Agenda

Global challenge, local contexts, varying responses

PoliTO's public engagement journey

› **The Local Context**: the City, Politecnico and their common history

› how public engagement became a pillar of the **Strategic Plan**

and the implementation:

› *Biennale Tecnologia:* a broad event on technology and society

› **The Impact Platforms:** ecosystems to create new opportunities globally and locally

The Context

Some history

POLITECNICO di Torino

1859
Technical School
for Engineers

1906
Regio
Politecnico di Torino

1958
Corso Duca degli Abruzzi
Campus opening

2019
160 years of
''Polytechnic culture''

POLITO

TORINO

1861-1970s
First capital city of Italy
Industrial powerhouse of the nation

1980s
manuf.
Ind. crisis

Technology,
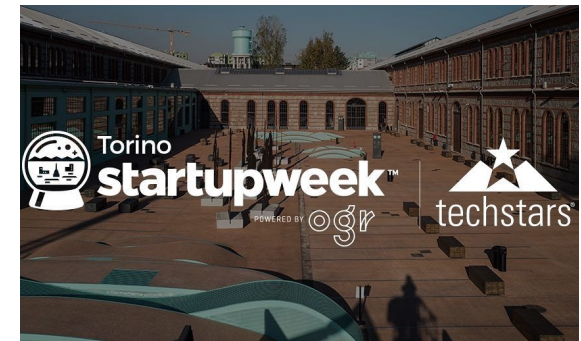Innovation &
Culture

Pop. 200.000

Pop. 1.200.000

Pop. 900.000

![Politecnico di Torino logo]

Torino a City of Technology, Innovation, Art, Culture & Creativity

Universities in Torino: 100.000 students
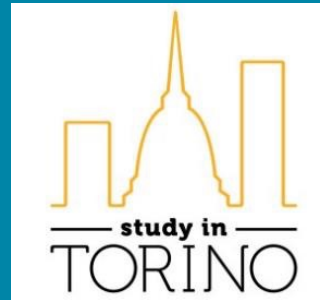
People@PoliTO

STUDENTS

36.000 Students enrolled in Bachelor's and Master's degree programmes

≈ 450 Students enrolled in "professional and executive programs"

≈ 800 PhD Doctoral Candidates

61% Students coming from outside Piedmont
43% Italians living outside Piedmont
18% **international students**

FACULTY

≈ 1.000 Academic staff

≈ 900 Administrative staff

Employment rate

Master's graduates
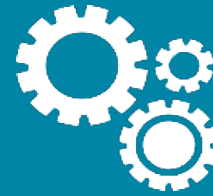1 year after graduation
2020 Almalaurea

Engineering 91%   **Archi* Civil Eng 78%**

QS Graduate Employability
2022 | Overall : 121-130
**Graduate employment rate
indicator: 28**

Departments

DENERG (Energy)
DIMEAS (Mechanical and Aerospace Engineering)
DISAT (Applied Science and Technology)

Industrial Engineering

Information Technologies

DAUIN (Control and Computer Engineering)
DET (Electronics and Telecommunications)

DIGEP (Management and Production Engineering)
DISMA (Mathematical Sciences)

Industrial Engineering and Management and Mathematics for Eng.

Civil and Environmental Eng., Architecture and Design
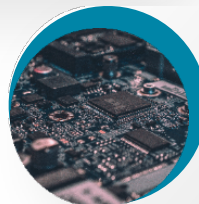
DAD (Architecture and Design)
DIATI (Environment, Land and Infrastructure Engineering)
DISEG (Ingegneria strutturale, Edile e Geotecnica)
DIST (Scienze, Progetto e Politiche del Territorio)

