

## Indiana Brightfields Webinar Series: Solar Procurement

Wednesday, November 19, 2025

**THANK YOU** for joining us for this webinar. We will get started in a moment. While you are waiting, please respond to the poll questions on your screen.

## **Technical Notes**

## If you experience technical difficulties with your connection:



Dial 785.532.0783



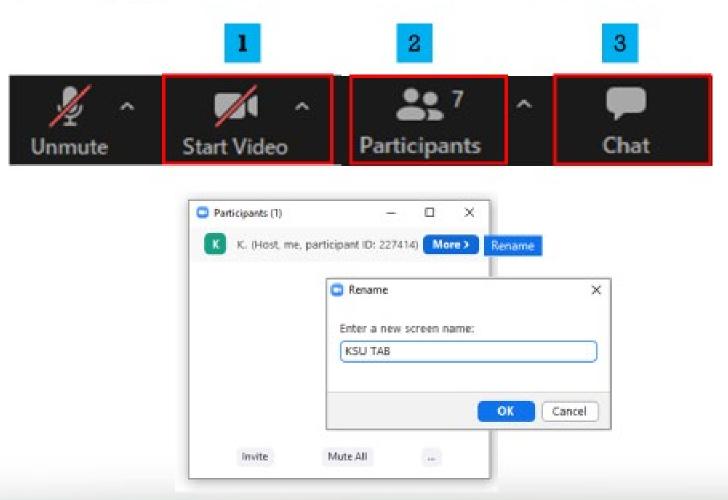
Email chsr@ksu.edu

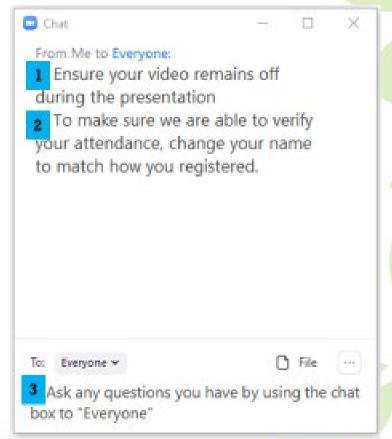
## Additionally, please note:



The presentation is being recorded and will be available on the website. The link has also been placed in the chat box.

## **Using Zoom – The Basics**







## Welcome

John Morris, Indiana Brownfields Program, IFA

# Technical Assistance to Brownfields (TAB)

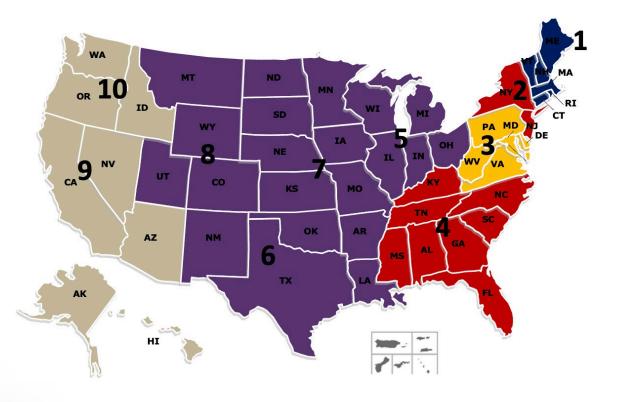
Nationally funding program by U.S. EPA

 Technical assistance for communities and tribes revitalizing communities through brownfields redevelopment

 Services provided are free and tailored to meet specific needs



## Technical Assistance to Brownfields (TAB)



#### **TAB Service Providers**

**University of Connecticut** EPA Region 1

**New Jersey Institute of Technology (NJIT) EPA** 

Regions 2 & 4

Mid-Atlantic TAB EPA Region 3

Kansas State University - EPA Regions 5, 6, 7 & 8

**Center for Creative Land Recycling (CCLR)** EPA

Regions 9 & 10











## You've Got a Friend in TAB

## TAB providers can fill gaps and help support overall project goals.

- Help identifying your community's brownfields
- Strategic planning and reuse visioning
- Solar and Green Energy Strategies
- Economic feasibility and Market Impact/Analysis
- Community outreach and input
- Educational workshops
- Help identify funding sources
- EPA Brownfields Grants-strategy development and application reviews



## We Want to Hear Your Feedback

## Please provide feedback on today's event:

1. Click this link: <u>Brightfields 301: Solar Procurement</u> 11/19/2025

2. Click the link provided in the chat box

1. Scan this QR image from your smartphone





# Brightfields 301: Solar Procurement Indiana Brightfields Webinar Series

November 19, 2025

Presented by











## Indiana Brightfield Series Webinar



Brightfields 101:

Introduction to Brightfields

October 1, 2025 1-2:30pm ET



Brightfields 201:

Permitting and Liability

October 22, 2025 1-2:30pm ET



Brightfields 301:

Solar Procurement

November 19, 2025 1-2:30pm ET



The last 15-30 minutes of each webinar will be office hours with the technical assistance partners. Come prepared with any site-specific questions!

## Today's Agenda

Welcome

**Types of Solar Deal Contracts** 

**Preparing for Site Reuse with Solar** 

**Questions and Next Steps** 

## Today's Objectives

1

Understand different types of deal structures for solar projects in Indiana

2

How to prepare for site reuse with solar, including procurement planning and utility engagement

## **Virtual Webinar Ground Rules**

### **Be Present**

- · Close other apps (email, messaging, etc.) except Zoom as if we were in person
- Ask questions so that we can all learn from each other
- · Be prepared for poll questions on the screen, even if your camera is off

### Be Aware

- Keep yourself muted during presentations/when others are speaking
- Create space for others to contribute

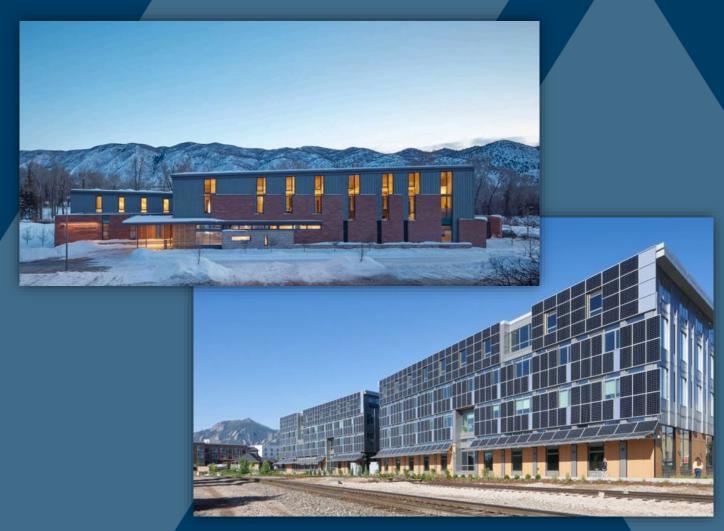
# Embrace a Learning Environment

- This is an introduction to energy topics for many participants
- This is not a sales environment

Rocky Mountain Institute (RMI) is an independent, nonpartisan, nonprofit organization dedicated to accelerating a prosperous, clean energy future for all

### What We Do:

- Founded in 1982, RMI now works across the United States and in 60 countries
- We combine research, whole-systems thinking, and unconventional partnerships to help communities advance sustainable energy systems



RMI and KSU TAB partner to help communities across America reuse brownfield sites with clean energy

Our goals are...



