

The Green-Campus Programme

Smarter Sustainable Campus Communities: A Guide for Campuses Embarking on the Green-Campus Programme

Green-Campus Office An Taisce, Environmental Education Unit





Roinn Cumarsáide, Gníomhaithe ar son na hAeráide & Comhshaoil Department of Communications, Climate Action & Environment





An Taisce, The National Trust for Ireland is the foremost environmental organization in Ireland. Its range of interests extends from the natural heritage of land, air, water, flora and fauna to the heritage of buildings and gardens. Through its local, national and international networks, it seeks to educate, inform and lead public opinion on the environment and influence policy and development. Strategies to achieve these aims include awareness and education programmes.



FEE (The Foundation for Environmental Education): seeks to promote environmental education by coordinating programmes and improving awareness of the importance of environmental education. It is composed of a network of organizations which undertake individual programmes in their own countries and participate in international efforts. An Taisce as the Irish member of FEE coordinates FEE international programmes in Ireland as follows: Green-Schools, Green-Campus, Blue Flag, Young Reporters for the Environment, Learning about Forests (LEAF). Green-Campus Materials produced by:

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The Purpose of this Guide

This guidance document aims to provide an introduction to and a basic level of assistance in implementing the Green-Campus Programme. Throughout the experience of developing and assisting campuses in implementing the Green-Campus Programme it has become increasingly evident that all campuses are different and a "one size fits all approach" is impractical. The routes to establishing the seven steps of the Programme will vary from campus to campus, however the Programme retains the flexibility to accommodate every organization. It is therefore recommended that this manual be used as an initial guide and the Green-Campus Office (01 400 2218 or greencampus@eeu.antaisce.org) should be contacted for further information and assistance in implementing the Green-Campus Programme.

Introduction to the Green-Campus Programme

What is Green-Campus?

Most people care deeply about environmental issues, and wish to make a positive change in the environment around them. The Green-Campus Programme (based on the successful Eco-Schools/Green-Schools Programmes) provides a means to foster environmental awareness in a third level institution in a way that links to everyday activities and study, and ties in with the operational requirements of a complex multi-use facility. The Programme is based on the EU EMAS (Eco-Management and Auditing System), and the Seven Steps also align with the 'plan-do-check-act' management method used in ISO 14001:2000 Environmental Management System Standards.

Green-Campus is an international environmental education Programme, offering well-defined, controllable ways for educational campuses to take environmental issues, innovation and research from the academic departments and apply them to the day-to-day management of the campus. The Green-Campus Programme is run by FEE (the Foundation for Environmental Education). Green-Schools and Green-Campus are operated by the Non-Governmental Organisations (NGOs) that are the FEE members in each of the participating countries. An Taisce, as the FEE member for Ireland, co-ordinates the programme in this country.

Green-Campus is holistic aiming to make environmental awareness and action an intrinsic part of the life and ethos of educational facilities. This should include the students, academic staff, non-teaching staff, as well as media, local business, contractors and visitors. Green-Campus endeavors to extend learning beyond the classroom/lecture theatre to develop responsible attitudes and commitment, both at home and in the wider community. Green-Campus does not aim to reward specific environmental improvement projects, or only those third level institutes that are able to invest financially in large scale projects; instead it rewards long term commitment to continuous improvement from the campus community.

Green-Campus offers your institution opportunities to:

- Provide a forum for management, academic staff and students to meet and engage on environmental issues.
- Empower students and staff to create a more balanced campus community.
- Involve a wider variety of the campus community in environmental decision-making.
- Improve learning on campus through development of student's confidence and sense of citizenship through
 participation, research and transferrable skills, introduction to new topics and by using data currently generated
 on site through investigative and problem based research.
- Supply fresh ideas for research topics, final year projects and events within the institution.
- Gain access to a wider network of support agencies.
- Link with other third level institutions in Ireland and internationally.
- Earn a prestigious award which is reassessed annually.
- Improve the campus environmental performance, reduce environmental risks and impacts, and achieve financial savings.
- Set a good example in the community and to provide guidance to and involve local stakeholders.
- Link to other An Taisce Environmental Education Unit Programmes: Clean Coasts, Green Home, Green- Schools, National Spring Clean and other national environmental initiatives such as Tidy Towns.
- Provide positive publicity for the campus.

It requires:

- The ongoing support of the President of the Institute/Head of Campus and any governing authority.
- A willingness to involve representatives from all sectors of the campus community in decision-making and action at every stage.
- Active involvement and support from the local community.

• A willingness to take action to instigate long-term change.

Green-Campus is both a Programmes and an award: Any campus using the guidelines given in this Handbook can adapt the Programme to their needs. While the Green Flag award will be given to campuses that complete all the essential elements of the Green-Campus Programme, it should be remembered that the Programme is flexible, and that different campuses will find different routes to achieving Green-Campus status.

Green-Campus is a long-term Programme: The Green-Campus award as outlined above takes the form of a Green Flag. This can be flown outside the institution or displayed in the foyer. However, it is important to remember that the Programme is one of continual reduction of the organisation's environmental impact. Therefore, the award requires progress reports to be submitted annually and a full reassessment every three years.

Please note that there are minimum requirements that must be fulfilled and the institution must have implemented all of the Seven Steps before applying for an award. An institution must have been registered for the programme for at least 1.5 academic years before an application for a Green Flag may be submitted. It is estimated that the implementation of the seven steps can take campuses at least 1.5 - 2 academic years to complete.

