

# Solar Parking Canopy – City of Madison Municipal Building

Energy use plays a big role in our community’s impact on the environment and our quality of life. Burning fossil fuels to produce electricity affects our air and water quality. As our use of energy grows, we need to find ways to reduce the impact.

Capturing energy produced by the sun is one option. Solar energy is clean: no emissions are released into the atmosphere. It also avoids the environmental effects of well drilling and mining.

The Solar Parking Canopy has been made possible through a partnership between the City of Madison and Madison Gas and Electric. Our objectives are to increase the visibility of solar energy and to provide data about the suitability for solar energy in our area.

The electricity produced by the panels is fed into the local power system. It offsets power that would have been produced by power plants. The City of Madison



is paid a percentage of the value of the electricity generated.

Madison is often called one of the most livable cities in the country. By working together, we can build on our high quality of life, protect our environment, create jobs and grow a healthy economy.

For more information, call the MGE Home Energy Line at 252-7117 or visit [mge.com/solar](http://mge.com/solar).

## Project features

- Building integrated. This system demonstrates how unobtrusive solar power can be when designed into a structure.
- Real-time system monitor. Many of the MGE solar systems, including this system, feed real-time data to the MGE Web site. Students and others can use the data to learn more about the value of solar energy. Visit [mge.com/solar](http://mge.com/solar) for more information.

## Technical description

- 1,525-square-foot photovoltaic array consists of 66 amorphous silicon modules that are laminated to the entire standing seam metal roof
- Rated at 8,500 watts
- Average annual energy production is 9,300 kilowatt-hours (kWh) (an average MGE residential customer uses 7,000 kWh per year)
- Four SMA inverters (one 1,800 watt and three 2,500 watt) convert the DC power to AC grid power