

# Students' Green Fund:

reflections on year one

**Students'**  
**Green Fund**

**nus**  
national union of **students**

# Contents

<b>1. Introduction</b>	<b>1</b>
1.1 Overview	2
1.2 This report	3
<b>2. Process and progress</b>	<b>5</b>
2.1 Process and progress: fund-wide	6
2.2 Process and progress: project-specific	11
<b>3. Categorisation and reflections</b>	<b>18</b>
3.1 Classification by theme: sustainability 'domain'	19
3.2 Classification by theme: Learning focus	25
3.3 Classification by theme: Audiences	28
3.4 Classification by theme: Project-led funding schemes	33
3.5 Reflections on SGF projects and approaches to change	34
<b>4. Future impacts and legacy beyond the fund</b>	<b>57</b>
4.1 Legacy beyond the fund	58
4.2 Looking forward to year two	61
<i>Appendices</i>	62
<i>Guide to projects and abbreviations</i>	66

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# Introduction

*"Students' Green Fund provides students' unions with the funding to develop transformative, student-led sustainability projects with real impact and legacy." NUS Students' Green Fund Business Plan, 2013*

## 1.1 Overview

Students' Green Fund provides students' unions with the funding to develop transformative, student-led sustainability projects with real impact and legacy. Using £5 million of Higher Education Funding Council for England (HEFCE) funding, NUS has helped 26 students' unions from across England to develop 25 ambitious greening projects, leading to step changes in student engagement across higher education.

With student leadership at the heart of all 25 projects, NUS is supporting initiatives ranging from improving the efficiency of student homes, to creating growing spaces on campuses; from up-cycling cafés, to developing sustainable transport for disabled students.

Embedding sustainability into the core purpose of higher education, Students' Green Fund aims to empower cohort after cohort of graduates to leave their time in education as part of the solution to our environmental challenges.

Through holistic approaches like embedding sustainability in the curriculum and developing widespread behaviour change, Students' Green Fund turns students' unions into hubs of sustainability at the heart of their wider communities, and helps students to adopt pro-environmental habits that will last far beyond their time in education. As a result, the key themes of the fund are: student participation, partnership, impact and legacy.

## 1.2 This report

This report provides an update on the progress and achievements at the mid-point of the fund (August 2014) and, where possible, demonstrates the early impacts of the fund.

The report draws on information provided by the 25 funded projects, including reflections from the project staff, primary research with project participants and volunteers, and data from ongoing monitoring of project activities. At the time of writing, the majority of projects have not yet completed mid-point or final evaluation research, therefore concrete evidence of impact in some areas (e.g. behavioural change) is limited. Full data and analysis of these impacts will be included in the end of fund report in August 2015.



*Steve Egan, HEFCE, at our parliamentary reception*

The following chapters of this report provide detail on:

### **Chapter 2: Process and progress**

Provides a fund-wide perspective, along with detail on individual projects in terms of the progress made, and the processes used to achieve this.

### **Chapter 3: Categorisation and reflections**

Assessing the focus of the different projects, and approaches taken to affecting change, in order to understand how the approaches and activities adopted by the projects have been working.

### **Chapter 4: Future impacts and legacy beyond the fund.**

# Process and progress

An insight into how the fund, and the funded projects, are being delivered

## 2.1 Process and progress: national level

### 2.1.1 History of the fund – from launch to selection

Following approval at the Catalyst Fund panel on 27 March 2013, the Students' Green Fund was launched that evening at NUS Services Convention Annual Dinner and also at NUS Conference on 08 April 2013.

Working with our steering group, made up of representatives from the key sector bodies<sup>1</sup>, we developed a two-stage application process, comprising an expression of interest form (launched 08 April 2013, deadline 05 June 2013) and a main application form (launched 24 May 2013, deadline 10 July 2013). The purpose of the expression of interest stage was to ensure that proposed projects were eligible, and resulted in a very small number of projects being asked not to proceed to main applications. Main applications involved completing a proforma no longer than 18 pages in length. There was a formative feedback process for all main applications, with applicants being able to submit one draft for comments prior to the deadline.

In total NUS received 167 expressions of interest from 130 students' unions worth c£31m. These turned into 120 main applications from 105 students' unions worth £23.3 million, substantially exceeding the target of 50 main applications proposed in the business plan for the fund.



*Cycling 4 All at the University of Bradford Students' Union*

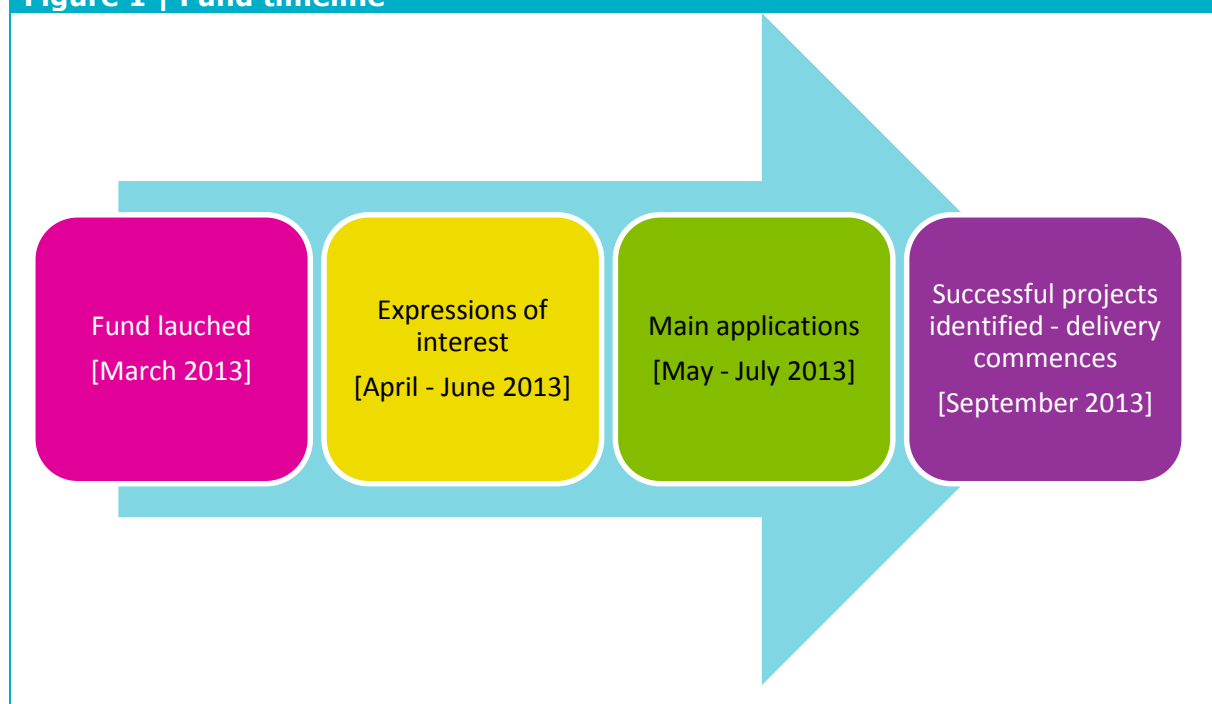
Research with applicants before the announcement of the successful projects in general revealed a positive application experience. Responses to a feedback survey were provided by 78 students' unions. The main barrier cited for those not progressing from expressions of interest to main application was lack of capacity to meet the deadline. The main improvement suggested was an increase in the time between initial expressions of interest to full application. As well as providing positive feedback on their experiences of the application process, respondents also recognised early impacts of the fund simply by working to develop their project proposals:

"Made our union and university work together, collaborate and communicate a lot better. We both wanted success from the application process so it really forced us together and I now have strong work relationship with a lot of university staff and community members.

It has also increased the universities and unions focus on green policy and agendas...  
...with new panels and boards connected to sustainability created on campus."

**SGF applicant**

<sup>1</sup> [www.nus.org.uk/en/greener-projects/funding/students-green-fund/steering-group/](http://www.nus.org.uk/en/greener-projects/funding/students-green-fund/steering-group/)

**Figure 1 | Fund timeline**

In September 2013, 25 projects, delivered by 26 students' unions, were announced as successful recipients of funding. These projects proposed covering a range of sustainability issues and approaches, whilst strongly supporting the four key themes of the fund: partnership, student engagement, impact and legacy. The successful projects were identified following assessment by a funding panel of 15 members, including NUS officers, student representatives, sustainable development sector experts and HEFCE representatives. Applications were judged against:

- Rationale, concept and plan
- Student leadership and partnership
- Impact, learning and legacy
- Value-added benefits
- Quality, credibility and value.

### **2.1.2 Supporting the successful projects**

The Students' Green Fund is delivered at NUS by a team of four key staff, including programme manager (FT), programme administrator (FT), research officer (0.5 FT) and communications officer (0.5 FT). The team is also supported by the wider sustainability team at NUS, including the head of sustainability, and additionally from external evaluator Andrew Darnton. To aid the 26 funded students' unions in the delivery of their 25 projects, NUS has developed a programme of support running throughout the course of the two year funding programme, including project management, monitoring and evaluation, and communications.

#### *Reporting*

Monthly and quarterly reports are submitted by projects to NUS to provide an update on progress. The reporting templates also aim to ensure project staff are taking stock and reflecting on their achievements and identifying learning from what they are doing on a day to day basis.

Following submission of their quarterly reports, the NUS SGF programme manager and members of the SGF team have scheduled teleconferences with each of the project teams. These teleconferences allow the NUS team to gather in-depth information on the



project activities, issues arising, progress to date, questions over their monitoring and evaluation, communications, budgeting and any other practical issues. As a result, anything that SU project staff may not have covered in the quarterly report can be aired, allowing NUS staff to keep track of progress and assist where necessary.

#### *Support days*

A series of six support days will be delivered over the two years of the fund, with three taking place in the first year. Each support day was delivered around a theme, including:

- *Monitoring and evaluation (September 2013)* – NUS staff aided project staff in identifying areas of work and key research questions, provided an introduction to behaviour change theory, provided guidance on how to use segmentation, and offered an introduction to research methods.
- *Project management and key skills (January 2014)* – With dedicated project staff now in place, this day focused on key skills needed for project management and communications, as well as networking between projects. Sessions ranged from working with local media to engaging academics, leaving plenty of space for sharing of good practice.
- *Experience and learning after year one (May 2014)* – project staff provided feedback and experiences on developing partnerships within the local community, creating social enterprises, working on energy in private-rented housing, engaging students and institutions in shaping education for sustainable development and driving student engagement.

The support days have proven to be a key chance for staff to share what has and what hasn't worked effectively on campus. In response to further demand for networking opportunities, NUS has set up smaller groupings of project staff who are working on similar issues, who communicate via Skype, troubleshoot shared issues in their projects, and share useful resources. This is in addition to the SGF JISCMail<sup>2</sup> that also provides projects with an opportunity to ask questions of each other and share resources.

*"The Green Exchange team attended the NUS support day for Marketing and Monitoring and Evaluation support and have come away with some great ideas with a view to review the marketing plan for the project in the coming weeks."* **Leeds**

#### *Guidance and resources*

Alongside continuous ad hoc support from the NUS Students' Green Fund programme team, NUS is represented on the steering group for each of the funded projects. Steering groups meet a minimum of three times each academic year. This structured support has been particularly useful in providing guidance to project staff, as well as ensuring any potential issues have been flagged up early and solutions found.

*"As we were struggling to find cost-effective and relevant training opportunities for our students it was invaluable to have the NUS SGF team to help us disperse this information and gain a lot of helpful feedback regarding this."* **Staffordshire**

Providing regular opportunities to communicate with and guide project staff has helped build strong relationships with just the right amount of support and challenge, so that reporting is always punctual and of a high quality. Funded projects have responded well to this relationship and have provided honest accounts of any issues arising, welcoming support from the NUS team where appropriate.

Specific resources have also been provided to aid projects in developing their monitoring and evaluation and communications activities. In terms of monitoring and evaluation, a

<sup>2</sup> JISCMail is an email discussion list facility for UK education and research communities.

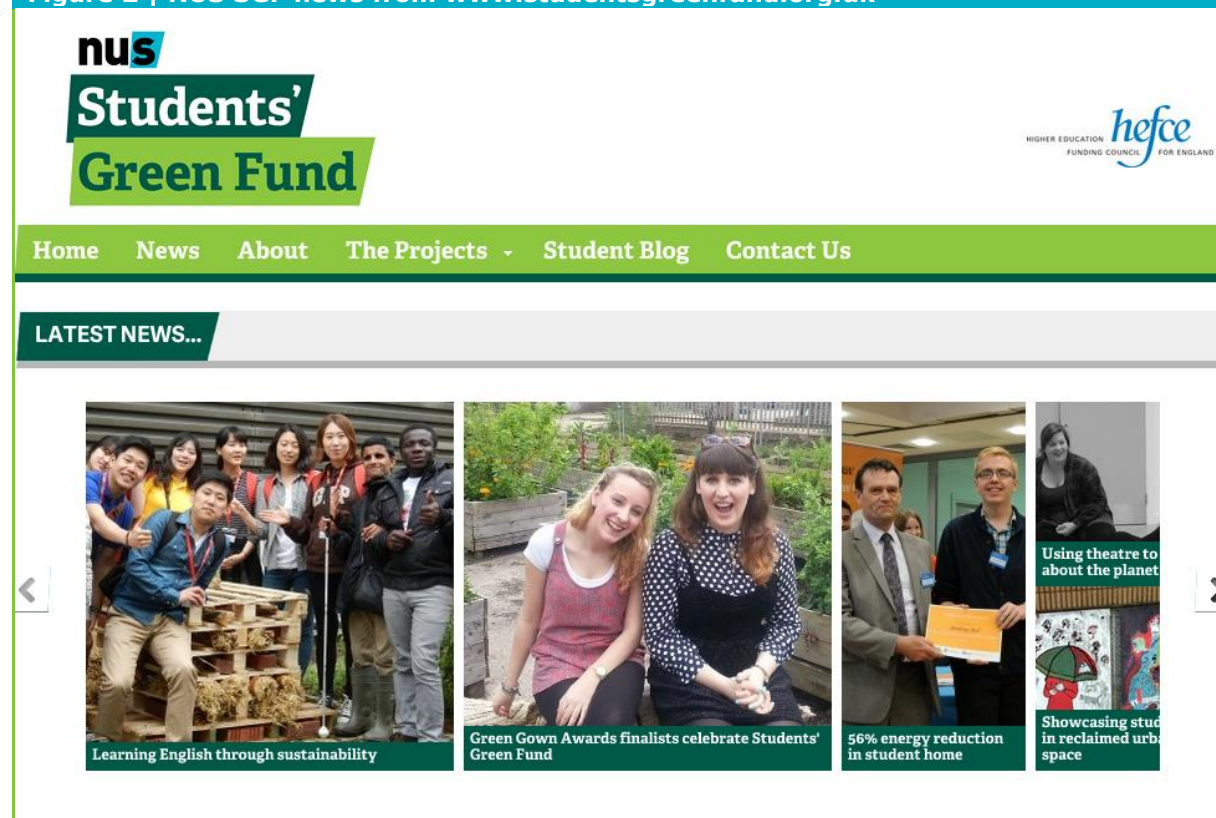


handbook providing guidance and good practice has been developed, along with template questions for quantitative survey research, and case study templates for qualitative data collection. Baseline and follow-up survey research will be conducted across all funded projects to track the impact of each project on students and staff, complementing the qualitative data from focus groups, interviews, reflective diaries and blogs.

#### *Communications and dissemination*

A central Students' Green Fund website<sup>3</sup> was created following the launch of the fund. The website features an overview of each of the successful 25 projects, along with regular updates of new stories and successes from the projects. One feature of the website is a monthly blog, written by volunteers from the individual projects. Figure 2 shows examples of recent news stories posted on the SGF website.

**Figure 2 | NUS SGF news from [www.studentsgreenfund.org.uk](http://www.studentsgreenfund.org.uk)**



These news articles have also been shared on NUS' membership platform NUS Connect, and through NUS social media channels on Facebook and Twitter (with followership of 45,462 and 42,700 respectively). This has ensured a far reaching and impactful central communications output. Since its launch, the SGF microsite has received:

- 12,012 sessions (visits to the site overall)
- 30,167 page views (independent page views within visits to the site)

As part of NUS' wider sustainability work SGF has received coverage as an overall project this year, being showcased in outlets such as The Guardian, Resurgence & Ecologist magazine and Times Higher Education. Alongside this, imminently upcoming coverage has been secured in further outlets, reflecting on our first year successes:

- Jellied Eel magazine
- Blue and Green Tomorrow
- Green Futures magazine

<sup>3</sup> [www.studentsgreenfund.org.uk](http://www.studentsgreenfund.org.uk)

We have been pleased to see our work showcased in a number of core green sector outlets, such as in our regular webinar series with EAUC, and a full report on our parliamentary reception in the House of Lords in Blue and Green Tomorrow. Beyond coverage of the fund overall, individual projects have been successful at generating positive news stories for students and students' unions at the local level. The projects have been showcased in outlets ranging from student newspapers to national newspapers; from local radio, to national television.



*The Real Junk Food Project funded by Leeds Green Exchange*

One example is the Real Junk Food Project, funded through the Leeds Green Exchange Project (using surplus food to create healthy meals), which has appeared on ITV news, The Guardian website, BBC News Magazine online and the Daily Mail website, representing a broad range of media, and enabling reach to a wide range of readerships. Further to this, the Newcastle project has been featured on ITV news, and the UCLan project has also been featured as part of the Sunday Politics Show. Of note about this particular feature is the project's inclusion as part of a wider feature on Disabled Students Allowance cuts, demonstrating the integration of sustainability into campus life through the overlap with other campaigns.

As mentioned above, the Students' Green Fund has allowed NUS to reach a wide range of audiences and readerships. Our project in Exeter was featured in the national Waitrose magazine, and work through the Greener Gloucestershire and Growhampton projects were showcased as part of their appearance in the Chelsea Flower Show in the Telegraph on two occasions. Elsewhere, Newcastle's project hit brand new audiences by being featured in outlets like The Drink Business and Canny Bevv. NUS will continue to explore general interest niches to showcase student-led sustainability to new audiences into the second year of the fund.

After discussion with the NUS communications team, it was decided that, where possible, projects should be advised to utilise pre-existing students' union social media communications channels; not only because it is difficult to build an audience from scratch, but also because a bespoke 'green' account risks immediately marginalising those who don't consider themselves to be part of the sustainability movement. This means that the targets of 'new followers' doesn't measure the full social media reach. The total numbers of new followers are still on track to meet our target (of 20,000 social media followers of funded projects over the two years), but they are included with the knowledge that our actual outputs and reaches are somewhat higher. Followers and interaction figures for SGF projects' social media profiles are:

- 5,877 Twitter followers
- 6,356 Twitter interactions
- 5,225 Facebook 'fans'
- 9,871 Facebook 'likes' or 'shares' across the funded projects

## 2.2 Process and progress: project specific

### 2.2.1 Individual project progress

Broadly speaking, the 25 projects are on track in terms of project milestones after one year of funding. This in itself should be regarded as a positive achievement as several projects suffered delays in the initial weeks and months, due to the tight turnaround between notification of the success of their bid and the start of planned project activity. The main delay here was the ability to recruit project staff. The timing of the start of the funding period also impacted on the ability of projects to run engagement exercises at freshers' fairs - a key point in the academic year for promoting opportunities and securing volunteers and participants. Despite these initial setbacks, the lessons from which will be built into the administration of funds by NUS in the future, the project teams have made good progress towards achieving their objectives. To date 44,839 students and 3,399 staff have been engaged through the 25 projects, and across project websites there have been 107,204 unique page views.



