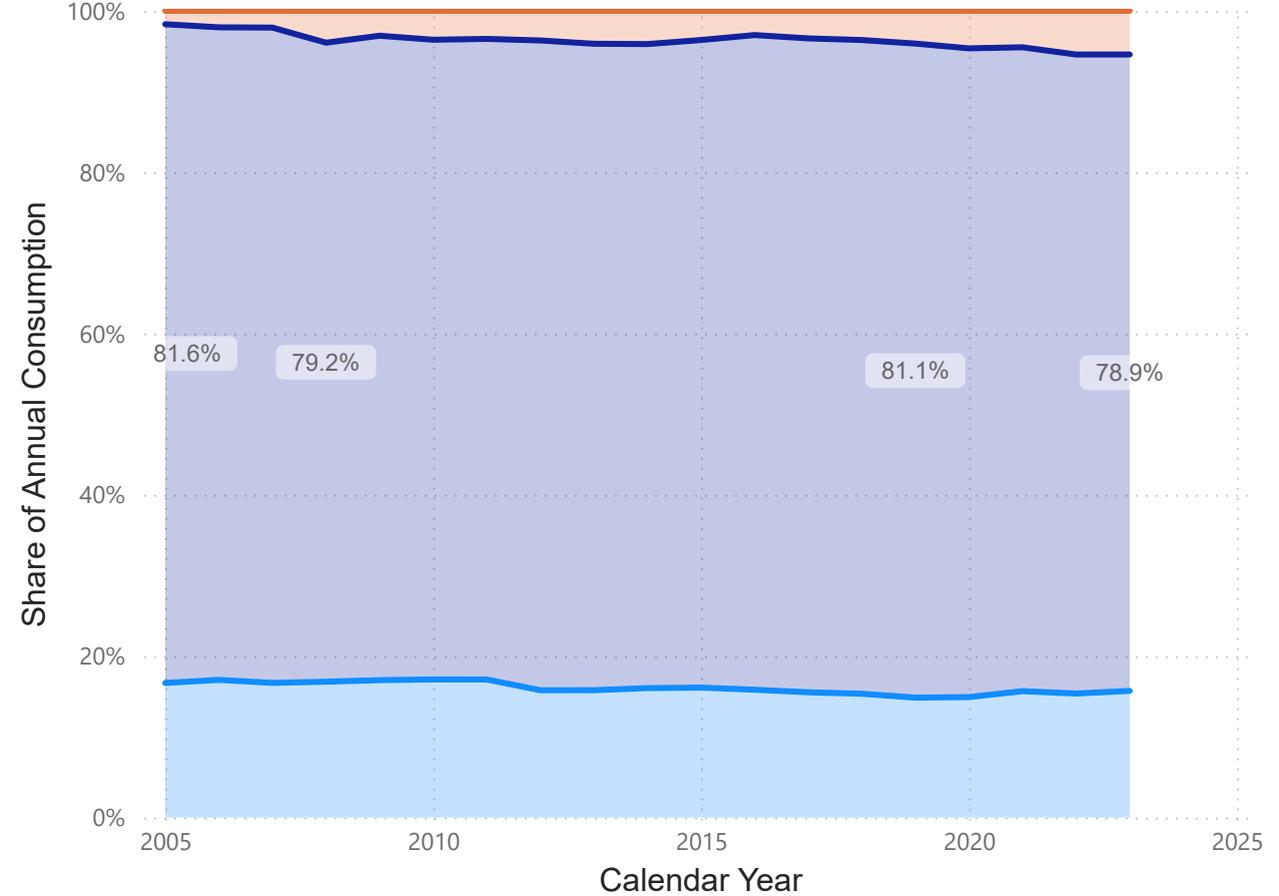


- Local authority energy consumption statistics have been amended for 2005, to enable comparison between all years of the dataset: in 2005, energy consumption by a 'single large industrial consumer' was assigned to the Rotherham local authority area, only to be excluded from every subsequent statistical release. Standard conversion factors were applied to NAEI (National Atmospheric Emissions Inventory) point source emissions data, to attribute a share of annual energy consumption to this single consumer, as imputed from the NAEI dataset.

## Share of Local Energy Consumption by Fuel Source

Source: DESNZ, 2025. Total final energy consumption at regional and local authority level: 2005 to 2023.

