



Dublin City University

**Application for Green Campus Flag Renewal
June 2016**

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1. Introduction

A major focus at Dublin City University in 2015/2016 has been the DCU Incorporation Programme. This Programme is the planned coming together of St Patrick's College, Drumcondra, Mater Dei Institute of Education and Church of Ireland College of Education with Dublin City University – the New DCU. Following incorporation the vision for the New DCU includes a new Institute of Education and an enhanced Faculty of Humanities & Social Sciences that will benefit from the combined strengths of the four institutions in addition to the existing faculties of DCU Business School (DCU BA), Engineering and Computing (FEC) and Science and Health (FSH). Another major development in DCU during 2015/2016 was the acquisition of the All Hallows Campus, a 6.74 hectare site in Drumcondra. An intensive investment programme by the university will ensure a fully active academic campus from 2016. A range of academic schools and support units will be established on the new campus in the first instance, with this increasing over time. The existing 100 bed student accommodation will be upgraded and plans are underway to develop additional accommodation units to meet the demands of a growing student body.

In addition, a new Educate Together primary school will be built on the All Hallows site, in close partnership with the Department of Education & Science, which will cater for young children in the Dublin 9 area.

DCU also announced an ambitious €230m capital development plan which will physically transform the multi-campus university and provide a platform to realise its ambitions in research, teaching and learning, student experience and enterprise engagement. The investment will allow for the upgrade of facilities on the All Hallows Campus and the construction of student accommodation. On the Glasnevin campus, the finance will facilitate construction of a further 560 on-campus student accommodation. This will bring the total capacity to over 2,200 student beds across campuses, helping address the pressing issue of student accommodation across the greater Dublin region. Lecturing capacity on the Glasnevin Campus will expand by 25% for the delivery of programmes across a range of disciplines and a new suite of teaching and learning spaces. A new Student Centre will commence construction in Summer 2016 to create a purpose-built space for students' social, cultural, global engagement and entrepreneurial activities. (Further information available in this video link : <https://www.youtube.com/watch?v=wXNMubPYw70&feature=youtu.be>)

All of these developments are undertaken with a strong commitment to sustainability. This report will outline some of the activities undertaken across our campuses over the past year.

2. Green Campus Committee

Review of 2015/2016 Committee

The Green Committee at DCU is renewed each year early in semester one. In 2015/2016 with the incorporation of DCU with St. Patrick College Drumcondra, Mater Dei and Church of Ireland College of Education a small group from the previous DCU Green committee along with some volunteer students agreed to establish a joint Green Committee across all incorporating institutions. This was agreed in advance with An Taisce. In addition it was agreed to combine previous environmental and horticulture societies to create one DCU EcoSoc which would form the basis of the Green Committee. A private facebook group was established for DCU EcoSoc and an all staff/student email seeking volunteers was circulated. In addition the DCU EcoSoc was represented at the 'clubs and socs' days on the DCU Glasnevin and DCU St. Patricks Campuses. Below is a list of DCU EcoSoc members

Denah Nic Éinrí Undergrad DCU-SPD Co-Chair Green Committee	Sam Fahy Sustainability Manager at DCU Co-Chair Green Committee
Mariane Galpo Undergrad	Saorla Kavanagh PhD Student at DCU
Anna Nolan Undergrad SPD	Mark Mempsey Undergrad SPD
Amo Mee Undergrad SPD	Eamonn Carroll Undergrad SPD
Claire Mangan Undergrad	Seán James Walpole Undergrad DCU
Rui Cheng Undergrad SPD	Caoimhe Ní Mhuircheartaigh Undergrad SPD
Tom McEvoy Undergrad	Dirragh Smath Undergrad
Ciara Whittaker Undergrad	Basra Mo Undergrad
Trish Fahey Undergrad DCU G	Meabh Convey Undergrad
Katie Boyle Undergrad	EG Ní Chuaig UG
Aisha Siwar Undergrad	Conor Dolan Undergrad

Saoirse Sarah
Undergrad

Aoife Greene
Undergrad

Dina Oláh
Undergrad

Rumen Panov
Undergrad

There was an initial introductory Green Committee talk/meeting on both the DCU Glasnevin and SPD Campuses which were well attended by both staff and students however many of the staff did not sign up to the facebook group – this will need to be address in 2016/2017. The first meeting of the committee elected Dehan Fitzharris (Nic Éinrí), Undergrad DCU SPD and Samantha Fahy, Sustainability Manager DCU as co-chairs of the Committee. Saorla Kavanagh was elected secretary. The committee met on a regular basis thought-out the year 15/10/2015, 26/10/15, 04/11/15, 11/11/15, 24/11/15, 05/02/16, 09/02/16, 20/04/16. Meetings tended to cluster around event that were being undertaken such as People Climate March. In addition as there were participant for different campuses it proved difficult at times to find a suitable time/place to meet and sometime meetings needed to be repeated on both Glasnevin and SPD campuses to ensure everyone was included. On reflection while this group worked very well together it was predominately students and greater staff involvement would have been good.

Outlook for 2016/2017 Committee

The operation of the Green committee for 2016/2017 is currently under review. The current suggestion is that while the Green Committee will continue to strongly support the DCU Eco Soc, the Green Committee will exist as a separate entity drawing some of its membership from the Soc but also including some staff from the campuses.

Green Committee Associations

As mentioned above the Green Committee was very strongly linked to the DCU EcoSoc. In addition the work of the Smarter Travel Campus Group was strongly linked to the activities of the DCU Green Committee.

3. Environmental Review Progress Report 2015/2016

There have been major changes at DCU over the past academic year and significantly more to come in 2016/2017. In this section we report progress on environmental performance across Energy, Water, Waste, Biodiversity and Transport on the DCU Glasnevin Campus and initial baseline data for the DCU St. Patricks Campus.

Energy

DCU continues to work toward its agreed target of 33% energy reduction by 2020 on 2010 figures and has undertaken several infrastructural projects include LED retrofit, insulation upgrades, building fabric and glazing upgrades, however 2015 shows a blip in the previously downward trend. This is being attributed to additional buildings (NRF Research building) coming online in early 2015.

Given this ~6% increase over 2014 figure, the DCU Glasnevin campus remain focused on reaching its 2020 targets.

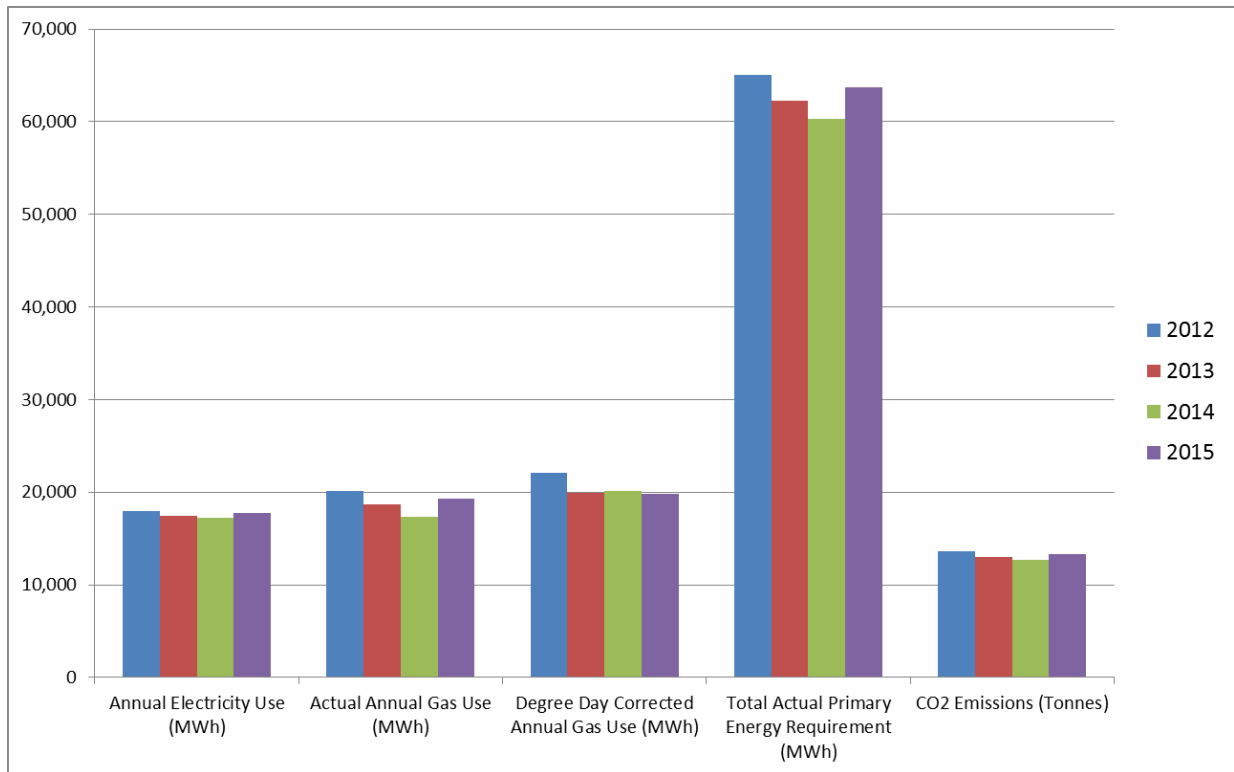


Figure 1: DCU Energy Consumption 2012 -2015 (calendar yrs)

We now also need to consider the DCU St Patricks Campus and looking forward also the DCU All Hallows Campus.

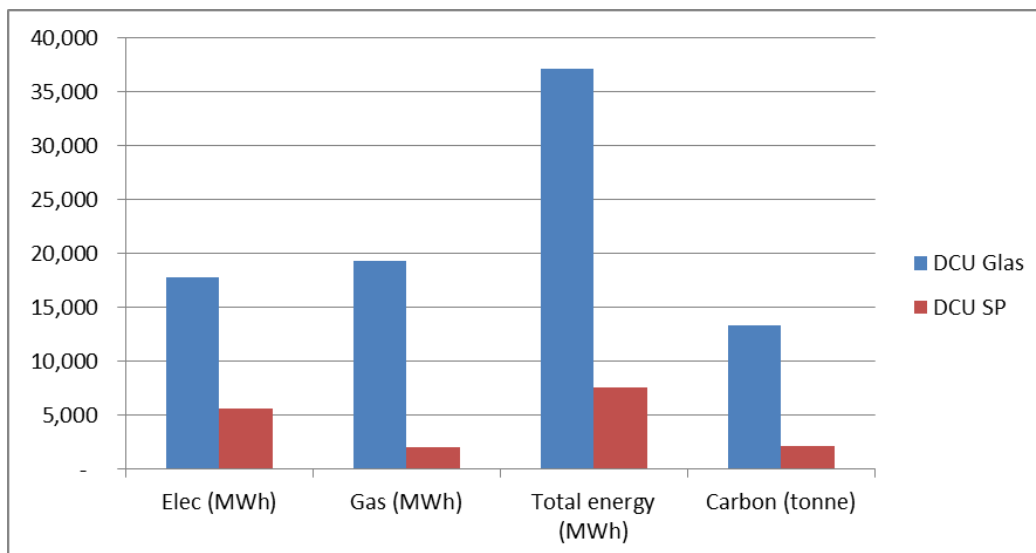


Figure 2: DCU Glasnevin Campus and DCU St Patricks Campus Energy consumption in 2015

2015/2016 has seen major changes at Dublin City University, 2016/2017 will see a redoubling of efforts to reduce energy consumption including some/all of the following measures

- SEAI Better Energy Works Grants
- SEAI Public Partnership Agreement
- Increase SEAI Financial Support
- Staff/Student Newsletters
- Issue Strategic Plan 2020 - Towards Sustainability
- ISO 50001
- LED Lighting Retrofits
- Green Campus/Green Flag
- Landscaping Greening Plans
- e3 Phase 4
- BEMS/M&T (Green Screens)
- 3% TPER Savings Target
- ESCO's/EPC's

Water

In 2015/2016 DCU commissioned LowFlow to undertake a full audit of water consumption on the Glasnevin campus. A primary aim of this audit was to establish a MNF (minimum night flow). This MNF could be made up of necessary water usage along with any leakages. A data logger was connected to the main water meter and water data collected. An annual consumption was estimated from this data logger – as can be seen from the graph below, the 2015 estimated figure represents an 8% increase over 2014 invoice based data. Some of this increase may be due to the data being collected during the academic term when water consumption is at its highest.

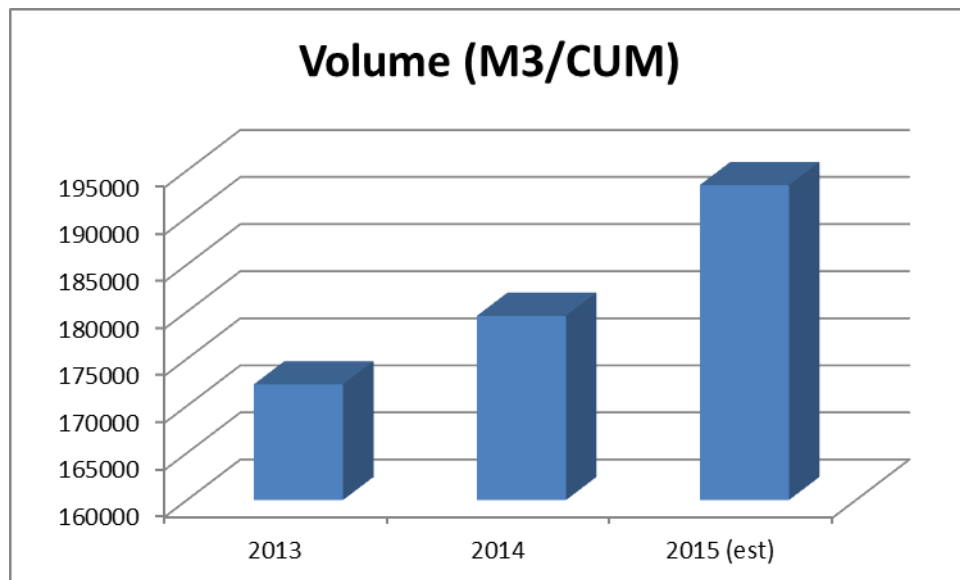


Figure 3: Total Water Consumption in DCU 2013 & 2014

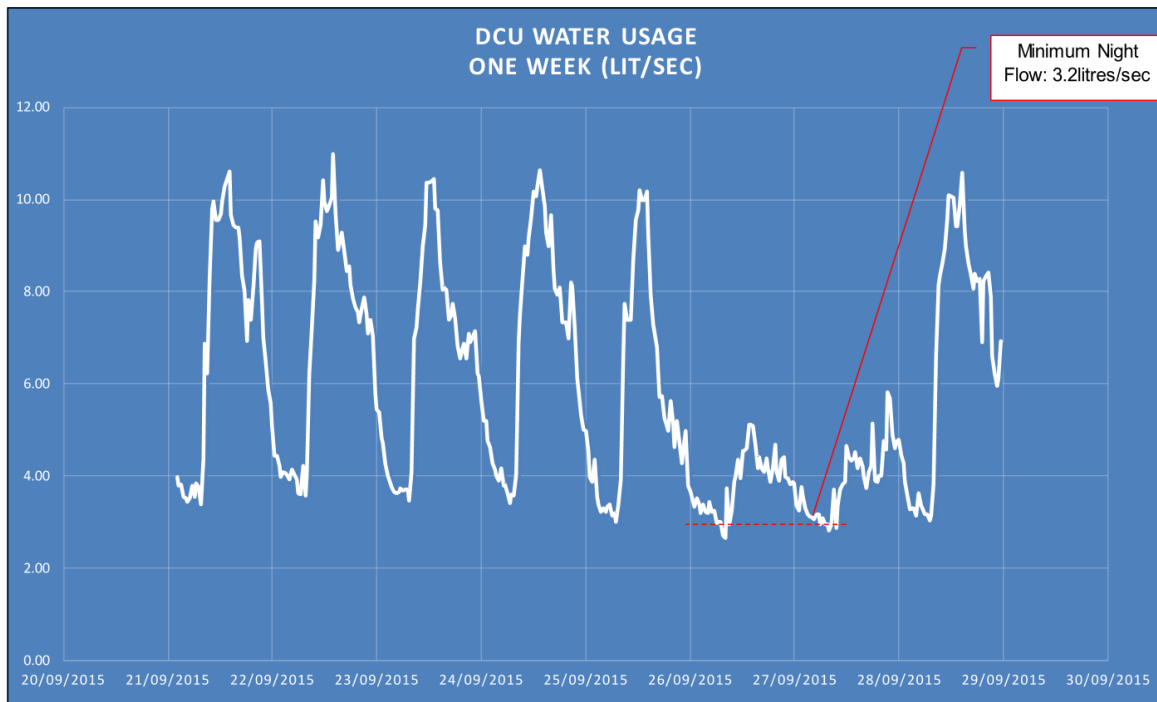


Figure 4: Average Weeks Consumption (academic week)*

* LowFlow Water Audit Report (Feb2016)

