EASTERN COTTONTAIL
solar project

PO Box 218
Baltimore, OH 43105

Eastern Cottontail Solar Project:
Addressing Common Solar Concerns

Health & Human Safety

Will solar panels radiate electromagnetic fields (EMFs) and impact the health of nearby landowners?

Modern solar panels are comprised of solid materials confined between sturdy glass with a metal frame. Panels typically consist of glass, polymer, aluminum, copper, and semiconductor materials. To provide decades of corrosion-free operation, the solar cells within panels are encapsulated and protected from air and moisture.[1]

Electromagnetic fields (EMFs) occur from the flow of current through wires or electrical devices that have an electric field produced by voltage. Electromagnetic fields surround anything that uses or carries electricity. They are associated with the production and distribution of electricity and can be produced through natural and human-made sources – refrigerators, coffee makers, microwaves, solar energy facilities, the sun, fire, lightning, and a multitude of other items.

The Eastern Cottontail Solar Project (Project) will not pose any associated health risks given the EMFs emitted are extremely weak. According to a study conducted by the National Renewable Energy Laboratory (NREL), EMFs measured at the perimeter of solar photovoltaic (PV) installations are indistinguishable from background EMFs, and are lower than EMFs emitted from common household appliances, such as televisions and refrigerators.[2] Eastern Cottontail Solar is committed to implementing mitigating measures, such as setbacks from neighboring properties, and adhering to strict safety standards to keep the community safe![3]

Do solar panels use PFAS (per- and polyfluoroalkyl substances)? If so, how will community members be impacted by those chemicals? Do solar panels have hazardous materials?

PFAS are not customarily used in solar panels because safer, effective alternatives have already been developed and commercialized.[4] Even in the event PFAS were present, either at the end of life or while in active use, studies have shown no presence or leaching of PFAS from solar panels. According to a report by North Carolina State University, "Photovoltaic (PV) technologies and solar inverters are not known to pose any significant health dangers to their neighbors. The most significant dangers posed are to trespassers of contact with high voltage equipment."[5]

[1] https://nccleantech.ncsu.edu/wp-content/uploads/2019/10/Health-and-Safety-Impacts-of-Solar-Photovoltaics-PV.pdf
[2] https://www.nrel.gov/docs/fy17osti/67440.pdf
[3] https://www.edf-re.com/flipbook/8586
[4] https://graham.umich.edu/media/pubs/Facts-about-solar-panels--PFAS-contamination-47485.pdf
[5] https://nccleantech.ncsu.edu/wp-content/uploads/2019/10/Health-and-Safety-Impacts-of-Solar-Photovoltaics-PV.pdf

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In short, PFAS and hazardous materials do not pose a risk to the health, safety, and welfare of the Fairfield community.

Will the solar project be loud when it is up and running?

Solar panels, themselves, are completely silent. Certain pieces of equipment of a utility-scale solar project, which include inverters, transformers, and motors, do emit a small amount of sound. The impact of this sound is nonexistent because the equipment is strategically placed within the solar layout and is distant from the project's boundary. Transportation and maintenance equipment – including cars, trucks, and lawnmowers – are also a common source of low-emitting noise within utility-scale solar projects that community members are used to hearing elsewhere.[6] A noise study will be conducted to ensure that the Project operates within applicable noise limits.

Will there be any light pollution from the panels?

Panels do not create light and will not cause light pollution. For security purposes, there will be lighting at the Project substation, however lighting will not be required within the rest of the arrayed area.

Do solar panels cause a glare to occur from light reflecting off the panels?

Solar panels are designed to ensure minimal reflection as any reflected light equates to lost energy; therefore, the panels are designed with anti-reflective coating to absorb the maximum amount of light. In addition, Eastern Cottontail Solar plans to mount the panels on single axis "tracking" arrays. The potential for glare is significantly reduced for solar projects that use these tracking arrays (as compared to fixed-tilt panels), because the angle of the panels continuously adjusts throughout the day to directly face the sun, significantly reducing the potential for ground-level reflections.

However, solar panel glare occasionally occurs when an observer sees an indirect reflection of the sun from the surface of a solar panel. As part of the permitting process, Eastern Cottontail Solar will conduct a Glare Analysis, which determines if there is any potential impact on homes, for planes and helicopters that may fly over the Project area, for cars driving along roads around the Project area, and structures near the Project. The study analyzes the extent of potential glare across all daylight hours throughout the year. If any potential for glare is identified, the Project will mitigate the identified glare by implementing screening and vegetative buffers, such as trees or shrubs.

[6] https://ohiodnr.gov/wps/wcm/connect/gov/fc124a88-62b4-4e91-b30b-bc1269d0dde5/ODH+Solar+Farm+and+PVs+Summary+Assessments_2022.04.pdf?MOD=AJPERES

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Will solar components, such as panels, inverters, and the like, catch on fire? If so, what action is required to mitigate the risk of fire?

The risk of fire in a utility-scale solar project is incredibly low. Solar panels are primarily made of non-flammable components.[7] A majority of the panel's weight comes from the one or two layers of non-flammable, protective glass that protects the PV cells, which are what harness the energy from the sun.

