



University of  
Central Lancashire  
UCLan

# Carbon Management Plan

2019/2020 Update



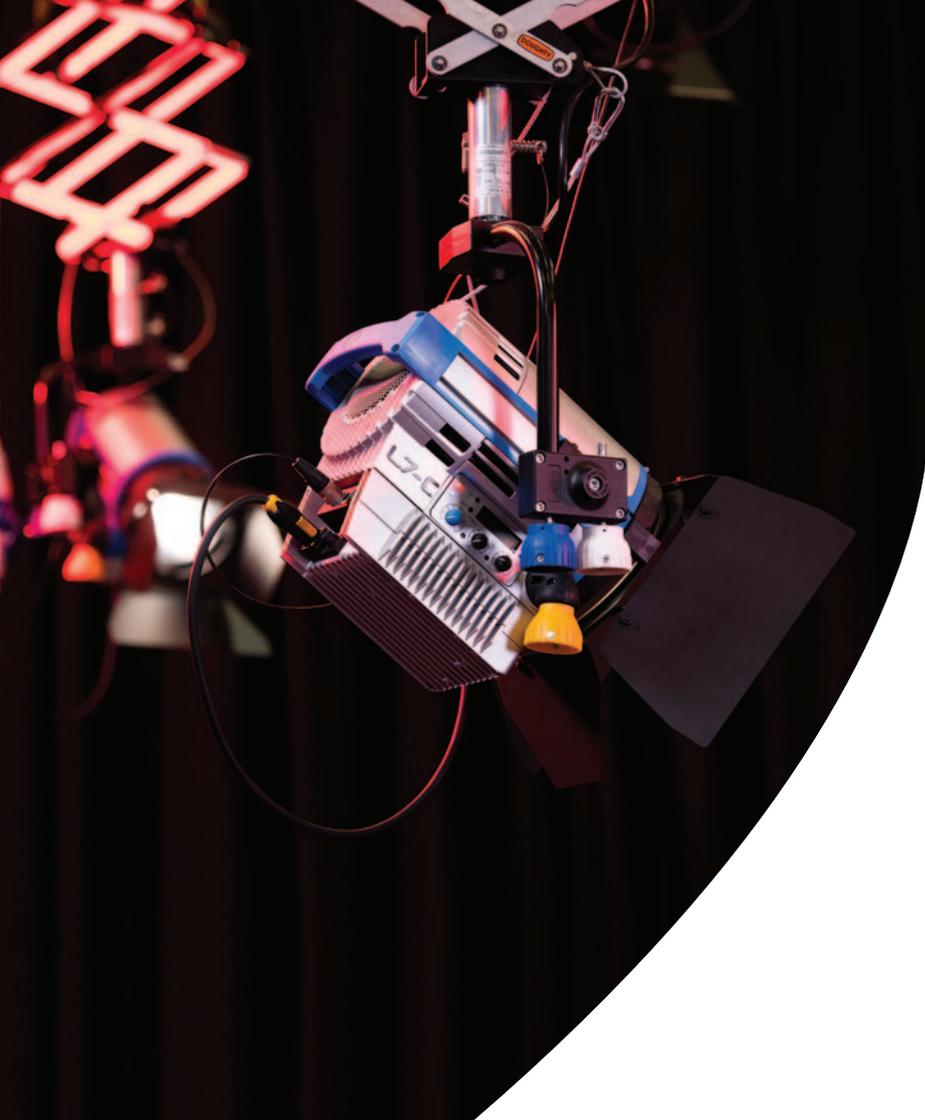
# Headline Figures

- **Scope 1 and 2 carbon emissions have fallen by 37.45%**
- **Scope 3 carbon emissions from water supply have fallen 24.96%**
- **Scope 3 emissions from wastewater treatment have fallen 21.69%**

We use 2018/19 figures as these are the latest published figures available to us. The changes in absolute carbon emissions are based on 2013/14 levels.

In 2013/14, our building intensity was 80.90 kg CO<sub>2</sub>e/m<sup>2</sup>, in 2018/19 it has reduced to 50.75kg CO<sub>2</sub>e/m<sup>2</sup>.





# 2019/20 Energy Reduction Projects

## Lighting upgrades - installing LED and lighting controls

We received reports that the lighting in St Peter's Arts Centre was dark and needed replacing so we updated the old fluorescent lights with LED. We also replaced the lighting in the lobby area between the Arts Centre and the the Students' Union (SU).

We expect an annual carbon saving of 1,261 kg CO<sub>2</sub>e and an annual reduction in electricity costs of £649.

The lights on Foster first floor corridor were at the end of their life and looking very discoloured, they have been upgraded to LED with wireless lighting controls integrated into the fittings.

We expect to see an annual carbon saving of 774 kg CO<sub>2</sub>e and a reduction in annual electricity costs of £398.

As part of a larger project in Kirkham KM013 the lighting was upgraded to LED.

The expected annual carbon saving is **1,867 kg CO<sub>2</sub>e** and **£961** annual electricity cost reduction.

Throughout the year our Caretakers have been reporting rooms where the lighting is left on overnight. From this we identified some rooms that needed the lighting upgrading and lighting controls installing to reduce energy waste.

The expected annual carbon saving is **507 kg CO<sub>2</sub>e** and **£261** annual electricity cost reduction.

The lighting in the Maudland laboratories was also highlighted as needing replacement so we audited the rooms and identified 18 rooms to be upgraded to LED and lighting controls installed. A total of 217 light fittings were upgraded.

The expected annual carbon saving is **8,379 kg CO<sub>2</sub>e** and **£4,313** annual electricity cost reduction.





## **Foster Building - Mitchell and Kenyon Lecture Theatre**

The expected annual carbon saving from lighting upgrades is 1,658 kg CO<sub>2</sub>e and £996 annual electricity cost reduction.

### **LED Performance Lighting**

We continued with the progress made last year by replacing Halogen lighting with LED in performance areas. Halogen lights are being phased out and LED technology is now advanced enough to replace it in performance areas. This year we worked with the Video Production Team to upgrade their outdated equipment.

We expect to see an annual carbon saving of 455 kg CO<sub>2</sub>e and a reduction in electricity costs of £234.

### **Whitendale Boiler Replacements**

This year we replaced 10 old inefficient boilers for new, more efficient condensing boilers in Whitendale. 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 CO<sub>2</sub>e and a reduction in gas costs of £102.



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