

# ABOUT THE COMPANY

**Hecate Energy is a leading developer, owner and operator of renewable power projects and storage solutions in the United States.**

- Hecate Energy develops clean energy power plants from planning and inception through construction and operation.
- Founded in 2012 by a team of energy industry veterans who have worked together for more than 25 years, Hecate Energy's team has developed thousands of megawatts of electricity generation projects across the United States.
- Hecate Energy successfully secured over 6 gigawatts (GW) of renewable power purchase agreements since 2012, with 45 GW of projects under development.

*"Solar energy serves the growing demands of today's increasingly electrified lives in a local, sustainable way.*

*Communities welcome solar projects because they are quiet neighbors, using essentially no municipal resources yet significantly boosting a community's revenue base."*

*— Harrison Luna, Project Team*



*Upshur Solar, Coffeeville, TX*

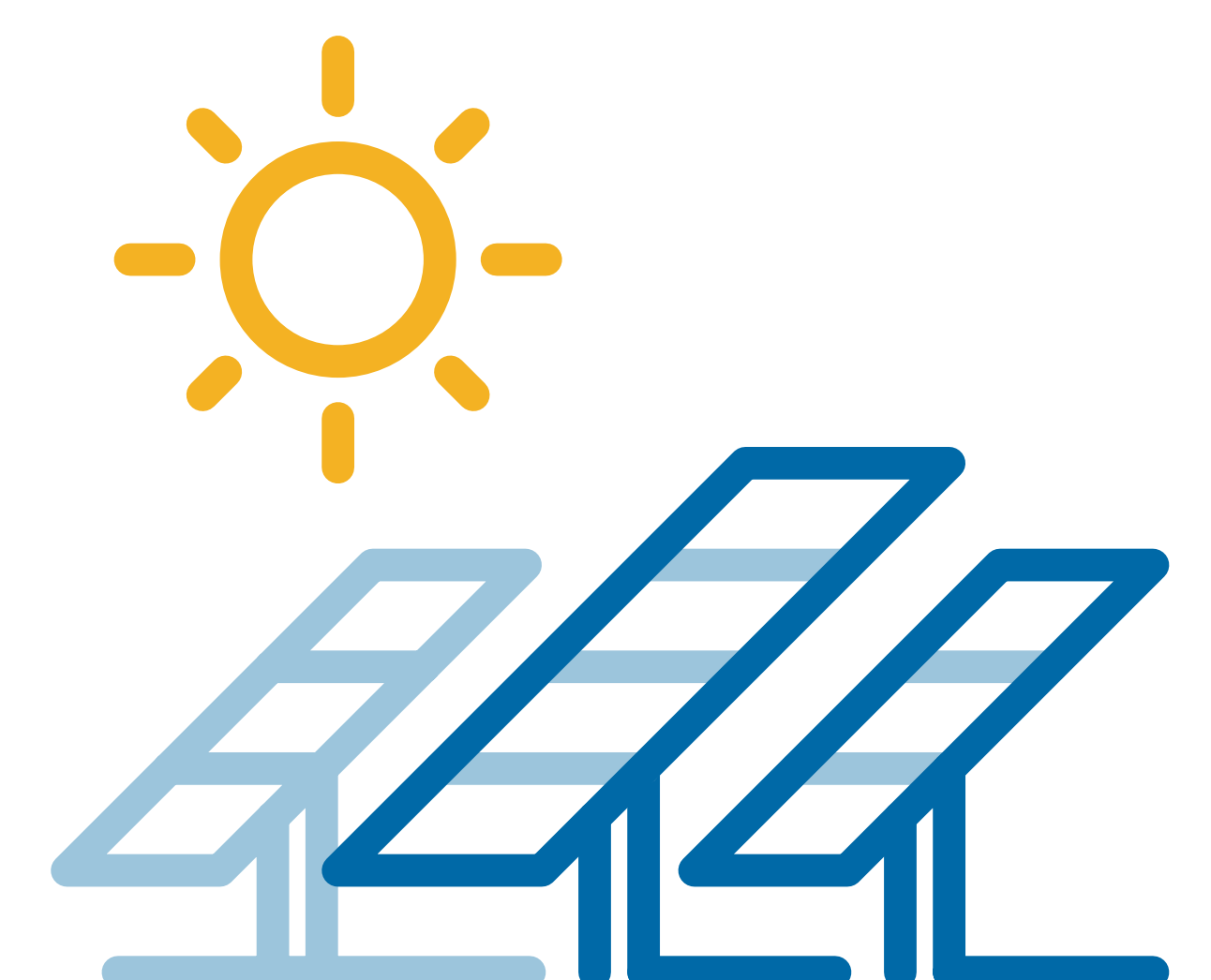
## Otter Creek Solar Farm Project Team:



