Campus Sustainability Toolkit

No two Universities are exactly alike and the development of campus sustainability programs will inevitably reflect institutional and regional issues/priorities. Therefore, an effective toolkit must be broadly designed and promote discussion that encourages organisations to reflect on its total environmental impact. It then needs to present examples of governance structures and programs that have been successful in influencing institutional and individual behaviour.

This toolkit reflects the experiences of the IARU members and is built on 6 steps. These steps are not prescriptive and should only be seen a guide to assist in developing a comprehensive sustainability that suits a particular campus.

1. Mapping current situation and developing a governance structure

The underlying goal of a campus sustainability program should be to mainstream environmental management into the operational and academic activities of the University.

An appropriate governance structure should be established ? which is supported by Executive Management and representative of the campus community. Concurrently, an review of current environmental arrangement on campus should be completed. This includes identifying current resources and funding being invested in campus environmental management as well as, finding any programs that may have been established at local levels. These may present opportunities to integrate existing activities into a corporate program and build on the early success of departments and students.

Resources:

Mainstreaming Environmental Management
University of Copenhagen Steering Committee Structure

2. Measuring environmental impacts

Identify all key activities that impact on the University environmental footprint and establish measures to determine the level of that impact. These data will be critical in identifying the critical areas and building strategies to improve environmental performance. This section provides resources and examples for developing a carbon/greenhouse emissions inventory.

Resources:

Carbon Inventory Template
Standardising Greenhouse Calculators
Climate Planning Guide - AASHE
Transportation Survey Template (UC Berkeley) - Template can be adapted for use by other institutions

Case Studies/Examples:

Green Results and Indicators - University of Copenhagen
Internal Measures to Increase Sustainability of ETH Campus

3. Integrating campus activities

There are significant benefits in integrating campus activities ? effectively taking an holistic approach to campus sustainability. Examples of this would include: building a relationship with contract staff to ensure that they assist in achieving environmental goals (cleaners turning off lights; maintenance contractors identifying poor environmental practices on campus etc); establishing environmental projects that allow campus operational staff to collaborate with academics working in the sustainability areas (using technology

developed by the University in University operations; operational staff participating in teaching activities); working with student bodies on campus sustainability projects (establishing fellowships/internships; supporting specific student programs).

Resources:

Developing a whole of University approach to educating for sustainability: Linking Currriculum, Research and Sustainable Campus Operations

Case Studies/Examples:

Student Sustainability Forums (Yale University)
Engagement and Collaboration ? University of Copenhagen

4. Determining goals and a strategy for the process

Develop an underlying policy framework that articulates the University?s overall commitment to environmental improvement and leadership. This policy should then be extended into a plan or plans that direct the campus sustainability initiative by identifying goals/targets to be met by the University as well as providing strategies on how these goals will be achieved (eg. a series of projects that are directly linked to achieving the environmental targets).

Resources:

Zeroing in on Sustainability ? (Paper on complexity of goal setting ? Yale Office of Sustainability)

Case Studies/Examples:

Energy and Climate Goals ? University of Copenhagen
Greenhouse Gas Reduction Commitment ? Yale University
Cal?s Climate Action Target ? UC Berkeley
ANU Environmental Management Plan
Cambridge Climate Charter ? University of Cambridge

5. Establishing strategies to create a sustainable campus

Campus sustainability is a product of engineered solutions and behaviour change. The latter is covered in more detail in the Education and Awareness Section below.

The policy and planning framework mentioned above provides a foundation for the operational and cultural changes that are needed to mainstream sustainability.

From an engineered solutions perspective, the University needs to establish appropriate standards for design of buildings and equipment, as well as, integrating campus infrastructure to achieve relevant environmental targets. There is also a need to identify those issues that may actually be blocking any meaningful changes. For example, environmental infrastructure (recycling bins, air conditioning controls; reporting procedures of environmental problems) must be easy to use and procedures well understood by the community.

The community needs to understand the environmental impact of individual and corporate decisions and how alternative decisions would substantially improve that performance. Various strategies can assist in building this awareness, including annual reporting, direct access to online information about energy use, water consumption etc or hardcopy and electronic media (posters; websites; published papers etc).

Resources:

Solar Cell Energy generation ? Daily Meter ? Yale University
Comparison International ESD Building Rating Schemes ? IARU Countries

International ESD Building Design Assessment Criteria
Labs for the 21st Century
APPA Sustainability Guide
Green Workplace (See Sustainability@work-SEE SAW) - ANU
Project Manager's Guide to energy and water efficiency measures in University buildings (The Energy Consortium (Education) - UK)

Case Studies/Examples:

Green Lighthouse ? University of Copenhagen
Science City ? ETHZ
Organic Recycling Project ? ANU

6. Education and Awareness

An informed and ecologically literate campus community will drive institutional change. The intent is to build from making community members aware of environmental issues to educating them about how they can influence environmental performance through behavioural change. A literate community also understands the holistic nature of environmental issues and therefore, the variety impacts that come from simple decisions related to purchase, travel, technology and personal comfort. The strategies for developing an aware and ultimately educated community might include:

- Staging of community activities (eg. sustainability fairs, swap meets, celebrate sustainability days; ride or bus to work days etc)
- Including sustainability briefings in induction programs
- Formal education programs for staff (ranging from function specific workshops for groups such as purchasing officers, finance   officers and fleet/travel managers to post graduate studies in campus sustainability)
- Student learning communities
- Acknowledging success (eg. Awards, internships, public recognition)
- Public reporting on University environmental performance and achievement against goals

Resources:

Work based sustainability programs ? ANU
Energy Efficiency Posters ? University of Oxford
What is climate change - Yale resource
Cambridge Program for Industry

Case Studies/Examples:

Sustainability Learning Community ? ANU
Sustainability Awards ? UC Berkeley
Climate Lectures ? University of Copenhagen
Climate Leadership Programme ? NUS

IARU Campus Sustainability

- Australian National University
- ETH Zurich
- National University of Singapore
- University of Peking
- UC Berkeley
- University of Cambridge
- University of Copenhagen
- University of Oxford
- The University of Tokyo
- Yale University

Campus Sustainability Networks

- Australasian Campuses Towards Sustainability (ACTS)
- International Sustainable Campus Network
- Northeast Campus Sustainability Consortium (NECSC ? USA)
- Association for the Advancement of Sustainability in Higher Education
- Network of Networks (University of Tokyo) ? Networks for Sustainable Campus
- UK Evironmental Association of Universities and Colleges

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