



Success  
Stories

## 2006 New Jersey Clean Energy Leader Monmouth University Clean Energy School

### PROJECT INFORMATION

#### Organization

- **Monmouth University**

#### Project Name

- **Monmouth University Energy Conservation Initiatives**

#### Location

- **West Long Branch, New Jersey**

#### Project Contact

- **Patricia Swannack, Vice President for Administrative Services**

#### Project Size

- **System Peak Capacity: 454 kW**
- **PV Surface Area: 40,000 sq. ft.**
- **2,344 Solar Electric Modules**

#### Technologies

- **PowerLight PowerGuard® Roof System**

#### Estimated Annual kWh and Energy Savings

- **1,302,386 kWh/yr**
- **468,568 kWh/yr**

#### Clean Air Benefits

(Emission Reduction)

- **18,000 lbs. N<sub>2</sub>O**
- **24,000 lbs. SO<sub>2</sub>**
- **10 million lbs. CO<sub>2</sub>**



Photo by Tom Grimes Photography, courtesy of PowerLight Corp.

“ Monmouth University enables students to pursue their educational goals, determine the direction of their lives, and contribute significantly to their profession, community, and society. ”

### Background

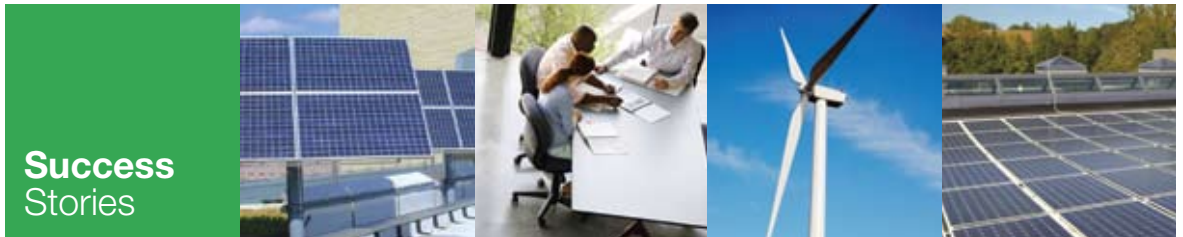
Monmouth University is an independent, comprehensive teaching-oriented institution of higher learning committed to service in the public interest, lifelong learning, and the enhancement of quality of life. The university promotes creativity, intellectual inquiry, research, and scholarship as integral components of the teaching and learning process.

Monmouth University, through its Energy Conservation Initiatives Project, was recognized as the 2006 Clean Energy School. This award, sponsored by the New Jersey Board of Public Utilities and its Clean Energy Program, represents the dramatic steps that Monmouth is taking towards energy efficiency and environmental conservation to accommodate its student body and academic community.

### Challenge

Monmouth University is very serious about environmental stewardship and sustainable practices, being an active member of the New Jersey Higher Education Partnership for Sustainability. Strong community relations are at the heart of the school's philosophy and key to the public's positive perception of Monmouth. The university was very interested in deploying clean, emission-free, renewable solar power to meet its growing energy needs.





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Photo by Tom Grimes Photography,  
courtesy of PowerLight Corp.

Monmouth University's 454 kW solar installation, covering 4 different buildings, is the largest university solar installation east of the Mississippi.

**MONMOUTH  
UNIVERSITY**

where leaders look forward™

### Solution

As a consistent leader of innovative energy conservation programs, Monmouth University took the initiative and contracted PowerLight Corporation to install their PowerGuard® Roof System on 4 buildings at the West Long Branch-based university. This stands as the largest grid-connected solar electric system installed at a higher education institution in the Eastern United States.

Monmouth University's commitment to harness solar power serves as a showcase for others, illustrating environmentally responsible technologies that can be incorporated into existing infrastructure as a means to reduce energy demand, hedge future energy costs, and promote climate-friendly facility management.

### Benefits

Comprised of 2,344 solar electric modules, the solar system at Monmouth University has an expected first-year system electrical output of 468,568 kilowatt hours. Collectively, these 4 arrays cover 40,000 square feet of flat roof on top of Monmouth's Student Center, Bey Hall, Boylan Gymnasium, and Facilities Management buildings. The PowerGuard system not only harnesses the energy of the sun to offset onsite day-to-day energy consumption, but it also insulates the building envelope and protects the roof system from UV and thermal degradation.

Monmouth's leadership in the area of energy conservation significantly contributed to its recognition as the 2006 New Jersey Clean Energy School. In addition, the university's efforts continue to serve as an example to its employees, students, and area businesses to harness renewable energy and energy efficiency technologies within their own homes or businesses.

