

2025 UPDATE AND 2024 SUSTAINABILITY REPORT

Strategic Sustainability Plan 2023-2025

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Strategic Sustainability Plan 2023-2025

2025 UPDATE AND 2024 SUSTAINABILITY REPORT



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Preface

Preface to the 2025 update of the Strategic Sustainability Plan

We are nearing the end of the second year of work, and the time is approaching to take stock for the first time. Two years ago, we set ourselves the goal of leading society's transformation towards sustainable development, starting by putting our own "house" in order (leading-by-example) to then contribute to a broader vision of collective responsibility. "Our society is engaged in an epochal change in which sustainability is progressively emerging as the new reference model [...]. To contribute to this transformation - in a historical phase in which we are moving from serious intentions to a real redesign of society - we need a strategic perspective that combines long-term goals with short-term actions that give a sense of urgency and absolute necessity for change. Our strategic sustainability plan is intended to show that we are serious about making a step change and convey an unequivocal message to the world: we are here, and we are doing this by bringing our vision and our transformative potential." (Strategic Sustainability Plan 2023 2025)

This initial period has been crucial in establishing a shared understanding of sustainability (broad, encompassing environmental and social dimensions, and structured around the 18 themes of the Plan); in raising awareness and engagement within our community; in developing and strengthening planning and governance tools; in reinforcing the organisational structure (the "Sustainability Task Force" and with it the various Units distributed across the Central Administration Divisions); and in achieving significant results that have enabled us to close the gap in critical environmental areas, and in integrating sustainability content into teaching and research (as identified in the positioning assessment carried out in 2023 with the support of Boston Consulting Group).

We have strengthened our foundations to address complete sustainability. This includes equal opportunities, student support services (diritto allo studio) accessibility of spaces, education, environmental sustainability, social innovation in the region and science diplomacy. This perspective underpins the four pillars of the University's Strategic Plan – People, Education, Research, and Social Responsibility – reflecting a coherent alignment with our founding principles, guided by a pragmatic rather than ideological approach.

Finally, processes and tools have been (re)defined in a coordinated and inclusive way, engaging central technical-administrative bodies, departments, campuses, and students (notably through sustainability working groups involving 250 participants across the university), while fostering constructive dialogue with other universities (in Italy, through the Network of Universities for Sustainable Development), and with organisations and businesses. The planning process has been completed, moving from the three-year plan (updated annually) to related secondary plans (CO₂ Emissions Mitigation, Home-University Travel, Energy, Gender Equality, etc.; in 2025, we will have the first version of the Climate Change Adaptation Plan), along with implementation, monitoring and verification tools.

With these targeted actions that we could achieve encouraging results compared to the initial targets: 68 out of 81 are fully on track to be achieved in 2025 (nine are already fully achieved for the threeyear period and another 15 achieved by 2024 but to be maintained in 2025); nine are feasible but require special attention and four are difficult to achieve.

We worked satisfactorily in some areas - People (and Campus) and Social Responsibility - recovering a substantial gap (especially on environmental targets). A striking example is CO₂ emissions: in 2024, the reduction is back in line with the Mitigation Plan targets (-25% compared to 2015, compared to an almost constant value in



2022 vs 2015). There is the design of the new platform for dialogue with the non-profit sector, which is in its final stages (the work is incomplete, but is progressing), and the gender equality certification, obtained at the end of 2024. In these two key areas, the year 2025 and the subsequent 2026–28 three-year period provide the opportunity for a more substantial step forward. Significant work has been done in the Training and Research area to take stock of what is already in place (courses and programmes, projects/results/research laboratories) and proposing flagship initiatives (for example, the zero library of MOOC courses on sustainability, the first version will be launched in mid-2025, and the "unveiling" of sustainability technologies and laboratories, which are in the final planning stage).

In appreciation of this remarkable collective effort, we extend our renewed thanks to those who have dedicated themselves to this endeavour. Their contribution is even more significant given our historical context, in which the goals of sustainable development are increasingly being challenged across different sectors of society. This is the time to confirm our determination.



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Donatella Sciuto Rector



Alessandro Perego Vice-Rector for Sustainable Development and Societal Impact We wanted to give the term sustainability the most straightforward and accessible meaning: a sense of responsibility and commitment to "support, protect, nurture, and ensure the long-term growth" of what truly matters—people and the environment—within our Politecnico community and beyond, beginning with the world closest to us. We have deliberately linked the term sustainability with the concept of development, referring explicitly to "sustainable development." We believe that no definition of the term can truly hold unless it embraces the conditions necessary for its ongoing renewal and regeneration. There is, therefore, no contradiction. It is the lack of a sustainability strategy that impedes collective progress. This is the perspective through which we must shape relationships within our community.

FROM THE PREFACE TO THE FIRST EDITION OF THE STRATEGIC SUSTAINABILITY PLAN 2023-25



01. Internal context

1.1 Il Politecnico di Milano

Founded in 1863, the Politecnico di Milano is one of the most recognised Italian universities in the field of science and technology. It is a modern university where quality and innovation in teaching and research are foundations of a strong and lasting relationship with the social and productive system and with foreign institutions in the fields of architecture, design, and engineering. It offers (Academic Year 2023/2024) 26 three-year degree courses (one is in partnership with another university), 46 master's degree programmes (four with other universities), 20 PhD programmes, one specialised architectural heritage and landscape school, 189 active courses between first- and second-level master's degrees and post-graduate specialisation. Politecnico is a national and international reference centre for education in engineering, architecture and design, with almost 49,000 students enrolled (Academic Year 2023/2024), 2,000 PhD candidates, 1,065 research fellows, 1,840 members of Academic staff and 1,382 members of technical administrative staff (as of 31/12/2024).

Politecnico focuses on high quality standards and innovative teaching and research, developing profitable relations with the economic and productive environment through experimental research and technological transfer. Together with teaching, research is a priority commitment that allows Politecnico di Milano to achieve high-level international results and bring universities and the business world together. The research activity constitutes an integrated path using cooperation and alliances with the industry. The challenge is to project this tradition of strong regional roots beyond the country's borders, particularly at a European level. The push towards internationalisation sees Politecnico di Milano participating in the European and global network of leading technical universities and offering numerous exchange programmes, double degree programmes and courses of study entirely in English.

Campuses

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In addition to the Milan campus, with two campuses in Leonardo and Bovisa, Politecnico has four additional campuses: Lecco, Piacenza, Cremona, and Mantua were established as part of a longterm initiative, carried out through multi-year development plans that integrate teaching, research, and technology transfer, while responding to the unique features, needs, and opportunities of their respective local areas. The network includes the Italo-Chinese Campus, with sites in Shanghai and Xi'an, established following the signing of international exchange and double degree agreements with around 30 Chinese universities.

Organisation: Divisions, Departments, Schools

The University develops its research and teaching activities through 12 Departments and four Schools, in addition to which there is a PhD School that defines the guidelines and coordinates the University's PhD programmes.

Departments serve as the institutional centres for conducting research in related subject areas and for developing the expertise needed to support corresponding teaching activities. The 12 Politecnico di Milano departments are:

- Architecture and Urban Studies
- Architecture, Built Environment and Construction Engineering
- Chemistry, Materials and Chemical Engineering
- Design
- Electronics, Information and Bioengineering
- Energy
- Physics
- Civil and Environmental Engineering
- Management Engineering

- Mathematics
- Aerospace Science and Technology

The Schools oversee teaching activities, coordinating the University study programmes. To effectively cover the teaching areas within Politecnico di Milano's remit, four Schools were established:

- Architecture, Urban Planning and Construction Engineering
- Design
- Civil, Environmental and Land Management Engineering
- Industrial and Information Engineering

Politecnico relies on an administrative structure coordinated by the University General Directorate, which is divided into 10 management divisions:

- · General Affairs and Strategic Support
- Campus Life
- Research, Innovation and Corporate Relations
- Educational
- Public Engagement & Communication
- · Supplies and Facility Management Division
- ICT Services
- Real Estate, Construction and Development
- Financial Management and Economics
- HR and Organisational Development

Consortia, Fondazione Politecnico di Milano and PoliHub

The consortia operating in research and postgraduate training are a vital component of the Politecnico di Milano ecosystem. They are responsible for delivering more than 85 per cent of the Politecnico's master's programmes and serve as a key resource for Departments in providing educational opportunities for graduates, professionals, and businesses.

The main Politecnico di Milano consortia are:

- **Cefriel**, which carries out research, advanced training and consulting in the field of ICT technologies
- **GSOM POLIMI Graduate School of Management**, lthe Politecnico business school, which offers management training, with a focus on technology applied to business management

• **poli.DESIGN**, which focuses on research and education in design and the promotion of design culture

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- **CIS-E**, which develops training and research initiatives in the field of structural engineering construction, giving priority to interdisciplinary studies and research with a European focus
- **Poliedra**, which focuses on environmental sustainability, regional development, participation, and smart cities and communities, carrying out research and providing consultancy to public administrations and businesses.
- **LEAP Laboratorio Energia e Ambiente Piacenza**, a research centre operating in the energy-environmental sector, active in research, consultancy and technology transfer.

Another key body associated with the University is the **Fondazione Politecnico di Milano**, which promotes joint and multidisciplinary innovation projects at national and European levels, with a strong focus on advancing research and technology transfer. The Foundation runs **PoliHub Innovation Park & Startup Accelerator**, through which it supports business creation and top start-ups.

1.2 From the University Strategic Plan to the Strategic Sustainability Plan

The Strategic Sustainability Plan, first published in 2023 and now presented in its second updated edition, was developed from the University's Strategic Plan 2023–25, where the concept of "sustainable growth" serves as the guiding theme, shaping its strategic orientation and directing objectives towards achieving tangible societal impact.

The University Strategic Plan is structured along four strategic lines (People, Education, Research and Social Responsibility), for which 17 objectives and 48 priority actions were identified. The achievement of each action is measured by indicators, which are monitored and reported annually.

The initial review of the Strategic Plan's progress, carried out between November and December 2023, had already revealed a positive outcome. For nearly all the targets set, performance indicators not only met expectations but often exceeded them, to the extent that some objectives could be achieved two years ahead of schedule. This year's monitoring, conducted at the end of 2024, confirmed and reinforced this success, with most of the performance indicators in the different areas of our university's action meeting expectations. A notable example was sustainability, for which the first Strategic Sustainability Plan was conceived, developed, communicated, and subsequently monitored, fully integrated within the university's growth policies. Also noteworthy is the attainment of gender equality certification, under UNI/PdR 125:2022; a formal recognition that acknowledges our commitment to fostering a more inclusive environment and reinforces a management model focused on the future of the next generations.

The Strategic Sustainability Plan reinterprets the University's Strategic Plan guidelines through the lens of sustainable development, embracing some of the already sustainability-oriented goals and developing new ones: 12 of the 81 targets of the Strategic Sustainability Plan are directly linked to the same number of indicators of the University Plan, reinforcing the need to consistently monitor and update the two Plans, with a view to make them converge in the future into a single tool for planning and disseminating the University's vision. The implementation, monitoring, and updating of the Strategic Sustainability Plan have been incorporated into the priority actions of the University's Strategic Plan, reinforcing and advancing the objective first achieved two years ago with the Plan's initial drafting, and last year with its first update.

1.3 Sustainability governance

The sustainability strategy governance is organised into three major areas - Strategy and Execution, Widespread Innovation and Engagement, and External Relations - with clear mechanisms for interaction and coordination.

Strategy and implementation

It is strategically directed by the Rector and the University's statutory bodies and operationally managed by the Sustainable De-

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velopment and Societal Impact Coordination Round Table, composed of:

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- Executive Vice-Rector for the implementation of the University Strategic Plan
- Vice-Rector for Sustainable Development and Societal Impact (Table Coordinator)
- Vice-Rector for Communication and Cultural Activities
- Rector Delegates for Sustainable Development and Societal Impact institutional issues
- Sustainability Task Force, a university unit that coordinates Sustainable Development and Societal Impact







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Sport activities	P. Metrangolo
Data strategy	A. Paganoni
Diversity and inclusion	M. Tanelli
Off campus projects	F. Cognetti
Social innovation	S. Maffei
Multichance	A. Campi
Relations with academic networks for sustainable development	M. Grosso
Science diplomacy	E. Colombo
Energy transition	M. Motta

// Table 1 | Delegates for Sustainable Development and Societal Impact //

The implementation of the guidelines identified by the Coordination Table, and the Strategic Sustainability Plan, is the responsibility of the following University bodies: Central Administration, Departments, Schools and Campuses. The different aspects of sustainable development are reflected at an organisational level through a wide network of people, units and offices within the University that work to support all aspects of sustainability.

Sustainability Task Force

A Task Force unit is established in the General Directorate to support the design and implementation of the projects identified by the Sustainable Development and Societal Impact Coordination Round Table. The task force is responsible for: (1) supporting strategic planning; (2) developing tools to monitor indicators; (3) coordinating participation in sustainability rankings; (4) acting as the technical administration office for the Sustainable Development and Societal Impact Coordination Round Table; and (5) managing relations between the Coordination Round Table and other internal and external bodies. The University Functional Coordinator must coordinate the Task Force and the network of sustainability contact persons within the University bodies. The Coordinator oversees the various projects, under the guidelines provided by the Sustainable Development and Societal Impact Co-ordination Round Table, promoting innovative solutions and the integration of suggestions with the administrative divisions objectives; and is responsible for coordinating data collection, policy development, reporting, sustainability ranking activities, and the preparation of the Sustainability Report and Strategic Sustainability Plan.

Central Administration Divisions

The Sustainability Task Force and technical and administrative divisions work closely to implement strategies and initiatives for the university's sustainable development. The interaction between the Sustainability Task Force and technical and administrative divisions makes it possible to create an effective, cross-cutting sustainability governance system involving all levels of the university. This means the University can develop and implement innovative sustainability strategies, while ensuring coordination between academic vision and the administrative management of resources. The technical and administrative divisions involved are: Campus Life; Educational; Supplies and Facility Management; Public Engagement and Communication; Research, Innovation and Corporate Relations; HR and Organisational Development; ICT Services; and Real Estate, Construction and Development.

Widespread innovation and engagement

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The division is dedicated to the generation of innovative ideas on sustainability issues and involves representatives of everyone in the Politecnico community in working groups committed to specific topics - called Sustainability Working groups.

The Sustainability Working groups project experienced considerable growth in 2023, with a more clearly defined structure for group management and the integration of project proposals into the University's decision-making and implementation processes. There was a notable rise in the number of groups created and participants engaged. The project and results achieved in 2023 are detailed in the dedicated section.

Alongside the Sustainability Working groups, another form of community engagement was developed through collaboration with the University Bodies (12 Departments and four Campuses). Each of the 12 Departments and four Campuses appointed a Sustainability Delegate from professors and a Sustainability Representative from the technical and administrative staff. Within each body, the Delegate and Representative work together to oversee sustainability matters and link the University's central sustainability governance with individual bodies governance. During 2023, four general meetings were organised with the network of almost 40 Delegates and Representative for Sustainability to align information and coordinate initiatives and consolidate the contribution of Departments and Campuses to the University's Strategic Sustainability Plan. To promote a more systematic alignment, regular online update meetings for the Delegates and Sustainability Representative of the various Bodies have been scheduled from 2024 onwards, to take place at least monthly. These meetings, led by the Rector's Delegates and University Directors, focus on key projects linked to the implementation of the Strategic Sustainability Plan (such as green building, sustainable mobility, education, energy, and the non-profit sector collaboration platform).

Finally, the involvement of students in sustainability-related activities is essential to build an active and knowledgeable academic communi-

ty. There are several groups of students directly involved in sustainability projects, including more than 50 students involved in the 10 Sustainability Working groups, the RUS Network and editorial board of the sustainability newsletter "Orizzonti Sostenibili" (see next section), the students enrolled in the "Ambassador" programmes (Green Technologies, Smart Infrastructures, Inclusivity Design, Creative Thinking), those who are members of associations recognised by the university that deal with sustainability issues (e.g. Resilient Gap, PoliEdro, Erasmus Student Network, Associazione Studenti Musulmani, Enactus Polimi and Poliran), students involved in Off Campus projects (university spaces in Milan, dedicated to teaching and research in the field and innovation and social responsibility). For 2025, a fundamental goal will be to involve and raise the awareness of the student community on Sustainable Development issues.

In 2024, an editorial board was established for the University's sustainability newsletter *Orizzonti Sostenibili* - with six columns: Focus; News; Opportunities; Training and research; Sustainability Working groups; Partnerships. The Newsletter aims to share sustainable development policies, engaging and involving the community, publicise activities and events; communicate research and training projects, inform about ideas from the Sustainability Working groups, showcase new infrastructure and illustrate partnerships. The newsletter is published monthly for the Politecnico community including Academic staff, technical administrative staff, research fellows, PhDs and students.

External relations

This area is dedicated to the coordination of the university's communication on sustainability, management of relations with institutions and the region in social responsibility and participation of the university in national and international academic networks focused on sustainable development and the impact on society. Politecnico di Milano joins national and international networks aimed at promoting a sustainability culture. The University participates in the RUS Network – the Network of Universities for Sustainable Development – the first initiative bringing together Italian universities engaged in environmental sustainability and social responsibility. Politecnico is involved in the RUS through the participation of 25 academic and technical-administrative staff members across 10 Working Groups and Round Tables (WGs) focused on social and environmental impact topics. The University coordinated the "Climate Change" WG until March 2023 and currently leads the "Resources & Waste" WG.

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Since 2023, the university has intensified its connection with the networks, with the appointment of a Rector's Delegate for Relations with the University Networks for Sustainability and strengthening the management of RUS processes within the university. Consolidating these relations leads to two main benefits - it ensures a broad, widespread and systematic dissemination of good practices that arise within the RUS, and allows Politecnico di Milano to support the network and its initiatives, make suggestions, provide skills and experiences that multiply the effects that a single university can produce in the regional framework.

In 2023, a sustainability chair was formally established within the Public Engagement and Communication division to strengthen the University's communication on sustainable development issues. Sustainability was included in the University Communication Plan with four lines of action:

- Major events: participation in national and international events on sustainable development, contributing to initiatives organised by external bodies or hosting side events on Politecnico premises.
- University events and initiatives: organisation of events and activities that establish Politecnico as a leading institution for sustainable development, aligned with the themes outlined in the Strategic Sustainability Plan.
- Digital editorial plan: promotion of sustainability initiatives via the University's new website and social media channels, ensuring wide visibility and transparency of the Strategic Sustainability Plan.
- Media plan: communication of sustainability achievements and initiatives at local, national and international levels through media coverage, including media partnerships to strengthen the University's positioning.

1.4 Sustainability Working Groups

The Sustainability Working groups are participatory working groups that promote innovative ideas in sustainable development, involving the Politecnico community through the positive mediation of participants.

The Sustainability Working groups are a cohesive element within a complex eco-system that embraces Politecnico bodies and people: Departments, Campuses, Central Administration Divisions, University governance including the Delegates Round Table for Sustainable Development and Societal Impact Rector's Delegates, Students and their representatives and associations. Each Working group brings together a wide range of members from across the University's diverse community, fostering participation, engagement, and the ability to translate ideas into action.

The Sustainability Working groups were established in 2022 as round tables bringing together the technical and administrative staff of Departments, Central Administration Divisions and Campuses, together with some student representatives, for a total of 50 people. During 2022, the five experimental Working groups (still active) generated around 20 project proposals, eight were implemented in 2023.

In 2023, the Working groups were redesigned to encourage greater participation by the University community. To date, the Sustainability Working groups see the participation of more than 200 people including professors, technical and administrative staff and students (around 50). During 2024, the Working groups' scope was broadened, involving the participants in implementing ideas, providing support to the University Directors in grounding these projects.

To date, 10 Sustainability Working groups are active, focusing on a wide range of topics. The first five were launched in 2022, the remaining five were initiated in 2023 in response to specific needs identified within the University and continued into 2024.

The work of the Working groups progresses continuously through a dynamic project portfolio, which evolves over time as certain proposals are consolidated—subsequently passed to the Coordination Round Table for final evaluation before entering the implementation phase—and new ideas are generated. Twice a year, a structured dialogue takes place between the Working groups Coordinators and the Sustainable Development and Societal Impact Coordination Round Table, to ensure alignment between the development of the project portfolio and the Sustainability Plan, while promoting horizontal coordination across the Working groups.

