

**Project Profile:**

# Fountain Point Solar Energy Center



Enough electricity to power more than **55,544 American homes**



An estimated **\$4.4 million per year** invested in Logan County through new taxes and landowners' payments over the life of the project



Will support an estimated **800 jobs** during peak construction



Up to **4 full-time** operations and maintenance jobs once operational



Emissions reductions equivalent to taking **60,880** cars off the road



Inenergy supports local education, emergency & veteran services and environmental stewardship



Uses the most up-to-date, innovative technology



Up to **280 megawatts** of sustainable energy

# Project Schedule



## Development Timeline

2019 - 2023

### Development

Activities include permitting, environmental and interconnection studies, and public feedback

2023 - 2024

### Construction

Groundbreaking, construction, inspections and QAQC, Final commissioning and certification

~Q4 2024

### Operations

Operations and continuous Maintenance of equipment and the land.

# Why Ohio? Why Now?

## • Cost Competitive Technology

- Solar technology is simple and scalable; its flexible and reliable. With costs that have decreased by nearly 90% in less than a decade, solar is now one of the least expensive and fastest growing sources of new energy generation in the world.

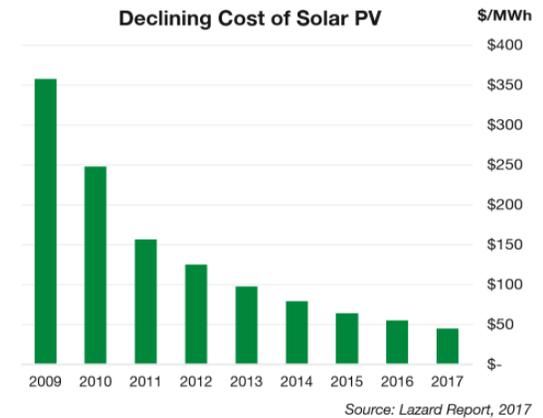
## • Commercial and Municipal Demand

- Nearly 70% of Ohio's regional planning commissions have publicly noted an interest in renewable energy or environmental sustainability plans
- City of Columbus – Proposed Electric Service Aggregation Program (Ballot Issue 1)
- Smart Columbus Energy- Aggregation for local large corporate and industrial organizations that consume approximately 5,000MWh or more per year.
- Nationwide Commercial & Industrial Users
  - Ohio's 60 largest employers have an average target of utilizing 80% renewable energy sources by 2025 to 2030

## • Decarbonization goals from utilities like American Electric Power (AEP)

- Renewable projects and relationship to carbon emission free energy generation. Cleaner air/water.