International and National Aspects of Green-Campus

International Green-Campus

FEE member organisations wishing to implement the Green-Campus Programme should contact the FEE Head Office for further information. Ireland is the lead country in its development indicating the success of the Green-Schools Programme here as students entering third level are aware of the Programme and identify means for its implementation on campus. Portugal and Russia have also initiated the Green-Campus Programme and it is in development in a number of other regions such as Latvia, Norway, Malta, Northern Ireland, Wales and Spain. An Taisce are a lead partner in the development of the programme internationally.

National Linking

Campus linking is an ideal way to learn best practice and share experiences with other campuses working on the Green-Campus Programme. The Green-Campus Office encourages these links and facilitates exchange of information between campuses. In addition an annual Network Meeting in January assists campuses to exchange information, case studies and best practice.

Green-Campus Funding and Support

Green-Campus is funded by the Department of Communications, Climate Action and Environment.

Benefits of the Green-Campus Programme

Benefits to the Environment		Benefits to Institute		
•	Environmental impacts of the Campus are quantified so targets and performance indicators can be set Improves overall environmental performance Improves waste management Decreases resource use Improves management of environmental aspects	 staff and students to meet Creates a more balanced campus community Empowers students and staff Encourages innovation and change Prevents and reduces environmental impacts 		
	Benefits to Students and Learning	Benefits to Local and Wider Community		
• • •	Improves learning outcomes Research skills (developing an action plan, investigation, setting targets, monitoring progress and reporting progress) Transferable skills to workplace: communication, facilitation, teamwork, committee servicing Introduction to new topics Curriculum links: using data currently generated, investigative research, problem based research	 Shares experience and best practice Links to other An Taisce programmes Clean Coasts Green Home Green Schools 		

Table 1: Expected benefits for environment, institutes, students and the community arising from Green-Campus

Where campuses have successfully implemented the Green-Campus Programme it has been noted that the following elements have been present:

- Strong support from the campus management.
- Strong support from the Students Union and other student groups such as clubs and societies.
- The willingness to involve the campus community in discussions and decision making.
- Frequent Green-Campus events, meetings and activities.

Green-Campus Themes

The Green-Campus Programme embraces a number of different themes: Litter and Waste, Energy, Water, Transport, Climate Change, and Biodiversity. New themes to have emerged include: Green Information and Communications Technology (ICT) and the sub-theme of Climate Justice. As your Green-Campus Programme progresses, themes can be developed in greater detail, but it's important that the seven steps of the Green-Campus Programme becomes an intrinsic part of day-to-day operations on site. It is also vital for the longevity of the Programme that the resources that are already in existence on site are utilised, for example the management of litter and waste, energy, water and travel.

In order to implement the Green-Campus Programme effectively, An Taisce encourages third level institutions to review the status of the management systems controls already in place in relation to the above listed themes. Many organisations have personnel already dedicated to monitoring and controlling the items listed, and may have targets and reduction programmes in place. In addition certain course work may already be generating data such as environmental reviews and statistics which may be useful.

As third level institutions may be spread out over a number of campuses and buildings, it might be an idea to look at these individually first, and tackle them campus by campus.

The first step of the Green-Campus Programme involves establishing a viable Green-Campus Committee, within the organisational structure of the Institution. This may be linked to the constitution of the Students Union and/or Environmental Society or become an official statutory committee within the college. It is important that it is made up of both staff and students. The chairperson and vice-chairperson should also have access to top level management within the Institution.

Depending on the structure of the college and the Green-Campus Committee, a multi-themed or single themed approach can be adopted. Because of the importance of litter and waste as a theme, it is a requirement that campuses adopt this theme when first starting out on the programme. It is recommended that the committee consult with the Green-Campus Office before choosing a thematic approach.

Themes of the Programme include:

- 1. Litter and Waste: Assesses the impact of litter and waste on the environment and explores practical means for preventing, reducing and minimising the amount of litter and waste produced by the campus. This theme is compulsory when a campus is first starting out on the Green-Campus programme and, like all initial themes, should be carried on as a maintenance theme once the campus is awarded.
- 2. Energy: Implements means by which the campus community can work together to increase awareness of energy issues and to improve energy conservation and efficiency.
- 3. Water Conservation and Protection: Focuses on the importance of water both locally and globally and raises awareness of water conservation and source protection.
- 4. Transport and Travel: Suggests ways for students, staff, and local government to work together to raise awareness of transport issues and implement practical solutions to make a real difference to commuter management on campus.
- 5. **Biodiversity:** Examines the diversity of plant and animal life associated with the campus and finds ways to enhance and protect biodiversity.
- 6. Green Information and Communications Technology (ICT): An emergent theme, Green ICT examines the environmental impact of ICT at third level and explores ways in which ICT personnel and Green-Campus Committees can cooperate to reduce this impact.

Other areas that can be examined in parallel with the themes include:

- **1. Procurement:** Examines goods consumed and used on Campus and raises questions about where these are sourced from. Action plans with respect to procurement can set out strategies on environmental purchasing.
- 2. Air Quality: Improvements in other thematic areas may have a knock on effect on air quality on campus. For example increased cycling, walking, fewer deliveries, changes to solvent management and storage, and reductions in fuel use on campus can all positively impact air quality.
- 3. Climate Change: Examines the impact the campus has on both local and global climate, and how our actions in the previous themes are interlinked to an overall 'footprint'.
- **4.** Climate Justice: Examines the social and economic impact of Climate Change internationally with potential to link via An Taisce to Green-Schools pursuing themes of 'Global Citizenship' and 'Climate Change'.

