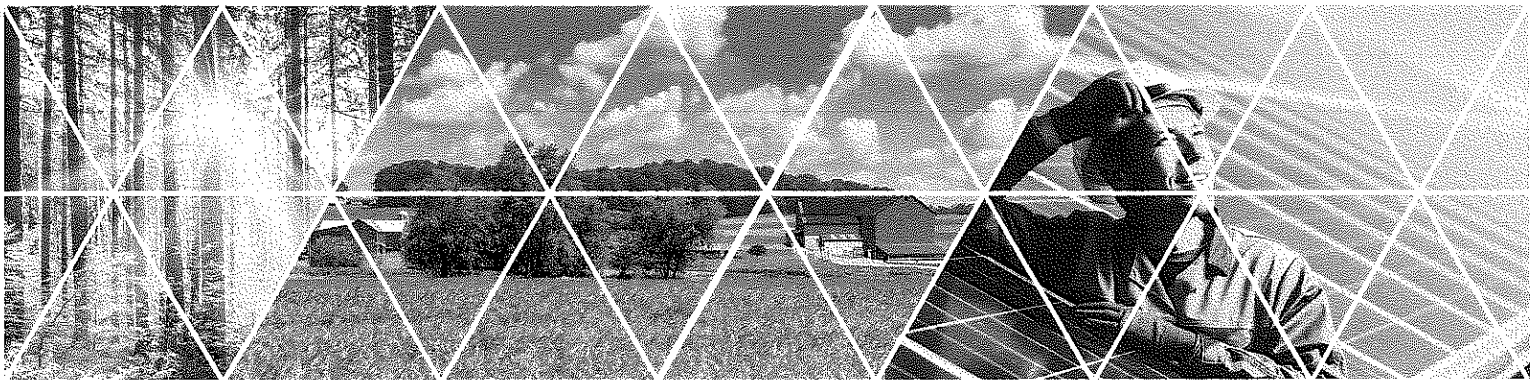


Hecate Energy

Highland Solar Farm

Community Benefits

- 268 construction jobs added during the 12-month installation period
- 5 permanent and 10 secondary jobs will be created to operate and maintain the solar farm
- $1.8 million in fiscal benefit for county and state government during construction
- $100,000 annually to county and state government due to the solar farm payroll
- Annual contribution to county tax base -- without drawing on government services for the life of the project
- Increased revenue will improve local governmental services like schools and County beneficiaries, which improvements have a positive effect on property values

Harvesting the Sun to Supply Your Electricity

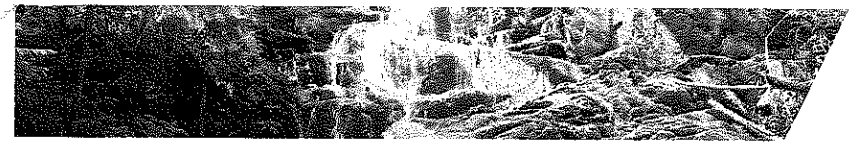
- 300-megawatt (MW) photovoltaic (PV) solar energy project
- Capable of producing enough electricity to power 49,200 average households in Ohio
- Output supplied to AEP Ohio (pending approval by Public Utility Commission of Ohio)
- Will connect directly to the existing 345 kV Stuart-Clinton transmission line, avoiding need for costly new high-voltage lines
- Planned for a 3,395-acre site

Solar Farms are Good Neighbors

- Operating quietly without airborne emissions or water pollution
- Providing home-grown, renewable power, fueled by the sun
- Low maintenance systems operated remotely and maintained by locally sourced workforce

Location

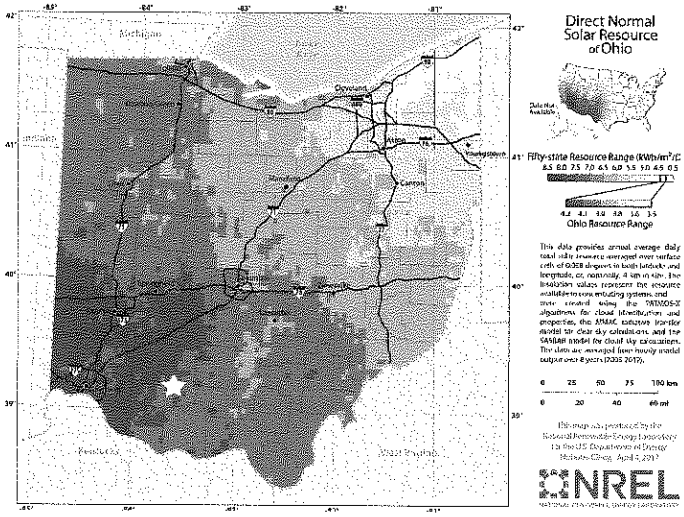
The solar farm will be installed in the townships of Clay and Whiteoak in Highland County, Ohio. (Approximately 2 miles east of Buford and 3.2 miles northwest of Mowrystown)



