Solar Energy Systems

Every year, solar energy increases its pace of development. Solar has been accelerating in Illinois in recent years, creating jobs, economic activity and much needed tax revenue for local communities. Illinois’ solar energy boom is being driven, in part, by the Future Energy Jobs Act. It mandates the state develop about 3,000 MW of solar by 2030. As a result, the industry expects to install up to 2,000 MW of ground-mounted solar farms by 2021, which will create a total $250-$350 million in property tax revenue over a 25-year lifespan.

Solar farms (also known as solar parks or solar fields) are the large-scale application of solar photovoltaic (PV) panels to generate green, clean electricity at scale, usually to feed into the grid. Solar farms can cover anything between one acre and one hundred acres, and are usually developed in rural areas.

Solar farms are well examined at the local level and go through a rigorous planning procedure before they are approved. This takes into account the suitability of the specific site, any potential impact on the area and relevant renewable energy targets. In many cases, solar farms are replacing cropland that often does not generate enough income from traditional farming. Solar farms are also being placed on vacant industrial sites and at airports and wastewater treatment plants.

Illinois has created a level playing field for local governments and the solar industry. Establishing a statewide formula for property taxes ensures that every county in the state will benefit equally from the revenue created by solar development. Under Illinois’ funding formula, approximately 70% of the tax revenue generated by solar farms will be dedicated to funding schools.
### Standardization of Property Tax Value for Commercial Solar Systems

**Senate Bill 486 (P.A. 100-0781)**

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 Senate Bill 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 Summary**

- 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 and 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

*Source: Illinois Solar Energy Association*
One of the most significant components of the Future Energy Jobs Act is the Illinois Solar For All Program. It makes clean energy accessible to more communities throughout the state and creates job opportunities in solar installation.

Program highlights include:

• Incentives for on-premises (including rooftop) solar development in economically-challenged communities.
• Incentives for community solar project development in economically-challenged communities. A community solar project is a larger-scale development of solar panels for people who don’t have a roof or space on their property to install solar. People invest in the project to reap the benefits of lowered energy bills and potentially other financial benefits from energy produced by these panels on investors’ behalf.
• Incentives for solar development on buildings owned by non-profits, including houses of worship, or the government.
• Additional incentives for projects to be carried out in Environmental Justice (EJ) communities, where pollution, contamination, and other negative environmental impacts have harmed community health. With solar development, EJ communities across the state can reap the economic and health benefits of clean air, clean water, and job creation.

In addition to goals from the Solar for All program, the electric utility serving northern Illinois (Commonwealth Edison) must spend $30 million through 2025 to train and apprentice new clean energy workers. Some of that money may be spent directly by ComEd, and some of it will flow to nonprofits. There is a goal to train 2,000 persons with records and alumni of the foster care system, who often face challenges to employment.

Illinois Department of Agriculture

Agricultural Impact Mitigation Agreement (AIMA)

Senate Bill 2591 (P.A. 100-0598)

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 Senate Bill 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 Summary

• 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
• AIMA provisions are subordinate to conflicting provisions in other agreements between the developer and landowner

Source: Illinois Solar Energy Association

Source: Faith in Place: Energy and Conservation
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 Senate Bill 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 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 six 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 six months of the bill being signed into law