

INDIANA LAND USE SUMMIT

Agrivoltaics and Renewable Energy



U.S. DEPARTMENT
of ENERGY
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SHARED EXPECTATIONS

This is a learning space. The Indiana Land Use Summit organizers and sponsors do not promote specific policies, projects, or developers. This program is intended to be educational and informational in nature.

- Respect speakers and other participants.
- Refrain from side conversations during presentations and Q&A.
- Do not video or record the presentations or discussions.
- Take care of your needs.

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DEMOGRAPHICS

Please fill out the short demographics form to help us count the number of individuals we reach. Your responses are voluntary and anonymous. Thank you.



AGENDA OVERVIEW

9:00 am	Registration and Networking
10:00- 10:15 am	Welcome, Overview of the Day
10:15- 11:30 am	Project Overviews and Research Updates
11:30 am- 12:30 pm	Lunch
12:30- 2:00 pm	Breakout Session Discussions
2:00 pm	Conclude Sessions
2:20 - 4:00 pm	Networking and Tour <i>Group 1– Black</i> <i>Group 2– Blue</i> <i>No Tour- Gray</i>
4:00 pm	Depart



Digital Program



**INDIANA LAND USE SUMMIT:
AGRIVOLTAICS AND
RENEWABLE ENERGY**

August 27, 2026 | Beck Agricultural Center

AGENDA

SPEAKERS

SPONSORS

INDIANA RENEWABLE ENERGY

Siting through Technical Engagement and Planning (R-STEP™)



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This material is based on work supported by the U.S. Department of Energy Office of Critical Minerals and Energy Innovation (CMEI) through the Reliable Energy Siting through Technical Engagement and Planning (R-STEP) program. R-STEP is administered with support from the Partnership Intermediary Agreement (PIA) that the U.S. Department of Energy (DOE) has established with ENERGYWERX.

Midwest Agrivoltaics for Resilient Communities (MARC)

Harvesting Food and Energy for a More Resilient Nation



WELCOME

ANGIE ABBOTT

ASSOCIATE DEAN OF AGRICULTURE

DIRECTOR OF PURDUE EXTENSION

PURDUE UNIVERSITY COLLEGE OF AGRICULTURE

WELCOME

LYNNE DAHMEN

SENIOR MANAGING DIRECTOR
PURDUE UNIVERSITY INSTITUTE FOR A
SUSTAINABLE FUTURE

INSTITUTE FOR A SUSTAINABLE FUTURE



Welcome to the 2026 Land Use summit!

Lynne Dahmen, Ph.D.
Senior Managing Director

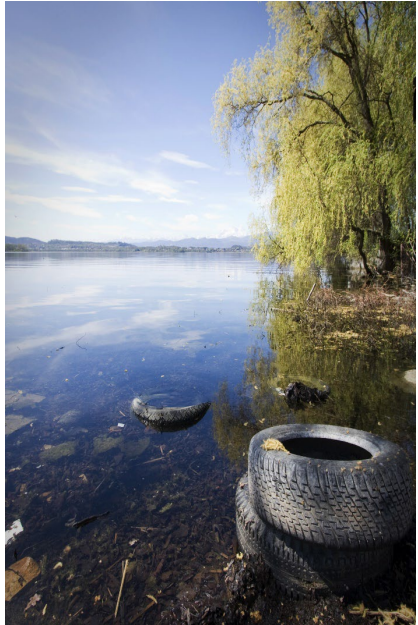
ldahmen@purdue.edu

Mission and Vision



- Foster and promote research, partnerships, and engagement
- Support research and development in sustainability
- Advance knowledge and innovation through an interdisciplinary research ecosystem
- Become the leading place for innovative and transformative discovery in sustainability

Research Groups



Biodiversity

Environmental Stressors

Risk and Resilience

Water Challenges

Renewable Energy (New!)

Amazon Sustainability Research (New!)

