



Sustainability

Published date: 08/06/2026
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Version: 1.0

Greenhouse Gas Emissions Report Academic Year 2024-25

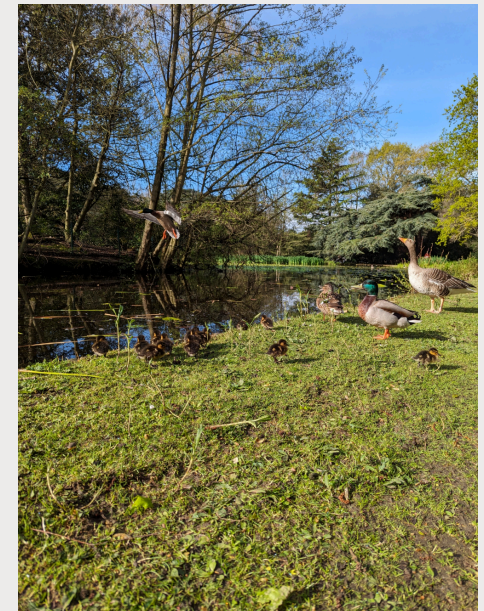
The University is committed to reducing its environmental impact and supporting the transition to a low-carbon future.

This report provides an overview of greenhouse gas (GHG) emissions across the University's operations and supply chain, highlighting key emissions sources, trends and progress against the baseline period.



Introduction

As a University, we have a long history of taking responsibility for our GHG emissions – starting with our first Carbon Management Plan (2011) and our first carbon reduction goal (40% reduction by 2020.) We smashed this goal; 60+ campus energy projects have been delivered, achieving a 49% reduction! Our Sustainability Policy was refreshed and republished in 2025, identifying our plan to create a Net Zero & Energy strategy. This Report demonstrates our improved monitoring practices, capturing a wider report of estimated emissions in our supply chain activities. Throughout 2026-27, we will continue to collaborate with our students, suppliers, and the wider sector, and develop our strategy for reducing emissions.



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Methodology

Reporting Standard

Emissions are calculated in accordance with the Greenhouse Gas Protocol and UK Government greenhouse gas conversion factors.

Baseline Methodology

Baseline emissions are calculated using the average annual emissions from academic years 2022-23, 2023-24 and 2024-25. These years were selected as they represent the most complete and robust emissions dataset currently available.

Reporting Boundary and Data Comparability

For Scope 1 and 2 emissions, reporting years back to 2018/19 have been included as the data is considered comparable across years. For Scope 3 emissions, and overall emissions totals which include Scope 3, only the most recent three years are presented, as supply chain data was not included in 2021/22, making earlier years not directly comparable. These three years provide the most representative post-COVID full emissions dataset.

Definitions

Scope 1 - Direct emissions from sources owned or controlled by the University.

Scope 2 - Indirect emissions from the generation of purchased electricity consumed by the University.

Scope 3 - All other indirect emissions that occur in the University's value chain.

Full-Time Equivalent (FTE): A standardised measure of student activity where one FTE represents the workload of a full-time student within one academic year.

tCO₂e (tonnes of carbon dioxide equivalent): a measure used to express the total climate impact of greenhouse gas emissions in a single unit by converting gases such as methane and nitrous oxide into the equivalent amount of carbon dioxide.

GHG Emissions Overview



2024-25 Total Emissions (tCO2e)

22.2K

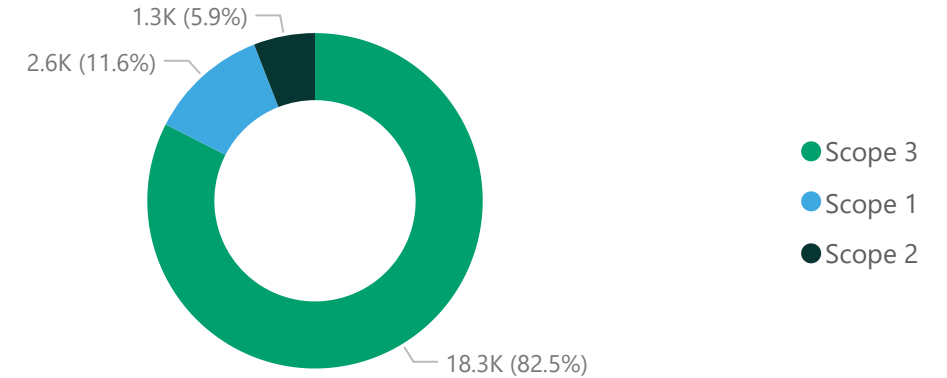
% vs Baseline

-12%

Baseline Emissions (tCO2e)