Diane Sullivan  
SVP, Environmental  
& Permitting



Harrison Luna  
Senior Development  
Manager





# PROJECT OVERVIEW

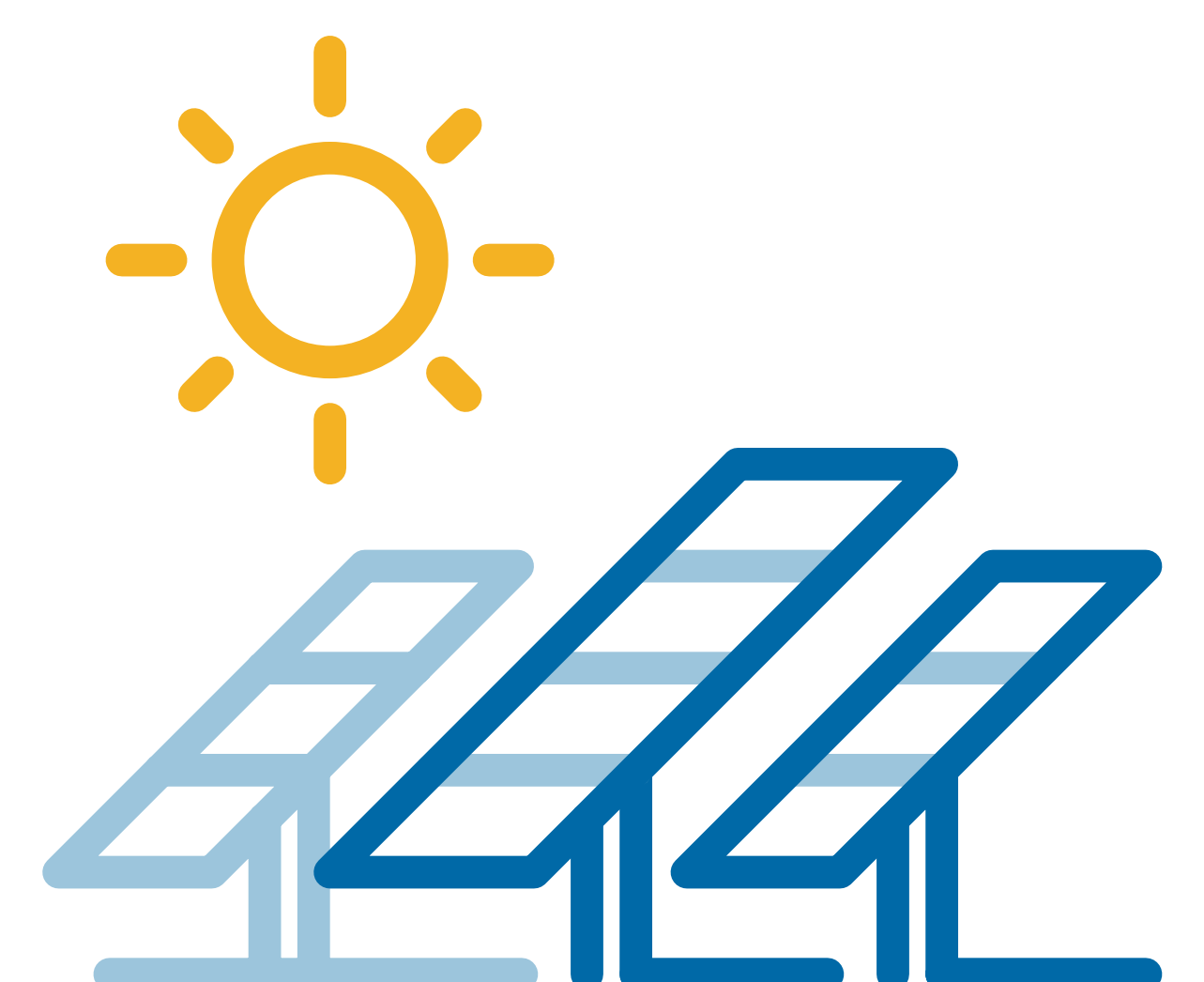
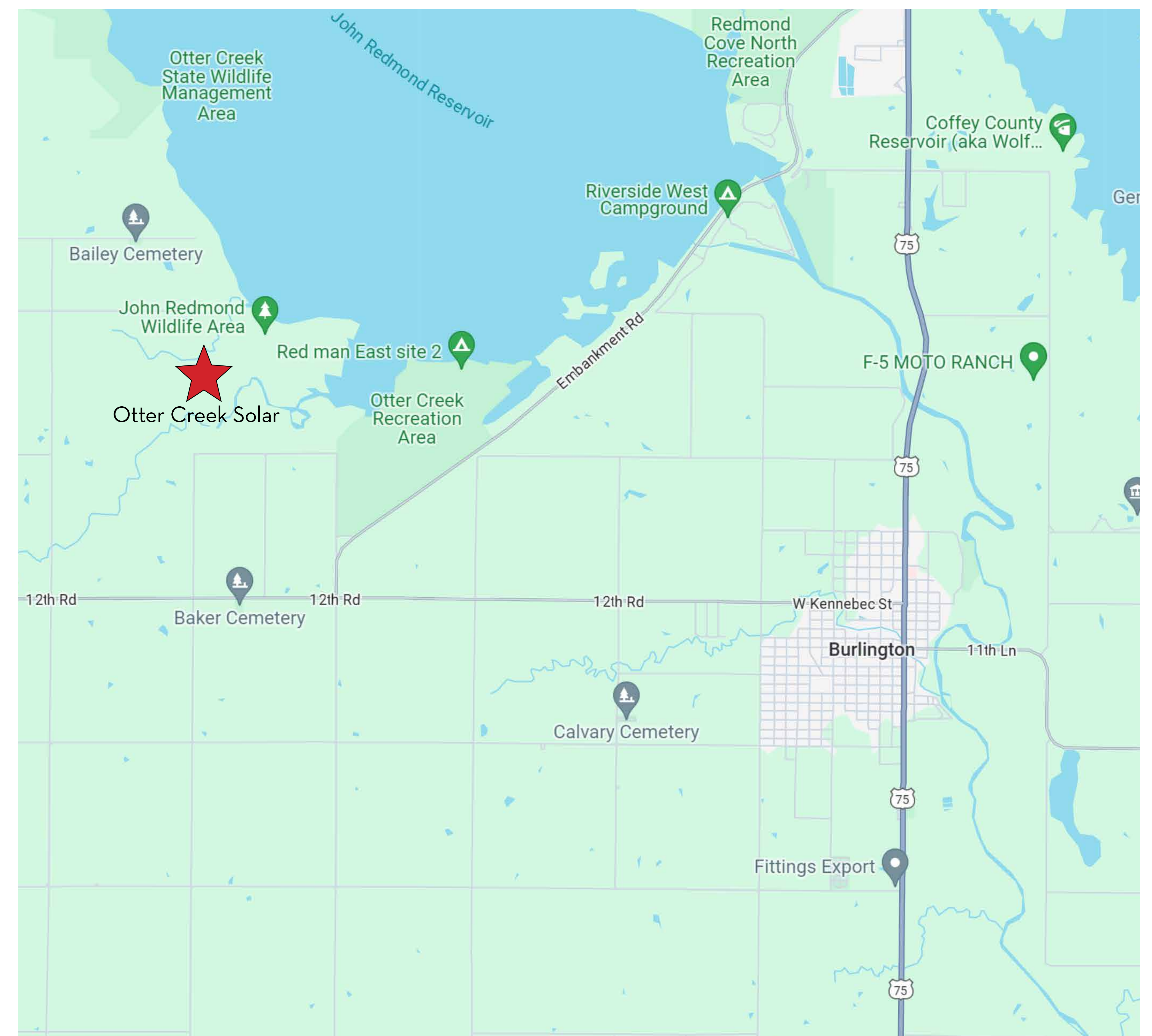
Otter Creek Solar Farm will provide renewable energy to Coffey County while protecting and preserving our clean air, water quality, and soil resources.

## Project Details

- Over 1 GW of PV solar facilities, potentially split across two phases.
- The planned project site is three miles west of Burlington, within Coffey County. Land leased totals approximately 8,500 acres, but the panel layout will cover less than this total area when built.
- Capable of safely supplying enough renewable electricity per year to power over 235,000 average households.
- New source of significant revenue for local governments, fire department, ambulance company, and library through taxes and direct donations.
- Boosts the area economy, creating full-time construction jobs and generating an economic stimulus for local businesses.
- Approximately \$1 Billion privately funded infrastructure improvement.

**Solar facilities  
are great  
neighbors.**

*They operate quietly, without emissions or water discharges, and help recharge farm soil for future generations.*





# OTTER CREEK SOLAR FARM

## TECHNOLOGY

### Engineering and Technology

- Otter Creek Solar will be configured as a ground-mounted solar facility with photovoltaic (PV) panels on galvanized steel tracker structures.
- The project will include rows of single-axis trackers that rotate the PV panels to follow the sun's daily path, optimizing the amount of power the solar facility can produce.
- The PV array is low-profile, approximately 15' above grade at the tallest point in the mornings and evenings (approximate height of mature corn stalks).
- The solar panels planned for the project are the crystalline type commonly used for residential rooftop systems. They contain the same materials (glass, aluminum, plastic) used in your home's windows.



