



**Università
degli Studi
di Torino**



UniToGO

UNIVERSITÀ DI TORINO
GREEN OFFICE

Green as a decision-making driver for planning infrastructures and actions

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The University of Turin: a complex organisation

7 territorial poles

Agriculture
and Veterinary
Medicine



Medicine
Orbassano
and Candiolo



Management and Economics

Luigi Einaudi
Campus



Humanistic
Studies



Natural Sciences



Medicine Torino



about **80.000** people

27 Departments

120 buildings

8 extra-metropolitan
locations

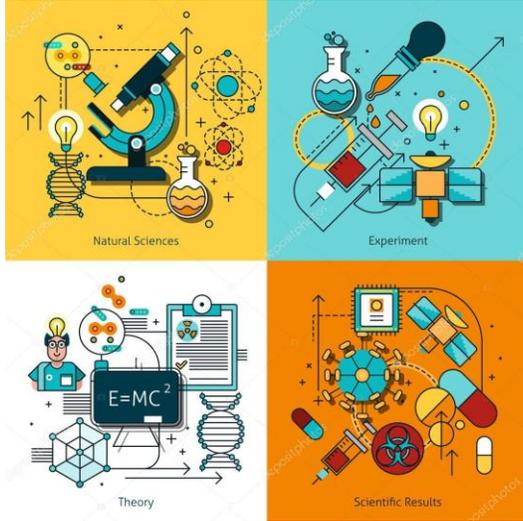
+ of 1 million of
m²



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The University of Turin: a complex organisation



Natural sciences and technology



Life sciences and medicine



Sustainability as a core value (Strategic Plan 2016-2020)

From 2013 Sustainability Report

From 2016 creation of the UniTO Green office (UniToGO)

Environmental Sustainability Action Plan 2018-2020

The main actions concern...



Food

to improve the quality & sustainability of food



Mobility

to encourage sustainable mobility



Energy

to improve energy efficiency & decrease consumption



Green Public Procurement

to increase the amount of green purchases



Waste

to enhance separate waste collection & improve waste management

The goal **is to reduce the environmental impact of the University**, involving and engaging the entire community.