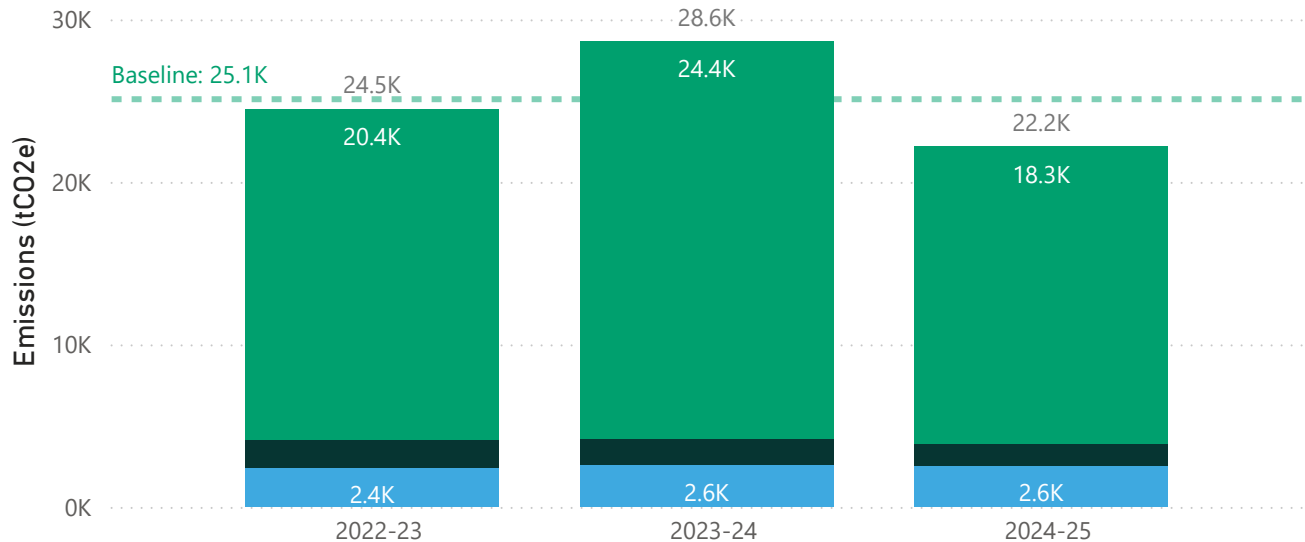
25.1K

2024-25 Emissions (tCO2e) by Scope



Emissions (tCO2e) and Baseline Emissions (3yr avg) by Academic Year and Scope

● Scope 1 ● Scope 2 ● Scope 3



Key Findings

The above figures show that the total greenhouse gas emissions for the 2024–25 academic year are **14% below the baseline average**.

As 2024–25 forms part of the baseline period, future reporting years will provide a clearer indication of long-term progress against this benchmark.

Scope 3 emissions continue to represent the largest proportion of the University's footprint.

Emissions Intensity 2024-25



Emissions (tCO₂e) per FTE

2.2

Emissions (tCO₂e) per m²

0.2

FTE Population (2024-25)

10.2K

Estate Area m² (2024-25)

