Solihull College – Carbon Report 2024

Below is a table showing the emissions calculations for different energy sources (gas, electricity and transport) in 2024. The total energy consumption and emissions are displayed and there is also a calculation for emissions per member of staff.

(For the period 1st August 2023 – 31st July 2024)

Energy source	Consumption	Scope	Emissions calculation
Gas – total kWh (kilowatt-hours) used for the year, taken from gas bills for each site	4,323,627 kWh (gross CV (calorific value))	Scope 1	4,323,627 kWh * 0.18316 (2021 fuels, natural gas conversion factor, gross CV to kgCO2e) = 791,915 kgCO2e **= 791.92 tCO2e**
Electricity – total kWh used for the year, taken from the electricity bills for each site	3,287,389 kWh	Scope 2	3,287,389 kWh * 0.21233 (2021 UK electricity conversion factor to kgCO2e) = 698,001 kgCO2e **= 698.00 tCO2e**
Transport – used in lieu of passenger vehicles	All fleet fuel purchases = 1,656 litres (diesel) and 666 litres (unleaded)	Scope 1	Diesel (1,656 * 2.56 conversion factor = 4,239) + unleaded (666 * 2.16 conversion factor = 1,438) = 5,678 kgCO2e **= 5.68 tCO2e**
Transport – total mileage for petrol reimbursed from staff claims	89,321 miles	Scope 3	89,321 miles * 0.28053 (2021 managed assets vehicles, average car conversion factor to kgCO2e, petrol)) = 25,057 kgCO2e **= 25.06 tCO2e**
Total			**1,520.66 tCO2e**
Intensity ratio - Emissions data (tCO2e) compared with an appropriate business activity (staff numbers)			1,520.66 tCO2e / 950 members of staff **= 1.60 tCO2e per staff member**