



## Sheffield Hallam University Facilities and Services

### Driving towards a sustainable fleet

#### About the project

##### Summary

This project is designed to reduce the environmental impact of the fleet of vehicles used by the university through a needs based procurement approach, ongoing CO<sub>2</sub> monitoring and tracking, and the introduction of low carbon technology.



#### Profile

- Higher Education
- 31,000 students (full and part time)
- 4,400 staff
- Urban and green campuses with satellite sports facilities

#### The results

##### The problem

Sheffield Hallam University is accredited to ISO14001:2015. Through this system, all potentially significant environmental impacts are formally identified and managed including the emissions resulting from using the fleet vehicles. The Environmental Plan outlines key targets against all of these impacts, including an ambitious aim to reduce the emissions from the fleet vehicles by 25% by 2020 (from a 2012 baseline).

##### The approach

When it comes to managing the fleet the university has adapted a number of methods to achieve the target;

- **Monitoring** - all of the vehicles are fitted with tracking devices which allows us to accurately calculate carbon emissions and ensure that the fleet remains appropriate to operational need in terms of both size and number of vehicles
- **Training** - All university drives must undertake training before getting behind the wheel. This is delivered by an external training partner and includes elements of sustainable and efficient driving skills.
- **Procurement** - The university has recognised that its fleet fulfils a range of needs and therefore requires a range of different vehicles to achieve these effectively. Procurement decisions are made based on the best and most efficient way of meeting the requirements and as a result the fleet now consists of a mix of different sized vehicles and different fuel types including two electric vans, with two more on the way during the 2017/18 year.
- **Development and Partnership working** - through being flexible in the approach towards managing the fleet the university has opened the door to trials and partnerships. We are currently working with ITM Power and Coventry University in trialling and providing user feedback on hydrogen powered vans.



### Our goals

The overall goal is to achieve our 25% emissions reduction target by 2020. One of the ways we are progressing towards this is pursuing EcoStars fleet accreditation. In 2017 we were awarded a 4 star accreditation, and have created a working group to ensure we achieve the full 5 stars next year by further improving the quality of the fleet and putting a greater level of importance on to achieving our emission reduction targets.

### Obstacles and solutions

Embracing new technology	This is not the first time the university has trialed new technology, and when electric vans have been tried in the past they had been found unfit for purpose. By allowing the drivers to test the new electric vans before they become a permanent part of the fleet and collecting extensive feedback we were able to integrate them into the fleet while addressing concerns. The electric vans are now the most popular vehicles in the fleet.
Changing carbon factors - diesel higher - slowing progress to target	Although the university has made strides in reducing its carbon footprint, changing DEFRA carbon factors year on year have slowed the progress. For example, if the factors had remained constant we could report a 16.7% reduction rather than the 1.3 we are currently reporting. This has further highlighted the long term environmental issue with diesel vehicles, and placed greater emphasis on phasing these out where not operationally required. We look forward to replacing a further two diesel vans with electric later this year.
Growth of the fleet	Although it is a priority to reduce our environmental impacts, the fleet vehicles are operationally required by the university. Since the baseline year the number of vehicles in the fleet has risen by 20% due to incorporating other departments into central management and a rise in jobs and need. Each lease renewal or new vehicle taken on is now seen as an opportunity to explore the best fit for the job, with electric vans now preferred where possible and a move toward petrol if electric is unsuitable.

### Performance and results

See below;

### CO2 savings

Please record the <b>annual</b> carbon savings* you have/will achieve with your initiative**.	
CO2t savings 2016/2017:	1.3 tonnes CO <sub>2</sub> e Actual savings
CO2t savings 2017/2018:	5.1 tonnes CO <sub>2</sub> e Estimated savings (electric vans numbers to double)
CO2t savings over the life cycle of the project:	9.5 tonnes CO <sub>2</sub> e Estimated savings to be achieved if 2020 target met (9 years between target and baseline)



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Finalist's case study



## The future

### Top 3 learnings from implementing your project

- 1 There is a wide vehicle market available, with a lot of information available to help procurement and operational decisions
- 2 The electric vehicles needed surprisingly little maintenance, it was great to learn that they're not the typical assumption of "milk float" electric vehicles, but viable petrol and diesel alternatives
- 3 This cross departmental project has been a great team builder, bringing together procurement, insurance, Health and Safety, Operations, Transport admin and Sustainability on a common goal.

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

Successfully meeting current global challenges can only be achieved through sustainable solutions. To be a Green Gown Finalist reflects the significant commitment we have made to practicing what we teach in terms of finding and implementing those solutions at Hallam and belongs to the entire Sheffield Hallam community.

### Further information

SHU Sustainability;

- <https://www.shu.ac.uk/about-us/sustainability>
- [@SustainableSHU](#)