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## The Columbus Dispatch

GOVERNMENT

### Columbus voters approve green-energy aggregation plan

Bill Bush

Published 10:48 p.m. ET Nov. 3, 2020 | Updated 11:28 a.m. ET Nov. 4, 2020

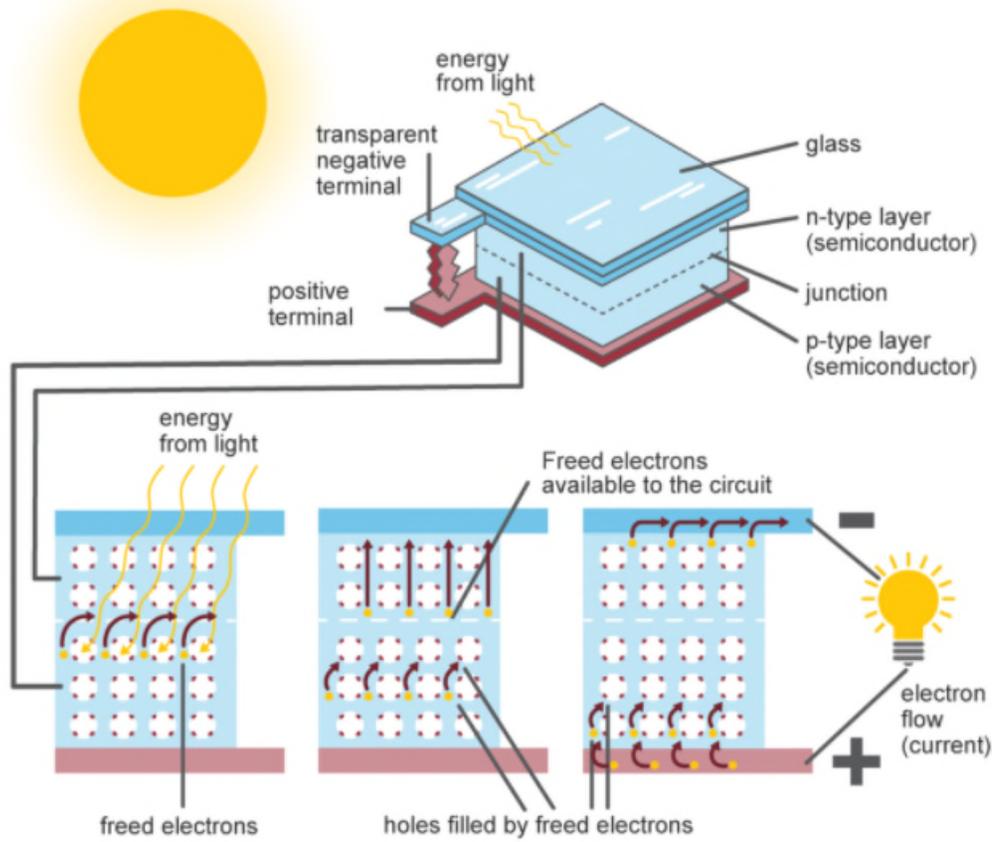


AEP's Carbon Emission Reduction Goals

**70%** by 2030  
**80%** by 2050

(both from a 2000 baseline)

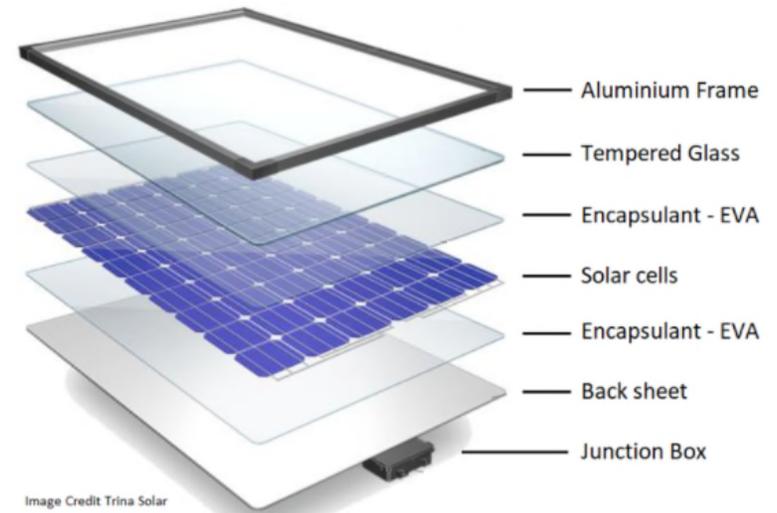
## Inside a Solar Panel



Source: U.S. Energy Information Administration

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## Solar Panel Components



The 6 main components of a solar panel - Image Credit Trina Solar

Invenergy follows safety procedures to ensure all panels are compliant with the EPA's TCLIP testing protocol, which categorizes them as **non-hazardous**.

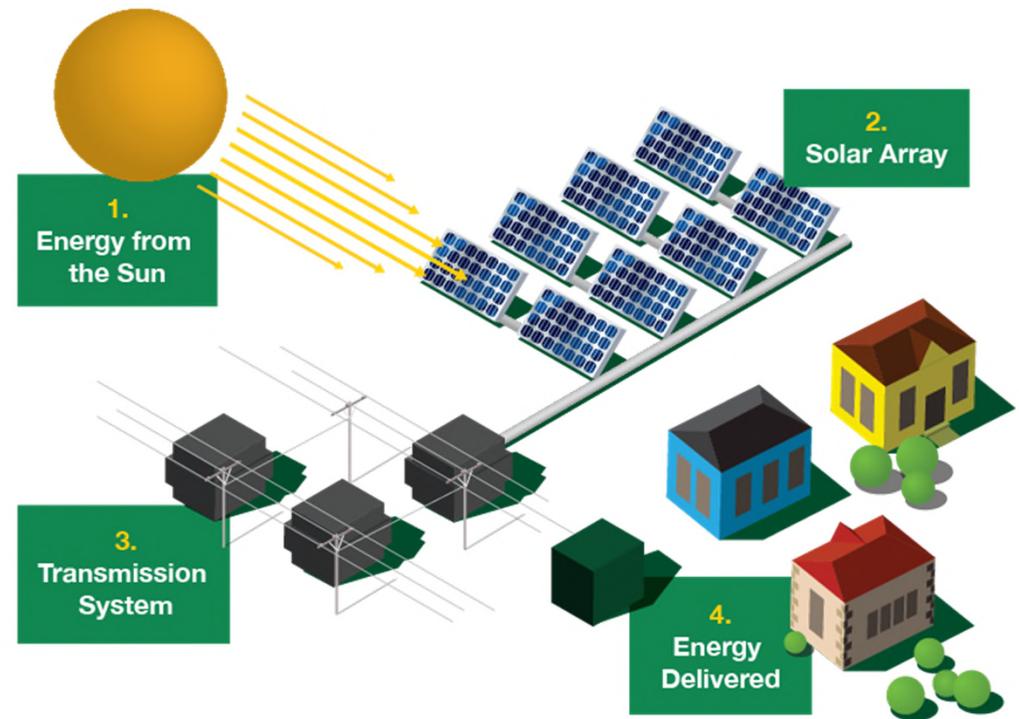
By weight, more than 80 percent of what goes into PV panels is **glass** and **aluminum** – both common and **easy-to-recycle materials**.

