

London South East Academies Trust Streamlined Energy and Carbon

Reporting

UK Greenhouse gas emissions and energy use data for the period 1 Sept 2019 to 31 August 2020	
Energy consumption used to calculate emissions (kWh)	2,903,594kWh
Energy consumption break down (kWh) (optional) <ul style="list-style-type: none"> gas, electricity, transport fuel 	Gas 1,690,832kWh Elec 1,155,837kWh Transport Fuel 56,925kWh
<u>Scope 1 emissions in metric tonnes O2e</u> Gas consumption Owned transport – mini-buses <u>Total scope 1</u>	Gas 310.9 tCO ² e Transport 4.6 tCO ² e
<u>Scope 2 emissions in metric tonnes CO2e</u> Purchased electricity	269.5 tCO ² e
<u>Scope 3 emissions in metric tonnes CO2e</u> Business travel in employee owned vehicles	9.5 tCO ² e
Total gross emissions in metric tonnes CO2e	594.5
<u>Intensity ratio</u> Tonnes CO2e per pupil	0.601 CO ² e/Pupil 0.435 CO ² e/Pupil and staff member 0.032 CO ² e/Sqm of floor space

Quantification and Reporting Methodology

The 2019 UK Government Environmental Reporting Guidelines were followed, and the report has been reviewed independently by Briar Consulting Engineers Limited.

The electricity and gas energy use was compiled from invoices and meter readings. For 2 sites (Bromley Trust Academy (Midfield) and Bromley Beacon Academy (Bromley)) electricity bills were unavailable or inaccurate, so consumption was estimated using the other schools in the trust as a benchmark (based on square meterage). Minibus energy use and emissions were calculated from odometer readings or litres of fuel used. Grey fleet energy use and emissions were calculated from mileage claims.

The energy data was converted to carbon emissions using the 2020 UK Government GHG

Conversion Factors for Company Reporting. The associated emissions are divided into mandatory and voluntary emissions according to the 2018 Regulations, then further divided into the combustion of fuels and the operation of facilities (scope 1), purchased electricity (scope 2) and in-direct emissions that occur as a consequence of company activities (scope 3).

Intensity measurement

The primary intensity ratio is total gross emissions in metric tonnes CO₂e per pupil, which is the recommended ratio for the sector for consistency and comparability. Pupil numbers are based on the Autumn 2019 Census.

Due to many of the academies having low pupil numbers compared to typical schools of similar floor area size due to the need to have a high staff to pupil ratio, staff numbers have been included as well in a secondary ratio to give a more representative and comparable intensity ratio than pupil numbers alone.

A third intensity ratio based on floor area (Gross Internal Area) is also provided to reflect the energy efficiency of the academy trust's buildings, which are the source of the majority of emissions.

Measures taken to improve energy efficiency

Energy consumption is expected to be below typical this year due to the reduced occupancy across all sites following COVID-19 restrictions from 23rd March 2020. From this date, the schools were open to critical worker's children only, with a phased and partial reopening for certain year groups occurring in June.

A further result of health precautions has been the greater implementation of video conferencing for staff and board meetings, reducing the need for travel to and between sites. The emission saving resulting from these activities has not been quantified, but this practice has resulted in behaviour changes that are expected to continue for the foreseeable future.