*A student-led garden at ECO by BCU*

There are a few projects that have seen more ongoing delays associated with particular strands of their project activities. In the case of Birmingham City, the team have experienced setbacks in the development of their innovative mobile cafés, due to concerns over health and safety aspects of the design. At Southampton and Falmouth & Exeter (FXU), the project teams have struggled to complete all activity scheduled for term three due to the focus of students on their exam commitments, and will therefore be rolling some of this activity into year two targets. Finally, Wigan & Leigh College experienced lengthier delays with their recruitment process, following a last minute change of mind from a successful candidate. However, since the current co-ordinator took up her role the project team have experienced support from within the college senior management team. Going forward, NUS has agreed to the reallocation of some of their budget to secure additional staff support for the Wigan & Leigh co-ordinator.

Conversely, other projects exceeded the objectives set for year one, whilst others are well on their way to completing some of their objectives for the entirety of the funding period at the halfway point. One such example is the Staffordshire project - the GreenPad sustainable lettings agency; the project team there are already on track to take over full running of the student-lettings programme.

Roehampton's Growhampton project is already well on the way to meeting its target statements, for example, they originally aimed to engage 400 members of staff (50% of the total staff population) but have worked with 547 university staff so far, ranging from



academic involvement in the project's monitoring and evaluation, to attending the launch of The Hive café. The café is also starting to prove itself to be financially viable, based on trading even within the summer holiday period.

UCLan's Green Ladder team have also reported being on track, or earlier than expected with their milestones for the first year of the fund. For example, an initial Transformation Project, led by students, has been completed. The Secret Garden project converted an over-grown plot into a garden, providing visitors with an outdoor space to enjoy but also developing a haven for local wildlife.

Sheffield on a Plate's team at The Sheffield College, Sheffield Hallam University and the University of Sheffield have already exceed their target for engaging students to take part in food sustainability volunteering projects, by reaching 335 one-off volunteers and 222 frequent volunteers in year one of funding. Achieving and exceeding these targets has had a knock-on effect on the team's ability to meet further milestones, for example, setting up the first fruit and veg market, and holding a regional dissemination event to share their learning to date with other institutions.

Throughout the fund, projects are measuring carbon savings associated with their activities. This will be assessed cumulatively through individual project research in year two, but early indications at the end of the first year suggesting an estimated saving of 1,029 tCO<sub>2</sub>e. This is expected to rise considerably when calculated across all projects at the end of year two.

### 2.2.2 Understanding project processes

The first year of the fund has seen the creation of 33 full time staff positions, 30 part time staff positions and 188 student staff employed to support project delivery. To enable delivery of their activities, project teams have drawn on partnerships and support from a number of sources. The next section looks at the particular relationships that have been developed with their parent institutions and with organisations within their local communities.

#### *Institutional relationships*

For the majority of projects, developing positive relationships with representatives from their parent institutions has been vital to the delivery of project activities. The strongest relationships are usually reported to have developed with the university or college sustainability team, and in most cases this builds on an existing relationship. However, feedback from project staff highlights how these relationships have been further strengthened by SGF, and also how project teams have been able to expand institutional relationships into new areas, for example estates, residences and senior leadership teams. The following examples outline the ways in which students' unions and universities/colleges have been interacting as a result of SGF.

**Partnership for project delivery:** As mentioned above, partnerships across the university have been key to the delivery of project activities. In some cases, this has been a hands-on role, for example, at Greenwich, the University's Sustainable Development Unit has been involved in the delivery of workshops and events. Elsewhere, university contacts have acted as connectors for the project team, highlighting individuals or teams who can contribute to the SGF project.

"The key relationships to develop initially were with the Sustainability Team (Facilities) and with the team responsible for staff CPD (the Centre for Lifelong Learning). Both of these areas were approached at an early stage to have senior representation on the steering group and this has clearly been beneficial in gaining support at a number of levels. Through these links it was possible to identify other key activists within the

institution, some of whom have been recruited onto groups such as the ESD Project Group.” **Liverpool**

In an annual survey, conducted by NUS, of its lead contacts within universities taking part in centrally run programmes such as Green Impact and Student Switch Off, 7 of 12 respondents who have an SGF project running at their institution reported that the collaboration between the SGF team at their department had been very good.

**Demonstrating capabilities:** For many, receiving SGF funding has enabled the project team to demonstrate the capabilities of the students’ union to deliver activities and services on campus, with the potential to change the way resources are allocated in the future.

“Our close work with facilities management has shown the university management how capable the union is to deliver in this area – as well as realising the potential the student movement has in delivering behaviour change when it gets behind something. The university has recognised that it is resourceful and powerful to support students to campaign on and deliver behaviour change in ways which they connect with and that, in many cases they are already doing (i.e. student media)” **Lancaster**

In some cases this has extended as far as senior management and strategy, for example, Southampton University Students’ Union report that the draft university sustainability strategy directly references partnership working with the students’ union. Again this is reflected in the responses provided in the NUS team’s annual review survey, which revealed that 7 of 10 respondents agreed or strongly agreed that the SGF projects in their institution had been successful in engaging senior leaders.

**SGF as a hook for engagement:** Some projects identified the benefit of having their SGF project as a ‘hook’ to engage previously difficult to reach parts of their parent institution; being able to develop around a particular ask or offer has enabled collaboration where previously the union has struggled.

“The most tangible examples are the stronger working relationship with the Halls of Residence (staff both within halls and those who manage halls) and with the Unite student accommodation providers...our project has opened up much clearer channels of communication.” **Bristol**

SGF has also piqued interest within institutions, due to the high profile given to the fund within the sector. In particular, projects have mentioned the kudos created by the House of Lords reception, which has been a tool for senior-level engagement within universities.

“NUS’ House of Lords visit provided a good scenario to discuss the project with the University Secretary and Registrar, who previously had had minimal involvement in the project itself. He is now interested in regular updates on the project.” **Cumbria**

“The SGF Reception at the House of Lords helped our project foster a relationship with the Vice-Chair of the University Council (Jacqui Henderson), who has since developed a strong interest in the project strands. She has now joined our Advisory Group and is acting as an advocate and supporter of the project. She is willing to give advice on who is best to contact for certain issues, and having her support means we are enabled to go straight to a high level contact with confidence.” **Newcastle**

The Students’ Green Unit at Exeter also note that the recognition they have received as winners of the 2014 International Sustainable Campus Network (ISCN) Excellence Award

for Student Leadership<sup>4</sup> has helped them to engage senior directors and executives within the university.

The injection of funding provided by SGF has also been an enabler for relationships in some cases, as outlined by the Birmingham City's ECO team:

"Our EcoFund [will be used] to reintroduce the project to all departments and academic staff. Having funding ready to support student-led projects, before dissertations are decided by third year students, will boost the impact and demand for the project dramatically." **Birmingham City**

In some cases, particularly those that involve a food-growing element, institution staff have also been involved as project participants, for example, the Newcastle SCAN project has plans to develop a growing area in the central campus which would allow staff members to grow and harvest fresh herbs.

**Barriers to engagement:** In some cases, projects have reported limits to the relationships they are able to develop. Just as the example above demonstrates the impact availability of funding can have on enabling relationships and project delivery, a lack of funding has been found to be a barrier to achieving some project aims. Wigan & Leigh College also report that time can be a significant barrier to developing relationships with senior staff at the college, despite positive feedback.

Further detail on the links with academic staff through the curriculum can be found in section 3.2 of this report.

#### *External stakeholders (community)*

Over the past year, SGF projects have worked with local and national organisations in a diversity of ways. These experiences have generated a wealth of learning around the benefits of partnering with organisations based in their local community and how these relationships can be managed. At the same time, relationships with community organisations have in some cases raised issues for project teams. Examples of the experiences in each of these scenarios are outlined here:

#### **Forming relationships through existing links:**

The relationships formed and developed with their parent institutions have also benefitted the SGF projects, by providing access to further project partners with the local community. For example, Greenwich report that accessing the Partner Colleges Network has been helpful in providing links with local schools. The Green Impact Student Homes at the University of Sheffield Students' Union has also used the existing relationships between local landlords and the university through propertywithUS – the university lettings agency – to recruit participants to the project.



*Greenwich Sustainability Hub expands Green impact*

<sup>4</sup> <https://www.exeterguild.org/news/article/6001/Students-Green-Unit-collects-international-award/>

**Mutually beneficial relationships:** Unsurprisingly, most relationships with external stakeholders described by the projects are mutually beneficial, for example Brighton Students' Union report that access to the student population can be attractive:

"...local businesses and community organisations have been invaluable in carrying out some of the activities so far, for example, our partnership with SAS on the beach clean and our partnership with the bike hub on the bike train launch...for many external organisations, the fact we represent 20,000+ students is a very strong reason for working with us." **Brighton**

Newcastle's SCAN project also report developing positive relationships around volunteers, however, as well as students they have engaged volunteers from other local projects:

"It has also been good to see volunteers with other groups getting involved in our projects, most notably Jackie and Val, two retired ladies from Fenham who learned about SCAN when we helped out with the Greening Wingrove Project. They were really interested in hearing about our allotment and have since gone on to be two of our most committed volunteers and fear not, they still find time to volunteer with Greening Wingrove." **Newcastle**

Other SGF projects report contributing towards more tangible achievements through working with external stakeholders, for example awards or further funding:

"Our work with Roots and Renewal has led to them receiving two prestigious awards as well as allowing us to link in with a potential lottery bid." **BCU**

"A good example of effective joint working was when we got students inputting into a funding bid to transform Moor Park. Over £1 million did get secured and our students helped this." **UCLan**

"Word seems to be spreading and in some cases the students' union has been actively sought out by community organisations who need further support. This has resulted in a lot of interest from local community groups to have a stall at the Freshers' Fairs that are being organised for September." **Wigan & Leigh**

Beyond providing opportunities for volunteers, SGF projects also report that partnerships with external stakeholders can give their work a 'seal of approval' required to engage participants, for example, working with the local authority has helped Energize Worcester gain better trust from local residents and landlords.

**Managing stakeholder relations:** The SGF projects have also reported learning about how relationships with external stakeholders can be managed. Whilst project staff report the numerous benefits and opportunities that partnerships contribute to their work, they are also conscious of the need to be selective about how they work with these organisations in order to focus their resources and maximise impact.

"We make a conscious decision to not overly commit to the community groups we engage with in terms of agreeing regular long term support, as we want to be able to work with a range of different groups and projects. Therefore we tend to arrange one or two visits at a time and to identify realistic tasks with achievable goals which our group can do. This makes the community group really think about what they want our help with and how best to use our volunteers input and also keeps the activities fresh for our volunteers, as no two projects are the same and they have the opportunity to meet lots of new people and groups throughout the area." **Newcastle**



Within this, some projects have reported a need to think about how they work with organisations – whilst opportunities for partnership are presented there is some concern that some represent 'scope drift' away from their project aims and objectives.

"Student volunteers quite often want a variety of tasks and experiences. This sometimes doesn't match the needs of communities who may need repetitive tasks undertaken on a regular basis, so this next year we will work to create a diary of community events that are varied. We need to work out how to best serve our community's needs that will work for students too." **UCLan**

Managing multiple stakeholders has also been an issue for some projects in terms of having sufficient resource to be able to develop the relationships to their full potential.

"The diversity and number of partnerships required is difficult to manage with one full-time member of staff and 6 part-time staff working flexible hours." **Greenwich**

In one case, lack of take-up from local partners has led the project to adjust their plans. Cumbria struggled to engage local colleges due to college staff time constraints, and so in consultation with NUS has decided to refocus this strand of their work on developing a programme of work in schools where they have existing links through their high student-teacher numbers.

For Northampton and FXU the strands of their projects focusing on engaging with local landlords will start next academic year. In Northampton a research project was carried out in year one with local landlords. In a questionnaire and focus group landlords suggested that there would be support for a sustainability-focused private rented housing accreditation scheme, but there would be a number of factors that need to be taken into consideration. These include clear incentives to encourage buy-in from landlords and students, having some entry level stage that is 'readily' accessible to most landlords, and ensuring that landlord associations, as well as the Borough Council, are fully engaged in the programme. This feedback will need to be carefully adhered to in the next academic year to ensure buy-in from this stakeholder group.

**Looking forward:** Some projects are also starting to think about the role partnerships with external stakeholders can play in ensuring the continuation of their work beyond the lifetime of the SGF funding period, and are planning to refocus their efforts in this area going into the second year of the fund.

"Partnerships within the local community will be essential for the success of the project post-funding as a lot of the drive, passion and expertise will need to come from the community partners... As students take more ownership of the project in year 2, the project co-ordinator needs to develop relevant community links for each strand of the project so that volunteers are supported in future." **Northampton**

#### *Approaches to project management*

The context in which projects are being delivered is varied and individual, and in some cases has presented challenges in terms of project management for the project teams. The project teams at Cumbria, Brighton, Bedfordshire and BCU have all been presented with the challenge of delivering their projects in different locations, simply due to the multi-campus nature of their parent institution.

"For us the geographical positioning of our campuses has made progression of the project perhaps slower than it would have been on a single site. Ensuring regular and equal visits to each campus has been one of the biggest challenges for us during the first year of the

project, in setting up gardens especially. We hope that now the 'ground work' has been done a regular rota can be kept." **Cumbria**

Bedfordshire and BCU have taken the approach of creating mobile features which take various elements of their project out to audiences in different locations, for example Bedfordshire's pop-up Green Pod and BCU's mobile re-use café vans.

Brighton and Cumbria have adopted the approach of basing project staff at different campuses; providing a permanent 'face' for the project in order to improve recognition and engagement.

Several projects have also used a devolved project management structure, with the central project co-ordinator supported by a team of student or graduate interns. This has the dual benefit of allowing the project team to increase the reach and capacity of their work simply through numbers on the ground, but at the same time providing key opportunities for skills development and in-depth engagement in action for sustainable development. Further evidence of the work the projects are contributing to skills development and employability can be found in section 3.2.



*Exeter Students' Green Unit tackle food waste*

Examples of this approach include Exeter's Students' Green Unit, where the project manager is supported by a team of co-ordinators who each have responsibility for leading work on research, students and community, operations, education and employability. Bradford's Cycling4All project has also adopted a similar approach to managing their project, with a team of three interns each with a different focus – operations, promotions and disabled student engagement. Through the networking opportunities provided at the NUS support days, other projects have noted the success of this approach, for example, the Sheffield on a Plate team will be restructuring the staffing of their project in year two to take on paid and voluntary interns at the three partner institutions, with responsibility for discrete elements of the project.

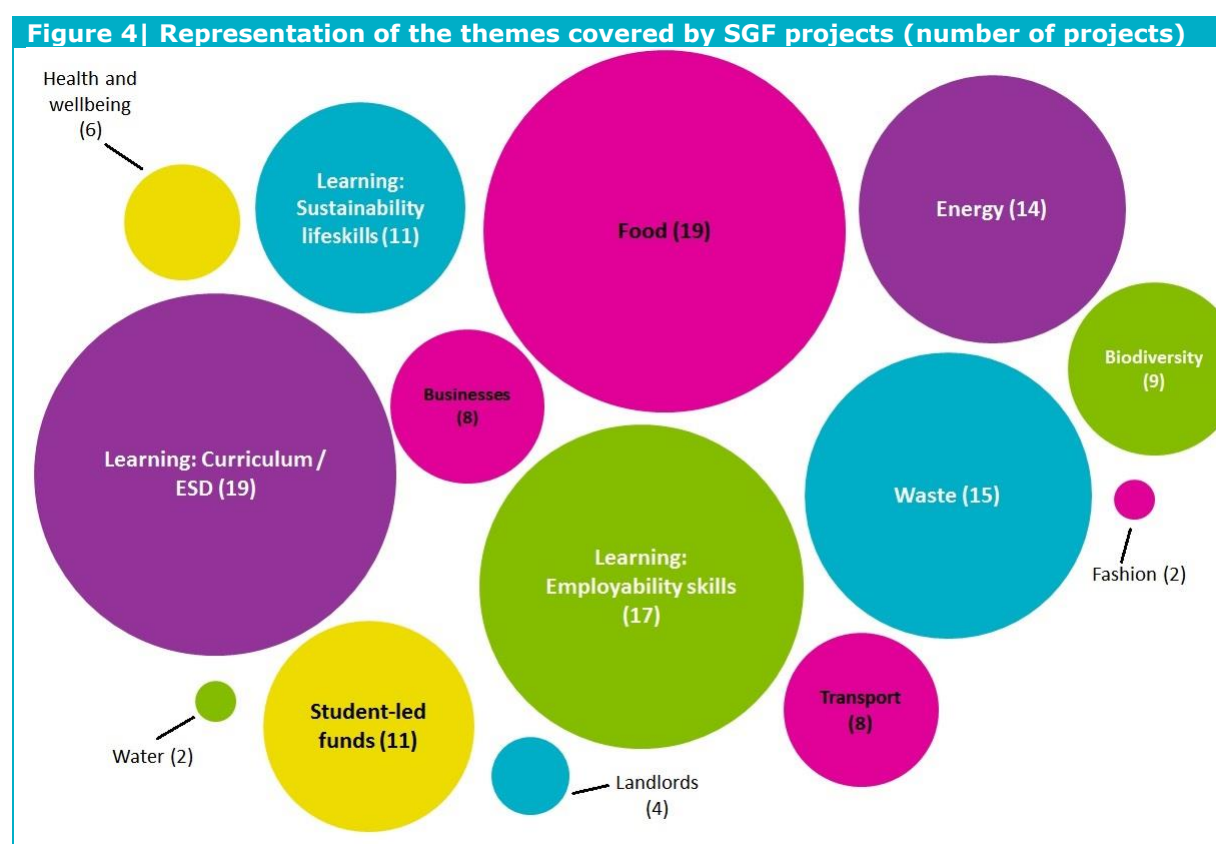
"The SGF support day inspired a restructure idea- take on more paid and voluntary interns at all 3 institutions to run standalone project aspects. These types of positions could greatly help legacy." **Sheffield on a Plate**

# Categorisation & Reflections

What is the focus of the different projects, and what approaches have they taken to affecting change?

The projects funded by the Students' Green Fund engage a variety of audiences in sustainable development in a plethora of ways, and often by focusing on multiple aspects of sustainability. This chapter attempts to classify the projects in each of these areas in order to draw out a more in-depth view of how these approaches and activities are working and with whom. In many cases, the lines defining these categories are blurred and most projects contain overlapping elements. It is worth bearing in mind that this may result in double-counting of results. The information presented here is based on details provided by the projects at the halfway point. As was highlighted earlier in this report, for many projects the mid-point and follow-up research that will provide evidence of impact will come in year two of the fund. As a result the findings presented here are liable to change over the remainder of the fund. However, bringing results together at this point will start the journey towards being able to draw out good practice guidance for the sector and beyond in achieving change in these areas.

Figure 4 below outlines a categorisation of the projects based on the themes covered by their activities.



### 3.1 Classification by theme: sustainability 'domain'

This section focuses on the learning so far from projects taking action in each of the following 'domains' of sustainable development:

- Waste
- Energy
- Food
- Water
- Fashion
- Health and wellbeing
- Biodiversity
- Transport

### 3.1.1 Waste

The approaches adopted by SGF projects working around the theme of waste have been grouped into methods and focus.

**Providing donation/collection opportunities:** Bedfordshire's Green Hub and Bristol Get Green are two examples of projects that are driving recycling and reuse through the provision of opportunities for students to donate unwanted goods, although many more have also taken this approach. Both projects have run successful end of term collections, with Bristol's Big Give diverting over 65 tonnes of material from landfill and, in the process, raising an estimated £155,000 for national and local charities. Bedfordshire also report receiving positive feedback from their charity partners – an added bonus to the diversion of waste from landfill.

