

ShIPLEY College



Streamlined Energy & Carbon Report 2021-22



The Streamlined Energy and Carbon Reporting Framework (SECR) was published by the Department for Business, Energy and Industrial Strategy (BEIS) that came into effect from 01st April 2019.

The city of Bradford is aiming to be a Net Zero Carbon region by 2038, with significant progress by 2023. As a Further Education (FE) College in the Bradford District, Shipley College recognises the role it has to play to ensure the city reaches this target. The College has voluntarily created the SECR report and supports the Government's desire to reduce carbon emissions within the FE sector.

Progress to Date - SDG 13 Climate Action

Shipley College is proud to have been the first College in world to sign up to the SDG Accord. One of the seventeen SDGs concentrates solely on Climate Action and Greenhouse Gas (GHG) emissions (SDG 13), which will be concentrated on throughout the report.

The College's first Carbon Management Plan (CMP) achieved a 28% reduction of carbon between 2010 and 2015. The second internal CMP, using the 2015 baseline, achieved a further 34% carbon reduction, equating to 160 tonnes of carbon saved between 2010 and 2020.



Descriptive Information;

Baseline Period - Aug 2017 - July 2018

Reporting Period - Aug 2021 - July 2022

2017 - 2018 was chosen as the baseline year as the College had finished it's Carbon Management Plan in July 2015 and the College wanted to use data from a year before the Government COVID lockdown period.

Completed GHG reduction projects;

- Lighting efficiency upgrades (LED's)
- Sub metering, monitoring and targeting
- Controlled thermostats
- Boilers are 5-10 years old
- Compression tap installation
- Efficient window replacements
- Removal of electric heaters

Shipley College Estate for the Reporting Year (2021-22)

Site/Building	Floor area of Site M2	Display Energy Certificate Rating (21-22)
Exhibition Building	3417	B
Salt Building	2047	B
Mill Building	1243	B
Jonathan Silver Building	1000	C

Emissions are defined under three different Scopes by the GHG Protocol as shown below;

Scope	Definitions
Scope 1 - Direct GHG emissions	Emissions from activities owned or controlled by the corporation that releases emissions into the atmosphere e.g. gas boiler emissions and owned vehicle fuel
Scope 2 - Energy indirect GHG emissions	Emissions from own consumption of purchased electricity, heat, steam and cooling. These are a consequence of the corporations activities but are from sources not controlled e.g. electricity.
Scope 3 - All other indirect GHG emissions	Emissions because of the corporation's actions where the source is not owned or controlled e.g. business travel in staff cars, water and procurement.

The purpose of this SECR report, Shipley College will be calculating its scope 1 and scope 2 GHG emissions.

Shipley College has used the SECR tool created by the Environment Alliance for Universities and Colleges (EAUC) and Hillside environmental Services. The SECR tool is compliant with EFSA Guidance and uses the Government's Conversion Factors for GHGs.

Greenhouse Gas (GHG) Emissions for the Reporting Year

Energy Consumption used to calculate emissions	Base Year August 2017 - July 2018	Reporting Year August 2021 - July 2022
Gas (kWh)	728,340	622,869
Electricity (kWh)	388,120	354,545 88,636 comes from renewable sources
Owned Fleet Fuel - Volume used (Litres)	3030	2273

Scope 1 emissions in metric tonnes CO₂e

	Base Year August 2017 - July 2018	Reporting Year August 2021 - July 2022	Emissions change
Gas Consumption	134.13	114.09	-15%
Owned Fleet	7.88	5.71	-28%
Total Scope	142.01	119.80	-16%

Scope 2 emissions in metric tonnes CO₂e

	Base Year August 2017 - July 2018	Reporting Year August 2021 - July 2022	Emissions change
Purchased Electricity	136.45	75.28	-45%

The reporting year electricity kWh includes 25% of the overall electricity supplied by EDF coming from renewable sources. This GHG offset comes to a total of 18.82 metric tonnes CO₂e and is calculated in the below total.

Total emissions in metric tonnes CO₂e

	Base Year August 2017 - July 2018	Reporting Year August 2021 - July 2022	Emissions change
Scope (S) 1 & 2	278.45	176.26	-37%

Reporting Year Greenhouse Gas (GHG) Ratios

GHG ratios (S 1 & 2)	Quantity	Kwh's/Unit	TCO₂e/unit
Floor Area m ²	7707	129.95	0.023
Staff FTE	205	4885.5	0.86
Staff Total Headcount	318	3149.5	0.55
Student FTE	1116	897.43	0.16

Future Measures to Improve Efficiency

- 1. Finalise LED installation project at Shipley College to reduce electricity use - 2023-2024**
- 2. New and efficient Building Management System to be installed throughout the estate - 2023 - 2024**
- 3. Installation of PIRs (light sensors) in select areas to reduce electricity use - 2023-2024**
- 4. Shipley College Travel Plan to be promoted to staff, students and visitors and will be available to view on the college website. Public transport and active travel will be encouraged to reduce GHG emissions - 2023 - 2024**
- 5. Active Travel promotion - Shipley College is currently applying for a grant to build a 20 bike shelter to promote cycling to the college - 2023 - 2025**
- 6. Food waste to be collected from waste supplier. To include VegWare used at Shipley College. This will reduce the amount of waste sent to landfill and will be in line with the Environmental Act 2021 - 2023 - 2024**
- 7. Key staff to roll out climate literacy training to staff. Volunteered staff will be trained on the science behind climate change and how they can reduce their carbon footprint and influence others - 2023 - 2024**

