

## Shrewsbury College's Carbon reduction plan

### Commitment to achieving Net Zero

The College aims to achieve Net Zero emissions by 2050 in line with the government target.

We are currently working to develop a full implementation plan which addresses the college's buildings estate and facilities, some of which are Grade II listed.

### Baseline emissions footprint

Baseline emissions are a record of the greenhouse gases that have been produced in the past and were produced prior to the introduction of any strategies to reduce emissions. Baseline emissions are the reference point against which emissions reduction can be measured. The College has been monitoring its Scope 1 energy use since 2016 and since 2019 has published a sustainability report annually which sets out its historic energy use.

### Baseline year: Year ending 31 July 2022

SCG began collecting emissions data in accordance with the Streamlined Energy and Carbon Reporting (SECR) requirement for our financial year ending 31 July 2020. In accordance with these requirements, we have Scope 1 and 2 emissions however due to the impact of the COVID pandemic on normal operations we have adopted the 2021/22 year as our baseline.

Scope 1 includes directly purchased Gas and fuel used to run the college's buildings and vehicles (primarily minibuses).

Scope 2 includes purchased electricity, generated by others using a combination of renewable and carbon based fuels.

Scope 3 includes vehicle emissions from employees vehicle mileage expenses claims. This represents a partial report against Scope 3 Business travel as this does not include emissions from hire vehicles, and business related train travel. Such vehicle hire and train and air travel is considered to be very limited and hence these emissions are not considered to be significant. The organisation has not captured emissions in respect of travel related to student trips and visits, nor emissions arising from "travel to learn" by students travelling to the college.

<b>Greenhouse gas emissions and energy use data for the period 1 August 2021 to 31 July 2022 – UK</b>	<b>2021/22</b>
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Energy consumption used to calculate emissions (kWh)	4,940,762
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#### **Energy consumption break down (kWh) (optional):**

Gas	3,299,231
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Electricity	1,598,791
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Transport fuel	42,470
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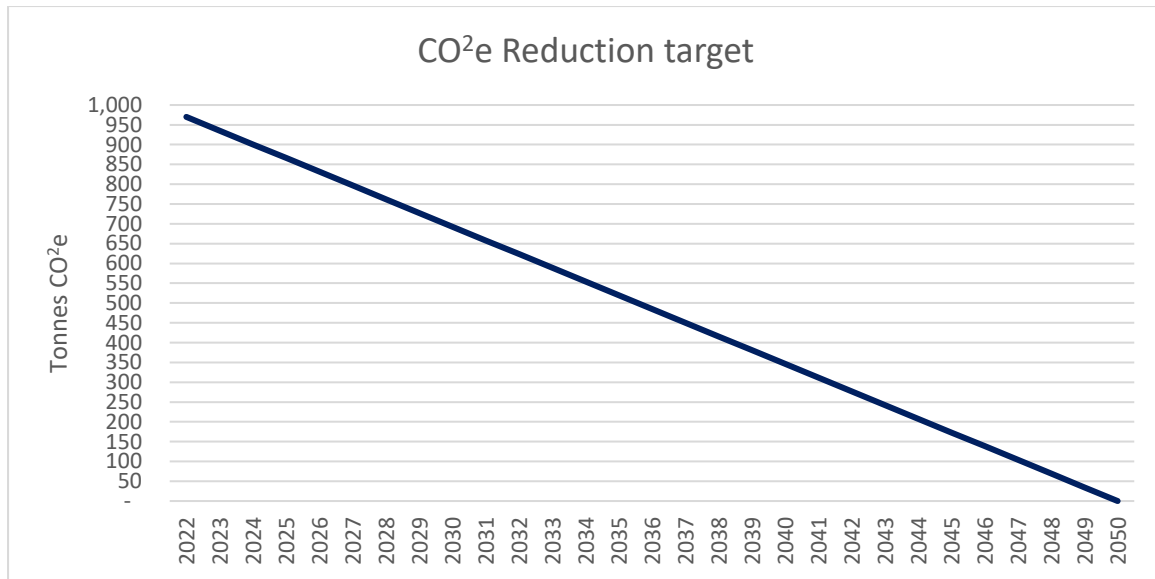
#### **Scope 1 emissions in metric tonnes CO<sub>2</sub>e**

