



Vaisala 3TIER Services Supports First Pattern Development Solar PV Project
Pattern Development's 122 MW marquee solar project, Conejo, receives financing and begins construction in Chile, leveraging due diligence work supported by Vaisala

VAISALA CORPORATION

PRESS RELEASE

SEPTEMBER 9th, 2015

Vaisala, a global leader in environmental and industrial measurement, has announced its role in supplying a comprehensive range of due diligence services to Pattern Energy Group LP ("Pattern Development") for its 122MW Conejo Solar PV project in Chile. The work played an instrumental role both in informing financing terms and setting ongoing production expectations at the site, which has recently commenced construction.

While primarily known for its experience in developing wind projects, Pattern Development is bringing its expertise to the solar sector. Once constructed, the Conejo project will not only be Pattern Development's first operational solar site, but also one of the largest solar PV projects in the rapidly expanding Latin American market.

Due to the size and nature of the site, reliable early-stage data and sophisticated long-term generation estimates played a critical role in securing capital and advancing the \$205 million project towards the construction phase. As the company expands into solar development, Pattern Development chose Vaisala 3TIER Services as a trusted partner, building on a long history with the company's wind energy consulting practice.

"Latin America is a strategically important market for Pattern Development," explains Chad Ringley, Director of Energy Analytics at Pattern Development. "When entering a new region or working with a new technology, we require partners with local experience, strong technical expertise, and quality customer service. Vaisala has delivered all three in the past, so it was an easy and comfortable choice for the Conejo project."

In evaluating long-term production uncertainty, Vaisala provides a sequence of services leveraging available ground data in conjunction with long-term hourly satellite-derived data. This long-term data, from Vaisala's extensively validated global solar dataset, addresses nearly two decades of climatological variability through hourly solar irradiance and weather information for any location on the planet.

For Conejo, Vaisala translated this atmospheric and irradiance data into multiple long-term energy generation estimate scenarios using a comprehensive approach to time-varying production for project-specific technologies. This approach combines long-term environmental context with a full propagation of uncertainty and associated losses and derates. To help Pattern Development determine optimal plant configuration, Vaisala also delivered detailed probability analysis on a custom basis for multiple project sizing and technology scenarios.

Chad Ringley added, "We were pleased with Vaisala and its flexibility in ensuring that all of our questions related to the radiation assessment were addressed."

Vaisala is an expert in solar and wind measurement, assessment, and energy forecasting. To learn more about this work or how Vaisala can support your company, visit Booth #634 at the [Solar Power International](#) conference in Anaheim, September 14th – 17st. For further conference details, please visit our event home page at www.vaisala.com/solar.

For more information on the range of services offered by Vaisala to the renewable energy sector, please visit www.vaisala.com/energy.



For further information, please contact:

Francesca Davidson

Energy Communications Expert, Vaisala

Tel +1 206 708 8544

[francesca.davidson\[at\]vaisala.com](mailto:francesca.davidson@vaisala.com)

Vaisala Energy

Weather is the largest variable impacting electricity generation, transmission, and demand and it provides the fuel for renewable energy projects. Energy customers work with Vaisala to support efficient, reliable, and profitable electrical energy systems around the globe with a wide range of measurement, assessment, forecasting, and asset management products and services. Our real-time and historical lightning information ensures continuous energy generation, improved safety, and reduced costs in both energy production and transmission. Renewable energy developers and operators use Vaisala equipment and services to support the entire project lifecycle, from greenfield prospecting and due diligence to operational forecasting and plant optimization.

[linkedin.com/company/vaisala-energy](https://www.linkedin.com/company/vaisala-energy) twitter.com/VaisalaEnergy

About Vaisala

Vaisala is a global leader in environmental and industrial measurement. Building on 79 years of experience, Vaisala contributes to a better quality of life by providing a comprehensive range of innovative observation and measurement products and services for chosen weather-related and industrial markets. Headquartered in Finland, Vaisala employs approximately 1600 professionals worldwide and is listed on the NASDAQ OMX Helsinki stock exchange. www.vaisala.com

www.twitter.com/VaisalaGroup