



Fondazione
Politecnico
di Milano

Fondazione Politecnico di Milano

Sparkling Innovation

Vision, Identity and Growth 2020

Fondazione Politecnico di Milano

Sparkling Innovation

Vision, Identity and Growth 2020



Contents

Vision

Designing the Future Together	8
A Progressively More International Foundation	10

Our Identity

Background	14
Mission	16
Politecnico di Milano	18
Founders	20
Institutional Participants	22
Investment in Other Companies	24

Our Growth and Impact

Generating Value	28
Network	30
Knowledge Dissemination	32
Supporting New Entrepreneurship	36

Our Commitment

Strategic Initiatives	40
Project Management	42
Research Capitalisation	46
Technological Transfer	48
PoliHub and Supporting New Entrepreneurship	50
Social Development	52
Lifelong Training and Digital Learning	54
Networking	56

Governance

Board of Directors	60
Scientific Committee	61
Assembly of Founders	62

Credits and Contacts

Vision

Designing the Future Together

A Progressively More International Foundation

Designing The Future Together



Ferruccio Resta

Rector of Politecnico di Milano

Until quite recently, a university was seen as a self-contained entity: highly esteemed in public opinion but observed with detachment. Businesses thought they could bring them into industrial projects, but only when needed. Today, things have changed. **A university is an active player in its community.** It is a trustworthy and long-term partner for the productive sector under many angles, from technological transfer to continuous learning and open innovation. A university is a modern structure increasingly engaged in diligently measuring its impact on social and economic growth.

In the early 2000s, Politecnico di Milano had the foresight to realise that it would be in need of **a Foundation that could fulfil this mediating role between academia and the outside world.** This accurate intuition was the catalyst for **a Foundation that today is judged by the University to be a resource important to Milan, Lombardy and, increasingly, the international stage,** according to the strategies that will be rolled out over the next three years.

In defining its Strategic Plan for 2020-22, Politecnico has outlined its mission very clearly. To be **a leading university in Europe,** capable of facing the challenges of in-

novation and address the great topics of tomorrow's society. These range from the safety of fragile territories to infrastructure; from mobility to smart cities; from an ageing population to designing new living environments; from sustainable food solutions to challenges in healthcare; from energy transition to the circular economy; from climate change to a sustainable environment; from renewal in the production system to renewal in education; and from the new requirements of the world of work to social inclusion.

This medley of topics reflects the image of a cultural institution which fully intends to take on a high-profile role; which is placing its skills at the service of its country to grasp the opportunities opened by technology, the true leading player in this modern ecosphere; which is discovering its European identity seen as the only possible path to drive development in local communities; which is proud to offer its contribution, progressively needed in today's world.

Bolstered by its team spirit, the **Foundation can play a crucial role in this context.** Through its daily work with companies, the public sector and young entrepreneurs, the Foundation has a natural insight into their requirements, and we are, thereby, asking it to widen its horizons. **We want our Foundation to embrace an international profile, and create large-scale opportunities for the University, as well as developing youth-based innovation along lines that are both professional and market-ready.** This Foundation will know how to translate these actions into positive reverberations for the academic world, the local economy and the competitiveness of many small and medium-sized companies. This Foundation will know how to weave an ever more tightly-knit network of contacts that can benefit the University and, through it, the various entities of reference. **Our Foundation is not a vehicle to promote the University, as outlined in its statute, it concerns our whole national economic system.**

A Progressively More International Foundation



Andrea Sianesi

President of Fondazione Politecnico di Milano

Anticipating the future so that we are not caught unawares in front of the challenges arising from technological and social evolution. This is the motto of the Fondazione Politecnico di Milano, which was established to emphasise our University's research and support innovation within Italy's economic, productive and administrative framework.

Over the next four years, the Foundation will be facing **several critical challenges**. The common thread is **internationalisation**, understood both as the potential for developing skills to intercept **opportunities beyond our traditional EU boundaries, and as the capacity to "export" startups of excellence**, exposing them to an international landscape of investors and users of advanced technology.

Our location in Lombardy, the Italian capital of patents, is certainly a big plus point. This is the birthplace of 39% of all Italian inventions and **Milan**, with its nearly 32,000 patents and registered trademarks, is the Italian city heading the list. Lombardy is also the region housing 20% of the 10,000 Italian startups in the field of innovation. Innovation is the only way to remain competitive and attract talent. For us in the ecosystem of **Politecnico di Milano, a world-class technical-scientific university, innovation is a tangible asset**.

Our business involvement has increased over recent years, expanding the network of people and organisations that play a continuous part in the Foundation's activity. The extensive **network of relationships** is also in continuous growth and today is a 2200-strong matrix of contacts encompassing universities and research centres, SMEs, large companies and public authorities. At the same time, we have seen an upward trend in the Foundation's projects, from 181 in 2015 to 212 in 2019. Their financial value grew from 85 to 91 million euros, and the financed part of the overall value of these projects has risen from 58 to 62 million euros.

As a Foundation, we want to act and reinforce our position as a reference point for collaboration between universities, the productive system and public institutions, sharing values, strategies and actions in a framework of **international alliances**.

An important ingredient in our strategy is **PoliHub, the award-winning Innovation District & Startup Accelerator of Politecnico di Milano, one of the five best university incubators in the world** and managed by Fondazione Politecnico di Milano. PoliHub hosts the business projects of startups and large companies, which have chosen it for their open-innovation projects. With its 8,000 square meters, this space is the largest innovation district in Italy. PoliHub was the first university incubator to acquire an investment fund. Its 60 million euros fund reserved for researchers and entrepreneurs is managed in collaboration with 360 Capital Partners, a venture capital firm.

