Askham Bryan College
Streamlined Energy & Carbon Report 2023-24

Introduction

Askham Bryan College ('the College') is committed to environmental sustainability and carbon reduction and to adopting appropriate measures to support the Government's net zero emissions by 2050 target as set out in the Climate Change Act 2008. The College recognises that it has a significant role to play in promoting sustainability and mitigating the impact of our operations on the environment and the lives of the individuals, communities and business we serve, with the potential to affect positive outcomes through community and educational engagement to work together towards a more environmentally sustainable future.

This Streamlined Energy and Carbon Report (SECR) is the College's response to The Companies (Directors Report) and Limited Liability Partnership (Energy and Carbon Report Regulations 2018) that encompass March 2019 Environmental Reporting Guidelines.

Whilst college corporations are outside of the scope of the 2018 Regulations, the college accounts direction encourages colleges to report and make the information available to stakeholders, the College is therefore voluntarily preparing a SECR in support of the Education and Skills Funding Agency (ESFA) and UK Government desire for carbon reduction.

There are direct benefits to the measuring and reporting of environmental performance, which include the increased awareness of energy usage through data collection and analysis, which help inform the adoption of energy reduction and efficiency measures to reduce the Colleges impact on climate change.

In line with the SECR guidance for colleges, the information contained in this report is calculated following the approved methodology for Green House Gas (GHG) Reporting Protocol and uses the UK Government conversion factors for company reporting.

Methodology

This report uses data for the year 1 August 2023 – 31 July 2024 and compares data from year 1 August 2021 – 31 July 2022 which was previously identified as the baseline year for reporting purposes.

The 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 ESFA guidance.

Emissions are defined under three different Scopes by the GHG Protocol as shown in the table below:

Scope	Definitions	Report as Minimum
Scope 1 - direct GHG emissions	Emissions from activities owned or controlled by the corporation that release omissions into the atmosphere. Examples include emissions from combustion in owned or controlled boilers, vehicles.	Emissions from gas and transport fuel combustion.
Scope 2 - energy indirect emissions	Emissions from own consumption of purchased electricity, heat, steam and cooling. These are a consequence of the corporation's activities but are from sources not owned/controlled.	Emissions from purchased electricity.
Scope 3 - other indirect emissions	Emissions because of the corporation's actions where the source is not owned or controlled. For example, business travel in private cars.	Energy use and related emissions from business travel in hire or employees own vehicles where staff purchase the fuel.

Whilst the reporting of scope 3 is a voluntary activity, this year the emissions have been calculated in both the baseline and current reporting year and are included in this SECR report.

Intensity Measurement

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

Greenhouse gas emissions and energy use data for the period - 1 August 2023 to 31 July 2024	Baseline Year 2021 – 2022	Current Reporting Year 2023 – 2024
Energy Consumption used to calculate emissions (kWh)	4,386,148	4,006,138
Energy consumption break down (kWh)		
Gas	1,184,483	977,696
Other Heating Fuel	271,420	219,685
Electricity	2,290,675	2,238,145
Transport Fuel	639,570	570,612
Scope 1 emissions in metric tonnes CO2e		
Gas consumption	216.95	178.82
Other heating fuel consumption	62.80	49.16
Owned transport	151.48	135.59
Fugitive emissions from refrigerants	98.01	64.54
Total scope 1	529.24	428.11
Scope 2 emissions in metric tonnes CO2e		
Purchased electricity	486.38	463.46
Scope 3 emissions in metric tonnes CO2e		
Water (supply and waste treatment)	13.03	11.84
Business travel in employee-owned vehicles	23.40	14.65
Total gross emissions in metric tonnes CO2e	1,052.05	918.07
Offsets		
Market based power (electricity)*	-	391.69
Total net emissions in metric tonnes CO2e	1,052.05	526.38
Intensity ratio (FTE staff)	329	339
Tonnes CO2e per member of staff	3.19880	1.55412

* In the period covered by the report the College has purchased 1,891,525 kWh (391.69 tonnes CO2e) of renewable energy attributes generated by wind and hydro assets (wholly or partly owned by SSE Renewables) matched annually to Renewable Energy Guarantees of Origin certificates enabling zero emission reporting.

Total net CO2e for the College in 2023/24 is 526.38 tonnes, a reduction of 50% (525.67 tonnes CO2e) from the baseline year of 2021/22.

Measures Taken to Improve Energy Efficiency in 2023/24

- The motor fleet was overhauled, substituting aging vehicles with replacement fuel technology (replacement of diesel with petrol where possible) and included 3 electric cars, 1 electric mini bus, 2 electric vans and 1 hybrid car.
- The continuation of the programme of LED lighting replacements to reduce electricity usage. Replacement lighting was installed in 126 student residential bedrooms and common areas, the equine department including indoor arena, classrooms and offices, the sports hall, the learning resources centre, and the gym and associated changing rooms.
- A large inefficient electrical emersion heater used to heat water for changing room showers was replaced with more appropriately sized modern efficient unit.

- Improvements to a teaching building were made with the replacement of old inefficient oil boilers with modern efficient condensing gas boilers and replacement of window and doors, improving both condition and thermal efficiency.