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Press Release

ENEL UNVEILS TOB, AN INNOVATIVE POWER GENERATION SYSTEM FOR ISOLATED AREAS - ITS FIRST TRIAL IN THE WORLD

TOB makes its debut in Pisa, presented by Livio Vido, Director of the Enel Engineering and Research Division. The new generation system can deliver electricity to places that have scarce access to power supplies. The project could reach poor and developing countries through the support of Enel Cuore Onlus.

Rome/Pisa, May 7th, 2012 – Known as TOB, the acronym for **Triangle-based Omni-purpose Building**, this innovative power generation system is designed for isolated areas. It consists of a wooden gazebo covered in photovoltaic panels and equipped with a storage battery which could revolutionise the energy sector, and mark a turning point for millions of people that are still living without electricity.

TOB was unveiled this morning at Enel Research in Pisa, in the presence of the Director of the Enel Engineering and Research Division, **Livio Vido**, the Trade and Industry Councillor for the Municipality of Pisa, **Giuseppe Forte**, the President of the Pisa Municipal Council, **Titina Maccioni**, the Human Resources Councillor for the Province of Pisa, **Nicola Landucci**, and representatives from numerous academic institutions and associations from the worlds of science and business.

"*This inauguration*" stated **Livio Vido,** Director of the Enel Engineering and Research Division "*is an important moment, because it confirms Enel Research's leading role in technological innovation in the energy field. TOB is a simple, low-cost solution that is easy to install and use, opening up important prospects for delivering electricity to the world's most remote locations*."

The trial system in Pisa is the **first of its kind in the world** and an initial step down the path which, through the use of TOB, aims at providing power and essential services to isolated areas where electricity is not yet available. Thanks to its flexible, easy to assemble structure, TOB is capable of integrating **photovoltaic cells** and **other renewable power generation systems**, based on the resources available at different installation sites. The power generated by TOB is made available for use, whenever necessary, by means of power storage systems installed inside the building.

The unit unveiled in Pisa consists of two base units (two modules of approximately 30m^2) with 5.4kW of thin-film photovoltaic panels, and houses storage batteries to guarantee the provision of electricity and services for four hours, even in the absence of sunlight, which makes it suitable to those places with little or no electricity supply. The TOB structure is

also habitable and can be employed for a variety of functions including schools, field hospitals, mountain refuges or holiday resorts.

The development of the TOB system will also benefit from an agreement currently being drafted with the **UN World Food Programme**, and, through Enel's non-profit arm **Enel Cuore Onlus**, a joint project with the **Architecture For Humanity** network, a non-profit organisation founded in 1999 that designs and constructs buildings and infrastructure for sustainable development, starting with poor and developing countries.

The TOB project is part of the broader programme, **Enabling Electricity**, conceived by the Enel Group to facilitate access to electricity in isolated areas and disadvantaged communities throughout the world. Enabling Electricity is Enel's response to the appeal from UN Secretary General, Ban Ki-moon, who has dedicated 2012 to the fight against energy poverty, declaring it the International Year of Sustainable Energy for All. A million people worldwide are already receiving sustainable electricity from Enel and the aim is to double the number of people benefitting from Enabling Electricity by 2014.