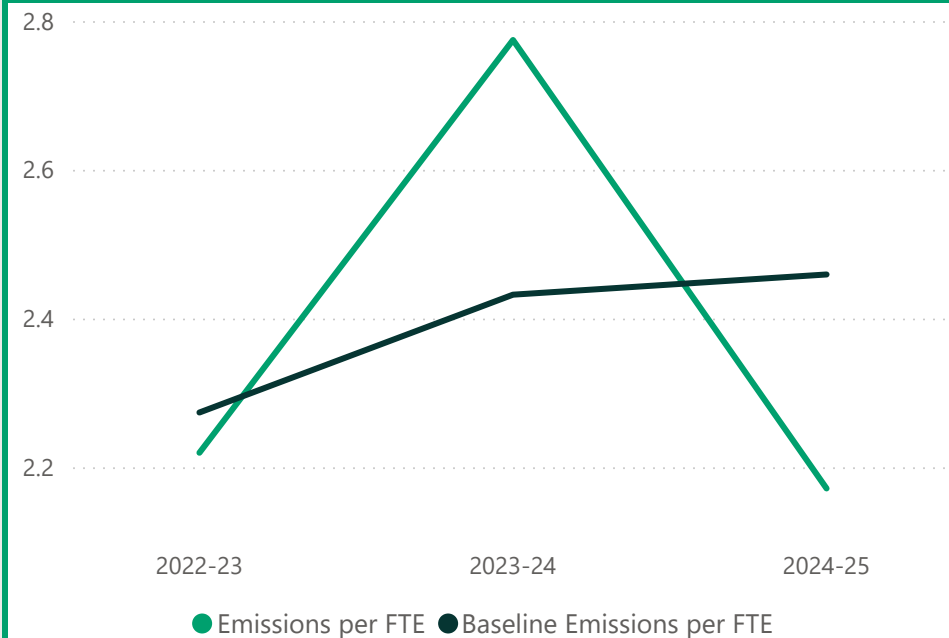
109.2K

Intensity metrics provide additional context to total greenhouse gas emissions by accounting for changes in student numbers and estate size. Emissions per FTE and per m² help assess environmental performance relative to the scale of the University's operations and support more meaningful comparisons over time.

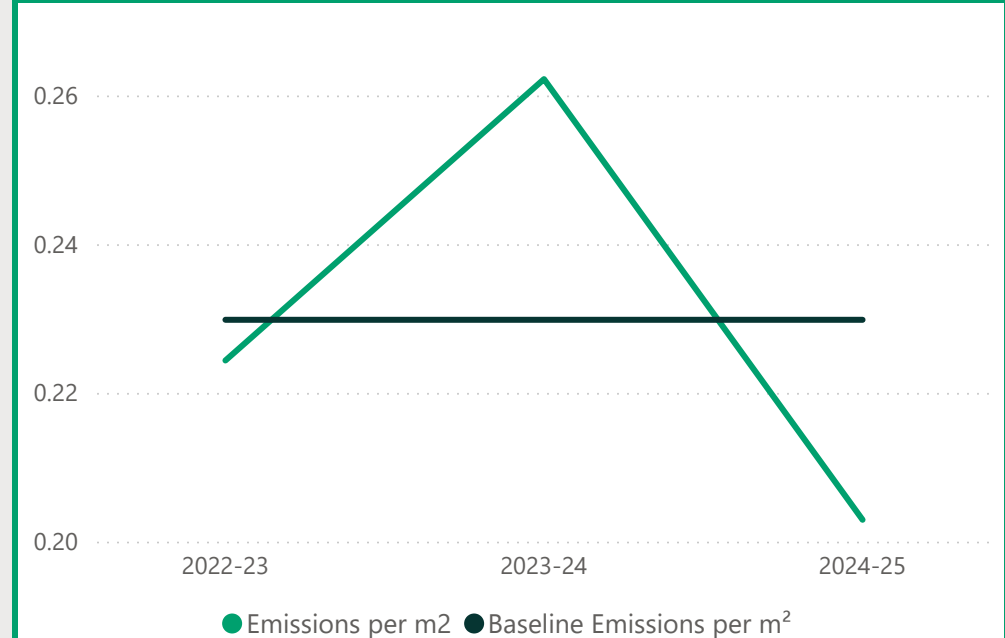
Understanding the Trends

While total emissions show the University's overall greenhouse gas footprint, intensity metrics indicate how emissions are changing relative to student population and estate area. Together, these measures provide a more complete picture of emissions performance over time.

Emissions per FTE Trend (tCO₂e/FTE)

