Communities Lead in Building a Sustainable Future

Leveraging Policy, Partnerships, and Innovation to Drive Equitable Community-Based Clean Energy Solutions in the Pacific Northwest and Beyond



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A NOTE FROM AINA

The world is at a critical juncture in the fight against climate change. The passage of the federal Inflation Reduction Act (IRA), Washington's Climate Commitment Act (CCA), and the creation of the Greenhouse Gas Reduction Fund (GGRF) have opened up unprecedented opportunities for communities to deploy clean energy solutions and reduce greenhouse gas emissions. These policies provide much-needed financial resources and incentives for communities to invest in clean energy infrastructure, energy efficiency upgrades, and other climate mitigation measures.

The IRA, signed into law in August 2022, includes \$369 billion in investments in clean energy and climate action, making it the largest climate investment in U.S. history. The CCA, passed in Washington state in 2021, established a cap-and-invest program to reduce greenhouse gas emissions and generate revenue for clean energy investments. The GGRF, created through the IRA, provides \$27 billion in funding for clean energy and climate projects in low-income and disadvantaged communities. In Washington state alone, the Department of Commerce will deploy \$72.6 million for 71 clean-energy projects in communities across the state.¹

These policies are a game-changer for communities in the Pacific Northwest and beyond. They provide the resources and support needed to accelerate the transition to a clean energy economy and build resilience against the impacts of climate change.

However, deploying clean energy solutions at the community level is not without its challenges. It requires strong partnerships, community engagement, and innovative approaches to overcome barriers and ensure equitable access to the benefits of clean energy.

In this white paper, we will explore the trends in community

INTRODUCTION

deployment of clean energy solutions in the Pacific Northwest, highlighting successful case studies and promising practices from other regions. We will also examine the barriers preventing more community projects and discuss how an organization like VertueLab can support the development and implementation of effective community-based clean energy solutions.

Our hope is that this paper will serve two main purposes. First, it aims to help organizations deploying projects in partnership with communities in a variety of ways. These organizations can gain an understanding of best practices, learn about pitfalls to avoid, and discover resources available to support their work. Second, we want to encourage more funders to support the deployment of clean energy solutions in frontline communities. By reading about successful deployments and understanding the barriers presented in this report, funders will be better equipped to act as collaborative partners. This increased support and collaboration is crucial for the continued success of clean energy initiatives in these communities.

Aina Abiodun President & Executive Director VertueLab





Sustainable Northwest staff visiting with rural energy leaders in Grant County.

OVERALL TRENDS IN COMMUNITY DEPLOYMENT OF CLEAN ENERGY SOLUTIONS

The deployment of clean energy solutions at the community level is on the rise in the Pacific Northwest and beyond. Communities are increasingly recognizing the economic, environmental, and social benefits of investing in clean energy infrastructure from both a mitigation and an adaptation perspective, and are taking action to implement projects² that reduce greenhouse gas emissions, create jobs, and improve quality of life.

THE GROWING FOCUS ON COMMUNITY-DRIVEN CLEAN ENERGY PROJECTS

Rather than relying solely on top-down approaches, communities are taking the lead in identifying their energy needs and priorities and developing projects that meet those needs. This approach ensures that clean energy projects are tailored to the unique circumstances and goals of each community, and that the benefits of clean energy are shared equitably.

THE INCREASING USE OF INNOVATIVE FINANCING MECHANISMS TO SUPPORT COMMUNITY CLEAN ENERGY PROJECTS

Traditional financing options like loans and grants are still the norm for communities funding their deployment, but without the support of intermediary groups to help navigate the process, these communities can experience challenges. In addition to these traditional sources, new financing models are being developed and implemented across the region to make it easier for communities to invest in clean energy projects and reap the benefits over time. Examples include community solar projects³ that share resources and the benefits of outputs, including the Decatur Island Community Solar Project and the Thurgood Marshall Community Solar Project, which retrofitted an Olympia-area middle school with solar arrays; as well as energy service contracts, which are agreements between a building owner or facility manager and an energy service company to develop energy efficiency improvements and upgrades to the building or facility, with the cost savings generated from these improvements being used to pay for the project over a specified period.

