

FEC Community

SOLAR GARDEN

November 18, 2011

Iowa's first community-owned solar garden began producing clean, renewable energy for Farmers Electric Cooperative (FEC) this month. The 13.8 kW solar installation, located on property at the FEC office in Frytown (rural Kalona) is unique because it is owned by individual members of the cooperative who receive a monthly credit on their electric bill for the power their solar module produces.

Community-owned solar gardens – gaining popularity in a few states – allow individuals an affordable way to invest in solar. FEC General Manager Warren McKenna says many co-op customers have expressed interest in solar, but either can't afford the upfront costs, or don't have adequate site conditions. With this community project, individually owned modules are installed on common arrays, with FEC providing mounts, transformers, insurance and labor.

FEC introduced its solar garden program last summer, offering twenty 230-watt solar modules to its members for \$250 each, a 50% savings. Response was overwhelming. The first twenty modules sold within one week, and as requests continued to come in, the FEC Board of Directors approved the introductory offer for an additional forty modules. The offer was limited to one module per customer, allowing 60 FEC members to participate.

With continued interest in the project and a downward trend in solar component prices, McKenna expects to expand the solar garden in the future. At current capacity, the solar garden will produce over 18,000 kWh per year, enough to power several homes. Module owners receive credit for this locally produced, renewable power at the co-op's retail rate of \$0.125/kWh.

To keep module owners involved in the community-based project and informed about solar power, owners receive regular e-mail updates from the co-op and will soon be able to track the solar garden's energy production in real-time via a web interface.



A 60-module, community-owned solar garden – with room for expansion – at Farmers Electric Cooperative, Frytown.

Modules – MAGE POWERTEC Plus 230-watt, purchased from Geode Energy, Danville; **Inverters** – SMA Sunny Boy; **Racking materials and assembly** – Gingerich Well, Kalona and Sharon Center Welding, Sharon Center; **Wiring materials** – Van Meter Industrial, Iowa City; **Inverter shed** – Martin's MiniBarns, Wellman.