Cross Departmental Centers

CARS@PoliTO
Center for Automotive Research and Sustainable mobility

CWC
CleanWater Center@PoliTO

Ec-L
Energy Center Lab

FULL
The Future Urban Legacy Lab

IAM@PoliTO
Integrated Additive Manufacturing

J-Tech@PoliTO
Advanced Joining Technology

PEIC
Power Electronics Innovation Center

PhotoNext
Center for Photonic technologies

PIC4SeR
PoliTO Interdepartmental Centre for Service Robotics

PoliToBIOMed Lab
Biomedical Engineering Lab

PoliToBIOMed Lab
Biomedical Engineering Lab

SmartData@PoliTO
Big Data and Data Science Laboratory

SISCON
Safety of Infrastructures and Constructions

The Strategic Plan

Politecnico di Torino
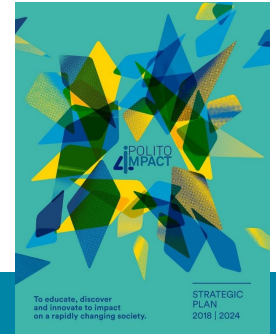
Vision & Principles

> **The Vision** an academic community committed to generating and sharing "polytechnical knowledge" for effective and sustainable development of society at national and international level

› BEFORE: "Laboratorio PoliTO" / electoral campaign forum

› PRINCIPLES:

- Bottom-up and "**emergent" approach**
- University as an (extended) community/ **Multiple Helix model**
- University not as a process-driven factory/service organization, but as an **enabling platform**
- **Subsidiarity** and Distributed Responsibility: University, Dep., Cross Dep. Center, Research Group, Individual
- Focus on **impact**

› AFTER:

- Cascading into an **ACTION PLAN** at university level
- Followed by the development of **DEPARTMENTAL STRATEGIC PLANS**

The Process

THE FRAMEWORK

I SCENARIO	II VALUES AND VISION	III EDUCATION
IV RESEARCH	V IMPACT ON SOCIETY, INSTITUTIONS &ENVIRONMENT	VI WHICH KIND OF UNIVERSITY

THE PHASES

Preliminary work	Workshops with external stakeholders	Workshops of the Rector's team	Joint workshops with the internal community	Final phase and draft sharing

Workshop INSTITUTIONS
City/Region/MP's

Workshop SOCIETY
Cultural, Religious & Volunteer Associations
Schools districts,Trade Unions

Workshop ECONOMY
Professional, Industry and SME Associations
Chamber of Commerce
Banks, Companies…

4 questions

1. **WHAT IS YOUR ORGANIZATION'S STRATEGY?**
2. **HOW DO YOU SEE POLITECNICO DI TORINO?**
3. **WHAT DO YOU EXPECT FROM POLITECNICO DI TORINO?**
4. **HOW CAN YOUR ORGANIZATION HELP US?**

Round Table
Half day each
Chatham House Rule

The Strategic Plan and Public Engagement

https://www.pianostrategico.polito.it/en

- › to generate new intellectual property
- › to strengthen the growth potential of our spin-offs
- › to encourage the development of sectorial innovation value chains .. to attract new investments and businesses

- › to train a growing number of students in innovation and entrepreneurship

- › to boost our competencies in human and social sciences

- › to develop new models for technology transfer
- › to better address the SDGs
- › to create a series of events related to Polytechnic culture

Governance & Management

New role in the Academic Governance
Rector's Delegate for Strategic Assessment and Implementation of the Strategic Plan
Prof. Marco Cantamessa, Professor of Management

New administrative department responsible for providing
› effective processes for **strategic and operational planning**
› statistics & analysis to support and monitor the implementation of the **ACTION PLAN** and evaluate it's **impact**

MISSION	ACTION	Target or KPI	Description	Milestones			Who?		Constraints	Feasability	Priority
				2022	2023	2024	PM	Other			
TERZA MISSIONE	Instaurare un dialogo con i cittadini, gli studenti e le istituzioni su particolari temi di attualità	Obb. 8 Almeno 3 progetti l'anno con un coinvolgimento crescente di anno in anno (visitatori, impatto sui media, ecc)	Manifestazioni Culturali: 1. Biennale Tecnologia: prima blended edition 2. Collana di lezioni politecniche 3. "CinqueLibri": ciclo di incontri ... 4. Notte Europea dei Ricercatori 5. Partecipazione a Biennale Democrazia 6. Partecipazione al Salone del Libro	1. Edizione 2022 .... 3. ... 4. ... 6. ..	1. Divulgazione dei contenuti culturali .... 2. ... 3. ... 4. .... 5. ... 6. ...	1. Edizione 2024 ... 3. ... 4. ... 6.	CC	GESD, ARI, IT, EDILO G	Sponsorizzazioni	alta	must

