



**Office of Energy Efficiency & Renewable Energy** 

### Manufacturing Ecosystem Track

## **APLUS**

#### **Team Members**

- Liwei Zhou Assistant Professor, University of Texas at Arlington
- Zhengwei Dong PhD Researcher, University of Texas at Arlington
- Mofoluwatele Olagbami President, UTA African Student Organization
- Kenzaria Atkins President, UTA Black Student Association
- Sofia Gutierrez President, UTA Society of Hispanic Professional Engineers

#### **Community Description**

**APLUS** focuses on underserved students' jub hunting needs in North Texas, an area where the power and energy industry is expansive. There is a gap between the supply and demand of students seeking positions in energy and power, and the companies who are hiring. APLUS aims to build a hiring ecosystem that offers students a more precise and convenient career pathway. APLUS' activities during the Community Energy **Innovation Prize impacted thousands of** students in dozens of colleges seeking roles at dozens of companies.

#### **Local University and Community College Partners**

- Texas Christian University
- Dallas College Tarrant County College
- Collin College McLennan Community College

#### **Student Organization Partners**

- African Student Organization
- Black Student Association
- Society of Hispanic Professional Engineers





#### **Project Summary**

APLUS aims to provide hands-on power and energy training to underserved students, bridging the gap between lab learning and job searching in North Texas. APLUS offered academic workshops, industry seminars, and lab trainings to students from the University



of Texas at Arlington (UTA), and other local universities and community colleges who would not otherwise have access to similar programs. These opportunities build student capacity in the power and energy industry and bridge the gap between students and companies for a demand-oriented career development process.











**Department of Electrical Engineering** 















Office of Energy Efficiency & Renewable Energy

### Manufacturing Ecosystem Track

## **CEIP Warren**

#### **Team Members**

- Rick Stockburger President & CEO, BRITE
- Joe Flarida Executive Director, Power a Clean Future
- Wiley Runnestrand Managing Partner, Sapientia Ventures
- Pat Kerrigan Executive Director, Oak Hill Collaborative
- Alex Hertzer Assistant Director, Mahoning Valley Manufacturing Coalition

#### **Team Bio**

**CEIP** Warren is composed of various stakeholders representing Warren, OH and its commitment to a clean and equitable energy future through a consortium of community and economic development organizations, resident groups, and industry. The team includes leadership from BRITE, the City of Warren, the International Brotherhood of Electrical Workers, the Mahoning Valley Manufacturing Coalition, Oak Hill Collaborative, Sapientia Ventures, Thrive Mahoning Valley, **Tipping Point, and Warren Forward, along with a network** of supporting manufacturers, community development organizations and workforce training providers. The Prize Team also sought additional partnerships during the PROGRESS phase, including the Small Business **Development Center, the Minority Business Assistance Center, Valley Partners and the Youngstown Business** Incubator. Individuals of the team represent diverse religious backgrounds and ethnicities.

- Christopher Colon Co-Founding Director, Thrive Mahoning Valley
- Vicki Vicars Director of Advancement, Thrive Mahoning Valley
- Reverand Todd Johnson Second Baptist Church, Councilman & Member of Warren Forward

#### **Project Summary**

CEIP Warren aimed to bridge manufacturing skill-building with energy entrepreneurship - establishing an inclusive, vibrant hub to foster diversity and strengthen their local manufacturing landscape. To address the barriers of advancing manufacturing innovation, the CEIP Warren team held a series of conversations to inform the development of a workforce training and energy entrepreneurship playbook. Team members learned from partners in neighboring communities about best practices for women- and minorityowned small businesses to provide greater context for Warren's playbook.

Members of the CEIP Warren team met weekly to discuss challenges, share insights, and coordinate initiatives to ensure a diverse set of perspectives guided our strategies. The resulting Cleantech Workforce Training Programs Playbook includes an asset map of regional resources, training providers,



national best practices on place-based training models, program-based training models, and trends that should be considered for designing programming in communities. The CEIP Warren team continues to analyze industry and community feedback.

#### **Community Description**

Warren is located in Northeast Ohio and is a city where an industrious spirit and a storied heritage come together. Historically a hub for steel, automotive, and electrical manufacturing, Warren boasts a legacy of innovation supported by a strong network of universities and development organizations that continue to drive technology adoption and creation. Despite the challenges brought by corporate consolidation and the departure of private R&D, recent reshoring investments have generated a robust need for skilled manufacturing talent. Through initiatives like WorkAdvance, CEIP Warren is empowering residents to embrace new opportunities and contribute to Warren's manufacturing resurgence. Yet, fostering a culture of innovation and entrepreneurship remains essential to ensuring we are not only responding to but creating our future. Warren is uniquely positioned as home to BRITE, an innovation ecosystem dedicated to advancing clean energy through its startup programs, extensive network, and strategic community presence. Building on our success in the first two phases of the **Community Energy Innovation Prize, we are strengthening** our mission to bridge manufacturing skill-building with energy entrepreneurship, establishing an inclusive, vibrant hub that fosters diversity and bolsters our domestic manufacturing landscape.























**Office of Energy Efficiency & Renewable Energy** 

### Manufacturing Ecosystem Track

## **Clean Tech Innovation Network (CTIN)**

#### **Student Team Members**

#### **Shannon McGhee**

**Vice President of Programs** and Engagement mHUB

### **Felicia Slaton-Young**

**Executive Director Greater Englewood Chamber** of Commerce

**Jordan Bester** 

#### **Team Bio**

Our diverse team brings together community engagement, clean energy, and entrepreneurial leaders. mHUB spearheaded the initiative with support from the Greater Englewood Chamber of Commerce (GECC) and organizations deeply embedded in local economic development. The team was established through a shared mission of advancing clean energy innovation while creating equitable economic opportunities for underrepresented entrepreneurs.

Shannon McGhee (Vice President of Programs and Engagement), mHUB leads all mHUB programs and technical trainings with extensive experience in community engagement and grassroots advocacy.

**Training Manager Greater Englewood Chamber** of Commerce

#### **Project Summary**

mHUB and its community partner, the Greater Englewood Chamber of Commerce, have established the Clean Tech Innovation Network (CTIN) to support manufacturing-based innovation, entrepreneurship, and job creation with a specific focus on energy infrastructure for grid modernization. CTIN's goal is to reduce barriers for startups and small and mediumsized enterprises (SMEs) to create new clean energy products and jobs, especially those led by people of color and women. CTIN recruits participants from local Opportunity Zones (OZs) and the Chicago Metropolitan Statistical Area (MSA) for skills training and entrepreneurial programming. Since launching in 2024, CTIN has supported 13 climate and energy startups with over 50% of those led by individuals from groups underrepresented in the industry.







Felicia Slaton-Young (Executive Director and Founder) – leads GECC and GE **Chamber Foundation**, two organizations with a mission to transform Greater Englewood into a popular commercial and retail destination.

#### **Community Description:**

Through community engagement activities and research, mHUB and GECC understood that residents in Chicago's OZs are in critical need of quality job opportunities and career pathways. Emerging industries, such as clean energy, provide an opportunity to prepare residents for jobs and inspire a generation of clean energy entrepreneurs and innovators. Community feedback indicates an interest in clean energy careers and a need for technical and entrepreneurial training pathways.

**CTIN** serves the Chicago MSA with a focus on two OZs: Englewood on the South Side and the Kinzie Industrial Corridor on the Near West Side. mHUB and GECC have developed programmatic ties connecting the two OZs with plans to expand into additional OZs in the future. The two OZs reflect high percentages of Black and Latino residents, and high poverty rates when compared to Cook County and the Chicago MSA.





There is critical need for low barrier entry points into the growing clean energy ecosystem. CTIN will serve as a community-based entry point to clean energy entrepreneurship and manufacturing careers for women and people of color. The clean energy products created, and the workers trained will have a regional impact on communities for generations.