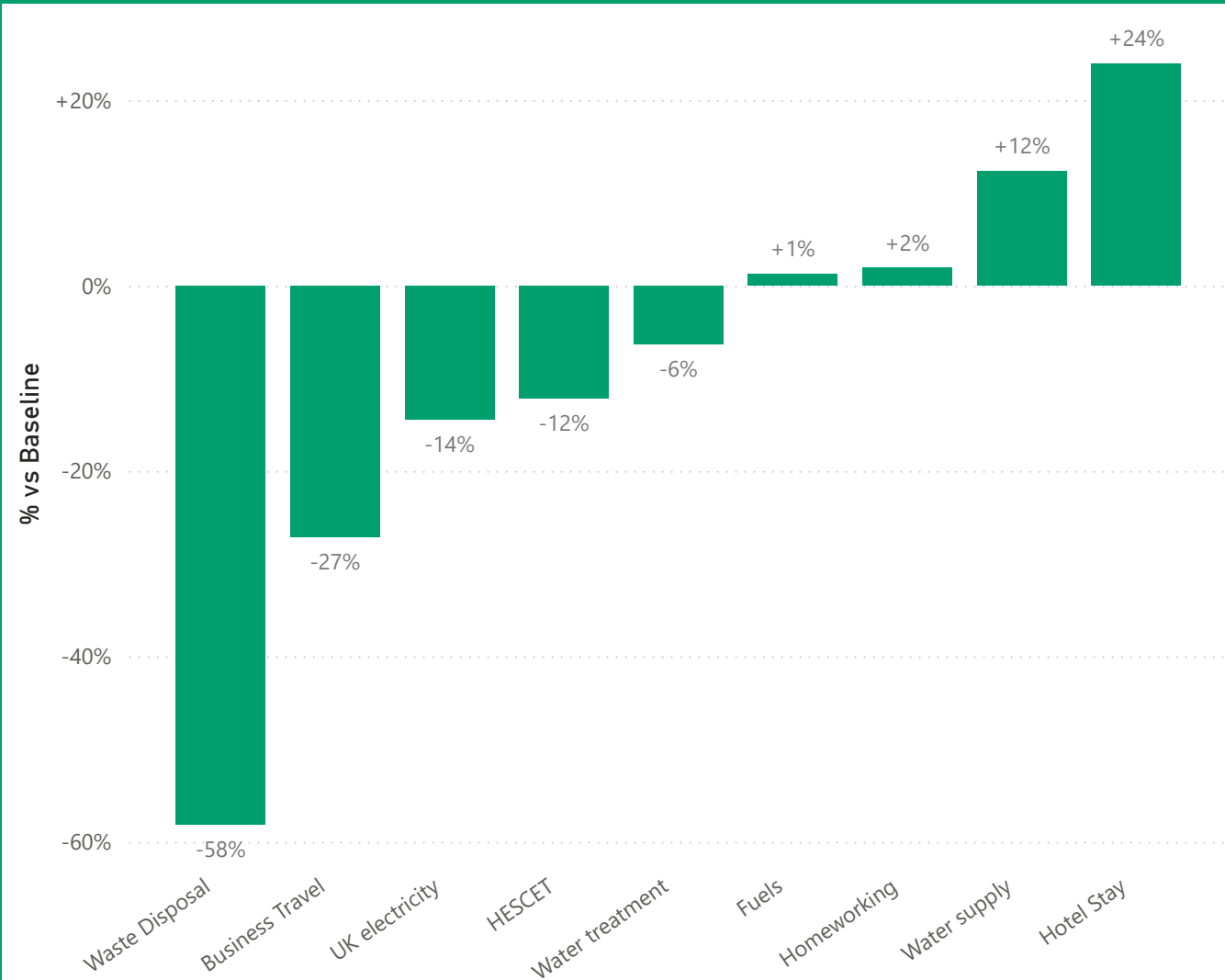


Emissions per m² Trend (tCO₂e/m²)



GHG Emissions Overview

Emissions Change by Category Compared with Baseline



Key Findings

Emissions Reduction Drivers

Total greenhouse gas emissions for the 2024–25 academic year are 14% below the baseline average. The largest reductions have been observed in waste disposal, business travel, purchased electricity, supply chain emissions reported through HESCET, and water treatment activities. These reductions have contributed significantly to the University's overall emissions performance relative to the baseline period.

Areas of Increased Emissions

Increases relative to the baseline have been observed in hotel stays and water supply emissions. These categories represent areas where emissions have risen despite the overall reduction in the University's greenhouse gas footprint.

Looking Ahead

While emissions have reduced overall, Scope 3 activities continue to account for the majority of the University's emissions. Ongoing efforts to improve operational efficiency, engage with suppliers, and reduce indirect emissions will remain important in supporting future emissions reductions.