Looking to the future, the Foundation's mission is to develop an even stronger synergy with industry, drawing closer to research companies, directing them towards efficient solutions and working with them to achieve their targets by means of financed projects that benefit their activity, in the light of continuous evolution. **In four years' time, I see a Foundation with a much wider international breadth and the outstanding reputation which we have built up in Italy extending to Europe and outside our continent.**

A. Sianesi

Our Identity

Background

Mission

Politecnico di Milano

Founders

Institutional Participants

Investment in Other Companies

Background

Fondazione Politecnico di Milano was established in 2003 on the behest of **Politecnico di Milano, our city's main institutions and the regional government of Lombardy**, with the support of several important **business companies**.

The Foundation contributes towards innovating and developing Italy's economic and productive landscape, operating to improve the efficiency of relationships between Politecnico and companies, institutions and public authorities, by providing professional support, including on an international scale, to research, education and the University's third mission.



Mission

To fulfil its **mission**, Fondazione Politecnico di Milano intends to:

- Manage, in agreement and on behalf of the University, **investments in companies, bodies and institutions, in Italy and internationally**, whose work is consistent with the Foundation's mission and which are, more generally, **instrumental for achieving the University's mission** (a *European leading University driving science and technological innovation to improve human life in a sustainable and responsible way*);
- Set in place suitable and dedicated **professional overseeing bodies to support development, management and improvement** in research, education and the third mission, including in an international context, in harmony with the University's strategic and organisational development lines;
- Ensure a multi-disciplinary **focus** in all its work, especially at international level, on the topics of **ethics, sustainability and social responsibility**;
- Encourage the creation and growth of **innovative technological enterprises**.





QS WORLD
UNIVERSITY
RANKINGS
by subject

7th place
ARCHITECTURE

6th place
DESIGN

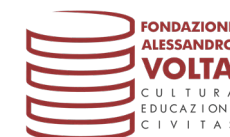
20th place
ENGINEERING

Founders

Built on solid foundations, Fondazione Politecnico di Milano understands and interprets dialogue and change. **Large-sized companies and public authorities share the Foundation's objectives and purposes**, taking part in **projects that can enhance academic research**, offer companies the opportunity for innovation and provide new products and services to the local community and its citizens.

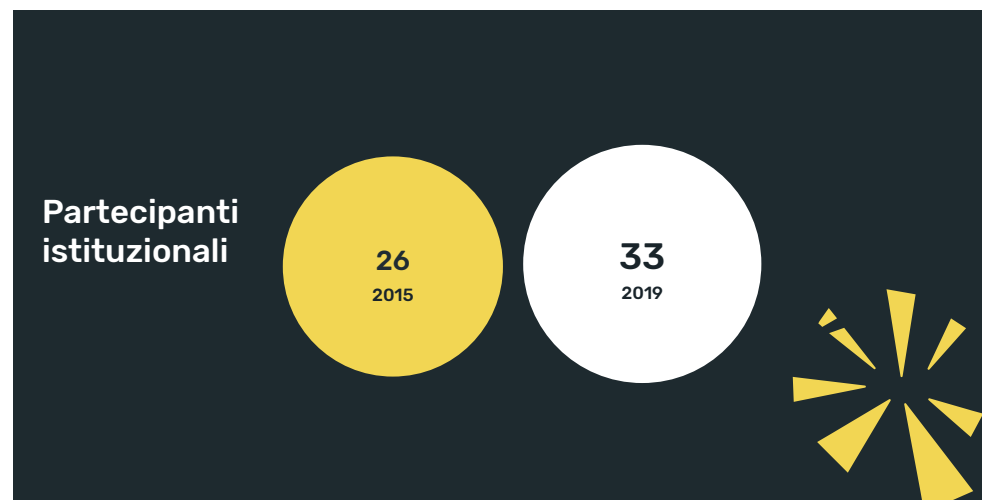


Associazione
Parizzi



Institutional Participants

One of Fondazione Politecnico di Milano's objectives is to **amplify the network of subject with whom it can create opportunities and initiatives**. Its Institutional Participants are public and private bodies that take part in the development of the Foundation's work on a continuous basis and share its aims and purposes.



Investment in Other Companies



PoliHub - Innovation District & Startup Accelerator of Politecnico di Milano, managed by Fondazione Politecnico di Milano, classified among the best five university startup incubators in the world.
Mission: support highly innovative startups through scalable business models and sustain processes of cross-fertilisation between startups, the University and consolidated companies that focus closely on innovation.



ComoNExT - Digital innovation hub and startup incubator certified by MISE (Ministry for Economic Development).
Mission: attract innovative companies, transfer innovation to the local community and incentivise the development of new businesses through its work geared to startups.



Fondazione CIFE - The International Photonic Energy Centre (CIFE) was established in 2011 through a collaboration between CNR, Fondazione Politecnico di Milano and Pirelli & C. S.p.A.
Mission: promote photonic research applied to renewable energy and to terrestrial and submarine optical communication.



Fondazione I.T.S. cantieri dell'arte - A cultural Foundation for the revival of architectonic restoration.
Mission: promote the diffusion of technical and scientific culture, support measures to develop the economy and active work policies.



Sidera - Sino Italian Design, Innovation, Education and Research Alliance. A company composed of Tus Holdings and Fondazione Politecnico di Milano.
Mission: create research and development opportunities to encourage Italo-Sino collaboration in innovation.



Fondazione R&I - Encourages the generation and development of new technological companies, activating a virtuous circle between highly-qualified players in industry, research and financial institutions.
Mission: insert synergy between the supply and the demand of technological knowledge, and promote open innovation in large companies, in collaboration with young innovative businesses (startups, spin-offs and innovative SMEs).



