

DIRECTION

THE FUTURE OF WIND



WindESCO's proprietary algorithms have outpaced many challengers in the market. (Courtesy: WindESCO)

WindESCo exceeds 50% growth in partnerships during first quarter of 2021

WindESCo, a pioneer in innovative renewable energy optimization technologies, has confirmed a benchmark increase in assets under management through the first 90 days of 2021. The partnerships comprise an increase of more than 50 percent against the closing months of 2020, with locations in North America, Asia Pacific, Europe, the Middle East, and Africa.

The milestone marks a significant evolution in the continuing maturation of the wind industry, as investors seek to improve their revenue and bolster balance sheets through a rigorous understanding of their annual energy production. Growth occurred primarily in the North American market, along with the opening of new customer opportunities in both Europe and India.

“Investors in the wind market are facing new challenges in terms of increasing revenue as the sector simultaneously grows more expensive, more populated, and more complex,” said Blair Heavey, CEO of WindESCo. “In a climate of uncertainty, we are proving ourselves as a trusted partner, driving beyond top-line data monitoring to suggest improvements, affect change, and deliver real value for customers.”

WindESCo’s proprietary algorithms have outpaced many challengers in the market by identifying and resolving restrictions to output through leading-edge hardware and controller modifications, as well as measuring AEP improvements and delivering revenue gains within a full-service optimization offering.

The company’s first quarter performance echoes its key innovations in the market, using proprietary machine learning technology to enact real change and tangible gains for investors, with a mission to maximize the performance of wind-farm assets by ensuring every turbine achieves its optimum energy production and reliability.

Efficiency has emerged as a critical

commercial advantage for wind-farm operators as the cost profile of the sector transforms. The increasing size of wind farms, and their component parts, has driven up overall costs in the last decade — a phenomenon compounded by the influx of larger entities into the market. Improved profitability through increased operational efficiency of existing assets is a natural counter to the potential decline in financial viability of new projects.

“Our software service is built on

▼ In a climate of uncertainty, we are proving ourselves as a trusted partner, driving beyond top-line data monitoring to suggest improvements, affect change, and deliver real value for customers. ►

deep wind-turbine expertise and first-hand understanding of how complex wind dynamics, turbine controls, and wind loads impact revenue,” Heavey said. “Our ability to evidence these conditions with our proprietary algorithms and act on them to positive effect has been crucial to our industry credentials and growth and the success we have delivered for our customers. We’re incredibly proud to start 2021 at such a high point, delivering more real revenue value for our customers, and we look forward to continuing this trend throughout the year and beyond.”

WindESCo recently announced its approval from DNV for its Energy Improvement Analysis Method, marking

a significant advancement in machine learning technologies for measuring performance change at wind plants. Using this measurement methodology, WindESCo’s services have demonstrated returns of up to seven times the investment. Furthermore, operators generally realize payback from WindESCo’s services within 12 months.

WindESCo was also selected from a field of more than 150 entrepreneurs to participate in the 26th Annual Innovation Growth Forum (IGF) sponsored by the U.S. Department of Energy’s National Renewable Energy Laboratory (NREL), which took place April 21-22. It is one of the nation’s premier events for clean-tech entrepreneurs and other industry experts, wherein a final shortlist of 40 of the world’s most promising start-up companies, elected through an extensive selection process, present their innovations to potential investors and industry experts. More than 600 clean-tech investors, entrepreneurs, and industry representatives attended this year’s IGF.

MORE INFO www.windesco.com

Southern Power acquires Glass Sands Wind Facility

Southern Power, a leading U.S. wholesale energy provider and subsidiary of Southern Company, recently announced the acquisition of its 15th wind project — the 118-MW Glass Sands Wind Facility — from Steelhead Americas, Vestas’ development arm in North America.

“We are proud to announce this new addition to our generation portfolio,” said Southern Power President Bill Grantham. “Glass Sands is a great project for Southern Power as we continue to provide clean, renewable energy resources to meet the needs of our customers.”

The project, in Murray County,



The Glass Sands Wind Facility is Southern Power's 15th wind project. (Courtesy: Southern Company)

Oklahoma, is Southern Power's fifth wind facility in the state and contributes to the company's growing fleet of clean-energy resources from California to Maine. Glass Sands was developed by Steelhead Americas and is expected to use 28 wind turbines manufactured by Vestas. Construction, executed by Mortensen, is underway, and the project is expected to achieve commercial operation in the fourth quarter of this year.

Once operational, the electricity and associated renewable-energy credits generated by the facility will be sold under a power purchase agreement with Amazon.

With the addition of Glass Sands, Southern Power's wind portfolio consists of more than 2,533 MW of wind generation. Southern Power's wind facilities are a part of the company's 4,928-MW renewable fleet, which consists of 43 solar and wind facilities operating or under construction.

This project aligns with Southern Power's overall business strategy of strengthening its wholesale business by acquiring and developing generating assets that are covered by long-term contracts with counterparties with strong credit support.