Case Study on Themes

Colleges of Further Education tend to take on a singular theme at a time, this is to facilitate the shorter course times as well as staffing levels on campus. Often these sites do not have buildings management or share building management with multiple sites.

Green-Campus Committees in colleges can look to foster their individual specialities as is the case with the jointly registered Maynooth University and St Patrick's College Maynooth (together known as Maynooth Green-Campus) who are harnessing their experience in international aid and development and climatology to address the theme of Climate Justice alongside the themes of Waste, Energy and Transport.

Getting Started

Before a third level institution can register on the Green-Campus Programme, the Green-Campus Committee must have support from the President of the Institute/Head of Campus, Management, Academic Departments, Students Union and other key staff (e.g. Buildings and Estates Management/Facilities or Maintenance).

It is suggested that one or more core members of staff and student representatives read this guide and present an outline of the Green-Campus Programme to campus management and key stakeholders. It is useful to consider the following points:

- The benefits to the campus.
- The seven essential steps as described on the following pages.
- The intention to start with small, achievable targets.
- The long-term nature of the Programme.
- The Programme's potential to act as a focus for developing a whole-campus policy for environmental education.

If the idea is received with sufficient enthusiasm for it to continue, then the next step is to contact the Green-Campus Office and further assistance will be offered. Registration for the Green-Campus Programme requires a meeting between a representative from the Green-Campus Office and the Green-Campus Committee in the institution at which the form is completed and signed and themes are agreed. The committee **must** have the support of the head of campus in order to proceed with registration. In addition, the committee **must** be composed of both students and staff.

The Green-Campus Programme recognises that there may be work already underway within third level institutes. Scoping (see 'Green-Campus Committee' document) will highlight these areas of good practice and ways to enhance and expand best practice can then be developed.

The award has five main stages:

- 1. Pre-Registration: forming the Green-Campus Committee and completing a scoping exercise.
- 2. Registration.
- 3. Implementation of Green-Campus Programme.
- 4. Applying for Green-Campus Award.
- 5. Award Renewal.

Registration offers the campus an opportunity to launch the Green-Campus Programme on site and to get increased visibility and awareness of the committee. It is also a great way to encourage participation.

The campus must have completed the scoping document, formed a committee and gained the approval of the head of campus to proceed with the Green-Campus Programme before registration. The college must be registered on the Green-Campus Programme for a minimum of 1.5 academic years and have the seven steps of the Programme implemented with a sustainable committee in place before applying for the Green Flag Award. The Programme methodology is outlined in Figure 1.

If a college has not made contact with the Green-Campus office for two academic years and committee members have not attended annual network meetings or provided annual progress reports for that period, the college is then officially de-registered from the programme. The college may apply again to register for the programme at any stage but must be operating the programme for 1.5 academic years from their new registration date before an application for a Green Flag may be submitted.

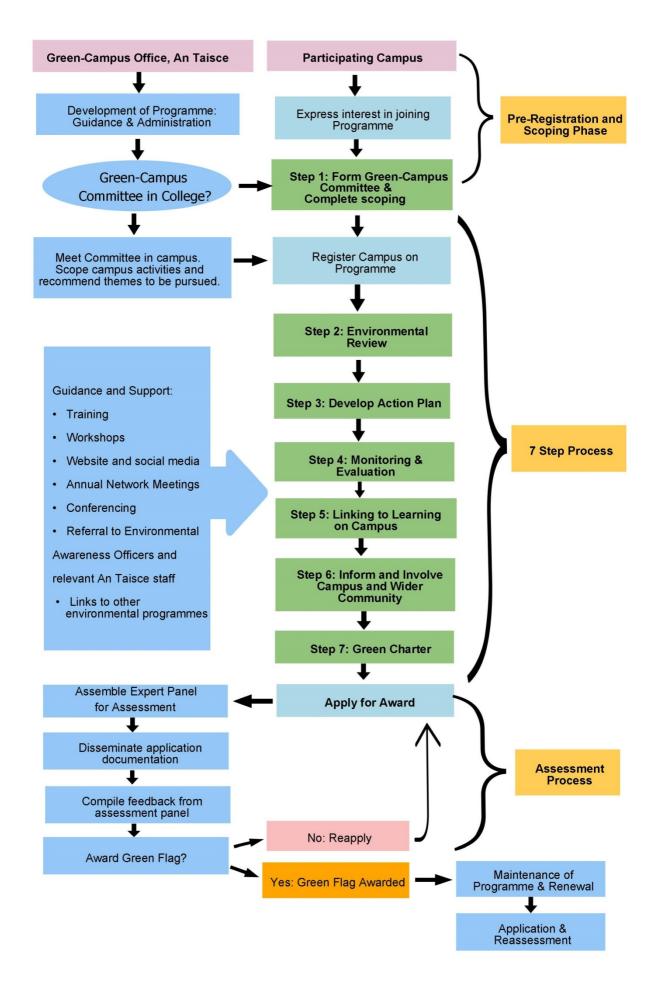


Figure 1: Green-Campus Methodology Flowchart

The Seven Steps of the Green-Campus Programme

The seven step process is intended to be flexible enough to accommodate any campus and each step should be implemented to suit the campus capacity at the point of implementation. The nature of the seven steps also allows for the Programme to be continually updated as the environmental status and the requirements of the campus change.

