# Indiana Solar and Agriculture

## **Solar and Prime Farmland**

GRID

Indiana is home to about 14.9 million acres of farmland, about 11.5 million acres of which are considered "prime."

- 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.

# 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.

#### **For Perspective...**

There are 6,326 MW of solar under construction and in advanced development across Indiana,<sup>2</sup> requiring approximately 53,800 acres of land. If every solar farm were sited on prime farmland, only 0.46% of Indiana's prime farmland would be used.

#### Indiana Prime Farmland<sup>1</sup>

## **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.<sup>3</sup>
- 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.<sup>4</sup>

Prime Farmland Land used for solar in the pipeline

# **Agrivoltaics: A Value-Added Farmer Friendly Solution**

#### Combining traditional farming and solar technology is called agrivoltaics.<sup>5</sup>

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.<sup>6</sup>



## **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		
IN Farmers, Ranchers,		
& Landowners Receive		
\$3.5 Million		
in annual land-lease		

payments from solar

**Production** Value per Harvested 5,500 Acres Crop **Acreage Actual** Melons \$23,809,500 6,500 Solar \$20,836,374 5.500\* **Pumpkins** \$19.808.250 7.400 Mint \$6,520,800 5.500 Corn \$5,845,125 5,270,000 Soybeans \$4,389,000 5,640,000 \$3,004,155 540,000 Hay \$3,001,350 270,000 Wheat Approximate

## **Current Solar Crop Values in Indiana**

Indiana has 650 MW<sup>2</sup> of solar, occupying approximately 5,500 acres of land.

- In 2021, IN solar projects generated nearly 360,000 MWh of electricity.<sup>7</sup>
- At a value of \$58.08 per MWh,<sup>\*</sup> Indiana's existing solar footprint has an annual production value of nearly \$21 million.

#### Sources

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