

Produced by

NewEnergyUpdate

In association with



Lessons Learnt from PV O&M Top Players

“What is critical in the future for O&M is to be looking for players who are more professional, players who have good controls, good systems, industrial scale.”

Jordi Francesch, Head of Asset Management, Glennmont Partners

“Today we don’t have enough benchmarking tools in the industry, which is nonsense if you think about it, because it’s a way to learn, to progress, to see how you’re doing compared to others”

Guy Auger, CEO, Greensolver

For this reason, New Energy Update has summarised a white paper based on an exclusive interview with major European investors and operational owners, as well as PV industry experts.



Major contributors to this white paper are experienced stakeholders, executive level decision makers and PV performance thought leaders. Learn from them how to optimise every kWh, reduce operational costs and maximise plant performance.

Expert perspectives include:



Nacim Ladjouze
Head of Asset Management in France
Sonneditx



Valerio Pelizzi
Director of Asset Management EMEA at Canadian Solar



Stefan Müller
Co-founder and COO
Enerparc



Vassilis Papaconomou
Managing Director
Alectris



Giles Clark
CEO
Primrose Solar



Jordi Lopez Francesch
Head of Asset Management
Glennmont Partners



Guy Auger
CEO
Greensolver



Steven Xuereb
Head of Business Unit PV Systems
PI Photovoltaik-Institut Berlin



Ingo Rehmann
Managing Director
Greentech



Edmee Kelsey
CEO
3megawatt



Robin Hirschl
Managing director
ENcome



Renaud Chevallaz-Perrier
Director of Operations
RES France



Prashant Khorana
Analyst
MAKE Consulting



Cyril Hinz
Project Manager of the PV Systems Business Unit
PI Photovoltaik-Institut Berlin



Giovanni Landi
General Manager
International Project Development of JA Solar



Geoff Hoffheinz
Technical Manager
Glennmont Partners



Christian Ahrens
Head of Asset Management Solar
Aquila Capital

The key topics that you will find in this white paper...

- Standardisation
- Asset Management
- Wider capabilities
- Big data
- Inverter maintenance



Optimise Every kWh

Join us at

PV OPERATIONS EUROPE

13–14 February 2018

Munich, Germany

[Check it out here](#)

Standardisation

Standardisation is a big buzz word in solar Operations and Maintenance (O&M) this year. Experts at the PV Asset Management and O&M 2017 event in Hamburg said the subject was a major issue, along with consolidation.

Jordi Francesch, Head of Asset Management at Glenmont Partners, a major PV asset owner, labelled standardisation as “the key driver behind the O&M industry at the moment.” And Renaud Chevallaz-Perrier, Director of Operations at RES Group in France, said “standardisation is a very important part of the evolution for O&M. We need to adjust price of the O&M but we still need to keep in mind we can’t do that for nothing.” As a result, he said, the industry needs to be “more standardised and flexible and agile.” Europe’s PV industry was increasingly looking at O&M to reduce prices, he said, because further decreases in capital expenditure were becoming harder to achieve. “We have more opportunity on the O&M price,” he said.

Having more standardised operations would also make it easier for asset owners to optimise their plants, he commented.

“If we want to be efficient in the future we need optimisation,” he said, “but before looking for optimisation we need to look for standardisation.”

Asset Management

The need for common ground across the industry is clear from debates around the linkage between O&M and asset management. Many large asset owners with in-house teams prefer to bring the two functions together.

“O&M is included in the overall asset management process,” said Chevallaz-Perrier. “It’s a very important part of asset management for solar.”

Other experts, such as Valerio Pelizzi, Director of Asset Management for Canadian Solar in Europe, Middle East and Africa, agreed the two functions work best together. “Integration of asset management and O&M is crucial,” he said.

Pelizzi said the asset management and O&M functions are all about managing a plant from different perspectives, and so merging the processes could help provide a more holistic view for the owner.

Enerparc, one of the largest asset owners in Europe, with 1 GW of assets under management across 200 plants, has adopted a similar strategy.