WORKING GROUP NAME	GOAL
Accessibility	Gather expertise and professionalism on physical and digital accessibi- lity, to initiate actions to map and remove physical and digital barriers in the University
Sustainable procurement	Discuss and generate ideas on policies and support tools to increase sustainability in procurement, reducing it where possible and raising awareness of the importance of sustainability as a key criterion in pro- curement choices
Behavioural change	Devise ways of involving the Politecnico community in disseminating new sustainable behaviour and lifestyles, when using space and re- sources
Sustainable mobility	Suggest policies and strategic actions to promote sustainable mobility in the University and region with environmental, social and economic benefits
Gender policies and inclusion	Promote gender equality and inclusion in University's activities, coun- teracting gender stereotypes and prejudices, promoting the empower- ment of people and suggesting initiatives to include international students and staff
Food policy	Develop ideas to support a University food policy, encompassing its dif- ferent aspects, including space and services, variety, supply, training, involvement, and reducing food waste
Energy saving	Discuss and generate ideas on policies, purchasing decisions, organi- sational changes and technical actions to reduce energy requirements, and inform and educate on the topic
Reuse of materials and waste management	Innovatively manage products and materials in the University, reducing waste throughout the life cycle by extending product life and reusing materials, promoting waste sorting, including experimental project for special waste categories
Digital sustainability	Generate ideas and suggestions to provide support for the Sustainabi- lity Plan through digital technologies, as transversal tools to implement the planned actions, with a synergic and coordinated approach
Sport and well-being in university life	Suggest ideas and solutions to improve the health and psychophysical wellbeing of the Politecnico community, exploring needs related to sport, welfare and social engagement

// Table 2 I 10 Sustainability Working groups //

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Between 2023 and 2024, the 10 Sustainability Working groups produced over 80 project ideas, leading to the development of 50 practical proposals, some of which emerged through cooperation between multiple Working groups. Examples include: assessing the impact of food choices at University delivery points; organising an inclusive sports day at the Giuriati Sports Centre; collecting used sports equipment to promote circular economy principles; proposing a platform to share physical and electronic goods; developing a mathematics course for deaf secondary school students; promoting behavioural change initiatives on sustainable mobility within the University community; supporting cross-gender inclusion initiatives for international students; launching an internal call for the renewal of technical-scientific equipment with energy savings in mind; applying for Environmental Event Certification (ISO 20121); and creating a Welcome Sustainability Kit for new students, highlighting the University's environmental and social sustainability services. Forty of the proposed ideas were submitted to the University Directors for a technical and financial feasibility assessment; of these, 20 have already led to the launch of dedicated projects during 2024.

1.5 Sustainability rankings

As part of its strategy to enhance the University's sustainability performance and reputation, Politecnico di Milano takes part in the leading international university rankings focused on sustainability. The objective is to establish a process that, building on accumulated experience, develops the skills needed for comprehensive sustainability reporting and identifies potential areas for improving policies that support sustainable development. The rankings provide avaluable opportunity to benchmark against other universities engaged in sustainable development, nationally and internationally.

Over the past two years, Politecnico di Milano has secured strong positions in the three sustainability rankings in which it participates, confirming its continuous commitment to the sustainable development of its activities. In THE Impact Rankings, the University achieved the best result in 2023 (91st place), with excellent rankings in specific SDGs (16th in SDG9, 28th in SDG10, 37th in SDG8). In QS World University Rankings: Sustainability, Politecnico was ranked 201st in 2023 and 278th in 2024 but showed significant improvement in Environmental Sustainability and Governance metrics, reflecting advances in sustainable campus management and the strengthening of its sustainability governance structure.

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Politecnico di Milano confirms a positive trend in the UI GreenMetric World University Rankings, achieving 66th place out of 1,477 participating universities in 2024 (its 15th consecutive participation), an improvement of four positions compared to 2023.

Politecnico remains committed to actively participating in the THE Impact, QS Sustainability, and UI GreenMetric rankings, with a focus on identifying weaknesses, seizing opportunities for improvement, continually assessing performance, and setting increasingly ambitious targets. Analysis of the ranking outcomes highlights several areas for improvement: The QS Sustainability Rankings highlight the need to strengthen the visibility of education on environmental sustainability and support for health and psychological wellbeing. THE Impact Rankings reveal the need to make a greater contribution to SDG 2 – Zero Hunger and SDG 6 – Clean Water and Sanitation.

25 NOVEMBRE

Giornata internazionale per l'eliminazione della violenza contro le donne

25 Novembre 202

CAMPUS LIFE DIVISION

POLIMIT 25 Giornat della vio

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1.6 The most significant achievements of 2024

Diversity and inclusion		More than 400 professors and TA managers trained in inclusive leadership and interpersonal skills in the two-year period
		$14,000\mbox{students}$ and $1,\!100\mbox{PhD}$ candidates responding to the climate survey
Gender balance -		€ 670,000 allocated for 28 Girls@Polimi scholarships (+47% compared to Academic Year 2022-23)
		Gender equality certification
Psychological well- being and health		1,286 students and PhD candidates who used PoliPsi's in-house psycholog- ical support service in 2024
		>1,000 employees involved in courses on relational, emotional and self-awareness aspects
Sport		9,383 students/employees and 10,159 external participants at sporting events in 2024(+70% over the two-year period)
		30 scholarships for sporting merit and 75 Dual Career athletes
đ	People growth and	7,677 service accessions in 2024 at the University (+28% compared to 2022)
	welfare	65% of professors and 96% of technical and administrative staff trained in new skills
Sustainable		47 interdisciplinary PhD scholarships on SDGs topics in the two-year period
ž	development in research topics	>2,000 SDGs-tagged scientific publications on Scopus and more than 900 non-bibliometric products published in 2024
〕	Ethical and responsible	More than 360 PhD candidates and postdoc research fellows trained in Open Science in the two-year period
	research	More than 300 professors and researchers trained in research ethics and impact
பீ	Sustainability in curricular teaching	28 Track/Major of master's degree programmes out of 145 with a focus on sustainability issues
		53% of Politecnico di Milano programmes are directly relevant to the SDGs (textual analysis)
	Lifelong learning	2,128 participants in master's and postgraduate programmes with a focus on sustainability in the two-year period
		20 master's degrees with sustainability focus mapped
Ŷ	Financial support and student mentoring	€ 9,5 million allocated by the university for >7,000 DSU grants with 100% coverage of eligible students
		 1,612 beds available in university residences (+18% compared to 2022) and +518 new beds planned for 2025

સં	Accessibilità degli spazi e della didattica	 100% of students with Specific Learning Difficulties (SLDs) and disabilities followed with customised pathways and full access to facilities 96% of graduates in protected categories find a job in line with their training within the first way after and untion
		within the first year after graduation
பீ	Innovazione di prossimità	1,000,000 € for Polisocial Award funding of 12 research projects (including four consolidations/extensions) on Off Campus over the two-year period
		More than 100 organisations and 2,300 students and young people were involved over the two-year period in four Off Campus spaces in Milan
ക്	Collaborazione con il Terzo Settore	More than 600 partnerships with over 380 players involved in Polimi projects with the Non-profit Sector
		More than 15% of staff involved in ongoing activities with the Non-profit sector
	Diplomazia scientifica	Six structured relations with five international organisations (UNESCO, UN-HABITAT, IAEA, WHO and WFP)
		19 cooperation and development initiatives with universities and local players from critical areas in the two-year period
ŷ	Energia e decarbonizzazione	1.47~MW installed PV capacity by the end of 2024 and additional $1.8~MW$ planned by the end of 2025
		Four Milan districts where CERS (Renewable Energy Communities with Char- itable Purposes) have been activated
		-28% CO ₂ emissions per capita compared to 2015 (Scope 1 and 2)
Ģ	Edilizia sostenibile e Verde	15,385 m² of redeveloped green space (Leonardo and Bovisa Nord Campuses)
		De-sealing the new green area on the Durando Campus: work continues on $10,500 m^2$
Ø	Mobilità sostenibile	>3.000 subsidised season tickets for employees from the University over the two-year period, with a funding of more than € 450,000
		Planning of approximately 800 additional bicycle parking spaces and start of first installations
\mathbf{C}	Economia circolare	100% of food surpluses recovered in catering outlets by selling 7,865 Food Boxes in 2024
		100% of special waste monitored quantitatively and qualitatively and more than 65% of municipal waste monitored quantitatively

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ABILITÀ E CESSIBILITÀ: POLITICHE IN MBARDIA E A MILANC

02. Dialogue with our stakeholders

Dialogue with stakeholders (materiality analysis)

The dialogue with the University's internal and external stakeholders was carried out in three phases: the first, conducted alongside the drafting of the initial 2023–25 Strategic Sustainability Plan, took place between April and June 2023. The second, aimed at external stakeholders, coincided with the Plan's 2024 update; and the third, focused on implementing the feedback received and exploring the internal community's perception of sustainability issues and initiatives within the University, was conducted from April to December 2024.

2.1 First phase: April - June 2023

The development and drafting of the first 2023–25 Strategic Sustainability Plan were supported and guided by close dialogue with the Rector, Vice-Rectors, the Rector's Delegates, University Directors, and internal Divisions. The dialogue resulted in the identification of six priorities (see Chapter 3) and the 18 related thematic areas (see Chapter 4), which form the foundation of the Plan, in its original and updated versions.

PRIORITIES	SCOPE
nclusion and equal	Diversity and inclusion
opportunities	Gender Balance
	Psychological well-being and health
	Sport
	People growth and welfare
ustainable research	Sustainable development in research topics
	Ethical and responsible research
ustainability in	Sustainability in curricular teaching
teaching	Lifelong Learning
Diritto allo studio (right to university education)	Financial support and student mentoring
	Accessibility of spaces and education
novation and social	Proximity innovation
esponsibility	Collaboration with the non-profit sector
	Science diplomacy
nvironment	Energy and decarbonisation
	Sustainable building and green spaces
	Sustainable mobility
	Circular economy

// Table 3 I The six priorities and 18 thematic areas identified for the Plan //

2.2 Second phase: January - March 2024

A more extensive "materiality analysis" was carried out for the 2024 Plan update, to highlight and incorporate the perspectives of external stakeholders, and a broader and more representative set of internal stakeholders, into the sustainable development strategy.

Method adopted

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The method involved presenting the Strategic Sustainability Plan to a selected group of Politecnico di Milano stakeholders to:

- raise their awareness of the University's strategy and commitment to sustainability;
- · gather feedback to inform the revision of the Strategic Sustaina-

bility Plan, ensuring the document reflects the needs and expectations of the academic community and external stakeholders.

Dialogue with stakeholders took place through a series of individual interviews, each preceded by a presentation of the 2023–25 Strategic Sustainability Plan. The interviews were conducted by a team composed of the Vice-Rector for Sustainable Development and Societal Impact, Vice-Rector for Institutional and Regional Relations, Pro-Rector Delegate, and Sustainability Task Force.

During discussions with stakeholders, the overall perception of Politecnico di Milano's commitment to sustainability was explored. Participants were asked to identify the most relevant material issues within the Plan's priorities and suggest potential future actions or initiatives. They were invited to specify elements that should be amended in the document and highlight areas for improvement in future updates. Additionally, synergies between the Plan's sustainability priorities and the strategic objectives of each stakeholder were examined.

Stakeholders involved in the analysis

Politecnico di Milano operates within a rich and extensive network of relationships, a strength it has maintained since its founding. In selecting stakeholders for the materiality analysis process, efforts were made to diversify the participants and ensure adequate representation across different types of organisations.

At the city level, discussions were held with the Deputy Mayor and councillors responsible for Education, Urban Regeneration, Welfare, Economic Development, and Labour Policies—areas closely linked to the University's activities and local engagement.

At the regional level, key representatives of the Lombardy Region were interviewed, including Councillors and General Directors responsible for University, Research, Innovation; Environment and Climate; and Economic Development. To best represent the regional industrial sector, the industrial association Assolombarda was involved in the process.

At the national and international institutional level, consultations were held with the Italian Agency for Development Cooperation (part of the Ministry of Foreign Affairs and International Cooperation), the General Directorate for Innovation, Research, Culture, Education and Youth of the European Commission, and UNESCO's General Directorate for Education.

In the corporate sector, companies and organisations with which the Politecnico di Milano has established Joint Research Projects (JRPs), such as "Autostrade per l'Italia", "A2A" and "Ariston Group", were selected and consulted.

In the philanthropic sphere, the Compagnia di San Paolo Foundation and the Cariplo Foundation participated in the analysis.

Other important stakeholders included the Network of Universities for Sustainable Development (RUS) and the impact investment fund Opes Italia.

Regarding the University's internal stakeholders, in addition to the discussions held during the drafting of the Plan's first edition, the dialogue was extended between late 2023 and early 2024 to include the Campuses, Schools, and Student Representatives. Direct interviews were conducted with representatives from each of the 12 Departments and the four Italian Campuses (Cremona, Lecco, Mantua, Piacenza)—involving Department Directors, Campus Vice-Rectors, Administrative Managers, and Sustainability Delegates and Representatives elected to the Academic Senate and Board of Governors, forming the Student Council. These meetings helped to identify the most relevant issues for each group of stakeholders and clarify the contributions each could make or is making, to implement the Plan.

Suggestions

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All internal and external stakeholders interviewed expressed appreciation for the completeness and systematic nature of the overall framework - vision, objectives, actions and result indicators - and recognised the six priorities highlighted with the 18 chosen themes as relevant to the university.

However, many areas for improvement and integration emerged, which can be grouped into three main categories: priorities and content, sustainability governance, and the analysis method.

In relation to priorities and content (or thematic areas), several issues were identified that were either not explicitly addressed or insufficiently covered in the original version of the Plan. These included:

- smart working strategy, social inclusion and commitment to NEETs (Not in Education, Employment or Training), ethics education in professional practice, guidance and training on sustainable development issues for children and adolescents, research on climate change and low-cost construction, health and safety of community members, sustainability in purchasing processes, start-ups/entrepreneurship on sustainability issues, digital perspective and digital transformation, and enhanced focus on diversity and inclusion.
- Contributors called for a stronger emphasis on the University's commitment to sustainability in teaching and research, high-lighting its social and innovative contribution to the wider community.

Regarding the sustainability governance model, many contributors suggested placing greater emphasis on elements that were already in place but not sufficiently detailed in the original Strategic Plan, such as:

- greater formalisation or clearer description of governance processes, particularly innovative initiatives like the Sustainability Working groups;
- outlining links with external stakeholders' sustainability plans, emphasising reciprocal value exchange and systemic contributions, and, more broadly, existing relations with society and the region;
- the data-driven approach and the use of data as a tool for organisational integration;
- · internal communication policy and tools.

Forward-looking suggestions were gathered, reinforcing directions of development already under consideration at the University, including:

- designing and implementing broader, deeper forms of student engagement to better harness their significant transformative potential;
- promoting impact assessment as an operational tool and a narrative framework, alongside the more traditional theme- or SDGs-based reporting;

• strengthen partnerships with the most sustainability-conscious university national and international networks.

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Important insights were collected to refine the method of analysis and drafting of the Strategic Sustainability Plan:

- in some themes, such as Sustainable Building and Green spaces and Energy and Decarbonisation, the three-year planning horizon was seen as insufficient, and the introduction of longer-term targets was recommended;
- it was suggested that the Plan's principal strategic priorities for Politecnico be made more prominent for greater clarity on first reading;
- it was recommended that connections with university networks focused on sustainable development be made more explicit, and that the University's objectives and targets be presented in relation to key external benchmarks;
- it would be beneficial to clarify more thoroughly the alignment between selected thematic areas and the SDGs of the 2030 Agenda.

The breadth and quality of the feedback received provide a valuable foundation for strategic reflection on sustainable development and will be crucial in drafting the new 2026–28 Plan, to be launched in the second half of 2025. In the meantime, several suggestions have already been incorporated into the 2024 update of the Plan—most notably through a more detailed introduction on governance and through additions to themes, objectives, targets, and actions, and further through the launch of new initiatives and projects during 2024, addressing areas of relevance identified by stakeholders.

2.3 Third phase: April - December 2024

During the subsequent months of 2024, the third phase of the engagement and dialogue process developed along two main strands: firstly, the implementation of the contributions gathered from the meetings held earlier in the year, and secondly, a deeper exploration of the community's perception of sustainability issues and actions carried out over the two-year period.

This phase focused on the integration of the suggestions received into the Plan designing and activities.

Regarding the integration of new themes and the strengthening of aspects previously underrepresented in sustainability planning, the University's commitment, initially reflected in the 2024 update of the Strategic Sustainability Plan and reinforced in the present 2025 update, has been significantly enhanced. Focus was placed on the following areas:

- highlighting the University's commitment to teaching and research on sustainability, by mapping and promoting academic and educational pathways with a sustainability focus, research outputs aligned with SDGs themes, and major research projects addressing sustainable development topics; providing in-depth insights into education and research relating to gender equality, inclusive technologies, and climate change;
- expanding diversity and inclusion initiatives, particularly by extending support services for students from disadvantaged geographical backgrounds, increasing hosting initiatives for international students, and strengthening activities supporting the LGBTQI+ community;
- enhancing community health initiatives, including the development of targeted awareness and prevention programmes, offering medical certificates as part of the Giuriati Sports Centre membership, and strengthening the University's welfare system, with an emphasis on the provision of health and welfare services for staff.

For the sustainability governance model contributions, in addition to the greater formalisation of governance processes already incorporated into the 2024 update and expanded further in this publication, the following actions should be noted:

- the establishment of new and renewed partnerships with local authorities on areas where the University's efforts are insufficient to achieve sustainability goals, notably in urban planning, sustainable mobility, and the circular economy;
- adopting a more data-driven approach, including the development of a data dashboard for monitoring the progress of the Strategic Sustainability Plan and analytical tools for evaluating sustainability content in teaching and research;

 strengthening communication towards our community, with the launch of the monthly newsletter "Sustainable Horizons" and the organisation of periodic update and training meetings with the Sustainability Representatives and Delegates of the University Bodies;

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- initiating projects designed to actively involve the student community, with the first pilot initiatives starting in 2025;
- an increased focus on impact assessment, evaluating University-led initiatives under the Strategic Sustainability Plan and research activities;
- increasing participation in university and non-university networks to strengthen cooperation and benchmarking on sustainable development topics, including specific themes such as open science, sustainability research, and science diplomacy.

Finally, regarding the analysis and drafting methods used in the Strategic Sustainability Plan, the University has moved beyond a strict three-year planning logic in themes requiring substantial investment and long-term vision, such as Energy and Decarbonisation and Sustainable Building and Green spaces, by developing a long-term energy and building redevelopment strategy with a time horizon extending to 2040, which will complement and guide the University's three-year planning cycles.

Internal materiality analysis: sustainability-focused survey

In the second half of 2024, an internal survey was conducted to explore the Politecnico community's awareness and perceptions regarding sustainability issues and the University's actions in support of sustainable development. The survey pursued two main objectives:

- to capture the interest of different groups within the University community (students, professors, research fellows, PhD candidates, and technical and administrative staff) across different social and environmental aspects of sustainability, interpreted through the categories of the Strategic Sustainability Plan. This is to derive the material relevance of sustainability issues as perceived by the internal community;
- to analyse the impact of a selection of actions drawn from the 2023–25 Strategic Sustainability Plan, evaluating their visibility, perceived usefulness, and effectiveness among the different

University groups. The proposed sustainability initiatives covered a wide range of topics, including campus management, personal services provided by the University, and activities in education, research, innovation, and social responsibility.

The survey consisted of a short questionnaire open to the Politecnico community (students, PhD candidates, research fellows, Academic staff, and technical and administrative staff) and was available for completion between 18 September and 31 October 2024. The results were subsequently analysed and shared with University governance and sustainability bodies during November and December. The response rate was satisfactory, with more than 3,000 respondents as follows: 2042 students, 442 professors, 423 technical and administrative staff, 192 PhD candidates and 77 research fellows. In terms of representativeness, the response rates allow for a robust and reliable interpretation of the data across all University communities.

