Livability, sustainability and identity of the university district in Milan

2012 ISCN Symposium | Power of Partnership

June 20 2012

Eugenio Morello

W: www.campus-sostenibile.polimi.it
E: campus-sostenibile@polimi.it

POLIMI: Alessandro Balducci e Manuela Grecchi
UNIMI: Dario Casati e Alessandro Toccolini
A campus in the city of Milan
A campus in the city of Milan
Two universities, one campus

**Politecnico di Milano - Campus Leonardo**

186,613 m² of surface
17,484 enrolled students in the academic year 2010/2011
1,748 Personnel (professors and staff)

**Università degli Studi di Milano - Campus Città Studi**

209,067 m² of surface
17,052 enrolled students in the academic year 2010/2011
1,955 Personnel (professors and staff)
Hotspots

What is a sustainable campus for us?

- Bottom-up approach, sharing the project with our community (living lab)
- Which community? Internal and external communities
- What is the project about?
  - Working on a wide spectrum of actions: from the physical layout of the campus to people behaviour
  - Working on an existing physical urban layout (re-novation)
  - … but how to deliver a masterplan which is compatible with the living lab approach?
Hotspots

The first year of work:

- Management: ideation, work in progress (evolution) of the open “form” of the masterplan
- construction of a baseline: modeling and data collection
- defining targets (long term and short term)
- measuring sustainability (ISCN Charter grid + GRI indicators): combining qualitative and quantitative tools and analysis
The campus as a living lab: A bottom-up approach

- The campus is here intended as **the place where knowledge and practice can meet**.
- **Everyone can collaborate** and propose ideas. For instance, this project is supported by the collaborative work of many components of both the POLIMI and UNIMI communities.
- The prerequisite for the success of the initiative is the **creation of a strong awareness** on the topic of sustainability within the community.
- The involvement is purely **on a voluntary basis**: for instance, people propose and share ideas, but no dedicated funding was initially provided by the institution, with the exception of the launch team.
- The campus as a living lab can be achieved through the **implementation of a complex web-platform**, which is the place where opportunities and problems become visible and proposals are collected and shared.
Working on partnerships

TYPES OF PARTNERSHIPS

INTERNAL
- Between two universities (UNIMI and POLIMI)
- Between students (and associations) and professors
- Between academics: interdepartmental, interdisciplinary research
- Between academics and personnel (technical, admin.)

EXTERNAL
- With the district (the schools, the district council, associations)
- With the city council (the municipality of Milan, a number of agencies)
- Other universities worldwide (ISCN)
- Partners of industry involved on research projects in sustainability
Four topics towards sustainability

PEOPLE

ENERGY

ENVIRONMENT

ACCESSIBILITY
Campus principles and ISCN principles

The four themes overlap with the ISCN-Charter principles and helped in organizing the management of the whole process and structuring the ISCN-report. The scheme shows the distribution of the projects so far.
The first proposals (May 2011)
The web portal (since September 2011)
The new release of the website (since July 2012)
Governance of the project

Activities, actions, results

Thematic tables

Technical offices

ENVIRONMENTAL MANAGEMENT GROUP POLIMI

ENVIRONMENTAL MANAGEMENT GROUP UNIMI

masterplan

Report ISCN

POLIMI & UNIMI community

Policies & City community

GOVERNANCE

POLIMI_Alessandro Balducci e Manuela Grecchi | UNIMI_Dario Casati e Alessandro Toccolini
Alignments
Where are we now: implementation and future work

Phase 0  *Mobilization of interests (as of February 2011)*

Call for participation and expressions of interest, mapping of (un)sustainability on campus, collection of documentation and information, contacts with potential donors. Reconstruction of the cartography and digital model of the campus under development.

Phase 1  *Design and implementations (as of April 2011)*

Launch of the thematic tables, design and development of the dedicated web platform, establishment of collaborations with other institutions and private partners, the physical transformation of some areas in a sustainable manner.

Phase 2  *Design and implementations (as of September 2011)*

Launch of the dedicated web platform, organized collection of project proposals, advancement of the thematic tables, development of ongoing projects and launch of new research projects.

Phase 3  *Design and implementations (as of January 2012)*

Definition of the baseline: measurements, quantifications and initial analysis on the actual situation. Setting up of project proposals for catching and redirecting the programmed refurbishments promoted by the technical offices. Launch of regular meetings with public authorities in order to share our programs.
Reporting for ISCN

- **First report** submitted in April 2012
- The **grid of indicators, targets and actions** defined by the thematic tables
- For the first year we **reported on the work in progress**: the construction of the management, the launch of the web-platform, framing of the baseline for enabling measurements and monitoring of results.
THE TABLE IS RESPONSIBLE FOR:

• the active participation of all campus users (students, researchers and administrative staff) in every situation of dis/abilities
• the creation of collective spaces being comfortable and livable for all
• the development of a dedicated web platform and improvement of the main web services accessibility
• the strengthening of campus identity as an open but unitary place
• the development of new accessible services for students, workers and residents (residences, sports, collective spaces, …)

