**LOCAL CHALLENGE PROJECT 2020: ACCELERATING THE SDGs**

**DESIGN CURRICULA FOR A RESILIENT 21ST CENTURY**

**DUBLIN, IRELAND**

**SDGs CONSIDERED:**

1. **Sustainable Development Goal and Target 4.7**

   By 2030, ensure that all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and of culture's contribution to sustainable development.
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Sustainable Development Goal and Target 8.4
Improve progressively, through 2030, global resource efficiency in consumption and production, and endeavour to decouple economic growth from environmental degradation, in accordance with the 10-Year Framework of Programmes on Sustainable Consumption and Production, with developed countries being the lead

Sustainable Development Goal and Target 4.4
By 2030, substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship

OPENNESS & INCLUSION; using transparent ICT tools to deliver transformation to a student centred curriculum

THE METRICS (Project Impact: Stage 2)
5 no. Programme Year frameworks agreed
63 no. People engaged in transparent digital online Peer Review Process of Architectural Design Studio Project Briefs for 2019/20
1 no. 5 year Action Plan Matrix to embed SDGs into the Bachelor of Architecture programme

FUNDERS:
Dublin School of Architecture
PROJECT TEAM:
School of Architecture Lecturers in Architecture and Architectural Technology at TU Dublin

SDGs CONSIDERED:
4-8-11-13-15-17

PROJECT: EDUCATION
STATUS: IN PROCESS

PROJECT TEAM:
School of Architecture Lecturers in Architecture and Architectural Technology at TU Dublin

LOCAL PROJECT CHALLENGE 2020 is a partnership between the Center for Sustainable Urban Development, The Earth Institute, Columbia University, and the Faculty of Architecture, Federal University, Rio de Janeiro.

Jennifer Boyer, Orna Hanly, Emma Geoghegan, the Architectural Student Association of TU Dublin, Students of the Bachelor of Architecture programme of TU Dublin, and the Dublin School of Architecture TU Dublin, Accenture, RKD Architects

One additional recommendation that came from students in May, was the establishment of our own campus in Linenhall to act as a test-bed and pilot for the wider TU Dublin in establishing a Green Campus and seeking Green Flag status in turn by recognition.

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1st (ever) Green House Committee established in Linenhall campus, a student, lecturer, management, and operations committee to establish Green Flag Status on the campus site for the Dublin School of Architecture

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Mike Haacke and Brian O’Brien

Assistance of the EU through the Interreg IV-B Cross Border Programme Irish Republic and Northern Ireland 2007-2013

FINANCING:
Dublin School of Architecture

PARTNERS:

Dublin School of Architecture

LOCAL PROJECT CHALLENGE 2020 is a partnership between the Center for Sustainable Urban Development, The Earth Institute, Columbia University, and the Faculty of Architecture, Federal University, Rio de Janeiro.
Sustainable Development Goal and Target 13.3

By 2030, ensure that all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and of culture's contribution to sustainable development.

We began the first day of classes on September 16th, 2019, together, all 338 of us, and we discovered that we alone could not do it. We learned that the problem was not in the hands of a privileged group of decision makers, but in all of us. We learned that the problem is complex and the solutions are not simple. We learned that the problem is global and the solutions must be global. We learned that the problem is urgent and the solutions must be urgent.

What do you hope for the year ahead? What do you fear? We are all on a journey, a learning journey, together. Where we will take this journey, we don’t know. But we will not let anyone take us off the road. We will not forget our new charge. We will not forget our new charge. We will not forget our new charge.

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DUBLIN, IRELAND

4/6

DESIGN CURRICULA FOR A RESILIENT 21st CENTURY
EDUCATION

PROJECT: EDUCATION

SDGs CONSIDERED:
4 - 8 - 11 - 13 - 17

STATUS: IN PROCESS

Encourage and promote effective public, public-private and civil society partnerships, building on the experience and resourcing strategies of Sustainable Development Goal & Target 17.17

THE METRICS (Project Impact: Stage 4)
21 no. vertically mixed student teams
32 no. hours donated by experts from practice
10,000 euro donated by DSA Partners to deliver Climate Camp
876 online votes cast in ‘live’ voting for best Climate Camp projects
1 no RIAI President presenting awards
3 no. trees to be planted in Grangegorman (TU Dublin Campus) in recognition of the winning project teams

CLIMATE CAMP - In October, the Vertical Project week was planned as a ‘Climate Camp’ experience. The objective of the Climate Camp is to educate students about how to create sustainable architectural innovations and to become responsible global citizens (GOAL 4, Target 4.7).

