Sustainable Finance Hub Project Development Workshop

October 16th & 17th, 2024

HEARTLAND CAPITAL STRATEGIES
APPALACHIAN SUSTAINABLE FINANCE HUB

Touring Athens, Ohio's Eastside Solar Complex to learn about its financing, construction and operation, and hearing from leaders and practitioners about inspiring and successful projects.

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Speaker, Author

» **50 + Attendees**

» **5 Expert Speakers**

» **2 Facilitated Workshops**

Workshop Overview

This workshop brought together a diverse groups of stakeholders to explore and discuss sustainable infrastructure development. The event aimed to showcase successful strategies in project development, highlight regional collaboration opportunities, and guide the ongoing design and development of a regional sustainable finance hub.

- **Morning Sessions**: The day began with breakfast followed by opening remarks that set the stage for the day's activities. The morning featured presentations from local leaders and industry experts, including a detailed look at the City of Athens' solar initiatives.

Workshop Overview

- **Site Tours**: Attendees participated in a guided tour of an on-site local solar project, where they witnessed firsthand the impact and operation of sustainable infrastructure projects.
- **Afternoon Breakout Sessions**: Post-lunch, the workshop transitioned into interactive breakout sessions. These sessions were designed to delve deeper into the challenges of project development and discuss scalable solutions.

Breakout Group Exercise
Part I: Identifying Project Challenges and Barriers

What prevents sustainable infrastructure projects from happening?

ACTIVITIES

5 mins - By Yourself

- Write all constraints and challenges you are facing in each of the category
- One idea on each sticky
- Each project sector will have a color (clearly shown)

20 mins - Share one at a time at your table

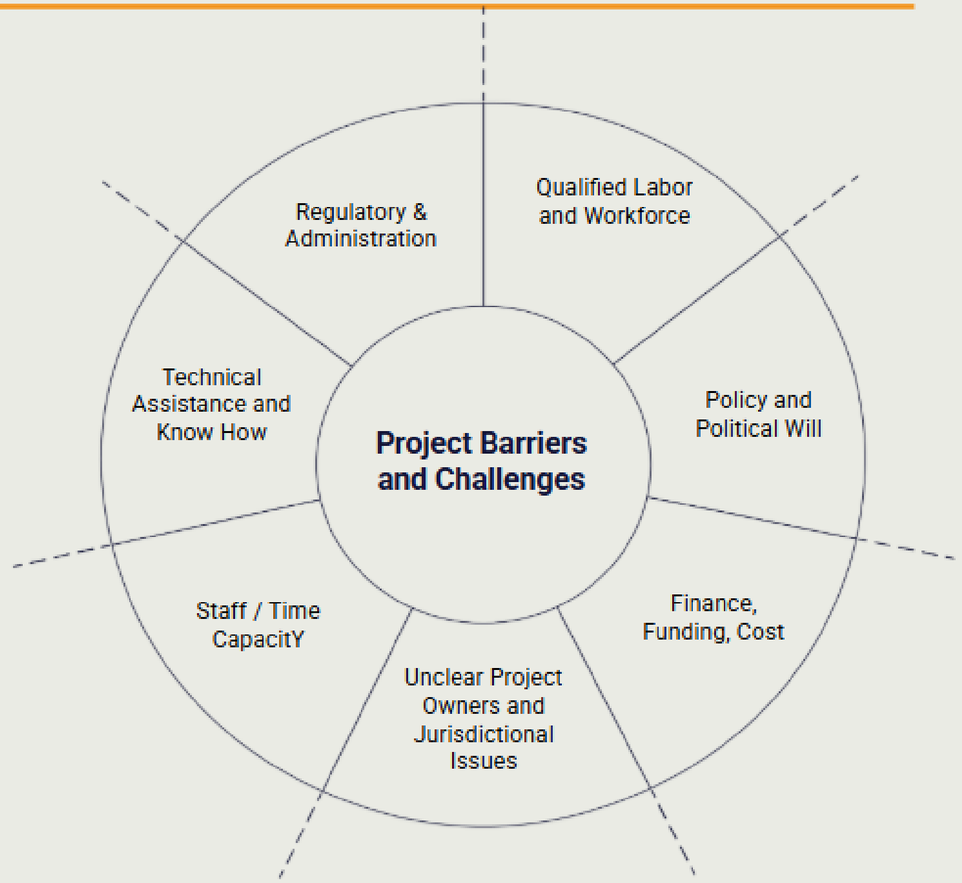
- Share your reflections across the 7 categories