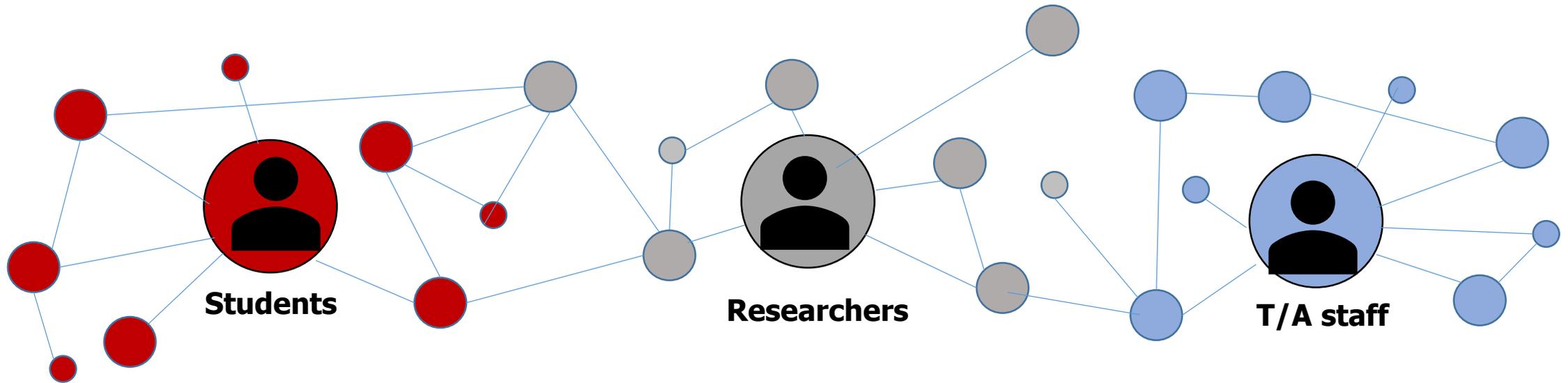


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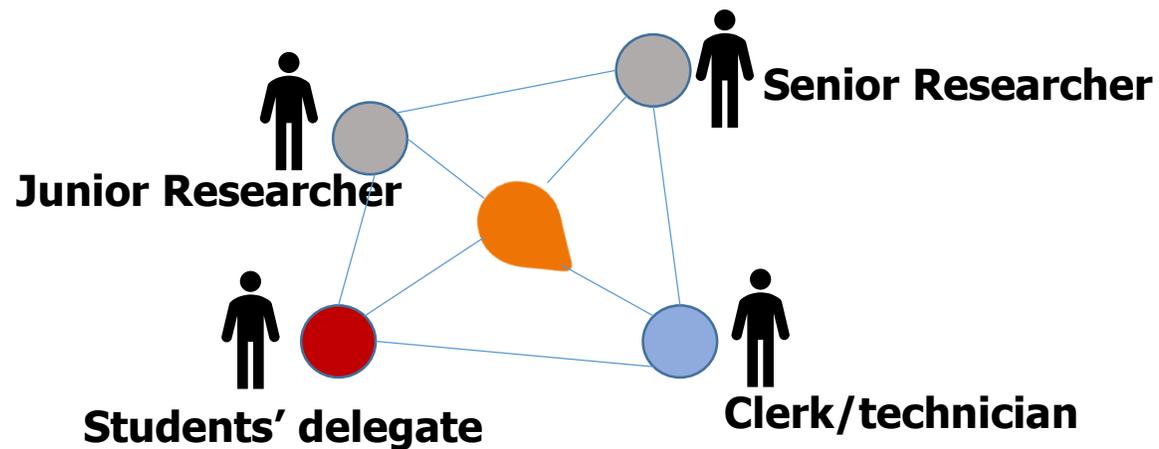
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UniToGO: how does it work?



UniToGO Working Group: how does it work?

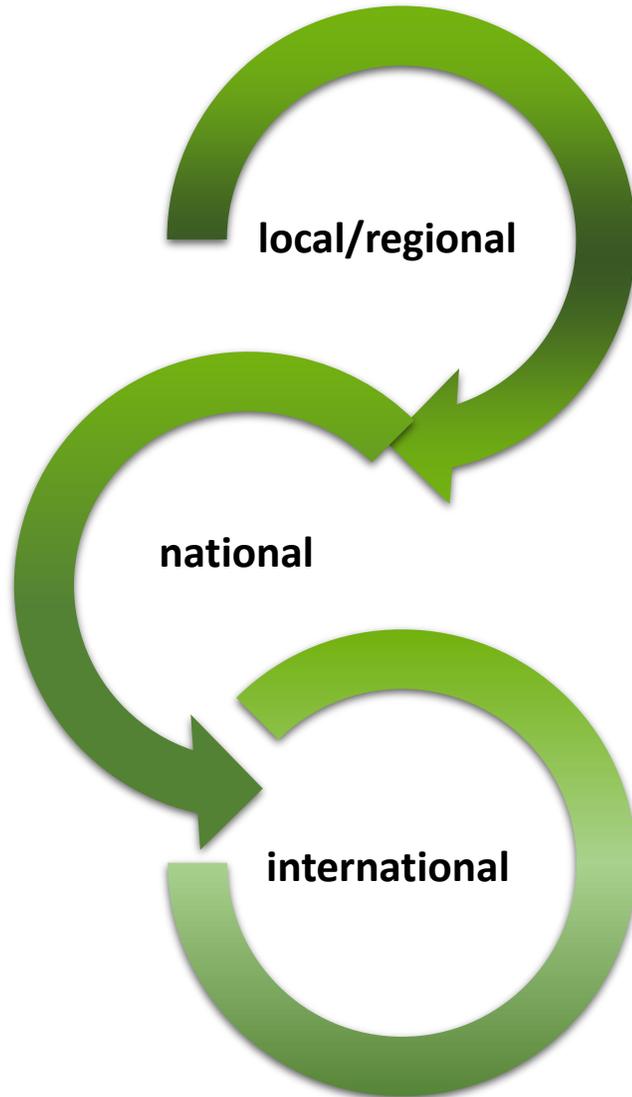


N. Tecco elaboration 2018



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UniToGO: a network of wider networks