FXU's 'Wasters' programme also focused on developing collection mechanisms for waste, and saw students trained as champions of food waste recycling, along with the provision of collection facilities and composters at the halls of residences. Since February 2014, there have been 18 collections, and 47 kitchens have taken part. A total of 871kg of waste was created, which has been converted to 1728 litres of compost. The compost is being used by the Home-Grown Allotment Society on campus.

**Reusable products and low waste alternatives:** At Exeter, a number of student-led projects have focused on waste, and in particular the development of reusable products as a means of driving down waste. Examples here include the ExBags project, which trialled a reusable jute bag designed by students, with the aim of promoting sustainable shopping habits. The bags proved to be highly desirable with 42 sold in two hours on the trial day. Another project developed an eco-friendly refillable water bottle accompanied by a map to locate drinking water fountains across the campus. An initial trial run generated over £200 to be reinvested in further production.

**Incentivising change:** Projects are also rolling out NUS programmes in new contexts which also includes a focus on waste – for example encouraging recycling through competition and reward through the Student Switch Off programme, and including recycling behaviour and provision of facilities as criteria in Green Impact workbooks.

**Food waste:** Whilst not a particular approach, it is worth touching on food waste as it has been a particular focus for a number of the projects. At Wigan & Leigh College a 'Five Aid' food waste event has saved an estimated 1.7 tonnes of carbon, as a result of feeding 300 staff and students with surplus vegetarian food which would otherwise have gone to waste. A further 50 portions were donated to a local homeless shelter. For other projects, the focus on food waste came about as a result of their baseline research, which identified a lack of action amongst students in this area. An example here is Liverpool's Green Guild team, who have organised the installation of a composter for waste food and biodegradable utensils produced by the Guild's catering outlets.

### 3.1.2 Energy

**Incentivising change:** Again using the models and techniques developed by the NUS Green Impact and Student Switch Off programmes, projects have used competition and reward to engage project participants in energy-saving behaviours. Bristol's enhanced version of Student Switch Off resulted in the winning hall reducing energy consumption by up to 6% compared to figures from the previous year. This equates to 230 tonnes CO<sub>2</sub>e. The savings achieved at Liverpool through the Student Switch Off programme have led to the University's sustainability policy board to consider a possible devolution of energy budgets to prompt greater responsibility and further change in energy behaviour.

**Assessments and audits:** Providing an assessment or audit of energy performance in private rented sector accommodation is a tool being used by several projects. Examples



include the Energize Worcester project, which in its first year has seen 74 students register, representing 52 properties. Five 'Energy Advocates' have been trained and have undertaken an energy awareness qualification. The project team have also highlighted some key learnings from the first year of activity, including a need to translate energy saving to an immediate impact for the individual students to engage them. Making sure any software used in auditing and recording of energy data is simple and easy to use is also key to participation. FXU have also trained home energy assessors with plans to complete audits of private rented sector properties in year two of funding.

The Staffordshire GreenPad team have also taken an audit approach and have carried out nearly 200 student home audits. As a result of engaging landlords through this process, many have reported considering changing their billing structure from inclusive to non-inclusive - making energy use more visible to their residents.

**Using new technologies and providing 'kit':** The student-led funding programme run through Exeter's Students' Green Unit has also seen action taken on energy issues with students developing a pilot smart metering scheme in one of the halls of residences. The project leaders reported that the smart meters resulted in residents becoming competitive in terms of the amount of electricity they are using. Students on an intelligent lighting project surveyed university buildings and identified areas where more sensitive and reactionary lighting could be installed, resulting in successful installation in the Students' Guild building.

Some projects have also provided participants with 'kit' to enable and encourage change, for example Northampton's P2 project distributed 300 'Green House Kits' to student houses.

### 3.1.3 Food

**Food-based social enterprise:** The food based activities being carried out by projects have led to the development of a number of food social enterprises. An example here is Birmingham City's ECO project partnership with local community organisation Edible Eastside. The team have installed three allotments and procured four beehives. The produce from the allotments is already being used within the institution's catering services, and the team expect to yield 100 jars of locally produced honey. Another example is Gloucestershire's student-led Cheltenham Chilli Company, in which students grow chilli plants, make jam and sell the product locally to create an ethical, sustainable and effective business model. To date, 400 jars of chilli chutney have been sold, and the team have also seen the replication of the model to produce local honey and cider. The project has also created a market for these products through the development of their Little Green Shop. Similarly, the Hive Café at Roehampton sells products using produce grown on campus and has served an average of 155 customers per day in the first 8 weeks of trading. And, at Lancaster, the transformation of the



*The Hive Café at the heart of campus through Growhampton*

campus to include 6 acres of growing space has provided fresh fruit, vegetables and herbs to the university catering team. In Leicester the development of the on-campus farmers' market has been met with enthusiasm and will be held five times over the next academic year.

**Improving access:** The success of the Cycling4All project at Bradford has seen the team take on responsibility for additional work within the field of sustainability. An example here is the allotment, which will be revitalised under a 'Gardening4All' banner, with the same approach of inclusivity through bespoke product design being used to enable disabled students to take part in food growing and gardening. They have been particularly focusing on the mental health benefits of such activities when promoting this project to new students.

As well as improving access to gardening and food growing, many projects have also increased access to fresh fruit and vegetables. For example, the student-led Exemas Veg project organised sessions around growing fresh produce and educating students on the benefits of locally grown food. The group plan to donate some produce to a local homeless charity to enable them to serve fresh vegetables at their Christmas meal. The Leeds Green Exchange has also improved access to food through contributing to a local food bank. Over the Christmas period, over 500 donations were received.

The development of growing spaces can also be seen as a means through which projects have been improving access to sustainable food. Roehampton, Lancaster and Leicester have all aimed to convert their campuses into areas of food production, whereas the Greenwich Sustainability Hub has aimed to encourage food production in student homes by giving out seed kits and 200 window boxes for students to grow their own food. Similarly, Leicester's Hungry for Change project has developed recipe bags, using the produce grown on site, which have been distributed to 55 students. Each bag contained enough ingredients for two meals.

Access to food growing has also impacted on particular audiences, for example, UCLan's summer programme, *Eco English*, for international students has seen 50 students from South Korea and three from Hong Kong involved in food growing in the union's Secret Garden site. The project team provide the following feedback:

"We can see that the week did have a positive impact on them. 52 of them had never gardened before and the opportunity to directly be involved with growing food was for some of them quite eye-opening. Many expressed the desire to go back to Korea and work more towards sustainability." **UCLan**

**Skills development:** The majority of food-based projects also include an element of skills development to provide participants with the knowledge and ability to grow their own food. Newcastle's SCAN project is a prime example here, having delivered training sessions on growing techniques, planting plans, and successional and companion planting. Skills have also been developed in terms of using the fruits of their labours in cookery. Exeter's Slow Food group provided training sessions that focused on a different food-related topic each week, from cooking without meat to using Fairtrade produce. The Sheffield on a Plate project has also focused on developing skills around using local food, with catering students at The Sheffield College training students at Sheffield Hallam and the University of Sheffield.

### 3.1.4 Water

Water-saving and efficiency is covered by just two projects explicitly. At Exeter, a student-led project is focused on raising awareness of water efficiency through social media campaigns. Elements of the campaign are based upon the Student Switch Off model by generating a competition between halls to see which can save the most



water. Preliminary surveys reported that whilst 60% of students already make attempts to save water, 40% reported not utilising water conservatively when carrying out tasks such as washing up.

At Liverpool, the Green Guild team have introduced a water pledge scheme, asking students to make pledges to save water. 96 students have pledged to have four minute showers, 169 have pledged to turn off the tap when brushing their teeth and 161 pledged to use a reusable bottle. To compliment this, the team have supported the 'bring your bottle' campaign on campus.

### 3.1.5 Fashion

As with water, only two projects have explicitly focused on fashion. The approaches used here can be summarised as skills development and awareness-raising. At BCU, the Birmingham Institute of Art and Design are running sessions on upcycled fashion and incorporating upcycling within the curriculum and graduate fashion show.

Also acting as a showcase for sustainable fashion, the Sustainability Show at the Greenwich Sustainability Hub will be designed, planned and delivered by team of student leads, showcasing sustainability at Greenwich and incorporating a sustainable fashion theme.

### 3.1.6 Health and wellbeing

SGF projects are also focused on improving the health and wellbeing of their project participants. Whilst for many this will be a secondary benefit of their work, some projects have explicitly designed activities in this area. For example, Bradford's Cycling4All project specifically aims to improve the health and wellbeing of disabled students through participation in sport and commuting via a sustainable transport method. The team have carried out a wide range of awareness raising events including a mental health event 'Headival', receiving positive feedback from those they engage.

"The Cycling4All stand at Headival demonstrated what they have to offer as an organisation. It also demonstrated how cycling can be of benefit to your mental health, this is something I was previously unaware of and now I can use this to reduce my low days by cycling more often." **Bradford participant**

Student-led projects funded by the Green Dragons project at City have focused on promoting a healthy diet coupled with scientific research to provide healthier alternatives. For example, the Smart Sugar Crystals project is investigating the technology involved in crystallisation of sugar, at the same time as communicating the impact of sugar crystallisation on diets to the student population.

Linking health and wellbeing to the curriculum, Health students at Birmingham City have been engaged in the project's growing activities as part of their course to learn about the ability of engagement with the natural environment to impact on mental and physical health.

### 3.1.7 Transport

**Skills development:** Overcoming the barrier of skills to support the use of sustainable transport methods such as cycling has been a target for a number of projects. For example, Brighton have worked on the development of a bike co-operative, which will train students in bike maintenance as well as providing low cost tools and components.

**Financial incentives:** Brighton's 'Go Green' project activities have also seen them engage with transport operators to secure an extension of the UniZone discount, which has resulted in cheaper train travel for staff and students.

**Access to products and services:** Again focusing on sustainable transport, Brighton have developed a 'bike train' guided ride to support new and returning riders in their journeys to and from the university site. Gloucestershire have also provided access to a pool bike and bike shed on campus. Providing another service is the Throckley Parent & Teacher Association who have received funding through Newcastle's Green Grants Fund. The association has developed a walking bus programme coupled with a road safety campaign. The team provides the following summary:

"The Green Grants Fund has enabled a walking bus and a road safety campaigning video, which aims to sort out some of the barriers to their children walking and cycling to school safely. Alongside the video, the project is teaching the children and families about why reducing dependence on cars for the school run is important for the environment. It is hoped that this two-pronged approach will not only encourage people to make the right environmental choice, but also enable this to happen in reality for more children. So far over 500 parents and children have been involved, the children have taken their campaigning video to the local ward committee and it is due for consideration by the local transport planning group. The school will monitor the changes in transport choices for their families over the coming year." **Newcastle**

Research carried out by the Green Impact Student Homes team in Sheffield found that cost was the main driver for students when choosing their transport method, highlighting the need for products and services to represent good value for money as well as being sustainable.

Bradford's Cycling4All is focused in the main on providing access to products and services designed to enable participation in sustainable transport methods by disabled students. The project includes engaging students in research projects to design bikes for particular disability needs. Developing a cycling club alongside these product developments has also provided disabled students with a sometimes rare opportunity to participate in sport and active transport. Since the start of the project, 376 individuals have tried cycling thanks to the project. The 'Give it a Go' days have been a particular success, securing the following feedback.

"Attending the Refreshers' fayre allowed me to see Cycling4All in full swing. This showed me what Cycling4All could offer me as a disabled student. The bikes in particular excited me and spurred me on to engage with Cycling4All by attending further sessions". **Bradford participant**

## 3.2 Classification by theme: Learning focus



Leeds Green Exchange at UNESCO conference

Learning has been a consistent theme across all 25 of the projects; however, unpicking this theme in more detail, it's possible to draw out three distinct areas of learning that participants have been able to experience through the activities taking place so far.

### 3.2.1 Curriculum and education for sustainable development (ESD)

Through the SGF, NUS wanted to support the development of core sustainability skills of relevance to both students' academic work, and as graduates in their future lives. The 25 funded projects have

taken varying approaches to this end, and a summary of these approaches are outlined below.

**Embedding and institutionalising ESD:** A number of the SGF projects have taken a methodological approach to curriculum within their project plan, attempting to embed and institutionalise sustainability, often adopting a student-led strategy.

The University of Bristol and the University of Bristol Students' Union have been taking pioneering student-led action on ESD within the sector. Prior to SGF funding, student interns had already been employed to work collaboratively with academics in auditing the curriculum to map current provision of ESD, creating a baseline of activity across departments. The team have also taken further steps to further embed ESD including training for teaching and learning staff. The ESD strand of UBU's *Get Green* project at Bristol University Students' Union has four key aims: to be student led, partnership-focussed, to utilise existing systems and processes and to develop open-access resources. Action has been taken to engage students with ESD, raising their awareness of what ESD is and what it covers, and finding out what types of curricular change they would like to see. The team are also exploring how the informal curriculum can provide learning opportunities about ESD. For example the team have embedded intensive ESD 'agent of change' training in the 2014-5 course rep training which will equip course reps with the skills necessary to champion ESD within their courses. Course reps will also be encouraged to join a new ESD Network which will link them with resources and support to embed ESD in their course.

Liverpool Guild of Students are taking an equally holistic approach to ESD in one strand of their project, and are at the start of their journey towards embedding ESD as an institution. The *Green Guild* project began by conducting primary research into what students wanted to learn from sustainability at the University of Liverpool. A baseline survey (structured around the national HEA/NUS surveys carried out over the last 4 years on student attitudes and behaviours towards sustainability<sup>5</sup>) and focus groups were carried out to investigate student perspectives on ESD. The Green Guild team have secured the support of their Director of Academic Development and Lifelong Learning to disseminate the findings of this research throughout the university. This has included holding meetings with Faculty Heads, the Deputy Vice Chancellor and a presentation by the elected student officer team to the University Senior Executive Team on Liverpool students' views on ESD, along with receiving signposting towards sector guidance on ESD developed by the QAA/HEA<sup>6</sup>. Liverpool have also recognised the benefit of building ESD content into course reps programmes and this will play a role in the training course for 2014/15. The work of the *Green Guild* project has led to full support from the University Senior Executive Team with proposals to develop departmental presentations reflecting specific relevance of ESD to their subject disciplines and showcasing best practice. Collaboration between the Sustainability Team, Green Guild Team and the Centre for Lifelong Learning has been consolidated around the aim of supporting the implementation of the QAA Guidance on ESD.

Both Liverpool and Bristol have reported that some faculties have been much more receptive than others, and that having an individual spearheading the efforts from within the faculty has been a very useful approach.

**Practical engagement with ESD:** All 25 of the SGF projects have engaged academics in either practical elements of the project or the monitoring and evaluation elements of the project. In many of the projects, academics from a huge range of disciplines have been

<sup>5</sup> HEA and NUS, (2013), Student attitudes towards and skills for sustainable development, <https://www.heacademy.ac.uk/node/2770>

<sup>6</sup> QAA, (2014), Education for sustainable development: Guidance for UK higher education providers, <http://www.qaa.ac.uk/en/Publications/Documents/Education-sustainable-development-Guidance-June-14.pdf>

keen to get involved in something affecting their local community, and integrate the project activities into their curriculum area.

One example from Birmingham City is with the School of Landscape Architecture, incorporating the build and design of the project's allotment into their first year modules and offering to take on the build of another space in the second year. The project team have also worked with School of Health academics to engage students on the project through their curriculum-based Growing Compassion Project, investigating the restorative benefits of natural environments and their application in healthcare contexts.

Exeter's Students' Green Unit creates partnerships between students with ideas and creativity, and academic mentors who are world leaders in their field. This academic year 17 student-led projects are being funded and supported through the Students' Green Unit. Exeter also has a dedicated pathway called 'Global Futures' which enables a large part of a student's degree to be focused on sustainability modules. Research from the Students' Green Unit showed that despite student feedback rating these modules as excellent and highly relevant to their career prospects and employability, students felt that the modules were not easily accessible. The Students' Green Unit have raised this issue at the Sustainability Advisory Group and with the Education Enhancement Team, and are working towards the goal of raising awareness of the range of sustainability related modules available.

The team at Cumbria are working with university academics, external partners and IT support staff to create their own open-access sustainability module with specific units linked to a range of academic departments. The module aims to give all participants a basic introduction to the three pillars of sustainability, focusing on a range of applied themes.

#### **Sustainability as a foundation for students' unionism:**

At Wigan and Leigh College Students' Union the project is based on a vision of a successful students' union with sustainability embedded within its core purpose. A central aim of their project is to develop amongst staff, students and the wider community an understanding of the key facets of sustainability (environmental, economic, social). The project team have discovered that students tend to have a

linear relationship with their college, in general visiting campus to attend their courses rather than to engage in extra-curricular activities. As a result, the programme of activity has been designed around driving engagement with sustainability through the curriculum. In the last academic year, sustainability was embedded into subject areas through the 'Green Dragon's Den' in which students submitted enterprising project proposals with the support of staff from an associated curriculum area. A sustainability training day was held for all interested students and staff, and a whole range of courses were represented in the room – from media to design to floristry to beauty therapy. In reality, after the project proposals were submitted and approved, the majority of the projects have then



*Students' Green Fund's parliamentary reception*



been driven forward by staff, with support of the students involved. In an FE environment this is understandable as many students have less time to commit to the projects, although there is one purely student-driven project still moving forward which focuses on food waste. Academic staff at Wigan and Leigh College were also trained on ESD at their recent staff development day. In the coming year academic staff from diverse subject areas will be encouraged to submit bids for innovative ESD project ideas.

As outlined in the examples above, many of the SGF projects have understood that the basis of a successful ESD approach is partnership, and they have been able to use these partnerships to start embedding sustainability within their institutions.

### 3.2.2 Employability skills

This theme relates to the development of skills specifically related to student's lives beyond their time in education as they enter the world of employment. Whilst the sustainability skills developed by students as a result of the projects' actions to increase coverage and links with ESD within the curriculum will be applicable beyond educational careers, project activities are also increasing opportunities for students to develop traditional employability skills such as project management, teamwork and communication.

Particular examples include the students taking the lead in projects funded by the SGF projects and those with a focus on social enterprise. At City the students taking part in Green Dragons have undertaken skills self-assessments at the start and finish of their projects and are reporting positive changes in empowerment, leadership, project management and team and civic skills.

"I am doing something that I am feeling positive about. I learnt how to deal better with my time...This project is developing so many crucial skills such as communication, time management, leadership and managing money skills" **City participant**

The projects have also offered students the chance to gain valuable experience in their chosen fields, for example at Worcester, media and design students were set timed challenges to create the branding for the Energize Worcester project.

For some individuals, this experience is already impacting on their employment options and has resulted in securing interviews or paid positions following their graduation.

"This project has been great and I've learnt so much, and I'm pretty sure I owe my successful job interview to talking about this!" **Exeter student – Style Cycle project**

"I am currently about to start work as a Graduate Category Buyer at a national food distributor which is directly linked to my role in the project. I was able to discuss in length during the interview project the pitfalls and obstacles we faced in the project, such as over-reliance on certain suppliers and of course issues with the weather affecting produce supply, as well as the successes of the project, such as the response we received from the general public." **Sheffield student - Sheffield on a Plate**

Many projects also involve elements of training, volunteering opportunities and internships that will contribute to the development of skills applicable to careers in sustainability. For example, Southampton's BEES programme trains volunteers to complete audits within local businesses, and Worcester have trained energy ambassadors who will leave the project with City and Guild qualifications.

