

PRESS RELEASE

EDISON AND “POLITECNICO DI MILANO” INAUGURATE OFFICINE EDISON IN BOVISA: THE NEW CENTRE FOR INNOVATION IN ENERGY, TOGETHER WITH MILAN POLIHUB

Attending the inauguration Roberta Cocco, Milan Municipality’s director of Digital Transformation, Ferruccio Resta, Rector of “Politecnico di Milano”, Stefano Mainetti, Polihub’s Chief Executive Officer, Massimo Sideri, editor-in-chief of Corriere Innovazione, Claudio Tuniz, scientist and writer, Patrizia Tiberi Vipraio, Economist, Nicola Monti and Giovanni Brianza, respectively Edison’s Chief Executive Officer and Executive Vice President of Strategy, Corporate Development and Innovation.

Edison, Fondazione Politecnico, Politecnico di Milano and PoliHub will launch a project on electric micro-mobility for the Bovisa district. The aim: to develop electric scooters with best in class safety standards for riders and the whole community.

Milan, September 12, 2019 – **Officine Edison** opens in Milan: **the new centre for innovation and experimentation with digital solutions applied to the energy sector**, the base for the company’s **Digital Centre** and the new linchpin of its Research, Development and Innovation activities. Housed at Bovisa within the **PoliHub**, the incubator of Politecnico di Milano, Officine Edison is the perfect place for profitable exchange and contamination with the ecosystem of talent, start-ups and centres of excellence, such as the departments of Politecnico di Milano with which the company aims to devise the best solutions for a future of sustainable energy.

The inauguration was an opportunity for comparison and debate among the representatives of the Public Administration, the academic world and business on the importance of collaboration between public and private entities in order to generate value for the whole community.

«A new research, development and innovation center is good news for the entire city. Milan is changing fast, it’s a city in full transformation, both urban and digital, which in recent years has attracted resources, investments and international talents, also thanks to the collaboration between the various sectors - public, private and academic - which together have achieved excellent results. The common goal is ambitious: all together we can generate value for the territory and bring Milan to compete with the great international metropolises », says **Roberta Cocco**, councilor for Digital Transformation and Civic Services.

«The collaboration between Edison and Politecnico di Milano is the union of two Italian excellences, that have always been committed to the growth of the country. Today we continue to join forces to seize the formidable opportunities offered by digitization and to produce innovation in the energy field. - declares Nicola Monti, Edison CEO - Officine Edison are a virtuous example of how companies, institutions, the academic world and young generations can make a concrete contribution to the creation of innovative projects, to build an increasingly sustainable world, community-friendly and close to the economic system of the territory».

«Officine Edison contributes to the development of an innovation district that is shaped based on major international models. - comments Ferruccio Resta, Rector of the Politecnico di Milano - An ecosystem between universities, companies and startups. A key point for the interaction between disciplines and

Edison Spa

Foro Buonaparte, 31
20121 Milan
Tel. +39 02 6222.7331
Fax +39 02 6222.7379
ufficiostampa@edison.it

www.edison.it

approaches for innovation and competitiveness. A common purpose and a closeness that generates critical mass, which attracts capital and ideas. This kind of initiatives are welcomed, since they give fresh air to the research, feed the sharing of ideas between public and private, multiply the interest of investors, who look to the future of the new generations».

*«Officine Edison is the answer to a threefold need: encouraging continuous osmosis between our Research and Development activities and the excellent work of the University, drawing in their best talent to enrich the expertise of our company, and finally locating Edison's research activities in a centre that is physically close to our Edison business. - states **Giovanni Brianza**, Edison's Executive Vice President of Strategy, Corporate Development and Innovation - *Officine is the place where Edison puts into practice its digital transformation process which means cutting-edge technology and a deep cultural change».**

During the morning, the results of an online survey launched by Edison were presented, in collaboration with RCS-II Tempo delle Donne, on the future, as it is imagined regarding key issues such as **health, energy, intelligent technologies, genetics, sustainability and the environment**. Today, climate change seriously concerns one person in two (24% extremely worried – 33% very worried – 31% quite worried – 9% not very worried – 3% not at all worried). More than 80% of the total sample argue that we must change our lifestyle in order not to leave permanent scars on the environment and that “we will find a way of producing energy in a sustainable way thanks to new energy sources” (54%), “we will develop circular-type economies where nothing goes to waste” (34%) and that we will be able to “enhance biodiversity” (28%).

Six projects are currently in the development phase at Officine Edison, to which a new one is being added today for the **electric micro-mobility**. A project that is the outcome of the synergic work with the Fondazione Politecnico, Politecnico di Milano and PoliHub and that works in the service of the Milan community starting from the Bovisa district.

