

Halo Energy / Success Story

SECONDWIND by Vaisala



Part of the next wave of North American community wind developers, Halo Energy is leveraging cutting-edge technology and industry best practices to develop a planned 15-turbine project. Phase I will provide around 30 MW of wind power. Halo has relied on Second Wind's meteorological services team for assistance in prospecting and assessing the wind site. Using the Triton Sonic Wind Profiler as the sole source of project data, the company emphasizes speed and agility in the development process.

Community wind innovator uses Triton as sole source of wind resource data for planned 30 MW installation in Illinois

Halo Energy uses Triton Sonic Wind Profiler for early stage prospecting, wind resource assessment, and turbine selection.

CUSTOMER PROFILE

Halo Energy is a wind energy development company that performs site assessments, project development, engineering, facilitation, consulting, and construction management. Its goal is to promote a cleaner environment through renewable energy projects.

Founded:	January 2010
Headquarters:	Inverness, Illinois
Employees:	3
To learn more:	www.haloenergyllc.net



“Triton gives better results for less money. The Triton’s accuracy has given us a strong leg to stand on and more confidence in the project and the expected results. That’s motivated me to proceed in a more definite and constant manner, and gives me a firmer grip on the end game—the project’s economics.”

Pascal Colletier
President, Founder, Halo Energy LLC

Halo Energy uses Triton® for:

- Early stage prospecting
- Wind resource assessment
- Turbine selection

Like other wind projects, community wind projects involve fast-breaking opportunities and changing circumstances. Illinois-based Halo Energy has taken advantage of the Triton’s accurate hub-height measurements and worry-free, flexible operations to help push projects through the initial stages of development. Halo uses Triton to rapidly prospect and assess areas for wind farm potential before incurring large up-front costs. Currently in power purchase negotiations for its 15-turbine project in Cedarville, Halo is also using Triton data to develop another project in Eastern Iowa.

“We have been talking with public agencies to buy the power from our wind farm. We have a very viable site with good wind and the opportunity to expand our project and grow,” said Pascal Colletier, Halo’s president and founder. “We’ve been aggressive on finding a

market early in the process. We’ve kind of worked it backwards. We leased the land, deployed a Triton, worked on securing key development and environmental items in the process, and began actively pursuing an end user/PPA. If you don’t have a client to buy your product, you may have a business model but most likely, an unsuccessful one.”

Halo’s project is located in the town of Cedarville, about 110 miles west of Chicago. The site fit Colletier’s plan to develop a community-scale wind project—10 to 30 megawatts—and to minimize the regulatory processes that often delay larger projects.

“I really think community wind is the proper focus right now,” he said. “With larger projects, there are so many more people involved at every step of the way that it’s easy for things to get bogged down, not to mention the amount of money also needed. A community wind-scale project made more sense for us.”

Halo leased 1500 acres in Cedarville with the intention of developing an initial four-turbine wind farm, but the preliminary reports showed that the wind resources on the site were better than expected. Based on that wind intelligence and increased interest from their potential customer, the company has twice doubled the project to its current planned size of fifteen turbines.

Prospecting and wind resource assessment are often identified as two separate phases, but in real life the edges are often blurred. Data gathered during an initial inquiry into land suitability are often used during wind resource assessment and wind farm design. Being able to relocate the Triton easily and obtain wind data analysis reports and power curve assessments quickly, Halo was able to keep up with the changing scope of its planned project. As the wind data indicated the project had greater potential, Colletier was able to re-work his plans and select appropriate turbines to fulfill the potential—using the Triton as the sole source of wind data.

The Triton unit was installed and serviced by Multiband Engineering and Wireless

Services, Midwest, Inc. (formerly WPCS), a Triton Certified Installer. “Multiband does everything from soup to nuts,” said Colletier. “Having Multiband’s help, along with daily monitoring service from Second Wind, and fast response to any concerns I had, made the experience of using Triton worry-free.”

When Halo was researching wind data collection systems, Colletier consulted Matt Cumberworth, Multiband’s Director of Wind Energy Services, for advice on the best solution for the Cedarville site. After Cumberworth described the relative merits of met towers and remote sensing, Colletier decided remote sensing was right for Halo.

“Matt gave me the pros and cons of both. I thought that with a 60-meter tower we’d get readings at 60 meters, but what do we do for 80 or 100 meters? We weren’t thinking of a 100-meter hub height, but 80 meters was definitely in our plans. Now the trend is to go to 100 and 120 meter hub heights. It made sense to go with the Triton to get actual readings at those heights,” Colletier said. “It was a logical choice for us to go with a technology that was consistent and could be monitored remotely and that didn’t require us to do a lot of extrapolating.”

Colletier credits the combination of Triton and Second Wind data analysis services with helping to get his project started faster than it would have following the standard wind farm development path. He expects the project to be complete before June 2013.

“Triton gives better results with less aggravation, maintenance, uncertainty and, of course, at a better price—comparably. The company’s professional staff and technicians have been ‘spot on’ with their back up support and timely response. They have always bent over backwards to help out. The Triton’s accuracy has given us a strong leg to stand on and more confidence in the project and the expected results,” he said. “That’s motivated me to proceed in a more definite and constant manner, and gives me a firmer grip on the end game—the project’s economics.”

SECONDWIND
by Vaisala

Through the combined expertise of Vaisala, a global leader in atmospheric observation, and Second Wind, a global leader in remote sensing technology and data services for the wind energy industry, we offer an integrated suite of wind measurement solutions.

VAISALA

Please contact us at
www.vaisala.com/secondwind



Scan the code for
more information

Ref. B211335EN-A ©Vaisala 2014

This material is subject to copyright protection, with all copyrights retained by Vaisala and its individual partners. All rights reserved. Any logos and/or product names are trademarks of Vaisala or its individual partners. The reproduction, transfer, distribution or storage of information contained in this brochure in any form without the prior written consent of Vaisala is strictly prohibited. All specifications — technical included — are subject to change without notice.

www.vaisala.com