Office of Energy Efficiency & Renewable Energy

### Clean Energy Ecosystem Track

# **Community Through Colors**

#### **Team Members**

**Edgar Oscar Ruiz** – Community Through Colors **Beth Straight** – Community Through Colors

#### **Team Bio**

The team is led by Edgar Ruiz, Executive Director of Community Through Colors (CTC), and Beth Straight, Operations Manager. Mr. Ruiz and Ms. Straight have been collaborating for three years in Vieques on resilience initiatives, including projects focused on food and energy security. Their work has centered on addressing local vulnerabilities, particularly in the context of limited energy access and the community's need for sustainable infrastructure.

The team's expertise lies in disaster response, community engagement, and renewable energy. Together, they have worked with local organizations, such as the Vieques Energy Cooperative and Energía desde Cero, to

#### **Project Summary**

The Resilient and Renewable Isabel Segunda Project is a community-led clean energy initiative in Vieques, Puerto Rico, aimed at transitioning the island to renewable energy and increasing resilience against power outages. The project focuses on solar PV and battery installations at critical infrastructure sites, including medical centers, schools, and first responder facilities, alongside residential solar systems. Notable locations included in the Isabel Segunda Microgrid include the Dialysis Center, the Boys and Girls Club, Town Hall, and multiple residential households. The project is reducing local reliance on imported fossil fuels and improving energy access for vulnerable communities. It has also built local capacity through solar training programs–empowering residents with the skills needed to maintain systems and pursue clean energy careers.

Post-prize, the team plans to continue expanding the microgrid, interconnecting more critical infrastructure like police stations and high schools, as well as increasing the number of residential solar installations. Efforts will focus on ensuring long-term sustainability through ongoing workforce development and maintaining close collaboration with local organizations like the Vieques Energy Cooperative. Additional funding will be sought to enhance these activities, with the goal of creating a self-sustaining, community-driven energy models that serve as replicable models for other island communities facing similar energy challenges.

implement solar solutions and support workforce development in Vieques. Their shared goal is to empower the community to take ownership of its energy future while building long-term resilience against future challenges. Mr. Ruiz's leadership in disaster response and Ms. Straight's operational capacity and data analysis background have made them a strong, complementary team. Their combined efforts are transforming Vieques into a model of energy independence and communitydriven sustainability.

#### Community

Isabel Segunda is a small, rural community on Vieques, an island municipality off the eastern coast of Puerto Rico. With a population of around 9,000, Vieques faces significant challenges in terms of energy access, infrastructure, and economic development. The island relies heavily on costly and polluting imported diesel for electricity, contributing to high energy burdens and environmental harm. Many households in Isabel Segunda spend 10-15% of their annual income on electricity. Power outages are frequent, and the grid is unreliable, especially after Hurricane Maria, when much of Vieques was completely disconnected from the grid for over a year. These conditions have left residents, particularly seniors and those with medical needs, highly vulnerable.

The demand for clean, accessible, resilient energy was confirmed through community outreach discussions and workshops. These conversations revealed the urgent need for alternative energy solutions, especially for critical infrastructure such as medical centers, schools, and emergency services. The project was designed to address these needs by providing solar energy systems to reduce residential energy burden, increase energy independence, and improve the resilience of the community against future disasters.









Office of Energy Efficiency & Renewable Energy

### Manufacturing Ecosystem Track

# **Eighth Generation Consulting**

#### **Team Members**

**Professor Saxon Metzger** – Eighth Generation Consulting

Ayda Donne – New York University

Wesley Ladd - Train GRC

#### **Team Bio**

Our team, driven by a commitment to community empowerment, was founded by Saxon Metzger of Eighth Generation Consulting and his brother Ayda Donne. Together, they've created a foundation focused on community development, reconnecting with family members while strengthening partnerships within the Osage Nation, including the Osage Mineral Council, Chief Geoffrey Standing Bear, and Osage Broadband. They also launched Polaris Ecosystems and are supporting the establishment of the Save Bigheart nonprofit to expand community-led initiatives.

Wes Ladd, Saxon's long-time collaborator, serves as Technical Lead, bringing over a decade of experience in strategic planning, resource management, and cybersecurity for Fortune 100 firms and government clients. He oversees LumiGrid's development, a software designed to optimize large-scale solar efficiencies. As an LSU Instructor and NASCLA/NASBA-certified professional through his company, TrainGRC, Wes strengthens the team's technical and educational foundation.

#### **Project Summary**

Our mission is to develop the Osage clean energy economy by addressing key challenges like orphaned oil wells and limited recycling infrastructure, through the construction of an Osage Recycling Center. Significant progress has been made toward our goals, including creating educational materials on circular economy principles for Indigenous communities, training 100 Indigenous individuals in recycling with industry certifications, and laying the groundwork for five Indigenous-led recycling startups.

In partnership with EUCI, WeRecycleSolar, and Green Clean Solar, we've secured \$610,000 in potential funding and gained support from Chief Geoffrey Standing Bear and other Osage Nation leaders. These partnerships have facilitated our attendance at the RE+ conference, GRID Alternatives Tribal Energy Summit, and led to MIT SOLVE and General Motors awards, while reinforcing connections with tribal stakeholders through multiple visits to Osage territory.

We are developing culturally relevant curricula, conducting surveys to assess needs, and establishing site partnerships for the pilot recycling facility planned for Q1 2026. Following the CEI Prize, we aim to scale our efforts by launching the facility, expanding training programs, and establishing Indigenous-led startups. These efforts will foster a sustainable clean energy infrastructure, empower Osage youth, and generate long-term economic benefits for the Osage Nation.





This award has allowed us to expand our team, adding two interns to further our mission, accelerate our goals for Indigenous-led clean energy, and gain MBE certification through NNASC. Our expanded team has also enabled us to apply for the Re-X Before Recycling, E-SCRAP, and Solar Prize Round 8 grants, supporting our vision to drive sustainable economic and environmental benefits for the Osage Nation.

#### Community

Our project was implemented within the Osage Nation, an Indigenous community facing pressing environmental and economic challenges. The absence of recycling infrastructure hinders the development of a sustainable energy economy. These needs were identified through onsite visits, extensive assessments, and surveys distributed to tribal educational institutions, gathering critical insights from important stakeholders.

To address these challenges, we are establishing a recycling facility, training Osage in sustainable practices, and developing culturally relevant educational materials focused on Indigenous circular economy principles. Training efforts include certifying individuals as NABCEP Photovoltaic Inspectors, PV Technical Sales Professionals, and NASCLA General Contractors. Partnerships with organizations like EUCI, WeRecycleSolar, and Green Clean Solar provide essential support, while collaborations with Osage leaders, including Chief Standing Bear, have identified land for facility

development and office and living space for future steps and ensured community buy-in.

Our team worked toward broader educational contributions, such as designing an Urban Economy and Sustainability course for Wilmington University, hundreds of hours of EUCI educational content, and engaging with the Rappahannock and Upper Mattaponi Tribes, fostering a regional network of sustainable energy initiatives for Indigenous communities. This work has been recognized through publications in CREO and ENGIE end-of-life reports and presented at EMBIZO and ASES.





Office of Energy Efficiency & Renewable Energy

### Clean Energy Ecosystem Track

### East Phillips Neighborhood Institute (EPNI) and Cooperative Energy Futures (CEF)

**East Phillips Neighborhood Institute (EPNI)** 

Daniel Colten Schmidt Joseph Vital Darby Ottoson Sean Lim Kieran Morris Dean Dovolis **Cooperative Energy Future (CEF)** 

Sachiko Graber Timothy Denherder-Thomas Dan Grantier Kyle Samejima Allye Doyle

#### **Team Bio**

EPNI and CEF team members have been envisioning the future of the historic warehouse together as neighbors for many years. We admire each other's work and fill different, but complimentary niches: EPNI has strong roots in the community through engagement and grassroots advocacy, while CEF has deep experience in installing and operating cooperatively owned solar arrays across the region. The decision to work together began with the Community Energy Innovation Prize and we are excited to deepen our working relationship beyond this prize through a 25-year operating agreement.