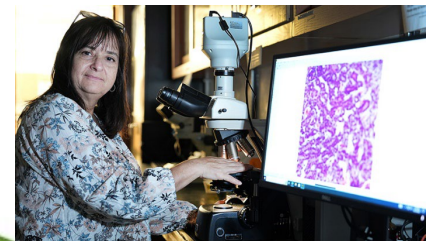
Great Lakes Science Initiative

Circular Economy Systems

Future Manufacturing

Africa Sustainability

Indiana PFAS Network (New!)





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Save the Date!

Discovery Park
DISTRICT

Solar Innovations & Energy Transitions in the Midwest September 30 | 3:30 p.m. | MRGN 121



Join the ISF's Renewable Energy Research Community to learn about the latest Purdue research on solar energy research and technology, renewable energy impacts on grids, and usage and impact in rural communities. Speakers include **Peter Bermel (ECE)**, **Rebecca Ciez (ME/SEE)**, **Andrew Liu (IE)**, **Xiaonan Lu (EET/ECE)**, **Juan Sesmero (AGEC)** and **Aaron Thompson (HLA)**. Students welcome!



INDIANA RENEWABLE ENERGY

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IN R-STEP

PARTNERS



Extension - Community
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Economic Research



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PUBLIC POLICY INSTITUTE

The Nature
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INDIANA R-STEP COLLABORATIVE

- Collaborative of technical assistance experts to support planning and local government decision-making for large-scale renewable energy developments
- Experiential learning opportunities for communities
- Online information hub to assist communities with renewable energy planning, evaluation, and decision-making



INDIANA R-STEP WHAT WE CAN DO

We can assist Indiana communities with data, tools, and educational resources to support informed utility -scale renewable energy planning.

- network hub of online resources
- peer-to-peer networking events
- in-person and online learning opportunities through webinars, tours, conferences and workshops
- research products for planning and economic development
- facilitate community meetings
- presentations

NEEDS ASSESSMENT STUDY

- Understand trends in Indiana's local land-use regulations for wind, solar, and battery storage systems
- Conducted two surveys and a series of focus groups and interviews
- Questions focused on
 - provisions in planning and zoning specific to renewable energy
 - factors influencing policy changes
 - level of public participation in planning
 - types of conflict and conflict resolution in planning and zoning processes
 - resources needed to make informed decisions about renewable energy planning

SURVEY INSTRUMENTS

Two survey instruments developed in Qualtrics, distributed via email from July through September 2025

Planning-focused survey

- Distributed to directors or primary staff contacts representing each of Indiana's county plan commissions
- Served as an ordinance inventory data-collection instrument
- 45 planners responded to the needs assessment survey

Community needs assessment

- Distributed to directors or primary contacts for local economic developers, regional plan commissions, emergency managers, county commissioners
- 271 responses

SURVEY NEEDS SUMMARY

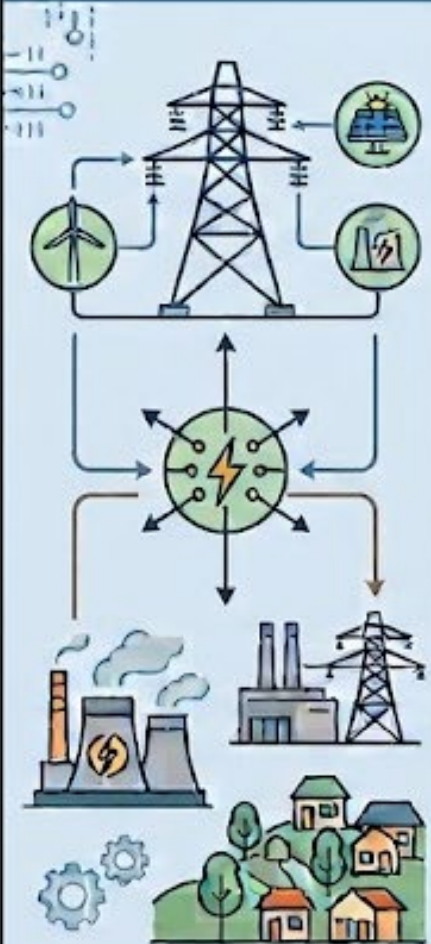
- Survey respondents confirmed that communities need both educational resources and technical support
- Decision-makers want access to trusted, unbiased, objective resources, education, and tools
 - Combat disinformation and spreading misinformation
 - Developer resources are viewed as biased, especially when distributed with a project
 - Identified need for local government toolkits with community examples and case studies
- Topics identified
 - economic impact analysis on counties and energy customers
 - policy guidance on state versus local authority
 - information on future local power needs
 - assistance with contracts and legal services
 - resources for reviewing plan designs and ordinance updates
 - considerations for decommissioning and technology updates

