



HOW TO USE NREL'S PVWATTS® CALCULATOR TO ASSESS SOLAR VIABILITY

The PVWatts Calculator is a tool designed by the National Renewable Energy Laboratory, or NREL, to help individuals interested in installing solar panels. Customers can use this tool to input specific data about their potential site and receive energy-production estimates to help them decide on the right size, location and configuration of their solar system.

Who's NREL? NREL is a government-owned facility in Golden, CO funded through the US Department of Energy. NREL specializes in renewable energy and energy efficiency research and has been a leader in the sector for over 20 years. NREL developed the PVWatts Calculator in collaboration with the Environmental Protection Agency as part of its **RE-Powering America's Land** initiative.

LES frequently works with organizations such as NREL to ensure local customers get the absolute best service with advice from the most qualified people possible.

1. Using your preferred internet browser, go to pvwatts.nrel.gov.
2. Input the address of the location you would like to assess for solar potential.
3. Click "GO."
4. Confirm location in the Resource Data Map.
 - **Using data obtained in partnership with the National Weather Service and the US Government, NREL tracks daily kilowatt-hours of average solar potential across the globe.**
5. Click "Go to system information."
6. Confirm or modify DC System Size in kilowatts.
7. Confirm Module Type.
8. Confirm Array Type.
9. Confirm Tilt.
 - **Based on NREL data the tool will automatically populate this field with the optimal tilt degree. Lancaster County's optimal tilt degree is 20 degrees.**
10. Confirm Azimuth.
 - **For a fixed array, the azimuth angle is the angle clockwise from true north, describing the direction the array faces.**

N – 0°	S – 180°
NE – 45°	SW – 225°
E – 90°	W – 270°
SE – 135°	NW – 315°
11. Under "Retail Electricity Rate," confirm your rate information is correct.
 - **If you're not sure what your electricity rate is, go to LES.com/rates or call LES at 402.475.4211 We're happy to help.**
12. Click "Go to PVWatts results."
 - **From here, you will see the results for your simulated system based on the data you input. These results are broken out by month, as well as totaled annually.**

Now that you know how to use the NREL PVWatts Calculator tool, play around with it! The whole point of the calculator is to adjust the variables until you find your optimal configuration.

As you consider solar, and what type of investment is right for you, please don't hesitate to call your community's public power utility. LES has local experts ready to assist you and give you the facts you need to decide how you want to invest in solar. LES.com/solar