



September 21, 2021

Senator Vogel
Majority Chair, Agriculture & Rural
Affairs

Senator Schwank
Minority Chair, Agriculture & Rural
Affairs

**MAREC Action comments for Pennsylvania Senate Agriculture and Rural
Affairs Committee Public Hearing on Utility Scale Solar Development and
Agricultural Land**

Senator Vogel, Senator Schwank, and Members of the Pennsylvania Senate
Agriculture and Rural Affairs Committee,

Thank you for the opportunity to provide written testimony concerning the development of utility-scale solar on agricultural land. I write today on behalf of MAREC Action, a non-profit organization representing over 30 businesses that develop and manufacture utility-scale solar and wind energy projects. With stable, pro-growth, responsible policies in place, our industry sees a major opportunity to continue investing in rural Pennsylvania. Many of our members already do business in Pennsylvania and employ Pennsylvania residents. According to the Solar Energy Industries Association, Pennsylvania's solar industry represents more than \$2.3 billion in private investment to-date.¹

Solar development has significant potential for long-term preservation of Pennsylvania's farmland and rural economies. The most common model for utility-scale solar development involves a company leasing land from one or more local landowners and making annual payments in exchange for use of their land to host solar panels. These lease payments are lucrative and stable for the 20 to 30-year average lifespan of a solar project. Farmers facing economic hardship, or with an eye on retirement, find solar leases particularly appealing as it enables them to keep their land in the family while enjoying passive income and a slower pace of life.

Pennsylvania has lost over 6,100 farms over a five-year period.² Leasing land to solar projects on farmland will help maintain existing farms. Landowners can make decisions about their land that could save their farms. Undue restrictions on solar development could unnecessarily restrict this option for a farmer facing financial distress.

¹ <https://www.seia.org/state-solar-policy/pennsylvania-solar>

² https://www.dailyitem.com/news/pennsylvania-loses-6-156-farms-over-5-year-stretch/article_90d87036-64eb-11e9-8377-7f803f0fec61.html



This leasing arrangement results in contiguous tracts of flat land being held static for the decades-long life of a solar project. Farmland under a solar lease is thereby protected from other development pressures, such as residential or commercial development, that would acquire and irreversibly change the character of the land.

Rural communities are indispensable partners in utility-scale solar development, and our member companies listen closely to make sure the benefits of solar development extend beyond the participating landowners. Solar projects create an impactful number of long-term, local jobs in operations and projects also pay millions of dollars each year into communities in the form of taxes, or payments in lieu of taxes, that help fund roads, schools, emergency services, and other needs expressed by a community. These investments help to invigorate rural economies, which often face an otherwise declining population and tax base. Often these solar projects become some of the highest (if not the highest) taxpaying entities in the communities where they exist. There are numerous construction jobs created for each utility-scale solar project developed in a rural community.

In contrast with many other forms of development, properly decommissioned solar facilities can be restored to productive and safe agricultural use at the end of a project's life. It is a common best practice among MAREC Action's members (and the solar industry in general) to minimize disruption of the topsoil during development. A typical solar project will leave topsoil in place and plant perennial groundcover under solar panels and across the vast majority of the project site. Most of a solar project footprint remains permeable to water, aside from access roads and concrete pads under inverters and transformers. Depending on pre-existing site conditions, soil quality and water runoff absorption can be improved through solar development due to the static planning of groundcover species with deep root systems.

In some cases, agricultural development can occur concurrently with solar energy production. The co-location of agriculture and solar photovoltaic (PV) infrastructure is referred to as "agrivoltaics". For some landowners, agrivoltaics offers an appealing opportunity to continue raising crops or animals on the same land that hosts solar panels. Small grazing animals such as goats or sheep are well suited to agrivoltaics, and even shade tolerant crops can be planted with modified project layouts. Larger animals like cattle are generally not compatible, though it may be possible to co-locate them with major modifications to project layouts.³ While every project has different economics, agrivoltaics generally represent a tradeoff for the solar facility and the landowner. Capital and maintenance costs for

³ <https://www.energy.gov/eere/solar/farmers-guide-going-solar>



the agrivoltaic solar projects will generally be higher, which corresponds to higher electricity rates or lower land lease payments. Additionally, agrivoltaics may require the farmer to remain more engaged in day-to-day farm operations, which would not appeal to a retiree or farmer facing economic challenges related to commodity market volatility. All-in-all, agrivoltaics is a good option in some cases, but landowners and market forces should be allowed to make that decision rather than it being enforced through policy.

MAREC Action and our members appreciate this opportunity to provide comments and we look forward to continued engagement with the Senate Agriculture and Rural Affairs Committee.

Best regards,

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