



**Dublin City University**

**Campaign toward a Sustainable  
Campus/University**

**25/11/2015**

# DCU Strategic Plan & Sustainability



## Transforming Lives and Societies

- Develop and implement a comprehensive Environmental Sustainability Strategy.



## **PROPOSAL:**

**DCU Sustainability Council** is drawn from all parts of the University and should represent all Academic and Operational Areas in the University

# Teaching and Learning Out/In Reach



## Business School

M.Sc. in Business Management  
Graduate Certificate/MSc in  
Sustainable Energy Finance  
MG334 : Business & Society

## Humanities and Social Science

B.Sc in Education & Training  
MA in Education & Training  
Management  
MA in Development  
MA in Ethics

Teaching and Learning @ DCU

## Science and Health & Oscoil

BSc in Horticulture  
BSc in Environmental Science  
M.Sc. in Management of Clean  
Technologies  
M.Sc. in Manage. for Sustainable Dev.  
M.Sc. in Manage. of Operations

## Engineering and Computing

Grad Cert/M.Eng. in Electronic  
Systems

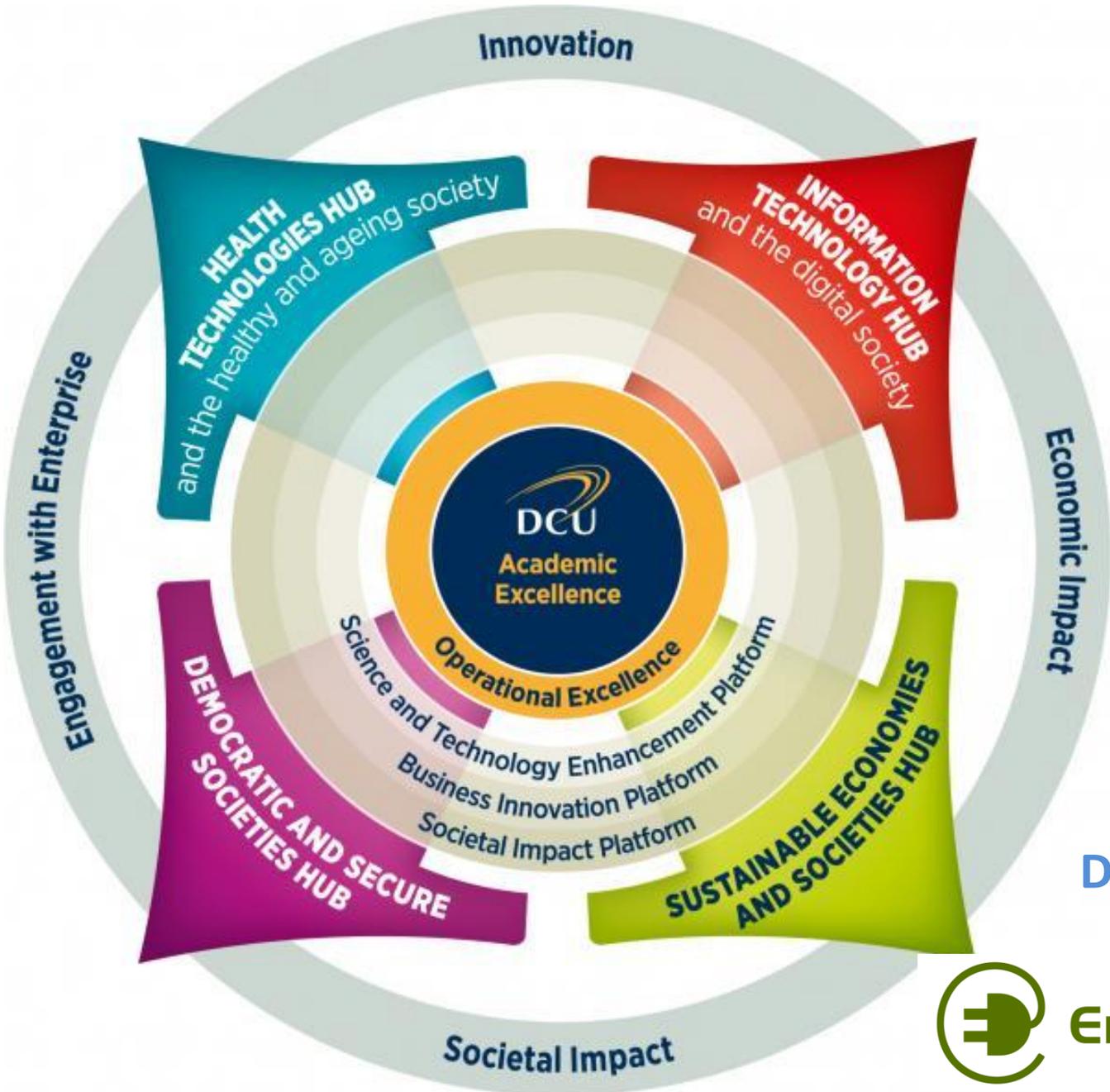
# Regional Centre of Expertise (RCE) Dublin in Education for Sustainable Development (ESD)