Our Growth and Impact

Generating Value

Network

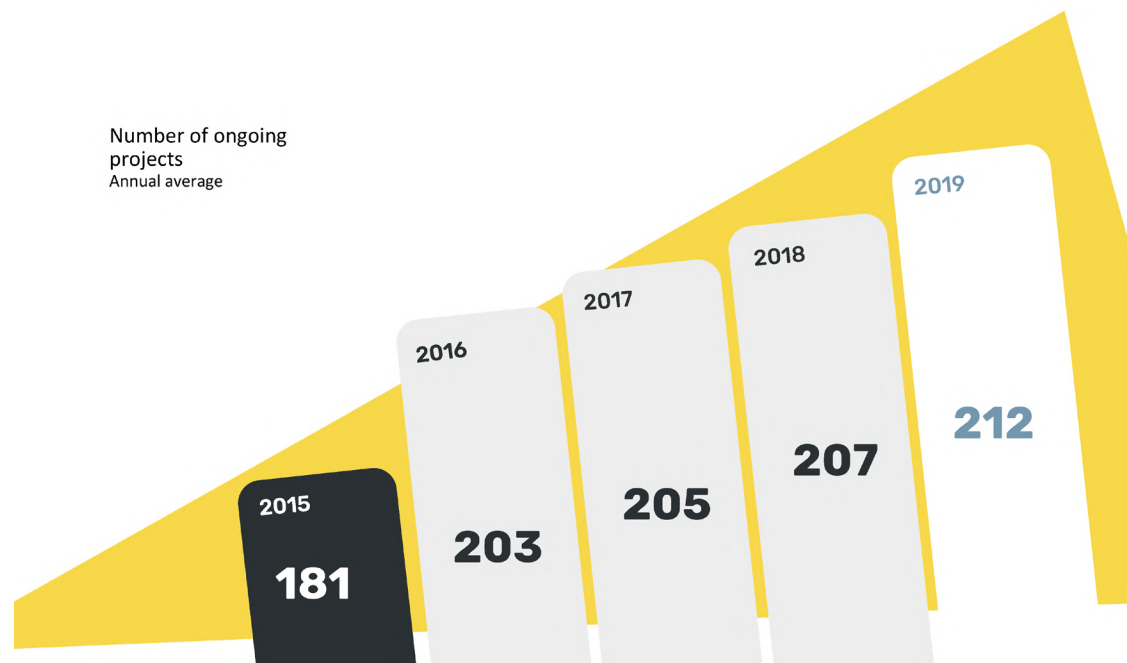
Knowledge Dissemination

Supporting New Entrepreneurship

Generating Value

Promotion, management and communication of research are the building blocks of an approach founded on the capacity to **obtain finance and reinject it back into the system, fuelling a virtuous circle that encourages growth**. In recent years, the number of projects has risen from 181 in 2015 to 212 in 2019. Their financial value has grown from 85 to 91 million euros, and the financed part of the overall value of these projects has risen from 58 to 62 million euros.

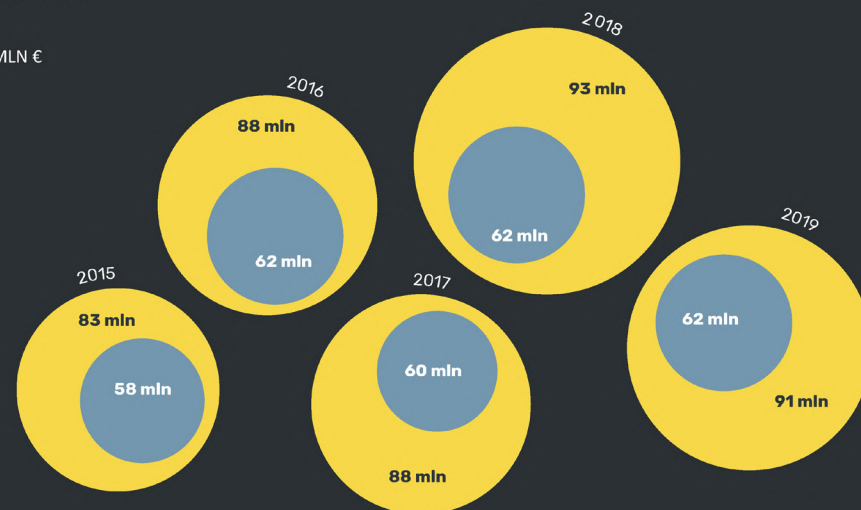
Number of ongoing
projects
Annual average