“We have a quite strong team in O&M,” said Stefan Mueller, Co-founder and Chief Operating Officer, “but we integrate asset management a lot.” Out of a total staff of 300, around 20 are dedicated to O&M, asset management and energy trading, which is a growing requirement for PV plants in Germany, he said. Yet while many large asset owners are keen to maintain strong links between O&M and asset management functions, service providers tend to have a very different view.

At Germany’s ENcome Energy Performance, for example, Managing Director Robin Hirsch said O&M and asset management were quite distinct activities. ENcome only provides O&M, and “in our organisation, operations and maintenance consists mainly of monitoring and reporting the technical data, preventive maintenance, corrective maintenance and auxiliary services,” he said.

Optimise Every kWh

Join us at

PV OPERATIONS EUROPE

13–14 February 2018

Munich, Germany

[Check it out here](#)

Wider capabilities

It remains to be seen how long such providers will be able to maintain their tight focus on O&M, however. Already, Francesch said, there was a trend for PV asset owners to seek out larger O&M providers with a wider set of capabilities.

“What is critical in the future for O&M is to be looking for players who are more professional, players who have good controls, good systems, industrial scale,” he said. “Looking for niche players is something of the past.” Increases in scale, capabilities and professionalism are already taking place through the consolidation of O&M players, he noted.

“Our strategy is now more sophisticated, looking for bigger players in the market who are accredited, who have redundancy in the system, who have good controls of their standards,” he said.

Mueller said Enerparc has also been forced to review the scale and scope of its O&M and asset management capabilities, partly because of the impact of energy trading on German solar operations.

“We have to adapt to the situation which we have in Germany right now, where energy trading is part of operational maintenance of PV power plants,” he said.

Other changes are being driven from within the organisation. Enerparc is considering various measures to increase the yield of existing sites, from recoating modules to repowering entire plants.

“We are looking to new ideas and concepts,” Mueller confirmed, “for example autonomous drones that can fly and analyze our power plants by themselves.”

Big data

Another trend that many solar asset owners are tracking is the rise of big data analytics and its application to PV.

Prashant Khorana, analyst at MAKE Consulting, a research and analysis firm, said one of the challenges facing O&M and asset management providers was a lack of clarity around big data and what it could achieve.

“The biggest issue I find is no-one really knows what big data is,” he said. “Big data is the combination of data coming from your sensors, your financial systems, as well as all opportunities in the market that are associated with soft costs or hard costs.”

While there is plenty of hype around the subject, Khorana said big data analytics had not yet matured to a point where it could fully bring together plant, financial and cost information.

“In my view, the solution that’s lacking in the market is something that sits on top of all these things,” he said.

Guy Auger, CEO at Greensolver, a technical asset adviser in PV and wind, said there was a need for improved analytical capabilities for solar plant management.

“Today we don’t have enough benchmarking tools in the industry, which is nonsense if you think about it, because it’s a way to learn, to progress, to see how you’re doing compared to others,” he said.

Optimise Every kWh

Join us at

PV OPERATIONS EUROPE

13–14 February 2018

Munich, Germany

[Check it out here](#)

Inverter maintenance

While big data analytics looks set to become part of the wider PV asset management toolbox, traditional O&M is also expanding to encompass new roles. One area seeing increasing demand is inverter maintenance.

Historically, this has been carried out by inverter manufacturers. But the likelihood of an original equipment manufacturer going out of business has led many asset owners to opt for maintenance through their O&M services provider.