UNITED NATIONS  
UNIVERSITY



**FIGHTING WORDS**  
**THE WRITE TO RIGHT**

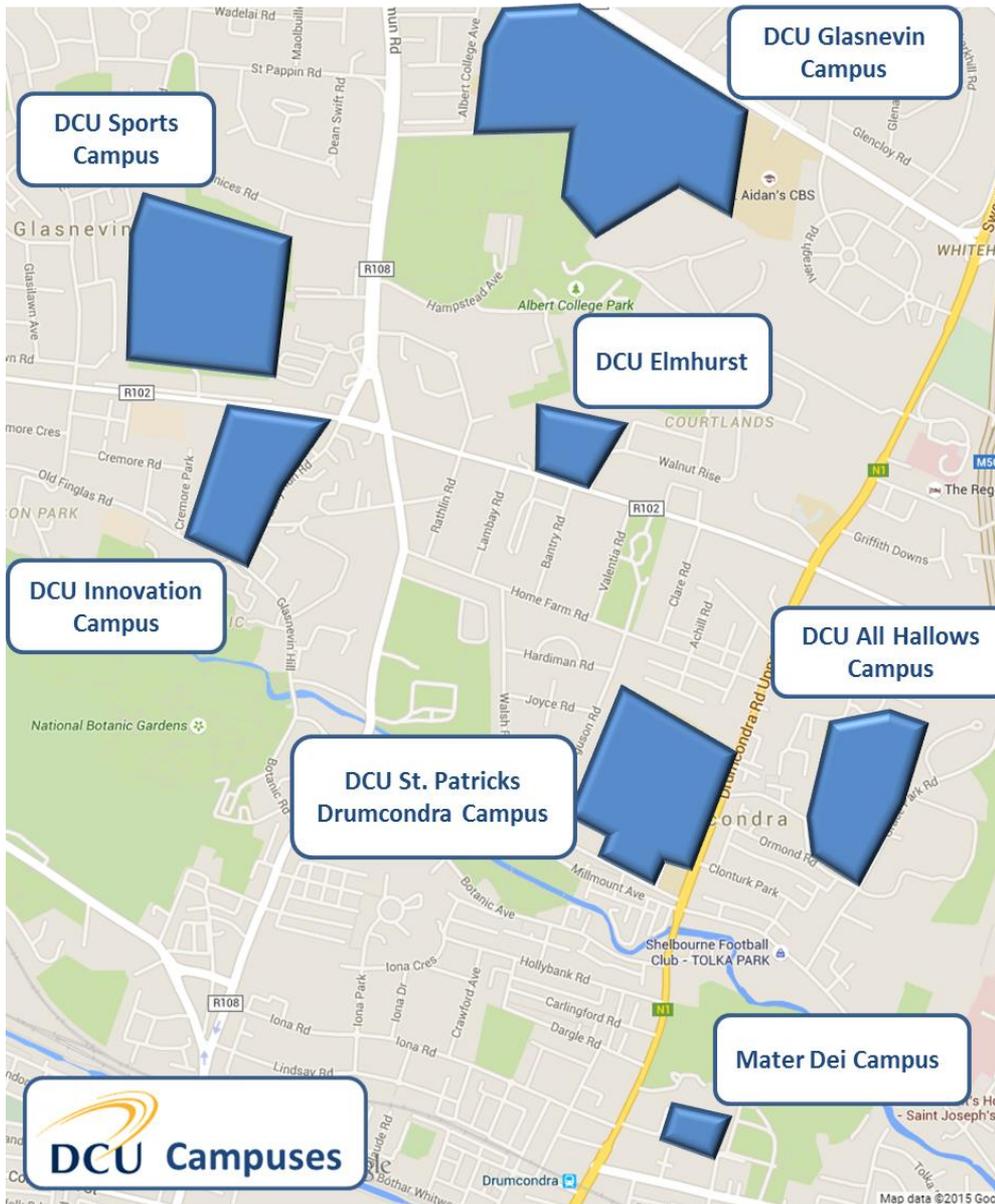


DCU Innovation  
Cleantech Campus

DCU Water Institute

 Energy Design Lab

# Campuses



**Post Incorporation  
Sept 2016**

**Students : 16,000  
Staff : ca 1,600**

# Campaign toward a Sustainable Campus



- Green Campus Programme
- Energy Water Waste Biodiversity & Transport
- Awarded in July 2014, renewed June 2015



## Sustainability Motion

The DCU SU amended its constitution to include sustainability :2.1.6 To promote an ethos of environmental sustainability within its operations.



