

Wisconsin Solar and Agriculture

Solar and Prime Farmland

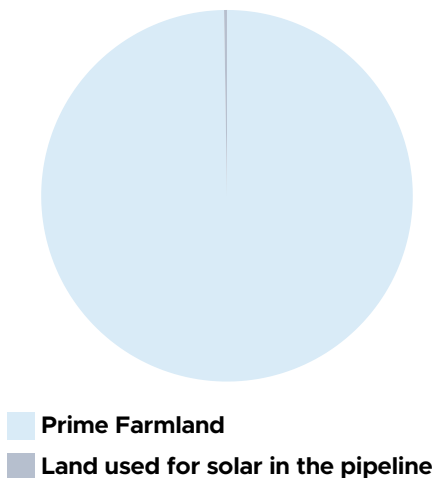
Wisconsin is home to about 13.8 million acres of farmland, about 6.5 million acres of which are considered “prime.”¹

- 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 1,773 MW of solar under construction and in advanced development across Wisconsin,² requiring approximately 15,000 acres of land. If every solar farm were sited on prime farmland, less than 0.25% of Wisconsin's prime farmland would be used.

Wisconsin Prime Farmland¹



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.

Crop	Production Value per 20,000 Acres	Harvested Acreage
Potatoes	\$125,610,000	66,000
Solar	\$62,986,156	20,000*
Cucumbers	\$46,560,000	6,800
Sweet Corn	\$23,991,000	52,000
Beans	\$15,984,000	47,600
Corn (Grain)	\$15,312,000	2,960,000
Peas	\$12,151,000	20,200
Soybeans	\$9,600,000	2,120,000
Hay	\$8,968,800	1,290,000
Wheat	\$7,790,000	220,000
Barley	\$5,265,000	6,000
Oats	\$4,422,000	64,000
Rye	\$4,056,000	30,000

*Approximate
 Note: Crop values calculated using data from USDA NASS

American Clean Power estimates
**WI farmers, ranchers,
 & landowners receive**

\$9.9 Million

**in annual land-lease
 payments from solar.**

Current Solar Crop Values in Wisconsin

Wisconsin has nearly 2,500 MW² of solar, occupying approximately 20,000 acres of land.

- In 2023, WI solar projects generated over 1.27 million MWh of electricity.⁷
- At a value of \$49.60 per MWh,⁸ Wisconsin's existing solar footprint has an annual production value of nearly \$63 million.

Our Calculations

SOLAR

MWh * Avg price of electricity = Production Value

CROPS

Yield per acre * 20,000 = Yield per 20,000 acres

Yield per 20,000 acres * Price per unit = Production Value

Sources

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