To educate communities, site owners, and state agencies on clean energy brownfields reuse options through in virtual and in-person workshops and presentations



To provide technical assistance to communities and site owners to vet site and market feasibility, including pre-development site evaluation, site visits, and engagement with relevant utilities, state regulators, and potential offtakers



To develop procurement documents, funding strategies, financing models, market guidance, and other resources that tangibly help site owners prepare for development, advance projects, and engage productively in their community and markets

## What technical assistance is available?



**Identifying Your Most Promising Brightfields Opportunities** 

Site pre-screening
Strategic reuse planning
Utility engagement



**Funding & Financing Guidance** 

Unpacking relevant incentives and funding Assistance with brownfields grant applications



**Accelerating Brightfields Procurement** 

Procurement support
Insights from the brightfields market

## "Brightfields" reuse previously disturbed, often-contaminated land to reactivate sites and support a local energy transition





#### **Brownfield:**

- A property where the expansion, redevelopment, or reuse may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant
- Common brownfields include former industrial sites, inactive landfills/dumps, old factories, abandoned mines, and closed power plants

### **Brightfield:**

 A type of redevelopment where renewable energy (typically solar) is built on a former brownfield or Superfund site

# Brightfields come in all shapes and sizes



Photos courtesy of Encore Renewable Energy and Clean Capital



## **Brightfields Site Selection Checklist**

## Strategic Reuse:

- ☐ Is this a productive reuse of the site?
  - ☐ Does this reactivate a site without current plans?
  - ☐ Does this risk impeding future reuses nearby?
- ☐ Is this the "highest and best use" of this site?
  - ☐ How well does this align with existing site owner goals and/or community visioning?
  - ☐ Are zoning, right-of-way, or land-use conditions aligned with the proposed reuse for this site?
  - ☐ Can co-locating clean energy further enhance plans for the site?

### **Technical Reuse:**

- □ Does the site seem like it can reasonably support clean energy?
  - ☐ What energy technologies (i.e., solar, wind, geothermal, or energy storage) could make sense?
  - □ Are there serious concerns about shading (for solar), wetlands, or floodplains?
  - ☐ Is there infrastructure on-site or nearby that may complement clean energy reuse?
  - ☐ Is the site large enough to make sense economically? (typically, 5 acres minimum, ideally at least 20 acres)
- ☐ Is there an economically feasible pathway for how the electricity generated would be consumed?
  - ☐ Is there on-site or nearby demand for electricity?
  - ☐ Would the electricity support the utility's grid?

## Today's Agenda

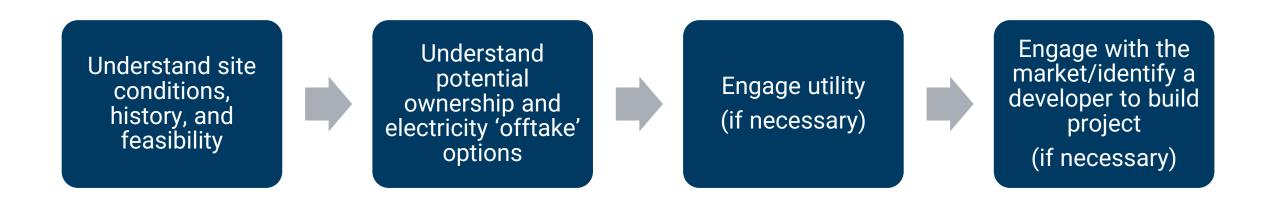
Welcome

**Types of Solar Deal Structures** 

**Preparing for Site Reuse with Solar** 

**Questions and Next Steps** 

## To responsibly advance a project, understanding the site and the deal structure options is critical



To make a clear, strategic ask from the brightfields market, site owners need to figure out how the project will be structured. A developer can eventually help with some project aspects this but it's important to have a working hypothesis before procurement.

## **Key Terms**

#### **Energy Offtaker**

• The end user or consumer of the electricity produced from a project

#### Watt (W)

How much energy something uses or generates per second (ex. an average LED lightbulb requires 10 Watts)

#### Kilowatt (kW)

• A measure of *power* equal to 1,000 W (smaller, on-site projects are typically measured in kW)

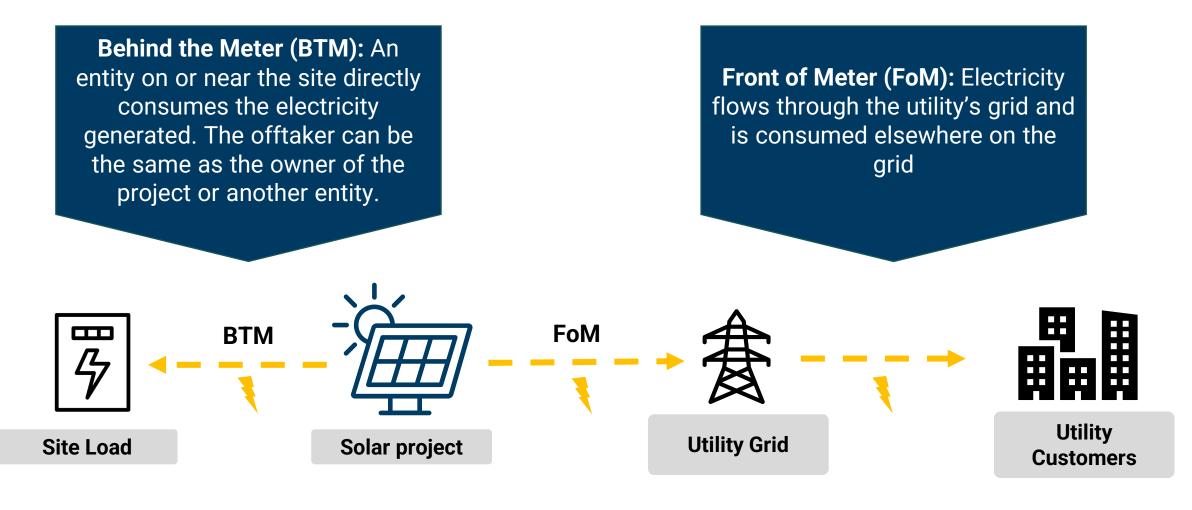
#### Megawatt (MW)