EDF Renewables (EDFR) will work with local departments to create an Emergency Response Plan in the unlikely event of an emergency, such as if a fire were to occur within the facility. The Emergency Response Plan ensures the Project, as well as local fire departments, EMS, and law enforcement agencies, are aware of proper protocols for entering the facility to manage an emergency event. In addition, the Project will work with local fire departments to provide training and education prior to operation of the facility.

For more information on health and human safety concerns, follow the links below:

- Solar and fire safety https://www.edf-re.com/flipbook/8043
- Health and safety of solar https://nccleantech.ncsu.edu/wp-content/uploads/2019/10/Health-and-Safety-Impacts-of-Solar-Photovoltaics-PV.pdf

Environmental

Will the quality of surface water, groundwater (i.e., aquifers) and other water sources used for public consumption and recreation be impacted by the solar facility? Will solar impact wetlands and current water flow?

Modern PV solar panels are comprised of solid materials confined between sturdy glass with a metal frame. Panels typically consist of glass, polymer, aluminum, copper, and semiconductor materials that can be recovered and recycled at the end of their useful life. To provide decades of corrosion-free operation, the solar cells within panels are encapsulated and protected from air and moisture.[8] All solar arrays are engineered to follow all pertinent regulations regarding engineering and safety. Due to their composition, solar panels do not pose a material risk of toxicity to public health and safety.[9]

The quality of surface water, groundwater, or other surrounding water will not be negatively impacted by the presence of an active solar facility. Additionally, the Project will comply with the Ohio Department of Natural Resources (ODNR) standards of proximity to wetlands, streams, and rivers.[10] The setbacks suggested are listed below:

[7] https://nccleantech.ncsu.edu/wp-content/uploads/2019/10/Health-and-Safety-Impacts-of-Solar-Photovoltaics-PV.pdf
[8] https://nccleantech.ncsu.edu/wp-content/uploads/2019/10/Health-and-Safety-Impacts-of-Solar-Photovoltaics-PV.pdf
[9] https://nccleantech.ncsu.edu/wp-content/uploads/2019/10/Health-and-Safety-Impacts-of-Solar-Photovoltaics-PV.pdf
[10] https://ohiodnr.gov/static/documents/real-estate/ODNR-Guidance_for_ProposedSolarEnergyFacilities_in_Ohio.pdf.

- 120-foot setback along streams
- 120-foot setback from Category 1 and Category 2 wetlands
- 300-foot setback from Category 3 wetlands

Solar panels do not contain levels of toxic chemicals or materials that pose a detriment to public health and welfare; therefore, nearby water ways will not be impacted from the presence of panels. In addition, during the operation and maintenance of the facility, mowing operations will occur to keep the vegetation at an appropriate length to avoid growing above the panels. Eastern Cottontail Solar will implement a robust vegetative management plan that will contribute to maintaining a healthy water source, prevent erosion, and assist in regenerating soil composition.

To avoid disrupting previous water runoff patterns, a hydrology study will be conducted to understand how grading at the Project site may impact surface water runoff under normal and extreme conditions (a worst-case scenario would be a 100-year flood event). Hydrological conditions and potential drainage issues, and mitigation measures, including grading and drainage routing, will be factored into design and detailed in the final drainage and grading plan for the Project.

Additionally, the Fairfield County Board of Commissioners contracted Bennett & Williams Environmental Consultants, Inc. to provide a report detailing potential chemicals of concern in photovoltaic materials, potential for leakage of identified contaminants of concern from solar panels, studies on potential leakage of contaminants of concern, effect of hydrogeologic settings on potential movement of contaminants, and potential for use as farmland after solar panel decommissioning. The report concluded that under normal operating conditions, properly sealed solar panels do not leak, and therefore, will not leach chemicals into the surface of the ground. In addition, the report concluded that it is unlikely that a solar farm will negatively affect the quality of the groundwater.[11]

During construction, when pilings are being driven into the ground, how can you confirm that they won't impact drain tiles? What will you do if drain tiles are impacted and land, soil, drainage, stormwater, and other issues occur due to damaged drain tile?

Similar to crops, a properly operating solar project requires a well-drained surface. EDFR has successfully built several solar projects on land containing robust drain tile systems and is experienced in preventing drainage issues for both project landowners and their neighbors. By incorporating existing data on the drain tile system in the area, as well as implementing construction best practices, Eastern Cottontail Solar will work to avoid negative impacts to drainage tile systems within the Project area by proactively repairing and/or upgrading drain tile prior to construction, as well as guaranteeing the integrity of the system through decommissioning.

Additionally, the Project will prepare a Drain Tile Maintenance Plan as part of the permitting process, which describes how the Project intends to maintain the integrity of the drainage systems within the Project area and adjacent properties throughout its life. Drain tile locations will be collected from Project area landowners and the county Soil

[11] https://www.co.fairfield.oh.us/COMMISH/minutes/03.19.24-meeting-minutes.pdf

and Water Conservation District, which will be compiled and used to inform final design. This plan will be comprised of mitigation measures that prevent impacts to surrounding properties during Project construction and operation.

Will trees need to be cleared for construction?