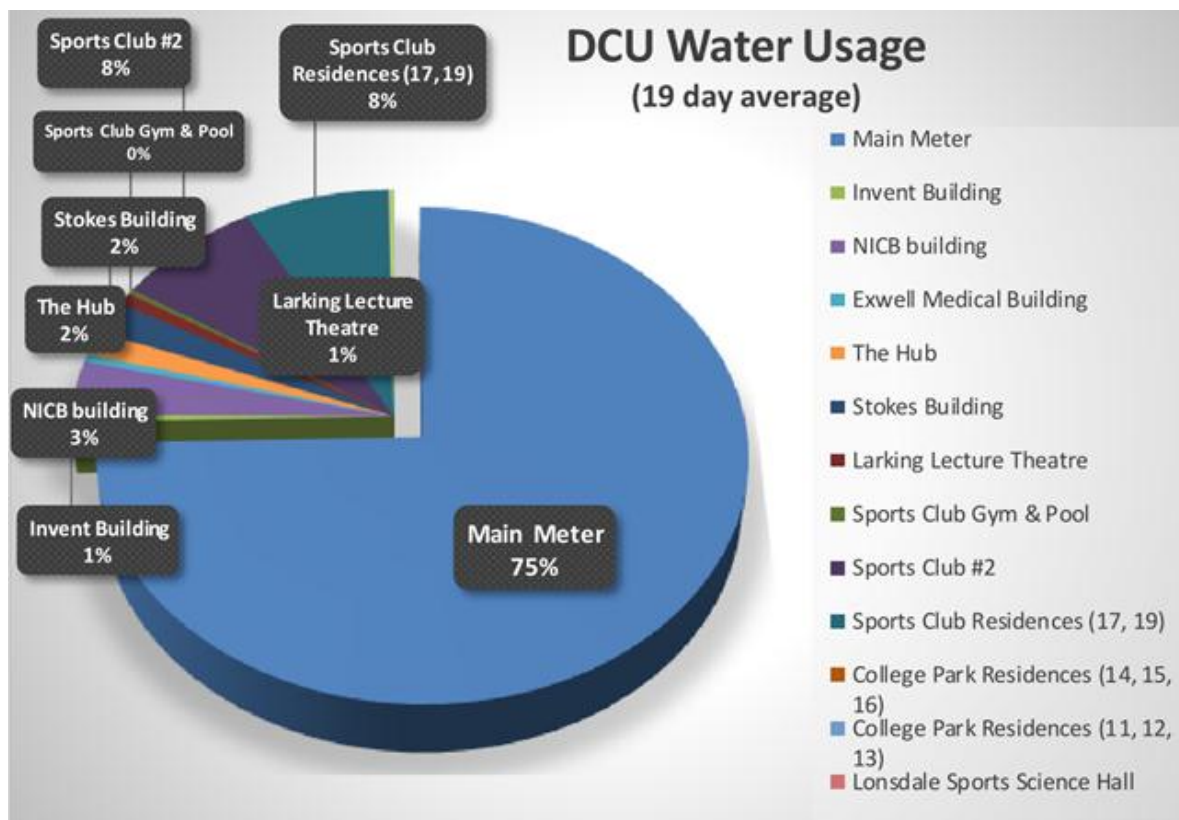


Figure 5: Breakdown of water usage across DCU Glasnevin

Major outcome of this report identified that the MNF rate is between 52% and 65% of consumption on campus implying that there are significant water losses on site. A major programme of identification and repair will be undertaken.

The total water consumption on the DCU St. Patricks campus was recorded at 120,000 m3 per annum, initial thoughts are that there must be a significant leak on this campus also.

Waste

DCU continue to closely monitor its waste and is working towards reducing total waste. Below is the data for 2014 vs 2015 data.

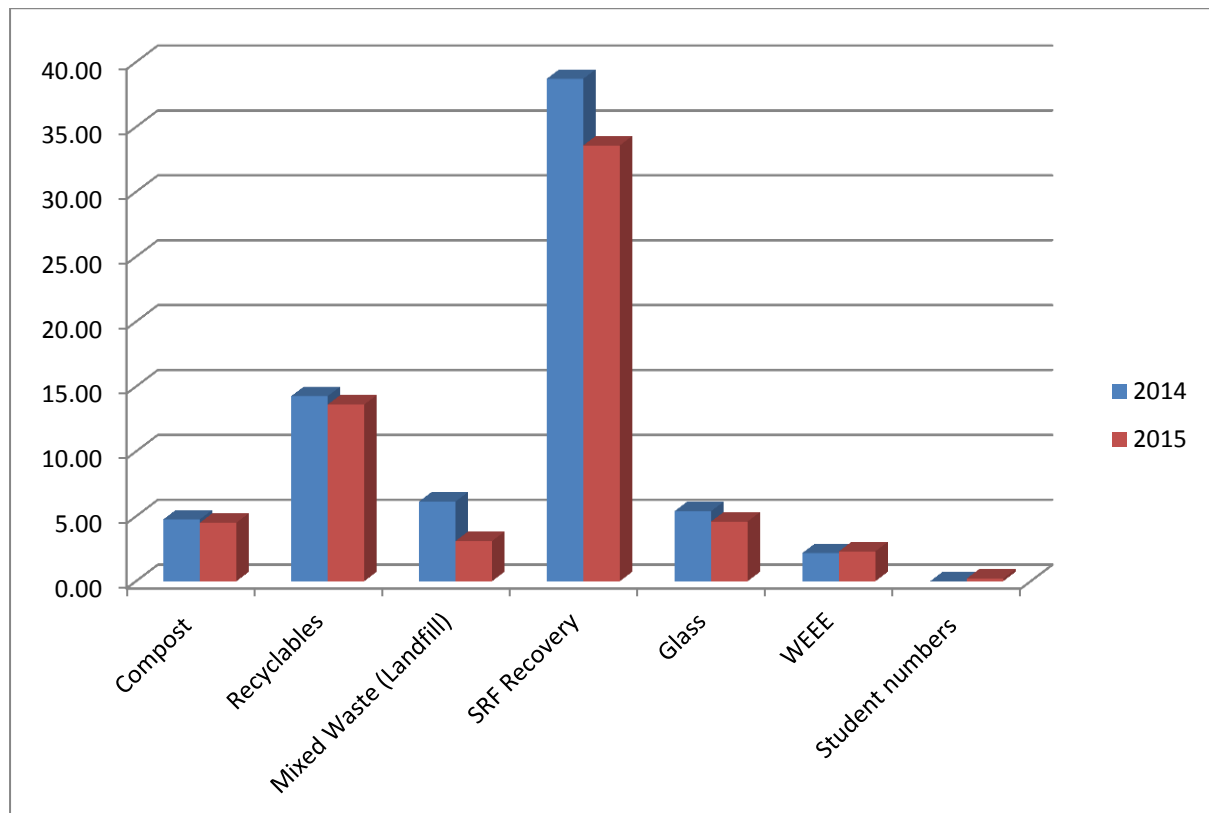


Figure 6: Breakdown of waste at DCU 2014 vs 2015

Biodiversity

Following on from the work carry out by Richard Cole, a student intern in 2014/2015 a quantitative survey of designated areas on the DCU Glasnevin campus was undertaken with a view to it being assess on a regular basis to understand increases/reduction in biodiversity.

Area 1 : Dry Meadows and Grassy Verges (GS2)

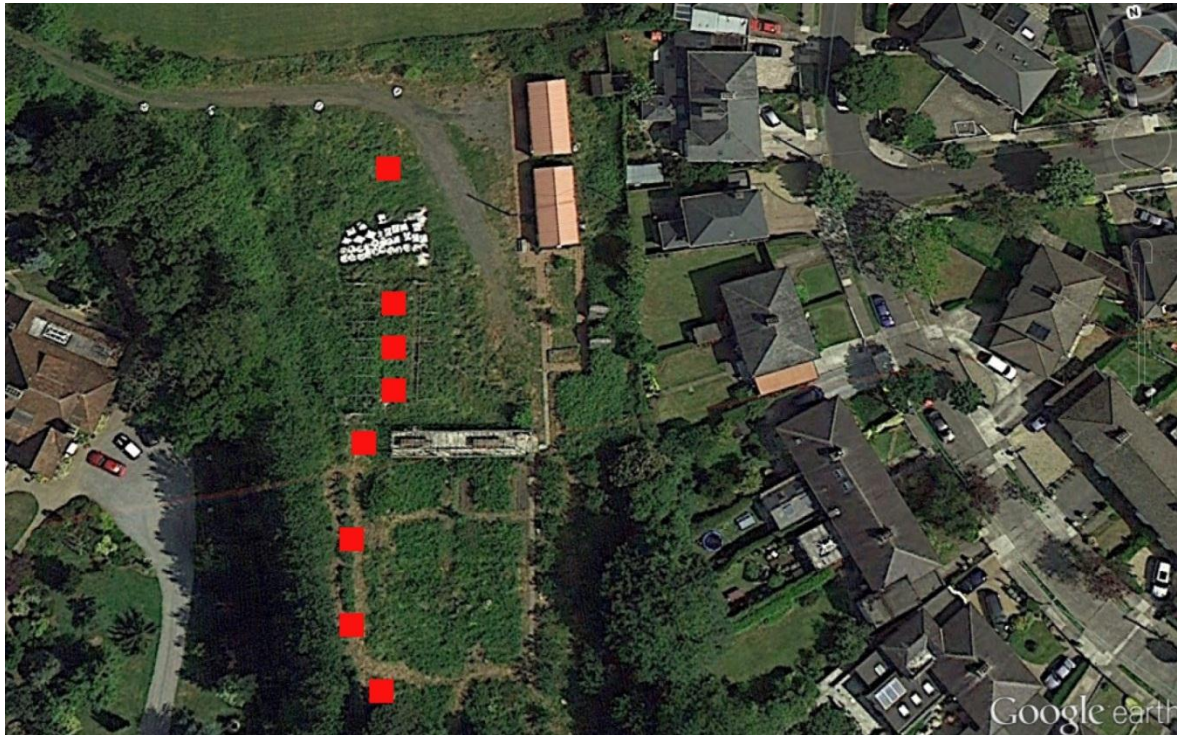


Figure 7: Location of quadrat samples for 'dry meadow and grassy verges'

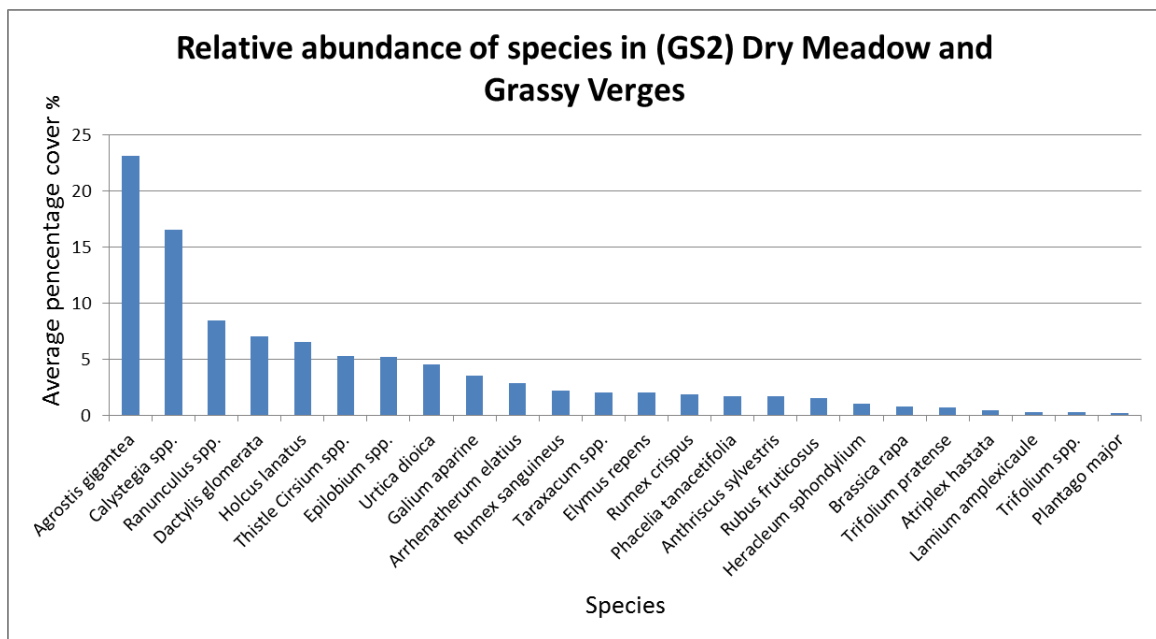


Figure 8: Relative abundance of species in (GS2) Dry Meadow and Grassy Verges

Area 2: Hedgerows (WL1)



