

## Clean Energy & Economic Opportunity For Knox County



# Solar Can Power Our Lives

Located on private property in rural Knox County, the project will have capacity to produce up to 150MW of clean American energy (enough to power 24,600 homes).

Wheatland solar is a significant investment in the local community through construction spending, job creation, direct local sourcing and economic activity over the course of operation that will benefit all county residents.

# **K** The Potential of Solar

As the nation strives to meet its growing energy demands, we must look at all resources. The sun provides enough energy in one hour to power the earth for a year.

It's as simple as catching the sun's rays, with a little help from technology.

The photovoltaic effect can directly convert energy from the sun into electricity. Photovoltaic (PV) technology releases electrons from their atoms when exposed to light.

Multiple PV cells are connected to form solar modules and each module is linked to create a solar array. Expanding the number of modules increases the electrical output. Large solar projects are often referred to as utility scale solar farms because they supply significant amounts of electricity that is absorbed into the grid.

# **«Clean Energy**

Solar power is clean. Producing electricity with solar panels generates zero emissions, protecting the air we breathe and the water we drink from harmful emissions and pollution. Solar energy can also replace dirtier fossil fuels to reduce overall emissions from energy generation and mitigate impacts to the climate.



## Solar energy produces zero emissions.





Solar is cost-effective because the cost of the fuel source (the sun) is free. As the price of solar panels has gone down, the cost of solar electricity has significantly decreased.

In fact, solar energy is currently the lowest cost way to produce electricity, nearly half the cost of natural gas.



(National Renewable Energy Laboratory, US Solar Photovoltaic System and Energy Storage Cost Benchmark: Q1 2020)

The Cost of Solar

**Continues to Decline** 

(U.S. Energy Information Administration, Levelized Costs of New Generation Resources, Annual Energy Outlook 2021)

# **«Why Knox County?**

Project sites are carefully and throughfully chosen, located near existing energy infrastructure and where they can best benefit the electric grid.

We take into consideration the area's solar resources, consider our potential environmental impacts, knowing we must find landowners who will benefit from selling or leasing their land for the life of the project.

## The Origis Approach to Siting



### Solar Resources

We don't just look a traditional sunny climate like Florida and California. In fact, Indiana also has significant sun resources - much of the same sun that helps the local agriculture industry. Knox County is in the part of the state with the greatest solar resource.

## Demand

There needs to be an electric demand and an interest in purchasing solar energy. Much of the demand in the Midwest is driven by the region's state renewable energy portfolio standards. Even in Indiana where the standard is voluntary, there remains ample demand, including CenterPoint's commitment to expanding its supply of renewable energy.

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### Energy Infrastructure

Knox County is in proximity to major electric transmission lines. The site location also has access to existing transmission lines.

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### **Environmental Evaluation**

We must avoid wetlands, protected and endangered species' habitats and any other areas of environmental concerns. We also need to identify large parcels that would be suitable for the project. These criteria help us narrow down to a preferred area in the community.

### Eager Property Owners

Then we start the process of talking with large local landowners to identify who is eager to lease their property.

Solar projects are a driver of economic development. They don't require any county resources, yet they produce a substantial amount of tax revenue. Likewise, solar leases can provide a steady source of income for local farmers.

The project also creates jobs and generates substantial economic activity in the project area. And of course, as a community uses energy, they have an interest in ensuring it is produced cleanly and affordably.







## **Pollinator Habitat**





Quiet Neighbors



#### Ag Landowners Benefit from Solar Farm Leases

Landowners receive lease payments over the life of the project, estimated at more than 35 years.

#### Land Can be Restored for Productive Ag Use

The project requires minimal land disturbances so the rejuvenated land with more nutrient rich soil can be returned to active agricultural use after the lifespan of the project.

## Enhances and Protects the Natural Environment

While the facility is in operation, we plant ground cover to attract natural, local pollinators, which helps the surrounding environment and farms.

## Low to the Ground & Screened by Trees

The average height of a solar panel is less than 10 feet. With increased buffers and screening with mature vegetation, the project will have minimal visual impacts.

#### Similar to the Noise of a Babbling Brook

Solar farms are quiet neighbors. At the fence line, the sound from the onsite inverters is a minor hum – equivalent to the sound of a brook. Further offsite, no noise can be heard.

# **«Environmental Benefits**

Shifting to solar will improve the local environment. The emissions reduction from our project will remove substantial amounts of CO2 from the air.



# **150,000 tons** of CO2 prevented

from entering local air





Equivalent to **32,622 cars** taken off the road by CO2 reductions The equivalent of the yearly carbon footprint of

9,000 average Americans

# Only Positive Impacts on Property Values

The American Society of Farm Managers and Rural Appraisers recent article supports the conclusion that solar in rural communities has no impact or in some cases having positive impacts on values.

## Guaranteed to Restore Property to Natural State

At the end of the project's useful life there is a decommission plan to return the property to its natural state. The plan is guaranteed by assurance bonds.

# **« A National Clean** Energy Leader

Origis Energy is a national leader in developing clean and affordable solar energy projects throughout the U.S. with more than 3GW of solar generation and nearly 1GW of energy storage currently in operation.

Worldwide, we have 170 solar and energy storage projects, producing enough energy to power 1.2 million homes. Origis is based in Florida and has successfully developed and operated solar projects across the county, including here in Indiana.

OR

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# Significant Benefits for the Local Economy

The Wheatland project will provide \$2.5 million in cumulative payments in lieu of taxes to the county over the first 6 years of operation and full yearly property taxes after the ten year abatement period.



# \$24-28 million

in local spending during construction



# \$20-22 million

in new local earnings during construction



## 200-240

new local jobs\* during construction and **7-15** long-term jobs



# \$20-24 million

in property taxes over the life of the project





## We Want to Hear From You

It's important to us that we hear from the local community. Please reach out with questions so we can continue this important conversation.

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