



**SIEMENS**



# Adlai E. Stevenson High School

Siemens helps Illinois school become the first high school in the country to achieve LEED-EB Gold Certification.

**Answers for infrastructure.**



## Facility improvements generate \$100,000 in annual energy savings.

**“Earning LEED Gold status is a validation of our ‘Green Initiative’ to reduce the school’s carbon footprint, and an achievement we all share, including the faculty, staff, and especially the students.”**

Mark Michelini  
Adlai E. Stevenson High School  
Assistant Superintendent  
for Business

Located in the northern suburbs of Chicago, Illinois, Adlai E. Stevenson High School is home to some 4,600 students, faculty, and staff. Since opening its doors in 1965, Stevenson High School has become one of the leading high schools in America, and has received the President’s Award for Excellence in Education five times. Stevenson’s 76-acre campus encompasses more than 1 million square feet of state-of-the-art facilities.

### Client Objectives

In 2007, Adlai E. Stevenson High School in Lincolnshire, Illinois, set a goal to achieve the U.S. Green Building Council’s LEED Certification. Looking to focus their efforts on becoming a green, energy-efficient, and sustainable school, Stevenson sought help from Siemens Building Technologies, including assistance with reducing natural gas and carbon usage, and energy efficiency.

### Siemens Solution

Through a full assessment and comprehensive understanding of the technical and operational aspects of the campus’ building automation, HVAC, lighting, and other systems, Siemens was able to help the Stevenson Green Initiative Committee develop a broad operational plan to systematically reduce electricity and natural gas usage after hours.

Among key deliverables, Siemens provided full transparency of CO<sub>2</sub>, energy consumption, and pricing through the company’s Energy Monitoring and Control (EMC) platform. Highly skilled energy technicians also delivered an existing building continuous commissioning program through on-going monthly energy analysis. Siemens also installed an interactive touch screen that displays energy consumption data from the Siemens APOGEE® building automation system.



The U. S. Green Building Council presents Adlai E. Stevenson High School with their LEED Gold Certification plaque.

Left to right:  
Doug Widener – U.S. Green Building Council IL President, Merv Roberts – Stevenson High School Board, Lori Lyman – Stevenson High School Board, Mark Michelini – Stevenson High School Assistant Superintendent of Business, Bob Dold – Illinois Congressman, Dave Wilms - Stevenson High School Sustainability Coordinator

To promote a green lifestyle in all areas of their lives, Siemens also worked to provide opportunities for Stevenson students to integrate sustainability into their classroom curriculum. This included a web-based energy dashboard and assistance in the development of the net zero environmental science lab by coordinating the effort to connect and monitor the solar photovoltaic and thermal energy sources, as well as the green roof.

#### Client Results

With the help of the Siemens Building Technologies Division, Stevenson recently achieved their goal by becoming the first high school in America to be certified LEED Gold for Existing Buildings (EB).

“In collaboration with Siemens and support from partners Cannon Design and Sodexo, our facilities team created a master plan to address campus energy and resource consumption,” said Adlai E. Stevenson High School Assistant Superintendent for Business, Mark Michelini, who coordinated the effort. “We’ve met and exceeded those targets and the result is our LEED certification - a national benchmark and an achievement we all share.”

As a result, Stevenson was able to achieve its first set of energy consumption reduction targets set forth in its sustainability mission

statement: 7% lower electricity use and 5% less natural gas consumption. According to Stevenson officials, those measures have saved the school over \$100,000 annually. The energy reduction targets were also seen in a 9 point increase in Stevenson’s ENERGY STAR® score after Siemens’ work with the school.

Since obtaining LEED Gold Certification, Siemens has continued to provide ongoing maintenance and operational efficiencies to uphold Stevenson’s current certification and ensure they will qualify for recertification in five years. This includes maintaining the school’s score and providing quarterly updates to ENERGY STAR; ongoing energy optimization; and implementation of Stevenson’s Building Operating Plan and Preventative Maintenance, which was documented for initial certification.

In addition, Siemens recently began a Performance Contracting project which includes a handful of energy-saving measures. Siemens also implemented improvement measures identified during the Smart Energy Design Assistance Center (SEDAC) energy assessment process and completion of switchgear breaker testing and troubleshooting through the Siemens electrical services offering.

Siemens regularly participates in sharing information on career opportunities in the Science, Technology, Engineering, and Mathematics (STEM) professions and supports the District’s Green Committee by participating and sponsoring both faculty and student sustainability events. This is particularly important to the student body, as many of them have become very aware of the importance of becoming green and sustainable in their own lives. Because of this, Stevenson students played a big role in the LEED process, including managing the transportation and occupant surveys, and assisting with water conservation calculations. Students have continued to provide their time and efforts to keeping Stevenson sustainable.

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#### Answers for infrastructure.

Our world is undergoing changes that force us to think in new ways: demographic change, urbanization, global warming, and resource shortages. Maximum efficiency has top priority – and not only where energy is concerned. In addition, we need to increase comfort for the well-being of users. Also, our need for safety and security is constantly

growing. For our customers, success is defined by how well they manage these challenges. Siemens has the answers.

**“We are the preferred partner for energy-efficient, safe, and secure buildings and infrastructure.”**