Fuel Source ● Electricity ● Fossil Fuels ● Other

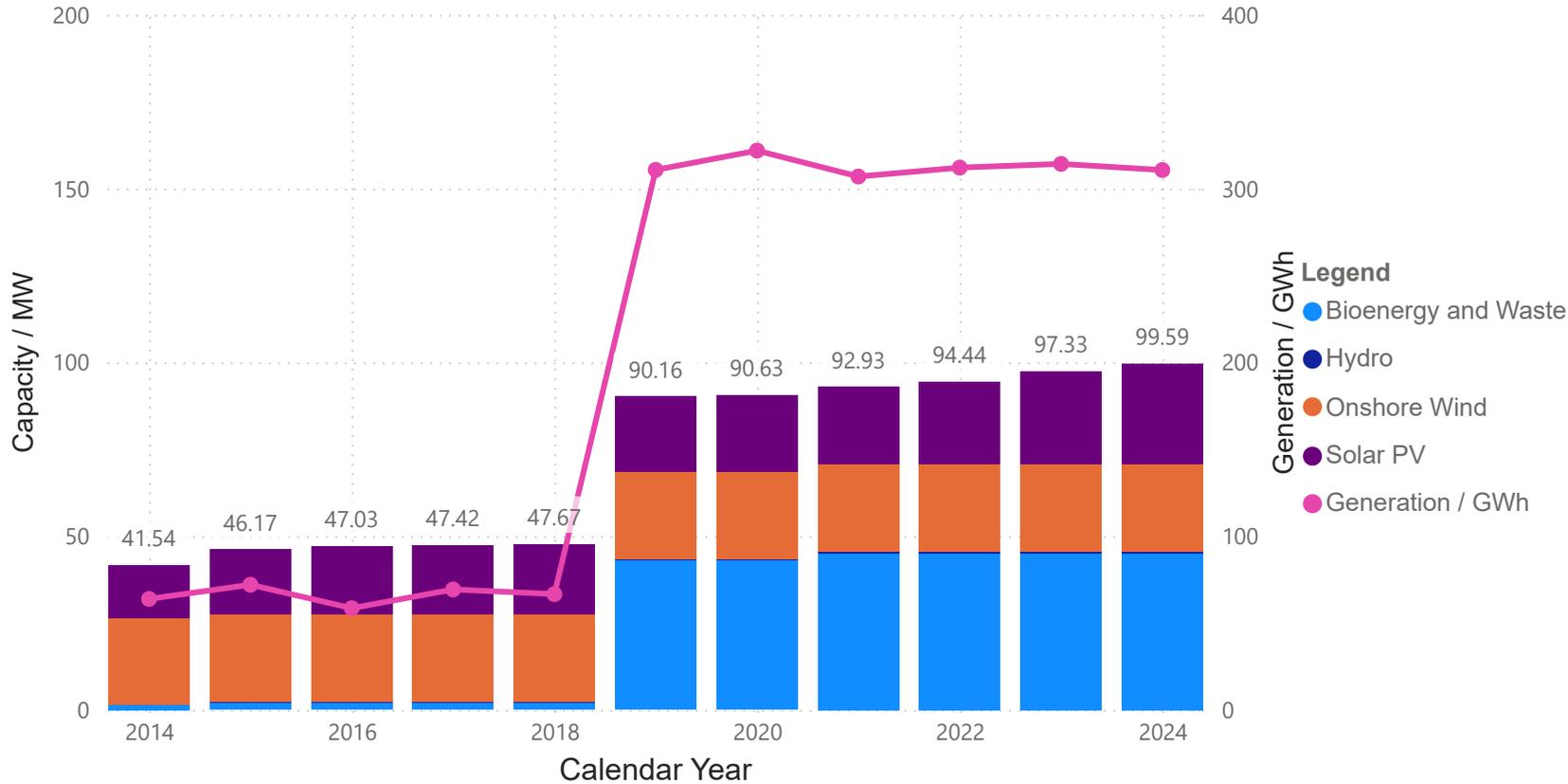


- For the last two decades, the share of local energy demand from fossil fuels has been consistent at **79-81%**: emphasising not only the twin challenges of electrification and electricity decarbonisation, but also the continuing importance of energy saving and energy efficiency as drivers of carbon reduction.
- Total energy demand in Rotherham was *ca.* 22% less in 2023 than at the beginning of the data series; in 2019, before the COVID-19 pandemic, it was 9.2% less.

# Rotherham Metropolitan Borough Renewable Energy Generation and Installed Capacity

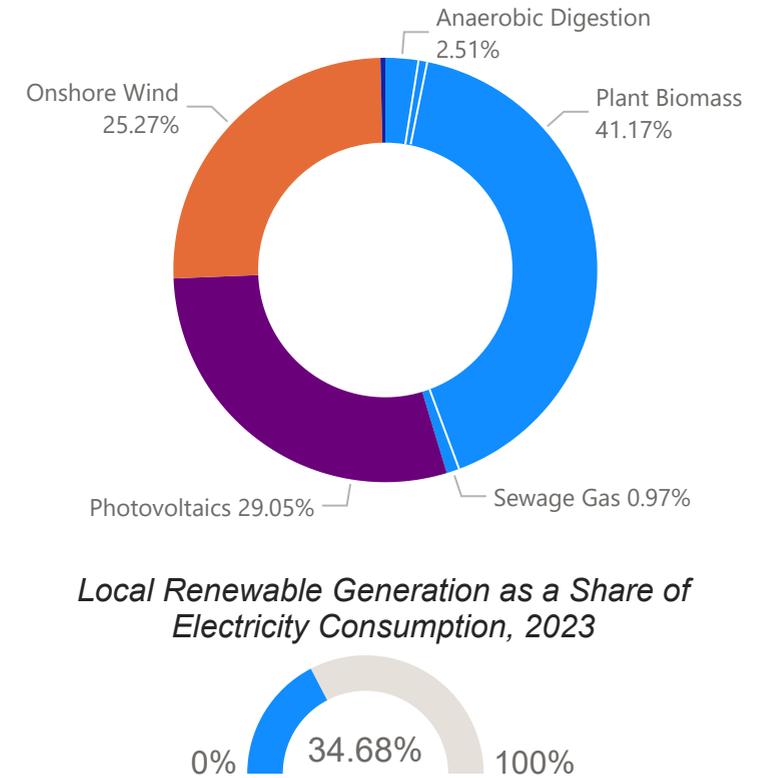
## Renewable Generation and Installed Capacity, 2014 - 2024

