

Greenhouse gas emissions and energy use data for the period 1 August 2020 to 31 July 2024

	Current reporting year 2023/24	2022/23	2021/22	2020/21
Energy consumption used to calculate emissions (kWh)	2,296,520	2,543,868	2,819,514	2,591,542
Energy breakdown (kWh)				
Gas	1,340,914	1,474,198	1,630,809	1,531,463
Electricity	955,606	1,005,350	1,132,453	1,019,420
Transport Fuel	55,317	64,320	56,252	40,659
Scope 1 emissions in metric tonnes CO2 equivalent				
Gas consumption	247	271	300	281
Owned transport	1	1	1	5
Total scope 1	248	272	302	285
Scope 2 emissions in metric tonnes CO2 equivalent				
Purchased electricity	196	206	219	216
Scope 3 emissions in metric tonnes CO2 equivalent				
Business travel in employees owned vehicles	13	14	14	6
Total gross emissions in metric tonnes CO2 equivalent	456	492	535	508
Intensity ratio				
Tonnes of CO2 equivalent per staff member	1.18	1.29	1.35	1.28

Notes regarding the emissions calculations:

Qualification and Reporting Methodology

The college has followed the 2021 HM Government 'Streamlined energy and carbon reporting for colleges' guidelines (updated 25 January 2023) and have used the relevant published UK Government's Conversion Factors for Company Reporting each year.

Intensity measurement

The chosen intensity measurement ratio is total gross emissions in metric tonnes per staff member, the recommended ratio for the further education sector. Staff numbers comprise those employed by the college and its subsidiary company, BCoT Professional Services Limited, in order to provide a meaningful and comparable measure.

Measures taken to improve energy efficiency

The college has a 400 panel solar pv installation in 2013 and a new 122 panel installation which went live in September 2024. All lighting is now LED. Building improvements have improved thermal insulation and reduced heating demand, most recently the first phase of the F block curtain walling replacement has been undertaken during the summer 2024. Staff and students are actively engaged in discussions and generate ideas to reduce energy consumption and harmful waste.

In 2022/23 the college implemented proactive management of day-to-day energy use which yielded a 10%+ reduction in both gas and electricity usage. Over 2023/24 a further 9% reduction in gas and a 5% reduction in electricity consumption has been achieved.

During 2024 an electric submetering monitoring system was installed to enable the college to drill down on areas of high and unexpected use.

The impact of COVID-19

2020/21 was not a typical year of operation due the COVID-19 lockdown measures necessitating the college to close for certain periods and resulting in significantly lower energy usage than usual. 2021/22 and 2022/23 has been a full-years of operation.

Meter reading inaccuracies

The college's energy supplier has identified errors in prior-year electricity meter readings which make the comparison of the latest data with earlier years less informative. Readings are correct for 2021/22, but for the earlier years the readings are under-stated but cannot be quantified.

Intensity ratio movement

The reduction achieved in 2022/23 is through lower energy use, staff number changes have not impacted this measure.