



Southwest Windpower

Flagstaff, Ariz.

Andy Kruse got into the clean-energy business by accident. As a cattle runner in Flagstaff, Ariz., he needed to find a reliable way to supply electricity for the headquarters of the Arizona ranch where he worked. The system that existed was, as he recalls, “an awful mess.”

So Kruse, who has a knack for mechanics, began looking for options. He ended up installing solar panels on the roof. As he investigated other ways to power the ranch, he met David Calley, who was working on building wind generators in Flagstaff. “I liked what he had built,” says Kruse. “We thought we could turn it into a business.” In 1987, they teamed up to launch Southwest Windpower (windenergy.com). Their first product was the 300-watt Windseeker, a turbine made from a souped-up Ford alternator. Flash forward to 2007. Southwest Windpower now bills itself as the world’s largest producer of small wind generators. The small company has produced nearly 110,000 generators used everywhere from homes to telecom transmitters. Its products include the Air series, the world’s best-selling small wind turbine; the Whisper series, a quiet system tailored for use alongside solar power; and Skystream 3.7, a generator designed for businesses and homes that are connected to utilities.

Kruse says sales are growing at double digit rates, as interest in wind power among businesses and consumers accelerates. “Today, we’re seeing three major things coming together: climate change issues, the scarcity of resources making the cost of energy go higher and higher and global instability,” says Kruse. “That makes for an industry with a very, very bright future.”

The company has grown fast enough to acquire the assets of another small company, World Power Technologies in Duluth, in 2000. World Power made 900- to 3,000-watt wind generators. Southwest Windpower, which has revised its business plan around a dozen times as it has grown, has attracted about \$20 million in two rounds of venture capital funding, from investors including Altira Group and Altira Technology Fund, Chevron Technology Ventures, NGP Capital Resources Company and Rockport Capital Partners.

Besides manufacturing an earth-friendly product, Southwest Windpower runs a green operation. Its facilities are compliant with the RoHS standard, introduced in the European Union in 2006 to restrict the use of certain hazardous substances in electrical and electronic equipment. “We were RoHS compliant way before it was even of interest,” says Kruse. “In the manufacturing process there are no hazardous materials used in our processes or leftovers.” This makes it easy to recycle the company’s products, he notes. The firm also uses reusable containers for its components, shipping the bins back to the manufacturer to be refilled, when possible, he adds.

The biggest challenge to Southwest Windpower’s sales growth is zoning, says Kruse. “Most areas don’t have a zoning standard for wind turbines,” he notes. As localities sort out their rules regarding small engines, customers can encounter roadblocks to their purchases. As a result, the company has increasingly lobbied to change laws that



restrict the use of windpower. “We go to whatever extreme is needed for our dealers to get permits,” he says.

Kruse believes that by sticking with its long-term goal – driving down the cost of energy while improving the reliability of renewable technology –his firm will be able to continue to grow rapidly. “That’s what’s going to help the consumer out the most,” he says. The market opportunity is large. “The U.S. Small Wind Turbine Industry Road Map,” [awea.org/smallwind/documents/31958.pdf] a study done by the American Wind Energy Association, estimates that about 13 million American homes have the right amount of land and wind resources for a turbine. Only 6,800 Americans bought a small wind system in 2006, according to the AWEA. “We’d be very happy with about 10% of the domestic market,” says Kruse.

To speed sales growth, Southwest Windpower has been building its network of dealers rapidly, creating what Kruse estimates are about 500 jobs – on top of the 96 positions at the company that didn’t exist before it started. That number is likely to skyrocket, he notes, given that the business is hiring staff and getting 80- to 100 new dealers up and running each month. Plans are underway for a new training center near Flagstaff. Once focused on winning early adopters for whom the cost of windpower wasn’t an issue, Southwest Windpower is now going after cost-conscious consumers, with help from Egg, a Seattle ad agency. One major selling point at a time of skyrocketing utility costs is that the turbines can reduce home energy use by 20 to 80% annually. Currently, the U.S. market is growing at 14 to 25% annually, according to the AWEA. If Congress passes a federal investment tax credit that covers wind, that growth rate could accelerate.

Southwest Windpower is already facing some competition. The AWEA estimated in 2007 that there are about 20 manufacturers of small wind systems based in the U.S. and 47 located elsewhere. While some of the American firms are startups, the AWEA considers about 12 to be “established.”

Given that there is a limit to how many turbines his company can produce each year, Kruse says he is glad the industry is growing. “We believed in windpower for 20 years and said it is going to be become a major part of our society,” says Kruse “Now, it’s no longer alternative. It’s such an exciting future we have.”

Contact:
Southwest Windpower
1801 W. Route 66
Flagstaff, AZ 86001 USA
Phone: 928-779-9463
Fax: 928-779-1485
info@windenergy.com
<http://www.windenergy.com>

Profile by Elaine Pofeldt