Source: DESNZ, 2025. Regional Renewable Statistics.

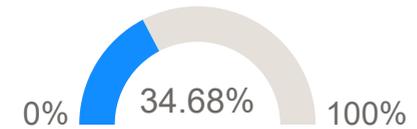


## 2024 Installed Renewable Capacity by Type

Source: DESNZ, 2025. Regional Renewable Statistics.



### Local Renewable Generation as a Share of Electricity Consumption, 2023



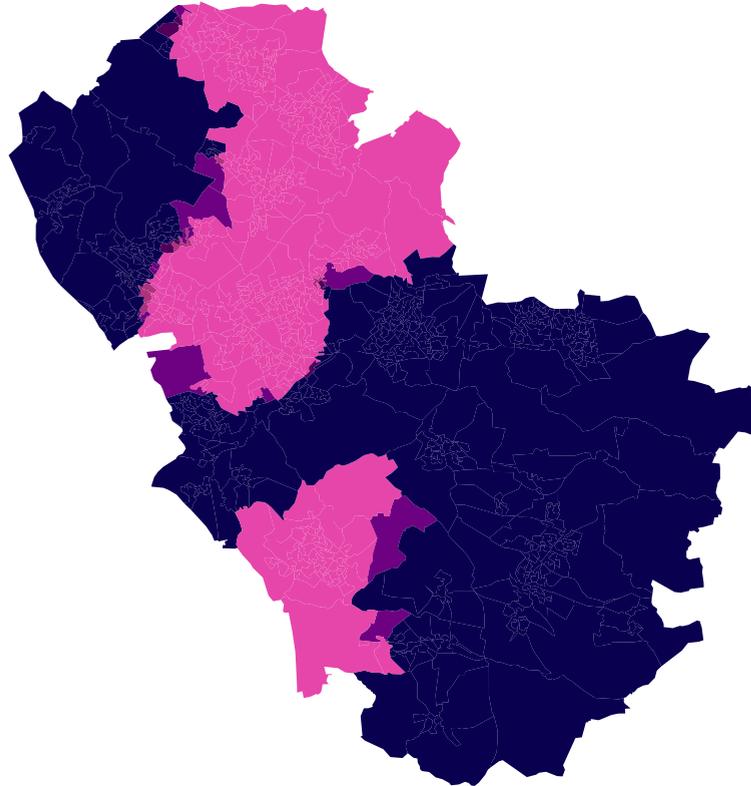
- Comparing *estimated* local renewable energy generation with consumption statistics for 2023 (the latest year for which both datasets are available) suggests that renewable energy generated in Rotherham was equivalent to approximately **one third** of all local electricity demand. Rotherham may not need to generate all its own renewable energy to achieve local climate change goals, but local generation has multiple advantages: transmitting and distributing renewable, low carbon electricity to where it is needed, is one of the severest constraints affecting electricity system decarbonisation. As of October 2025, renewable energy generating projects [*not including battery energy storage systems*] in Rotherham which were either awaiting construction or the determination of a planning application, had a combined, declared capacity of **180MW**.
- In 2024, there were 7,638 solar PV installations in Rotherham, with an average installed capacity and generated output of 3.79kW and 2.8MWh, respectively. Sites of this scale are typical of arrays sited on domestic rooftops. Such installations offer a direct saving on consumers' energy bills and can unlock other low carbon technologies, notably electric vehicles and air source heat pumps for home heating. Modelled datasets of domestic and non-domestic potential for rooftop solar PV in Rotherham, made available to the Council by Northern Powergrid through *Advanced Infrastructure's* LAEP+ Net Zero planning tool, suggest a theoretical maximum, combined annual generation output of 721.6 GWh from all suitable sites: equivalent to *ca.* 80% of local electricity demand in 2023.