# How Solar Farms Function

Proven  
Technology

Innovative  
Design

Year-Round  
Sunlight



Invenergy uses **state-of-the-art photovoltaic (PV) panels** to harness the sun's energy. Nearby transmission infrastructure will deliver energy to the grid.

# Operations / Decommissioning

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- **The operational life of the facility is expected to be at least 45 years.**
  - Activities during operations include landscape and vegetative management, equipment monitoring and inspections, and project area security.
- **The owner of the facility will be responsible for decommissioning the facility at the end of its operational life, as required by the conditions put forth by the Ohio Power Siting Board.**
  - A bond or other financial security will be put into place **prior to the commencement of construction** to ensure that sufficient funds are available for decommissioning.
  - Decommissioning involves the removal of equipment and the reclamation of the land.



# Benefits of Vegetation Management Approach

- Soil/planting diversity and health
- Improvement in stormwater drainage through diversified plantings and long rooted systems that can reduce soil erosion
- Reduction or elimination of annual soil tilling
- Improvement in downstream water quality through the reduction or elimination of fertilizer use
- Can help increase pollinator habitats with seed mix prescribed in Vegetation Management plan



From left to right, the plants depicted are turf grass, corn, soybeans, a selection of native prairie grasses and forbs, and a solar racking system depicted in a 2x1 portrait configuration. Scale is in feet. The racking system foundation will go below grade, but a final depth has not yet been determined so it is omitted from this illustrative figure.

Figure 2: Selected Native Plant Rooting Depths and Growth Heights

# Studies Completed to Date

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- **Landscape, Vegetation Management, Lighting Plan**
- **Geotechnical Report**
- **Wetland and Waterbody Delineation**
- **Site Characterization Study**
- **Hydrology**
- **Drain Tile Mitigation Plan**
- **Cultural Resource Surveys**
- **Viewshed Analysis**
- **Noise Analysis**
- **Socioeconomics Evaluation**
- **Property Value Impact Assessment**
- **Construction Routing Study**
- **Phase I Environmental Site Assessment (ESA)**
  
- **Other Environmental items to note:**
  - All drain tile repair work will occur under the supervision of Logan County Engineering.
  - Project has and will continue to coordinate with Ohio EPA and associated permitting requirements including NPDES Permit #5
  - Project has and will continue to coordinate with U.S. Fish and Wildlife and Ohio Department of Natural Resources on wildlife and habitat.



# Environmental Diligence and Planning

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## Landscape Aspects Studied by the Project

- Soil and Substrate Geotechnical Conditions
- Wetlands and Waterbodies
- Hydrology
- Topography
- Plants, Wildlife, and Habitats
- Local Drainage Network

## Environmental-Related Organizations the Project has Engaged:

- U.S. Fish and Wildlife Service
- Ohio Department of Natural Resources
- Ohio Environmental Protection Agency

## Key Project Plans Include:

- Avoiding impacts to sensitive/protected habitats, plants, and wildlife through site design and planning of activities
- Addressing hydrology through grading and planting of perennial vegetation – will meet local stormwater management requirements
- Continued engagement with above agencies, to communicate project updates, and compliance with environmental regulations
- Landscape, Lighting, Vegetation, Stormwater, Decommissioning Plans