15 mins - Link & Group

- Group similar barriers and challenges
- Post your tabletop posters on the wall
- Walk around the room to read other posters drawing connections and finding opportunities to jointly collaborate or share resources on identified challenges
- Designate a person from your table to report out and be ready to summarize the project development challenges faced by co-participants.

10 min - Plenary

- Summarize challenges faced in each group



Summary of Barriers: Throughlines

Finance and Funding: Access to funding, including grants, loans, and tax credits, was a recurring theme across all sectors.

Political Will and Public Perception: The need for political will, community education, and addressing misinformation was evident in multiple sectors.

Regulatory and Administrative Barriers: Streamlining regulations and addressing jurisdictional issues were identified as key challenges.

Qualified Labor and Workforce: The need for skilled labor and workforce development was a common concern.

Technical Assistance: Access to technical assistance for project development, implementation, and management was highlighted.

Collaboration and Partnerships: The importance of collaboration between different sectors, government levels, and stakeholders was emphasized.

Summary of Barriers: Transportation Electrification

Finance and Funding: This was a major concern, with issues raised around the prioritization of investments, the capacity of the private sector to leverage programs, and affordability/adoption in low-income rural areas.

Political Will: The need for political will to support the deployment of renewables and address unclear project awards and jurisdictional issues was highlighted.

Regulatory and Administrative Barriers: Participants identified regulatory barriers that prevent good projects from qualifying for funding and other programs.

Qualified Labor and Workforce: The need for skilled labor and dedicated businesses in the clean energy and public transportation sectors was emphasized.

Technical Assistance: A need for skilled labor (mechanics) in biogas systems and technical assistance in mapping EV networks was identified.

Summary of Barriers: Energy Efficient Buildings

Finance and Funding: Issues included the need for matching funds and bridge loans, grant opportunities for solar, and challenges related to funding availability.

Unclear Project Awards and Jurisdictional Issues: Silos and a lack of clear project leads were identified as barriers to implementation.

Staff and Time Capacity: Participants highlighted the lack of capacity to write grants, manage solar arrays, and support new homeowners with their solar systems.

Technical Assistance: The need for technical assistance in managing solar arrays, adding solar to existing infrastructure, and educating the local labor force was emphasized.

Political Will: A lack of political will and pushback against projects, coupled with a need for community education on renewable energy, were noted.

Regulatory and Administrative Barriers: Complicated pre-qualifications and a lack of statewide community choice aggregation programs were identified as challenges.

Qualified Labor and Workforce: A lack of workforce experience with solar and contractor availability and know-how on new technologies were mentioned.

Summary of Barriers: Clean Energy Manufacturing

Finance and Funding: Concerns were raised about affordable options in low-income rural areas, cheap landfill costs, and the low commodity value of residuals.

Technical Assistance: The need to address heavy industry waste and supply chain issues was highlighted.

Political Will: The culture and legacy of fossil fuels and uneven statewide approaches to growing clean energy and manufacturing were identified as challenges.

Regulatory and Administrative Barriers: Participants pointed to a lack of recycling facilities and local/regional manufacturing.

Unclear Project Awards and Jurisdictional Issues: Project reconfiguration and scaling across different regions were identified as concerns.

Qualified Labor and Workforce: The need for regional cooperation to repurpose energy assets and develop local and regional manufacturing capabilities was emphasized.