### 3.2.3 Sustainability life skills

Another learning focus for many projects has been the development of everyday 'life skills' relating to sustainable development. Through workshops, events or through their

volunteering experiences, students are learning practical skills that enable them to live in a more sustainable fashion. An example of this approach is the Green Impact Student Homes project being delivered in Sheffield. Through completion of the workbook, students are picking up positive behaviours, and the project team is planning to accompany the workbook with specific skills sessions (for example understanding bills and heating, changing energy supplier, upcycling, Fairtrade, growing your own, composting, minimising food waste, reduce, reuse, recycle, travelling by train, carbon footprinting) into the second year of funding. Growing projects such as Leicester, Lancaster, Cumbria, Bedfordshire and Roehampton are engaging students in developing the skills to grow their own food as well as considering the wider issues around food production and consumption.

### 3.3 Classification by theme: Audiences

At this stage in the funding scheme, projects have also developed their learning about engaging different audiences in their work. The audiences participating in their projects can be grouped as follows:

- Students (including those who have a prior interest in sustainability and those who don't, those who have previously engaged with their students' union and those who haven't, international students, disabled students and minority groups)
- Staff (including academics, estates and facilities, and senior management)
- Communities (including businesses, schools and landlords)

Overall, respondents taking part in the NUS ethical and environmental department's annual survey of lead contacts who participate in Green Impact and Student Switch Off from within universities revealed at 8 of 10 agreed or strongly agreed that the SGF project at their institution had initiated a step change in student engagement with sustainable development.

#### 3.3.1 Students

The following key recommendations can be applied in general across all student audiences.

**Peer to peer learning and engagement:** A key learning across many of the projects has been the positive impact of student staff and volunteers in terms of engaging their fellow students in the project activities. The Cycling4All project managers have described their student interns as 'the secret of student engagement', a sentiment echoed by Exeter's Students' Green Unit team:

"Students respond best when they are working with their contemporaries (students and recent graduates) and have control over their projects. They felt comfortable working with the Students' Green Unit team because they see them as equals supporting their projects. What does not work is the "top down" method where students feel they have no say in the process or outcomes." **Exeter**

Staffordshire's GreenPad reflect on the benefits to project delivery of using a team of student staff, allowing the project to easily reach a wide audience through word of mouth and personal recommendation.

"Without a doubt, it has also been incredibly beneficial to actually work with students, hiring a student team meant that we had an immediate way in with their friends for audits etc, and they acted as key communication agents across campus helping to spread the word." **Staffordshire**

**Face to face contact:** Many projects have reported the importance of engaging with students on a face to face basis, with some suggesting that social media and email may have limited impact beyond awareness-raising.

“Rewarding them with t-shirts, hoodies and a celebratory lunch was found to help engagement and boost enthusiasm but it was very important for the team to be accessible through providing multiple drop-in opportunities for face to face meetings. The main barriers can be summarised as communication and timing. Responsiveness to emails and website items is low.” **Liverpool**

On the other hand, some have found social and online media to be useful tools, highlighting a need to adopt a triangulated approach to engagement.

“All-student emails - at Uni of Sheffield this has resulted in by far and away the most web hits, survey responses and compost caddy sign ups” **Sheffield on a Plate**

Related to this is the finding that students often respond well to opportunities to socialise, alongside participation in project activities. For some participants, the opportunity to socialise may be the primary reason for involvement, and therefore an important tool through which to ‘hook’ participants onto sustainable development.

### Visible and tangible:

Many projects have also commented on the need to have a physical or visible presence on campus to secure engagement with the project. At Cumbria, due to the multiple-campus make-up of the university this has sometimes presented an issue for the team, however, developing visible growing spaces has seen a change in levels of interest and engagement with the project.



*Hungry for Change at University of Leicester Students' Union*

**Incentives:** Finding the right incentive can also be key to securing participation. Whilst the ability to control and direct a project can be seen as an incentive, smaller more immediate incentives can also help to drive participation. This mirrors the learning developed by the NUS Student Switch Off programme, which rewards energy saving with prizes such as Ben & Jerry's Fairtrade ice cream. SGF projects note that motivations can vary and whilst ice cream may work in some contexts, it has no effect in others.

“Everybody knows students love incentives but it's important to get to know what sort of incentives your target group likes. It's also good to work out what sort of incentive will encourage participation for low-participatory tasks and high-participatory tasks. Some incentives that have worked for others, didn't work for me. I tried offering ice cream as an incentive (like student switch off) but had no take-up. To incentivise feedback, I offered Green & Blacks selection boxes to match the level of effort that'd be required to fill the surveys in, which worked well.” **Green Impact Student Homes**

The following recommendations and experiences regarding specific audiences have also been made by projects as a result of their activities over year one of the fund.



**International students:** Three distinct approaches have been taken to engaging international students. Firstly, some projects have adopted a showcasing approach, for example BCU's ECO project has seen cultural days which demonstrate the links between international cultures, in this case Chinese culture, and nature. Other projects have developed specific programmes to target international students, particularly over the summer when the students are first inducted into university life in the UK. Examples include UCLan's Eco English summer programme, which has seen students from South Korea and Hong Kong visiting local nature reserves and ethical businesses, as well as taking part in gardening and food growing at the union's Secret Garden site. Others have taken particular steps to engage the international community at their university in the activities they are running. Bristol have recruited international students to their halls liaison team, who will be able to speak to their fellow international students about the project in their first language. Multi-lingual project resources have also been produced. Newcastle have also engaged with the International Office within their university, developing strong links to secure volunteer engagement from their international community. This has resulted in the SCAN committee being represented by 10 nationalities across the 12 committee members.

"We have also built up a strong relationship over the years with staff in the International Office and INTO Programme, who recognise the benefits for their students of taking part in our projects and champion the work we do. This is important as they know their students better than we do and are able to put the message across in a way they will understand." **Newcastle**

**Disabled students:** The nature of the Cycling4All project at Bradford means the team have learnt a lot about how to engage with the disabled student population at their university. Whilst reporting that it was initially challenging, the team reflect on the importance of using multiple engagement methods, recognizing in particular the importance of face to face engagement with this audience. Key to success has been the opportunity to have a go at the activities on offer which has the effect of beginning to increase feelings of agency amongst the target population.

**College students:** Wigan & Leigh College and the Sheffield on a Plate team, including The Sheffield College, have both noted the importance driving participation through the curriculum and course tutors with their students. Whilst this technique has also been used by projects operating in a university setting, Sheffield on a Plate have noticed a difference across the three institutions involved in the project, with college students engaging relatively more through this approach than their university counterparts.

**Not engaged in sustainable development:** Using the curriculum as hook for engagement has also been used to draw those students not traditionally engaged in sustainable development into project activities. For example, Bradford's project has engaged engineering and computer studies students in the design of products, to enable disabled students to take part in cycling. The Energize Worcester project has also appealed to mechanical and engineering students as a result of its technical focus.

"Our range of engagement strategies has enabled us to reach students who might not normally engage with a "green" project. Examples of where we've achieved this include: the Film & Media students we worked with on the film competition; the Eco English Language students; the barbecue at Roeburn Halls; the event at the end of year Survival party; and the Give It a Go events." **UCLan**

Focusing on the additional benefits, besides taking action on sustainable development, has also been a useful tool for project teams, for example emphasising the fun and social aspects of their work to appeal to a broad range of students.

"The pub quiz seemed to work well, with a strong turnout and 'hijacking' just one of the rounds means that it doesn't overwhelm the students but still gives an avenue to educate and highlight energy awareness." **FXU**

The Growhampton project's Hive Café aims to change perceptions of sustainability by making it a cool and fashionable venue, but at the same time demonstrating sustainable and ethical values.

"The construction of the Hive followed sustainability principles (upcycling, reuse etc) but was designed to have a similar look and feel to the independent coffee shops which are creating a vibrant coffee culture in the UK. We have tried to make sustainability accessible, easy, more popular and more fashionable than being non-sustainable by tapping into daily consumer behaviour." **Roehampton**

Other projects have learnt the need to consider the language they use when communicating to students about their work, recognising that sustainability can be an alienating concept. Gloucestershire have seen the importance of communicating the full definition of sustainability, including social and economic as well as environmental in order to engage students. Also related to communication, the team at Exeter have recognised the importance of feedback to project participants, enabling them to see how and where they have made a difference.

"One of the learning points was for any change we hope to implement people must feel they are part of the change. Students are more accepting of change when they know they can make a difference." **Exeter**

For the disengaged, this difference can be communicated in financial terms to drive initial engagement. The projects working in the private rented sector have found this to be a key tool to encourage energy efficient behaviours.

"Having something as simple as pocketing the difference from their changes in behaviour can be key for students, even if they are not necessarily interested in environmental issues, it enables us to target an audience we would not otherwise get, who in the long run learn about the environmental positives too." **Staffordshire**

**Not engaged with the students' union:** Over the first year of the fund, projects have also reported developments in student engagement with the students' union. Examples here include the creation of new officer or student council roles and new societies and forums. As some of the new activities have developed as part of the projects, this has resulted in new and different offerings to students and hence new and different audiences being engaged.

"We are finding that students who do not get their social fix from any of the other activities offered by the university find it when working with other volunteers in the garden and it is extremely beneficial to their personal and social wellbeing." **Lancaster**

"Often no existing channels for engaging disabled students - they are not historically engaged with the SU at Bradford. The project has provided an opportunity to engage with the union and integrate into university life more." **Bradford**

### 3.3.2 Staff

The funded projects have demonstrated two main methods of engaging with staff at their institutions, through academic departments and faculties for engagement with the formal curriculum, but also to enable staff to become participants in the projects as well as their students.

**Departments and faculties – opportunities for teaching and learning:** As reported earlier in this section of the report, engaging academic staff in curriculum development for education for sustainable development has been a key part of project activities in the first year of funding for many projects. Here they have provided opportunities for academics to expand their teaching beyond classrooms and lecture theatres, for example, at BCU the School of Architecture incorporated the build and design of the allotment, the School of Health projects links wellbeing and nature, and upcycling furniture workshops have been led by students from the School of Art. As well as engaging staff in immediate teaching opportunities, the SGF projects have also engaged academics in considering how else they might include education for sustainable development within their curriculums through engaging with curriculum development teams.

**Staff as participants:**

University staff have also been direct participants in the SGF projects, for example, at Bedfordshire staff members have been taking part in the union's Student Eats project and have also participated in the 'swap shop' organised by the union. Cumbria has also sought to engage staff in learning about sustainability through the development of its online sustainability module, which will be available to all staff and students at the university.



*Allotment days at the University of Newcastle Students' Union*

The Sheffield on a Plate team have started to engage the catering departments across the three partner institutions with the aim of half of departments achieving Food for Life accreditation.

*"We have seen an increase in participation across our Bardon Grange edible growing session on campus with increasing demand for lunchtime sessions for staff."* **Leeds**

### 3.3.3 Community and wider organisations

Many project activities have involved outreach activities, resulting in participation from within the local community, as well as involving wider community organisations and businesses in the delivery of their projects as outlined in section 2.2.2.

**Outreach and participation:** Birmingham City's ECO project has seen a number of events being held with the aim of engaging local communities with their project. Examples here include the 'East meets West' celebration of Chinese and Western traditional music at the New Birmingham Library, the Beatrix Potter inspired theatre, designed to teach young children the value of farm life and sustainably sourced food; and the adventure breaks for disadvantaged young children, with events at project partner Edible Eastside.

Other projects are also aimed at engaging external organisations in existing NUS programmes such as Green Impact. For example, the Greener Gloucestershire team is developing a variant on the Green Impact programme for sports clubs.

Looking at more in-depth participation; at Newcastle's Ruperts Wood site, the team has created a series of day trips and camps for youth groups and schools, with sessions focusing on environmental protection, practical conservation tasks and understanding impact on the natural world. The project has also made their grant funding scheme open to local community groups and organisations.

Schools form a particular target for other projects, including Cumbria, Leicester, Liverpool and Greenwich.

### 3.4 Classification by theme: Project-led funding schemes

A major component of many projects has been the development of their own funding schemes to empower students and the local community to develop and lead their own sustainability related projects.

Projects such as City, Exeter and Wigan and Leigh have focused their funding schemes on students at their institutions. Whilst there are similarities in the approaches used, there are some particular innovations such as the 'Kickstarter' style approach used by City's Green Dragons project. City University London Students' Union's project focuses on student-led projects. Initial ideas are submitted on the back of a postcard or online to help encourage submissions. Students are then contacted by the Green Dragons coordinator to invite them to discuss the idea further. A smaller number of project ideas are then worked up into thorough proposals and video pitches with the support of the project coordinator. The proposals are presented to a panel of judges, the 'Green Dragons' (sabbatical officers, university sustainability staff, and student trustees) who choose whether or not to put projects through to the next stage. If a project is put through to the next stage they must garner a certain level of support from the student body before funding is released. This part of the Green Dragons project is run through their website ([www.green-dragons.co.uk/](http://www.green-dragons.co.uk/)) which allows City University London students and staff to watch project proposals and pledge their support for the one they would like to see funded on their campus. The bespoke Green Dragons website and branding were developed by an external developer, One Ltd, using an iterative process of feedback from the sabbatical officers, Students' Union Manager and the City Green Challenge Coordinator. The crowd-sourced support from across the student body ensures the funded projects are popular and successful. The Green Dragons panel have defined different pledges for each project, dependent on the type of activities proposed. This year pledge asks have ranged from pledging to attend training sessions to donating items to a reuse scheme. Next year they plan to increase the level of the 'asks' associated with the pledges as all projects managed to easily exceed the number of pledges needed for their funding to be released (which ranged from 50-200).

Exeter's approach ensures support for students leading the projects by assigning an academic mentor with expertise in the area in which the project is operating. To support the younger student population at Wigan and Leigh, staff members are taking a lead in generating project plans, supported by a team of student volunteers.

Others have expanded potential applications to the fund to include wider community organisations. For example, Leeds' 'Funding Exchange' is open to any student studying in Leeds. This has helped them to build partnerships with all of the other HE and FE students' unions across the city.

"We have already received a successful application from Leeds Beckett SU, a pending application for Leeds College of Art and interest from Leeds City College for an application next month. In addition we were able to provide work experience opportunities for two Leeds Trinity students for 6 weeks, split between Green Exchange and Community projects. The Green Exchange has also hosted an event at Leeds College of Music and maintains a relationship with their staff environmental group. We will continue to develop



these relationships next term, with the hope of funding at least one successful student fund project at each SU.” **Leeds**

Others have expanded yet further, opening their funding schemes to local community organisations and groups. As described earlier in section 2.2.2, Newcastle is one such project which has led to the funding of local parent and teacher associations to develop sustainable school transport projects.

In the first year, project managers have focused on getting their funding schemes up and running and there is a sense that they have been a little reluctant to force students into concentrating their efforts on monitoring and evaluation. The NUS team is reviewing how to better support project teams to go on to support student-led projects to retain a focus on impact going into the second year of funding.

### 3.5 Reflections on SGF projects and theoretical approaches to change

#### 3.5.1 Reflections on SGF projects

Unions applying to the fund were required to undertake projects which would result in measurable change; as with the previous Degrees Cooler programme (funded by Defra) behaviour change was a *sine qua non*. However, unlike the previous programme, the SGF did not specify precisely which behaviours were to be changed, in keeping with its emphasis on student-led projects, and pursuing students’ own sustainability concerns.

As highlighted on page 7 in order to help participating students’ unions deliver effective and measurable behaviour change activities, the NUS project team provided both generic and bespoke support, including through the initial Support Day which included developing understanding of models of behaviour and theories of change. The



*Student Switch Off training at the University of Bristol Students’ Union*

resulting projects adopt a wide range of change approaches, targeting a wide range of behaviours. Some are instrumental, being very clear about the behaviours they are aiming to change (e.g. providing a workbook and assessment framework to help participants make those changes) while others are more open-ended, seeking to build new programmes, structures or curricula out of which a variety of possible changes will flow.

In the event, only a few projects have specified a theory of change (or indeed, several theories applying to different elements). This is not to say the participating unions have

not theorised about their activities; but that they have not tied them to named theories. It follows that there is then an opportunity to stand back and survey the 25 projects as a whole, and categorise them in theoretical terms. While the absence of explicit theories does not necessarily reduce the effectiveness of any one intervention, it does make it difficult to draw comparisons between projects in different contexts, and to devise measures and indicators against which to evaluate their impacts. By applying a theoretical lens at this point, we can lay the ground for the monitoring and evaluation that will need to be concluded at the end of the second year of SGF funding – both within and across projects.

In conducting this analysis, two conceptual frameworks will be used, as follows:

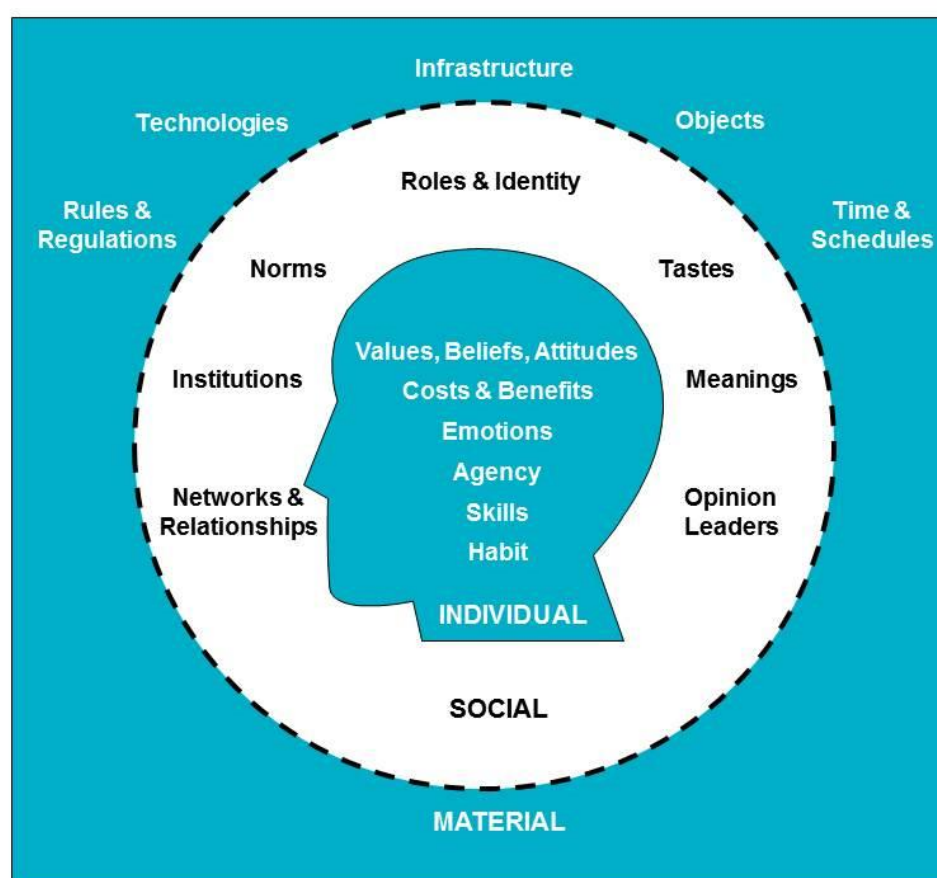
- i) The ISM Model ('Individual, Social, Material')
- ii) Spectrum of Learning and Change

For an introduction to both of these frameworks please refer to Appendix 1.

### 3.5.2 ISM analysis of SGF projects

The following analysis cuts across all 25 Students' Green Fund projects, and analyses them collectively, in terms of the factors and influences on behaviour which they are targeting. The analysis pulls out common characteristics from the 25 projects, and describes them in order to understand the ways in which SGF projects are likely to bring about lasting change. The ISM model (figure 5) is split into each of its three contexts, and key characteristics of the projects are mapped onto each factor in each of the three contexts; commentary on the analysis is provided beneath each context.

