Streamlined Energy and Carbon Report (SECR) for CWA Website- 2022-23

V1-05/03/24

V2 -16/09/24 with audited total staff numbers

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Introduction

Non-statutory guidance, (Ref 1), updated in January 2022, requested that Colleges report their carbon emissions. The Companies (Directors' Report) and Limited Liability Partnerships (Energy and Carbon Report) Regulations 2018 implement the government's policy on Streamlined Energy and Carbon Reporting (SECR).

Whilst corporations are outside of the scope of the 2018 Regulations, the college accounts direction encourages them to make equivalent disclosures on their website. 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.

Our Estate

The College has 3 main campuses in King's Lynn, Wisbech and Milton which is north of Cambridge. It also has leased space at Lynn Sport and Providence Street in King's Lynn. It has not historically been possible to get apportioned data for Providence Street. Note for next year, we vacated this property in December 2023. In this reporting year we have removed our estimated Lynn Sport data completely, see below. We also lease space in Downham Market, for which we have our own meters, so this is included, but this has been out of normal use. Note for next year, from January 2024, this is now back in use, for the activities which were previously taking place in Providence Street.

Methodology

These calculations are based on the Government conversion factors for 2023 (references 2 and 3).

Scope 1 Gas emissions are calculated using verified invoice data. The fuel data is obtained from the fuel cards used to purchase fuel for our managed fleet and our gardening equipment.

Scope 2. The electricity emissions are calculated using verified invoice data. Following a meeting with King's Lynn and West Norfolk Borough Council (KLWNBC), the place holding data for Lynn Sport is not included this year's submission, as Alive Leisure are reporting this. It is not possible to apportion the CWA contribution with a degree of certainty, so it is preferrable that they report it, to prevent duplicate reporting.

Scope 3- The business travel emissions are calculated using data from Finance, who process the mileage claims of staff. The average car conversion factor is used.

Intensity measurements

The chosen intensity measurement ratio is total gross emissions in metric tonnes CO2e per staff member. In addition, we have used the Full Time Equivalent staff number, as a considerable proportion of our staff are part time.

Work planned and ongoing, to reduce energy use/carbon emissions.

- 1. Work continues optimising our BMS and managing our buildings carefully during out of hours and non-term time, aided by our in-house mechanical services engineer. We are also continuing our programme of replacing older lighting with LEDs.
- 2. Efforts were made to maximise the use of biomass fuel at King's Lynn, but the Wisbech biomass boiler proved more problematic, and work continues with this.
- 3. Smaller gas boilers at our Milton site have been replaced with electric boilers. Work is progressing on our energy data management system too.
- 4. Our business mileage rate allows an extra 5 pence a mile if a passenger is taken. This has been publicised more widely and may assist in reducing business miles.
- 5. Work has started on collating refrigerant gas, Scope 1 emissions, which will add to our reported emissions.
- 6. New Green Skills centres are being developed at our King's Lynn and Wisbech Campuses, which will lead to more environmental training of our staff, which will assist the College in energy efficiency and carbon reduction measures.

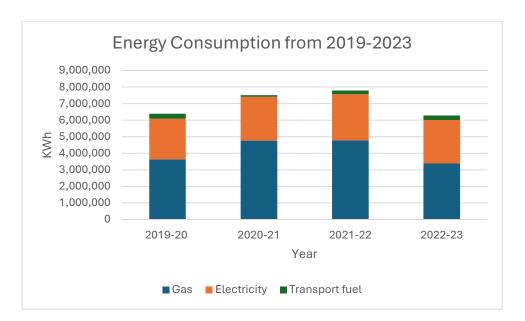
Table 1 Showing Energy consumption and carbon emissions from 2019-2023.