# 2020 Energy Targets



Energy Costs

EnPI Benchmarking

Savings Benchmarking

Renewable Energy

CO2 Emissions

Project Energy Savings

Energy Savings: 30.7% improvement

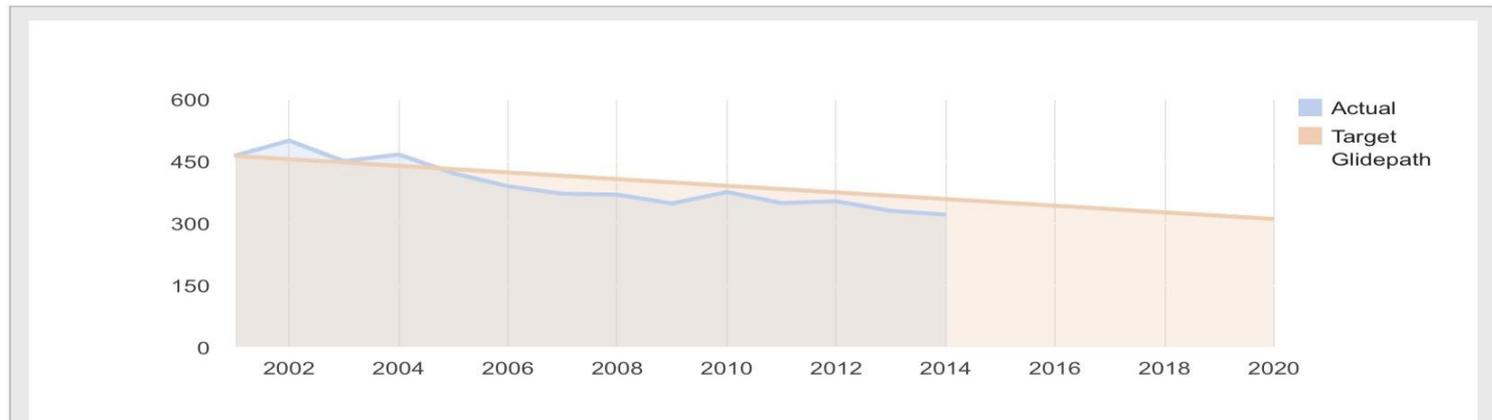
Change in Energy Consumption: 6.4% lower



## Energy Performance Indicators - 2014

2014 EnPI = 321  $\frac{\text{kWh}}{\text{Equivalent Floor Area (m}^2\text{)}}$

Target EnPI = 311  $\frac{\text{kWh}}{\text{Equivalent Floor Area (m}^2\text{)}}$



2.7% better than 2013

30.7% better than baseline

3.3% improvement required by 2020

10.5% better than target 'glidepath'