PEOPLE

Users, participation and identity
# PEOPLE | significant ongoing activities

<table>
<thead>
<tr>
<th></th>
<th><strong>1.</strong> Activation and management of a collective development of <strong>CODE FOR SUSTAINABLE BEHAVIOURS</strong> within the POLIMI and UNIMI environments</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>2.</strong> Launch and management of <strong>CAMPUS SOSTENIBILE CHALLENGES</strong> devoted to crowd sourcing ideas and projects to be transformed into Campus Sostenibile activities</td>
</tr>
<tr>
<td></td>
<td><strong>3.</strong> Collaboration with METID for the design and testing of the <strong>WEB PLATFORM</strong></td>
</tr>
<tr>
<td></td>
<td><strong>4.</strong> Strong collaboration with the <strong>CITY TABLE</strong> for widening the attention and initiatives on the use of public spaces internal and external to the campus</td>
</tr>
</tbody>
</table>

## LAUNCH OF CHALLENGES

- **peripheria.eu**
- **Inclusive Campus:** Complete and customizable accessibility for a socially sustainable campus
- **Experimenting the urban:** The Campus as an urban lab
- **Behave! Busting sustainable behaviors in Città Studi**

---

POLIMI_Alessandro Balducci e Manuela Grecchi | UNIMI_Dario Casati e Alessandro Toccolini
Initiatives by the Alta Scuola Politecnica (ASP)

Through some micro-scale events that work as experiments, we are willing to create the community that will take an active part into the process. We will face this project through a Living Lab approach.
Projects get funded and promoted

The SMART CAMPUS project submitted by INDACO and DIAP in cooperation with other EU partners with the call CIP-ICT-PSP-2011-5 (Energy Efficiency in Public Buildings) has been funded and will be soon included among the PEOPLE Table activities. SMART CAMPUS targets Public buildings (Universities) through the use of Services enabled by ICT in particular by supporting the user behaviour transformation.

The TOC-TOC proposal developed within the DeCoSe project has been selected to be presented at the SICamp MILANO. TOC-TOC will develop a platform supporting the exchange of things and abilities. Its aim is to improve citizens interaction and collaboration, and to enable “reuse”.

The TOC-TOC proposal developed within the DeCoSe project has been selected to be presented at the SICamp MILANO. TOC-TOC will develop a platform supporting the exchange of things and abilities. Its aim is to improve citizens interaction and collaboration, and to enable “reuse”.
Energy efficiency and renewable energies

- Energy savings (reduction in fuel consumption and losses)
- Widespread use of renewable sources
- Monitoring and energy management
- Experimentation of innovative systems for energy control
ENERGY | significant ongoing activities

1. **Survey** and return of consumptions for the current state (since 2011)
2. Installation of monitoring **sensors**
3. Establishment of the **POLIMI Energy Board**
THE TABLE IS RESPONSIBLE FOR:

• The improvement of the wellbeing of people (indoor and outdoor)
• Education and lifestyle towards more sustainable behaviors
• Water management (savings, permeability, on-site disposal)
• Soil and underground management (census of the tanks, prevention and management of spills)
• Air (quality, emissions)
• Waste management according to the principle of reusing, reducing and recycling
• Strengthening of the ecological system on campus

ENVIRONMENT

Environmental quality
ENVIRONMENT | significant ongoing activities

1. Survey of indoor comfort
2. Survey of outdoor comfort
3. Green areas (census and design)
4. Waste management initiatives

www.progettogru.it  www.greenwaste.info
ACCESSIBILITY

Transport terms accessibility and sustainable mobility
1. Redesigning traffic and routes in the Città Studi district through a working group with the Municipality of Milan and the Agency for Mobility and the Environment (Amat)

2. Promoting cyclability through improved facilities and services on campus

3. Regulating car parking on campus

4. Encouraging car pooling already in place

5. Investigating mobility credits to encourage sustainable mobility of students and employees.

www.greenmove.polimi.it

www.carpooling.polimi.it/
Sharing with the inhabitants targets and design choices

THE TABLE IS RESPONSIBLE FOR:

• Opening the Campus Sostenibile initiative to the context of the Campus and making of it a driver for the urban context
• Making of Campus Sostenibile initiative a innovation resource for the city
CITY | significant ongoing activities

1. Promotion of Public Private Partnerships widening the impacts of Campus Sostenibile outside the Academic space and organization

2. Cooperation with the Poli4People initiative

3. Supporting the conception of the master plan in a PPP perspectives

4. Organization and management of meetings involving citizens and representatives of the non-academic world, in order to discuss:
   • relevant issues on the relation city / university
   • Specific topics launched by the thematic tables or by the public administration
   • Research activities on the open masterplan project of Campus Sostenibile
Next steps

- Defining more targets and quantifications (establishment of the energy board just announced)
- Achieving concrete results (actions and transformations)
- Increasing the involvement of students (Sustainable Campus Days and other initiatives such as launch of “challenges”)}
Thank you!

www.campus-sostenibile.polimi.it

campus-sostenibile@polimi.it