Our values match perfectly: both organizations care deeply about generating

#### **Project Summary**

EPNI is renovating a 230,000-square-feet historic warehouse and 2-acre parking lot into a community-owned climate resilient hub that will include:

- A 120,000-square-feet aquaponics farm
- A 30,000-square-feet outdoor farm and community composting site
- 110,000t food processing and storage, restaurants, and community gathering
- A rainwater recycling system and eco-restoration project
- A 2.7 MW solar array to power up to 200 homes and offset the aquaculture energy usage by over 90%
- An estimated 500 new jobs!

CEF, a cooperative, will own half of the solar array and provide energy rebates and profit distributions to local residents. EPNI, a nonprofit, will own the other half of the solar array, and is developing a community ownership model which will ensure local self-determination.



wealth for community members who have been marginalized for generations. Our organizations are aligned with the ethos that the conventional for-profit model does not serve the lowest echelon of the economic spectrum. EPNI and CEF agree that developing climate resilient technology through cooperative, community ownership is a powerful solution to solving the climate crisis.

Our team is 55% BIPOC, and includes people who identify as Native, Asian, Black, Multiracial, and White. We are 55% male, and some people on our team identify as LGBTQIA+. Our team members come from multiple generations, ranging from Baby Boomer to Generation Z.

#### **Community Description:**

For over 100 years, residents of the East Phillips neighborhood have been overburdened by high rates of chronic disease and early deaths in children and adults, especially those caused by asthma and heart attacks. In response, neighbors began to share their concerns and seek solutions together.

The East Phillips neighborhood was designated by the real estate and banking industries-as well as the federal government-as "undesirable." As a result, the neighborhood became rundown and polluted. It is no coincidence that East Phillips residents are over 80% BIPOC, have a median annual household income of roughly \$17,000, and was contaminated by hazardous materials for 80 years-East Phillips was finally recognized as a Superfund site in the early 2000's.

For almost a decade, EPNI has worked with community residents through surveys and community meetings to design a hub of climate resilient infrastructure in the heart of the community. In 2021, a survey of 424 residents listed their top three visions for the neighborhood as no more pollution, more living-wage jobs, and repurposing the former warehouse site for high and low-tech farm operations. The EPNI and CEF team will deepen this relationship through community ownership.





Office of Energy Efficiency & Renewable Energy

### Manufacturing Ecosystem Track

## **Green Leap Riverside**

#### **Team Members**

Andrew Anson idea>Driver

Hannah Bastawrose itty bit Better

**Eddie Konialian** Directrope Julian Barber Aliensun Labs

Ronan Wall
Dosen

Amartya Datta Purple Lemon **Cody Coss** Live Beyond Normal

**Giovanna Gatto** Find The Story

**Stephen Lawrence** Bluecraft Leads



The GLP team came together when Andrew Anson, founder of idea>Driver, recognized a need for improved energy efficiency within manufacturing. Leveraging his expertise in marketing, startups, and finance, Andrew's knack for making connections sparked GLP's formation as he gathered a skilled team to address this gap.

Hannah Bastawrose, founder of itty bit Better, crafted GLP's "Roadmap," a tailored guide to help manufacturers enhance efficiency. With a background in mechanical engineering, she designs resource-saving solutions that promote energy efficiency.

**Eddie Konialian**, founder of Directrope, leads GLP's community activation, helping partners drive sustainable change through local engagement.

#### **Project Summary**

The Green Leap Team has evolved into the Green Leap Program, a digital roadmap startup aimed at equipping the facility managers of small to medium-sized manufacturing facilities in Riverside County, CA with the knowledge and strategies needed to enhance energy efficiency. By understanding their roles and addressing their major concerns, this roadmap guides them through the complexities of clean energy and energy management.

By leveraging digital assets, we bring strength to the community and the Green Leap Program (GLP). The community will gain accessibility, engagement, and a streamlined service to their overwhelmed, overworked, and under-informed community.

Looking to the future, GLP is now in the process of forming into a separate business entity, considering investments, and looking to broaden its market into other states.







**Ronan Wall**, founder of Dosen, provided an intuitive, Al-powered platform for GLP, organizing resources, supporting mentorship, and tracking engagement.

Julian Barber, founder of Aliensun Labs, manages GLP's digital marketing and data consolidation, streamlining digital assets across platforms like Drupal, Dosen, Directrope, and social media.

After the Progress Phase, **Amartya Datta, Cody Coss, Giovanna Gatto, and Stephen Lawrence** joined the team to build out its branding, social media, lead generation, messaging, and reporting.

Together, this team harnesses a broad mix of expertise to address energy efficiency in manufacturing, catalyzed by Andrew's Riverside County roots and vision.

#### **Community Description**

Riverside County, California boasts a diverse community of over 2.4 million people. Its robust manufacturing sector employs over 84,000 people working in food processing, metal fabrication, and even aerospace components. Riverside County is located strategically near transportation hubs, a skilled workforce, and a supportive government ecosystem that empowers it to thrive.

However, growth brings its own challenges

like balancing the energy demand from the manufacturing sector and ensuring a future-ready workforce through continuous skill development. Through discussions with local organizations, GLP deepened its understanding of the community's needs from how to get started to how to access incentives. The Green Leap Program is addressing these needs by becoming a low cost, accessible version of an Energy Service Company (ESCO).





**Office of Energy Efficiency** & Renewable Energy

### Manufacturing Ecosystem Track

### **IMPACTT - Technology Transfer** for Impact Ventures

#### **Team Members**

**Logan Jenkins** 

**Circular Venture Lab** 

#### **Erin Lewis**

**University of Evansville Center for** 

#### **Don Wettrick**

**STARTed UP Foundation** 

**Tyler Stock Evansville Regional Economic Partnership** 

#### **Team Bio**

Logan Jenkins of Circular Venture Lab ideated and designed the initial IMPACTT curriculum, goals, and outcomes. He is responsible for developing and refining the program, introducing it to prospective students, community leaders, and partners, and serves as the project lead.

**Erin Lewis** of the University of Evansville's Center for Innovation and Change has local, regional and statewide connections in higher education. Lewis has advised and iterated several aspects of the curriculum with Jenkins.

**Tyler Stock** of the Evansville Regional Economic Partnership serves as a conduit to our region's entrepreneurial and manufacturing ecosystems, regional partnerships, and our young talent pipeline.

#### **Project Summary**

Through the IMPACTT technology transfer curriculum, Indiana participants identify, research, and critically analyze technology inventions and patents available for license through universities and U.S. federal agencies. The IMPACTT program supports economic development through entrepreneurial education, manufacturing talent pipelines, and building a resilient community powered by local innovation.

The program encourages students of all backgrounds and academic disciplines. They explore and familiarize themselves with potential career pathways through regional manufacturing partners, a multitude of venture-building services, and additional resources for further exploration. With assistance from statewide partners, the program is expanding across the state of Indiana colleges and high schools.

Through the prize phases, multiple milestones have been reached, including hiring a fulltime curriculum facilitator; receiving three additional funding awards from state and federal agencies; receiving private funding; and securing three new partnerships. We have completed one successful summer cohort and are hosting fall workshops now. The program is exceeding our initial expectations and potential outcomes.

Our initial plans included establishing the Indiana Center for Emerging Technologies in late 2025. The entity has already been fully established, funded, and operates as a technology research firm and venture partner with a statewide presence.







CIRCULAR

VENTURE LAB





**Don Wettrick** of the STARTed UP Foundation is leading efforts to expand IMPACTT in Indiana high schools through their existing innovation programs. He is responsible for curriculum deployment to 100+ high schools in late 2025.

Team partners and their respective organizations are the grassroots catalysts for change across Indiana. Together, they have worked independently and collaboratively on multiple statewide projects and initiatives since 2019. They formed the program partnership specifically to support the region's entrepreneurial and manufacturing ecosystems and talent pipelines. The partnership is built on a foundation of trust and respect for each team member.

#### **Community Description:**

Evansville, Indiana is the blue-collar heart of a blue-collar region. Located along miles of the Ohio River, it served as the World War II manufacturing hub for shipbuilding, warplanes, and ammunition. Today, the Evansville region is the nation's hub for the molded plastics industry, with dozens of large companies and chemical suppliers headquartered here or having significant operations in the area. Manufacturing in our region accounts for one in five jobs and contributes \$22 billion in annual GDP. This represents 41% of the area's total economic activity.

