# **Appalachian Sustainable Finance Hub Co-Lab**

Where is Investment Headed? A conversation focused on how project funders select sustainable projects in different sectors.



Mike Ibarra Vice President, Investor **Relations at Richmond Capital Management** 



Jessica Mooney, Project Developer, **Duquesne Light Company** 



Ramsay Stevens **Program Director**, **Project Development Platform** 

**Communities Driving Change: Follow up** conversation with community institutions driving sustainable projects forward.



Rebecca Kiernan, Director of Collaborative Funding, CONNECT



Andrew Chiki. Deputy Service-Safety Director at City of Athens, Ohio

# July 10, 2024





## 70 $\rightarrow$ **Attendees**

### **5** Speakers >>

# **5** Breakout Room Discussions

# **Financing Sustainable Housing Projects**



# Session Highlights:

Flexible Financing Structures: Mike emphasized the flexibility Richmond Capital Management offers in structuring loans for sustainable housing, highlighting their ability to finance up to 90% of construction costs if the projects meet certain criteria like affordability and energy efficiency.

**Project Examples**: He provided examples of successful projects, such as the transformation of an agricultural insurance building in DeWitt, Iowa, into housing, showcasing the impact of adaptive reuse in small communities.

Focus on Smaller Markets: Mike discussed the company's strategic focus on smaller markets, which are often overlooked by major investors, stressing the importance of supporting local development teams.

**Community Impact and Preservation:** He detailed a project in Mound, MN, where baby boomers opted for cooperative housing over traditional options, showing a model that supports community stability and social interaction.

**Renovation Importance:** The discussion on the importance of renovating and preserving existing housing stock highlighted efforts to modernize facilities while ensuring tenants are not displaced, enhancing the quality of living and maintaining affordability.

HUD's Role and Requirements: Mike answered questions about the role of HUD in housing financing, discussing the strict requirements that projects must meet to ensure sustainability and efficiency, as well as HUD's favorable terms for highly sustainable projects.

**Engaging Local Communities in Financing**: He spoke about the necessity of local involvement in housing projects, indicating that community-based approaches are crucial for the successful development and funding of sustainable housing.

**Benefits of Cooperative Housing Models**: Mike explained the advantages of cooperative housing models, such as shared ownership and wealth creation opportunities for residents, underscoring their potential to contribute to community stability and individual financial growth.

**Strategies for Bridging Funding Gaps**: He discussed strategies for bridging financing gaps in housing projects, suggesting the use of layered financing from various sources including HUD, state, and local programs, and the importance of creating regenerative funding models to sustain project financing over time.

**Challenges in Scaling Projects**: The dialogue touched on the challenges of scaling housing projects to meet regional demands, with a focus on the need for innovative financing structures to support larger, more impactful projects.



# **Financing EV Projects**



# » Session Highlights:

**Duquesne Light Company's EV Initiatives**: Jessica highlighted the company's commitment to electric mobility, with a dedicated team focused on transitioning to electric vehicles. This includes extensive planning to support the growth in EV adoption in the Pittsburgh region.

**Infrastructure Needs and Growth**: The current EV infrastructure is not adequate to support the anticipated growth. Projections indicate a need for a substantial increase in the number of charging stations by 2027 to accommodate the rising number of electric vehicles.

**Utility Support for Infrastructure**: Duquesne Light has introduced a program where the utility designs, engineers, installs, and owns the infrastructure necessary for EV charging stations, reducing the financial burden on customers and streamlining project implementation.

**Business Models for EV Charging**: Jessica discussed different business models for operating charging stations, comparing the advantages and disadvantages of site hosts owning the equipment versus third-party operation, including aspects like control over pricing and user experience.

**Funding and Incentives**: She emphasized the importance of leveraging state and federal incentives to facilitate EV infrastructure projects, noting recent changes in available funding and how these influence project viability.

**Challenges in Scaling Up**: Jessica and participants discussed various challenges in scaling EV projects, such as the complexity of permitting processes and the necessity of early utility involvement to ensure power supply and infrastructure readiness.

**Security Concerns**: Addressing security issues at EV charging stations, such as vandalism and equipment theft, with suggestions like better lighting, surveillance, and strategic site selection to deter criminal activities.

**Impact of Utility Programs**: The discussion highlighted the transformative impact of utilityled programs like those of Duquesne Light, which not only facilitate infrastructure development but also help control the overall costs and management burdens of EV charging installations.

