PRESS RELEASE

ENEL AND THE SAPIENZA UNIVERSITY OF ROME JOIN FORCES FOR 'SMART SOLAR HOUSE', THE SMART AND SUSTAINABLE HOUSE OF THE FUTURE

- *The prototype, powered exclusively by solar energy and equipped with 'smart metering and EV charging' technology supplied by the Enel Group, is participating in the Solar Decathlon architecture competition, which started in Dubai*

Rome, November 15th, 2018 - The **Smart Solar House**, a prototype house of the future, developed by the **Enel Group** in collaboration with a team of **about 50 students and PhD students from Rome's Sapienza University**, was presented yesterday in Dubai, for the 'Solar Decathlon Middle East 2018' international architecture competition.

This smart and sustainable house design, powered only by solar energy, uses the most advanced technological systems, including the Internet of Things (IoT), home automation and Enel's infrastructure for charging electric vehicles, and is **made entirely of wood** and other materials with low environmental impact.

In particular, thanks to the teamwork between Enel and the Sapienza University, two **second-generation Smart Meters** have been installed to manage and monitor energy flows: a sophisticated **remote management system** that uses leading-edge software to provide cloud-based real-time collection of energy data. Using these devices, Sapienza's scientific team will be able to receive and analyse consumption data and thus schedule energy usage with a view to boost savings, convenience and sustainability.

Based on a 2002 initiative of the US Department of Energy, the *Solar Decathlon* is an international architecture, design, planning and engineering competition held every two years, which aims to develop innovation and research in the field of renewable energy and eco-friendly architecture. This year, 22 universities from 16 countries around the world, selected by an international jury from over 60 nominations will compete in Dubai, **from November 14th to the 28th**.

The challenge is to design and build a prototype house of about 100 square metres and to test its efficiency and environmental quality for one month on a dedicated site.

Web-based interfaces and mobile apps will provide access to the results of the experiment, including the consumption trends and other information such as temperature, humidity, air quality and lighting. For example, the box station installed for electric vehicle charging will provide constant monitoring of the car's charging status directly on a smartphone.

With this collaboration, the Enel Group reaffirms its constant commitment to developing technologies that improve the energy efficiency of our homes, new products and services, fostering smart grids and smart cities, promoting electric mobility and integrating renewable sources in the energy system.