



Green Gown
Awards 2016



Dissemination
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Finalist's case study

University of Birmingham Facilities and Services

Brum Brum: Driving Greener Fuels at Birmingham

About the project

Summary

The University of Birmingham (UoB) is leading the way in greener vehicles, fuel technology and everyday sustainable travel options, resulting in one of the most sustainable fleets in the country, by turning scientific research into reality. Through improved infrastructure and salary sacrifice schemes staff are encouraged and supported to buy their own green vehicles as part of the University's Green Travel Plan to increase the usage of sustainable transport methods across Birmingham.

Project partners

The Transport team worked with other commercially focused departments as well as academics and research teams to find ways to reduce carbon emissions through its transport fleet. Working with the University's Procurement Department, the team awarded the leasing contract to LEX Auto Lease two years ago (2014). Focus was given to the procurement of Electric Vehicles and understanding lifecycle costs. In addition, a software solution was introduced to not only give clear and strong data around emissions used but to manage the whole transport solution. Following the successful adoption of EV vehicles the teams then looked at bringing a hydrogen car into the fleet.

The results

The problem

The University of Birmingham did not have one central team that managed fleet. The process of hiring vehicles and managing travel around campus was the responsibility of individual teams. This meant that there wasn't a coordinated and sustainable approach regarding the use of vehicles and therefore the monitoring of emissions on campus. By taking initial steps to bring the management of the fleet into one department enabled the team to proactively look at using alternate fuelled vehicles.

The approach

A holistic approach to travel and transport was adopted at UoB to reduce emissions and encourage the usage of alternate fuelled vehicles on campus. UoB combined academic prowess with a positive operational attitude to change, which has been key to reducing CO₂ from 367 tonnes pa 2005/06 to 238 tonnes pa 2012/13 and reduce single vehicle commuter usage to just 34.9%. In order to reduce emissions, the university had to offer a more coordinated and sustainable approach to travel.



UNIVERSITY OF
BIRMINGHAM

Profile

- Higher Education
- 32,00 students (includes full and part time students)
- C. 7,000 employees



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Obstacles and solutions

Electric Vehicle Reputation	Earlier electric vehicles (pre 2013) were problematic, hence earning a reputation of unreliability. Battery technology was less effective giving short range and low life cycles. This resulted in driver's reluctance to use them. With the arrival of Nissan NV200 and Renault Kangoo (post 2013), we were able to change driver perception which resulted in an increase in confidence, extended range and ease of driving. The electric vehicles are now recognised as the preferred option with employees.
Financial Implications	Initial investment in this technology posed a risk to budgets. Working with our preferred leasing provider we negotiated excellent terms and coupled with savings on fuel costs, this new technology proved to be financially viable.
Centralising Fleet/Travel and Logistics	Having a holistic approach to transport and travel was resource intensive and required many administrative hours to track all the fleet, external business and commuter travel. With investment into a software package that enabled us to record all movement associated with the University we saved considerable manual entry, were able to manage risk and record emissions on a daily basis.

Performance and results

Green Travel at UoB has created environmental and social wins on a number of different levels.

- Carbon reductions from fleet switching and alternative travel by staff and students
- Less noise pollution from quieter electric vehicles
- Less local air pollution from low emission or zero emission vehicles (over 13.5 tonnes of emissions have been reduced by replacing fuel with electric vehicles, based on the mileage and CO2 emissions those vehicles would have produced)

These benefits aren't limited to the above; there has been a positive shift in the behaviour of staff and students in the way they think about sustainable travel. The university has also seen financial benefits as well. The lifecycle costs of our electric fleet in comparison to the combustion engine have also made taking this approach viable.

The future

Lessons learned

- We found that working collaborating and utilizing research carried out into fuel cell technologies by our academics has been pivotal in developing our sustainable fleet.
- Working together with procurement in creating mandatory process where all fleet bookings come through one central point, has enabled the successful collection of data.
- Providing staff with access to information about alternate fuel vehicles has seen a notable behavior change.

Sharing your project

Representatives from the university have relationships within the motor trade that provide the platform to share the success of our sustainable fleet at both an industry level and throughout the HE sector.



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

To be a Green Gown Award finalist is an honor and privilege for the University and teams involved. To be recognised has given our transport team the confidence to continue to develop new and innovative sustainable travel solutions and has recognised the importance and pivotal role that our leading research plays in driving positive change that impacts on everyday activities.

Further information

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