Funding and total value projects

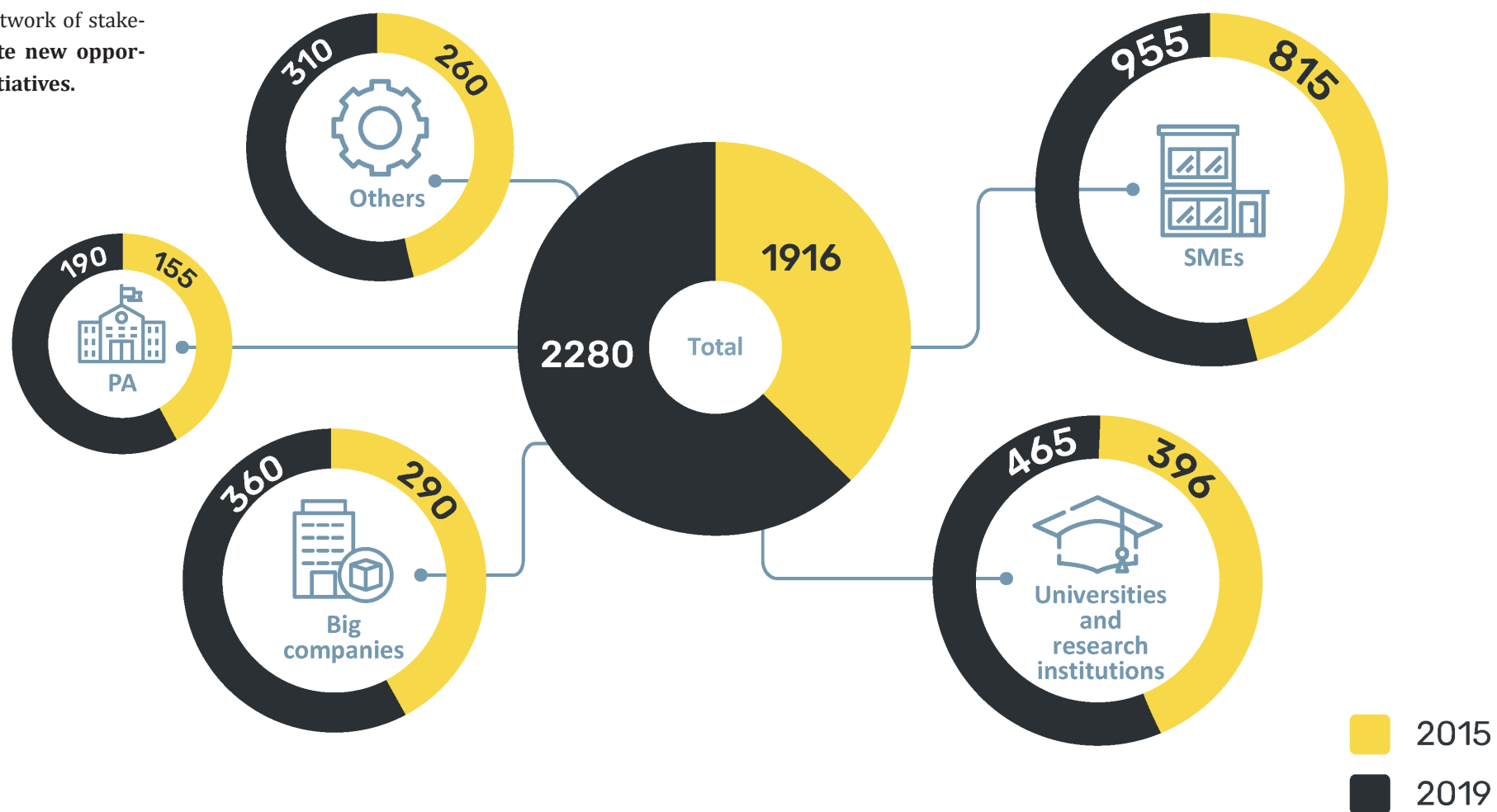
Annual Average - MLN €

Value
Funding



Network

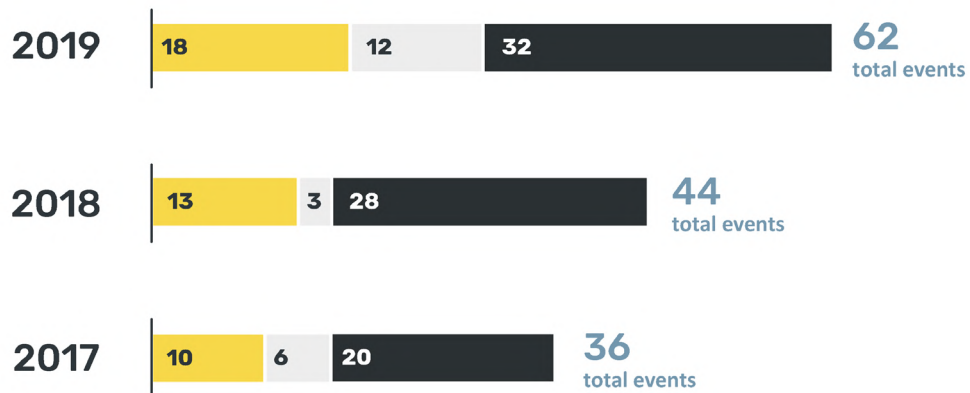
One of the goals of Fondazione is enlarging the network of stakeholders **to create new opportunities and initiatives.**



Knowledge Dissemination

Events

Alongside its committed work in conducting its many projects, the Foundation organises and coordinates prestigious **events, conferences and conventions for the international scientific community**.



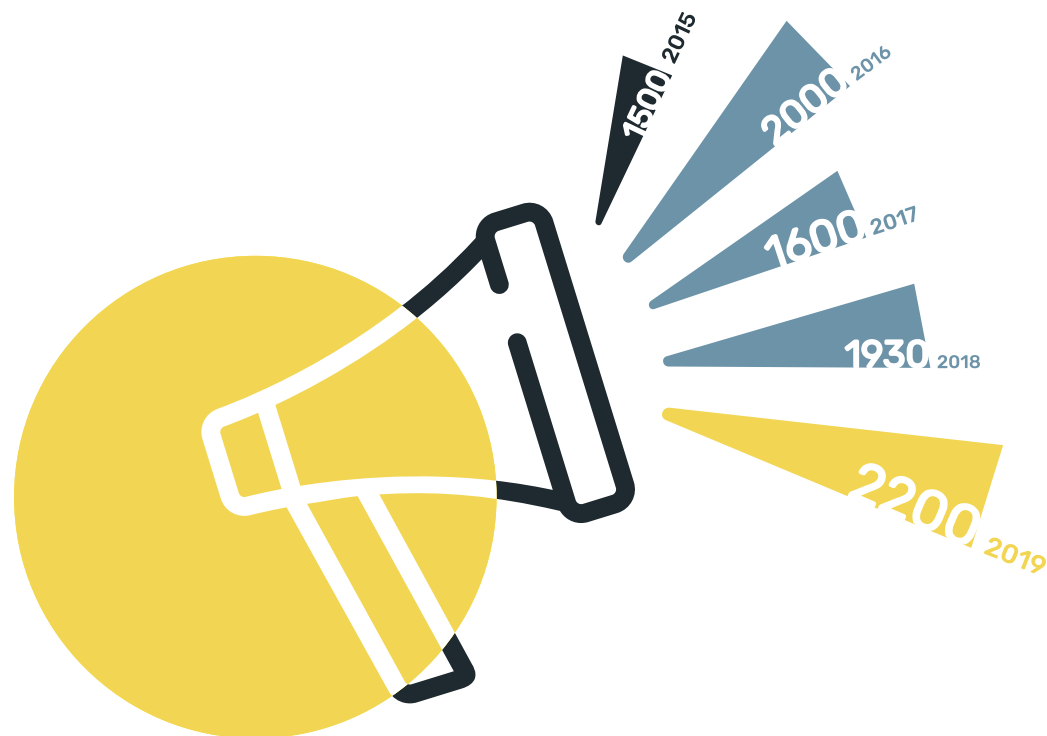
Events organized by
Fondazione Politecnico
di Milano