FOCUS GROUPS

- Conducted five focus groups and five interviews with 44 participants from July through September 2025
 - Interviews added due to privacy concerns
- Led discussions online via Zoom using a balanced sampling framework
 - Indiana population tiers (metropolitan, micropolitan, noncore)
 - Plan commission structures (advisory, area, metropolitan)
 - Types of grid operators
 - Project development status
- Engaged two participant cohorts
 - County Officials: economic developers, county commissioners, planners, zoning boards, emergency managers
 - State-Level Providers: wind/solar/battery developers, investor-owned/co-op/municipal utilities, and steering committee members

FOCUS GROUP THEME SUMMARIES

ENERGY PRIORITIES AND GRID DEMANDS



RENEWABLE ENERGY PLANNING



COMMUNITY IMPACTS



INFORMATION AND TRUST NETWORKS



MANAGING COMMUNITY ENGAGEMENT AND CONFLICT



ENERGY PRIORITIES & GRID DEMANDS



Industrial Load Demands

Utilities and planners reported demand spikes driven by data centers and advanced manufacturing, focusing future planning on capacity additions.

"We have a lot of large loads coming into our system... 35 megawatts or above... more so 100 megawatts or larger."

- Utility Representative

Reliability & Baseload

Decision-makers are weighing intermittency against costs. Expectations around Small Modular Nuclear Reactors (SMRs) may create misconceptions regarding immediate solar/wind needs.

"Folks are worried about the reliability and affordability... they think nuclear is going to solve it and solar/wind will go away."

- Planner

RENEWABLE ENERGY PLANNING



Planning and Zoning Trends

- Approval methods
- Development standards
- Increased use of moratoria
- Managing intense public hearings
- Required plans and agreements
 - Decommissioning plans
 - Economic Development Agreements (EDAs)
 - Road-Use Agreements

Local Concerns

- Large-scale data center developments, grid capacity, and resident electric rate hikes
- Property values
- Soil preservation
- Water quality and quantity

"Drainage was probably the most thoughtful comment... There were a lot of neighbors that were genuinely concerned that floodwaters would be coming." Planner

"In our ordinance, basically, we state they have to go to BZA, and we will not release the permit until the EDA is done. So even if BZA is okay with it, it still is left at the commissioner's level because if they don't ever get that EDA signed, then they can't move forward anyway." Planner

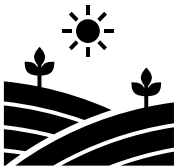
"Primarily impacts on value of- future residential value of properties within close proximity to solar projects, I would say, that's the chief concern." Planner

COMMUNITY IMPACTS



Pros: Participants cited lucrative lease rates that help keep family farms viable, increased county tax bases funding local schools and public services, and emerging agrivoltaic opportunities such as sheep grazing and pollinator habitats.