Indiana has a long and storied history of manufacturing, and more recently, developing and deploying renewable energy technologies. The state is home to world-class energy infrastructure companies and has seen incredible investments in hard technologies, solar developments, and electric vehicle production.

Since the COVID pandemic, the entrepreneurial community and ecosystem in our region is largely stagnant in multiple regards. Sustainable economic growth in clean energy entrepreneurship and manufacturing in our region demands a robust local innovation ecosystem, new ideas, and a vision for the future. The Evansville region and Indiana have multiple, specialized resources available to individuals with an interest in entrepreneurship, technology, and building the healthy, vibrant communities desired by residents.

START<sup>ed.</sup> UP

Innovation & Change VERSITY OF EVANSVILLE





Office of Energy Efficiency & Renewable Energy

### Manufacturing Ecosystem Track

### **Energize Wai'anae Moku**

#### **Team Members**

**Sharlette Poe** LEI Foundation

Kapua Keliikoa-Kamai Wai'anae Sustainability Cooperative **Parker Kushima** Hawai'i State Energy Office

Malia McDonald Hawai'i State Energy Office **Nicole Shintani** Hawai'i State Energy Office

Lauren Ballesteros-Watanabe Sierra Club of Hawai'i

LEEWARD EMPOWERMENT INITIATIVES

#### **Team Bio**

Sharlette Poe, EWM's Team Lead is a fifthgeneration resident and the CEO of LEI Foundation. Kapua Keliikoa-Kamai is a lifelong resident and the President of Wai'anae Sustainability Cooperative and represents the community as co-developer. Though they didn't start as community energy advocates, they have served as advocates for improving a broad array of conditions for residents for decades. Once Hawai'i committed to reaching 100% clean energy, they realized that only a handful of activists were paying attention to "energy" and possessed enough knowledge to engage in discussions with government officials, developers, and industry. They joined a coalition of professionals and experts in the Energy Equity Hui group where they developed relationships with representatives from

#### **Project Summary**

Energize Wai'anae Moku (EWM) was designed to cultivate a community adept at navigating the clean energy, renewable energy, and decarbonization spaced to become successful developers of community-owned energy projects. EWM is developing the Energy Warriors program to steward the community's position in clean and renewable energy discussions, project planning, and development. We are crafting community-created, led, and supported solutions, increasing capacity to guide policy, and improving interactions and led, negotiations with developers and utilities.

We have identified values and priorities to design and build community-owned power projects that would provide good paying jobs and establish Wai'anae Moku's energy security and economic stability. EWM has also laid the foundation to compile its intentions, strategies and goals into an upcoming Wai'anae Moku Energy Plan, which will be a companion authoritative document to our Wai'anae Sustainable Communities Plan. EWM will also be working with the University of Hawai'i Office of Indigenous Knowledge & Innovation, and Leeward Community College–Wai'anae Moku to develop curriculum and increase community and neighborhood-level data, integrate Native Hawaiian systems thinking and values-informed analyses, and mapping capacities. This work will be housed at LEI Foundation's new Resilience & Innovation Hub.



collaborating organizations.

Sierra Club of Hawai'i (SCH) has contributed to the community's environmental needs through committed staff time, data, and other activities. Lauren Ballesteros-Watanabe, the Sierra Club liaison, is experienced in working with youth, environmental stewardship, and energy policy. Hawai'i State Energy Office (HSEO) has also contributed to the success of this project through Parker Kushima's staff time as the Outreach and Community Engagement Specialist and Clean Energy Wayfinders Coordinator. Finally, the Clean Energy Wayfinders, Nicole Shintani and Malia McDonald, act as interfaces between Community and State legislators, agencies, and the energy industry.

#### **Community Description:**

Located on the dry side of the island of O'ahu, Wai'anae Moku is a 20-mile-long coastal community vulnerable to rising sea levels, climate change, natural and man-made disasters, and looming drought conditions. It is described as a disadvantaged community with 50,127 people, experiencing poor academic outcomes, low household and earned income, and persistently poor healthcare outcomes. Impacting quality of life even more, residents here pay some of the highest rates per kilowatt-hour for electricity in the US.

With supportive partners and collaborators, we have embarked on a process to raise Energy Warriors, increase community clean energy competence, and develop our own energy plans and projects. These are all informed by community values and priorities to reduce energy burdens, increase householdlevel resilience, and strengthen communitylevel coordination and infrastructure.

We have identified our clean energy needs in



our desire and need to shift from a primarily profit-driven energy system to a peoplepowered pono (well-intentioned) system; promoting a local energy economy that puts'āina (the collective of land, air, water, ocean, and people) at the center of design and decision making. Ongoing conversations about adopting a new energy paradigm reflecting values of pono energy solutions are gaining momentum.





Office of Energy Efficiency & Renewable Energy

### Manufacturing Ecosystem Track

### **Metals Innovation Initiative (MI2)**

#### **Primary Team Members and Organization Affiliations**

- Summer Goldman Project Lead, MI2 COO: Founder of Dixon Strategies and with 15 years of leadership experience, Summer directs operational strategy and oversees the work plan's implementation.
- Vijay Kamineni MI2 CEO: With 30 years in metals manufacturing innovation and a focus on sustainability, Vijay provides strategic direction and leads MI2's industrial initiatives.

#### **Team Bio**

MI2 was formed to drive sustainable growth across Kentucky's metals and advanced manufacturing sectors and to address local workforce, sustainability, and energy needs.

- Formation: Kentucky's booming metals industry prompted a coalition of metals companies to establish MI2 in partnership with public, private, and community stakeholders. Together, they develop innovative solutions to industry challenges, including clean energy and workforce development. MI2's primary teams are supported by over 30 partners to ensure an equitable clean energy transition for Kentucky communities.
- Sam Ford Director of Strategic Communications: A specialist in media strategy, Sam leads marketing efforts and leverages industry connections to share MI2's achievements.
- Ruthie Caldwell Grants Consultant: With extensive experience in rural community development, Ruthie ensures planning aligns with grant application standards and supports equitable energy projects.

#### **Project Description**

**Summary:** Kentucky's metals industry boasts 250 facilities and employs 36,000 community members. It is rapidly expanding due to reshoring, which is creating new demands for energy and skilled talent. The Community Energy Innovation Prize is helping the Metals Innovation Initiative (MI2) team to accelerate this growth, emphasizing clean energy, job creation, and workforce development.

#### **Notable Achievements:**

- **Clean Energy Plan:** Hired All4 to develop a five-year Clean Energy Report outlining industry power needs and potential renewable sources, aligned with state and federal policies.
- Community Engagement & Workforce Planning: Held four Community Planning Workshops with over 30 leaders, creating KY-WORCS action plans to support job training and establish satellite hubs in Muhlenberg, Ohio and Floyd and Pike, KY, while revitalizing rural areas through off-site manufacturing roles.
- **Digital Equity Grant Proposal:** Built partnerships to submit a \$12 million NTIA grant proposal to fund KY-WORCS Hubs, focusing on local hiring, onsite childcare, and digital advanced manufacturing training.
- Industry Outreach: Presented KY-WORCS plans at the Kentucky Industry Conference, helping local leaders promote their communities to manufacturers.

**Future Plans:** MI2 will share the Clean Energy Report with Kentucky manufacturers, fostering collaboration on clean energy solutions. Community-led town hall meetings in the four counties will gather resident feedback, and MI2 will continue seeking funding to bring off-site manufacturing jobs to rural former coal communities.

#### **Community Description:**

The KY-WORCS pilot program serves two sets of neighboring, disadvantaged counties in Kentucky's coalfields, each features unique assets and challenges:

- Western Kentucky Muhlenberg and Ohio Counties: Known for hilly farmland, these counties have shifted from coal to agriculture, healthcare, and manufacturing. Recent closures in coal-fired power and a low workforce participation rate highlighted the need for job opportunities. Broadband expansion and access to nearby colleges create potential for workforce growth in these communities.
- Eastern Kentucky Floyd and Pike Counties: These mountainous counties offer natural beauty, outdoor recreation, and an emerging skilled trades center. Despite assets like natural gas, industrial parks, and rail, high unemployment and low educational attainment persist, emphasizing a need for stable, quality jobs.