# Rotherham Council Electric Vehicle Charging Provision

## 2024 Year End

Share of Residences per Census 2021 Output Area within 1.5 miles of their nearest RMBC EV charger

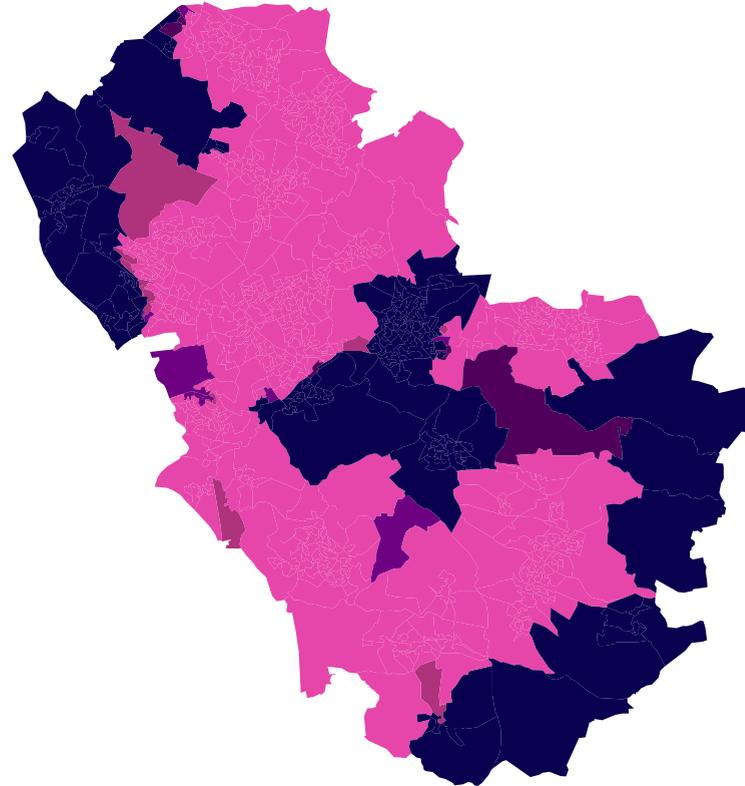
ResPC\_24 (bins) ● 0.00% ● 20.00% ● 40.00% ● 60.00% ● 80.00%



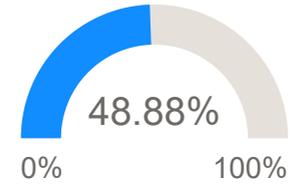
## 2025 Year End

Share of Residences per Census 2021 Output Area within 1.5 miles of their nearest RMBC EV charger

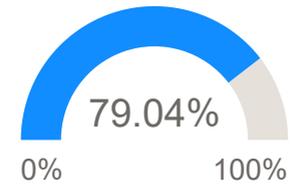
ResPC\_25 (bins) ● 0.00% ● 20.00% ● 40.00% ● 60.00% ● 80.00%



2024 Year End



2025 Year End



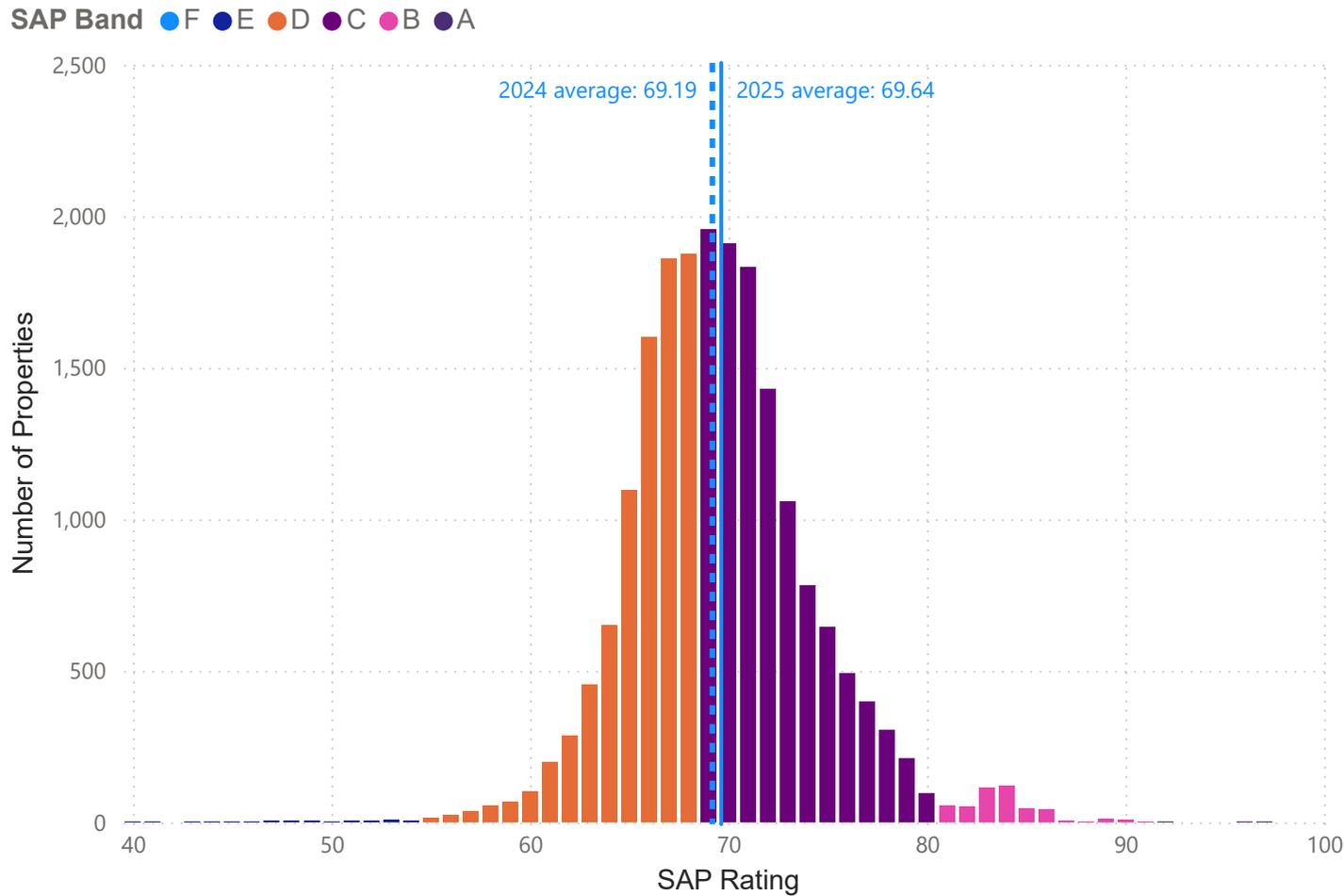
Above: Share of residences within 1.5 miles of their nearest RMBC electric vehicle charge point: change year on year.