Figure 9: Location of transects for (WL1) Hedgerows

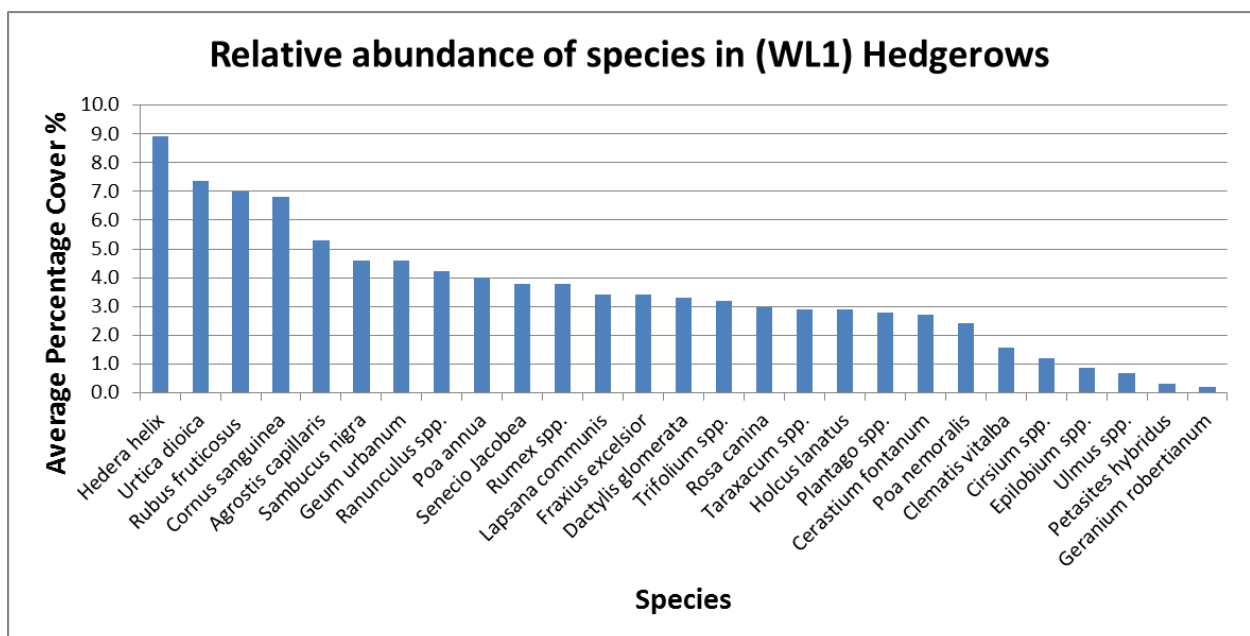


Figure 10: Relative abundance of species in (WL1) Hedgerows

Area 3: Tree-lines (WL2)

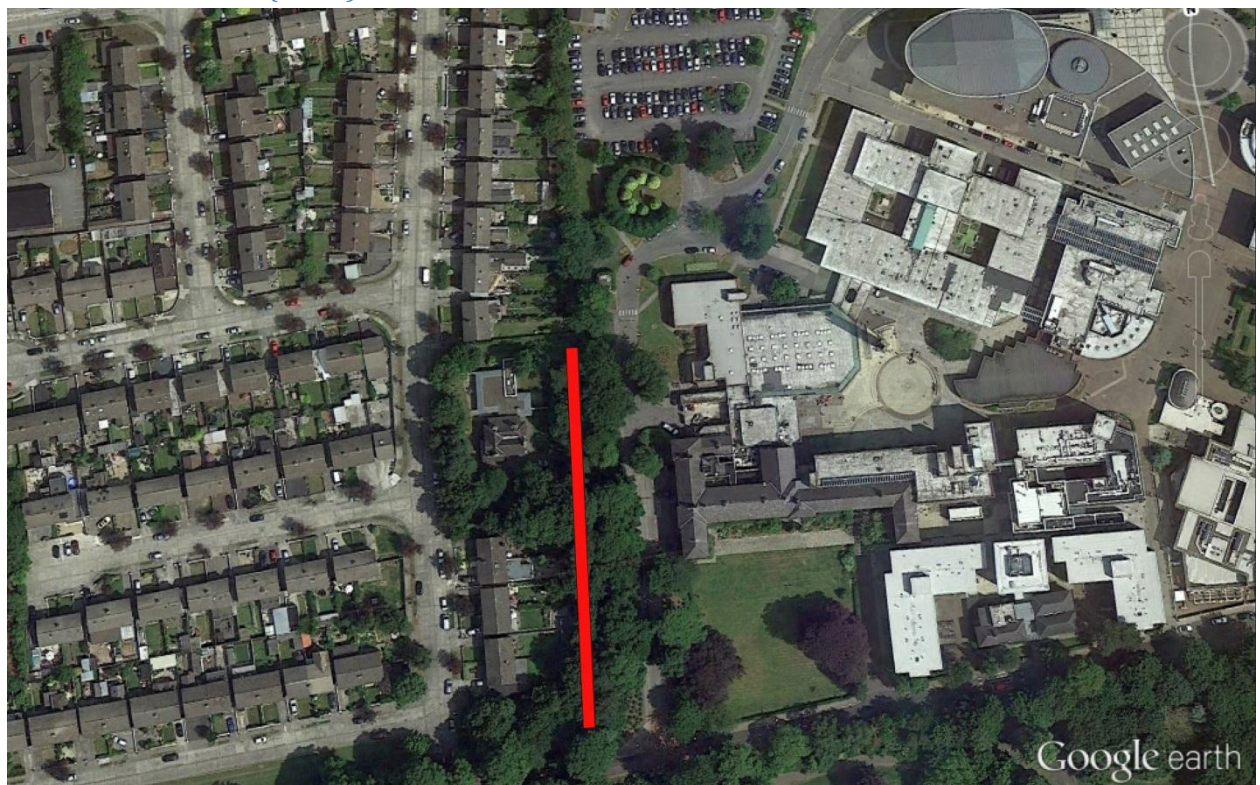


Figure 11: Location of transect for (WL2) Tree lines

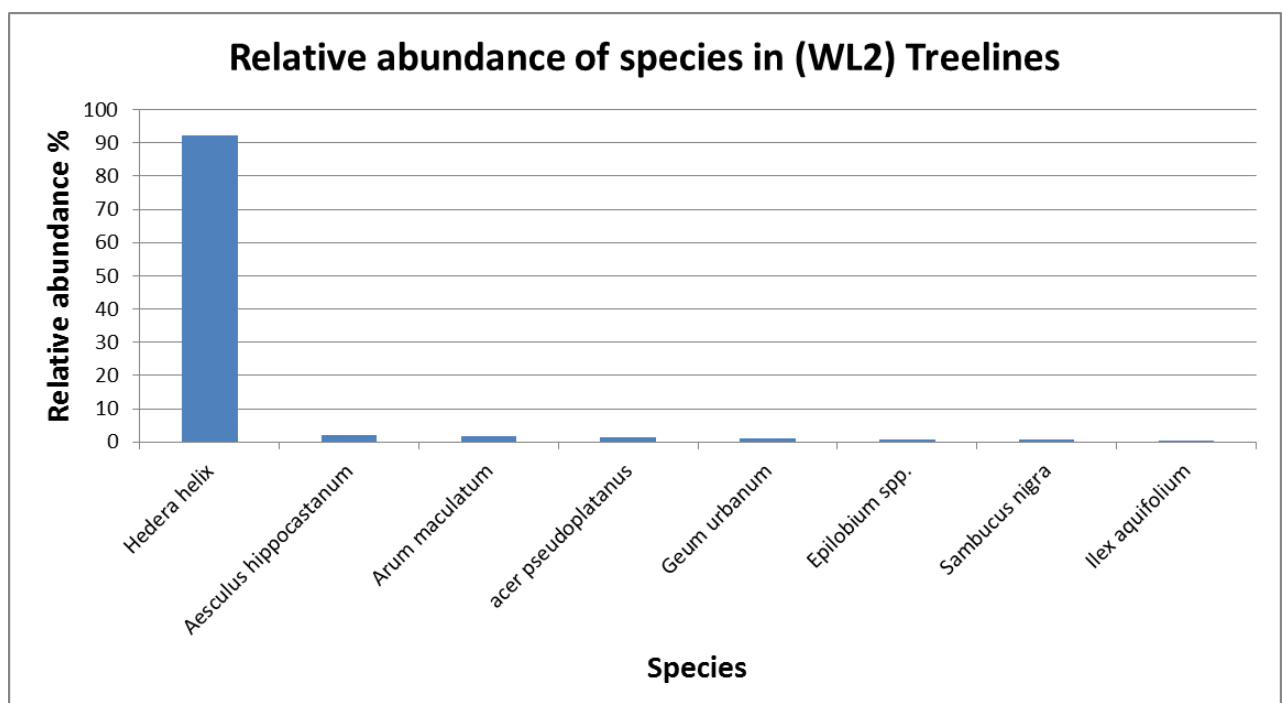


Figure 12: Relative abundance of species in (WL2) Tree lines

Area 4: Earth Banks BL2

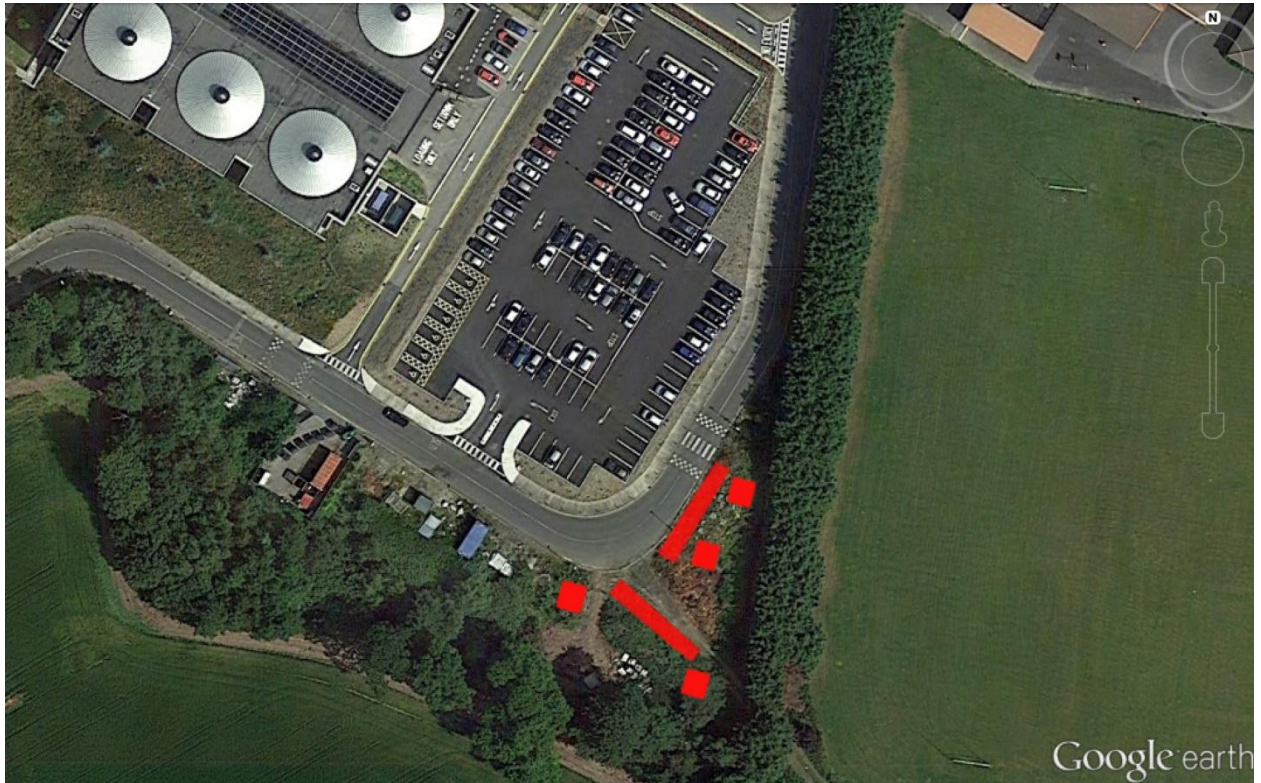


Figure 13: Locations of quadrats and transects for (BL2) earth banks

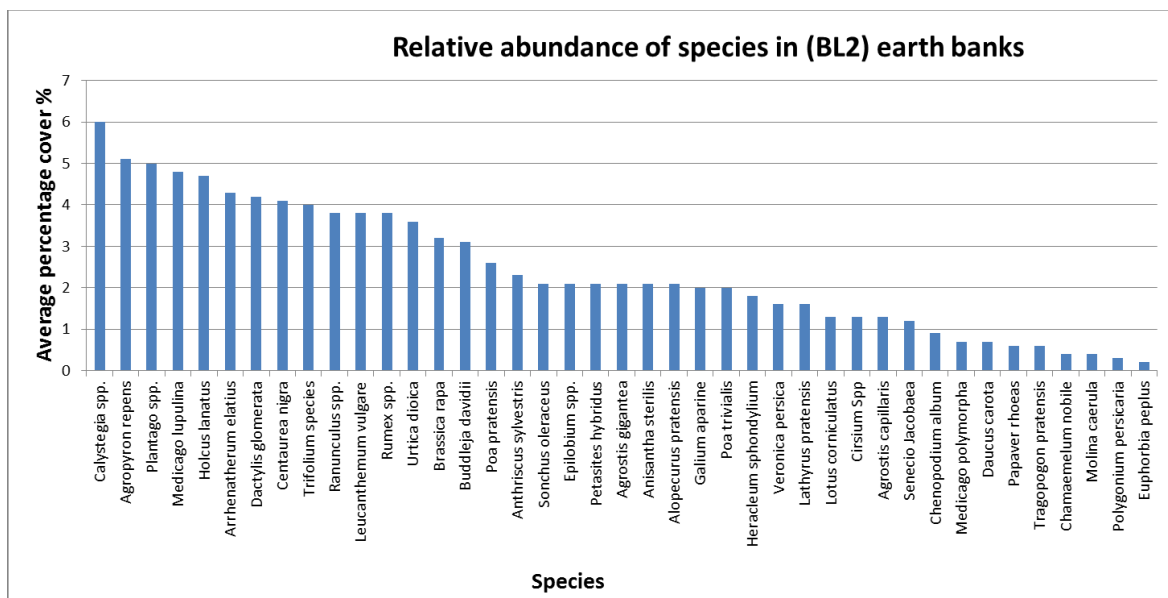


Figure 14: Relative abundance of species in (BL2) earth banks

Transport

Dublin City University is now a multi campus university and the second largest commuting hub in the north Dublin region after the airport. In early 2016 DCU undertook a survey of all staff and students across all incorporating institutions to assess current transport choices vs a similar survey undertaken in 2013. This project was undertaken in conjunction with the National Transport Authority. In addition a psychology intern was taken on to investigate the motivation factors before current transport modes and to identify potential behavioural change initiatives. In addition a review of all air travel was undertaken for the DCU Glasnevin campus.

2,494 people responded to the DCU travel survey, which was conducted online through www.surveymonkey.com between 27th of January and 11th February 2016. This represents a response rate of 14% based on 17,865 staff and students (2,020 staff and 15,845 students).

