

University of Reading Carbon Reduction Smashing 35



Profile

- Higher Education
- 17,000 students
- 4000 staff
- Suburban
- Research Intensive

About the project

Summary

The University set out in 2011 to reduce its carbon emissions by 35% by 2016 compared to a 2008/09 baseline. Since then, over £4 million has been invested to improve energy efficiency across the University's estate and at the end of 2016, we were delighted to announce we had achieved this target. Our annual carbon emissions have reduced from 44,000 tonnes of CO2 in 2008/09 to just over 28,500 tonnes per year. The total carbon saved over the five year period is 63,000 tonnes, which equates to just over two years' worth of the University's current carbon emissions!

The results

The problem

The University aspires to be a leader in reducing its impacts on the local as well as global environment, by embedding a culture of sustainability throughout its teaching, research and operations. As a large organisation, the University has a significant carbon footprint and therefore put in place a plan to mitigate its carbon emissions.

In 2011 the University Executive Board (UEB) set an ambitious target to reach a 35% carbon reduction compared to the 2008/09 academic year. The scope of the target including all buildings (including halls of residences), business travel, waste, water and refrigerant gases.

The approach

The work was led by Sustainability Services and covered several key areas:

- 1. Electricity Improvements
- 2. Heathing and ventilation improvements
- 3. New Energy Centre and district heating network
- 4. Wider sustainability
- 5. Better use of space
- 6. Halls redevelopments and efficiencies
- 7. UK emission factors

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Performance and results

Our annual carbon emissions have reduced from 44,000 tonnes of CO2 in 2008/09 to just over 28,500 tonnes per year. The total carbon saved over the five year period is 63,000 tonnes, which equates to just over two years' worth of the University's current carbon emissions. In total, £4.1 million has been invested in energy efficiency over the last 5 years to achieve the 35% carbon reduction. Over that same period, cumulatively we have saved £17 million and anticipated 'business as usual' energy costs.

CO2 savings

[If applicable, please insert your CO2 savings. Delete if not applicable. *Overall tonnes of CO2 saved using the DEFRA/DECC conversion factors. http://www.ukconversionfactorscarbonsmart.co.uk/. **if your initiative does not have any carbon savings please leave this area blank. If your initiative is a long-term project then please state over how many years.]

| Please record the annual carbon savings* you have/will achieve with your initiative**. | |
|---|--------------------------------|
| CO2t savings 2016/2017: | 15,800 estimated |
| CO2t savings 2017/2018: | 15,900 estimated |
| CO2t savings over the life cycle of the project: | 75,100 actual over the 6 years |

The future

Top 3 learnings from implementing your project

- 1. Achieving absolute reductions is possible even when teaching more students
- 2. The programme will evolve but requires regular progress reporting
- 3. Internal and external sources of funding can be utilised to enable more work to be done

Sharing your project

The project has been well-communicated both internally and externally. This includes:

- Numerous industry publication articles, for example in Labmate, University Business, Laboratory News
- Articles on our Blog pages, social media coverage, local news and radio
- Presentations at Salix Finance, S-Lab and other events
- Lectures to students at the University on how we manage carbon and energy



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What has it meant to your institution to be a Green Gown Award finalist?

"We are delighted to be nominated for a Green Gown Award again this year, in recognition of our significant achievements in reducing the carbon emissions from our operations. This further reinforces the commitment of the University to sustainability as well as our ability to deliver all that we have promised." Sir David Bell, Vice Chancellor, University of Reading

Further information

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