The Project will be sited in such a way that it is very likely trees will not need to be cleared in bulk for the construction of Eastern Cottontail Solar. Best efforts will be made to situate the Project fully outside of forested regions of the Project area.

Do solar facilities impact the health and safety of domestic animals, livestock, wildlife, and aquatic life?

Preservation of wildlife habitats and migration patterns are a high priority for the Project. Large-scale solar projects proposed on either private or public lands in the U.S. must comply with strict federal, state, and local laws and regulations regarding environmental and wildlife protections.[12] Projects are required to provide detailed project construction plans, undergo a strict environmental review process, identify potential habitat where threatened and endangered species may be located, and incorporate mitigation measures where necessary before receiving a permit to be able to construct the project.

To avoid interfering with wildlife movement, the ODNR has provided guidance for fencing and maintenance of each proposed project. Fencing around panels should incorporate gaps or spaces of at least 6 inches x 6 inches to allow passage of small animals.[13] The Eastern Cottontail Solar Project will be incorporating wildlife-friendly fencing that includes wooden posts and wire mesh fabric comprised of square holes to allow small animals to pass through.

The ODNR recommends for solar developments to plant a minimum of 70% of the developed project area in beneficial vegetation, utilizing native and natural plant species to help create habitats for natural bird and bee pollinators, which can benefit natural and agricultural sites neighboring the solar project. The ODNR also recommends setbacks from existing wetlands and streams to preserve ecological integrity for amphibian and reptile habitats. Eastern Cottontail Solar will strive to follow all of these ODNR recommendations.

For more information on Environmental Impacts, follow the links below:

- https://www.edf-re.com/flipbook/8045
- https://www.edf-re.com/flipbook/8784
- https://graham.umich.edu/media/pubs/Facts-about-solar-panels--PFAS-contamination-47485.pdf
- https://nccleantech.ncsu.edu/wp-content/uploads/2019/10/Health-and-Safety-Impacts-of-Solar-Photovoltaics-PV.pdf
- https://ohiodnr.gov/static/documents/real-estate/ODNR-Guidance_for_ProposedSolarEnergyFacilities_in_Ohio.pdf

[12] https://www.seia.org/initiatives/habitat-conservation-planning
[13] https://ohiodnr.gov/static/documents/real-estate/ODNR-Guidance_for_ProposedSolarEnergyFacilities_in_Ohio.pdf

- https://dam.assets.ohio.gov/image/upload/ohiodnr.gov/documents/real-estate/ODNR-Guidance_for_ProposedSolarEnergyFacilities_in_Ohio.pdf

- On ODNR Guidance for Solar Developments:
  - https://ohiodnr.gov/static/documents/real-estate/ODNR-Guidance_for_ProposedSolarEnergyFacilities_in_Ohio.pdf
- On Wildlife Fencing and Vegetation Plans:
  - https://www.edf-re.com/flipbook/8784
- On Habitat Conservation and Environmental Reviews:
  - https://www.seia.org/initiatives/habitat-conservation-planning

Weather & Solar

What happens if a tornado, or some other strong weather event, were to occur in proximity to a solar facility and damage the panels?

In the event that severe weather, such as a tornado, were to occur within the Project area and cause damage to the Project components, EDFR will be liable for cleaning up the impacted area and properly disposing of the damaged components. Furthermore, just like anyone would have insurance on their car or home, EDFR will have insurance on the Eastern Cottontail Solar Project, which ensures that following any damage incurred to the Project, proper clean up and replacement would occur. All payments associated with clean-up and replacement that may be due to a severe weather event would be paid for by the Project. The community will not be liable for any payments, damage, or the like done to the Project due to severe weather.

Prior to the construction of a utility-scale solar project, solar panels go through rigorous testing for production and manufacturing approval. Their unique design allows them to withstand harsh weather elements such as hail, torrential rain, and wind. Studies have shown that modern panels are capable of withstanding quarter-sized hail for 30 minutes at speeds of 50 miles-per-hour without significant damage.[14] In addition, operation and maintenance team members will have the ability to tilt or "stow" the panels to reduce direct impacts from hail or other such storms.

Ohio has minimal amount of sunlight per year – how will panels produce electricity when it's always cloudy?

The sun is a utility-scale solar project's closest companion, but that's not to say electricity won't be generated on a cloudy day. Just like you can get a sunburn on an overcast day, solar panels will continue to produce electricity during cloudy weather. With advanced technology, solar panels can convert both direct and indirect sunlight into electricity, tilt and follow the sun throughout the day, as well as harness sun on both sides of the panel, which collectively further helps with generation.

[14] https://news.energysage.com/solar-panels-hail-hurricanes/

Operation and maintenance team members will be able to tilt the solar panels to minimize the accumulation of snow on the panels. What does accumulate will melt and fall off when the panel tracks the sun and harvests clean energy. The panels used for Eastern Cottontail Solar will likely be bifacial in nature, meaning they can harvest energy directly from the sun on the face of the panel as well as from the reflection of the sun off the snow, ground, etc. beneath the panel. This allows the panel to be more efficient and productive in harvesting energy from the sun.