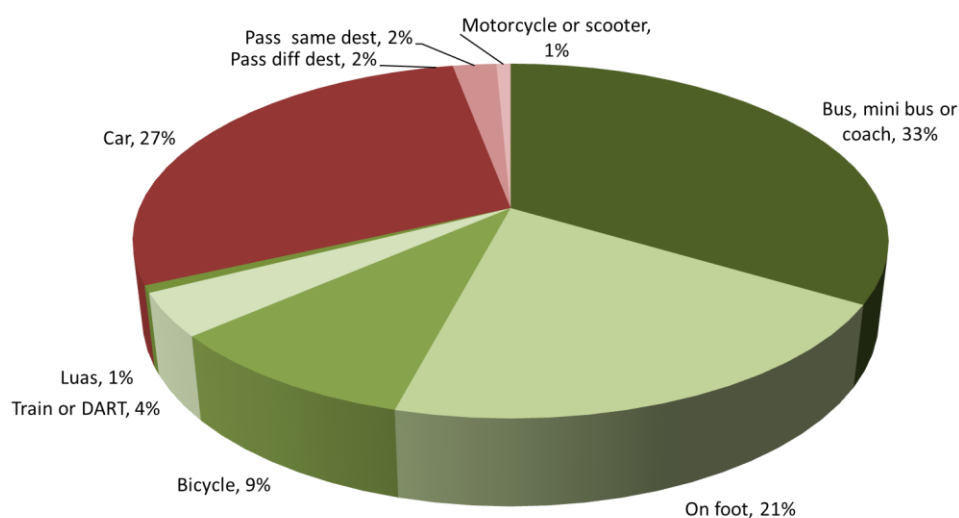


Figure 15: Modal split for DCU Staff/Students Jan 2016

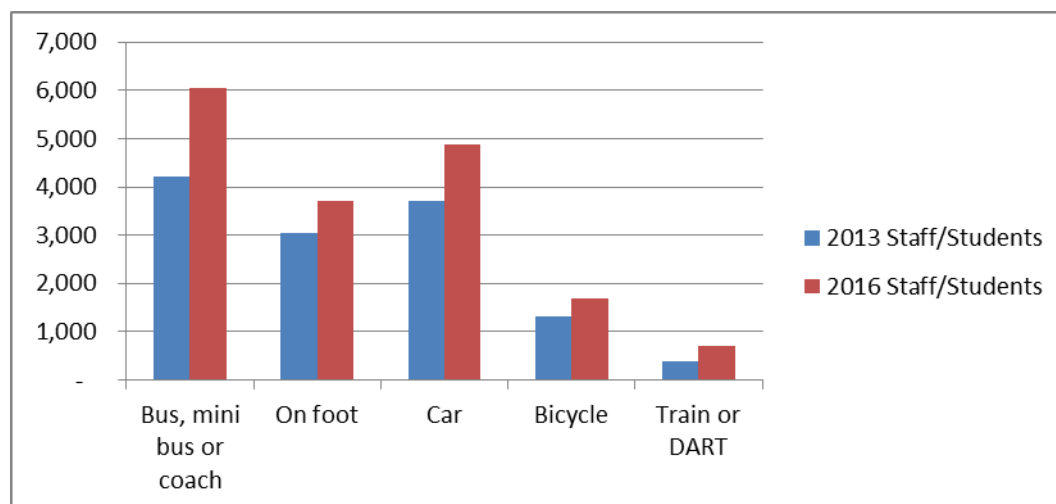


Figure 16: Comparison 2013 vs 2016 (NOTE 2016 incl all incorporation institutions)

Carbon Footprint

DCU seeks to actively contribute to the creation of a post carbon world and in doing so it is seeking to become a carbon neutral campus. Following the **Greenhouse Gas Protocol Corporate Standard** DCU is currently carrying out a full carbon footprint of all of its activities. Once the campus carbon footprint has been established and strategy and implementation and timeline plan will be developed to achieve carbon neutrality.

4. Action Plan for 2015/2016

The DCU Green Committee endeavours to keep our Action Plans up to date. They are available on a share drive for individuals to update. This sometime does happen. New actions are added to the end of the list to ensure that where projects have not been finished that they are not forgotten and have to be reinvented. Attached is the most recent version of the Action plan (Appendix 1).

5. Monitoring and Evaluation

In this section we will discuss the monitoring and evaluation of the additional assessment we have undertaken in 2015/2016.

Energy

DCU continues to work toward its agreed target of 33% energy reduction by 2020 on 2010 figures. As can be seen for the data report in the environmental review section above there has been an overall increase in energy consumption in 2015 over 2014 on the DCU Glasnevin Campus. This is being predominately attributed to new building on campus. In addition to the Glasnevin Campus, an initial analysis of the DCU St. Pats campus was also undertaken.

2015	Elec (MWh)	Gas (MWh)	Total energy (MWh)	Carbon (tonne)	Students 14/15	Carbon Kg per student
DCU Glas	17,781	19,262	37,043	13,337	11,820	1.13
DCU SP	5,600	2,000	7,600	2,204	2,711	0.81

Figure 17: Table of energy consumption in 2015 at both DCU Glasnevin and DCU St. Patrick Campuses

As can be seen from the table above the estimated carbon footprint (in kg) per student is higher on the DCU Glasnevin Campus than the DCU St. Patricks Campus. It is expected that this is because there is relatively little laboratory based research activity on the St. Patricks campus, however this cannot be confirmed at the moment as there are limited sensors on the SP campus.



A major action undertaken by the DCU Green Committee and EcoSoc in 2015/2016 was the campaign for DCU to divest from fossil fuel investments. The committee established a petition page (<https://campaigns.gofossilfree.org/petitions/divest-dcu?source=facebook-share-button&time=1455825568>) and just before the end of semester a letter was sent to Prof. Brian MacCraith, President of DCU (appendix 2). Prof. MacCraith asked the DCU Educational Trust to

investigate DCU's exposure to fossil fuel investments, who have reported that this is less than 2% and they are now investigating the possibility of full divestment. – more to follow !!

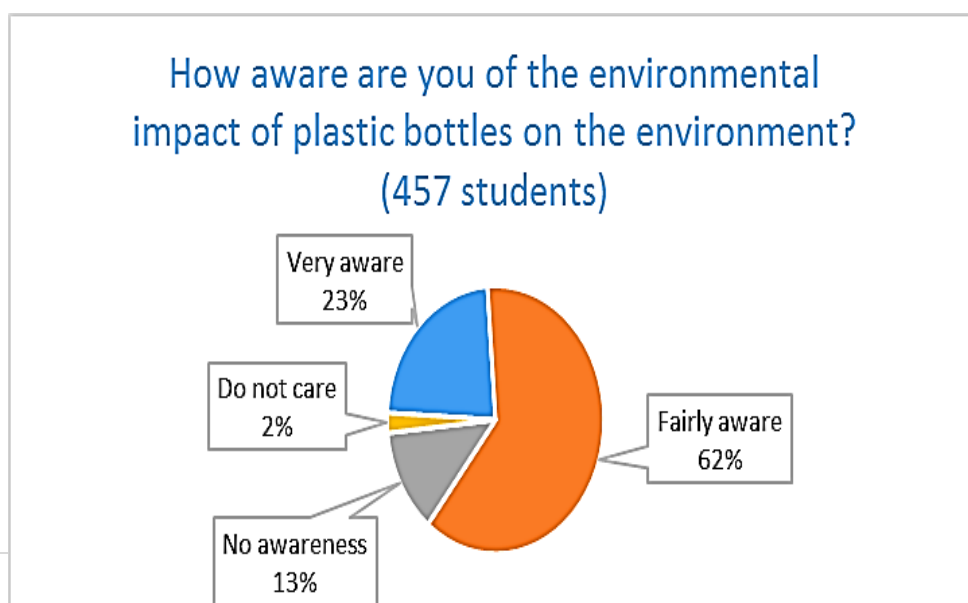
Water

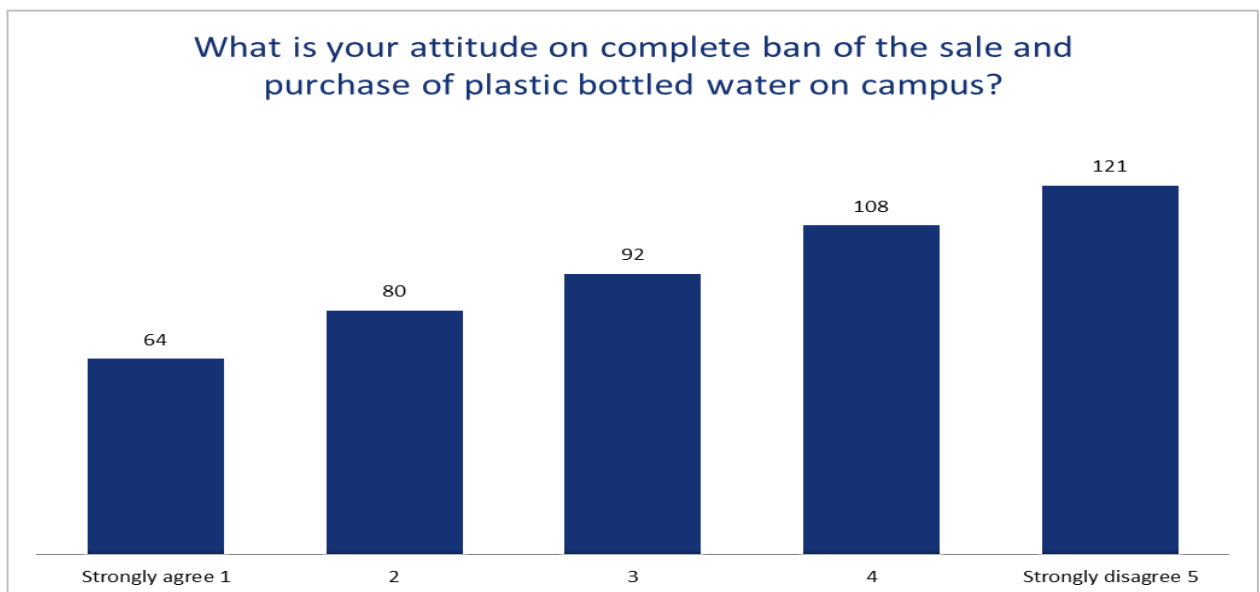
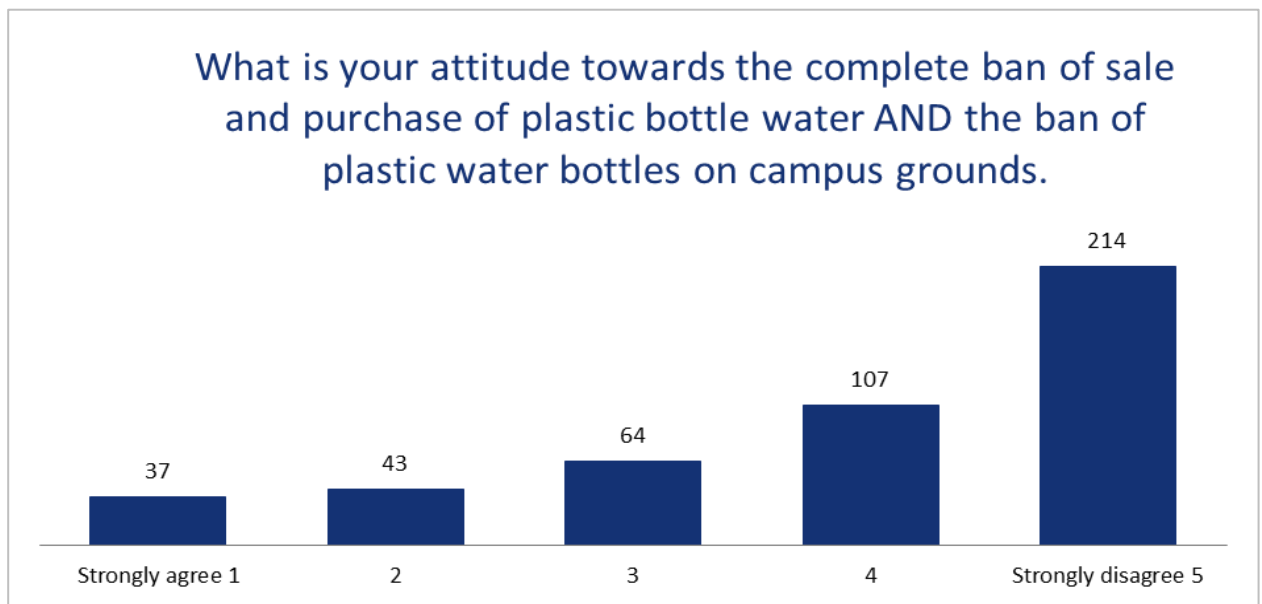
Water continues to be a concern at DCU. As can be seen from the Lowflow report there is a high probability that there are several leaks both on the DCU Glasnevin and St. Patricks campuses. The DCU Estates office are undertaking several measures to enable the identification and rectification of leaks on both campuses.

Potable water at DCU

In this project we investigated that level of potable water consumption on campus and what vessels were being used. This project impacts both water and waste element. A full report including literature review is available. This project used both quantitative and qualitative research methods (mixed-mode design). These methods were an online survey, a focus group, a questionnaire for DCU shops/canteens/cafés and a naturalistic observational study. The aim of this project was to undertake a physical review of all potable water points in 'student access areas' across DCU Glasnevin campus, to identify the water drinking habits of DCU students and their rationale behind their choice, and to determine the attitude of students toward a ban on non BPA free plastic water bottles. The data from the survey showed that 35% of students say they use a reusable bottle and 34% say they use a plastic bottle (non BPA free). 34% of students stated they reuse their bottle for two weeks or more, and 28% reuse their bottle for one week. 43% of student buy their bottled water for convenience, however 53% of students choose to refill their bottle on campus due to convenience and cost reasons. The recommendations from this project to reduce plastic bottle waste on campus are i) to increase the number of bottle filler filtered water stations around the DCU campuses ii) to increase awareness of impact of plastic water bottles (non BPA free) on health and the environment and iii) to reduce the variety of bottled water bottle and increase reusable water bottle sales.

The figure below identify an interesting conundrum re perceived environmental knowledge and actual behaviour !!





Waste

As can be seen from the graph below the total amount of waste on the DCU Glasnevin campus reduced in 2015 from 2014 levels leading to a significant fall in the waste per student on campus.

WEEE and glass waste was the only category of waste to increase. The WEEE increase was predominately a sign of the times, as the university is expanding and the economy has started to recover, the departments have started to replace a lot of their old equipment which they had kept ticking over with due to the recession. In addition a large proportion of computer needed to be upgraded due to software requirements.