Left: By Census 2021 Output Area (OA). There are 877 OAs in Rotherham, which may comprise between 40 and 250 households. OAs are classed in equal intervals of 0 - 20% of residences, 20 - 40% etc. - only the interval's lower bound is displayed in the legend.

As a result of new electric vehicle charge points (EVCP) installed in 2025, the Council has increased its coverage - as defined by the share of residences within 1.5 miles of their nearest Council charge point - from less than half of all residences in the Borough of Rotherham, to almost 80%. An objective of the Council's 2024-2027 [Rotherham Public Electric Vehicle Charging Infrastructure Strategy](#) is to increase coverage at the 1.5-mile-level to 95% of residences, by 2030. Since **99.66% of residences are within 3.0 miles** of the Council's EV charging network as extended in 2025, the Council has achieved its earlier strategic objective, that 95% of all residences should be covered at the 3.0-miles-level, by 2025.

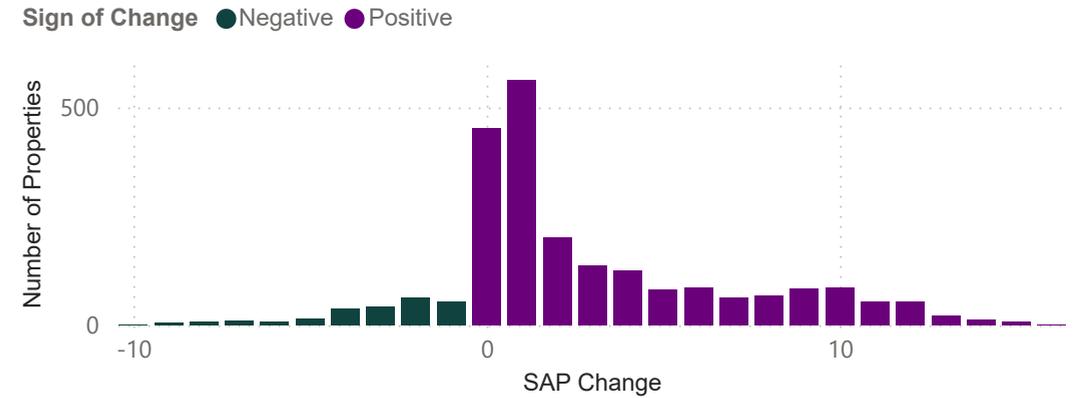
# Energy Performance of Rotherham Council Homes

## Profile of Rotherham Council Homes SAP Ratings as at 31 March 2025



## Change of SAP in Existing Properties, 2024-2025

*Excludes changes in SAP rating between -0.5 and 0.5*



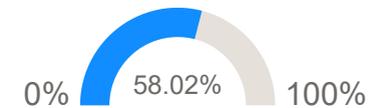
### Share of Council Homes by SAP Band

SAP Band	2024	2025
A	0.01%	0.07%
B	1.91%	2.27%
C	51.98%	55.69%
D	45.77%	41.69%
E	0.30%	0.27%
F	0.04%	0.02%

### Acquisitions and Disposals, 2024 - 2025

Acquisition or Disposal	Average of SAP
Acquisition	80.62
Disposal	69.13

*Council Homes Band C or Above (RdSAP9)*



From 31 March 2024 to **31 March 2025**, the share of Council homes whose energy performance was rated **band C or above** increased from 53.90% to **58.02%**. Over the same period, there was a net increase in the Council's housing stock of 63 properties: acquired properties' average SAP rating was 80.62, with the Council's housing acquisitions policy reflecting its target for all Council homes to be band C or above by 2030. Discounting acquisitions and disposals, an increase in SAP rating of more than 5 was recorded for ca. 550 properties. As of 31 March 2025, there remained 8,371 Council owned homes with energy performance less than band C.

