

## Streamlined Energy and Carbon Report (SECR) for CWA

### Website- 2021-22

New non-statutory guidance, in September 2020 requested that Colleges report their carbon emissions. The 2018 Regulations were designed to increase awareness of energy costs within organisations, provide them with data to inform adoption of energy efficiency measures and to help them to reduce their impact on climate change. They also seek to provide greater transparency for stakeholders.

<b>Greenhouse gas emissions and energy use data, updated for the period 1 August 2021 to 31 July 2022</b>	<b>2019-20</b>	<b>2020-21 Updated</b>	<b>2021-22</b>
<b>Energy consumption used to calculate emissions (kWh)</b>	6,388,854	7,505,968	7,787,288
Energy consumption break down (kWh)			
Gas	3,634,670	4,767,248	4,787,219
Electricity	2,453,724	2,647,146	2,777,848
% of Electricity on Green Tariff (nuclear)	100%	100%	100%
Transport fuel includes: - owned, leased fleet, hired cars and minibuses plus business miles (kWh)	300,459	91,574	222,221
<b>Scope 1 emissions in metric tonnes CO2e</b>			
Gas consumption	672	873	874
Owned transport and Managed (leased fleet and hire cars) *	28	9	12
Total scope 1	700	882	886
<b>Scope 2 emissions in metric tonnes CO2e</b>			
Purchased electricity, including Transmission and Distribution emissions *	621	612	586
<b>Scope 3 emissions in metric tonnes CO2e</b>			
Business travel in employee-owned vehicles	46	13	43
Total scope 3	46	13	43
<b>Total gross emissions in metric tonnes CO2e- for required reporting</b>	<b>1,367</b>	<b>1,507</b>	<b>1,515</b>
<b>Full Time Staff Equivalent</b>	<b>471</b>	<b>585</b>	<b>603</b>
<b>Intensity Ratio for FTE</b>	<b>2.9</b>	<b>2.6</b>	<b>2.5</b>
Total number of staff	751	861	944
Intensity ratio for total staff	1.8	1.8	1.6

Notes on table above

The Managed fleet emissions were calculated using the preferred 'litres of fuel' method.

A correction was applied to the 2020-21, as there was a summing issue.

An estimate of electricity emissions at Lynn Sport is included. In future years, when a new methodology is used, this will not be included. It will be included in Lynn Sports Campus, carbon footprint as they can not apportion the energy use to us, at this time.

### **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 measurements**

The chosen intensity measurement ratio is total gross emissions in metric tonnes CO<sub>2</sub>e per staff member, the recommended ratio for the sector. In addition, we have used the Full Time Equivalent staff number, as a considerable proportion of our staff are part time.

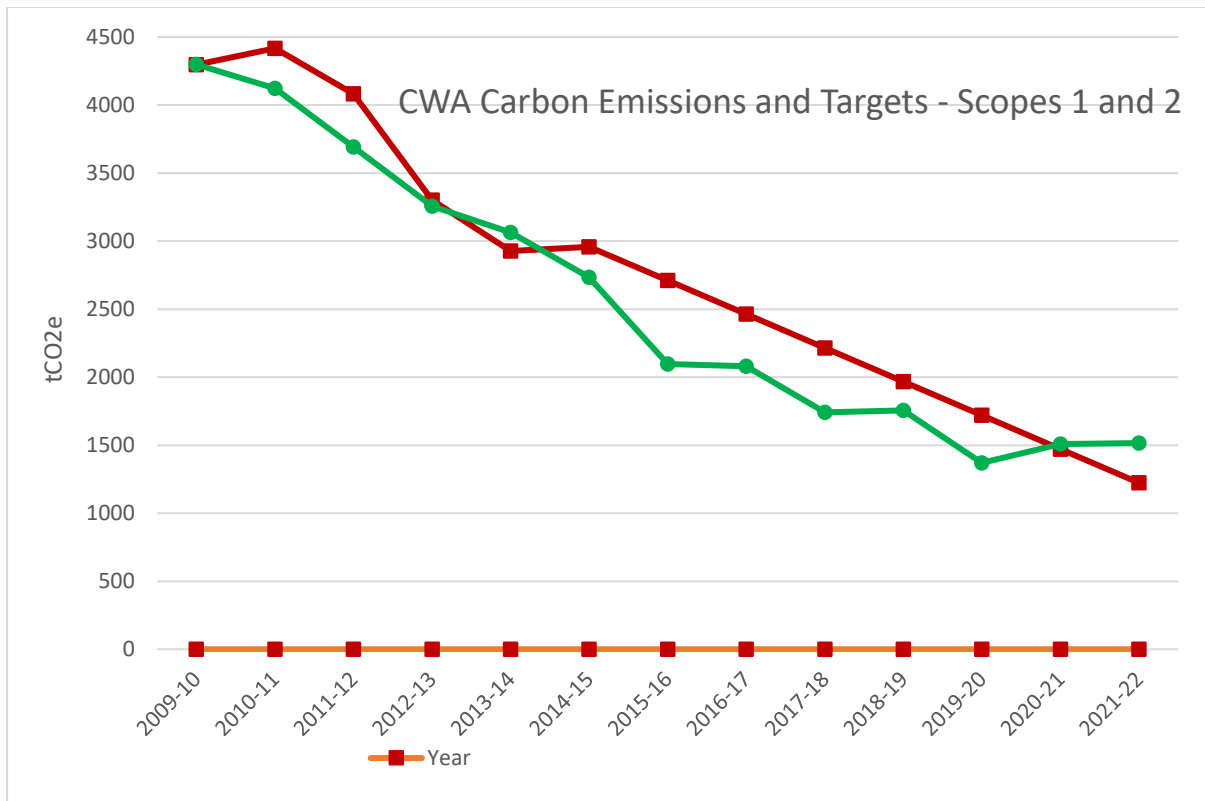
### **Emissions from Gas and Electricity Consumption**

The gas consumption and emissions are very similar to last year. The electricity consumption is higher, which reflects problems with the biomass and gas boilers, which cause more electric heating to be used. We were still having increased ventilation rates throughout the winter to help prevent covid. The electricity emissions are lower, as the grid becomes decarbonised, but note we actually have a nuclear tariff, so some establishments/companies would report this as zero carbon, but this is not the accepted methodology for our sector, which prefers the 'market based' methodology.

### **Comment on Intensity Ratio and Transport**

Business travel has increased substantially, as we came out of covid restrictions and staff can now travel between campuses. A similar pattern is noted with the fleet and hired vehicles, as educational trips resume. The intensity ratio is very similar to last year.

### **Carbon Reductions in last 13 years- Scopes 1 and 2**



The graph shows that we have plateaued; we were expected to have a 72% reduction from our 2009 baseline year, but have only achieved 65%, i.e., like last year. We have already noted the increased ventilation rates, but we were not able to have any major capital investments in energy efficiency this year, which stalled progress. We were not successful with any of our Salix Capital Grant applications.

**Work planned and ongoing, to reduce energy use.**

We are carrying on with our programme of replacing older lighting with LEDs, optimising BMS and building shutdowns during holiday periods.

Our Energy Data Management system is still being developed, as new hardware had to be installed; this will assist us greatly. We have a new Mechanical Engineer to assist with BMS and heating optimisation and the new Project Construction Manager can also assist in bids and implementation. We hope to get our biomass boilers to operate when required and to have a more energy efficient solution in the King’s Lynn Front block, which had many temporary electric heaters during winter 21/22

We are working to obtain funds to implement our Heat Decarbonisation Plan. This is difficult in a climate of rising costs for equipment and labour, but of course is even more important as energy prices are so high.