• A measure of *power* equal to 1,000,000 W (utility-scale projects are typically measured in MW)

#### **Kilowatt-hour (kWh)**

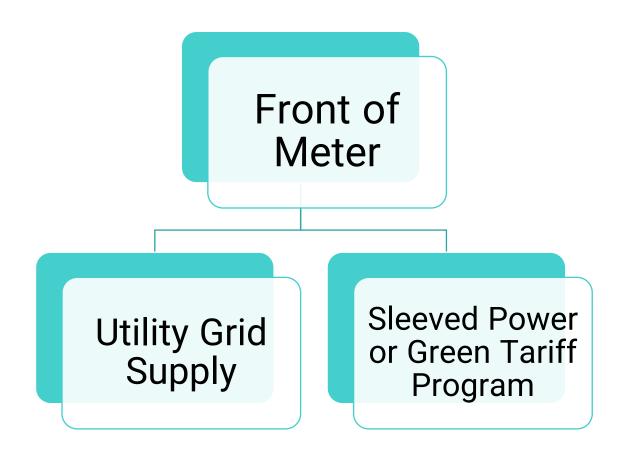
• A measure of energy which is equal to 1,000 watts being used or generated in one hour (you typically pay for the # of kWh consumed monthly for your electric bill)

For a project to be viable, the electricity produced needs to be sold to a consumer or to a utility, either on-site or through the electricity grid. Two primary offtake options exist:



## The offtake options available may vary by site, proximity to existing end users, and utility service territory in Indiana

Behind the Meter On-Site **Energy Use** 



# Behind-The-Meter, On-Site Offtaker

### **On-Site Solar:**

Behind the meter solar can be sited in multiple ways to meet the power needs of a specific facility

**On-site systems** directly power a **Site Load** 1) Rooftop specific facility, but **On-site systems** are typically still typically fall into connected to the grid one of three categories: 2) Parking Canopy **Grid power for** remaining load **Utility** 3) Ground Mount (including landfill)

## On-site solar is optimal when the size and timing of generation are matched with the end use

## **Benefits**

On-site solar can save money by not requiring infrastructure and fees to connect to the grid

Does not require use of the utility distribution or transmission system, which can be a limiting factor

If the on-site use is already grid connected, brightfields can decrease the amount of electricity needed to be bought from the grid

## Challenges

If more electricity is generated onsite than is used locally, excess will need to be connected to the grid and sold to a utility, or you need to resize the system

On-site works best if power is needed during daylight hours, unless paired with battery storage

## Dayton, OH shows how municipalities can use adjacent brownfields to power municipal operations with solar and reduce energy costs

#### **Deal Structure:**

- Project offsets 38% of annual consumption from an energy-intensive municipal facility (water treatment plant)
- The "on-site" solar panels were installed on an adjacent 16-acre brownfield site

#### **Power Moves:**

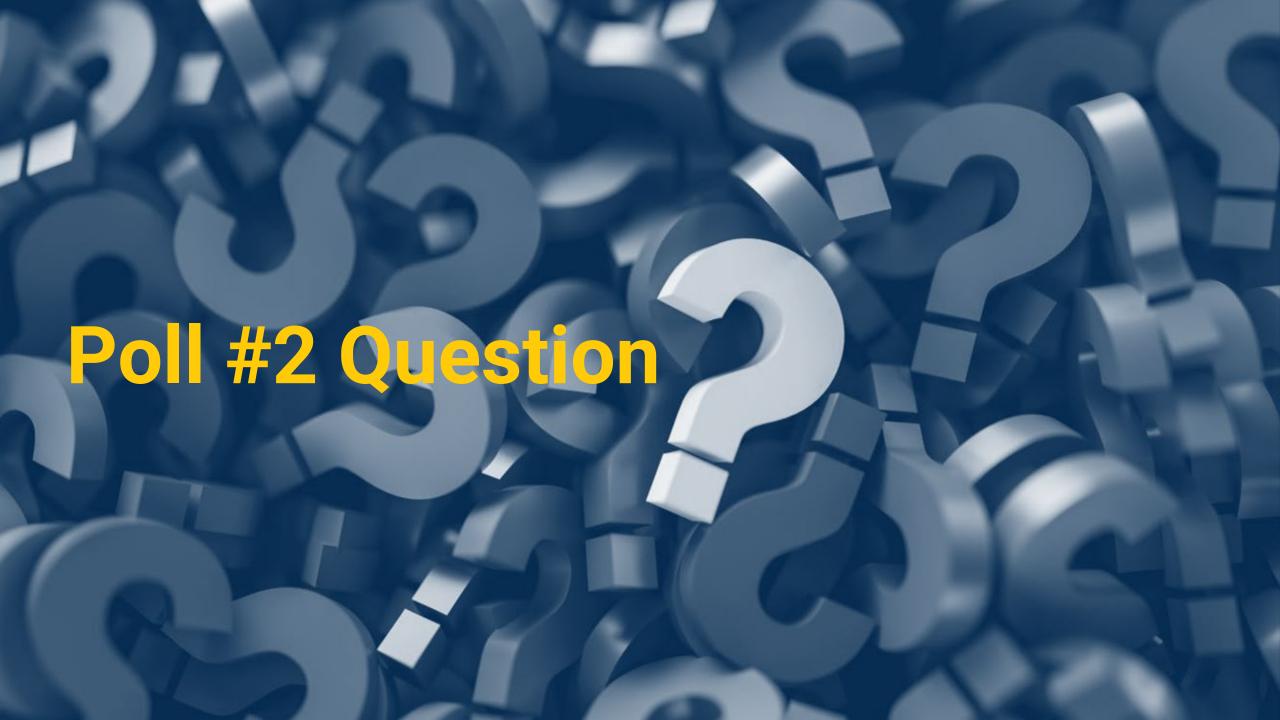
- The City optimized sizing of the project to maximize savings
- The City negotiated with utility (AES Ohio) to waive interconnection fees

### **Project Status:**

 Construction is expected to start in early 2026 and be completed by end of the year



