

# PHOTOVOLTAIC PLANT INSTALLATION AND ASBESTOS REMOVAL

CERAMICA SAVOIA



**Date of start of work:**  
January/February 2022

**Date of end of work:**  
August 2022



**ENERGY PRODUCTION  
FROM RENEWABLE  
SOURCES RESULTING IN A  
REDUCTION OF ENERGY  
CONSUMPTION:**

Thanks to the power of 500,250 kWp of the plant, it is estimated a production of renewable electric energy of 587.000 kWh per year.

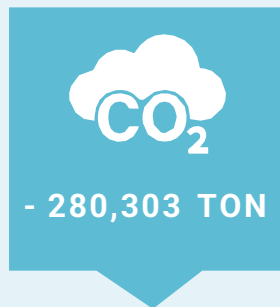


**RETURN PLAN OF  
THE INVESTEMENT  
generated by the  
savings in the bill:**

Almost all the electric energy produced by the photovoltaic plant will be directly consumed by the utilities. It is estimated that the auto-consumption could be above 93% of all the energy produced by the photovoltaic system. The estimate is made based on the average yearly consumption, which can be seen in the electric bills, and the average expected yearly production of the plant.

# BENEFITS FOR THE ENVIRONMENT

## ANNUAL ESTIMATES

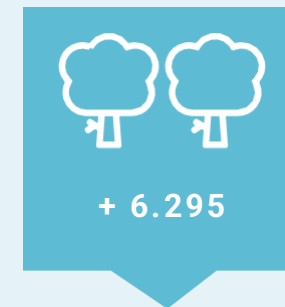


**CO<sub>2</sub> EMISSIONS PREVENTED**



**ENERGY INPUT**

kWh annual production  
(approx.)



**EQUIVALENT TO 6.295  
TREES PLANTED**

# OBJECTIVES OF THE PROJECT

The project here presented has brought to the **realization of a plant that produces electric energy through photovoltaic conversion of the power of 500,25 kWp.**

The photovoltaic plant is essentially composed of: photovoltaic modules for the production of energy, support structures of the modules, 5 inverters, general framework.

The energy produced by the system during the daytime hours will consistently reduce the need for electric energy by the company and, therefore, the withdrawal from the public network, which will result in a **reduction of the impact on the environment caused by the work activities.**

The realization of the project has been made possible through two operations: **the remake of the roof by removing asbestos and the installation of a photovoltaic plant.**



# RESULTS

The project has made possible the realization of a **new roof** and the installation of a **photovoltaic system** of the power of **500,25 kWp**.

This will consistently reduce the **need for electric energy** of the company and, therefore, the withdrawal from the public network, which will result in a **reduction of the impact on the environment** caused by the work activities.



# FINAL REPORT

The photovoltaic plant allows a reduction of the emissions in the atmosphere of substances that have a polluting effect and of those which contribute to greenhouse effect.

Emissions avoided in the atmosphere of	CO <sub>2</sub> [TON]	SO <sub>2</sub>	NO <sub>x</sub>	Dusts
Specific emissions in the atmosphere [g/kWh]	496,0	0,930	0,580	0,029
Emissions avoided in a year [TON]	280,303	0,52552	0,32819	0,0163
Emissions avoided in 25 years [TON]	5.655,13	10,60318	6,61221	0,33002

# FINAL REPORT

Nowadays most of the electric energy production comes from thermoelectric plants that use fuels of mostly fossil origin.

Thanks to the realization of the photovoltaic system, we intend on obtaining a significant energy saving for the infrastructure by the direct auto-consumption of the energy produced.

The use of this technology comes from the need of combining:

- A significant saving on fossil fuels;
- The production of electric energy without the emission of polluting substances;
- The compatibility with needs of environmental safeguard and architectural needs;
- No acoustic pollution.

We can estimate a Payback Time of the costs of the investment **for the photovoltaic plant** in approximately 4 years.