Events in collaboration
with external partners

Events organized by third
parties but promoted by
Fondazione

Press Releases

Fondazione Politecnico di Milano is in active contact with the **media world to promote the University's research and the projects it is responsible for**. Over the years, it has been the subject of many press articles.



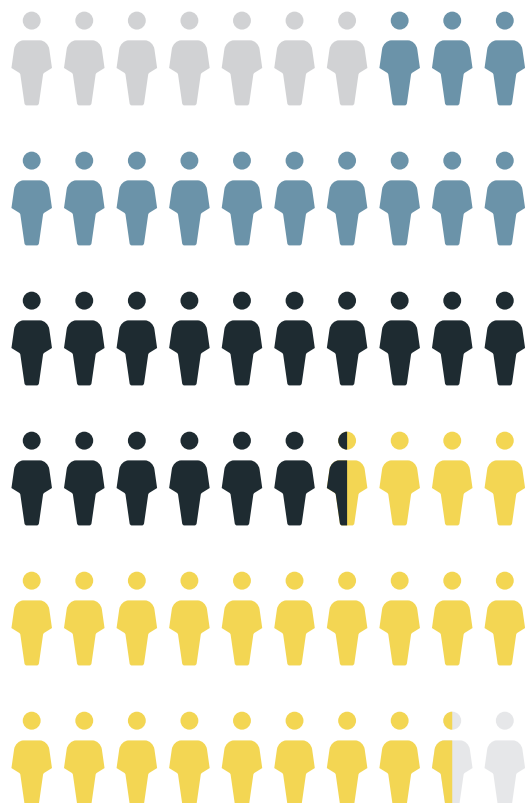
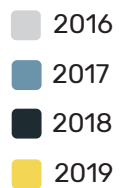
Knowledge Dissemination



Twitter



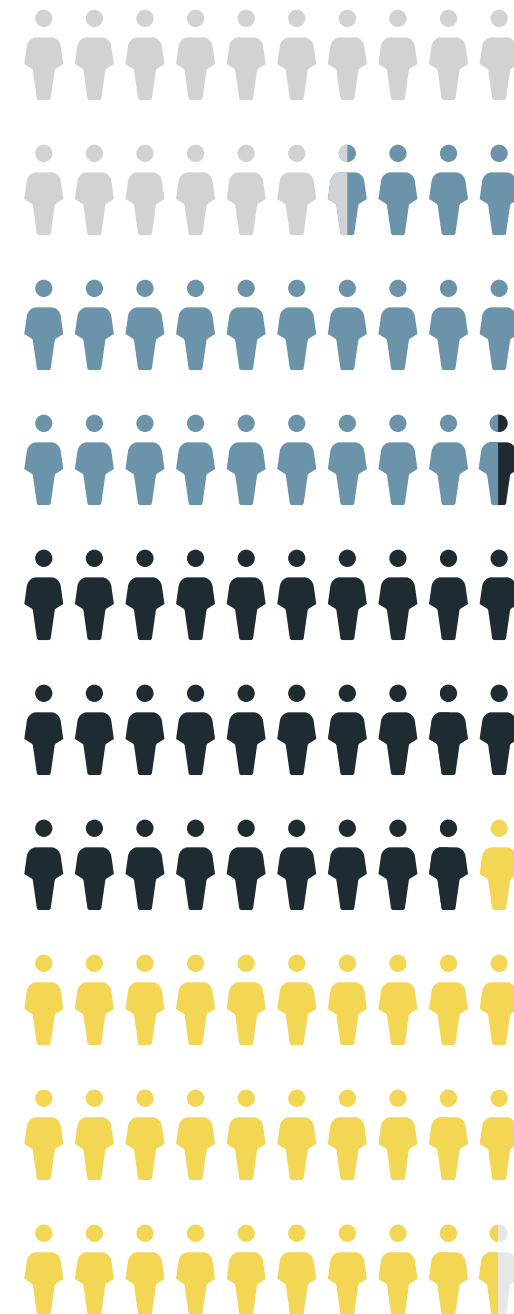
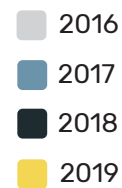
= 100 followers



