ENEL GREEN POWER INAUGURATES NEW HJT PRODUCTION LINE AT 3SUN FACTORY

- The production line for the latest generation of bifacial photovoltaic panels using heterojunction technology (HJT) with an efficiency of more than 20.5% has been launched
- With a total investment of about 80 million euros, Enel Group’s centre in Catania for the development of renewable technologies has become the world’s most automated photovoltaic production plant

Catania, October 25th, 2019 - Enel Green Power has inaugurated the new production line of its 3SUN factory to manufacture bifacial photovoltaic panels based on heterojunction technology (HJT) that combines amorphous and crystalline silicon. The President of the Region of Sicily, Nello Musumeci, the Mayor of Catania, Salvo Pogliese, the Head of Enel Green Power, Antonio Cammisecra, and the Head of 3SUN, Antonello Irace, started up the factory's production.

This event completes the technological conversion project for 3SUN's 2.0 factory. The project was launched in the second quarter of 2018 and was broken down into three stages, with the aim to make Enel Green Power's "La fabbrica del sole" (The Sun factory) capable of producing on a continuous cycle, 24 hours a day, 365 days a year, turning out about 1,400 panels a day for a total of about 500,000 a year.

Antonio Cammisecra, CEO of Enel Green Power said: “The start-up of this new production line is a significant milestone and one that has been strongly supported by Enel Green Power. We have believed and invested in this highly innovative project, highlighting Italian industrial excellence on the global scene, especially in a competitive sector such as solar energy. We will continue with our commitment to research and develop this technology as we strive to further improve its performance, sustainability and competitiveness, with the confidence that we are a global technological outpost of the photovoltaic sector.”

Antonello Irace, Head of 3SUN commented: "We are the first company in the world to produce photovoltaic panels based on the innovative bifacial “HJT” hetero-junction technology, on an industrial scale. We hope to be a driving force for the entire industry and, by promoting innovation in photovoltaic technology, we want to turn solar energy into a pragmatic solution of clean energy wherever the sun shines."

Bifacial photovoltaic panels have an efficiency of more than 20% and a nominal power of 400 W. The "bifacial" feature will allow solar radiation to be captured also from the rear surface and achieve more than 30% greater energy production. In addition, while the previous modules had a life cycle of up to 25 years, the new panels are durable enough to last more than 35 years, with a high performance even in extreme weather conditions.
This technological leap will allow the plant in Catania to achieve a nominal production capacity of about 200 MW per year and to become the most automated photovoltaic production plant in the world with more than 300 employees and spillover business employing more than 600 people. The goal is to be able to overcome the theoretical limit of silicon efficiency in the next five years, thanks to constant technological innovation, and to achieve more than 28% of efficiency.

The investment was financed in part by European research and innovation programmes (Horizon 2020), in part by the Italian Ministry of Economic Development and the Region of Sicily, and by incentives for Smart Factory 4.0 development.