## Level 2 Energy Performance Indicators (2014)

Electricity = 3,705  $\frac{\text{kWh}}{\text{FTE Students}}$

Thermal = 1,604  $\frac{\text{kWh}}{\text{FTE Students}}$

Transport = 13  $\frac{\text{kWh}}{\text{FTE Students}}$

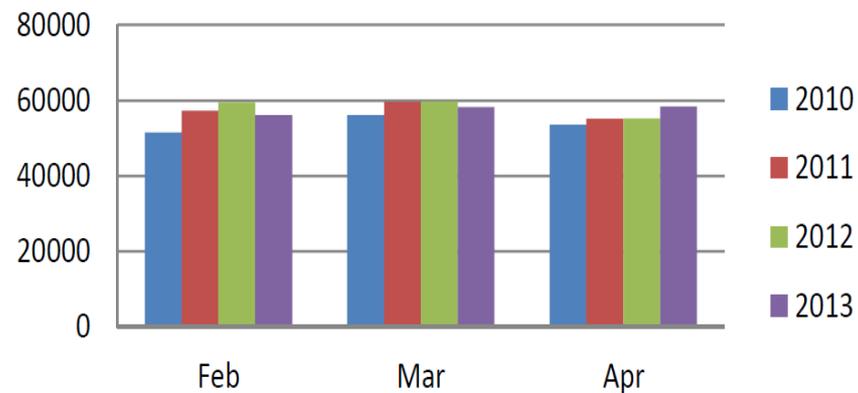
Tell me more



# Energy



HUB Monthly Electricity Usage (kWh)



## Demonstration in DCU Community Garden

- Solar
- Urban Wind Turbine
- Biogas
- Hydrogen !



# Waste



## Bin your Butt!



Cigarette butts leach toxic chemicals into the soil and waterways that are used to produce our food and water. Please don't litter your butts – they are NOT biodegradable!

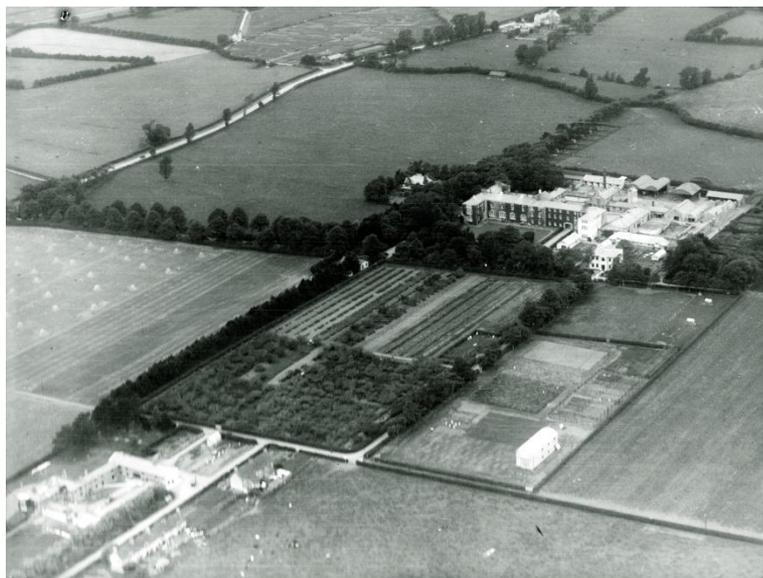
Thank you from the DCU Green Committee



# Water



# DCU Community Garden



The DCU Community Garden aims to

- Open inclusive community garden
- Opportunity for education and training
- Space for joint and shared learning across communities
- Living lab garden for the demonstration of new and innovation solutions to local and global issues, social, cultural, economic and environmental.



# Current Engagements

- **Community Employment x 3 (Ballymun Welfare Rights)**
- **Tus Placements (TAP) x 5**
- **Membership** – Student/Staff & Community - small but growing – all time based
- **Marks and Spencers** – Spark Something Good (Sept 2015)
  - 6/8 Volunteers (€500)
  - Clearing fruit bushes, mulching, herb plots, garden map
- **Deloitte** (June & Sept 2015)
  - w/ An Taisce Green Communities
  - 15/20 Day 1 10/15 Day 2
  - Pond, Digging beds, planting beds, clearing, mulching...
  - Possibility help with skin for second poly tunnel next time (2016)
- **An Taisce Green Communities**
  - Moth Night (Sept 2015)
- **Central Remedial Clinic (Clontarf)**
  - Under discussion

