Solarize Grand Rapids

Solarize GR is a community-centered initiative to educate homeowners about photovoltaic (PV) solar power & coordinate a **BULK BUY DISCOUNT of up to 15%** with a local solar installer if you attend a workshop. Our participating solar installers will offer a tiered discount of 1% per signed contract (with a maximum discount of 15%) for all contracts that are generated by a Solarize workshop. The City of Grand Rapids facilitates the Solarize GR program as an action of the GR Climate Action & Adaptation Plan (CAAP) to build up our community's climate resiliency.

Why Buy Solar Now?

The costs of solar have come down significantly over the last decade and panel efficiency is better than ever. With the passage of the Inflation Reduction Act of 2022 **federal tax credits for solar were increased to 30%** for the next 10 years. This means that residents can install solar panels on their home with **up to 45% total discount on their installation** when combined with the bulk-buy savings realized through Solarize GR.

- Lower your energy bills
- Reduce carbon emissions to slow the effects of climate change
- Build your energy resiliency and reduce grid dependency
- Invest in Michigan jobs and local green energy industry
- Assist Grand Rapids in reaching its greenhouse gas emissions reduction goals

How can I participate?

To learn more or to sign up for a Solarize workshop, see the event information calendar on our website: grcity.us/solarize

Please contact knieschwitz@grand-rapids.mi.us for any questions about attending a workshop or to connect your solar energy company with the City of Grand Rapids Office of Sustainability

How much can I save on my solar installation?

Solarize participants can save up to 15%, depending on the number of households that sign contracts with the chosen installer following a workshop. In addition to the 30% federal tax credits for solar panels, recently increased as part of the Inflation Reduction Act of 2022, you can save **up to 45% total discount on your installation.**

SOLARIZE GR

CITY OF GRAND RAPIDS | Office of Sustainability

CAAP

I don't have a south facing roof- is that okay?

Yes! E/W facing panels are only ~15% less efficient than N/S facing panels, depending on the pitch of the roof. In most cases, the financial impact on your return on investment is fairly modest. Your solar installer will be the expert on siting your panels to maximize the solar potential of your installation to ensure you get the best return on investment possible.

Do I have to sign a contract? When do I have to sign a contract by?

No. You are not obligated to purchase solar if you attend a Solarize GR program. To receive the group-buy discount you need to sign a contract **within 30 days of the workshop.**

What if my roof is older?

Most installers recommend having **at least 5-7 years left on the life of your roof** for solar installation. If the roof will need to be replaced sooner than that, it is best to do it all at the same time. When a roof that has solar panels does need to be replaced, you will need to pay for the labor costs of removing and replacing the system.

Will solar panel installation damage my roof?

Solar panels installed properly **will not damage your roof.** They will add weight to the roof, which could be a factor if you have multiple layers of shingles. A roofer can evaluate your situation if this is the case. In fact, solar panels will reduce the amount of Sun exposure that degrades shingles over time and can extend the life of your roof.

What is the average cost of putting up a solar array?

Cost depends on many factors such as how much energy your household uses, how much sunshine your roof receives and its shape, the efficiency of the PV panels and brand of inverter. An average 7-kilowatt (kW) system might cost around $22,000 before federal tax credits and solarize discounts. This could be reduced to around $14 - $15,000 with the federal tax incentive and the discounts offered through the Solarize GR program.

Is financing available for solar?

Yes! All Solarize installers participate with Michigan Saves, a green bank that offers low-interest financing for energy efficiency upgrades and solar. In addition, some homeowners are taking advantage of the very low interest home equity loans currently available.

What is the average return on investment (ROI) time for solar?

The average ROI in the west Michigan area is around **8 to 12 years.** This can vary by several years, depending on the intensity of Sun exposure on your panels which is determined by the amount of shade and orientation of your roof.

Can I put solar panels on top of my garage?

Yes! Panels that power your house can be placed on an adjacent structure such as a detached garage if this is the most suitable roof. Garage solar can be used to charge an electric vehicle.

Can solar panels be ground-mounted?

Yes! Your installer can help determine the best set-up for you. In Grand Rapids, ground mounts cannot be in the front yard due to our current zoning ordinances, but they are allowed in back or side yards.

