

Renewable NRG Systems

After three decades designing and manufacturing turbine optimization and resource assessment products for wind energy, Vermont-based manufacturer's commitment to renewable energy remains strong

By Stephen Sisk

The year is 1982.

USA Today is first published and delivered to front doorsteps across the nation. Disney opens its Epcot theme park in Orlando. "E.T. The Extra-Terrestrial" tops the box office. Now-retired tennis phenom Andy Roddick is born.

Gasoline is 91 cents-per-gallon.

In Vermont, the company that is now Renewable NRG Systems is founded with the intent of designing and manufacturing measurement and resource assessment instruments to support wind energy—a sustainable, reliable, economical method of power generation that itself is considered to be in its infancy.

The three-plus decades that have since passed have brought the maturation both of the company and the industry it serves. The company now serves its global client base—to include renewable energy developers, utilities, government agencies, wind turbine manufacturers, and research institutions, among others—from its 75,000-square-foot headquarters in Hinesburg, Vermont.

That worldwide client base, represented by customers in more than 150 countries, has grown to depend on Renewable NRG Systems to offer reliable, leading-technology solutions to meet the rapidly changing needs of renewable energy.

Technology in the renewable energy industry has grown exponentially in the last few years alone, and through constant innovation, Renewable NRG Systems has been able to maintain its position as a pioneer in emerging renewable energy technologies.

"Our expertise spans both wind resource assessment and wind turbine optimization," Renewable NRG Systems president Justin Wheating said. "Our wind-specific product lines include complete systems, towers, data loggers, sensors, Lidar, and a condition monitoring system."

Among recent notable products introduced to the market by Renewable NRG Systems are: the WINDCUBE and Wind Iris Lidar remote sensors (in a joint venture with Leosphere), an 80-meter tilt-up tower, and TurbinePhD—the company's wind turbine condition monitoring solution.

"We have our traditional line of products—sensors, towers, data loggers, systems, and so on," Wheating said. "Our new areas are condition monitoring and Lidar, which are particularly innovative. Our condition monitoring system leverages advanced data processing techniques from the aerospace industry. We adapted the technology to provide proactive analysis of the components in turbines to predict failures. Our

Lidar products use technology that is new to the wind industry to not only measure the wind for assessment purposes, but also to improve turbine performance and increase energy output."

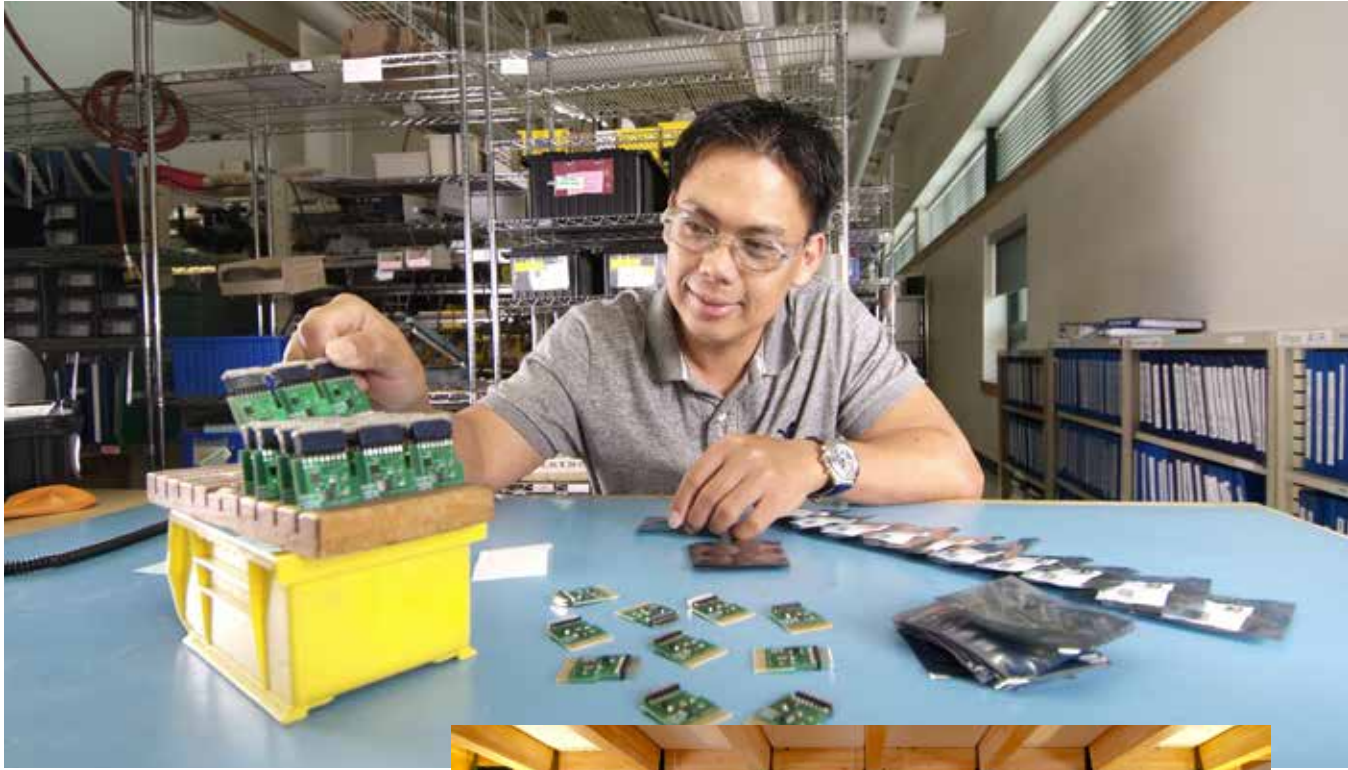
Offering products that have such capabilities exemplifies the company's close adherence to its longstanding operating philosophy.