Regarding the relevance of the themes addressed, the findings reveal a consistently high level of interest in sustainability topics featured in the Strategic Sustainability Plan. The themes attracting the greatest relative interest are those concerning environmental awareness, with three topics appearing in the top five positions: Circular Economy (first place), Sustainable Mobility (third), and Sustainable Building and Green spaces (fifth). Equally prominent are themes relating to wellbeing and personal support, with six themes ranked within the top 10: Psychological Wellbeing and Health (second), Professional and Personal Development and Welfare (fourth), followed by Financial Support and Tutoring, Accessibility of Spaces and education, Sport, and Diversity and Inclusion. Themes more directly associated with the University's core activities, such as Education, Research, Innovation, and Social Responsibility, appear to elicit less interest. This may be due, in part, to these aspects being taken for granted. Nonetheless, when focusing on non-student respondents, themes such as Ethical and Responsible Research and Sustainable Development in Research gain notable significance.

When it comes to awareness of the University's initiatives, those relating to sport, scholarships, and paid student collaborations are the most widely recognised across the University community. Overall, initiatives centred on individuals are the most well-known, followed by those addressing environmental concerns. By contrast, activities relating to education, innovation, and social responsibility are less frequently mentioned. However, most of the proposed initiatives are known by fewer than half of respondents, with a marked disparity between significantly higher awareness levels of staff and those of students. This underscores the pressing need for enhanced communication efforts to ensure the University's sustainability initiatives are widely understood and appreciated.

In terms of perceived usefulness and effectiveness, proposed initiatives are generally rated as either "useful" or "very useful", underscoring the broad value of the University's efforts in these areas. However, not all initiatives are seen as equally effective. Students and technical and administrative staff who are familiar with the initiatives generally report higher perceived effectiveness than professors, research fellows, and PhD candidates.

The results of this internal survey have already been instrumental and will continue to serve in shaping and directing internal communication strategies related to sustainability, helping to raise awareness of the University's efforts and the important outcomes they have produced. At the same time, analysis of these findings will form a crucial foundation for defining the University's future sustainable development strategy and for setting the objectives of the forthcoming Sustainability Plan for 2026–28.





03. Ambition and priorities

3.1 Politecnico di Milano's ambition on sustainability

Mission

A leading guide. A solid, recognisable, and reliable reference point for sustainable development in Italy and Europe. This is how Politecnico di Milano aims to set itself apart in the coming years: through its capacity to address major scientific and technological challenges, guided by a culture that is more inclusive and committed to promoting equal opportunities. This approach embraces an ethical vision, redefining sustainability as a synonym for equity, inclusion, and collective growth.

It is through the interplay between scientific rigour and creativity that our university aims to establish itself as an international community of people united in diversity. An attractive community for international students and researchers; committed to making a significant contribution to social and cultural progress and opposed to any unfair discrimination.

Vision

The vision that shapes our future starts from the European Union's six core values: human dignity, freedom, democracy, equality, rule of law, and respect for human rights. These are accompanied by the goals of the New European Bauhaus initiative, whose central focus is the value of beauty, not only as a stand-alone aesthetic quality but as a measure of ecosystems protection, harmonious relationship between places and people, economic growth and the use of resources. Politecnico di Milano is inherently a European university, in its origins and aspirations.

From this perspective, student education is central to the university's strategic direction. Following this path, we will continue to experiment and apply innovative teaching models that are hybrid and multidisciplinary, and interactive processes, far removed from classroom-taught lectures, in a cosmopolitan environment open to international exchange and attentive to sustainable development issues.

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Scientific research, which has always been an integral part and a driving force at Politecnico, will open new opportunities with a focus on the stable recruitment of young researchers, with partnerships with European networks to strengthen our goals. We will expand our commitment to key sustainability issues while involving all areas of research to ensure constant technological, social and environmental innovation.

It will be crucial to rethink the physical space to create more flexible places for study, research and exchange; places that are sustainable (from an environmental and energy point of view), welcoming (to promote well-being and safety), accessible and liveable. We will endeavour to support the growth and innovation of society, including through the Politecnico expertise with a view to strengthening relations with the city, region and its institutions, with a focus the non-profit sector.

Commitment to sustainable development

Politecnico di Milano embraces the principles underlying sustainable growth, which the 2023-2025 Strategic Plan clearly expresses. In its fullest and most profound sense, sustainability signifies "caring for, supporting, and nurturing" the integral development of individuals, society, and the environment — a commitment reflected in the University's strong emphasis on the wellbeing of the entire Politecnico community. It is an expression of increased awareness and maturity. It indicates a unifying perspective for the three academic domains: teaching, research and social responsibility. It creates opportunities for shared growth within our international community — from fostering inclusion and embracing diversity to enhancing quality of life and encouraging active participation in University life.

Politecnico di Milano interprets attention to sustainability as a

cornerstone of research, teaching, and the advancement of social responsibility and innovation. Actions aimed at improving the quality of man-made and natural ecosystems, and those related to reducing inequalities and promoting social inclusion and cohesion at different scales, are not peripheral to the University's mission.

Through the pursuit of research excellence, the development of accessible and high-quality educational programmes, the stewardship of regions and communities, and the promotion of research dissemination within society, Politecnico is committed to building a fairer, more sustainable future.

In terms of education, sustainability means equipping our students with the critical skills needed to face major global challenges and local demands, while ensuring equal access to study opportunities. This is achieved through tangible tools, models, and services designed to guarantee full accessibility and uphold the "diritto allo studio" (right to university education). Within this framework, sustainability is not an aspiration but an integral component of the academic education - embedded across curricula through foundational and cross-disciplinary content and learning pathways that cultivate specific expertise.

In research, adopting a sustainable approach entails a deep understanding of the ethical implications inherent in scientific and technological progress, and a broadening of disciplinary perspectives to embrace humanistic knowledge. It involves strengthening cooperation with leading national and international research institutions and public bodies. This approach safeguards the independence and quality of research, while supporting the development of talent and the career paths of young researchers. At Politecnico, it means intensifying our commitment to research in key areas of sustainability, consolidating and enhancing our leadership in technological, social, and environmental innovation while embedding a sustainability-driven perspective across the entire spectrum of our research activities.

In terms of social responsibility, a sustainable proposal recognises and consolidates actions and projects in response to the needs of the city, region, country and in terms of international cooperation. It supports the growth and innovation of society by providing Politecnico expertise with a view to strengthening relations for the autonomous regional growth by working in a multi-stakeholder logic to cooperate with non-profit sector entities on local issues and inform institutional decision-makers on global issues.

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Our ambition is to consolidate a sustainable social innovation model, which is exportable in Italy and worldwide, with clear and measurable impact objectives.

It is along these lines that the first 2023–2025 Strategic Sustainability Plan was developed - to provide direction for the University's actions, while enabling the measurement and validation of outcomes and the effectiveness of the chosen strategies.



3.2 The Plan's priorities

In outlining the 2023–2025 Strategic Sustainability Plan, six key priorities were identified, each closely aligned with the University's core institutional missions: Inclusion and equal opportunities, Sustainable research, Sustainability in teaching, Diritto allo studio (right to university education), Innovation and social responsibility, and the Environment. As structuring elements of the overall strategy, each priority is broken down into objectives to be achieved and practical measures to be implemented in the 2023-2025 three-year period. Specific indicators are associated with each objective for effective monitoring of the success of actions and transparent presentation of progress.

Inclusion and equal opportunities

Becoming an increasingly welcoming and inclusive environment, ensuring equal opportunities and celebrating individual uniqueness through targeted initiatives. These actions aim to dismantle stereotypes, challenge all forms of discrimination, and prioritise the physical and mental wellbeing of the Politecnico community.

Sustainable research

Extend scientific research efforts on key sustainability issues, confirming and reinforcing its position as a leader in technological, social and environmental innovation, while making the sustainability perspective pervasive in all research areas

Sustainability in teaching

Embedding sustainability as a key factor of the educational experience, by integrating cross-cutting and foundational content across all academic programmes, and developing new pathways dedicated to advanced sustainability expertise.

Diritto allo studio (right to university education)

Ensuring equity in access to education, through a comprehensive support framework that includes scholarships, affordable accommodation, fully accessible facilities and teaching, personalised study plans, and enhanced academic guidance

Innovation and social responsibility

Supporting the growth of society by providing Politecnico expertise with responsibility and reciprocity, in a multi-stakeholder logic to partner with non-profit-sector entities on local issues and inform institutional decision-makers on global issues

Environment

Promoting innovation and experimentation in environmental sustainability, engaging in energy transition and reduction of greenhouse gas emissions, energy consumption and enhancing sustainable mobility solutions and the circular economy



04. Goals, actions and outcomes 2024

STRATEGIC SUSTAINABILITY PLAN



Diversity and inclusion

Strategic orientation

Politecnico di Milano's ambition is to be an increasingly welcoming place, where each member of the community can feel their uniqueness and that of others respected and valued, and where inequalities and stereotypes are combated. It also wants to contribute to a more inclusive society through scientific and technological innovation.

In the 2023-25 period we will:

- listen to all members of our community.
- educate the community on diversity and inclusion issues.
- strengthen inclusion within our community.
- bridge distances through the development of inclusive technologies



Target

GOALS	TARGETS 2025	TARGETS PROGRESS: END OF 2024	ACHIEVEMENT
Listening to needs using climate surveys	Delivery of climate surveys for different groups and analysis of results	Surveys provided for teaching and technical and administrative staff in 2023 and for students and PhD candidates in 2024	(\Rightarrow)
Diversity and inclusion training	50% of professors and 100% of technical and administrative staff trained in the three-year period	24% of professors and 90% of technical and administrative staff trained in the two years	!
Research on inclusive	A portfolio of technology for inclusion projects	Implementing the mapping model of publications and projects related to inclusive technologies and ongoing collection of cases	$\textcircled{\Rightarrow}$
technologies	Annual selection and awarding of a flagship	Launching the Polimi4inclusion project to award two prizes annually to research projects on inclusive technologies	$\textcircled{\Rightarrow}$
	Extension of services to support international students from non privileged backgrounds UPDATE	Introduction of administrative and financial facilities for students with refugee status and from other critical geographical areas	(\mathbf{i})
Strengthening inclusion	Extension of reception activities for the international community	More than 20 initiatives organised during the Welcome Week 2024, with almost 15,000 registrations from the more than 5,000 enrolled international students	\bigcirc
	Strengthening initiatives for the LGBTQI+ community	Further expansion of the Pride week programme, with awareness-raising and education events Issuing and disseminating the Alias protocol for Politecnico staff	$\widehat{}$

Degree of achievement

Attention Not on track

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On track

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Achieved

Actions

GOALS	ACTIONS 2023-2025	ACTIVITIES AND RESULTS 2023-2024
Listening to needs using climate Involvement - Administration of climate surveys surveys to the entire community (Bachelor's, Master's and PhD candidates, teaching and administrative staff) by 2024 Critical issues analysis - Identification of key issues related to Diversity & Inclusion (D&I) emerging from climate survey findings	surveys to the entire community (Bache- lor's, Master's and PhD candidates, teach-	 Delivery of student and PhD surveys in 2024 (submission deadline in 2025) Delivery of staff surveys (teaching and technical and administrative staff) in 2023 Analysis and presentation of staff survey results, including departmental and division-specific meetings focused on each body.
	key issues related to Diversity & Inclu- sion (D&I) emerging from climate survey	 Organisation of team building and training initiatives for professors and technical and administrative staff Designing coaching initiatives in 2025
Diversity and inclusion training	Inclusive leadership courses - Devel- opment of prototype training courses on inclusion issues focused on inclusive lead- ership and interpersonal skills for teaching and technical and administrative staff	 Delivery of more than 60 courses on inclusion, valuing diversity and inclusive leadership 24% of professors and 90% of technical and administrative staff trained in the two years
Research on inclusive technologies Communicati visibility of incl gagement with	Technology mapping - Audit of ongoing research in inclusive technologies	 Presentation of initial case studies as part of National Resilience and Recovery Plan (NRRP) academic guidance courses in secondary schools (2023) Mapping of inclusive technologies publications and projects carried out by a Department Extending this mapping process to other Departments
	Communication - Initiatives to increase visibility of inclusion efforts, including en- gagement with partner companies and the non-profit sector	 Events held to mark the International Day of Persons with Disabilities in both years, featuring mentoring sessions and presentations of inclusive research at Politecnico di Milano 292 participants in events and mentoring courses (including 110 participants in the Polimi Inclusion "Beyond Sight" event in 2024)
Strengthening inclusion	Support programmes for international students - Development of new tools for "Diritto allo Studio" and inclusion	 Expansion of Welcome Week with 22 events held in September 2024, attracting 14,957 attendees from among the 5,104 enrolled international students Expansion of the Buddy project (3,847 enrolled) with eight new activities for students involved (454 total participants)
	Regulation review - Review of University policies to enhance inclusivity (e.g. extension of alias identity options to academic and administrative staff)	 Implementation of the alias protocol for professors and technical and administrative staff Event held on Alias Careers at University to raise awareness and support inclusion of individuals undergoing gender transition (142 participants) Approval of proposal to amend Rector's titles on Degree Certificates

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Polimi Inclusion: Beyond the Sight

To mark the International Day of Persons with Disabilities 2024, Politecnico di Milano hosted a dedicated awareness event focused on visual impairment. The initiative offered participants a first-hand experience of university life from the perspective of students with low vision.

The 110 attendees took part in a simulated university lecture using assistive tools and technologies typically employed by visually impaired students, gaining insight through practical simulations of partial and total visual impairment.

As part of the event, participants took part in a walk in the dark – a sensory experience designed to simulate navigating the university as a visually impaired student, along with a presentation showcasing the University's key research projects in this field.

Diversity Day

In May 2024, Politecnico di Milano hosted Diversity Day, a national careers event dedicated to individuals with disabilities and those belonging to protected categories. The event brought together more than 700 participants and approximately 60 companies, promoting social and professional inclusion while encouraging the corporate sector to embrace integration and equal opportunities.

The day included an opening workshop with contributions from institutional representatives, company delegates, and personal stories, and an exhibition area to facilitate dialogue, networking, and career guidance. A key highlight of this year was a new focus on neurodiversity, with dedicated spaces and tailored digital interactions introduced to foster a more inclusive and accessible environment.





Gender balance

Strategic orientation

Women are often associated with social and work contexts far removed from the fields of science and technology; this under-representation has significant socio-economic impacts in Italy, Europe and globally. Politecnico di Milano wants to contribute to mitigating these prejudices and to promote orientation actions for STEM courses and careers that also contribute to promoting gender balance.

In the 2023-25 period we will:

- train the community on unconscious biases
- expand STEM outreach and improve communication around the social impact of technology
- develop teaching and research activites related to SDG5 (Gender Equality)
- implement tools to foster gender balance

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OBJECTIVES, ACTIONS AND RESULTS FOR 2024

Target

GOALS	TARGETS 2025	TARGETS PROGRESS: END OF 2024	ACHIEVEMENT
Training on unconscious bias	50% of teachers and administrative technical staff trained in the three year period	9.2% of professors and 35.4% of administrative technical staff trained within two years	(!)
Academic counseling and scholarships for female students	+20% Girls@Polimi scholarships	+47% <i>Girls@Polimi</i> scholarships (28 scholarships for A.Y. 2024-25 vs. 19 for A.Y. 2022-23)	ACHIEVED FOR 2023 AND 2024
inhancing the gender perspective in eaching and research	Increase in teaching and research projects focusing on SDG5	Additional five teaching activities (four started in 2024) and additional 10 research projects (five started in 2024) on SDG5-related topics	(\Rightarrow)
Gender balance	40% female representationof new researchersin the University governance	Women's representation in new researchers: 35% in 2023 and 36% in 2024 Female representation in governance roles: 33%	\bigotimes
	30% gender balance courses	24% in gender balance courses for A.Y. 2023-24	\bigotimes

Degree of achievement



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63

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Actions

GOALS	ACTIONS 2023-2025	ACTIVITIES AND RESULTS 2023-2024
Training on unconscious bias	Courses - Development of unconscious bias training courses for teaching and technical and administrative staff	 Training courses for staff on empowerment, awareness and inclusive language 9.2% of Academic staff and 35.4% of technical and administrative staff involved in training initiatives in the two years Launch of the "Zero Tolerance" module addressing gender-based violence
	Expansion of the educational offering through asynchronous online courses, aimed at reaching a wider student audience	 Development and launch of the MOOC "Educating Against Gender-Based Violence" on the International Day for the Elimination of Violence Against Women Introduction of the Younicity platform by Valore D, providing wide access to curated content on diversity and inclusion
Academic counseling and scholarships for female students	Academic guidance - Development of communication tools for research and STEM studies that highlight their social impact and strengthening academic guidance programmes and scholarships for female students	 "IngegnerA? Sì, al femminile" seminar conducted during Open Days: 130 participating students over the two years Delivery of two courses: "Engineering You Don't Expect: Leading Sustainability, Social Impact and Inclusion" and "Technology for Inclusion" in four secondary schools, engaging around 330 students. Approx. 200 courses in 93 schools, reaching more than 6,500 students
	Women's engineering narratives - Strengthening the presence of young female researchers in schools to share experiences and represent Politecnico En- hanced visibility of female experts in media and institutional communication	 The "Gender (In)Equality in STEM" training course was delivered to female students in five high schools. It included first-hand accounts from young female researchers, totalling 18 hours of training and reaching 454 students Dedicated seven-hour preparatory course for 18 participating researchers
Enhancing the gender perspective in teaching and research	Mapping teaching and research - Census of existing teaching and research activities on gender equality and equal opportunities and support for new initiatives	 Content analysis of gender-related themes in teaching and research through professor mapping and textual analysis tools 10 active publicly funded research projects and 24 lectures in the A.Y. 2024-25 addressing SDG5-related topics such as: gender gaps and bias in technological systems, women's entrepreneurship, metropolitan and labour inequalities, media representation of women's identities
	Communication - Communication actions to strengthen the visibility of teaching and research results on gender equality issues	 Enhancement of the international days with participation of more than 600 people: screening of C'è ancora domani"; stories of two pioneering women in architecture and design; presentation of the MOOC "gender-based violence: how to become an active bystander" panel discussion on female leadership "Mind the STEM gap - Together" exhibition during the International Day of Women and Girls in Science

Actions

GOALS	ACTIONS 2023-2025	ACTIVITIES AND RESULTS 2023-2024
Gender balance	Gender Equality Plan (GEP) - Drafting of the new Gender Equality Plan for 2024- 2026, ensuring it is fully integrated within the broader Diversity & Inclusion Sustaina- bility Plan	• Presentation of the Gender Equality Plan 2024-26 to Senate and Board of Governors and related publication
	Mentorship programmes - Launch of mentorship programmes for female stu- dents, PhD candidates and researchers, with mentors chosen from university staff and alumni	 Implementation of the first mentorship programme with 19 participating PhD candidates and eight mentors involved in 2023 Delivery of three "Women Mentoring" events in 2024 for female engineering students, with 52 participants Delivery of two "Leadership Tips for Women in Technical Roles" events in 2024 for female students, involving 52 participants
	Gender equality certification - Quality certification process for the University's gender equality action plan and manage- ment system	Obtainment of Gender Equality Certification under UNI/PdR 125:2022 by the certifying body RINA

Gender-based Violence: How to Become an Active Bystander

During the International Day for the Elimination of Violence against Women, the *MOOC "Gender-Based Violence: How to become an active bystander"* was launched as an awareness-raising and action-oriented course designed to address gender-based violence by empowering individuals to intervene effectively.

Through real-life scenarios in work and academic settings, the course analysed the cycle of violence, its causes and forms, and proposed a 5D methodology for active bystander situations involving violence or harassment.

The course content was developed by experts and professors from Politecnico di Milano, the University of Milano-Bicocca, Valore D, Parks – Liberi e Uguali, Il Cerchio degli Uomini, and the Milan Local Police.

Gender equality certification

In December 2024, Politecnico di Milano obtained certification for gender equality under UNI/PdR 125:2022, becoming the first STEM university and one of the first public institutions to achieve this goal. The certification acknowledges the University's sustained commitment to inclusion through a wide range of initiatives, including the protection of parenthood, promotion of pay equity, enhanced representation of women in governance roles, and efforts to improve work-life balance. The University has developed a new Gender Equality Action Plan for the period 2024–26. This outlines new targets, including initiatives to support better time management and measures to prevent harassment and discrimination. This achievement strengthens the University's commitment to a fairer and more conscious environment, under international best practices.




Psychological well being and health

Strategic orientation

Politecnico di Milano is committed to ensuring a study and work environment geared to the psychological and physical well-being of all members of its community as an integral part of its educational and social mission. The centrality of this lies in the will to ensure equal opportunities and promote inclusion.

