NRG Systems Receives Second Gold Medal From U.S. Green Building Council For Nation's First Net-Zero Manufacturing Site

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Hinesburg, VT--As the opening of the 2010 Winter Olympics approaches, NRG Systems, manufacturer of wind measurement equipment for the global wind energy industry, celebrates its second gold from the U.S. Green Building Council for the most recent addition to its Hinesburg (Vermont) campus.

The new 31,000 square-foot manufacturing and office building at 60 Riggs Road received LEED gold certification for its environmental and energy efficient design.

LEED, which stands for Leadership in Energy and Environmental Design, is the nationally accepted standard and rating system for high performance, sustainable (green) buildings developed by the U.S. Green Building Council.

“It’s always nice to be recognized for our team’s work…but this building is really about remaining true to our values as a renewable energy company and our desire to tread as lightly on this planet as possible,” said Jan Blittersdorf, CEO and President of NRG Systems.

The facility uses state-of-the-art technology to reduce energy use and minimize environmental impacts, while producing most of its electricity with an on-site 70.6-kilowatt solar photovoltaic (PV) system.

With the recent addition of a 140-kw solar tracker farm adjacent to its property, NRG Systems expects to produce all of the electricity for its two buildings with onsite renewables in 2010—which would make the campus the first net-zero manufacturing site in the nation.

The output from the solar tracker farm is being shared by both NRG Systems and its sister company AllEarth Renewables (formerly, Earth Turbines, located in Williston, Vermont).

“Buildings are a leading source of green-house gas emissions and consume 70% of the electricity in the U.S.—this shouldn’t be the case,” said David Blittersdorf, CEO of AllEarth Renewables and founder of NRG Systems.

“As a country, we need to get off the dime and change the way we construct our buildings. We’re here to show what’s possible.” The facility features a super-insulated building envelope, solar photovoltaics, two wood-pellet boilers, solar hot water and a radiant heating and cooling system.
According to the company, several innovative design features make the second building even greener than the first one completed in 2004. This includes an open-loop, ground-source cooling system that draws water from two 500-feet deep wells and feeds it through radiant tubing, providing a significant energy savings.

It also features thicker walls and cellulosic insulation, making the building better insulated and 50% tighter than the first.

In addition to technological improvements, the building incorporates aesthetic details that make it a welcoming, beautiful, and productive place to work.

It features unique floor murals and three-dimensional, mixed media floor tiles, created by Sarah Lee-Terrat and Carolyn Shapiro.

Some represent the mission of the company, while others provide whimsical and social commentary on the times.

“The NRG Systems building serves as a model for what can be done with building technology and design today,” said Architect and Designer Bill Maclay of Maclay Architects in Waitsfield.

“It demonstrates that net-zero energy buildings are not only possible, they can be quite practical from both the economic and environmental perspectives.”

The building features dozens of skylights and operable windows designed to take advantage of natural light, allow for natural ventilation and provide employees with views of the outdoors.

Laptop computers and Energy Star-rated office equipment were selected to reduce electricity usage and heat gain.

Earth- and human-friendly materials were used throughout the building, including low- or no-VOC stains, paints and adhesives, polished concrete floors, certified wood and recycled bathroom tiles.

The building features a first floor café, a second floor library, informal meeting and gathering spaces, and a 40-person training room.