**Learning from Experience**: Participants shared their own experiences and challenges with EV charging projects, underscoring the need for better planning, funding alignment, and community engagement to ensure the successful and widespread adoption of EV technology.

## **Regional Cooperation and**

**Standardization**: There was a strong call for increased collaboration between utilities across regions to standardize processes and possibly jointly apply for funding, which could simplify regulatory complexities and enhance project deployment efficiency.



# **Financing Solar Projects**



# » Session Highlights:

**Strategic Financial Analysis**: Ramsay emphasized the importance of conducting thorough financial analyses before launching a solar project. This includes establishing baseline energy consumption, identifying potential tax credits and utility incentives, and calculating the expected return on investment to ensure the project is financially viable and optimally designed.

**Utilizing New Financing Tools**: He discussed a specific project example at a NECa-IBEW facility that benefited from the Inflation Reduction Act's direct pay Clean Electricity Investment Tax Credit. This example highlighted the evolving landscape of solar financing, showcasing how new tools can significantly enhance the financial feasibility of projects, particularly for governments and non-profits that previously had limited access to such incentives.

**Expertise in Project Financing**: Ramsay pointed out the critical role of NECA contractors in solar projects, who bring specialized knowledge in navigating project financing and maximizing the use of tax credits. Their expertise ensures that projects not only meet technical standards but also achieve optimal financial outcomes.

**Project Warranties and Labor Standards**: He highlighted the additional benefits that come with engaging NECA contractors, such as robust project warranties and adherence to high labor standards. These aspects are crucial for maximizing federal support for solar projects, ensuring long-term sustainability and compliance with regulatory requirements.

**Maximizing Return on Investment**: Throughout the discussion, Ramsay focused on the importance of maximizing watts generated per dollar spent. This approach not only enhances the economic attractiveness of solar projects but also ensures that investments yield tangible and substantial benefits in terms of energy production and cost savings.

## **Community Metering and Tariff Structure Concerns:**

Participants discussed the importance of addressing tariff structures in Pennsylvania to facilitate solar adoption. Community metering was suggested as a beneficial approach for buildings unsuitable for individual solar setups, allowing for energy aggregation within local areas.

**Challenges with Current Market Design**: The conversation highlighted the difficulties posed by the existing market design, which is not always conducive to solar initiatives. The need for better regulatory support for solar investments, even in non-ideal utility markets, was emphasized.

**Involvement of Local Contractors in Solar Projects**: The potential for local electrical contractors to play a significant role in solar projects was discussed. It was suggested that even contractors without prior solar experience could be pivotal in setting up projects, especially in regions lacking established solar firms.

**Educational and Legislative Gaps**: There was a consensus on the need for more educational efforts towards local governments and contractors about the benefits and logistical aspects of solar power, including how to handle incentives and tax credits effectively.

## Engagement Strategies for Rural

**Communities**: Participants shared strategies for engaging conservative rural communities in sustainability projects, emphasizing the need to frame projects around resilience rather than sustainability to gain broader support.



## **Relevant Resources**





## Clean Energy Project Development **Best Practices**

Heartland Appalaichan Sustainable Finance Hub July 8th, 2024

Download Ramsay's presentation slides here:

https://www.heartlandfinancehub.org/\_files/ugd/ 7e8b85\_5afb777467cf48c4b40ccfe2e19ed423.pdf

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# **EV Projects in Appalachia**



# » Session Highlights:

**Collaborative Framework**: Rebecca Kieran introduced Connect, a non-profit organization focused on fostering collaboration among 47 municipalities surrounding Pittsburgh, aimed at improving infrastructure resilience and public safety.

**Electrify Allegheny Initiative**: The initiative, a partnership with Duquesne Light and Pittsburgh Region Clean Cities, assists municipalities in implementing EV charging infrastructure by providing site assessments, project support, and grant writing help.

**Capacity Building**: Recognizing that many municipalities lack the staff to implement such projects, Connect acts as a facilitator to reduce the workload on municipalities, helping them navigate the complexities of installation and funding.

**Joint Procurement and Planning**: The project emphasizes the benefits of regional planning and joint procurement to streamline processes, fill charging infrastructure gaps, and utilize municipal properties effectively.

