



FRASIER SOLAR KNOX COUNTY, OHIO



OPEN ROAD
— RENEWABLES —

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INTRODUCTION

The Frasier Solar project (the “Project”) is a proposed 120 Megawatt (MW) solar project located in Clinton and Miller Townships and the City of Mount Vernon in Knox County and is under development by Open Road Renewables. In partnership with Knox County farmers and other private landowners, the Project will consist of 8-12 solar array fields totaling up to 840 acres of private property. Solar panels and other equipment will be enclosed with agricultural-style fencing, and views of the solar arrays will be mostly hidden with trees, shrubs, and other native vegetation planted around its perimeter. The project area will feature dual solar-agricultural land use, with flocks of sheep grazing under and around the panels to maintain the vegetation.

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In addition to increasing energy independence and diversifying Ohio’s electricity generation, the Project will provide **\$1.1 million in new revenue** for Knox County, Miller Township, Clinton Township, and Mount Vernon City Schools every year for the life of the Project.

The Open Road Renewables team is dedicated to a community-first approach to development that includes active participation in the Mount Vernon community, supporting local causes and initiatives, and soliciting community feedback. Engagement with community members and leaders is well underway, and we look forward to hearing from you as well.

We hope the information in this packet is helpful. Please reach out to us if you have questions or concerns, would like to provide feedback, or want to get involved!

FRASIER SOLAR PILOT SUMMARY














Here's what the approved PILOT means for Knox County.

\$42.8 MILLION

**of stable,
guaranteed
revenue over
40 years**

What is a "PILOT"?

The PILOT (Payment In Lieu of Taxes) program allows local communities to create a lasting partnership with a utility-scale solar facility that will provide significant and sustaining revenues for schools and local governments, while creating jobs and economic activity.

	Knox County Taxing Jurisdiction	Percentage	Annual	40-Year Total
 Mount Vernon City School District		45.2%	\$488,289	\$19,368,090
 Developmental Disabilities		6.7%	\$72,646	\$2,881,515
 County General Fund		26.5%	\$286,167	\$11,351,243
 City of Mount Vernon		0.3%	\$2,877	\$114,594
 Senior Citizens		1.0%	\$10,727	\$425,495
 Public Library		1.6%	\$17,652	\$700,181
 Miller Twp		4.5%	\$48,454	\$1,919,235
 Clinton Twp		1.8%	\$19,438	\$774,426
 Mental Health		1.3%	\$13,579	\$538,601
 Children's Services		1.6%	\$17,652	\$700,181
 County Parks District		0.4%	\$4,753	\$188,510
 Knox County Career Center		8.0%	\$86,904	\$3,447,046
 Community Health Center		1.0%	\$10,863	\$430,881
TOTAL			\$1,080,000	\$42,840,000

Each year, \$7,000/MW is divided among the local governmental taxing entities, plus \$2,000/MW goes to the general fund. Total annual payments to each taxing entity are subject to change based on future tax levy rates. Annual payments in the first year of operations may be less than the amounts shown here due to construction of the facility in two phases.

THE FRASIER SOLAR PILOT IN ACTION

Creating jobs, increasing local and state revenues, and creating clean and domestic energy.



of the construction workforce on the project must come from Ohio residents

\$1.1 MILLION

annually to local schools and services

120 MEGAWATTS of clean energy

200+ construction jobs



FULL-TIME JOBS AND CAREER DEVELOPMENT



FARMLAND PRESERVATION



LASTING COMMUNITY PARTNERSHIP



TRAINING PARTNERSHIP WITH LOCAL VOCATIONAL SCHOOL



REQUIREMENT TO MAINTAIN & IMPROVE INFRASTRUCTURE



EMS & FIRE TRAINING



SOLAR COMPONENTS

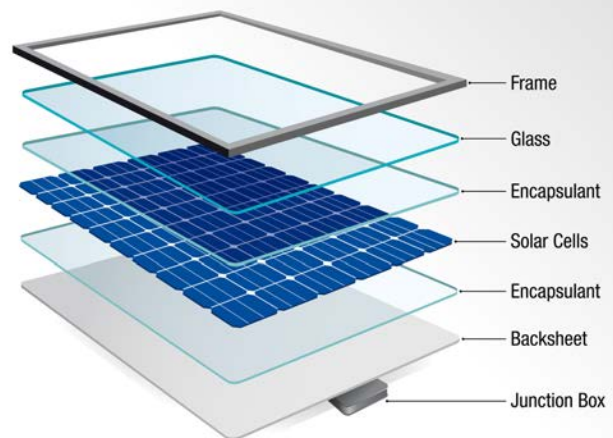


SOLAR PANELS

A Solar PV panel consists of a semiconductor material that absorbs the sun's light and transfers that energy to negatively charged electrons. This extra energy allows electrons to flow through the semiconductor material as electric current, which is collected by conductive metals.