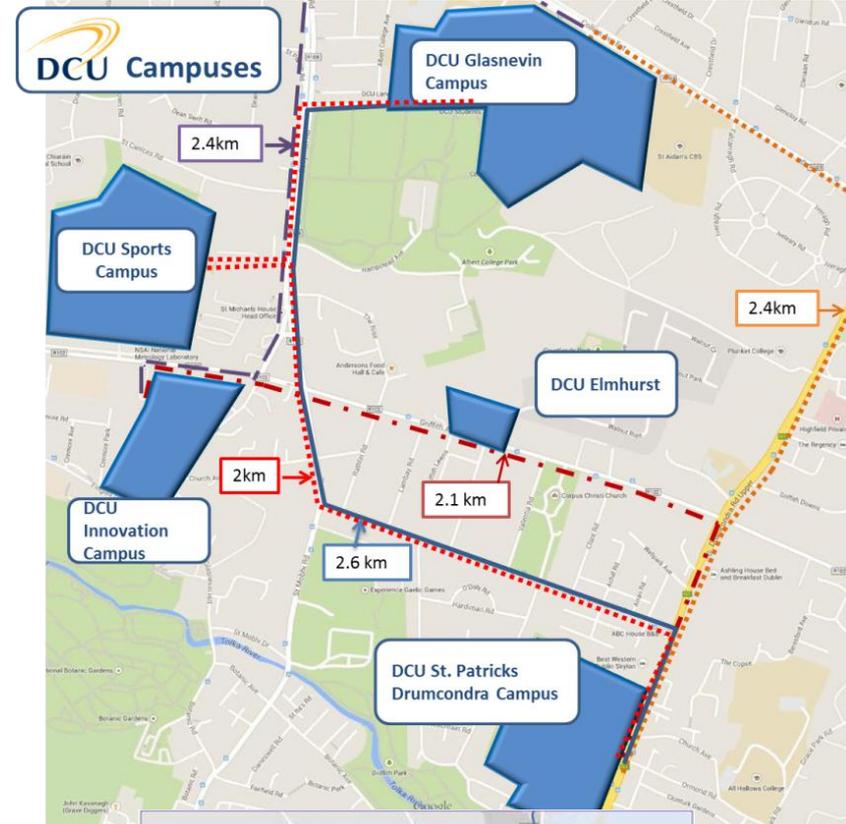
# Current Engagements



- Research/Final Year Projects
  - Soil Analysis : James Platt w/ School of Chemistry
  - Garden App : Kevin Mc Mahon w/ School of Computing
  - Solar panels : Alex Conlon w/ School of Electronic Engineering
  - Honey Bees : Saorla Kavanagh w/ School of Chemistry
  - Horticulture Histories w/ RCE Dublin
  - Site for Bio-refinery (seaweed) application under consideration by EI Commercialisation Fund : Silvia Tedesco w/ School of Mechanical Engineering
- DCU Restaurant
  - Food from the DCU Community Garden used for ASU visit
  - Need to agree longer term engagement rules

# Transport

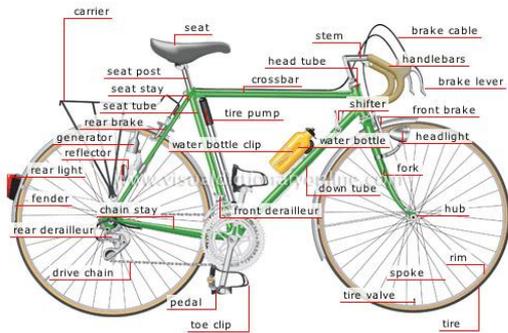
- DCU Mobility Management Plan
  - 90% sustainable commuting
  - Efficient high capacity public transport service
  - Sustainable inter-campus commuting
  - What we would like/need :  
High capacity efficient direct campus service – Metro North



smartertravel >>>  
>>> campus



## Active Transport



## Inter Campus Bicycle Scheme

- For University Staff
- For Intercampus commuting
- For free

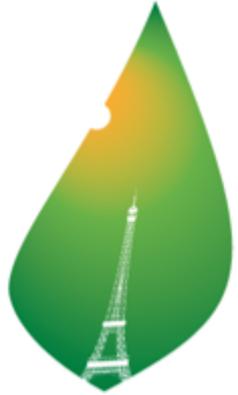
[www.dcu.ie/info/walking\\_cycling.shtml#DCUICBS](http://www.dcu.ie/info/walking_cycling.shtml#DCUICBS)

# Transport – Public Transport

- Dublin Bus – increase buses & frequency
- Private buses – Newbridge/Naas, North Dublin



