



## CASE STUDY

### PROinSENER ENERGÍA - Cooling the control cabinets for a 50 MW photovoltaic plant in the Philippines

#### Pfannenberg filterfans for the second Leyte's pv plant

*„The Philippines are carrying out several projects for the production of clean energy and our experience in the thermal management of control panels – with a wide offer of products ranging from heaters to air conditioners, from filterfans to chillers - will provide valuable support for future projects, where we hope to be involved again.“*

Xavier Pedescoll  
Area Sales Manager Iberia  
Pfannenberg Italia srl

A 50-megawatt solar power plant was built in Palo, Leyte Island, and linked to the power grid of the National Grid Corporation of the Philippines in March 2016.

It is the second solar farm built in Eastern Visayas after the one in Ormoc City. Now, with three power sources of NGCP in Leyte, together with the geothermal plant at Tongonan in Kananga town of Leyte, there is enough providers for the energy needs of Leyte and Cebu.

The new solar plant consists of 188,000 solar panels built on a 70-hectar property located about eight kilometers inward from the main highway.

## The customer

PROinSENER ENERGÍA is a Spanish provider for containerized solutions. They design and manufacture transformer stations, solar inverter stations, electrical rooms, electrical panels and other containerized solutions for different applications: renewable energy, mining, water pumping stations, emergency units, etc.

PROinSENER ENERGÍA has more than 400 MW installed worldwide, from the Philippines to Chile, with projects in Jordan, Morocco, Brazil, etc.

## The solution

PROinSENER ENERGÍA has supplied 15 inverter stations in 40'HC containers. Each of them generates 2.8MW for the 50MW PV plant in Leyte Island, Philippines.

After evaluating different options on the market, PROinSENER's choice fell on the Original filterfans. Each control cabinet in these stations is provided with Pfannenberg's bespoke 4th Generations filterfans.

When it comes to safe and costeffective cooling of control cabinets with filtered ambient air, our filterfans are the first choice. Since Otto Pfannenberg invented it in 1958, they have held a leading position in the market.

The latest generation is even expanding this lead – with no fewer than 11 well-thought out and patent protected details. One example worth mentioning here is the closed housing, which reaches guaranteed high system of protection IP 54 and IP 55, or the fluted filter mat which, in the IP 55 model, keeps the volume flow constantly high but increases the service life (time between 2 mat changes) by 300 %.

Our **ECOOLseries** sets standards in terms of capacity-cost-efficiency and maintenance friendliness.



PF 65.000 - 505 m<sup>3</sup> / h Outdoor filterfans IP 55 for demanding indoor and outdoor applications. UV protected.

## Facts at a glance

<b>Task</b>	Control cabinet cooling in solar inverter containers
<b>Application</b>	Photovoltaic plant in Leyte Island , Philippines.
<b>Solution</b>	n.30 PF 22.000 IP 54 + n.30 PF 65.000 IP 55
<b>Success factors</b>	<ul style="list-style-type: none"> <li>• high quality products with the highest level of protection for extreme conditions</li> <li>• IP 55</li> <li>• long term agreement with Pfannenberg regarding warranty and world-wide support.</li> </ul>