

Ver-Tex

CONSTRUCTION



FIELD DEMONSTRATION SITES NEEDED TO TEST THE ENVIRONMENTAL IMPACTS OF INTEGRATED SHADE AND LIGHTING SYSTEMS

ENHANCE PRODUCTIVITY & SUSTAINABILITY

BY SHOWCASING CUTTING-EDGE TECHNOLOGY

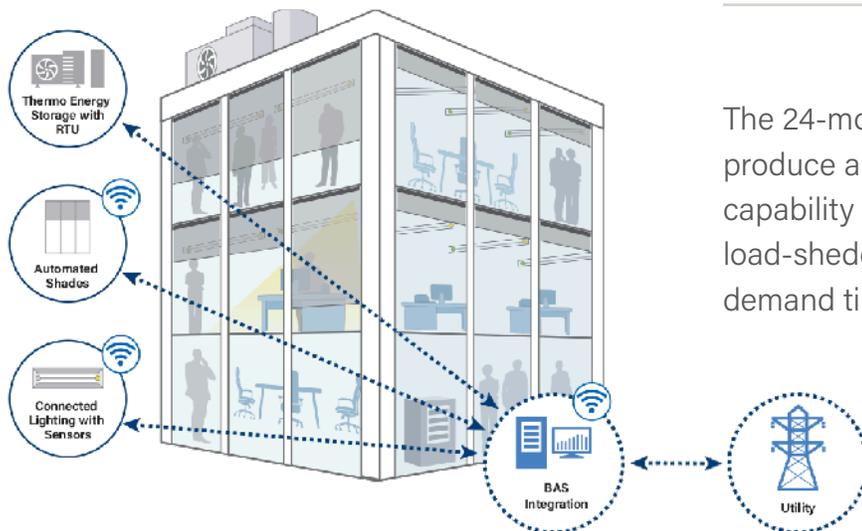
Ver-Tex has partnered with the Department of Energy, Building Technologies Office and Slipstream, a nonprofit organization with the mission to deliver clean energy for all, to field-test and analyze the energy-saving performance of two integrated systems:

1.

CONNECTED LIGHTING & AUTOMATED SHADES

2.

CONNECTED LIGHTING, AUTOMATED SHADES, & INTELLIGENT ENERGY STORAGE



The 24-month project and resulting analysis aim to produce a comprehensive report on the systems' capability to facilitate grid flexibility in regards to load-shedding and load-shifting during peak energy demand times.

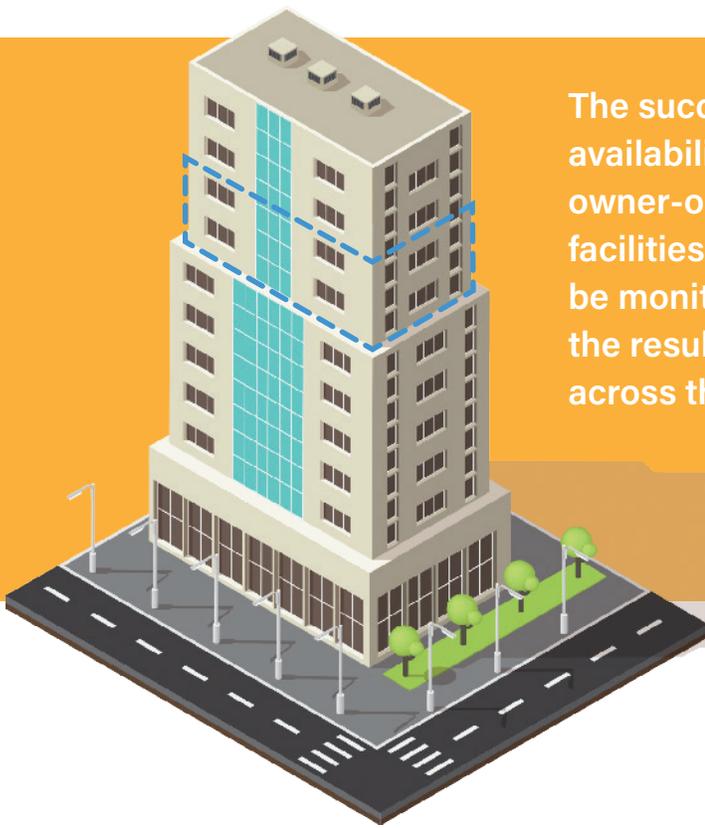
This collaborative effort is facilitated through cooperation with several leading energy-conscious manufacturers:

CREE LIGHTING
A COMPANY OF IDEAL INDUSTRIES, INC.

