Streamlined Energy and Carbon Reporting (SECR)

UK energy use and associated greenhouse gas emissions

Annual energy usage and associated annual greenhouse gas ("GHG") emissions are reported pursuant to the Companies (Directors' Report) and Limited Liability Partnerships (Energy and Carbon Report) Regulations 2018 ("the 2018 Regulations") that came into force 1 April 2019.

Organisational boundary

In accordance with the 2018 Regulations, the energy use and associated greenhouse gas emissions are for those assets owned or operated within the UK only as defined by the operational control boundary, with the mandatory inclusion of scope 3 business travel in employee-owned or hire vehicles (grey fleet). This includes all five schools controlled during the reporting period along with minibuses and personal vehicles used for business mileage (grey fleet).

Reporting period

The annual reporting period is 1st September to 31st August each year and the energy and carbon emissions are aligned to this period.

Quantification and reporting methodology

The 2019 UK Government Environmental Reporting Guidelines and the GHG Protocol Corporate Accounting and Reporting Standard (revised edition) were followed. The 2023 UK Government GHG Conversion Factors for Company Reporting were used in emission calculations. The report has been reviewed independently by Briar Consulting Engineers Limited.

The electricity and gas consumption were compiled from invoice records. In instances where energy invoices covering the full reporting year were not available, the direct estimation and pro-rata estimation technique has been applied. To determine mileage, the average diesel price was also used to convert costs into litres of fuel for the Minibus. Mileage figures were used to calculate energy use and emissions associated with grey fleet. Generally gross calorific values were used except for grey fleet mileage energy calculations as per Government GHG Conversion Factors.

The associated emissions are divided into mandatory and voluntary emissions according to the 2018 Regulations, then further divided into the direct combustion of fuels and the operation of facilities (scope 1), indirect emissions from purchased electricity (scope 2) and further indirect emissions that occur as a consequence of Trust activities but occur from sources not owned or controlled by the organisation (scope 3).

Breakdown of energy consumption used to calculate emissions (kWh):

Energy type	2021/22	2022/23
Mandatory requirements:		
Gas	2,418,071	2,468,655
Purchased electricity from the grid	838,116	793,619
Transport fuel	515	3,285
Total energy (mandatory)	**3,258,233**	**3,265,559**

NOTE: Figures may not sum due to rounding

Breakdown of emissions associated with the reported energy use (tCO?e):

Emission source	2021/22	2022/23
Mandatory requirements:		
Scope 1		
Natural gas	441.4	451.6
Company owned vehicles (minibuses)	0.4	0.8
Scope 2		
Purchased electricity (location-based)	162.1	164.3
Scope 3		
Category 6: Business travel (grey fleet)	0.1	0
Total gross emissions (mandatory)	**604**	**616.7**
Intensity ratios (mandatory emissions only)		
Tonnes of CO_2e per pupil	0.191	0.208
Tonnes of CO_2e per square meter floor area	0.032	0.033

NOTE: Figures may not sum due to rounding

Intensity ratio

The intensity ratio applied is total gross emissions in metric tonnes CO2e (mandatory emissions) per pupil. Emissions per pupil is the recommended ratio for the sector for consistency and comparability and pupil numbers are based on the Autumn 2022 Census.

Energy efficiency action during current financial year

During the reporting year, the Trust has continued to undertake actions that will improve their energy efficiency. These include:

- Wilbury boiler replacement: This action involved replacing the boiler system at the Wilbury location. This led to improved energy efficiency, reduced emissions, and cost savings.
- Ongoing program of LED installations across all schools: The continuous LED installation program is a significant step towards reducing energy consumption. LED lighting is more energy-efficient and longer-lasting than traditional lighting. It not only reduces energy costs but also decreases the need for frequent bulb replacements, contributing to sustainability and cost savings.
- Installation of sensor lights in communal and toilet areas to ensure lights are only active when needed. Sensors can detect motion or light levels, automatically turning lights on and off, which reduces energy waste and maintenance requirements.
- Sections of some sites closed off at the end of the school day: This energy-saving measure involved closing off certain sections of school buildings at the end of the school day to reduce heating and cooling needs. It is a simple way to conserve energy, especially in unused spaces.
- Heating turned on based on need with delayed turn-on in Autumn 2022: Adaptive heating practices are important for optimizing energy use. Turning on heating systems based on actual need, and implementing delayed turn-ons during milder weather, demonstrates a commitment to efficient energy management and cost savings.
- Heating turned off from April 1st is a seasonal adjustment to conserve energy, as the weather becomes warmer. This prevents unnecessary heating expenses during the spring and summer months when heating is not required.
- Weekly reminders to staff about energy saving ideas: Regular communication and reminders are crucial for creating a culture of energy efficiency. Providing staff with energy-saving tips and ideas empowers them to be more conscious of their energy usage, both at work and in their daily lives. This can include actions like turning off lights and equipment when not in use.

By implementing these actions, the trust significantly reduces their energy consumption which leads to lowering operational costs and contributing to a more sustainable and eco-friendly environment.