French cattle breeding farm improves solar safety and increases revenues by 5%

Since 2008, Free Power, a member of the <u>Copergreen Group</u>, and its teams have participated in the development of decentralized and renewable electricity generation through photovoltaic technology. Their objective is clear and that's to allow everyone to produce and consume clean and accessible energy. In 2012 the company was contracted to install a 248kWp PV system on a cattle breeding farm in the municipality of Hérisson.

The farmer, Laurent Vénuat, wanted to switch to solar as the generous Feed-in-Tariff of 0,61€/kWh would provide complementary income alongside the farm's revenues. Mostly he saw the opportunity to sustain the farm's core activity for the coming years using clean energy. With the standard 5-year inverter warranties and 10 to 12-year life expectancy of his existing traditional inverters, Mr Vénuat elected to replace them in 2018 with five SolarEdge <u>SE25K</u> three phase inverters, and four <u>SE27.6K</u> three phase inverters. This was done both to protect his asset and enjoy the peace of mind that SolarEdge's standard 12-year inverter warranty, extendable up to 20 or 25-years, could provide him.



Key points

Using SolarEdge's inverters, Mr. Vénuat was able to:

- Increase revenues by more than 5%
- Cut O&M costs from 15% up to 30%
- Mitigate fire risk Minimize the likelihood of fires with arc fault detection and interruption
- Protect workers, assets and fire fighters with SolarEdge SafeDC[™]

Maximum power, all the time

SolarEdge provides module-level power optimization. This is in sharp contrast to traditional inverters where string performance is only as good as the least performing module. This Module-level optimization is well suited to agricultural conditions, where dust and volatile temperatures can contribute to lower module output. The SolarEdge system enabled the farmer to potentially increase additional net revenue by up to €84,000 over the remaining 14 years of his Feed-in-Tariff contract.

Less maintenance, more savings

Using built-in module-level monitoring, system owners have a detailed overview of the system health. This together with automatic alerts meant that Mr. Vénuat could potentially cut O&M costs from 15% up to 30% and save on maintenance expenses. Additionally, with its simpler topology that only handles DC/AC conversion, SolarEdge's inverters are significantly less expensive than standard inverters when replaced out of warranty. A win-win scenario.



Peace of mind

With SolarEdge's PV systems, peace of mind extends to way more than just performance, reliability and warranties. Having had several fires triggered by defective solar modules, Mr. Vénuat decided to go with SolarEdge due to its arc fault detection and SafeDC[™] functionality. SafeDC[™] protects maintenance workers and fire fighters from electrocution by automatically reducing the system DC voltage to touch-safe levels of 1V per module.

"We have reached an important milestone in the business and we know that the contribution of photovoltaics to our operation has been instrumental in that. It has allowed us to develop new buildings and build the business, but we realize that to continue to develop, we needed to continually increase the production of our central operation. The SolarEdge solution proposed by Copergreen presented a real opportunity to increase our revenues as part of our EDF OA contract and to continue our approach of sustainable development."



Laurent Vénuat - Farm operator GAEC of Chaussières in Hérisson (Allier)

	Standard inverter	SolarEdge inverter
Retrofitting investment	€52 000	€85 000
Increased yields/year	=	5%
Additional revenues/year	€0	€8 400
Additional revenues/14 years	€0	€117 600
Lowered maintenance costs	No	Yes
Increased safety	No	Yes

More proof of why Mr Vénuat changed to SolarEdge's Solution

Contact your local SolarEdge office today for more information on this and other SolarEdge PV solutions, or visit the <u>website</u>.



