

Empowering you to make smart energy choices

Media Contact: Elizabeth Cowles on behalf of UI/Energize Connecticut 860-426-9991 ext 20 ecowles@cjpr.com

Northeast Energy Efficiency Partnerships and Department of Energy Tout Success of Stratford Brewery's State-of-the-Art Lighting Project

United Illuminating continues to support local business in advancing energy efficiency efforts

After revitalizing a historic 1911 vacant brick building to house brewing facilities and a tasting room, Two Roads Brewing Company is once again blazing the trail of smart, efficient operations. The Stratford, Connecticut, craft brewery was one of only nine project sites in the Northeast chosen as part of a pilot to replace their standard efficient lighting with next-level high efficiency LEDs and advanced networked lighting control technologies.

With the ability to control and program the entire lighting system – every one of the 200+ lighting fixtures across offices, retail space, manufacturing and storage areas – Two Roads can realize maximum efficiency for cost savings and for optimal visuals, safety and comfort.

Two Roads was an ideal candidate for the pilot. In 2012, United Illuminating (UI), a subsidiary of AVANGRID Inc., assisted Two Roads with technical support and funding through the Energize Connecticut initiative to identify and implement energy savings solutions for the site renovation. The facility was overhauled with efficient products and technology and began operating with a sophisticated program of advanced manufacturing systems, environmental controls and energy-saving measures. Although the fluorescent lighting installed at that time was energy efficient, the new LED lighting and controls upgraded though the pilot have achieved a 67 percent energy savings for Two Roads.

Grant funding was made available from the US Department of Energy (DOE) with its selection of the Northeast Energy Efficiency Partnerships (NEEP) advanced lighting proposal from among dozens of competitive grant submissions. NEEP sought financial support and partnership in the effort with several of its electric utility partners, including UI.

Seeking to further improve on energy savings opportunities for local retail, production and manufacturing companies, UI worked closely with NEEP, assessing how the new technology could get in the hands of utility customers, determining financial incentives and identifying efforts of utility personnel and other partners to support the installation.

"The culmination of interests in proving the growth opportunities for advanced lighting systems was integral in the success of the Two Roads project. The project team incorporated participation from DOE, the customer, UI, Digital Lumens' product support team and the installation team at Earthlight Solar & Energy Solutions," said NEEP project manager Gabe Arnold.

Digital Lumens' Intelligent LED Lighting System was installed throughout Two Roads' facility, incorporating occupancy and photo sensing within each fixture and advanced dimming control,

all with networked capabilities. A primary objective of the pilot was to prove the performance of advanced lighting controls with on-site monitoring and data collection, with subsequent analysis for performance verification of advanced lighting controls in a site application.

"We're proud to be part of the pilot with DOE and NEEP and continue to take advantage of the opportunities and incentives through Energize Connecticut to upgrade to more efficient systems that reduce our overall carbon footprint and greenhouse gas emissions," said Two Roads cofounder Peter Doering. "These lighting technology upgrades have had positive aesthetic impact and driven a great return-on-investment, but we're also really happy with the control, ease of use and added safety benefits the system has provided."

Efforts to upgrade lighting at Two Roads included features called *high-end trim lighting controls* or *task tuning*, which govern the percentage of light level in a set area based on how the space is being used. So, storage areas are set to lower lighting while retail or service areas require varying brightness. Up to 20 percent energy savings can be provided by "tuning" the light to the specific task in an area rather than employing a one-size-fits-all approach across the facility.

Another advanced system feature taps *daylight harvesting* technology. Sensors automatically dim lights based on the amount of daylight present, so beyond time of day controls, variations for weather and seasonal changes allow for maximum efficiency.

Occupancy sensors, which turn off lights when no activity is sensed in a room, were also installed with advanced features. Lighting gradually dims and brightens the perimeters of areas automatically with occupancy changes, preventing a harsh change in lighting with optimum savings.

Outside of energy savings, there are additional features to the advanced lighting system that provide benefit to business operations, particularly in regards to Occupational Safety and Health Administration (OSHA) safety compliance. The system automatically tests and stores compliance reports making them readily available for safety reporting. This feature replaces a time consuming manual task, allowing facility managers to focus more on productivity and production.

"The advanced lighting and controls initiative implemented at Two Roads provides a great example of strong energy-saving and cost-saving results to show how other businesses, manufacturers and retailers can benefit from this type of technology," said UI engineer Michael Doucette.

Project collaborators are hopeful that data collected from Two Roads and other pilot sites will encourage more businesses to seek advanced lighting solutions customized for their use and needs. The results, which support DOE's goal to conserve 30 percent more energy by 2030, demonstrate another tool Connecticut businesses can utilize to thrive in a competitive business market.

About Energize Connecticut

Energize Connecticut helps you save money and use clean energy. It is an initiative of the Energy Efficiency Fund, the Connecticut Green Bank, the State, and your local electric and gas utilities, with funding from a charge on customer energy bills. Information on energy-saving programs can be found at EnergizeCT.com or by calling 1-877-WISE-USE.