THE GROWING RECOGNITION OF THE IMPORTANCE OF WORKFORCE DEVELOPMENT IN THE CLEAN ENERGY TRANSITION

As communities deploy clean energy solutions, there is a growing need for skilled workers to design, install, and maintain clean energy infrastructure. Many communities are investing in workforce development programs to train local residents for clean energy jobs, creating economic opportunities and ensuring that the benefits of the clean energy transition are shared widely and equitably. It is crucial that these workforce development initiatives prioritize equity and a just transition, focusing on communities that have been historically underserved or disproportionately impacted by the fossil fuel economy. By providing accessible training, supporting diverse hiring practices, and partnering with community-based organizations, clean energy workforce development programs can help ensure that the economic benefits of the clean energy transition are distributed fairly and contribute to building a more inclusive and resilient economy.



Attendees and panelists mingle at Badass Women Entrepreneurs 2023.

CASE STUDIES: PROMISING PRACTICES FROM REGIONAL DEPLOYMENTS

What it takes to make clean energy work in rural Oregon

PROBLEM

Rural communities in eastern Oregon faced **high energy costs** and **limited access to clean energy options**, hindering economic development and community resilience. Energy prices fluctuated significantly depending on the utility, and many households in rural Oregon spent more than **6% of their income** on energy, representing a high energy burden. The inefficiency of the housing stock contributed to this problem. Communities also sought energy resilience solutions to address their specific needs.

SOLUTION

Sustainable Northwest's "Making Energy Work for Rural Oregon" project collaborated with rural communities to develop clean energy projects tailored to their unique needs and priorities. The project offered technical assistance, capacity building, and financing support to help communities identify and implement clean energy solutions. They secured \$50,000 for every county in Oregon to conduct resilience plans, which are now integrated into the Oregon Department of Energy.

IMPACT

The project assisted rural communities in eastern Oregon in deploying various clean energy projects, including solar-powered water pumping systems for irrigators, energy efficiency upgrades for small businesses, and community solar projects. These initiatives reduced energy costs, created local jobs, and enhanced community resilience. The program engaged 400 people from several dozen communities to address issues related to pre-development, capacity building, and funding. The project recognized the need for pre-development funds to determine community needs, as most available funding was allocated for project construction.

SUCCESS FACTORS

- Prioritize community needs and plans over grant-chasing, aligning projects with local priorities.
- Build strong partnerships through extensive outreach with communities, utilities, and other stakeholders.
- Provide ongoing, tailored education and technical assistance to address community-specific needs.

- Facilitate information sharing and learning through newsletters, events, and annual symposiums.
- Bridge communication between communities (especially rural and tribal) and policymakers.
- 6. Utilize innovative financing mechanisms, such as energy service contracts and community solar. *(cont.)*

CASE STUDIES | PROMISING PRACTICES FROM REGIONAL DEPLOYMENTS

- 7. Balance policy work with education and technical assistance, establishing representative policy committees.
- Leverage networks to identify partners for funding opportunities and create project pipelines.
- 9. Participate in national competitions to showcase work and learn from others.
- Continuously expand the network by reaching out to new communities and inviting them to join for shared learning.

There is funding available for the deployment of clean energy projects, but there is a lack of resources for building the capacity within communities to properly plan and apply for these funds. When the Inflation Reduction Act (IRA) was announced, it became clear that there would be significant gaps in getting the funds to the communities that needed them most. This is where our work focuses on building the capacity within communities to access these funds and ensure that the deployment of the resources aligns with their carefully considered needs."

> Bridget Callahan, Clean Energy Program Director, Sustainable Northwest

> > 8

CASE STUDIES | PROMISING PRACTICES FROM REGIONAL DEPLOYMENTS

Just transitions: supporting the clean energy workforce of tomorrow

PROBLEM

Low-income and frontline communities, particularly **women and BIPOC individuals**, face significant barriers to accessing clean energy jobs, opportunities, and the economic benefits of the clean energy transition. These communities are often most impacted by climate change, yet **underrepresented in the high-paying trades** critical to addressing it, such as electricity, HVAC, and internal air quality. While some support exists to introduce people to these trades, there's a **lack of ongoing assistance** for training, business ownership, and wealth creation in the sector.