N. Tecco elaboration 2018



The Environmental Sustainability Action Plan

- **know:** build a shared base of knowledge on the environmentally sustainable initiatives launched within the University of Turin and about possible areas of intervention, and about good practices through the analysis of literature and current research, with particular attention to the experiences of sustainable universities and campuses in Italy and abroad;
- **engage:** intensifying networking activities within the university and with relevant stakeholders at local, national and international scale. Through a capillary communication the engagement actions aim at engaging in the activities of UniToGO all the interested subjects and at transferring and sharing scientific and technological knowledge with the local actors;
- **change:** design and implement interventions aimed at effectively reducing the environmental impact of the University. The actions aim to enhance the existing university context and identify areas of intervention to improve the Athenaeum environmental performance, starting from the concepts of rationalization and reduction of consumption, materials recycling and procedures optimization



A concrete realized experience of sustainability: **vending machines, a participative and eco-innovative tender process design**



SPP Regions was aimed at promoting the creation and expansion of European regional networks of municipalities working together on sustainable public procurement (SPP) and public procurement of innovation (PPI).

The 7 networks involved in the project regional networks collaborated directly on tendering for eco-innovative solutions, whilst building capacities and transferring skills and knowledge through their SPP and PPI activities also in the sectors of food and catering services.

Within this H2020 project, UniTO has taken the opportunity to fundamentally rethink its vending machines concessions requirements in order to stimulate eco-innovation and to explore alternative procurement approach.



UniToGO VM inspiring principles:

THE TENDER GOALS

HEALTHY AND
SUSTAINABLE FOOD



a wider snack food supply,
thanks to the presence of
healthier products

FAR-REACHING
PRESENCE



a widespread presence of
the vending machines
across the University

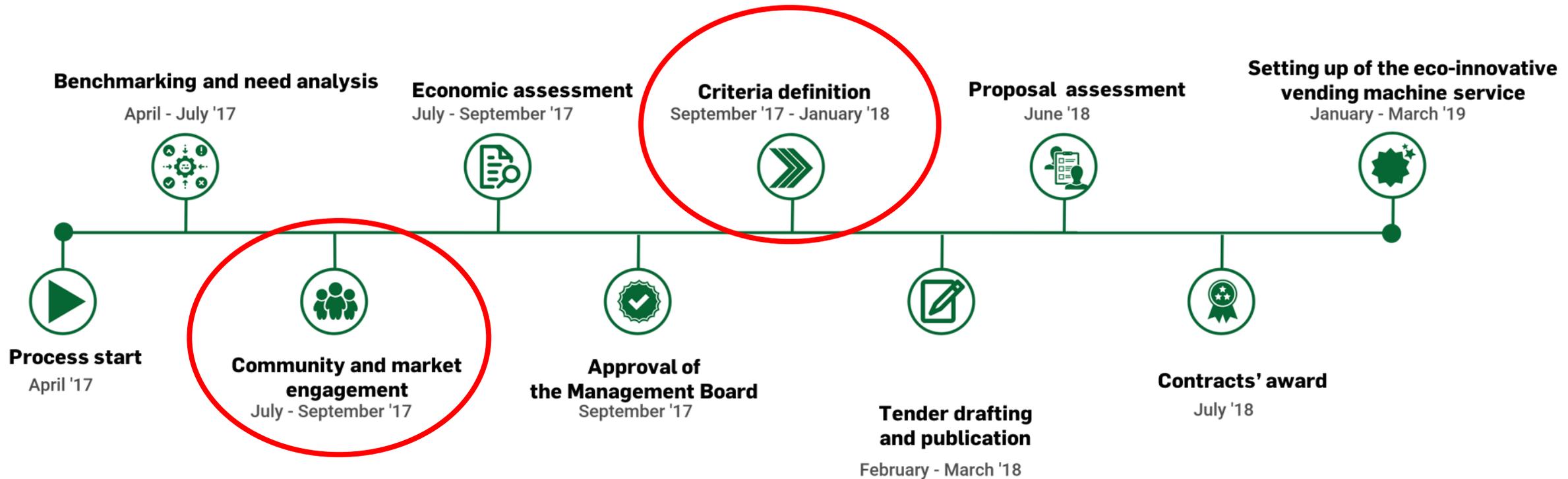
AFFORDABILITY



lower and aligned
prices within the
entire University



Timeline of the eco-innovative tender process design





Main final outcomes



- the food supply of the vending machine in the University has been enriched with the addition of healthy snacks and a balanced nutritional intake
- tap water dispenser has been introduced in the university buildings
- an overall improvement of the energy efficiency of the vending machines with improved energy class (A+) and LED lighting
- ameliorative actions for the waste management were also introduced such as the use of plastic compactors and the collection and re-use of coffee grounds