*These figures do not account for changes in methodology from RdSAP9 to RdSAP10, which have depressed the energy performance band of some of the Council's housing stock. The Council's 2026-27 Housing Revenue Account (HRA) Plan notes the award of £8.8 million Warm Homes funding to improve energy performance of ca. 1,000 properties to at least EPC band C. An additional £41 million HRA funding is earmarked to improve the energy performance of ca. 9,300 remaining properties to at least band C, by 2030.*

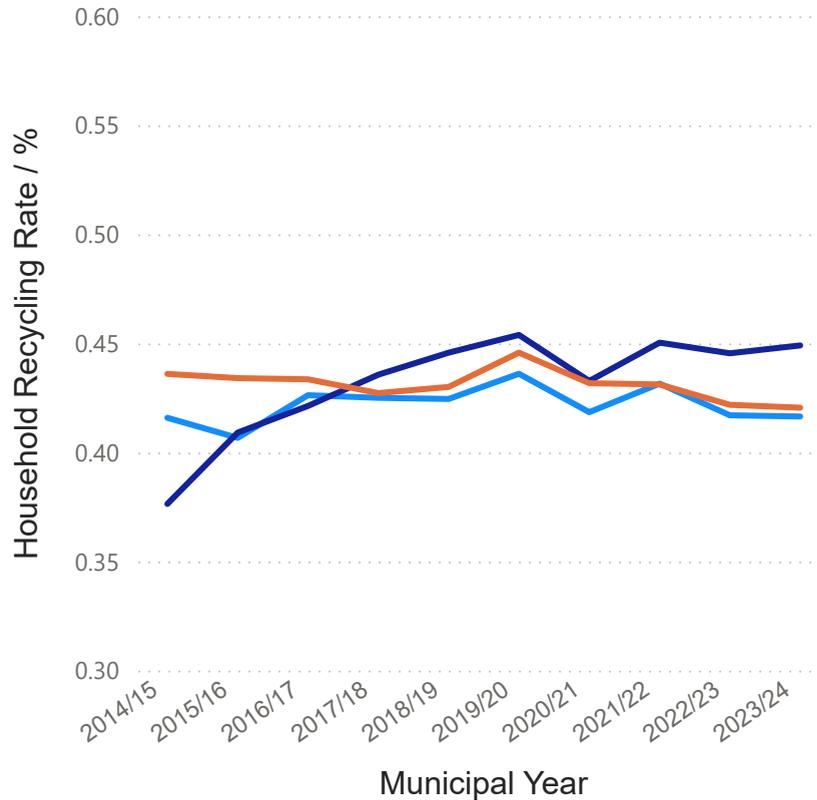
# Rotherham Household Waste

Comparing Rotherham with Yorkshire and the Humber Local Authorities and CIPFA Nearest Neighbours.

## Household Recycling Rate

Source: Defra, 2025. Local authority collected waste management - annual results.

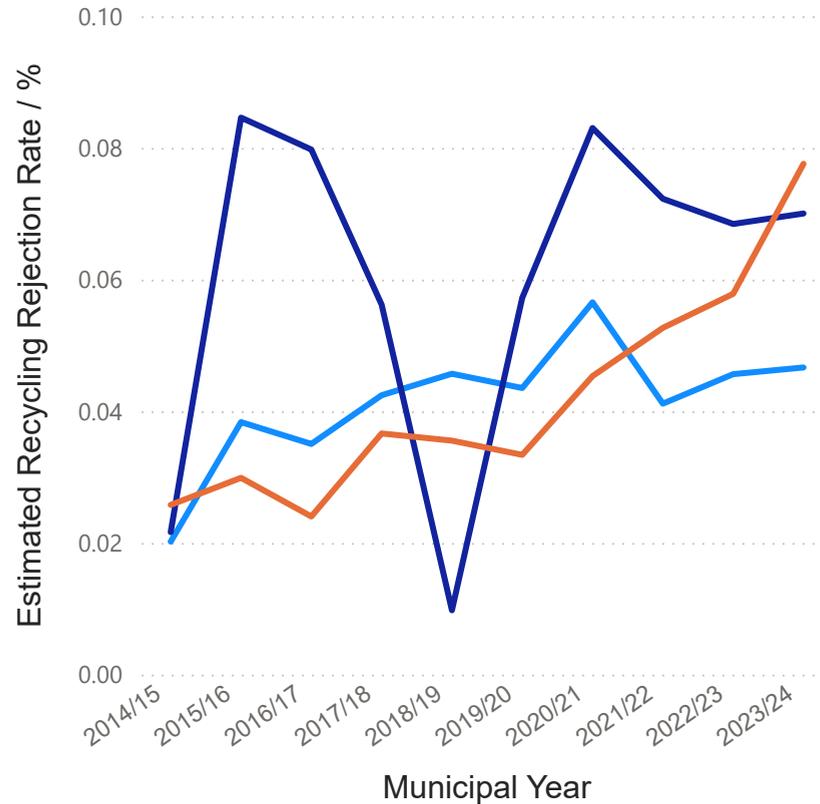
Comparator ● CIPFA Nearest ... ● Rotherham ... ● Yorkshire an...