SOLUTION

The Emerald Cities Collaborative's E-Contractor Academy addresses this gap by providing a comprehensive 6-7 week training program for underrepresented populations. The program offers business skills development, insights into clean energy opportunities, and navigation strategies for the industry. It also includes networking assistance and ongoing support. The E-Contractor Network, composed of program alumni, provides continuous capacity-building experiences and networking opportunities. The initiative aims to create a diverse workforce and contracting base capable of meeting varied community needs and serving as visible role models.

IMPACT

Since 2019, the E-Contractor Academy has trained over 50 individuals from low-income and disadvantaged communities in the Pacific Northwest. Graduates have worked on significant clean energy projects and the program has successfully created economic opportunities and diversified the clean energy workforce in the region.

SUCCESS FACTORS

- The program maintains a strong focus on underrepresented populations and communities, ensuring that those most affected by climate change have access to clean energy job and ownership opportunities.
- Comprehensive training and support are provided, including networking assistance and ongoing mentorship, which helps participants navigate the industry long-term.
- Strong partnerships have been established with government, unions, and other contractor and small business development organizations, creating a robust network for entrepreneurial advancement.
- 4. The curriculum includes connections to work opportunities, information on how to integrate rebates and incentives into your business offerings, and entrepreneur spotlights, allowing participants to gain practical experience. (cont.)

CASE STUDIES | PROMISING PRACTICES FROM REGIONAL DEPLOYMENTS

- 5. The Academy consistently provides timely and relevant information, bringing in speakers who address the specific needs and interests of the cohort.
 - Continuous engagement with alumni ensures that support extends beyond the initial training, adapting to changing needs as graduates progress in their careers.
 - Grants are offered to network members, providing financial support for expansion into the clean energy sector.

- 8. The program prioritizes curated connections, information, and resources to support diverse business owners in their growth goals.
- 9. Emerald Cities Collaborative serves as a hub, connecting graduates to technical training programs, contracting assistance, and resources, further expanding their opportunities in the clean energy sector.

CASE STUDIES | PROMISING PRACTICES FROM REGIONAL DEPLOYMENTS

Tulalip Tribes: pioneering holistic climate adaptation for cultural and environmental resilience

PROBLEM

The Tulalip Tribes are the successors in interest to the **Snohomish**, **Snoqualmie**, **Skykomish**, **and allied tribes and bands** who signed the Treaty of Point Elliot and moved to the Tulalip Reservation. They are located in Western Washington State, and face increasing threats from climate change impacts, including **sea level rise**, **changing precipitation patterns**, **increased fire risks**, and **impacts on important plant and animal species**. These changes threaten their **lands**, **resources**, **cultural practices**, **and way of life**.

SOLUTION

In 2015, the Tulalip Board of Directors adopted a policy to create a comprehensive climate adaptation strategy. This strategy aims to maintain the health and well-being of Tulalip people and culture in the face of the adverse effects of climate change. The Tribes developed a multifaceted approach that combines programmatic and geographic strategies, incorporating both traditional ecological knowledge and modern climate science. They formed a core team of staff from various departments to develop the strategy, identifying specific areas of tribal life affected by climate change. The approach focuses on developing targeted strategies for both programs and geographic areas, engaging the community in the planning process, and incorporating ongoing adaptation into daily tribal activities and governance.

IMPACT

The Tulalip Tribes have made significant progress in their climate adaptation efforts. They have developed a climate adaptation strategy for Tulalip Health Services and updated their Hazard Mitigation Plan to consider climate change impacts on each hazard. The tribes have also initiated a climate and food sovereignty plan and conducted studies on coastal erosion and sea level rise, leading to a Coastal Managed Retreat Plan. Additionally, they have assessed climate change impacts on key plant species important to tribal citizens and partnered with the EPA and University of Washington to model wetland distribution, forest structure, and water movement in the Snohomish Watershed. These efforts demonstrate a comprehensive approach to addressing climate change impacts across various aspects of tribal life and governance.