Solar projects use several industry standard solar panel varieties such as Crystalline, Crystalline Bi-facial, and Thin Film. Ohio is home to one of the largest solar panel manufacturing facilities in the entire world.

Solar panels are composed of layers of solid materials including tempered glass, plastic encapsulant, and semi-conductor material – meaning that, if damaged, there is nothing that can leak out.



PARTS OF A SOLAR PANEL

QUICK FACTS

- Solar panels are solid state and contain nothing that can leak out into the surrounding environment
- Solar panels are designed and tested to perform at a high level for over 25 years
- Solar technology is modular, allowing the same technology to be used on a house, farm, school, commercial building, or in a power generating facility.

SOLAR COMPONENTS



INVERTERS

The DC cabling from strings of solar arrays is routed through combiner boxes to higher-capacity DC cabling that routes power to an inverter. Inverters consist of electric equipment that converts the power generated by the solar array from DC to AC. An associated transformer "steps up" the voltage of the AC power to 34.5kV.

In the solar industry, inverters come in two principal forms: Central Inverter or String Inverter. String Inverters, as the name implies, handle a string or several strings of solar panels. A Central Inverter is higher capacity and handles many strings. Almost all utility-scale solar projects in Ohio use Central Inverters.

Central Inverters are mounted on a gravel pad, cement foundation or metal skid in the interior of solar arrays (far from neighboring properties).

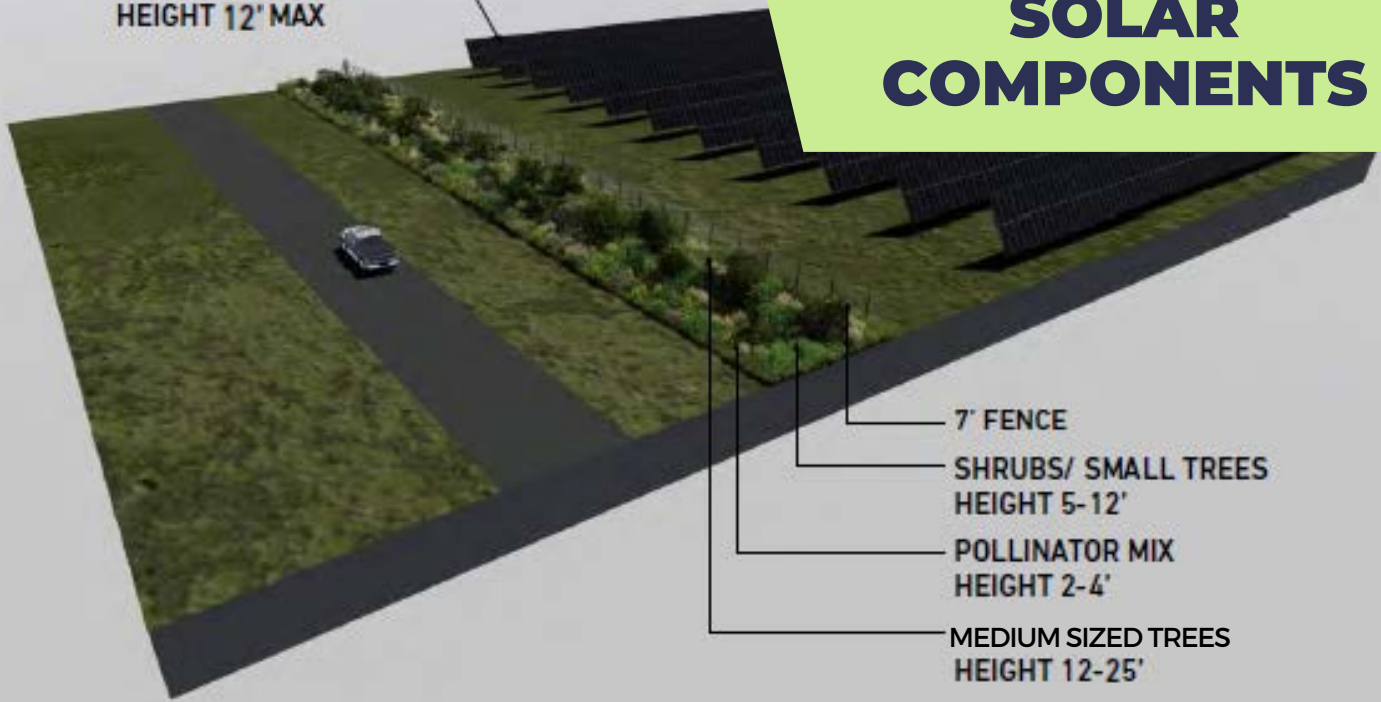
Inverters and the associated step-up transformers are sited to avoid off-site noise impacts of that occur during operations. For Open Road projects, this means that Central Inverters will be placed where there is no noticeable increase in noise levels at neighboring homes, and will be at least 500 feet from those homes.

