Residential Solar

Why it can be a great option…(or not).

June 9th 2026

Presented by:
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Retired Physical Science Educator, Solar Consultant at Lifestyle Solar

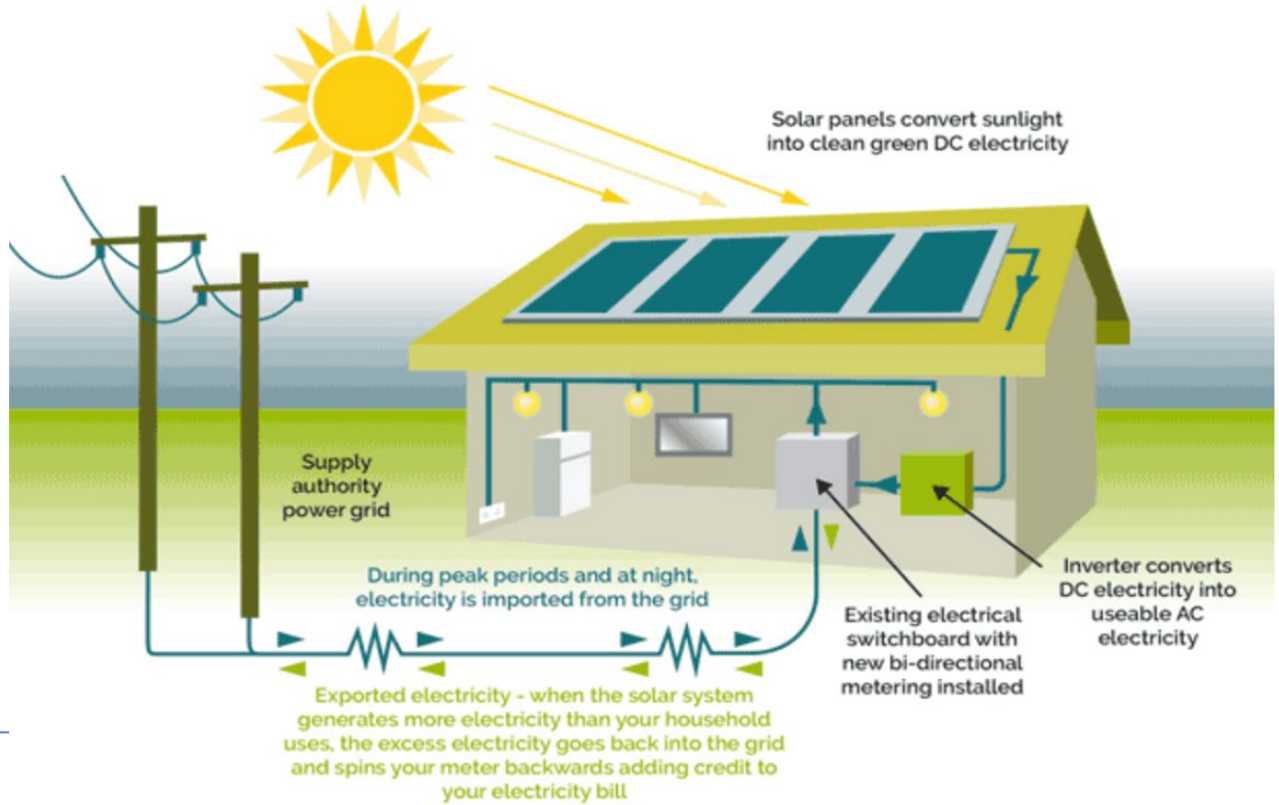
Quick Bio

- Former 33 Year Physical Science Educator, Science Department Chair and Coach at East Pennsboro ASD
  - Retired from teaching - June 2021

- Homeowner with a residential solar array that was installed in 2013
- Solar Consultant with Lifestyle Solar
  - Started current position in July 2021

(Our Home)

Solar Energy - How it works… (quickly)



Designing a system

Modules

Hyundai 440W (x20)

Inverter

Enphase Energy
ENPHASE ENERGY
IQ8HC-72-M-DOM-US
@240 VAC(x20)

