

Success story

Solargis has helped us create sustainable growth throughout our operations.

CHRIS BROSZ, HEAD OF ENGINEERING

candi solar scales its business sustainably with Solargis data services

candi solar partners with businesses to provide zero-risk, end-to-end solar and battery solutions, made possible through flexible financing customised to clients.

Having tripled its installation base in 2022, candi plans to incorporate an additional 1 GWp of generation capacity into its portfolio. To sustain a viable growth trajectory, candi has turned to Solargis to provide accurate irradiation data that will enable them to meet expected returns on investment across their projects.

Challenge

Quality engineering and data-enabled asset management are essential pillars that have enabled candi to build a scalable platform.

During the project development stage, the Engineering team at candi carries out an energy yield assessment (EYA) study to evaluate the economic viability of a project. Given the critical role of energy yield in financial models, even slight deviations from expectations significantly affect the business' Internal Rate of Return (IRR). It is important that they can offer a competitive yield to prospective customers, but at the same time the EYA must also be realistic.

As the Head of Engineering at candi, Chris Brosz, is responsible for the technical review of all projects.

Chris said: "If our projects don't perform, we don't get a return on our investment. There are many metrics and parameters that we consider in our financial model. Energy yield is the most important parameter for us."

Upon analyzing performance data from its initial operational assets, candi observed production levels below their expectations. This was partly attributed to lower-than-average solar irradiance in India during the years 2018-2021, a trend previously reported by Solargis.



KEY FACTS

Location

India and Africa

Customer

candi solar

Service

Solargis Evaluate

Service function

High-quality, granular resource data.

Outcome

- + Confidence in irradiation source data, which allows for scrutiny of other variables.
- + Contributed to the development of a scalable platform through data-enabled asset management.

Yet, Chris and his team grappled with identifying the root cause of the issue – was it elevated soiling losses or overestimated irradiance? Despite installing soiling sensors to measure loss from dust and dirt, the results failed to provide a conclusive resolution.

Solution

Recognizing the necessity for a more dependable source of irradiation data, candi turned to Solargis' product Evaluate to provide robust and accurate data.

Chris added: "The fact that Solargis was well accepted by other stakeholders and was already being used by candi's asset management team for performance analysis of operational projects was an added bonus".

It was important for Chris and the team that the irradiance model used accurately accounted for the impact of air pollution in the EYA. This was particularly important for candi's projects in North India, where high aerosol concentration in the atmosphere impacts the irradiance reaching solar panels. Additionally, there was a requirement for a data source that encompasses recent information while also being regularly updated to reflect changes in the climate.

Outcome

Accurate yield information is crucial in minimizing time spent deliberating over EYA losses, allowing for a more efficient and informed decision-making process.

After starting to use Solargis data, Chris and the team saw a positive impact immediately.

When they downloaded data for selected sites and compared it to their existing irradiance data source, it confirmed that that the previously used irradiance data source was overestimating the irradiance.

Chris continued: "We had a suspicion of overestimation in the solar resource and when we downloaded our first Solargis file, we saw it was 3-10% less than expected."

Establishing confidence in irradiation data empowers a more thorough scrutiny of other variables, leading to a more comprehensive understanding of project dynamics. This, in turn, fosters investor confidence in the financial model's robustness and reliability.

Chris concluded: "Solargis has helped us create sustainable growth throughout our operations. One of candi's four values is to keep it simple, and Solargis does just that for us. Solargis is the gold standard for us. It's true."

About candi solar

candi solar partners with businesses to offer end-to-end solar and battery solutions.

Our approach is flexible, enabling us to tailor the offering to your exact needs, and our shared value model means we're invested for the long run to ensure you reap the full rewards.

Underpinned by our global expertise in financing, quality engineering and data-enabled asset management, our unique mix of strengths allow us to take all the risk of going solar, so you don't have to.