QUICK FACTS

- Central inverters are sited centrally to project arrays to optimize the amount of DC cables used.
- Open Road commits to minimum setbacks from residences of 500 feet.
- Open Road conducts comprehensive sound monitoring and modeling during design and permitting to inform setback distances and avoid any noticeable increases in off-site noise during operations.

SOLAR PANELS
HEIGHT 12' MAX

SOLAR COMPONENTS



5 YEAR HIGH DENSITY PLANTING -
POLLINATOR MIX, LARGE SHRUB / SMALL TREES AND LARGE TREES

LANDSCAPING

In addition to setbacks, array height restrictions, and smart project design, Open Road works with Ohio-licensed landscape architects to design robust and area-appropriate perimeter landscaping. Our approach to landscaping involves creating three or more landscaping design densities that we refer to as "modules."

These modules are designed using a wide range of native and adapted plant species, density of plantings, and number of rows of plantings. The goal of each module is not necessarily to fully obscure the project from view from the start. Rather, the goal is to install a low maintenance and resilient planting design that grows over time and is appropriate the area.

Higher-density modules will largely obscure the project from most viewers within 5 to 8 years after planting.



QUICK FACTS

- Open Road works with Ohio licensed landscaping architects to design site-specific landscaping modules
- Each module consists of diverse native and adapted plant species appropriate for the area
- The project is responsible for maintaining all project landscaping

SOLAR COMPONENTS



FENCING AND LIGHTING

Solar facilities in Ohio are expected to use agricultural-style fencing. This fencing is typically woven wire and is supported by wood or metal posts that are either driven or cemented into the ground. These fences are usually 6 to 7 feet high and do not include any barbed wire or razor wire. Chain-link style fencing and barbed wire are used only at the project and utility substations, as required by national codes.

The entire perimeter of the project area is fenced for security purposes with secure, gated access points from public roads. Although such fencing can restrict the passage of larger mammals, accommodations can be made in the fence to allow the passage of smaller animals. Corridors along streams, larger ditches, forested areas, and roadway setbacks are frequently left open and function as wildlife corridors.

Solar projects require minimal permanent lighting – typically only at project entrances, inverters, and the substation. Lighting at gates and inverters is motion-activated and shielded. Otherwise, project lighting during operations is limited to temporary lighting when necessary for maintenance.

QUICK FACTS

- Fencing is typically 6 -7 feet high.
- Ohio expects the use of agricultural-style fencing without barbed wire.
- Fencing can be made wildlife-permeable to benefit smaller mammals.
- Solar projects use minimal permanent lighting.

PROTECTING FARMLAND, DECOMMISSIONING, AND RESTORATION

Drain Tile

In addition to complying with Ohio EPA stormwater management regulations, Frasier Solar will complete a comprehensive Drain Tile Assessment of the project area. The assessment involves extensive mapping of existing drain tile based on information gathered from landowners, maps on file with the Knox County Soil and Water Conservation District, and satellite imagery. The Drain Tile Assessment will be submitted to the OPSB for review along with the Project's permit application, and the Project will be designed to avoid all drain tile mains and as much lateral drain tile as possible. After construction, any damaged drain tile that impacts drainage on neighboring properties will be repaired or replaced. Frasier Solar will consult with the owners of adjacent agricultural parcels regarding any shared drain tile infrastructure, and the Project's permit will prohibit adverse drainage impacts on neighboring properties.

Best Soil Management Practices

Frasier Solar is committed to Best Management Practices to preserve agricultural soils during the construction and decommissioning of the Project. These practices are designed to protect the topsoil and subsoils at the Project site. Frasier Solar will conduct extensive soil testing before construction and after the Project is decommissioned to ensure soils are returned to at least their pre-construction conditions. Additionally, year-round vegetative cover and pollinator habitats reduce runoff, and reduced chemical loading of solar compared to modern farming practices are expected to improve soil quality over time.