Facebook



= 100 followers

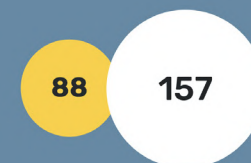


Supporting New Entrepreneurship



In the World Top 5 Business Incubator - University

Source: UBI World Rankings
Business Incubators 2019-20



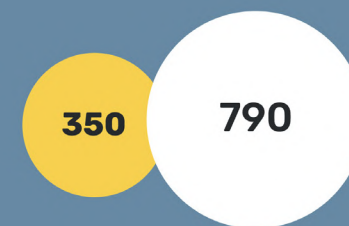
Incubated startups



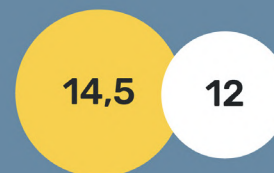
Competitions carried out



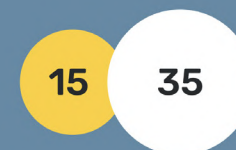
Participants at the competitions*
*persons



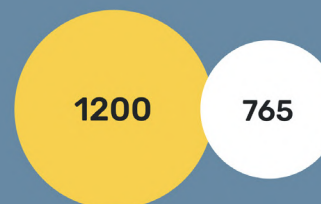
Employment generated*
*persons



Capital raised*
*millions



Revenue from companies incubated during the incubation period*
*millions



Ideas analyzed and evaluated



Exit (takeover by companies)

2015 2019

Our Commitment

Strategic Initiatives

Project Management

Research Capitalisation

Technological Transfer

PoliHub and Supporting New Entrepreneurship

Social Development

Lifelong Training and Digital Learning

Networking

Strategic Initiatives

Fondazione Politecnico di Milano develops **multidisciplinary innovation projects in partnership with companies, public authorities and research centres, in Italy and across Europe**, in many of the University's areas of competence. It supports the creation of enterprises and sustains the finest startups through its management of the PoliHub incubator. It promotes initiatives concerning corporate social responsibility and international cooperation, and it promotes continuous learning projects.

Project Management

Research Capitalisation

Technological Transfer

PoliHub and Supporting New Entrepreneurship

Social Development

Lifelong Training and Digital Learning

Networking

Per saperne di più:

<https://fondazionepolitecnico.it/what-we-do/>

Project Management

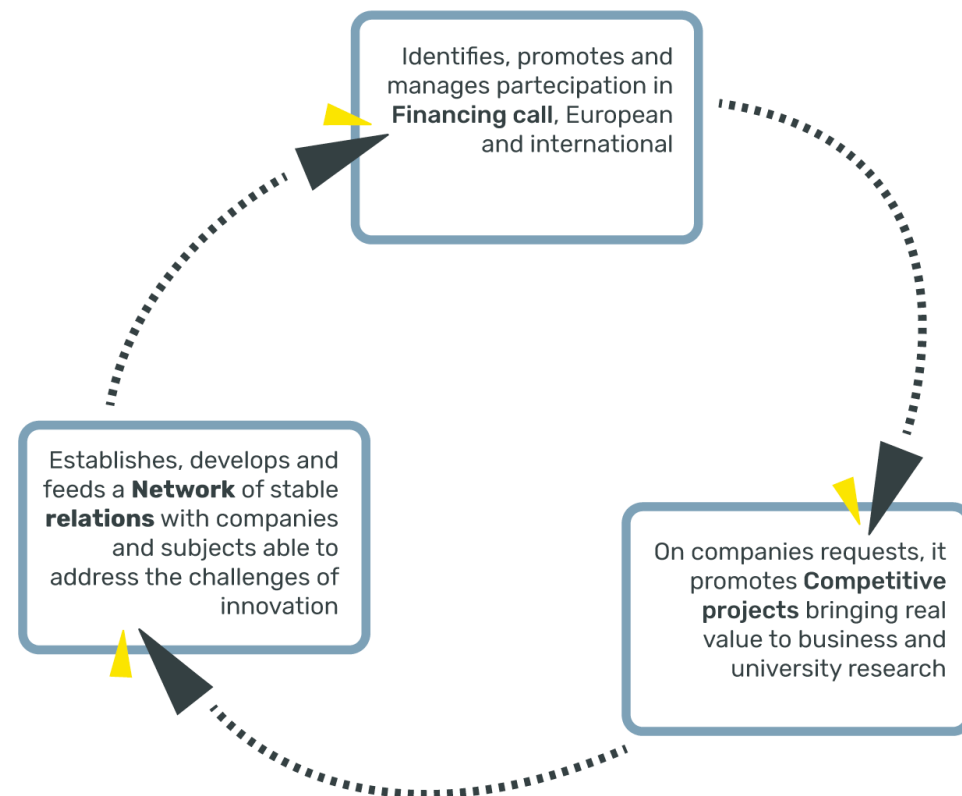
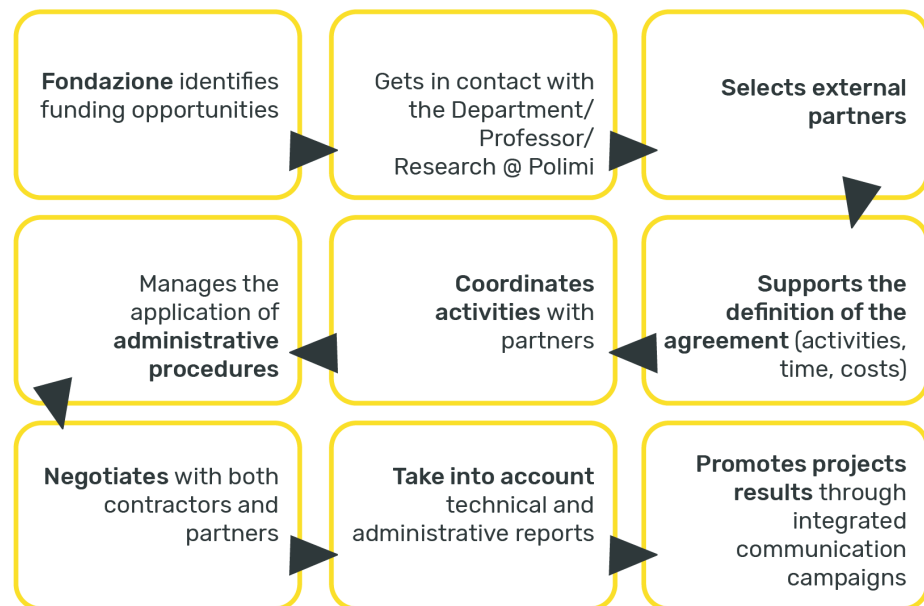
Fondazione Politecnico di Milano is an agile organisation that operates in a **proactive mode**. Its method is applied in heterogeneous and polyfunctional work groups that can identify solutions to problems during the individual phases of a project. The Foundation can also **identify opportunities and financing tools** that are both targeted and diversified, and gives its support to applications for funded proposals and projects. Furthermore, it contributes towards establishing inter-departmental and multidisciplinary work groups.

