

Solar Energy & Agriculture

The solar industry is strongly committed to responsible land use, community partnership, and being good stewards of the sites that host solar facilities.



Solar & Agricultural Land Use

The solar industry has proven it is a valuable addition to the community – complementing existing agricultural activity with dual-use options providing benefits back to farmers and farming communities, and preserving farmland increasingly lost to permanent development:

- Even with the significant revenues and benefits for communities and farmers, solar at scale utilizes only a small percentage of total farmland – less than 2%.
- With a steady long-term revenue stream, solar can keep family farms in the family for generations. Unlike oil and gas leases where revenue can vary or go to zero, farmers who host solar can count on a predictable, long-term income, mitigating against market volatility, drought losses and other threats to their livelihoods.
- Guaranteed farmer revenue along with increased tax revenue for schools and local improvements in many cases is the only alternative to encroaching development. Solar on farmland regenerates land by allowing it to lie fallow, improving its use for future agriculture.
- Solar development does not involve large-scale removal of topsoil, allowing the land to return to production at the end of a project's life

Solar and agriculture not only exist side-by-side, but are increasingly found together.

- Responsible solar development improves soil health, reduces erosion, and provides low-cost energy to local communities. By contrast, residential & commercial construction permanently removes topsoil, replacing it with permanent structures that prevent future farming on that land forever.
- Sheep farmers have opportunities to contract for vegetation management of solar sites and thus increase farm viability.

Solar Development is a Positive for Property Value

Solar is a good neighbor in communities across the country – a low-impact use that generates local tax revenue with zero or minimal use of municipal resources.

- Data from across the U.S. shows that large-scale solar arrays can increase adjacent property values, and usually have no negative impact on the value of adjacent properties
- Proximity to solar farms does not deter sale or lease of agricultural or residential land.
- Large solar projects have similar characteristics to a greenhouses or single-story residence. Usually no more than ten feet high, solar farms are often enclosed by fencing and/or landscaping to minimize visual impacts.

Solar Project Decommissioning & End-of-Life Management

Managing the end of a solar project's production is important for all photovoltaic ("PV") technologies to ensure clean energy solutions are a sustainable component of the energy economy for future generations.

Solar Project Decommissioning & End-of-Life Management

- Decommissioning refers to safely removing the facility from active service, which involves removing solar equipment and restoring the land to its original condition or adapting it to a new use, based on the preference of the landowner.
 - Industry best practices direct the inclusion of decommissioning provisions within solar lease agreements to ensure that solar systems will be decommissioned safely and responsibly by the project owner, without burdening landowners or the community.
- Today's solar installations pose little to no risk to human or environmental health at any point in their lifecycle—PV Modules do not release hazardous chemicals that contaminate soil or water.
- PV panels typically consist of glass, aluminum, copper, silver and semiconductor materials that can be successfully recovered and reused. Other solar energy system components, such as metal racks, steel posts and inverters, can readily be reused or recycled.
- SEIA's National Recycling Program is preparing now for larger volumes of used PV modules in future years, including actively seeking, developing and elevating the market visibility of solar recycling partners across the country. There is currently a PV recycling drop-off location within the Commonwealth.

Supply Chain Ethics & Sustainability

Ensuring an ethical and sustainable supply chain is of paramount importance to the U.S. solar industry. Based on credible reports of human rights abuses in China, the solar industry is working to stamp out these abhorrent practices throughout its supply chain. SEIA and the industry are taking numerous steps to address these critical issues and are committed to the long-term sustainability and integrity of our supply chains.

- To ensure solar imports are free from forced labor from Xinjiang & anywhere else in the world, SEIA has developed the Solar Supply Chain Traceability Protocol. Solar module producers will be able to adopt this protocol, which includes a series of steps they can take to trace the sources of their supply chain.
- In addition, SEIA has conducted a comprehensive update to our Solar Industry Environmental and Social Responsibility Commitment ("Solar Commitment"), a document that outlines common practices and expectations for the solar industry, including manufacturers, suppliers, subcontractors, and customers in the solar value chain.
- We are also encouraging all solar companies to sign the Forced Labor Prevention Pledge to oppose forced labor and raise awareness on this important issue. As part of this commitment, companies pledge to conduct their businesses in an ethical manner and uphold the integrity of the solar industry.

Solar Permitting

Existing federal law creates a sound environmental protection regime for the minimizing impacts of solar development.

- All large-scale solar farms apply for federal permits for water quality, erosion and sedimentation control. This permit requires low impact construction and grading to be used, and photovoltaic panels within an array must be arranged to minimize runoff and allow vegetation growth beneath and between panels.
- Beyond these environmental permits, solar developers consult with other state and federal agencies such as the State Historic Preservation Office and the U.S. Fish and Wildlife Service when developing projects. These approvals are in addition to county and municipal approvals for zoning, development, and similar issues.