SUCCESS FACTORS

The plan addresses multiple sectors including health, hazard mitigation, food sovereignty, energy security, and natural resource management. Rather than creating separate initiatives, the tribes are incorporating climate adaptation into ongoing tribal activities and governance.

(cont.)

CASE STUDIES | PROMISING PRACTICES FROM REGIONAL DEPLOYMENTS

- The plan includes a combination of programmatic and geographic strategies. This allows for targeted approaches to specific issues and areas.
- It employs a long-term perspective and develops tools and models to understand and plan for changes over the next century.
- 5 Collaborations with external organizations like the EPA, University of Washington, and United States Geological Survey enhance the tribe's capacity for research and planning.
- The tribes recognize that climate adaptation is an ongoing process that requires continuous adjustment and learning.

- The plan emphasizes protecting culturally important plant and animal species, as well as traditional lifeways.
- Included studies on microgrids and solar energy production demonstrate a commitment to sustainable and resilient energy systems.
- The tribes' 2015 policy decision demonstrates foresight and proactive leadership in addressing climate change.
- 10 The tribes consider how climate change affects all aspects of tribal life, from health and economy to natural and cultural resources.

Ensuring a just and inclusive Future: workforce development In the clean energy transition



The clean energy transition presents both challenges and opportunities for workforce development, particularly in ensuring a just transition that includes historically excluded populations. In both the primary source interviews and the desk research we did for this report, workforce development came up again and again as a crucial component of the clean energy transition. As the energy sector evolves rapidly to meet climate goals, there is a growing need for a skilled workforce that can adapt to new technologies and changing industry demands.

KEY CHALLENGES

- There are currently chronic skilled labor shortages in critical occupations related to clean energy home installations including electricians, HVAC technicians, solar panel installers, energy auditors, and energy efficiency specialists. There's also a growing need for professionals skilled in smart home technology integration and battery storage system installation.
- **Despite efforts to increase diversity**, there remains a significant demographic imbalance, with the sector remaining predominantly white and male.
- A generational shift is underway, with older workers retiring and taking valuable experience with them, ushering in younger workers with different priorities and skills into the workforce.
- **Rapid upskilling and reskilling** is needed to keep pace with technological advancements in clean energy.

OPPORTUNITIES FOR INCLUSIVE WORKFORCE DEVELOPMENT

 Targeted training programs: Develop and expand programs like the Renewable Energy Vehicle and Infrastructure Technician (REVIT) training, which introduces high school students to renewable energy careers, creating early pathways into the industry.

Partnerships with educational institutions:



Students in the REVIT training program at Centralia High School

- Strengthen collaborations between industries, community colleges, and universities to create relevant curricula and provide hands-on experience through internships and apprenticeships.
- **Diversity and inclusion initiatives:** Implement focused recruitment and retention strategies to increase participation of women, people of color, and other underrepresented groups in the clean energy workforce.
- **Career awareness campaigns:** Enhance outreach efforts, particularly to grades 6-12, to build awareness of clean energy careers and opportunities.
- **Skill bridge programs:** Create transitional programs that help bridge the gap between high school education and entry-level positions in the industry.
- **Soft skills development:** Incorporate essential skills training, including communication, teamwork, and problem-solving, into technical education programs.



A 2-day rural energy summit in 2024 in Lake County facilitated by Sustainable Northwest and Lake County Resources Initiative.

SUCCESSFUL IMPLEMENTATION STRATEGIES

- **Sector partnerships:** Strengthen collaborations between industry, educational institutions, and community organizations to align training with industry needs and provide support for underrepresented groups.
- Flexible learning pathways: Offer a mix of short-term training programs and longer-term education options to accommodate diverse learning needs and career goals.
- **Continuous adaptation:** Regularly update training programs to keep pace with technological advancements and changing industry requirements.
- **Mentorship programs:** Establish mentoring initiatives to facilitate knowledge transfer from experienced workers to newcomers in the field.

