

Carbon Management Plan 2020/2021 Update

Headline Figures

The HESA submission for 2019/20* shows the following changes in our absolute carbon emissions based on 2013/14 levels:

- Scope 1 and 2 carbon emissions have fallen by 50.37%
- Scope 3 carbon emissions from water supply have fallen 43.27%
- Scope 3 emissions from wastewater treatment have fallen 45.14%
- In 2013/14, our building intensity was 80.90 kg CO₂e/m², in 2019/20 it has reduced to 38.80kg CO₂e/m²

*These figures are the latest available for the Carbon Management Update. The figures for 2019/20 are not comparable with previous years as due to Covid, all teaching was online from 18 March 2020 and campus closed 23 March 2020 due to the Covid pandemic. The savings are therefore greater than would have been achieved in a standard year of operation due to reduced activity on campus. al School of Medicine & Dentistry wa



Implications of Covid

The technological capabilities to work in a blended way, which were utilised during the Covid pandemic will help us to support our carbon reduction targets, including commuting and business travel. Focus groups and surveys will be conducted to review estate utilisation as a result of blended working post-pandemic.

Savings have been made in the number of photocopies, with the number of copies in September-December 2020 at 15% of the level of the previous year pre-pandemic.

2020/21 Energy Reduction Projects

Boiler replacements

This year we replaced a further 10 old inefficient boilers for new more efficient condensing boilers in Whitendale Hall of Residence. This is an ongoing project, currently half of the boilers in Whitendale are over 10 years old. The new boilers are 6.3% more efficient.

We expect to see an annual carbon saving of 1,043 kg CO₂e and a reduction in gas costs of £102.

Removal of electrical appliances

Work has been undertaken to improve communal kitchen facilities in C&T Building, with the ground floor kitchen upgraded this year, as part of a rolling programme. Inclusion of a hydro-boil for boiling water, means that separate kettles can be removed.





Energy Waste reporting

We have an ongoing project for Caretakers and Building Managers to report rooms where lights are left on overnight and frequently reported rooms are investigated. We speak to room occupiers to find out if there is a maintenance issue and will repair or install automatic lighting controls where appropriate. Estates Services Helpdesk can be contacted for reporting areas of energy waste. Some examples that this initiative has highlighted are: taps constantly running, projectors left on when teaching rooms are empty and external lighting on during the day.

Out of hours use of buildings

Evening and weekend teaching on Preston Campus has been moved to Greenbank Building, Harrington Building and Media Factory to prevent heating whole buildings when only a few rooms were in use. Analysis comparing Sept 2019 - Jan 2020 with the comparable period the previous year show that this reduced consumption by 7% and carbon emissions by **150,000** kg CO₂e.

Sub-metering

Additional sub-meters have been installed, which helps to look more closely at certain areas and pinpoint any wastage. Additional systems have been fitted in Roeburn Building for water usage and Media Factory and Harrington Building for electricity.

Waste

During 20/21 UCLan saved **152,400** kg CO₂e by diverting waste from landfill. Over 255 tonnes of waste has been used to provide refuse derived fuel. Almost five tonnes of paper and card were recycled and over eight tonnes of glass. By recycling 1.6 tonnes of plastic this has saved the equivalent of 38,000 two-litre drinks bottles being produced. In total the amount of energy saved by sending materials for recycling and recovery was over 60,000 KWh, enough to power over 12 households for the entire year.





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