

AVIX Autonomic Laser Bird Deterrent Enhances Sonnedix Facility's Solar Panel Efficiency in Italy

Location	Tortona , Piemonte, Italy
Application context	Solar array rooftop
Problem definition	Birds on rooftop causing high maintenance costs and reduction of PV production
Bird species	Seagulls
Bird behavior	Perching, Roosting
Time of the year with bird problems	All year
Time of day with bird presence	Mostly between dusk and dawn
Laser projection area	22.000 square meter (2,2 ha)
Number of systems	1 x AVIX Autonomic Mark II
Birds reduction after the system has been installed	85%
In use since	2018

2,2 ha of solar panels in Tortona, Italy

Seagulls posed a significant threat to the efficiency of the solar panels

85% bird presence reduction after the laser deployment

The facility reduced bird presence on the solar array rooftop by 85% with the AVIX Autonomic bird control technology

Sonnedix, a multinational renewable energy producer with a strong focus on sustainable growth and a global capacity of over 10 GW, manages a solar installation located near Tortona, in northern Italy, on the rooftop of a logistic center.

The solar installation stretches for 22.000 sqm and has an installed power of 1,1 MW. Despite the facility being situated far from the sea, seagulls posed a significant threat to the efficiency and maintenance of solar panels by perching and roosting on the array. The damage caused by pecking, scratching, and depositing droppings obstructed sunlight and potentially caused lasting damage to the surface and protective coating of the panels.

In 2018, the AVIX Autonomic Mark II laser bird deterrent system was installed at the facility and programmed to activate during the night when bird activity is most prevalent, ensuring continuous protection for the solar installation.

The AVIX Autonomic Mark II laser bird deterrent system works by emitting a green laser beam that is harmless to birds but creates visual disturbances, effectively deterring them from landing or nesting on the rooftop.

Sonnedix acquired the solar plant years ago, finding it already equipped with the AVIX Autonomic laser bird deterrent. Over the years, they have clearly observed the effectiveness of the laser, noticing a significant difference in bird presence when the system is active versus inactive. Over the years, they have come to appreciate the system's consistent operation and its significant role in drastically reducing seagull presence at the PV site.

By utilizing this innovative solution, **Sonnedix actively reduces bird presence on the rooftop by over 85%**, mitigating damage to the solar panels and significantly decreasing cleaning and maintenance expenses.
The AVIX Autonomic system has enabled Sonnedix to enhance the efficiency of its renewable energy production, aligning perfectly with its commitment to sustainability..

"As Sonnedix's asset manager, I can attest that the tool ensures high reliability and operational continuity – crucial features for us to keep the panels consistently clean and avoid frequent external interventions by technical personnel. The use of AVIX Autonomic has allowed us to achieve an 8% increase in daily plant performance"

Alessandro Basilico, Asset Manager