**Figure 5 | ISM model**



*Commentary on individual context*

Elements of all projects aim to build positive ('green') motivations among their audiences, although it would appear that direct attempts to win hearts and minds are relatively few; values- and attitude-change appears to be a means rather than an end for most projects. There is also a notable lack of communications activity in the projects' descriptions and progress reports (however, communications materials are likely to be present at lower level, in the detail of delivery such as in student-led grant projects – e.g. Exeter social media campaigns to raise awareness on water saving (see p22). Influencing (Values, Beliefs and Attitudes) appears to be approached by more face to face (F2F) methods, especially via events e.g. Meat Free Mondays. There also appears to be a notable lack of explicit norms campaigns (e.g. telling students what proportions of their peers behave in particular ways): although norm activation is inherent in feedback-based monitoring and audit activities; it is also demonstrated in events and competitions.

**Costs** appear critical to drive engagement and action. All kinds of formats are used: handouts (e.g. grants), savings (e.g. from energy saving), negotiated discounts (e.g. reduced rates for students on public transport), prizes (e.g. SSO model for winning halls), wages (e.g. living wage for student staff and interns), non-financial benefits (e.g. awards), and leveraging other funding (e.g. Green Deal tie-in). Note that many projects, including grant-funded student projects, are designed to be self-funding beyond the grant period (e.g. through making savings: audit-based projects; or through becoming social enterprises or products in various forms: cafes, food produce, apps, modules – see under 'Material').

SGF is designed to fund student-led projects; this in turn means students are central to leading and delivering the projects, giving them "experiences of personal mastery" which, according to theory (e.g. Bandura 1977), are critical to building a sense of agency (i.e. that they can achieve their goals). **Agency** is thus a key outcome of SGF, underlying the learning focus of most projects. SGF projects aim to increase agency at all levels, via learning through doing (again, lots of F2F and handholding: modelling new behaviours).

At the highest level, for project staff, interns and volunteers, the explicit aim of many projects is to create 'change agents' with a thirst for change at the heart of their identity and future purpose.

Most projects are characterised by learning, and most of this is hands on training, and learning through

doing. This can be found at every layer of the programme, from NUS Support Days for project co-ordinators, down to practical training for project volunteers, and sustainability life skills for student and community participants.



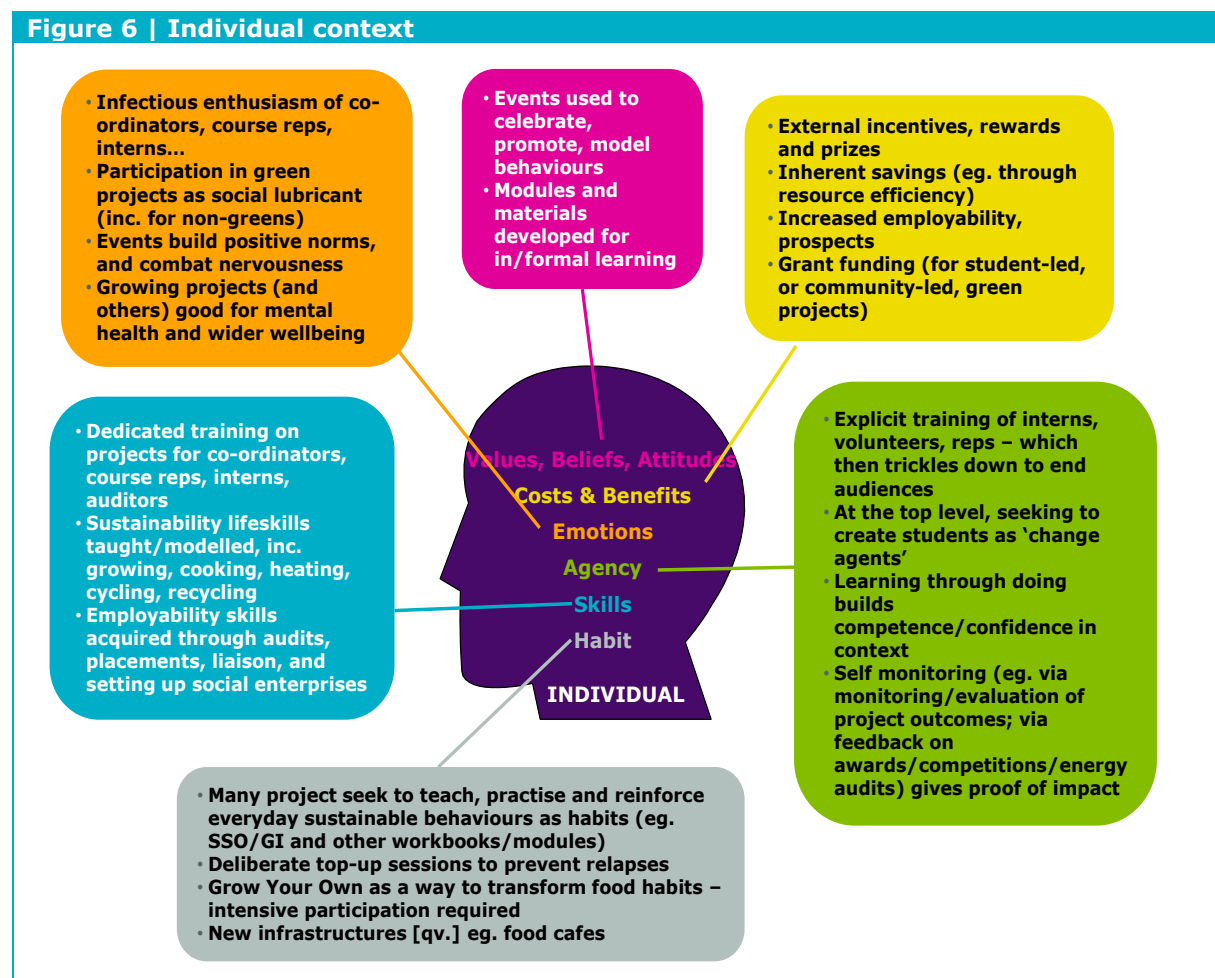
*A green market at the University of Newcastle Students' Union*

In different ways, all SGF projects target **habits** (this is no coincidence, considering behaviour change was a selection criterion). In keeping with theory, they do this in two ways: by targeting individuals and helping them break and form habits through intensive (individualised or group) interventions; and by targeting the environment within which



students act, by addressing more 'Material' factors like the infrastructure or by providing new institutions, with new rules and ways of working (e.g. grant schemes).

**Figure 6 | Individual context**



### *Commentary on social context*

The implicit purpose of SGF projects is to create a new student identity. A stated aim of project applications is to go beyond the usual suspects: both in terms of the less green, and the unengaged in union life. The twin aims of reinvigorating students' unions and recasting them as sustainability hubs in their universities come together and make space for a new student identity, based on engagement and partnership, and informed by the values and actions of sustainability.

**Norms** are embodied and enacted, more than made explicit subject material: there is little sign of hectoring or students telling each other how to behave (again, that may be more evident within specific activities, or grant-funded student projects). Changing norms goes hand in hand with campus transformation – e.g. an edible campus involves sustainable food attitudes and behaviours as well as the necessary growing spaces and markets, meanwhile green homes involve energy saving norms as well as efficient housing stock. In this way norms bridge the Social and Material.

A number of new **institutions** have been created across SGF projects (as well as the partnerships being forged within, between, and beyond funded unions). This is a further indication of the need to change the environment in order for transformational behaviour and culture change to occur, and endure. The new institutions should outlast the funding term of SGF (either being self-funding, or funded by related activities, or the union or parent institution) and ensure lasting change. Some of these are formal/hard institutions

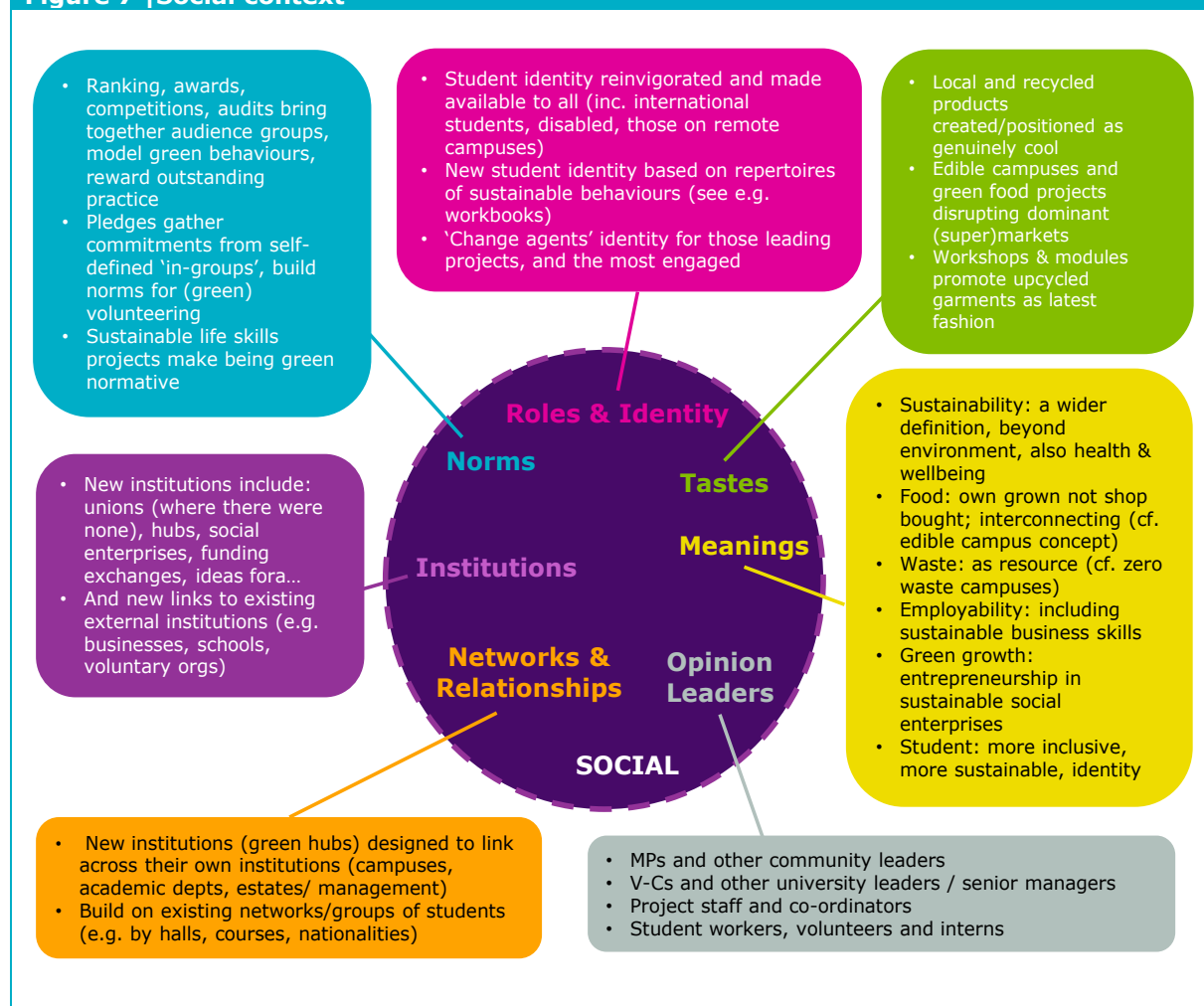
(cafés, markets) some are soft (bodies of people, like Green Units or Funding Exchanges); others are more like brands – for example the established NUS projects like Student Switch Off and Green Impact, plus those being created or refined through SGF (e.g. 'GISH' Green Impact Student Homes, or Blackout – already rolled out after its start in Southampton). All these kinds of institutions also bring with them their own sets of Rules & Regulations (see 'Material' below) – similarly formal and less formal - which require and pattern different ways of doing things.

The projects are reconfiguring the **meaning** of materials they focus on - 'food' 'waste' 'fashion' - but also reshaping identities (e.g. what it is to be a students' union, and a student). Ultimately projects are playing with what it means to be a fully-qualified and fully-prepared student for adult life: new vocational and experiential 'qualifications' being undertaken in parallel to, and now also within, formal courses (by rewriting modules, embedding ESD). Similarly, they are redefining what skills and experiences students will need to enter the workplace – and in the meantime trying to influence workplaces to make them more sustainable, even before this generation of students becomes employees.

Work on **networks** has significant overlap with the action described around 'Existing Institutions' above; much of the purpose of projects is to bring together the student body and the HEI (both academics and management) with the Union in the middle (as a kind of 'green hub' – in some cases, with a dedicated Hub built within/alongside the union). The more ambitious projects also engage external partners, to reposition the union and university in the community: with the student body extending partnerships with schools and youth, employers, and voluntary organisations. Each of these organisations is reflecting attributes of the HEI itself, and reconfiguring what the university is (what it offers, and how it delivers): consider e.g. the work with landlords (Staffordshire) where students transform letting practices, then set up green lettings agencies in their unions.

Conventional **opinion leadership** figures are key to the success of projects: both in the university (vice-chancellors) and in the community (MPs). Primarily they endorse the projects and enable the unions to leverage other funds, in-kind support, and new relationships. In terms of driving behaviour change among students, it is notable that opinion leaders tend to be drawn from students' own peer groups: engagement has been found to be far stronger if events are student-led, not led by paid union staff. A number of unions are explicitly aiming to develop students as 'agents of change' or 'change champions' through, and beyond, the life of the project. This peer-to-peer approach is reflected in the widespread use of student interns on projects: "interns are the secret of student engagement" (Bradford); interns also lead on community outreach activities. Student-led projects are a prerequisite of SGF, and this approach seems to have a double benefit: more innovative projects are generated (see reflections on learning and change in section 3.5.3 below) and they are more successful at engaging and galvanising their student peers.

Figure 7 | Social context



### Commentary on material context

As with Institutions above, there is a profusion of new **Infrastructures** being put in place by projects. As with the Institutions, this suggests the extent of change required in the union environment for lasting and transformational change to occur. The need for new infrastructure, and the type of infrastructures provided, reflect the different starting points of different projects: some institutions need a functioning union building, or forum for debate; others can look more off-campus (e.g. acquiring new growing spaces). It is not just the case that infrastructure is put in in order to enable certain behaviours, as a sort of removing of barriers (e.g. no growing spaces, no grow your own); new infrastructures can also support new ways of doing, such as the mobile hubs (with their second-hand clothes) or food cafes (selling own-grown produce). Once installed, new infrastructure continues to support transformative change, as practices evolve to capitalise on the new environment (e.g. a cycle hire scheme at the Growhampton food café).

**Technologies** involve innovation: new kit is required to support new project approaches (e.g. to pledging/enrolment) and new behaviours (e.g. cycling for disabled students). Some of these technologies can become freestanding elements which can in turn be spun-off: e.g. new software/apps/MOOCs, or new equipment (e.g. adaptive bikes) – another example of how SGF projects can produce lasting, and self-funding, change (cf. the new institutions, like GISH or Blackout).

**Objects** function a little like Technologies, although in terms of material kit they may not be so obviously innovative. Like Technologies, Objects are required for practices to happen: some examples here are outputs from projects (workbooks; honey) others are inputs (e.g. bees; seeds). Others are used during a project (e.g. window boxes, ice cream and chocolate – as incentives for participation) while some are transformed through the project: a good example being waste items being upcycled (whether clothing, surplus foodstuffs, or freight containers).

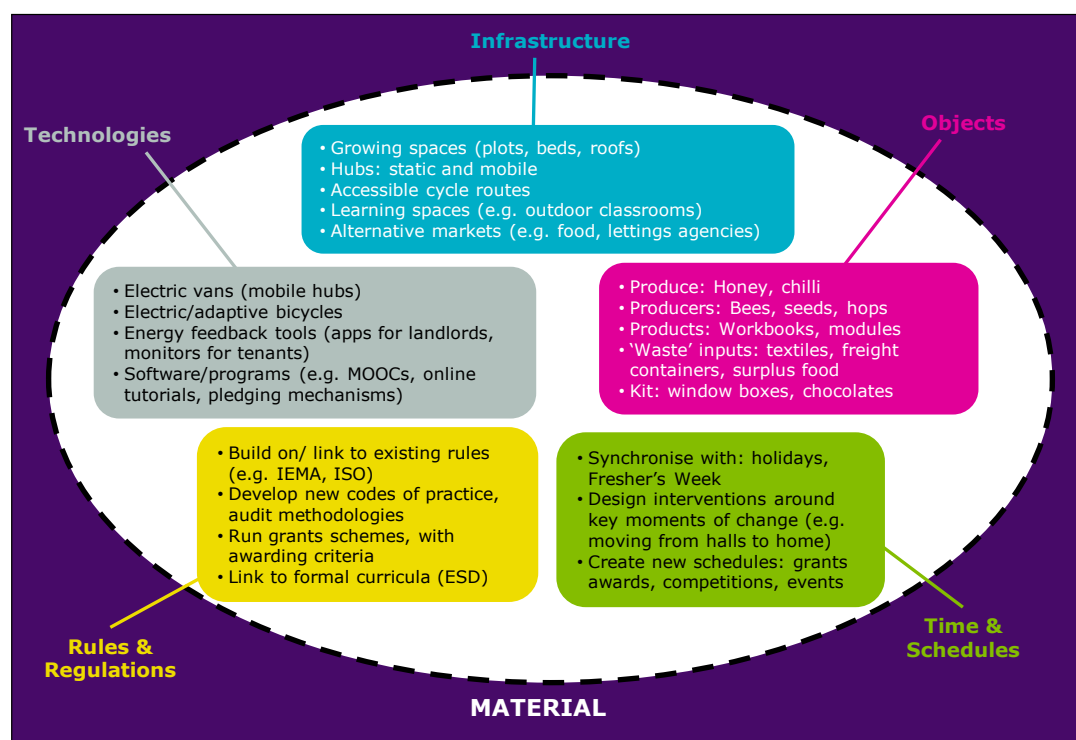
**Rules and Regulations** implicitly or explicitly guide how things should be done, and often flow from informal or formal Institutions (qv.). Similarly to Institutions, Rules and Regulations appear across numerous SGF projects, and help ensure lasting and transformational impacts. Sometimes projects simply tie in to existing governance or awarding frameworks (e.g. academic courses, or Environmental Management systems); in other cases they form new units that supplement existing arrangements (e.g. sustainability modules in e.g. fashion or architecture). Other SGF projects seek to write new rules or codes of conduct, by bringing together lessons from current practice (e.g. in business ethics, or energy auditing); in other instances they are modifying current rules (e.g. rental agreements, to prevent energy bills being all-inclusive). Finally, some frameworks are new, such as the grant funding schemes (for students themselves, or for community bodies, to bid into) which bring with them a whole set of new rules about what can be funded, how to apply, and how to demonstrate effectiveness. Taken together, these rules add up to transformation in institutional frameworks, and anchor culture change.

SGF projects are keenly aware of the need to work with existing institutional **timings**: most obviously the academic year. This can present obvious opportunities, such as freshers' week being seen as a key opportunity for many to engage new students. Likewise, a number of projects are based around time-critical opportunities to change behaviour and instil new habits (qv.): in intervention theory, 'Moments of Change' are provided by gap years, and the move to private rented accommodation, as well as the act of becoming a student for the first time (i.e. freshers' week). Conversely, the holidays present a potential problem for non-academic projects, like growing schemes: some unions have engaged staff and community partners to tend to their plots in the holidays.