By focusing on these strategies, the clean energy sector can work towards a more diverse, skilled, and adaptable workforce, ensuring that the benefits of the clean energy transition are shared equitably across communities.

ADDITIONAL BARRIERS FOR COMMUNITY-BASED PROJECT DEVELOPERS

Despite the growing momentum around community-based clean energy projects, there are still significant barriers that prevent many communities from accessing the benefits of clean energy. Some of the key barriers include:

LIMITED ACCESS TO FINANCING

Many individuals in lower-income communities face challenges in accessing affordable financing for clean energy projects due to a lack of financial assets and extensive credit history. Traditional financing options, such as loans and grants, can be difficult to obtain, while newer financing models like those offered through green banks⁴, are not yet widely available.

LACK OF TECHNICAL CAPACITY

Developing and implementing clean energy projects requires specialized technical expertise, which many communities may lack. This can make it difficult for communities to identify and evaluate clean energy options, navigate permitting and interconnection requirements, and manage projects over the long term.

REGULATORY AND POLICY BARRIERS

Complex and often outdated regulatory and policy frameworks can create barriers to clean energy deployment at the community level. For example, interconnection requirements and net metering policies can make it difficult for communities to install solar or other distributed energy resources, while zoning and permitting requirements can add time and cost to projects.

LIMITED COMMUNITY ENGAGEMENT AND OWNERSHIP

Many clean energy projects are developed without meaningful community engagement or ownership, which can lead to a lack of trust and support from local residents. Projects that are imposed on communities from the outside, or that fail to share the benefits of clean energy equitably, can face significant opposition and delays.

INEQUITABLE ACCESS AND BENEFITS

Low-income and disadvantaged communities often face disproportionate barriers to accessing clean energy technologies and the economic benefits of the clean energy transition. These communities may lack the resources, capacity, or political power to advocate for and benefit from clean energy projects, leading to a widening clean energy divide.

OVERCOMING HISTORICAL INEQUITIES: BUILDING TRUST FOR CLEAN ENERGY PARTNERSHIPS IN TRIBAL AND RURAL COMMUNITIES

A lack of meaningful historical investment and increased political polarization create challenges for some rural communities to engage with the government in good faith. Additionally, some new clean energy technologies present high upfront costs, which can be a barrier to participation for some rural communities.

Organizations such as the v highlight the significant gap in research addressing the specific decarbonization needs of rural and tribal communities. They emphasize the importance of Community Defined De-Carbonization⁵, which considers the histories of displacement and inequality. This approach also focuses on investing in infrastructure that generates local economic benefits while preserving traditional lands for future generations.





Ribbon cutting in Hood River celebrating solar on a critical health facility. One of 4 projects the Making Energy Work team supported as part of a U.S. DOE challenge, winning the national Best Nonprofit Project prize.

(left)

OPPORTUNITIES & SUCCESS STORIES

FURTHER OPPORTUNITIES FOR IMPACT

While the barriers to expanding communityled clean energy projects are significant, they are not insurmountable. Recognizing these challenges is the first step toward developing effective solutions. As we shift our focus to opportunities for impact, it becomes clear that there are numerous avenues for support and development that are available for communities. Government programs, innovative funding mechanisms, and capacity-building initiatives are emerging as powerful tools to empower communities, especially those that are rural, tribal, or disadvantaged, to take charge of their own clean energy futures.

These opportunities not only address the barriers we've discussed, but also pave the way for a more equitable and sustainable clean energy future. By leveraging these resources and support systems, communities can overcome obstacles and become active participants in the clean energy transition, creating lasting positive impacts for their residents and the environment.

Ensuring that more PNW-based organizations access funding from the Greenhouse Gas Reduction Fund (GGRF)⁶

The Greenhouse Gas Reduction Fund (GGRF) has offered several opportunities for deploying capital to address climate change through investments that prioritize low-income and disadvantaged communities. To date, a variety of PNW-based organizations have applied and been awarded funding from various GGRF programs, and we see a great opportunity to work collaboratively across the region to identify more ways to scale programs using these funds.