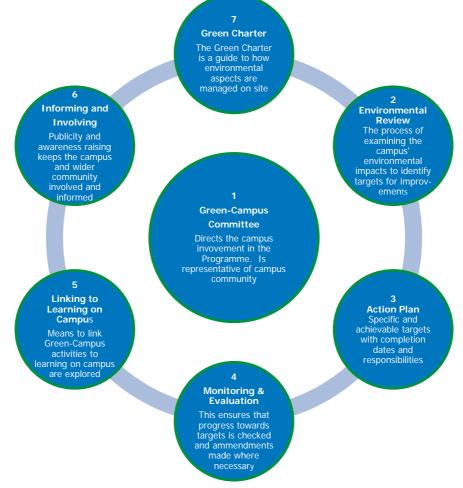


Figure 2: The Seven Steps of the Green-Campus Programme

Step 1: Forming a Green-Campus Committee

The first step of the Green-Campus Programme involves establishing a viable Green-Campus Committee, within the organisational structure of the institution. This may be linked to the constitution of the Students Union and/or Environmental Society or become an official statutory committee within the college. The chairperson and vice-chairperson should also have access to top level management. The committee should be as representative of the whole organisation as possible. It should primarily be made up of students (making up the majority of the committee members whenever possible) and should also incorporate a combination of academic and research staff, a member of the executive board or governing authority, non-teaching staff particularly building managers and those responsible for the facilities management onsite, contractors, and any other interested members of the campus and local communities. The Committee should remain open at all times to new members and should make meeting minutes and records available to new members.

The Green-Campus Committee aims to direct and address all phases of the Green-Campus Programme. It is the driving force of the Programme and should ensure that the other steps are carried out.

The purpose of the committee is:

- To ensure the views of all members of the college community are heard and acted upon where possible.
- To ensure the six other steps of the programme are successfully adopted and implemented.
- To give students responsibility and to ensure that their ideas are valued.
- To ensure the continuity of the Programme long term.
- To link the institution's campus community, the local community and stakeholders.

The committee may take different forms depending on the size and operation of a campus. However, the committee should be representative of all members of the campus community and should keep records of meetings held and decisions made. It is therefore important to circulate up to date information and eliminate out of date information.

For the committee to be effective and to enable decisions and directions to be actioned within the workings of the institution, it may need to be linked to the constitution of the college or the Students Union. The chairperson and vice-chairperson should also have access to top level management within the Institution. It may also be useful to co-opt

Hints and Tips

Social Media channels are no-cost, very easy to use and extremely student friendly! Assess your social media needs & Start а Facebook/Twitter/Instagram or Tumblr page for the Green-Campus *Committee and elect a committee* member or members to update and supervise it on a regular basis.

Store photos, maps and comments on a Flickr/Instagram page or other image management website. A Flickr page can be linked with a Facebook page to minimize the amount of time spent uploading images.

Encourage recording and photography of events: get other societies involved.

Google Documents, Dropbox and shared drives can be very useful to save files. Establish protocol early for data management. This will ensure smooth transitions from year to year.

internal environmental groups or societies and a Local Authority representative such as the Environmental Awareness Officer. Regarding size and operation, it should be remembered that there is no set formula or rules for a successful committee. The Green-Campus Office has further information on forming a committee. Remember to regularly invite members of the campus community to join the committee. A high turnover of students can be met by ongoing recruitment of new members from the student body.

The **Green-Campus Partner Programme** is aimed at service providers into the third level education sector looking to reduce the environmental impacts of their organisation's activities (both in house and relating to the specific service that they provide) and strengthen the relationship with their third level education clients. This programme is run by the Green-Campus office and contact should be made on <u>greencampus@eeu.antaisce.org</u> with any queries. You may consider service providers/contractors on your campus as potential candidates for the Green-Campus partner programme.

Case studies on Committees

GMIT Letterfrack Green-Campus have a representative who sits on both the local Tidy Towns group and the Green- Campus Committee in GMIT Letterfrack. This ensures that strong connections are maintained with their local community. The two groups regularly host joint events such as Home Composting Evenings and local clean ups and both groupswork to support each other in their efforts.

Ballsbridge College of Further Education: Membership and active participation on the Green-Campus Committee has for a large proportion of students become part of their required course work in Ballsbridge CFE. Students of Teaching English as a Foreign Language study a module called Business Management and a requirement of this module is to implement and monitor a change in their workplace. These students each year form the key group of the Green-Campus committee and are assessed on the work done implementing the Green Charter and the developments of the Green-Campus Programme for the academic year. This active involvement from students where there is a link to performance and assessment has proven quite successful in the CFE environment where students often attend courses lasting for one year only.

Scoping

The completion of a scoping exercise is required to register for the Green-Campus Programme. This scoping exercise is designed to assist Green-Campus Committees in maximising their efficiency in working on the Green-Campus Programme. The Green-Campus Programme encourages a partnership approach to environmental management in third level institutions to achieve improved and sustainable environmental stewardship. Therefore certain aspects of the Programme may require inputs from different sectors of the campus community. Scoping allows the committee to focus on the areas in which it will be most effective and efficient. It is recommended to start scoping prior to registration so that the members of the campus community identified can be brought on board with the committee prior to starting the Programme. It is assumed by the Green-Campus Office that the campus is in compliance with all environmental and planning legislation. Please contact the Green-Campus Office for a copy of the scoping guidelines. On completion of scoping, formation of the committee and once the approval of the head of campus is gained, the Campus can proceed to register on the Green-Campus Programme.