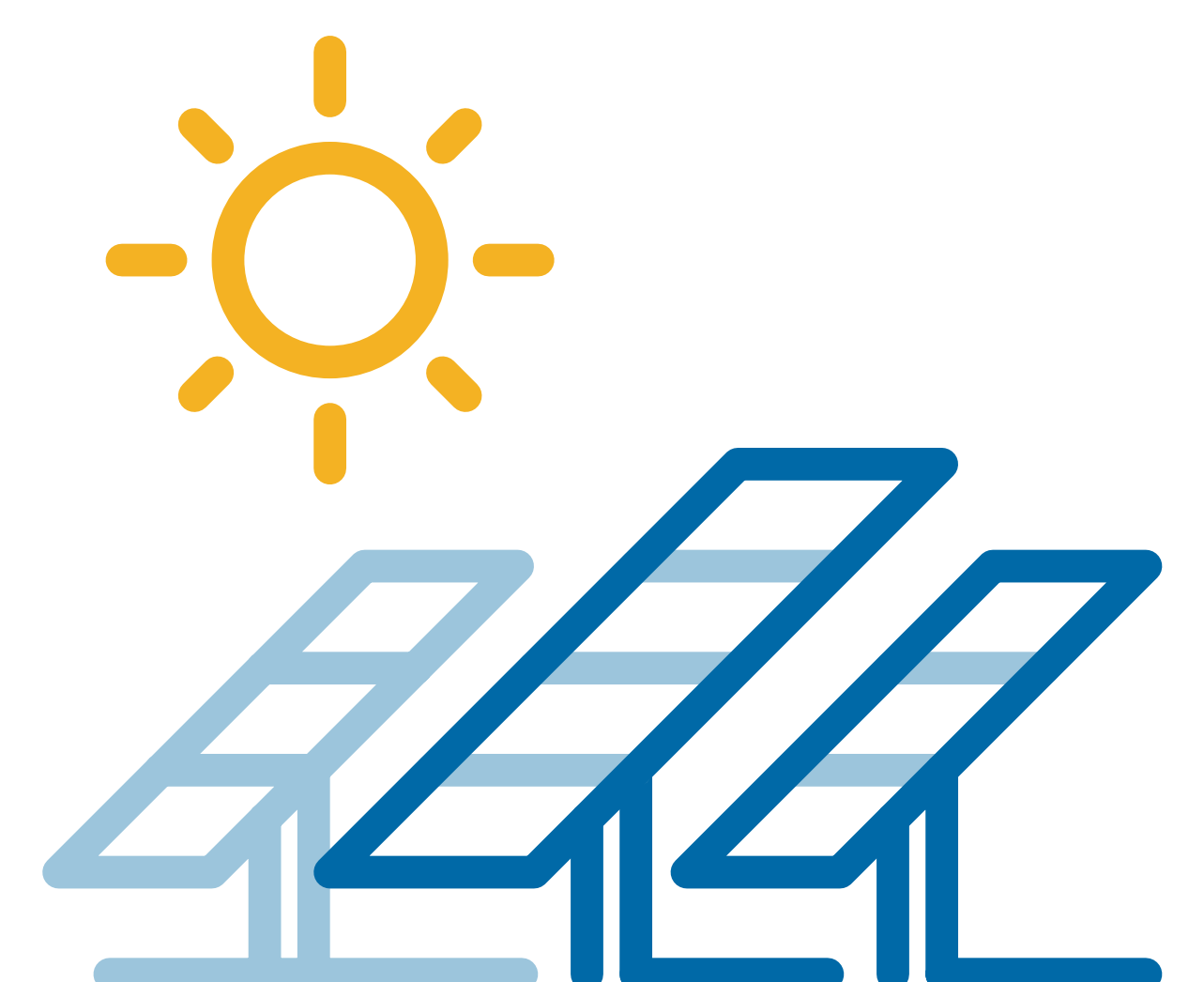
*Coeymans Solar, Coeymans, NY*



*Clarke, VA*



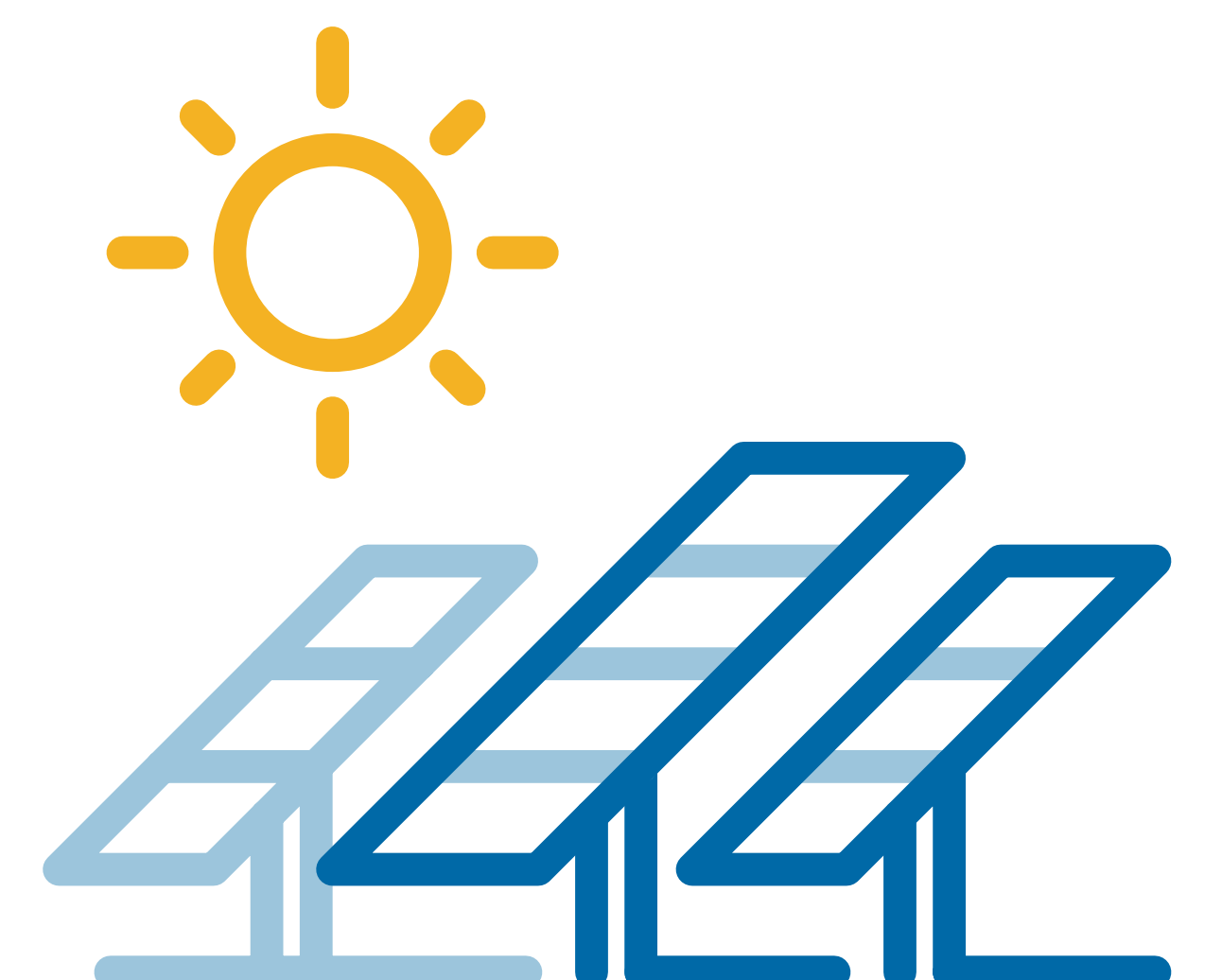
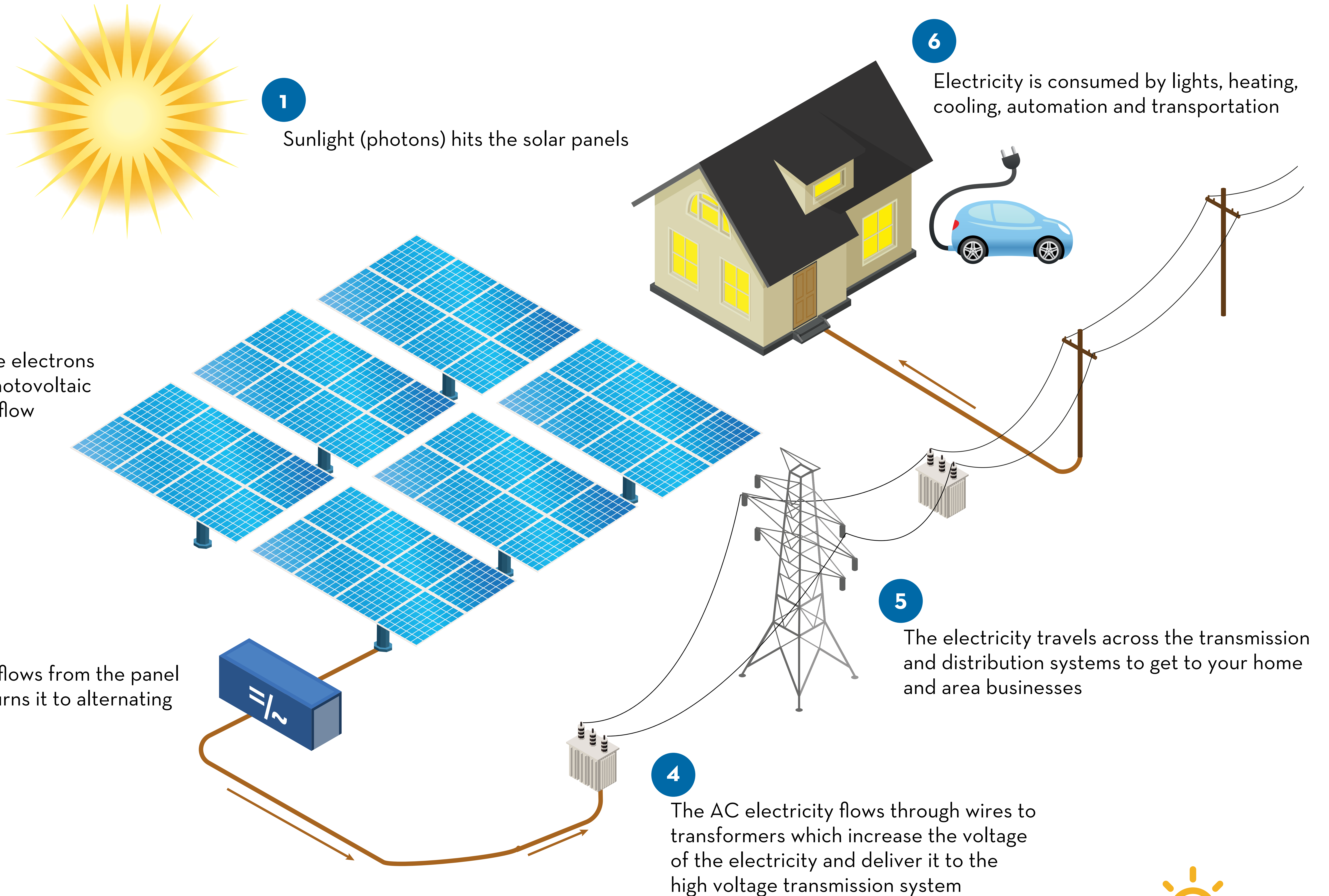
CONTACT THE PROJECT TEAM: [OtterCreekSolar@HecateEnergy.com](mailto:OtterCreekSolar@HecateEnergy.com) | (312) 722-5908 | [www.OtterCreekSolarFarm.com](http://www.OtterCreekSolarFarm.com)