#### **Identified Needs and Solutions:**

- Workforce Imbalance: A statewide workforce shortage exists alongside high unemployment in rural areas. KY-WORCS is addressing this imbalance using local assets to redistribute critical, difficult-to-fill jobs in manufacturing.
- Equitable Clean Energy Transition: Justice40 mapping indicates these counties face pollution burdens and limited access to infrastructure and workforce development. KY-WORCS engages local organizations and advanced manufacturers to create satellite offices, bringing long-term economic benefits and stable jobs to these communities, enhancing local workforce participation and supporting sustainable growth.













Muhlenberg Economic Growth Alliance







**Office of Energy Efficiency & Renewable Energy** 

### Manufacturing Ecosystem Track

## **PDX Clean Industry Network**

#### **Team Members**

**Corky Collier (Team Lead) Alexis Elias** Columbia Corridor

Association

**Sonrisa Cooper** Portland Bureau of Planning and Sustainability **Rhys Roth** Center for Sustainable Infrastructure

#### **Beth Gilden** Laura Fleming

Portland State University, Institute for Sustainable Solutions

**Eve Green Chris Smith** Energy 350

**Daryl Lambert** Worksystems

**Team Bio** 

Our team, the Portland Clean Industry Network, was born out of an existing city-industry collaboration called the Portland Clean Industry Initiative. The Network includes technical experts, universities, workforce development organizations, universities, local government, and is led by Corky Collier, the Executive Director of the Columbia Corridor Association. Corky, who first studied industrial symbiosis in college, is our team lead due to his connections and leadership within the manufacturing industry.

The City of Portland continuously dedicates extensive resources to clean industry, sending cross-sector groups, including over half of the members of this project team, to Denmark for in-depth training about their clean industry model. Denmark is home to a symbiotic network in operation for over 50 years. In 2022, the City commissioned a study on industrial decarbonization and equitable growth of clean energy. The study urged collaboration between private businesses, public agencies, and universities. The Community Energy Innovation Prize offered us the opportunity to bring the study's recommendations to fruition, activating our cross-sector coalition of people already working towards a vision of clean industry in Portland, united by one idea: If we're going to get serious about carbon reduction, we have to get serious about building an economy around it.

**Katherine Krajnak** Kate Merrill **Prosper Portland** 

**Karl Haapala Brandon Murray** Oregon State University, **Industrial Assessment** Center

#### **Project Summary**

Our project jumpstarted an industrial symbiosis ecosystem in Portland's Columbia Corridor, the largest industrial area in Oregon. Industrial symbiosis is a circular economy model that reduces emissions and waste while supporting energy efficiency and organizational resilience.

Our activities and achievements include:

- Social Infrastructure Development: We reached over 40 different manufacturers, 16 public agencies, and 8 Congressional Budget Offices (CBOs) through individual outreach and five convenings, yielding crucial feedback about technical implementation, enabling policies, and equity impacts.
- Technical Assessments: Our technical partners, the OSU Industrial Assessment Center and Energy 350, developed an industrial symbiosis assessment protocol that was applied at six manufacturers. They identified potential symbiosis opportunities and plan to integrate the new protocol into future consulting work.

Our team is now dedicated to the long-term pursuit of industrial symbiosis in Portland, starting with \$348,000 awarded from an EPA program. Future work will be carried out in part by Portland's largest business association, which has sponsored a Clean Industry Hub. The Hub has unified private and public sector and community advocates with a multidecade commitment to meet city goals for industrial decarbonization and reached the final application stage for a \$19 million grant from the city of Portland.











#### **Community Description:**

The Columbia Corridor, Oregon's largest economic corridor, houses most of Portland's industrial sector. It borders vulnerable neighborhoods and ecosystems, and its businesses provide critical middlewage jobs to residents from disadvantaged communities, particularly BIPOC and low-income neighborhoods. The goal of industrial symbiosis is to reduce waste and emissions while improving economic outputs and providing more middle wage jobs to underserved members of our community.

This project aimed to begin the implementation process while engaging key stakeholders to gather feedback about community needs. We convened workforce experts to glean key feedback about workforce and training needs in the transition to clean industry. Our focus group of CBOs serving nearby areas helped us understand their needs, concerns, potential benefits of symbiosis, as well as priorities in long-term implementation. As our team continues working on symbiosis in Portland, we now have priorities to ensure equitable distribution of economic benefits, improve local climate resilience, and ensure accountability through Community Benefits Agreements (CBAs). These findings will guide future steps in promoting industrial symbiosis while prioritizing workforce transitions and environmental justice for nearby communities.







PORTLAND STATE UNIVERSITY









Office of Energy Efficiency & Renewable Energy

### Clean Energy Ecosystem Track

### **People Power: Energy Security | Ownership**

#### **Team Members**

April Ambrose - Arkansas Advanced Energy Foundation Shelley Buonaiuto - Arkansas Climate League Jo Elsken - Arkansas Climate League/Citizens' Climate Lobby - Fort Smith Chapter Robert McAfee - Arkansas Climate League/Citizens' Climate Lobby - Fort Smith Chapter Tara McDanie - Arkansas Climate League/Citizens' Climate Lobby - Fort Smith Chapter Herbert McGill - Elizabeth McGill Drop-In Center/Arkansas Climate League Dr. Paulette Meikle - University of Arkansas Fort Smith/Arkansas Climate League Isaac Salazar - Arkansas Climate League/Citizens' Climate Lobby state co-coordinator

#### **Team Bio**

**Our nine-member core People Power Team** shares a deep commitment to collaboration, fostering community trust, and improving lives as we pursue an inclusive clean energy transition in Arkansas. Our professional pursuits and life experiences include artist, green energy workforce leader, climatologist, high school educator, associate dean of sociology, graduate student, social worker, and community center directors. Three of our team members live and/or work in our target neighborhoods. Given the fact that the Arkansas Climate League began with a climatologist and a grassroots advocate for disadvantaged communities, this prize fit our skills and goals nicely. The team came together organically: Isaac, Herbie, and Tara know the area and have strong community connections. Jo regularly participates in city and nonprofit meetings to advance sustainability. As a professor, Paulette gained the support and engagement of university leadership and the city as stakeholders, while Jan, Robert and Shelly structured, delegated, and coordinated every project. Our complementary knowledge and skill sets have sustained us and we are committed to continuing to foster community health and energy efficiency through an inclusive energy transition.

#### **Project Summary**

People Power has three pillars: **solar installations, community outreach,** and **student engagement**. We successfully installed solar on two community centers in our target neighborhoods. We attended many community events, listening to families' top concerns and introducing weatherization and utility bill assistance resources. We helped 30 families apply for utility bill relief, provided 50 referrals, and distributed 40 DIY weatherization starter kits. We held a bilingual in-person training to ensure that no community member was left out. We teamed up with Solar Under the Sun to provide a basic solar workshop to high school and grade school students. We planned and co-hosted the River Valley Green Energy and Education Seminar and provided 23 scholarships to low-income individuals and students so they could meet sustainability leaders and learn about the City of Fort Smith's sustainability plans and green workforce opportunities. We constructed a database of local businesses related to the clean energy economy, which will be used by the City of Fort Smith and AAEF to convene a Green Energy Employer Forum.

Relationships and community trust are our most precious achievements. When the CEI Prize comes to a close, we will continue to collaborate with Hope Enterprises on Solar for All, we will seek additional solar installation funding, continue energy efficiency outreach, and partner on student and workforce engagement.

#### Community

Using the Economic Justice Screening Tool, we identified two tracts in north Fort Smith, AR – 05131000300 and 05131000400. Both tracts have diverse populations, are classified as disadvantaged and face multiple burdens exceeding critical thresholds, including education, life expectancy, low income, asthma, diabetes, linguistic isolation, and lack of indoor plumbing. The Screening Tool helped us to understand all the barriers these communities face and the skill sets of our local team members helped us determine which needs to focus on first. Through stakeholder meetings and learning from local non-profits, we identified topline community needs for the People Power Project to address, those include **functional** greenspace (community garden), greater knowledge of and access to weatherization and energy bill assistance programs, and tangible sense and evidence of inclusion in the clean energy transition via solar installations on trusted community hubs. Exposure to and entry into green workforce opportunities is an ongoing long-term goal necessitating significant collaboration between People Power Team members and other stakeholders, including the City of Fort Smith.