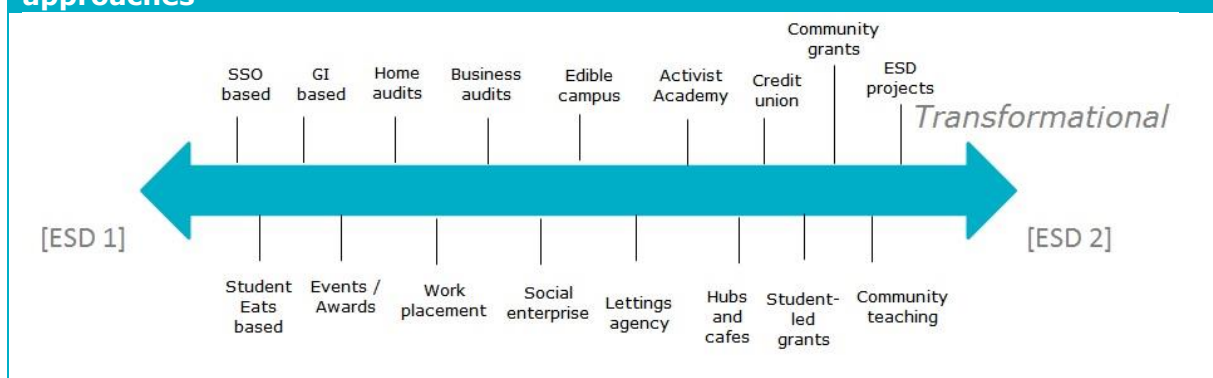
Many projects have also created new events, in order to impose new schedules of their own: competitions are good examples, with rounds and deadlines, before a final showpiece event to drive and celebrate engagement. Finally, it should be remarked that many projects also address questions of space as well as time: making sustainable projects or behaviours accessible often means going to students (and out into communities) – hence the use of mobile hubs, and community outreach activities.



*The Green Schools scheme at Liverpool Green Guild*

**Figure 8 | Material context**


### 3.5.3 Learning and change analysis of SGF Projects

**Figure 9 | Understanding SGF projects - from Incremental to transformational approaches**


Each of the 17 project elements and activities plotted above is described briefly below, with illustrations drawn from specific institutions participating in SGF. As well as describing each element, the summaries below explain why each element is positioned where it is on the spectrum of learning and change, from incremental to transformational approaches. For full detail on ESD1 and ESD2 approaches, please refer to the appendices.



### 1. *Student Switch Off and variants*

Student Switch Off (SSO) is a pre-existing programme developed by NUS (and rolled out as part of their Defra-funded Degrees Cooler project). SSO is designed to bring about specific behaviour changes among first year students living in halls of residence. It starts from the premise that students in halls have little incentive to reduce their energy use, as it is included in their rent. The project is thus designed to provide extra incentives, like ice cream and cinema vouchers, to encourage energy saving. It also requires halls to compete with one another in terms of who can make the biggest savings, with whole-hall celebrations for the winners. Through this fun-based hall-wide approach SSO can reach large numbers, including different attitudinal segments. SSO has been a proven success, with more than 50 HEIs participating in 2013-14, reaching over 150,000 students, and reducing electricity consumption by 6%.

Many of the unions who have been funded through the Students' Green Fund for 2013-2015 proposed projects which built on the successes of existing NUS environment schemes, including SSO. In some cases they are simply introducing the scheme to new audiences, either for the first time in their institution, or by extending to new halls or campuses (e.g. Bedfordshire). Other SGF projects are taking the SSO model and developing new versions. For instance, Liverpool are complementing their awareness raising work on water-saving and recycling with a new version of SSO designed to cut water usage and increase recycling in halls. Meanwhile Bristol have developed a bespoke intensive version of SSO (with themed weeks such as 'Kiss Me I'm Green') which addresses recycling as well as energy saving. Finally, Northampton are developing a pilot version of SSO targeting students in private rented accommodation.

These variants of SSO are innovative, in that they are finding new applications for the existing and proven model, and in many cases customising it to fit their own contexts. However, the SSO approach is based on promoting pre-defined behaviours, and encouraging their take-up through relatively instrumental means (e.g. external incentives) rather than by requiring values change from participants. Likewise the project can be seen as a classic ESD<sup>17</sup> activity, with prescribed content (i.e. set behaviours) which participants are taught how to perform correctly. As such, SSO can be plotted at the incremental end of the SGF change spectrum.

### 2. *Students Eats and variants*

Student Eats is another of the existing programmes in the NUS Ethical and Environmental team's portfolio. Student Eats provides support to help students to create low-carbon, organic growing sites on their campuses; it is currently being delivered at 23 institutions across the UK. Student Eats also links students' unions with their institutions and the wider community, by encouraging them to partner up with one off-campus community group such as a local school or a wellbeing charity, in order to offer demonstration sessions, volunteering opportunities and cookery events.

A number of unions participating in SGF are using it as an opportunity to extend their Student Eats activity, increasing the amount of growing space for students (e.g. Bedfordshire), or reaching new audiences (e.g. Lancaster's work with international students and postgraduates). While growing projects are at the heart of many food-focused SGF projects, the growing spaces emphasis in Student Eats means that these approaches can be associated with incremental change, being tightly focused on a number of known actions; the work to link the growing activities into curriculum or community engagement has more transformational potential (see e.g. edible campuses below).

<sup>17</sup> Full overview of ESD1 and 2 approaches in appendices, p. 63.

### 3. *Green Impact and variants*

Green Impact (GI) is the third of the pre-existing NUS environmental programmes, and the widest ranging. Green Impact provides university estates managers with a structured framework for 'greening' the practices of different academic and non-academic departments. The structure is provided by the Green Impact workbook, which sets out a tailored action plan for departments to implement, bespoke to each university. In this way, the project specifies the required behaviour changes from participating departments; but also provides tips and know-how for them to develop their own techniques to encourage the required changes. Like Student Switch Off, Green Impact also has a reward and recognition element: the workbook ties into a set of awards, and as departments achieve the required changes so they progress from bronze to silver and gold.

The GI format has proved very popular, and to be adaptable to different settings; for instance, as well as over 50 universities and colleges, NUS is extending the programme to local authorities and NHS Trusts. The effectiveness of the approach is demonstrated by its appeal among SGF participants, many of whom are extending the reach of the programme in their own institutions, or customising it for new applications. Examples of new variants include work to reach out to new kinds of institution across the local community, such as local museums and historic properties (by Greenwich), and local sports clubs (by Gloucestershire, who have started by developing a GI workbook for their university sports clubs, and will be taking it out to off-campus sports clubs and organisations). The workbook format, and awards element, are also at the heart of efforts to adapt the programme for students living in private rented homes. Northampton University Students' Union and Sheffield University Students' Union both have programmes of this kind, targeting energy saving in private student homes [see also Home Audits below]. Sheffield's Green Impact Student Homes (GISH) programme has shown particular promise, and NUS is now looking at adopting GISH for pilot programmes with other unions in 2015.

In this context Green Impact is clearly capable of delivering significant changes, with considerable innovation arising from the new variant models being developed under SGF. While it allows for more flexibility in delivery than the other two pre-existing NUS programmes, it still prescribes specific sustainability behaviours, and gives participants a framework through which to undertake those behaviours. Thus, at its heart, GI sits at the more incremental end of the change spectrum.

### 4. *Events and awards*

Events lend momentum to public engagement campaigns and change programmes, by providing focal points at which like-minded participants can come together as in-groups, and demonstrate their shared social norms. Events also inject energy into projects, by acting as fixed points, before which progress must be made and achievements brought together. Most of the SGF programmes include events of this sort, notable examples including Bristol's Big Give (in which students donated over 65 tonnes of unwanted items to local and national charities), and the Sheffield On A Plate (SOAP) consortium's Summer Food Drive (which collected over 1,500 items for local food banks).

Some of these high-profile events are designed to celebrate achievements at the end of a structured programme of change – just as the Green Impact Awards presentations do. As well as developing shared norms among participants, these awards events build agency among participants, by celebrating their impacts and giving them a sense of achievement. Examples to date in the SGF programme are numerous, and include the Sheffield SOAP consortium's Sustainable Masterchef competition for catering students, and FXU's work addressing the hidden impacts of waste.

As well as the use of events as focal points or celebrations in wider programmes, many participants are using face to face meetings as workshops, to influence peers and demonstrate new behaviours. For example, Roehampton's Hive Café runs a four-day-a-week programme of workshops and events for students, in practical areas such as food and cooking, and cycle maintenance. Meanwhile UCLan has set up what they explicitly call 'give it a go days' covering a wide range of activities and pursuits, in order to build agency among less engaged audiences, and to help them get over barriers of low confidence or lack of familiarity. A similar taster day approach has proven very useful at Bradford, as they encourage disabled students to try a range of less familiar sustainability-related sports and activities, including cycling and gardening.

By building engagement in a pre-set agenda, events and awards can be seen as more ESD1 than ESD2: prescriptive, and based on modelling behaviours. However, by encouraging new skills in a 'live' setting (as opposed to e.g. through a workbook or module), and by building new networks of participants, events and awards have the potential to catalyse new and unforeseen activities – as well as to become fixtures on the university calendar in their own right [see also 'Social: Institutions' in the section above].

### 5. Home audits

With a new sense of direction which has emerged from previous NUS and union environmental activity, a number of SGF projects are developing programmes to encourage students living in private rented accommodation to reduce their environmental impacts. As mentioned above, some of these projects are derived from pre-existing NUS models, like Student Switch Off and Green Impact.

Three projects in particular can be highlighted here, each taking slightly different approaches to tackling similar audiences and challenges:

- Energize Worcester's project focuses on engaging both landlords and students. In the first academic year they have developed a bespoke app to collect data from student properties and track their progress using benchmark energy data for each property type. Although landlord interest was high, student recruitment has been a challenge and from the 52 properties taking part they struggled to gather energy meter readings from student participants. For next academic year the app will be targeted more at the landlords participating. Smart meters will be installed to develop a real-time behavioural change competition, and the face-to-face visits from the five trained student Energy Advocates and online competitions will be used to engage students. From September 2014 the Energize project will also be running at the Birmingham University Guild of Students who own their own lettings agency: the SHAC. This setting should allow easier engagement with landlords and student renters.
- Staffordshire GreenPad is similarly working with private student homes, installing energy monitoring systems to keep tenants updated with regular bulletins on their household's energy usage, and feedback on how to improve performance. The student-led assessment methodology is regarded as particularly innovative. GreenPad also aims to engage landlords alongside tenants, and to accelerate a move to transparent (rather than all-inclusive) rental bills, thus giving students more control and encouraging energy saving. The aim of Staffordshire's GreenPad project is to open a sustainable student lettings agency, with pricing and level of promotion for landlords tiered according to the measures they have taken to improve the environmental impact of their properties. Staffordshire engaged landlords through landlord forum events and to date the paid student assessors have completed just under 200 audits of student private rented properties. Staffordshire's plans for next academic are to open a physical space on campus to begin their GreenPad sustainable lettings agency. Starting this

slightly earlier than originally planned will allow them to start securing funds to help with the continuation of the project.

- The University of Sheffield's 'Green Impact in Student Homes' (GISH) project, mentioned above, similarly works on reducing the environmental impacts of student homes. Like GI it centres on a workbook of environmentally-friendly actions for both students and landlords, with guidance and recording mechanisms for student tenants. 42 households took part in the first academic year with the aim being to increase this to 100 households in year two. A core part of the project involved students encouraging their landlords to take part and vice versa. There is a competition element, with the highest scoring students winning a free month's rent, and the highest scoring landlord winning sustainable home improvements like solar panels and double glazing. The winning houses will be used as an exemplar of good practice – used as part of tours for both students and landlords as an illustration of how effective and beneficial environmental improvements to student accommodation can be. M&E undertaken with a broad range of stakeholders and potential stakeholders showed that the project was progressing in the right direction: 'Feedback from interested but non-participating landlords and students was reassuring, as it confirmed that lack of engagement was not due to inherent problems with the scheme. Interested landlords misunderstood a few things, which once clarified with them, they expressed interest in participating for 2014-15.' On a local level the intention is that propertywithUS (the university lettings agency) will continue to run the programme, given their excellent links with landlords and students.

Home audits of this sort can be seen as instrumental in their approach to change, with prescribed actions and a workbook to instruct participants in how to follow them through. However, from the examples cited above it is clear that there is a good deal of innovation in applying the GI model in homes; furthermore, with the inclusion of other elements in the activity, to disseminate good practice, and to use the results both to improve the existing housing stock and to revolutionise the student lettings market, there is clearly potential for transformational change from these approaches.

#### 6. *Work placements, including gap years*

NUS environmental projects have long been recognised for providing student participants with experiences and skills which increase their employability. However, some of the SGF projects have taken that approach further, by using the SGF's encouragement of building community links to undertake direct engagement with local businesses. The relationships are designed to deliver two-way benefits, with students acquiring employability skills, while also teaching businesses how to operate along more sustainable lines. It can be suggested that these projects have evolved from previous NUS sustainability projects, which, having engaged university departments and faculties, are now looking at institutions in the wider local community (as has happened in the development of Green Impact). It can also be suggested that the drive to 'green' local businesses and employers comes from students themselves: SGF is explicitly designed for student-led projects, and the focus on improving business ethics and operations could be seen as part of students' clearly expressed call for more sustainable behaviour from society at large.

SGF projects are taking diverse approaches to student liaison with businesses. Of the more straightforward approaches, Brighton's GreenSkills programme is developing the practice of finding work placements and internships for students in an explicitly pro-environmental context. GreenSkills provides ten green internships with local businesses, and ensures that students acquire workskills from the business, as well as giving them the experience, skills and inclination to embed sustainability into their future workplaces.

Taking a different approach to gaining work experience, Gloucester's 'Big Green Gap Year' (BiGGY) project is designed to build on the current popularity of constructive gap years as



a means of advancing personal development and employability. BiGGY aims to link students with local community organisations and businesses for placements prior to university, deliberately requiring the development and sharing of sustainable business and employability skills.

Finally, one facet of Northampton's SGF project will focus on developing more ethical and sustainable practices in businesses. First they are undertaking a survey of local employers in the content of 'Sustainable Business Ethics', in order to identify the sustainability skills which local employers are looking for. Second, they are seeking to support the development of new student-led student businesses, through a 'Sustainable Business Ethics Loan Fund' which provides match funding of up to £3,000 to students and recent graduates with proposals for credible social enterprises plans [this activity also overlaps to the many student-led grants schemes funded through SGF – see below].

Given the diversity of the SGF projects outlined here, it is difficult (and of limited explanatory value) to determine a single approach to change among them. However, engaging with businesses tends to involve incremental change, given the need for developing a dialogue with employers, and learning the skills which they require (as much as encouraging the practices that students would like to see workplaces adopting). Placements tend to be given at the discretion of the employer, and it may be difficult to use them to create new ways of operating for the business concerned. However, new concepts like the Big Green Gap Year could prove mutually beneficial for both parties, in turn transforming what it means to be employable in a modern (sustainable) workplace.

### 7. *Business audits*

One SGF project is taking a direct approach to influencing business behaviour, by developing an auditing tool to assess local business' ethical and environmental impacts. Southampton's BEES programme borrows from the Green Impact approach to change programmes by developing an assessment tool with which specially-trained student auditors will go out into local businesses to assess their approach to business ethics, and encourage change in key practices. To an extent, this project can be treated as a Green Impact variant – and it may be that, in time, a greater focus on business ethics can be incorporated into the wider Green Impact for community organisations. However, the different relationship between universities and potential future employers may require a distinct approach, and in turn, that dedicated approach may prove more influential for influencing businesses' current practices, and shifting the dynamic between employers and universities.

### 8. *Social enterprise*

One of the selection criteria for SGF projects was that they should be able to continue beyond the two-year term of SGF funding. This requirement has encouraged unions to include revenue-generating elements in their plans, which could continue to fund project activities into the future. Social enterprises, or new products developed and owned by the union, are one way to achieve the goal of self-funding over the longer term. However, such products and activities also advance sustainability in themselves, by displacing less sustainable current alternatives, or serving to encourage more sustainable behaviours. Finally, the developing of new businesses and products is seen as a highly effective means of acquiring business and sustainability lifeskills which will increase students' employability in later life.

Across the current SGF projects, those relating to food all tend to include social enterprise elements, selling the produce students grow, whether in dedicated 'student food markets' (like that run by the Sheffield SOAP consortium) or just in campus cafés and shops (e.g. Birmingham City University's mobile café). Others have gone further to process their produce into products which can be sold through other supply chains: Gloucestershire for instance are building on the previous success of their Cheltenham Chilli Company, in

which students grow chilli plants, make jam, and sell the product locally to create an ethical, sustainable and effective business model.

Also in relation to food-led projects are social enterprises focused on cooking and serving sustainable food (be that own-grown produce, or surplus food from conventional supply chains). Roehampton's Hive Café is the standout example of a new food and leisure enterprise, which is already proving a success with staff and students.



*A growing site at the University of Newcastle Students' Union*

Roehampton's project always planned to have a physical social enterprise space at the heart of campus, but the plans for this have altered considerably since the initial business plan. Initially the proposal was that the university would gift an available room on campus to the project and that this would become the site of their café, and the visible face of Growhampton and environmental initiatives on campus. During Autumn term 2013 changes on campus meant that possible site for the café was no longer available, and the Growhampton team had to reconsider their plans for this key element of their project plans. The development of the café as a social enterprise was an essential part of their legacy plans for continuing key elements of the project post-funding. Taking this as an opportunity to envisage their ideal space for Growhampton, the students' union chief executive, sabbatical officers, and Growhampton development officer formulated a proposal for a new physical structure constructed from upcycled shipping containers in a central, but previously under-utilised, social space, which was taken to university management in January. The university were unwavering in their support for the Growhampton project and agreed to match-fund the development. The structure was developed over the Easter break and launched officially by Justine Greening MP and the vice-chancellor in May 2014 with 400 attendees present.

The finished café – 'The Hive' – is constructed from two repurposed shipping containers, upcycled scaffold board tables and espresso counter, apple crate stools, scorched cable reel coffee tables, salvaged plastic crate seating and cedar coffee tables made from off-cuts of trees found in the campus grounds. It is transforming this central part of campus and proving hugely popular for its triple certified high-quality coffee and very local, freshly made food options. The Hive is reinvigorating student engagement, serving as a popular meeting place for students.

Other cooking and catering enterprises are arising from student-led projects, funded by unions who have chosen to use part of their SGF funding to offer small grants to student-led projects. Two successful examples which have received local recognition beyond their institutions are:

- City University's Project Eatro: an 'online marketplace for homemade food', in which students cook extra portions, promote and sell them online, then dine together.

- Leeds University's Real Junk Food Project: a 'pay as you feel' café open to the community, and serving meals made from surplus ingredients.

Away from the numerous food-based projects, SGF participants are generating a wide range of innovative products and technologies. Included in this long list are the software programs and apps, such as Energize Worcester's energy feedback app for landlords, and Cumbria's online module for teaching sustainable development skills to staff and students. Particular interest has been aroused by City University's online pledging mechanism, which they commissioned as a bespoke tool mechanism. The pledging tool does double duty, in helping to select which student-led grants applications should be funded (based on the numbers of student supporters they attract) and in securing commitments from those student supporters (who are asked not merely to 'like' the proposals, but to commit to giving their time or resources to helping those projects succeed). Finally, one less virtual piece of new product development is Bradford's work developing a range of adaptive electric and pedal bicycles, suitable for use by disabled students. As with City, they have partnered up with a wide range of internal academic schools and external sector organisations, and commercial manufacturers, in order to turn their ideas into workable products.

It should be emphasised that at present none of these products has been worked up to the point of being standalone products which can be spun off from their parent unions and institutions, but all of them are capable of generating income to support future SGF-related activities, even working on the scale on which they currently operate. As such it could be argued that these products and services only amount to incremental changes: not opening up whole new markets but providing improvements to the ways in which they currently operate. On the reverse side however, it can be argued that these prototypes could all be capitalised and rolled out, transforming the institutions who develop them, and ultimately supporting behaviour change among the population at large (e.g. through enabling disabled cycling, or encouraging new means of volunteering for sustainability).