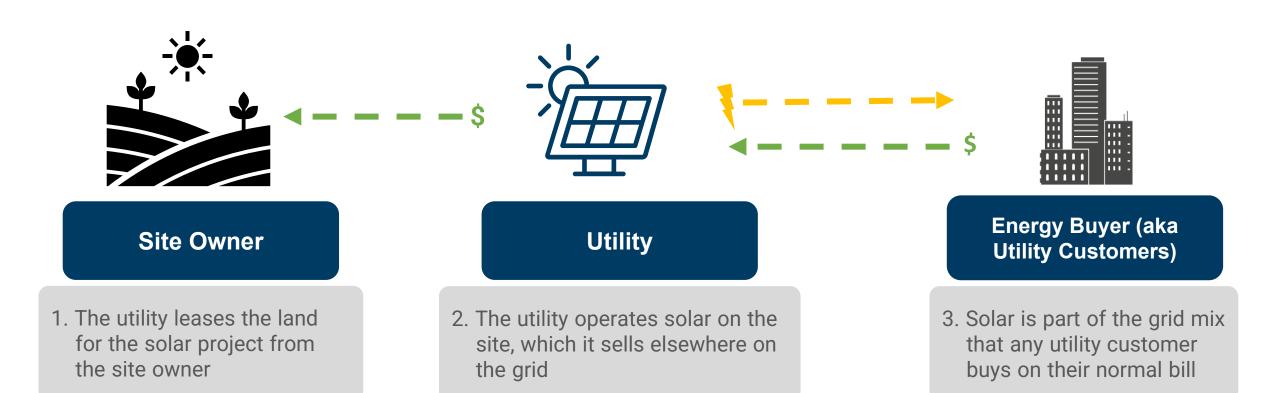
Image Credit: City of Dayton Sustainability Team



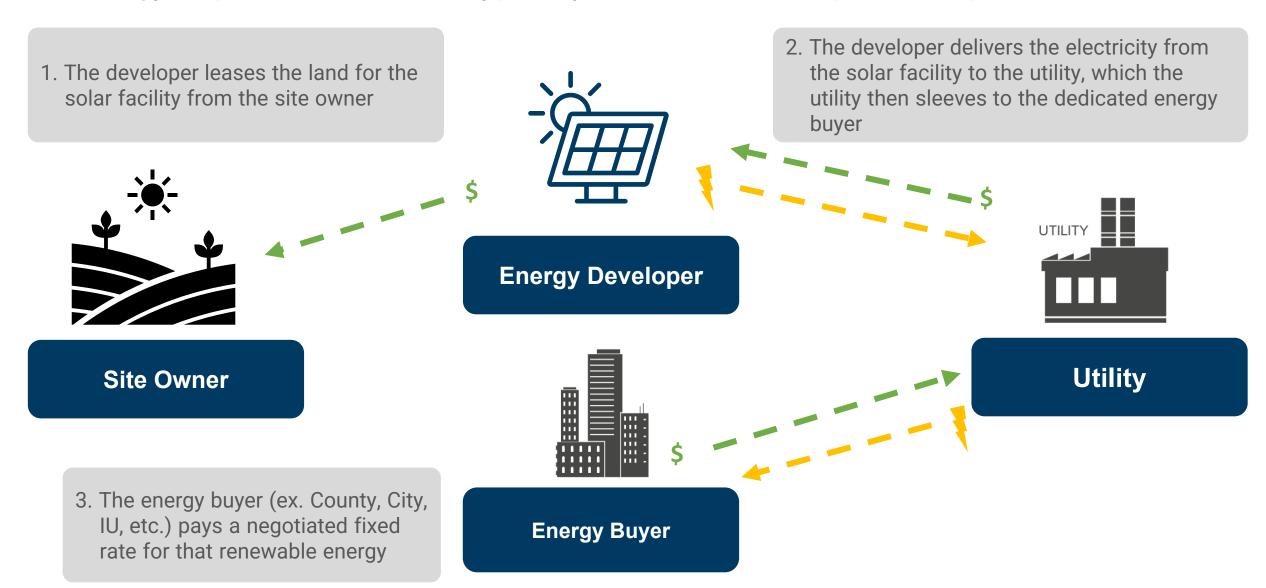
# Front-of-Meter, Off-Site Offtakers

## **Direct Utility Ownership:**

If a site is large enough or economically competitive enough, a utility may be interested in directly owning the generation



# Green Power Purchasing Programs (aka Sleeved Power or Indirect Power): Utility programs can enable customers specifically interested in renewable energy to purchase it, but it typically comes with at a premium price



# Multiple Indiana utilities offer green power purchasing programs with different requirements

#### **Duke Energy Indiana: Green Source Advantage program**

- Offtaker negotiates the rate directly with the developer
- Compensation is based on the value of the power in the energy market

#### **AES Indiana: Cogeneration and Small Power Production program**

- Capped at systems < 80 MW</li>
- · Compensation is based on electricity production and installed capacity

#### NIPSCO: Excess Distributed Generation tariff

- Capped at systems < 1MW</li>
- The compensation rate is 1.25x market priced power (wholesale rate)

#### Municipal and REMCs

Programs vary—will require working with your utility to set up program

## Belmont Wastewater Treatment Plant shows how municipalities can benefit from a brightfield project with third-party ownership

### **Deal Structure:**

- 20-year lease for developer to own and operate a solar project on Citizen Energy Group's property
- Nominal lease payments for the land to Citizen's Energy Group
- Developer paid for project, labor, interconnection, operation, and maintenance
- Project likely used AES Indiana's Sleeved Power Program

### **Project Status:**

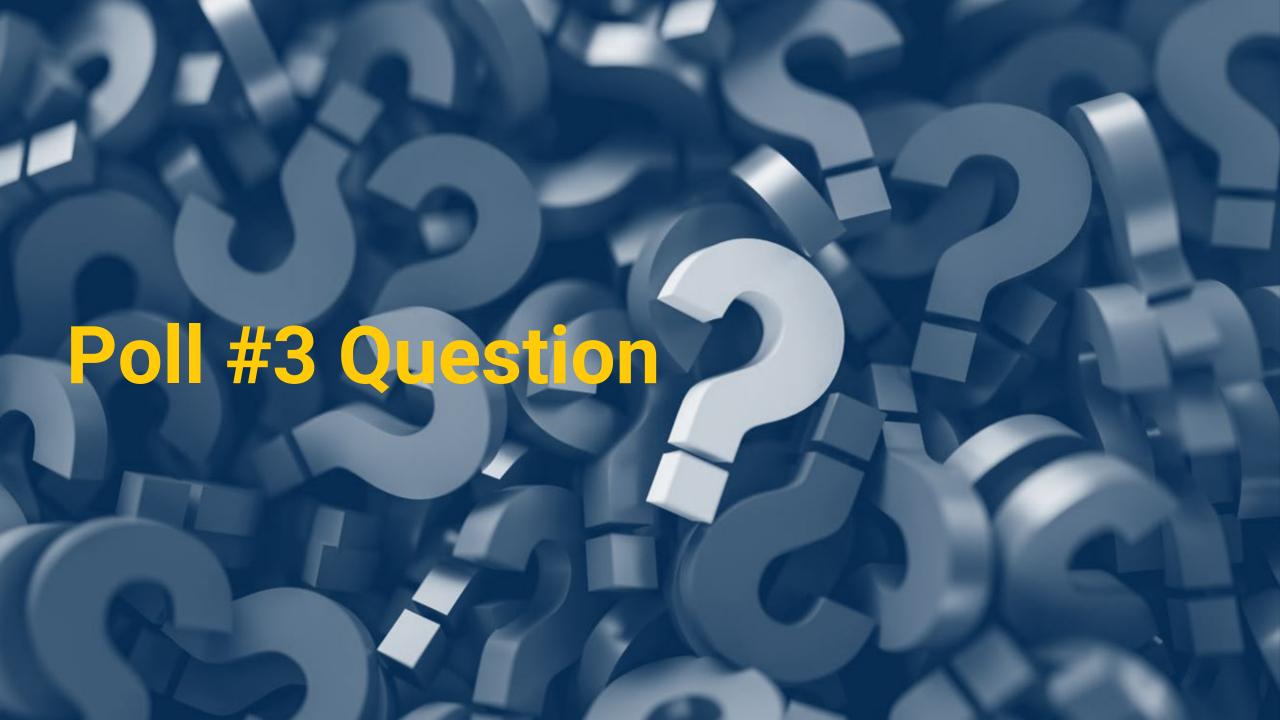
Energized and activated in November 2015