# HOW SOLAR WORKS

## THE SOLAR GENERATION PROCESS





# WHY DEVELOP SOLAR?

## AIR

- Solar energy generates emission-free electricity.
- Energy from the Otter Creek Solar Farm is projected to offset nearly 1.7 million metric tons of CO<sub>2</sub> per year – that is equivalent to taking nearly 400,000 average gas-powered cars off the road per year.

## SOIL

- Unlike conventional power plants, solar facilities do not damage or degrade soil resources.

## WATER

- Solar facilities are excellent protectors of watershed resources.
- Unlike conventional power plants, operating solar facilities use little to no water. The low impact design also maintains porous surface area for local groundwater recharge.



*“Kansas is a national leader in renewable energy, but almost all that power is wind. Now it’s time for Kansas to lead with solar as well. Kansas offers an immediate advantage to companies/communities committed to sustainable innovation”*

### Why Do We Need More Solar?

- Kansas has been a national leader in the development of clean energy --renewable resources provide 45% of in-state electricity generation – but almost all that power is produced by wind. To build a more reliably balanced mix of power sources, Kansas needs to diversify by expanding solar power, which will represent one of many technologies used to power Kansas..

### Where Will the Electricity Go?

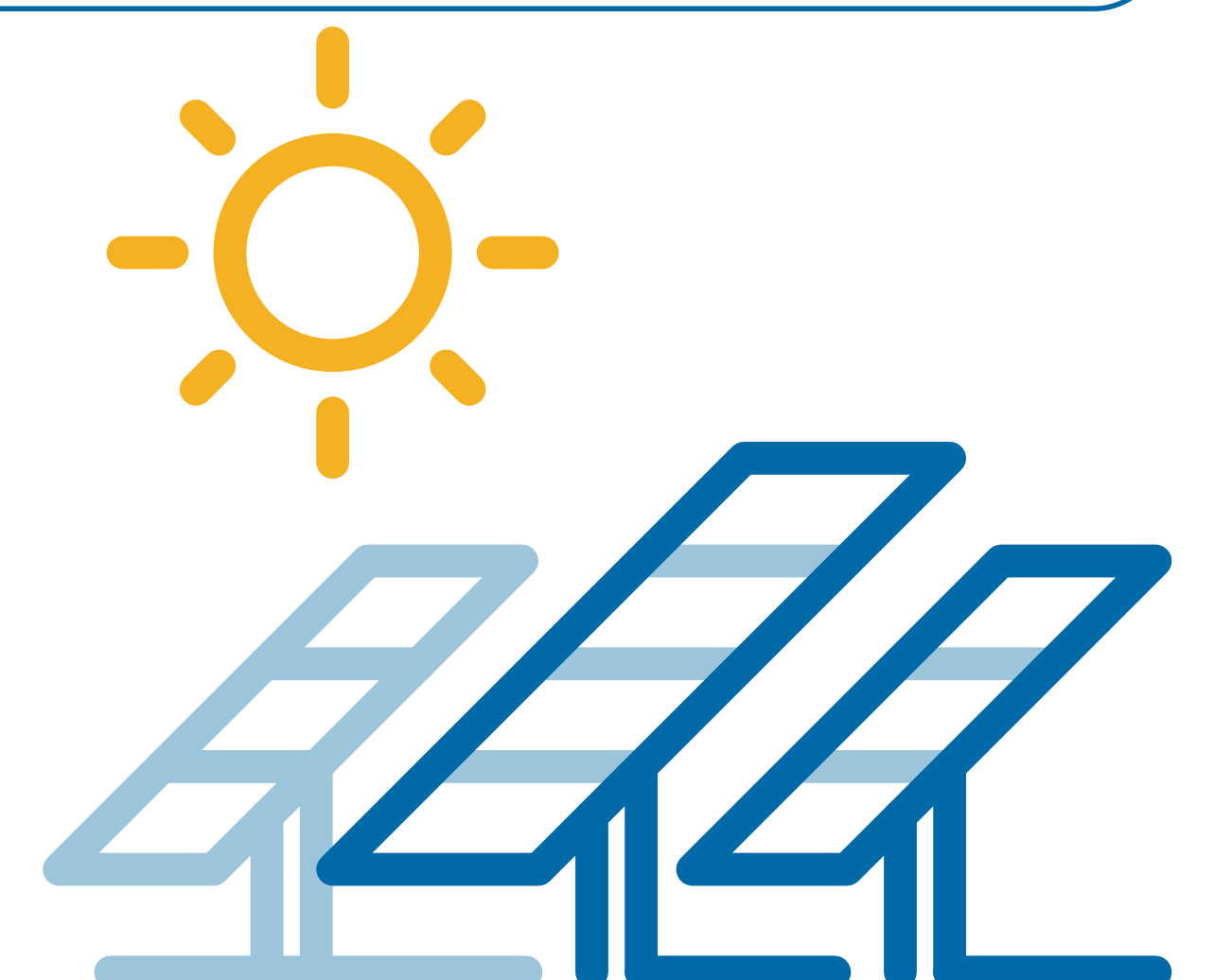
- The electricity produced by the project will be delivered to the local grid after interconnection.

### How Will This Affect Reliability and Price?

- The project will boost electric system reliability due to proximity to a vital section of the electric grid.
- Solar is one of the least expensive forms of electricity generation and its fuel, the sun, is free. As the price of other power generation grows, solar energy will help to mitigate overall electricity price increases.

