



CASE STUDY: *Solar on Eau Claire Schools*

PROJECT SUMMARY:

The Solar on Eau Claire Schools project first launched in December of 2019 when Eau Claire Area School District and Eau Claire Public Schools Foundation connected with the Couillard Solar Foundation, which has personal ties to the district. The Eau Claire Public Schools Foundation (ECPSF) subsequently formed Solar on Eau Claire Schools Fund, committing that month to raise the necessary funds for engineering, maintenance, and installations at the district's two high schools, thus avoiding any financial commitments by the district. Between December 2019 and October 2020, ECPSF raised more than \$291,000 to fund the engineering design, installation, racking, and 25-year maintenance contract for two solar PV systems each consisting of 360 solar panels, totaling 252 kW. All 720 panels for the project were donated by the Couillard Solar Foundation through their [Solar on Schools](#) program, managed by the Midwest Renewable Energy Association (MREA).

In addition to the Solar on Schools donation, other major donors include the Solar Moonshot Program by Hammond Climate Solutions and the Pablo Foundation, among others. In the Spring of 2020, local solar specialists, Next Step Energy, and engineers, Lien & Peterson, facilitated the project's early stages and design; and by the summer, Eagle Point Solar of Dubuque, Iowa was selected as the installer for the project through ECASD's competitive bidding process. The two 126 kW systems installed on both North High School and Memorial High School were complete by the end of October and commissioned in December 2020. This solar project will save the district approximately \$20,000 annually in utility costs.

The solar panels' performance is incorporated into STEM curriculum at the two high schools. This is a first glimpse for many students into the inner workings of

solar energy, affording them an educational component of the project while exposing them to careers in the solar and renewable energy fields, and showing them how clean, affordable energy can be produced right on top of their schools. With Solar PV Installer leading the way as the fastest growing occupation in the United States, and careers in energy and engineering also offering students promising futures, this Solar on Schools project has been undertaken to provide students with hands-on education utilizing functioning solar PV systems. In preparing students for their futures as creative and responsible adults, as the Eau Claire Area School District aims, it is important to present the most current technology in the strongest industries with the most room for further growth in the students' studies. By backing solar over its fossil fuel counterparts, the ECPSF and ECASD have made commitments toward not only the future careers of their students, but for all people inhabiting the shared planet.

Along with Eau Claire Area School District's priorities of academic achievement, collaborative cultures, and partnerships with families and community, among others, the initiative fit perfectly with the mission of the district and city. In 2019, both the Eau Claire City Council and the Eau Claire County Board of Supervisors adopted resolutions to support efforts to move toward carbon-neutral energy use by 2050. In fact, ECASD had already begun to focus on energy-saving initiatives as this resolution was in development, including automating the lighting system to cut down on electricity, updating heating systems and windows to much more efficient models, and installing lower water-use toilet fixtures. Solar on Eau Claire Schools is only the beginning for the district's sustainability efforts. The commitment of the board, district, and city at large suggests that ECASD has willing partners to invest in bringing their goals to full realization.



SYSTEM AT A GLANCE:

- **Commissioned:** Memorial—TBD, North—November 2020
- **System Size:** 252 kW DC combined
- **Expected Year 1 Performance:** Memorial—149,484 kWh, North—147,636 kWh
- **Racking:** Unirac
- **Modules:** 720 Adani 325 watt modules (ASM-7-PERC-325)
- **Inverters:** SolarEdge 100 kW (SE1000K-US): 2 total
- **Monitoring:** Monitoring through SolarEdge via ethernet CAT6 connection
- **Solar Installer:** Eagle Point Solar
- **Cash Grants, Rebates, Incentives:** \$122,000
- **Total Billed System Cost:** Memorial—\$133,198.00*, North—133,198.00*
- **Cost/Watt (Excluding Cash Grants):** \$1.06

*Total Billed Cost excludes Solar on Schools (100 kW) and Couillard Solar Foundation (152 kW) in-kind grants valued at \$100,800.

"We are so grateful for the community's support of this awesome initiative. Their investment is having a profound impact on our schools and planet for generations to come."

— **Sarah French, Eau Claire Public Schools Foundation Executive Director**

ENVIRONMENTAL BENEFITS:

In the first year the combined 252 kW DC system will offset CO₂ emissions equivalent to:



494,572 Miles Driven
by an Average
Passenger Vehicle



219,615 Pounds
of Coal Burned



Electrical Usage
of 33.7 Homes

ABOUT Eau Claire Area School District:

The Eau Claire Area School District, with an enrollment of approximately 11,500 students, is the eighth largest school district in Wisconsin. It covers approximately 200 square miles, which includes most of the city of Eau Claire and portions of the townships of Brunswick, Clear Creek, Drammen, Hallie, Pleasant Valley, Rock Creek, Seymour, Union, Washington, and Wheaton. There are 12 elementary schools in the district, one early learning center, three middle schools, two high schools, and three charter schools.

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ABOUT Eau Claire Public Schools Foundation:

The Eau Claire Public Schools Foundation is a nonprofit, independent organization that connects the community and the Eau Claire Area School District to inspire and enhance the educational experience of our students. Through charitable donations gifted from community members and businesses, ECPSF is able to provide schools with their greatest needs, support educator creativity, and grow endowment funds to enable future giving.

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PROJECT PARTNERS:



KEY PROJECT FUNDERS:

Couillard Solar Foundation • Pablo Foundation • LE Phillips Family Foundation • Midwest Renewable Energy Association (MREA) • Eau Claire Public Schools Foundation • Solar Moonshot Program



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