Own electricity and gas consumption	603
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Owned transport	14
Total scope 1	617
<b>Scope 2 emissions in metric tonnes CO2e</b>	
Purchased electricity	336
<b>Scope 3 emissions in metric tonnes CO2e</b>	
Business travel in employee owned vehicles	17
<b>Total gross emissions in metric tonnes CO2e</b>	<b>970</b>
<b>Intensity ratio</b>	
Tonnes CO2e per member of staff	1.59

\* Categories 5 (waste generated in operations), 6 (business travel), 7 (employee commuting) and 9 (downstream transportation and distribution) have been included in our scope 3 calculations. Category 4 (upstream transportation and distribution) has been excluded as the data is not available. We will work with procurement in to consider whether category 4 emissions could be captured through changes in process and cost allocation software.

**Emissions reduction targets**



To continue our progress to achieving Net Zero, we have adopted the following carbon reduction targets. We will reduce our carbon emissions from Scope 1 and 2 emissions to achieve NetZero by 2050 and will put in place interim targets to ensure sufficient progress is made.

**Carbon reduction projects**

**2017/18 and 2028/19**

- a) Reviewed and amended electricity provider tariffs to include an increasing proportion of renewable energy sources to reduce the Co2e impact of electrical energy used.

**2019/20**

- a) Installed energy efficient LED lighting across its London Road campus.
- b) Reviewed of base load electricity consumption which identified significant reductions through optimising use and performance of air ventilation and extraction systems at London Road.
- c) Replaced of single use plastics in all College canteens with compostable alternatives, combined with incentives to use non disposable alternatives.
- d) Engaged with Teracycle to redirect writing implement waste to an effective recycling scheme.
- e) Active management of build-up of construction and motor vehicle wastes

### **2020/21**

- a) 2020/21: Renewal and upgrading of windows in the Performing Arts block at London Road campus to improve thermal efficiency and comfort of the building.
- b) 2020/21: Upgrading of London Road main building boiler with a more thermally efficient unit.
- c) 2020-21: Review and re-procurement of waste disposal routes.

### **2021/22**

- a) 2021/22 Installation of a 200kwp Solar Panel system comprising 721 panels at the London Road campus (January 2022).

### **2022/23 to date**

- a) Renewed and upgraded 180 windows with modern double glazed units in its Main Block at London Road campus to improve thermal efficiency of the block (completed Summer 2022).
- b) Installed Voltage Reduction equipment at the English Bridge and Welsh Bridge campuses to reduce carbon emissions. (December 2022) and London Road campus (February 2023).
- c) Installed improved power monitoring systems to enable actively identification of opportunities for further reduction in use at London Road.
- d) Completed Heat Decarbonisation Plans for 5 of its major buildings to identify the opportunities for improved thermal efficiency and to identify the opportunities and quantify potential costs for decarbonisation of heating systems.

### **Goals**

- a) Develop and start implementation of a long-term strategic plan to enable decarbonisation of building heating systems across all campuses over the life cycle of existing building heating equipment.
- b) Review needs and develop long term plans for EV charging points at all campuses where appropriate and taking into account the capacity of the local electricity infrastructure to meet future needs.
- c) Target a reduction in total Scope 1 energy consumption in 2022/23 and 2023/24 by 10% using 2021/22 as the baseline.
- d) Continue staff and student engagement to raise awareness and engagement in sustainability activities and sustainable behaviours.

This Carbon Reduction Plan has been completed in accordance with PPN 06/21 and associated guidance and reporting standard for Carbon Reduction Plans.

Emissions have been reported and recorded in accordance with the published reporting standard for Carbon Reduction Plans and the GHG Reporting Protocol corporate standard<sup>4</sup> and uses the appropriate Government emission conversion factors for greenhouse gas company reporting<sup>5</sup>.

Scope 1 and Scope 2 emissions have been reported in accordance with SECR requirements, and the required subset of Scope 3 emissions have been reported in accordance with the published reporting standard for Carbon Reduction Plans and the Corporate Value Chain (Scope 3) Standard<sup>6</sup>.