

Streamlined Energy & Carbon Reporting 2024/25

Hardenhuish Secondary School

Energy Background

The school is heated through a combination of mains gas, oil, and biomass. The school also generates electricity via solar panels and a wind turbine. Approximately 50% of electricity generated is used by the school, and the remainder is exported to the grid. The academy trust has some staff who claim business mileage, for which the trust has recorded the number of miles travelled during the year.

This methodology follows the [GHG Reporting Protocol](#) and uses the 2025 [Government emission conversion factors for greenhouse gas company reporting](#).

Energy Source	Consumption	Scope	Emissions calculation
Gas – total kWh (kilowatt-hours) used for the year	784,531 kWh (gross CV (calorific value))	Scope 1	784,531 kWh * 0.18296 (2025 Fuels - Natural Gas conversion factor gross CV to kg CO ₂ e) / 1000 = 143.538 tCO₂e
Electricity – total kWh used for the year	449,211 kWh	Scope 2	449,211 kWh * 0.17700 (2025 UK Electricity conversion factor to kgCO ₂ e) / 1000 = 79.510 tCO₂e
		Scope 3	449,211 kWh * 0.01853 (2025 Transmission and Distribution - UK electricity conversion factor to kgCO ₂ e) / 1000 = 8.324 tCO₂e
Kerosene – 16,003 litres used for the year	164,729 kwh	Scope 1	16,003 litres * 2.54016 (2025 Fuels – Burning Oil conversion to kgCO ₂ e) / 1000 = 40.650 tCO₂e
Biomass - Woodchips total kWh used for the year	245,080 kwh	Scope 1	245,080 litres * 0.0115 (2025 Fuels – Biomass - Woodchips (kWh) conversion to kgCO ₂ e) / 1000 = 2.818 tCO₂e
Owned Transport – zero miles in the year	2,500 miles = 2,767 kWh	Scope 1	2,500 miles = 0.6729 tCO₂e
Reimbursed Transport – total mileage reimbursed from staff claims = 1,479 miles	1,479 miles * 1.10679 (2025 SECR kWh pass & delivery vehs, average car conversion factor to kWh) = 1,637 kWh	Scope 3	1,479 miles * 0.26915 (2025 Business Travel- land, average car conversion factor to kgCO ₂ e) / 1000 = 0.398 tCO₂e
Total	1,647,955 kWh		275.912 tCO₂e

Energy Source	Consumption	Scope	Emissions calculation
Intensity ratio	Emissions data (tCO ₂ e) compared with an appropriate business activity (pupil numbers as per Autumn census)		275.912 tCO ₂ e/ 1,558 pupils = 0.177 tCO₂e per pupil

Disclosure of Information

UK Greenhouse gas emissions and energy use data for the period 1 September 2024 to 31 August 2025	Current reporting year 2024/25	Comparison reporting year 2023/24 (figures are for illustrative purposes)
Energy consumption used to calculate emissions (kWh)	1,647,955	1,243,029
Scope 1 emissions in metric tonnes CO ₂ e		
Gas consumption	143.538	87.368
Kerosene consumption	40.650	28.823
Biomass - Woodchips consumption	2.818	1.873
Owned transport	0.6729	0.000
Total Scope 1	187.679	118.064
Scope 2 emissions in metric tonnes CO ₂ e		
Purchased electricity	79.510	99.355
Scope 3 emissions in metric tonnes CO ₂ e		
Business travel in employee-owned vehicles	0.398	0.778
Purchased electricity (transmission and distribution)	8.324	8.781
Total gross emissions in metric tonnes CO ₂ e	275.912	226.979
Intensity ratio Tonnes CO ₂ e per pupil	0.177	0.147

Quantification and reporting methodology

We have followed the 2019 HM Government Environmental Reporting Guidelines. We have also used the GHG Reporting Protocol – Corporate Standard and have used the 2025 UK Government's Conversion Factors for Company Reporting.

Intensity measurement

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

Measures taken to improve energy efficiency

Lighting is being replaced across the site with lower energy LED lighting. When replacing ICT infrastructure and electrical appliances we are choosing items with a lower energy consumption.

END OF REPORT