Solar Farm Components

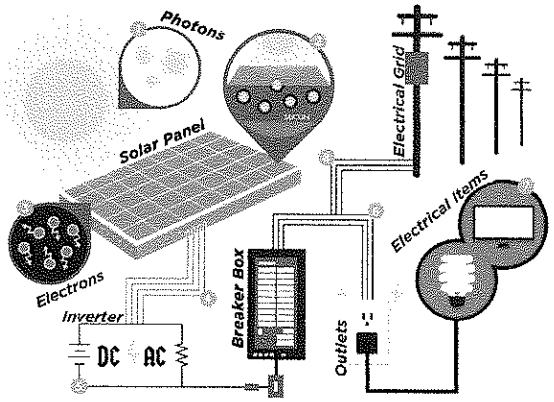
- Photovoltaic (PV) panels mounted on steel tracker racking structures (Tracker structure is 6-8 feet tall – about the height of a corn stalk)
- Rows of single-axis trackers follow the sun's path over the course of the day to optimize power production
- PV panels are connected to each other and to electric inverters that convert DC to AC electricity for delivery to the utility grid

According to the National Renewable Energy Laboratory, Highland County is situated among the sunniest places in Ohio -- providing the best solar resources for power generation by photovoltaic systems.



How Does Solar Power Work?

- PV panels use the sun's energy to produce direct current (DC) electricity that flows to on-site electrical inverters that turn DC electricity to alternating current AC electricity which then flows to the electrical grid for consumers to use



1. When exposed to sunlight, material in a solar panel absorbs the sun's photons
2. Photons dislodge the electrons from atoms in the photovoltaic (PV) cell
3. The voltage difference between positive and negative electrodes creates an electric current
4. Copper wire inside the panel carries the current out
5. Direct current (DC) flows from the panel to an inverter that turns it to alternating current (AC)
6. Electrical current then passes through electrical safety breaker boxes before going to the grid
7. Electrical items (lights, computers, etc.) use the electricity
8. Most solar farm energy goes to the electrical grid for use by consumers

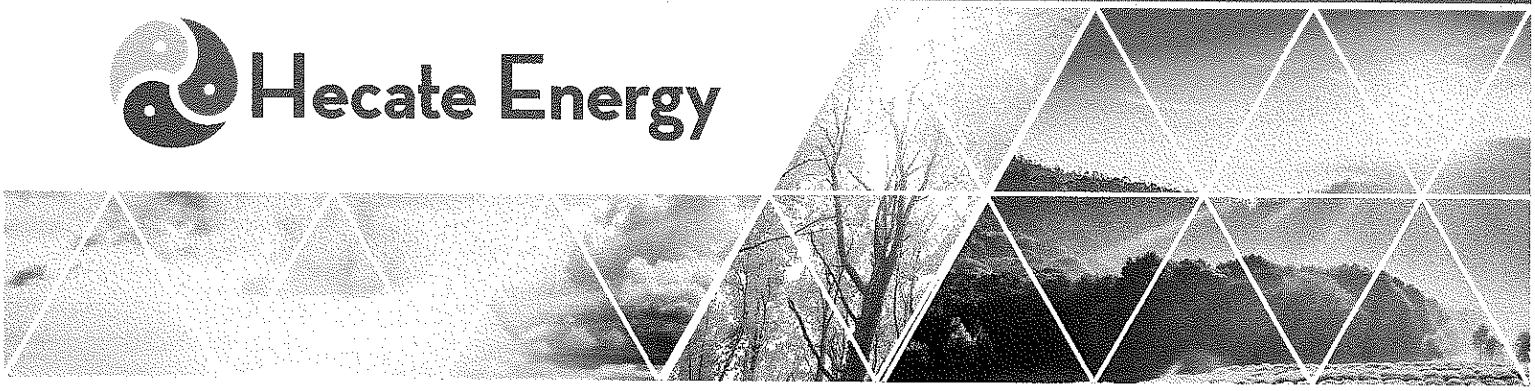
Hecate Energy

Founded in 2012, Hecate Energy has developed 332 megawatts of solar projects now operating across the nation, with more than 1,000 megawatts of projects under long-term development. Hecate Energy is headquartered in Chicago, Illinois and has additional offices in Columbus, Ohio and Los Angeles, California.

