



# Streamlined Energy and Carbon Report 2023-2024

## Introduction

Streamlined Energy and Carbon Reporting (SECR) is a mandatory reporting requirement in the United Kingdom that came into effect 1 April 2019 under changes introduced by the Companies (Directors' Report) and Limited Liability Partnerships (Energy and Carbon Report) Regulations 2018 ('SI2018/1155'). Whilst college corporations are outside of the scope of the 2018 Regulations, the college accounts direction encourages them to make equivalent disclosures on their website.

The Sheffield College is committed to regularly reporting on energy and carbon across its campuses. Energy information was calculated using Standardised Carbon Emissions Reporting Framework for Further and Higher Education, which is based on the Green House Gas (GHG) Reporting Protocol, using appropriate conversion factors relevant for each reporting year. Our SECR disclosure presents our carbon footprint across Scopes 1, 2 and selected Scope 3 emissions, together with appropriate intensity metrics and total electricity, gas, heat and transport use.

Benefits of SECR reporting include increasing internal awareness of energy use and cost, standardising external reporting, and providing greater transparency for stakeholders on energy efficiency within the College.

## Energy efficiency action taken in reporting year 2023/2024

In the year 2023/2024, we have completed the following actions which contribute to increased energy efficiency:

The Environmental Sustainability Action Plan was approved in November 2023. This plan sets out the actions to be taken to work towards our ambition of being a Net Zero organisation by 2040. Short, medium and long-term actions are set out under the 5 themes recommended in the FE Roadmap – Leadership and Governance, Estates and Operations, Teaching and Learning, Partnerships and Engagement, and Data and Reporting.

Heat Decarbonisation Plans were commissioned for our City, Hillsborough, Olive Grove and Peaks campuses. These set out high level recommendations to remove the use of gas for heating, through the installation of air source heat pumps or consideration of additional connections to the existing district heating network. Installation of ancillary solar PV was also recommended to support the change to air source heat pumps. The only building fabric upgrade recommended was replacement glazing at part of the Peaks campus. Funding opportunities to enable implementation of heat decarbonisation projects are being explored.

We have continued to upgrade light fittings to LEDs on a rolling basis, reaching approximately 40% coverage at the beginning of 2024, with more replacements happening as part of wider project works at Olive Grove and Peaks campuses.

We have reinstated the automated meter reading system at City and Hillsborough campuses, giving us greater visibility of energy use in different parts of the buildings.

We have updated our Travel Plan, setting out actions to support a reduction in fossil fuel based journeys and an increase in sustainable and active travel options.

## Quantification methodology

We have applied an operational control approach to account for energy emission values from sites that the college has direct operational control over. The report therefore includes the City campus, Hillsborough campus, Peaks Campus and Olive Grove campus. We have also included Pennine 5 this year as we now have access to energy usage data, we pay for energy use and have a degree of operational control at the site.

Actual energy consumption data has been used for August 2023 – July 2024, and the previous year. We have also included waste and water consumption data, employee commuting data and data relating to our Turing international student travel programme in our Scope 3 reporting this year.

Waste data has been provided by weight by our main waste contractors and includes central disposal of general waste, paper and card and plastic and can recycling, as well as central use of skips.

Water consumption and wastewater data has been taken from supplier bills.

Employee commuting data is based on an employee travel survey conducted in December 2023. Information from this survey, including usual travel mode, average distances travelled and average number of days worked, has been used to calculate passenger miles per travel mode for FTE employees.

DEFRA conversion factors for 2024 have been used for the year 2023/2024, and 2022/2023 CO<sub>2</sub>e figures updated to reflect DEFRA 2023 conversion factors, except for purchased heat and steam, where a site-specific carbon conversion factor has been used provided by our supplier.

The published SECR for 2022/2023 was based on 2022 DEFRA conversion factors at the time of publishing; this year's report therefore reflects a revision upwards in CO<sub>2</sub>e emissions from grid electricity due to an increase in this conversion factor in the 2023 DEFRA set. Going forward, we will continue to use the conversion factors for the year in which the majority of the reporting year falls.

## Year on year Comparison

Our total emissions this year are not comparable with the previous year due to the inclusion of Our Pennine 5 campus and more Scope 3 emissions in this year's report. However, an additional column has been added to the data table to illustrate both the comparable emissions, and our total measured emission this year. Our directly comparable emissions can be summarised as follows:

We saw an overall 1.5% reduction in CO<sub>2</sub>e emissions year on year. This breaks down as a 12% increase in Scope 1 emissions, 8% decrease in Scope 2 emissions and 4% decrease in Scope 3 emissions year on year.

There has been a 5.5% reduction in CO<sub>2</sub>e emissions against 2021/2022 baseline. This breaks down as a 3% decrease in Scope 1 emissions, 5% decrease in Scope 2 emissions and 10% reduction in Scope 3 emissions.

In 2023/2024 more floor area has been included (Pennine 5 campus) and more Scope 3 emissions included (student international trips; employee commuting; waste; water) so the overall total for 2023/2024 is higher.