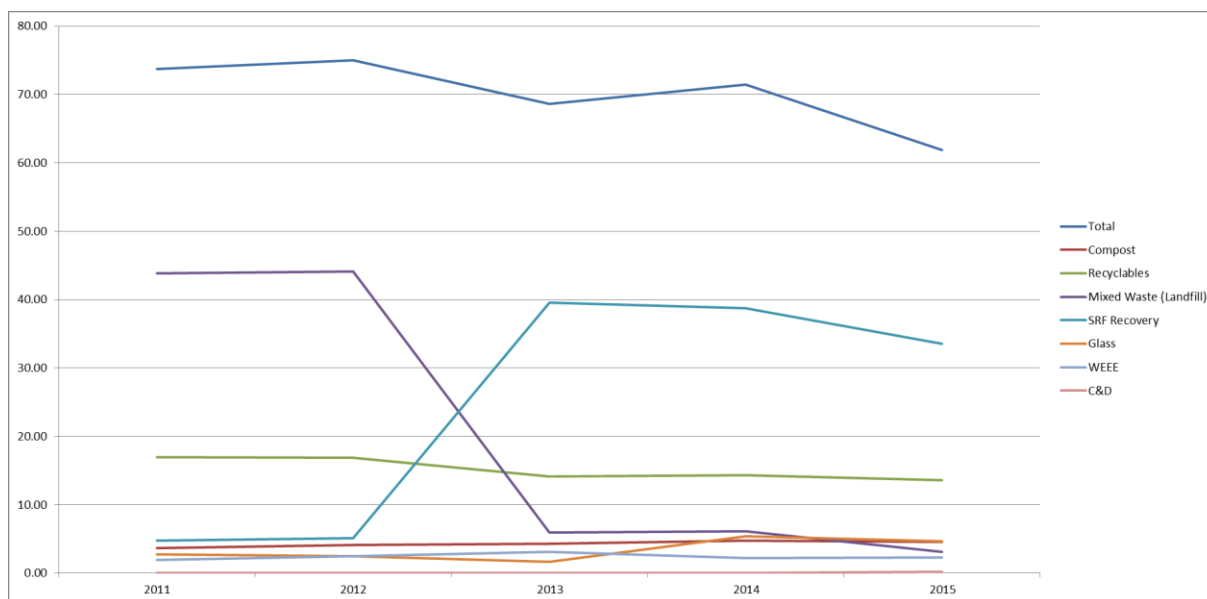


Figure 18: Waste (in Kg) per student at DCU Glasnevin

The increase in glass recycling went up significantly as Kathleen Whelan, the waste manager at DCU developed a new policy with Thorntons to allow the laboratories to recycle chemical bottles which has been very successful and Sciences are delighted with the extra service.

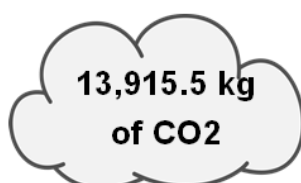
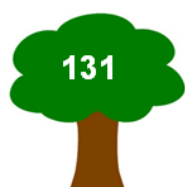
There was improvement also in clean dry recyclable across campus with an extra 50 recyclers being put out across campus to encourage recycling.

The general waste figures for both campus residences and trispace(catering), two of the largest contributors fell during 2015/2016.

Paper Waste at DCU

The aim of this project was to investigate the environmental impacts of paper consumption at DCU and a full report along with literature review is also available. It focuses on the consumption of paper printing and specifically that consumption is captured by the 'papercut' system. DCU uses Papercut as the printing management system; all students at DCU are provided with a papercut account that is linked to their student number. Using this account student can print to centralised printers across the campus. The Papercut system records the number of pages printed per print job per student. This project will investigate the volume of printing, the major reasons for printing, its environmental impact and make suggestions as to what alternatives might be possible at DCU.

- 🌐 1,096,000 pages have been printed out in one semester.
- 🌐 For an environmental perspective this corresponds to



Water Bottles/Coffee Cups/Behavioural Change

DCU continues to promote reusable water bottles and reusable cups (albeit our original DCU branded cups are not currently available). Reusable water bottles are available in the DCU SU for €5 and there is 10c off all hot beverages if you bring your own cup.

Litter surveys

As per recommendations from our assessment in July 2014 DCU Green Committee has undertaken several litter surveys across campus. Preliminary results would indicate that overall the level of litter is low however there is consistent evidence of small particle litter like bottle tops/paper bits/chewing gum scattered throughout the campus. The one most prevalent litter is cigarette butts which are particularly plentiful at the entrances to buildings irrespective of the requirement not to smoke within 5m of doorways. Campaigns have been carried out to 'Bin your Butt' but there was no discernible impact. The CG 2015/2016 may wish to consider alternative approaches such as seeking a ban on smoking on campus. This is actually being considered under the Healthy Campus initiative and DCU is looking at becoming a smoke free campus.

Pack it up Pass it on – Version 2

Following several years of 'pack it up and pass it on' in 2015/2016, together with the DCU SU we undertook another form of recycling/upcycling of surplus stuff from student apartments when they were leaving DCU. For three weeks over the end of semester and the exams period we provided a space for people to leave their unwanted 'stuff' which was then taken away by Rags 2 Riches Recycling. Following these collections Rags 2 Riches Recycling then made a cash donation to DCU SU who combined it with their other fund raising and donated it to the charities for 2015/2016.



Biodiversity

There have been many projects undertaken to promote biodiversity on campus

Biodiversity survey

There have been several biodiversity surveys of the DCU campus (copies available) and in summer 2014 the creation of an online database was started to capture scale of biodiversity on campus along with identifying invasive species. This was followed on with a fourth year horticulture project on quantifying the biodiversity on campus in designated locations as shown in the environment review data above, full report available.

DCU Community Garden

In addition to this DCU continues to run a vibrant and active community garden. The Community Garden at the Dublin City University Glasnevin Campus aims to

- Be a welcoming space for the whole community where organic fruit and vegetables are sown, harvested and consumed by members of the community garden,
- Provide an opportunity for intergenerational and cross community education and training through active working/volunteering in the garden and tutor lead on site training courses,
- provide an space on a university campus for joint and shared learning across all garden members from academia, under and postgraduate students, local community members, enterprises, community employments schemes, Men's Shed Associations etc
- Be a living lab garden for the demonstration of new and innovation solutions to local and global issues, social, cultural, economic and environmental.

The community garden at DCUG (DCU Glasnevin) is currently a 1.6 acre off-grid garden. It has two working poly tunnels, several raised beds and open planting areas along with 20 apple trees, 20 gooseberry bushes, 40 black/red/white current bushes and an assortment of other fruit trees. There is a small apiary with capacity for 2-4 beehives. There are two structurally sound sheds (12m x 4m each) requiring complete refurbishment. There is no working connection to the electricity grid or mains water and there is no working toilet – all of these facilities would have been in place in the past but have fallen into disrepair from 10-15 yrs of disuse. There is rain water harvested from the roofs of the sheds into IBC tanks. Below is a schematic of the garden along with an aerial picture.



Figure 19: Schematic and Aerial picture of the Community Garden at DCU Glasnevin

Activities in the garden include the cultivation and planting of fruit and veg, training and development of Community Employment placements. In addition the garden works closely with An Taisce Green Communities and has been the location of several 'corporate social responsibility' (CSR) days where companies, including AOL, Deloitte and Marks and Spencers, have dedicated their staff to the garden for a day/number of days to undertake major projects such the erection of the polytunnels.

Transport

DCU is an active partner in the NTA Smarter Travel Campus Programme. The DCU Mobility Management Plan aims to have 90% of commuters to DCU avail of a sustainable form of transport. In addition in 2015/2016 the DCU Incorporation Programme will bring together St Patrick's College, Drumcondra, Mater Dei Institute of Education and Church of Ireland College of Education with Dublin City University. Significant measures are being made to address these objectives.

Measure to promote active commuting

- Free on-campus shower/changing facilities for all walkers/cyclists
- Additional 410 cycle parking spaces across campuses.
- Designated routes for walking and cycling
- Promotion of health benefits of active commuting
- DCU Bike Scheme

Measures to promote public transport

- A bus every 15 mins between campuses (on average)
- School/Unit Leap cards for intercampus commuting
- Enhanced public transport connectivity including new Bus Terminus on the DCU Campus (Busses 44 and 1.4)
- A shuttle service for 2015/2016 may be considered once numbers are clarified. (To be reassessed in Sept 2016)

Alternative Intercampus mobility modes

- GoCar can be used to travel between campuses
- A designated GoCar space to be established on all campuses
- Car Sharing between campuses will be encouraged

Car Park Management

- Establish interim Incorporation Car Park (10 spaces DCU Glasnevin /10 spaces DCU SPD) to facilitate first year of incorporation
- Introduce an all campus car park management system
- To enable carpark demand management introduce phased car parking charges over the coming 3-5 yrs

DCU Intercampus Bike Scheme



Figure 20: Dr. Andrew McGrady, President MDI and Samantha Fahy, DCU Sustainability Manager

The new DCU Intercampus Bike Scheme has recently been launched. This pilot scheme, supported by the Incorporation Programme, is for University Staff for intercampus commuting and it's free. Bicycles are available at stations at DCU Glasnevin, DCU St. Patricks Campus and Mater Dei. Staff can sign up to the scheme on the website <http://www.dcu.ie/info/bikescheme.shtml> where they will also find up to date information on where they can collect the keys for the bikes. Once a bike has been taken it is the responsibility of the staff member to return the bike to the campus from which it was initially taken. All bikes are new and come with a U-Bend Lock and security cable, front basket and rear carrier. The estimated cycle time from the DCU Glasnevin Campus to the DCU St. Patricks campus is ~ 10 mins and a little longer to come back up the hill. Recommended routes for travelling between the campuses can also be found on the website. For further information contact sustainability@dcu.ie.

Acknowledgements: Rediscovery Centre – supply and maintenance, Campus Print – Station and Bike signage.

6. Link to Learning on Campus

Over the past year the linkages to education programmes on campus have grown. We are not yet at the point where sustainability is embedded into all modules so that all graduates of DCU understand the meaning of sustainability and the interrelationship between the social, cultural economic and environmental factors that need to be balanced to ensure a sustainable future for all BUT we are making progress!

Making a Post Carbon World

In Semester II 2015/2016 DCU ran a not for credit online module open to all staff and student entitle 'Making a Post Carbon World'. Facilitated by Prof. Barry McMullin, Dr. Stephen Daniels and Ms Samantha Fahy, this 10 week course covered several aspects of what need to be accomplished to achieve a sustainable post carbon world. The number of places was limited to 60 and the course was 100% oversubscribed with a mix of staff and students. The number did, as expected dwindle somewhat as the course progressed but the general feedback was of a very positive nature.

Other linkages include over the past year several projects,

Project title	Student	Project	Programme
Biodiversity at DCU	Joe Cornish	Final year thesis	Horticulture
The use of potable water in DCU	Ellen Kelly	Final year thesis	Environmental Science and Health
Paper consumption at DCU	Bernadette Leng Ian Lo	Final year thesis	Environmental Science and Health
Soil analysis in the DCU Community Garden	James Platt	Final year thesis	Environmental Science and Health
Food Waste	Margaret Cronin	Master's Thesis	Open Education
DCU Carbon Footprint	Sean Walpole	Intern	Environmental Science and Health
Transport and Behavioral Change	Stephen Dowling	Intern	Psychology
INSULATION PRODUCTS, FOCUSING ON GLOBAL WARMING	Natalie Farrell	Master's Thesis	Open Education

Linkages to MG334 Business and Society : This module addresses the key environmental and sustainable development issues facing organisations today. It focuses on the links between corporate social responsibilities, management of the organisation and the environment and on how these may be integrated through strategy and operations. The module assignment require student to research and write a report on one of the following :

- How to make the New Hub sustainable
- Reduce waste production on DCU Campus
- National No Smoking Day on Campus
- Car Sharing Initiative
- Energy Awareness Campaign for Students
- DCU in the Community
- Education – integrating sustainability
- Social Enterprise Model for the DCU Community Garden
- Intercampus bike scheme for students

Space to Grow Module

This module run in St Patricks focused on provide student teachers with an understand of biodiversity and the development and implementation of outdoor teaching tools and methodologies. The module has undertaken several interesting project including establishing and maintaining its own growing space on the SPD campus and well and bring primary school children together to design and build a plastic bottle green house – this project is half way thru construction and will be finished in 2016/2017.





Within this project trainee teachers also went to work in a preschool in Drumcondra to establish a growing space for the preschool children.

Also as part of this project the student not only created new habitats for birds they recycled old microscope boxes in the process. The group also participated in an bioblitz of the Royal Canal and posted their results on this website <http://www.ispotnature.org/projects/spdroyalcanal>.

7. Informing and Involving the Campus and Wider Community

Encompassing such issues as equal access to social resources, corporate governance, community, diversity, culture and quality of life, social sustainability is one aspect of sustainability but one that is often the weakest in terms of representation. DCU has long recognised the merits and responsibilities of engaging with the wider community and contributing to the social and economic contexts of the community in which we are based. The development of a specific 'Civic Engagement' mission and the establishment of the DCU in the Community Outreach Centre in Ballymun is a solid expression of the commitment which DCU has made to community outreach projects.

The DCU Green Committee/Sustainability Programme has leveraged several of these existing link to enhance our engagement with the local community. We have worked closely with several local organisations and intend to continue and build on these mutually beneficial linkages.

The Community Garden is now open to all of our community internal and external to DCU. We are working closely with the Age Friendly University Initiative at DCU to support intergenerational learning.

World Climate Event



Figure 21: Mr. Martin Leavy, DCU HR Training and Development Manager, arguing for least developed countries in the COP21 Simulation.

On 1 December 2015 the incorporating institutions came together to participate in a networking event. This 'World Climate' event was a role-playing exercise that allowed the 30 participants an opportunity to experience the efforts required in attempting to reach a global agreement to limit the

scale and speed of continuing human disruption of the world climate system. Senior Management for all of the incorporating institutions participated along with Prof. MacCraith, Prof. Keogh and Dr. McGrady. Dr. Lodge was unable to attend but was represented by senior CICE staff. In addition Student Union representatives also participated.

There was energetic and enthusiastic participation from all involved. Apart from helping participant to understand some of the policy-relevant science of climate change and the many obstacles to successfully crafting a solution to the challenges it also allowed participants from the various institution to come together and work together to tackle and even bigger issue than those posed by the incorporation of four institution for higher education.

Date: 18th December 2015

Climate Politics in Small European States Conference

On 1–2 June, DCU's School of Law and Government hosted an international workshop on "Climate Politics in Small European States". Coming in the wake of last December's landmark Paris Agreement on climate change, the workshop explored how different small states across Europe are responding to the challenges of low-carbon transition.

The workshop brought together scholars from or working on Ireland, Belgium, Austria, Denmark, Finland, Sweden, Norway, and the Czech Republic, as well as a range of Irish academics and practitioners. Participants addressed the following questions, among others:

- How do climate policy dynamics play out in different national contexts?
- Which countries are leaders and which are laggards?
- What distinct challenges and opportunities do small states face in addressing climate change, and how do these differ from those faced by larger states?
- What can small states learn from each other in terms of combating climate change?

The workshop also featured a high-level policy roundtable discussion which featured contributions from; H.E. Carsten Søndergaard, Danish Ambassador to Ireland; Julie O'Neill, Chair of the board of the Sustainable Energy Authority of Ireland; John O'Neill, Principal Officer with responsibility for Climate Change Policy at the Department of Communications, Climate Action and Environment; Dr. Matthew Crowe, Director of the Office of Evidence & Assessment at the Environmental Protection Agency; and Dr. Lorna Gold, Head of Policy and Advocacy at Trócaire.

The workshop was organised by Dr. Diarmuid Torney (Dublin City University), Dr. Conor Little (University of Copenhagen), and Prof. Neil Carter (University of York). It was supported financially by DCU School of Law and Government, the Environmental Protection Agency, the University Association for Contemporary European Studies, and the Irish Association for Contemporary European Studies.