Image Credit: Citizens Energy Group

# Most methods will require a utility to approve interconnecting the site to the broader grid

| Option                               | Requirements   | Pros   | Cons   |
|--------------------------------------|--|--|--|
| On-Site<br>(behind the<br>meter) use | Enough demand on/near the site to make project cost effective and worthwhile | Does not require an interested third party, utility, or grid interconnection, which can save money       | System must be sized to the demand; if project is owned by municipality, it requires up front investment |
| Direct Utility Ownership             | An interested utility  | Straightforward one-and-done deal;<br>utility could play role of or hire a<br>developer                  | Requires grid interconnection; Usually utilities are only interested in very large sites                 |
| Green Power Purchasing               | An interested third-party and utility program to use                         | An entity with clean energy goals may be willing to subsidize project; developer can finance the project | Requires grid interconnection, may come with additional utility fees                                     |



# Indiana's solar market is growing but has fewer electricity offtake options than its neighbors in Illinois and Ohio

#### **Solar Industry in Indiana:**

- According to SEIA, Indiana ranks 16th for capacity of solar installed
- 4,103 solar jobs
- 91 solar companies in the state
- Projected to grow by 10,681 MW in the next 5 years

#### **Retail Electric Choice is not an option:**

 Unlike Illinois, power customers in Indiana cannot choose from whom they buy electricity in a competitive marketplace

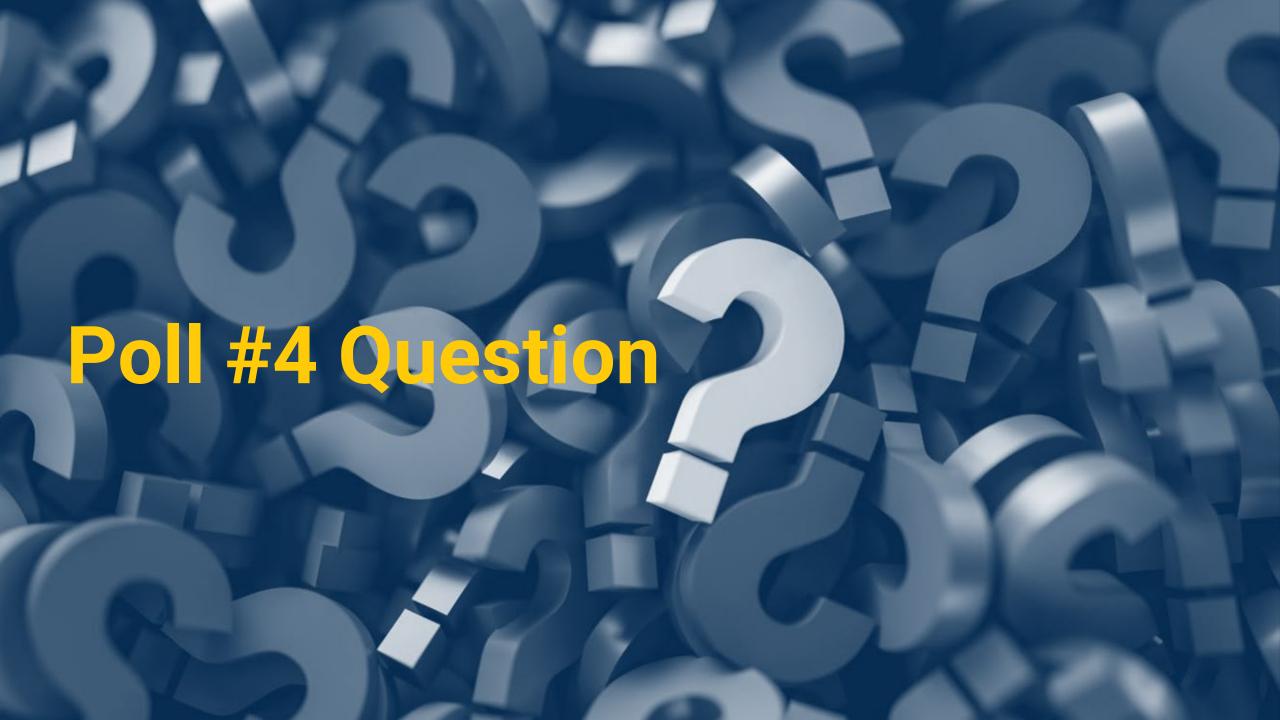
#### **Community Solar is not an option:**

 Unlike Illinois, power customers cannot subscribe to shares of a larger solar project (Illinois)

#### **Community Choice Aggregation is not an option:**

• Unlike Ohio, power customers cannot aggregate their electricity loads to purchase clean energy in bulk from the market (Ohio)

# **Solar Companies in IN** 24 Solar Manufacturers **34** Solar Developers **33** Other Solar Companies



## 3 takeaways:

- If your site is located next to your building or another entity's building with energy consumption, behind the meter likely your best option
- Green Power Purchasing, or "Sleeved" power, is an option energy buyers and offtakers when there isn't on-site power demand, but it often comes at a premium
- If your site is large enough, the most straightforward option could be to offer the site to your utility for a project in exchange for lease payments for the site