An on-going experience of sustainability: Scientific and Strategic Project for the new University Campus in Grugliasco (Città delle Scienze)

The hub will aggregate resources and knowledge among different sectors, technologies and disciplines

This will cover activities from research to business with a new interest in innovation-related activities designed to address the following social challenges

Agri-Food



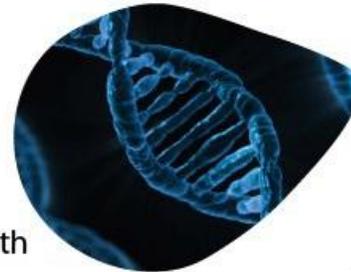
Materials, Chemicals and Manufacturing



Energy



Excellence in Fundamental Science



Biology and Health

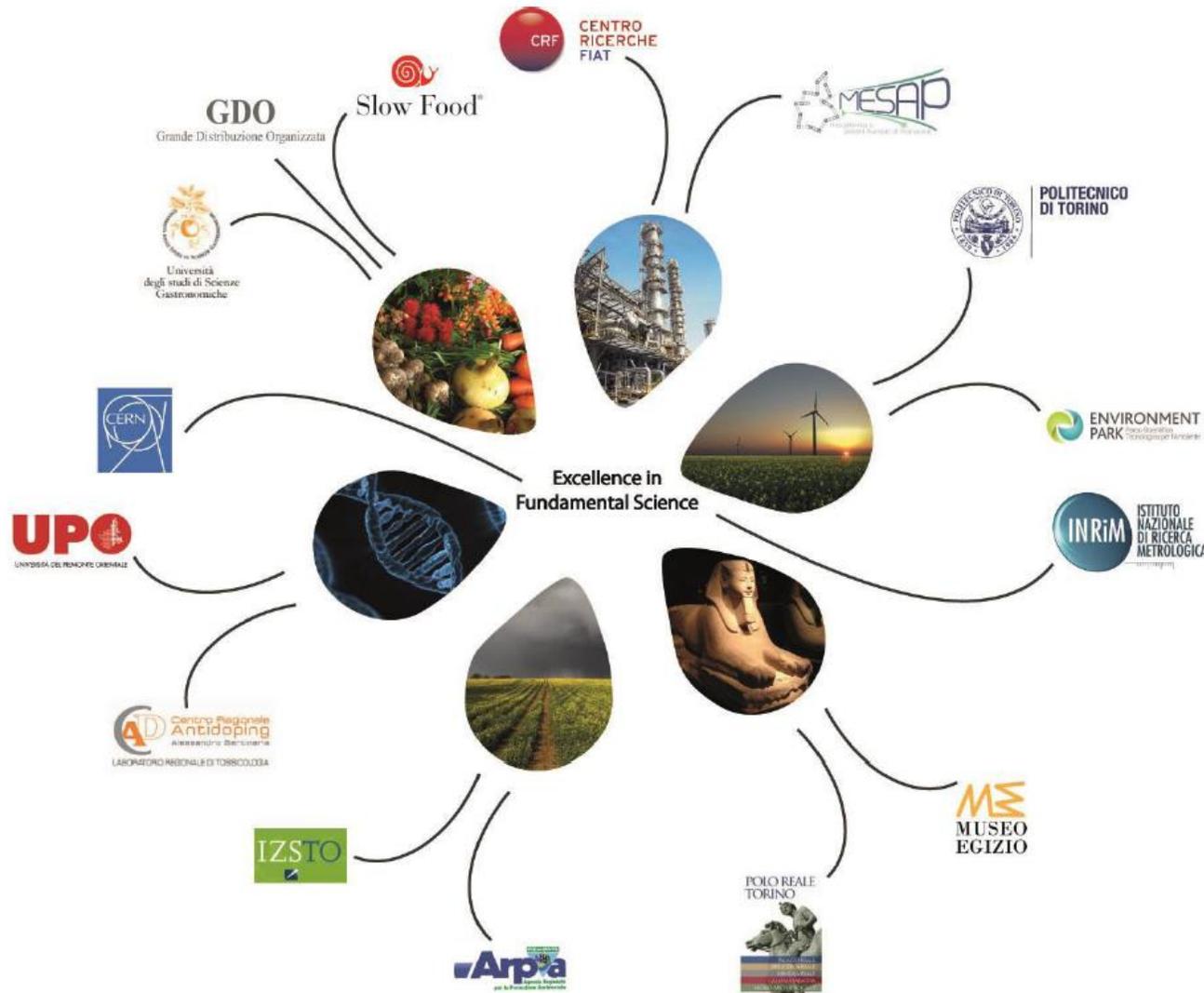


Cultural Heritage

Land, Environment and Resources



Concrete experience of sustainability: Scientific and Strategic Project for the new University Campus in Grugliasco (Città delle Scienze)