## Household Recycling Contamination Rate: Rate of Estimated Rejects as a Share of Household Recycling

Source: Defra, 2025. Local authority collected waste management - annual results.

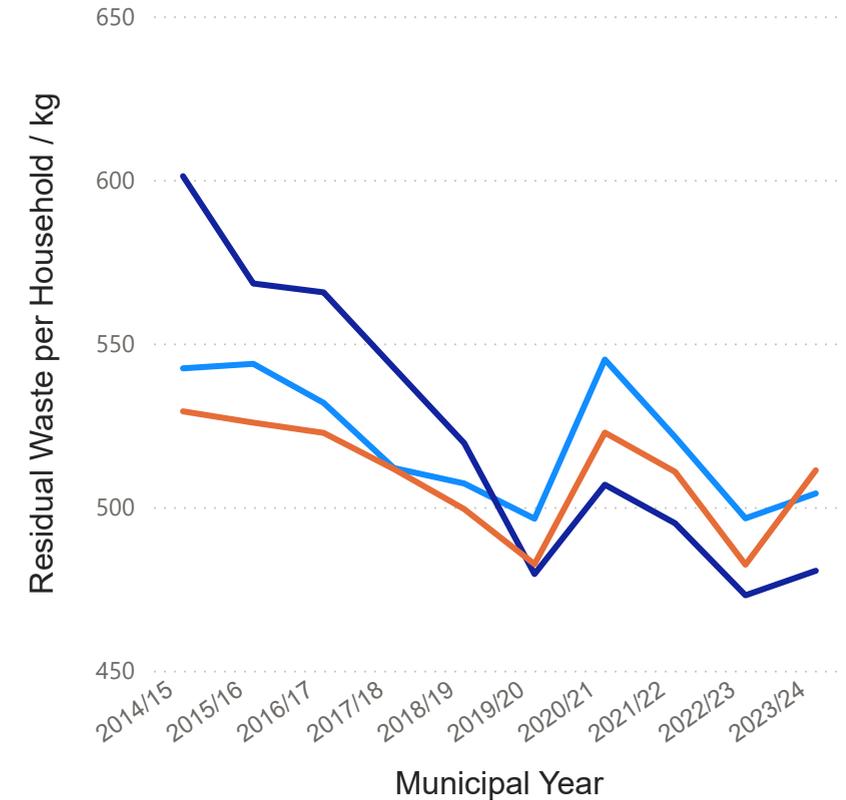
Comparator ● CIPFA Nearest ... ● Rotherham ... ● Yorkshire an...



## Household Residual Waste

Source: Defra, 2025. Local authority collected waste management - annual results.

Comparator ● CIPFA Nearest ... ● Rotherham ... ● Yorkshire an...



The above measures of household recycling rate; household recycling contamination rate, calculated as the rate of estimated rejects as a share of household recycling; and amount of residual waste per household, were used by the former Office for Local Government ('Oflog') to measure the performance of local authorities' household waste collection services and were co-opted as performance measures within the Council's climate change monitoring framework. Estimates of material rejected for recycling are adjusted to reflect recycling material which has been recovered from material disposed as residual waste, so may not accurately reflect the rate of household recycling contamination as it is collected from the kerbside, which has been a persistent issue affecting the performance of the Council's downstream recycling contracts.

