

Wisconsin Solar and Agriculture

Solar and Prime Farmland

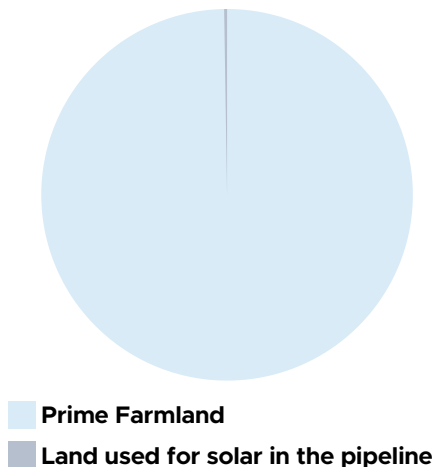
Wisconsin is home to about 14.3 million acres of farmland, about 6.2 million acres of which are considered “prime.”¹

- Wind and solar are compatible and profitable ways farmers can grow their business as the stewards of their own land.
- Limiting use of prime farmland is unnecessary, and doing so infringes upon private property rights. All possible sites should be evaluated to best serve the community, the environment and our clean energy needs.

For Perspective...

There are 1,882 MW of solar under construction and in advanced development across Wisconsin², requiring approximately 16,000 acres of land. If every solar farm were sited on prime farmland, only 0.25% of Wisconsin's prime farmland would be used.

Wisconsin Prime Farmland¹



Prime Farmland

Land used for solar in the pipeline

Solar Land Use

Land used for solar remains versatile, coexisting with a variety of conservation efforts.

- An average of between 7 and 10 acres of land are required to produce one megawatt (MW) of electricity from solar energy.³
- Some community garden and utility-scale solar projects pair beehives with pollinator-friendly native plants and flowers in and around the project area.
- Pollinator-friendly solar can recharge groundwater and reduce soil erosion, at the same time increasing yield of pollinator-dependent crops, such as soybeans.⁴

Agrivoltaics: A Value-Added Farmer Friendly Solution

Combining traditional farming and solar technology is called agrivoltaics.⁵

Agrivoltaics have a wide range of benefits for farmers, both immediate and long-term. Altogether, conservation and vegetation plans amidst renewables lead to healthier soil, improved water storage and filtration, sequestration of carbon, erosion reduction, habitat preservation and lower local energy costs.⁶

prime·farm·land

NOUN

Land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops and is available for these uses.

Property Rights

A landowner has the right to make decisions about how their land is used.

Renewables...

- Help diversify income portfolios.
- Are harvested all year long.
- Are drought-proof, high-yield land outputs that can produce for decades at a time without expensive inputs like fertilizers, pesticides, and irrigation.

American Clean Power Estimates

**WI Farmers, Ranchers,
& Landowners Receive**

\$2.7 Million
in annual land-lease
payments from solar

Crop	Production Value per 5,000 Acres	Harvested Acreage Actual
Cranberries	\$40,136,700	20,600
Potatoes	\$27,950,000	69,000
Cucumbers	\$13,910,000	6,600
Solar	\$5,402,369	5,000*
Sweet Corn	\$5,049,000	57,500
Corn	\$4,680,000	3,950,000
Beans	\$4,496,500	60,100
Soybeans	\$3,492,500	2,100,000
Peas	\$3,458,000	27,100
Wheat	\$2,343,750	290,000
Hay	\$2,288,000	1,230,000
Rye	\$1,404,250	270,000
Oats	\$1,212,100	175,000
Barley	\$1,192,500	15,000

*Approximate

Current Solar Crop Values in Wisconsin

Wisconsin has 560 MW² of solar, occupying approximately 5,000 acres of land.

- In 2021, WI solar projects generated over 93,000 MWh of electricity.⁷
- At a value of \$58.08 per MWh,⁸ Wisconsin's existing solar footprint has an annual production value of nearly \$5.5 million.

Sources

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4. Siegner, K. et al. 2019. "Maximizing Land Use Benefits from Utility-Scale Solar," Yale Center for Business and the Environment. <https://cbey.yale.edu/research/maximizing-land-use-benefits-from-utility-scale-solar>
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7. EIA, 2021. "State Electricity Profiles." <https://www.eia.gov/electricity/state/wisconsin/>
8. Calculated average MISO wholesale price of electricity based on EIA 2021 data.

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