



SDG6

CLEAN WATER AND SANITATION



Strategic programme

SUSTAINABLE CAMPUS - ENVIRONMENT

Within the “Environment” line of action, the University’s Sustainable Campus Project, with particular reference to drinking water, contributes to SDG6 through the following main actions:

- Interventions on the water infrastructure in the toilets of the campuses, in order to ensure a conservation of the resource: Politecnico has been installing for years water saving devices, such as photocells on water taps, aerator nozzles and dual flush toilets.



- Installation of drinking water dispensers on campuses in order to make the resource accessible to all and reduce the production of plastic waste.
 - **Drinking water dispensers:** since 2016, Politecnico has invested in the installation of drinking water points and water coolers inside the campuses. They are located in the buildings, housing and teaching facilities, to provide free access to water for our students and reduce the consumption of disposable plastic. A map of all the water points can be found here: www.campus-sostenibile.polimi.it/progetto-asap



- **Casa dell’Acqua Campus Bassini:** the “Casa dell’Acqua” [Water House] was inaugurated on World Water Day 2018 in the presence of the city authorities, MM Spa and the Politecnico di Milano. The new Water House, located in the playground in Via Pascal 6, is equipped with real-time water quality analysis instruments and is used by teachers and researchers of the Civil and Environmental Engineering Department for study/research activities, while doubling as an information point for the city of Milan, thanks to the information boards on Municipal water.

- **AcquaPoint at Cremona campus:** AcquaPoint was installed in 2019 inside the Cremona campus thanks to Padania Acque, sole manager of the integrated water service in the Province of Cremona. Refrigerated, plastic-free natural water has been provided since then for both students and staff and, to mark the inauguration of this service, around 200 “Goccia” water bottles were distributed to Polimi members.
- **Installation of water fountains at the new Leonardo Gardens:** the ViviPolimi Project addresses the issue of water supply by providing the community with fountains installed at the new outdoors study and rest areas.



- Awareness-raising during sustainability events and initiatives, and through the suggestions in the “Code of Conduct for a Sustainable Campus”, a document resulting from a collaborative discussion of Politecnico community in 2011, which has since been updated.
 - **Water bottle distribution:** the University has been carrying out awareness-raising activities on the issue of tap water quality for years, combined with the distribution, free of charge, of water bottles bearing the Sustainable Campus logo to members of our community, activity carried out by the Sustainability Unit during some of its events; To mark the start of the new 2019-2020 academic year, the Piacenza Regional Campus welcomed first-year students on the Mechanical Engineering and Architectural Design courses by giving new students a personalised Polimi water bottle to discourage the use of plastic water bottles.



- **What kind of water do we drink?** A seminar focusing on the underground journey of Lombardy’s water from the glaciers to the plains” organised by Padania Acque in collaboration with the Cremona Water Hub and Water Alliance, at the Palazzo Comunale in Cremona. The event was organised as part of the MEET ME TONIGHT (Researchers’ Night) initiatives.
- Launch of specific projects, in some cases working together with external partners (e.g. ASAP, BeviMi).
 - **ASAP! Acqua Sostenibile al Politecnico** [Sustainable Water at the Politecnico]: The ASAP! project is the result of a collaboration between Eliante and the Politecnico di Milano (DASTU - Architecture and Urban Studies Department, DICA - Civil and Environmental Engineering Department and Area Campus Life - Sustainability Unit) with the support of Fondazione Cariplo. The ASAP! project aims at teaching people that the Municipal water is safe and constantly under sanitary control. To do this it explores new ways of providing drinkable water, changing the experience and the perception linked to using Municipal water instead of water bottled in single use plastic containers. This will bring a significant reduction of waste produced due to such packaging, as part of a circular economy.

- **BeviMI:** The BeviMI Project - Mayor's Water and Responsible Consumption, was conceived and proposed by the Italian Committee for the World Water Contract (CICMA) and co-funded by Fondazione Cariplo within the framework of the "Plastic Challenge - Challenging disposable plastics". It involves three Milanese universities: Politecnico di Milano (Civil and Environmental Engineering Department, in collaboration with the Sustainability Unit), University of Milan, and University of Milano-Bicocca. The BeviMI project, which targets around 150,000 people (students, professors and university staff), is part of a series of initiatives and actions on sustainability to which the three universities - members of the RUS_Rete delle Università per lo Sviluppo Sostenibile [Network of Universities for Sustainable Development] - have been committed for some time (waste, mobility, lifestyles and water).

Data



Teaching and research

The self-mapping initiative POLIMI4SDGs yielded 2 teaching activities linked to SDG6, with only one (**Supply water treatment**) explicitly referring to the SDGs in the course programme; the testing of the keywords-based mapping methodology also yielded the course "Supply water treatment", and identified 13 additional course units focused on SDG6; the pertinence appears to be high for the majority of them, suggesting that the keywords choice was appropriate, although these activities were not captured by the self-mapping initiative. The overarching topic of water resources management is mainly relevant within the School of Industrial and Information Engineering (7) and the School of Civil, Environmental and Land Management Engineering (6).

The self-mapping initiative also resulted in the identification of 14 research activities linked to the topics of SDG6, mainly carried out at the Department of Civil and Environmental Engineering. Among these 6 PhD theses which have been developed/are under development are fully focused on water management, pollutant removal, wastewater treatment and drinking water upgrade. Other research activities deal with irrigation systems, water quality monitoring and sludge treatment. Finally, the international cooperation project **Dafne: Decision-Analytic Framework**, carried out at the Department of Electronics, Information and Bioengineering in 2016-2020, deals with water management issues in Africa.

Administrative units

- **Sustainability Unit:** the unit in charge of the operational management of environmental sustainability in the university, from the design to the implementation of institutional policies and initiatives; it manages relations between the Politecnico and the local community in terms of environmental sustainability issues; it organises internal and external dissemination initiatives; it manages the experimental activities and projects related to reducing water consumption.
- **Housing & Dining Unit:** with respect to drinking water consumption in the University campuses, this Unit manages the installation and maintenance of drinking water dispensers.
- **Supplies, Building Management & Logistic Division:** reading water quality and supply at Politecnico, this Division manages maintenance and upgrading of water supply systems of university buildings, laboratories and water fountains in outdoor areas, including the installation of water saving devices.