| Greenhouse gas emissions and energy use data, updated, for the period 1 August 2022 to 31 July 2023 | 2019-20 | 2020-21 Updated | 2021-22 | 2022-23 |
|---|-----------|--------------------|-----------|-----------|
| Energy consumption used to calculate emissions (kWh) | 6,388,854 | 7,505,968 | 7,787,288 | 6,281,461 |
| Energy consumption break down (kWh) | | | | |
| Gas | 3,634,670 | 4,767,248 | 4,787,219 | 3,381,763 |
| Electricity | 2,453,724 | 2,647,146 | 2,777,848 | 2,630,778 |
| % of Electricity on Green Tariff (nuclear) | 100% | 100% | 100% | 100% |
| Transport fuel includes: - owned, leased fleet, hired cars and minibuses plus business miles (kWh) | 300,459 | 91,574 | 222,221 | 268,920 |
| Scope 1 emissions in metric tonnes CO2e | | | | |
| Gas consumption | 672 | 873 | 874 | 619 |
| Owned transport and Managed (leased fleet and hire cars) * | 28 | 9 | 12 | 17 |
| Total Scope 1 | 700 | 882 | 886 | 635 |
| Scope 2 emissions in metric tonnes CO2e | | | | |
| Purchased electricity, including Transmission and Distribution emissions * | 621 | 612 | 586 | 592 |
| Scope 3 emissions in metric tonnes CO2e | | | | |
| Business travel in employee-owned vehicles | 46 | 13 | 43 | 48 |
| Total scope 3 | 46 | 13 | 43 | 48 |
| Total gross emissions in metric tonnes CO2e- for required reporting | 1,367 | 1,507 | 1,515 | 1,275 |
| Full Time Staff Equivalent | 471 | 585 | 603 | 508 |
| Intensity Ratio for FTE | 2.9 | 2.6 | 2.5 | 2.5 |
| Total number of staff | 751 | 861 | 944 | 778 |
| Intensity ratio for total staff | 1.8 | 1.8 | 1.6 | 1.6 |
| | | | | |

Analysis of data

Our business miles have increased to pre pandemic levels and reflect multi campus-based staff returning to their normal duties.

Chart 1- Energy Consumption from 2019-2023



The data from the last 4 years of SECR reporting, shows a welcome decrease in our emissions to the partially covid free year of 2019-20. This is mainly due to a large reduction of 29% in gas usage. On closer examination this is due to large decreases at our King's Lynn Campus. A portion of this is due to the use of electric heating in our KL front block, whilst we await the replacement of gas boilers. As we moved out of the pandemic restrictions, we were able to return to normal ventilation levels and recirculate air, which will account for the majority of this. The increased use of biomass at King's Lynn also kept the electricity usage down in KL tech Block.

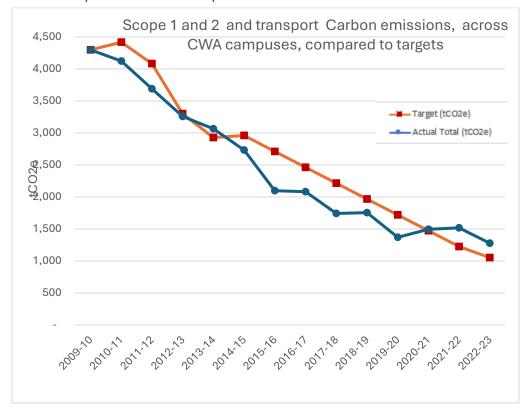


Chart 2 Scope 1 and 2 and transport Carbon emissions.

Note from 2022-23 the target is reduced from 6% to 4% a year, off our baseline year of 2009-10.

Following two years of increased carbon emissions, we have returned to levels akin to 2019-20. Whilst our energy consumption has decreased overall by 19% compared to the year before, the carbon emissions have reduced by 16%, as the conversion factory for electricity increased this year. In the 2023 update, the UK Electricity CO2e factor has increased by 7% (compared to the 2022 update) due to an increase in natural gas use in electricity generation and a decrease in renewable generation. In previous years, it was reducing e.g. in the 2019 GHG Conversion Factors, there was a 10% decrease in the UK Electricity CO2e factor compared to the previous year. In the 2020 update, the CO2e factor decreased (compared with 2019) again by 9%.

Closing comments

Capital funding is required to be able to invest in ASHPs and PV in order to meet our Net Zero targets, as we cannot rely on grid-based changes and good housekeeping to achieve this. As we increase our Scope 2 and 3 reporting, we plan to move to the Standardised Carbon Emission Framework, (SCEF) which is under development by the Environmental Association of Universities and Colleges (EAUC).

References

Reference 1- Streamlined energy and carbon Reporting for college corporations- January 2022-Gov.UK

Reference 2- Government conversion factors for company reporting of greenhouse gas -January 2024 emissions- Gov.UK.

Reference 3- Conversion factors 2023- condensed set-updated June 2023 DESNZ and DEFRA

Reference 4- https://www.eauc.org.uk/scef