Donabate Community College and DCU gear up for Greenpower Car Challenge



Students from Donabate Community College supported by the DCU Faculty of Engineering and Computing tested their electric powered cars at DCU (Wednesday, June 8th) in advance of the upcoming Greenpower Car Challenge in Kirkistown, Belfast on June 11 th.

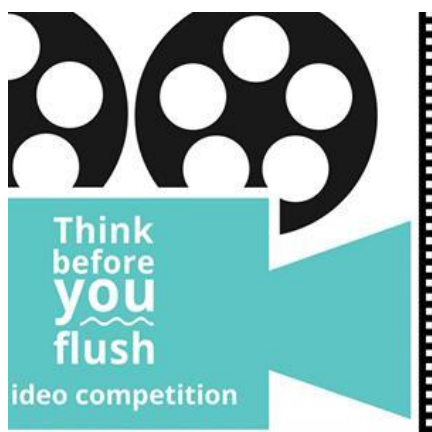
The Transition Year students built both cars with the guidance of members of the DCU Engineering Society and academics over a two month period.

Dr Paul Young from the School of Mechanical and Manufacturing engineering at DCU said:

“The Greenpower Challenge has been an exciting project for Dublin City University and Donabate Community College to work together on and the level of dedication and commitment displayed by the students has been fantastic. Projects like this are invaluable for sparking an interest in STEM subjects and careers as students get to experience these subjects in a practical way.

By using real life applications such as the building of electric cars we hope to explain and to get young people enthusiastic about science and technology.

For further information about the challenge visit www.greenpower.co.uk



DCU STUDENTS WIN THINK BEFORE YOU FLUSH

Clean Coasts are delighted to announce the winners of the ‘Think Before You Flush’ Third Level Video Competition, supported by Irish Water. The competition asked third level students to create a video that ties into our new ‘Think Before You Flush’ campaign.

The Winners of the People’s Choice Award were; Corey McLaughlin (Multimedia Studies) & Aby McLaughlin (Communication Studies) DCU https://www.youtube.com/watch?v=ZcAJf_FHR-I

The Winners of the First Place Award was; Ferdia Sean Mooney

<https://www.youtube.com/watch?v=5q0SsiGtmgY>



Student car-pool app Hitch wins DCU Hackathon!

Hitch, a car-pool app which allows student drivers and fellow students to connect and share transport was the winning idea at the 2016 DCU Hackathon #HackDCU announced on Sunday, March 6th.

Luke Scales, Jaime Badiola Ramos, Shane Carter, Oisín Hoy, Pedro Neto and Eva Christie, all students at DCU beat off stiff competition from over 120 students at the DCU Hackathon (Friday, March 4th to Sunday, March 6th).

The event, organised by DCU Ryan Academy invited students from a range of disciplines to come together in a 72 hour enterprise boot-camp and to come up with ideas which could form the basis for a credible enterprise start-up. Representatives from Accenture, AIB, the Irish Exporters Association of Ireland in addition to mentors from numerous enterprise and software start-ups in Dublin, attended the second ever student Hackathon at DCU.

Luke Scales, a third year Mechatronic Engineering student; Jaime Badiola Ramos, a first year Global Business student; Shane Carter, a first year Business Studies student; Oisín Hoy, a second year Global Business student; Pedro Neto, a third year Analysis and Design international student at the School of Engineering and Computing and Eva Christie, a second year Education and Training student devised their winning idea to enable students to share resources and save time and money. The winning team received a prize fund of €1000 plus free flights and accommodation to Berlin for a major StartUp Europe Hackathon taking place in June, funded by the Welcome initiative under StartUp Europe. The team will also apply for a place on the prestigious UStart Student accelerator

programme run by DCU Ryan Academy. To further support the deployment of the app DCU is designating prioritised car sharing spaces on all campuses.

DCU Community Garden Engagement – CSR Days

In Sept 2015 Marks & Spencer Ireland launched Spark Something Good, an initiative aiming to inspire employees and customers to donate their time to improve the lives of others in their local community. Spark Something Good Dublin engaged in 24 projects over seven days across the city, with M&S is calling upon volunteers to get involved and take action for social good. One of these project was the DCU Community Garden with ten M&S Staff and volunteers weeding and mulching their way through the DCU community garden.

The An Taisce Green Communities CSR day on the 17th of September saw 17 volunteers from Deloitte take part in a very successful second volunteer day at the DCU Community Garden. Their efforts have visibly helped progress the gardens creation, and its production. This September volunteer day saw four work groups active within the garden from 10 am

<https://www.facebook.com/An-Taisce-Green-Communities-133325730075465/timeline/>

In May 2016, An Taisce again brought along another CSR group to the DCU Community Garden. 50 volunteers from AOL worked in the garden all day chopping down weeds and mulching fruit bushes and trees as well as funding and putting up the second polytunnel in the garden.

The DCU Community garden is very happy to support lots more CSR days – the joys of a garden is that it keeps growing and there is always lots to do.

DCU Community Garden and Social Enterprises

DCU community garden is delighted to have signed an agreement with Grow Dome (<http://www.thegrowdomeproject.com/>) . Grow Dome are in the process are building an 11 mtr aquaponics grow dome in the DCU Community Garden. Lots more to come on this!!



DCU Community Garden and Community Employment

DCU Community Garden now host two community employment placements who are building their experience and skills to help them progress to further education or employment over the next year.



DCU does Dublin Climate March! Sunday 29th 2pm @ Custom House

8. DCU Green Charter

The DCU Green Charter has not been updated since it was finalised in 2014. It will be reviewed by the DCU Green Committee in 2015/2016.

Here is a link to the Charter: <http://www.dcu.ie/ocoo/sustainability/sustainable-campus.shtml>

9. Appendices

1. DCU Green Committee Action Plan 2015/2016 (rolling)
2. Divestment Petition letter

Appendix 1 : DCU Green Committee Action Plans

Energy Action Plans			
Goal 1 : Reduce energy consumption and increase awareness within the Student Centre - Hub			
Action	Person/Group Responsible	Time Frame	Status
Baseline data available for 2010/2011/2012	Richy Kelly, Estates Office	Sep-12	Completed
Campaigns–run sequentially (one after the other) to allow effective monitoring:	Paul Doherty, Myrian Castanie, Alan Mangan, Mark Young	Feb/Mar/Apr 2013	Completed
Turn off computer (+ other non essential power consumers)	Paul Doherty , Mark Young DCU SU	Feb/Mar/Apr 2013	Completed
Turn off lights	Paul Doherty , Mark Young DCU SU	Feb/Mar/Apr 2013	Completed
Turn off wifi	Paul Doherty , Mark Young DCU SU	Feb/Mar/Apr 2013	Completed
Turn off vending machines	Paul Doherty , Mark Young DCU SU	Feb/Mar/Apr 2013	Completed
Awareness campaign on 'turn heat off before opening windows	Paul Doherty , Mark Young DCU SU	Feb/Mar/Apr 2013	Completed
Awareness campaign on 'turn heat off before opening windows	Energy Group	Feb/Mar/Apr 2014	Completed
Awareness campaign on 'turn heat off before opening windows	Energy Group	Oct/Nov/Dec 2014	Completed
Goal 2 : Campus Wide Shut Down to increase awareness			
Action	Person/Group Responsible	Time Frame	Status
Combined Gaelic/Green Week Event	Paul Doherty, Mark Young, Sam Fahy, Richy Kelly	Week 8 2012	Completed
Christmas Shutdown 2012	Estates/Sustainability	Dec-13	Completed
Christmas Shutdown 2013	Estates/Sustainability	Dec-13	Completed
Earth Hour 2014	Sustainability DCU	Mar-14	Completed
Goal 3 : Computer Power down across campus campaign			
Action	Person/Group Responsible	Time Frame	Status
Identify costs associated with switch off screen / computer	Green Committee/Sam Fahy	Mar-12	Completed
Awareness campaign re power down	Green Committee/Sam Fahy	Oct-12	Ongoing
Identify potential autoshtut down mechanisms	ISS	Nov-12	Completed
Investments in technology	ISS/DCU	Jan-13	Ongoing
Goal 4 : Use the stairs campaign			
Action	Person/Group Responsible	Time Frame	Status
Energy savings & increased fitness from using stairs rather than lift.	Alan Mangan, Sam Fahy, Daniel Tetis	Jan-15	Completed
Identify how much energy required to walk flight of stairs	Alan Mangan, Sam Fahy, Daniel Tetis	Jan-15	Completed
Equate energy consumed/savings to health benefits/environmental savings/financial savings	Alan Mangan, Sam Fahy, Daniel Tetis	Jan-15	Completed
Draft poster to represent information and encourage stairs	Alan Mangan, Sam Fahy, Daniel Tetis	Jan-15	Completed
Put up poster at each lift shaft	Alan Mangan, Sam Fahy, Daniel Tetis	2015/2016	ongoing (issue with poster - no sweets)
Transition yr project	Alan Mangan, Sam Fahy, Daniel Tetis	Jan-15	Completed
Goal 5: Last out lights out			
Action	Person/Group Responsible	Time Frame	Status
Design poster	Saorla Kavanagh, Mariane Galpo	Sep-14	Completed
Get authorisation to post posters	Saorla Kavanagh	Sep-14	Completed
Poster popular areas and room exits	Saorla Kavanagh, Mariane Galpo	Oct - Jan 1415	Completed
Monitor room lights	Mariane Galpo	Mar-15	Completed
Report on room light	Mariane Galpo	May-15	Completed
Goal 6: Renewable energy in Comm Garden			
Action	Person/Group Responsible	Time Frame	Status
Design master project	Sam Fahy/S Daniels	Sep-14	Completed
Appoint student	Susuitha	Sep-14	Completed
Undertake project to install urban wind turbine in garden	Susuitha	Oct - May 1415	Completed
Deployment in Garden	Susuitha	July- Aug 2015	Stalled
Report on room light	Susuitha	Sep-15	Stalled
Install solar panel in GD	S. Daniels/Student tbc	July- Aug 2015	Stalled

Goal 7: Reduce Energy Consumption via Behavioural Change (focus on campus res ??)			
Action	Person/Group Responsible	Time Frame	Status
Design project	Sam Fahy/S Daniels	2015/2016	Stalled
Acquire funding !	Sam Fahy/S Daniels	2015/2016	Stalled
Lias with DCU Psychology Dept	Sam Fahy/S Daniels	2015/2016	Stalled
Goal 8: Fossil Fuel Divestment			
Action	Person/Group Responsible	Time Frame	Status
Design Programme	Denah/EcoSoc	2015/2016	Done
Establish web presence	Denah/EcoSoc	2015/2016	Done
Gather support	Denah/EcoSoc	2015/2016	Done
Letter to President of DCU	Denah/EcoSoc	2015/2016	Done
Await response	President DCU	2015/2016	Ongoing
Divest	DCU	2016/2017	Ongoing
Goal 9: Energy Reductions			
Action	Person/Group Responsible	Time Frame	Status
LED Retrofitting	DCU Estates	2015/2016	Ongoing
Building retrofits	DCU Estates	2015/2016	Ongoing
Newsletter	DCU Estates/Sustainability	2016/2017	Ongoing
Goal 10: Awareness			
Action	Person/Group Responsible	Time Frame	Status
Induction Info for Staff and Students	Sustainability	2014 - 2017	Ongoing
Newsletter - need to work with Estates to restart for 2016/2017	DCU Estates/Sustainability	2016/2017	Ongoing
Info Campaign at Glas/SP/AH	DCU Estates/Sustainability	2016/2017	Ongoing
Goal 11: Carbon Neutral Campus			
Action	Person/Group Responsible	Time Frame	Status
Assess Carbon footprint of Energy	Sean Walpole/S Fahy/Estates/e3	Q2/3 2016	Ongoing
Identify strategy and pathway to Carbon neutral	DCU Estates/Sustainability	2016/2017	Ongoing
Implement strategy	DCU Estates/Sustainability	2016/2017	Ongoing

Water Action Plan			
Goal 1 : Reduce Water Consumption on Campus & At home			
Action	Person/Group Responsible	Time Frame	Status
Awareness campaign	Water team	Oct-13	Ongoing
Green Day 3 - Water	Water team	Mar-14	Completed
Flow Movie	Water team	Mar-14	Completed
Rocket competition	Abdul Ali Hassan, Brendan Heery/ water team	Mar-14	Completed
Goal 2 : Water Harvesting for Community Garden			
Action	Person/Group Responsible	Time Frame	Status
Assess possibility of rain water harvesting (RWH) on community garden sheds	Abdul Ali Hassan, Brendan Heery/ water team	Oct-13	completed
Source materials for RWH system (with limited/no financial resources)	Abdul Ali Hassan, Brendan Heery/ water team	Nov-13	Completed
Install system	Abdul Ali Hassan, Brendan Heery/ water team	Nov-13	Completed
Goal 3 : Water Bottles			
Action	Person/Group Responsible	Time Frame	Status
Gather information on potential reusable water bottles	Saoria Kelly Kavanagh, Lorna Finnegan, Sam Fahy	Oct-13	Completed
Assess student feedback on reusable water bottles via FB	Lorna Finnegan	Feb-14	Completed
Identify units/groups within DCU that could financial support a water bottle for first year orientation packs	Sam Fahy	Apr-14	Completed
Identify suitable bottle	Water bottle group	May-14	Completed
Put reusable water bottle in all first year orientation packs	Water bottle group	Sep-14	Completed
Water bottles for sale in SU	Sam Fahy/SU	2014/2015	Completed
New water bottles for sale in SU with SU logo	SU	Jun-15	Completed
Reversion to DCU logo on bottles proposed by SU	SU	Jun-16	Ongoing
NOTE : Map of water bottled needs to be redone	TBC	2015/2016	TBC
Goal 4: Rain water treatment in CG			
Action	Person/Group Responsible	Time Frame	Status
Project Descriptor	Sam Fahy/Fiona Regan	Sep-14	Completed
Appoint student	Ross Begg	Sep-14	Completed
Undertake project	Ross Begg, Fiona Regan, Sam Fahy, Brendan Heery, Andrew Jordan	2014/2015	Completed
Deploy sand filter		Mar - Apr 2015	Completed
Report	Ross Begg	May-15	Completed
Potential to replicate for other CG	TBC	2015/2016	Ongoing