For More Information

Visit the Highland Solar Farm website:
www.HighlandSolar.net
Visit the Ohio Power Siting Board website:
https://www.opsb.ohio.gov/opsb/

Hecate Energy



Hecate Energy
HIGHLAND

Highland Solar Farm – Frequently Asked Questions (FAQ's)

1. What is the Highland Solar Farm?

   The proposed solar farm is a 300-megawatt (MW) photovoltaic (PV) solar energy generation facility to be built in Highland County, OH.

   The solar farm will consist of PV solar arrays, access roads, and electrical interconnection to the utility grid.

2. Who is proposing to build the Highland Solar Farm?

   Hecate Energy Highland, LLC is proposing to build the Highland Solar Farm. Hecate Energy Highland LLC is a wholly owned subsidiary of Hecate Energy LLC. Founded in 2012, Hecate Energy has developed 332 megawatts of solar projects now operating across the nation, with more than 1,000 megawatts of projects under long-term development. The company is headquartered in Chicago, Illinois and has additional offices in Columbus, Ohio and Los Angeles, California. For more information, please visit: www.hecateenergy.com

3. Where will the solar farm be located?

   The project will be located in portions of both Clay and Whiteoak Townships in Highland County, Ohio. The approximately 3,400-acre tract is located about two miles east of Buford and 3.2 miles northwest of Mowrystown.

4. What type of solar technology will be built at the Highland Solar Farm?

   The Project will be configured as a ground-mounted solar farm with photovoltaic (PV) panels on galvanized steel tracker racking structures. It will include rows of single-axis trackers, oriented in a north-south direction, that rotate the PV panels from east to west following the sun's daily path, optimizing the amount of power the solar farm can produce.

   The tracker structure is low-profile, approximately 6-8 feet high above grade at the tallest point (about the height of corn stalks).

   The solar panels planned for this project are the crystalline type commonly used for rooftop residential systems. They contain the same materials (glass, aluminum, plastic) used in many household products such as windows.

5. How does solar power work?

   Photovoltaic (PV) panels use the sun's energy to produce direct current (DC) electricity that flows to on-site electrical inverters that turn DC electricity to alternating current AC electricity which then flows to the electrical grid for consumers to use.

6. What economic benefits will the solar farm provide to Highland County?

   If approved by the Highland County Commissioners, the Highland Solar Farm will provide annual contributions to the county tax base. Ongoing operation of the solar farm is projected to produce significant new local revenues in the form of Payment in Lieu of Taxes (PILOT) payments. In addition, Operations and Maintenance will create additional jobs which we seek to locally source.

7. How long does the PILOT affect property taxes?

   This project will bring a significant increase in property tax revenue for the locality than what is currently collected. The increased revenue will improve local governmental services like schools, which improvements have a positive effect on property values. The PILOT payments will last for the life of the Project.

8. Is solar photovoltaic (PV) technology well established?

   The type of solar PV technology to be used by the Highland Solar Farm has been in use and continually refined since it was invented in 1954.

   Over 53,000 MW is currently installed in the US. Solar projects accounted for 30% of all new electricity generation built in the US in 2017.

9. Will reflection from the panels create glare?

   A common misconception about solar photovoltaic (PV) panels is that they inherently cause or create "too much" glare, posing a nuisance to neighbors and a safety risk for pilots. Light absorption rather than reflection is central to

the function of solar PV panels to absorb solar radiation and convert it to electricity. Solar PV panels are constructed of dark-colored (usually blue or black) materials and are covered with anti-reflective coatings. Modern PV panels reflect as little as two percent of incoming sunlight, about the same as water and less than soil or even wood shingles.

10. Will there be local oversight for the project?

    Local oversight will be required in obtaining building and stormwater permits. Additionally, Hecate will continually work closely with the community and local government officials to keep everyone briefed throughout the development, construction and operation of the project.

11. Will the project require construction of a new transmission lines?

    Highland Solar Farm will connect directly to the existing 345 kV Stuart-Clinton transmission line located within the project footprint. So, there is no need for new transmission lines.

12. How will it affect farmland?

    Solar farms are among the least disruptive of any electricity-producing technologies. This project's impact on the soil will be limited to the spots where steel beams are driven into the ground to support the solar panel arrays and foundations built to hold inverter stations and transformers. The land used by the solar farm can be returned to full agricultural production after the planned life of the project.