Step 2: Environmental Review

The aim of the review is to identify the initial situation on campus regarding the environmental management of the theme(s) under investigation. The results of the review are used to derive the action plan. The review helps to establish whether change is necessary, urgent or not required. It also assists in setting realistic targets and monitoring implementation. By thoroughly checking all potential environmental impacts on campus for the theme under investigation, the environmental review should:

- Provide a clear view of the range of the campus' impacts and establish a baseline.
- Ensure that significant areas are not overlooked.
- Identify areas where current practice is good or areas where current practices are lacking.
- Communicate the impacts to the campus community.
- Help to prioritise actions to be taken.

In order to gather the optimum amount of information needed for the environmental review, the Green-Campus Committee should have access to all data required and maintain strong lines of communication with the college management and various other branches within the college. The environmental review is a tool to ascertain issues, and is not an end in itself. It is likely that once you have identified an area that needs action you will have to do a more detailed analysis against which your targets can be measured, e.g. surveys of the how and where waste is generated or the differences in recycling levels across campus.

Case Studies Environmental Review

The first Intervarsity BioBlitz, held in May 2014, saw 5 campuses competing to record the greatest number of species on campus over a twenty-four period with NUI Galway emerging as the lead team. With training and online support from the National Biodiversity Data Centre, partners with Green-Campus on the programme, volunteers are equipped with the information necessary to carry out BioBlitz on their campus. Records are uploaded in real time, providing an exciting and engaging level of competition between campuses. Complimentary events over the twenty four hours such as bat, bird and plant walks, moth identification etc provide a further draw for volunteers to get involved. The Intervarsity BioBlitz is seen as an opportunity to initiate the biodiversity element of an environmental review and engage the campus community including specialists such as botanists and ecologists from within academic departments. It also provides practical experience for students of field based work.

It is important to work with buildings and facility management within the institution at this stage. There may be reports, data and monitoring records readily available. Table 2 outlines some issues to consider when undertaking environmental reviews.

Theme	Issues to Consider		
Litter and Waste	 Examine waste figures and undertake a waste audit. What kinds of waste are generated on campus? What waste prevention measures are employed? Are there opportunities for further waste prevention. Is recycling being optimised on site? Can additional items be diverted from landfill? The following website has some useful information on carrying out litter monitoring: http://www.litter.ie/# Assess the litter management on site. Are there litter black spots? Can heavy littering be connected to certain times of the academic year for example: open days, rag week etc? Often a litter problem is masked by very efficient litter management. Undertake a litter survey of the area under study and interview the personnel who maintain the grounds; they might suggest litter prevention ideas. What measures are in place for the prevention of waste in the first instance? Can these measures be enhanced or employed in other areas? Are the correct measures in place to dispose of all hazardous wastes (automotive wastes and oils, batteries, laboratory chemicals, solvents, paints etc.) correctly and are these procedures supported with relevant documentation? 		
Energy	 Establish if there is an energy management system on site. How is energy used on site? What sources of energy are used? (E.g. electricity, oil, gas, solid fuels, bio/renewable fuels etc.) Examine all types of energy use within the institution. Evaluate figures and metering. Establish high users. Undertake an appliance audit / survey. Involve all departments in focusing on behavioural changes in relation to energy use, to achieve further reductions. Examine the storage of fuel, oils, diesel etc. Ensure that fuel storage poses no environmental threat. 		
Water Conservation and Protection	 Establish if there is water management on site. Review the consumption information for the institution. Is water metered and how is it metered? Is there a leak detection programme in place? Where is water used? (Examples include swimming pools, gyms, accommodation, cleaning and cooking, laboratories, irrigation etc.) What are the high users? Undertake an audit/survey where possible. Laboratories can be high use areas especially with vacuum pumps and DI water systems. Are there opportunities to form a demonstration project? Are there natural water courses and sources on site? How are these protected from environmental damage or risk? 		
Travel & Transport	 How is travel to and from the college managed? What are the main travel and location issues? Undertake a travel survey to establish the modes of transport used. This survey should be designed to be repeatable at regular intervals. How are goods and services delivered to the campus? Are there ways to reduce deliveries to/from the campus? Can linkages be made with local authorities and transport authorities with the aim of promoting sustainable modes of transport for those travelling to and from the 		

Biodiversity	 Establish if the campus is located in or nearby to a designated area such as a Special Protection Area (SPA), a Special Area of Conservation (SAC) or a Natural Heritage Area (NHA)? This information is available from the National Parks and Wildlife Service (NPWS). Make a habitat map of the campus or of particular areas within the campus grounds Investigate grounds management methodologies, especially the use of herbicides, pesticides, fertilizers, water use for irrigation etc. Explore biodiversity enhancement opportunities such as those suggested in the All Ireland Pollinator Plan 2015-2020 Investigate risk of invasive species introduction and methods to prevent or manage a potential or existing problem.
Green ICT	 Establish if there is an onsite department with responsibility for ICT management and consider how the Green-Campus Committee can engage with that department. Note: the ICT department may be located off site. The ICT department may already have useful information to contribute such as: the amount of equipment in use on site, estimates on the numbers of personal electronic devices being brought onto campus, scale of equipment no longer in use and average tonnage per year, current procurement policy in relation to software, ICT hardware, WEEE etc. Establish some common goals between your committee and the ICT department: for instance how can the Green-Campus Committee assist in promoting behavioural change in relation to reducing the environmental impact of ICT on site

Table 2: Factors to consider when undertaking environmental reviews

It is important to gather reliable quantitative data at this stage so that monitoring and evaluation can easily be carried out. This baseline data is very valuable as it can be used over time to compare progress made by your committee. The committee should decide on an appropriate set of environmental performance indicators to assist in the monitoring of initiatives set in the action plan. Environmental performance indicators should be clear, transparent and comparable. Examples of environmental indicators for waste commonly used by campuses:

- Kg waste per annum per full time equivalent (FTE) student.
- Kg waste per course.
- % of waste materials recycled.
- Kg of waste prevented per FTE student.

