Streamlined Energy And Carbon Reporting St Francis Xavier Sixth Form College



Annual Energy Use

Greenhouse gas emissions and energy use data for the period 1 August 2023 - 31 July 2024 (Comparison 1 August - 31 July 2023)

Greenhouse gas emissions and energy use data for the period 1 August 2022 to 31 July 2023	2023/24	2022/23
Gas	588,487	668,546
Electricity	479,994	478,499
Transport fuel	-	-
Total energy consumption used to calculate emissions (kWh)	1,068,480	1,147,045

Scope 1 emissions in metric tonnes CO2e	2023/24	2022/23
Gas consumption	107.63	122.05
Owned transport	-	-
Total scope 1	107.63	122.05

Scope 2 emissions in metric tonnes CO2e	2023/24	2022/23
Purchased electricity	99.38	99.08

Scope 3 emissions in metric tonnes CO2e	2023/24	2022/23
Business travel in employee owned vehicles	99.81	0.00

Total gross emissions in metric tonnes CO2e	2023/24	2022/23
Total	207.12	221.13
Intensity Ratio	2023/24	2022/23
Tonnes CO2e per member of staff	1.40	1.45

How we calculate our energy use				
Gas - total kWh(kilowatt- hours) used for the year, taken from gas bills for the College site	588,486.77	0.1829	(2024 fuels, natural gas conversion factor CV to kg Co2e)	107,634.23
Electricity - total kWH(kilowatt- hours) used for the year, taken from electricity bills for the College site	479,993.70	0.20705	(2024 UK electricity conversion factor CV to kg Co2e)	99,382.70
Transport -Mini-bus :356 miles in the year	-		(2024 managed assets vehicles, vans class 2)	
Transport -total mileage for petrol reimbursed from staff claims	431	0.1645	(2024 managed assets vehicles, Cars (by size))	99.81
Total		207,116.73		
Intensity ratio - Emissions data(tCO2e) compared with an appropriate business activity (staff numbers)		1.40		
Number of staff		148		

Quantification and Reporting Methodology

We have followed the 2019 HM Government Environmental Reporting Guidelines. We have also used the GHG reporting Protocol - Corporate Standard and have used the 2024 UK Government's Conversion Factors for Company Reporting.

Intensity measurement

The chosen intensity measurement ratio is total gross emissions in metric tonnes CO2e per staff member, the recommended ratio for the sector.

Measures taken to improve energy efficiency

Buildings

The upgrade to our old Boiler House which included replacing the boiler plant, pipework, equipment & replacing the pumps has now been fully completed. This has resulted in improved heating efficiency as well as reduction in fuel consumption (gas) & maintenance costs which is reflected in the above figures.

We have continued with the upgrade to all lighting to LED's where feasible. This will be supported by a new CIF Bid 25/26 submission to upgrade the rest of the College.

Our New Business Hub was opened in September 2022 & is fully BREEAM compliant.

Feasibility studies are ongoing for Solar panels which we will hope to install on our flat roofs. We are also investigating the installation of a number of EV charging points.