Eastern Cottontail Solar is committed to conducting their due diligence to provide the members of Fairfield County with a safe, clean, and reliable source of energy. Our facility will be fitted with the most advanced technology, which will be tested and approved to handle even the most severe weather conditions.

For more information on Inclement Weather & Solar Panels, follow the links below:

- On solar panels and hail:
  - https://www.energy.gov/eere/articles/hail-no-national-labs-solar-panels-survive-severe-storm
- On testing of solar panels and related components:
  - https://www.nrel.gov/pv/accelerated-testing-analysis.html
- On solar panels and snow:
  - https://www.energy.gov/eere/articles/let-it-snow-how-solar-panels-can-thrive-winter-weather

End-of-Life & Decommissioning

Will solar panels be recycled?

EDFR is committed to responsible end-of-life management and is proactively developing collection and recycling processes. Should solar panels not meet operational standards, all efforts will be taken to refurbish, reuse, repurpose, or recycle the panel before disposing of it. Many components of the crystalline silicon panels can be reused and recycled, namely the metal, glass and wiring components, as well as the silicon cells which can be melted down to reclaim the silicon and various metals by specialty recycling companies. The glass recycled from solar panels is used for many products, such as berglass, glass containers, llers in paint, bead manufacturing, abrasives and specialty glass. The metals are separated and sent to their recycling partners. The Federal Resource Conservation and Recovery Act (RCRA) along with state laws govern the end-of-life disposal of solar products to ensure there are no negative outcomes to the local environment. Should the panel not be eligible to be refurbished or repurposed, the majority of the components can be recycled.

Furthermore, in November of 2023, EDFR signed an agreement with SOLARCYCLE,[15] a technology-based solar recycling company that specializes in recycling damaged or broken solar panels during the construction process or while the facility is operational. They provide recycling services for projects at grid scale (such as Eastern Cottontail

[15] https://www.solarcycle.us/

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Solar),[16] distribution scale (community solar),[17] and onsite (rooftop or ground-mounted solar arrays).[18]

Many components of the solar modules anticipated to be used for Eastern Cottontail Solar can be reused or recycled at the project's end-of-life. The metal, glass and wiring components, as well as the silicon cells, can be melted down by specialty recycling companies such as SOLARCYCLE.[19] Should a panel not be eligible to be refurbished or repurposed, the majority of the components can be recycled.

Partnering with SOLARCYCLE is part of EDFR's commitment to provide responsible end-of-life management for used or damaged solar panels. With the technology provided by SOLARCYCLE, up to 95% of the solar panel can be recycled and reused. The materials recycled from solar panels through SOLARCYLE's process can be refurbished and incorporated in the next round of manufactured solar panels. This helps EDFR close the loop on the life of the solar panels.

Will the pilings that the solar panels rest on be chopped off at ground level or completely removed?

At the end of its useful life, the Project can work with landowners to "repower" the power plant in accordance with lease agreements and permit stipulations or decommission it. Decommissioning refers to removal of equipment and restoration of the site. A decommissioned solar project site can be repurposed for other uses at the landowner's discretion, such as returning the grounds to agricultural production or pursuing other types of development. Ohio legislation requires that the anticipated costs for decommissioning are bonded by the project.

At the Project's end-of-life, decommissioning will include removal of:

- Wires shallower than 3 feet;
- Inverter and transformer foundations to at least 3 feet below ground;
- Access roads by excavating, de-compacting, and replacing soils to level the terrain, unless agreed upon by the landowner and allowed by permit;
- Piles that are pulled out from the ground; and,
- Panels that may be re-used, re-sold, refurbished, or recycled.

Is it true that the owner/operator of the Project won't decommission the Project and landowners participating in the Project will be liable for cleaning up the mess?

The Project owner will be responsible for decommissioning the site, which includes being held responsible for the costs of decommissioning. The local community will not be responsible for the costs of decommissioning nor physically removing the components from the site given bonding requirements as outlined by the State of Ohio.

[16] https://www.edf-re.com/what-we-do/grid-scale-power/
[17] https://www.edf-re.com/what-we-do/distribution-scale-power/
[18] https://www.edf-re.com/what-we-do/onsite-solutions/
[19] https://www.edf-re.com/flipbook/8920

In addition, the Ohio Power Siting Board (OPSB) requires utility-scale solar project applicants to submit a decommissioning plan for review 60 days prior to starting construction of the facility. The applicant must also have a state registered professional engineer prepare the plan. Furthermore, the plan that is prepared by the state registered professional engineer must include the following:[20]

- A schedule of decommissioning activities; decommissioning must occur within 12 months of the facility ceasing operations;
- The cost of decommissioning, including the plans for proper disposal of facility components and the restoration of the land; and,
- The cost of decommissioning must be recalculated every five years by an engineer that has been retained by the applicant.

For more information on Project End-of-Life & Decommissioning, follow the links below:

- https://www.edf-re.com/flipbook/8037
- https://www.seia.org/sites/default/files/2020-11/SEIA-Recycling-Program-Factsheet-January%202020%20final.pdf
- https://www.seia.org/sites/default/files/SEIA-PV-Recycling-Checklist.pdf
- https://farmoffice.osu.edu/sites/aglaw/files/site-library/LawBulletins/SB52DecommissioningOct2021.pdf

Construction & Operations

Who will construct Eastern Cottontail Solar? Will it be locals or people from other states?