Unique Selling Proposition

The Foundation's results confirm that its staff can manage complex projects involving multiple sources of finance and calls for proposals. Through a combination of strategy, creativity and planning, the teams work with Italian and international partners to turn innovation into reality.



Project Management

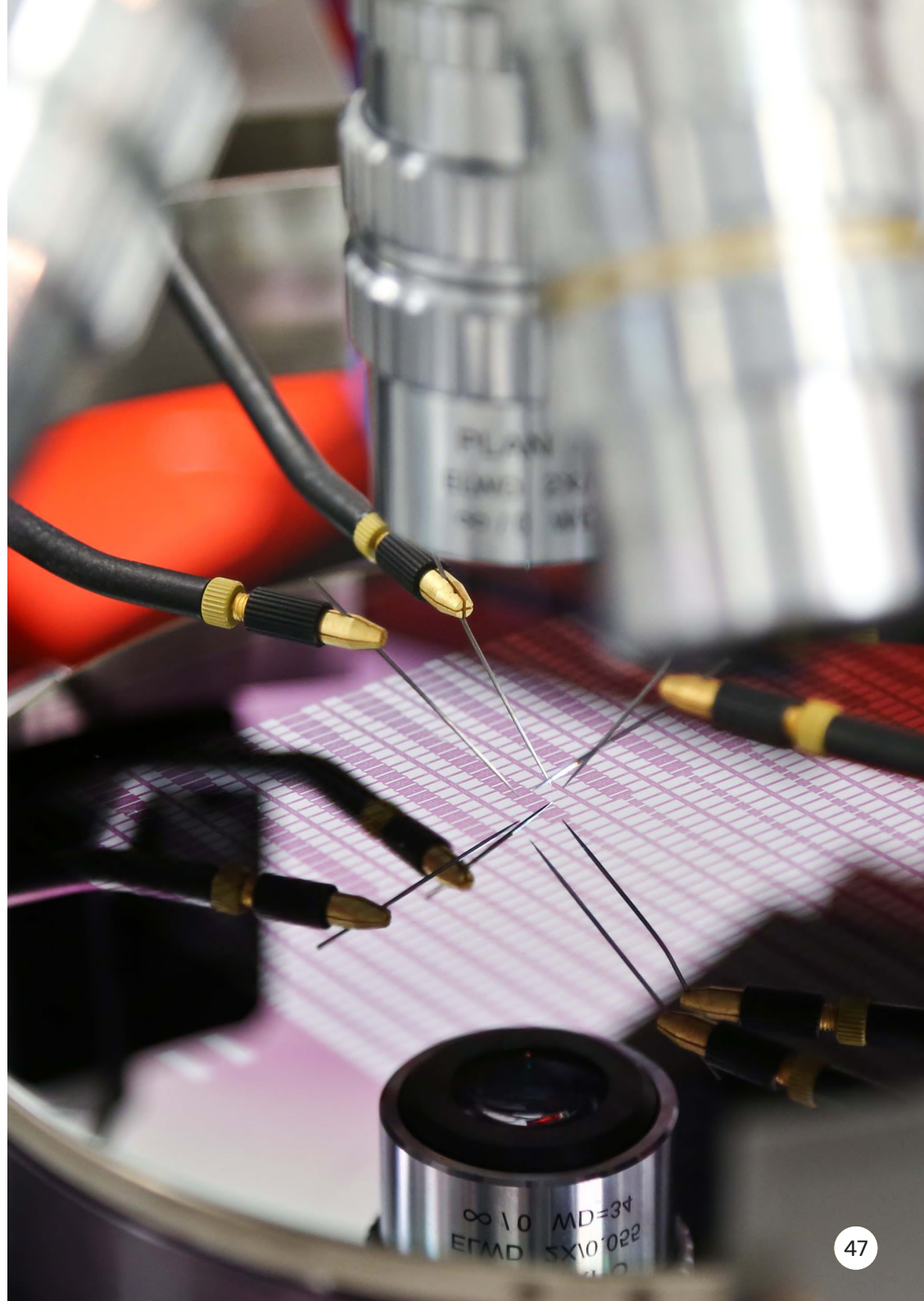


Research Capitalisation

Research is the pinnacle of knowledge, its most complex expression and is the most versatile combination of intelligence and intuition. Research anticipates change, it guides progress and growth in developed economies. The Foundation, on the mandate of Politecnico di Milano, has **the objective of disseminating knowledge and appreciation of the University's research, including raising funds within the private and public sectors**. Fondazione Politecnico di Milano works alongside teachers and researchers to identify partners and resources for their projects. It also supports them in promoting and spreading the results of their work.

Unique Selling Proposition

For researchers at Politecnico di Milano, the Foundation is an active and trustworthy supporter and sponsor.



