

Excellence Report for Business School

Background

Over the last ten years the Business School has moved from being a largely UK-focused recruiter of students to a School that attracts substantial numbers of international students. In 2012/13 74% of new entrants came from outside of the UK with 107 nationalities being represented across our programmes. The School has always recognised the fundamental necessity for good environmental stewardship in our day-to-day operations and accepts the challenge of seeking creative solutions to addressing environmental concerns, but it had not considered the impact of increasing its international student numbers. It was whilst seeking to obtain carbon neutrality to mitigate our greenhouse gas emissions through the purchase of offset, we had our carbon footprint calculated. The British Standard PAS 2060 was used to calculate our carbon footprint and in Scope 3 – all activities not controlled by ourselves, it was suggested we should include international student travel. When the calculations were completed it was a tremendous shock as it was between 13,000 and 14,000 tonnes per annum. The School decided it needed to reduce this, but how? So when the opportunity arose to devise a project for the Green Impact Awards it was decided by the Green Impact Team this would be the ideal chance to try and solve this predicament. Scope 3 does not have to be included in the measuring of a carbon footprint, but with such a large proportion of the School's carbon footprint being international student travel it is not something that can be overlooked and the School is never afraid to take on a challenge. The School and the Green Impact Team agreed to reduce this element of the School's carbon footprint and it would have to be offset and what better way than involving the students themselves. The plan is to make them aware of their carbon footprint and help them devise ways of reducing it through a merit scheme, where all actions have a value that can be used to offset their carbon emissions. This is going to be a complex project in terms of devising methods and processes of calculating and recording accurate information. It is a project that brings together a number of different groups of staff within the Business School and University wide, all who have different skills to offer and most importantly it incorporates the students into the School and encourages them to think more about the environment. If it is successful it is also a model that could be rolled out across the University.

Aims

To reduce the carbon footprint of our international students travel and thereby reduce the Business School carbon footprint which will contribute to the University goal of reducing its carbon footprint by 43% by the year 2020. To encourage all Business School students to reduce their own carbon footprint and engage in the School's quest to reduce its carbon footprint.

Objectives

To calculate and inform Business School students of their carbon footprint and encourage and help them to reduce this.

To inform international students of their travel carbon footprint and encourage and help them to reduce this.

To maintain contact with those students who work on sustainable modules to see what impact their studies have on their future sustainable work in their countries and workplaces and use this to retrospectively reduce their carbon footprint which in turn for international travel reduces the Business School footprint retrospectively.

To design a merit system whereby all sustainable work carried out by students, be it community work or project work etc., will be measured and given a value that can be used to reduce the students' carbon footprint.

Design a portal where students can view their carbon footprint status and consider a reward for high achievement in this scheme.

To encourage students to carry out community service within the University and Exeter City and by doing this offsetting some of their carbon footprint.

To inform students of the carbon footprint of the Business School and how it is calculated and made up and engage them in helping to reduce the Business School carbon footprint and thereby their own. To show the students that they can make a difference and create a change in their Business School, their University.

To give them messages, ideas and values regarding sustainability that they can take away with them and use in their lives, home countries and workplaces.

Project Plan

The first part of the project was to obtain data of the Business School's carbon footprint. This has been done and the School commissioned the Centre for Energy and the Environment to calculate the CO₂ emissions created by Business School. The quantification of greenhouse gas emissions for the Business School was conducted according to the method outlined in the British standard PAS2060 and prepared in accordance with ISO 14064-1 (2006). Carbon emissions are categorised in three scopes:

Scope 1 – direct emissions e.g. gas, oil etc.

Scope 2 – electricity emissions

Scope 3 – all other activities not controlled by ourselves and this includes international student travel

All three scopes were incorporated in the calculation of the Business School carbon footprint and the Business School carbon footprint of 14463 tonnes CO₂ is made up from:

Energy use of buildings – 660 tonnes CO₂

Staff business travel – 466 tonnes CO₂

Student Travel – 13000 tonnes CO₂

The student travel element was calculated by taking their home post codes and using the distance from that code to the University post code. The radiative forcing factor was also included (the non CO₂ emissions from flights altering the balance of incoming and outgoing energy in the Earth's atmosphere). So we did everything by the book. Calculations were made for a student traveling twice a year and three times a year and the twice a year calculation was decided to be the more accurate, but the difference can be seen in the figures below:

Twice a year travel 14,000 tonnes of carbon emissions

Three times a year travel 21,000 tonnes of carbon emissions

The largest contributor to the carbon footprint of the Business School is the international student travel and this cannot actually be reduced so the project was created in trying to devise a scheme to offset international student travel.