What about a flat roof? Metal roof? Slate roof?

Flat roofs are not a problem, nor are metal roofs, usually. Slate roofs can be more difficult. It's best to meet with a solar installer and get recommendations based on your specific situation.

Are there restrictions in Historic Districts?

There are often restrictions, and this varies by municipality. Frequently, an additional permit must be submitted for projects in a Historic District to gain approval. In Grand Rapids, there are requirements such as "all panels shall have tempered, non-reflective surfaces." Most installers are well-versed in how to install in historic districts. You can check out this guide if you live in a Historic District in the City of Grand Rapids and are interested in solar for your house.

What about batteries? Do I need one?

Batteries are optional and will increase your up-front cost. Your solar array is "grid-tied" most of the time, which means it feeds excess power you generate into the grid, and then you receive energy back from the grid when you are not generating (e.g. at night). A battery enables you to store your excess energy on site and use it later in the evening, instead of purchasing it back from the utility at a higher rate than what you sell it to them for.

In addition, a battery can act as a back-up generator, helping to power your home when the power goes out. Your grid-tied system is automatically shut down in a power outage due to safety concerns for line workers. If you have a battery back-up, the system switches to this in a power outage. Finally, a battery can enable you to install less panels overall, as it helps you utilize more of the electricity you produce when you need it.

Can I add to my solar system over time?

Yes! If you anticipate adding to your system in the future (e.g. to accommodate an electric vehicle purchase), make sure you discuss this with your installer so that the system can be designed to allow growth over time.

What about community solar? Is this something I can participate in?

No, currently the laws in Michigan do not permit direct "community solar" which is the sharing of power generated by solar panels across property lines (i.e. sharing one solar array with multiple houses). Currently, any excess power generated by your solar panels will be sold back to Consumers Energy for the electricity grid or it can be stored in your battery on-site.

Do all installers offer around the same prices?

There is some variability in pricing, based on things such as the type of panels and inverters used by the installer, the complexity of the project (e.g. trenching, multiple roof areas, EV chargers,

etc.), product and service warrantees offered, the size and scope of the company, and whether the installer utilizes subcontractors or provides their services in-house.

The size of the system is also a factor, with smaller sized systems usually having higher cost per watt. If interested, talk to your contractor to find out more about what's included in their pricing models. **The average "price per watt" can be anywhere from $2.70/watt to $3.80/watt** for most roof-mounted systems, depending on those factors detailed above. In 2004, the average price per watt was $10.28 according to the Solar Energy Industry of America.

Can I get multiple quotes from other companies besides the chosen installer?

Yes, you can certainly choose to get additional bids after the Solarize workshop. The 15% group-buy discount is only offered by the installer that participates in the Solarize workshop.

How are the Solarize installers chosen?

Participation in the program is offered to all area solar installers who participate with Michigan Saves- which is an independent green bank and accreditation service. Michigan Saves vets solar energy installers to ensure licenses, registrations and insurance are up to date. The contractors participating have all agreed to pre-negotiated tiered discounts and have signed on as Solarize contractors.

For each Solarize workshop, the host will receive competitive bids from multiple solar energy installers and choose one to work with based on any number of factors, just as you would choose any contractor for your home. Currently, the Grand Rapids Office of Sustainability is assuming the role of the "host" and is coordinating each Solarize GR workshop as we pilot this initiative in our community.

What about Green Energy programs provided by utilities? Are these large-scale solar farms better for our communities' energy demand than my panels?

No. The Green Energy program from Consumer's Energy allows customers to purchase solar energy that is generated by large-scale solar farms around the state of Michigan. These "solar blocks" are available for purchase around $16 per kW per month. At the end of the month, you receive credit for each kW of energy purchased ($6.36 per kW in 2024).

Energy from renewable sources is now cheaper to produce than fossil fuel-based sources. But green energy programs often include *an enrollment fee* for consumers to buy energy produced by solar farms. Additionally, Utilities like Consumers Energy are *required* by the Michigan Public Service Commission to produce a certain amount of their energy via renewable sources. This means that *paying extra* into a green energy program realizes *a higher profit margin for the Utility* and, in most cases, *does not* incentivize green energy infrastructure that would not already be built per the State minimums.