# Sustainability Highlights Report 2016-17

Think **green**.



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University of HUDDERSFIELD

# University of Huddersfield Sustainability Highlights 2016-17

# **Policy and Strategy Development**

The University is currently undertaking a process of reviewing and developing further its environmental and sustainability policies. The aim is to strengthen our commitments, clarify delivery methods and links with the wider university strategy and ensure policies comply with the new university policy framework. The Environmental Policy has been significantly updated to this effect and a process of research, consultation, and review has been completed for the supporting strategy documents including revising the Carbon Management Plan and Travel Plan due for implementation during the 2017 calendar year.

The University's environmental policies and plans have been developed to take into account future campus improvement and expansion. The Estates capital plan 2016-21 committed the University to significant development of the campus and has allocated a specific budget annually to carbon reduction projects.

# **Carbon Footprint**



The carbon footprint of the University is continuing its downward trend with a 6% reduction between 2014-15 and the reporting year 2015-16 [most recently available HESA Estates Management Record data]

Whilst the total footprint of the university remains above the 2005 baseline, the emissions per  $m^2$  gross internal area has reduced to below the baseline and is projecting to continue this trend going forward. With the continued expansion of the university's campus and the undertaking of new energy intensive research activities a realistic goal is to maintain the overall footprint at baseline levels and to reduce the emissions per  $m^2$  GIA.

# **Energy and Water consumption**

Total gas use is decreasing across the university, this is through a combination of milder winters and improvements in efficiency and control of our building.

Total electricity use has increased on campus through new buildings and refurbishments being brought on line, increased operating hours for a number of buildings and an increase in energy intensive research projects such as the Institute of Railway Research.

When the usage of both electricity and gas is pro-rated to the size of the campus the reduction in gas use is more markedly obvious, however it also demonstrates that despite the increases in electricity requirement as explained above, the usage by area is in control and not increasing further.

Energy reduction initiatives are continuing with major LED replacement projects continuing in the Library and smaller scale projects across the campus. The scheme to replace Harold Wilson building's lighting with LED fittings has successfully resulted in a 20% decrease in total electricity consumption for the building across the 12 month period post project completion.

Further activities are underway to utilise the Building Energy Management Systems (BeMS) to reduce consumption through control of operating hours and temperature set-points whilst maintaining the thermal comfort of staff and students.



Water use has decreased between 2014-15 and 2015-16 by 5% across campus and by 8% when pro-rated by gross internal area. Water conservation activities continue to be implemented with push-taps and low flush toilets and urinals specified where possible.



#### New buildings and refurbishment

The Oastler Building was completed and was the University of Huddersfield's first to achieve Energy Performance Certificate 'A' and BREEAM 'Excellent' and incorporates the following 'green' features to minimise its environmental impact

- A green roof to help improve air quality and encourage biodiversity that also incorporates water attenuation devices to slow the rate of run off and reduce the risk of flooding.

- A complex heating and cooling system using a range of low carbon technologies such as air source heat pumps and combined heat and power (CHP). Each room has presence-detection sensors to maintain the optimum levels for temperature and lighting when the room is occupied by users.
- LED low energy lighting with daylight adjustment and presence detection
- Locally sourced materials and products including the Yorkshire stone cladding, metal fins and high performance glazing were supplied from contractors in Huddersfield and Brighouse. 73% of labour on site was from the local area.

Following on from Oastler the University now has a policy to construct all new buildings to a minimum standard of EPC 'A' and BREEAM 'Excellent' beginning with the new Barbara Hepworth building due to be completed in 2019.

Work is currently underway with the major refurbishment of Joseph Priestley building to incorporate new offices, teaching space and post-graduate research areas for the school of applied sciences. The works will include LED low energy lighting with daylight adjustment and presence detection throughout plus new heating and cooling systems utilising natural ventilation, heat recovery units and improved building energy management system controls.

# Waste

We implemented a campus-wide recycling scheme in 2016 incorporating split recycling and general waste bins for staff and students. A launch campaign for all students and staff was undertaken and projects are ongoing to encourage increased rates of recycling and identify opportunities for reducing waste and its impact. Examples include

- Paper saving through the introduction of online payslips for staff with regular computer access. This has resulted in an 84% reduction in the number of monthly payslips printed.
- Collecting waste from around campus using an electric tug, rather than diesel vans, which helps reduce local air pollution and has a lower carbon footprint
- All cooking oil from our kitchens is recycled into biodiesel, which our catering supplier uses to power its delivery vans to campus.

# Travel

We have improved our range of staff travel incentives, successfully introducing the Northern Rail scheme and developing a user-friendly online system for Metrocard passes. A variety of travel offers and stands were presented to staff at the last Support Staff Conference.

A revised Travel Plan will be implemented in 2017 to continue the progress made under the previous plan in which all major targets were achieved and a modal shift away from single occupancy car use towards public transport and active travel for staff commuting occurred.

#### Fairtrade

The University held a comprehensive Fairtrade Fortnight programme in early 2017, including a Fairtrade supplier event, seminars run by local social enterprises, and ran a social media competition. We continue to maintain our status as a Fairtrade accredited University and recently contributed to the successful renewal of the Kirklees-wide Fairtrade accreditation until 2019.

#### **Reducing environmental impact of cleaning**

The University has implemented a system of microfiber mops and cloths that eliminates the use of cleaning chemicals in most areas across campus. A concentrated chemical dilution system significantly reduces the volume of remaining chemicals and also the amount of plastic and cardboard packaging waste. This system reduces the environmental impact of the cleaning undertaken and is more economical for the University.