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IS SOLAR ELECTRIC RIGHT FOR ME?

Solar In Michigan? Our long summer days and bright snowy conditions provide more solar energy that many residents realize. Solar electric is extremely convenient. Homes, RVs, Boats, remote sites, cabin systems, security lighting power are just a few examples of solar electric applications in our area.

| | System cost thsnds | Pybk yrs | Life yrs | Difficulty of installation |
|-------|--------------------|----------|----------|----------------------------|
| Solar | \$16-\$30 | 12-20* | 20-30** | Moderate-project level |

* based on current utility rates. **may require maintenance or replacement of system components.

What will I need?

- township(?), utility permits
- south facing roof top or
- unobstructed southern view
- conduit, AC hook up trencher possible

How Do I Start?

1. Contact your power company for your average annual monthly use. Solar Electric or PV systems are measured in **kilowatt hours per day**.
2. Review your electric providers requirements for hooking up a system.
3. Determine much of your average electrical use you want to put on your PV system.
4. Evaluate your use for reduction. Are you using compact fluorescent lighting? Identify electric heating applications.
5. Determine if you require a back up system that will operate during utility down time.
6. Contact us for a system design.

Sizing Your System The average home uses 12-18 kilowatt hours per day. Review your electric bill for average use and rates. Notice any 'penalty' rates you may be paying. Remember, you don't have to build your system all at once. Solar arrays are very modular and can be increased over time.



Mounting If you do not have south facing roof space, options such as top-of-pole mounts are available.

What Systems are the Most Popular? Currently, the most popular PV system in Michigan is the 2kw, pre-assembled grid tie system. With tax credits, these systems are within the price range of wind generated electric. But PV systems can be designed to fit any need.



battery backup system



Stand Alone power systems do not require any utility interconnect. These are ideas for remote commercial applications, cabins and building sites where utility power is not available. Stand alone systems can range from small dc powered lighting systems to industrial applications using 220v.

Hybrid systems consist of solar and wind electric. These are very popular in Michigan as it allows the equipment owner to maximize power production in varied weather conditions. Hybrid systems also ac

Dealing with the Power Company . You will need a permit to interconnect with the utility. Power companies have programs in place to allow you easy access to their lines. A submission package is required. Event Horizon provides application assistance and much of the required documentation. Be assured, all equipment and designs comply with safety requirements.

A **simple interconnect** allows your meter to 'spin backwards' when your system produces more electricity than you are consuming. Your meter must be able to run backwards for this configuration.

A **net metering interconnect** involves two meters, one for your production and one for the consumption. Under this arrangement, any excess electricity produced over the year would be refunded to you by the power company. As a rule, we do not recommend net metering as the incremental cost of the system does not justify the payback.

Installation Assistance. If you are one of our many do-it-yourself customers, you may enjoy installing your own system with our assistance. Grid tie systems are particularly suited to owner installation. If you prefer to have your system installed for you, we can arrange that also.

How Does Event Horizon Fit Into Your Renewable Energy Plans? For 10 years, Event Horizon Solar and Wind has helped Michigan residents realize their dream of independent power. We provide design, sales and customer service. We can install your equipment, with the help of some contractors, or we can provide the information you need to do your own installation.

To Store Or Not to Store? Solar may be used to charge batteries which replaces gas powered generators during blackouts. **Grid-Tie Systems** use the grid as the 'battery'. They are less costly but will not function during blackouts.



pre-assembled grid tie system