## Today's Agenda

Welcome

**Types of Solar Deal Contracts** 

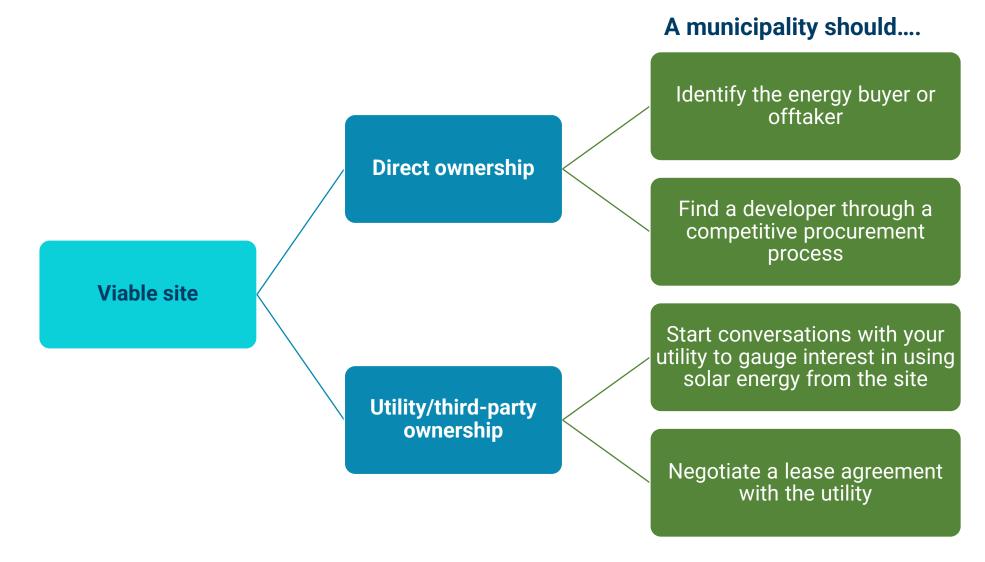
**Preparing for Site Reuse with Solar** 

**Questions and Next Steps** 

## You have a site that may work for solar....

# How do you plan for reuse and engage with the solar market?

# In Indiana, there are typically two viable paths for getting your project to the market



# Direct ownership offers control of the project and helps offset municipal energy bills, but has its challenges

#### **Benefits**

- Municipality maintains control of the project
- Can use the electricity produced to offset electricity use

#### Challenges

- Requires municipality to run procurement process, a potentially complex or novel process for some communities
- Requires an upfront investment

#### **Direct Ownership**

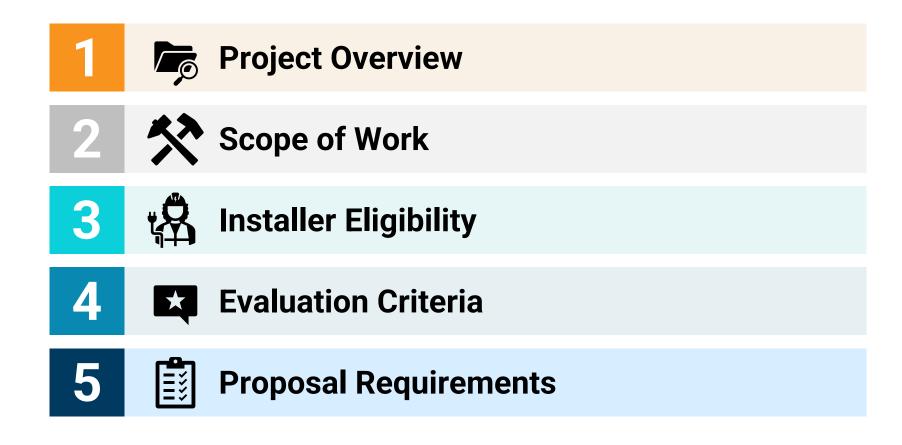
# When you go to procurement, it's important to remember that you are asking developers to invest time and resources to consider your site and submit a proposal



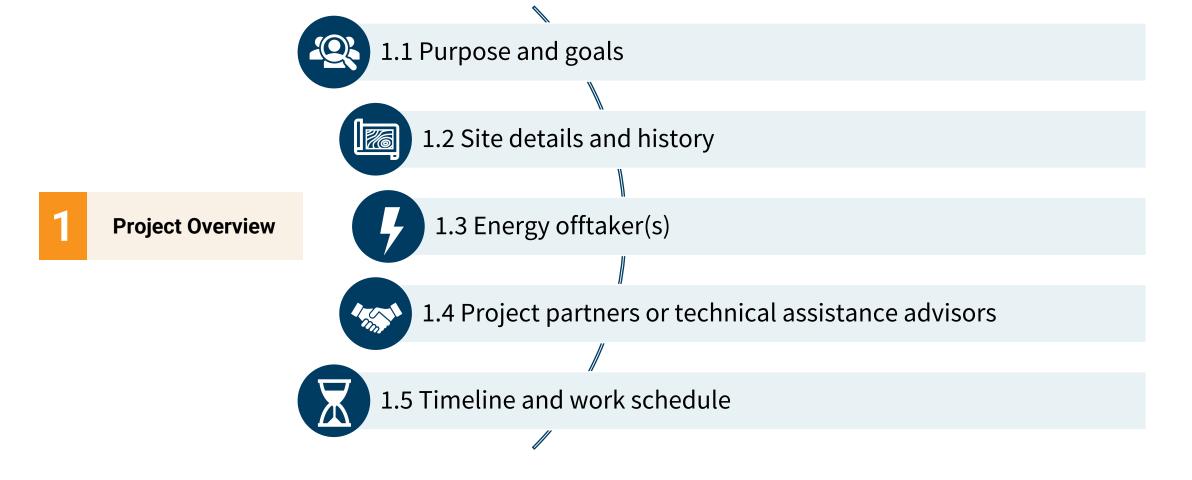
A developer will consider a list of factors before deciding whether to submit a proposal, including:

- Economics of a project; factors that influence project costs include:
  - State and federal incentives available
  - ☐ Size of project
  - Supply chain availability
  - Interconnection costs (if applicable)
- Regulatory status of the site (i.e., is the site in compliance with the state?)
- Interconnection to the energy demand location

Work through as many project details as you can before bringing on a developer and include it all in an RFP to give developers a good sense of the project



# The Project Overview section should concisely provide necessary information for installers to determine whether they can deliver on the goals



# Developers will look for green flags or signs that indicate this project is worth their time

#### **Green Flags (More Likely to Respond)**

The site owner offers developers creativity and flexibility in project execution.

The site owner identifies a customer with strong credit to buy the power generated at the site – ideally a MUSH customer – municipality, university, school, or hospital.

The procurement document clearly communicates the project priorities and goals.

The site owner demonstrates evidence of collaboration with state or federal agencies and/or knowledgeable technical assistance providers.

#### **Direct Ownership**

# Developers will also look for red flags or signs that indicate this project is NOT worth their time

#### **Red Flags (Less Likely to Respond)**

The site owner has a lack of understanding of the regulatory environment or the site conditions and they want the developer to be able to figure everything out on their own.

The RFP is only focused on the site with no identified customer or electricity buyer.

The site owner sets unrealistic expectations about project costs or revenue generation.