Scope 1

Scope 1 Emissions (tCO₂e)
2024-25

2.6K

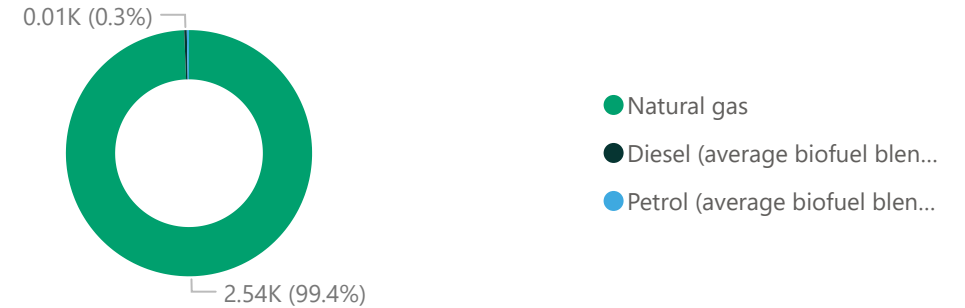
% vs Baseline

+ 1%

Baseline Emissions (3yr avg)

2.5K

Scope 1 Emissions by Source



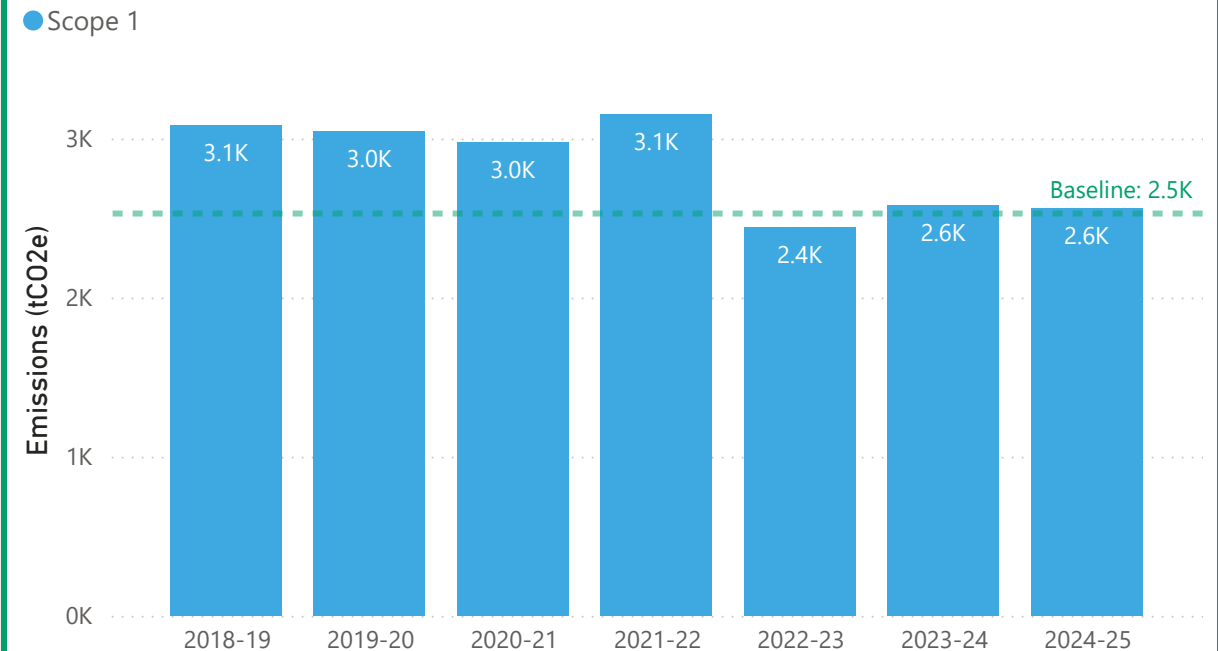
Key Findings

Scope 1 emissions remained broadly stable between 2023/24 and 2024/25. Emissions from natural gas consumption decreased slightly, reflecting a small reduction in gas usage across the estate.

This reduction was partially offset by an increase in diesel consumption within the university fleet, while petrol consumption decreased compared with the previous year. Overall, Scope 1 emissions increased by approximately 1% year-on-year, indicating that energy demand for heating and fleet operations remained relatively consistent.

Compared with the baseline year, Scope 1 emissions in 2024/25 were also around 1% higher (2,559 tCO₂e compared with a baseline of 2,530 tCO₂e), demonstrating that emissions from direct fuel combustion have remained relatively stable over time.

