

Project Overview

Ben Franklin Technology Partners of Northeastern Pennsylvania, Lehigh Valley, PA

Lab/Office Building

47,000 sq. ft. addition



Lutron® light and shade controls save energy at TechVentures².

Challenge

The award-winning Ben Franklin Technology Partners (BFTP) of Northeastern Pennsylvania, Lehigh Valley, PA is part of one of the nation's most successful technology-based economic development programs.

Dedicated to providing both early-stage and established companies with funding and business assistance, BFTP embraces a commitment to sustainability and energy savings in its facilities. Its newest building, Ben Franklin TechVentures²®, was designed to achieve LEED Gold Certification NC2.2.

Their commitment has been widely recognized. Officially dedicated in October of 2011, TechVentures² was awarded first-place national honors in the U.S. Environmental Protection Agency (EPA) 2011 Energy Star Challenge.

BFTP and Spillman Farmer Architects, Bethlehem, PA, worked closely with Lutron Electronics to ensure that the light control system incorporated strategies to effectively reduce lighting electricity use as well as demand on HVAC systems, while providing a comfortable, productive working environment.

*“Ben Franklin
TechVentures²
demonstrates how
Lutron light controls
save energy while
enhancing the
workplace and
supporting sustainable
building design.”*

*Tom Ike,
Vice President,
Global Sales, Lutron*



photos © Barry Halkin Photography



Solution

EcoSystem® ballasts, Sivoia® QS shades with Hyperion™ solar-adaptive software, occupancy sensors and personal control, Quantum® Total Light Management™ system

Lutron EcoSystem digitally addressable dimming ballasts communicate with daylight sensors to automatically adjust electric lights in response to available daylight. To further minimize glare and thermal heat gain, Lutron Sivoia QS automated shades with Hyperion solar-adaptive software are installed on every window. This shading strategy can reduce HVAC demand by 10 - 30%*.

Occupancy/vacancy sensors and personal controls are installed throughout the space to ensure that lights are not left on when an area is vacant, but tenants still have control over the lights in their space.

Finally, a Lutron Quantum Total Light Management system provides centralized control of all lights and shades, and utilizes GreenGlance® software to evaluate, monitor, and communicate energy use.

Results

In addition to taking first place in the 2011 Energy Star Challenge, with a 51% projected reduction in carbon dioxide emissions, the facility was also named Pennsylvania Economic Development Association Project of the Year in October of 2011.

Early estimates indicate that TechVentures² is at least 20% more efficient when compared with a baseline building performance rating. Lutron controls contribute a significant percentage of those savings.

BFTP President and CEO, R. Chadwick Paul says, “By choosing a Lutron light control system, we are contributing to the responsible use of energy and we are lowering our electricity bills. Over the long haul, the savings will enable us to help more early-stage clients ‘keep the lights on,’ and support job creation in Pennsylvania.”

* Lutron commissioned study by Herrick Laboratories, Purdue University. 2011.

www.lutron.com/casestudies

World Headquarters 1.610.282.3800

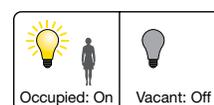
Technical Support Center 1.800.523.9466 (Available 24/7)

Customer Service 1.888.LUTRON1

Energy-saving strategies



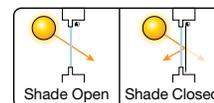
Personal control



Occupant sensing



Daylight sensing



Automatic shade control