The site owner expects the developers to clean up contaminated sites.

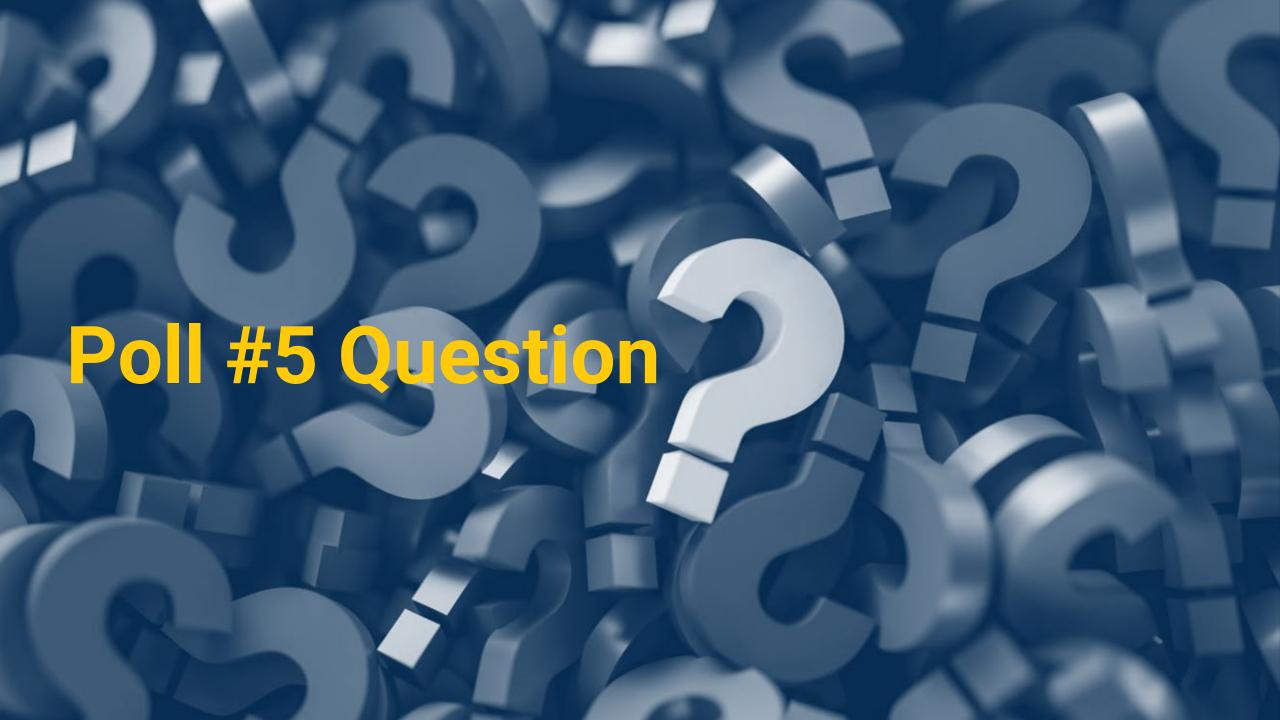
**Bonus points if you** can get a letter of support from your utility or other key players in your RFP it shows the developer that you already have buy-in for the project



#### **Direct Ownership**

An RFP may be the right type of document, but an RFQ or RFI may be the best choice for some situations

|                                  | Advantages  | Risks   |
|----------------------------------|---|---|
| Request for Proposals (RFP)      | Directly solicits pricing<br>proposals through a<br>competitive procurement<br>process                        | <ul> <li>Requires the site owner include many project details to receive quality proposals</li> <li>If evaluation criteria heavily weigh cost, this could skew responses based on price, rather than project quality</li> </ul> |
| Request for Qualifications (RFQ) | <ul> <li>Allows site owners to find a<br/>developer to partner with and<br/>refine project details</li> </ul> | <ul> <li>Process to evaluate<br/>proposals based on<br/>pricing competition<br/>becomes more complex</li> </ul>   |
| Request for Information (RFI)    | <ul> <li>Low-stakes tactic for projects<br/>in their early stages to gauge<br/>market interest</li> </ul>     | <ul> <li>Does not set up for a<br/>contract so be prepared<br/>for a mixed or marginal<br/>level of response</li> </ul>   |



# Utility ownership is a good way achieve site reuse without the upfront cost and with minimal administrative effort at the municipal level

#### **Benefits**

- Site owner doesn't have to pay the upfront costs of the project
- Site owner could receive lease payments for site reuse

### Challenges

- Site owner hands over control of the site to the utility
- May not be interest from the utility in installing solar on the site

How and when you approach your utility to gauge their interest in your project will depend on various factors

Political context

Previous relationship

Type of utility

Utility goals and plans



### **Types of utilities in Indiana**





#### **Investor-Owned Utility**

- Duke Indiana
- Indiana Michigan Power
- Northern Indiana Public Service Company (NIPSCO)
- Vectren
- AES Indiana (Indianapolis Power & Light)

#### Co-op

- Hoosier Energy
- Wabash Power Alliance

#### **Municipally-Owned Utility**

Indiana Municipal Power Agency (IMPA)













# How and when you approach your utility to gauge their interest in your project will depend on various factors

Questions to begin the conversation with the utility

What type of project structures are allowed in this jurisdiction?

If solar is part of their long-term planning, could you offer your site to host some of their planned resources?

Have you worked on a solar project similar to this size before or a brightfield project?

Can the surrounding infrastructure (substation or distribution power lines) support this project?

If there is interest from the utility to manage/own the project, the utility would likely lead the procurement and development process. In this case, the site host would likely be hands-off but for a lease agreement and information requests about site history.

## **Marion Solar Case Study**

- Marion Solar, a developer, approached Citizens
   Energy Group, seeking to install solar in early 2014
- They set up a 20-year site lease allowing construction and operation of solar project
- Marion Solar arranged interconnect with AES Indiana and is the generator
- Project is 3.8 MW AC
- Commercial operation in November 2015
- The project likely used AEP's former Cogeneration and Small Power Production program