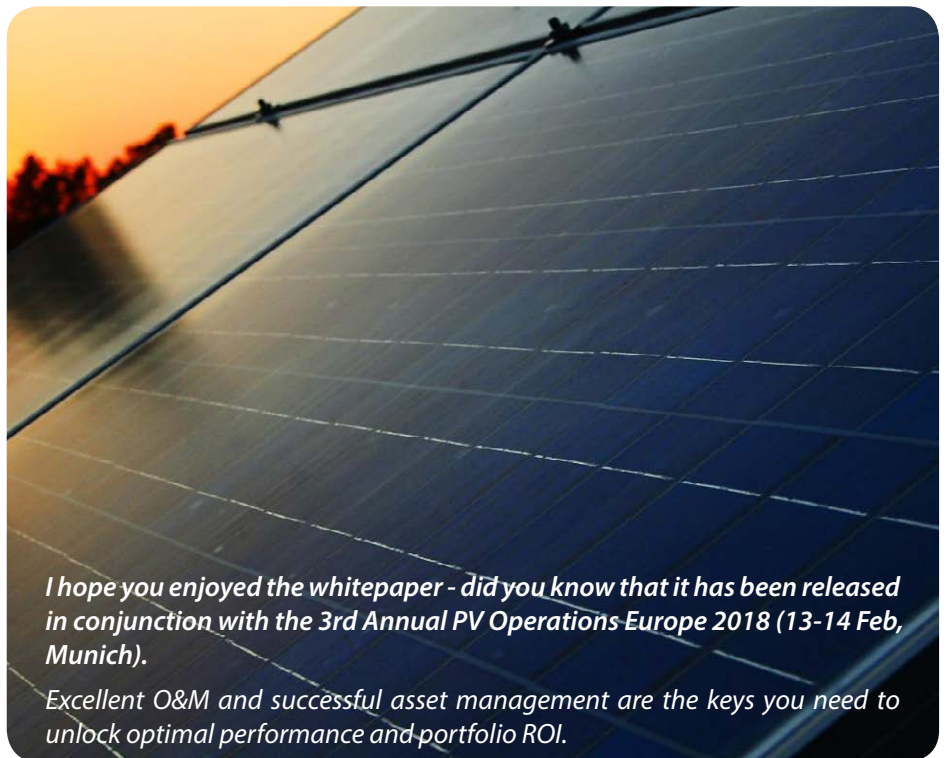
For example, said Francesch at Glenmont Partners: “We are looking at working with O&M players who can provide a substantial level of activities in inverter maintenance, and potentially in the future take over the inverter risk.”

Glenmont sees this transition as “a critical item in de-risking deals and cost reduction of O&M services,” Francesch said.

Handing over control of inverter maintenance may have a further benefit in allowing an O&M provider to integrate data from an inverter’s performance into a wider monitoring system.

Marjan Valand, Sales Manager for Raycap, which provides devices for asset management and O&M, said his company was already working on this kind of systems.

“You can precisely control the whole situation of the PV plant and react very quickly, even to predict something which is about to happen,” he said.



I hope you enjoyed the whitepaper - did you know that it has been released in conjunction with the 3rd Annual PV Operations Europe 2018 (13-14 Feb, Munich).

Excellent O&M and successful asset management are the keys you need to unlock optimal performance and portfolio ROI.

Optimise Every kWh

Join us at

PV OPERATIONS EUROPE

13–14 February 2018

Munich, Germany

[Check it out here](#)

NewEnergyUpdate



ENERGY
STORAGE
UPDATE

PV Operations Europe

Formerly PV Asset Management & O&M Europe

Conference & Exhibition • 13-14 February 2018 • Munich, Germany

Optimise Every kWh

Join Europe's Most Influential PV Forum with every O&M and Asset Management decision maker involved!



Focused topics for the 2018 agenda to solve your PV O&M and Asset Management challenges:

- ✓ Maximize your plant performance and asset profitability: Access exclusive case studies from the most profitable operating owners across Europe and hear how to improve O&M service in times of price pressure
- ✓ Improve data reliability through standardization: Discuss how efficient usage of data can be a significant driver of commercial and operational success, and evaluate what advantages have been achieved so far with deeper data analysis
- ✓ Create profitable PPA agreements: Adapt to the current market conditions and learn best practice when it comes to technical due diligence, best plant performance and making the case for PPA contracts that are in favour of the asset owner
- ✓ Improve contract reliability and warranty negotiations: Ensure realistic contracts are applied in favour of your asset profitability and assess how you can negotiate better warranties with reliable suppliers
- ✓ Revive or repower aging plants: Hear what strategies plant owners are putting in place for addressing aging plants, advanced degradation and PID
- ✓ Component maintenance & optimisation: Establish how to reduce downtime and improve plant performance, and understand how to negotiate better contract warranties to cover your damages with reliable suppliers.

Sponsorship and Exhibition enquiries are open. Contact **Ben French** at ben@newenergyupdate.com

Find out more here