CLEAN GRID ALLIANCE

FACT SHEET

Iowa Solar and Agriculture

Solar and Prime Farmland

Iowa is home to about 30 million acres[1] of farmland, about 17.5 million acres[2] of which are considered "prime."

- Solar farms are developed on prime farmland for a variety of reasons, including access to the electric grid.
- All possible sites should be evaluated to best serve the landowner, the community, and our energy needs.

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.

Solar vs. Prime Farmland

Total Prime Farmland[2]

Land for Solar Projects in the Queue

For Solar Land Use Perspective...

One megawatt (MW) of utility-scale solar power typically requires between 7-10 acres of land.[4]

Iowa has about 3,806 MW of solar in the MISO Queue[3] which would require ≈ 32,351 acres of land.

If every solar project in the queue was sited exclusively on prime farmland, it would only occupy 0.15% - 0.2% of land considered "prime."

Property Rights & Financial Benefits

A landowner should have the right to make decisions about how their land is used—and benefit from it.

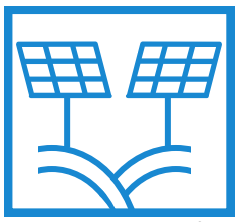
Solar energy development provides a stable, year-round income through drought-proof land lease payments, without the rising input costs of fertilizer, irrigation, or pesticides.

American Clean Power Estimates

IA farmers, ranchers, & landowners receive

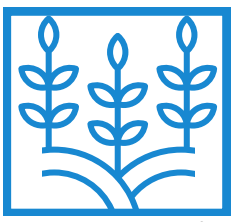
$4.3 Million[5]

in annual land lease payments from solar



$658/Acre[8]

Avg. Solar Land Lease



$271/Acre[9]

Avg. Irrigated Cropland Lease

Every landowner deserves the freedom to choose what's best for their land, livelihood, and legacy. Restricting solar on prime farmland takes away that choice.

CLEAN GRID ALLIANCE

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The Production Value of Solar

In 2025, Iowa has 677 MW of solar online,[5] occupying approximately 5,755 acres of land.

At a value of $48.34[6] per MWh, Iowa's existing solar footprint generates a total production value of approximately $11,316 per acre, making it among the most valuable land uses in the state.

Crop	Production Value per Acre
Solar	$11,316*
Corn	$928
Soybeans	$600
Hay	$391
Oats	$295

*Approximate
Crop Values Derived from USDA NASS Data[7]

CALCULATIONS

Solar

(2023 MWh[10] * 2025 MW Capacity) ÷ 2023 MW Capacity[10] = 2025 MWh
MWh ÷ Acreage = MWh per Acre
MWh per Acre * Avg. electricity price = Production Value per Acre

Crops

Yield per acre * Price per unit = Production Value per Acre

American Clean Power Estimates

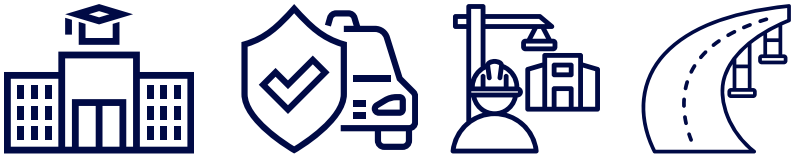
IA solar projects have invested

$984 Million[5]

into the state

Strengthening Rural Economies

Iowa solar projects have provided $3.2 million[5] in state and local tax revenue, funding:



Schools | Public Safety | New Jobs | Infrastructure

Sources

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