In the 2023-25 period we will:

- strengthen and expand the psychological and psychotherapeutic services to students
- train technical and administrative and Academic staff
- introduce experiential workshops for the university community



GOALS	TARGETS 2025	TARGETS PROGRESS: END OF 2024	ACHIEVEMENT
Psychological and psychotherapeutic support services	100% of students accessing the service within a month of request	80% of students accessing the service within a month of the request The average waiting time for the first session has been further reduced to two weeks — a significant improvement compared to 2022, when the average was two months	(\Rightarrow)
Health promotion and prevention	20% of staff participating annually in preventive health initiatives	More than 25% of staff participated in prevention activities in 2024	ACHIEVED FOR 2024
Community training	900 people involved in the three-year period	1,453 people involved in the first two years	\odot
Monitoring results	Enrichment of the PoliPsi platform and analysis of opinion questionnaires	Improving the PoliPsi platform accessibility and speed Development of post-session feedback questionnaires is underway	$\textcircled{\Rightarrow}$

Degree of achievement



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GOALS	ACTIONS 2023-2025	ACTIVITIES AND RESULTS 2023-2024
Psychological and psychotherapeutic support services	Analysis and support - Periodic evaluation of the questionnaires filled in by students when requesting support and staff identi- fying the most suitable procedure in terms of urgency and type	 Timely evaluation of 100% of questionnaires for applying
	Communication - Enhancing Initiatives	 Tailored communication campaigns to promote the University's psychological support services Dedicated initiatives for World Mental Health Day, including a special helpline for students and technical and administrative staff
Health promotion and prevention	Medical check-ups - Promotion of check up services provided by the University in different areas (Sport, <i>Polimi People Care,</i> Department and Campus services)	 Seminars, prevention campaigns, and genetic screenings provided by the Department of Architecture, Built Environment and Construction Engineering, in partnership with Vita-Salute San Raffaele University: more than 200 staff members involved Issuance of 655 medical certificates included in the <i>Polimi Sport Basic</i> Staff Subscription
	Staff training - Courses on relational, emotional and self-awareness aspects for Academic, technical and administrative staff, research fellows and specialists	 Design and implementation of experiential seminars on personality and self- knowledge topics, organisation of 12 team building and mindfulness courses: more than 1,000 employees involved (there were 80 in 2023)
Community training	Experiential workshops and seminars for students - Introduction of experiential workshops and seminars/roundtables for students on relationships, emotional man- agement, and self-awareness	• Delivery of 58 experiential workshops on relationships, emotional management and mindfulness and 10 workshops on study method in 2023 and 2024
Monitoring results	Reporting and satisfaction question- naires - Improvement of the existing platform	 Review of the self-assessment questionnaires and definition of the PoliPsi platform opinion questionnaires Implementation of filters to monitor the level of perceived discomfort and type effectively Review of the "Identity and Well-being" platform for the planning and delivery of psychological support workshops, available to students

Mindfulness

In 2024, five mindfulness courses were organised for staff, promoting psychological and professional well-being. The course aimed to enhance awareness of personal strengths and potential, encouraging participants to be more present and mindful in everyday life. Across the sessions, 175 participants explored the core principles of *mindfulness* and discovered its benefits through guided meditative practices and group reflection.

Additionally, a thematic workshop focusing on the integration of body, mind, and spirit was held, engaging 46 participants in advanced *mindfulness* techniques and deepening their self-awareness.

Staff climate survey

For the first time, Politecnico di Milano's 2023–24 organisational climate and well-being survey included academic and technical and administrative staff.

The results showed a generally positive working environment, marked by good social relations, high autonomy and a strong involvement. Levels of bullying, work-life interference, and job-related stress were reported to be low.

Participation in the survey was substantial - 58% of academic staff and 69% of technical and administrative staff took part, highlighting strong interest in these topics. The survey identified areas for improvement, highlighting the need for targeted initiatives to promote inclusion and value diversity throughout the institution.





Sport

Strategic orientation

Politecnico di Milano promotes sports as a tool for people's well-being, development and improvement, both on an individual and a social level. To this end, it encourages its community members to participate in sporting activities and organises sporting events in the local community.

In the 2023-2025 period we will:

- involve an increasing number of students and employees by providing courses, tournaments and *team-building* initiatives
- promote sport as a tool for community outreach and social reintegration
- · showcase teaching and research activities related to sport



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OBJECTIVES, ACTIONS AND RESULTS FOR 2024

GOALS	TARGETS 2025	TARGETS PROGRESS: END OF 2024	ACHIEVEMENT
Involvement of the internal community and support for deserving students	+50% students and employees involved	+70% students and employees involved (9,383 in 2024 vs 5,532 in 2022)	ACHIEVED FOR 2023 AND 2024
	+50% sporting merit scholarships	+50% sporting merit scholarships (30 scholarships in 2023 and 2024 vs 20 in 2022)	ACHIEVED FOR 2023 AND 2024
	+50% Dual Career athletes	+67% Dual Career athletes (75 in 2024 vs. 45 in 2022)	ACHIEVED FOR 2024
Sport as a tool for community involvement and social responsibility	+40% in external participants in University organised sports events	+67% in external participants in University-organised sports events (10,159 in 2024 vs. 6,080 in 2022)	ACHIEVED FOR 2023 AND 2024
	Five annual initiatives of social responsibility	15 social responsibility initiatives in the two-year period, five in 2023 and 10 in 2024	ACHIEVED FOR 2023 AND 2024
Integration and visibility of teaching and research in sport	Implementation of the "Sport" platform	A.Y. 2024-25 opening dedicated to sport and the first official platform overview	(\mathbf{i})

Degree of achievement



GOALS	ACTIONS 2023-2025	ACTIVITIES AND RESULTS 2023-2024
Involvement of the internal community and support for deserving students	Events and tournaments - Organisation of <i>in-house</i> and international events	 Wider participation in international events: Two competitions/tournaments in 2023 and four in 2024, with more students selected for representative teams (197 vs. 20) Marketing campaigns successfully increased registrations for flagship events including <i>PolimiRide, PolimiRun, Polimi League, Spring Games and Torneo 6 campus</i> (9,383 registrations 2024 vs 5,532 in 2022, +70%)
	Infrastructure – Infrastructure strength- ening (Gasometers Park in Bovisa, Gym- nasium in Cremona, new fitness centre at Leonardo Campus)	 Completion of authorisation procedures for the new 1,500 m² fitness centre at the Leonardo Campus Construction of sports fields in the Gasometers Park at Bovisa Campus Design and partial construction of the 180 m² gymnasium on the new Cremona Campus Design of a new masterclass space at Bovisa Durando Campus (240 m²)
	Sports offered - Broadened the range of individual and team sports, with active involvement of Dual Career students and alumni acting as sports ambassadors	 More than 10,000 Sport Polimi subscribers Significant growth in masterclass enrolment: 2,432 internal participants in 2024 compared to 1,201 in 2022 (+102%) Three sports workshops delivered with direct involvement of Dual Career student athletes
	<i>Team building</i> - Organisation of team building initiatives	 Integration of the theme across Sustainability Working groups (Sport and Wellbeing, Gender and Inclusion Policies) Off Work Tournament programme for university staff with 110 participants in 2023 and 140 in 2024 Three team building training and sport initiatives: 268 participants in 2024 (about 5% of staff)
	Development of the Dual Career pro- gramme – Supporting student-athletes	 Updating sports criteria for participation in the Dual Career programme, with more focus on team sports and introduction of time limits for qualifying results Expanding membership: 54 Dual Career students in A.Y. 2022-23 and 75 in A.Y. 2023-24 (+67% compared to A.Y. 2021-22)
	Scholarships - Financial support for high level student-athletes	 Expansion of sporting merit scholarships: 30 open scholarships (+50% vs 2022) of €5,000 each (+100% vs 2022) in 2023 and 2024

GOALS	ACTIONS 2023-2025	ACTIVITIES AND RESULTS 2023-2024
Sport as a tool for community involvement and social responsibility	Events - Increasing the impact of sport on the region by organising major sport- ing events open to citizens and socially responsible initiatives with minors, people with disabilities and underrepresented groups	 +67% of external participants in <i>Polimirun Spring, Polimirun Winter, Polimiride</i> (10,159 in 2024 vs. 6,080 in 2022) Summer sports <i>camp</i> at Centro Giuriati: 551 children involved in the two-year period Initiation and expansion of social responsibility initiatives: e.g. in 2024 <i>"Parasports for all"</i> (385 participants) and the <i>Sport@OffCampus project</i> with initiatives in Cascina Nosedo, Nolo and San Vittore (more than 120 total participants)
	Environmental sustainability - Reduc- ing single-use plastics at major sporting events	 Reducing plastic usage by using <i>tetrapack</i> bricks in Polimirun and <i>PolimiRide</i> First pilot of waste sorting at PolimiRun Spring 2024 in partnership with AMSA: approx. 1,000 kg of sorted waste sent for recycling
Integration and visibility of teaching and research in sport	<i>Hub</i> - Creation of a platform that con- nects and enhances the University's teaching and research activities on sports-related topics	 Collecting information on education and sport, research and sport and sports services Launch of the platform's first version Inauguration of A.Y. 2024-25 dedicated to sport with platform content promotion

Parasports for all

On 12 October 2024, Politecnico di Milano hosted 16 parasport disciplines at the Giuriati Sports Centre, including climbing and baseball for the blind, Paralympic athletics, handbiking, wheelchair hockey and fencing, blind tennis, five-a-side football, wheelchair archery, calisthenics, blind chess, volleyball, bocce, rhythmic gymnastics, baskin, and wheelchair rugby. The participants, with and without disabilities, could take part in the activities with the support of specialised associations. In addition, the University presented several research projects focusing on sport, disability, and social inclusion. The event, organised in collaboration with the Cariplo Foundation, was held under the patronage of the Lombardy Region, the Municipality of Milan, CONI, and CIP.

Sport at the centre of the opening ceremony of the 162nd academic year

Politecnico di Milano opened A.Y. 2024-25 by focusing on the sport and its role in education and unity. In her welcome address, the Rector highlighted the University's wide-ranging research activity in the field of sport, spanning engineering applications, infrastructure, technology, and design. Particularly noteworthy were the testimonies of students and alumni who, alongside their academic journeys, had become Paralympic athletes - a clear demonstration of how sport can serve as a powerful tool for personal growth and breaking down barriers. The presence of world champion cyclist Filippo Ganna underscored the importance of merging research and technology to enhance sporting performance, with Ganna referencing the numerous trials conducted in the University's Wind Tunnel.



POLITECNICO DI MILANO



People growth and welfare

Strategic orientation

Politecnico di Milano aims to take care of the people who work in the University, enhancing talents, bringing forth ambitions and capabilities, strengthening professional skills, supporting needs and vulnerabilities. This can be realized through a cohesive set of measures that place the individual at the centre and aims to make the University the shared home of all its members.

In the 2023-25 period we will:

- expand the services offered in the field of *welfare* by broadening the range of those involved with a focus on vulnerable groups
- invest in new training courses to enhance staff skills in priority areas
- foster our community's contribution to the Non-profit sector in connection with the *Polimi4nonprofit* initiative



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GOALS	TARGETS 2025	TARGETS PROGRESS: END OF 2024	ACHIEVEMENT
Strengthening the welfare system	8,000 service registrations	7,677 service accesses in 2024 vs. 6,000 at the end of 2022 (+28%)	(\mathbf{P})
Staff training on new skills	75% of staff trained over the three year period	Updating the training project Training participants: 1,186 professors out of 1,840 (64.5%), 1,324 administrative and technical staff out of 1,382 (95.8%); a total of 2,510 people out of 3,222 (77.2%)	\oslash
Contribution to the Non-profit sector	10% of staff involved	>15% of staff involved in Non-profit sector initiatives (services, innovation in the field, development cooperation, research, consultancy, teaching)	ACHIEVED FOR 2024

Degree of achievement



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GOALS	ACTIONS 2023-2025	ACTIVITIES AND RESULTS 2023-2024
Strengthening the <i>welfare</i> system	Promotion of services – Communication and dissemination initiatives of welfare ser- vices available to professors and technical and administrative staff	 Promotion of the second joining window of the <i>Polimi People Care</i> programme for the 2024-25 two-year period Digitalisation and promotion of the "transport season ticket" service Granting benefits to pay the all-inclusive university enrolment contribution for staff members' children. <i>Techcamp – technology summer school</i> scholarships for employees' children Preparing the communication and promotion plan for new services: analysis of user needs through surveys, with the option for users to subscribe to thematic content channels, attend <i>webinars</i>, and take part in in-person meetings <i>7</i>,677 subscriptions to the University's <i>welfare</i> initiatives in 2024 (+28% compared to 2022), including 976 Academic staff subscriptions to <i>Polimi People Care</i> (+41% compared to 2022) and 1,654 subscriptions in agreement (+51% compared to 2022)
	Reporting system - Implementation of a reporting system on welfare services to monitor the membership rate and verify the degree of user satisfaction	Planned activities from 2025
	Parenting - Services to support parenting will be launched in line with the needs of children across different age groups.	 Planning and agreement with suppliers to implement parenting services in 2025: support and counselling for parents, children and young people, school and university guidance for employees' children
	Assistance - Services to assist parents and family members with disabilities or care needs	• Agreements with providers to implement home care and transport services for parents and family members with disabilities or support needs in 2025
	Work-life balance – Implementation of initiatives and services to ensure work life balance	 Agreements with providers for services available in 2025, supporting work-life balance and <i>time-saving</i>, such as finding <i>babysitters</i>, live-in caregivers or home care workers, and support for administrative processing
	Prevention and promotion of healthy lifestyles - Strengthening of existing services in synergy with the sport unit and promotion of new dedicated initiatives	 Agreements with providers for services available in 2025 to prevent and promote healthy lifestyles, through psychotherapy, osteopathy and nutritionist sessions

GOALS	ACTIONS 2023-2025	ACTIVITIES AND RESULTS 2023-2024
Staff training on new skills	Training of Academic staff – Formalisation of a training plan in teaching, research, soft skills, with a focus on sustainability issues	 145 courses activated over the two-year period with 2,316 participants (1,186 people) and a Academic staff coverage ratio of 64.5% over the two-year period Confirmation of the 2025 Plan with more than 50 courses scheduled
	Training of technical and administrative staff - Increase of customised plans for key roles and focus on the development of sustainability and inclusion issues	 425 courses activated over the two-year period with 6,846 participants (1,324 people) and a coverage rate of almost 100% of technical and administrative staff over the two-year period Confirmation and publication of the 2025 plan with >150 courses scheduled
Contribution to the Non-profit sector	Non-profit sector engagement – Involve- ment of teaching and administrative tech- nical staff in Non-profit sector initiatives, according to their available time, skills and preferences	 Systematic mapping of >380 Non-profit sector organisations with which the university has existing relations with more than 500 people involved in services, regional innovation, development cooperation, research, consultancy, and teaching

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Polimi People Care 2.0

During 2024, Politecnico di Milano worked on new agreements, supplementing those already in place, for its employees' benefit. The *Polimi People Care 2.0* expansion, which will be activated from May 2025 for technical and administrative staff, provides new services in the following areas: support for parenting with advice on breastfeeding, sleep and school guidance; *caregiving*, providing home assistance, transport for the assisted and legal advice for vulnerable family members; psychophysical wellbeing and self-care, psychotherapy, osteopathy and nutrition sessions; and work-life balance with services for selecting babysitters and carers, administrative assistance and health facilities.

La formazione professionale al Politecnico

In 2024, training activities for teaching and technical-administrative staff covered a wide range of areas, to promote significant growth in terms of knowledge, skills and experience. The aim was to enhance ambitions and skills, strengthen expertise and provide support to needs and issues.

Special attention was paid to sustainability, including ethics, psychological well-being, diversity and inclusion, which were explored in courses such as *"Dual Use"*, *"Artwell Therapy"* and *"Inclusive Language."*

Teaching innovation emerged as one of the most developed areas, with courses including "Generative AI in Education", "Methodological Meetings and Tools for the Active Classroom", and "Leveraging Perplexity as a Research and Narrative Tool."

Developing soft skills was a major focus, with communication and science dissemination suggestions. Courses include *"Podcast creation - communication and science dissemination"*, *"Public speaking"* and "team building."

To support researchers in advancing their academic careers, the University launched targeted training courses such as "Privacy and Data Management in Research", "How to Develop an Excellent ERC Project" and "Write a Competitive Proposal", and "Leadership and People Management – Talent Development", aimed at enhancing managerial capabilities and project leadership within the academic environment.





Sustainable development in research topics

Strategic orientation

Politecnico di Milano believes that the focus on sustainable development should be as pervasive as possible, in this favoured by an interdisciplinary approach in facing the challenges of scientific progress and technological development. Key enabling factors are the training and awareness-raising of researchers, incentive tools for the generation of synergies between researchers of all disciplines and the availability of large university laboratories and living labs located throughout the territory.

In the 2023-25 period we will:

- foster interdisciplinary research on sustainability with PhD scholarships on SDGs topics
- develop state-of-the-art living labs and infrastructures for research on sustainable development and social innovation
- enhance and integrate sustainability into the outcomes of our research
- give visibility to research results on sustainability issues within our campuses



GOALS	TARGETS 2025	TARGETS PROGRESS: END OF 2024	ACHIEVEMENT
Interdisciplinary research	60 PhD scholarships funded on SDGs topics over the three-year period	47 grants funded over the two-year period, covering 12 SDGs	\bigcirc
Living Lab Development	Five projects funded for the development of <i>living lab</i> in the three year period	Six projects launched in the two-year period (in EU Missions, NRRP and Polisocial Award)	\bigcirc
		Sustainable Building Laboratory (NEXTBUILD Lab): work completed, opening scheduled for early 2025	
Creation of Major New Infrastructures	Three new laboratory facilities on sustainability	The Wave Energy Laboratory (Marine Energy Flume) has completed its design phase, and the contracting process is under way, with the opening expected by the end of 2025.	(\mathbf{i})
		The Life Science Laboratory has secured its space, with design and construction to begin in 2025.	
	SDGs focus in 40% of scientific publications	SDGs focus in 34% of scientific publications on Scopus (vs. 33% in 2022)	!
Leadership in scientific research on sustainability issues	Exhibition trail of innovative technologies applied to campus sustainability	Involvement of Campuses and their departments in collecting ideas Concept definition and preliminary design of the exhibition trail	\bigcirc

Degree of achievement



 (\checkmark)

GOALS	ACTIONS 2023-2025	ACTIVITIES AND RESULTS 2023-2024
Interdisciplinary research	SDGs Scholarships - Funding of interdisciplinary PhD scholarships for basic research with SDGs focus	• Allocation of 47 interdisciplinary SDGs-themed PhD scholarships over the two- year period (12 SDGs covered) with an investment of approximately €3.6 million
Living Lab Development	EU Missions - Promoting participation in EU Missions call for applications (<i>Horizon</i> <i>Europe</i>) for the development of SDGs- related <i>living labs</i> and development of internal funding instruments for excellent proposed projects even if not funded by the EU	 Sharing the EU Missions programme with Department Research Delegates Matchmaking activities and identification of calls potentially relevant to each department Three EU Missions research projects launched: LandShift and iCOSHELLs (Mission Soil: soil health and recovery), URBREATH (joint call Mission Cities and Mission Adaptation: urban sustainability and climate neutrality); two NRRP MUSA research projects funded and started: Too Cool to Go Wasted (textiles and fashion) and Circular Food System Lab (food chain and circular economy)
	Polisocial Award - Politecnico di Milano's research funding programme for projects with high social impact — has been directed towards the development of living labs.	 Polisocial Awards 2023 and 2024 dedicated to Off Campus projects, to support research in the field and the community: 12 projects funded in the two calls two living labs funded in Off Campus Nosedo, as part of the DROPS (water management, already started) and ECHOES (knowledge and care of the agricultural landscape, to be started in 2025) projects
Creation of Major New Infrastructures	Large laboratories - Financing and setting up new laboratory facilities to support high-tech research on major sustainability challenges	 NEXTBUILD Lab dedicated to architecture and the sustainable built environment, with a focus on people's well-being: completion of lab construction work and installation Marine Energy Flume laboratory focused on renewable energy from wave energy: executive project, definition of the criteria for the upcoming tender process Life Science Laboratory for interdisciplinary health and life science research: identification of laboratory space and technical manager; surveys for upgrading and adaptation of facilities

OBJECTIVES, ACTIONS AND RESULTS FOR 2024

GOALS	ACTIONS 2023-2025	ACTIVITIES AND RESULTS 2023-2024
	Publications - Analysis of sustainability content in publications and training and awareness-raising initiatives for professors	 Sustainability content analysis of publications on the Scopus database using Elsevier methodology: more than 2,000 products published in 2024 with a strong SDGs connection Development of a first version of a textual analysis application capable of mapping SDGs on publications in IRIS (internal research database): more than 900 non-bibliometric products published in 2024 with strong SDGs connection Implementation of a training webinar, available to the internal community
Leadership in scientific research on	Innovative technologies - Identification of technological products and services on sustainability issues developed by the University's research to be applied and made visible on campuses	 Definition of project orientation and collection of proposals from Campuses and their departments Project development and definition of fundamental elements: central <i>hub</i>, distributed <i>totems</i>, laboratories and technologies, virtual <i>hub</i>
sustainability issues	International networks and leading companies - Systematic engagement with major university networks, international research centres, and <i>partner</i> companies on cutting-edge topics in sustainability research.	 Networks on open science topics – Active involvement in EOSC (European Open Science Cloud), with representation in each of the network's four task forces, and in ICDI (Italian Computing and Data Infrastructure); participation in the CESAER task force on "Openness of Science & Technology." Participation in KICs and other Horizon Europe partnerships: Climate KIC; EIT Raw Materials; Urban Mobility KIC; Circular Bio-Based Europe; Zero-Emission Road Transport (2ZERO); Clean Hydrogen; Batteries: Towards a competitive European industrial battery value chain (BATT4EU) Initiating dialogue with the main networks in which the university participates (Alliance4Tech, IDEA League, ENHANCE) and with the companies involved in the Joint Research Platforms.

