

Co-promoters:



Supporters:



Mobility management at Politecnico di Milano: New infrastructures and behavioural change

- Messori, Morello, Perotto, Infussi, Mondini, Faroldi, Tolentino, Ugolini

Sustainability@Polimi

Sustainability at Politecnico
Quality of life, health and well-being

International policies

Networks and collaborations with
Universities and research centres

Sustainability Office

SUSTAINABLE
DEVELOPMENT
GOALS



VIVI.POLIMI.

Polisocial

Multi Chance Poli Team



POLIMI
SPORT



COMITATO
UNICO DI GARANZIA



ISCN
International Sustainable Campus Network

Commissione Energia di Ateneo



Politecnico di Milano in figures

Population (a.y. 2018-19):

- 46,409 students
- 5,723 professors and staff

7 campuses:

- Milano Città Studi
- Milano Bovisa
- Mantova
- Cremona
- Lecco
- Como
- Piacenza



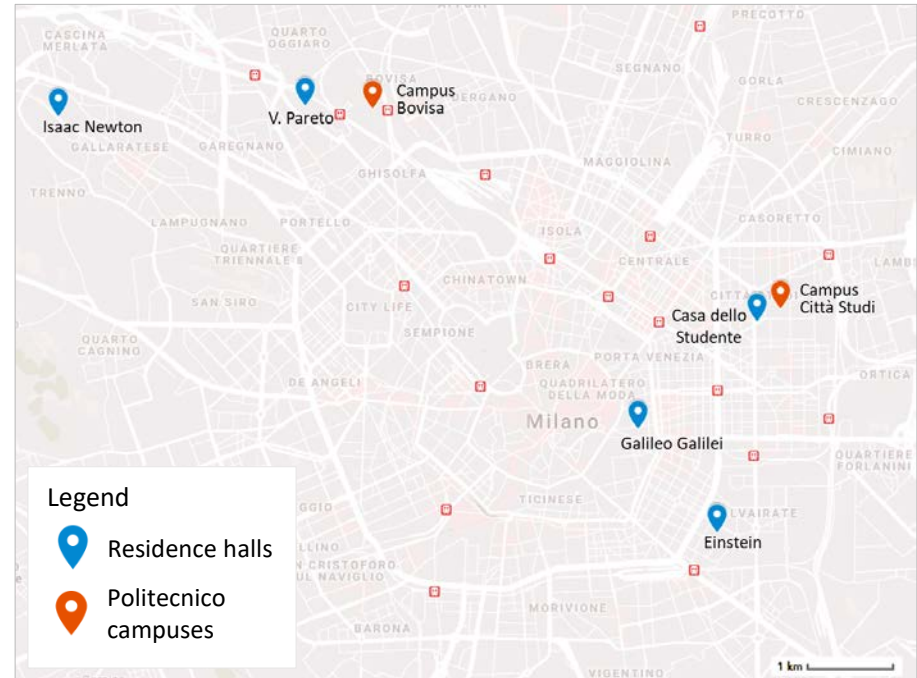
Politecnico di Milano - Residences

2 residences available on campus

Overall, only 7 residences:

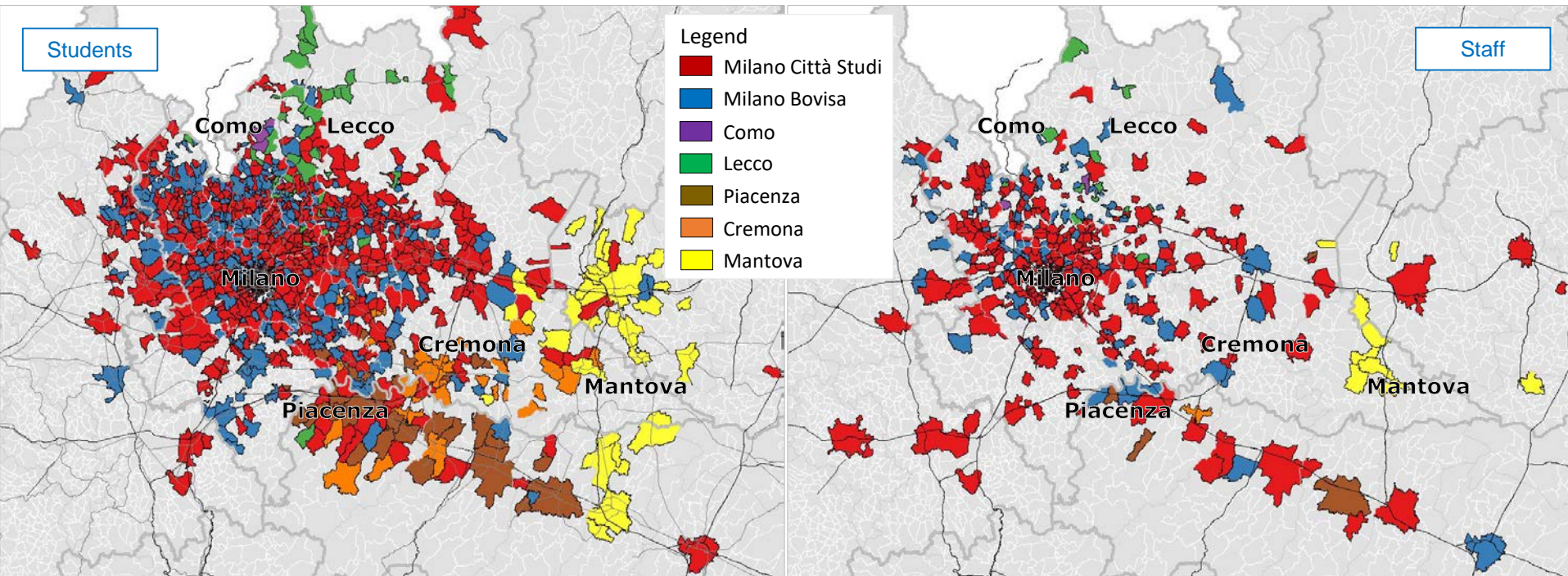
- can be far from main buildings (4km)
- can accommodate 1,700 guests
- guests are for 60% foreign students

Residences in Milan



Short and medium-range commuting is important

Politecnico di Milano - Catchment area



Milanese campuses attract both students and staff from all over the region, secondary campuses are generally limited to the nearby areas/corridors

Mobility surveys

2015

~12,000 answers (27% of the total population)
20% of student and 28% of staff travelled by car
(67% of the overall commuting CO₂ emissions)

2017

~14,000 answers (24% of the total population)
10% modal shift from private cars to public
transport and active mobility



The screenshot shows the website for the 'CITTA STUDI CAMPUS SOSTENIBILE' survey. The header includes navigation links: HOME, THE PROJECT, BECOME A PARTNER, EVENTS, MATERIALS & OPPORTUNITIES, ARCHIVE, and CONTACTS. The main content area is titled 'Mobility Survey 2019' and features a 'DEADLINE EXTENDED - AVAILABLE UNTIL 30TH SEPTEMBER 2019' notice. The text describes the survey's purpose in collaboration with the University of Milan and the Politecnico di Milano, aimed at gathering data for a commuter plan. It includes a graphic of question marks and a row of small circular images. At the bottom, it provides contact information for further details.

Ed. 2019
Work in progress!