⁶ https://www.epa.gov/greenhouse-gas-reduction-fund

Some past and current GGRF programs:

National Clean Investment Fund:

This initiative provides substantial grants to national nonprofit clean financing institutions⁷ which, in turn, support a variety of clean technology projects across the United States, including potential projects in the Pacific Northwest.

Who qualifies:

National nonprofit clean financing institutions

How to learn more and take advantage of the opportunity:

While the initial application period has closed, interested organizations should review the NCIF awardees page⁸ to see if there are opportunities to partner with awarded institutions.

Clean Communities Investment Accelerator:

This program focuses on supporting community lenders in low-income and disadvantaged communities to deploy clean technology projects⁹. Although applications to participate closed in October 2023, it emphasized building the capacity of these lenders to finance long-term clean technology projects effectively.

Who qualifies:

Community lenders serving low-income and disadvantaged communities.

How to learn more and take advantage of the opportunity:

While the initial application period has closed, interested organizations should review the CCIA awardees page¹⁰, which includes four Community Development Finance Institutions (CDFIs) and one not-for-profit, which may be open for partnership to help reach their deployment goals.

Solar for All:11

This competition aimed to increase solar energy deployment in low-income and disadvantaged communities, which could include various localities within the Pacific Northwest. The program supports the creation and expansion of low-income solar programs, providing financial and technical assistance to enable communities to benefit from residential solar power.

Who qualifies:

States, territories, Tribal governments, municipalities, and eligible nonprofit organizations.

How to learn more and take advantage of the opportunity:

Interested entities should monitor the DOE website for future funding opportunities and review the state-specific pages for Washington¹² and Oregon's¹³ Solar for All implementations to see if there are ways to get involved.

⁷ https://www.epa.gov/newsreleases/biden-harris-administration-announces-20-billion-grants-mobilize-private- capital-and

^{*} https://www.epa.gov/greenhouse-gas-reduction-fund/national-clean-investment-fund

⁹ https://energycommunities.gov/funding-opportunity/clean-communities-investment-accelerator-ccia/

Each of these programs is designed to leverage private capital, increase access to clean energy technologies, and support economic development, while simultaneously addressing environmental justice. The focus on low-income and disadvantaged communities ensures that the benefits of these investments are distributed equitably, helping those who are typically most affected by climate change.

Empowering communities through Thriving Communities Technical Assistance Centers (TCTAC)

The TCTAC¹⁴ program is a nationwide initiative funded by the EPA and DOE to provide support to underserved communities in accessing federal funding for environmental and energy justice projects. The program has established a network of 16 centers across the country, including two serving the PNW region, which offer free technical assistance, training, and capacity-building support to community organizations, tribal governments, and other stakeholders. Services include help with grant applications, project development, community engagement, and navigating federal systems. This program can significantly benefit communities and organizations working to deploy clean energy technologies, especially in rural, tribal, and underrepresented areas. The centers can provide crucial support in identifying funding opportunities, writing stronger grant proposals, and managing grant funding for clean energy projects. They also offer assistance with project scoping, feasibility studies, and navigating regulatory requirements. The program aims to build local capacity and foster partnerships, which can help communities and organizations develop more sustainable and impactful clean energy initiatives.

Washington's HEAL Act: advancing environmental justice by funding capacity building and community involvement

The Healthy Environment for All (HEAL) Act in Washington State represents another approach to addressing environmental justice and empowering historically excluded communities. As the state works to implement climate solutions and reduce environmental health disparities, there is a growing need for meaningful community involvement and increased agency responsiveness to community needs¹⁵.

¹⁰ https://www.epa.gov/greenhouse-gas-reduction-fund/clean-communities-investment-accelerator

¹¹ https://www.epa.gov/greenhouse-gas-reduction-fund/solar-all

 ¹² https://www.commerce.wa.gov/growing-the-economy/energy/infrastructure-investment-and-jobs-act/solar-for-all/ #:~:text=Washington%20awarded%20%24156%20million%20Solar,accessible%20to%20income%2Dqualified%
22
20Washingtonians.