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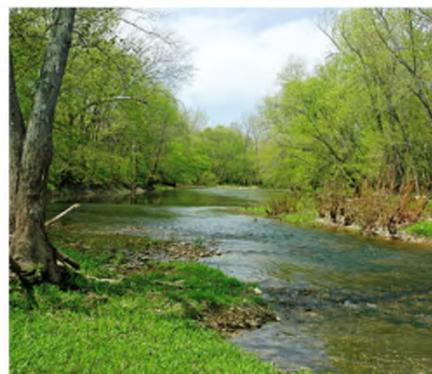


# Community Benefits



## The Land

- Invenergy will be responsible stewards to conserve the land and protect the watershed
- The project will be located on privately owned land that will be returned to use for farming for generations to come



## The Community

- The project will bring an estimated **\$1.0 million** in new local long-term earnings for Logan County annually
- **\$4.4 million** will be invested in Logan County annually
- Invenergy has had outreach with the Logan County Chamber of Commerce and will be active in the local community

### Conceptual Minimum Project Payments

	Annual	Total
Logan County	\$366,333	\$16,484,985
Townships	\$180,993	\$8,144,685
Fire & EMS	\$176,507	\$7,942,815
Benjamin Logan Schools	\$1,121,142	\$50,451,390
Ohio Hi-Point JVS	\$115,025	\$5,176,125
<b>Total</b>	<b>\$1,960,000</b>	<b>\$88,200,000</b>

# Our Invenergy Impact



**\$258 million**

Total 2020 local economic investment in wages & benefits, lease payments, and state & local taxes



**\$1.4 million**

Given to different cause-based organizations in 2020, focusing on veterans, education, emergency services & environmental stewardship



**10% veterans**

Percent of Invenergy's U.S.-based workforce who are military veterans or reservists

**ORACLE**

**Sustainability Innovation Award**

*Awarded by Oracle to Invenergy in 2017 for sustainability leadership*



Proud to Support

**Four Star Sponsor**

*First sustainable power developer & operator to sponsor National FFA (Future Farmers of America formerly)*