Dedicated "*Centro Studi*" as a task force for Analytics and Business Intelligence to support decision making-faculty and staff (coordinator: **Prof.ssa Laura Montanaro**: Deputy Rector)
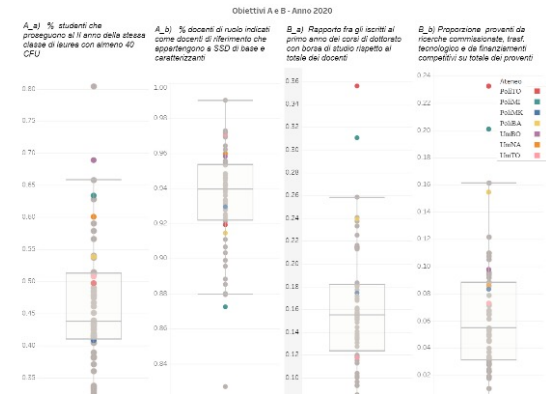
New skills
› TRAINING programmes on portfolio &agile project management, and data analysis for administrative staff
› RECRUITMENT of analysts and IT experts

Analytics, KPIs & Storytelling
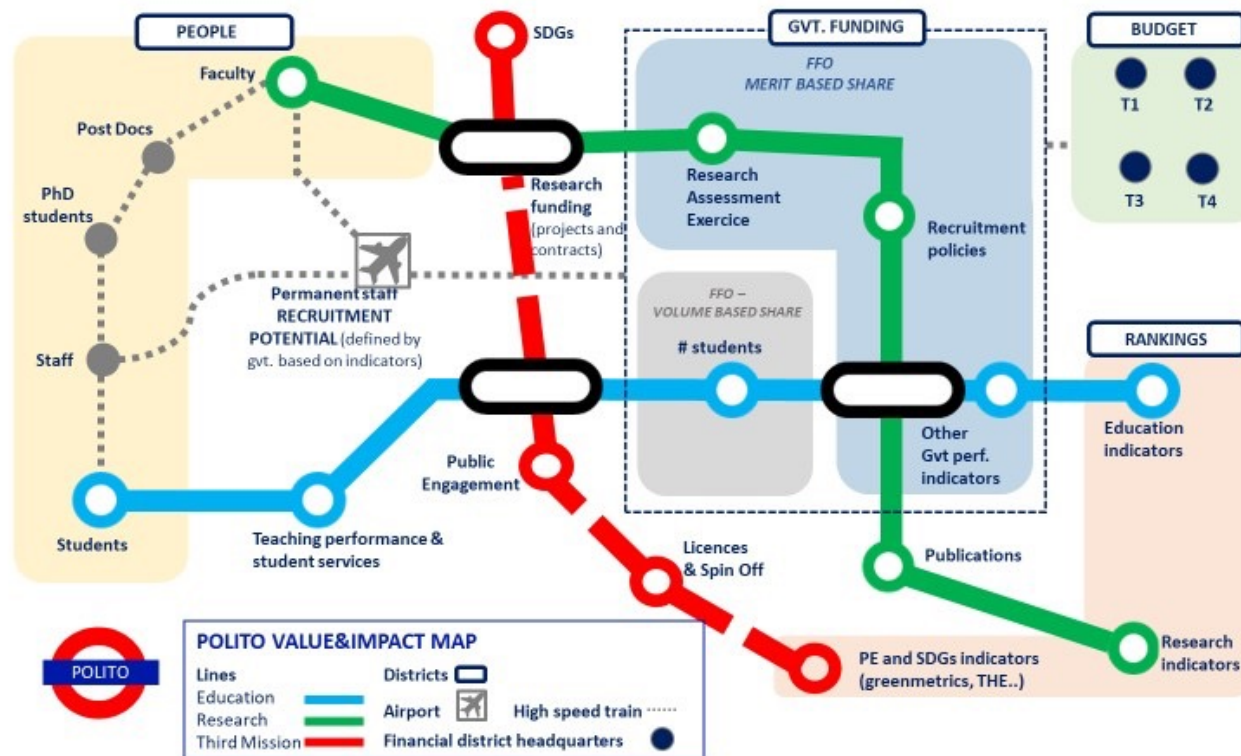
Eg. Metro Station KPIs and Benchmarks

