

GREEN ROOF POLICY

Proposer: RAG Chair, Karandeep Dhanoa

*Seconders: Deputy President (Education and Welfare), Kirsty Patterson;
Thomas Post, Aleksander Zikic.*

Introduction

A project is currently being investigated to have a Green Roof installed at Imperial College. The aim is to have one of the existing roofs resurfaced with a student designed ecosystem.

The project proposes that the surface of the roof is replaced with a waterproofing layer, a growing medium and an ecosystem, otherwise known as a Green Roof. This roof would be designed by students as part of their coursework. For example Biology students would be required to design the ecosystem, Mechanical Engineering would be required to design a watering system, Civil Engineering would be needed to work out weight restrictions etc.

ICU Council Notes:

1. A Green Roof has a number of benefits over a conventional flat roof.
2. A Green Roof has a significantly longer lifespan of approximately 30 years than a conventional flat roof.
3. Currently the flat roofs at College are surfaced with layers of gravel (or similar) and will require maintenance (replacement) every ten years or so.
4. Air quality will be improved by the extra plant life which will help to remove CO₂ and pollutants from the air around the roof.
5. The roof will reduce the volume of runoff during heavy rain and remove some pollutants in any excess storm water.
6. The roof can use recycled water, provided it is clean e.g. runoff drinking water, in irrigation techniques.
7. The roof will provide better insulation, reducing the urban heat island effect and allowing for heating to be turned down.

ICU Council Further Notes:

8. A number of Imperial College London Academic Staff have taken a keen interest in the project with a view to incorporating it into design work for undergraduate students.
9. The design and implementation of the project could be brought about by collaboration across different faculties and departments.
10. The project involves techniques and skills required from undergraduates in Biology, Mechanical Engineering, Civil Engineering and could include more.
11. Interested staff members currently include:
 - I. Professor Nigel Bell, Environmental Pollution and Director of MSc Environmental Technology
 - II. Andy Oliver, Fourth Year Co-ordinator, Department of Mechanical Engineering
 - III. Dr. Richard J Murphy, Department of Biology
 - IV. Dr. Steven Cook, Department of Biology

ICU Council believes:

1. A Green Roof will create a new outdoor space which could be used as an amenity area for the college and its students
2. Putting a Green Roof on top of a building will help replace other green areas that are being destroyed in the city due to development projects.
3. A Green Roof Project will create a good image for the college and show support for environmentally friendly initiatives.
4. Students will benefit academically from the project, either through direct involvement or from the continuing environmental message which it will send out to our populace.
5. Imperial College London, which is at the forefront of research in areas such as environmental technology, should be leading the sector in terms of environmental initiatives.
6. The Green Roof Project is the type of innovative engineering that will make Imperial stand out in its field and inspire and encourage future students to choose Imperial College for their degree programme.
7. The Grass is always Greener on the top of a building.

ICU Council Resolves:

1. To endorse the Green Roof Project and give it the backing of Imperial College Union.
2. To mandate the Deputy President (Education and Welfare) to draft a proposal to the College with the help of the RAG Chair and other interested parties.
3. To mandate the President to Champion the proposal to key members of College Staff.
4. To publicise the Green Roof Project to Imperial College Students and Staff to raise awareness and gather support for the project.
5. To mandate the Deputy President (Clubs and Societies) to encourage the involvement of Clubs and Societies, especially affected DepSocs and those with environmental interests.