## References

- Advanced Infrastructure. 2025. Rooftop PV Suitability Assessment Domestic Dataset. *Local Area Energy Planner Plus*. [Online]. [Accessed 15 December 2025]. Available from: <https://www.advanced-infrastructure.co.uk/datasets/domestic-pv-rooftop-deployment-potential>.
- Advanced Infrastructure. 2025. Rooftop PV Suitability Assessment Non-Domestic Dataset. *Local Area Energy Planner Plus*. [Online]. [Accessed 15 December 2025]. Available from: <https://www.advanced-infrastructure.co.uk/datasets/non--domestic-pv-rooftop-deployment-potential>.
- Department for Energy Security and Net Zero. 2025. *2005 to 2023 local authority greenhouse gas emissions dataset*. [Online]. [Accessed 15 December 2025]. Available from: <https://www.gov.uk/csv-preview/68653c7ee6c3cc924228943f/2005-23-uk-local-authority-ghg-emissions-CSV-dataset.csv>.
- Department for Energy Security and Net Zero. 2025. *Government conversion factors for company reporting of greenhouse gas emissions*. [Online]. [Accessed 15 December 2025]. Available from: <https://www.gov.uk/government/collections/government-conversion-factors-for-company-reporting>.
- Department for Energy Security and Net Zero. 2025. *Regional renewable statistics*. [Online]. [Accessed 15 December 2025]. Available from: <https://www.gov.uk/government/statistics/regional-renewable-statistics>.
- Department for Energy Security and Net Zero. 2025. Renewable Energy Planning Database (REPD): October 2025 (quarter 3). *Renewable Energy Planning Database: quarterly extract*. [Online]. [Accessed 15 December 2025]. Available from: <https://www.gov.uk/government/publications/renewable-energy-planning-database-monthly-extract>.
- Department for Energy Security and Net Zero. 2025. *Total final energy consumption at regional and local authority level: 2005 to 2023*. [Online]. [Accessed 15 December 2025]. Available from: <https://www.gov.uk/government/statistics/total-final-energy-consumption-at-regional-and-local-authority-level-2005-to-2023>.
- Department for Environment, Food and Rural Affairs. 2025. *Local authority collected waste management – annual results*. [Online]. [Accessed 15 December 2025]. Available from: <https://www.gov.uk/government/statistics/local-authority-collected-waste-management-annual-results>.
- Department for Environment, Food and Rural Affairs. 2025. *UK and England's carbon footprint to 2022: Annual greenhouse gas and carbon dioxide emissions relating to UK and England consumption*. [Online]. [Accessed 15 December 2025]. Available from: <https://www.gov.uk/government/statistics/uks-carbon-footprint>.
- HM Treasury. 2024. *Sustainability Reporting Guidance: 2024-25*. [Online]. [Accessed 12 December 2025]. Available from: [https://assets.publishing.service.gov.uk/media/66a2235afc8e12ac3edb048d/2024-25\\_Sustainability\\_Reporting\\_Guidance.pdf](https://assets.publishing.service.gov.uk/media/66a2235afc8e12ac3edb048d/2024-25_Sustainability_Reporting_Guidance.pdf).
- HM Treasury. 2025. *Sustainability Reporting Guidance 2025-26*. [Online]. [Accessed 12 December 2025]. Available from: <https://www.gov.uk/government/publications/sustainability-reporting-guidance-2025-26/sustainability-reporting-guidance-2025-26>.
- Hows, S.-M., Pearson, B. and Richmond, B. 2025. NAEI Points Sources 2023. *National Atmospheric Emissions Inventory*. [Online]. [Accessed 15 December 2025]. Available from: <https://naei.energysecurity.gov.uk/data/maps/emissions-point-sources>.
- Kuriakose, J., Jones, C., Anderson, K., Broderick, J. and MacLachlan, C. 2019. *Setting Climate Commitments for Rotherham: Quantifying the implications of the United Nations Paris Agreement for Rotherham*. [Online]. Tyndall Centre for Climate Change Research. [Accessed 14 November 2024]. Available from: <https://carbonbudget.manchester.ac.uk/reports/E08000018/>
- Paris Agreement. 2015. [Online]. 3156 UNTS 79, opened for signature 12 December 2015, entered into force 4 November 2016. [Accessed 15 December 2025]. Available from: [https://unfccc.int/sites/default/files/english\\_paris\\_agreement.pdf](https://unfccc.int/sites/default/files/english_paris_agreement.pdf).
- Rotherham Metropolitan Borough Council. ca. 2008-9. *Tackling climate change in the community*. [PowerPoint presentation]. [Online]. [Accessed 15 December 2025]. Available from: <https://moderngov.rotherham.gov.uk/documents/s35094/Climate%20Change%20Presentation.pdf>.
- Rotherham Metropolitan Borough Council. 2024. *Climate Emergency Annual Report 2023 – 2024, Appendix 3: Carbon Emissions Data Summary*. Cabinet 13 March 2024. [Online]. [Accessed 15 December 2025]. Available from: <https://moderngov.rotherham.gov.uk/documents/s145679/Appendix%203%20-%20Carbon%20Emissions%20Data%20Summary.pdf>.
- Rotherham Metropolitan Borough Council. 2024. *Rotherham Public Electric Vehicle Charging Infrastructure Strategy 2024-2027*. [Online]. [Accessed 15 December 2025]. Available from: <https://moderngov.rotherham.gov.uk/documents/s145590/App%201%20-%20EV%20Strategy.pdf>.
- Rotherham Metropolitan Borough Council. 2025. *HRA Business Plan, Rent Setting and Service Charges 2026-27*. Cabinet 15 December 2025. [Online]. [Accessed 15 December 2025]. Available from: <https://moderngov.rotherham.gov.uk/documents/b42614/Housing%20Revenue%20Account%20HRA%20Plan%20Rent%20Setting%20and%20Service%20Charges%202026-27%20Monday%2015-Dec-2025%2010.pdf?T=9>.