MORE INFO www.southerncompany.com

Walmart moves toward total renewable business

Walmart recently announced in a collaboration with ENGIE North America, more than 500 MW of new renewable energy generation capacity now operational across three separate wind projects. Together, these projects are expected to supply renewable energy annually to hundreds of stores, clubs, and distribution centers across Texas, South Dakota, and Oklahoma. This is enough renewable electricity to power more than 240,000 average American homes for an entire year.

According to the American Clean Power Association, as a result of these transactions, Walmart procured the most wind energy of any company in the U.S. in 2019.

This collaboration will allow Walmart to purchase offsite power from three separate wind farms in Texas, Oklahoma, and South Dakota. Together, these facilities are expected to help avoid as much as 1.3 million metric tons CO₂ of greenhouse gas emissions per year.

But beyond being better for the planet, these facilities also provide more direct benefits to communities

by creating local opportunity. They support employment ecosystems all their own. According to ENGIE North America, the three projects supplied 1,000 construction jobs at their peak and are expected to deliver more than \$400 million in landowner lease payments, taxes, wages, and commitments over the life of the project.

The partnership highlights how Walmart's investments in infrastructure, paired with innovative thinking, are creating change for people and the environment in ways that will benefit the communities Walmart serves, its associates, and customers for years to come.

Bringing this amount of renewable energy online represents an important leap forward in Walmart's renewable energy journey, reinforcing its broader mission to spark collective climate action and drive environmental sustainability.

But it still stands as part of the bigger picture toward reaching the company's goal of becoming a regenerative company.

It's not just wind energy that's helping Walmart fulfill its renewable ambitions. The sun is playing its part, too. According to the Solar Energy Industries Association, in 2019, Walmart added the most solar of any company in the U.S., increasing its solar use by more than 35 percent. This growth in solar was driven by several large off-site solar projects added to Walmart's history of using solar at its facilities. And according to the EPA Green Power Partnership Top 30 Retail Ranking, Walmart was the top retailer in terms of annual green power usage in the U.S. in 2020.

These recent strides have moved Walmart closer to meeting its goals. In 2020, renewable sources supplied an estimated 36 percent of its electricity needs globally. To date, Walmart's actions will have helped to bring more than 3 GW of new renewable energy capacity to power grids since 2008. As of the end of 2020, Walmart had more than 550 onsite and offsite projects in operation or under development in eight countries, 30 states, and Puerto



According to the American Clean Power Association, Walmart procured the most wind energy of any company in the U.S. in 2019. (Courtesy: ENGIE North America)

Rico.

Last year, the renewable energy supplied by Walmart's projects globally grew to more than 4 billion kWh.

Beyond efforts to scale renewable energy for Walmart's own operations, the company is encouraging its suppliers to act in theirs through Project Gigaton, an initiative to avoid a gigaton of greenhouse gas emissions from the global supply chain by 2030. In September 2020, in collaboration with Schneider Electric, Walmart launched Gigaton PPA™ to help engage its suppliers in accessing renewable energy purchases and accelerating greater renewable energy adoption.

Securing innovative, scaled energy transactions is another step toward Walmart's goal of being powered by 100 percent renewable energy by 2035 and achieving zero emissions across its operations by 2040.

MORE INFO corporate.walmart.com

NovaTech CEO seeks to consolidate organization, products

NovaTech, a medium-sized provider of automation and engineering solu-

tions serving electric utilities and process manufacturing industries for 40 years, recently announced the appointment of Conrad Oakey as its chief executive officer.

Oakey, who originally joined NovaTech in 2000, includes among his many accomplishments consolidat-



Conrad Oakey.
(Courtesy: NovaTech)

ing the management of the two business units (power and process automation), simplifying online ordering and customer support, as well as continuing to improve the functionality and ease-of-im-

plementation of the company's three product lines.

In his previous role as vice president of strategy and communications, Oakey focused on web technologies, search engine optimization, and other digital marketing strategies while tracking or managing multiple high-level change initiatives within the organization.

He continues to drive the digiti-

zation of internal information and work processes to increase responsiveness to customer needs.

During the pandemic, he successfully shifted NovaTech's communications by introducing weekly educational product webinars for its power business customers and adopting real-time web-based collaborations to support process division customers during installations. These innovations helped keep NovaTech closely engaged with their customers during a period when they could not visit them in person.

As CEO, Oakey has a priority meeting with NovaTech's customers as markets begin to open up.

"I want to make sure I spend as much time meeting with customers and advocating for them within our organization as possible," he said. "Customer experience, not established practice, will continue to be of primary importance at NovaTech."

Product innovation is another area of focus for the new CEO, including incorporating specialized versions of products requested by customers into standard releases to accelerate new feature development.

Oakey points to the latest version of their Orion product for substations that have been reduced to the size of a book. The smaller form factor enables the device to sit on a pole-top or inside larger equipment, where it can consolidate information and perform control actions for distribution feeders.

Oakey envisions moving beyond the company's long-held strength in utility substations onto more points along the feeder, including pole-top sensing and control applications, underground vaults, small exchange points and mini substations.

Internally, Oakey will be leading a recently consolidated management team responsible for sales, marketing, operations, product development and employee services including IT, HR, finance and administration. ↵

MORE INFO www.novatechautomation.com.