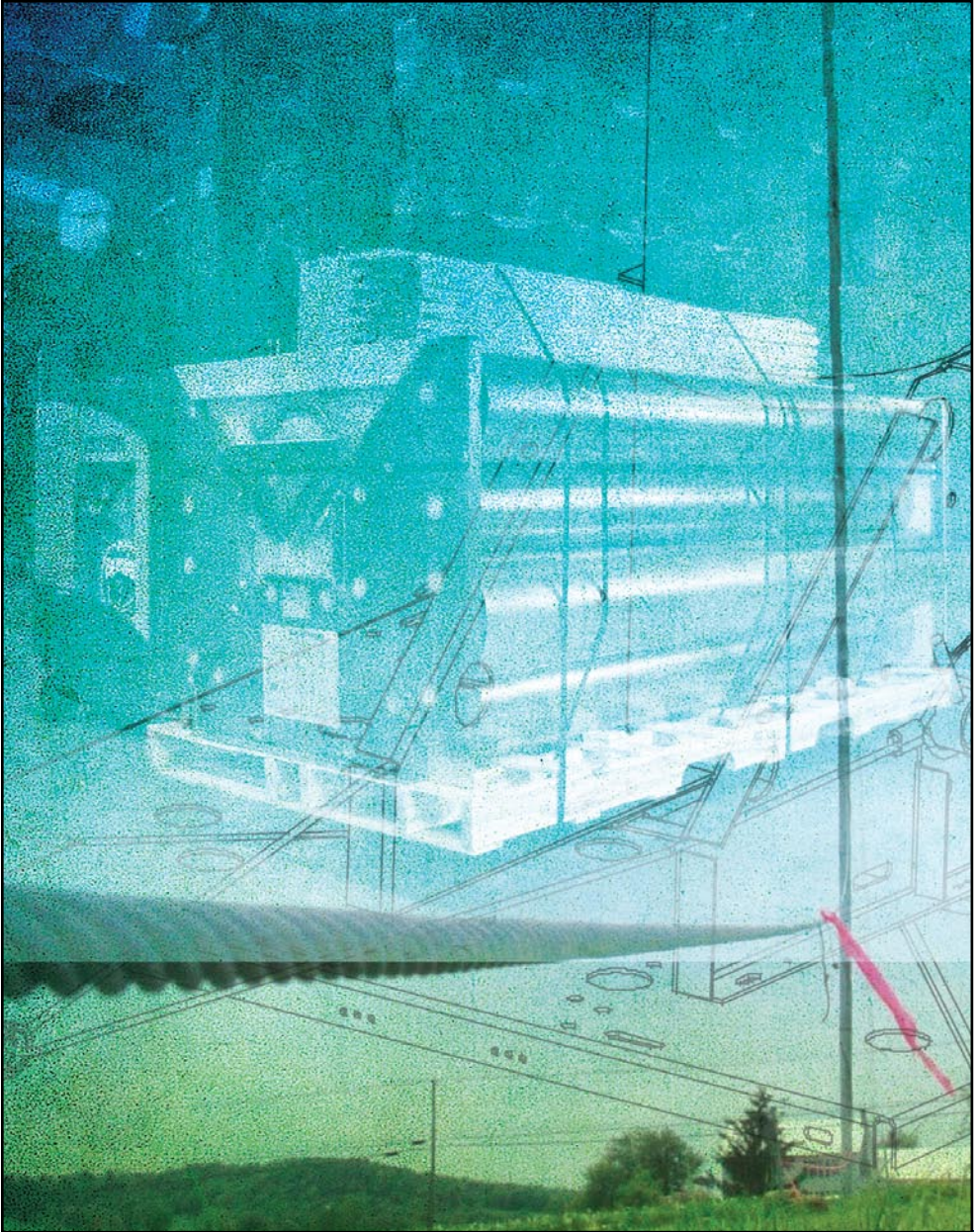


PROFILE

NRG SYSTEMS, INC.

By Russ Willcutt



You can't just talk the talk, you've got to walk it as well, especially when you're in the wind energy business. This company sets an example for others to follow.

IT'S ONE THING TO TALK ABOUT being a good environmental steward, but one Vermont-based manufacturer of wind measurement systems and turbine controls provides proof of that commitment in its products, actions, and even the facility in which it is housed. "We are a values-based company," according to Barton Merle-Smith, director of marketing and sales for NRG Systems, Inc., "and that's directly connected to our founders. Those values guide every decision we make whether that involves product design, our environmental footprint, and how we conduct ourselves as an enterprise. And I think that's one of the reasons our customers enjoy doing business with us."

Founded in 1982, NRG Systems has grown in leaps and bounds into one of the most progressive companies to be found. Employing more than 110 people, the first phase of its 75,000 square-foot headquarters and manufacturing facility was built in 2004 using the greenest materials and technologies available. This resulted in the building—which is 100-percent powered by renewable energy—being one of only five industrial facilities in the world at that time to receive gold LEED certification from the U.S. Green Building Council. This dedication to efficiency is also reflected in its embrace of lean manufacturing techniques, which has resulted in a remarkable three-day lead time, on average. And this is not achieved by manufacturing equipment in advance to be stocked in a warehouse, Merle-Smith explains.

"Since we design and build everything ourselves—sensors, towers, data loggers, and we even write our own software—and have worked extensively with our vendors to streamline the supply chain, we're able to get our products out the door extremely quickly," he says. "If you order 15 60-meter towers today, or one of the new 80-meter towers we've just introduced [see press release in this issue], they will typically ship in no more than three days. Achieving that requires thinking strategically, staying abreast of market demand, and developing production processes that are incredibly efficient."

And when those products do ship, if sent by surface freight there is no charge, which

allows the company to choose the best method themselves. Orders are shipped by rail whenever possible, for instance, to minimize fuel usage, and overseas shipments can be bundled in containers for additional savings. Another remarkable breakthrough is known as the Envirocrate®, in which the product forms its own packaging.

"We pioneered the development of the tilt-up tubular tower over 25 years ago and they became such a success that we were shipping more and more of them to locations all around the world, so we started thinking about the cardboard that was being wasted," Merle-Smith says. "The question we asked ourselves was 'why can't the towers be their own packaging?' So that's what we've done. The tower bases form the ends of the shipping unit, and there's practically nothing to throw away on the receiving end. We also donate the lumber that's used to pack some of our raw materials to Habitat for Humanity, so there are houses around here that have been built with wood that we've provided!"

This spirit of innovation is especially apparent in the company's products, which are designed for ease of use, reliability, and manufacturability. Knowing that its wind measurement systems—complete system packages, tilt-up towers, and a wide variety of data loggers and sensors, including lidar—are often used at remote locations, quick setup and easy operation are at a premium, and both have been engineered into NRG's entire product line. In addition to these measurement systems the company also offers the IceFree Hybrid line of turbine control sensors, widely utilized by OEMs around the world. Two years ago the company entered into a relationship with Leosphere, a specialist in lidar for atmospheric observations, to develop and market the WINDCUBE® v2, which is the lightest and most-compact lidar remote sensor available.

"Our niche is in designing mainstream products specifically for the wind industry, and I believe our commitment to sustainability is evident in everything we do," Merle-Smith says. "That's a philosophy that was instilled in us from the very beginning by our founders, and it will continue to guide all aspects of our operation in the future." ✎