



Solar on La Crosse Schools: Hamilton Elementary

PROJECT SUMMARY:

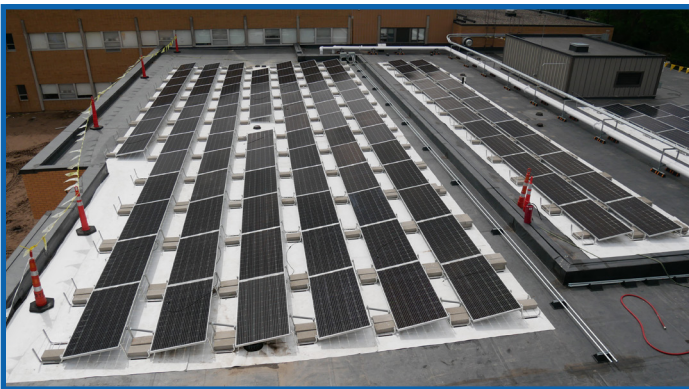
The timing was perfect for solar at Hamilton Elementary as the building was undergoing an extensive expansion and renovation project in the fall of 2020, with the roof and electrical completed and ready for the solar installation by late spring 2021. During the same time period, the concept of Solar on La Crosse Schools (SOLS) was born. Community members Cathy Van Maren, Heather Talbot, Alysa Remsburg, and others formed SOLS in early 2020 to push for a district-wide solar transition. SOLS partnered with the La Crosse Public Education Foundation to facilitate donations exclusively for solar projects.

The School District of La Crosse had wanted to install solar for quite some time because of the environmental and financial benefits as well as the educational opportunities that it will provide the students. With budgets being stretched more than ever, the district had not had the capital to independently fund a project like this. Fortunately, the district was approached by community members who share a vision of helping the area schools adopt solar. The project was largely funded by an anonymous donor, but its full scope was made possible by additional contributions, community support from SOLS, Focus on Energy, a \$25,000 grant from the Left Coast

Fund's [Solar Moonshot Program](#) managed by [Hammond Climate Solutions](#), and an in-kind grant from MREA's Solar on Schools program, which expanded the nearly 300 panel installation by 50 kW.

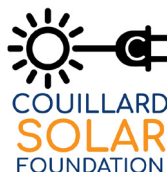
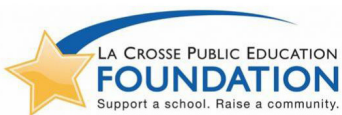
The building project is unique because it directly furthers the efforts of Hamilton Elementary's transition to becoming a full-service community school—a partnership between the school and community offering support and resources for students, families, and the surrounding neighborhood. The expansion project includes the addition of a gymnasium, community center space, remodel of the library, and additional classrooms. The community space will also be open for a variety of services that will benefit the entire Powell-Poage-Hamilton Neighborhood.

Solar Connection, Inc. out of Onalaska, Wisconsin installed the 97.68 kW system in the Spring of 2021 on the new portions of the Hamilton building which include the gymnasium, community center space, library media center and additional classrooms. The solar array fully utilizes the new roof surface, completely offsetting the added energy consumption of the addition.



“ One of the things that’s so unique [about this project] is that we’ll be able to take some of these abstract concepts of renewable energy and we’re going to be able to make it tangible, real, walk-around-able, touchable for our children. ”

– Associate Superintendent Troy Harcey





"I am excited for the students who will grow up seeing solar on their roof and in their school garden, who will get to study energy generation and engineering firsthand." -Lily Herling, 2020 Alumna

SYSTEM AT A GLANCE:

- **Commissioned:** August, 2021
- **System Size:** 97.68 kW DC
- **Expected Year 1 Performance:** 107,000 kWh
- **Solar Installer:** Solar Connection Inc.
- **Total Billed System Cost:** \$169,464*
- **Cash Grants, Rebates, Incentives:** \$12,710 Focus on Energy; \$25,000 Solar Moonshot
- **Cost/Watt:** \$1.73
- **Lifetime LCOE =** \$0.0454/kWh
- **Year 1 Electric Savings:** \$8,025
- **30-Year Electric Savings:** \$383,265
- **30-Year Cash Flow:** \$226,511
- **30-Year IRR:** 7.1%
- **Array Tilt and Azimuth:** 10 degrees; 180 degrees
- **Racking:** RM10 UniRac system
- **Modules:** 264 Philadelphia 370 watt bi-facial
- **Inverters:** 2 SolarEdge 43.2 kW
- **Optimizers:** 132 P860 SolarEdge
- **Monitoring:** SolarEdge production monitoring

*Total Billed System Cost excludes the 50 kW Solar on Schools in-kind grant value estimated at \$20,000.

ENVIRONMENTAL BENEFITS

In its first year, this 97.68 kW DC system will offset eCO₂ emissions equivalent to:



The Electrical Usage of 13.8 Homes



190,573 Miles Driven by an Average Passenger Vehicle



83,813 Pounds of Coal Burned



ABOUT LA CROSSE SCHOOLS

The School District of La Crosse serves a population of 80,000 that includes all of the city of La Crosse, which has approximately 55,000 residents, and all or part of the towns of Medary, Shelby, Campbell, Bergen,

Greenfield, Hamburg, and Washington.

PROJECT CONTACT

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The new roof utilized white TPO roofs, which will not only make the building more energy efficient by absorbing less heat, but will also help the bifacial solar modules produce more energy.



Learn more and access resources at:
midwestrenew.org/solar-on-schools