



Solar Energy – Frequently Asked Questions

- 1. Does Solar Energy work in Michigan?** A new study from the National Renewable Energy Lab indicates that Michigan could get 45.9% of its current electricity sales from rooftop photovoltaic (PV) or solar electric systems.
- 2. Is Solar Energy expensive?** During the past five years the costs of PV systems have gone down more than 50%. A typical installation will pay for itself in 10-15 years and the PV owner will have free electricity for 15-20 years.
- 3. What if I move?** Maybe you won't be in your house for 30 years. A new study from The Appraisal Journal shows that homes with PV are sold at a premium. The average premium for all study areas is \$14,329, which is 3.7% of the average house sale price. This means if you move, you can recover your investment.
- 4. Are there any state or federal incentives?** There is a 30% federal tax credit available until Dec. 31, 2019. In 2020 it goes down to 26% and in 2021 it goes down to 22%. There is no federal tax credit in 2022. Go to www.dsireusa.org for details. There are no state incentives.
- 5. What is Net Metering** – Net metering is a state policy that allows you to get a bill credit for extra power that you might produce. Most of the power you generate is used on site at your home. But if you do produce more power than you can use, you give those electrons to your utility and they will give you a utility bill credit at the same rate that they charge you. Your PV system has to be 20 kW or less and you cannot have a PV system that would provide more power than you use on an annual basis.
- 6. How do I know if I have a good site for solar?** A southern orientation and little or no shading is best. PV systems produce approximately 10 watts per sq. ft. You can make a rough estimate of how big a system you could have on your roof or in your back yard.
- 7. What if I have a bad site?** If you don't have a good site, you could consider investing in a community solar project. Lansing Board of Water & Light (micommunitysolar.org) and Consumers Energy (www.consumersenergy.com/residential/renewable-energy/solar-gardens) have community solar programs. These programs let you lease a solar panel for 25 years and you get bill credits based on the electric production of your panel.
- 8. How do I find an installer?** GLREA has a business directory at www.glrea.org. Look under “About Us” and “Business Directory” for “Solar & Energy Efficiency Contractors.”
- 9. Where can I find additional information?** American Solar Energy Society (ases.org) web site has a resource library on technology, community, policy, etc.

Energy Resources

- **PV Watts** <http://pvwatts.nrel.gov/pvwatts.php> (determine your solar potential)
- **Carbon Calculator** <https://www.nature.org/greenliving/carboncalculator>
- **Appliance Worksheet**
<http://www.mycvec.com/assets/appliance-energy-usage-worksheet.pdf>
- **Utility**

Energy Rebates

- <https://www.consumersenergy.com/residential/save-money-and-energy/rebates>
- <https://www.lbwl.com/energysavers.aspx>

Solar/Renewable

- <https://www.consumersenergy.com/residential/renewable-energy/solar-gardens>
- <https://micommunitysolar.org/>

- **Efficient Appliances**

https://www.energystar.gov/index.cfm?c=partners.most_efficient_criteria

- **Net Zero Case Studies**

<http://cbe.berkeley.edu/centerline/wp-content/uploads/Paul-Schwer-ZNE-Oct-25-2017.pdf>

http://www.abettercity.org/docs-new/The_Commercial_Net_Zero_Energy_Building_Market_In_Boston.pdf

- **Organizations**

Meridian Energy Team: <http://recycle.meridian.mi.us/energy>

Great Lakes Renewable Energy Association: www.glrea.org

Michigan Energy Options: <http://michiganenergyoptions.org>

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