Polisocial Award 2024

In 2024, Politecnico di Milano launched the 11th *Polisocial Award*, a competition funded through the 5x1000 IRPEF contributions collected by the University. The initiative supports research projects that generate high impact and recognised social value.

The 2024 event was dedicated to Proximity Innovation, to strengthen the University's role in processes in underserved areas, in close synergy with the *Off Campus* programme and spaces, which serve as drivers of local social innovation.

Seven of the 12 submitted projects received funding, helping to strengthen existing research and initiate new lines of inquiry in their respective fields.

Living Labs in Politecnico research

Research projects aiming at establishing *living* labs, research and innovation ecosystems involving local authorities, institutions, researchers, companies and citizens in the process of co-designing, testing, monitoring and evaluating new solutions in real contexts to accelerate their adoption, are steadily increasing. With the support provided by the *Horizon Europe Missions* research funding programmes, NRRP and internal *Polisocial Award* competition, which earmarks the proceeds of the university's 5x1000 to fund research projects with a high social impact, two projects for the development of *living labs* were launched in 2023 (on soil recovery and water system management) and four in 2024 (on urban sustainability, soil recovery and circularity in the fashion and food supply chains). These projects combine laboratory and field research activities with partnership and stakeholder engagement initiatives.

Two more projects will be launched in 2025, with a focus on agricultural landscaping and nature-based solutions for the sanitation of contaminated soil.



POLITECNICO È

RISPETTO

RESPONSABILITÀ INTEGRITÀ PROFESSIONALITÀ EQUITÀ FIDUCIA TRASPARENZA

Sustainable research

Ethical and responsible research

Strategic orientation

Politecnico di Milano aims to strengthen the skills needed to address the challenges of ethics in science and technology and those related to the broader implications of scientific progress, technological development and innovative design. Furthermore, the University intends to continue developing an open-science and open-access, ethical and responsible approach to scientific research, identifying suitable communication tools to enhance the impact of research.

In the 2023-25 period we will:

- develop training activities and support the development of skills on the ethical and social aspects of scientific and technological research
- promote the open access, open data, open source and citizen science principles
- support and enhance the research of PhD candidates with a focus on supervisor preparation



GOALS	TARGETS 2025	TARGETS PROGRESS: END OF 2024	ACHIEVEMENT
Skills on ethics and philosophy of science	A researcher on ethical and social issues in each department	11 Departments with at least one researcher with the specified profile	!
Training researchers on research ethics and impact	150 researchers trained over the three- year period	Training and awareness-raising on research impact assessment: A Department involved (156 professors) and more than 100 professors and researchers trained through the VQR case study preparation process Training of 23 dual-use researchers (one course in 2024, two are planned for 2025)	\oslash
Open science	Drafting of university guidelines on open science	Open Science document drafted by the dedicated Round Table	\oslash
Support for PhD candidates	200 professors and researchers trained as supervisors over the three-year period	93 professors and researchers trained as supervisors (one course in 2023 and three in 2024) Additional four are planned for 2025	(\mathbf{a})

Degree of achievement



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Achieved

GOALS	ACTIONS 2023-2025	ACTIVITIES AND RESULTS 2023-2024
Skills on ethics and philosophy of science	Strengthening of resources – Inclusion of a resource in each university department to support interdisciplinary research on scientific and technological innovation through collaboration with the humanities and social sciences	 Approval by the Academic Senate of resources for the placement of professors and researchers with the required profile and collection of departmental needs Two new Tenure Track Researcher positions advertised, one of which is already active 20 young researchers (RTD, RTT, Post-doctoral researchers) in 11 Departments
Training researchers on research ethics and impact	Research impact assessment - Design and delivery of training activities on research impact analysis and self- assessment, with a focus on young researchers	 Practical training of more than 100 professors and researchers in research impact assessment and reporting, by drafting more than 20 knowledge valorisation case studies for the VQR process Mapping the research impact of 64 projects in one department, involving relevant Academic staff (156 professors) Awareness-raising and training activities on research impact assessment in Digital Innovation Observatories: organisation of a webinar (96 participants), a workshop (30 participants) and several awareness-raising events in 2024
	<i>Dual use</i> training - Design and delivery of training activities for Academic staff on the dual use of technologies	 Design and delivery of a training course on the dual use of technologies 23 participants in the 2024 pilot Presentation of the new calendar programme 2025 in the relevant Department Boards
	Planning training activities - organisation of short events for a wide audience	 Organisation of five events open to the public (conferences, lectures, workshops) by the META - Social Sciences and Humanities For Science and Technology unit, for about 250 participants

GOALS	ACTIONS 2023-2025	ACTIVITIES AND RESULTS 2023-2024
Open science	Open science model for research management - Development of university guidelines to support data sharing, <i>open</i> <i>science</i> logic methods and results under European networks (EOSC)	 Establishment of open science guidelines on open access and open data principles Participation in national and European round tables: APRE - FAIR Data, CESAER - Task Force "Openness of science and technology", ENHANCE Alliance, ICDI (Italian Computing and Data Infrastructure) Participation in the Coalition for Advancing Research Assessment (CoARA) and European Open Science Cloud (EOSC) partnership More than 360 PhD candidates and research fellows trained in open science principles during the two-year period
	<i>Citizen science</i> - Development of research activities involving citizenship in Off Campus spaces and living labs	 Development of research projects aimed at the Off Campus community, including five research projects Polisocial Award 2023, Abitare San Siro, Atlante San Vittore Vocabolario di quartiere Nolo e San Vittore, ONFOODS - Nolo
Support for PhD candidates	Supervisor training course – Design and delivery of training activities for supervising PhD candidates, dedicated to new researchers and available to Academic staff	 Design and delivery of supervisor training by identifying the <i>supervisor's</i> role profile, analysis of training needs, training design and revision 93 participants in four training courses over the two-year period, including 79 in 2024 Additional four courses are planned for 2025

PhD Supervisor Training courses

Following the pilot success in 2023, the training course for supervising PhD candidates was expanded with three new courses in 2024, involving 93 participants over the two-year period. Designed primarily for young researchers, the course enhanced the speakers' skills by addressing topics such as mentorship, feedback techniques, research ethics, psychological well-being and stress management, leadership models and the management of diverse research groups. The course included the analysis of significant case studies, was enriched by external trainers.

META – Social Sciences and Humanities for Science and Technology

The META research group produces and disseminates knowledge and expertise on philosophical, epistemological, ethical and social issues related to scientific research, technological development, design and innovation. In 2024, META promoted a series of events on topical ethical and scientific issues. Seven META Lectures were organised with leading experts, including Roberto Fumagalli (King's College) and Jonathan Osborne (Stanford University). In addition, the unit held 11 interdisciplinary conferences, including "Vulnerability & AI - Rethinking the Human", in partnership with G. D'Annunzio University, to explore the implications of artificial intelligence on human life.

La disinformazione scientifica tra gli studenti delle scuole superiori. risultati di un orogetto di ricerca ierdi 22 novembre 2024 meta Politicolo 🔮 Careto & Careto &



Sustainability in curricular teaching

Strategic orientation

Politecnico di Milano is committed to designing and delivering excellent education and to integrating sustainability as a key element in the educational offer, developing both cross-disciplinary and preparatory teaching content in all study programmes and new specialized programmes aimed at developing specific skills.

In the 2023-25 period we will:

- develop a range of extracurricular courses preparatory to teaching - a "library" of modules designed to integrate knowledge and tools that support the inclusion of sustainability themes across different subject areas
- strengthen the multidisciplinary dimension of sustainable development by designing cross-curricular courses focused on sustainability, building on the experience of the PoliMI Ambassador advanced training programmes
- redesign the teaching governance to increasingly improve the quality of educational services offered to students, with a focus on sustainability



GOALS	TARGETS 2025	TARGETS PROGRESS: END OF 2024	ACHIEVEMENT
" -	Implementation of the course library	Definition of the Library architecture and initiation of work on the production of the first five MOOCs	(\mathbf{a})
"Zero library" of courses on sustainability topics for students	Adoption of the library in 100% of study programmes	Involvement of Deans, Schools and Course Coordinators to ensure the adoption of the Library in study programmes	(\Rightarrow)
Transversal paths related to sustainable development	Enhancing study paths with a focus on sustainability UPDATE	Mapping sustainability content within the current curriculum for individual subjects and Track/Major degree programmes 28 Tracks/Majors out of 145 with strong focus on sustainability issues	(\mathbf{a})
Sustainable approach to teaching	New teaching governance model	Establishment of the Teaching Commission in 2023 Two years of work geared towards new regulations for the teaching commitment of professors and researchers (approved), revision of budget process, registers, student feedback, admission criteria, and new teaching model	(\mathbf{i})

Degree of achievement



GOALS	ACTIONS 2023-2025	ACTIVITIES AND RESULTS 2023-2024
"Zero library" of courses on sustainability topics for students	Library architecture design – Designing content based on School needs	 Definition of the library architecture, finalisation of the MOOC format and identification of additional existing educational resources (including 27 'Sustainability' MOOCs and additional 19 with references to sustainability)
	Development of MOOC modules - Identification of professors to be involved and implementation of training modules in MOOC format (open courses, available online)	 Selection of more than 20 possible sustainability topics for the Zero Library Identification of professors and production of the first five "Zero Library" MOOCs within the first six months of 2025
	Involvement of Schools and Study Programmes - Involvement of Schools in adopting the library within study programmes so that each Course has at least one teaching activity that uses the library	 Involvement of Headmasters and presentation of the project in School Boards Involvement of Course Coordinators to gather topics of most interest through dedicated surveys
	Enhancing the library - Identifying the potential for using the library in pre- university education and Lifelong Learning	 Identification of Zero Library MOOCs to be used for training professors and administrative and technical staff Designing the Zero Library in open mode, to make it usable in pre-university education and Lifelong Learning.
Transversal paths related to sustainable development	Designing the educational offer - Analysis of existing education and identification of potential interconnections between study programmes on sustainability issues	 Curricular mapping at the level of Master's Degree tracks revealed 28 out of 145 tracks with a strong sustainability orientation. Identification of potential cross-curricular elements in the identified tracks Development of an initial version of a textual analysis application to map the SDGs within the teaching: 36% of teaching activities with a strong SDGs connection (more than 4,000 courses analysed)
	Analysis of supply at international level - Benchmarking the provision of sustainability studies at top international universities	Planned activities from 2025

GOALS	ACTIONS 2023-2025	ACTIVITIES AND RESULTS 2023-2024
Identification of actions - Analysis of University teaching management and identification of areas for improvement Sustainable approach to education Innovations in the teaching delivery model - Suggestions for innovative models to optimise available resources, increase teaching quality and make it more sustainable	University teaching management and	 Revising the budget allocation process for teaching, register of teaching activities and student opinion questionnaire Defining new regulations for admitting national and international students to Master's and Bachelor's Degrees in Engineering and Design
	 Adapting the regulations on the allocation of Academic staff and related assignment plan University bodies' approval and presentation of the new training/teaching model focused on student learning quality 	

Polimi Ambassador

As part of the Technologies for Transitions project, conducted with seven other universities, Politecnico di Milano has launched high-level training programmes designed to develop new professional profiles equipped to address environmental and social sustainability challenges.

The Green Technologies course provides the tools to develop sustainable solutions and foster decarbonisation. The Smart Infrastructures course trains experts in design, management, and innovation of enabling, sustainable infrastructures and technologies. The Inclusivity Design course prepares professionals who will make cities, spaces and technologies more accessible and resilient. The Creative Thinking course develops skills in creative thinking and strategic design, which are essential to meet innovation and digital transformation challenges.

These offer a tangible opportunity to contribute to future technological and social transitions.

Zero Library in courses on sustainability topics

The Zero Library project stems from the need to provide Politecnico di Milano students with basic training on sustainability through a virtual library of online courses, structured as short MOOCs, that complement the core teaching. These courses provide support tools, prerequisites or in-depth studies on different sustainability themes, giving students the opportunity to delve into topics that are marginally covered by their study programme. In 2024, a survey was carried out to identify existing online courses that could be integrated into the Zero Library as supplementary content, and work began on five MOOCs forming the initial core of the library's offering. These modules focus on sustainable development and the SDGs, sustainable cities, the intersection of ethics and artificial intelligence, ecodesign, and sustainable water management.





Lifelong learning

Strategic orientation

In an increasingly advanced and complex world, it is crucial to integrate the curricular offer of traditional study programmes with an offering of advanced, constantly evolving content for lifelong learning. Politecnico di Milano is committed to developing and evolving this offer to be increasingly suitable to meet the challenges of sustainable development.

In the 2023-25 period we will:

- strengthen the lifelong education range open to all (MOOCs), with a focus on sustainable development
- increase the sustainability content in existing master's programmes and develop new ones on sustainability
- provide postgraduate training courses with a focus on the non-profit sector



GOALS	TARGETS 2025	TARGETS PROGRESS: END OF 2024	ACHIEVEMENT
MOOCs and microcredentials	130 MOOCs (of which 20 focused on sustainability)	137 MOOCs (27 from the "Sustainability" series)	\odot
Master's on sustainability	2,500 hours dedicated to sustainability in master's and postgraduate programmes	4,453 hours dedicated to sustainability in master's and postgraduate programmes	ACHIEVED FOR 2024
	1,000 participants in sustainability master's and courses	1,397 participants in master's and postgraduate programmes on sustainability in 2024	ACHIEVED FOR 2024
Postgraduate training for the Non-profit sector	1,500 participants in training courses	145 participants in training courses over the two-year period	!
	1,000 hours of training (teaching and project activities)	1,133 hours provided to Non-profit sector players in the two-year period	\odot

Degree of achievement

Attention Not on track

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Achieved

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On track

GOALS	ACTIONS 2023-2025	ACTIVITIES AND RESULTS 2023-2024
MOOCs and microcredentials	<i>MOOC</i> - Design and implementation of the sustainability MOOCs collection	 Design, production and publication of MOOCs on sustainability MOOCs on POK: 137 (27 on sustainability) Designing new MOOCs for 2025 (including contributions to the Zero Library project)
	Microcredentials - Design of a postgraduate training course on specific sustainability-related topics with delivery of courses and issue of microcredentials and certification	• Testing and development for platform plug-ins enabling the issuance of microcredentials via <i>Open Badge</i> , along with integration of the PagoPA payment system.
Specialising Masters on sustainability	Improvement and strengthening of existing training - Redesigning training in Politecnico-accredited postgraduate programmes to prepare responsible sustainability professionals	 Analysis of sustainability content in postgraduate education and mapping postgraduate programmes with a focus on sustainability 4,453 hours dedicated to sustainability in master's and accredited postgraduate courses 20 specialising masters with sustainability focus mapped
	Design of new specialising masters programme - Development of postgraduate courses (master's degrees and courses) with a prevailing focus on sustainability	• Eight new specialising masters with a focus on sustainability such as the green transition and sustainable resource management, approved in the two-year period
Postgraduate training for the Non-profit sector	Training for the Non-profit sector – Provision of postgraduate education, asynchronous training and mentoring activities for the Non-profit sector	• Participation of staff of Non-profit sector organisations in the University's postgraduate training: 145 participants and 1,133 hours delivered over the two-year period
	Mentoring in projects - Providing expertise to support Non-profit sector players in implementing innovation and continuous improvement projects	• Fourth "Leave Your Mark" initiative organised by GSoM to provide free expertise to non-profit institutions committed to building a more inclusive society: 15 organisations supported in the two-year period, with the involvement of alumni and professors
	Facilitated participation - Increase of partial exemptions between 10-15% for candidates from the Non-profit sector	 Discounts of 20-30% on selected programmes Definition of a targeted project for participants from non-profit organisations for 2025 (asynchronous training and free participation courses)

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New MOOCs sustainability

During 2024, four MOOCs were developed in cooperation with MOST - National Centre for Sustainable Mobility. This centre, established through the cooperation of 24 universities, the National Research Council (CNR), and 24 major companies, is dedicated to advancing and supporting innovative solutions for more sustainable, efficient, and inclusive mobility across the country.

Among the courses, one focuses to Electric Traction System and Batteries -Designing Sustainable Electric Motors: Efficiency, Circularity and Resource Optimisation - while three others focus on Rail Transport:

- FS Italiane for sustainable mobility
- Modelling the Energy Transition: the Role of Railway Sector Energy Demand

• *Virtual and Augmented Reality to Support Training and Maintenance* These courses stimulate professional growth, promote innovation and disseminate knowledge in the transport sector.

Leave Your Mark Project

The Leave Your Mark project was developed to give managers, professionals, and young talent trained at the Graduate School of Management the chance to volunteer their expertise in support of non-profit organisations committed to creating a more inclusive society and a better future.

The initiative is an opportunity for personal and professional growth, and a practical way to return value to the community by contributing what they have learnt during their training.

In 2024, the project involved nine non-profit organisations, 24 Alumni, six professors and 15 members of technical and administrative staff, leading to the implementation of 15 projects.





Financial support and student mentoring

Strategic orientation

Politecnico di Milano is committed to removing financial barriers that hinder access to university education, supporting categories of people that are under-represented in the university population and rewarding merit and dedication in studies.

