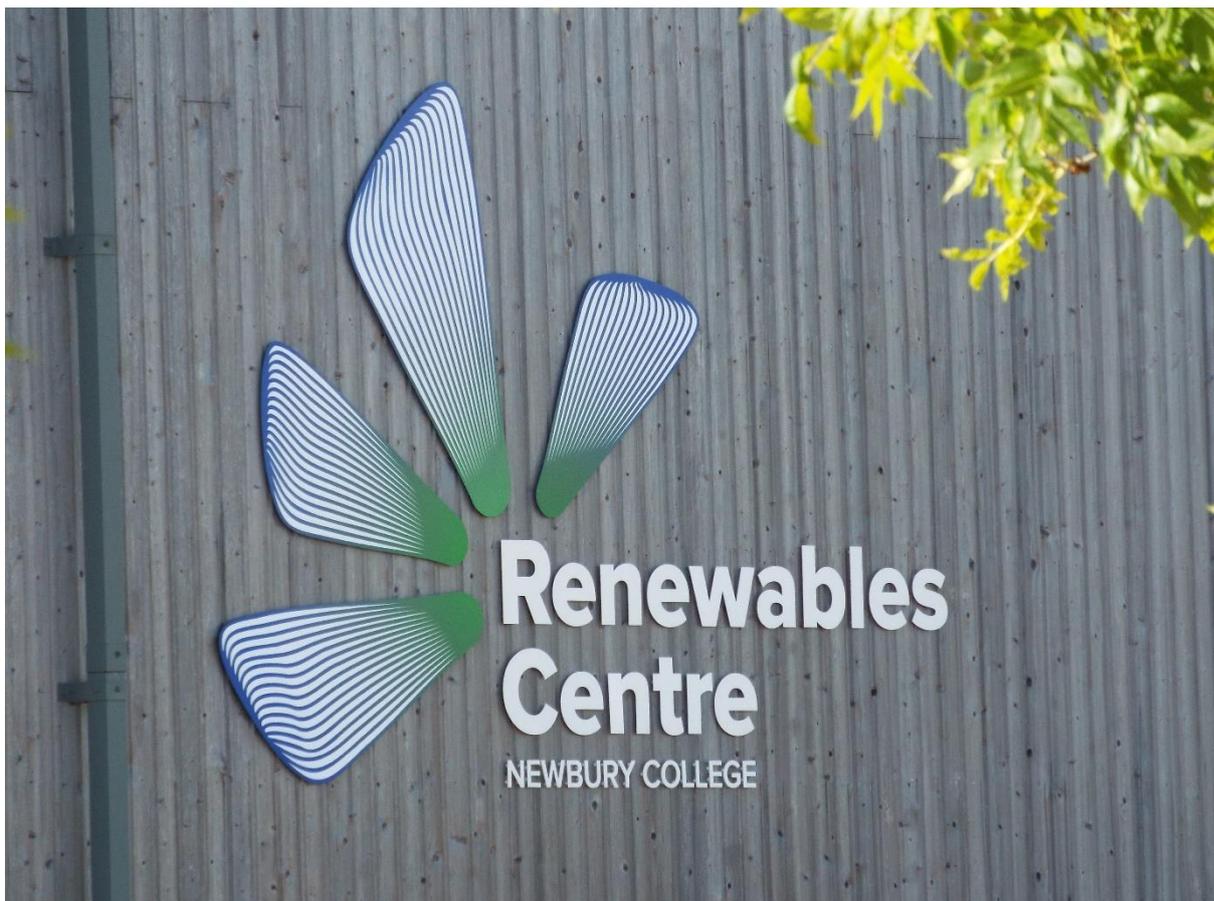




**Greenhouse Gas Emissions Inventory  
and  
Annual Streamlined Energy & Carbon Report  
Newbury College Academic Year 2021 - 2022**



Newbury College is required to produce the SECR report that details our scope 1,2 & 3 emissions.

### Quantification and Reporting Methodology

We have followed the 2019 HM Government Reporting Guidelines. We have also used the GHG Reporting Protocol - Corporate Standard and have used the 2021 UK Government's Conversion Factors for Company Reporting.

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

### Intensity measurement

The chosen intensity measurement ratio is total gross emissions in metric tonnes CO<sub>2</sub> e per staff member, the recommended ratio for the sector

### Findings

Report Year Scope 1 emissions	Fuel Score	Volume Unit	TCO <sup>2</sup>	Emission Change v Base Year
Heating	Natural gas	2,029,624.23 kWh	371.75	0%
Transport	Petrol			
	Diesel	21,147.00 kWh	5.01	-17%
Fugitive emissions		-	-	
		<b>Scope 1 Subtotal</b>	<b>376.75</b>	<b>-1%</b>
Report Year Scope 2 emissions	Fuel Score	Volume Unit	TCO <sub>2</sub> e	Emission Change v Base Year
Location Based Power	Electricity	685,678.90 kWh	145.59	1%
Self-Generated Renewable Power		-kWh	-	-
		<b>Scope 2 Subtotal</b>	<b>145.59</b>	<b>1%</b>
Report Year Scope 3 emissions	Fuel Score	Volume Unit	TCO <sup>2</sup>	Emission Change v Base Year
Water (supply & waste treatment)	Not disclosed	4,161.00 M <sup>3</sup>	4.58	-12%
Waste (Landfill)	Not disclosed	1.8 Tonnes	0.84	60%
WEEE	Not disclosed	0.63 Tonnes	0.01	-63%
		<b>Gross TCO<sub>2</sub>e</b>	<b>529.10</b>	<b>1%</b>

Offsets	Fuel Score	Volume Unit	TCO	Emission Change v Base Year
Market Based power	Electricity	466,261.65kWh	99	1%
		<b>Net TCO<sub>2e</sub></b>	<b>425.77</b>	<b>0%</b>

In summary, there has been a small decrease year on year with the College producing 425.77 2tonnes of CO<sub>2</sub> produce compared to the previous year of 429. The college looks forward to comparing it's usage with another full year next year, when like for like years can be compared (No impact of a lockdown in the figures).

### Energy Intensity Ratios

	Total tonnes of CO <sub>2e</sub>	CO <sub>2e</sub> per unit	CO <sub>2e</sub> per average FTE employee	CO <sub>2e</sub> per average FTE student
Floor Area	279.41	0.04362		
Staff FTE	16,305.45	2.54497	0.150589	
Student FTE	3668	0.11726		0.0000319

### Transport Intensity Ratios

	Total Units	kWh's per unit	CO <sub>2e</sub> per mile
Miles	6325	3.34	0.000792
Per Vehicle	5	4229.4	1.0017760

### 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 and staff and the management of the Fleet.

### 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 2021-22, whilst working within the end of the pandemic restraints the following was achieved:

#### Improved technology

- Continued to allow Microsoft Teams meetings between apprentices and assessors to reduce need to travel
- Reduced the number of onsite meetings
- On-line enrolment continued with HE students to reduce paper usage

#### Recycling

- Re-cycling of metals and electricals increased.
- More signage to recycle has been introduced

## **Energy usage**

- Continued with the roll out of LED lighting
- During nightly checks, electrical items are switched to off
- Working with the PFI provider to utilise the newly installed BEMS system
- Commissioned an external report to identify potential energy savings. This identified solutions that need to be mainly actioned by the PFI provider.

## Appendices

### Methodology

Floor Area:	9861m
Staff FTE:	169
Student FTE:	3668
Number of staff:	296
Miles:	6325
No of Vehicles:	5

- 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 (converted to kms) through our expenses then converted using DEFRA conversion factor for average petrol and diesel combined