**Solar is Good  
for the Earth**

*Compared to other forms of electric generation, solar has the least impact on the environment.*





# PERMITTING

## Overview of Siting & Permitting Law

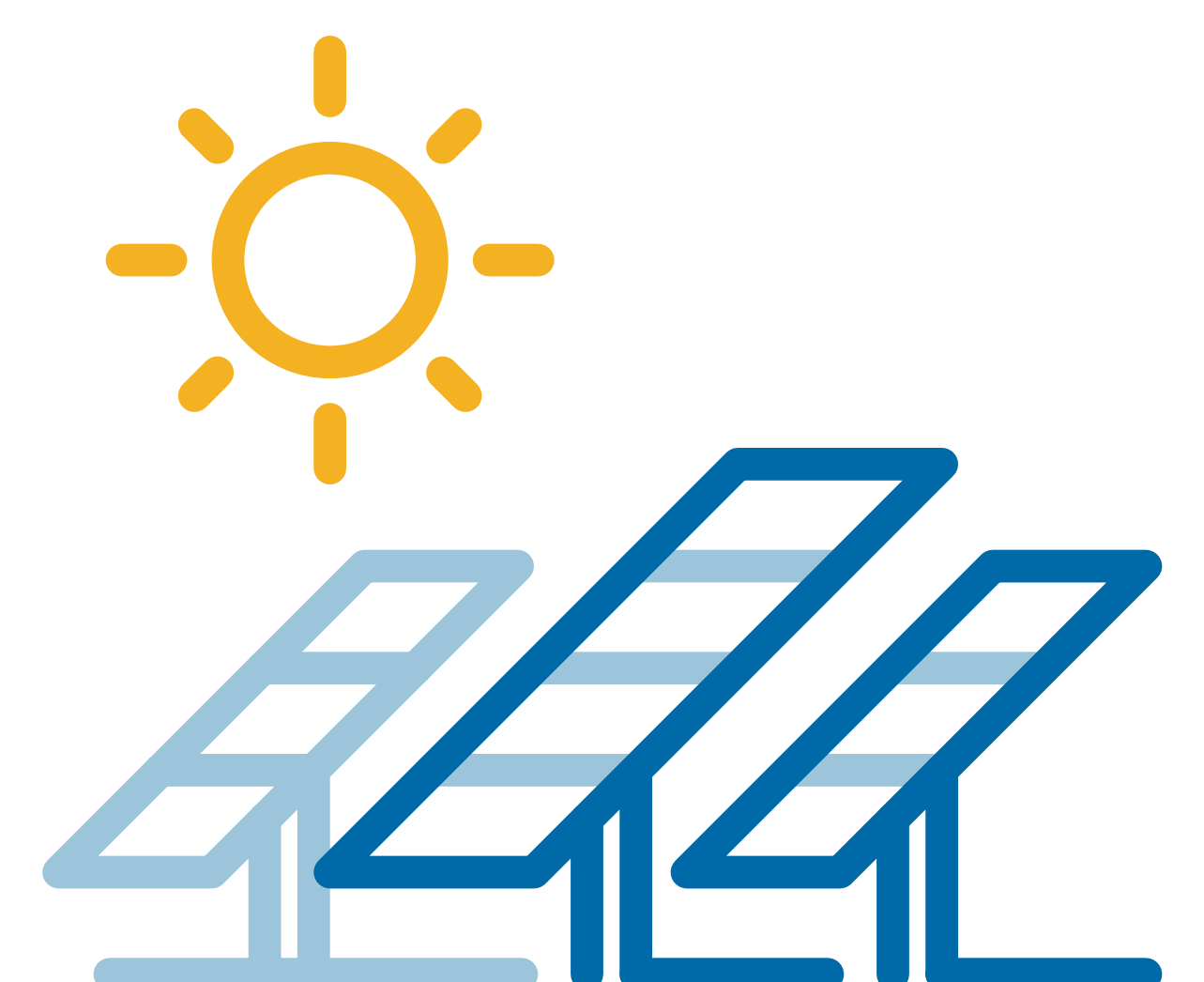
- Coffey County is currently considering a draft solar ordinance. When and if the County approves an ordinance, Hecate Energy will explore permitting paths based on the requirements of the ordinance.

## Stormwater Management

- During construction, Hecate Energy will minimize impacts to surface waters and wetlands by implementing industry best practices for soil erosion management and sediment control. As mandated by the state, these controls will be identified in a Stormwater Pollution Prevention Plan and submitted for state approval with the Kansas Department of Health & Environment prior to construction.



*We actively engage the public through project briefings, informational open houses, media coverage, public notices, mailings, email, and other means. We believe in building collaborative, long-term partnerships with the communities we serve.*





# COMMUNITY ENGAGEMENT

## Communication

- Project website – [www.OtterCreekSolarFarm.com](http://www.OtterCreekSolarFarm.com) – provides easy access information and a place to provide feedback about the project.
- Regular project updates for stakeholders to be provided by the Hecate Energy team.
- Project briefings can be requested via email: [OtterCreekSolar@HecateEnergy.com](mailto:OtterCreekSolar@HecateEnergy.com)
- Our toll-free number - (312) 722-5908 - provides a direct line to the Project team.

## Collaboration

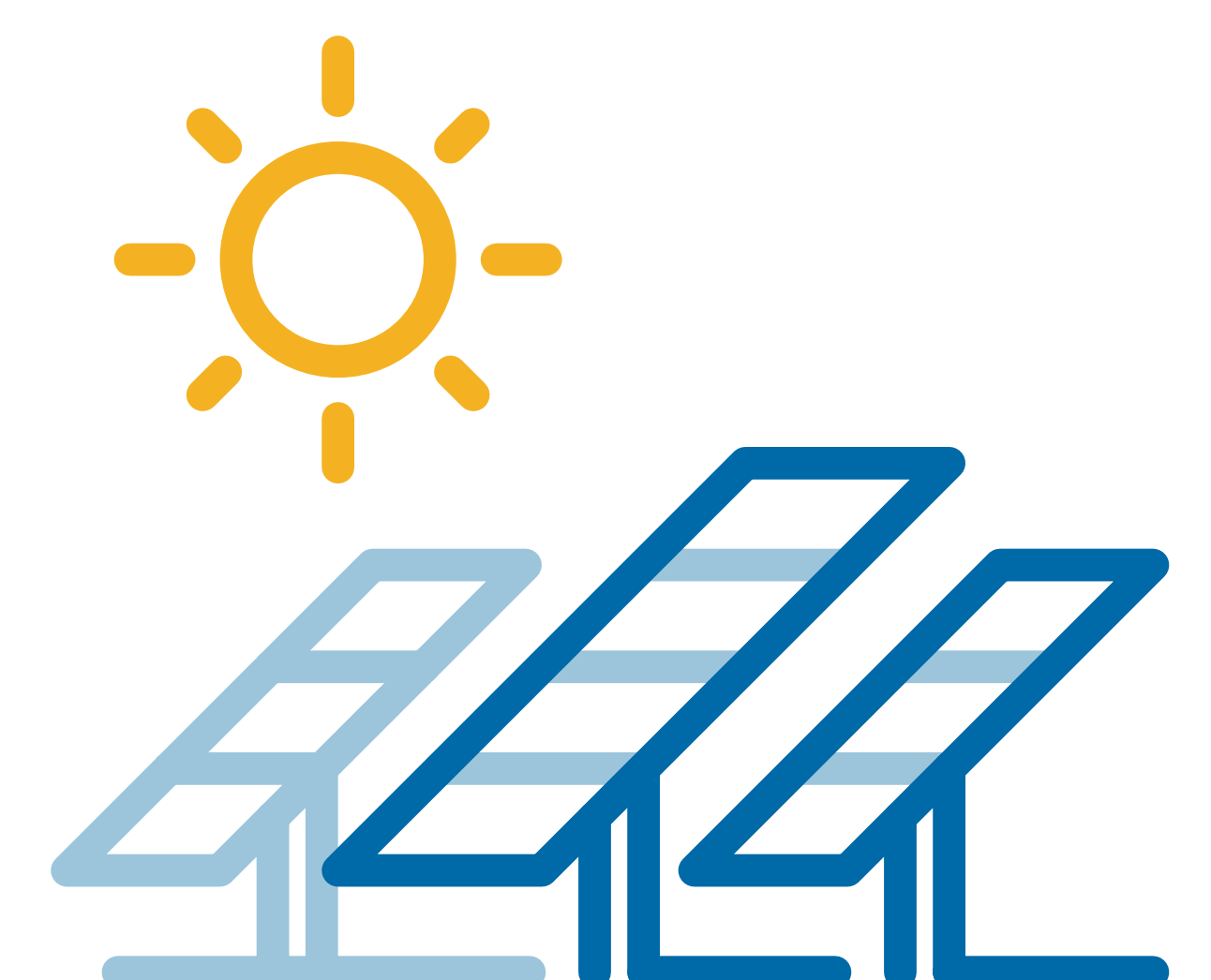
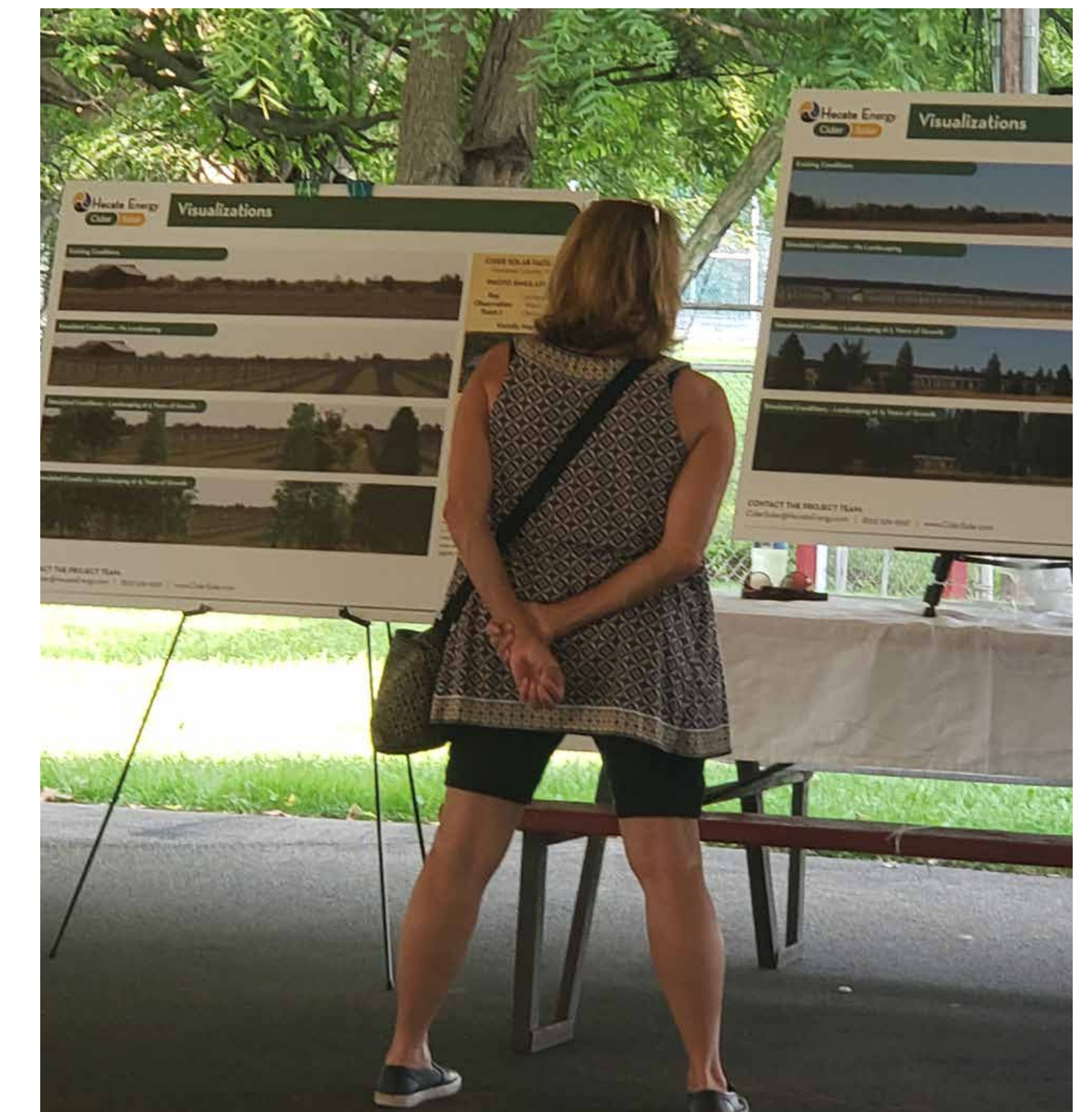
- Close coordination and specialized training for first responders who may encounter solar panels either on our project, or on residential and commercial structures.