The first important need was to reach the students and so discussions with the Student Services were very productive. Students in their second and third years are under a lot of work pressure and they live off campus. So it was decided that the first year students were the target. First thoughts were to attend Freshers week in Xfi, but this was not feasible as already there were so many stands with so many societies etc., talking to the students. Another event in Freshers week is the Academic Social Evening where the new students get to meet the academics who will be teaching them. Student Services agreed that this event could also be used to meet with the students to engage them in discussions regarding sustainability and Green Impact.

From the idea of offsetting the international students travel the project evolved that the carbon footprint of as many students as possible (or are interested) could be reduced by the setting up of a merit scheme by which they would reduce their carbon footprint and thereby the School's and the University's. This would encourage students to be involved in sustainability and engage with the Schools activities to reduce its carbon footprint. They could become involved with the Green Impact Team, community work or just remembering to turn the lights off when leaving a room, the list is endless, but everything on it will reduce carbon emissions. The launch of this scheme will be at the Academic Social Evening where in attendance will be the Business School Green Impact Team, the University Sustainability Project Manager and Travel Plan Co-Ordinator and a representative from Community Action at the Guild. As much information as possible would be provided to the students at this event to allow them to get

involved and making a difference.

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Local organisations that provide community work have already been contacted and showed interest in the School directing students their way. Information forms have to be completed so these will be obtained to give out to students at this event. The School encourages and funds students in extracurricular activities and a fairly new student society 'Be the Change' engages students in a variety of projects including promoting environmental sustainability. The University Grand Challenges also enables first year students to work in interdisciplinary research groups where topics such as Water Security and Solving the Climate Change Problem are researched.

A meeting with the University Energy Manager has opened up this idea, and in conjunction with the School Green Impact team he and his team will help devise a short questionnaire, develop a series of measures for the different actions that could be used to offset carbon footprint and help develop a portal where students can see how the carbon footprint is diminishing. There are many things still to be decided i.e. do students send in their sustainable deeds and we put the merits on or do are they allowed to do it themselves etc.

The team was aware that there were a number of modules taught in the School that have an element of sustainability. Meetings were arranged with one of the academics and the Energy Manager and the project moved on another very large step. The third year students produce essays and reports with topics such as carbon neutrality and how the School might reduce its carbon footprint. Since this meeting the Energy Manager has presented to the students (many of whom are international) what his role is and what the University is doing to reduce its carbon footprint and he has also read the essays and reports and is going to give his comments. Some of the projects outlined in the reports may be usable in the short and long term to work towards lowering the School's carbon footprint. Therefore it was decided that engaging with these students from the beginning of their third year and working with them on their projects i.e. talks and guidance from the Energy Manager and more interaction with the School's Green Impact and Sustainability team they too could be involved in reducing their carbon footprint and international travel, by using their projects.

The next idea to evolve was to build up sustainability alumni with these students with the help of the academics teaching these modules, the Energy Manager and the Business School GI & S team. Communication through a newsletter or bulletin could inform the alumni of the development of their project and what the School was achieving as these students are already engaged with sustainability. The communication would work both ways and they could feed back what differences taking these modules has made on their lives and those of others in their workplace, countries etc. The carbon footprint of these students could be retrospectively reduced by what they have achieved or differences they have made and in doing so the carbon emissions of international student travel could be reduced by these achievements thereby reducing the Business School's carbon footprint.

The modules teach sustainability in different fields of business. These are taken by many students of which a large number are international students with a large international travel carbon footprint. Therefore to work with these students in helping them to reduce this is the main criteria for this project. To encourage them to take up local and University community work and help the School reduce its carbon footprint through engaging with the Green Impact and Sustainability team in projects. Continuing to report to this team after they have left the University to ascertain how they use this knowledge and develop their skills in this field could be used retrospectively to offset their carbon footprint when they attended the University.

Andy Seaman has been invited to present to the students on the BEM3015 module, 'The Business of Climate Change'. This liaison has also brought about the request for EDS to facilitate tours of the Universities Renewable Energy Installations for Business School staff and students. All helping to raise within the School the awareness of sustainability and carbon emissions.

This cross pollination of academics who teach topics with aspects of sustainability and EDS energy management staff can lead to a lot of shared information which will have an impact on carbon reduction and can be relayed back to the students in their lectures. Julie is already working with Andy and Shirley Turner, the Green Impact

and Sustainability Manager for the School, to try and bring these ideas to fruition and they have formed the Business School Carbon Management Group. The idea, for this project, being that the international students can feed into this Group and receive information back. EDS now has a new Energy Management Software package for the School which will enable students and staff to be able to view their energy and carbon emissions.

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Again involving the students with the carbon management of the School and using their input can help to offset the carbon footprint created by their travel.

Timescales

This project is very much in its infancy and some areas i.e. devising appropriate calculations are still to be achieved, but we have already identified a team, headed by the Energy Manager, who are looking forward to helping with this.