# ICCC – COP21 – Paris 2015



United nations conference  
on climate change

COP21/CMP11

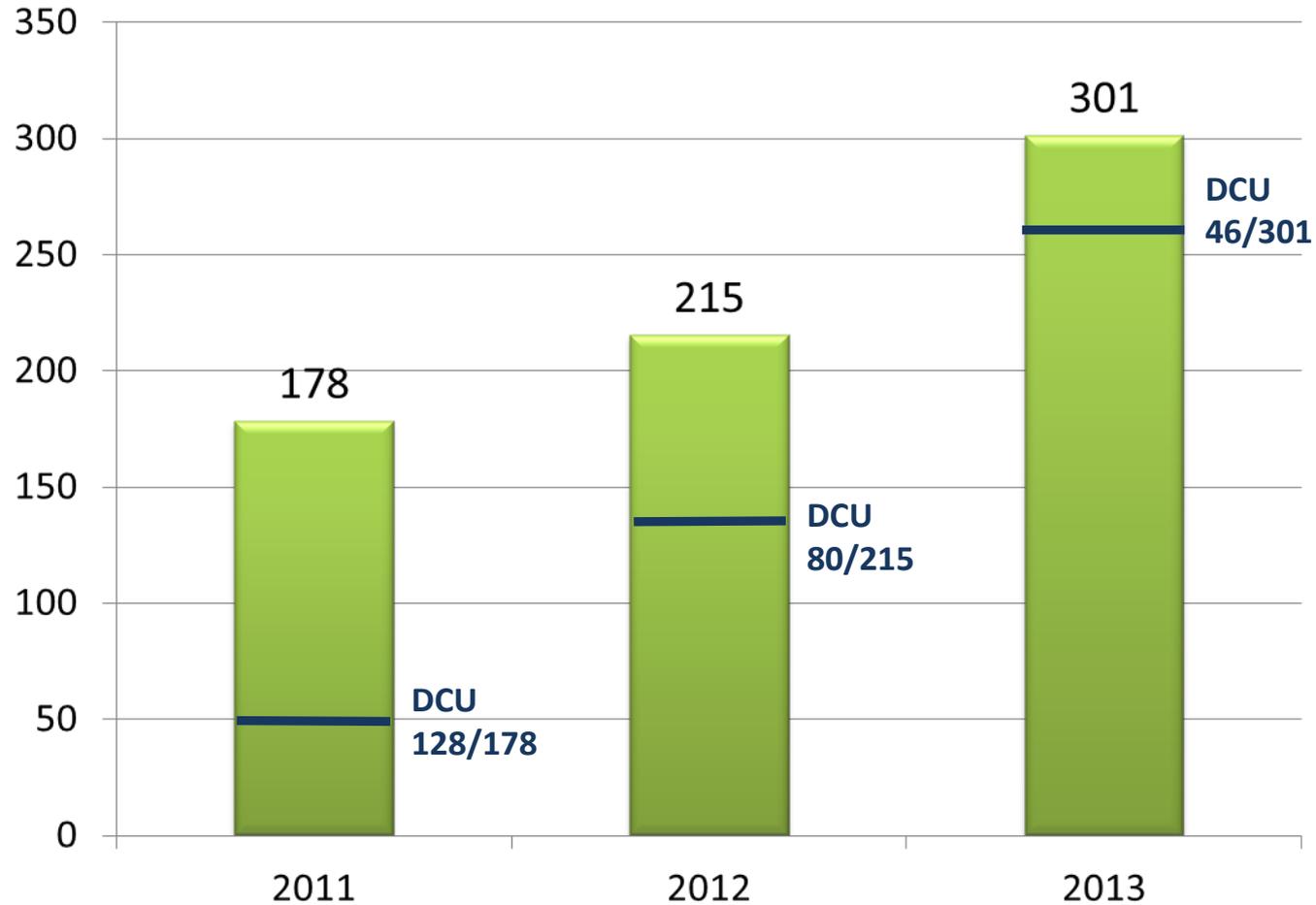


- Incorporation COP Simulation
- Climate Chats
- Sustainability public event (Q1 2016)

***Thank you***

***Contact : [sustainability@dcu.ie](mailto:sustainability@dcu.ie)***

# DCU in UI Green Metrics



# DCU Objective



# Management of the Garden



# DCU Programme Projects



- Biodiversity Database



- Waste in Residences

- Water in Sports Complex



- Community Garden