Scope 1 Emissions by Academic Year



Scope 2

Scope 2 Emissions (tCO₂e)

2024-25

1.3K

% vs Baseline

-14%

Baseline Emissions

3 year average

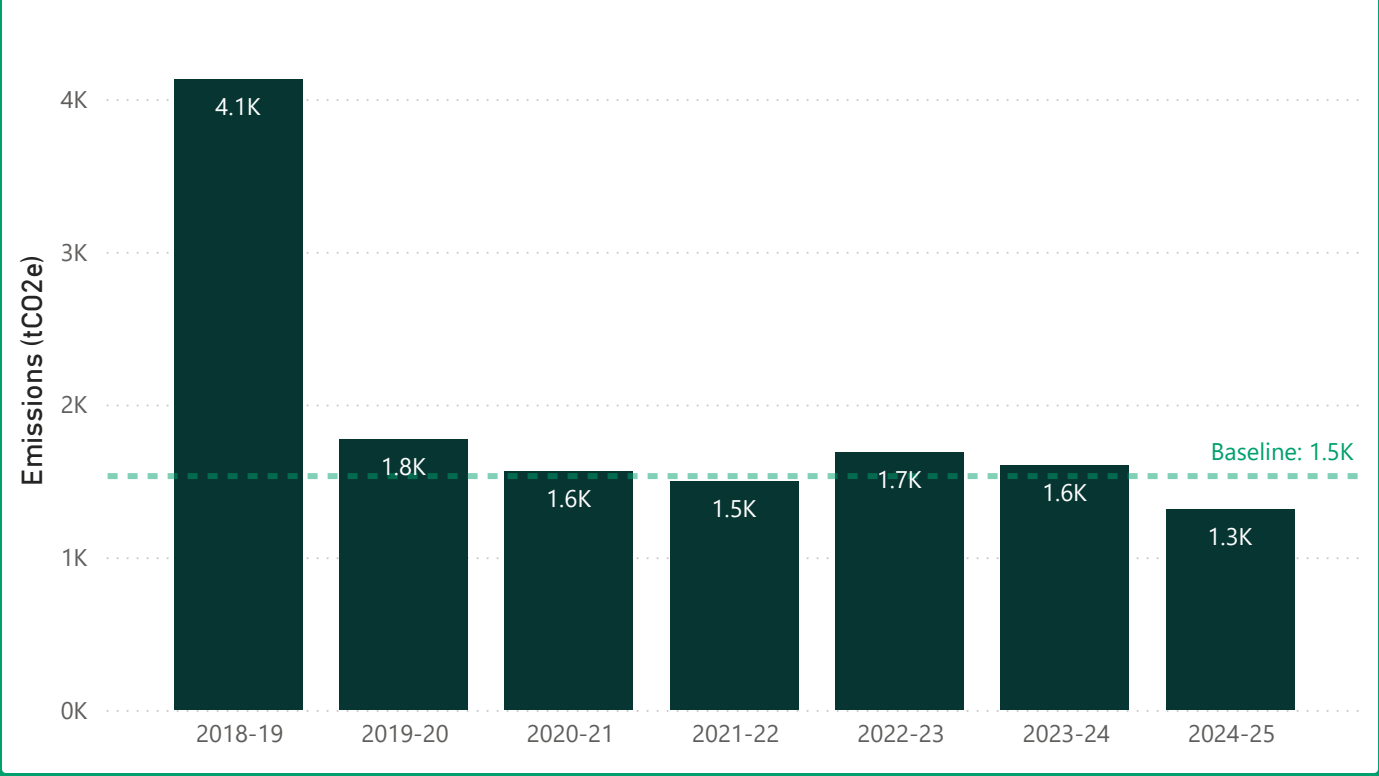
1.5K

Scope 2 emissions decreased between 2023/24 and 2024/25, driven by both a reduction in electricity consumption and a lower location-based electricity emission factor. Electricity use fell from 7.73 million kWh in 2023/24 to 7.40 million kWh in 2024/25, contributing to a reduction in emissions associated with purchased electricity. The continued procurement of REGO-backed electricity meant that market-based Scope 2 emissions remained at zero.

The reduction in location-based emissions reflects both lower electricity demand across the estate and the ongoing decarbonisation of the UK electricity grid. Compared with the baseline year, location-based Scope 2 emissions in 2024/25 were 14% lower (1,310 tCO₂e compared with a baseline of 1,530 tCO₂e), demonstrating continued progress in reducing emissions associated with electricity consumption.

Scope 2 Emissions by Academic Year

● Scope 2



NB: The University purchases Renewable Energy Guarantees of Origin (REGOs) to match its electricity consumption, resulting in zero market-based Scope 2 emissions. However, throughout this report we focus on location-based electricity emissions when assessing year-on-year performance.