HEAL-ENABLED OPPORTUNITIES FOR INCLUSIVE ENVIRONMENTAL JUSTICE IMPLEMENTATION

- Community engagement plans: Developing comprehensive, agency-specific plans that outline clear strategies for meaningful community involvement.
- Environmental justice assessments: Implementing robust assessments for significant agency actions, ensuring community input throughout the process.
- Environmental health disparities map¹⁶: Utilizing and continually improving a tool to identify and prioritize overburdened communities.
- Implementation plans: Creating agency-specific plans that go beyond compliance to address how environmental justice principles will be applied to all activities.



Example of environmental health disparities map of Washington.t

¹³ https://www.oregon.gov/energy/Incentives/Pages/Solar-for-All.aspx

¹⁴ https://www.epa.gov/environmentaljustice/environmental-justice-thriving-communities-technical-assistance -centers#Overview%20of%20the%20EJ%20TCTACs

¹⁵ https://frontandcentered.org/heal-act/

¹⁶ https://fortress.wa.gov/doh/wtnibl/WTNIBL/

SUCCESSFUL IMPLEMENTATION STRATEGIES:

- Co-governance structures: Establishing clear pathways for community voice in decision-making processes beyond the Environmental Justice Council.
- Community assemblies: Supporting the development of community-led assemblies to provide autonomous spaces for communities to articulate their needs and concerns.
- Interagency coordination: Strengthening the Interagency Work Group with clear leadership and technical support to ensure consistent implementation across agencies.
- Community-driven data: Incorporating community-owned data and lived experiences into environmental justice assessments and decision-making processes.
- Expanded agency participation: Including additional relevant agencies, such as the Department of Labor and Industries, to address environmental justice comprehensively.

The HEAL Act¹⁷ presents a unique opportunity to create lasting, transformative change in Washington State's approach to environmental justice. However, realizing its full potential will require dedicated effort from agencies, community organizations, and policymakers. By focusing on these strategies and centering the voices of overburdened communities, Washington can work towards a more equitable and just environmental future for all its residents.

17 https://doh.wa.gov/sites/default/files/2024-07/HEALCommunityCapacityGrants.pdf



PROMISING PRACTICES FROM THE REGION AND BEYOND

While many communities in the Pacific Northwest have made strides in their deployment of clean energy technologies, there are also promising practices and models from other regions that could be applied or adapted to support more projects in the region. Some examples include:

AN EMERGENCE OF COMMUNITY -CENTERED PROJECT DEVELOPERS:

Organizations like v, Solar Holler, and Blacks in Green are pioneering new approaches to clean energy development that prioritize local economic benefits and community empowerment. These project developers combine technical expertise with cultural understanding to create clean energy projects that not only reduce emissions, but also address historical inequities, support economic revitalization in underserved areas, and ensure that the benefits of the green economy reach communities that have been traditionally left behind.

COMMUNITY CHOICE AGGREGATION (CCA):

CCA programs, which allow communities to aggregate their energy demand and procure clean energy on behalf of residents and businesses, have been successful in California and other states in driving clean energy deployment and providing local control over energy decisions.

Photo courtesy of https://www.blacksingreens.org

GREEN BANKS AND LOAN FUNDS:

States and cities across the country are establishing green banks and loan funds to provide low-cost financing for clean energy projects, particularly in underserved communities. For example, the Connecticut Green Bank has leveraged public and private funds to support over \$1 billion in clean energy investment, while the New York City Energy Efficiency Corporation has provided over \$100 million in loans for energy efficiency and clean energy projects in the city.

DIRECT PAY OPTION EMPOWERS NONPROFITS TO INVEST IN CLEAN ENERGY:

The Inflation Reduction Act's direct pay option allows tax-exempt entities like nonprofits to receive direct payments from the IRS for clean energy investments, equivalent to the tax credits available to for-profit companies. This game-changing policy enables organizations such as churches, schools, and community centers to install solar panels and other clean energy technologies, reducing their energy costs and advancing their missions while contributing to climate mitigation efforts.