Office of Energy Efficiency & Renewable Energy

### Clean Energy Ecosystem Track

### Direct-to-Renter Clean Energy Program for Underserved Communities

#### **Team Members**

The Energy Coalition (Project Lead)

Laurel Rothschild, Vice President
Felicia Federico, Director of Funding and Research
Meaghan Laverty, Director of Communications Day One (Community-based Organization Partner)

#### **Team Bio**

The Energy Coalition (TEC) is a Californiabased 501(c)(3) with nearly 50 years of experience designing and implementing energy programs and education initiatives for diverse communities, focusing on underresourced households. Day One (DO) is a nonprofit organization providing effective, high-quality, culturally sensitive public health initiatives. Latino/Latina Roundtable (LRT) is a nonprofit organization dedicated to promoting education, civic engagement, advancing leadership, and providing a proactive voice to Pomona communities. All three organizations had an existing partnership, together with the City of Pomona, under a state-funded grant. The formation of this team arose naturally as a combination of strengths needed for the project's success. TEC provided project leadership, fiscal management, technical design, data analysis, product ordering and delivery coordination, and marketing support. DO and LRT worked directly with the community to recruit participants, deliver appliances, and gather feedback. They also developed Spanish language messaging and provided community-specific program input. The City of Pomona and Pomona Choice Energy, a community choice aggregator, promoted the program on the city website, assisted with appliance delivery, and participated in outreach. This collaborative effort was fundamental to the program's success.

- Julie Castro, Assistant Director
- Tyler Aguirre, Program Manager
- Taylor Rosetti, Program Manager
- Vanida Tran, Project Manager
- Angelique Lopez, Project Coordinator
- Orson Spence, Project Analyst

#### • Christy Zamani, Executive Director

 Ashley Mercado, Director of Strategic Engagement

#### Latino/Latina Roundtable (Communitybased Organization Partner)

- Lina Mira, Executive Director
- Gabriela Lara, Special Projects
   Coordinator

#### <u>City of Pomona and Pomona Clean</u> Energy (Municipal Partners)

- Tim Sandoval, City of Pomona Mayor
- Julie Carver, City of Pomona/Pomona Clean Energy, Environmental Compliance Supervisor

### **Project Summary**

This program is a no-cost initiative designed to equip renters with portable clean energy and electrification technologies that improve resilience, thermal comfort, and indoor air quality, while enabling energy use management and lowering greenhouse gas emissions. Renters have been left out of the clean energy programs designed for homeowners, despite having the most financial need. We addressed this equity gap in Pomona's Justice40 community by offering renters a portfolio of appliances carefully selected based on portability, ease of installation, affordability, and other renter-friendly criteria. Through extensive outreach led by trusted community-based organizations, 25 eligible households applied within a few weeks of the program's launch. 10 applications were selected in a live-streamed bingo-style drawing to each receive up to \$2,500 worth of appliances tailored to their preferences. After receiving their appliances, participants were surveyed to gain feedback on their satisfaction and usage. From these interviews, the team developed a replicable program protocol or "blueprint" for other communities to adapt and implement. Looking ahead, our program aims to expand its offerings by introducing additional direct-to-renter resources like portable solar panels, and further develop peak demand reduction strategies like pairing battery storage with air conditioning units to lower household energy costs.













Office of Energy Efficiency & Renewable Energy

### Clean Energy Ecosystem Track

## **Requity Foundation Clean Energy Programming**

#### **Team Members**

- Michael Rosenband Requity Foundation
- Sabrina Rosenberg Requity Foundation
- Elisha Johnson Requity Foundation
- Maggie Gill Requity Foundation
- University of Maryland Carver Green Lab
- Maryland Department of Housing and Community Development – Carver House Funding
- Maryland Department of Labor



Requity's staff come from diverse backgrounds and lived experiences, reflective of the populations we serve. Many are industry professionals from architecture, construction, and masonry firms; others are current or retired vocational school teachers who are well prepared to work with youth on real-world projects. All staff receive training in effective communication, trauma-informed care, and cultural competency, ensuring they can support participants in both their professional and personal development. With a strong track record of collaboration and a commitment to sustainable growth, the Requity team is passionate about creating lasting impact in West Baltimore.

#### Contractor

- Bria Evans Requity Foundation
- Wendell McCray Requity Foundation
- Kayla Jackson Requity Foundation
- Linday Jones Jones Masonry & Requity Foundation
- Timmy Aziz MICA & Requity Foundation
- **Barb Dziedzic** BCPS Career Readiness Manager, Secondary Success & Innovation
- Holden Washington HWC Construction
- New Ecology Passive Home Building Raters

#### **Project Summary**

Requity breaks down barriers between vocational education and the workforce. Our work-based learning programs provide Baltimore City high-schoolers with opportunities to apply and develop their skills, laying a foundation for success in the growing field of high-performance construction. Additionally, our communitybased projects build environmental resilience and promote climate action in West Baltimore, an area historically underserved in federal clean energy investments.

Our annual cohort has expanded from nine students in 2022 to 60 students in 2024 across three schools. Of the 113 students engaged, 29 have graduated, with 11 securing full-time jobs at reputable

- Carver Vocational-Technical High School – Student Recruitment and Development
- Maryland State Senator Antonio Hayes Strategic Partnerships, Legislation
- Matthew A. Henson Neighborhood Association (MBE) – Community Engagement
- Wythe Windows Donation of Windows and Doors
- **ADT** Donation of Solar Panels for House, Funding Vice President
- Mafi Flooring Donation of Flooring

companies such as BGE, Harbor Bank, and HWC Construction, while 16 continue their education in college.

**Our Carver House Pilot Project has drawn** national attention. It was the backdrop for Maryland Governor Wes Moore and White House Senior Climate Advisor Ali Zaidi to announce Maryland's inclusion in the Biden Administration's National **Building Performance Standards Coalition.** High-profile visitors, including Acting U.S. Secretary of Labor Julie Su and U.S. Senator Chris Van Hollen, underscored Baltimore's role as a Workforce Hub. Additionally, Requity students shared their work with the **United Nations High-Performance Building** Initiative, highlighting our programs' reach in sustainable workforce development. Requity plans to expand and replicate programming in other communities and cities.

#### Community

Requity serves the Greater Rosemont area of West Baltimore. This primarily Black community has faced decades of disinvestment, leading to economic disparity, educational inequity, rising unemployment, and a skilled labor shortage. In 2020, 32.7% of children in Greater Rosemont lived below the poverty line, compared to 27.8% citywide. Additionally, 35.7% of households earned less than \$25,000 annually,compared to 26.5% citywide, and the unemployment rate was 17.8%, more than double the 7.7% rate in Baltimore overall.

Requity has deep relationships with residents, community leaders, and local schools, who highlighted particular needs for economic empowerment and vocational pathways for youth. Our programs prepare students to meet the demand for skilled labor, especially in fields like high-performance construction, by integrating hands-on experience into their education. This approach fills an experience gap that leaves many graduates underprepared for employment and at the same time provides the community with affordable housing, food access, and other resources.





Office of Energy Efficiency & Renewable Energy

### Clean Energy Ecosystem Track

## **RESCo Innovation Team**

#### **Team Members**

Wayne Boyd – Rosebud Sioux Tribe Treasurer

Jaime Poignee – RESCo Executive Director

John Saams - RESCo consultant

#### **Team Bio**

RESCo is comprised of community leaders addressing some of the Rosebud Sioux Tribe's most pressing issues. Some of these leaders have held – or currently hold elected office, but all embody the qualities of the traditional Lakota definition of a leader: to be a spokesperson for the people, to trust in the people to help you make important decisions, and to look for compromises between irreconcilable forces. Most of our team was born and raised on the Rosebud Reservation.