13. Who will pay for the repair of any damaged local public roads?

    Hecate Energy will document the current condition of the roads prior to construction then restore the roads back to the same condition or better as part of construction follow up. These costs will be borne by Hecate, not the taxpayers. The County Engineer has requested that the Project enter into a Road Maintenance Agreement similar to what has been agreed to with other solar projects located in the County.

14. How will the solar farm affect area drainage, ponds, streams and stormwater run-off?

    Hecate Energy will work with the landowners and the Highland County Soil and Conservation District prior to construction activities to obtain proper permitting. It is very important to ongoing operations of the Project that drainage be maintained and perhaps improved. The land below the solar arrays will be planted with low-growing seed mix of native grasses and other low-maintenance varieties to promote precipitation infiltration and reduce water run-off and soil erosion.

15. How would severe weather like tornadoes affect the project?

    The solar tracking arrays are built to robust ASCE (American Society for Civil Engineers) standards. In the event of extreme weather and high winds, operational procedures will be implemented to stow the trackers in a direction to best withstand high winds.

    Recent experience with solar farms encountering severe weather is encouraging. When Hurricane Florence struck in September 2018, North Carolina's solar farms remained operational with only minimal damage while other parts of the state's electricity system failed.

16. What happens when solar panels get damaged?

    If solar panels are broken or damaged through acts of nature or otherwise, there are no materials that will leak out or pollute the air. Hecate will be responsible for any repairs or maintenance.

17. Will there be any cleaning agents used to wash the panels?

    We don't wash panels with chemicals. To the extent washing is needed, which may be quite infrequently due to regular rainfall, distilled water will be used.

18. How will this affect the wildlife?

    The project Site will be built on cultivated cropland which is seasonally disturbed for agriculture. The land will be converted from agricultural farmland to a solar farm. Studies conducted indicate that the project will not have adverse impacts to wildlife and will seek to mitigate through project design any potential issues that may arise.

19. How will the vegetation around and under the solar arrays be maintained?

    Vegetation management will primarily be done with periodic mowing and trimming. Little or no chemical vegetation control is planned once the site is stabilized.

Hecate is also exploring the potential incorporation of pollinator-friendly vegetation, and suitable crop co-location.

20. How will the solar farm affect air quality?

Because solar energy is created through the physical process of sunlight striking and exciting electrons and starting a flow of energy, as opposed to a combustion process, solar energy does not produce emissions during operation.

21. How will visual impacts be addressed?

Hecate Energy is committed to working with adjacent landowners in the project line of sight, to ensure minimal visual impact occurs to adjacent properties.

22. Will the solar farm affect property values?

Proximity to solar facility has not been demonstrated to decrease property values.

The Projects addition to the local tax base adds long-term, reliable funding to the County to provide for better schools and County services which will also protect the property values of adjoining landowners.

23. Where will the solar farm's electricity go?

If approved by the Public Utility Commission of Ohio (PUCO), the electricity generated by the Highland Solar Farm will be purchased by AEP Ohio, an electric utility serving Highland County and other parts of the state.

24. How many jobs will Highland Solar Farm create?

268 construction jobs will be added during the 12 to 18 month installation period. (Payroll is expected to total $56 million over period.)

5 permanent jobs and 10 secondary jobs will be created to operate and maintain the facility on an ongoing basis. (Annual payroll is expected to be $2.5 million.)

25. How long is the solar farm expected to remain in operation?

The Highland Solar Farm is expected to operate for at least 35 years.

26. What will happen when the solar farm ends its operating life?

When the Project stops producing power, the site will be cleared of all project components and properly disposed. The majority of the materials used to build the project will be steel, aluminum and glass which allow for recycling by Hecate Energy. The land will be restored to agricultural use, unless circumstances at the time of decommissioning indicate that another use is more appropriate.

27. What standards are being followed during construction and design?

To assure safety of workers and the community, the solar farm will be designed and installed in conformance with ASCE (American Society for Civil Engineers) standards. These standards promote safety, reliability, productivity and efficiency across all areas of design and construction of energy systems.

28. Why build a solar farm in Highland County?

According to the U.S. Department of Energy's National Renewable Energy Laboratory (NREL), Highland County is situated in the southwestern region of Ohio, which is the sunniest part of the state and offers the best solar resources for power generation by photovoltaic systems. This location also offers efficient transmission capabilities without building additional electrical wires.

29. How can I learn more or participate in the siting process?

Hecate Energy is taking great care to ensure that development, construction, and operation of the Highland Solar Farm benefits the community. We encourage you to provide feedback on any questions, thoughts or concerns. You may contribute to that effort by participating in several ways.