Eastern Cottontail Solar, like other utility-scale renewable energy projects developed across the United States, will partner with Engineering, Procurement, and Construction (EPC) contractors who are skilled in constructing solar facilities. EDFR also holds a trilateral agreement with local Ohio Unions—International Union of Operating Engineers, Laborers International Union of North America, and International Brotherhood of Electrical Workers—who will support the Project's efforts in hiring local labor for the construction of Eastern Cottontail Solar. The Project intends to pursue a Payment in Lieu of Taxes (PILOT) with the Fairfield County Commissioners, which will hold Eastern Cottontail Solar accountable for acquiring at least 70% of its labor force for construction from those who reside in the state of Ohio.[21]

During construction, will there be a lot of traffic on our roads and bridges? Who will be responsible for repairs to our local infrastructure?

During the construction of Eastern Cottontail Solar, traffic may increase due to crew members traveling to the site, as well as supplies being delivered. EDFR will conduct a pre-construction road analysis to determine the best routes for trucks and trailers to haul supplies to the site and whether upgrades are necessary for anticipated construction

[20] https://farmoffice.osu.edu/blog/thu-07012021-254pm/ohio-legislature-passes-solar-and-wind-project-siting-and-approval-bill
[21] https://codes.ohio.gov/ohio-revised-code/section-5727.75

activity, based on the current road conditions. The Project conducts this analysis to minimize the impacts of traffic on local roads. A similar analysis will be conducted post-construction to evaluate whether roads will need repairs due to damage that may have occurred during construction.

Roads will continue to be monitored throughout construction. Following construction, the Project will work with local officials to guarantee the roads have been returned to the same or better condition before construction commenced.

Once operational, where will the power go? I've heard it will be transported to other states, as far away as the East Coast? I thought it would remain local?

Once operational, the power that is generated from the Project will be routed to the electric transmission grid. For Ohio and other segments of the Midwest and Eastern United States, PJM Interconnection, LLC (PJM) is the regional transmission organization that oversees the movement of electricity across this portion of the country.[22] Similar to what Air Traffic Control does for the aviation field, PJM performs a balancing act directing power from the supply to the demand. They coordinate where power is needed during peak demand and ensure there is enough supply to meet the needs of the consumer.

Power on the grid moves along the path of least resistance, similar to how water flows. If there is an energy need close to a generation site (coal, natural gas, wind, solar, etc.), the need will likely be fulfilled by that closely located generation source. Once all the needs for energy near the generation site are fulfilled, energy will continue to flow down the line to meet other energy demands further away. While we cannot track the distribution of every electron from the source of power generation, we can be certain that the power generated from Eastern Cottontail Solar has the capacity to assist meeting local energy demands by connecting to the regional electrical grid.[23]

How will the solar facility be managed to ensure everything is operating efficiently and effectively? Will there be proper maintenance to replace components that are not working properly?

Eastern Cottontail Solar is fully equipped to manage the integrity of the Project once it is operational. EDFR will have an experienced team of full-time technicians, supervisors, and support staff, who are direct EDFR employees, that will work on-site from an Operations and Maintenance building in the project area. The technicians will manage on-site preventative and corrective maintenance, the integrity of the solar plant, major component repair/replacement, engineering support, and coordinate other required services, such as mowing.

[22] https://pjm.com/about-pjm
[23] https://www.edf-re.com/flipbook/8587

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What type of visual mitigation will there be during the life of the Project? Will adjacent landowners be looking directly at panels? I don't want to see it from my house!

Eastern Cottontail Solar will provide visual mitigation through vegetation to be planted within the buffer to screen the Project from adjacent properties. Visual mitigation may consist of planting native and naturalized trees, shrubs, and grasses, to obscure the view of the solar facility from the neighbors and roadsides. The visual mitigation plan will be incorporated within our broader site plan.
In addition to visual mitigation through screening with trees and other plants, the Project will adhere to the current setback regulations proposed by the OPSB. The currently proposed setback regulations require a project to adhere to the following distances, which will help alleviate the visual effect near a solar facility[24]:

- Non-participating residences: 300 feet
- Non-participating parcel boundaries: 50 feet
- Roadways: 150 feet

Will the panels be manufactured overseas?

In August of 2023, EDFR North America signed a multi-year U.S. manufactured solar module (panel) supply agreement to deliver up to 7 gigawatts (GW) of high efficiency solar modules that will allow for an increase in energy production throughout the life of the Project. These panels will support EDFR's efforts in providing clean, renewable, and reliable energy to the local transmission grid. The modules will be manufactured in Mesquite, Texas, as previously announced by Canadian Solar, in June 2023. The facility will not only provide skilled labor for Americans but will also be a domestic provider of solar modules for projects across the United States. Partnering with a domestic solar module manufacturer will minimize the risk of supply chain fluctuations that have been seen across the industry and support American manufacturing and jobs.

What are the vegetation management requirements during the operation of a solar facility?