In the 2023-25 period we will:

- maintain the allocation of diritto allo studio (DSU) scholarships for eligible students and expand the scholarship range to support vulnerability and merit
- enhance activities to support students in their studies
- increase the number of places in the residences
- develop the University's offer of paid collaborations for students



GOALS	TARGETS 2025	TARGETS PROGRESS: END OF 2024	ACHIEVEMENT
Scholarships	Diritto allo studio (DSU) scholarships awarded to 100% of eligible students	100% (6,999 eligible DSU in 2024-25; 7,103 in 2023-24)	ACHIEVED FOR 2023 AND 2024
Tutoring for study support	Less than 10% first-year drop-out rate	Drop-out rate in the first year: 6.95% (A.Y. 2023-24)	ACHIEVED FOR 2023 AND 2024
Residences	+50% in places available, of which 60% dedicated to eligible DSU	1,612 vs 1,363 available places (+18%) 1,097 places reserved for DSU (68% of the total)	\bigcirc
Paid student collaborations	+20% in hours vs. previous three-year average	115,163 hours in 2024 vs. 74,548 as average in 2020-22 (+55%)	ACHIEVED FOR 2024

Degree of achievement



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GOALS	ACTIONS 2023-2025	ACTIVITIES AND RESULTS 2023-2024	
Scholarships	DSU budget - Budget allocation to ensure eligible students receive a scholarship	• Allocation of €9.5 annually by the university to supplement state and regional funds to cover approximately 7,000 DSU eligible students' grants in each of the two years	
	New scholarships - Development of new types of scholarships and enhancement of existing programmes to support deserving vulnerable students	 Six UNICORE scholarships for refugee students from Congo, Eritrea, Ethiopia, Rwanda, and South Sudan Exemption from tuition fees for students with refugee status and those classified as "displaced persons," i.e., coming from other critical geographical areas Administrative facilities, educational and psychological support for refugee students (>20 refugee students) Initiation of partnerships with prisons to provide courses and analysis of support applications through specific agreements 	
Tutoring for study support	Communication and Awareness-raising – Implementation of awareness-raising initiatives towards students to increase awareness of study support services active in the university	 Delivery of the "Learning to Learn" course for first-year students, with 317 participants in the two-year period Delivery of maths and physics revision courses for first-year students Publication of MOOCs on core subjects for first-year students 	
	<i>Learning analytics</i> - Increased use of learning analytics tools to monitor the careers of students in difficulty and identify the need for tutoring	• A dashboard , available to Schools since 2023, is used to identify and monitor students most at risk of dropping out and to provide them with targeted peer-to-peer tutoring.	
	Student involvement - Monitoring student (tutees) participation in tutoring	 Monitoring student (tutees) participation in tutoring activities through TutorApp and integration of the app with the monitoring dashboard to support analysis and decision-making processes 2,292 student tutees and 1,240 student tutors participating 	
GOALS	ACTIONS 2023-2025	ACTIVITIES AND RESULTS 2023-2024	
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Residences	Building measures - Building new residences to increase the University's accommodation range, particularly for students in difficult financial conditions	 Opening the new Marie Curie residence in 2023, with 213 beds, 60% of the places reserved for DSU scholarship recipients and 12 studios equipped for guests with mobility disabilities Casa dello Studente (Student House) redevelopment in 2024 with the addition of 44 places in two-person flats with double rooms 	
Paid student collaborations	Remuneration and number of hours - Increase in the number of hours for student collaboration and increase and diversification of hourly remuneration based on the type of student and activity	• Entry into force in 2023 of the "Student partnership" regulation, which sanctions an increase in the number of hours (from 150 to 200 hours per student), hourly remuneration and the types of activities that students can carry out	
	Management model - Increase and diversification of the range through the involvement of Schools and Departments, increase of flexibility in calls for applications	 Preparation of the 'single semester announcement', simplifying the application procedure for students Reducing time and simplifying the assignment process Partnership contracts: applications received for 6,302 students from the Bodies, 191,122 hours paid in the two-year period 	

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Diritto allo studio (Right to university education) | Financial support and student mentoring

Paid student collaborations

Part-time collaborations provide students the opportunity to support Politecnico di Milano's bodies through different activities, receiving variable remuneration depending on the assignment. These collaborations fall into three main categories: support for administrative, teaching and peer-topeer services.

To apply, students take part in a call for applications, while the University's bodies submit their requests, which in 2024 exceeded 3,500 applications, totalling 115,163 hours of work required.

Assignments are based on the task and requirements specified in each request, resulting in a contractual relationship.

Casa dello Studente Renovation

At the end of August 2024, the first 44 refurbished units were handed over at the Leonardo da Vinci Residence – Casa dello Studente. These units, mostly located in flats equipped with kitchen, bathroom, and twin rooms, were allocated to DSU students through an extension to the initial call for applications.

Although renovation work is still ongoing on the upper floors, with the goal of full reopening for the next academic year, several communal spaces have already been made available, including a basement study room, laundry facilities, vending machines, a printer, and a small common room on the ground floor equipped with board games and musical instruments.





Accessibility of spaces and education

Strategic orientation

Politecnico di Milano is committed to promoting the active participation of all members of its community in academic life, collectively tackling the challenges related to the presence of disabilities or Specific Learning Disorders (SLDs).

In the 2023-25 period we will:

- create accessible and inclusive environments and pathways
- provide our students with disabilities and SLDs with customised support and appropriate technological tools to help their integration into the labour market
- invest in teacher awareness and training and promote more inclusive teaching



Target

GOALS	TARGETS 2025	TARGETS PROGRESS: END OF 2024	ACHIEVEMENT
Full accessibility of spaces and education		100% students with SLDs and disabilities are guaranteed full accessibility to learning spaces and materials by providing the necessary alternatives	(\Rightarrow)
	100% students with SLDs and disabilities supported with ad-hoc programmes and full access to facilities	Implementation and analysis of the Architectural Barriers Removal Plan, identification of priorities and implementation of initial actions	
		Drafting guidelines for the construction and adaptation of university spaces based full accessibility criteria	
Postgraduate support service	100% students from protected categories	96% of graduates in protected categories find a job in line with their training within the first year after graduation (92% in 2023)	(\mathbf{a})
	employed a year after graduation	+15% of Small and Medium-sized Enterprises (SMEs) hired for the induction of protected categories, with a reduction in the time needed for induction	
Inclusive education	60% of teaching staff trained in the three-	Publication of the digital accessibility guidelines "Specific Learning Disorders (SLDs): suggestions for inclusive teaching"	(\mathbf{a})
	year period	Dissemination of the guidelines in Schools and Study Programmes, for maximum coverage and awareness in 2025	

Degree of achievement



GOALS	ACTIONS 2023-2025	ACTIVITIES AND RESULTS 2023-2024
	PEBA - Finalisation and Implementation of the Plan for the Elimination of Architectural Barriers (PEBA)	 Drafting and analysis of the PEBA and identifying priorities Planning 2024-25 and implementing the first measures: extension of transponder locks in the toilets for people with disabilities, adapting refreshment areas with microwaves and extraordinary maintenance of lifts
Full accessibility of spaces and education	Barrier removal at the design stage - Revision of regulations to remove architectural barriers at the design stage	 New building works in compliance with accessibility regulations Abolition of existing architectural barriers when renovating buildings and spaces Start drafting guidelines for full accessibility of new university spaces
	Politecnico - City Interconnection - Implementation of the MEP (Maps for Easy Paths) app to provide external mapping of campus accessibility.	 MEP application being installed on the University server Engagement with the Municipality of Milan to use the data that will be made public in view of the Milan Cortina 2026 Olympic Games
Postgraduate support service	Partnership expansion - Actions to strengthen networks to ensure adequate placement of graduates from protected categories	 349 companies (+16% compared to 2022) and 114 institutions (+8% compared to 2022) with partnerships in place to facilitate the hiring graduates from protected categories The University hosted the Diversity Day event in 2024, featuring 60 company stands and information points and attracting more than 700 participants Partnership with Afol Citta Metropolitana di Milano and SiR Consortium of social cooperatives for job placement support Participation in the Coordination of Lombardy Universities for Disability (C.A.L.D.) by coordinating the management of the "Managing Disability" platform
	Support process - Review of support strategies and monitoring methods	• Two mentoring programmes for protected categories dedicated to inclusion: Eight companies involved (four in 2024) and 26 total participants (12 in 2023)
	Digital Accessibility (SLDs /Disability) - Creation of courses for Academic staff on teaching accessibility issues	• Drafting the "Specific Learning Disorders (SLDs): suggestions for inclusive teaching" guidelines with a focus on the drafting of accessible digital documents
Inclusive education	Inclusive education (SLDs /Disability) - Dedicated training for Academic staff on inclusive teaching and innovative teaching methods for disability and SLDs profiles	 Dissemination of the "Specific Learning Disorders (SLD)" guidelines wit presentation in Schools Training within the Engineering Physics Programme Board Planning training for disseminating the guidelines in Departmental Boards from 2025 Designing a MOOC on inclusive teaching

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OBJECTIVES, ACTIONS AND RESULTS FOR 2024

Diritto allo studio (Right to university education) | Accessibility of spaces and education

Implementation of the Architectural Barrier Removal Plan

The Architectural Barrier Removal Plan (PEBA) was published In January 2024. It maps the accessibility situation on the University's campuses, and highlights existing architectural barriers, particularly for users with motor disabilities. In addition to identifying existing barriers, the plan suggests solutions for overcoming them and adapting facilities, with an initial estimate of the investment needed to make significant progress towards full physical accessibility at the University.

The initial works will concern lifts, classrooms, libraries and refreshment areas, and then extend to more complex buildings.

Guidelines for inclusive teaching

In 2024, the "Specific Learning Disorders (SLDs): suggestions for inclusive teaching" guidelines were produced and disseminated to Academic staff, to provide useful tools for the design and implementation of inclusive teaching that is attentive to the needs of students with SLDs.

The guidelines offer a broad overview of SLD profiles, detailing how specific areas of the brain function differently in neurodiversity.

They provide professors with practical strategies and suggestions for adopting inclusive teaching approaches, and examples that can be applied in the classroom and during examinations. The document is enriched with guidelines to ensure teaching material accessibility.





Proximity innovation

Strategic orientation

Politecnico di Milano aims to contribute to societal growth in a logic of responsibility and reciprocity through innovative forms of collaboration between the University and the local community, bringing its expertise and innovative content to more vulnerable contexts, activating programmes of co-learning and co-production of knowledge.

In the 2023-25 period we will:

- strengthen the Off Campus programme, through which the University demonstrates its commitment to and engagement with the local context, expanding its educational and cultural activities.
- build a platform for cooperation with local stakeholders around the Off Campus, in synergy with the Polimi4nonprofit initiative.
- develop a "sustainable model" of proximity-based social innovation inspired by the Off Campus experience.



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OBJECTIVES, ACTIONS AND RESULTS FOR 2024



Target

GOALS	TARGETS 2025	TARGETS PROGRESS: END OF 2024	ACHIEVEMENT
Strengthening the Off Campus system	2,500 students involved in Off Campus	More than 2,300 students and young people involved over the two-year period (more than 1,450 in 2024)	
	activities over the three-year period	90 cultural and outreach events organised through Off Campus in the two-year period (40 in 2024)	(\mathbf{a})
Platform for regional partnerships	200 organisations involved in Off Campus activities over the three year period	More than 100 organisations involved in Off Campus in the two-year period	\bigcirc
A "sustainable model" of proximity	Strategic plan for "sustainable"	Completion of the proposed revision of the Off- Campus organisation model	
social innovation	development	Second Polisocial Award dedicated to Off Campus (12 projects funded in the two initiatives)	(\mathbf{a})

Degree of achievement



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GOALS	ACTIONS 2023-2025	ACTIVITIES AND RESULTS 2023-2024
Strengthening the Off Campus system	Training - Organisation of training to involve university and high school students in <i>Off Campus spaces</i>	 Involvement of more than 1,100 students in research, teaching (courses and workshops, internships and theses, paid partnerships) and neighbourhood service activities Involvement of more than 350 children and young people on Off Campus projects in partnership with local stakeholders (Coding School; Girls' After-School; <i>Coding Bricks</i>; PTCO; <i>ReverseLab</i>)
	Mentoring and volunteering - Involvement of students and student associations through collaborative, cultural and voluntary activities	• Partnership with five student associations on voluntary, cultural and project activities: Suspended; neighbourhood cleaning; guitar course for young people in the San Siro neighbourhood; meeting on Muslim culture, recreational meeting on chess with Nolo primary school
	Support for research projects - Support for professors in the development of projects and institutional relations with cross-campus <i>partnerships</i>	 Drafting project proposals for activities in the Off Campus, including one submitted in 2024 (CIMEA on educational and digital poverty) Supporting the application of the Off Campus initiative within festivals, for funding and prizes Two awards (Seoul Design Award 2023 and ADI Index 2024) Presentation of the Off Campus programme at the New European Bauhaus
	Cultural events - Planning of cross- campus events that intercept city events and reviews promoted by the Politecnico (<i>ArchWeek</i> , Festival of Sustainable Development)	 Participation in eight Milan weeks and Polimi festivals (Polimi Fest) delivering more than 90 public events via Off Campus across two years Involvement in Design Week, Festival of Sustainable Development, ArchWeek, Milano Green Week, Book City, Civil Week, Milano Digital Week, and Universities Unveiled – National University Day
Platform for regional partnerships	Milan University Network and Higher Education - Strengthening partnerships with universities involved in Off Campus activities or related contexts	• Stipulation of an agreement with Università degli Studi di Milano
	Strengthening relations and agreements - Development of contacts with institutions for the activation of formal agreements related to the project	 Seven broad and strategic partnerships, five of which were launched in 2024: Associazione Tech7 ETS, Associazione Terzo Paesaggio, Università Statale, Associazione Genitori Ciresola, Cooperativa Equa, Il Vespaio ETS, and Associazione Forme Tentative ETS 23 partnership agreements in publicly funded projects (six of which in 2024) 78 partnerships on projects and services, including Polisocial Award projects (25 in 2024)

GOALS	ACTIONS 2023-2025	ACTIVITIES AND RESULTS 2023-2024
A "sustainable model" of proximity social innovation	Organisation model - Strengthening initiative coordination and activity planning actions	• Completion of the new Off Campus organisation model, to be implemented in 2025
	Financial model - Identification of funding sources and design of <i>Polisocial</i> <i>Award</i> competitions with a focus on neighbourhood social innovation	 Completion of the Off Campus financial sustainability model, to be implemented in 2025 12 research projects funded for Polisocial Award 2023 and 2024 on Off Campus, four of which strengthen previous projects (€ 1,000,000 funding)
	Evaluation and impact - Construction of a stable impact evaluation model and identification of recognition and incentives for involved teachers and students	 Completion of the Off Campus Impact Assessment and presentation of the project as a case study of Knowledge Enhancement in VQR4

"Gli artisti sono quelli che fanno casino"

The ReverseLab project at *Off Campus* San Vittore, run by Politecnico di Milano, transformed a previously uninhabitable space within San Vittore Prison into a hub for artistic and cultural expression. In September 2024, the exhibition "GLI ARTISTI SONO QUELLI CHE FANNO CASINO – Frammenti dal carcere di San Vittore", opened as a site-specific installation by artist Maurice Pefura, created with the involvement of over 40 inmates. The exhibition and the revitalised space were visited by a wide inside and outside public, giving this space back to the institution and the city. With over 800 visitors and more than 200 press mentions, the project generated significant public and media attention.

Sport@OffCampus: sport as a widespread tool for inclusion

In 2024, the first few Politecnico di Milano *Off Campus* sports projects were developed. These activities were designed to reflect the distinctive character of each local context, working in synergy with ongoing projects and community networks already active in those spaces. The first event was dedicated to Cascina Nosedo, south of Milan, and the projects it hosts; starting from Campus Leonardo by bicycle, participants stopped at different points in the area with the support and guidance of local guides. In Nolo, northeast of the city, the University chess association Scacchi Polimi organised a children's chess course. In San Vittore Prison, sport took centre stage as Politecnico's male and female football teams played two triangular matches against inmate teams, in partnership with the You Sport association.





Collaboration with the non-profit sector

Strategic orientation

Politecnico di Milano recognises the non-profit sector's fundamental social and economic role and believes that. for the pursuit of its mission of sustainable development and social innovation, it is essential to build and enhance a structured system of collaboration with the most dynamic stakeholders of the non-profit sector.

In the 2023-25 period we will:

- carry out a mapping of Politecnico's expertise in social innovation linked to the SDGs across teaching and research.
- launch a programme of events and public initiatives to establish a collaborative platform and begin the process of stakeholder engagement.
- through participatory *co-design*, develop an integrated framework of processes and services known as the Platform of Action - Digital Platform P4NP (Polimi4nonprofit).



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OBJECTIVES, ACTIONS AND RESULTS FOR 2024



Target

TARGETS 2025	TARGETS PROGRESS: END OF 2024	ACHIEVEMENT
Complete mapping (100%) of University activities	Mapping social innovation expertise and existing relationships and services Census of Non-profit sector organisations with active partnerships with the Politecnico: more than 600 partnerships, more than 380 organisations	\bigcirc
50 players involved in defining challenges and needs	Dialogues with two Non-profit sector aggregators (<i>Link2007</i> , CoLomba) Involvement of more than 20 internal players (governance, reference delegates and internal bodies) to define the content of the offer Pilot project involving Non-profit sector organisations with active partnerships set up (2025)	(\mathbf{a})
50 players involved in the development process	Definition of the service delivery model with identification of roles and services Pilot project involving Non-profit sector organisations with active partnerships set up (2025)	$\textcircled{\textbf{i}}$
Operational construction with user testing	Design of the digital platform content	\bigcirc
100 organisations registered on the platform	Planned activities from 2025	(\mathbf{P})
	Complete mapping (100%) of University activities 50 players involved in defining challenges and needs 50 players involved in the development process Operational construction with user testing 100 organisations registered on the	Complete mapping (100%) of University activitiesMapping social innovation expertise and existing relationships and services Census of Non-profit sector organisations with active partnerships with the Politecnico: more than 600 partnerships, more than 380 organisations50 players involved in defining challenges and needsDialogues with two Non-profit sector aggregators (<i>Link2007</i> , CoLomba) Involvement of more than 20 internal players (governance, reference delegates and internal bodies) to define the content of the offer Pilot project involving Non-profit sector organisations50 players involved in the development processDefinition of the service delivery model with identification of roles and services Pilot project involving Non-profit sector organisations with active partnerships set up (2025)50 players involved in the development processDefinition of the service delivery model with identification of roles and services Pilot project involving Non-profit sector organisations with active partnerships set up (2025)0 Deprational construction with user testingDesign of the digital platform content100 organisations registered on thePlanned activities from 2025

Degree of achievement



GOALS	ACTIONS 2023-2025	ACTIVITIES AND RESULTS 2023-2024
Mapping the social innovation expertise system	Expertise mapping - Definition and testing of expertise mapping methodology on social innovation (teaching, competitive and consultancy research)	Social Innovation Skills Mapping 100% implemented
	Polimi/Non-profit sector report - Mapping Projects with the Non-profit sector	• Mapping existing relations and services with the Non-profit sector: more than 600 partnerships with more than 380 Non-profit sector players
Building the network of partners and participants	Promotion and development of partnerships - <i>Network</i> building activities through the <i>co-design</i> of an action plan	 Identification of the needs and potential demand of the Non-profit sector Involvement of University <i>governance</i> and Bodies (Departments, Schools, Consortia, <i>Career Service</i>) in defining the range, the service provision methods and the target groups
	Launch of the public initiative and engagement plan - Launch of initiatives to promote P4NP and connect Non-profit sector organisations with the Politecnico community	Planned activities from 2025

GOALS	ACTIONS 2023-2025	ACTIVITIES AND RESULTS 2023-2024
Definition and co-design of the Polimi4nonprofit action platform	Defining the Platform for Action - <i>Co-design</i> of the mission, management structure, activities, services, partnership building criteria and access to services	 Definition of the" hub&spoke" model with identification of roles and services Finalisation of four services identified for activation: vocational training, career service and job placement, involvement in curricular teaching, and volunteering
	InternshipProgramme - Implementation of a <i>matchmaking</i> system for the organisation of <i>internships</i> of master's degree students and recent graduates in Non-profit sector organisations	 Designing the information architecture for Non-profit sector organisations within the new Career Service platform
	Development of the Digital Platform - Planning and co-designing (with the partner network) of the platform's services, related management and scheduling model	• Designing web area content to support the service provided
	Digital Platform Programming - Executive programming of the digital platform making resources and services accessible	Planned activities from 2025

Polimi For Non Profit

Polimi for Non-Profit (P4NP) is an initiative to provide integrated services to non-profit organisations in the Non-profit sector. Based on a hub-and-spoke model that draws on several structures across the University, P4NP coordinates and optimises institutional resources, making them available through a dedicated area on the University website.

To initiate the programme, a mapping exercise of non-profit-sector organisations (Enti del Terzo Settore, ETS) was carried out in 2024 in partnership with University departments. The analysis identified around 380 organisations, with more than 600 active partnerships in research, placement, teaching, and project development.

In 2025, a prototype service package will be developed and presented to the mapped non-profit-sector organisations (ETSs), with a focus on two key areas: vocational training and career services. Professional training, in cooperation with Politecnico di Milano Consortia, will include *workshops*, short courses, *online* training modules and more structured courses such as master's degrees. The customised Career Service will provide a digital matching system between supply and demand for internships and job placement opportunities for students and graduates at non-profit-sector organisations. Non-profit-sector organisation involvement initiatives will be integrated into curricular education and targeted volunteer programmes, involving professors, staff and students. The goal is to create a bridge between the Politecnico expertise and sector needs, fostering synergies and tangible impacts.