KPIs for Public Engagement@Universities: ESG Environmental, Social, and Governance indicators (impact of investments)?
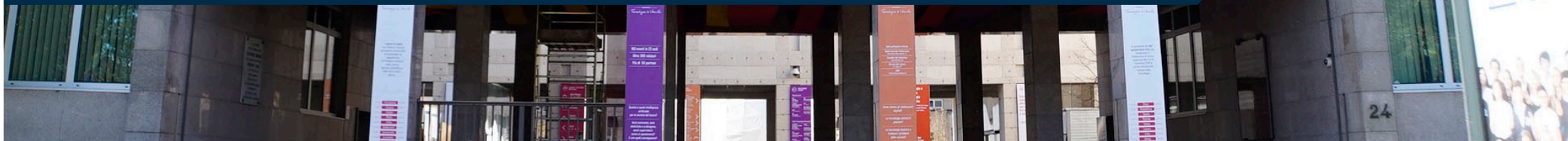
Biennale Tecnologia

«Thinking about technology in Torino»
Prof. Juan Carlos De Martin
Rector's Delegate for Culture and Communication

On the **160th anniversary** of its foundation, PoliTO organized the 1st ed. of the **FESTIVAL DELLA TECNOLOGIA** (2019)

Since 2020, PoliTO host **BIENNALE TECNOLOGIA** every 2 years

Tecnologia è Umanità

› It explores the connection between technology and society & human life with and emphasis on current affairs

› a big and wide ranging event for a broad audience

› guests with different perspectives and backgrounds

› multi-location

› workshop and debates -exchange

› visual arts, literature, theatre, cinema, and music

Biennale Tecnologia Programme

Politecnico di Torino

2020 TOPICS

Artificial intelligence, robotics, big data

Technology and sustainability

Politics and technology

Philosophy of technology

Economics and technology

Technology, culture and society

Technology, art and literature

Health and technology

Technology and cultural heritage

Travel, space, exploration

BIENNALE TECNOLOGIA
TORINO, 12-15 NOV 2020
Tecnologia è Umanità

From words to deeds for the future of Italy
Enrico Giovannini

Who do we trust? experts and politics in the age of new media
Gloria Origgi and Chiara Saraceno

The Earth seen from above
Paolo Nespoli

Pandemic, surveillance culture and data justice
David Lyon

Health and big data
John Brownstein, Carmela Troncoso and Alessandro Vespignani

Immersed in the future. Virtual reality, the new frontier of cinema and TV
Simone Arcagni, Valentina Noya, Alessandro Parrello, Carlo Rodomonti e Rossella Schillaci

….and more…

2019 Festival della Tecnologia in

50 000 «tickets»
160 scheduled events
23 locations
50 collaborations
30 «off» events in the region
14 000 polito students involved
352 guest speakers
kids festival: **16** labs, **3** shows
9 permanent exhibitions and installations
night a the the cinema museum
2 concerts
3 plays

https://2019.festivaltecnologia.it/

› **76** accredited journalists, photographers and video operators
› Around **300** press releases in local and national media
› **5 000** followers on social media (Facebook, Twitter and Instagram)
› **3 000** app downloads
› **739 334** page views on www.festivaltecnologia.it
› **80 424** single users visited the website pages

*15 October - 14 November 2019

festival della TECNOLOGIA
TORINO, 7-10 NOV 2019
Tecnologia e Umanità

Politecnico di Torino
1859

2020 Biennale Tecnologia in

Politecnico di Torino

+20 000 online «presences»
142 meetings
44 additional meetings on ''Biennale OFF''
34 activities and meetings for the **Politecnico Aperto** initiative, with more than 600 participant
13 technology short videos (PhD students)
260 guest speakers
22 labs for kids
3500 high school students involved (labs in schools + invited speakers at school)
6 permanent exhibitions
4 concerts
4 reading sessions