The environmental review can also become a participatory learning process enabling the committee to get more people involved at an early stage without requiring specialist knowledge.

Further assistance can be accessed by contacting the Green-Campus Office.

Step 3: Action Plan

Information gleaned from the environmental review is used to identify priority areas and create an action plan. Action planning involves setting achievable and realistic targets and deadlines to improve environmental performance on specific issues by listing a number of agreed activities, along with deadlines and clearly allocated responsibilities for each action. Where possible, action plans should be linked to learning on campus, show any cost implications, and specify arrangements for monitoring and evaluation. The action plan is continually amended to reflect the findings of subsequent monitoring and evaluation.

Do not be tempted to be too ambitious at first as this can be overwhelming and failure to realise unrealistic expectations can lead to disappointment. Not all points raised in the environmental review have to be tackled and it is better for the action plan to have realistic and achievable goals set within achievable timeframes. Success increases confidence and builds enthusiasm for setting new targets in subsequent years of the Green-Campus Programme.

All of the actions described on the action plan do not have to be carried out at the time of application, as some goals are long term and require long term action to achieve their aim. However it is important to document and demonstrate that actions have taken place and indicate the progress of actions regularly.

Quantifiable targets should be set where possible e.g. 50% reduction in waste to landfill in 6 months, 100% recycling of aluminum cans in 8 months, 10% reduction on electricity consumption from previous year, etc.

The sample action plan (Table 3) describes the actions taken by a Green-Campus Committee to achieve one of their goals in a clearly defined step by step process. The action plan should, if possible, be linked to college curriculum work and have realistic and achievable goals. It is crucial to work out how you will monitor and measure your progress and this should be integrated into your action plan. Try to involve all the committee members in the development of the action plan, and as much of the institution as possible in its implementation.

Goal: To increase the level of recycling by 10% by the end of 2014; To improve awareness and promote use of facilities on campus and to significantly reduce the level of waste going to landfill.

Action	Person/Group Responsible	Time Frame	Status
Installation of clean dry recyclable bins in restaurants and offices	Buildings Office	Aug 2016	COMPLETE
Installation of four experimental clean dry recyclable bins in outdoor thoroughfares	Buildings Office	Aug 2016	COMPLETE
Marketing campaign to increase awareness & promote use of recycling facilities.	Environmental Society & Green- Campus Committee	Feb 2017	Ongoing
Establishment of website providing information on recycling and waste status in the college	Buildings Office	Mar 2017	Ongoing
Change Waste contractors to capture food before landfill	Buildings Office	April 2016	Ongoing
Re-evaluate waste status by carrying out further waste audit	Environmental Society & Green-Campus Committee	Autumn 2017	Ongoing
Improve signage on bins as they have not been used correctly in last month of monitoring	2 Volunteers from Green-Campus Committee will check and re-label bins	Oct 2016	Ongoing
Include waste recycling signage in student induction pack next year	Buildings and Estates & Student's Union	Summer 2017	Upcoming

Table 3: Sample Action Plan

In summary, your action plan should:

- Be developed from the results of your environmental review.
- Contain realistic and quantifiable goals and targets with time frames, where possible. These goals should be displayed at the top of the action plan.
- Be in table format (as above sample), identifying action, person or group responsible, and the time frame for completion.
- Be displayed on your Green-Campus notice board & web page.
- Include regular monitoring, and should be a 'working document' to be updated if and when necessary, (monitoring and evaluation will be discussed in the following section).

Case Studies on Action Planning: A long term project

Project: Establishment of a 5 acre Native Woodland in Letterfrack, Co. Galway

Collaborators: GMIT Letterfrack, Connemara West, Connemara National Park and the local community.

In 2013 the Green Campus Committee of GMIT Letterfrack initiated collaboration with Connemara National Park to establish 5 acres of Native Woodland. With support from 'One Million Trees in a Day' and the Department of Agriculture Native Woodland grant, over 3,000 saplings were planted in the grounds of Connemara National Park by students and staff of GMIT, Connemara West, Connemara National Park, Green Belt and community members. A number of additional plantings took place over the following two years to restock the woodland with continuous maintenance to help the tress get established. The species planted include Alder, birch, whitethorn, guilder rose, holly, pendunculate oak and scots pine. The site will be hugely important to support biodiversity in the area, will play its role in carbon sequestration and will also act as a learning environment for students and the wider community.

In the coming years GMIT Letterfrack will develop resources to ensure that the potential of the woodland is maximised from an educational perspective. Ireland imports approximately 95% of hardwoods consumed each year and this project helps students of GMIT Letterfrack, who specialise in the use and manipulation of wood in furniture design and technology projects, to understand how trees and forests develop and how long it takes for trees to mature. It is hoped that thinings, and later mature timber, from the woodland will be extracted to demonstrate how sustainable forestry can work in local environments, supporting local communities.