Decommissioning and Restoration

At the end of Frasier Solar's 40-year life, the project will be decommissioned and the land restored to its previous agricultural condition. Ohio state law requires that solar projects submit financially-assured decommissioning plans before construction that detail the removal and restoration processes. The law also requires solar project owners to post a "decommissioning bond," which will be held by a third party to ensure sufficient funds will be available to cover all removal and restoration costs. The bond amount is re-evaluated every five years throughout the project's life to account for inflation and changes in disposal, labor, and other relevant costs.

Preserving Farmland

Frasier Solar's payments to participating landowners help families keep farms intact for future generations. As a long-term but temporary land use, utility-scale solar facilities also protect farmland from permanent loss to real estate, commercial, and other types of development. Furthermore, much like a conservation easement, solar facilities allow the soil to rest and for nutrients to be restored during the projects' 40-year life-spans.





FREQUENTLY ASKED QUESTIONS

TECHNOLOGY

Q. What kind of technology do solar projects use?

A. Solar projects use conventional solar panels just like those installed on the roofs of homes and businesses. This well-established technology has been around for decades.

Q. How do solar panels make electricity?

A. When sunlight hits a solar panel, the electrons in the solar panel's semi-conducting material become energized and create an electric current.

Q. Who uses the electricity from solar projects?

A. The electricity from solar projects goes onto the high-voltage electrical grid that supplies power to everyone. That means power will flow to homes and businesses in the area where the project is located as well as to the larger region.

Q. Isn't solar too expensive?

A. No. Innovation and competition have dramatically reduced the cost of solar in recent years. In many areas, solar now costs about the same or less than traditional sources.

Q. Doesn't solar receive federal subsidies?

A. All types of power generation (including coal, gas, hydro and nuclear power) receive economic benefits from certain federal policy incentives, and solar is no exception.

CONSTRUCTION & DECOMMISSIONING

Q. How long does it take to build a solar project?

A. Construction of most solar projects takes roughly 12-15 months.

Q. What happens at the end of the useful life of the solar panels?

A. After the productive life of the panels, which is 35-40 years, the solar project will be "decommissioned", panels recycled or otherwise properly disposed of, and the land returned to its pre solar project condition.

Q. What assurance is there that the project owner will carry out the decommissioning?

A. Financial security, such as a bond, is required to ensure funds are always available for decommissioning and restoration of the land.

Q. What if the owner of a solar project goes bankrupt?

A. If an owner went bankrupt, it is very likely that a new owner would take over. Solar projects are expensive to build but reliable and inexpensive to operate. So, there are strong incentives to continue a solar project's operations.

LAND USE

Q. What impact do solar projects have on the land?

A. Very little. In flat areas, earth moving for solar projects is limited because the steel piles for the panels are installed using the existing grades. Topsoil is preserved for future agricultural use. Essentially the entire site will be planted with native grasses and maintained with minimal herbicide use.

Q. Do solar projects have foundations?

A. The steel piles for panels generally have no foundations and inverters are installed on gravel pads, prefabricated concrete, or metal skids. Fence posts usually have small foundations.

Q. How much of the land in a solar project is occupied by equipment?

A. Solar panels are spaced apart to prevent shading, inspect and maintain the equipment, and maintain the vegetation under and around the panels. Only about 1/3rd of the project area is beneath solar panels.

Q. How is storm run-off controlled?

A. Solar projects are required to install controls to prevent sediment erosion during construction, and, during operation, they must comply with stormwater management permits to protect neighbors and the environment.

Q. Can fields used for a solar project be returned to farming?

A. Absolutely. A study by N.C. State University found that solar has only short-term impacts on productivity and is a “viable way to preserve land for potential future farming.”

Q. What happens to drain tile on farm fields?

A. Prior to construction, drain tile is located and mapped, and the facility is designed to avoid as much tile as possible. Open Road commits to ensuring drain tile networks continue to function properly for neighbors.

FREQUENTLY ASKED QUESTIONS



IMPACTS TO NEIGHBORS

Q. Do solar projects make any noise?

A. Because they have very few moving parts, solar projects come close to operating silently. Some of the equipment makes small sounds, but those sounds typically cannot be heard by neighbors.

Q. Do solar projects have any permanent lighting?

A. Virtually none. Motion-activated and downward-facing lights are located only at gates and sometimes at equipment such as inverters or the project substation.

Q. Do solar panels reflect sunlight?

A. Solar panels are designed to absorb, not reflect, sunlight. In fact, they reflect much less light than glass or water. All but about 2% of the sunlight is absorbed and converted to electricity.

Q. Do solar projects create any traffic?

A. Construction activities will create additional traffic, but once completed, the project will have minimal impact on area traffic. Open Road commits to upgrading or repairing county and township roads used during construction.