In the coming months, Edison, together with Politecnico di Milano and PoliHub will develop innovative prototypes of electric scooters at Officine, testing their mechanical components, controlling systems and interaction with the surrounding environment, the aim is to develop a new micro-mobility service for the Bovisa district. The target is to identify **the best safety standard and the best practices, valuable information to support Milan Municipality and other entities involved** in defining the most suitable measures to adopt for the protection of riders and the community. After the first experimentation phase, a single prototype will be selected in the spring of 2020, 200 examples of which will be produced to test the most strategic charging points of the Bovisa district and to assess the development of a technology that automatically limits the scooter's maximum speed, depending on the route followed and in compliance with the Highway Code.

Other projects on which the research teams are already working concern the application of artificial intelligence (AI) to renewable energies and gas, in the service for customers and the optimisation of the energy resources for industrial production. **Machine-learning algorithms** are trained with a very rich quantity of data so that they learn to make **increasingly accurate forecasts, both of the expected electrical generation of wind farms** (both for the following day and the next hour) **and of the demand for gas**.

Succeeding in **forecasting the production of renewable energies is one of the sector's main challenges** in order to improve the balancing of the national electricity grid, compensating for the intermittence of this type of source. Moreover, the accuracy of the forecasting will become an increasingly relevant factor when, in 2020, Italy also will adopt the European Directive that involves the continuous negotiation of electricity. Similarly, in the gas sector, the ability to forecast the demand from the various areas (civil, industrial,



thermoelectric), and in time periods ranging from one to three days, this allows a more efficient management of the gas supply portfolio.

Digitisation of energy also has applications in other spheres of activity, including major industry, and leads to a considerable competitive advantage, since it enables the optimisation of industrial assets management, preventing potential malfunctions of the machines, avoiding production stops and the consequent economic damage. Edison has developed tailor-made algorithms for one of its industrial clients able to indicate the best settings for the compressor room, indicating which machines to activate and for how long, based on the efficiency performance of each one, the expected production and the meteorological conditions of the day. A few days ago, the factory test phase of this solution began, which is highly scalable and applicable to many industrial sectors, with positive impact in terms of energy and economic efficiency.

AI is also being used to improve the so-called “customer journey”, that is, the pathway and points of contact between the company and the customer, in order to offer solutions that meet their actual requirements. Digitisation has also enabled the automation of repetitive actions with low added value, bringing benefits both of a qualitative nature for the wellbeing of workers and of a quantitative nature (cost reduction).

With an area of 500 square metres, Officine Edison also houses **two technological assessment laboratories**: **Energy Storage**, where the best solutions for energy storage are tested and studied with particular focus on domestic systems; and **Domus**, which perfectly reproduces a common domestic environment, complete with all the domestic appliances (dishwasher, refrigerator, washing machine, microwave oven) but is also furnished with a sophisticated measurement and control system for the testing and study of IoT (Internet of Things) systems aimed at improving people’s comfort and ensuring greater energy efficiency.

Officine Edison are confirmation of the Open Innovation strategy that the company adopted in 2018 with the aim of incorporating the expertise and technological instruments of the academic world and start-ups. This perspective underpins the partnership with Idinvest Partners, one of the main private equity companies with which Edison has joined the Smart City venture capital fund “Electranova”, focused on startups that operates in the fields of Smart Energy, Smart Building & Industry, New Mobility and Enabling Technologies.

Officine Edison Milano completes the transfer of the Research, Development and Innovation activities to a location close to Edison’s business activities and the Italian centres of innovation. The first element of this transformation came with the establishment in 2018 of Officine Edison Torino at the Politecnico Energy Centre (in the “innovation mile” of the Piedmont capital), dedicated to research and experimentation of advanced energetic technologies focused on energy efficiency.

Edison

Edison is a leading Italian and European operator in the supply, production and sale of electricity, in energy and environmental services and in Exploration and Production. Founded over 135 years ago, Edison has contributed to the electrification and development of Italy. It now operates in Italy, Europe and the Mediterranean basin, employing 5,000 people. Edison’s electric power plants have a total capacity of 6.4 GW.

Edison Press Office

<http://www.edison.it/it/contatti-2>

<http://www.edison.it/it/media>



Elena Distaso, +39 338 2500609, elena.distaso@edison.it; Lucia Caltagirone, +39 331 6283718, lucia.caltagirone@edison.it;
Lorenzo Matucci, + 39 337 1500332, lorenzo.matucci@edison.it