



Algonquin District 158

Self Funded Energy Efficiency Project

Project Snapshot

Facilities:
District Wide (8 Campus)
Project / 1,425,752 Sq. Ft.

Project Type:
Guaranteed Energy
Savings Performance
Contract

Contract Term:
10 Years

Guaranteed Annual
Energy/Operational
Savings:
\$352,467

DCEO Illinois Energy
Now Grants:
\$713,719

Qualified Energy
Conservation Bonds:
\$333,042

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Dir. of Operations
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Energy Retrofits that Pay for Themselves

Facing rising energy costs and aging systems, Algonquin District 158 sought out a fiscally responsible option for upgrading the comfort of their facilities and cutting energy use. They found that solution in CTS who enabled the District to leverage a financing mechanism called Energy Saving Performance Contracting (ESPC) to pay for the improvements through energy and operational savings. CTS engineered, designed, and implemented the following energy conservation measures on the District's eight campuses and administration building.

- Lighting Upgrades and Occupancy Sensors
- Temperature Control Building Automation System
- Variable Frequency Drive Implementation

The project is guaranteed to save District 158 \$316,094 in annual energy costs, plus another \$36,373 in operating costs. These annual savings will be used to pay for the cost of the project and result in a positive cash flow for the District. Additionally, the retrofits will drastically reduce their carbon emissions.

ESPC not only made it possible for District 158 to make necessary improvements without diverting money away from the overall budget, but also allows the District to lead by example as they reduce their overall energy use. This project exemplifies the significant energy efficiency gains that can be achieved through strong, forward-thinking leadership in the community.

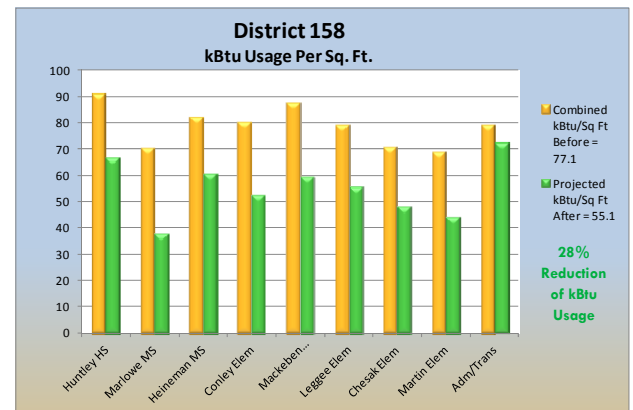
Grant Services

On behalf of the District, CTS submitted grant applications and will continue to perform all reporting required for the programs. The result is over \$1 million in grant awards through the Illinois Department of Commerce and Economic Opportunity and the Federal Qualified Energy Conservation Bond program. These funds are used to help fund the project.

Reduced kBtu Usage

The project is projected to result in a 28% reduction of kBtu usage and \$316,094 in guaranteed annual energy savings.

By utilizing Performance Contracting as the funding mechanism for the project, District 158 is able to drastically cut energy use and their carbon footprint without spending taxpayer money. The energy and operational savings afforded by the project, along with the grant funding, will be used to repay the capital cost of installing the energy efficiency measures.



Funding for this project was provided in part by the Illinois Department of Commerce and Economic Opportunity with the help of American Recovery and Reinvestment Act federal stimulus dollars.

Reduced Greenhouse Gas Emissions

The good stewardship of the District is reflected not only in the cost savings from reduced energy usage, but also in the reduced carbon footprint left on the environment. The project's reduced annual emissions would be equivalent to:

Annual Greenhouse Gas Reduction = 2,209 Metric Tons of CO₂ Equivalent



CO₂ sequestered by 58,710 tree seedlings grown for 10 years



CO₂ sequestered by 488 acres of pine forests



CO₂ emissions from 449 passenger vehicles



CO₂ emissions from 5,325 barrels of oil consumed



CO₂ emissions from the energy use of 198 homes



CO₂ emissions from burning 12.5 railcars' worth of coal

Source: All carbon equivalencies extracted directly from the EPA website greenhouse gas equivalencies calculator