System Size

8.8 kW

Estimated Yearly Production

11,377 kWh

SYSTEM DETAILS

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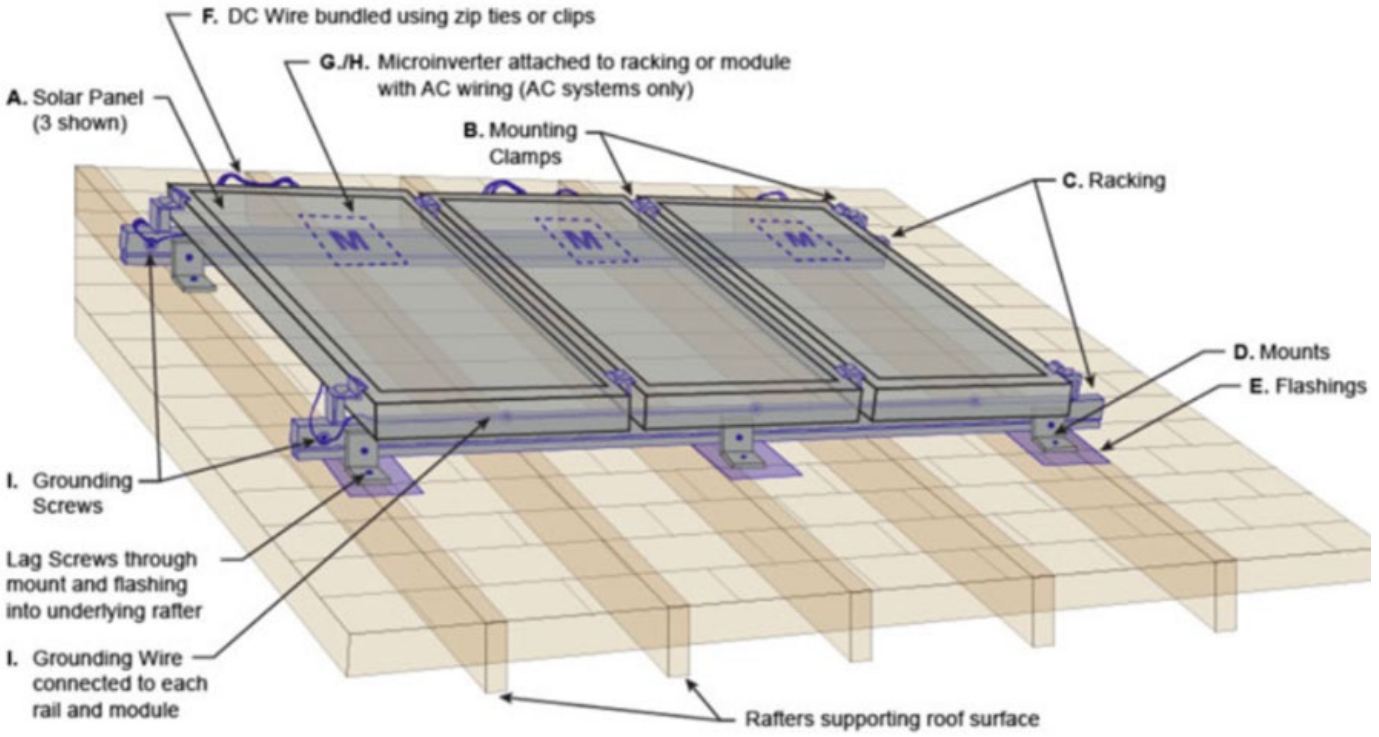
How is the system placed on the roof?

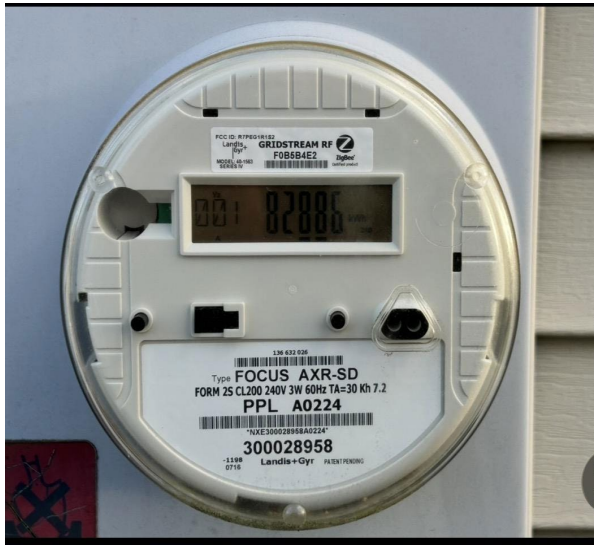
Wind ratings in PA are required at 110-115 mph wind speeds.

Lifestyle solar 140-160 mph wind ratings.

Most installers exceed PA and local requirements.

