



University of Central Lancashire



CARBON MANAGEMENT PLAN

2017/2018 Update

HEADLINE FIGURES

The HESA submission for 2016/17 shows the following changes in our absolute carbon emissions based on 2013/14 levels:

- Scope 1 and 2 carbon emissions have fallen by 28.6%
- Scope 3 carbon emissions from water supply have fallen 11.5%
- Scope 3 emissions from wastewater treatment have fallen 9.2%

In 2013/14, our building intensity was 80.90 kg CO₂e/m², in 2016/17 it has reduced to 60.34 kg CO₂e/m².



2017/18 ENERGY REDUCTION PROJECTS

Ribble Halls of Residence LED Lighting installation

Over summer 2018, 20 flats in Ribble Halls of Residence were refurbished, removing a bedroom to create a kitchen and lounge communal area. This reflects the improvements carried out in Whitendale last year, which has improved the student experience.

The kitchen lighting has been upgraded from florescent strip lights to LED and the lounge lighting upgraded from a compact fluorescent light fitting to LED.

The corridor already had LED fittings but on a manual switch and the lights were left on all the time so we installed PIR sensors to cut down the energy usage further.

We expect annual electricity savings of at least 65% and a carbon saving of **5,859** kg CO₂.





LED Performance Lighting

As traditional theatre lighting is highly inefficient, we worked with our Technical Manager for Creative Industries Support to investigate whether current LED technology had improved enough to be implemented across our performance areas. We met with several lighting manufacturers and have now replaced the halogen lighting in Greenbank GR081 TV Studio, Media Factory ME020 Dance Studio and St Peters Arts Centre with LED equivalents.

We expect to see an 82% reduction in electricity costs and an annual carbon saving of 39,965 kg CO₂ in the Media Factory Dance Studio.

We expect to see a 79% reduction in electricity costs and an annual carbon saving of 18,707 kg CO₂ in Greenbank TV Studio.

We expect to see a 77% reduction in electricity costs and an annual carbon saving of 15,012 kg CO₂ in St Peters Arts Centre.

This was a significant spend from the Sustainability budget but we expect to see an overall annual carbon reduction of 73,684 kg CO₂ and annual cost savings of £27,500.

Adelphi TVI Lecture Theatre LED Lighting Installation

The lighting in ABTVI was due to be re-lamped so we took the opportunity to upgrade the existing lighting to LED with lighting controls.

We expect to see an annual electricity reduction of 65% and an annual carbon saving of **821** kg CO₂e.

Hanover HR104 and HR108 LED Lighting Installation

We received reports that the diffusers on the light fittings in two of the Fine Art studios in Hanover had yellowed and needed replacing so we contacted a lighting manufacturer who provided an LED lighting scheme suitable for the rooms. A total of 71 fluorescent light fittings were removed and replaced with LED equivalents.

We expect to see an annual electricity reduction of 73% and an annual carbon saving of **5,785** kg CO₂e.

Vernon Staircase LED Lighting Installation

It was noted on a night audit that the lighting on the back staircase was being left on overnight so the existing fluorescent strip lights were replaced with LED fittings with internal microwave sensor controls.

We expect to see an annual electricity reduction of 37% and an annual carbon saving of **298** kg CO₂e.

Vernon Annexe Window Replacement

In February 2018 we launched an online form on both the Staff Intranet and the external webpage to provide an easy way for staff to report areas of energy waste across campus.

One of the reports we received was for the external window in Vernon Annexe. They were very draughty and the heating was on full to compensate. To reduce the heating load we replaced 8 single pane timber windows with double glazed upvc units. The expected annual carbon saving is **4,757** kg CO₂e.

Water Consumption Reduction

To reduce water consumption across campus we have a rolling programme to replace all push and turn taps with automatic sensor taps. We had received several reports of the taps in C&T building being left on and wasting water so we replaced all 38 taps with infrared sensor taps.

We expect to see annual carbon savings of **73** kg CO₂e.

We also changed 15 taps in the open access toilets at the UCLan Sports Arena. This is expected to have an annual carbon saving of **28** kg CO₂e.

The 2018/19 Carbon Management Plan update is due to be released in September 2019.



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University of Central Lancashire
Preston PR1 2HE

uclan.ac.uk

7422 0/19

