

Success story

"We were blind and now we have one of the most robust performance analysis methods in the world"

LOUIS KLÉPAL, DEPUTY GENERAL MANAGER, SHIFT ENERGY JAPAN (SEJ)

SEJ integrates Solargis Monitor across 450 systems in Japan

Japan is known for its mountainous landscape and dense but variable population distribution. These conditions make deploying reliable solar energy to the population a challenging task. Shift Energy Japan, as a financier, developer, and operator, seeks to set a new standard for solar energy to meet those demands.

Creating value by minimizing risks across the supply chain, SEJ manages feed-in tariff (FIT) solar power systems, finances new FIT systems, and develops commercial self-consumption systems.

Operating 100MW across 435 solar facilities in 139 separated locations in Japan alone, 143MW in 172 locations worldwide.

Challenge

Complex Japanese topography and geography serve to compound solar resource variability, reducing the quantity of suitable land for the deployment of large-scale PV projects. To maximize solar potential in the region a multiplex of small-scale PV systems dominates the country's industry.

Solar project investors and operators with large portfolios are currently reliant on publicly available irradiance data to monitor asset performance. Because of its low granularity, available data can be located more than 50km away from a monitored site, creating a major challenge in accurately capturing the financial and operational performance risks.

Japanese solar investors and operators require a new, highly granular, and standardized form of monitoring software to accurately understand the feasibility of future projects and the financial returns of those in operation.

It is this challenge that led SEJ to seek out Solargis Monitor.



KEY FACTS

Location

Japan

Customer

Shift Energy Japan (SEJ)

Service

Solargis Prospect + Solargis Monitor

Service function

Technical analyses to support investment decisions

Outcome

- + Sets a new standard for performance evaluation and monitoring
- + Boosts investor confidence
- + Enhances the value solar installations bring to SEJ's corporate and industrial (C&I) customers across Japan



Louis Klépal, Deputy General Manager, SEJ, said: "Our investors and operators are tired of having to do the guess work around inaccurate and low granular datasets.

To reduce financial performance and operational risks, they need highly accurate and easily digestible monitoring systems that can be applied as a framework across the country."

Solution

SEJ uses Solargis Monitor as a replacement for the scarce, publicly available data to track and assess its projects' financial performance and deliver key insights into operations.

Louis added: "We wanted to find a solution that was easily understandable; a simulation that we didn't have to constantly keep an eye on."

Solargis Monitor provides the company with a user-friendly technical analysis of ground-based, locally measured solar parameters, such as near shading, site specific predictions, system configuration, modules orientations and many more.

Solargis Monitor uses satellite-derived irradiation data - comparable to ground based measurements - to generate independent and reliable solar data for PV performance assessment using an automatically simulated PV production for each system specifically. This compares what a system could be producing with the same solar resource, but with increased efficiencies.

Simulations of PV power production are underpinned by the configuration of a power plant, with a high variety of different small-scale plants in Japan. This is a vital tool for improving the transparency of performance reporting.

Outcome

Solargis Monitor supports SEJ in setting a new standard for performance evaluation and monitoring, boosting investor confidence, and enhancing the value these solar installations bring to SEJ's C&I customers across Japan.

Louis Klépal, commented: "Through integrating Solargis Monitor into our operations, our investors have a clear and accurate understanding of how their assets are performing in real-time."

Not only does it provide SEJ's operators with trusted data, but it also allows its investors - that are not necessarily proficient in PV systems - to gain crucial financial and operational insights.

By reducing uncertainty and improving efficiency of performance reporting, Solargis Monitor is critical for investors in the planning, development, and operational phase, allowing them to make substantial savings across their wide-scale distributed system, while standardizing operational and investment decisions.

Louis added: "We can do our recordings and then only require a simple check against the model."

Conclusion

Solargis' extensive experience in the global solar market, with granular, site-specific solar data and PV simulation services, makes the company a premium partner, not only for SEJ but for the wider Japanese market, as solar investors and operators seek to standardize financial and performance monitoring.

Highly accurate and easily integrated, and incorporating data for past, present, and future time periods, Solargis Monitor allows developers and operators to overcome resource and financial uncertainty when contending with difficult terrain and challenging geographies.

