

# Streamlined Energy & Carbon Reporting 2019/20

## Trust-Ed Schools' Partnership

### **Background**

Trust-Ed Schools' Partnership has 6 schools.

In 2019/20 15 staff in the Trust claimed business mileage.

### **Oldbury Wells School**

- The school is a split site and has 7 gas fuelled boilers, 2 hot water boilers and 7 standalone gas heaters.
- The lighting is a mixture of LED, fluorescent tubes (T5) and high-pressure Sodium lighting.
- The school has 3 minibuses

### **Church Stretton School**

- The school has 4 gas fuelled boilers and a number of smaller standalone gas heaters.
- It has building management controls.
- The school has 2 systems of solar panels
- 15% of the school's lighting is LED
- The school has 2 minibuses

### **Aveley Primary School**

- The school has 2 gas fuelled boilers
- The school kitchen has electric ovens

### **Stokesay Primary School**

- The school is a split site with 3 gas fuelled boilers
- The school kitchen has electric ovens

### **Castlefields Primary School**

- The school has 2 gas fuelled boilers
- The school kitchen has gas ovens

### **St Leonards Primary School**

- The school is a split site with 5 gas fuelled boilers
- The school kitchen has gas ovens

This methodology follows the [GHG Reporting Protocol](#) and uses the 2020 [Government emission conversion factors for greenhouse gas company reporting](#).

## Calculations

Energy Source	Consumption	Scope	Emissions calculation
Gas – total kWh (kilowatt-hours) used for the year taken from gas bills for each academy within the trust	2,670,688 kWh (gross CV (calorific value))	Scope 1	$2,670,688 \text{ kWh} * 0.18387$ (2020 fuels, natural gas conversion factor gross CV to kg Co2e)= 491,059 kgCO2e = <b>491.059 tCO2e</b>
Electricity – total kWh used for the year, taken from the electricity bills for each academy within the trust	676,692 kWh	Scope 2	$676,692 \text{ kWh} * 0.23314$ (2020 electricity conversion factor to kgCO2e) = 157,764 kgCO2e = <b>157.764 tCO2e</b>
Transport – Mini-bus 1 – 3385 miles in the year. Mini-bus 2 - 3932 miles in the year Mini-bus 3 – 1929 miles in the year. Mini-bus 4 - 8236 miles in the year Mini-bus 5 – 2708 miles in the year.	20190 miles * 1.57 (2020 SECR kWh pass & delivery vehs, Vans average diesel – used in lieu of passenger vehicles conversion)= 31698.30 kWh	Scope 1	$20190 \text{ miles} = 32495 \text{ km}$ $32495 \text{ km} * 0.2471$ (2020 managed assets vehicles, Vans average diesel – used in lieu of passenger vehicles conversion)= 8029.51 kgCO2e = <b>8.030 tCO2e</b>
Transport – total mileage reimbursed from staff claims = 6034 miles	$6034 \text{ miles} * 1.16319$ (2020 SECR kWh pass & delivery vehs, average petrol car conversion factor to kWh)=7019 kWh	Scope 3	$6034 \text{ miles} * 0.28052$ (2020 managed assets vehicles, average petrol car conversion factor to kgCO2e)= 1692 kgCO2e = <b>1.692 tCO2e</b>
Total	$2,670,688 + 676,692 + 31698 + 7019$ = 3,386,097 kWh		$491.059 + 157.764 + 8.030 + 1.692$ = 658.545 tCO2e
Intensity ratio	Emissions data (tCO2e) compared with an appropriate business activity (pupil numbers as per Autumn census)		$658.545 \text{ tCO2e} / 2,323 \text{ pupils} =$ <b>0.283 tCO2e per pupil</b>

## Disclosure of Information

### 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)	3,386,097
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**UK Greenhouse gas emissions and energy use data for the period  
1 September 2019 to 31 August 2020**

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Energy consumption break down (kWh):

- gas
  - electricity
  - transport fuel
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**Scope 1** emissions in metric tonnes CO<sub>2</sub>e

Gas consumption	491.059
Owned transport – mini-buses	8.030
Total Scope 1	499.089

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**Scope 2** emissions in metric tonnes CO<sub>2</sub>e

Purchased electricity	157.764
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**Scope 3** emissions in metric tonnes CO<sub>2</sub>e

Business travel in employee owned vehicles

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Total gross emissions in metric tonnes CO <sub>2</sub> e	658.545
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Intensity ratio Tonnes CO <sub>2</sub> e per pupil	0.283
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## 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 chosen intensity measurement ratio is total gross emissions in metric tonnes CO<sub>2</sub>e per pupil, the recommended ratio for the sector.

## Measures taken to improve energy efficiency

### Oldbury Wells School

- Solar panels have been installed on three roofs
- The school converted the ovens from gas to electric in September 2018
- There is a rolling programme to replace high pressure sodium lighting with LED.

### Church Stretton School

- Two systems of solar panels have been installed
- 15% of the school's lighting has been changed to LED

**Alveley Primary School**

- The school has had some LED lighting installed

**Stokesay Primary School**

- The school has a building management control system to monitor the heating

**Castlefields Primary School**

- The school has a building management control system

**St Leonards Primary School**

- The school has had some LED lighting installed
- Building management control system is in place

## Annex 1

Details of the Academy Trust's energy usage

### Electricity

Site Name	MPAN	Usage (kWh) for period 01/09/2019 to 31/08/2020	Notes
Alveley Primary School	1417201902007	38,158	
Bridgnorth Castlefields School	1460002265553	48,616	
BRIDGNORTH OLDBURY WELLS SCHOOL	1427482200001	106,738	
BRIDGNORTH OLDBURY WELLS SCHOOL	1429462200000	164,388	
Church Stretton School	14281820200007	159,870	
ST LEONARDS CE PRIMARY SCHOOL	1416195902009	9,404	
ST LEONARDS CE PRIMARY SCHOOL	1417195902000	30,342	
ST LEONARDS CE PRIMARY SCHOOL	1419195902004	40,298	
STOKESAY PRIMARY SCHOOL	1415055802006	59,317	
STOKESAY PRIMARY SCHOOL	1417055802000	19,561	

### Gas

Site Name	MPRN	Usage (kWh) for period 01/09/2019 to 31/08/2020	Notes
Alveley Primary School	9158582010	159,992	
Bridgnorth Castlefields School	2469606602	151,997	
BRIDGNORTH OLDBURY WELLS SCHOOL	2802002	447,566	
BRIDGNORTH OLDBURY WELLS SCHOOL	2804500	587,872	
BRIDGNORTH OLDBURY WELLS SCHOOL	2804601	19,838	July to August 2020 usage is estimated as actual usage data not available
BRIDGNORTH OLDBURY WELLS SCHOOL	9331869704	59,476	
Church Stretton School	7275300	319,801	
Church Stretton School	9086724005	285,018	
Church Stretton School	9219869804	58,066	
ST LEONARDS CE PRIMARY SCHOOL	13891005	158,253	
ST LEONARDS CE PRIMARY SCHOOL	13891903	199,706	
STOKESAY PRIMARY SCHOOL	8430219905	71,916	
STOKESAY PRIMARY SCHOOL	9101776507	151,186	

END OF REPORT