**TAMARINDO**  
strategic communications advisory

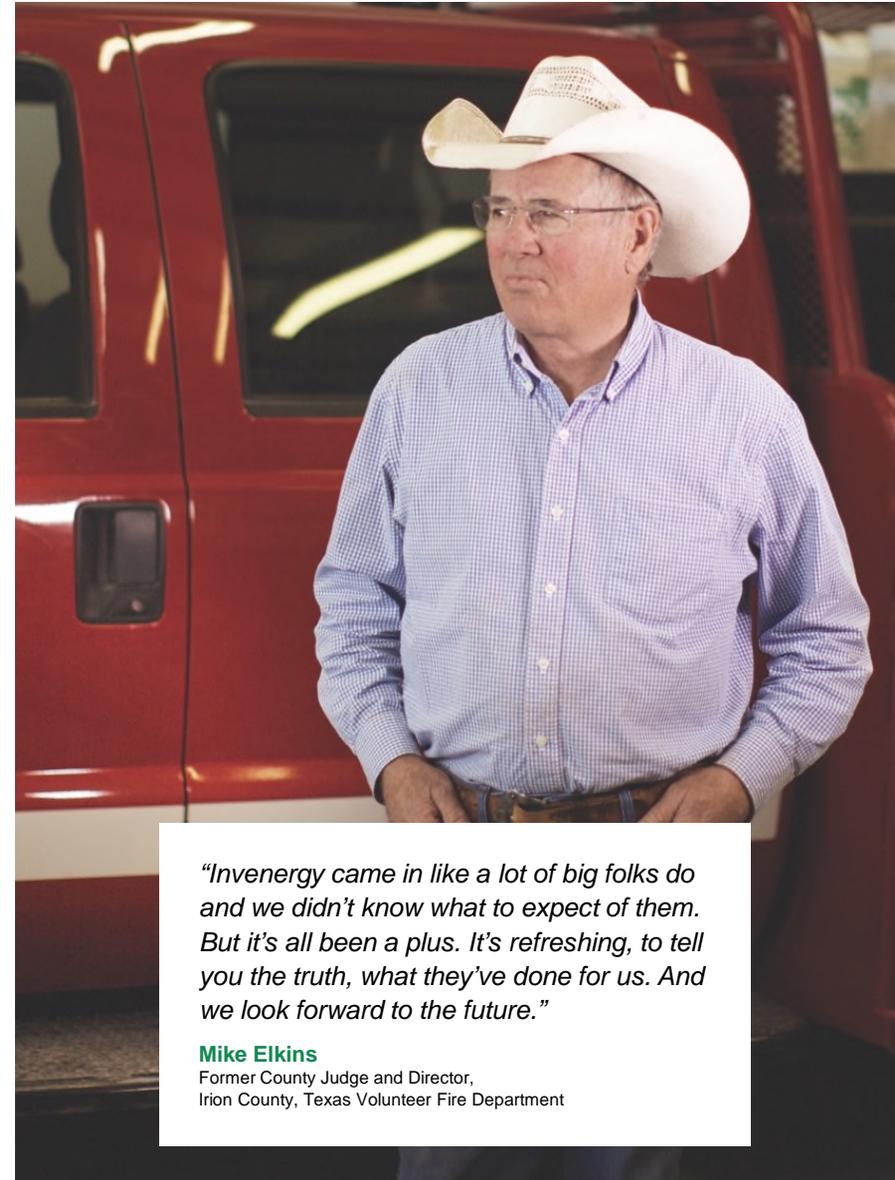
**#1 Renewables Reputation**

*Top brand reputation among 1,500 companies active in the North American renewables market*



**HIRE Vets Gold Medallion**

*Recognized in 2019 by the US Department of Labor for commitment to hiring veterans*



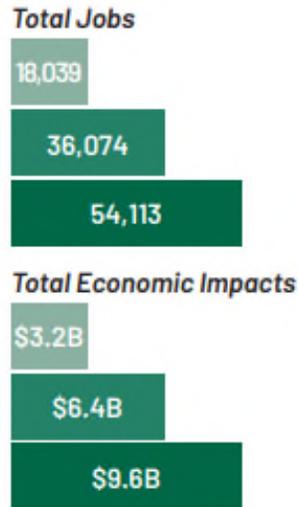
*"Invenergy came in like a lot of big folks do and we didn't know what to expect of them. But it's all been a plus. It's refreshing, to tell you the truth, what they've done for us. And we look forward to the future."*

**Mike Elkins**

Former County Judge and Director,  
Irion County, Texas Volunteer Fire Department

# Measuring the Economic Impacts of Utility Scale Solar in Ohio

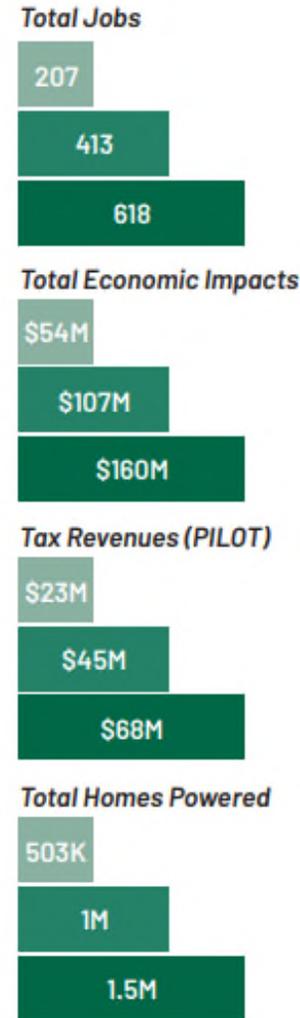
## One-Time Construction Phase Impacts



### Deployment Scenarios

- Low (2.5 GW)
- Moderate (5 GW)
- Aggressive (7.5 GW)

## Annual Operations Phase Impacts



## Aggregate Lifespan Operations Phase Impacts



In the aggressive (7.5 GW) deployment scenario, the energy produced could power all of the households in Columbus, Ohio roughly **four** times over.

\* All calculations assume 80% of labor and 30% of materials originate in Ohio.

Conducted by the George V. Voinovich School of Leadership and Public Affairs at Ohio University

# Involvement in Logan County

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## Local Leaders Outreach

- Multiple meetings with Logan County Commissioners
- Meetings with Bokescreek Township Trustees
- Meeting with Perry Township Trustees
- Meeting with Rushcreek Township Trustees
- Meeting with local Kiwanis Club
- Outreach to Logan County Chamber of Commerce

## Adjacent Landowner Outreach

- Mailings with project information to 140+ landowners
- Door-to-Door Efforts (w/social distancing protocol) to see specific concerns in and around the project area
  - 50+ doors knocked
- Phone outreach and follow up
  - ~100+ calls completed
- Online Engagement for information about solar and specific project details



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**We're building a  
sustainable world.**

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**Join us.** [in](#) [f](#) [twitter](#) [instagram](#)

