Solar Power Bears Fruit for Spanish Company Giropoma runs harvest-to-storage apple business with SolarEdge system

Case Study

The Challenge

We are all familiar with the many benefits of using renewable energy, which is increasingly seen as a valid long-term investment opportunity. In the solar energy sector, interest is growing at the commercial level - more and more company owners are opting for a PV system for their factories to amortize electricity costs and increase self-consumption.

This too is the case for Giropoma, an apple production company in beautiful Costa Brava, Spain. Giropoma's business covers the entire scope of fruit production and sales including harvesting, storage and conservation, packing and delivery. The company had been dealing with escalating high energy consumption costs specifically related to the machinery that cleans and waxes the apples and - above all - the refrigeration and conservation equipment required for the fruit storage.

The management of Giropoma decided to go solar and install a PV system on the factory's roof. The goal was to maximize the level of energy produced to reach the highest level of self-consumption while reducing energy costs.

For the choice of the installation, Giropoma decided to rely on Energy Tools, a local company that always champions renewable energy. What sets Energy Tools apart from the competition is that it selects excellent system components which provide the site owner with peace of mind and maximum power while reducing resources spent on system management and maintenance.

The Solution

Energy Tools and Giropoma decided to install a complete SolarEdge photovoltaic system that includes 6 inverters with 842 power optimizers, 2 energy meters and 1,984 PV modules installed on the roof for a total capacity of 555 kWp. This investment is backed by the longest product warranties in the industry.

I "We are committed to providing excellent solutions to our clients so that they have at their disposal an installation that gives them peace of mind and maximum production. We therefore offer our clients products that have the longest possible warranty period so that when the payback period ends the products are still under warranty." Jordi Coll, Technical Director Energy Tools



Installation at a Glance:

- Site's capacity: 555 kWp
- Type of installation: rooftop
- Installation date: August 2019
- SolarEdge Inverters: 6xSE82.8K
- SolarEdge Power optimizers: 842x P730
- SolarEdge Accessories: 2x energy meters
- Solar modules: 1984x AXITEC 280P





Maximum Efficiency for Commercial Installations

In commercial installations, module mismatch is not uncommon where modules connected in the same string generate different amounts of power. This is due to factors such as different production tolerances, dirt (dust, leaves, etc.), different temperatures and partial shading. With conventional solar systems, one underperforming module reduces the energy production of an entire PV string.

The SolarEdge solution mitigates this problem with power optimizers attached to each module. SolarEdge power optimizers maximize energy production for the entire PV string; power losses are minimized and the plant is always assured of maximum efficiency.



The Power of Knowing in Realtime

Giropoma tracks its solar energy consumption and system performance using the SolarEdge monitoring platform. This real time dashboard can be viewed on all mobile devices, enabling full plant management as well as remote maintenance at both a system and module level.

Underperforming PV modules and inverters trigger system alarms to allow intervention - even from remote locations - in real time. This minimizes operation and maintenance time and expense.

Long Warranties Come Standard with SolarEdge

With the SolarEdge system, Giropoma received the 12 year warranty on the system's inverters, extendable to 20 years for an affordable fee. This warranty covers 50% of the minimum operating period of a PV system. The SolarEdge Power Optimizers come with a 25 year warranty and the Monitoring Platform is provided free of charge.

The long warranty periods provide continued peace of mind once the initial investment is realized, with options to extend the warranties at advantageous rates.

The Bottom Line

Energy Tools' philosophy has always been to provide products of excellence that perfectly meet the customer's demands – a quality that distinguishes the SolarEdge suite of solutions. In addition, the ability to control the system's production, remotely, and the certainty of a consistent and valid warranty ensures many years of profitable operation.

As a result, Giropoma is very happy with the choice and operation of the PV system provided by Energy Tools.

"We can roughly estimate that Giropoma saves around 782,000kWh per year with the SolarEdge system, which amounts to an annual savings of around €60.214," explained Jordi Coll, Technical Director Energy Tools.

About SolarEdge

SolarEdge is a global leader in smart energy, delivering innovative commercial and residential solutions that power our lives and drive future progress. Leveraging world-class engineering and worldwide experience, SolarEdge developed a ground-breaking intelligent inverter solution that changed the way power is harvested and managed in photovoltaic (PV) systems. As a result of this and other innovations, today SolarEdge is the world's #1 solar inverter company in revenue with millions of systems installed in 133 countries. SolarEdge addresses a broad range of smart energy market segments through its PV, storage, EV charging, battery, UPS, and grid service solutions.

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