



illinois solar  
energy association

## Community and Utility Solar Facts

### **Will living near a solar farm affect the value of my property?**

Numerous local and national studies have shown that clean energy projects do not negatively impact nearby property values. CohnReznick accounting firm recently conducted a study of property values near solar farms in Illinois and Indiana, with participation from county assessors and local real estate professionals. This study concluded that solar farms do not adversely affect adjoining property values in either the short or long term.

### **Can solar projects be located out of sight of homes and businesses?**

When developed correctly, solar farms don't change the look or feel of a community. Although it is sometimes necessary to build within view of residences, solar arrays have a low profile of only 8-12 feet high. Landscaping can easily be used to effectively shield the projects from view.

### **I understand that solar farms make money for the companies that own them and the landowners who host them, but what do they do for the communities where they're located?**

Solar projects provide both economic and environmental benefits for nearby communities. A typical solar project will generate 30 years of steady tax revenue, funding, local schools and community services while keeping taxes low for homeowners. Solar also creates local construction and operations jobs which means increased business for nearby hotels and restaurants. Importantly, community solar projects allow local subscribers to purchase lower-cost, clean energy.

### **How much does solar power cost?**

Solar is now one of the lowest-cost ways to generate electricity<sup>1</sup>. Technological advancements have increasingly reduced solar's price in recent years, in many cases it's now cheaper than coal, gas or nuclear.

### **Does it make sense to build solar projects on farm land? Shouldn't we be concerned about taking land out of production?**

The opportunity to host a solar installation on their land allows farmers to diversify their income. With more than 27 million acres of farmland in Illinois, solar energy production will never displace agriculture's central role in our economy, landscape and culture. Many solar projects are planted with native grasses that improve soil and water quality and provide habitat for pollinators, making nearby farmland more productive.

For more information, visit [illinoissolar.org](http://illinoissolar.org)

### **What if the project is abandoned? Will the county be stuck paying to remove it?**

There are numerous protections in-place – including statewide standards developed in partnership with the Illinois Farm Bureau and the Department of Agriculture – to ensure projects are decommissioned at the end of their useful lives. Lease agreements and county solar ordinances specify a developer's responsibility for decommissioning projects and returning land to its prior use.

### **Do solar panels contain toxic chemicals? Could solar facilities affect land or water quality for families living nearby?**

Solar panels are safe to touch, attach to your home and install in your neighborhood. Panels are primarily made of glass, aluminum, copper and other common materials found in household appliances<sup>ii</sup>. The trace amounts of chemicals in solar panels, that enable them to produce electricity, are completely sealed within the glass and coatings of the panels. Solar panels are designed to withstand severe weather and last up to 40 years. After their useful life, solar panels are easy to disassemble and recycle.

### **Do solar farms increase runoff, erosion or flooding?**

Solar farms do not increase runoff, in fact, they improve soil quality. Many projects are planted with native plants that absorb rain, improve the soil, recharge groundwater and prevent erosion. Storm water management plans are a required part of the solar development process.



View inside a solar farm (Champaign, IL)



View 100 ft outside a solar farm (Champaign, IL)

<sup>i</sup> Lazard Levelized Cost of Energy Analysis: <https://www.lazard.com/perspective/levelized-cost-of-energy-2017/>

<sup>ii</sup> Solar Energy Industries Association: PV Waste 101 <https://www.seia.org/research-resources/pv-waste-101>

**Background: SB2591 - PA 100-0598****Agricultural Impact Mitigation Agreement Bill****What it's about:**

The Future Energy Jobs Act has spurred a significant increase in the development of both utility-scale and community solar projects on land that is currently being used for agriculture. The intersection of solar development with agriculture is logical as the two uses value many of the same land characteristics. Parcels that are open, predominantly flat, well-drained, undeveloped and free of sensitive habitat yet close to infrastructure such as public roads and electrical distribution or transmission are conducive to both land uses. Solar development is compatible with, and even beneficial to, agriculture provided that certain development, construction, operational and decommissioning practices are observed.



To ensure that these practices are observed, the Illinois General Assembly passed SB 2591 on May 28, 2018. The bill requires solar developers to enter into an Agricultural Impact Mitigation Agreement (“AIMA”) with the Illinois Department of Agriculture prior to the commencement of construction of a commercial solar facility on agricultural land. This legislation is an extension of an existing bill that previously pertained to only commercial wind energy facilities. The AIMA requirement is intended to ensure that the construction and decommissioning of a commercial solar energy facility is done in conformance with the practices set forth in the Department’s standard agricultural impact mitigation agreement, which are intended to benefit the landowner and other agricultural parcels in the surrounding area.

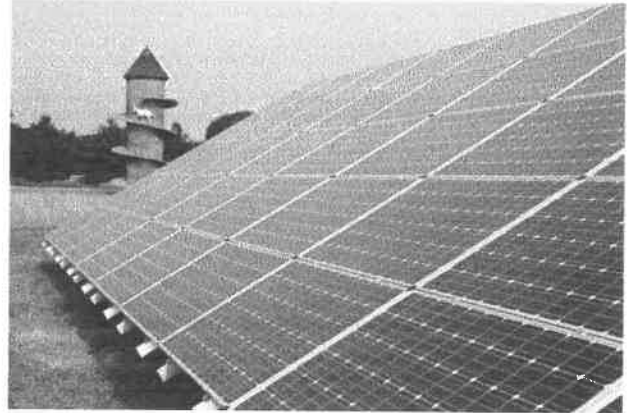
**Bill Details**

- Applies to all ground mounted solar project larger than 500kW located on agricultural land
- Requires the developer or system owner to execute an AIMA at least 45 days prior to commencement of construction of the solar facility
- Standard AIMA provisions contemplate: decommissioning plans and security, drain tile repair, indemnification of participating landowners, electrical cabling depth, topsoil removal, weed control, soil compaction amongst other things
- Provides that AIMA provisions are subordinate to conflicting provisions in other agreements between the developer and landowner

