

September  
3, 2021



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Attn: Kentucky General Assembly  
Joint Committee on Agriculture and the Natural Resources and Energy Committee  
700 Capital Ave.,  
Frankfort, KY 40601

Members of the Interim Joint Committee on Agriculture and the Natural Resources and Energy Committee,

Attached are the joint comments of the Kentucky Solar Energy Industries Association (“KYSEIA”), the Mid-Atlantic Renewable Energy Coalition (“MAREC Action”) and the Solar Energy Industries Association (“SEIA”) on solar decommissioning, development, and solar on agricultural land in Kentucky. We appreciate the willingness of the Kentucky State Legislature and the members of the Interim Joint Committee on Agriculture and the Natural Resources and Energy Committee to engage members of the community and stakeholders on this critical economic development opportunity for Kentucky during the Sept. 9<sup>th</sup>, 2021 meeting.

We support development of solar in Kentucky across multiple types of sites, from greenfields and agricultural plots to rooftops and parking lots. We believe solar on agricultural land, even on prime farmland when necessary, helps to preserve and strengthen rural communities. Solar means significant economic opportunity for farmers, rural communities, and the Commonwealth of Kentucky:

- Solar development in Kentucky creates new jobs and a potential investment of billions over the next decade, of which a significant portion can go to supporting rural, agricultural communities. Two large projects breaking ground in 2021 represent an investment of over \$200 million alone.
- Solar keeps farmers on their land, creating an ongoing revenue stream for local communities worth millions of dollars each year in land leases and local taxes.
- Depending on watershed conditions, solar can reduce soil erosion and improve water retention through groundcover plantings.
- The solar industry supports smart, efficient decommissioning policy to ensure land used for solar development can return to other productive uses, including agriculture.
- Solar shields agricultural land from other development pressures that permanently change the land (warehouses, big box stores, residential complexes), thereby preserving those farmlands for the 25+ year life of a project or more.

We appreciate the opportunity to comment on Kentucky solar power and economic benefits.

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## **Solar Represents a Billion Dollar Clean Investment Opportunity for Kentuckians**

Kentucky represents a major potential market for the solar industry and a massive economic investment for Kentucky. Currently, over 61 megawatts of solar energy have been installed in Kentucky, representing an investment of \$116.46 million, with over \$14 million being invested in 2020. The solar industry directly supports over 1,200 jobs and almost 50 companies based in Kentucky. While only 0.15% of Kentucky's total electricity generation comes from solar, the Solar Energy Industries Association and Woods Mackenzie estimate that over 816MW could be built over the next five years.<sup>1</sup> That's represents a potential investment of over a billion dollars between 2021 and 2026. MAREC Action notes that there are 2,469.3MW of solar either recently approved or under consideration by the Kentucky Siting Board. If all or some of these projects are approved, forecasted solar deployment will go up accordingly.

Solar development on a small fraction of agricultural land in Kentucky can generate big benefits. If even half of the 816MW are built on agricultural sites over the next five years, it represents an investment in rural communities of over \$775 million and a total land usage between 2,000 and 4,000 acres (or approximately 0.03% of all Kentucky agricultural land). Currently, Kentucky utilizes approximately 12.8 million acres of land for agricultural purposes<sup>2</sup> and has a generating capacity of 25.1 gigawatts (1 gigawatt = 1,000 megawatts) across all electricity generating sources, such as solar, wind, natural gas, and coal.<sup>3</sup> Even in an unrealistic scenario where all solar capacity currently under consideration by the Kentucky Siting Board was constructed on farmland, and nothing but farmland, it would only use approximately 0.15% of farmland in Kentucky<sup>4</sup>. In reality, some portion of the projects under consideration by the Siting Board will be built on farmland, and some will be built on brownfields or other marginal lands.