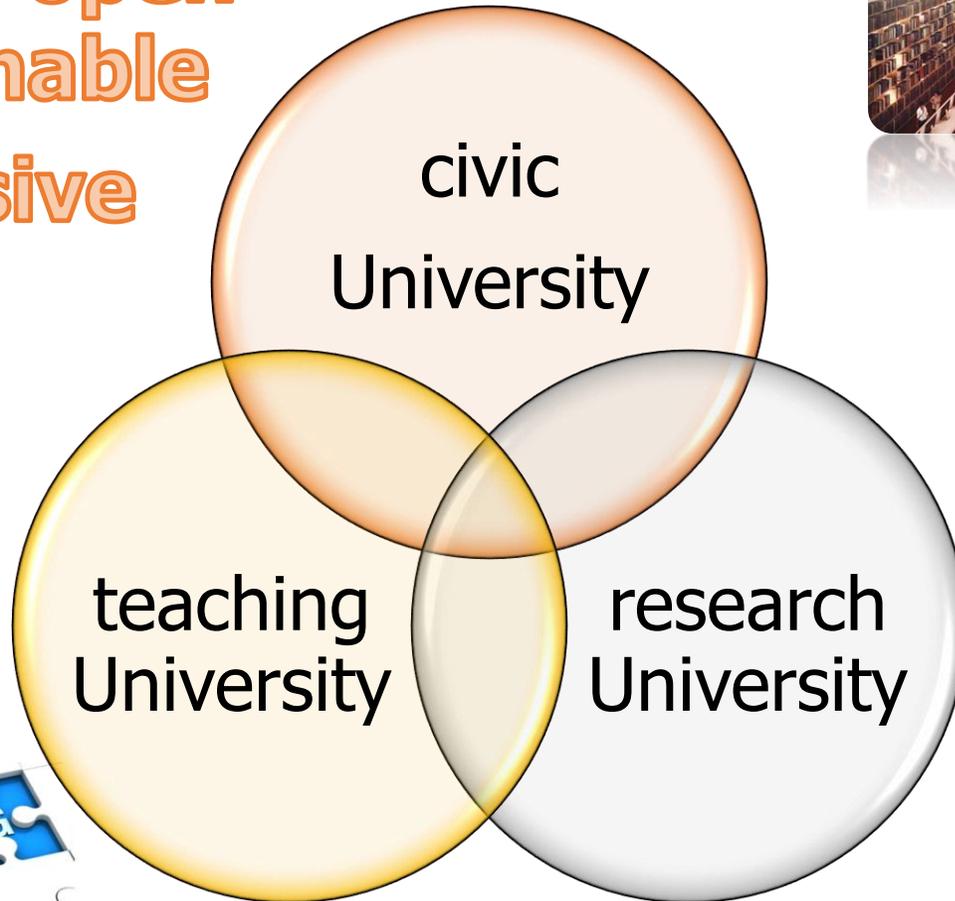


University and local institutions have convergent objectives in the field of social innovation, knowledge dissemination, and economic impact



Concrete experience of sustainability: Scientific and Strategic Project for the new University Campus in Grugliasco (Città delle Scienze)

«open»
sustainable
inclusive



The new University Campus in Grugliasco (Città delle Scienze)

Teaching spaces for **5.000** students
Classrooms, Studyrooms, common areas
and services for students **18.000** m²



Spaces for Research:
Departments of **Chemistry, Life
Sciences and Systems Biology
and Earth Sciences**

