CASE STUDY

TERRANUOVA BRACCIOLINI, ITALY, 3 LUGLIO 2025

RENEWED PERFORMANCE: STERN ENERGY CHOOSES FIMER WITH MCLAREN APPLIED FOR A SUCCESSFUL REVAMPING

Stern Energy, a company specializing in technical services for the management, maintenance and construction of photovoltaic systems, has recently completed a significant revamping intervention in a group of **five photovoltaic systems located in the province of Udine, Italy**.

This project, with a total power of **24 MWp**, involved the installation of **over 1000 FIMER PVS-20 inverters**, an important step to restore the performance of the systems that had recorded lower availability values than expected due to the high failure rate of the existing inverters.

The intervention, carried out by the Stern Energy team, lasted two months and allowed the availability of the systems to be brought back to the expected levels. The choice to install FIMER inverters was guided by the Company's long history and experience in the sector and by the Made in Italy quality represented by its string inverters, essential elements for the success of the project.

FIMER **PVS-10/33** is a three-phase Made in Italy inverter available in six power sizes: 10, 12.5, 15, 20, 30 and 33 kW. It is the ideal solution for large residential systems and commercial and industrial applications.

PVS-20, the model chosen for the revamping intervention, offers reliability, high performance and flexibility with significant DC/AC oversizing capacity, 4 MPPTs, a maximum input voltage of 1,100V per string and single string monitoring.

It is designed to be compact and easy to install. The PVS-10/33 range is fuse-free, further reducing maintenance costs and field visits to a minimum.

The project featured a combination of unique **challenges** for which Stern Energy’s O&M and engineering teams worked closely to find a suitable solution while optimising costs. This cooperation, combined with FIMER’s support in selecting the most suitable PV inverter that was customised to be compatible with an output voltage of 460 Vac, ensured that all obstacles were effectively addressed and the project was completed on time and with the desired results.

Thanks to the intervention described, the plants have now reached the expected availability levels, significantly improving their overall performance.

This project is an example of how flexibility and teamwork can lead to excellent results, demonstrating the importance of choosing advanced and reliable technological solutions to address the challenges of the energy sector.

Andrea Bandini, Director of Operations and Board Member at **Stern Energy**, said: "*This project perfectly represents our operational approach: combining technical expertise, collaboration and reliable technological solutions to ensure high and long-lasting performance. During the O&M management phase of the plants, before their renewal, some critical issues emerged. Thanks to the support of our engineering department and the cooperation with FIMER, we were able to transform such challenges into improvement opportunities, bringing the plants back to the expected performance levels and strengthening the long-term value of the investment*."

Regarding the project, **Giovanni Manchia**, Chief Technology Officer at **FIMER with McLaren Applied**, commented: "*With projects such as the one carried out together with Stern Energy, we daily demonstrate how revamping is not just a technical replacement, but a strategic lever to restore PV systems' value and safeguard the sustainability of the investment. Thanks to the versatility of the inverters belonging to our PVS-10/33 series and their plug-and-play integration into existing plants, we ensured a quick, easy and perfectly compatible intervention. This is the Made in Italy that supports the energy transition.*"

About FIMER

FIMER is a brand owned by MA Solar Italy, an affiliated of the McLaren Applied group and a leading manufacturer of renewable energy solutions. The Company, specializing in the production of solar inverters, offers a wide range of solutions designed for any application. With local training centers, 2 production sites, one in Italy and one in India, FIMER is close to its customers in the evolving dynamics of the energy sector.

For further information visit www.fimer.com and follow us on our social channels:

About Stern Energy

Stern Energy is an independent operator of the renewable energy sector, founded in Italy and now active in five other European countries thanks to a network of branches in Germany, the United Kingdom, France, the Netherlands and Denmark. The Company offers a complete portfolio of services for photovoltaic plants, which includes Operation & Maintenance, Revamping, Repowering, Construction and Asset Management. Currently, Stern Energy manages over 2.2 GWp in O&M activities, 0.6 GWp in Revamping, Repowering and Construction projects, and 1 GWp in Asset Management. These numbers confirm it among the main players in the sector, recognized for its technical expertise, reliability and operational capacity. Stern Energy supports its customers in the path towards energy transition, creating ground-mounted and rooftop photovoltaic plants for industrial applications.