Photo credit: Citizens Energy Group



## Today's Agenda

Welcome

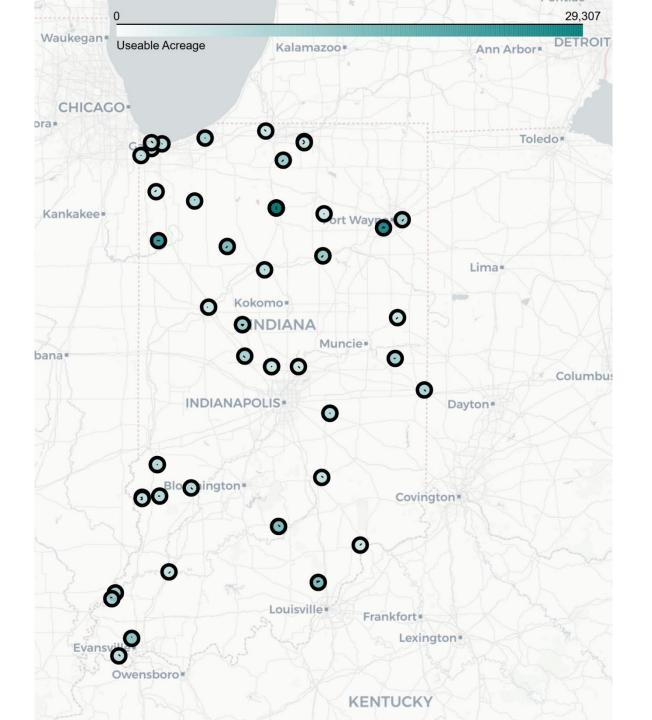
**Types of Solar Deal Contracts** 

**Preparing for Site Reuse with Solar** 

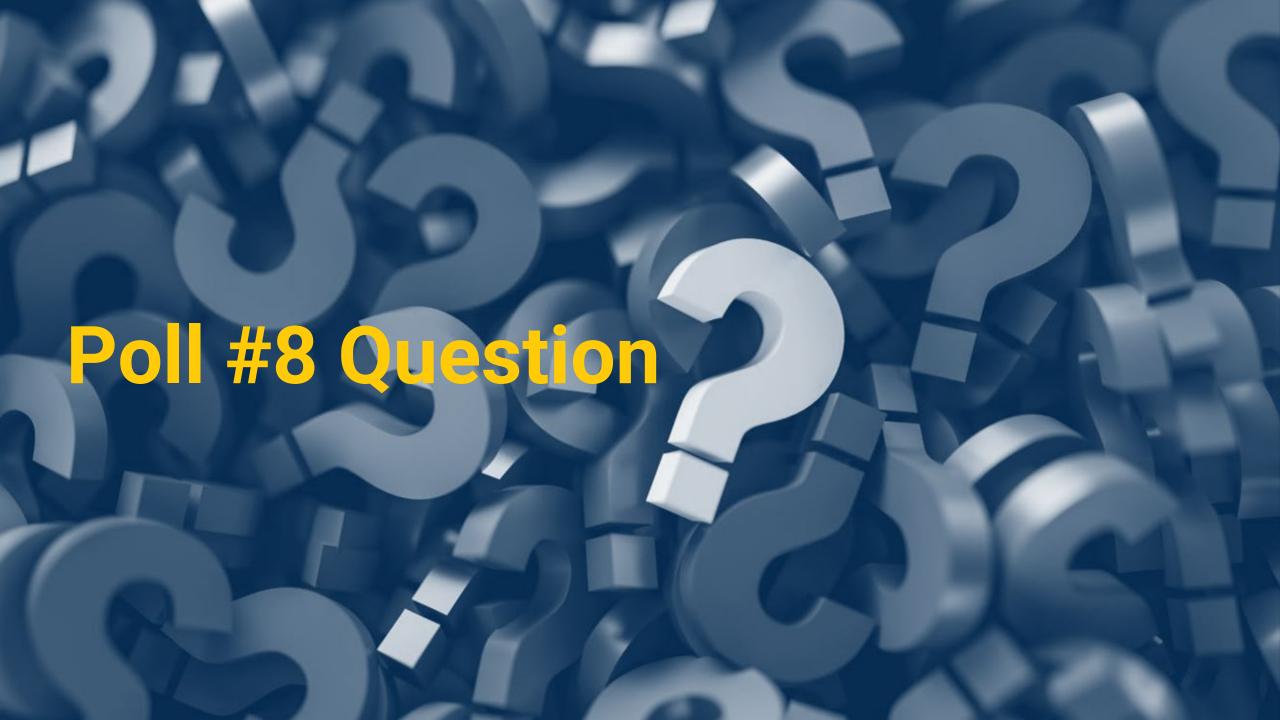
**Questions and Next Steps** 

# Coming soon: map of potential brightfield sites in Indiana

On the right:
The top 50 potential
brightfield sites
ranked by estimated
useable acreage







# Our Brightfields Procurement FAQ provides insights for communities planning for the brightfields market





## **Next Steps**



Slides and recording will be shared by November 24th



Fill out our evaluation survey! It helps us improve for next time.

Stick around to ask site/community specific questions or get in touch!



# Thanks for joining us! Interested in technical assistance? Get in touch!

#### RMI Contacts:

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# Indiana Brownfields Program

**Brownfields Program Overview** 

Brightfields 301

November 19, 2025





# Indiana Brownfields Program

Brightfields 301: Solar Procurement

November 19, 2025



## Indiana Brownfields Program

- Provides <u>free</u> governmental assistance to address environmental issues that impede brownfields redevelopment
- Works typically with communities or prospective purchasers
- Allows for voluntary participation— not enforcement
- Works in partnership with U.S. EPA & IDEM
- Has different processes for different incentives
- Uses consultants differently per incentive
- Utilizes IDEM's Risk-based Closure Guide (R2)
- Offers closure & liability clarification documents



## **Program Basics**

**Financial Incentives** - Environmental Assessment and Remediation Awards of Professional Services and Loans

**Technical Resources** - Environmental Evaluations and Field Work Oversight



**Education and Outreach** – Workshops, Trainings, Community Meetings and EPA Assistance

**Legal Assistance** - Liability Interpretations and Enforcement Discretion Determinations



### Financial Incentives

**State and federal \$:** loans, subgrants (or awards of professional services), coordination, leveraging funds

- Phase I Environmental Site Assessment (Phase I ESA) Initiative
- Petroleum Orphan Sites Initiative (POSI)
- Revolving Loan Fund (RLF) Incentive (federal \$) (loans/grants)
- IFA State Revolving Fund (SRF) Loan Program coordination
- IDEM Supplemental Environmental Project (SEP) coordination
- OCRA-IFA partnership coordination (e.g., demo/clearance)
- Misc. brownfield determinations/support letters (e.g., PEDs)
- Current/Future funding via U.S. EPA (e.g., 128(a), RLF)

Financial assistance varies throughout the years....
Some assistance via rolling applications... some not....
Assistance is not mutually exclusive and is not linear....

### Indiana Brownfields Program Contact Information

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Check out the Indiana Brownfields Program web site at: <a href="www.brownfields.in.gov">www.brownfields.in.gov</a>
Sign up for announcements and updates from IBP!

## We Want to Hear Your Feedback

#### Please provide feedback on today's event:

1. Click this link: <u>Brightfields 301: Solar Procurement</u> 11/19/2025

2. Click the link provided in the chat box

1. Scan this QR image from your smartphone



