

Rebuild America Bolsters University of New Hampshire's Energy Leadership

Coupling a "continuous" campus effort with support from high-level management, one of the nation's leading research universities has parlayed decades of energy work into becoming a leader in energy efficiency.

The University of New Hampshire (UNH) in the city of Durham has been making smart energy decisions for 25 years. This effort has placed UNH in the top 5 percent of the most efficient research universities in the country, based on data analyzed by the U.S. Department of Energy's Oak Ridge National Laboratory. Even with this ranking – reported in the Rebuild America-Association of Higher Education Facilities Officers report, *Higher Education Energy Performance Indicators* – campus leaders recognized the benefits Rebuild America brings its partnerships and recently decided to call on the program's expertise.

"The University of New Hampshire is a terrific example of an energy-efficient university campus.... Rebuild America is pleased to be able to help them increase their efficiency even beyond where they are now," says Mike MacDonald, Rebuild America's College and University Sector manager.

Success in the Past

Over parts of four decades, UNH has made it a practice to incorporate many different energy-smart measures into the design and operation of campus buildings. Through a series of building retrofits and educational programs, the university saves \$4 million annually in energy compared to the national average. The effort included lighting change-outs, revamped building control systems and new motors, and energy education for the maintenance and operations staff, students and faculty.

UNH Campus Energy Manager Jim Dombrosk explains that the campus' lighting retrofit was a key element towards UNH achieving its high efficiency rating – due in large part to excellent in-house project managers and assistance from an engineering faculty member with lighting expertise.



Morse Hall: Just one example of UNH's long-term effort to boost energy efficiency on campus.

PARTNERSHIP FACTS (prior to joining Rebuild America)

- **Square feet retrofitted to date**
2 million square feet during past 10 years
- **Annual cost savings**
\$4 million compared to energy use of mean peer group from Oak Ridge study (includes cost savings from energy system management activities not directly related to retrofit projects)
- **Targeted Buildings**
All campus facilities
- **New & Notable Innovations**
Worked with lighting manufacturer to develop new-style T5 fixture for gymnasium applications.
- **Completion Date**
Ongoing
- **Benefits**
Maintain UNH energy-efficiency ranking

According to Dombrosk, the driver behind this reduction in energy consumption is actually two-fold – enjoying the support of upper-level campus officials who are keenly aware of energy efficiency and its benefits, and pursuing an aggressive, long-term program. With assistance from the New Hampshire Energy Office and the U.S. Department of Energy's programs, UNH has prevented any slacking in its commitment to energy efficiency.

"The key factor here is 'continuous' – we never let up," Dombrosk explains.

In developing this partnership, MacDonald visited the campus to survey campus buildings and to discuss energy programs and improvements. Based on this visit, he found that an important factor in the campus' successful past efforts is "staff on site who actually commission the control systems and components that are used, and who also provide continuous commissioning of those controls."

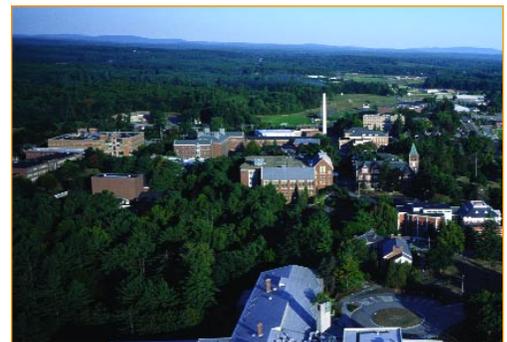
"This ensures that energy systems work well and efficiently," MacDonald explains.

Eyeing the Future

Moving forward, Dombrosk says UNH seeks technical assistance from Rebuild America in three areas. For starters, UNH wants to learn about the most recent operations and maintenance procedures to ensure that the campus maintains its status as one of the most efficient research institutions around. Second, the university hopes to gain the ability to monitor and track energy use and savings in order to document best practices, and expeditiously find

flaws and solutions to correct them. And third, the campus seeks to incorporate Rebuild America's know-how in designing and constructing new buildings.

All the campus facility data point to this place of higher-learning as one of the most energy efficient. But UNH decided that joining Rebuild America would boost the school's ability to procure energy-efficiency information – and disseminate what it has learned.



Campus Energy Manager Jim Dombrosk predicts Rebuild America will help the UNH campus maintain its high energy-efficiency ranking.

Dombrosk also says that pathways to energy information sharing are being created via this partnership. The New Hampshire Governor's Office of Energy and Community Services is active in UNH activities, and Dombrosk hopes that the accomplishments of UNH will provide other partnerships with examples of how to improve building performance.

"Learning, improving, sharing: These are the things I hope our Rebuild America partnership brings to us – helping UNH maintain our high energy-efficiency ranking," Dombrosk pronounces.

TO LEARN MORE ABOUT REBUILD UNIVERSITY OF NEW HAMPSHIRE, CONTACT:

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