

Rooftop Solar in Wisconsin

Myth vs Fact

Myth

Doesn't rooftop solar shift costs to non-solar customers?

Is Wisconsin really the only state that doesn't have third-party financing solutions?

What about what happened in Texas?

Fact

Rooftop solar located on businesses and homes provides benefits to all ratepayers. These benefits are often worth more than the credits that customers receive for day-to-day excess solar generation.¹

Rooftop solar penetration levels are far too low to result in any discernible negative effect on retail electricity prices.² Generally, any concerns about cost shifts are unwarranted if rooftop solar penetration is less than 10%.³ Wisconsin has a long way to go, as it is projected to hit less than 2% rooftop solar penetration by 2030.⁴

No other state has affirmatively denied ALL third-party financing options for businesses and citizens.⁵ At least 28 states expressly allow third-party financing, while others remain silent. A select few (FL, MS, NC, SC) may restrict power purchase agreements, but they explicitly allow solar leasing as an option.⁶

In Wisconsin, outdated state statutes, costly legal challenges, and in-action to clarify third-party financing as a solution have resulted in a de facto ban on third-party financing. Third-party financing has allowed hundreds of thousands of businesses, non-profits, and families to manage and save on energy bills.⁷

The Texas freeze in February 2021 left over 10 million people without electricity, and has been used as a reason why policy clarification for third-party financing of customer-sited solar is a bad idea. In reality, the exact opposite is true.

All major large generation fuel sources underperformed against expectations during the incident, except for rooftop solar and storage. Thousands of Texas families with rooftop solar and batteries powered through grid-wide blackouts, keeping their families warm and providing essential services. Backup power provided by home solar, paired with batteries, kept power on for multiple days.

These storms and outage events across the U.S. increase demand for innovative solutions such as customer-sited generation and backup power. By increasing access to rooftop solar and battery back-up power, third-party financing will make Wisconsin businesses more competitive and families safer.

1 Frontier Group, Value of Rooftop Solar Power, 2015. environmentamerica.org/sites/environment/files/reports/EA_shiningrewards_print.pdf

2 Lawrence Berkeley National Lab, 2017. <https://emp.lbl.gov/publications/putting-potential-rate-impacts>

3 As a % of total retail electricity sales - Putting Rate Impacts into Context, LBNL 2018. https://eta-publications.lbl.gov/sites/default/files/lbnl_webinar_briefing.pdf

4 Putting Rate Impacts into Context, LBNL 2018. https://eta-publications.lbl.gov/sites/default/files/lbnl_webinar_briefing.pdf

5 DSIRE, 2019. <https://www.dsireusa.org/resources/detailed-summary-maps/>

6 Id.

7 Institute for Local Self-Reliance, 2018. <https://ilsr.org/states-agree-third-party-ownership-enables-distributed-solar-but-whats-next/>



Myth

Fact

Won't third-party financing lead to deregulation?

Third-party financing of rooftop solar is not a threat to regulation, nor does it signal a move towards deregulation. Nearly a dozen states with regulated electricity markets have expressly allowed third-party financing of some sort with no resulting deregulation.⁸

Rooftop solar is customer-sited, located behind the utility meter and on private property. Third-party financing of private solar is not unlike a home equity loan from a financial institution or a car loan for your vehicle. Solar equipment should not be treated differently than a gas-fired generator for lease from a local hardware store. Critically, private financing options for private property should not be blocked by ambiguous laws.

Rooftop solar is expensive and inefficient compared to other options.

Comparing the two types of solar only on cost to generate electricity at the point of generation ignores the value of distributed solar to the grid. Rooftop solar has many benefits for the electric grid, resulting in long-term savings for all. Rooftop solar can lower peak demand, on those 95 and sunny days, potentially cutting the need for expensive investment in power plants across the grid. This can save ALL ratepayers money.

The grid's wires, poles, substations, and meters are made stronger, more efficient, and more resilient at a lower cost to ratepayers.

In fact, in an effort to transition to a clean energy grid, leveraging expanded rooftop solar and storage can save ratepayers nationally \$473 billion by 2050 compared to a clean electricity grid that doesn't utilize and expand rooftop solar and storage.⁹

All the studies cited are national, isn't Wisconsin different? Is there no Wisconsin study?