Goal 5: Water Consumption on Campus			
Action	Person/Group Responsible	Time Frame	Status
Gather water information for DCU Campus	Mark Argue/Sam Fahy	Sep-14	Completed
Analysis water bills for consumption data	Sam Fahy,	Sep-14	Completed
Compare date with other ECIU universities	Sam Fahy	Oct-14	Completed
Highligh info to DCU	Sam Fahy/Mark Argue/Ricky Kelly	Mar-15	Completed
Propose addition meter to enable better management	LowFlow Commissioned	Jun-15	Completed
Night flow rate identified	LowFlow Report	Feb-16	Completed
Leak identification plan under development	DCU Estates	2016/2017	Ongoing
Implement repairs	DCU Estates	2016/2017	Ongoing
Assess SP and AH	DCU Estates	2016/2017	Ongoing
Goal 6: Water Consumption in DCU Sports Complex			
Action	Person/Group Responsible	Time Frame	Status
Design Project	Anne Morrissey SF, Clionadh Williams	Sep-14	Completed
Undertake project (consumption and behaviour)	Clionadh Williams, Cody Byrne	2014/2015	Completed
Report	Clionadh Williams	Apr-15	Completed
Analysis recommendations	Sam Fahy/Mark Argue/Ricky Kelly	Jun-15	Completed
Goal 7: Water Rocket Competition			
Action	Person/Group Responsible	Time Frame	Status
Promote water rocket to engineering	Mariane Galpo	Sep-14	Completed
Run rocket competition as part of green day	Mariane Galpo	Nov-14	Completed
Goal 8: World Water Day W/ DCU Water Insititue			
Action	Person/Group Responsible	Time Frame	Status
Design plan for WWD 2015 (22 March 2015)	Sam Fahy, Fiona Regan, Jane Wall, Brendan Heery, Huw Leggate etc etc	Jan-15	Completed
Engage Local schools	Sam Fahy,	Jan - Feb 2015	Completed
Provide St. Aidans/St. Pat NS with instrucion for how to make rocket	Sam Fahy	Mar-15	Completed
Organise and run event	team	Mar-15	Completed
Launch clips	Clionadh, Ross, Mohammed	Mar-15	Completed
Goal 9: Potable Water Fontaitions			
Action	Person/Group Responsible	Time Frame	Status
Identify location for Bottle fountaion	SU/SF	Jun-15	Completed
Identify fountain	DCU Estates/S Fahy	Jun-15	Completed
Place order	Sam Fahy	Jul-15	Completed
Installation and commissioning	DCU Estates/S Fahy	Aug-15	Completed
Goal10: Potable Water Bottles - Research			
Action	Person/Group Responsible	Time Frame	Status
Review volume/mode of water consumption on campus	Ellen Kelly/S Fahy	Q4 2016	Completed
Quantify water consuptpion & mode	Ellen Kelly/S Fahy	Q1 2016	Completed
Survey	Ellen Kelly/S Fahy	Q1 2016	Completed
Analysis and recommend	Ellen Kelly/S Fahy	Q1 2016	Completed
Goal 11: Carbon Neurtal Campus			
Action	Person/Group Responsible	Time Frame	Status
Assess Carbon footprint of Water	Sean Walpole/S Fahy/Estates	Q2/3 2016	Ongoing
Identify strategy and pathway to Carbon neutral	DCU Estates/Sustainaiblity	2016/2017	Ongoing
Implement strategy	DCU Estates/Sustainaiblity	2016/2017	Ongoing

Waste Action Plan			
Goal 1 : Segregated bins in Student Hub aiming to increase % diverted from Landfill			
Action	Person/Group Responsible	Time Frame	Status
Agree waste level reduction	Green Committee	Feb-13	Completed
Install internal recycling bin	Mark Young, Kathleen Whelan	Mar-13	Completed
Promote use of bin	Mark Young, Paul Doherty, Patrick Keane	Mar – May 2013	Completed
Assess impact	Mark Young, Paul Doherty, Patrick Keane	May-13	Completed
Goal 2 : Reduce total tonnage of waste produced (per head of student) via Awareness campaigns, Seminars, Green Screens			
Action	Person/Group Responsible	Time Frame	Status
Assess the level of waste produced per student in b	Sam Fahy	Dec-12	Completed
Focus on printing and paper consumption	Anne Morrissey, Myrian Castanie, Cecilia Fenech	Dec-12	Ongoing
Awareness campaign on reducing printing	Green Committee FB	Oct-13	Ongoing
Awareness campaign on sustainable printing practic	Green Committee	Oct-13	Ongoing
Awareness campaign on Green Screens	Richy Kelly/Sam Fahy	Oct-13	Ongoing
SU policy on printing	Lorna Finegan	Oct-13	Ongoing
DCU policy on printing	Sam Fahy	Dec-12	Ongoing
MG334 Student assessment of printed assignments	MG334/Sam FAhy	Apr-14	Ongoing

Goal 2a : Reduce paper from SU elections			
Action	Person/Group Responsible	Time Frame	Status
Paper free elections	NEW CG 2015/2016	2015/2016	TBC
Promote digital alternatives	NEW CG 2015/2016	2015/2016	TBC
Get buy in from SU	NEW CG 2015/2016	2015/2016	TBC
Goal 2b : Reduce enourmour paper per academic programme (REAP)			
Action	Person/Group Responsible	Time Frame	Status
analysis programme vs consumption of paper (this)	Mark Glynn (TEU), Sam Fahy	Summer 15	TBC
Identify high consuming programmes	Mark Glynn (TEU), Sam Fahy	Summer 15	TBC
Identify possible reduction mechanisms via teaching	NEW CG 2015/2016	2015/2016	TBC
Implement changes and monitor			
Goal 2 : Reduce total tonnage of waste produced (per head of student) via Awareness campaigns, Seminars, Green Screens			
Action	Person/Group Responsible	Time Frame	Status
Assess the level of waste produced per student in b	Sam Fahy	Dec-12	Completed
Focus on printing and paper consumption	Anne Morrissey, Myrian Castanie, Cedilia Fenech	Dec-12	Ongoing
Awareness campaign on reducing printing	Green Committee FB	Oct-13	Ongoing
Goal 3 : Potable Water Points & Campaign to reduce plastic bottle waste			
Action	Person/Group Responsible	Time Frame	Status
Investigate potable water points on campus	Paul Doherty, Sam Fahy	Dec-12	Completed
Map potable water points on campus (Draft 1)	Water Team : Abdul Ali Hassan (Leader), Saorla	Nov-13	Completed
Post map on FB and seek corrections/additions	Water Team	Feb-14	Completed
Map potable water points on campus incl feedback (Draft 2)	Water Team	Sep-14	To do
Get student feedback on reusable bottle for sale in	Lorna Finnegan + SU	Jan-14	Completed
Open discussion with DCU Units who may be interest	Sam Fahy, Saorla Kelly Kavanagh, Lorna Finnegan	Jan-14	On going
Identify DCU Units	Sam Fahy	Mar-14	Completed
Gather Info on potential bottles	Sam Fahy, Saorla Kelly Kavanagh, Lorna Finnegan	Jan – Apr 2014	Completed
Presentation to DCU Units	Sam Fahy	Apr-14	Ongoing
Selection of water bottle + design	DCU Water Bottle group	May-14	Ongoing
Purchase of water bottle	Sam Fahy	May-14	Ongoing
Water bottle in first year packs	SU + SSD	Sep-14	Ongoing
Water bottles for sale in SU	Sam Fahy/SU	2014/2015	0
New water bottles under consideration	SU	Jun-15	Ongoing
NOTE : Map of water bottled needs to be redone	TBC	2015/2016	TBC
Goal 4 : Reusable Coffee cups			
Action	Person/Group Responsible	Time Frame	Status
All members of Green Committee provides with their own KeepCup	Sam Fahy	Mar-12	Completed (This was only possible for first year due to budget constraints)
Open discussion with Catering on Campus	Sam Fahy/Trispace	Sep-12	Completed
Distribute reusable coffee cups to Green Committee	Sam Fahy	Dec-12	Completed
Identify trial cup for sale on campus	TriSpace	Dec-13	Completed
Trial reusable cups with 20% discount for BYOC	TriSpace	Dec-13	Ongoing
Promote reusable coffee cups	Green Committee	Dec-13	Ongoing
Awareness campaign on coffee cups	Eimear Donoghue, Mariane Galpo, Saorla Kelly	Dec-13	Ongoing
Information Sessions at Coffee docks during Green Days	Eimear Donoghue, Mariane Galpo, Saorla Kelly Kavanagh, Pat Hong, Lorna Finnegan, Dave	Dec-13	Ongoing
Information gathered on paper cup sales on DCU Campus - 961 paper cups per DAY	Waste committee with Trispace, Helix and Spar	Oct-14	Completed
Behavioural Change project	Sam Fahy/Cody Byrne	Q1 15	Completed
Get approval for DCU reusable cup	Sam Fahy	Feb-15	Completed
Purchase cups	Sam Fahy	Mar-15	Completed
Design promotional programme based on motivating factors - different for different departments	Cody Byrne	Mar-15	Comp
Get agreement for all coffee outlets to sell cups	Waste committee with Trispace, Helix and Spar	Q1 15	Completed
Deploy cups	Sam Fahy/Cody Byrne	May-15	Completed
Sell out		May-15	Completed
Open discussion with all coffee providers to restock cups	Sam Fahy	Jun-15	ongoing
Goal 5 : External Segregated bins (Source and install trial external segregated bins)			
Action	Person/Group Responsible	Time Frame	Status
Identify potential external bin suppliers	Paul Doherty, Sam Fahy	Summer 2013	Completed
Seek donations for trial project on site from three suitable firms (local if possible)	Paul Doherty, Sam Fahy	Summer 2013	Completed
Get trial bins on site and placed in appropriate locations	Estates, Paul Doherty, Sam Fahy	Sep-13	Completed
Post 4 th year project (Environmental Science and Health Programme) descriptor for analysis of bins on	Anne Morrissey, Sam Fahy	Sep-13	Completed
Literature Review	Aoife Fallon, Anne Morrissey, Sam Fahy	Oct 2013-Jan 2014	Completed
Circulate literature review to participating companies	Sam Fahy	Jan-14	Completed
Survey all staff & Students on Bins	Aoife Fallon, Anne Morrissey, Sam Fahy	Apr-14	Completed
Analysis survey results	Aoife Fallon, Anne Morrissey, Sam Fahy	Apr-14	Ongoing
Analysis contents of bins	Aoife Fallon, Estates Office	Apr-14	Ongoing
Report on efficacy of segregated bins	Aoife Fallon	May-14	Ongoing

Goal 6 : Community WEEE Recycling				
Action	Person/Group Responsible		Time Frame	Status
Agree process with Estates/WEEE	Eimear Donoghue/Kathleen Whelan		Feb-14	Completed
Awareness campaign for competition	Eimear Donoghue, Mariane Galpo, Saorla Kelly Kavanagh, Pat Hong, Lorna Finnegan, Dave Whittle, Ying Fan, Le Min Chan, Heather Rainey		Mar-14	Completed
Seek Sponsorship	Eimear Donoghue		Mar-14	Completed
Supervise and record donations	Green Team		Mar-14	Completed
Repeat for future Green Days	Green Team		Mar-14	Ongoing
Goal 7 : Pack it up and pass it on in conjunction with DCU in the Community				
Action	Person/Group Responsible		Time Frame	Status
End of Semester campaign to recycle material by passing it on to a charity	Eimear Donoghue, Mariane Galpo, Saorla Kelly Kavanagh, Pat Hong, Lorna Finnegan, Dave Whittle, Ying Fan, Le Min Chan, Heather Rainey		May-14	Completed
End of Semester campaign to recycle material by passing it on to a charity	DCU in the Community, Saorla Kavanagh, Pat Hong, Le Min Chan, Sam Fahy et lots of other al who donated 21 bags of stuff		May-15	Completed
Goal 8 : Litter surveys				
Action	Person/Group Responsible		Time Frame	Status
Main Mall	Saorla Kavanagh		2014/2015	Completed
Campus wide	Green Committee		2014/2015	Completed
Main Mall	Saorla Kavanagh		2015/2016	On going
Campus wide	Green Committee		2015/2016	On going
Goal 9: Waste from where				
Action	Person/Group Responsible		Time Frame	Status
Gather data on waste bin collection	Waste working group incl all uni stakeholders		Sep-14	Completed
Identify major producers	Waste working group incl all uni stakeholders		Q4 14	Completed
Develop campus wide plan to address	Waste working group incl all uni stakeholders		Jul-05	Ongoing
Consistant signage across entire campus	Waste working group incl all uni stakeholders		2015	Ongoing
Appropriate bin across campus	Waste working group incl all uni stakeholders		2015	Ongoing
Goal 10 : Pack it up and pass - Version 2				
Action	Person/Group Responsible		Time Frame	Status
End of Semester campaign to recycle material by passing it on to a charity	Eimear Donoghue, Mariane Galpo, Saorla Kelly Kavanagh, Pat Hong, Lorna Finnegan, Dave		May-14	Completed
End of Semester campaign to recycle material by passing it on to a charity	DCU in the Community, Saorla Kavanagh, Pat Hong, Le Min Chan, Sam Fahy et lots of other al		May-15	Completed
End of Semester campaign to recycle material by passing it on to a charity	DCU in the Community, Saorla Kavanagh, Pat Hong, Le Min Chan, Sam Fahy et lots of other al		Jun-15	Completed
Goal 11 : Promote WEEE				
Action	Person/Group Responsible		Time Frame	Status
Agree regular WEEE collections	Kathleen Whelan		2015/2016	Completed
Promote to all staff and students and units	Kathleen Whelan		2015/2016	Ongoing
Goal 12 : Promote Recycling				
Action	Person/Group Responsible		Time Frame	Status
Promote recycling	Kathleen Whelan/Sust/EcoSoc		2015/2016	Completed
Laboratory glass recycling	Kathleen Whelan/tech labs		2015/2016	Ongoing
Increase Clean dry recycling bins	Kathleen Whelna		2015/2016	Ongoing
Goal 13 : Paper consuptpion on campus				
Action	Person/Group Responsible		Time Frame	Status
Review paper consuptpion in academic institutions	Bernadette Leng Ian Lo/Sam Fahy		Q4 2015	Completed
Quatify paper consuptpion on campus via student 'papercut' account data	Bernadette Leng Ian Lo/Sam Fahy		Q1 2016	Completed
Breakdown info across programmes	Bernadette Leng Ian Lo/Sam Fahy		Q1 2016	Completed
Survey	Bernadette Leng Ian Lo/Sam Fahy		Q1 2016	Completed
Analysis	Bernadette Leng Ian Lo/Sam Fahy		Q1 2016	Completed
Recommendations	Bernadette Leng Ian Lo/Sam Fahy		Q1 2016	Completed

Goal 10: Carbon Neutral Campus			
Action	Person/Group Responsible	Time Frame	Status
Assess Carbon footprint of Waste	Sean Walpole/S Fahy/Estates	Q2/3 2016	Ongoing
Identify strategy and pathway to Carbon neutral	DCU Estates/Sustainability	2016/2017	Ongoing
Implement strategy	DCU Estates/Sustainability	2016/2017	Ongoing

