Official Global Partner
EXPO MILANO 2015
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Press Release

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ENEL CREATES THE WORLD'S FIRST SMART CITY CAPABLE OF SERVING 100,000 PEOPLE FOR EXPO 2015

The entire Expo exhibition area will be fully electric thanks to smart grids and cutting edge technology that combines efficiency with sustainability

Rome/Milan, 30th April 2015 – Innovation is the watchword of **Expo 2015**, where Enel has helped create the world's first completely electric **smart city** capable of satisfying the energy needs of 100,000 people.

The energy business, which is an Official Global Partner of the event, is completing the installation of the cutting-edge technology that will characterise the city of the future: from the most modern network management and control systems to smart grids, electricity storage plants, electric vehicle charging infrastructure and smart street lighting.

Smart cities combine protection of the environment, energy efficiency and economic sustainability in a single urban model that has the aim of improving quality of life and creating new services for residents and local authorities.

The Expo Smart City in numbers:

- 75 MW of installed capacity
- 1,000,000 kWh estimated daily consumption
- 100 medium-voltage sub-stations that deliver electricity to the pavilion
- 100 charging stations for electric vehicles (30 within the Expo area and 70 outside)
- 8,500 LED Archilede lights that will illuminate the exhibition area and save around 280,000 kWh, roughly 36% of consumption
- One storage system that will optimise local energy flows (270 kW)
- One smart grid operations centre, which will be active 24 hours a day
- One showroom for visitors

The smart grid is equipped with an advanced remote control and protection system, and implements a closed loop medium-voltage network that will ensure a high quality of service, thanks to automatic measures that isolate parts of the network damaged by any eventual breakdowns and as a result avoid service disruptions for customers and visitors.

Each pavilion has its own energy management system that lets visitors take part in the use of energy and combines cutting-edge technology that monitors and controls energy consumption and requirements, optimises energy flows and integrates both renewable energy plants and storage systems.

Enel is also contributing to the lighting of the exhibition area with vast public lighting network and highly-efficient LED lights that will offer quality lighting outside the pavilion. This network will also be managed by and integrated with the energy management system, as well as making sure that the lighting is in harmony with the natural light of the exhibition area.

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Enel will also be present at the Expo with an interactive **pavilion** that, within an illuminated virtual forest, will let visitors see inside a smart city control room, the nerve centre of the smart city in which technicians and experts interact with the different technologies operating within each plant.

The design of the pavilion was inspired by the same thing at the heart of Enel's participation in the Expo: the idea that food and energy, thanks to the development of new technologies, have more in common than you would usually think. The future of both food and energy supply will involve the same solutions: smarter, more rational and less intensive production, more efficient distribution and sustainable sharing of available resources, all of which will help satisfy the needs of a human race that has an increasing need to nourish its life.