

CASE STUDY: Solar on Milwaukee Area Technical College (MATC): Mequon and Oak Creek Campuses

PROJECT SUMMARY

MATC is committed to sustainability in the educational programs offered as well as in the operations of their own facilities. MATC has signed onto the Presidents' Climate Leadership Commitment and committed to being carbon neutral by 2030. MATC's solar projects are a cornerstone to their carbon neutrality strategy. At the Mequon campus there will be 300 kW DC of roof mount solar PV and at the Oak Creek campus there will be 300 kW DC of ground mount solar PV.

The college is funding the majority of the project via a capital equipment budget. This capital funding comes from the sale of municipal bonds. This project is made possible by the additional funding provided by the solar on schools grant and the focus on energy solar incentive. This will be a design build project using Arch Electric for both campuses.

The solar panel installations will be used as a demonstration and educational tool by the MATC educational programs at the Mequon and Oak Creek campuses. MATC also plans to do public tours as demand presents itself.



ABOUT MILWAUKEE AREA TECHNICAL COLLEGE

Milwaukee area technical college has been serving the Milwaukee area community for over 100 years. In 2019 MATC served over 35,000 students. MATC has 4 campuses which total over 3 million square feet of building space over 2 counties. As a public, two-year comprehensive technical college, MATC offers exceptional educational and training opportunities and services to our diverse metropolitan area by engaging with partners to advance the quality of life for our students and community.

HELPING WISCONSIN SCHOOLS GO SOLAR

The Couillard Solar Foundation Solar on Schools program is managed by Midwest Renewable Energy Association (MREA). The initiative educates schools on the benefits of solar energy, provides resources to simplify the project development process, and offers grants to lower the upfront cost of solar.

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

MEQUON SYSTEM AT A GLANCE

Commissioned: April 2021 **Electric Utility:** We Energies **System Size:** 272.32 kW DC

Expected Annual Performance: 370,355.20

kWh

Solar Installer: Arch Electric

Total Billed System Cost: \$407,967.01 **Cash Grants, Rebates, Incentives:** \$30,230

Cost/Watt: \$1.39

Cost/Watt Excluding Cash Grants: \$1.50

Y1 Electric Savings: \$26,424.83

30 Year Electric Savings: \$792,744.88

Array Tilt and Azimuth: Tilt: 23°, Azimuth: 166°

Modules: Philadelphia Solar, 370 W

Inverters: Solar Edge





OAK CREEK SYSTEM AT A GLANCE

Commissioned: October 2021 Electric Utility: We Energies System Size: 346.32 kW DC

Expected Annual Performance: 470,995.20 kWh

Solar Installer: Arch Electric

Total Billed System Cost: \$679,461.48

Cash Grants, Rebates, Incentives: \$65,632

Cost/Watt: \$1.77

Cost/Watt Excluding Cash Grants: \$1.96

Y1 Electric Savings: \$33,605.50

30 Year Electric Savings: \$1,008,165

Array Tilt and Azimuth: Tilt: 25°, Azimuth: 160°

Modules: Philadelphia Solar, 370 W

Inverters: Solar Edge

PROJECT PARTNERS





