CITY OF WOLVERHAMPTON COLLEGE

Carbon Report 2025-26

Below is a table showing the emissions calculations for different energy sources (gas, electricity, and transport) for the academic year 2025-26. The total energy consumption and emissions are displayed and there is also a calculation for emissions per member of staff (FTE).

Energy Source	Consumption	Scope	Emissions Calculation
Gas – total kWh (kilowatt-hours) used for the year, taken from gas bills for each site	3,047,300 kWh (Gross Calorific Value)	Scope 1	3,047,300 kWh * 0.184 (2025 fuels, natural gas conversion factor, gross CV to kg CO2e) = 560,703 kgCO2e = **560.7 tCO2e**
Electricity – total kWh used for the year, taken from the electricity bills for each site	1,860,437 kWh	Scope 2	1,860,437 kWh * 0.177 (2025 UK electricity conversion factor to kgCO2e) = 329,897 kgCO2e = **329.9 tCO2e**
Transport – used in lieu of passenger vehicles	All fleet fuel purchases (incl. mini-buses): 2,223 litres (diesel)	Scope 1	2,223 litres * 2.68 conversion factor = 5,958 kgCO2e = **6.0 tCO2e**
Transport – total mileage for business travel reimbursed from staff claims	77,094	Scope 3	77,094 miles * 0.28053 (2025 DESNZ Average Car (unknown fuel) factor) = 21,627 kgCO2e = **21.6 tCO2e**
Total			**918.2 tCO2e**
Intensity ratio - Emissions data (tCO2e) compared with an appropriate business activity (staff numbers)			918.2 tCO2e / 550 members of staff = **1.67 tCO2e** per staff member

Emissions have been calculated using the UK Government Greenhouse Gas Conversion Factors for Company Reporting 2025, published by the Department for Energy Security and Net Zero (DESNZ) in June 2025. Natural gas emissions were calculated using the Gross CV natural gas factor of 0.18385 $kgCO_2e/kWh$ and purchased electricity emissions using the UK grid electricity location-based factor of 0.17700 $kgCO_2e/kWh$. Transport emissions were calculated using the relevant 2025 DESNZ conversion factors for diesel fuel and business travel.