

Justin Arneson Madison, WI Solar Energy Consultant

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Helped 400 property owners make the switch to solar including businesses, non-profits, and homeowners

Outside of work I usually like to ski, hike, and golf!





AGENDA

- About All Energy Solar
- Why Solar Power
- Solar Incentives
- Solar Installation Basics
- Options to Pay for Solar











- Family-owned and profitable since 2009
- 1,350+ reviews with 4.9/5 star ratings
- 7,000+ homes and businesses installed
- 240+ employees with healthcare and benefits
- 40% of customers come through our referral program



All Energy Solar Overview



Why Solar Power? Common Objectives

save money

- Why Solar Now?
- Establishing Goals
- How to pay for electricity: Utility vs Solar

emergency backup power 12%







Solar Incentives in Wisconsin





Wisconsin Solar Incentives

- 30% solar federal tax credit
- Solar panels are exempt from state sales tax
- Focus on Energy Wisconsin Rebates
- Net Metering

The Inflation Reduction Act of 2022

Impact on Solar Customers

- Solar Tax Credit for 2022 was 26% of the total cost and it was expected to fall to 22%, now it's 30%
- Solar *with* battery storage or EV charger qualify
- Standalone Batteries of 5kw or larger qualify







The Inflation Reduction Act of 2022

Impact on U.S. Solar Industry

- The IRA will lead to 70% more solar deployment in the next decade than without it
- Incentivized USA solar component manufacturing
- Industry employment will more than double, from 255,000 today to 538,000 by 2032
- Solar manufacturing jobs will swell over 100,000







Net Metering

Wisconsin Net Metering

- Not all states have solar net metering
- Customers of investor-owned utilities and municipal utilities may net meter
- Rates, rules and policies vary by utility
- 47 states have proposed changes to net metering that could reduce its availability

Limit and reduce energy costs with solar and net metering







AGENDA

About All Energy Solar



Solar Incentives

- Solar Installation Basics
- Options to Pay for Solar







Solar Basics: Solar Array

A solar array starts with photovoltaic (PV) panels, which are then grouped together. This group of solar panels is called an array.

Your solar consultant may use this term when he or she discusses your energy needs and how many solar panels (the size of your array) you need to power your home.







Solar Basics: Inverter

Inverters convert direct current (DC) electricity to alternating current (AC), either for stand-alone systems or to supply power to an electricity grid.

Inverters are built to last, though their installation location and the energy load they convert influences lifespan.

All Energy Solar typically uses microinverters due to their ability to adjust during different weather and shading conditions.







Solar Basics: Monitoring

Monitoring software operates through a connection with your solar panels' inverters. As they convert energy from DC to AC, information is gathered and recorded to allow you to check in on each individual panel's production, output, and performance via smartphone, tablet, or laptop.

According to many All Energy Solar customers, monitoring energy production is very satisfying.



Solar Basics: Battery

A **battery** stores energy produced by solar panels and discharges the power during the evening or an emergency power outage.

Batteries are an optional feature for solar arrays, though more people chose to include them these days.

A battery can be added to your system at a later date should you choose to wait.







<u>eBook: Energy Storage + Solar Power</u>





AGENDA

About All Energy Solar Why Solar Power The IRA & Solar Incentives Grid Congestion Solar Essentials How to Pay for Solar Q & A Session







Residential Example

Initial Cost 30% Federal Investment Tax Credit Focus on Energy Rebate

Cost After Incentives

Key Tax Advantages:

30% Investment Tax Credit can be "banked" towards more profitable years. This should not be considered legal or financial advice, please be sure to consult a tax professional when filing.



\$25,000 System

\$ 25,000
\$ <u>7,500
\$ 500</u>



\$ 17,000



How to Pay for Solar

	Low Interest Solar Loan	Credit Union or Bank Loan	Cash Purchase
Why Some Customers Like It	 Least impact to your cash flow & rainy-day funds Easy process to get approved Lien placed against equipment instead of your property 	 Lower price per watt due to lack of admin fee Flexibility to pay loan off early to avoid impact of interest charges AND administration fee Tax credit stays with you 	 No interest, no monthly payments, no admin fee Peace of mind of being debt-free from Day 1 Buy energy in bulk at a discount
Why Other Customers Don't Like It	 Higher price per watt due to administration fee Cost of admin fee is incurred even if you choose to pay loan off early 	 Modest impact to your cash flow More complicated to get approved Requires home equity 	 Investment level can be prohibitive Loans allow you to make money on your cash elsewhere







The All Energy Solar Proven Process











Questions?