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**Background: SB 486 - PA 100-0781****Standardization of Property Tax Value for Commercial Solar Systems****What it's about:**

Because of the Future Energy Jobs Act, Illinois will experience increased development of ground-mounted solar energy systems. These systems will range anywhere from two megawatts to hundreds of megawatts (MW) in size. There presently exists a limited number of smaller ground-mount solar systems in Illinois today, and there has been no consensus on how to value them for property tax purposes.



To address the need for a predictable process in which to value ground mount solar energy systems, the Illinois General Assembly unanimously passed SB 486 in May 2018. This bill provides a standardized formula for both assessed values and the depreciation schedule for ground-mounted commercial solar energy systems. This legislation is modeled after the successful standard assessment formula adopted for wind energy, which the General Assembly enacted in 2007. This legislation provides a predictable process for how solar energy systems will be valued for property tax purposes, will provide millions of dollars in new tax revenue to rural communities and provide solar energy developers and property owners with a standardized statewide formula for determining the value of completed ground mount systems.

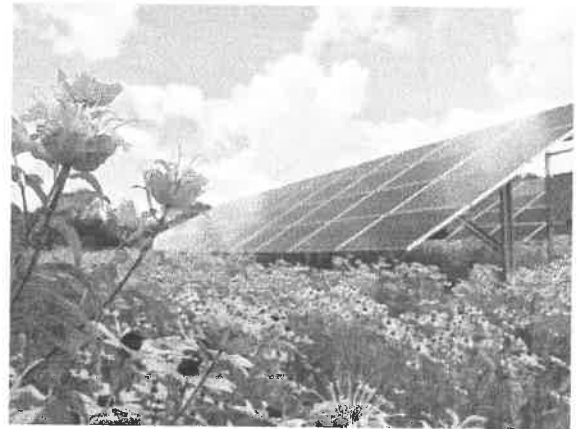
**Bill Details:**

- Results in annual property tax burden of \$5,000-\$7,000/MW/year depending on local jurisdiction
- Sets the market value of ground-mount solar at \$218,000/MW, including the land valuation and is not subject to any equalization factor applied by local jurisdictions
- Any remaining land outside of the project lease footprint will continue to be taxed at its current use providing a metes & bounds legal description is provided for the actual developed area
- The market value of the system increases over time with inflation based on the Consumer Price Index, offset by allowable depreciation over 25 years to a level of no less than 30% of its initial value
- The actual tax *rate* applied to the system varies by local jurisdiction and Township Assessors
- Provides certainty and protection for the landowner and the project owner
- Provides that the underlying land goes back to the farmland assessment value immediately after the system is decommissioned and removed

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**Background: SB3214 - PA 100-1022****Pollinator Friendly Solar Site Act****Background:**

The Future Energy Jobs Act has spurred a significant increase in the development of solar projects on rural land throughout Illinois. While the land on which a solar project is sited typically cannot be farmed during the operational life of a system, it can still be used in a way that benefits the environment through the planting of native vegetation and foraging habitat that provides needed benefits to local pollinators and birds. This popular practice is being increasingly adopted by solar developers, as it is attractive to land owners, conservation advocates, and developers alike.



To tailor this practice to the various local habitats throughout Illinois and provide a common standard recognized by the state for use in evaluating claims of providing benefits to pollinators and birds, the Illinois General Assembly unanimously passed SB 3214 on May 28, 2018. The bill creates a voluntary standard and set of criteria for pollinator-friendly solar site management through the use of a scorecard drafted by the Illinois Department of Natural Resources (DNR) in consultation with the University of Illinois Department of Entomology. An owner/manager of a ground-mounted solar generation system over 40 kW in size may claim that a site is “pollinator-friendly” or provides benefits to game birds, songbirds, and pollinators only if the site adheres to the guidance set forth by this scorecard and achieves a certain score. A final version of the scorecard will be published within 6 months of the bill being signed into law.

**Bill Summary**

- Passed unanimously by both the Illinois Senate (54-0) and the Illinois General Assembly (114-0)
- Creates a voluntary standard for pollinator-friendly solar site management
- The draft scorecard used to assess compliance allows a site to achieve two different standards:
  - Meets Pollinator Standards (score of 70 – 84)
  - Provides Exceptional Habitat (score of 85 and higher)
- A final version of the scorecard will be published within 6 months of the bill being signed into law

**Benefits of Pollinator-Friendly Solar Sites**

- **Provides foraging habitats** - Monarchs and honeybee populations are in crisis, and loss of habitat is one of the most significant causes. A single 10-acre solar site is equivalent to more than 5,000 6'x12' backyard pollinator gardens. More than 300 song and game bird species are threatened due to changes in habitat and seasonal conditions.
- **Provides Improved Storm Water Management and Soil** - Compared to gravel or turf-grass, long-rooted native plants filter and channel storm water directly to the aquifer while improving soil organics and helping to prevent area nitrates and phosphorous from reaching waterways.
- **Economic Development** - Demand for growing native ground cover on solar sites will provide employment opportunities for local seed growers and landscape service companies.