## **The Solar Industry Supports Smart Decommissioning Policy**

The solar industry is committed to responsible land use and acting as good stewards of the sites our systems occupy. To this end, we support the industry best practice of including decommissioning provisions within landowner/development agreements to provide assurances that solar systems will be decommissioned safely and responsibly and won't place an undue burden on landowners or other community stakeholders. The following principles should apply to any large-scale solar development:

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<sup>1</sup> See <https://www.seia.org/sites/default/files/2021-06/Kentucky.pdf>

<sup>2</sup> See [https://www.nass.usda.gov/Quick\\_Stats/Ag\\_Overview/stateOverview.php?state=KENTUCKY](https://www.nass.usda.gov/Quick_Stats/Ag_Overview/stateOverview.php?state=KENTUCKY)

<sup>3</sup> See [https://www.energy.gov/sites/prod/files/2016/09/f33/KY\\_Energy%20Sector%20Risk%20Profile.pdf](https://www.energy.gov/sites/prod/files/2016/09/f33/KY_Energy%20Sector%20Risk%20Profile.pdf)

<sup>4</sup> Solar projects on agricultural land typically occupy between 5 and 10 acres per MW.

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- The developer/owner of the solar project will file a decommissioning plan with the county that has jurisdiction over the land in question
- The plan should allow for the landowner and developer to mutually agree upon conditions for land restoration
- The amount of financial assurance for the decommissioning plan must be equal to the estimated cost of decommissioning the project, less the facility's salvage value
- These costs should be determined by a third-party professional engineer, at the expense of the project developer
- The cost calculation and salvage value should be reassessed periodically to ensure it remains accurate over the lifetime of the project
- Financial assurance should be flexible and allow for letters of credit, parent company guarantees, bonds, or escrow accounts, along with any other forms deemed acceptable by the county of jurisdiction
- Decommissioning plans should describe the steps that would be taken to remove the project equipment from the landowner's property and restore the property to a condition that is reasonably similar to its condition prior to the commencement of construction
- When enacted, state-level decommissioning requirements should supersede any local, county, or municipal requirements
- Small, distributed, behind-the-meter solar projects should be exempt from decommissioning requirement.

These principles are consistent with industry best practices for decommissioning projects and will allow solar development to flourish responsibly, providing economic benefits to local communities.

### **Solar is an Economic Opportunity for Farmers and a Job Creator for Kentucky**

Solar on agricultural land provides an economic opportunity for the landowner, the community, and to the entire Commonwealth of Kentucky. The utility-scale solar industry shares an interest in building and preserving strong agricultural communities in Kentucky. Many farmers and ranchers across the U.S. view solar energy as a drought and recession proof cash crop. In this way, solar power acts as a form of long-term agricultural land preservation by providing landowners with a long-term, stable, and passive income stream that is attractive to diversify their farm's revenue stream or to enjoy a slower pace of life while still making use of their land. Furthermore, solar development does not involve large-scale removal of topsoil, allowing the land to return to agricultural production at the end of a project's 20-30 year lifespan. A solar project land lease also alleviates other, more permanent, development pressures (such as housing or warehouse development that would destroy the topsoil).

Development on these sites offer myriad benefits, such as:

- Keeps farmers on their land:
  - o Solar lease payments tend to be higher than leasing for traditional agriculture operations.
  - o Farming is an extremely low-margin, competitive industry. If a farmer can add solar to a portion of their property and get a long-term steady income, it can help them to keep their farm through hard times.
  - o Steady income from solar projects means that farmers are less vulnerable to fluctuations in market prices or crop yields.
- Downstream benefits from operations and maintenance, and tax revenue, have lasting positive community impact.
- Provides substantial tax revenue to local communities. Detailed data collection in North Carolina shows local tax revenues up 2000% after the state’s big solar build up through 2017.<sup>5</sup>
- Provides local construction jobs.

Chart 1. Annual Property Taxes Paid on Real Estate Parcels with Solar Projects  
\*Data represents taxes collected in the year before and after a large solar project was built.  
Source: County Tax Offices, North Carolina Utilities Commission and NCEA Renewable Energy Database

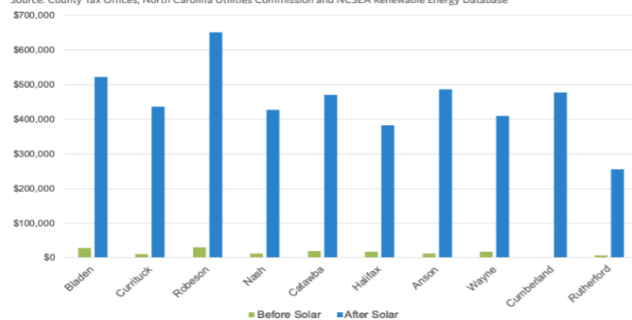


Figure 1 Tax Revenue Before and After Solar Development in Various N. Carolina Counties, 2019