## Intensity measurement

The intensity metric selected for the organisation is tonnes gross emissions in metric tonnes CO<sub>2</sub>e per full time member of staff as recommended by SECR guidance. The carbon intensity of The Sheffield College will provide a key indicator of future energy efficiency performance.

We have also included CO<sub>2</sub>e per student as an alternative intensity measure. Student numbers include 'headcount' of all students using the campuses throughout the academic year, including young people, adults and apprentices. This will therefore include a variety of attendance patterns including full time and part time courses, short courses and courses where some delivery is off-site but the student attends campus for at least part of their learning.

We also calculate CO<sub>2</sub>e per m<sup>2</sup> for our Scope 1 and 2 and energy related Scope 3 emissions for our campuses.

## SECR data 2023-2024

|  | Current year            | Current year                                     | Previous year (Baseline) |
|--|-------------------------|--|--------------------------|
|  | August 2023 – July 2024 | August 2023 – July 2024 (comparable to baseline) | August 2022 - July 2023  |
| <b>Energy consumption used to calculate emissions</b>    |                         |  |                          |
| Gas (kWh)  | 3,172,270.00            | 2,928,911.00                                     | 2,585,666.70             |
| Purchased Electricity (kWh)                              | 3,335,801.00            | 3,288,553.00                                     | 3,467,853.90             |
| Purchased Heat and Steam (kWh)                           | 2,272,650.00            | 2,272,650.00                                     | 2,537,850.00             |
| Transport from Owned Fleet (kWh)                         | 5,924.77                | 5,924.77   | 6,294.14                 |
| Other Fuel (kWh)   | 1,617.76                | 1,617.76   | 2,115.77                 |
| Oil (kWh)  | 0                       | 0  | 0                        |
| Employee Business Travel (Miles)                         | 20,792                  | 20,792   | 53,375                   |
| <b>Scope 1 emissions (tonnes CO<sub>2</sub>e)</b>        |                         |  |                          |
| Gas consumption  | 571.00                  | 527.20   | 465.42                   |
| Oil consumption  | 0                       | 0  | 0                        |
| Transport from Owned Fleet                               | 1.40                    | 1.40   | 1.51                     |
| Other Fuel   | 0.38                    | 0.38   | 0.51                     |
| Annual contribution to carbon footprint (%)              | <b>19.94%</b>           | <b>31.61%</b>                                    | <b>27.52%</b>            |
| <b>Scope 2 emissions (tonnes CO<sub>2</sub>e)</b>        |                         |  |                          |
| Purchased electricity                                    | 690.76                  | 680.97   | 718.10                   |
| Purchased Heat and Steam                                 | 122.95                  | 122.95   | 157.35                   |
| Annual contribution to carbon footprint (%)              | <b>28.33%</b>           | <b>48.05%</b>                                    | <b>51.54%</b>            |
| <b>Scope 3 emissions (tonnes CO<sub>2</sub>e)</b>        |                         |  |                          |
| Employee Business Travel                                 | 5.57                    | 5.57   | 14.31                    |
| Employee Commuting                                       | 540.45                  | -  | -                        |
| Student Trips International Travel                       | 584.81                  | -  | -                        |
| Purchased Water  | 4.26                    | -  | -                        |
| Waste Generated in Operations                            | 5.63                    | -  | -                        |
| <b>Fuel and Energy Related Activities</b>                |                         |  |                          |
| Well to Tank Business Travel                             | 1.46                    | 1.46   | 3.75                     |
| Well to Tank Gas   | 95.83                   | 88.48  | 78.11                    |
| Well to Tank Diesel (owned fleet and horticulture)       | 0.43                    | 0.43   | 0.49                     |
| Well to Tank Electricity Generation                      | 153.11                  | 150.94   | 159.17                   |
| Transmission and Distribution - Electricity              | 59.76                   | 58.91  | 62.13                    |
| Well to Tank Electricity T&D                             | 13.24                   | 13.05  | 13.77                    |
| Transmission and Distribution - Heat                     | 21.48                   | 21.48  | 22.98                    |
| Annual contribution to carbon footprint (%)              | <b>51.74%</b>           | <b>20.34%</b>                                    | <b>20.94%</b>            |
| Total gross emissions in metric tonnes CO <sub>2</sub> e | 2,872.12                | 1,673.26   | 1,698.61                 |
| Total Full Time Employees (FTE)                          | 968                     | 968  | 974                      |
| Total Students   | 15,971                  | 15,971   |                          |
| Total Floor Area (m <sup>2</sup> )                       | 56,073                  | 53,658   | 53,658                   |

|  |      |      |      |
|--|------|------|------|
| Tonnes of CO <sub>2</sub> per member of staff<br>(Intensity Ratio) | 2.97 | 1.73 |      |
| Tonnes of CO <sub>2</sub> per student (Intensity<br>Ratio)         | 0.18 | 0.10 |      |
| Tonnes of CO <sub>2</sub> per m <sup>2</sup> (Intensity Ratio)     | 0.03 | 0.03 | 0.03 |