The team formed organically from various initiatives starting with Tatanka Funds, Inc. pursuing federal funding for clean energy and workforce development projects in spring

**Shere Wright-Plank** – Rosebud Sioux Tribe Council Representative and acting Executive Director Tatanka Funds, Inc.

Sharli Colombe – Tatanka Funds, Inc.

Ken Haukaas – Rosebud Sioux Tribe Forestry Department

#### **Project Summary**

The RESCo Innovation Team has worked to promote clean energy on our land for many years. Our original proposal to the CEI Prize aimed to coordinate funding applications across Tribal and other local organizations to increase the impact of each dollar invested. Our mission was to inform stakeholders of funding opportunities, potential projects, and workforce and business development. We planned to leverage public funding to establish a clean energy workforce and new businesses that would lead to a sustainable future clean energy economy on the reservation.

A lofty vision that quickly transformed into a mandate for action.

We submitted that plan in February 2024 when we were hitting challenges that looked overwhelming. Once selected for the PROGRESS and IMPACT Phases, we began a fast-paced scramble that continues today. In the past two months, we've won \$30 million for clean energy projects on the reservation and now it's time to get to work.



#### TATANKA FUNDS

2023. After over 20 years of trying to establish a Tribal electric utility, the Tribal Council established RESCo in summer 2023 and by Nov. 2023 they came together to pursue the Office of Indian Economic Development's (OIED) Tribal Electrification Program (TEP) funding for clean energy and electrification.

This catalyzed RESCo to hire an Executive Director, expanded our pursuit of federal funding, and build a business case for clean energy across the region. This has fulfilled the dream of many Tribal members that goes back to the 1990s, which we are honored to carry forward to benefit the Sicangu Oyate.

#### Community

The Rosebud Sioux Tribe occupies part of its historic homeland consisting of 3.2 million acres, with 915,000 acres held in trust by the United States. This area represents 15% of the Great Plains Region. 9,220 people call the reservation home, but a lack of affordable housing presents a significant challenge for our community.

The Reservation is exposed to extreme weather throughout the year, including low winter temperatures reaching -40°F, hot summer months with days over 100°F, and wildfires, blizzards, tornadoes, and high winds. These intense climate events impact the reservation's energy security, leading to three lengthy electrical outages already this year.

With a high school graduation rate of under 70%, high unemployment, and household incomes at less than half the state median-our community faces significant socio-economic challenges. Additionally, the Reservation experiences one of the highest rates of suicide and mental health challenges in the nation.

These non-energy challenges create an environment where solutions have to be holistic to be sustainable. RESCo's projects intersect critical challenges by aligning clean energy goals with workforce development, housing improvements, and health/safety programs. This is a long-term, strategic response to the most pressing issues for our community.





Office of Energy Efficiency & Renewable Energy

### Manufacturing Ecosystem Track

## **Scale for Climate Tech**

#### **Team Members**

Shai Fogelson, SecondMuse

Sanya Srivastava, SecondMuse

Lara Croushore, SecondMuse

#### **Team Bio**

SecondMuse (2M) is an impact innovation company collaborating with communities focused on climate, equity, and tech to tackle global challenges. For the last 7 years, 2M's Scale For ClimateTech program has transformed the climate tech manufacturing sector and helped startups achieve manufacturing success through a cohort-based model, Manufacturer Readiness Level (MRL)based curriculum, and access to manufacturers and technical experts. S4C has worked with New York MEPs, which include centers across the state, connecting with numerous supplychain and contract manufacturing service providers to foster growth and innovation statewide.

Suma Reddy, Riffle Ventures

Ash Seth, Riffle Ventures

#### **Project Summary**

SecondMuse, in partnership with the New York State Energy Research & Development Authority, launched the Scale For ClimateTech (S4C) accelerator alongside NextCorps in 2018. Recognizing the need to offer startups guicance on climate equity, S4C added a Climate Equity Module (CEM) for its 2024 cohort. This module consists of workshops, mentorship, and accountability sessions, with the mission of achieving equitable climate impacts for all.

Recognizing that manufacturers and supply chain partners are key ecosystem players, S4C began developing a CEM specific to this demographic. S4C utilized the Manufacturing Extension Partnership (MEP) Network in New York as a vehicle for curriculum dissemination.

Success has involved securing buy-in from Fuzehub (the lead NY MEP Center), successfully adapting the CEM to be MEP-friendly, and building a repository of climate equity materials for eventual inclusion on the MEP websites. S4C hosted a preliminary CEM workshop on July 22, 2024, attended by MEP Directors from New York's ten regional MEPs. A second workshop, held on Nov. 19, 2024, included manufacturers and supply chain partners statewide. S4C has received buy-in from multiple NY MEPs to adopt these materials going forward.



Riffle Ventures is an impact engine that unlocks climate innovation to solve meaningful problems. They are a collective of missiondriven builders, educators, investors, and designers. They helped co-create the climate equity content with SecondMuse for workshops and online access to content. This co-creation occurred both for the startups within Scale For ClimateTech's most recent cohort as well as the adaptation of the materials for the New York State MEPs.

FuzeHub is the lead MEP within New York overseeing ten other regional MEPs.

#### Community

Today, disadvantaged communities are disproportionately affected by the negative impacts of climate change. Yet voices from these communities are not as prevalent in advancing climate tech innovation. Less than 19% of small/medium clean tech enterprises are majority woman-owned, and less than 5% are owned by visible minorities or indigenous people. This inequity is also prevalent across the manufacturing industry, in which business has been typically conducted through highly exclusionary processes. Those with a seat at the table often represent a highly homogeneous group from similar cultural and socioeconomic backgrounds.

Addressing the lack of diversity in climate tech requires proactive efforts to promote inclusivity and equity with startups and manufacturers. This includes providing equal access to resources, funding, networks, and mentorship opportunities for individuals from underrepresented



RIFFLE

communities. It also involves challenging biases, promoting diverse representation, and creating inclusive environments that value and support the contributions of all individuals, regardless of their background.

The Climate Equity Module serves as a valuable tool to assess and integrate equity considerations into climate-focused companies. By disseminating this module widely, it allows for a comprehensive and standardized approach to address the complex intersections of climate change and social equity.





**Office of Energy Efficiency & Renewable Energy** 

### Clean Energy Ecosystem Track

## **Shake Energy Collaborative**

#### **Team Members**

**Ali Andrews** CEO

#### **Sebastien Selarque**

**Community Planning** and Technical Lead

**Ikaika Hussey** 

#### **Sofia Luczak**

**Community Energy Planning Specialist** 

Kea'a Davis **Design Strategist** 

#### **Team Bio**

Shake Energy Collaborative, a Hawai'ibased woman-owned benefit corporation energy developer, is driven by the mission to empower communities to actively influence and benefit from their own energy resources. Our team of six designers, engineers, and developers uses an approach that is deeply rooted in the acknowledgement that community members possess invaluable knowledge about their local land. This understanding is pivotal in designing highly effective renewable energy infrastructure tailored to each community's unique needs.

Shake Energy Collaborative employs a distinctive co-design framework that

**VP of Project Development** 

#### **Ayla Vega Community Energy Intern**

#### **Project Summary**

The Shake Energy Collaborative is working with historically disinvested communities in Hawai'i to co-design renewable energy projects that will be bid to upcoming utility procurements. In the first two phases of the CEI prize, we supported cooperatives administratively and co-designed energy project proposals with the Wai'anae Sustainability Co-op (WSC). Through a series of design workshops and other community engagement activites, Shake and WSC identified project sites and concepts that align with community values and meet utility requirements for energy procurement.

Once the CEI Prize concludes, we will continue to refine these concepts into bid-ready proposals while we wait for the utility to open the solicitation for new projects in Spring 2025. Once the projects are awarded contracts in Fall 2025, WSC and Shake will fundraise for and manage the construction of the projects, which will come online by the end of 2028.



empowers community members. Through this approach, community members integrate technical information and collaborate with stakeholders to shape various aspects of energy projects, including siting, sizing, and dual land uses. After Shake develops community-designed projects, they generates low-carbon energy and financial savings. These savings are reinvested back into the community, allowing the community to decide how to maximize social impact. At Shake Energy Collaborative, the emphasis is on designing with, rather than for, communities.