Summary of Barriers: Renewable Energy

Finance and Funding: Issues included the need for a basic understanding of grants and finance programs, upfront funds, and assistance with capital stacks and tax credits.

Technical Assistance: The need for technical assistance in transitioning from old infrastructure, educating the local labor force,

Political Will: Concerns included distrust of outsiders, misinformation about projects, and the politicization of sustainable projects.

Regulatory and Administrative Barriers: A lack of statewide community choice aggregation programs and legal assistance for procurement specs were identified as challenges.

Unclear Project Awards and Jurisdictional Issues: Silos, interconnection application approval delays, and the need for project owners were highlighted.

Qualified Labor and Workforce: The need for skilled labor in renewable energy technologies and a mismatch between skill sets and available union labor were mentioned.

Staff and Time Capacity: A lack of capacity to understand opportunities, undertake non-essential projects, and provide training and education was noted.

Breakout Group Exercise
Part II: Identifying the Critical Work and Solutions Needed to Overcome Barriers

Given Sector Challenges: What Critical Work is Missing?

ACTIVITIES

10 mins - As a Table

- Review consolidated barriers/challenges list as a sector

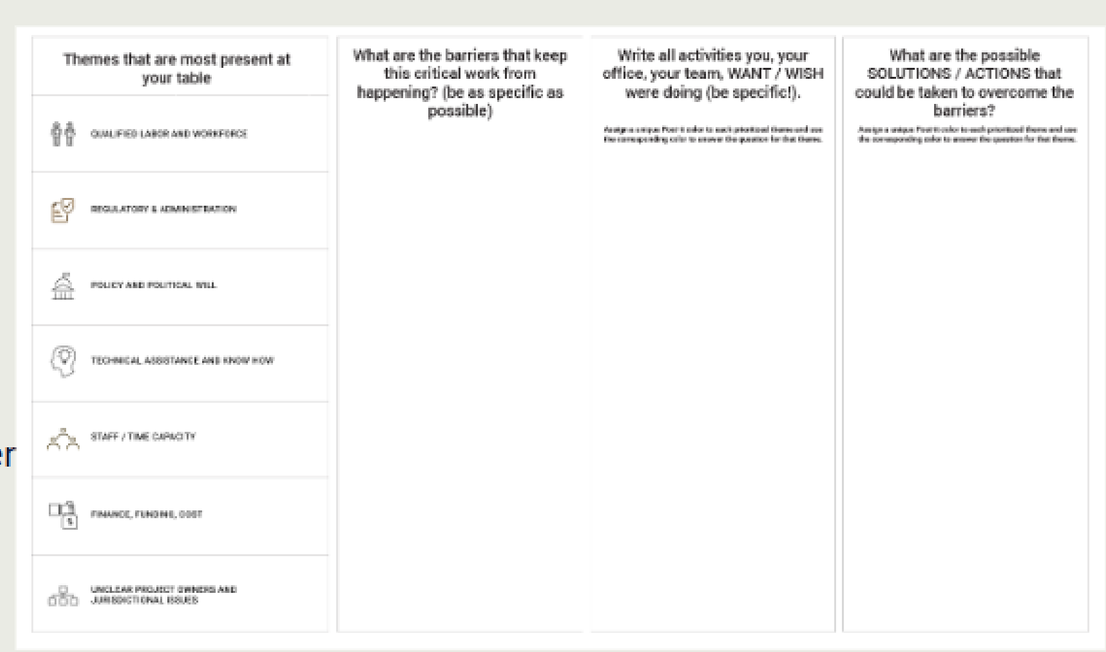
10 mins - As a Table

- Prioritize 3 barriers/challenges to discuss initially (you can do more if there is time).

20 mins - As a Table for each Activity Group

- Under each one, discuss what you, your office, your team, WANT / WISH were happening (be specific!).
- What are possible SOLUTIONS / ACTIONS that could be taker to overcome the barrier
  - Identify Solution/Action
  - Who needs to do this?
  - What would it take for this to happen?
  - Is there someone in the region that already does this in the region?