The calculation of the amount of the CO2 footprint for the Business School has been completed and it is now the task of offsetting and reducing these omissions with the merit awards scheme.

We want to try and be ready in time to engage the first cohort of first year students in September 2014.

Engaging with the third year students (studying sustainable modules) has already commenced and the intention is to build up a communication line and build an alumni relationship which needs to be established by July 2014 when they will leave. Then engaging with the next sustainable studies cohort will commence in January 2015. The information required from this group will be gathered over the future years to offset the School's carbon emissions. This is very much an ongoing and long term project. (See Appendix 1 for Time Scale Table)

Stakeholders

The key stakeholders are all Business School national and international students and starting with a new intake of first year students in 2014.

Business School third year students studying sustainability related courses.

Academic staff teaching modules covering sustainability issues etc.

CEE to provide updated data.

Sustainability Delivery Team providing help with travel info, volunteering opportunities, promotion in newsletter, signposting to internal/external/local organisations.

EDS Energy Manager and team to help devise measuring system and design a portal.

Resources and Research Required

The data calculations from CEE are vital to be able to calculate our carbon footprint and carbon emissions from student international flights.

The ACM for Infrastructure and Technical Services to be able to drive this project and work with all those involved.

To build a team to carry on the project into future years.

Key Performance Indicators

The data from the monitoring of student's carbon footprint will illustrate how much they are embracing the challenge and achieving reducing it.

The Schools energy bills will show some changes as students behave in a different way towards things like lighting and heating.

Waste recycling will illustrate a change in attitudes and could be used as a merit i.e. if recycling improves everyone's carbon footprint will be reduced by an amount.

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The feedback and response received from the sustainability alumni and the number of students from the 2014 intake who go on to attend the sustainability course when they reach the third year.

Project Difficulties and Opportunities

The initial difficulty was obtaining the data and information to calculate the School's carbon footprint. It is not a straightforward process and has very many variants from which choices have to be made and still be working within the British Standard.

Being able to approach people to ask for their help and involvement in the project. Everyone is extremely busy and you can be somewhat loathed to take even more of their time.

Anticipated difficulties in finding ways to keep the students engaged in the merit scheme over the three years they are in the School and then encouraging them to keeping the communication going after they leave.

Not sure of the number of staff needed to run this project. Everyone currently on board are willing to continue working with it, but depending on the success this team will have to expand.

The opportunity to really develop a good model that can be used to reduce School/College carbon footprint that can then be rolled out across campuses.

The opportunity for academics, professional services and students within the School to work together for a common cause.

The opportunity to work with other teams across the University and share ideas and skills again for the common cause to participate in the reducing of the University's carbon emissions.

Excellence Legacy

As this project is in its early development stages we are unable to provide a case study, but by next year there should be numerous studies about individual achievements, projects and ideas thought up, community achievements etc., to talk about. This project has longevity and need never come to an end. This project can be adopted and used by any group, department, college etc. It will continue to evolve over time and many people will be encouraged to be involved with the environmental and sustainability of the School and University and hopefully help in reducing our carbon footprint.

Shirley Turner
9.5.14

Appendix

Time Scales

Start Date	Project Item	Person/Persons/Team	End Date
Undergraduate Carbon Footprint Project Plan			
w/c 19 th May	Discussions regarding devising portal, measuring tool, questions needed to calculate student carbon footprint.	Shirley Turner/Andy Seam	End of May
June	Completion of above work.	Shirley Turner/Andy Seam	End of August
16 th September	Engage with students at Academic Social All Day Event. Questionnaires to be completed.	Shirley Turner/Andy Seaman/Sustainability Team/BS Green Impact Team/Student Services	16 th September
w/c 22 nd September	Calculate Student Carbon Footprints	Andy Seaman Team	End September
October	Event/email etc. to explain project again and give students' their carbon footprints.	Andy Seaman/Student Services/Shirley Turner/BS Green Impact Team	October
February 2015	Update on progress to students. Remind options i.e. community work.	Shirley Turner/BS Green Impact Team	February 2015
3 rd Year Undergraduates Sustainability Alumni Project Plan			
Current	Engage with students and give them feedback regarding their projects	Andy Seaman/Julie Whittaker	14 th July

Current	Discuss methods of engaging and maintaining contact with this year's cohort as sustainability alumni.	Shirley Turner/Julie Whittaker	31 st May
June	Implement method and contact the above cohort of students	Shirley Turner/Julie Whittaker/Student Services	30 th June
Ongoing	Maintain contact with students for as long as is possible	Shirley Turner/BS Green Impact Team	Ongoing
January 2015	Meet with next cohort to replicate engagement again.	Julie Whittaker/Shirley Turner/BS Green Impact Team	July 2015