"Our mission has always been to be a resource to renewable energy developers—to help them establish and operate their plants with minimal fuss and maximum ease," Wheating said. "We also strive to promote the benefits of renewable energy and to facilitate its development."

In other words, the company's long-term and continuing success has been made possible through commitment. However, this is not simply a commitment to individual customers. Preceding its statement of values, Renewable NRG Systems asserts:

"At Renewable NRG Systems, how we work is as important to us as what we do. Our values work together synergistically: they form the foundation of our business, guide our decisions, and energize our business practices and relationships. Through these values, we uphold our commitment to a triple bottom line focusing on our people, profits, and planet."

That commitment is evident when



examining the efforts Renewable NRG Systems makes in supporting clients' exact needs and providing a high level of support through and beyond the sale.

"We embody our values every day: both internally and with our customers, we aim to display a high level of integrity," Wheating said. "We strive for respect, fairness, and to do the right thing—which is not necessarily the most profitable."

An impressive library of technical resources on Renewable NRG Systems' products and solutions are available to its customers online at the company's website. Resources include product manuals, a technical support forum, searchable knowledge base, and a schedule of upcoming training sessions the company offers at its offices in Vermont.

"We are lucky to have a very talented and knowledgeable tech support team," Wheating said.



"They talk with customers every day, assisting with issues and learning more about customer challenges. We strive to share their expertise via various tools to address issues that appear to be consistent across all customers. "

Renewable NRG Systems staff members also compose the company's "Wind Currents" blog, consisting of company news, articles

on renewable energy topics, case studies, and product information.

Comprehensive product information, including overviews, technical specifications, download links, warranty information, certifications, and support documents are easily accessible from Renewable NRG Systems' website by navigating to the "Product Quick-Link" via the top menu.

The company is also currently



making a push to further involve customer response into the development of its products and processes with the goal of more closely identifying and meeting clients' specific needs.

"Strengthening our customer feedback program has been a renewed initiative for us," Wheating said. "We now have a much stronger focus on the voice of the customer (VOC). When communicating with

customers, we not only want to share what we sell but also learn about special needs and challenges. We are still in the process of learning how to distill and use this information."

Long-known simply as NRG Systems, the company underwent a re-branding campaign in 2013 to more accurately communicate its diversification into other renewable energy sour-

es. However, Wheating is quick to point out that wind energy is and will remain the company's core business.

"We are fully committed to the wind industry," Wheating said. "Manufacturing products for the industry is what we do. We rebranded to more forcibly share the message that we are not solely in wind resource assessment. We have expanded our role into wind turbine performance and operations & maintenance. In addition, though the wind industry continues to be our primary focus, customer requests have encouraged us to expand our offerings into other renewable energy areas. Our rebranding fits

with our mission and core competencies."

Regarding Renewable NRG Systems' commitment to wind, it is best illustrated in the company's own account of its history. A timeline on the company's website mentions only one event prior to its formal establishment in 1982.

Pre-dating the company by four decades is what may be considered its true genesis.

"1941 – The world's first utility-scale wind turbine begins operation on Grandpa's Knob in Castleton, Vermont, launching the modern wind industry in the U.S."

Put simply: It all started with wind.

With regard to environmental stewardship, Renew-

able NRG Systems' goes beyond simply manufacturing products used by clean, environmentally conscious industries. Its commitment extends to its facilities (which are LEED Gold certified and operate on 100 percent site-generated renewable energy), to its manufacturing and packaging processes, to its transportation processes.

"The company adopted a lean manufacturing approach in the 1990s, and it is now ingrained into our culture," Wheating said. "We recently achieved ISO certification, which demonstrates our commitment to customer focus, quality, and process."

Also noteworthy is the company's

commitment to its approximately 80 employees— serving in engineering, manufacturing, sales/marketing, and administrative roles—who are encouraged to help drive the company's continued success in a collaborative environment.




Looking toward the future in the wind energy industry, Wheating pointed out that, for a company that operates on a global scale, it's important to get a thorough assessment of all of the markets it serves.


"One has to look at it on a country-by-country basis—each market is different," Wheating said. "The U.S. market is, in a sense, on hiatus due to



the uncertainty of government policy. But there is determination to move forward. There is a "macro" demand for energy, and in general, a strong commitment to renewables. The more mature markets are going through a period of reassessment."

Still, he has what could be described as a guardedly optimistic outlook for the industry in the long term.

"The fundamentals are such that the industry will grow. It will happen sooner in developing markets. The more mature markets will grow more gradually as the economics become more compelling," Wheating said. ↵

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