While market-based reporting reflects the renewable electricity purchased, location-based reporting provides a more meaningful measure of the University's actual energy consumption and the associated emissions from the UK electricity grid. Tracking location-based emissions enables us to monitor changes in electricity demand, assess the effectiveness of energy efficiency initiatives, and measure progress in reducing consumption over time, regardless of the electricity procurement arrangements in place.

Scope 3



Scope 3 Emissions (tCO₂e)

2024-25

18.3K

% vs Baseline

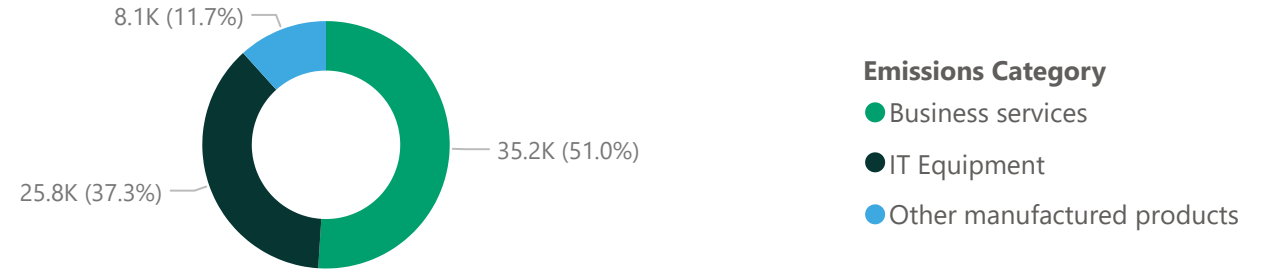
-13%

Baseline Emissions

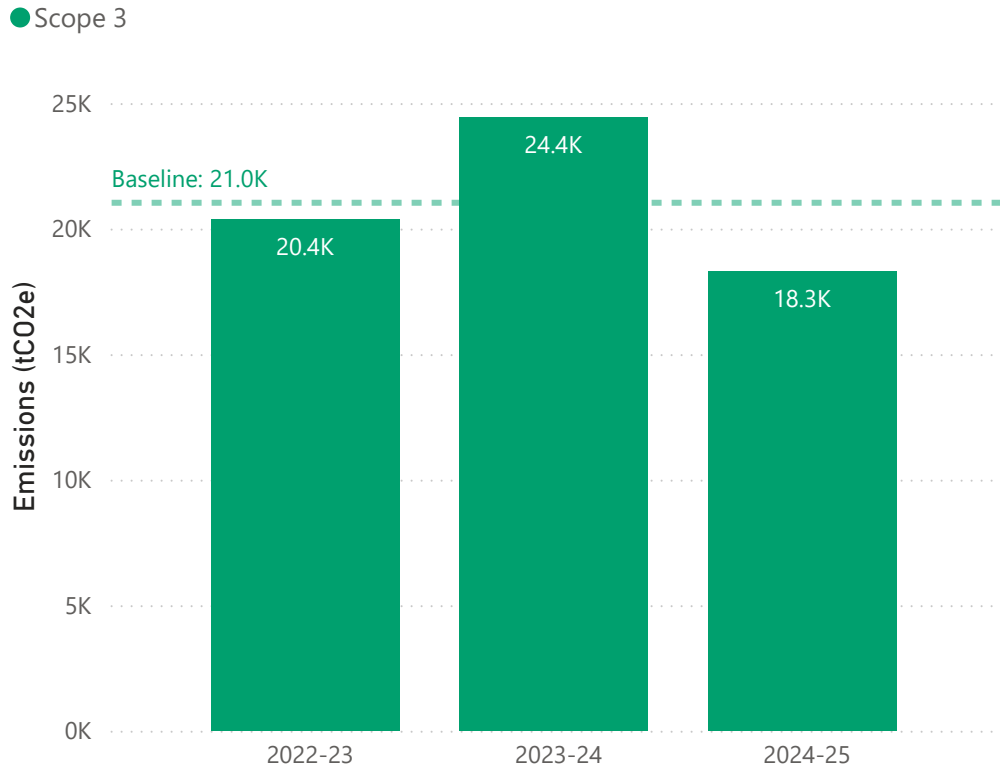
3 year average

21.0K

Top Contributors to Scope 3 Emissions



Scope 3 Emissions by Academic Year



Key Findings

Scope 3 emissions decreased between 2023/24 and 2024/25, driven primarily by reductions in purchased goods and services, capital goods and business travel. Significant decreases were recorded in ICT procurement, catering, medical equipment and other procurement categories, indicating lower levels of purchasing activity compared with the previous year.