Continue with additional prioritized barriers/challenges



Summary of Barriers: Throughlines

- **Barrier:** Lack of standardization across local government utilities and complex, time-consuming project approval processes.

- **Need:**
  - State-level requirements and standards to provide guidance and certainty for clean energy projects.
  - Unified codes across jurisdictions to streamline project approvals.
  - Collaboration with utility companies to facilitate permitting and inspections.

- **Solutions:**
  - Set industry standards with input from professionals.
  - Work towards the adoption of accepted practices and standardized codes.
  - Engage EJ communities as advocates and coalitions to push for regulatory changes.

Summary of Barriers: Throughlines

- **Barrier:** Aging infrastructure that is incompatible with new clean energy technologies.

- **Need:**
  - Interconnected microgrids for resilience and increased use of distributed energy resources (DERs).
  - Upgrades to utility systems to accommodate new energy technologies.
  - Collaboration between state, local, and utility entities on infrastructure planning.

- **Solutions:**
  - Update land-use and zoning regulations to favor renewable energy build-outs.
  - Pressure utilities to plan, develop, and assist with grid upgrades.
  - Demonstrate the benefits of microgrids with redundant equipment as a proof of concept.

Overcoming Barriers to Energy Efficiency in Buildings

#1

- **Barrier:** Difficulty in benchmarking property energy performance and lack of incentives for building owners to invest in energy efficiency.
- **Need:** Methods to assess energy performance (energy audits) and incentives to encourage investment in energy-efficient upgrades.
- **Solutions:**
  - Provide rebates on licensing for owners who rent out cleaner, more energy-efficient buildings.
  - Increase the cost of licensing for poorly operating buildings to incentivize upgrades.

#2

- **Barrier:** HVAC system replacements are often unplanned and done in emergency situations, leading to rushed decisions and missed opportunities for energy-efficient upgrades.
- **Need:**
  - Better options for HVAC replacements during emergencies.
  - Education and support for homeowners to make informed decisions about HVAC systems before emergencies occur.
  - More affordable energy-efficient solutions.
  - Training for contractors on energy-efficient technologies and rebate programs.
- **Solutions:**
  - Implement training programs requiring installers to be trained by manufacturers on energy-efficient HVAC systems.
  - Provide training for installers on available energy rebate programs.
  - Leverage state funding for training and rebates to better inform contractors about energy-efficient options.

Overcoming Barriers to Clean Energy Manufacturing

#1

- **Barrier:** Manufacturers lack awareness of potential markets for clean energy products and technologies.
- **Need**: Education and training to connect manufacturers with clean energy opportunities and demonstrate the economic benefits of transitioning to clean energy.
- **Solutions**:
  - Partner with Manufacturing Extension Partnerships (MEPs) to provide support and resources.
  - Strengthen green technical education to create a skilled workforce for the clean energy sector.

#2

- **Barrier:** Lack of regional knowledge about specific industries and available federal funding opportunities for clean energy initiatives.
- **Need**: Identification of knowledge and resource gaps in the workforce and credentialing for clean manufacturing.
- **Solutions**:
  - Leverage resources like UBC research and search to identify and access federal funding opportunities.
  - Create a hub to bring together key stakeholders for collaborative solutions and knowledge sharing.

#3

- **Barrier:** No comprehensive strategy to support manufacturers in transitioning to clean energy and manufacturing processes.
- **Need:** Development of a competitive manufacturing strategy for the region, with a focus on clean energy.
- **Solutions:**
  - Establish a cross-sectoral coalition to develop a regional clean manufacturing strategy.
  - Implement a workforce and training plan for manufacturers, including apprenticeships, to support the transition.

Overcoming Barriers Conclusion

Addressing these barriers and needs will require a multifaceted approach that includes policy changes, investment in infrastructure and workforce development, collaboration between stakeholders, and a commitment to innovation and sustainability.

Broadly, **education** and **training** emerged as critical themes, appearing in each solution to overcoming a barrier.