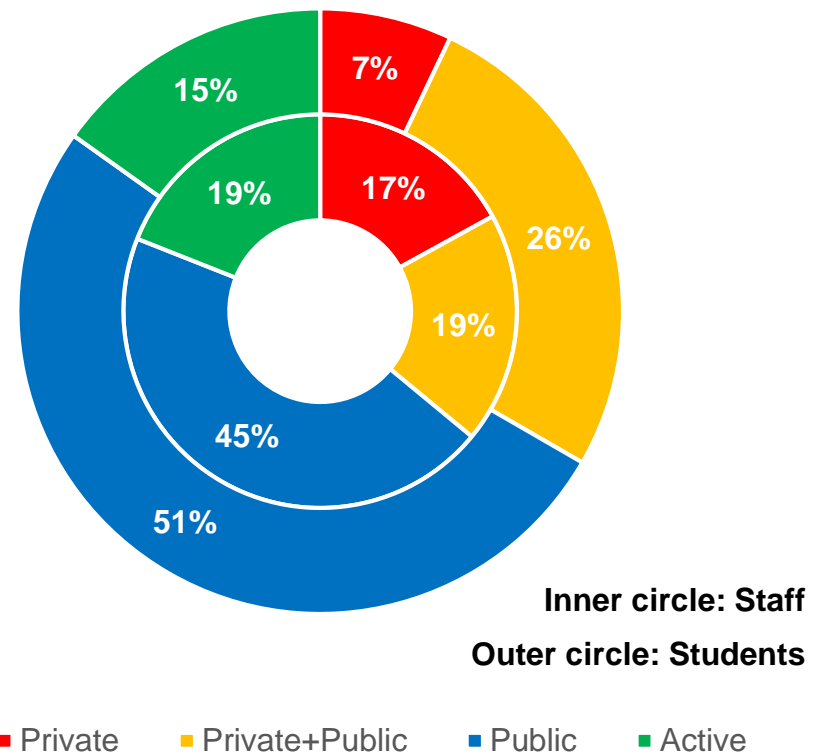
Mobility surveys - Results

Main results of the 2017 survey:

- widely used public transport, both alone or with private transport;
- private vehicles mostly used by staff;
- high share of active mobility.

Very different commuting patterns between Milanese campuses and regional ones

2017 Modal Shares



Politecnico mobility strategies



Facilitations and agreements

Funds for staff PT subscriptions, agreements for shared mobility services, ...



Infrastructural interventions

Bike shelters, structural renewal and redesign of open spaces



Awareness raising campaigns

Events and seminars, test drives, experimentations, citizen science projects, ...



Networking activities

Working groups at local, national and international level (RUS, UMOB, ...)

Bike shelters

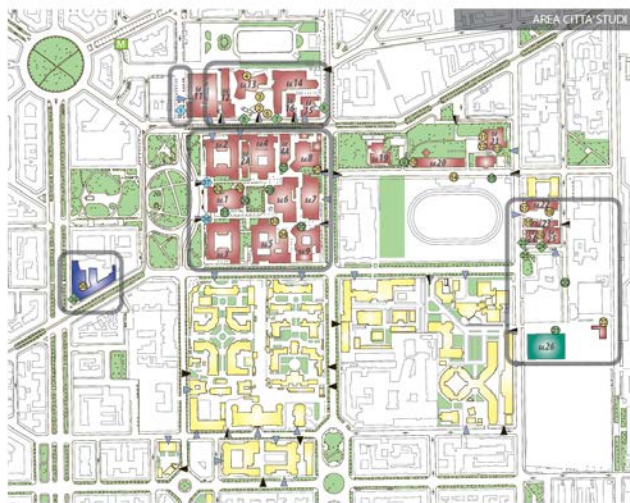
2012

census of the Leonardo bike parking supply:
number, position and state of repair (1,155)

2012 - 2017

+280 bike parking spots; tot: 1,437
Leonardo: 677, Bovisa: 459

BIKE PARKING SUPPLY INSIDE THE POLITECNICO CAMPUS
AND STATE OF THE ART OF THE STATIONS – June 2012



2018

+48 covered bike parking spots

2019

+54 bike parking spots

Structural renewal and redesign of open spaces

Two main renewal projects, Renzo Piano and VIVI.POLIMI, aiming at:

- improving the liveability, functionality and quality of the Milanese campuses;
- enhancing the Politecnico spaces by providing more open and green areas;

These transformations will also have impacts on people's mobility habits, both directly and indirectly.

➔ **Behavioural change**



Renzo Piano

VIVI.POLIMI - Leonardo



VIVI.POLIMI – Bovisa

Renzo Piano Project

The future



SBE 19 - Resilient Built Environment for Sustainable Mediterranean Countries, Milan