Business travel emissions also reduced considerably, particularly for long-haul and international flights, reflecting a reduction in travel demand and contributing to lower transport-related emissions overall. Waste-related emissions declined across most waste streams, with construction waste showing the largest reduction, consistent with reduced construction activity during the reporting period. Water-related emissions showed mixed performance, with emissions associated with water supply increasing slightly while wastewater emissions decreased.

Purchased goods and services remained the largest source of Scope 3 emissions in 2024/25, with Business Services and ICT continuing to be the most significant contributing categories. Compared with the baseline year, Scope 3 emissions were 13% lower (18.3 ktCO₂e compared with a baseline of 21.0 ktCO₂e), reflecting reductions across several major procurement and travel-related categories.

Residential Accommodation Emissions



Total Residential Emissions (tCO₂e)
2024-25
1.8K

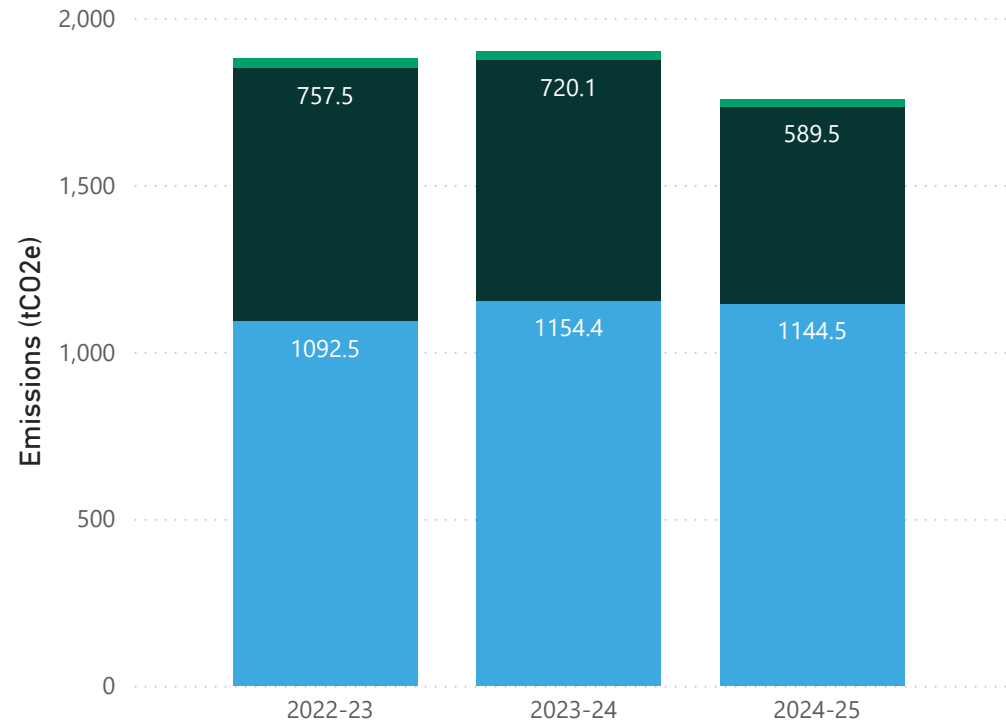
Total Residential Emissions (tCO₂e)
2024-25
1.1K

Total Residential Emissions (tCO₂e)
2024-25
590

Total Residential Emissions (tCO₂e)
2024-25
23.3

Total Residential Emissions by Academic Year

● Scope 1 ● Scope 2 ● Scope 3



Residences Accommodation Emissions Methodology

Residences accommodation emissions have been estimated using a pro-rata approach, with 45% of relevant emissions allocated to accommodation based on residential occupancy assumptions. This methodology has been used where direct activity data is not available and provides a consistent basis for reporting.

For Scope 1 emissions, natural gas consumption has been included within the calculation, while fleet fuel emissions were excluded prior to applying the accommodation proportion to ensure only relevant building-related emissions were captured.

All Scope 2 emissions have been included within the calculation.

The following Scope 3 categories have also been included:

- Water supply
- Wastewater treatment
- General waste and recycling

The university has no externally managed accommodation.