

Tenesol, the global solar power provider owned by energy giants TOTAL and EDF, has helped create the first “positive-energy” production facility in France. A positive-energy facility creates more energy than it consumes.

In this case the new facility, located in Vaucluse (near Avignon, southern France) and owned by Isoltop, generates up to 3.5 times more energy than it consumes. The factory was created as a benchmark – a model that can easily be replicated elsewhere.

Isoltop, a manufacturer of environmentally friendly products (patented insulating beams), wanted its new factory to reflect its business philosophy and act as a prototype for future eco-friendly manufacturing facilities. Tenesol partnered with Isoltop during the design of the factory. It provided a 1,500 m² turnkey PV solution capable of producing 228,000 kWh of electricity per year – far more than the 75,000 kWh per year the factory requires and enough to power around 60 households.

“This Isoltop project marks a fantastic achievement by Tenesol and should serve as a benchmark for other companies looking to develop their green credentials,” says Benoit Rolland, general manager of Tenesol. “Today’s manufacturing processes are more energy efficient and more environmentally aware. At the same time, solar power continues to develop and advance. Together this means that positive-energy factories are an achievable target for any number of industries and facilities.”

Making energy positive

In operation since early 2010, the Isoltop factory was built in accordance with the latest environmental standards. In addition to the PV system it features highly efficient insulation, energy-efficient production techniques and geothermal powered heating and cooling.

When first designing its new factory, the use of solar energy was one of Isoltop's main requirements and it searched for a reliable and effective PV partner. Tenesol was selected from a shortlist of five companies.

"It was critical we chose a reliable company that works on the same principles as we do," says Patrice Riberolles, CEO of Isoltop. "In addition to functional and financial considerations, we valued Tenesol's professional approach and the company's ideas, which were intelligent and realistic."

A model factory

Following the successful creation of this positive energy factory, Isoltop now plans to replicate this green building model elsewhere. Through promotional activity and technology transfers with construction companies, it is likely that the Vaucluse model will soon be seen elsewhere.

“There has been a dramatic increase in the number of businesses with sizeable roof space or accessible façades that wish to investigate PV technology,” says Mr Rolland. “But to exploit its full potential, the right solar partner must be selected. Tenesol has 27 years of experience delivering customized PV systems on a turnkey basis. We work with clients in every stage of a project – from technical and financial evaluations to installation, operation and maintenance – to deliver advanced PV solutions that suit exact customer requirements.”

Isoltop’s new factory contains an automated production line that can produce 400km of insulating beams per year. The company intends to launch several other beam production lines in France over the next few years.