

ENERGY SAVINGS HELP BALANCE THE BUDGET

Grayslake Community High School District Obtains 36% of Electricity Needs Through Solar

With school districts trying to stretch already constrained budgets, many are finding the answer in energy savings.

THE DECISION

Before installing solar, Grayslake Community High School District in Illinois was already interested in reducing its energy bills. The district joined an electric co-op, enabling it to receive lower electricity rates and participate in a demand response program. The program is offered by ComEd, the local utility, and pays the school district for reducing electricity use during peak hours. The district created additional savings through energy efficiency improvements at

its two high school buildings, Grayslake Central and Grayslake North.

Following the energy efficiency upgrades, Dr. Michael Zelek, the associate superintendent and chief school business officer, explored additional ways to reduce the district's energy consumption. Zelek initially thought wind turbines might be the best option. However, research conducted by Performance Services, a design-build firm hired by Grayslake, determined that solar was more cost-effective for the district. Zelek conducted his own due diligence, speaking with administrators of districts who had previously installed solar. "It was an easy choice at that point, everybody I spoke to was thrilled with solar," Zelek says.

SCHOOL DISTRICT:

Grayslake Community High School

DISTRICT SIZE:

Two High Schools

LOCATION:

Village of Grayslake, Lake County,
Illinois

COST:

\$5.3 Million

SOLAR CAPACITY:

3 MW on Three Sites - Two Schools
and Offsite

FINANCING:

Bank Loan

PROJECTED SAVINGS:

\$10 Million Over 25 Years



DEVELOPMENT AND FINANCING

Once Grayslake decided to move forward with the project, Performance Services then designed and built two solar installations which utilized the large roofs on the district's two high schools, Grayslake Central and Grayslake North. A third, ground-mounted system was installed on underutilized land owned by the district. With a total cost of \$5.9 million, the combined output of the three systems is just under 3 MW, accounting for 36% of the district's energy consumption.

Financing such a large solar installation can be challenging for many schools. Grayslake explored leasing panels, buying the system upfront, and financing the system through debt service certificates. In the end, Grayslake decided that debt service certificates through a local bank made the most sense. The certificates had a market 2.9% interest

rate, 12-year term, and no prepayment penalty. The opportunity to prepay was important, Zelek explains: "We are expecting \$100,000 in cash savings to pay off the loan in eight years."

In addition to energy savings, Zelek is excited to "bring the students out to the solar farm" and believes that it will be a valuable educational tool. The district is partnering with the National Energy Education Development project to develop curriculum utilizing the new solar installations.

With Grayslake's investment in solar expected to save the district \$9.8 million over the lifetime of the system, districts across the region are expressing interest. According to Ryan Stout of Performance Services: "When districts like Grayslake go solar, other districts take notice and start exploring their own options to install solar."

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Ryan Stout, Performance Services

Photo Credit: Grayslake Community High School District



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