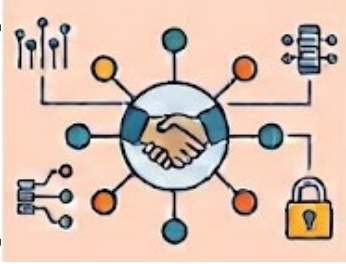
"...EDA [Economic Development Agreement] dollars have actually been used to assist some of the small communities with a fire station, firetrucks, wastewater, and water improvements... ends up being assets for the community that has saved small communities and the taxpayers a lot of money. Local Economic Developer



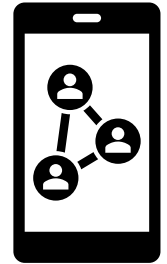
Cons: Concerns included removing agricultural land from crop production, altering rural viewsheds, risking property devaluation, disrupting field drainage, and managing solar and wind decommissioning.

"Our position is we don't care if they decide to stick it on their roof. If they want to put it over their parking lot, we're fine with that. But when it comes to eating up thousands of acres of farmland, that's problematic for us. Local Elected Official

INFORMATION AND TRUST NETWORKS



Outside Influences : Participants recognized that organized groups deploy structured playbooks, including social media campaigns and mobilizing speakers across county and state lines who may not reflect local sentiment.



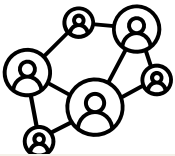
“We had people from other counties who were anti -wind and solar attend and said, 'Hey, you guys don't need to do this.'... They definitely flocked to our community during those hearings.” – Local Elected Official

INFORMATION AND TRUST NETWORKS, CONT.



Trusted Technical Assistance : Local decision-makers, planners, and local economic developers expressed high trust in university technical assistance, peer-county officials, and neutral utility presentations.

“...state universities, and their research and resources tend to register really, really well with Indiana communities.” –Renewable Energy Developer



Data Sources: Community leaders reported deep skepticism toward unverified online blogs and developer-commissioned impact studies.

"I think the caveat is that for every scientific article that states that solar does not affect property values or that it is safe, there's a counter article out there somewhere... So you do have to be careful who the messenger is, and hopefully, you find somebody within the community to convey that information, versus you as the developer.” –Renewable Energy Developer



MANAGING COMMUNITY ENGAGEMENT & CONFLICT



Proactive Engagement: Practitioners emphasized the need for early outreach, structured public meetings, study committees, third-party inspectors for drainage and road compliance, and direct peer-to-peer discussions rather than late-stage developer pitches.

Community Conflict: All focus groups mentioned how solar and wind projects have split rural communities, leading to intense public hearings and significant local elected official turnover.

"The last update to the ordinance was done with the study committee, and it was made up of anti-solar people, public officials, and pro -solar people. And that was... how we came up with the additions to this ordinance that we have now, which gave those people who were at the meetings a lot of times with the strong anti -voice an opportunity to be part of the solution..." -Local Elected Official

IMPACTS / ACCOMPLISHMENTS

2024-2026 Summary

- Delivered 40 educational events
 - Webinar Series: Landowners and Local Government & Planning
 - Presentations with State Associations
 - Statewide Regional Workshops and Bus Tours
 - Peer-to-Peer Networking Opportunities
- 964 participants



“I plan to implement programming and conversations regarding Agrivoltaics with producers to assist in diversifying businesses.”

“Using information from the renewable energy ordinance inventory to help inform a code rewrite.”

ENGAGEMENT AND TECHNICAL ASSISTANCE ACTIVITIES

2026-2027 activities and content based on needs assessment surveys, focus groups, and interviews

- Workshops, bus tours, webinars, networking
- Needs assessment and ordinance inventory publications
- Local government renewable energy planning guidebooks and fact sheets
- Community engagement curriculum and facilitation processes
- GIS siting tool



IN R-STEP Website: <https://puext.in/rstep>

Purdue Extension Community Development Newsletter:

<https://extension.purdue.edu/cdext>

R-STEP Email List: If you have registered for an R-STEP program, you will be signed up for this

Reach out to the program managers with questions

- **Tamara Ogle**, Community Development Regional Educator, togle@purdue.edu
- **Kara Salazar**, Assistant Program Leader for Community Development, salazark@purdue.edu
- **Kayla Wright**, Community Resilience Extension Specialist, knwright@purdue.edu

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