Mecho
INNOVATIVE DESIGN. TRUSTED PERFORMANCE.

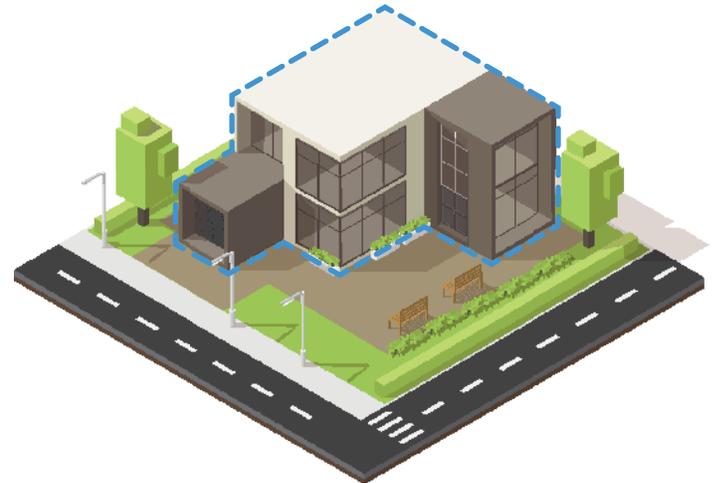
AcuityBrands

NETenergy



The success of this analysis is dependent upon the availability of two appropriate testing sites – ideally owner-occupied office buildings or higher-education facilities located in the Boston area. These sites will be monitored for the span of the demonstration, and the results will be used to help utility companies across the U.S. create and implement incentive programs related to the installation and continued use of energy-saving solutions.

Either a portion of a large building or an entire small building.



THE FOLLOWING BUILDING CRITERIA MUST APPLY:

- ✓ Access to abundant daylight for lighting interior spaces
- ✓ Large common workspaces
- ✓ Rooftop HVAC system
- ✓ Building Automation Systems (BAS)

PROJECT OBJECTIVES

1. REDUCE LIGHTING PEAK DEMAND BY 50% THROUGH INTEGRATED CONTROLS

2. IMPROVE RTU EFFICIENCY BY 10% & REDUCE RTU PEAK DEMAND BY 40%

BENEFITS OF PARTICIPATION

- Integration of the newest energy-saving lighting systems and controls
- Free 5-ton hybrid air conditioner + thermal energy storage
- Reduced energy demand costs
- Improved facility-wide energy efficiency
- Reduced overall energy costs
- Marketing opportunities & DOE incentives available
- Increased productivity and occupant comfort
- Opportunity to provide feedback and contribute to energy-related environmental outcomes

APPLY TO PARTICIPATE BY CONTACTING:

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LIGHTING, SHADES, & THERMAL STORAGE **ACUITY NLIGHT/NLIGHT AIR & CREE SMARTCAST**



DESCRIPTION

- Connected/Networked lighting system
- Wired or wireless
- Luminaires with individual occupancy & photosensors

BENEFITS

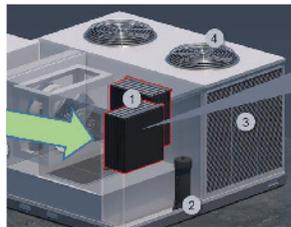
- Automated demand response
- Improve occupant comfort & reduce electric lighting peak demand

NETENERGY INTELLIGENT THERMAL STORAGE

Thermal Battery → Commercial Integration



NETenergy
Black Ice™ Technology



Integrates to Build Hybrid AC
+ Thermal Energy Storage

DESCRIPTION

- Phase Change Material (PCM)
- Integrates to Rooftop Units (RTU)

BENEFITS

- Load-shedding and load shifting
- Reduce carbon emissions
- Improve RTU efficiency 10% & reduce RTU peak demand 40%

MECHO SOLARTRAC 4.0



DESCRIPTION

- Automated shades

BENEFITS

- Prevent glare and maximize daylight
- Optimize seasonal building performance
- Reduce HVAC peak load

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