### 9. *Edible campuses*

The concept of an 'edible campus' is an innovation brought to prominence by the Students' Green Fund, and moves the NUS' and unions' approach to sustainable food on from Students Eats [described above]. The key difference is the explicit attempt to put sustainable food at the heart of student life: not just in terms of providing access to own-grown food, but in terms of integrating the processes of food production and consumption into everything that a university does, including its formal curricula, and its ethos.

Lancaster University's SGF project is explicitly framed around becoming an edible campus. This entails extending existing student growing spaces to a full six acres, as well as turning unexpected areas of the campus into growing sites. Growing boxes will be available right outside halls of residence, mass seed planting to create herb and salad lawns will deliver widespread student participation, and a field of hops opens the door to student-led campus beer production. Besides student growing activities, food topics will be used to deliver Education for Sustainable Development through links to 15 academic departments who will use the project for sustainable food production research; demonstrating the latest in vertical growing and urban horticulture.

It is also worth underlining the work at Roehampton in this context - or 'Growhampton' as they have titled their project, and restyled their university. Similar production-side activities are apparent (including reclaiming disused growing spaces), also with some links to formal curricula. However, the Hive Café provides a very tangible hub for the growing activities at Roehampton; its apparent cachet should galvanise students and staff to get involved in the wider food-based work.

In terms of classifying these edible campuses in terms of their approach to change, much will depend on what they can achieve – particularly in terms of how well they can link and embed the various food activities into union and university life. Yet the overall ambition is fully transformational: to use food as a way in to sustainability, and in all areas of life. From practical growing and eating, to academic research and attainment, to skills acquisition, employment and entrepreneurship. In these projects, it is possible to see how far NUS has moved from relatively incremental approaches to SD (based on a limited repertoire of prescribed behaviours, such as growing your own) to transformational approaches (in which SD becomes a set of critical skills through which all activity – including learning – is appraised, and towards which it must contribute).



*Conducting a waste audit at Falmouth and Exeter Students' Union (FXU)*

#### *10. Lettings agencies*

The idea of a student-run lettings agency is not new: unions have been offering such services for many years (and deriving revenue from them). However, the Staffordshire GreenPad project [outlined above under 'Home Audits'] proposes to improve these services by linking them up to the mechanism of student-led audits. In their proposed Green Accommodation Service, only student homes which have been audited and can be shown to have limited environmental impacts will be eligible to be promoted to students. This in turn should drive improvements in the housing stock, and push the market for student rentals towards placing a premium on sustainable properties. While the GreenPad project in the first instance will lead to incremental improvements for Staffordshire students, in the longer term it could transform the private rented market there – and in other universities where the model could be replicated.

#### *11. Green activist academies*

The idea of giving students the critical thinking and lifeskills to become more effective campaigners is not new to NUS environmental programmes: Going Greener, delivered by People and Planet, provided such activities as part of the Defra-funded Degrees Cooler programme. In the evaluation of Degrees Cooler, Going Greener was described as the most transformational of the programme strands, given the autonomy with which Going Greener groups operated, and the emphasis on learning through doing which characterised their activities.

Many of the SGF-funded projects have made a similar commitment to develop students as 'change agents' (e.g. Brighton, Liverpool). In many cases however this is an indirect outcome of the intensive training that student co-ordinators and the most committed volunteers will have received. For example, several unions running energy audit projects are training up students to act as auditors, but in some cases that role extends beyond implementing the audit tool or workbook to acting as a general champion for environmentally-friendly practices. For example, Energize Worcester's auditors are labelled as Energy Advocates, and their training is City and Guild accredited. Likewise the



12 trained student home auditors in Staffordshire's GreenPad project are given explicit roles as "peer-to-peer change agents". A related example comes from Bristol's ESD-focussed work. The UBU Get Green team have embedded intensive ESD 'agent of change' training into the 2014-5 Course Rep training programme. The result is that the Bristol Course Reps will be equipped to champion ESD in their courses – complementing the higher level work with academics to embed ESD in formal curricula [see ESD below].

One SGF project is explicitly developing a training course designed to create students as sustainability change agents, imparting a set of flexible skills which can be applied to a wide range of challenges and organisational contexts. UCLan's 'Stand up, Stand out' is their activist academy, designed to enable students to lead green projects. Given the evidence that students are keen to use SGF activities as a pathway into employment, UCLan have positioned 'Stand up, Stand out' primarily as offering employability skills, with the strapline "Giving you the skills to lead". Free half day training sessions are offered to any student, in which they can gain the chance to learn about key skills in areas such as leadership, communication, diversity, public speaking, managing change, time management, and health and safety. 50 students have so far benefitted from these courses.

Training activities of this kind, designed to give people flexible skills, clearly have the potential to deliver transformational change in the long term. It can be understood as pure ESD2: based on acquiring critical skills which can be applied to a wide range of challenges (including some as yet unknown), rather than following a set process to achieve a pre-set outcome. It is notable that in SGF, as opposed to earlier NUS projects, the training is undertaken in the context of either specific professional training (e.g. as an energy auditor) or wider employability and leadership training. This move away from explicitly green change training may suggest a more evolved approach to create future activists than one which concentrates on accentuating pro-environmental values among an already committed minority: instead knowing how to be sustainable is an essential part of what it means to be a competent employee or leader. The emphasis on employability may also flow from SGF's requirement for student-led projects: in the current HE landscape, students want university experiences which deliver both sustainability and employability.

### *12. Hubs, units and cafés*

Many of the projects funded by SGF have included the development of physical spaces from which to co-ordinate their activities. Again, this reflects an evolution in students' approaches to advancing sustainability: previous NUS environmental projects have tended to be run from within the union. These new physical hubs are highly visible, and symbolise the central role being given to sustainability in the universities and colleges which have created them.

In two examples from SGF projects, the potential for the hub to become a physical meeting point is emphasised. Both Roehampton and Gloucestershire are food-led projects, and both have developed shops through which to sell their produce, but also provide new space within which students and staff working on SGF and related activities can come together and co-ordinate strategy. It is notable that Roehampton's Hive Café [outlined under 'edible campuses' above] only happened to be housed in a bespoke site after shared space could not be found: a drawback which has since become a massive benefit for the project and the union.

Other projects have created new institutions to co-ordinate their SGF activities, but have not housed them in dedicated spaces: these are more like virtual Units, usually housed within unions as in past years, but marked out by their level of ambition. Exeter's Student Green Unit is perhaps the best example, a dedicated body within the Students' Guild, which acts as the interface between academic departments and the student body,

co-ordinating the 17 student-led projects alongside their academic mentors. Greenwich's Sustainability Forum similarly is a new body in that institution; it takes the form of termly meetings among the student body, to generate ideas and feedback on their sustainability projects.

The idea of hubs as bringing students together around sustainability topics is especially critical in universities and colleges with geographically widely-distributed campuses (SGF is being used as a force to build cohesion across dispersed campuses by unions such as Cumbria, and Falmouth and Exeter). Two SGF projects have created mobile hubs which take SGF activities out to where students are, and thereby join campuses together. Birmingham City University's mobile hub is in fact two customised electric vans, one with a mobile café the other with a mobile workshop for upcycled fashion. Meanwhile Bedfordshire's Green Hub and their pop-up pod is an integral part of its whole project: touring the campuses and wider community, acting as the centrepiece for pop-up events and workshops.

These hubs, units and cafés serve as new institutions and infrastructure, transforming the campuses and places where they appear. These kinds of material changes are necessary to enable deep change, especially in settings where there has previously been a lack of focal point or meeting place (see the discussion on 'Social: Institutions' and 'Material: Infrastructure' above). With the hubs in place, there is then increased potential for co-ordinated and transformational activity over the longer term – especially if the hubs themselves are self-funding (e.g. through their double lives as cafés or shops, or just their links to other revenue-raising project activities).

### 13. Credit unions

The idea of student to student credit unions is highly topical – especially given the focus on student fees, and the wider phenomenon of pay day loan companies. Such mechanisms have the potential to shake up financial services markets, and to transform the circumstances (and indeed the identity) of students' unions, offering a potentially significant new line of income. As discussed above under 'work placements', Northampton has set up a Sustainable Business Ethics Loan Fund. They have a close working relationship with the University of Northampton Changemaker Credit Union and the loan fund is managed and administered through the Credit Union, which provides match funding of up to £3,000 to students wanting to set up social enterprises with sustainability objectives and considerations. The fund has been challenging to set up within the union, and students have needed ongoing support when applying for loans through the project. Notwithstanding, this is an important first step towards establishing a workable model for a student-led credit union, which if successful could be rolled out elsewhere. It is known that other models are underway (e.g. at SOAS and Huddersfield), and it is hoped that these projects can learn from one another, and become viable means to transform unions in the near future.



*Local currency in action at FXU*

#### 14. Student-led grant schemes

When SGF was launched to universities it was made clear that the Fund was designed to increase student-led innovation, and “Initiate a step change in student engagement in sustainability issues”. Accordingly many unions came back with proposals which included a programme of grant funding for student-led projects, and as funded unions have refined their project plans, these student-led grant schemes have become increasingly popular.

Some of these projects are explicitly for supporting the development of new social enterprises (see e.g. Gloucestershire – as described above), and like those new businesses, one of the benefits of a student-led grant scheme is the experiential learning it provides to students, who acquire employability skills through the very act of developing, and then running, a grant-funded project. However the projects themselves are also of direct value in advancing sustainability in the institutions where they run, while the most innovative may then be suitable for replication and roll out elsewhere (again, see ‘social enterprises’ above).

However, a critical point to emphasise upfront is that many of these projects are unknown commodities: given the time required to set up grant funds, invite and assess applications, then fund the projects and get them moving, it is too early to say what change approaches they will pursue, and what levels of success they will achieve. Some student-led projects may tend towards the incremental (for instance, promoting the use of reusable bags, or raising awareness of water saving) while others may be more innovative (such as the food-based projects at Leeds and City University, already cited above under ‘social enterprises’). The potential for innovation is vast, given that SGF has not stipulated particular priority behaviours and approaches to change, and the open-endedness of the student-led grant funds presents challenges for monitoring and evaluation. It will be up to the end of Fund report next year to take an overview of all these projects, and assimilate learnings from them.

One immediate innovation potentially cutting across all the student-led grants programmes is the online interface developed by City University to ensure students have a say in which projects are funded, and also take early ownership for ensuring the projects’ success. City’s pledging tool, [discussed above under ‘social enterprise’] has the double benefit of providing a democratic mechanism for voting on student-led grants applications, while capturing commitments from those student voters to commit their time and skills to supporting the projects they are endorsing. This model has proved highly effective, engaging more than 1,300 student voters on top of the 160 students who developed project proposals. The model will be re-run in a second round of student-led applications in the coming year, with a potentially bigger ask of student voters, in terms of the support they commit to each project proposal. The refined prototype has great potential for future roll out, and the ability to transform both public engagement processes, and volunteering schemes.

Of the SGF projects who have made good progress in getting their student-led grant schemes off the ground, and whose student-led projects are already up and running, there are clearly a wide range of activities underway. The following selection of student-led projects appears fairly representative of activity to date:

- Birmingham City University’s EcoFund has sponsored a number of events and initiatives around campuses and the wider community, including upcycling furniture workshops, a day celebrating Chinese Culture and its connection with nature, and Eco team stands at community and cultural events.
- Bedfordshire’s grant scheme has funded waste activities including Swap Shops, End of term collections, and a recycling party. A further project is installing plants in campus buildings to reduce indoor CO2 levels.
- Liverpool University has a wide range of projects underway, including: three cycling-related projects (a cycle safety gear loan scheme, promotion of the local

cycle hire scheme, and an attempt on the world velocipede land speed record), a green i-device repair service, growing sites (allotments; rooftops), and a research project exploring the potential for growing warm-weather fruit and vegetables indoors using waste heat and light.

- Wigan and Leigh College have adopted a 'Green Dragon's Den' format for selecting student-led projects, all focussing on building social responsibility through sustainability. The team have observed that co-ordinating and monitoring student-led projects is challenging (a finding noted by the NUS SGF team!).

### *15. Community grant schemes*

A few unions have responded to the SGF's call for student-led innovation, and for the building of stronger community links, by setting up grant schemes for community organisations, administered and co-ordinated by the unions' student teams. These community grant schemes go beyond the call for community outreach, by encouraging community groups to respond by bidding in for support with the sustainability projects they need most. As such, they combine the potential of trickle-down funding schemes (like the student-led grants above) with the transformational benefits of community engagement (discussed under 'outreach' below). The leading example of such schemes is Newcastle's Green Grants programme.

### *16. Outreach community teaching activities*

The SGF selection criteria included 'building community bridges', as part of the overall objective of establishing unions as hubs of sustainability across campuses and out into the wider community. In response, several unions have established outreach and learning programmes, working with local schools. These activities meet the criterion of building bridges by using sustainability challenges as the shared medium through which to collaborate, thus strengthening social capital, and advancing local sustainability. In terms of mutual benefits, both students and pupils gain in terms of increased agency and enhanced lifeskills. Yet projects of this kind can be seen as actively transformational, in terms of building a relationship between university and school, where rather than the school simply acting as a feeder for future students, the university provides teaching inputs direct to the school. In terms of student development, most of these projects include students as teachers (rather than in their usual role as learners); indeed some projects have taken on students as interns to act as point of contact for this liaison work. By playing with these respective roles and identities, the outreach work finds new synergies between universities and schools, and holds out new possibilities for shared approaches between local educational settings. As such, these activities can be seen as deeply transformational, in terms of the immediate experiences of students and pupils, as well as their potential for future collaborations.

In some SGF projects, the approach is designed more to draw the community into university life, with school pupils visiting campuses to undertake learning activities. Examples include Cumbria, where the union is building links on top of existing relationships forged through teacher training courses. Likewise, Leicester have included a schools strand in their edible campus project, with the Geography department opening up the campus growing activities to visits from local schools.

Other SGF projects move in the opposite direction, providing outreach activities and lessons in local schools (e.g. Greenwich). Liverpool's Green Schools project strand (with its community grants scheme, described above) involves an extensive programme of volunteering in which trained students take sustainability into local schools via a bespoke programme of six interactive and themed sessions. So far, 28 sessions have been delivered in 8 local schools. In addition they have invited all the participating schools to the Guild for a day of workshops culminating in a presentation for local MP Louise Ellman.



One method which the Liverpool team have found very engaging is to deliver the lessons in a combination of indoor and outdoor settings. This picks up on a long tradition of outdoor learning in environmental education, and it is notable that other projects also use the natural environment as a neutral space for the two institutions to meet. Newcastle are using their outdoor growing spaces in Rupert's Wood as a site for learning session with schools and youth clubs.

### 17. ESD projects

The Students' Green Fund represents one of HEFCE's main commitments to advancing sustainability in English Universities. In this context, the SGF is a partner piece to the Revolving Green Fund, which supports capital projects delivering sustainability goals.

Since its inception, SGF has become a testing ground for new approaches to ESD, exploring and answering the guidance on ESD set out by the QAA (2014) and HEFCE's revised Framework for Sustainable Development (2014).



*Embedding sustainability into the curriculum*

'Greening the curriculum and learning' was thus one of the selection criteria used by NUS for SGF projects, along with a more general imperative to build sustainability and employability skills among students. This emphasis on formal ESD reflects

the starting point of most universities, in which action on sustainability was the property of students and their unions, with academic departments slow to respond to the challenge; indeed this imperative was one of the early objectives of the Greener Impact programme. SGF has carried that work forward, with all projects answering the call for sustainability skills learning in one form or another. As such, the projects can all be regarded as moving towards the transformational end of the spectrum, with an emphasis on skills learning which can underpin lasting change. As seen above on SGF, projects have innovated in approaching the call for sustainability learning in many different ways.

First there are projects who are developing new bespoke teaching modules to support learning explicitly focused on sustainability skills. One such project is Cumbria's, which involves developing an online learning module ('A day in the life') accessible to all staff and students. The online module will provide teaching units and practical tips on how to adopt sustainable practices throughout everyday routines; it will be supported by optional workshops, garden days and drop-in sessions.

The most widespread approach to delivering ESD is that focussed on embedding sustainability themes and content into formal taught courses. This is perhaps the approach most in line with the good practice guidance which QAA and HEFCE are promoting. The University of Bristol Students' Union are the exemplary proponents of this approach. Their SD training for course reps, engagement with senior leaders across the University, and regular surveys of the student body mean that there is a slow and steady cultural shift taking place at Bristol in which sustainability is becoming the norm and the expectation. This is found to be occurring in the classroom, the Students' Union, in estates, and in the community at large.

Similar whole-university approaches can be found in numerous other SGF project institutions. For example, many of the food-led projects are linking their growing and

producing activities into taught courses, including with Schools of Health (not least, exploring mental health benefits), Geography and Architecture (e.g. Birmingham City, Newcastle). Lancaster supported with the development of a module to accompany their Edible Campus project, which is now being carried across as a template for 15 academic departments. Meanwhile, at Liverpool the Director of Academic Development and Lifelong Learning is leading a cross-institutional working group with the aim of producing recommendations to implement the QAA/HEA guidance.

An alternative, and potentially even more innovative, approach to advancing ESD is underway at Exeter University. As described above [under student-led grants schemes], the union has set up a Students' Green Unit to administer and co-ordinate up to 40 student-led projects by the end of year two. However, in terms of ESD as it is generally described in the HEFCE/QAA guidance, the Students' Green Unit works 'back to front': instead of embedding SD into curricula, it takes environmental solutions from academic research and makes these into a range of student-led projects. A few examples include:

- A Food Waste Working Group (set up by a Catering Manager within the University's Campus Services) which undertook a Food Waste Pileup demonstration, on the back of which the University has made changes in its catering practices.
- Academic and student collaboration via the Computer Science Society resulting in discussions on how technology could provide a small scale solution to unwanted clothes going to landfill
- The Face 2 Face project which highlights the breadth of climate change research that is being conducted in the local area of Exeter, and at the University itself. By taking photographs of local scientists involved with the IPCC report, printing them on a large scale, and displaying them in an exhibition at the centre of campus, the concept is to bring figures of academia into the public realm.

In parallel to running the grant scheme, the Students' Green Unit has engaged with the Education Enhancement Team at the University, and in turn presented a case at the Vice-Chancellor's Executive Group to ensure colleges promote sustainability modules from other departments.

These examples of projects from across the SGF illustrate how the Fund is making good on its commitment to HEFCE to embed sustainability in formal curricula, and ultimately to normalise ESD as a strand across all academic courses. In terms of change approaches, this work has the potential to revolutionise what students learn at university, and the skills they come away with, while in the meantime transforming universities as institutions in their own right. Perhaps above all, the collaborative nature of this work, and the smooth interchange between teaching and learning, mean that students and universities will continue to develop new conceptions of what skills and content are required to advance SD, potentially providing new lessons for how all peoples respond to the pressing challenges of the coming century.

### 3.5.4 Conclusions on approaches to change

Analysis of the main elements of the 25 projects in the Students' Green Fund has enabled each element to be plotted on a spectrum of learning and change, from incremental change at one end to transformational change at the other. As with the conceptual model of change provided by ESD1 and ESD2, it is not the case that one approach is better than the other: instead both are required. The same can be said of the 17 main elements picked out from across the SGF projects; incremental approaches are required just as much as transformational ones, for example:

- To reach previously unengaged audiences, bringing the whole student body and wider community audiences into play;
- To play catch up: reflecting unions' different starting points, and different subgroups' different levels of engagement/uptake of sustainable behaviours.

It is also notable that in the rich and diverse programmes of activity which each SGF project is developing many combine elements drawn from multiple points along the spectrum, reaching new audiences with relatively instrumental interventions, consolidating work with more engaged audiences, and experimenting with new innovations in ESD, community outreach, and social entrepreneurship.

