

Greenhouse Gas Emissions Inventory
&
Annual Streamlined Energy & Carbon Report
Academic Year 2023 – 2024



Introduction

The Streamlined Energy and Carbon Reporting framework – SECR is a package of regulations published by the Department for Business, Energy and Industrial Strategy (BEIS) that came into effect from 01 April 2019. The College fully embraces this example of cross-government working understanding fully the role all organisations have to play in reducing energy and carbon emissions and how this is central to delivering the UK’s ambition to reach net zero.

Newbury College is committed to sustainability and will ensure that it is a thread through all its activities, using our values as guiding principles:

Respect:

We will respect ourselves, others and the environment in which we live and work and educate our staff and students to reduce inequalities. We will support good health and wellbeing in terms of both our staff and students.

Aspiration:

We will educate our staff, students and the wider community on their impact on the world and provide opportunities to minimise our impact on climate change. We will work in partnership with other organisations to support the achievement of the Sustainable Development Goals

Integrity:

Environmental sustainability will be considered in all aspects of the business, focussing on carbon footprint reduction, energy and resources efficiency, sustainable procurement, and the circular economy. We will comply with all relevant legislation and produce an annual report of actions and results.

Quantification and Reporting Methodology

We have followed the 2019 HM Government Reporting Guidelines.

- Scope 2 emissions include location-based power and market-based power.
- Scope 3 omissions include water (supply and waste treatment), waste (landfill), WEEE.

Descriptive Information

Name of the company	Newbury College
Description of the Company	Further and Higher Education College
The reporting period covered	August 2022 – July 2023
Base year period	2020-21
Methodology Used	GHG protocols corporate standards. SECR guidelines for College Corporations
Chosen intensity measurement ratio	Total gross emissions in metric tonnes CO ₂ e per staff member, this is the recommended ratio for the sector.

Background

Newbury College is under a PFI agreement, which limits the impact it can have on its chosen energy sources and uses of the building. However, we do have direct impact on our recycling/waste control, the technology used with our students, a separate sports hall building and staff and the management of the Fleet.

Findings

Report Year Scope 1 emissions	Fuel Score	Volume Unit	TCO ²	Emission Change v Base Year
Heating	Natural gas	1,071,718.00 kWh	195.63	-47%
Transport	Petrol			
	Diesel	104437.77 kWh	25.19	315%
Fugitive emissions		-	-	
		Scope 1 Subtotal	220.82	-42%
Report Year Scope 2 emissions	Fuel Score	Volume Unit	TCO _{2e}	Emission Change v Base Year
Location Based Power	Electricity	688.808.60Wh	133.20	-7%
Self-Generated Renewable Power		-kWh	-	-
		Scope 2 Subtotal	133.20	-7%
Report Year Scope 3 emissions	Fuel Score	Volume Unit	TCO ²	Emission Change v Base Year
Water (supply & waste treatment)	Not disclosed	5360 M ³	2.04	13%
Waste (Landfill)	Not disclosed	1.04 Tonnes	0.49	-7%
WEEE	Not disclosed	0.6 Tonnes	0.01	-50%
Grey Fleet (Miles)	Diesel & Petrol	27904 Miles	7.83	15%
		Gross TCO_{2e} pre offset	364.38	-31%
Offsets	Fuel Score	Volume Unit	TCO	Emission Change v Base Year
Market Based power	Electricity	688,808.60kWh	133.20	
		Net TCO_{2e}	231.18	-57%

Transport costs have increased significantly due to the introduction of football academies, who are required to travel to football games and training centres daily. In summary, despite an increase in fleet emissions and water emissions, we continue to reduce our net TCO₂ emissions.

Energy Intensity Ratios

	Total tonnes of CO ₂ e	CO ₂ e per unit	CO ₂ e per average FTE employee	CO ₂ e per average FTE student	Emission Change v Base Year
Floor Area	189.13	0.02344	1.03	0.13	-30%
Staff FTE	10,247.06	1.25647	56.3		-35%
Student FTE	1289.74	0.15815	0.89		-35%
Number of staff	6520.85	0.79957	22.8		-48%

Transport Intensity Ratios

	Total Units	kWhs per unit	CO ₂ e per mile	Emission Change v Base Year
Miles	48178	2.17	0.000523	108%
Per Vehicle	9	11604.2	2.798352	268%

Measures taken to improve efficiency

The College remains committed to the reduction of emissions and has an action plan in place. We continue to make progress along the Association of college's Roadmap to Climate Action. In 2023-24, the following was achieved:

Improved technology

- Business case given to local authorities to provide tablets for SEND students as well as supporting the learning experience this will reduce the levels of printing requirements.

Recycling

- Re-cycling of metals and electricals has continued to increase.
- Re-cycling of wood scraps or shared with staff continues.
- Continued with the cupboard of kindness.
- Staff and student Café have moved to 100% compostable food storage items.
- Coffee grounds from the cafe are used in the staff garden.

Energy usage

- Continued with the roll out of LED lighting within the main building and the sports/skills centre.
- During nightly checks, electrical items are switched to off.
- Working with the PFI provider to utilise the newly installed BEMS system
- Analysis undertaken to review evening opening hours of college and reduce environmental impact whilst supporting the community.

Purchasing

- When purchasing stationery and office supplies, priority is given to products made from recycled materials.
- Packaging from deliveries is either recycled (cardboard) or re-used.

- We no longer purchase plastic cups for the water machine; staff and students bring their own water bottles/cups.
- Where possible, local companies are used so that fewer road miles are required for delivery.
- Where possible, delivery dates for multiple items are grouped together on one day.
- A commitment to stationery recycling and re-using within the college ensures a reduction in the number of items purchased e.g. no new plastic punched pockets, plastic filing trays, ring binders or lever arch files purchased for general stationery use in the last 5 years.
- Annual archive disposal undertaken by local company, Environmental Solutions Waste Management. Certificate of Destruction provided confirms once shredded all paper.
- Certificate for summer 2024 archive disposal/confidential waste destruction states 'Total number of trees saved from January through paper recycling = 18' relating to the purge bags sent for destruction.
- College headed paper. Members of staff are encouraged to use electronic headed paper template when producing letters and where possible to send these by email for paper reduction. When having paper headed paper produced, the logos that were previously printed on the bottom of the page have been removed so reprinting is not required each time a logo changes, reducing the amount of paper waste.
- Empty toner cartridges from the photocopier are recycled.

Students

- Staff and students continued to develop the garden area and grew our own fruit and vegetables and encouraging wildlife. The College was again recognised for its efforts in the local Newbury in Bloom competition, achieving the top prize.
- A bee monitor has been installed and will be monitored by foundation learning students.
- Key curriculum staff have enhanced their understanding of sustainability in education to support the rest of the curriculum team.
- Catering students grow some of their own produce, they learn to cook with seasonality, they understand the recycling of ingredients and create new products for consumption rather than waste.

Appendices

Methodology

Floor Area: 9861m

Staff FTE: 182

Student FTE: 1446

Number of staff: 286

Miles: 48,178

No of Vehicles: nine

- Data collected from a mixture of profile and invoice data for gas and electricity.
- Fleet vehicles usage compiled from mileage logbooks.
- Grey fleet figures based on the number of miles claimed through our expenses.