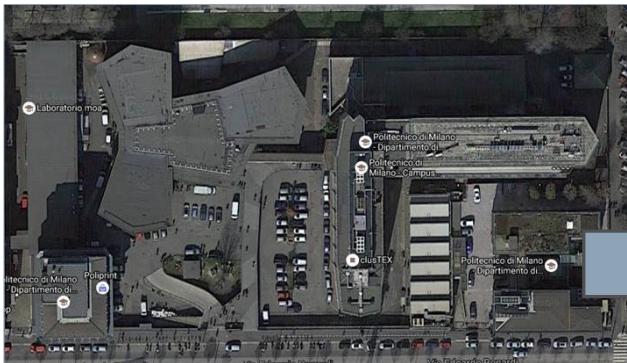
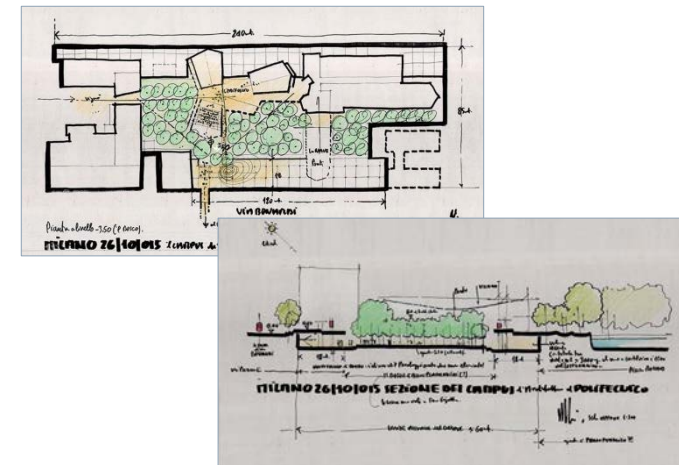
Renzo Piano Project

Today: ongoing

Design scheme offered in 2015 by archi-star Renzo Piano for the Bonardi campus.

The former parking lot will turn into a pedestrian public space of 8000sqm with:

- more than 100 new trees providing shade;
- accessible rooftops.



Renzo Piano Project

Today: ongoing

Yesterday



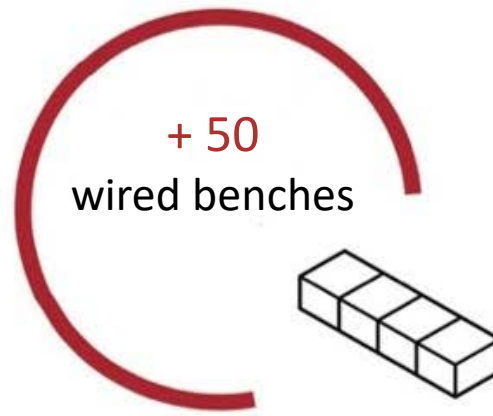
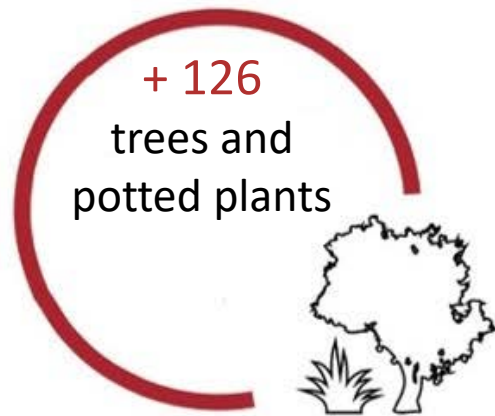
Today



