

At a glance

Cork Institute of Technology established a sustainable campus programme at its Bishopstown campus. The integrated programme involved all areas of sustainability from energy and water consumption to solid waste and resource use, as well as raising environmental awareness. The programme involved baseline auditing, installation of appropriate monitoring equipment, prevention opportunity assessment, options generation and projects implementation and monitoring.

Some key results

- The programme is significantly raising awareness on campus;
- Solid waste generation was reduced by 12% per student and recovery rate was increased by 17%, following the installation of a new recycling system across campus;
- Electricity kWh usage per student was reduced by 5.5% despite the increase in activity, facilities and buildings on campus;
- Water consumption decreased by almost 4%;
- CO₂ emissions generated from electricity consumption were reduced from 314 kg per student to 122 kg per student;
- Paper usage was reduced by 4.6% per student
- Combined total savings of €458,582 since beginning of project.
- Two Green Hospitality Awards

These reductions have obvious environmental and economic benefits for the Institution and the local community.



Picture 1: The Department of Tourism & Hospitality Studies at CIT receives the Gold level Green Hospitality Award

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CIT's Sustainable Campus Programme



Cork Institute of Technology Rossa Avenue, Bishopstown, Cork

With over 12,000 registered students and 1,544 staff, Cork Institute of Technology (CIT) caters for both full and part-time study as well as many evening and weekend courses. CIT has expanded rapidly over recent years, and now encompasses a mix of new and older buildings.

Aims of this project

The programme aims to significantly raise environmental awareness in the Institute among staff and students, which will lead to long term sustainability on campus. The programme aims to identify and implement improvement options to reduce energy, water, solid waste and resource use at the campus, and to disseminate the cleaner greener production message to the broad audience of staff and students. Implementing a sustainable campus programme will help ensure that long term reductions result, leading to continual improvement and sustainable development.

Project description

Since 2009 Cork Institute of Technology has established a Sustainable Campus Programme at its Bishopstown campus.

It is an integrated programme involving all areas of environmental management from energy and water consumption to solid waste and resource use, as well as raising awareness. This successful programme has a high level of replicability, not just across all other third-level Institutions, but all public sector organisations.

Outcomes

The programme is significantly raising awareness on campus among the staff and student body. These reductions have obvious environmental and economic benefits for the Institution and the local community.



Picture 2: Water conservation awareness poster

The College Canteen became the first third-level canteen in Ireland to receive the Green Hospitality Award and the Department of Tourism & Hospitality received the Gold level award. It is hoped that Sustainability will be built into the daily lives of students and staff at CIT.

Total economic savings of €458,582 (of which €353,885 were from more favourable electricity rates from a new supplier) and projected savings of €389,682 for 2011.

The project will continue at CIT after the funding from the EPA's CGPP has ceased.

Key achievements

A guide book "How to Green Your Campus or Workplace - A Step by Step Guide" was produced based on the results of the programme and disseminated widely across other third level institutions, local authorities and other public sector organisations. (<http://www.greencampuscit.ie/index.php?menu=&id=9&nid=86>)

Savings made

- Implementation of separate food waste bins well in advance of the Food Waste Regulations (diverting 39 tonnes of food waste from landfill in 2010);
- Reduction of solid waste by almost 8% despite the increase in student numbers by 5%;
- Increased recyclable recovery rate by 17%;
- Campus BER rating improved by a full grade from a D1 in 2009 to C1 in 2010;
- A reduction of 1293 t CO₂ emissions (54%) to the atmosphere compared to the previous year
- Electricity bills were significantly reduced (€353,885)*

**Much of these savings were made by switching to a different supplier with cheaper rates.*

Actions to produce savings

- Many old inefficient lights were replaced in corridors with energy efficient fittings and sensors installed;
- Student Centre lighting replaced 44 x 400W metal halide fittings with 22 x 90W and 22 x 30W frontline LED fittings (saving €15,040 annually);
- 63 timers were fitted to heaters, extraction and light fittings;
- 100 LED flood lights (90W) replaced the old 400W flood lights around the campus;
- CIT's gas bills reduced by 36% with a financial saving of €4624 in the first 3 months
- Water flow rates in one building were reduced by 80%

Recognition for the programme

- Achieving two Green Hospitality Awards
- Final stages in the Sustainable Energy Awards 2010
- Shortlisted for the Green Awards 2011
- Green Campus CIT featured on the RTE Eco-Eye programme.

Other activities

- Waste awareness day was held;
- Zero waste meal was prepared by the students as part of the European Week for Waste Reduction (EWWR) events reducing waste generated by 35% of the industry norm;
- Developing a new uniform recycling system across campus;
- Installation of an electronic vehicle point on campus (1st in an Irish third level organisation)

Academic activities

- Introduction of a new sustainability module for fourth year students at CIT in Environmental Management.

Lessons learned

The programme has replicability, not just across all other third level institutions, but all public sector organisations. Improving sustainability of all aspects of our lives, not just conventional production processes is important. All campuses should endeavour to operate in the most sustainable fashion possible and have the opportunity to promulgate the message widely.

Gaining support and commitment are the first steps to a successful Sustainable Campus Programme. Buy in from top management is hugely important for a successful programme. A sustainable campus programme is an integrated programme combining the involvement and education of the student and staff body to help reduce the consumption of resources on campus.



Picture 3: Electrical vehicle point launched at CIT

More information

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The **Cleaner Greener Production Programme (CGPP)** of the EPA is funded under the National Development Plan 2007-2013. The CGPP was launched in 2001 as a grant scheme to fund Irish organisations to implement cleaner greener practices while achieving significant cost savings.

Cleaner Greener Production is the application of integrated preventive environmental strategies to processes, products and services to increase overall efficiency and reduce risks to humans and the environment.

Production processes: conserving raw materials and energy, eliminating toxic raw materials, and reducing the quantity and toxicity of all emissions and wastes

Products: reducing negative impacts along the life cycle of a product, from raw materials extraction to its ultimate disposal.

Services: incorporating environmental concerns into designing and delivering services.

The programme aims are focussed on avoiding and preventing adverse environmental impact rather than treating or cleaning up afterwards. This approach brings better economic and environmental efficiency.

The CGPP is funded by the EPA STRIVE and NWPP programmes

Additional case studies from companies that participated in CGPP are available on our website (www.cleanerproduction.ie), including:

- A full technical report for each project
- Programme brochures, summarising all projects funded under CGPP

More information on CGPP is available from the EPA:

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