Step 4: Monitoring and Evaluation

Monitoring and evaluation are used to assess progress made towards achieving targets identified in the action plan and to identify areas that require further corrective action. Corrective action is a rapid and adequate response to problems which either solves the problem or moderates the negative effects and prevents the problem from occurring again. Monitoring and evaluation also enhances whole college awareness by highlighting the successes of the actions undertaken. Monitoring and evaluation should be developed in tandem with the action plan. Monitoring is vital for identifying areas in your action plan that can be improved upon and amended. This aids performance and feeds back to further actions and new goals. It is important to ensure that the whole campus is aware of your progress by displaying any results and figures prominently on campus (e.g. on your Green-Campus notice board, newsletters, website, etc.).

In summary your monitoring and evaluation programme should:

- Be developed in parallel with your action plan.
- Be carried out by the students when and where possible in conjunction with internal college management.
- Use the same unit of performance as for your environmental review to allow comparison with initial figures.
- Feed back into your action plan to identify areas for adjustments and improvements to be made when and where necessary.
- Increase the likelihood (or reduce time required) for achieving goals formulated in your action plan.
- Be publicised (e.g. display graphs, charts, etc. on your Green-Campus notice board, newsletter, social media etc.).

Environmental performance indicators should be clear, transparent, and comparable and relate back to findings of the review.

Case Studies Monitoring and Evaluation

In University College Cork, the monitoring of items like waste disposal, energy, and water use is undertaken by the Buildings and Estates Department. This data is communicated at Green-Campus Committee meetings in order to analyse and compare data against established targets. Transport and Travel is monitored by the Commuter Manager, who is also a member of the committee.

Galway Mayo Institute of Technology, Mayo has established within the committee systems for monitoring and evaluation. For instance the monitoring of energy use and water use allows the committee to identify when the heating system has been drained and refilled. The committee are thus not alarmed by increased water consumption (and do not assume there is a leak) when it is known that the system is under maintenance.

Step 5: Linking to Learning on Campus

Environmental topics studied as part of certificate, degree and master's programmes should influence the way the whole college operates. Opportunities exist within Green-Campus to make learning links into a range of subjects at many levels. The Green-Campus Programme can involve the use of research findings, student projects, student and staff induction, and the use of many departments to produce posters, videos, applications, surveys etc.

Areas such as Engineering, Science, Environmental Science, Geography, Arts all encompass environmental based subjects. However some campuses have gone further and have successfully developed links between the Green-Campus Programme and learning on campus where subjects available are less obviously linked to environmental issues.

There are numerous benefits for the campus in engaging in this type of learning. It develops investigative, problem led learning with real results and outcomes. This in turn provides valuable graduate attributes and real life experiences for students. The Green-Campus Programme should be integrated through as many subjects and courses as possible and be used to inform the campus community of environmental issues and to inform actions. Ultimately, graduates from an educational establishment that is involved in the Green-Campus Programme should be aware of the steps that can be taken to ensure that they are environmentally responsible throughout their future career.

Case Studies on Linking to Learning on Campus

Ballsbridge College of Further Education: Students studying Teaching English as a Foreign Language, Marketing, Business and Word Processing all interact with the programme through various modules in their coursework. In Business and Marketing courses the concept of Corporate Social Responsibility is covered in both business and marketing modules. The Green-Campus programme is discussed as an example of Corporate Social Responsibility in action. Marketing students also become involved in the Green-Campus programme as they aid in the design of the environmental awareness survey for students to complete each year. In Ballsbridge CFE approximately 80% of full time students are required to take word processing as part of a module on the FETAC Level Five courses. This module requires students to complete documents, letters and posters as part of the exam. Exams/coursework in Ballsbridge CFE can have an environmental theme and can address the Green Charter of Ballsbridge College.

Step 6: Informing and Involving the Campus and Wider Community

The aim of the informing and involving step is to spread the Green-Campus Committee's message throughout the campus and the wider community through ongoing publicity and at the very least a 'Day of Action'. Most campuses have a Green Week already established. It is important to also focus on what is happening on campus as well as the threats to the local and national environment. Make Green Week an opportunity for students, staff and the wider community to get together to work towards achieving some of the targets set out in the action plan. On some campuses the 'Day of Action' has been carried out in conjunction with local or national projects (e.g. Tidy Towns, National Spring Clean, Energy Awareness Week, Tree Week, Bike Week, etc.).

Informing can be achieved by:

- Placing a dedicated Green-Campus notice board in a prominent position for staff, students and other visitors.
- Ensuring that a Green-Campus webpage is constructed which is easily accessible for students, staff and visitors. Use this website to publish the "Green Charter" (see step 7).
- Including information on Green-Campus in first year information packs and staff induction programmes.
- Creating a specific Green-Campus newsletter that could be circulated to students or inclusion of Green-Campus articles for the campus newspaper.
- Allowing time in staff meetings to announce success in achieving targets, or for staff to present their research and results. The Students' Union, staff and class representatives can announce success in achieving targets or provide opportunities for students to present their research and results.
- Looking for other novel ways to spread awareness of Green-Campus.
- Making use of local press and radio where possible.
- Making visitors to the campus aware of Green-Campus

Involvement can be enhanced by:

- Using a whole-campus day of action or a longer-term community project to raise awareness of Green-Campus within and beyond the campus.
- Offering opportunities for people to contribute to Green-Campus: e.g. through volunteer events, becoming an energy or waste champion in their department etc.

Involvement of the wider community brings benefits in both directions. Neighbours, local businesses, schools and the local authority can all be drawn in to provide advice and practical help. It is important to ensure that actions and events organised for the Green-Campus Programme are well publicised. This helps ensure maximum participation from the different groups involved.