BIENNALE TECNOLOGIA
TORINO, 12-15 NOV 2020
Tecnologia è Umanità

https://www.biennaletecnologia.it

› **400 000** page views on www.biennaletecnologia.it
  82 000 unique users visited the website pages
› **10** live streaming channels
› **1 200** downloads of the official Biennale app
› FACEBOOK Over **650 000** hits
› **6 000** page views
› YOUTUBE **+10 000** views (as of 25 Nov)
› INSTAGRAM **127 400** accounts reached
› TWITTER **412 000** Tweet views
› **350** + press releases in local and national media

*15 October - 14 November 2020

The Biennale World

Biennale Tecnologia alternates with BIENNALE DEMOCRAZIA

PODCAST "HARD TIMES" 11 Lessons
Maps for orientation in the first pandemic of the 21st century

BIENNALE TECNOLOGIA FOR HIGH SCHOOLS

› **Preserving the planet: technologies for sustainability**
› **We and the digital revolution**
› **When literature meets technology**
› **…**

✓ **From the plague of the 1300s to Covid-19: lessons learned from history?**
✓ **Vaccines and monoclonal antibodies to regain freedom**
✓ **The great online migration: costs and opportunities**
✓ **Can catastrophe be made sense of?**
   A philosophical investigation
✓ **Social consequences of the pandemic**
✓ **….**

Backstage / The Organisation

Scientific Curators

Juan Carlos De Martin | Rector's Delegate for Culture and Communication

Luca De Biase | Journalist and essayist

Organised by the CULTURE AND COMMUNICATION DEPARTMENT
Director | **Angela La Rotella**

› Organisational coordination 1

› Communication coordination Team 8

› Programme coordination 4

SUPPORT: All the administrative departments, in particular:

IT	International Office	Technology Transfer and Industry
Finance	Research Support	Legal Affairs
Procurement	HR	Safety
Logistics		

ACTIVITIES: Doctoral School, Departments…

Partners

MAIN PARTNERS AND SPONSORS

INTESA SANPAOLO

iren

WITH THE CONTRIBUTION OF

Camera di Commercio Industria Artigianato e Agricoltura di Torino

Fondazione Compagnia di San Paolo

LINKS

CSI your digital partner

PATRONAGE

Ministero dell'università e della ricerca — Patrocinio

MiBACT Ministero per i beni e le attività culturali e per il turismo — Patrocinio

REGIONE PIEMONTE — Patrocinio e sostegno

CITTÀ DI TORINO — Patrocinio e sostegno

COLLABORATIONS

FONDAZIONE CIRCOLO DEI LETTORI

UNIVERSITÀ DEGLI STUDI DI TORINO

UNIONE INDUSTRIALE TORINO

INDUSTRIAL SPONSORS

Avio Aero

LAVAZZA GROUP

LEONARDO

OTHER PARTNERS

Accademia delle Scienze di Torino	archimede	Aspenia	ITC International Training Centre	limes	LMU
ALUMNI POLITO	Biennale Democrazia	CentroScienza	LUISS University Press	MAO	MAUTO
Informatica & Società	CDD Circolo del Design	codice edizioni	MUFANT	ME MUSEO EGIZIO	MUSEO NAZIONALE DEL CINEMA TORINO
Castello di Rivoli	Egea	ENVIRONMENT PARK	nesta Italia	Nexa Center for Internet & Society	OGR officine grandi riparazioni
Fondazione 1563		A+ FONDAZIONE ARTE CRT TORINO PIEMONTE	POLINCONTRI	Polo del '900	Rai Teche
FT Fondazione per la cultura Torino	Fondazione per la Scuola Compagnia di San Paolo	i3P	Slow Food	slp	TORINO FILM FESTIVAL
il Mulino	INRiM	Irot	TORINO URBAN LAB	UPO	Università di Scienze Gastronomiche di Pollenzo

The Impact Platforms

The Strategic Objectives

Politecnico di Torino

/ SECOND MISSION: RESEARCH

3

OBJECTIVE

TO INCREASE OUR UNIVERSITY
SELF-FINANCING CAPACITY
BY AT LEAST 50%.

