



ROMA
CAPITALE



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UNIVERSITÀ DI ROMA



THE SUN ALSO SHINES AT NIGHT IN VALLE GIULIA THANKS TO THE “DIAMOND”

The Municipality of Rome, Enel and Rome's La Sapienza University sign an agreement for the installation, at Valle Giulia, of the “Diamond”, the first power plant able to collect and store the renewable energy it produces.

Rome, April 14th, 2011 – The Mayor of Rome, Gianni Alemanno, Enel's CEO and General Manager, Fulvio Conti, and the Chancellor of Rome's La Sapienza University, Luigi Frati, signed today a memorandum of understanding for the installation of the high-tech Diamond power plant in the magnificent Valle Giulia, home of the Faculty of Architecture. The plant will be installed once the technical and administrative process is completed.

The Diamond is the latest generation photovoltaic power plant designed and developed by Enel's Research Department in partnership with the University of Pisa.

It is a high-tech energy system that allows, for the first time ever, to test the power generated in photovoltaic panels coupled with a storage system that can supply power even when the skies are overcast.

The Municipality of Rome which signed up to the EU Covenant of Mayors whose aim is to cut greenhouse gas emissions by over 20% by 2020 in the participating European cities, turned to Enel to find the best location for the Diamond in the Italian capital, a city that is both a treasure trove of monuments to the past and dynamic host to the architectural revolutions of the modern and contemporary era, from the EUR complex to the Parco della Musica Auditorium.

Seen in this light, the Diamond is fully in tune with the city's vocation, taking on an even greater significance as the symbol of the city's commitment to combating atmospheric pollution and reducing CO₂ emissions.

Indeed, the Diamond represents a new concept in power generating plant, which is no longer in conflict but rather in harmony with the surrounding area. The architectural structure, shaped like a Fuller geodesic dome built from glass and steel, is particularly suited for being placed in prestigious architectural locations and environmental contexts such as that of Valle Giulia, where the Faculty of Architecture intends to upgrade a currently unused green space, near the National Gallery of Modern and Contemporary Art, opposite the Villa Borghese Park. The area will be lit thanks to the zero-emission power generated by the Diamond.

In this context, the Diamond will act as a bridge between the modern and contemporary architectural styles, representing innovative research applied to architecture both from the visual and functional points of view.

The 38 photovoltaic panels and latest generation monocrystalline cells enable the Diamond to generate electricity directly from the sun's rays. Any energy not used during the day is stored in state-of-the-art batteries to provide power during the night or when the sunlight is not strong enough to bring the solar panels online.

This means that, during the day, the power plant uses the sun's rays to generate energy which is then used in the city to recharge electric bicycles and electric cars, to provide street lighting, etc. Any unused energy is accumulated in a cutting-edge renewable energy storage system, whose batteries will provide a continuous supply of electricity sufficient to guarantee the energy self-sufficiency of a small building.

Given the high-tech profile of the Diamond, Enel, the Municipality of Rome and the University of Rome intend to work together on research initiatives and projects aimed at fostering an environmentally-friendly energy culture which is also integrated within its urban surroundings.