Biodiversity Action Plan			
Goal 1 : Community Garden and Vegetable Plot			
Action	Person/Group Responsible	Time Frame	Status
Launch of Community Garden by DCU President Prof Brian MacCraith	Sam Fahy, Hilary Murphy, Eoin Campbell /Green Committee	Mar-12	Completed
LA21 Application for access	Sam Fahy	Spring 2012	Completed (successful)
Clearing & making Site safe	Sam Fahy/Hilary Murphy	Jun-12	Completed
Establish Community Garden Development Committee (CGDC)	Sam Fahy	Mar-13	Completed
Establish development plan	Sam Fahy/CGDC	Spring/Summer 2013	Completed
LA 21 application for disability access raised bed	Sam Fahy/Saorla Kelly Kavanagh	Nov-13	Completed (successful)
Development of Community garden safety statement	Sam Fahy/Eileen Tully (DCU Safety Officer)	Mar-14	Completed
Sources materials for raised bed	Bio Group	Mar-14	Ongoing
Refurbishment of polytunnel	Sam Fahy/BWP	Mar-14	Ongoing
Engagement with CE Scheme	Sam Fahy/BWRights	Q4 14	Completed
Development Plan revised	Sam Fahy, Saorla Kavanagh, Brendan Heery	Q1 15	Completed
Membership form	Sam Fahy, Saorla Kavanagh, Brendan Heery	Q1 15	Completed
Working model developed	Sam Fahy, Saorla Kavanagh, Brendan Heery	Q1 15	Completed
Planting and harvesting	Andrew Jordan et al	Q1 15	Completed
Engagement with Tolka Area Partnership	Sam Fahy et al	2014/2015	Ongoing
Food available for donation	All	2014/2015	Ongoing
Goal 2 : Community engagement			
Action	Person/Group Responsible	Time Frame	Status
Engage with GAP & other local community groups	Joanne Ozarowska, Myrian Castanie, Sam Fahy, Hilary Murphy	Mar-12	Completed/Ongoing
Supervised engagement with St. Aidans Secondary School	Sam Fahy/Saorla Kelly Kavanagh/Patrick Traynor (St. Aidans)	Oct-13	Ongoing
Engagement with Ballymun Whitehall Tus horticulture programme	Sam Fahy/Saorla Kelly Kavanagh/BW Partnership	Feb-14	Ongoing
Support 'Age Friendly University' Initiative – promote to Senior citizen buying paper in SPAR/Interfaith!	Sam Fahy/Green Committee	Mar-12	Completed/Ongoing
Goal 3 : Integrated with core activities			
Action	Person/Group Responsible	Time Frame	Status
Teagasc students pruning practice (2012/2013 class)	Saorla Kelly Kavanagh/Teagasc/Deg in Hort at DCU	Spring 2012	Completed
Horticulture Student projects	Saorla Kelly Kavanagh/Micheal Parkinson	Oct-13	Ongoing
Teagasc students pruning practice (2013/2014 class)	Saorla Kelly Kavanagh/Teagasc/Deg in Hort at DCU	Spring 2012	Ongoing
Submission of SEAI Better energy communities application - Funded in 2014 but DCU was unable to take up the award due to timing constraints of the grant and public procurement rules	Sam Fahy/Estates/Green Way	Apr-14	Completed
Quantitative Biodiversity Project	Joe Cornish/Sam Fahy/Anne Morrissey	2014/2015	Ongoing
4th year project on sustainability of CG	Alan Rigney/Sam Fahy/Anne Morrissey	2014/2015	Completed
Submission of SEAI Better energy communities application	Sam Fahy/Estates/Green Way	Apr-15	Unsuccessful
Goal 4 : 'A plant for U at DCU'			
Action	Person/Group Responsible	Time Frame	Status
Project on rockery beside spar shop	Saorla Kelly Kavanagh	May-13	Completed
DCU Suppliers donated trees for planting at DCU	Saorla Kelly Kavanagh	May-13	Completed

Goal 5 : Programme to increase Native Irish trees on campus			
Action	Person/Group Responsible	Time Frame	Status
Awareness campaign	Niamh O'Dowd, Saorla Kavanagh / Green Committee	Oct-13	Ongoing
National Tree Week 2013	Saorla Kelly Kavanagh /Green Committee	Mar-13	Completed
One million trees in one day	Saorla Kelly Kavanagh /DCU Community	Mar-13	Completed
National Tree Week/International Women's Day	Saorla Kelly Kavanagh /Green Committee	Mar-14	Completed
One million trees in one day	Saorla Kelly Kavanagh /DCU Community	Mar-14	Completed
One million trees in one day	Mariane Galop/ Saorla Kavanagh	Mar-15	Completed
Goal 6 : Biodiversity on Campus			
Action	Person/Group Responsible	Time Frame	Status
Submit project descriptor to Intra placement for Environmental Science and Health Course - focus on Biodiversity for	Sam Fahy/Saorla Kelly Kavanagh	Oct-13	Completed
Manage and monitor placement	Sam Fahy/Saorla Kelly Kavanagh/ Richard Cole (Intra Student	Apr-14	Completed
Participate in Intervarsity Bioblitz	Green Team + experts !	May-14	Completed
Bioblitz 2015	Green Team + experts !	Sep-15	unable to compete
Quantaive biodiverstiy project	Joe Cornish/Sam Fahy/ Anne Morrissey	Sep-15	Completed
Bioblitz 2016	Sam Fahy/Jason McGuire/Marty Mathwes	Sep-16	Hopefully !!
Goal 7 : Refurbishment of Shed in CG (linked to energy and water)			
Action	Person/Group Responsible	Time Frame	Status
Clear Shed 2	Green Committee	Q4 14	Completed
Refurbish windows with non glass alternative	Sam Fahy, Andrew Jordan, Brendan Heery & Care & Repair Team	Q4 14	Completed
Alternative/Renewable energy RWH Treatment	Sam Fahy, Andrew Jordan, Brendan Heery, Stephen Damsels, Susmitna	2014/2015	Ongoing
Goal 8 : Mens Shed			
Action	Person/Group Responsible	Time Frame	Status
Establish Mens Shed	Green Committee	2015/2016	Ongoing
Open discussion with Ballymun Mens Shed Association	S Fahy	Feb-16	Ongoing
Research on Impact of Mens Sheds in Ireland	S Fahy/P Murphy/B Sheridan	Jun-16	Ongoing
Goal 9 : CSR Volunteers			
Action	Person/Group Responsible	Time Frame	Status
Run CSR days in conjunction with An Taisce Green Communities	Sam Fahy, Andrew Jordan, An Taisce Green Communities	2015/2016	Ongoing
Deloitte CSR day (x 2)	Sam Fahy, Andrew Jordan, An Taisce Green Communities	2015/2016	completed
M& S CSR Day	Sam Fahy, Andrew Jordan, An Taisce Green Communities	2015/2016	completed
Aol CSR Day	Sam Fahy, Andrew Jordan, An Taisce Green Communities	13 May 206	completed
Goal 10 : Refurbishment of the DCU Community Garden			
Action	Person/Group Responsible	Time Frame	Status
Assess viability of sheds on site	DCU Estates	Q2 2016	Ongoing
Get costing for power/water and waste reconnections	DCU Estates	Q2 2016	completed
Ballymun MSA workshop - in Shed 2	Sam fahy	Q2 2016	completed
Goal 11 : Grow Dome in DCU Community Garden			
Action	Person/Group Responsible	Time Frame	Status
Agree location with Grow Dome (social enterprise)	S Fahy	Q1 2016	completed
install foundations	S fahy with volentary help for contractors in field next door !!!!	Q1 2016	completed
Build grow dome	Grow Dome	Q2/Q3 2016	ongoing
Goal 12 : Community Employment Scheme support in DCU Community Garden			
Action	Person/Group Responsible	Time Frame	Status
Identify placement 1	S Fahy	Q1 2016	completed
Identify placement 2	S Fahy	Q2 2016	completed
Identify placemnt 3	S Fahy	Q2/Q3 2016	ongoing
Goal 13: Carbon Neurtral Campus			
Action	Person/Group Responsible	Time Frame	Status
Assess Carbon footprint of Biodiverity on campus - sink or source !	Sean Walpole/S Fahy	Q2/3 2016	Ongoing
Identify strategy and pathway to Carbon neutral	DCU Estates/Sustainaiblity	2016/2017	Ongoing
Implement strategy	DCU Estates/Sustainaiblity	2016/2017	Ongoing

Transport Action Plan			
Goal 1 : Smarter Travel Campus (in conjunction with NTA)			
Action	Person/Group Responsible	Time Frame	Status
Awareness of sustainable transport to/from campus	Sam Fahy/Transport Team	Oct-13	Completed
Awareness of shower facilities on campus for walkers/cyclers	Sam Fahy/Transport Team	Oct-13	Completed
Establishment of Smart transport committee	Sam Fahy/STC	Apr-14	Completed
Bus Terminus at DCU	Sam Fahy/STC	Q3 2014	Completed
Additional Cycle Parking (410 spots)	Sam Fahy/STC	Q3 2015	Completed
Cycle maintenance stands on Glas/SPD/Ah	Sam Fahy/STC	2016/2016	Completed
Permeability Study	Sam Fahy/STC	Q4 2015	Still Ongoing!
Goal 2 : Promote Walking/Cycling			
Action	Person/Group Responsible	Time Frame	Status
Marchaton	DCUSU/Green Comm	Mar-14	Completed
Transport Green Day	Transport Team	Apr-14	Completed
Engagement with 5k fun run	All Green Committee !!	Apr-14	Completed
Rediscovery Centre bicycle workshops at each Green Day	Sam Fahy/Rediscovery Centre	Oct-13	Completed
Rediscovery Centre bicycle workshops at each week at DCU glasnevin and monthly at SPD	Sam Fahy/Rediscovery Centre/SU	2015/2016	Completed
Rediscovery Centre bicycle workshops at each week at DCU glasnevin and monthly at SPD	Sam Fahy/Rediscovery Centre/SU	2016/2017	hopefully - funding dependant
Goal 3 : Bike Scheme			
Action	Person/Group Responsible	Time Frame	Status
Staff bike scheme	Sam Fahy/Transport committee	Q3-2015	in use
Student Bike Scheme	All Green Committee !!	2015/2016	in disucssion with SU
Goal 4: Enhanced Transport Facilities			
Action	Person/Group Responsible	Time Frame	Status
Enhanced transport facilities for staff	Sam Fahy/Transport committee	2015/2016	TBC
Enhanced transport facilities for student in new hub ??	All Green Committee !!	2015/2016	TBC
Goal 5 : Connectivity			
Action	Person/Group Responsible	Time Frame	Status
Enhance public bus connectivity	Sam Fahy/Transport committee	2016/2017	TBC
Enhance private bus connectivity (Kildare/Meath/Cavan/Dundalk)	Sam Fahy/Transport committee	2016/2017	TBC
Goal 13: Carbon Neurtal Campus			
Action	Person/Group Responsible	Time Frame	Status
Assess Carbon footprint of Transport on campus	Sean Walpole/S Fahy	Q2/3 2016	Ongoing
- Commuting Transport	Sean Walpole/S Fahy	Q2/3 2016	Ongoing
- Air travel	Sean Walpole/S Fahy	Q2/3 2016	Ongoing
Identify strategy and pathway to Carbon neutral	DCU Estates/Sustainaiblity	2016/2017	Ongoing
Implement strategy	DCU Estates/Sustainaiblity	2016/2017	Ongoing

Communications Action Plan			
Goal 1 : Green Days			
Action	Person/Group Responsible	Time Frame	Status
Agree first set of dates	Sam Fahy/Green Committee	Oct-13	Completed
Agree focus + activities	Green Committee	Oct-13	Completed
Awareness campaigns on FB etc	Green Committee	Oct-13	Completed/Ongoing for future dates
Write report on completed GD's	Nominated Green Committee member	Oct-13	Completed/Ongoing for future dates
Goal 2 : Sustainability/An Taisce Green Campus Information session for all new first years			
Action	Person/Group Responsible	Time Frame	Status
Get agreement with Student Support and Development for slot in Orientation week	Sam Fahy/Paul Doherty	May-13	Completed
Draft slides and submit to SSD	Sam Fahy	Aug-13	Completed
Deliver presentation (10 times!!)	Sam Fahy	Sep-13	Completed
Report for next intake – Sept 2014	Sam Fahy	Sep-14	Completed
Report for next intake – Sept 2015	Sam Fahy	Sep-15	Completed
Report for next intake – Sept 2016	Sam Fahy	Sep-16	Ongoing
Presaentation to Staff Inducation re CG	Sam Fahy	01/09/2014/2015 & 2016	Ongoing
Goal 3 : Notice Board			
Action	Person/Group Responsible	Time Frame	Status
Identify process for gaining notice boards on campus	Saorla KK	Jan-14	Completed
Apply for Notice Board	Saorla KK	Feb-14	Completed
Manage and update 'Sustainability DCU' notice board	Green Comm	Apr-14	Ongoing
Goal 4 : Linked Events			
Action	Person/Group Responsible	Time Frame	Status
Identify potential linked events to support Green Committee activities	Green Committee	Oct-13	ongoing
Water Day with DCU Water Institute	GC/WI	Mar-15	completed
DCU in the Community Pack it up and Pass it on	All	May-15	completed
Goal 5: Facebook/Social Media			
Action	Person/Group Responsible	Time Frame	Status
Youtube clips	Mariane /Saorla/Mark Foley	2014/2015	compelted
Youtube clips	Clionadh,/Ross/Mohammed	Mar-15	compelted
Get media students to design social media plan to promote DCU Green Campus	Green Comm	2015/2016	Ongoing
Face book	Sam/Mariane/Saorla/Pat	2015/2016	Ongoing
Goal 5: Facebook/EcoSoc Group			
Action	Person/Group Responsible	Time Frame	Status
Links and info	Denah/All	2015/2016	ongoing
Divestment	All	2015/2016	ongoing

Appendix 2 : Divestment Petition

----- Forwarded message -----

From: **Denah Fitzharris** <denah.fitzharris5@mail.dcu.ie>

Date: 29 May 2016 at 10:19

Subject: Fossil Fuel Divestment Petition

To: president@dcu.ie

To Professor Brian MacCraith,

I am writing on behalf of the students of DCU, and namely the students of the Green Committee, to ask you to bring the issue of divesting from fossil fuels by 2020 to the University Board, as by the terms of our ongoing petition found at <https://campaigns.gofossilfree.org/petitions/divest-dcu>

Fossil fuel divestment is an increasingly widespread campaign in the climate movement, both in Ireland and worldwide, and we feel DCU has the power to take the initiative and lead other Universities and educational institutes in Ireland by announcing our complete divestment from fossil fuels. While divestment is not directly taking money from fossil fuel companies, it is sending them a powerful message - that their shareholders are no longer willing to invest in products and practices which are contributing on such a large scale to the destruction of our planet.

The future of fossil fuel companies is not a bright one. There is major pressure on governments internationally to introduce or raise carbon taxes, and more and more people are switching their investments and usage to sustainable energy. Financially, divesting now makes sense to us, as in the near future the demand for fossil fuel is going to begin a steady decline. (Instead, we might suggest considering reinvesting in renewable energy, or even in solar panel windows and rain water harvesters on campus!)

Perhaps most importantly, we feel the announcement of divestment would set an example to the students and open up a conversation about what else DCU can do to safeguard the future of our planet.

Our petition at <https://campaigns.gofossilfree.org/petitions/divest-dcu> currently has 197 signatures but will remain open until the University Board approves our request.

Thank you for taking the time to consider our call for fossil fuel divestment, we await your response with great anticipation,

Denah Fitzharris,

On behalf of the DCU Green Committee.