6

OBJECTIVE

TO PROMOTE THE AGGREGATION
OF SINGLE RESEARCHERS
AND RESEARCH GROUPS,
ALSO AT AN INTERDEPARTMENTAL
LEVEL, ON CURIOSITY DRIVEN
PROJECTS, AS WELL AS
ON RESEARCH TOPICS
OF GREAT VISIBILITY
AND IMPACT STILL UNEXPLORED
IN OUR UNIVERSITY.

POLITO 4 IMPACT

To educate, discover and innovate to impact on a rapidly changing society

EDUCATION	RESEARCH	THIRD MISSION	WHICH KIND OF UNIVERSITY?
To innovate in education and to the benefit of society	To create and disseminate knowledge	To generate a significant impact on society	An ever - changing University

THE IMPACT PLATFORMS

7

OBJECTIVE

TO ORIENT INTERDISCIPLINARY
RESEARCH TOWARDS
THE ACHIEVEMENT
OF THE SUSTAINABLE
DEVELOPMENT GOALS
OF THE UN 2030 AGENDA.

6

OBJECTIVE

TO DEVELOP NEW MODELS
FOR TECHNOLOGY TRANSFER
IN THE FIELD OF ARCHITECTURE,
PLANNING AND DESIGN.

## / THIRD MISSION: TECHNOLOGY TRANSFER AND KNOWLEDGE SHARING

3

OBJECTIVE

TO ENCOURAGE
THE DEVELOPMENT
OF SECTORIAL INNOVATION
VALUE CHAINS TO PROMOTE
THE IDENTITY AND CREDIBILITY
OF OUR TERRITORY
FOR ATTRACTING NEW
INVESTMENTS
AND BUSINESSES.

The Platforms

› **Bring together** research, teaching, training, innovation and services

› Are thematic **academy-industry ecosystems** dedicated to **multidisciplinary** and innovative issues that have **real life meaning** and **industrial value for local stakeholders** (Science and Technology Parks)

› Create new opportunities for **collaborative research and technology transfer**

› Develop **new relationships** with the external environment and promote **public-private partnerships**
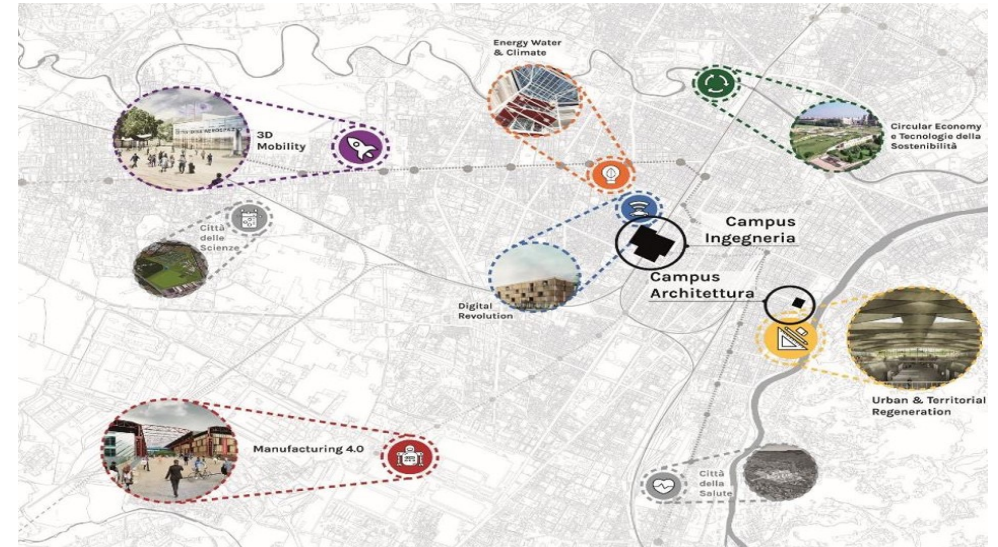
«The Platforms in the Urban Landscape»
Mario Ravera
Pianificazione e Progetti di Ateneo

Distributed across the city
Significant **Impact Invesments** by University and Local Institutions