**Education and Outreach**: Through workshops and educational sessions, Connect aims to educate municipal leaders about the benefits and processes involved in adopting EV technologies, encouraging regional and collaborative efforts to address transportation emissions.

**Perception and Accessibility**: Concerns were raised about whether installing EV charging stations in underserved areas truly serves the community, with discussions pointing towards increasing EV adoption across all community segments.

**Collaboration and Best Practices**: Participants discussed the importance of regional collaboration and sharing best practices. The session emphasized leveraging existing infrastructures and frameworks to promote broader and more effective implementation of EV projects.

**Funding and Policy Challenges**: Challenges related to securing funding and navigating complex policies were discussed, stressing the need for clear and supportive policies to facilitate the transition to electric vehicles.

**Future Directions and Technology**: The conversation also pointed towards future technological advancements that might support more efficient and less resource-intensive EV charging solutions, like incorporating battery storage or improving utility coordination.

Addressing Underserved Areas: The discussion touched on the challenges of deploying EV infrastructure in underserved areas, highlighting the need for governmental lead in applications and addressing capacity issues in smaller municipalities.



## **Relevant Resources**



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https://www.heartlandfinancehub.org/\_files/ugd/ 7e8b85\_46f9b6778b8e47799e88d1d82cac345b.pdf

https://youtu.be/kUm3-tX8afo

# **Solar Projects in Appalachia**



# **Session Highlights:**

**Project Scope and Execution**: Andrew Chiki introduced a complex solar project in Athens, Ohio, encompassing a 2.1 MW system distributed over three types, including ground-mounted, roofmounted, and carport arrays, tailored to fit the specific energy needs and physical constraints of the city's infrastructure.

Innovative Financing and Legal Framework: Utilizing a competitive design-build power purchase agreement (PPA) allowed the city to manage costs effectively, minimizing upfront investment and planning for eventual ownership transfer of the solar installations after benefitting from tax incentives.

**Community and Environmental Considerations**: The project faced community resistance due to the repurposing of a dog park. This challenge was mitigated by integrating community-friendly solutions like relocating the dog park and creating pollinator habitats around the solar panels, showcasing a commitment to biodiversity alongside renewable energy production.

Strategic Energy Management: Chiki detailed the strategic placement of solar arrays at high-energy-consuming facilities like the wastewater treatment plant to significantly cut down the city's hefty energy bills, demonstrating a targeted approach to leveraging solar power for maximum financial and environmental impact. Sustainability and Future Planning: The city plans for the long-term sustainability of the project by setting up frameworks to eventually own the solar installations outright and by preparing for future technology upgrades to enhance efficiency as solar technology evolves.

**Public Engagement and Transparency**: The use of a public-facing dashboard to display real-time data on solar production enhances public trust and engagement, showing tangible benefits and operational status, thus supporting the city's transparency commitments.

Adaptation of Municipal Processes: Discussion on the adaptation required within city legal and financial processes to accommodate the nontraditional financing and construction models used in the solar project, emphasizing the need for flexibility in municipal practices to incorporate innovative environmental projects.

**Replicability and Resource Sharing**: Chiki highlighted efforts to share the project's successes and challenges through platforms like the Sustainable Ohio Public Energy Council, aiding other municipalities interested in similar projects, thereby fostering a collaborative approach to renewable energy adoption.

**Long-term Viability and Maintenance**: Discussions about the operational longevity of solar panels, the economic feasibility of replacing older panels with more efficient ones in the future, and the overall sustainability of the city's approach to managing its solar resources effectively.

Economic and Job Impact: The project's emphasis on local job creation and retention through the solar installations was pointed out, showcasing a model that supports local economies while advancing sustainable initiatives.

# **Relevant Resources**





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Watch Andrew's presentation and the group discussion here:

https://youtu.be/Cvjs-R2MRkc

## **Event Takeaways**

Data and discussions from this event will help to inform the structure of the Appalachian Sustainable Finance Hub, which is in its planning grant period. Here are some preliminary take-aways:

What are the biggest impediments you've heard that keep projects from getting funded?





**Insufficient Financial Returns** 

**Complex Application Process** 



Other



### What kind of support would be most useful to your organization in developing successful projects?



- Library of model development documents
- **Pre-development Funding**
- Joint application opportunities, joint procurement/RFP support
- Case Studies and storytelling of successful examples