Students worked in groups throughout the week to propose architectural design solutions within our local community (Dublin City) that have the potential for universal application. Each group of students ‘camped’ in portions of the large studio spaces in Linenhall to collaborate and design their projects. Submissions were collected on Friday morning, and shortlisted for presentation by students on Friday afternoon. Awards were given by the three distinct juries (students, lecturers, and guest panel). A local reception in the city centre followed. The Climate Camp week was punctuated with project breaks where students joined specialist workshops and attended talks given by guest speakers in the Linenhall Gallery space. Replacement stations (bring your own cup!) were located throughout the camps.

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SUSTAINABLE CITIES AND COMMUNITIES

11

Sustainable Development Goal and Target 11.2
By 2030, provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons.

Sustainable Development Goal and Target 11.7
By 2030, provide universal access to safe, inclusive and accessible green and public spaces, in particular for women and children, older persons and persons with disabilities.

THE METRICS (Project Impact: Stage 5)

12,000 fewer cars entering into Dublin City Centre
450 more public bicycles available
8% increase in ‘heart health’ across Dublin City population
22% decrease of CO2 emissions in Dublin City Centre
19% increase in public green spaces in Dublin 1 & Dublin 2
40,000 more public transport users / LEAP card holders
1 clean River Liffey

UNLOCKING THE URBAN FABRIC: STUDENT DESCRIPTION

What would our cities look like if the pedestrians ruled the streets and cars were only the guest? How would people live and connect together in a city not divided by super motorways and dangerous roads? What would a modern-day city look like if cars didn’t exist?

It may not be realistic in today’s world to suggest that we can get rid of cars completely in a city that relies so heavily on them, but we feel that with the correct plans in place with a vision of a cleaner, safer city, we could collectively phase private motor vehicles out of city life.

Currently, a lot of city planning is built around transport and mainly private transport. A change in attitude in the public and in the government is needed if this is to be successful. A more positive plan for people and spaces rather than just cars and traffic. Our states should belong to the people, to the cyclists, the joggers and to the street vendor. If you design for cars and traffic, you will get cars and traffic. If you design for people and spaces, you will get people and space. The pedestrian street, the public space, where there are no cars or vehicles are always the most lively and energetic places. People can move more freely, they can stop and chat, there is more potential for interaction. More interaction means a more connected space and a space more connected is a happier space to be in. We propose what it looks like so we can start to picture the future of our city.

Dublin School of Architecture TU Dublin, Faculty of Health and Wellbeing, RIAI Sustainability Taskforce, Sustainable Energy Authority Ireland (SEAI), Grangegorman Development Agency, Irish Green Building Council
Jennifer Boyer, Orna Hanly, Emma Geoghegan, the Architectural Student Association of TU Dublin, Students of the Bachelor of Architecture programme of TU Dublin, and the Dublin School of Architecture Lecturers in Architecture and Architectural Technology at TU Dublin

FUNDERS:
Dublin School of Architecture TU Dublin, Faculty of Health and Wellbeing

PROJECT TEAM:
Dublin School of Architecture TU Dublin, Faculty of Health and Wellbeing

LOCAL PROJECT 2020 2021 is a partnership between the Center for Sustainable Urban Development, The RIAI Student Network, and the Faculty of Architecture, Federal University, Re de Lwem.
Sustainable Development Goal and Target = 15.5
Take urgent and significant action to reduce the degradation of natural habitats, halt the loss of biodiversity and, by 2020, protect and prevent the extinction of threatened species.

This student project responds to Dublin air quality and aims to improve the overall air quality of Dublin City. The Bio-Beacon towers are intended to filter and mitigate the existing heat island effect within the city. They are modular towers inhabited by flora and fauna, intended to filter the air in the city. They can be scaled to fit a variety of sites, from bus stops to vacant lots. They feature a modular nature and simple method of construction, these towers can be adapted to any environment (with minimum supervision to ensure they are completed correctly).

A key feature of these towers is that they will feature series of small LED lights that indicate the quality of the surrounding air. Each tower would feature a small number of LEDs, with a fully lit tower indicating good air quality, a half or quarter lit tower would mean poor air quality. This aims to encourage surrounding residents to make wiser choices about their everyday actions – i.e. leave the car at home and walk or cycle instead to improve air quality and decrease air pollution. By engaging with passers-by and their local communities, the towers would serve as a visual connection to the environment. In turn they could begin to act as new markers for meeting and navigating throughout the city.

In looking to see how this idea might be expanded upon, the simple method of construction and versatility of locations that the Bio-Beacon project could be adapted to any environment in a far more sustainable and integrated method than most. Dublin and Ireland could lead the charge in this field that could see Bio-Beacons sprout up all over the world.