

ROBERT & CHERYL DREVLLOW

RESIDENCE

SOLAR PV

I chose to install the PV system myself because of Next Energy Solution's Ready-to-Install (RTI) option. During the installation of the system, Next Energy Solution (NES) staff was always available on site or remotely to answer the question I was having at the moment. I would have muddled through on my own but the confidence achieved through their experience was invaluable. NES was also willing to include my son's project in Marshfield.

Although I understood many of the aspects of solar system installations, I would not have proceeded without the efforts of Cheq Bay Renewables and Next Energy Solution. Those efforts reinforced my underlying motivations and guided and aided me throughout the entire process.

Robert Drevlow, co-owner



System overview

- Metal ground-mount Ready-to-Install PV installation
- Installed by owner, Robert Drevlow
- Grid-tied to Xcel Energy with net metering

Technical specs

- 5.4 kW dc consists of 20, 280-watt solar modules manufactured by Peimar
- Modules Model SG280P made in Italy
- single-phase system, 10 modules per string
- Inverted from DC to AC using Fronius Primo 6.0
- Fronius web-based monitoring
- Mount design and hardware by IronRidge of Hayward, CA. Piping sourced locally
- Estimated generation is 6900 kWh per year

Incentives

- 30% Federal Investment Tax Credit for renewable energy
- Focus on Energy Incentive Grant paid for 12% of the system

Costs

- Total cost including solar system and electrical: \$11,874
 - RTI system \$10,098, Mount \$1415, Electrical \$361
- Out of pocket costs after incentives: \$6,887
- Estimated payback of 7.5 years
- 25-year annualized internal rate of return: 13.6%

What is a Ready-to-Install (RTI) system?

An RTI, just like the name suggests, is a set of parts, blue prints and instructions so the owner can self-install the system, saving on labor costs. It is a trademark name and product of Next Energy Solution (NES) headquartered in Shell Lake, WI. A licensed electrician makes the final connections and NES oversees the project, inspects, and handles the interconnection with the utility company. The RTI system has made solar more affordable to many area farms and residences that have the necessary skills to take on a hands-on project.

Additional Highlights

- Robert Drevlow is a retired electrical engineer formally with CESA 10 and Xcel Energy and was able to install the electrical system
- Additional installation savings were realized by family and friends providing help with trenching and pipe-fitting.
- He has volunteered with Cheq Bay Renewables to provide energy efficiency services and help expand solar PV in our area. He is currently working with the Drummond School District.