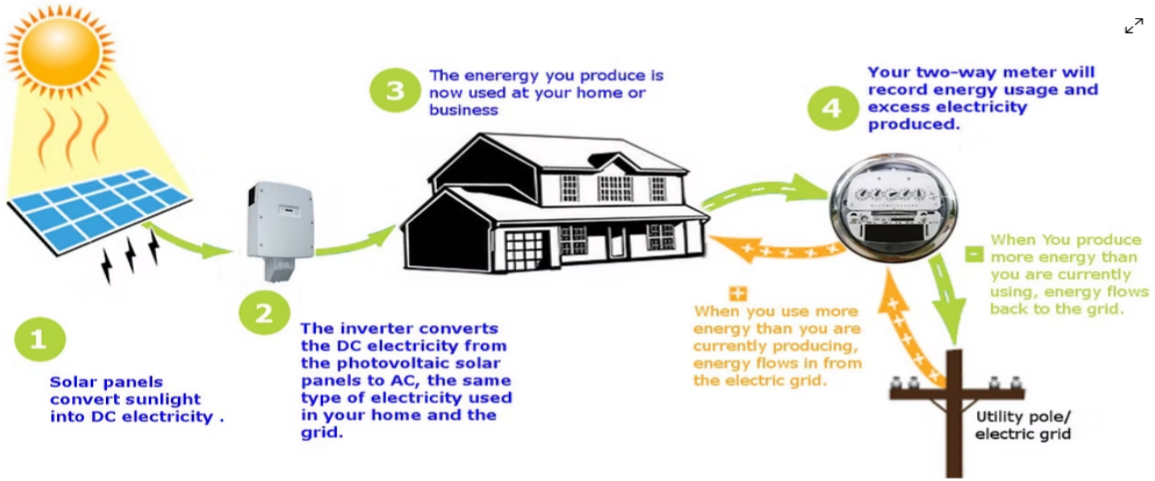


Net Metering in Pennsylvania



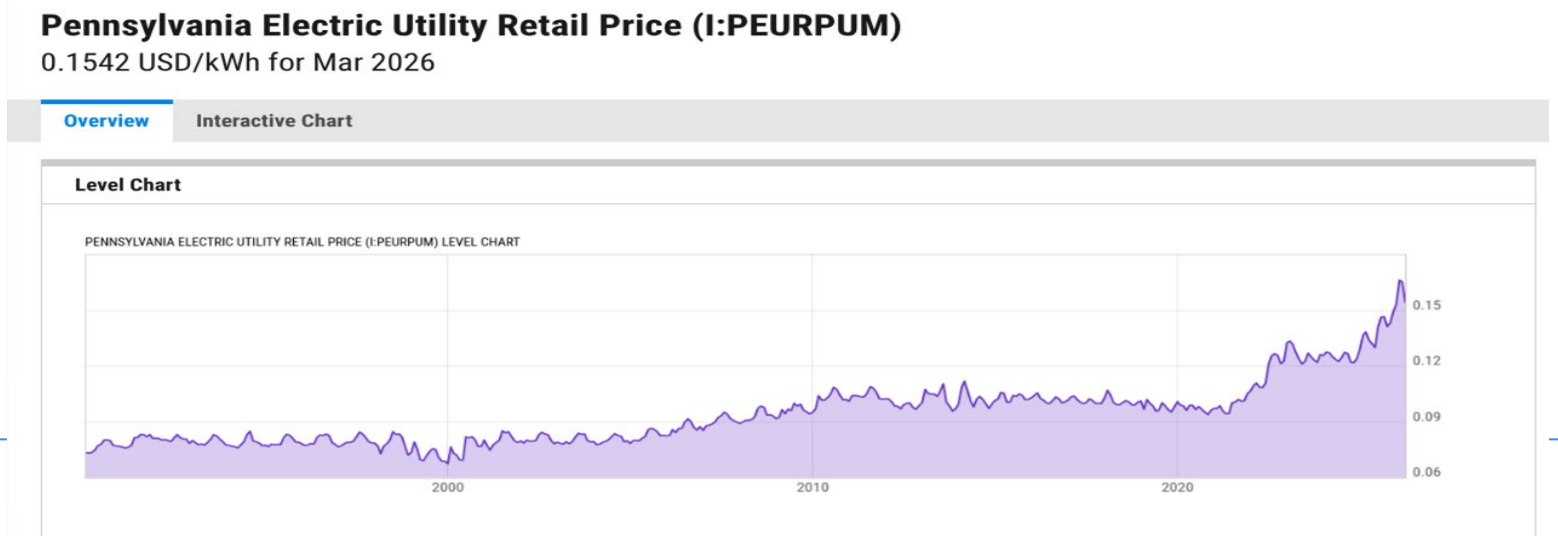
Benefits of Net Metering ✅

- **Lower Energy Bills** 💸 – Many Pennsylvania homeowners reduce their utility costs by up to 90% with net metering.
- **Improved Return on Investment (ROI)** 📈 – Net metering accelerates the payback period for your solar system by ensuring that all the energy you produce is put to good use.
- **Alternative to Batteries** 🔋 – Net metering acts like a virtual battery, storing your excess energy in the form of credits instead of requiring expensive physical storage.



Why Solar?

- Statewide, Pennsylvania residential electricity bills have risen at an average of 10% to 15% per year. Driven by grid investments and surging natural gas and capacity costs, all-in residential rates have increased by roughly 70% since 2020.



Why Solar?

2. Solar Array Decreasing Cost per kW

- Panel efficiency and reliability continue to improve while the cost per kW continues to decline.

Excess Production Payback in Pennsylvania

Key Details on Electric Solar Compensation:

- **Annual True-Up (April or May):** If your solar system produces more electricity than you use over the course of the year, the utility will pay you for the excess kilowatt-hours (kWh) remaining in your account at the end of the April or May billing cycle.
- **Compensation Rate:** Excess electricity is paid out at the utilities "Price to Compare" (PTC) rate, which is the supply-only portion of your bill. This rate has recently ranged from 7.5 cents per kWh (2020) to 12.953 cents per kWh (current).