Total **40.000** m²

Business spaces – incubator



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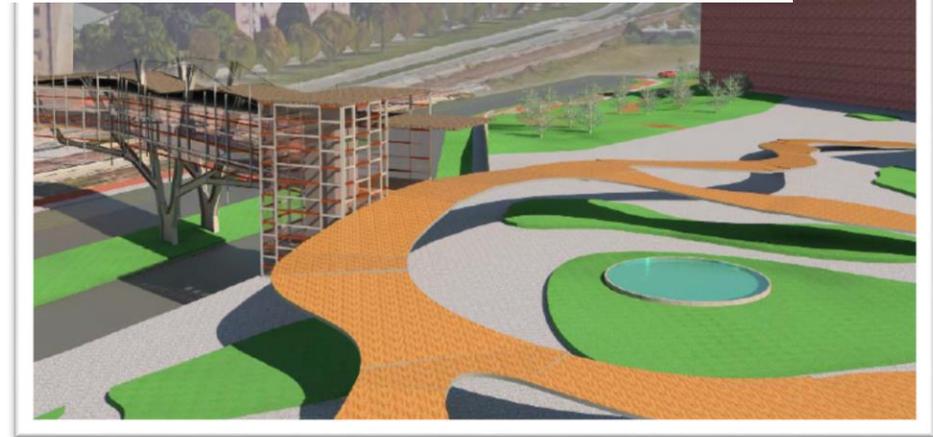
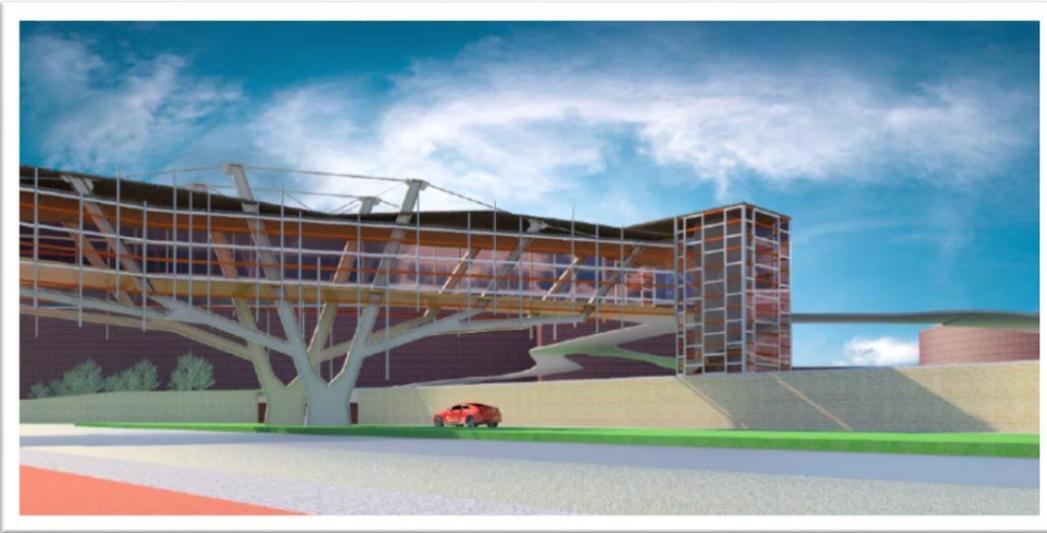
The new University Campus in Grugliasco (Città delle Scienze)

Place of relationship = link between Campus and City

- Railroad walkway completion
- New urban park **40.000** m²
- Implementation of the Piedmont Region cycle system
«Corona Verde» project



The new University Campus in Grugliasco (Città delle Scienze)



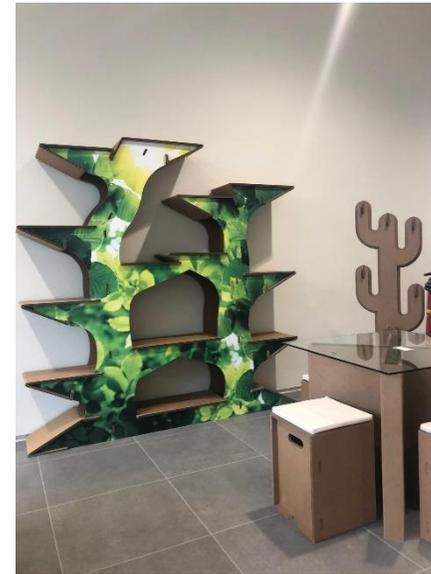
Large equipped square, hub and interaction between university activity and the city: 7,200 m²