Case Studies on Informing and Involving

The Green-Campus Committee at Trinity College Dublin has uploaded a publicly accessible version of their Action Plan in their dedicated section of the TCD website (Google search: 'Trinity Green Pages'). Also included in the Green Pages section are: a quick introductory video to the Green Pages, details of the Green-Campus Committee, how to get involved and contribute to activities and an explanation of the environmental aspects of the Green Campus and College sustainability programmes onsite and more. Most importantly, the website includes suggestions for simple steps (divided into themes) that every member of the campus community, including the thousands of transient visitors, can take to help reduce their environmental impact.

<u>National Spring Clean</u>: Many Green-Campus Committees join forces with local community groups to take part in this annual clean up which can raise positive publicity for the college within the local community when the clean-up is extended beyond the college gates and into the local community.

Step 7: Green Charter

The Green Charter is essentially a "this is how we do things here" guide to environmental management on site. Most organisations will have a substantial Environmental Policy in existence with specific policy statements related to waste, energy, water and other environmental issues. This is often a large document and not easily remembered by staff or students.

The Green Charter may contain an environmental policy but essentially it should be a concise guidance document on how environmental issues are handled on campus. It should include contact details for the Green-Campus Committee, targets from the action plans and best practice guidance specific to the campus. Often there is a dearth of environmental information available to students/staff. The Green Charter should be a space on the website accessible to those that use the campus, students, staff and visitors, where environmental information can be published and, more importantly, updated.

The Green Charter is designed to be compiled after the action plan has been implemented and the monitoring and evaluation steps have been carried out. In short, the differences between an environmental policy and the green charter are the former is an expression of what the campus intends to do and provides assistance at the

strategic/management level; the latter is the means by which the campus community can achieve the aims through specific advice and information.

The Charter should be displayed somewhere prominent (e.g. your Green-Campus notice board and web page). Awarded sites are required to display their committee's Green Charter on the college website. The Green Charter needs to be updated as required.

Assessment Process

In order for a campus to apply for the Green Campus Award the campus must be registered on the Green-Campus Programme for at least 1.5 academic years and have all seven steps of the Green-Campus Programme implemented. The campus must have a sustainable functional committee in place. In order to be eligible to apply for the award the campus needs to demonstrate (at a minimum) that:

- 1. A Green-Campus Committee, representative of the campus community has been established and meets on a regular basis.
- 2. An environmental review has been undertaken, which clearly indicates the environmental impact of the college for the theme(s) undertaken.
- 3. An action plan with realistic and manageable goals has been developed from the review, with goals partially or fully achieved.
- 4. The progress towards achieving these goals has been monitored and displayed.
- 5. The Programme has been integrated with the college curriculum when and where possible.
- 6. The whole college has been updated on the progress of the Programme and has been involved to some degree. A "day of action" should be part of this process.
- 7. An appropriate "Green Charter" has been written, adopted, and displayed.

The Green-Campus Committee submits a written description of the implementation of the seven steps of the Green-Campus Programme on campus. The Campus that is applying for the Green Flag is facilitated in its efforts by the Green-Campus Office. Guidance is provided to the campus on compiling their application. Versions of the application can be reviewed and feedback and recommendations can be made by the Green-Campus Office prior to official submission of the application by the committee. The official application is then distributed to the assessment panel and an assessment assembly date is agreed. The Green-Campus Officer becomes the facilitator for the assessment process rather than a member of the assessment panel. Further guidance on the application and assessment processes are available from the Green-Campus Office.

An assessment panel is chosen by the Green-Campus Office. The panel members are selected based on the themes undertaken by the Campus under assessment. The assessment panel may consist of staff from the Environmental Education Unit at An Taisce, FEE and independent assessments with specific knowledge and experience.

The assessment assembly affords the Green-Campus Committee an opportunity to present the work undertaken on campus. The committee may present the implementation of the Programme through talks, demonstrations, tours, video and other media. A tour of the campus featuring the work of the Green-Campus Committee has proven to be a highly effective means of demonstrating the implementation of the programme.

The panel is offered the opportunity to provide oral feedback to the Green-Campus Committee at the assessment assembly. The Green-Campus Officer requests written feedback from the assessment panel no later than 3 weeks after the assessment assembly.

Renewal and Reassessment

Each campus that has been awarded the Green Flag is required to renew every year. To achieve this, the campus must demonstrate that it has maintained achievements, and built on them by expanding the original programme, addressing new action areas and setting and meeting new targets.

The annual renewal process between receiving the first flag and applying for the second is similar to the initial application process that the campus has already gone through, although in brief. The campus is reminded that it must undergo a full reassessment 3 academic years following the initial Green Flag Award, and following two successful annual renewals. The Green-Campus Office contacts all awarded campuses with the renewal form and sets a date for submission of reports. The requests are sent at the beginning of May and the closing date for reports is set at the 1st July. The benefits of undergoing the renewal process are:

• Maintaining the focus of the Green-Campus Committee.

- Updating of the Action Plan and Green Charter.
- Alerting the Green-Campus Office to any concerns arising or issues that are likely to arise over the coming months.

Once a Green-Campus Committee receives the Green Flag it is obliged to then take on at least one new theme. This can be a brand new theme or a theme that has been examined in only a minor way in their previous application. Three years from receiving the Green Flag Award and providing that two successful annual renewals have been achieved, the campus can apply for the next Green Flag Award.