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Streamlined Energy and Carbon Reporting

UK Greenhouse gas emissions and energy use data for the period 1 September 2019 to 31 August 2020	
Energy consumption used to calculate emissions (kWh)	
Energy consumption break down (kWh)	
<u>Mandatory Emissions</u>	1,223,247
Gas	959,786
Purchased Electricity	20,697
Transport fuel	
<u>Voluntary Emissions</u>	
Biomass	82,487
Renewable energy generated on site	12,160
Scope 1 emissions in metric tonnes CO2e Gas consumption	
Owned transport – mini-buses Total scope 1	
<u>Mandatory Emissions</u>	224.9
Natural Gas	4.4
Transport – Company owned vehicles (mini-buses)	1.3
<u>Voluntary Emissions</u>	0
Biomass	
Renewable energy generated on site	
Scope 2 emissions in metric tonnes CO2e Purchased electricity	223.8

Scope 3 emissions in metric tonnes CO2e Business travel in employee owned vehicles	0.6
Total gross emissions in metric tonnes CO2e	455
Intensity ratio	
Tonnes CO2e per pupil	0.225
Tonnes CO2w per square meter floor area	0.029

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 2020 UK Government’s Conversion Factors for Company Reporting.

Intensity measurement

The primary intensity ratio is total gross emissions in metric tonnes CO2e (mandatory emissions) per pupil, which is the recommended ratio for the sector for consistency and comparability. Pupil numbers are based on the Autumn 2019 Census. A secondary intensity ratio based on floor area (Gross Internal Area) is also provided to reflect the energy efficiency of the 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.

Nevertheless, this year has seen the implementation of the following energy efficiency measures:

- Potter Street Academy has replaced lights in the main kitchen and Hub with LED lighting, estimated to save 4,204 kWh per year.
- A defective boiler and flue system have been replaced at Purford Green (Little Acorns Nursery) in August 2020 with a new more efficient Vaillant model. Estimated energy savings have not been quantified.