- **Monthly Credits:** During the year, if your system produces more energy than you use in a given month, you receive a 1:1 credit for every kWh, which rolls over to reduce future bills.

Why is solar still a viable option for many?

2013 Optimal System (34 panels)

Modules

240W (x34)

Inverter

Enphase Energy

System Size

8.5 kW

Estimated Yearly Production

10,000 kWh

2026 Optimal System (20 panels)

Modules

Hyundai 440W (x20)

Inverter

Enphase Energy
ENPHASE ENERGY
IQ8HC-72-M-DOM-US
@240 VAC(x20)

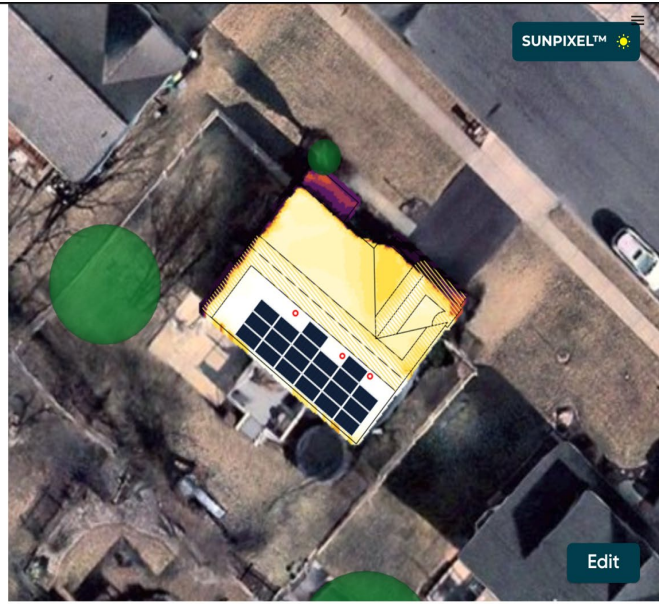
System Size

8.8 kW

Estimated Yearly Production

11,377 kWh

SYSTEM DETAILS



Fewer panels, more power production, similar overall cost…

Methods of Acquiring Solar Arrays

- Cash or Self Financing
  - While previously a great option for those who could afford it, the elimination of the tax credits limits this option currently. (Qualifies for SREC payments)

- Financing
  - Current interest rates and tax credit changes have limited this option. A significant advantage to this method is a locked in rate for the entirety of the financing period. (Generally 25 years)
    (Qualifies for SREC payments)

- Power Purchase Agreements (PPA)
  - By far the most popular option for most homeowners currently. This option offers a full warranty for the system, no down payment, and savings starting in year one with price controlled for the entirety of the agreement. If a homeowner chooses to sell their property, these agreements are transferable.
    (Does not qualify the homeowner for SREC payments)

Questions?

Contact Information

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