## Long-Term Partnerships

- When the project stops functioning as a solar power generation facility, all the components are cleared and properly recycled or disposed of without impact to local taxpayers. Land is returned in farmable / grazable condition, having been in meadow for decades.

*“We are committed to making Otter Creek Solar Farm a world-class project the Coffey County community will be proud to host for decades to come”*

*Harrison Luna, Project Team*





# COMMUNITY & ECONOMIC BENEFITS

Otter Creek Solar Farm will be a good neighbor - supplying clean, affordable, renewable energy and an array of benefits to the community.

## Community Benefits

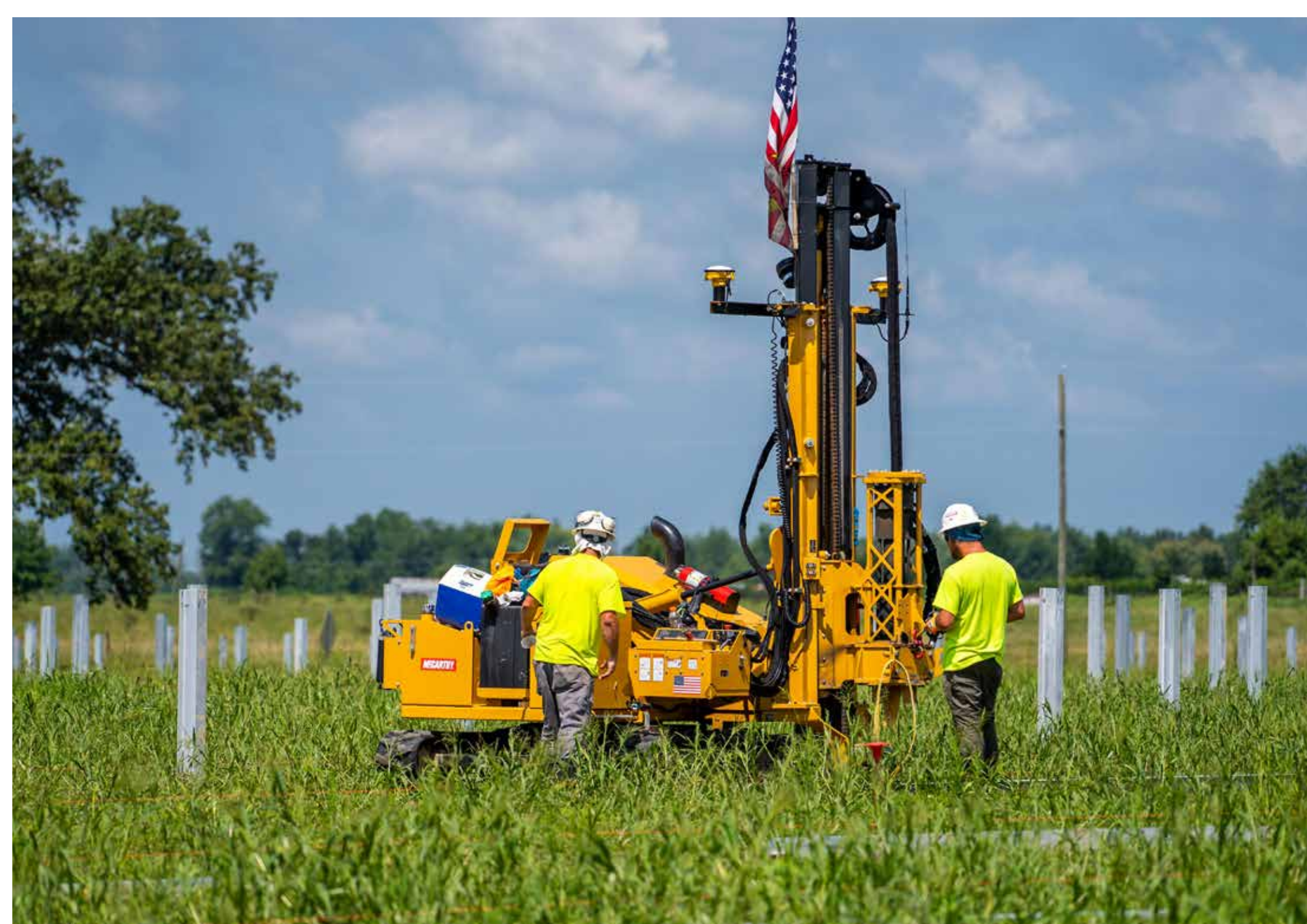
### Funds for Local Government & Schools

- The project generates long-term dedicated revenue for the town, county, and schools.
- Tens of millions of dollars in payments and contributions over the life of the project.
- New revenues will be significantly higher than the current tax revenue generated by the land on which the project will be sited.