Volunteering opportunities for students

Four agreements with major non-profit organisations are in place to channel voluntary opportunities among Politecnico students, particularly *tutoring and mentoring* projects. With Save the *Children* (Volunteers for Education project) and Fondazione Cariplo (TOP – *Tutoring Online Program*), students can apply to tutor children and adolescents in primary, middle, and secondary schools. With Associazione Deina, through the Auschwitz Reminder project, students may participate in an educational initiative on the Holocaust either as attendees or trained tutors. Through Refugees Welcome Italy's *EmpowerED* project, students can become mentors for young refugees, whether enrolled in education or not. These volunteering opportunities are promoted through targeted student communications and University-led awareness events, although they are fully managed by the partner institutions.





Science diplomacy

Strategic orientation

Politecnico di Milano aspires to be a leading player in science diplomacy, both in the sense of science for diplomacy - science as a strategic axis in international cooperation - and science in diplomacy - the University as a driver of informed policies for sustainable development with a global impact.

In the 2023-25 period we will:

- strengthen models for international cooperation in research and institutional capacity building, with a particular emphasis on the African continent.
- train the next generation to use scientific research to inform policy decisions.
- participate in major networks and *think tanks* to help close the gap between scientific evidence and *policymaking*.



Target

GOALS	TARGETS 2025	TARGETS PROGRESS: END OF 2024	ACHIEVEMENT
Cooperation and development (responsible research and institutional <i>capacity building</i>)	12 international initiatives in partnership with other universities or local stakeholders in areas facing critical challenges over the three-year period	19 initiatives (10 launched in 2024), including six new collaborative projects with international universities and four forums for dialogue with development cooperation organisations	\odot
Partnerships with international organisations	Six structured and continuous relationships over the three-year period	Two agreements renewed (UNESCO <i>Chairs</i> - Department of Energy and Mantua Campus) Four agreements signed by the university with international organisations to establish partnership and expertise centres	ACHIEVED FOR 2024
Science diplomacy training	60% young researchers and <i>PhD</i> candidates trained in science diplomacy over the three-year period	Two PhD School courses for more than 50 PhD candidates and researchers Lecture series <i>"Complexity of the global geopolitics"</i> with the Institute for International Policy Studies (ISPI), aimed at professors, researchers and technical and administrative staff (six meetings, approx. 100 participants per meeting) Launching the design of a <i>MOOC</i> on science diplomacy	(!
<i>Advocacy</i> networks for science diplomacy	Active participation in six networks or advocacy actions to guide international policies	Six memberships of <i>advocacy</i> networks for science diplomacy with key university <i>policymakers</i> , including four in 2024 10 advocacy actions (initiatives, events and <i>workshops</i>) at regional, national, European and international level, six in 2024	ACHIEVED FOR 2024





GOALS	ACTIONS 2023-2025	ACTIVITIES AND RESULTS 2023-2024
Cooperation and development (responsible research and institutional capacity building)	Funding - Strengthening the attractiveness of funding for research projects from cooperation agencies, development banks and international organisations	 Six new projects to attract funding of more than €1.4 million were initiated. The funding was for four NRRP projects "Transnational Education", MAECI G7 Africa and Italian Agency for Development Cooperation (AICS)
	Allocation of funds - Allocation of funds to foster partnerships of Politecnico researchers in developing country areas (focus Africa)	 Four important events for debate with Development Cooperation players (Director of AICS; MAECI; Consorzio SPeRA - Solidarietà, Progetti e Risorse per l'Africa; convegno CUCS Firenze 2024)
	Legacy management - Continuation of active partnership initiatives	 Launching and continuing initiatives: Three institutional training projects, two Erasmus+ projects in Kenya and Ghana, four <i>Polisocial Award</i> 2022 research projects for local development in the Democratic Republic of Congo, Madagascar, Algeria and Brazil OECD-DAC 2023 and 2024 mapping, mapping 2025 started
	Diplomatic relations - Strengthening Italian and international diplomatic relations	• Meetings within advocacynetworks: at VIU - Venice International University; round tables of the European Commission's General Directorate for Research and Innovation; <i>Central European</i> Initiative meeting with ambassadors from Southern and Eastern Europe
Partnerships with international organisations	International Organisations - Partnerships with international organisations in a <i>multi-stakeholder</i> perspective including institutional players to address major global challenges	 Launching the governance model (University Platform) for partnerships with international bodies Call for applications for three interdisciplinary "Science in Policy" PhD scholarships Two renewals of UNESCO Chairs (Department of Energy and Mantua Campus) Four agreements signed by the University with international organisations such as UNHABITAT - Metropolitan Vulnerability, IAEA - Nuclear energy education, WHO - Design & Health, WFP - Sustainability and Reusability of Products

GOALS	ACTIONS 2023-2025	ACTIVITIES AND RESULTS 2023-2024
Science diplomacy training	Training of young researchers - Implementation of at least one training activity annually on science diplomacy with internal and external, national and international professors	 Training for 15 students in cooperation with CoLomba Cycle of six events "Complexity of The Global Geopolitics" in cooperation with ISPI for professors, researchers and technical and administrative staff (approx. 600 participants) Launching the design of a MOOC on science diplomacy
	PhD - Activation of a permanent (annual) course in science diplomacy in the PhD School	 First and second sessions of the PhD School course "Science Diplomacy for researchers: filling the gap between science and policy within the global challenges" with >50 PhD candidates and researchers participating
<i>Advocacy</i> networks for science diplomacy	Participation in networks/think tanks - Confirming the university's participation in international networks and projects linking research, education and <i>policymaking</i>	 Participation in six advocacy networks: EU Science Diplomacy Alliance, Science Diplomacy Working Groups of the European Commission, agreement with Link2007, Central European Initiative Science Diplomacy network multi-stakeholder round table Lombardy Region, and National Council for Cooperation and Development Four Italian-level advocacy actions for MUR, MAECI, CRUI on science diplomacy issues in 2023 Mapping projects in Africa within the Mattei Plan and the "Outposts in Africa" of Italian universities in 2024 Five advocacy actions to inform international policies in 2024: Generation Cooperation event with CoLomba, "Cross-Continental Teaching Collaborations" workshop promoted by IDEA League, LEAP-RE event, "Science and Research in the Africa Just Energy transition" event, second meeting of Africa G7 Directors @Polimi

Complexity of the global geopolitics

To explore the complexities of an era marked by economic, political, environmental and social uncertainties and crises, Politecnico di Milano launched a seminar series called *"Complexity of the Global Geopolitics."* in 2024 Organised in partnership with ISPI - Istituto per gli Studi di Politica Internazionale - the meetings provide an open and informed look at different regions of the world, analysing their main socio-economic and geopolitical dynamics.

The initiative is part of science diplomacy and internationalisation training activities, offering a global framework to understand the University role in international relations and sustainable development policies.

Africa-energy themed events

In October 2024, Politecnico di Milano organised four events focused on Africa and Energy. The first dealt with *Science Diplomacy*, the AU-EU *Innovation Agenda*, the Mattei Plan and the ecological transition.

The second event, entitled "The Energy Challenge in Africa", was organised in cooperation with the Regional Order of Journalists of Lombardy. The third event hosted the *Stakeholder Forum* of the H2020 LEAP-RE project. At the last meeting, Politecnico hosted the Second G7 Africa Directors' Meeting, chaired by the Central Director for Sub-Saharan African Countries, with the participation of officials from MAECI and diplomatic representations of the G7 countries.





Environment

Energy and decarbonisation

Strategic orientation

Politecnico di Milano promotes responsible energy policies and solutions that leverage on the most advanced technologies for energy efficiency with the aim of reducing fossil primary energy consumption and greenhouse gas emissions along with it.

In the 2023-25 period we will:

- reduce the University's primary energy consumption, through effective management strategies and behavioural change.
- ensure that the energy consumed is produced using renewable sources wherever possible
- involve the Politecnico community, citizens and institutional stakeholders, becoming a catalyst for impact on the region's path to decarbonisation.



13 CLIMATE ACTION

Ex

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Target

GOALS	TARGETS 2025	TARGETS PROGRESS: END OF 2024	ACHIEVEMENT
Energy efficiency	-30% energy consumption	15% electricity consumption in 2024 vs 2022 -20% gas consumption in 2024 vs 2022 -12% per capita mobility from campus access in 2024 vs. 2015	(!)
	15% of purchased electricity from renewable sources	Tender procedure for a Power <i>Purchase Agreement</i> (PPA) to meet all external energy needs with renewable energy by 2025	\bigcirc
Generation and use of renewable energy	+5 MW installed PV power	1.47 MW of installed capacity by the end of 2024 and an additional 1.8 MW to be installed by the end of 2025	(\mathbf{x})
	Renewable Energy Communities with Solidarity Purposes (CER) active in at least three Milan districts	CER active in four Milan districts	(\mathbf{i})
		Approval and publication of the CO ₂ Mitigation Plan	
CO ₂ emissions reduction	-25% by 2025 vs 2015 -50% by 2030 vs 2015	-28% per capita emissions related to electricity and gas in 2024 vs 2015	(\mathbf{a})
	Net zero by 2040	Estimated mobility-related emissions per capita (Mobility Survey 2024)	-

Degree of achievement



GOALS	ACTIONS 2023-2025	ACTIVITIES AND RESULTS 2023-2024
	Temperature control - Improved regulation of heating and cooling systems by installing environmental controllers/thermostats	 Ongoing energy monitoring of individual buildings and evening measurement campaigns conducted in nine buildings to identify sources of energy waste Expansion of the network with 67 newelectricity meters, installation of occupancy sensors and lighting timers in six buildings in the two-year period, including five in 2024 Optimising the air-conditioning system in the premises and laboratories of Building 4 at the Leonardo Campus and renovating the classrooms in Building 14 at the Bonardi Campus
Energy efficiency	Lighting - Replacing at least 7,000 luminaires per year with LED systems	• Replacing > 9,700 luminaires with LED systems in 11 buildings over the two-year period
	Behavioural models - Developing guidelines and initiatives to raise consumer awareness based on individual behaviour	 Establishing a Sustainability Working group dedicated to energy saving, with a focus on user behaviour in energy services Creating a best-practice guide on energy-efficient behaviour for departmental users. Creating a best-practice guide for department and laboratory managers to assess the energy impact of equipment and guide energy-saving purchasing decisions
Generation and use of renewable energy	Photovoltaic power generation - Installation of photovoltaic systems averaging 1.7 MW per year	 >1,470 kW installed capacity in operation at the end of 2024 Additional systems on the Milano Città Studi and Bovisa campuses being installed, totalling >1,800 kW Installation of an extra 130 kW capacity at student residences and the Lecco Campus, which was unplanned
	Renewable <i>Power Purchase Agreement</i> (PPA) Procurement of at least 10 GWh/year of renewable electricity through a dedicated Power Purchase Agreement	• Technical and financial feasibility analysis and preparation of the 2025 call for tenders for the PPA (<i>Power Purchase Agreement</i>), to cover the University's full electricity needs (excluding self-produced energy) with certified renewable energy—part of which may be linked to a newly built plant
	Energy Communities - Creation of Renewable Energy Communities (CER) by involving public and private stakeholders	 Establishment of the CER.ca.Ml Solidale ETS association, presented jointly with the Municipality of Milan and other key local partners Participation in the Lombardy Region's "CER - phase 1" call for applications and selection of CER projects in four Milan districts Activation of the first CER plant (photovoltaic Giuriati Sports Centre)
	Heat pumps - Replacement of gas-fired generation systems with groundwater heat pump system for the La Masa/Lambruschini Campus	 Ongoing authorisation process for the construction of geothermal wells (Environmental Impact Assessment)

GOALS	ACTIONS 2023-2025	ACTIVITIES AND RESULTS 2023-2024
CO ₂ emissions reduction	Measures related to energy (consumption reduction and energy transition), mobility, and sustainable building included in the Plan contribute directly to this objective.	 Participation in the" Climate <i>City Contract</i>" programme led by the Municipality of Milan Completion of the 2022 CO₂ emissions inventory and update of the 2023 inventory (being finalised) Inventory started in 2024 – emissions from electricity and gas consumption: 15,218 ton_{cO₂} from electricity and gas consumption in 2024 (-28% in 2024 vs 2015 per capita; -26% vs 2022 per capita) Approval and publication of the CO₂ Mitigation Plan
	Climate Change Research - Survey of research activities in the University on the topic	 First mapping of research products on climate change Identification of >200 Scopus-indexed publications and 83 non-bibliometric research products strongly aligned with SDG13 in 2024 (based on textual analysis) 18 research projects on SDG13 started in 2024

Politecnico di Milano is among the founding members of the CER.ca.Mi Solidale association

The CER.ca.Mi Solidale association – standing for Comunità Energetica Rinnovabile e Cittadinanza Attiva Milano Solidale (Renewable Energy Community and Active Citizenship Milan Solidale), was founded by the Municipality of Milan, Politecnico di Milano, Abitare Società Cooperativa, Associazione Terzo Paesaggio ETS, and Diapason Cooperativa Sociale a.r.l. onlus. Operating within the Milan metropolitan area, the association was established to promote the production, sharing, and self-consumption of renewable energy—supporting decarbonisation while generating economic value to fund socially driven projects in the region. CER.ca.Mi will start its operations through four configurations in the Bovisa, Chiaravalle, Città Studi and Niguarda-Affori districts. By 2025, CER.ca.Mi Solidale will benefit from around 2,000 kWp of photovoltaic systems, to be installed and activated by Politecnico di Milano.

CO2 Mitigation Plan

In 2024, Politecnico di Milano released the second edition of its CO₂ Mitigation Plan, which outlines measures in the energy and mobility sectors aligned with the Strategic Sustainability Plan's objectives: -25% in CO₂ emissions by 2025, -50% by 2030, and carbon neutrality by 2040. The document presents two scenarios: a baseline scenario with eight targeted actions, and a more ambitious target-oriented scenario with 16 strategic actions and higher investment to accelerate progress towards the 2030 targets. Both scenarios allow the University to meet its 2025 emissions target, incorporating external factors beyond institutional control and internal variables, directly influenced by the University's commitment. Estimated investment required: \in 22 million for the baseline scenario and \in 70 million for the target-oriented scenario.





Environment

Sustainable building and green spaces

Strategic orientation

Politecnico di Milano pursues the improvement of the environmental quality of its campuses, starting with the regeneration of both outdoor and indoor spaces according to sustainability principles, always prioritizing the quality of life and the psycho-physical well-being of the people using these spaces.

In the 2023-25 period we will:

- upgrade the University's building assets to minimise energy waste and mitigate the negative impacts of climate change
- design new buildings following innovative sustainability standards
- sustainably regenerate and restore open spaces to reduce climate change effects



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OBJECTIVES, ACTIONS AND RESULTS FOR 2024

Target

GOALS	TARGETS 2025	TARGETS PROGRESS: END OF 2024	ACHIEVEMENT
Building redevelopment	Plan for the redevelopment of the building stock	Leonardo Campus redevelopment plan is being drafted	(\Rightarrow)
	three renovated buildings	Complete renovation of Building 4; ongoing renovation of part of Building 5 and the tower of Building 6	(\Rightarrow)
	Climate change adaptation strategies	Work underway to develop the Adaptation Plan by the end of 2025	$\textcircled{\Rightarrow}$
New building projects	New "Net Zero Carbon" (NZC) Bovisa Nord Campus	75-80% coverage of consumption through photovoltaic energy generated on site and elimination of residual CO ₂ emissions by purchasing certified renewable energy	$(\mathbf{\hat{e}})$
	100% of new projects implemented following sustainable building standards	Development initiated on "Recommendations for Sustainable Building", to be completed by the end of 2025	$(\mathbf{ \Rightarrow }$
		15,385m² of redeveloped green space (Leonardo and Bovisa Nord Campus)	
Soil restoration and nature-based solutions	25,000 m ² of land restored through green or de-sealed areas.	Work started on the Durando Campus for the de- sealing of >10,000m ² , part of which is intended for green spaces (4,400m ² existing green redevelopment and 1,900m ² new green areas)	(\Rightarrow)
		Planning of further regeneration projects and new green areas, restoring an additional >3,800m ² of soil	

Degree of achievement

Attention Not on track

(!)

 (\mathbf{X})

 $(\mathbf{ })$

On track

 (\checkmark)

Achieved

OBJECTIVES, ACTIONS AND RESULTS FOR 2024 | CE

GOALS	ACTIONS 2023-2025	ACTIVITIES AND RESULTS 2023-2024
Building redevelopment	Redevelopment plan - Definition of an energy redevelopment plan for all University buildings, identifying financial benefits and decarbonisation potential	 Analysis and classification of building-specific consumption First version of the energy upgrading plan, with analysis of a minimum and a more virtuous trajectory Insight into the first trajectory and the link with fire prevention building standardisation
	Building renovation - Identification of priority building works and completion of refurbishment works for at least three of the least energy-efficient buildings	 Overall redevelopment of Building 4 at the Leonardo Campus: cladding energy requalification and installations refurbishment Renovation of the roof and part of the fixtures of Building 5 at the Leonardo Campus and initiation of the procurement process for full works Commencement of works to upgrade the tower of Building 6 at the Leonardo Campus: replacement of windows and air-conditioning systems in laboratory spaces
	Existing buildings – Replacement of remaining original doors and windows in the historic building (Leonardo Campus)	 Replacement of window frames in Building 4 and part of Building 5, start of replacement works in the laboratory tower in Building 6 and planning the replacement of part of the window frames in Building 2 at the Leonardo Campus Completion of the redevelopment of the facades of Building BL26 at the Bovisa Campus
	Adaptation Plan - Analysis of the risks, Politecnico adaptation potential and drafting a Climate Change Adaptation Plan for the University's campuses	 Working group establishment and initiation Drafting a table of contents and document with the Adaptation Plan's preliminary contents

GOALS	ACTIONS 2023-2025	ACTIVITIES AND RESULTS 2023-2024
	Net Zero Carbon (NZC) standard for Politecnico - Definition and application of a Net Zero Carbon (NZC) standard in the design of new buildings and spaces	 Executive design for the new Bovisa Nord Campus with the Zero Energy (Net Zero Operational Carbon) objective (1) Optimising passive design to minimise energy needs; (2) Optimising active design, with high-efficiency plants able to modulate operation based on needs and heat recovery systems; (3) Power supply from renewable energy sources (photovoltaics and groundwater) with production from photovoltaics expected to be 3,700 MWh/year, against total expected consumption of 4,800 MWh/year
New building projects	Minimum sustainability requirements - Definition and application of minimum sustainability requirements when designing buildings and installations	• Launching a round table for developing "Sustainable Building Recommendations"
	Regional partnerships - Dialogues with the city of Milan for impact assessments and connection with the new PGT (Piano di Governo del Territorio - Regional Government Plan)	 New Bovisa Nord Campus impact assessment underway Dialogue with the City of Milan on new pedestrianisation and active mobility projects
	Restoration of soil consumption - De- sealing of the Durando Campus	 Starting de-sealing in the new "car free" area at the Durando Campus >10,000m² covered by the works, of which 6,300m² is green (4,400m² existing green redevelopment and 1,900m² new green areas)
Soil restoration and nature-based solutions	Heat islands - Identification of critical pathways in terms of heat exposure and installation of shading structures, with preference for natural solutions	Roofing of the external terrace at the Bonardi Campus
	Green - Revision/renewal of existing green areas to maximise tree coverage, biodiversity, and soil permeability	 Redevelopment of the outdoor park of Building 26 at the Leonardo Campus (3,835m²) and the "Goccia" area for the creation of the Parco dello Sport at the Bovisa Nord Campus (12,000m²) Redevelopment and expansion of green areas at the Durando Campus: 4,400m² of existing green redevelopment and 1,900m² of new green areas Designing additional green areas (Smerlo Park 2,000m² and Leonardo Gardens 100m²) and new green spaces (pedestrianisation Via La Masa 1,300m², Leonardo Gardens 400m² and pedestrianisation Via Bonardi)

OBJECTIVES, ACTIONS AND RESULTS FOR 2024

EN: lab - New Energy Department Laboratory

In 2024, EN:lab was inaugurated — a new 6,000 m² facility dedicated to the Energy Department at Politecnico di Milano. A pioneering feature of EN:lab is that the building serves as a laboratory, showcasing innovative solutions for integrated, efficient energy management. The building has a large area dedicated to photovoltaic production. Thermal and cooling energy is provided by two high-performance, environmentally friendly reversible air source heat pumps. There are no combustion systems, resulting in zero direct emissions. This building exemplifies the integration of technological innovation and energy efficiency in new construction.