The Ohio Department of Natural Resources (ODNR) has developed guidance for vegetation management at solar energy facilities.[25] Eastern Cottontail Solar will consult with the ODNR on the Project's vegetation management plan, and the plan will include goals to plant a 70% minimum of the developed Project area in beneficial vegetation, as outlined by the ODNR. The Project will also follow the Ohio Solar Site Pollinator Habitat Planning and Assessment Form[26] with a minimum score of 80 points. The assessment form outlines guidelines on native and flowering plant diversity within the site perimeter and buffer area, planned vegetative buffers, site preparation, and more. Routine mowing will be limited to allow for natural reseeding of plantings and reduce impacts to ground-nesting birds.

[24] https://dis.puc.state.oh.us/ViewImage.aspx?CMID=A1001001A23G20B42806E01564

[25] https://dam.assets.ohio.gov/image/upload/ohiodnr.gov/documents/real-estate/ODNR-Guidance_for_ProposedSolarEnergyFacilities_in_Ohio.pdf
[26] https://dam.assets.ohio.gov/image/upload/ohiodnr.gov/documents/real-estate/Ohio_Solar_Site_Pollinator_Habitat_Planning_and_Assessment_Form.pdf

Further, the Eastern Cottontail Solar Project will aim to select a seed mix to also assist with drainage, prevent erosion, and further regenerate soil health.

As solar projects become more abundant across the Midwest, the possibilities for dual land use strategies grow, as well. Some examples of this dual land use include specialty vegetable crop production, livestock grazing, and pollinator habitats.[27] Eastern Cottontail Solar will continue to update the community on design plans throughout its development process.

What type of fencing will be used for this project?

Sometimes called "agricultural fencing" or "wildlife friendly fencing," Eastern Cottontail Solar's perimeter fencing will be constructed using wooden posts and wire mesh 'fabric' that contains approximately 6-inch square holes. This fencing is also permeable, allowing for the passage of small animals.

Exterior facing portions of the Eastern Cottontail Solar facility are currently anticipated to have six-foot fences to restrict the public, with gates at entrance points to control access for maintenance personnel. Internal areas, including around the substation, may have seven-foot chain link fencing where necessary in compliance with the National Electrical Safety Code.

For more information on Construction and Operations, follow the links below:

- On power transmission and the grid:
  - https://www.eia.gov/energyexplained/electricity/delivery-to-consumers.php
- On the ODNR Design Guidance and Construction Best Practices:
  - https://ohiodnr.gov/static/documents/real-estate/ODNR-Guidance_for_ProposedSolarEnergyFacilities_in_Ohio.pdf

Use of Farmland

Why locate the Project in our community?

As Fairfield County continues to grow and seek development that supports economic expansion and workforce development, the Eastern Cottontail Solar Project is a viable solution to compliment growth outlined in the Fairfield County Comprehensive Plan by providing a significant tax base and an expanded workforce.[28] According to the County's Comprehensive Plan, it is expected that an additional 56,000 people will call Fairfield County "home" by 2050. Eastern Cottontail Solar is well positioned to supply nearly 75% of the required power needed for these new residents!

[27] https://ohioline.osu.edu/factsheet/cdfs-4106
[28] https://www.co.fairfield.oh.us/rpc/pdf/Fairfield-Comp-Plan-D10-02.2024.pdf

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The following additional reasons highlight why Fairfield County is an optimal choice:

- Private landowners have expressed interest in diversifying their financial portfolios and preserving multi-generational real-estate assets by voluntarily signing lease agreements, exercising their property rights to do so.
- There is availability of local workforce for construction and long-term maintenance of a utility-scale solar project.
- Fairfield County consists of flat, cleared land, with direct access to existing transmission infrastructure with available capacity.
- Utility-scale solar meets the significantly increasing demand from regional Ohio utilities and commercial and industrial customers for locally generated, clean energy to reduce state energy imports, while meeting ever-growing electricity usage.

Will there be an impact to local food production once the land is no longer being used for row-crop production?

In 2022, the United States exported $196 billion worth of farm and food products to foreign countries such as China, Japan, Europe, South America, and even Canada and Mexico. From that total, soybeans accounted for more than one-third of the increase in annual exports, which in 2022, was 11 percent higher than in 2021.[29] Additionally, corn had its second-highest year in exports, primarily due to supply issues from other countries across the globe, as well as an increase in demand. Of all the other agricultural products grown in the U.S., approximately 20% of those products are exported on an annual basis.[30]

For Ohio, nearly $3.6 billion worth of agricultural goods were exported in 2017, with soybeans and corn ranking the highest on the charts.[31] In Fairfield County, OH, roughly 188,407 acres of ground is farmed for corn, soybeans, and other crops.[32] A majority of the crops grown locally are shipped elsewhere to be manufactured into goods or other products such as soybean meal for animal feed, soybean oil for cooking, or even made into ethanol for fuel. Crops grown in Fairfield County and across Ohio are used for a variety of resources, which are shipped nationally or abroad.

The Eastern Cottontail Solar Project, once constructed and operational, will be comprised of less than 0.31% of land in Fairfield County, OH and less than 0.47% of prime farmland in Fairfield County, OH, allowing for continued use of the neighboring land for row-crop production. In addition, the ground will be able to be farmed once the Project is decommissioned at the end of its useful life and returned to the owner to use their ground for whatever they see fit.