#### **Community Description:**

The project design is centered around our partnership with the Wai'anae Sustainability Co-op, based in Wai'anae, O'ahu.

Wai'anae, situated on the Leeward Coast of O'ahu, holds significance as a home for many proud Native Hawaiians. However, it has consistently grappled having the highest poverty rates on the island and a significant portion of the houseless population in the area comprises Native Hawaiians. Shake has partnered with WSC for several years and together, they have identified key community needs that drive our project development:

- Lower cost of energy–O'ahu residents pay over 40¢/kWh for electricity, which is over double the national average. Energy costs are a large burden to low- and moderateincome households. Electricity cost savings are needed for families in Wai'anae.
- Self-governance of energy infrastructure-Wai'anae Moku hosts several industrial facilities-from landfills to a diesel power



plant to utility scale solar projects. A group of community leaders wrote a letter to the Public Utilities Commission in 2021 asking the commission to stop letting developers build projects in their Moku without adequate community consultation. Community-led, community-owned projects are needed in Wai'anae Moku in order to change this extractive development pattern.





**Office of Energy Efficiency** & Renewable Energy

### Clean Energy Ecosystem Track

# **Convivencia Hispana Energy Navigators**

#### **Team Members**

- Luisa Trapero Supplemental Nutrition Assistance Program Education with University of Minnesota Extension and member of Convivencia Hispana

#### **Team Bio**

This project was developed as a partnership between the Region Nine Development Commission and the Latino-led community organization Convivencia Hispana from rural St. James, MN (population 4,793). Convivencia Hispana is made up of Hispanic and Latino community members who seek to inform and educate their neighbors on issues that impact family, economic and social well-being. They fulfill these goals through educational programming and scholarship opportunities. The Region Nine Development Commission is a regional unit of government that works on community and economic development in the nine counties of south-central Minnesota which includes the city of St. James. These two partners were initially connected through a Welcoming America Grant, for which Region Nine was the fiscal sponsor. The partnership continued and when Region Nine organized a clean energy delegation to Germany, they included Convivencia member Luisa Trapero. Upon returning Luisa saw a need for more funding and technical support to make the energy transition accessible to the Hispanic community. At once, Region Nine staff began exploring opportunities to build on Convivencia's community organizing and education to make the clean energy transition accessible. Region Nine has also contracted with the Center for Energy and Environment(CEE) to conduct the audits.

- Julieta Ochoa Employee of Smithfield Foods and member of Convivencia Hispana
- Sabri Fair Region Nine Development Commission
- Everardo Vargas Employee of Smithfield Foods and member of **Convivencia Hispana**
- Maria Yasmine Zamarripa Convivencia Hispana Member
- Maria Christina Carreon Convivencia Hispana Member
- Cristi Liliana Aguilar Convivencia Hispana Member
- Nidia Zelaya Henriquez Convivencia Hispana Member
- Benjamin Eliseo Ayala Aguilar Convivencia Hispana Member

#### **Project Summary**

Convivencia's Community Energy Navigator Program was founded on the same principles that have proven to work-that neighbors and coworkers educating their neighbors and coworkers makes for long-term sustainable change. We leveraged this experience and community-based knowledge to develop a program of Community Energy Navigators to engage and register community members for 200 free energy audits. As of Nov. 1, 2024, we have registered 137 Hispanic and Latino households for energy audits and have completed 50 of those audits. Once these audits are completed our project will identify common issues across the community and develop clear and understandable pathways for community members to install needed energy efficiency upgrades. We will also provide funding for pilot projects that could include insulating exterior walls and attics, updating old water heaters to electric tankless or Air Source Heat Pumps, replacing air conditioners with air source heat pumps, and upgrading furnaces to high efficiency or electric models.



#### **Community Description:**

As identified by the DOE's Energy Justice Dashboard, St. James, Minnesota is overburdened and underserved. This community has seen a demographic shift in recent years because of the anchor employer, a Smithfield pork plant, and their reliance on immigrant labor. The city's demographics as of the 2020 are 43.9% Hispanic, 54.9% White, and 1.2% of other races or ethnicities. Employment at the food processing facility is physically demanding, low paying, and dangerous, which leads the Latino community to experience outsized environmental impacts.

We identified the need for this project through the experiences of Convivencia Hispana members who live and work in St. James. We have seen that people in the community live in housing with broken windows, broken appliances, and high energy bills. Despite the very clear issues we had no idea where to turn. In the past, the city had a home rehabilitation loan, but that process was too difficult for Hispanic community members to access, and the local Weatherization Assistance Program has also been difficult to navigate. We have filled this need by developing communitybased energy navigators who can provide resources and connect households with funding to implement clean energy investments.











Office of Energy Efficiency & Renewable Energy

### Clean Energy Ecosystem Track

### **Team Bean**

#### **Team Member**

**Devin De Wulf** Krewe of Red Beans, Organizer and Project Lead

#### **School Partner**

Morris Jeff Community School Student Team Members: Rhys, Sam, Evangeline, Isaiah, Emery, Lu, Lillie, and Ramona Science Teacher: Mrs. Kristen Bowens

#### **Team Bio**

Our team is led by **Devin De Wulf**, founder of the Krewe of Red Beans. Since Hurricane Ida, Devin worked to launch "Get Lit Stay Lit", an effort to install solar panels and batteries on local restaurants. He believes in a "block by block" approach for New Orleans resilience. Devin has also worked to create "Beanlandia", a community center in the 9th Ward of New Orleans. As Beanlandia grows, Devin envisions a summer camp and afterschool programs. As a former middle school social studies teacher, Devin also believes children are capable of dreaming up resilience projects for their own communities. He believes the experience of "making tangible change" will create hope and inspire future leaders to make our world better.

#### **Community Partners**

Glass Half Full, Feed The Second Line, SOUL, Lower 9th Ward Center for Sutainable Engagement and Development



Photo by Katie Sikora Photography for Krewe of Red Beans

#### **Project Summary**

Our project is based on creating teen leadership, community resilience planning, and career pathways in resilience-combined with a block-byblock effort to prepare New Orleans for future climate challenges. We are working towards the creation of a summer camp where teens will work with younger children to design resilience solutions for their neighborhoods in New Orleans. This spring, we conducted a series of field trips for students to learn about local non-profits engaged in solar, coastal restoration, and urban reforestation. Students then led a mock-resilience planning activity for their middle school campus.

These activities engaged students to a wide range of jobs in resilience, such as engineers, grant writers, and project managers. Before our field trips, when

asked about careers in clean energy and resilience, only 6% were interested in working in these areas. After our field trips, 52% of students were interested in a career in clean energy or resilience. This is an 800% increase.

Now, we have a small after-school team of 7th graders planning a resilience project for their future high school campus. They will also travel to the pitch competition and gain valuable experience and leadership skills through the project.

We are also thrilled to welcome **Mrs. Kristen Bowens**, 7th Grade Science teacher at Morris Jeff Community School to our project team, along with a small cohort of students: **Rhys, Sam, Evangeline, Isaiah, Emery,** 

Our project also has the partnership with local non-profits: Glass Half Full, Feed The Second Line, SOUL, Lower 9th Ward Center for Sustainable Engagement and Development

#### **Community Description:**

Lu, Lillie, and Ramona

New Orleans is a beautiful city in South Louisiana. We are also a community on the front line of climate change, and have unfortunately experienced many challenges throughout our city's history. Most recently, in August 2021, we experienced Hurricane Ida, a category 4 hurricane that devastated smaller communities in South Louisiana and knocked out power to the entire city of New Orleans for 10 days. This experience has led various community groups and non-profits to work towards greater resilience. We understand we will face future hurricanes and heat waves. We also face coastal restoration issues and a lack of tree canopy, issues that will impact all community members.

Our project is centered in the Upper 9th Ward of New Orleans, an area that is considered disadvantaged by the EPA and J40. We are thrilled to continue to partner with local non-profits and schools to advance climate, resilience, and help inspire our community.