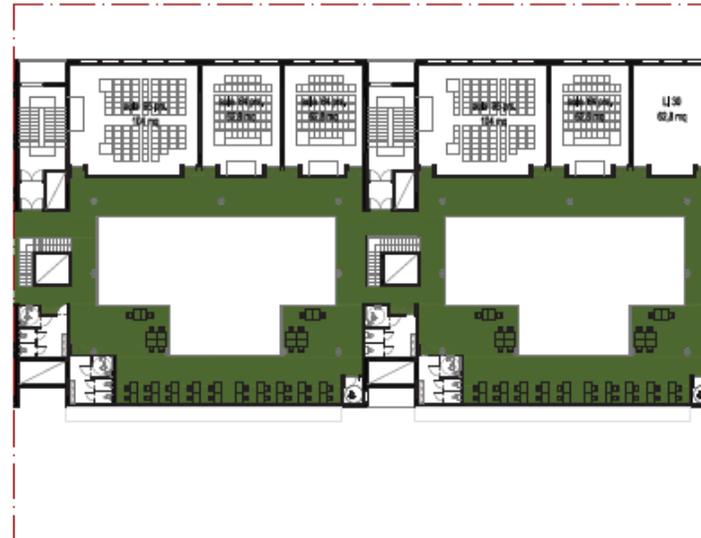
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The new University Campus in Grugliasco (Città delle Scienze)



B



The new University Campus in Grugliasco (Città delle Scienze)

- Energy Efficiency and Sustainability

Targets:

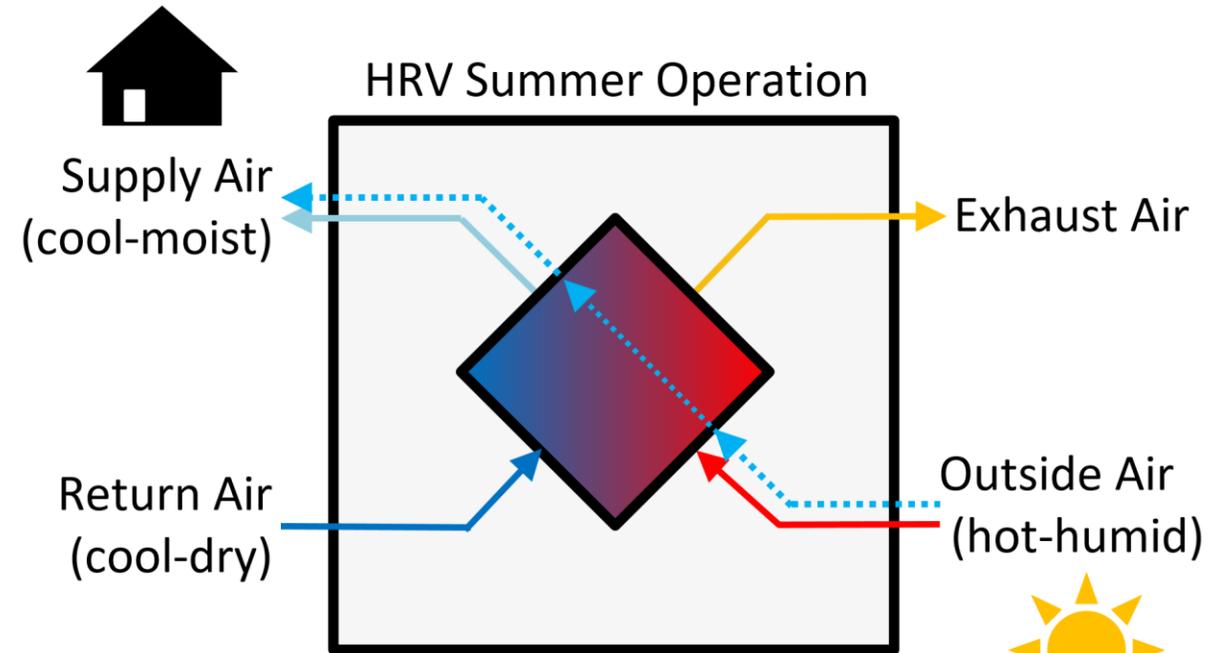
1. nZEB: **nearly Zero Energy Building**, according to the European Directive 2012/27/UE;
2. Green Building Certification LEED (Leadership in Energy and Environmental Design).