[29] https://www.fas.usda.gov/sites/default/files/2023-05/2022-Yearbook.pdf
[30] https://www.ers.usda.gov/data-products/ag-and-food-statistics-charting-the-essentials/agricultural-trade/#:~:text=The%20overall%20export%20share%20of,remained%20relatively%20constant%20since%202001.
[31] https://ustr.gov/map/state-benefits/oh
[32] https://www.nass.usda.gov/Publications/AgCensus/2017/Online_Resources/County_Profiles/Ohio/cp39045.pdf

Due to the relatively small footprint of the facility in comparison with the total area of current farmland in the county, the impact on local food production will be negligible.

How will prime farmland soil be impacted? It is never going to be the same!

Utility-scale solar projects are low-impact land uses that can safely operate next to neighboring agricultural operations. Natural ground cover under and between the rows of panels encourages the soil to rest and rebuild nutrients, allowing the respective landowner to return to agriculture if desired. Responsible solar development provides benefits to both agriculture and ecosystems by improving soil health, retaining water, and supporting native and naturalized pollinators that aide local food production.[33] In addition, farmers can utilize solar as a steady revenue stream. This steady income means that farmers are less vulnerable to fluctuations in market prices and the increasing frequency and severity of damaging weather events across the nation.

At the end of the solar farm's useful life, the pilings and equipment can be easily removed, and the land returned to its original state. Utility-scale solar is not a significant cause of the loss of agricultural land.[34] Though there are claims that ground-mounted solar projects are taking up large swaths of viable agricultural land, expanding urban areas and residential development accounts for nearly all lost farmland.[35]

What about stray voltage? Are you sure your electrical infrastructure is safe?

Stray voltage is typically caused by very old or faulty electrical equipment. Utility-scale solar projects must follow strict federal and state electrical safety codes governing the design, construction, and operation of any project, which means stray voltage will not impact neighboring farms due to modern-day underground collection and transmission lines.

For more information on the Use of Farmland, follow the links below:

- On Solar and Agricultural Land Use:
  - https://www.edf-re.com/flipbook/8042
  - https://www.energy.gov/eere/solar/solar-and-agriculture-co-location

[33] https://cbey.yale.edu/research/maximizing-land-use-benefits-from-utility-scale-solar
[34] https://www.seia.org/research-resources/solar-agricultural-land-use
[35] https://www.agweek.com/business/31-million-acres-lost-development-cuts-into-u-s-farmland

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Project Economics & Community Benefits

What's our community getting out of this—will the Project pay taxes?

Solar energy projects in Ohio can be exempt from tangible personal property and real property tax payments if they meet certain conditions. These conditions are enumerated in Section 5727.75 of the Ohio Revised Code (ORC). Operators of these exempt projects, known as qualified energy projects (QEP), are instead required to make annual PILOT (Payment in Lieu of Taxes) payments.

The Project intends to execute a PILOT agreement, which would require annual PILOT payment to Fairfield County. These funds would then be apportioned to local tax entities according to the location of the facility components. Based on the preliminary location of the proposed facility, these local tax entities would include Fairfield County, Walnut Township, Fairfield Union Local School District, Liberty Union-Thurston Local School District, Eastland-Fairfield Career & Technical Schools, Fairfield County Library District, and Fairfield County Park District.

Assuming an annual payment of $9,000/megawatt, the maximum payment authorized, and a Project nameplate capacity of 220 megawatts, the PILOT would total approximately $1,980,000 annually for the lifespan of the Project. Details on PILOT amounts are subject to an executed PILOT agreement with Fairfield County.

Will the Project create jobs and help with economic development?

Yes! Our preliminary findings indicate that during the construction of Eastern Cottontail Solar, 504 full-time jobs will be created, with an additional 263 indirect and induced jobs being established, as well. This will total approximately $80.6 million in earnings for the state of Ohio during this phase alone, while creating $123.7 million in economic output.

Once the Project is officially operational and providing energy to the grid, approximately 6 full-time jobs will be created, along with an additional 8 indirect and induced jobs. These jobs are expected to generate $1.0 million in annual earnings for the state of Ohio throughout the lifespan of the Project, and the creation of $2.4 million in annual economic output.

What public services will the Project require from the local authorities?

The Project engages with local authorities, specifically local fire departments and EMS, starting in the development stage, during construction, and throughout the operational life of the project. The Project team offers basic training on solar power, a site layout, and contact information for the Project site, so in the unlikely event an emergency response is needed, all authorities are equipped to respond effectively and efficiently. Other than limited use of public roads by the small operational staff, the Project is not anticipated to require any other local public services.

How do we know you will do all these things you say you will do?

Eastern Cottontail Solar will apply for a Certificate of Environmental Compatibility and Public Need (CECPN) with the OPSB who will review the application to ensure the Project will be properly sited within the proposed footprint. The OPSB includes members from six state agencies: the Chair of the Public Utilities Commission, the Director of the Environmental Protection Agency, and the Directors of the Departments of Agriculture, Development, Health, and Natural Resources, which guarantees a detailed review of our Project's permit application. The OPSB will have continued oversight throughout the permitting process, construction, and operation. The Project will be required to follow through with all commitments made in the application.

