Solar Array Project - Dane County Arena

Energy use impacts our environment, affecting air and water quality. As our area grows we burn more fossil fuels to meet the increasing need for electricity. Using energy efficiently and developing clean power options can help to reduce the impacts.

Capturing energy produced by the sun is one option. Solar energy is clean energy; no emissions are released into the atmosphere. It also avoids the environmental effects of drilling for oil and gas and mining for coal.

Dane County and Madison Gas and Electric are working together to raise the visibility of solar energy and to provide data about its suitability for our area. One of our installation sites is at the Dane County Arena, a 22,000 sq ft facility designed to handle 1,000 people for a banquet or a 100-booth trade show. The Arena is located near the Veterans Memorial Coliseum and the Exhibition Hall. It's a visible part of Dane County's exhibition complex, making it a perfect location to showplace solar energy.

The electricity produced by the panels is fed into the local power system. It offsets power that would have been produced by power plants. Dane County is paid a percentage of the value of the electricity generated. MGE owns, operates and maintains the solar photovoltaic (PV) system.

For more information, call the MGE Home Energy Line at 252-7117 or visit mge.com/solar.

Project features

- Fixed-panel PV systems convert sunlight into electricity. They are mounted on the roof of the Arena building and provide renewable, nonpolluting energy.
- Output is affected by the amount of cloud cover, time of day and season of the year.

Technical description

- The entire system is called an array. The array consists of 16 modules, 4 ft x 6 ft each.
- Average annual energy production is 5,612 kilowatt-hours (kWh) per year. The average home in our area uses about 7,000 kWh per year.
- Year installed: 2000

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