The only study conducted in Wisconsin related to the value of rooftop solar was conducted by We Energies in 2009. The value of energy was calculated to be about \$0.15 per kWh over the PV system's 30-year lifetime, which is higher than the retail rate for power, without even considering capacity benefits.¹⁰

While this study is more than 10 years old and the results may be different today, it is recognized locally generated solar energy has a value well above the average electricity rate.

Utilities do not get any payments from rooftop solar customers while still needing to maintain the grid.

Solar customers are still required to pay monthly fixed charges on utility bills, just like every other customer. Residential fixed bill charges on bills range from \$15-\$21 a month throughout Wisconsin, regardless of the amount of energy used. These fees cannot be avoided by generating your own solar, and go to cover costs to maintain the grid.

⁸ AR, GA, NC, NM, SC, WV have passed affirmative legislation. CO, FL, IA, MI and OK have approved through agency action.

⁹ Vibrant Clean Energy, 2020. <https://www.localsolarforall.org/roadmap>

¹⁰ http://psc.wi.gov/apps35/ERF_view/viewdoc.aspx?docid=213884, page ES-9, Conclusions, bullet #2: "Value per unit of energy was calculated to be about \$0.15 per kWh over the PV system's 30-year lifetime."

Myth

Fact

Don't the utilities do this already?

The Wisconsin PSC has allowed investor-owned utilities the ability to offer a variety of solar programs. Utilities offer: tariff programs that charge additional fees to buy energy from green sources; rider programs for businesses to buy energy from green sources; "community" solar programs that have a high upfront costs to participate or cost consumers more; and rent-a-roof programs where solar panels are installed on business rooftops. While located on business property, rent-a-roof programs only provide a lease fee to the host and the host does not receive full benefit of the energy offset from a private investment. Additionally, this creates an unlevel playing field, disallowing private competitive small business solar providers from employing a business model widely used in states around the country and even utilized by utilities here in our state.

Without clarity in state law, Wisconsin businesses and families are stuck paying a large upfront bill, or spending more money with their utility to access renewable energy.

Some say only rich people benefit from rooftop solar while hurting poor families who cannot afford it.

Upfront costs are the number one barrier to installing rooftop solar. Having access to financing systems that limit upfront costs of solar expands access to more households and businesses, providing a valuable tool to manage and lower energy bills, rich or poor.

Solar leasing has increased solar adoption among low and moderate income households and has driven more installations into previously under-served low-income communities.¹¹

Third-party owned solar creates more of a risk for businesses and families.

Third-party financing has emerged as one of the most popular, standard, and effective methods of solar financing for businesses, households, non-profits, and governments to realize the benefits of customer-sited solar throughout the country.

Third-party financing removes traditional, upfront barriers such as installation or maintenance costs that prevent adoption of solar by those who cannot afford direct ownership. While agreements differ, the majority of third-party financed solar contracts include critical warranties, part replacements, monitoring and performance guarantees of the system. Required disclosures and consumer protection provisions can ensure clear understanding of contract terms and responsibilities.

Third-party solar is a dated concept.

Today, many groups see the savings and benefits of customer-sited rooftop solar. In other states, small family farmers, local businesses, churches, schools, homes, and large corporations all enjoy the savings and flexibility third-party financed solar offers. Wisconsin employers are already stating their position in support of third-party financing at the PSC, knowing how this option can expand jobs and save their businesses money.¹²

The Bottom Line

Rooftop solar provides a benefit to all Wisconsinites. The debate around compensation of solar and many of the myths above is irrelevant to how a business or church or homeowner chooses to finance their solar system.

Legislative clarity is essential to ensure energy choice through a competitive, private, and consumer oriented solar market.



¹¹ Lawrence Berkeley National Lab, 2020. <https://newscenter.lbl.gov/2020/11/09/how-to-accelerate-solar-adoption-for-the-underserved/>

¹² Eagle Point Docket WI PSC, 2021. <https://apps.psc.wi.gov/ERF/ERFsearch/content/searchResult.aspx?UTIL=9300&CASE=DR&SEQ=104&START=none&END=none&TYPE=COM&SERVICE=none&KEY=none&NON=N>

<https://apps.psc.wi.gov/ERF/ERFsearch/content/searchResult.aspx?UTIL=9300&CASE=DR&SEQ=104&START=none&END=none&TYPE=COM&SERVICE=none&KEY=none&NON=N>