### Support for First Responders

- Creates a new local continuous revenue stream for community services, including the local fire department and ambulance company, while making minimal use of their services.



## Economic Benefits

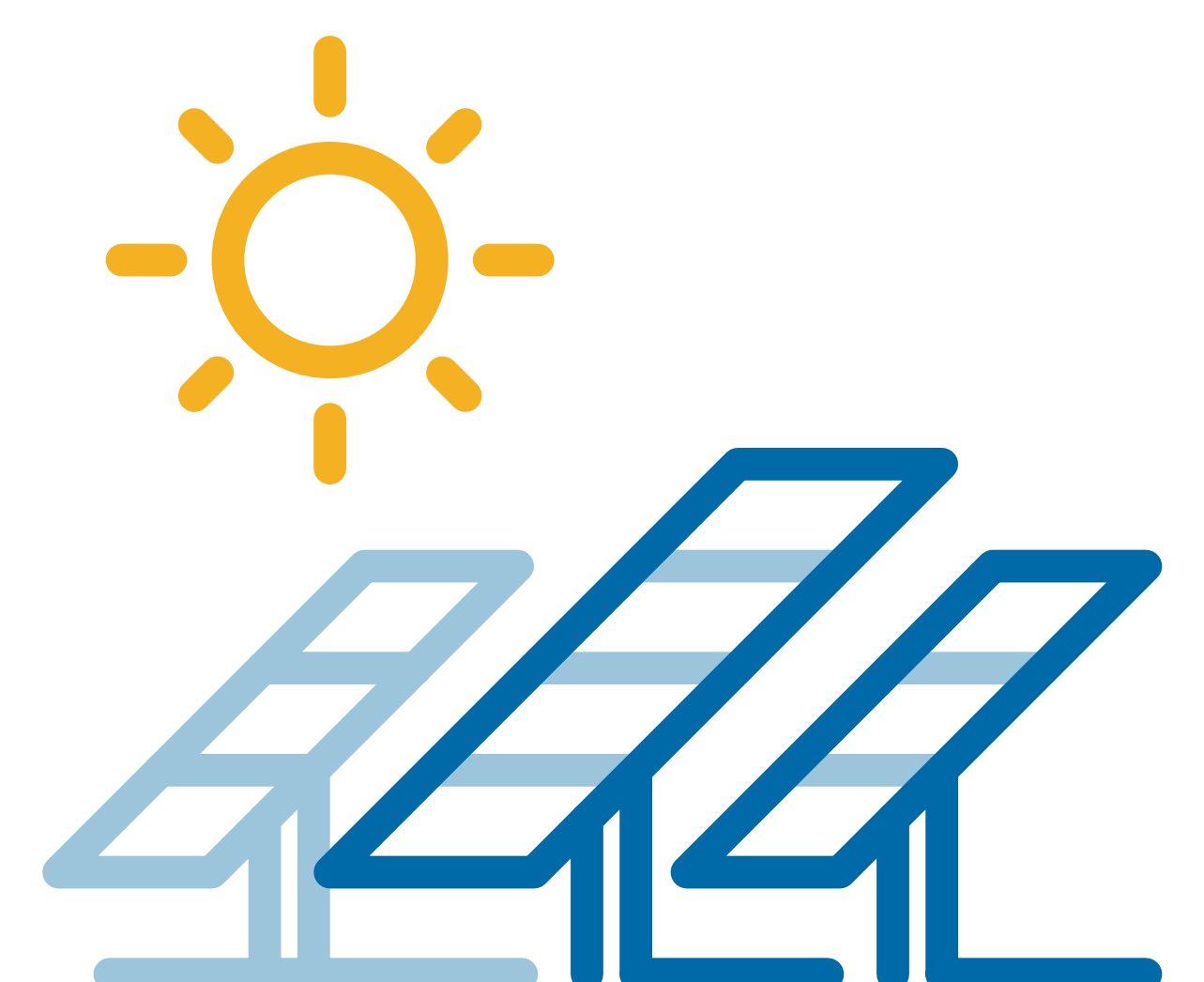
The Project will conduct a detailed socioeconomic impact analysis to determine the regional and local economic impact of the construction and operation of the project that will evaluate direct and indirect benefits to the community and the region.

### Employment Opportunities

- The project will generate significant construction jobs during peak construction.
- Construction period benefits will include substantial payroll and direct onsite employment.
- Ongoing operations and maintenance will require annual non-payroll expenditures over the 30-year study period of the site for materials and operation supplies and landscaping services.
- Local businesses and workers contracted for engineering, surveying, site preparation, construction and ongoing operation and maintenance support.

### Regional Economic Impact

- Significant host community contributions via taxing jurisdictions.
- Significant private investment in area economic stimulus including jobs created during construction and operations that will benefit local and regional building trades, restaurants, lodging, gas stations, and stores.



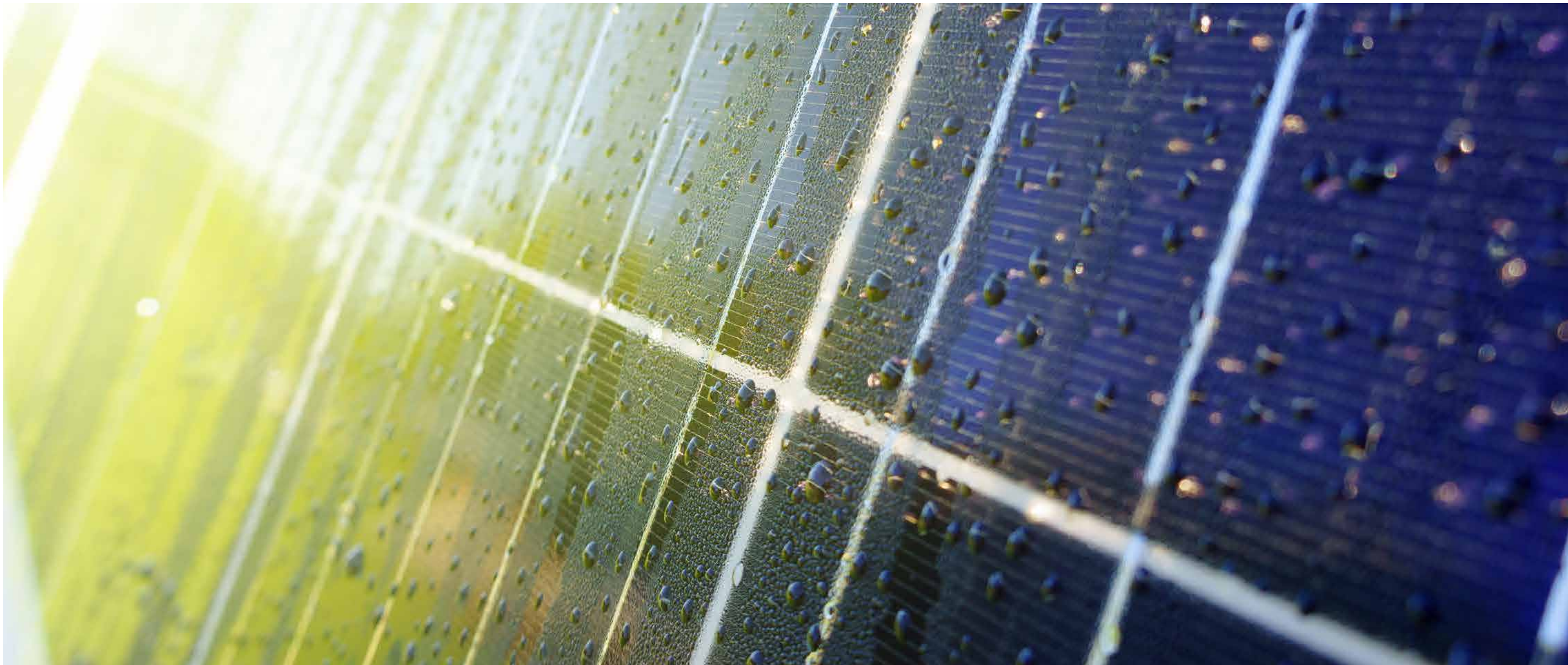


# SITE RESTORATION, DECOMMISSIONING & RECYCLING

Hecate Energy's mission is focused on protecting our air, earth and water with clean energy. We have a responsibility to the communities that host our projects to limit environmental impacts.