In their different ways, it can be seen that all the SGF projects are innovative: that is to say SGF funding has enabled new activity everywhere. It is also the case that all SGF projects tend towards the transformational: going beyond previous models and approaches, and reconfiguring relationships between students and staff, unions and schools, and with the wider community. It can be conjectured that this emphasis on transformational change is what happens when students lead their own projects. In some places, SGF projects are developing genuine innovations, new for the first time anywhere. These innovations include new technologies, new curricula, new businesses, and new settings for learning; notably many of these innovations will be self-funding and outlast the term of the SGF. At their most innovative and transformational, SGF projects transform meanings and relationships: what it is to be a student, a union, to acquire lifeskills, to be employable. In so doing SGF projects are changing the practice of universities to bring it closer in line with what students value, i.e. sustainability: based on ethics and environment, wellbeing, a sustainable economy with sustainable employment, and more inclusive and productive communities.

# Future impacts and legacy beyond the fund



As one of the key themes of the fund, legacy has been a focus throughout delivery both from the point of view of the funded projects, and from NUS as administrator of the fund. To this end, the application and assessment phase of the fund had a strong focus on legacy, with applicants required to outline the potential for post-funding legacy. Following advice from NUS, the successful projects have built consideration of the potential for legacy into their individual steering group agendas. Successful projects are also required to report back to the NUS project team on a quarterly basis about how their thinking, planning and actions in this area are developing.

## 4.1 Legacy beyond the fund

This chapter provides reflections on the steps that projects have taken to date to ensure post-funding legacy along with a consideration of the role stakeholders will play in delivery, including the role NUS can play in supporting legacy.

**Embedding within students' union infrastructure:** A key development, which will ensure legacy, over the first year of the fund has been to embed the funded projects within the governance structures of the students' unions. For example, Bedfordshire and UCLan report that new sabbatical / council roles have been created that are associated with the project, and Bedfordshire report that the first holder of this role is already in place for the 2014/2015 academic year.

"The creation of the new council role, new Go Green Society and Better World Forum shows students want to lead on these issues and are using the democratic processes currently available to them to push this agenda." **UCLan**

Other projects have worked to integrate their project activities into their students' union strategic direction for example at Southampton University Students' Union, the BEES team are contributing to the embedding of a 'Sustainability Zone' within the overall work of the union. Again this sees the creation of a specific student officer role to ensure student ownership and continued engagement. Leicester have also worked to integrate activities associated with the 'Hungry for Change' project into the day to day activities within the union by building it into existing roles and job descriptions.



*Launching the Southampton BEES project with local businesses*

"Contact (the main volunteering group within the SU) have agreed to take this project on as one of their mainstay activities and will be actively managed by them after the funding period, with the support of the staffed Activities Resource Centre." **Leicester**

Going further than building SGF project content into other parts of the organisation, as a result of the success seen at Staffordshire, the university is preparing to devolve responsibility for the running of the accommodation service to the students' union. Final discussions are taking place with the institution around the handover of the StudentPad website and management of housing lists allowing the union to fully integrate the GreenPad sustainable lettings scheme across the local area.

Another example includes the Leeds Green Exchange team who have contributed to the development of the Leeds University Union strategic plan for 2014-2018. Research by the team highlighted the continuing demand for action on sustainability from the student population at Leeds.

“Overall our student population told us they wanted LUU to take the lead in being more sustainable and provide the facilities and opportunities for our members to do the same. One of the key areas of LUUs work highlighted to take forward has been the areas of work covered by the Leeds Green Exchange: Student engagement, raising the profile of sustainability work at LUU and working cross departmentally to deliver sustainable living guidance to students.” **Leeds**

Five of the projects (UCLan, Leicester, Liverpool, Cumbria and Bedfordshire) are working together with NUS Digital, NUS’ online platform, to create a volunteering dashboard which will give students’ unions a powerful tool in being able to manage, advertise and recruit volunteers to projects through their own websites. The dashboard is designed to match potential volunteers to opportunities which match their own interests, as well as incorporating time banking and the ability to reward volunteers for long-term service.

**Action from university stakeholders:** A key method through which the SGF projects envisage embedding their work is through their influence on the university or college curriculum. Many projects have specific elements explicitly designed to embed and enhance sustainability within the curriculum at the participating institutions and these have been described in section 3 of this report. However it is worth mentioning these approaches from the point of view of their potential for a lasting legacy of the fund. The changes achieved through SGF have the potential to make a lasting impact both in terms of teaching practice at the institutions, but also in terms of their ability to reach cohorts of students beyond the lifetime of SGF. The Bristol project team reiterate this highlighting that the very essence of their project is to embed change for long-term impact through education for sustainable development.

Gaining buy-in and support from senior management within the university is also seen as an important mechanism through which legacy can be supported. Whilst the specific outcomes from this support are generally undefined at this stage, high level backing is seen as an indicator that the university will support the students’ union in its efforts to continue the project activities at the end of the funding period.

“The Senior Management support of Green Ladder has been very strong indeed. Michael Ahern, Chief Operating Officer, has congratulated the project and been a fantastic advocate of it. He has stated that our environment is the one thing that binds us and unites us across the campus. Therefore SU, student and academic collaborations that show positive transformations for the campus are very important for all of us. He has expressed a very strong desire to see Green Ladder continue into the future in some shape or form.” **UCLan**

Some projects have the potential to integrate their work alongside a wider ambition within their university in terms of sustainable development. For example, Lancaster have proposed a termly action group, co-chaired by the SU president and the Vice Chancellor, which would bring together all those on campus who are involved with behaviour change and sustainability to work towards becoming the leading university for sustainable behaviour in the UK.

**Developing future funding**

**streams:** The projects are investigating and planning to adopt an array of techniques in order to secure future funding for their work beyond the lifetime of the SGF. Some project teams are searching for continued 'grant' funding, for example UCLan have noted the potential to apply to the Heritage Lottery Fund, or to the Waste and Resources Action Programme (WRAP) to secure funding to extend specific areas of their work. The team at Leeds also report the potential for including elements of their SGF work within the roles of other staff members in the union, for example a newly employed Fundraising Manager will in part be responsible for investigating further funding streams.



*Promoting sustainable transport across Brighton*

For some projects, their activities are designed to generate income and so by their very nature will also help to secure the continuation of the project. For example, Greener Gloucestershire student-led social enterprises have exceeded their year one targets for the number of new social enterprises founded - and are also working to develop an ongoing market for these products through the creation of their Little Green Shop.

The team at Newcastle's SCAN project are also looking to develop income generating projects, based on the successes seen at other community organisations in the area. Building on the success they have seen in terms of engaging volunteers in the Guerrilla Gardening project, the team are looking into the potential of developing a paid-for gardening service for landlords who rent properties to students in the city.

**Support from NUS:** Many of the projects have activities which are designed to pilot and expand the programmes developed by NUS in students' unions, universities and colleges into new contexts, for example students' homes, schools, businesses and community organisations. Unsurprisingly therefore, some projects envisage direct support from NUS in order to ensure legacy from their work. Greenwich, Gloucestershire and Sheffield's Green Impact Student Homes all noted the role NUS can play in disseminating their learning and encouraging uptake by other students' unions to engage schools, community organisations, sports clubs and student households respectively in sustainability.

To this end, NUS has taken action throughout the course of the fund to ensure learning is captured and communicated. Having an NUS staff member on each steering group has a dual purpose in that as well as providing in-depth and tailored advice based on NUS' experience, the NUS project team is also in a good position to learn first-hand what is and isn't working in these new contexts.

In addition, those projects working in similar areas have been brought together to share their learning. For example, seven of the projects have a focus on private rented accommodation, although only three (Staffordshire, Sheffield and Worcester) have it as the main focus of their projects. At the end of the first academic year of these projects a reflections workshop was held to look specifically at the successes and challenges of the projects focusing on private rented housing. It was also examined how NUS might be able to take forward some elements of these projects centrally. All of these projects have aimed to engage both landlords and students in their project activities, and sharing their

approaches was useful for the project staff in planning engagement approaches for the coming academic year. There were two key factors identified that would affect how any future private rented programme could run: the first being whether or not the union or university had their own accommodation service – meaning better access to landlords and households and more staff time to invest in a project like this; and the second being the ratio of students to available houses – impacting on the competition between landlords to market their house to the student audience. It was recommended by the group that NUS should promote a variety of approaches depending on the context.

In response to project staff and steering group feedback an additional training day will be held on January 16<sup>th</sup> 2015 focusing on ESD and scope 3 carbon emission calculations. Many projects have plans to increase their work on embedding sustainability within the curriculum as a way to access students who may never engage with sustainability in an extra-curricular capacity. The final support day will be held on April 16<sup>th</sup> 2015, celebrating the achievements of the 25 projects and sharing learning. The event will be hosted by the University of Bristol Students' Union during the year in which Bristol holds the title of European Green Capital.

## 4.2 Looking forward to SGF year two

All projects have taken the time over the summer to reflect on the successes and challenges of year one, and NUS has held individual review meetings with project leaders to prepare for the forthcoming year. These meetings provided feedback on project progress, communications, monitoring and evaluation, expenditure and explored areas for improvement for year two.

Going forward into the next academic year (2015-6), all projects will be specifically focusing on firming up legacy plans for their work. For some of these projects NUS will be directly supporting a national roll out of their projects, for example in the work focusing on private rented housing. The NUS team is also working with Southampton to include elements of their work on business ethics within the NUS Green Impact programme running in universities, colleges, councils and SMEs. A number of the projects also have new strands of work emerging for year two, such as FXU's plans to introduce a local currency in partnership with local independent businesses, Greenwich students taking Green Impact into new community settings (including the National Maritime Museum, Cutty Sark and Royal Observatory), and multiple projects training course reps in ESD in order that they can start conversations with their course leaders about how to embed sustainability within the curriculum.



*Enjoying campus grown produce at the Hive Cafe*

As a final reflection, it should be remembered that not all the projects, activities and elements described here have been delivered yet. Some are still blueprints and aspirations; others will be amended and refined in the process of development and delivery. It will be the task of the Year 2 End of Fund report to check back against this conceptual framework to see what has been delivered and what it has actually achieved – supported by findings from the pre- and post-project survey of students in all participating institutions. In the

meantime, this analysis provides a framework for understanding and measuring those results – and for other institutions to draw from as they develop their own work to embed and extend sustainability in their institutions and communities.

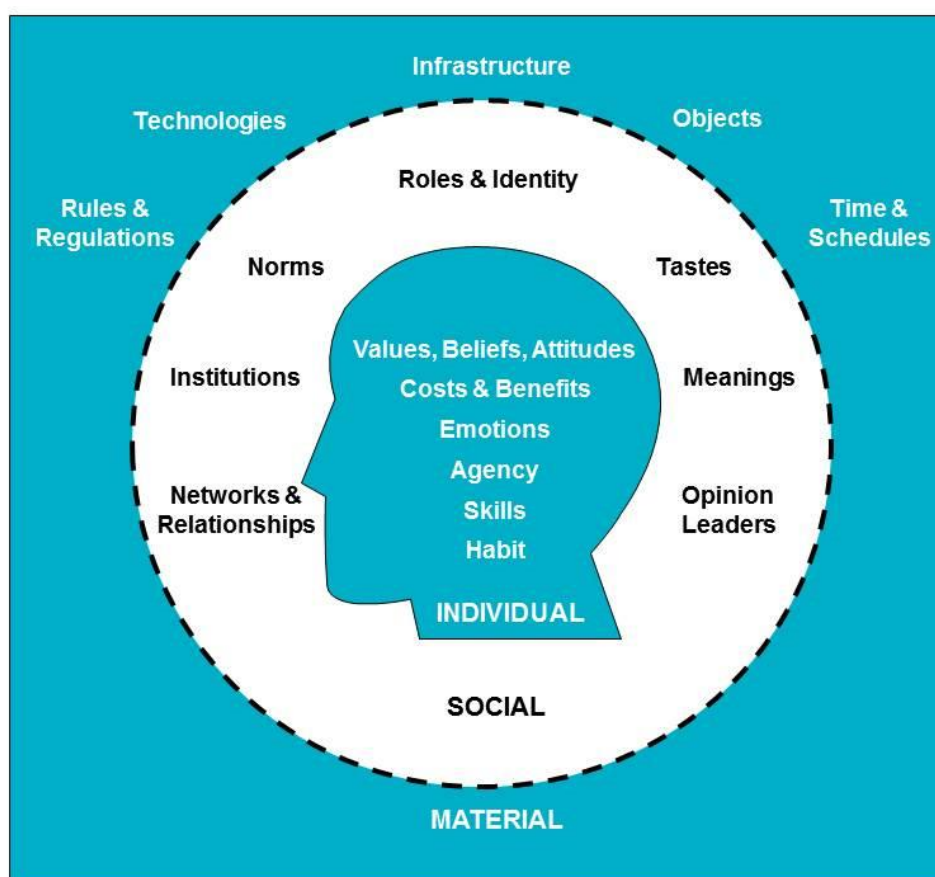


## Appendices

### Appendix 1 – Introduction to the conceptual frameworks

#### i) The ISM Model ('Individual, Social, Material')

**Figure 10 | ISM model (Darnton & Evans, in Darnton & Horne 2013)**



The ISM model arranges the principal factors influencing behaviour (as observed by a range of disciplines including economics, psychology, and sociology) into the three main contexts in which they are most commonly found – the Individual, Social and Material. As with many behavioural models, ISM can best be understood as a thinking device (“models are concepts for using our heads” – Triandis, 1977). In this case, ISM has already proven useful as a tool for devising potential policy interventions, and as an evaluative framework for classifying existing interventions. The central premise of work using the ISM Model is that interventions should target factors in all three contexts simultaneously if they are to result in lasting change.

The three contexts are described as follows<sup>8</sup>:

**I – the ‘Individual’ context:** includes factors that affect the choices made by individuals and the behaviours they undertake. These factors are found (and measured) within individuals, and include an individual’s values and attitudes, their skills, as well as the

<sup>8</sup> A full breakdown of the model and how to use it can be found at:  
<http://www.scotland.gov.uk/Resource/0042/00423436.pdf>

calculations he/she makes before acting including personal evaluations of costs and benefits.

**S – the 'Social' context:** includes factors that exist beyond the individual in the social, yet shape their behaviours. These influences include understandings that are shared amongst groups, such as social norms and the meanings attached to particular activities, as well as people's networks and relationships, and the institutions that govern how groups of individuals behave.

**M – the 'Material' context:** includes factors that are 'out there' in the environment and society, which both constrain and shape behaviour. These influences include existing 'hard' infrastructures, technologies and regulations, as well as other 'softer' influences such as time and daily schedules.

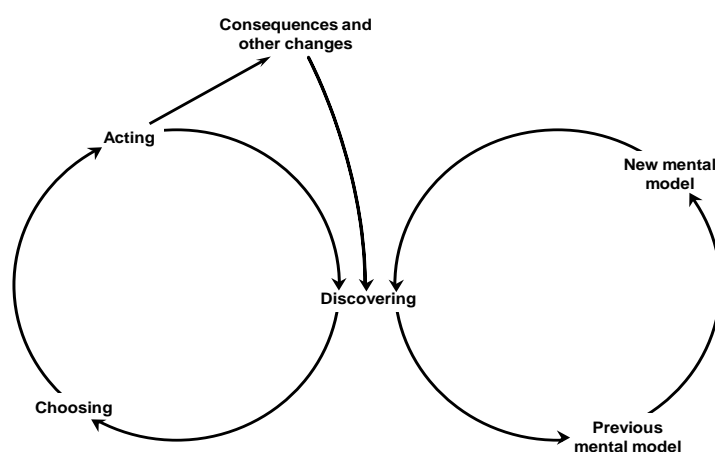
## ii) Spectrum of Learning and Change

This conceptual model is a simple spectrum of approaches to change, moving from incremental at one end to transformational at the other. It was used in the analysis of outcomes from the Defra-funded 'Degrees Cooler' project, in order to understand how the three main programme strands provided complementary approaches to change, spanning the full range of the spectrum. It is used again in this report, albeit applied to the more complex Students' Green Fund with its 25 funded unions, each running multi-component projects, and many including nested grants funds of their own.

The spectrum of approaches to change draws on two well-established models from change theory, both founded on the premise that learning and change are intertwined (see e.g. the work of Ed Schein on organisational culture, talking about the "*inevitable pain of learning and change*" – Schein 1985).

The first model is taken from work on organisational change undertaken at MIT by Chris Argyris and Donald Schon (1978, in Argyris and Schon 1996). This model is of 'double loop learning'; change results from naturally from acting, in both loops, but the change in the first loop is incremental ("paradigm constrained") and change in the second loop is transformational ("paradigm breaking"). The distinction arises because the second loop learning (also "higher order learning") involves questioning the assumptions ("theories in use") with which we judge the outcomes of our actions in the first loop. It is only by analysing and then changing these assumptions that transformational change can occur. Proponents of double loop learning are thus called "reflective practitioners" by Donald Schon.

**Figure 11 | Reflective learning loop (Argyris & Schon, 1978)**



The second model of learning and change, descended over time from the first, is explicitly developed in the context of Education for Sustainable Development. It is Paul Vare and Bill Scott's theory of ESD1/ESD2 (Vare and Scott 2007). In it, ESD is seen as having two complementary purposes, as follows:

### **ESD1: Promoting Behaviour Change**

Relates to the teaching of pre-determined skills and behaviours, which are to be adopted as taught. The impact of ESD1 can be measured in terms of wider environmental impacts. The downside of ESD1 is that it does not build our capacity to act as autonomous individuals, in the short or long term.

### **ESD2: Exploring Sustainable Living**

Relates to building learners' capacity to think critically about the behaviours identified as delivering sustainability. There are no pre-determined behaviours, hence the impact of ESD2 cannot be measured against pre-determined environmental impacts. The downside of ESD2 is that it may not lead to effective sustainable behaviour (ie. we "*sit around all day just talking*", says Vare).

ESD1 and ESD 2 are not either/or approaches; instead they are explained using the yin/yang symbol, with each moving around the other, and the seed of each being present in the other. The authors do however advocate ESD2 approaches over ESD1, partly as a corrective to current educational practice, but chiefly because environmental change will throw up future challenges which we cannot predict, so teaching a prescribed set of skills alone will be insufficient. Like 'reflective practice' described above, ESD2 also requires participative approaches to learning through doing, on the basis that this is non-prescriptive, that it is the most impactful means of acquiring knowledge, and that at the same time as learning about a problem it builds the learner's sense that they can influence it (ie. they acquire agency).



## Guide to projects and abbreviations

SGF – Students’ Green Fund

HEI – Higher Education Institution

FE – Further Education

SU – students’ union

ESD – Education for Sustainable Development

### Funded projects

Students’ Union	Project name
Bedfordshire	Bedfordshire Green Hub
Brighton	Bright ‘n’ Green
Bradford	Cycling 4 All
Birmingham City	ECO by BCU
Lancaster	Edible Campus
Worcester	Energize Worcester
City University London	Green Dragons
Newcastle	Green Guerrilla Gardeners
Liverpool	Green Guild
Sheffield	Green Impact Student Homes
UCLan	Green Ladder Project
Falmouth and Exeter (FXU)	Green Living Project
Staffordshire	GreenPad
Leicester	Hungry for Change
Cumbria	Greener Minds
Gloucestershire	Greener Gloucestershire
Greenwich	Greenwich Sustainability Hub
Roehampton	Growhampton
Leeds	Leeds Green Exchange
Northampton	P2 (Planet Too)
Sheffield, Sheffield Hallam, The Sheffield College	Sheffield on a Plate
Wigan & Leigh	Smart Green Scheme
Southampton	BEES (Business Ethics and Environment Students)
Exeter	Students’ Green Unit
Bristol	UBU Get Green

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