### Solar on Agricultural Land Can Promote Conservation and Agricultural Land Recovery

Data Item	Acres
Agricultural land developed or compromised	265,300
Agricultural land converted to urban and highly-developed land use (UHD)	60,200
Agricultural land converted to low-density residential land use (LDR)	205,100
Nationally Significant agricultural land developed or compromised	119,600
Nationally Significant agricultural land converted to UHD	28,300
Nationally Significant agricultural land converted to LDR	91,400
Best agricultural land developed or compromised	121,900
Best agricultural land converted to UHD	25,600
Best agricultural land converted to LDR	96,400

Figure 2 Agricultural Land Developed into Other Land Uses, 2001 - 2016

Between 2001 and 2016, over 265,300 acres of agricultural land in Kentucky was converted into either urban and highly developed land use (UHD) or low-density residential land use (LDR).<sup>6</sup> This is hundreds of thousands of acres more than all Kentucky solar projects currently under development. UHD and LDR land development often leaves the land unusable for agriculture and threatens the livelihoods of America’s farmers.

<sup>5</sup> See [https://energync.org/wp-content/uploads/2019/07/Small\\_Increased-NC-County-Tax-Revenue-from-Solar-Developmentv3.pdf](https://energync.org/wp-content/uploads/2019/07/Small_Increased-NC-County-Tax-Revenue-from-Solar-Developmentv3.pdf)

<sup>6</sup> See <https://farmlandinfo.org/statistics/kentucky-statistics/>

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In contrast, smart solar development on agricultural land, like solar development paired with appropriate vegetative cover, helps soils recover and prevents erosion. Soil can be improved by planting patches of native grasses/pollinators and effectively letting the soil rest. In the future, when a solar project is decommissioned, farming can once again resume on that land.

### **Kentucky Should Support Solar Development on Agricultural Land**

We again appreciate the unique opportunity to comment on the development of the solar industry in Kentucky, and how it might provide a wealth of benefits for Kentucky's farmers, communities, and economy. Thank you for allowing us to submit comments, and we look forward to engaging the members of this committee and the people of Kentucky on this important issue.

Sincerely,

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### **About KYSEIA**

The Kentucky Solar Energy Industries Association represents businesses involved in the nation's leader in new power generation - the solar industry. KYSEIA's objective is to provide leadership and promote sound policy in the Commonwealth as our power sector enters the solar-age. KYSEIA understands that free market policies pursued over the past two decades are revolutionizing the nation's power grid and creating more affordable energy. KYSEIA wants to ensure lower cost energy is available for all, and ensure that all can participate in the benefits of solar growth in the Commonwealth.

### **About MAREC Action**

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The Mid-Atlantic Renewable Energy Coalition (MAREC Action) is a 501c4 nonprofit organization representing a membership of utility-scale wind developers, solar developers, wind turbine manufacturers and nonprofit organizations dedicated to the growth of renewable energy technologies to improve our environment, diversify our electric generation portfolio, and boost economic development in the region. Our mission is to improve and enhance the opportunities for renewable energy development in ten of the jurisdictions in the PJM region in and around the Mid-Atlantic, which include: Delaware, District of Columbia, Kentucky, Maryland, New Jersey, North Carolina, Ohio, Pennsylvania, Virginia, and West Virginia. MAREC Action focuses our education and expertise on wind and solar energy generation technology; we offer technical expertise and advice to assist in understanding the operating and environmental impacts of integrating wind and solar into the electrical power system; and we promote fair policies, rules and regulations to expand the region's electric transmission system to accommodate the growth of renewable energy generation.

### **About SEIA**

The Solar Energy Industries Association (SEIA) is the national trade association for the United States solar industry. With more than 1,000 member companies nationwide, SEIA is leading the transformation to a clean energy economy, creating the framework for solar to achieve 20% of U.S. electricity generation by 2030. SEIA works with its 1,000 member companies and other strategic partners to fight for policies that create jobs in every community and shape fair market rules that promote competition and the growth of reliable, low-cost solar power.