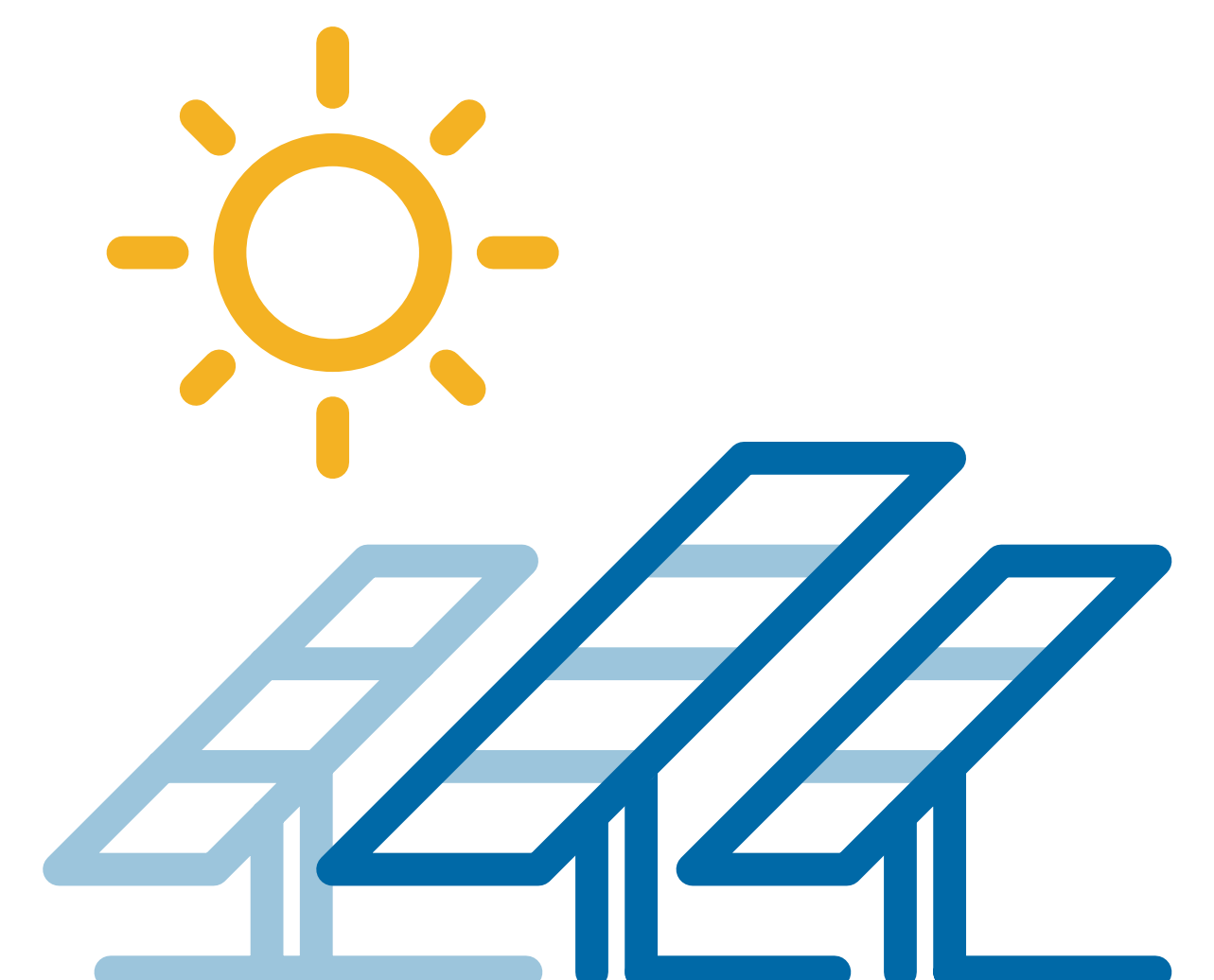
## Maintenance and Cleaning

- Solar panels are generally quite tough, difficult to damage, and low maintenance.
- If solar panels are broken or damaged through acts of nature or otherwise, there are no harmful materials that will leak out or pollute the air or ground. The Project will be responsible for any repairs or maintenance.
- Panels generally cleaned by precipitation. No harmful chemicals used.



## Decommissioning

- The project plans to enter into a Decommissioning Agreement with the County that will include a requirement to issue a financial assurance large enough to decommission the site.
- Project decommissioning is triggered by certain events, such as when the Project components reach the end of their operational life (although components will likely be updated as technology improves over time).
- The Project's Decommissioning Agreement will include an estimated net decommissioning cost with an obligation to update such estimate periodically.
- Project components such as panels may be recycled. All components that cannot be recycled will be disposed of in compliance with all legal requirements.





# ENVIRONMENTAL STUDIES

Potential impacts are rigorously studied in the permitting process administered by Coffey County and the State of Kansas in conjunction with local stakeholders. Issues pertaining to community, wildlife or wetland impacts are addressed as part of this comprehensive process.

## Visual

- A common misconception about solar photovoltaic (PV) panels is that they inherently cause or create glare. The central function of solar panels is to absorb light, not reflect it. Light reflected is no longer available to be converted into electricity, so glare is minimized by design.
- 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 2% of incoming sunlight.
- Hecate Energy is committed to working with neighboring landowners and the community to ensure minimal visual impact. A vegetative landscape plan will be designed to screen the project.

## Wildlife

- Hecate Energy is committed to preserving wildlife habitat.
- We undertake environmental surveys to minimize impacts to wildlife and will mitigate any adverse impacts of the Project.

## Studies Being Conducted

- Land survey
  - Property boundaries
  - Topography
- Desktop constraints analysis
  - Floodplains, topographical features, wetlands and surface waters, threatened/endangered species, sensitive habitats, environmental concerns, geotechnical screening, cultural resources, permitting
- Stage 1 geotechnical investigation
- ASTM Standards Phase 1 Environmental Site Assessment
- Drainage and hydrology study
- Desktop and reconnaissance level Waters of the United States (WOTUS) delineations and site assessments for habitat suitable for listed species
- Cultural screening and Kansas State Historic Preservation Office consultation
- Consultation with US Fish & Wildlife and Kansas Department of Wildlife





# WATER & SOIL

Hecate Energy will implement best management practices during construction to minimize impacts to water and soil. It is vital to ongoing operations of the project that proper drainage is maintained.

## Stormwater, Soil, and Crop Pollination

- The Project will not use fertilizers within the operations area of the site.
- By using the right seed mix, solar sites can provide significant benefits related to soil regeneration and crop pollination.
- Establishment of native and naturalized plants and/or pollinator species improves the soil's organic matter over the 35- to 40-year life of the Project, allowing soil nutrients to establish as they would in meadow condition.

### ***Did you know?***

*Compared to conventional energy sources, solar energy does not deplete local water resources because solar photovoltaic cells do not rely on water to generate power.*





# VISUAL BUFFERS AND SCREENING

The Project will use vegetative screening to soften and/or screen views of the solar facility and provide ecological benefit and diversity.

## Vegetative Screening

- Selection will be based upon using native, naturalized and non-invasive species that simulate the character of the surrounding landscape.
- Trees will be used to provide screening, and native shrub species will be selected for wildlife value and visual interest.
- When selecting the planting palette, characteristics considered will include: native locale, hardiness zone, seasonal interest, and wildlife value.

## Maintenance

- Plant material will be maintained by the construction contractor until completion of the Project, when at such time the Project takes over the maintenance duties.
- Over a two-year period, the project will ensure proper growth of all plantings made for screening or landscaping purposes.