Technological Transfer

The competitiveness of the productive fabric can be determined by its capacity for renewal, for adapting positively to change, for measuring up within the international context and for grasping complex challenges. Fondazione Politecnico di Milano intends to **empower companies, especially SMEs, with technology and innovation, introducing them to research**, directing them towards efficient solutions and working with them on precise programmes. Furthermore, the Foundation is keen to involve companies in funded projects, to the benefit of their operations, in a perspective of continuous evolution.

Unique Selling Proposition

Companies approach the Foundation because we listen to them carefully and have direct and intimate knowledge of a complex and multi-layered organisation such as Politecnico di Milano.



PoliHub and Supporting New Entrepreneurship

In 2001, when the first university business incubator was emerging from Politecnico di Milano, talking about startups sounded foreign and avant-garde. Today, this is the reality for many of our youngsters, who are ready to take risks and test the value of their ambitions in the field. Lean and agile, startups respond to the immediate needs of the market, they rapidly intercept the most beneficial opportunities and propose flexible solutions that contribute towards regenerating obsolete processes. Managed by the Foundation and classified **among the first five university incubators at global level**, PoliHub Innovation District & Startup Accelerator is a consolidated reality that can give its support to this pool of companies in continuous evolution.

Unique Selling Proposition

Budding entrepreneurs who approach PoliHub know that they can rely on a structure of excellence with the right professionals - investors, mentors and business people - to guide them through the creation and development of their company.



Social Development

Public authorities pay careful attention to the needs of the general public and companies, they participate in wide-ranging initiatives and act as spokespersons for cutting-edge solutions. Smart cities are no longer a figment of the imagination, but the result of well-planned policies that aim to improve quality of life through the use of new technologies. **Italian cities, first and foremost Milan, are investing in strategies for sustainability and the sharing of resources, with ecological measures for saving energy and solutions to innovative mobility and safety & security.** For public authorities, Fondazione Politecnico di Milano is the first point of contact.

Unique Selling Proposition

The Foundation, together with the main local public entities, the best-known humanitarian associations and large companies, encourages initiatives leading to new services for the public and for social growth and promote multi-disciplinary projects for sustainable development.



Lifelong Training and Digital Learning

Training and new/improved skills are fundamental for building an economy based on knowledge and to promote innovative organisational and professional change. Fondazione Politecnico di Milano develops and implements **personalised corporate training projects and learning models based on competency-based training**. These programmes mainly target schools, universities, public authorities and companies, nationally and internationally.

Unique Selling Proposition

Starting from the users' needs and exploiting the potential of technological tools, the Foundation encourages and supports processes of innovation in teaching and online collaborations.



Networking

The Foundation today encompasses a large group of professionals whose solid and dynamic approach, combined with their ability to operate in national and international contexts, has allowed them to **build consolidated relationships with the world of companies and public authorities, interpreting their needs for innovation** and championing their collaboration with the world of universities and research.

Unique Selling Proposition

The Foundation is at the centre of an exchange system, where they share the value generated through its work with those who worked to implement it.





Governance

Board of Directors

Scientific Committee

Assembly of Founders

Board of Directors

President

Andrea **Sianesi**

Vice President

Ingrid **Paoletti**

Directors

Marco **Belloli**
Luigi **De Nardo**
Monica **Papini**
Claudio **Picech**
Lucio **Pinto**
Giuseppe **Tannoia**
Umberto **Tolino**
Elena **Vasco**

Scientific Committee

President

Andrea **Sianesi**

Members

Giovanni **Arvedi**
Gaia **Bernini**
Manfredi **Catella**
Enrico **Cereda**
Adriano **De Maio**
Giorgio **Diana**
Sergio **Dompè**
Mauro **Fenzi**
Giorgio **Ferrari**
Pasquale **Forte**
Luciano **Galimberti**
Pietro **Guindani** (President of the Institutional Participants Committee)
Alberto **Meda**
Paola **Mungo**
Alessio **Rocca** (Student Representative)

Assembly of Founders

The Founders' Assembly consists of one member appointed by each one of the Founder. The President of the Committee of Institutional Participants attends the Assembly meetings. The Assembly's duties include **making recommendations to the Board of Directors concerning the general direction of the Foundation's work and the relative objectives and programmes, expressing opinions on the provisional and actual financial statements, and nominating four Directors to the Board.**

President

Attilio **Fontana**, *President of Regional Government of Lombardy*

Vice President

Vico **Valassi**, *President of UniverLecco*

Members

a2a, Associazione Eugenio e Germana Parizzi, Camera di Commercio di Milano Monza Brianza Lodi, Comune di Cremona, Comune di Milano, Comune di Piacenza, ENI, Fondazione Alessandro Volta, Indesit Company, Intesa Sanpaolo, Pirelli & C., Provincia di Cremona, Regione Lombardia, Siemens, UniverLecco.

Credits

Designed by

Elisabetta **Caregnato**

Data and documentation

Fabrizio **Amarilli**

Sonia **Pezzali**

Claudia **Pingue**

Manuela **Pizzagalli**

Paolo **Vercesi**

Copyedited by

Elisabetta **Caregnato**

Giulia **Dadà**

Traslated by

Julieth **Hammond-Smith**

Scientific coordination by

Marisa **Galbiati**

Graphic designed by

Twig Srl

Imagislab - Dipartimento di Design

Overseen by

Eugenio **Gatti**

Photographic credits

Marco **Introini**

Lab immagine **polimi**

Contacts

© Fondazione Politecnico di Milano

Piazza Leonardo da Vinci, 32

20133 Milano

T. (+39) 02 2399 9150

F. (+39) 02 2399 9155

info@fondazione.polimi.it

www.fondazionepolitecnico.it



Fondazione Politecnico di Milano



@FondaPoliMi



Fondazione Politecnico di Milano



Fondazione Politecnico di Milano