Visit:

The Highland Solar Farm website:
www.HighlandSolar.net

Contact:

Hecate directly: Patti Shorr, VP Project Development, Hecate Energy (PShorr@HecateEnergy.com).

Contact:

The Ohio Power Siting Board (OPSB) by going to the section of their website on the Highland Solar Farm's application: https://www.opsb.ohio.gov/siting-case-breakdown/18-1334-el-bgn-hecate-energy-highland-solar-facility-highland-county/

The Columbus Dispatch

Opinion

Editorial: Clean-power projects need more advocates in Ohio government

Posted Feb 2, 2019 at 4:30 AM

The fight over two proposed solar-energy plants in southern Ohio suggests that something's amiss in the way the state evaluates such proposals.

AEP Ohio is asking the Public Utilities Commission of Ohio for approval to be part of a deal to build two plants totaling 400 megawatts in Highland County and to tack the cost onto customers' electric bills. By many measures, it seems a good prospect, yet it faces opposition not only from industry groups who could be expected to oppose rate hikes but also from the Ohio Consumers' Counsel, an agency created to look out for utility consumers' best interests.

OCC, which has a long history of protecting consumers from excessive and unfair utility charges, says ratepayers shouldn't be charged for the solar projects because Ohio doesn't lack for generating capacity. If one considers nothing but the surcharge, that sounds reasonable.

But the solar plants promise benefits that easily outweigh the 28 cents per month they would add to the average residential customer's bill. If state law and regulations don't allow for PUCO to weigh anything else, something should change.

If PUCO can consider a broader picture, there's plenty to argue in favor of the projects.

Ohio, long dependent on coal for generating electricity, lags many other states in developing a renewable-energy economy.

The political power of the coal industry and the backward rejection by many Ohio politicians of anything smacking of "environmentalism" have been a heavy drag on alternative-energy development.

AEP Ohio says a majority of its customers want to see more of the company's power come from renewable energy and many say they're willing to pay something extra for it. Officials say the 28-cent surcharge would drop over time and that, eventually, lower electricity costs will save customers more than the plants' construction cost.

The company is in a sense under orders from PUCO to offer more solar-generated power; in a 2016 settlement agreement out of a dispute before the commission, AEP Ohio promised to pursue development of 900 megawatts of solar power. A spokesman said the Highland County projects would be among the largest in the Midwest, providing a substantial boost to solar in Ohio.

And beyond all that, the projects would bring desperately needed economic development to an area of the state with more than its share of struggles. Company officials estimate it would bring 4,000 construction jobs and 150 permanent ones, boosting many other businesses in the process.

Meanwhile, at the other end of the state, construction is about to begin on a 72-turbine wind-power project in Hardin and Logan counties and permits are in place for what could be hundreds more wind turbines in northwestern Ohio.

Unfortunately, the momentum won't be sustained because Ohio lawmakers effectively have killed future wind development with a 2014 law change that, at the behest of neighbors and clean-energy opponents, established unreasonably strict setback requirements for turbines. Projects under construction were approved before the law change; nothing new has been proposed since.

Wind proponents are working to restore reasonable rules, but they face stiff opposition in the General Assembly.

Regardless of how much one cares about addressing climate change, companies with bright futures care, and they want clean power. Ohio needs to encourage renewable-energy development — or at least stop sabotaging it.

Now these regional hopes are running into opposition in Columbus, led by a group called the Ohio Consumers' Counsel. Ironically, I have yet to find a single consumer who opposes this project. Nevertheless, the OCC says that there is not a "need" for this project. I say, come on down to Jackson, and I will show you some need.

To me, need is seeing working people struggle without a whole lot of help. Need is watching generation after generation of proud folks live in poverty. Need is seeing manufacturing and coal plants close their doors leaving behind few other options for employment.

I learned a long time ago from the late Gov. James A. Rhodes, a native of Jackson County, that the two most important things one can give a person are an education in one hand and a job in the other. There was a day in Ohio when we would have found a way to build projects like these.

I'm confident that those days are returning. We in Appalachian Ohio deserve to play a part in America's energy future, just like we did in America's energy past. I call on the PUCO to heed the plea of this region, and approve these projects.

Alan Stockmeister is a businessman who lives in Jackson, Ohio. He is a trustee of the Foundation for Appalachian Ohio and chair of the Southeastern Ohio Economic Initiative, a group of CEOs dedicated to the economic development of Appalachian Ohio.