Target: Leed Gold Buildings



How to get the goals

- Minimizing environments energy consumption for winter and summer, applying design strategies for **solar buildings**
- Use of construction materials with **minimal environmental impact** and no emissivity throughout the life cycle
- Adoption of **passive systems** for summer cooling



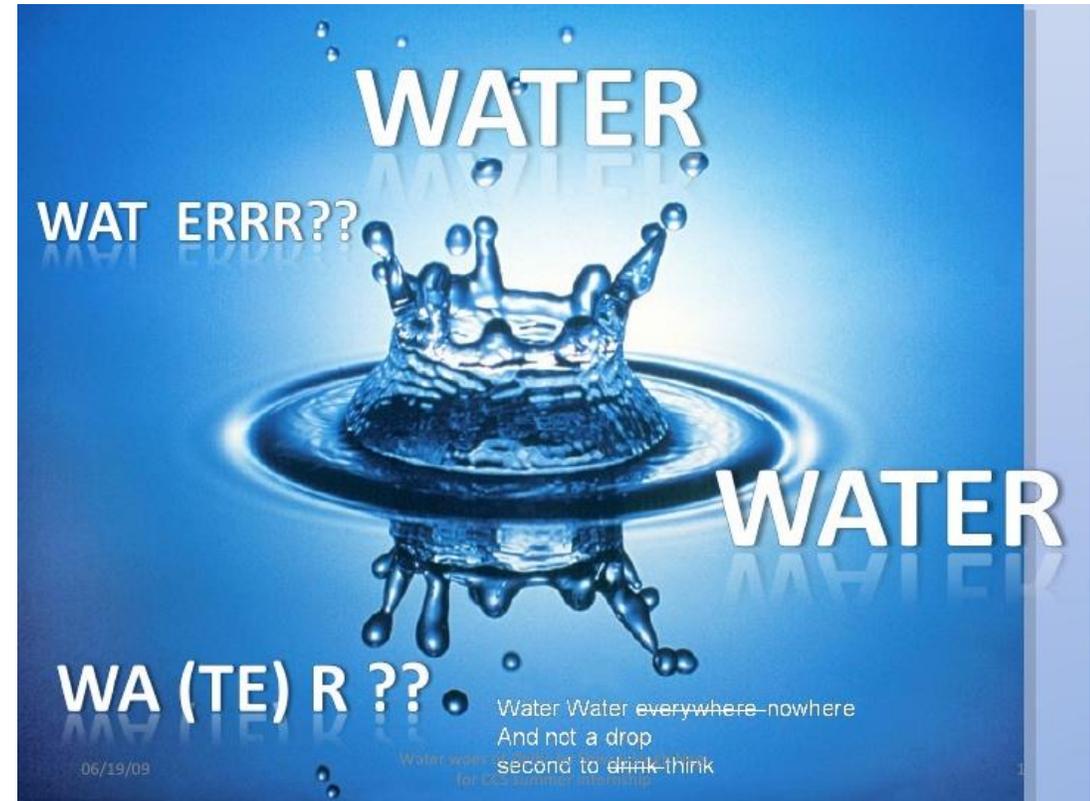
How to get the goals

- Optimization of **natural lighting** as a function of energy saving and visual comfort
- Minimizing electricity consumption from a fossil source through the use of trigeneration plant, **photovoltaic panels and geothermal plants** for power generation



How to get the goals

- Reduction of drinking water consumption through the use of **taps and valves** for saving water and energy
- Reduction of drinking water consumption through the **reutilization of rainwater** for the firebox and the irrigation of green areas



Concluding Remarks

A strong **initial commitment** to sustainability in the University policies (e.g. strategic plans, program agreement)

The creation of a **dedicated structure and instruments** to enable the implementation of sustainability into daily actions (e.g. Green Office, Sustainability Action Plan)

The adoption of **communication and accountability tools** related to the sustainability (e.g. Sustainability Report, Web and Social Communication)



Concluding Remarks

Community engagement

(events, communities of practices, network with students' associations)

Stakeholder engagement through the **co-design** of strategic planning actions (protocols, agreements)

Membership of university network (best practices exchange, joint research, educational and third mission actions)

Compliance with internationally agreed standards on several topics (energy efficiency, buildings, GHGs emissions)



More information at:



www.green.unito.it



unito-go@unito.it



[@GreenUnito](https://www.facebook.com/GreenUnito)

