## CURRENT



## Going Green

By Priscilla Knight

Green means "go" and many businesses, schools, and governments across the country are going green to save energy and to protect the environment. Some of these big energy users are NOVEC customer-owners. From installing energy-saving lighting to growing rooftop gardens, Wetlands Studies and Solutions, Inc., Power Loft @ Innovation, and Wal-Mart Stores, Inc., are working to reduce their carbon footprints and turn NOVEC territory greener.

Wetlands Studies and Solutions. Inc.

When Wetlands Studies and Solutions, Inc., outgrew its facility and started planning its new building and site in Gainesville, it wanted to practice what it supports in the Chesapeake Bay Preservation Act: "Healthy state and local economies and a healthy Chesapeake Bay are integrally related; balanced economic development and water quality protection are not mutually exclusive." WSSI developed a Low Impact Development site plan and

followed Leadership in Environment and Energy Design<sup>1</sup> for Commercial Interiors set forth by the U.S. Green Building Council, "because we believe it's the right thing to do," says Michael S. Rolband, WSSI president.

WSSI's LID plans conserve and protect natural features to provide stormwater control. The company installed a garden and an 8,000-gallon cistern on part of the roof to reduce rain water runoff and conserve energy inside the building. WSSI used pervious surface materials for most of its parking lots.

In accordance with LEED guidelines, the new building, built in 2005, uses less energy than most commercial buildings. Motion and daylight sensors turn on fluorescent lights only when they are needed. The building has R-30 insulation in the roof and R-22 insulation in the walls. The building's windows are highly energy-efficient. The heating and cooling systems have a 10.3 Seasonal Energy Efficiency Ratio, which is better than the required 9.3

SEER. All kitchen appliances, computers, printers, copiers, and other electronics have the ENERGY STAR label. WSSI predicts that these energy-conservation measures will help it use 30 to 35 percent less energy than a typical Northern Virginia building. Power Loft @ Innovation

One of NOVEC's newest customers is Power Loft @ Innovation in Prince William County. NOVEC completed a \$4 million upgrade to its substation and distribution system in December 2008, to provide electric service to the new 215,000-square-foot building at Innovation Park. NOVEC will be prepared to deliver up to 50 megawatts of power to the center in 2009.

Jim Coakley, president of Power Loft LLC, says that while modern commercial buildings with similar attributes require extraordinary amounts of electricity for high-technology equipment, Power Loft's facility will use approximately 30 percent less energy than comparable facilities.

Power Loft designed its building to

<sup>&</sup>lt;sup>1</sup> LEED is short for Leadership in Energy and Environmental Design, a government certification created by the U.S. Green Building Council that is earned by following prescribed design and construction standards aimed at building more environmentally appropriate facilities.

meet LEED Silver certification standards. John Schofield, of the Prince William County Office of Economic Development, says, "We particularly appreciate their LEED-certified design, which employs a green roof and a living ivy exterior skin that minimizes impact on the local watershed, reduces heating and cooling energy-use, and looks good." Power Loft also uses the latest smart-cooling technology to maximize server room air-conditioning efficiency.

Coakley praises NOVEC: "Among the many factors that drew us to Prince William County was NOVEC's familiarity with mission-critical facilities and their willingness to support the demands of this new, high-density design — both of which are critical to the success of this project."

In 2007, 218 of the nation's electric cooperatives, including NOVEC, supplied power to 371 Wal-Mart facilities<sup>2</sup>. Three Wal-Mart stores and one Sam's Club warehouse operate in NOVEC territory and a fourth Wal-Mart is under construction in Manassas.

The retail giant spends close to \$2 billion each year on energy just in the U.S. In 2005, Lee Scott, president and CEO of Wal-Mart Stores, Inc., said the world's largest corporation is

working "to be supplied 100 percent by renewable energy, to create zero waste, and to sell products that sustain our resources and environment."

To that end, Wal-Mart opened its first high-efficiency store in January 2007 in Kansas City, Mo. It has opened several more since. Wal-Mart plans to spend \$500 million annually to make new and existing stores at least 25 percent more efficient by 2015. According to David Ozment, Wal-Mart's manager of regulated utilities, the stores in NOVEC territory will have energy-saving lighting, refrigeration, heating, and cooling systems.

To encourage consumers to save energy, Wal-Mart and Sam's Club stores sell energy-saving appliances, light bulbs, and other green products.

WSSI, Power Loft, and Wal-Mart — three green giants in NOVEC territory — are leading the way to a cleaner environment today and tomorrow.

NOVEC's Business Development department works with businesses to help them use energy wisely. For more information, business customers should visit www.novec.com/page.cfm?id=104 and residential customers should visit www.novec.com/useitwisely1.



<sup>2</sup> Statistic from the National Rural Electric Cooperative Association

The definition of green varies, but generally, a green building and site will have materials and systems with many of these characteristics:

- Built or produced using energy-efficient methods
- Uses local materials Reduces the amount of energy needed for transportation
- Low-toxicity or non-toxic
- Minimal emissions They emit few or no volatile organic compounds or chlorofluorocarbons
- Low-VOC assembly Materials can be put together and installed without using high-VOC substances or methods
- Made with recycled and reusable content
- Sustainable Products are made from natural sustainable resources
- Moisture Products are moisture resistant or inhibit growth of biological contaminates
- Water conserving Products or systems use water efficiently
- Improve indoor air quality
- Can be maintained with non-toxic cleansers or methods