

FAQs

FAQs, cont.

What will it cost if I want to use solar panels to help provide electricity for my home?

Solar electricity costs about \$10 per installed watt (i.e. \$20,000 for 2 kW). This cost may be further reduced through state and local incentives (see inside panel for details).

What will it cost if I want to use solar energy to heat my water? How about my swimming pool?

A solar thermal water heating system can pay for itself in 12-15 years or less. These typically cost under \$6,000 and can reduce your monthly hot water heating bill anywhere by 50-100% depending on the size of your system and the season. For a swimming pool you can buy a pre-fabricated system for several hundred dollars. This too will pay for itself in a few years or less.

Can I add solar panels to my house?

Yes! The most effective systems are on homes with a south-facing roof and no shading from trees or other buildings.

Will my solar energy system only generate power during the summer months?

No, your solar energy system will produce energy whenever the sun shines. However, due to shortened days and weaker sunlight in the winter months, it will produce about fifty percent less during the winter than during the summer.

How will my solar energy system be affected by storms and snow?

If you add solar panels to your house, your homeowners insurance will extend coverage to them, just as it insures the rest of your household items. Nonetheless, you should take precautions against storm damage (e.g., sweep snow off collectors) and verify coverage with your insurance provider.

I am a renter, but would like to have a solar energy system installed on my home or office building. How can I convince my landlord it's a good investment?

You can start by presenting them with this brochure! Your landlord should also visit www.a2gov.org/energy for informational resources on how to find a local contractor, get a price quote, and install a solar energy system. There are a number of financial incentives that can help a landlord cover the cost of installing a solar energy system (see inside for details). Furthermore, the addition of a solar energy system to a rental property can also make it more attractive to potential renters since the utility bills will be lower.

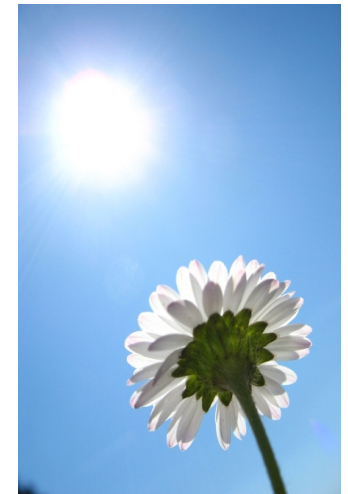
CITY OF ANN ARBOR ENERGY OFFICE

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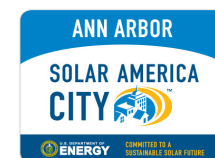
How to Go Solar in Ann Arbor

A Guide for Installing a Solar Energy System

City of Ann Arbor Energy Office



Some of the information included in this guide is sourced from: www.thesolarguide.com, the Canadian Renewable Energy Network (CanREN) www.nrcan.gc.ca, and the City of Ann Arbor Energy Office www.a2gov.org/energy.



A Guide for Installing a Solar Energy System

Why Go Solar?

1.) *The Solar Power you Use is Free!*

No matter how much you use, solar power is free to capture. The only expense is the upfront cost of installation.

2.) *It's Practical and Economical*

Solar energy can be integrated into existing electricity and heating systems to significantly reduce your energy bills. There are two primary types of solar: PV and solar thermal systems. There are ample financing incentives for solar, too. Visit www.dsireusa.org for detailed descriptions.

3.) *It Reduces your Carbon Footprint*

By installing a clean, green, solar energy system on your home or office building you can offset the fossil fuel used to generate conventional electricity and heating for the building. This will also help our community meet the Green Energy Challenge - a 20% reduction in greenhouse gas emissions below 2000 levels by 2015.

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Solar: Step-By-Step

Step One: Assess your Solar Potential

If you are within the City of Ann Arbor limits, visit www.a2gov.org/Mypropertyinformation/address.asp and enter your home address to see the solar potential of your building. If you are not in the City of Ann Arbor, check with the state's energy office (517.241.6228; www.michigan.gov/energyoffice) for assistance or find a local solar contractor to determine your solar potential. If your home is within an Historic District you must also contact the Historic Preservation Coordinator for further guidance (Jill Thacher 734.794.6265 x 42608).

Step Two: Choose the Size of your System

In order to determine the best size for your system, you should first review your electricity and/or heating bills for the last twelve months. It is necessary to look at your usage over the course of the year to see how your usage varies by season (expect up to 100% generation in the summer and 50% in winter). Keep in mind that most solar energy systems offset rather than replace all the electrical use for a building. Because of this, most residential systems are sized at 2 kilowatts (kW) or less. The size of the system you select will also be influenced by how much you've budgeted for the project. There are many online tools that can help you estimate the size and cost of your system. Check out www.coolerplanet.com, www.infinitepower.org, or the IMBY tool on the National Renewable Energy Laboratory website (www.nrel.gov/eis/analysis.html).



Step Three: Explore Financial Incentives



There are a number of financial incentives available for residential and commercial improvements. Visit www.dsireusa.org for information on federal and state financial incentives and descriptions of what kinds of projects qualify. Additionally, visit www.a2gov.org/energy for further details on financial incentives.

Step Four: Find a Contractor

A list of local contractors can be found at www.gleaa.org if you click on "Printable Business Directory". This PDF includes a variety of business contacts, including local contractors that can install a solar energy system on residential or commercial buildings. The contractors are required to obtain the necessary permits and adhere to all local laws and regulations. Do your best to locate contractors in your area and ask for price quotes for the installation of a solar energy system. Attempting to get multiple price quotes from contractors is a good idea, so that you can choose the right company for your project.

Step Five: Enjoy the Savings!

Watch as your energy bills decrease and keep an eye open for new renewable energy opportunities in Ann Arbor!

Photo of stacked Money courtesy of AMagill.