Tomorrow



Renzo Piano Project





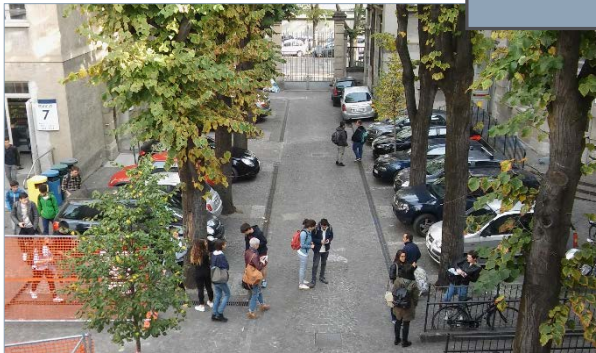
VIVI.POLIMI - Leonardo

Today: ongoing

For the cars



For the people

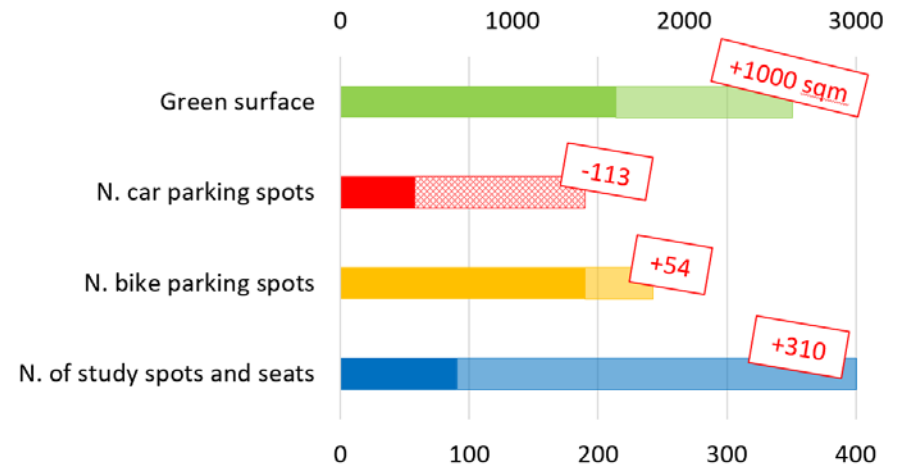




Internal traffic will be strongly reduced and most parking spots will be eliminated, preventing pollution, noise and danger.

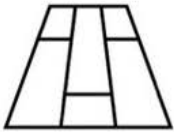
New infrastructures for slow mobility:

- new bike racks and shelters
- charging stations for electric cars
- redevelopment of driveways, pedestrian and cycling paths



VIVI.POLIMI - Leonardo

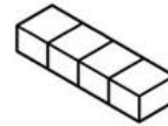
2500 sqm
stone paving



+1000 sqm
green area
with
trees



+ 260 lm
of stone seats
400
spots



+ 190
wired study
spots, including
60
indoor



VIVI.POLIMI - Bovisa

The future



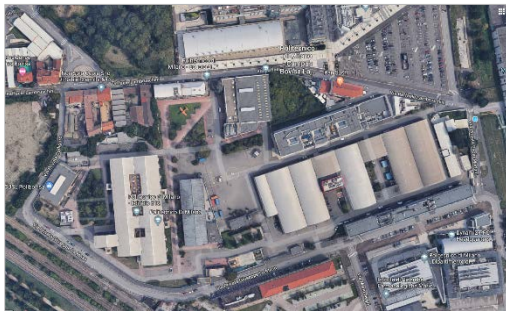
SBE 19 - Resilient Built Environment for Sustainable Mediterranean Countries, Milan

VIVI.POLIMI - Bovisa

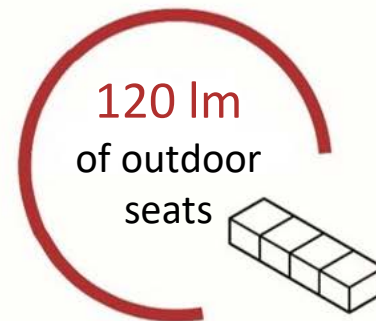
Today: to be started

The project aims to:

- create a liveable, multifunctional and accessible landscape
- increase permeable surfaces and shading
- define car free areas and limit vehicular flows
- provide charging stations for electric cars
- redevelop driveways, pedestrian and cycling paths



VIVI.POLIMI - Bovisa



Conclusions

Wide spectrum of mobility strategies:

- strictly mobility related actions,
- physical redesign of spaces,
- educational and behavioural change initiatives.

Future activities

Enhance current policies, like:

- bike related services;
- agreements for public transport and sharing mobility;
- liveability of open areas;
- engagement campaigns;
- monitoring;
- networking with stakeholders.

Providing a wide range of mobility alternatives and delivering high quality projects that facilitate good practices can change people attitude and habits.

Thank you for your attention!

Giada Messori, Politecnico Sustainability Office

Eugenio Morello, Rector's delegate for the University Environmental Sustainability Project

Eleonora Perotto, Politecnico Mobility Manager and chief of the Sustainability Office

Emilio Faroldi, Francesco Infussi, Michele Ugolini and Giuseppe Mondini, Vivi.Polimi Commission

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