Torino, Città della Tecnica
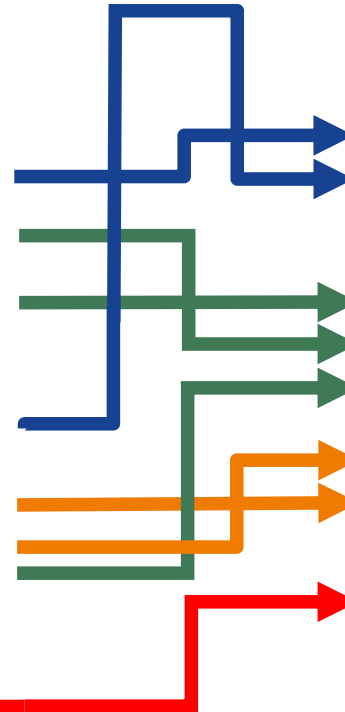
National and EU Context

Recovery And Resilience Plan

#NEXTGENERATIONITALIA

THE **EU BUDGET** POWERING
THE RECOVERY PLAN FOR EUROPE
#EUbudget #EUSolidarity #StrongerTogether

Recovery and Resilience Plan Missions

6 Platforms

› Manufacturing 4.0

› **Energy,Water & Climate**

› **Circular Economy & technologies**

for sustainability

› Digital Revolution

› 3D Mobility

› Urban & Territorial Regeneration

M1: Digitalisation, Innovation, Competitiveness, Culture

M2: Green Revolution and Ecological Transition

M3: Infrastructure for Sustainable Mobility

M4: Education and Research

Politecnico di Torino
1859

European Commission

Governance & Management

› A Rector Delegate for each Platform

› Platform Table

› "Commissione Centri e Piattaforme"

› Technology Transfer and Entrepreneurship facilities

› Qualified managerial support

Entrepreneurship & Innovation Center

i3P WE STARTUP THE VENTURE
The incubator of Polytechnic of Turin supports the creation and development of high-tech innovative start-ups with a high growth potential.

CLIK CONNECTION LAB AND INNOVATION KITCHEN
Interdepartmental Laboratory for Technology Transfer | LabTT

SPACES FOR COMPANIES AND "PEOPLE"

SHOWROOM

RESEARCH

INNOVATION

START UPS

LIFELONG LEARNING

EDUCATION

SERVICES

The Future Platforms & The Masterplan

› Digital Revolution House

NEW SPACES/MODERN USE

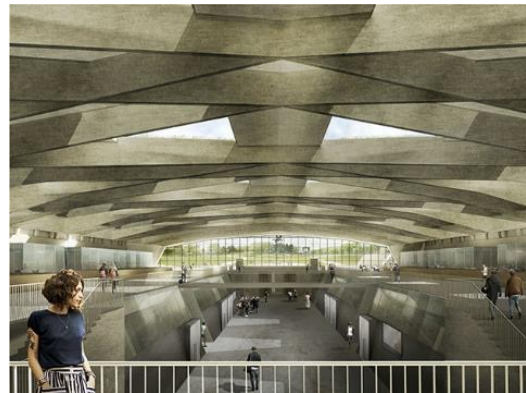**PARTNERSHIPS
WITH LOCAL INSTITUTIONS**

REDESIGN OF EXISTING AND ABANDONED CONSTRUCTIONS

MP T-
Masterplan
Processo per lo sviluppo strategico degli spazi di Ateneo

› Urban & Territorial Regeneration

› Manufacturing 4.0

**DISTRIBUTED ACROSS
THE GREATER METROPOLITAN
AREA OF TORINO**

URBAN REGENERATION

HIGH-PERFORMANCE BUILDINGS

Wrap Up

WHAT WORKS

› Actively engage internal and external community

› Give meaning and "tell a story"

› Territorial dimension and contribution to urban regeneration

› Investing in "Business Intelligence"

› Investing in Culture and in Communication

CHALLENGES

› Define a framework for universities Public Engagement impact indicators

› Adapt "on the go" the governance and management of the platforms

WHAT TO KEEP ON DOING (ALWAYS)
Training, Investing, Sharing/Asking, Communicate, …

Contacts

✉ **mahee.ferlini@polito.it**

🌐 www.polito.it

Thank you for your attention

Politecnico di Torino