

Masofma produces furniture sustainably with the help of photovoltaic panels

★ BENEFITS

Straight-line production for 25 years

Carbon dioxide emissions reduced by 61.76 t/year

Average annual electricity production of 135.14 MWh/year



Wood processing



Sebiş, Arad county



Photovoltaic system on the roof of Masofma production facilities

ENEL X CUSTOMER

Masofma is a company located in Sebiş, county of Arad, which manufactures furniture, as well as furniture accessories and materials.

THE CHALLENGE

Masofma wants to improve the energy efficiency in their production halls and is looking for solutions to optimize energy consumption and the related costs, as well as to reduce their annual carbon footprint.

THE SOLUTION

Enel X proposes the placement of an efficient photovoltaic panel energy system on the roof of the building.

Further to the design process, that considered all aspects, with a view to obtaining the best possible characteristics with the resources available, the resulted photovoltaic system consists of:

- > **410 photovoltaic panels**, with polycrystalline-type cells, each with a power of 325Wp
- > **2 inverters** that ensure high efficiency



- > **Monitoring, operation and maintenance system (O&M)**
- > **Metal structure**, especially designed to be fixed onto corrugated sheet metal, following the approx. 5° gradient of the roof

The system was designed for self-consumption considering that the customer is a prosumer that does not inflow any energy into the electricity grid system. The equipment and technologies used by Enel X in the project have high performance and reliability, and are sourced from Tier 1 traditional producers on the global photovoltaic system market: Canadian Solar, Schneider, Eaton, ABB.

BENEFITS

Reduction of annual consumption

The solution proposed by Enel X has an installed capacity of 133.25 kW and will help the facility reduce the CO2 emissions by 61.76 tons per year.

Digitalization of processes

Using high-efficiency equipment to find the ideal cost-benefit ratio, Enel X Romania supplies specialized software to optimize and monitor the proposed photovoltaic systems. Masofma is provided with such "eco-design", with a focus on modularity, performance and reliability, in order to minimize the impact on the environment.

"The energy efficiency solutions Enel X Romania proposes for Masofma factory allow independent electricity generation, higher energy efficiency and cost effectiveness, by cutting down the electricity costs and reducing the impact on the environment by reducing the carbon footprint."

Laurențiu Brumaru, Head of Sales and Marketing e-Industries, Enel X România

Remote monitoring

The operation and maintenance system used for the photovoltaic panels aims to maximize energy production by analyzing the short, medium and long-term historical data of the operations on-site, adjusting the processes accordingly, and extending their lifetime.



"One of our goals is to turn our business into a sustainable business in all respects, and increasing our energy efficiency is one of the steps we need to take on this path. In this way, we respond to the needs of our customers to purchase pieces of furniture produced with care for the environment."

George Țucudean, General Manager of Masofma