La Goccia - il Parco dello Sport

In 2024, the construction of the sports park in the Goccia area of the Milan Bovisa campus was completed. The facility is the result of regenerating green spaces and restoring a historic building located on the former industrial site, now transformed into a vibrant space dedicated to catering and sporting activities for the University community. The park spans 12,000 m² of green area and includes the planting of approximately 200 new trees. Sports facilities include: two indoor padel courts, a multi-purpose court for volleyball and five-a-side football, an indoor facility for calisthenics; a bocce court; and a 3x3 basketball playground.

The redeveloped building houses a cafeteria and fully equipped changing rooms with showers and toilets on the ground floor.





Environment

Sustainable mobility

Strategic orientation

Politecnico di Milano promotes sustainable mobility within its community with the ultimate aim of increasing individual and collective well-being. The value perspectives that the University wants to pursue are manifold: from the improvement of the quality, liveability and accessibility of spaces both on and off campus to the promotion of active mobility, from the improvement of travel safety to the reduction of total emissions related to campus access.

In the 2023-25 period we will:

- reduce the modal share of private motorised vehicles for accessing campuses
- lower the parking pressure to free indoor and outdoor spaces for other uses
- contain greenhouse gas emissions to improve air quality and combat climate change

STRATEGIC SUSTAINABILITY PLAN







OBJECTIVES, ACTIONS AND RESULTS FOR 2024

Target

GOALS	TARGETS 2025	TARGETS PROGRESS: END OF 2024	ACHIEVEMENT
Modal share of private motorised vehicles	-15% "private motorised transport" modal share for students	Approval and release of the University Housing Plan 2024 -5% modal share for students (2024 vs 2022)	!
	-20% "private motorised vehicles" modal share for staff	-23% modal share for staff (2024 vs 2022)	(\mathbf{i})
	+10% of users accessing campuses by bicycle	-8% of users accessing the campus by bicycle compared to 2022; however, still +50% compared to pre-COVID levels (2024 vs. 2019)	
Promotion of active and sustainable		Opening of the La Masa bike station (Bovisa Campus)	\bigotimes
mobility		Design and construction of new cycle stations and modernisation of bike parking infrastructure (+800 spaces, in addition to 1,300 existing): works underway at the Bovisa La Masa Campus	
Mobility CO ₂ emissions	-15% emissions for campus access	-8% CO ₂ emissions for campus access vs 2022 based on preliminary estimates	:

Degree of achievement



GOALS	ACTIONS 2023-2025	ACTIVITIES AND RESULTS 2023-2024
Modal share of private motorised vehicles	Pedestrianisation – Pedestrianisation of part of the Durando Campus, Leonardo Campus and Via Pascal	 De-paving and pedestrianisation in the Durando Campus in progress (completion expected in 2025): 18,500^{m2} made car-free, reduction of about 75 parking spaces Planning pedestrianisation works at the Leonardo Campus
	Subsidised travel passes - Increased funds allocated for the purchase of travel passes for the university community and an increase in users benefiting from sustainable mobility agreements	• >3,000 subsidised travel passes for University staff over the two-year period, with a funding of more than €450,000.
	Regional engagement - Dialogue with relevant bodies to monitor the quality and reliability of public transport and the possibility to extend cycle routes to University campuses	 Development of Sustainable Mobility Working group projects: <i>bike-friendly</i> routes, awareness campaigns and Local Public Transport incentives Establishment of a round table involving the Sustainable Mobility Working group, Municipality of Milan and AMAT for the "Sustainable Mobility Friendly Cities" project
	Monitoring and planning - Analysis of transport methods of the University community to and from campuses	 Release of the Home-University Travel Plan 2024 and processing Mobility Survey 2024 results Modal share 2024: Public transport: 49% students, 47% staff; public + private transport: 25% students, 13% staff; Car/motorbike: 9% students, 20% staff; Bikes/ electric scooters: 6% students, 11% staff; On foot: 10% students, 9% staff

GOALS	ACTIONS 2023-2025	ACTIVITIES AND RESULTS 2023-2024
	Infrastructure supporting active mobility - Investment in changing rooms with showers in campus buildings, electric bike charging stations, bike and scooter stands	 Planning of approximately 800 additional bicycle parking spaces compared to the 1,300 available at the University in 2023 and start of the first installations Construction of the La Masa bike station: 88 bicycle parking spaces, eight parking spaces for electric scooters with recharging and a Bike Repair Station Survey of shower facilities at the Milano Città Studi, Milano Bovisa and Lecco, Mantua and Piacenza campuses (61 showers in 30 buildings)
Promotion of active and sustainable mobility	Safety - Development of an app indicating access cycle routes to campuses and their safety levels	 Development of an "App for promoting cycling and pedestrian mobility" in the Sustainable Mobility Working group
	Awareness-raising and engagement - Information campaigns, participation and organisation of initiatives (including training) to promote active and sustainable mobility	 "Electric cars and batteries: state of the art" training initiative during the European Mobility Week 2023 (74 participants) "Road safety training day" during the European Mobility Week 2024 (75 participants); safe driving training course at the ACI-SARA Safe Driving Centre (79 participants); "Ecoverso R-Ace" event at the Lecco Campus (117 participants) Inauguration of La Masa bike station with local stakeholders (approx. 50 participants)
	<i>Smart working</i> - Initiatives to coordinate smart working for emission reduction purposes	 Analysis of the different types of remote work that can be activated and approaches to rotating on-site workstations Pilot project launched in selected offices at the Bovisa Campus
MOBILITY CO ₂ EMISSIONS	Charging points - Doubling of electric vehicle charging points	 Installation of 40 charging points in 2023 Monitoring the use of charging points (2024 and 2025) to evaluate a possible expansion with low-power and high-power charging points
	Transport emissions – Calculation of CO ₂ emissions from campus access, internal staff projects, mobile students, and University service vehicles	 Inventory finalisation 2022 - mobility share: total emissions from mobility 2022 of 16,302 t_{co2} of which 13,907 t_{co2} from campus access Preliminary estimate of emissions per campus access based on the Mobility Survey 2024: about -8% CO₂ emissions per campus access vs. 2022

Inauguration of the Milan Bovisa bike station

During World Bike Day - 3 June 2024 - Politecnico di Milano's third bike station was inaugurated at the Bovisa - La Masa Campus. During the event, bicycle bells and lights were distributed, which are essential for cyclist safety. The new infrastructure has 72 park-up spaces, 16 bicycle parking bays, an equipped cycle workshop and a Bike Repair Station, and eight parking spaces for scooters with electric charging outlets. The bike station complements the two existing facilities at the Leonardo and Bovisa Durando campuses, bringing the total to 132 bicycle parking spaces and 14 scooter bays across the University's three bike stations. Access is granted via badge or PoliCard.

Road safety training day

In September 2024, as part of European Mobility Week, the University Mobility Manager organised a Road Safety Training Day. The event involved 75 participants, including staff, students and Prevention and Protection Service Managers, and consisted of two sessions.

Morning focused on refresher training for Prevention and Protection Service Managers, with contributions from ACI (Automobile Club d'Italia), Lombardy Region, and INAIL (Italian National Institute for Insurance against Accidents at Work) The afternoon was dedicated to the safety of cycling and pedestrian mobility, in partnership with the Municipality of Milan, AMAT (Municipal Transport Agency), FIAB (Italian Federation for the Environment and Cycling), and Policiclo - the Politecnico's cycle workshop





Environment

Circular economy

Strategic orientation

Politecnico di Milano aims to adopt a systemic approach to monitor resource consumption and management according to the principles of circular economy, based on a combination of good management practices, technological innovation and active engagement of the entire community in a leading-by-example approach.

In the 2023-25 period we will:

- fight food and water waste
- strengthen and complete the resource consumption monitoring system
- reduce the amount of waste generated by the University and enhance the waste sorting system



Target

GOALS	TARGETS 2025	TARGETS PROGRESS: END OF 2024	ACHIEVEMENT
Reducing food waste	Zero food waste in 100% of catering	10 out of 10 catering outlets adopted food boxes (100%) and surplus recovery clauses in 55% of catering contracts Food Waste Working group evolution into the new Food Policy Working group, with an expansion of topics	(\mathbf{i})
Monitoring and eliminating water waste	Water consumption monitored throughout the University	Launching the Water Management @Polimi project to monitor water consumption and quality 80 tall faucets and five drinking fountains with drainage outside toilets have been installed, with an additional 20 units planned by 2025	(\mathbf{i})
Monitoring and reducing waste	Re-use of 60% of assets no longer useful	A formal regulation for asset reuse is under finalisation, and around half of the unused furniture has already been relocated or repurposed.	(\mathbf{a})
	Monitoring 100% of waste produced in the University	100% of hazardous waste monitored quantitatively and qualitatively >65% of municipal waste monitored quantitatively Qualitative monitoring of municipal waste with product analyses	$(\mathbf{\hat{e}})$

Degree of achievement



GOALS	ACTIONS 2023-2025	ACTIVITIES AND RESULTS 2023-2024
Reducing food waste	Organisational innovation in catering services - Redistribution through food boxes of 100% of legally recoverable food UPDATE	 7,865 food boxes in catering outlets distributed in 2024 Inclusion of formal agreements in new catering specifications
	Partnership - Programme agreements with catering suppliers to reuse 100% of legally recoverable food	 Mapping of leftovers in catering and designing a monitoring report Inclusion of formal agreements in new catering service specifications Benchmarking with other universities in the Food Policy Site
Monitoring and eliminating water waste	Monitoring - Mapping the water network and monitoring flows with identification and reduction of consumption and waste	 Launching the Water Management @Polimi project to create a digitised and connected infrastructure for monitoring, scheduling and managing University water resources Implementing water supply infrastructure mapping and monitoring at building level
	Drinking water - Installation of a widespread network of taps and drinking water dispensers NEW	 Identifying tall faucets needed to cover the total number of public services in the University Identifying the number ofwater dispensers to cover buildings with classrooms or offices Starting the installation of 80 high faucets out of 320 needed, five water dispensers and planning the installation of an additional 20 by 2025
	Water quality - Monitoring and certification of water quality in the University water network NEW	 100% sampling across University buildings and 170 swabs carried out on water dispensers for drinking water quality control in 2023 Signing a contract for water quality monitoring

GOALS	ACTIONS 2023-2025	ACTIVITIES AND RESULTS 2023-2024
	Reduction of disposable products - Implementing actions such as the use of "washable" dishware, replacement of paper towels by electric hand dryers, and increasing the digitalisation of documents	 Launching an experiment to remove disposable products (reusable crockery for on-site consumption and own containers for take-away) in the Lecco Campus refreshment area The new catering tender for Campus Bovisa also mandates zero disposable tableware.
	Prevention and waste sorting - Initiatives to raise awareness of waste reduction and support the reuse of goods and strengthening the waste sorting system	 Digitalisation of the asset re-use process to develop a web application Renewing the waste sorting collection points (1,000 bins purchased), placement of 31 containers for the collection of small WEEE (Waste Electrical and Electronic Equipment) and spent batteries and 20 smoker points for collecting and recycling cigarette butts Enhanced waste management during graduation days, in partnership with AMSA
Monitoring and reducing waste	Ecological areas and waste monitoring - Expansion of ecological areas to improve management and enable more effective monitoring of waste production and waste sorting quality	 Analysis of experimental monitoring results for 12 waste collection points in the NANDO project: collection improved by 18% Commodity analyses on three groups (paper, plastic and metal, mixed waste): 46.5% recyclable material in the undifferentiated waste Monitoring results: >15 tonnes paper, >11 tonnes plastic and metal, >40 tonnes unsorted waste, collected in six months
	Innovation initiatives - Local organic waste management with compost and biogas/biomethane production	 Ongoing project to extend the collection of organic waste: new procurement process for related bins placed throughout the University
	Regional partnerships - Participation in projects initiated by the city of Milan and Lombardy Region	 Partnership with AMSA for waste sorting during graduation day, goods analysis and weighing Partnership Projects: "Smart" NANDO collection (with AMSA-A2A-Relearn), Small WEEE and Batteries (with AMSA; WEEE Coordination Centre, National Coordination Centre for Batteries and Accumulators), Toner (with 00Toner), Cigarette butts (with Re-Cig), inner tubes and PVC sheets (with Cingomma)

RE-CIG

In July 2024, Politecnico di Milano launched a new initiative for the collection and recycling of cigarette butts, combining environmental protection with education. This project aims to curb littering particularly the improper disposal of small waste like cigarette butts and promote circular economy practices by transforming waste into resources used to create new products On the Milan campuses, 20 smoker points were installed, each capable of collecting up to 1,500 cigarette butts. These points are equipped with educational panels highlighting the environmental damage caused by improper disposal of this type of waste.

Monitoring waste sorting

To monitor the effectiveness of waste sorting, Politecnico, in partnership with AMSA, conducts product analyses on the different waste groups to assess their quality.

The latest analyses, carried out in December 2024, found that the dry residue was more than 50% compliant, the paper and cardboard group reached 99.5% compliance, while plastic and metal were around 93%. These results show an improvement in waste sorting quality compared to 2023. This is the result of prevention and optimisation actions taken in 2024, including waste sorting practices during graduation sessions, increased cleaning of waste bins and communal spaces by Politecnico and AMSA.

LCA Network

The establishment of the Polimi LCA Network in 2024 marked a significant step forward in advancing sustainability research within the University. This network brings together professors and researchers who apply Life Cycle Assessment (LCA) methods to diverse fields.

LCA is an analytical and systematic approach to assess the environmental footprint of a product or service throughout its life cycle. It is an essential tool to guide actions and policies oriented towards environmental, social and economic sustainability.

The network will play a strategic role in supporting the university in the scientific evaluations underlying operational decisions, which will generate a tangible impact on the Politecnico community. The network's objectives include sharing expertise, strengthening interdisciplinary partnerships between departments and spreading awareness of the importance of LCA in research and teaching.





Methodological note

Document structure

The purpose of this document is twofold:

- It is intended to update and confirm the commitments set out in the three-year Strategic Sustainability Plan published in 2023 and revised in 2024, reiterating Goals, Targets and Actions, which have been adjusted where necessary in response to contextual developments or targets already achieved during the first two years of the Plan's implementation (2025 update);
- It provides a detailed report on activities started or completed in 2023 and 2024, which contributed to achieving the Plan's Objectives.

In this second function, the document constitutes the Politecnico di Milano 2024 Sustainability Report, maintaining the same structure as the Strategic Sustainability Plan (according to the 2025 update) to facilitate the integration between planning and reporting approaches. The Strategic Sustainability Plan 2023-25 is structured on two levels: the highest includes the six priorities, identified as the macro-environments that the University intends to address in terms of sustainable growth; the second level breaks these down into 18 thematic areas, defining the specific domains of intervention.

For each thematic area, this 2024 update of the Strategic Sustainability Plan 2023-25 presents:

• a planning sheet that reiterates the Objectives and Targets originally defined in the Plan published in 2023 and updated in 2024, specifying any updates or modifications to the target values con-



sidering the progress made by the end of 2024. This is accompanied by an assessment of the degree of progress toward each Target, expressed as follows:

- "Target 2025 achieved" for Targets that have already reached their target value by 2025;
- "On track for Target achievement by 2025" for Targets whose progress aligns with expectations and planned trajectories; this is supplemented with the labels "Achieved (for 2023 and 2024)" or "Achieved (for 2024)" for Targets that require recurring annual confirmation or that have already been met but need to be sustained;
- "On track, requiring special attention" for Targets with partial alignment that still demand significant acceleration in 2025 to reach the goal;
- "Not on track to achieve the Target in 2025" for Targets for which the progress observed in 2024 did not allow to confirm attainability of the forecast value in 2025, and need extraordinary actions;
- a reporting sheet that outlines the Actions envisaged for each Objective over the 2023-25 period, alongside a summary of the Activities and Outcomes in 2023 and 2024, including initiatives, projects and services that were carried out or made available over the two-year span;
- a description of one or two 2024 projects or initiatives considered particularly relevant to the thematic area and instrumental in fulfilling the associated commitments.

Any changes made to Goals, Targets and Actions since the previous version of the document are marked with specific labels ("Update/ New").

Operational planning process

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After the Strategic Sustainability Plan 2023-25 was published, operational planning was conducted between September and November 2023 to define the roadmap for achieving each Goal and Target throughout the three-year period. For each Target, a timeline of milestones was laid out corresponding to the end of each year (2023, 2024, 2025). Furthermore, the general Actions described in the Plan

were broken down into practical, year-specific activities.

This planning process involved the Vice-Rectors, Rector's Delegates responsible for the Plan's thematic areas, and Heads of Central Administration Division charged with implementing the action guidelines—over 30 individuals in total. The operational planning enable the development of the Plan's monitoring and reporting framework, which underpins the progress assessments presented in this document.

Following the planning phase, a dialogue process was launched with internal and external stakeholders. This communicated and shared the Plan contents and collected suggestions to inform its future updates. Some of these contributions, detailed in Chapter 2, were already incorporated in the 2024 update and have been fully integrated in the current version.

Data monitoring and management

To support the tracking of data related to the Strategic Sustainability Plan, a monitoring dashboard was created to streamline the updating and historical archiving of information with increasing automation. The dashboard mirrors the Plan's structure (six priorities subdivided into 18 thematic areas) and allows for tracking progress at the individual Target level and in aggregate form for each theme and priority. By the end of 2024, the visualisation model and data architecture had been fully refined, enabling 100% of the Plan's indicators to be actively monitored. The dataset will be expanded to offer a more comprehensive picture of the University's sustainability performance. The implemented system ensures consistent monitoring by clearly identifying responsible parties and standardising the data updating processes.

Reporting methodology notes

The broad framework used to define the Plan's contribution to sustainable development is that of the UN Sustainable Development Goals (SDGs), providing a comprehensive and detailed perspective on sustainability-related issues. Each thematic area is linked to the SDGs it contributes to, with these connections summarised in the SDG analytical index included in the final section of the Plan. The reporting scope covers the calendar years 2023 and 2024; for those activities aligned with the academic year, the latest available data from A.Y. 2023-24 has been included. The data in the Report was extracted from official documents approved by the governing bodies or from material provided by the Politecnico administrative and management bodies (10 divisions).

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Two main tools were used to analyse the content of sustainability in teaching and research. The first is the SDG self-mapping, a system in which professors and researchers manually indicate which SDGs are addressed by their teaching modules or research projects. The second tool, still undergoing refinement, uses text analysis techniques to automatically identify the SDGs associated with teaching and research content. This tool enabled the validation and enhancement of self-reported mappings, particularly for teaching, and allowed for more targeted analysis, such as research output related to climate change. The objective is to expand the application of this tool to enable a deeper examination of teaching and research, enhancing the scope and accuracy of sustainability monitoring.

Greenhouse gas emissions are calculated and disclosed following the methodology outlined in the RUS Guidelines, developed by the Climate Change Working Group, which cover direct emissions, indirect emissions from energy use, and transport-related emissions.

Sustainable Development Goals index



4 QUALITY EDUCATION

5 GENDER EQUALITY

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SDG2:Defeating Hunger

SDG3: Health and well-being

SDG4: Quality education

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Acknowledgements

The 2025 update of the 2023-25 Strategic Sustainability Plan presented in this document is the outcome of a broad and inclusive effort that engaged many members of the Politecnico community, during the operational planning phase, which enabled the timely launch of the Plan and led to significant achievements in its first year, and during the reporting phase, which allowed for a detailed assessment of its progress and its presentation in these pages. The Plan's update process was coordinated by a dedicated working group, whose efforts were made possible by the essential support and active contributions of many individuals across the University, to whom we extend our sincere gratitude. Our thanks go to the Rector's Delegates and Vice-Rectors, Vice-Rectors of Campuses, Heads of Department, Deans, the Presidents and Directors of the Consortia, Professors, Researchers, Student Representatives, and members of the Technical and Administrative Staff who supported this endeavour. We would like to express special appreciation to those involved directly in sustainability governance and management: the Delegates of the Sustainable Development and Societal Impact Coordination Table, the more than 200 students and staff engaged in the Sustainability Working groups, Department and Campus Sustainability Delegates and Representatives, and the editorial team of the Orizzonti Sostenibili Newsletter. Finally, we would like to thank the many people involved in the stakeholder dialogue and materiality analysis process for their valuable contributions and advice. We are especially grateful to the representatives of institutions, businesses, organisations, and associations who took part in the interview and consultation phase during the early months of 2024, and members of the University community-students, professors, research fellows, PhD candidates, and technical and administrative staff, who contributed to the internal materiality analysis through the survey conducted in October 2024.