Have you built any other solar projects in this area?

EDFR is currently constructing a solar project in Madison County, Ohio—Fox Squirrel Solar, which is a 577-megawatt solar project. As one of the first solar projects to be built in Ohio, Fox Squirrel has exceeded the expectations of the local community and state by being proactive in their engagement, coordination, and planning.

EDFR is proud to continue partnering with local communities across the State of Ohio to continue developing additional renewable energy projects.

Will our energy bills be higher due to the operation of this solar project?

In recent years, there has been an increased demand for electricity, which will only continue to grow as new technologies are developed that require electricity. In addition, over 66 new residents are relocating to Central Ohio daily. With an increase in demand comes a need for an increase in supply; hence, the rapid growth of developing power generation sources, such as wind, solar, natural gas, and other power producing facilities. Both solar and wind, which are renewable energy sources, have been a primary source of power being developed across the U.S., given they are the two lowest cost forms of energy. By developing low-cost sources of energy, this typically allows the provider to keep the cost of electricity down for the consumer, while providing a clean source of electricity.

Renewable energy sources are extremely affordable and, in the case of solar, the most cost-effective source for power. Rising market rates over the last few years, as well as inflation, have caused a spike in electricity prices for the end-user; however, the cost is expected to go down as more renewable projects become operational.[36]

Will property values be impacted for neighboring homes? Will I ever be able to sell my home?

Professional real estate valuation studies continue to prove that large-scale solar power facilities economically benefit the community and overall do not decrease residential property resale values following proper siting and design. The increase in tax revenue generated by the facility typically leads to stronger school funding, levelized taxes, better

[36] https://www.reuters.com/business/energy/us-wholesale-power-prices-broadly-expected-fall-this-year-2023-01-10/

roads, stabilized funding for emergency services, and many more community benefits. Additionally, buyers often view a solar facility as a means to providing a safer, quieter neighbor.

As a commitment to showcase this trend to the local community, EDFR electively contracted CohnReznick to provide a Real Estate Adjacent Property Value Impact Report to better understand the valuation of homes near the Project. After evaluating 8 solar projects across Ohio, Indiana, Michigan, Iowa, Minnesota, Wisconsin, and Illinois, and analyzing over 1,300 sale transactions of homes near an operating solar facility, CohnReznick concluded that "no consistent negative impact has occurred to adjacent property values that could be attributed to proximity to the adjacent solar farm" (Lines & Bowen, 2024, pg.144). The contracted party also conducted interviews with Lisa Ruhlen, a Real Estate Clerk with the Hardin County, OH Auditor's office, who reported that "there have been no complaints or petitions to lower assessed values on homes near the Hardin Solar farm" (Lines & Bowen, 2024, pg. 132).[37]

Where does Ohio stand in the solar industry?

Ohio currently ranks 22nd in the nation for total installed solar capacity with 1,389 megawatts installed. As of the end of 2022, only 1.04% of the state's electricity comes from solar. The growth projection over the next five years includes 7,782 megawatts, enough to power approximately 1.5 million American homes, which will tremendously surpass what's currently installed.[38]

In Ohio, there are 7 solar projects over 50 MW that are currently generating utility-scale electricity, with 46 more that are either in development or recently approved.[39] Most of these projects are developed by private companies and the power is then sold either to a regional utility or a commercial/industry partner, such as a large corporation in the technology or automotive space. Typically, these entities are seeking renewable energy to diversify their power generation mix, to provide additional local, affordable electricity, to assist in national decarbonization efforts, and to be better corporate stewards of the community and to the environment.

Ohio is one of the top five electricity consumers across the country. With demand as high as it is, Ohio currently imports nearly one-fifth of the electricity it needs each year from other states to meet consumer demand.[40] By adding renewable energy facilities into the state's energy portfolio mix, Ohio can produce its own electricity, and in doing so become more energy independent.

[37] Lines & Bowen (2024). Real Estate Adjacent Property Value Impact Report: Academic and Peer Authored Property Value Impact Studies, Research and Analysis of Existing Solar Facilities, and Market Participant and Assessor Interviews. CohnReznick LLP Valuation Advisory Services.
[38] https://www.seia.org/sites/default/files/2023-09/Ohio.pdf
[39] https://opsb.ohio.gov/wps/wcm/connect/gov/b504e379-a4ba-49e4-aa35-dba759ffee7f/Solar+Map+and+Stats04222024.pdf
[40] https://www.eia.gov/state/analysis.php?sid=OH

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For more information on Property Values, follow the links below:

- https://www.co.delaware.in.us/egov/documents/1649083921_62275.pdf
- https://montoursolar.com/wp-content/uploads/2021/03/CR-Solar-Impact-Study-Montour-Solar-One-Exec-Summary-3.8.21.pdf
- https://www.edf-re.com/flipbook/8044
- Simeng Hao, Loyola University, 2023. *Assessing Property Value Impacts Near Utility-Scale Solar in the Midwest.* If interested in a copy of this thesis, please email a project representative, as it is not yet available online.