

SolarEdge, the Natural Choice for La Cuisine des Champs

Belgian organic food manufacturer supports environmental and community values by choosing a SolarEdge solution to maximize energy yield of modules impacted by shading from a nearby wind turbine.

La Cuisine des Champs manufactures high-quality, organic, environmentally friendly, healthy meals for kindergartens, schools and elderly care centers in their local community. As the company is strongly committed to reducing its carbon footprint, and as all food products are sourced locally and prepared using cutting-edge energy-efficient cooking processes — it was a natural progression to invest in solar energy to power their business as well.

With financing from a local municipal investment cooperative, La Cuisine des Champs approached Enersol SPRL to design and implement the photovoltaic (PV) site on the rooftop of their manufacturing facility. La Cuisine des Champs benefits from self-consumption and sells surplus energy to the utility grid in accordance with the Belgian “Green Certificate” feed-in tariff electricity rate, which is guaranteed for ten years.

“For businesses like La Cuisine des Champs who are dedicated to renewable energy, the SolarEdge solution was an obvious choice. With the advantages of design flexibility, reduced costs, exceptional safety, and life-time system monitoring, SolarEdge has enabled La Cuisine des Champs to maximize their solar energy production. We at Enersol expect our cooperation with SolarEdge to drive continued commercial PV success.”

Jean-François Bragard, Responsable département photovoltaïque, Enersol



Installation Date:
May 2017

La Cuisine des Champs,
Fernelmont, Belgium

Peak Power:
99.6 kWp

Modules:
332 x 300 Wp

Power optimizers:
166 x P600

Inverters:
3 x SE27.6K



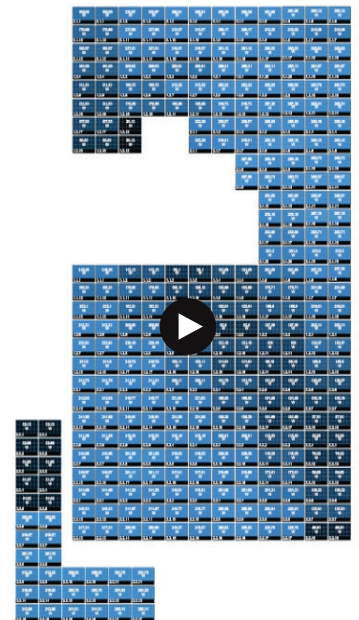
Enersol selected SolarEdge for this installation to minimize the reduced yield caused by the shade from the wind turbine positioned next to the facility.

Wind turbines feature prominently in the local environment, and the location of a turbine just 120 meters from the company's building created a serious constraint for the PV design. The wind turbine's tower casts a long shadow that crosses the rooftop each day, potentially reducing the amount of energy harvested during those times. A key reason for Enersol selecting a SolarEdge solution for this site was to minimize the effects of the shading. As SolarEdge power optimizers perform maximum power point tracking (MPPT) at the module level, each module produces energy to its maximum capacity. Although the shading by the wind turbine causes the shaded modules to generate less power, SolarEdge eliminates further losses from unshaded modules due to module mismatch.

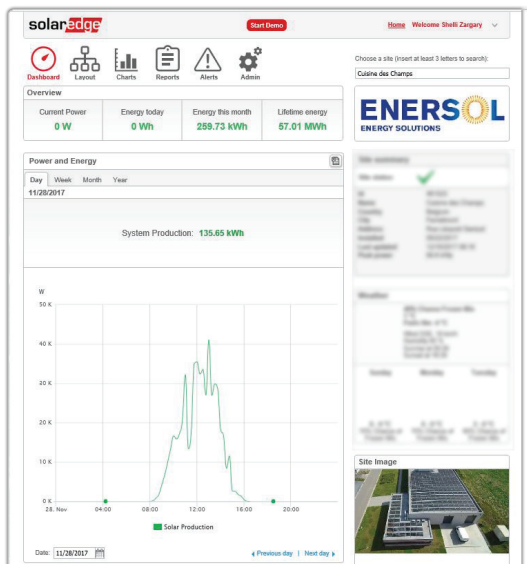
Enersol selected SolarEdge because of the ability to reduce the impact of this shading, as well as to maximize roof utilization despite design constraints posed by cooling equipment on the roof. SolarEdge's exceptional design flexibility also enabled Enersol to maximize the number of modules in the entire PV array, and in each string, potentially reaching an 11% higher peak power level than that of a traditional string inverter system. Costs were decreased by oversizing, which reduced the number of inverters required, and by reduced cabling expense, which was 50% less than cabling required in traditional string inverter design.

Further savings can be achieved through using the SolarEdge Monitoring Platform, which delivers module-level visibility and identifies performance issues remotely. SolarEdge remote monitoring can reduce the number of costly maintenance site visits needed, which can reduce O&M costs throughout the system's lifetime.

Another advantage of the SolarEdge solution is the SafeDC™ feature, which is designed to automatically reduce voltage to a touch-safe level, protecting maintenance personnel and first-responders during on-site visits.



View a clip from the SolarEdge Monitoring Platform showing the impact of the wind turbine shading on solar production.



This graph from the SolarEdge Monitoring Platform dashboard depicts daily solar production by the Cuisine des Champs PV system on 28 November, 2017, the same day shown in the video clip featured above.



SolarEdge's design optimization maximizes the number of modules that can be installed in the PV system on the rooftop.

*To view the video, click on <https://marketing.solaredge.com/acton/media/8801/-cuisine-des-champs>