MUNICIPAL GRANTS SUPPORTING JUST TRANSITION:

Municipal grants are a tool for supporting clean energy projects that provide tangible benefits to local communities, such as job training, local hiring, and community ownership. For example, the Portland Clean Energy Fund, which was created through a ballot measure in 2018, requires that at least 50% of the revenue generated by the fund be invested in projects that benefit low-income communities and communities of color.

COLLABORATIVE PROCUREMENT AND BULK PURCHASING:

Collaborative procurement and bulk purchasing programs can help communities access clean energy technologies at lower costs and with greater economies of scale. For example, the Solar Energy Industries Association (SEIA) has developed a collaborative procurement program for community solar projects, which has helped to drive down costs and increase deployment in several states.



ENERGY EQUITY METRICS AND TOOLS:

Several organizations and agencies have developed energy equity metrics and tools to help communities evaluate and prioritize clean energy projects based on their impact on underserved and disadvantaged populations. For example, the California Energy Commission has developed an Energy Equity Indicators tool that maps clean energy access and benefits across the state, while the National Renewable Energy Laboratory (NREL) has developed a Low-Income Energy Affordability Data (LEAD) tool to help identify and target energy assistance program.



THE COMMUNITY-DRIVEN CLIMATE RESILIENCE PLANNING FRAMEWORK

The Community-Driven Climate Resilience Planning framework¹⁸, developed by the National Association of Climate Resilience Planners, offers a comprehensive approach to ensure that community benefits are centered in the development and implementation of climate resilience plans. This framework addresses common oversights in traditional planning models, where the voices of those most impacted are often sidelined or delayed. As the framework states, "Community-driven planning processes increase the flow of critical data from communities to decision-makers, while cultivating human capacities essential to putting solutions into action."

The approach emphasizes seven essential components:

- 1. Co-development of the planning model
- 2. Power building
- 3. Visioning
- 4. Problem definition
- 5. Assessing community vulnerability and assets
- 6. Solutions development
- 7. Interventions to keep public planning processes on track.



Key elements encompass engaging a diverse coalition of stakeholders from the outset, prioritizing community leadership and capacity building, conducting participatory vulnerability assessments, developing comprehensive solutions that address root causes, and creating mechanisms to influence and monitor public planning processes.

Central to this framework is the focus on building community power and leadership throughout the planning process. It emphasizes early and consistent community engagement, fair compensation for community partners' time and expertise, and the development of local expertise and infrastructure to implement solutions. The framework encourages the creation of multi-stakeholder partnerships and regional resilience teams to ensure comprehensive approaches to climate resilience. By integrating community voices and leadership at every stage, from visioning to implementation, this model helps ensure that climate resilience plans and solutions are aligned with community needs and priorities, leading to more equitable and sustainable outcomes. The framework also highlights emerging opportunities in several areas, including narrative change, building new economic models, deepening democracy, and activating ecological and cultural wisdom to further support long-term community resilience. This approach not only improves the quality and relevance of climate resilience plans but also builds the capacity within communities to implement and sustain these solutions over time.

THE GREENLINING INSTITUTE'S "GREENLINING THE BLOCK" INITIATIVE

The Greenlining Institute's "Greenlining the Block" (GTB) initiative is an innovative approach to ensure that climate resilience investments benefit communities of color and address long-standing inequities in infrastructure development. This program strengthens community-based organizations' capacity to advance climate justice neighborhood projects across several states, including California, Colorado, Illinois, North Carolina, and Michigan. The initiative aims to bridge the gap between community needs and new infrastructure funding opportunities, particularly those available through federal programs like Justice40, the Bipartisan Infrastructure Law, and the Inflation Reduction Act. By focusing on community-led solutions, Greenlining the Block addresses systemic barriers that often prevent infrastructure investments from adequately serving communities of color or, worse, exacerbate inequities and displacement.

Central to the Greenlining the Block approach is a focus on community transformation through four key components: community visioning and planning, project development and pre-development, support with grant application processes, and programs for community transformation. To support these components, GTB includes a Community of Practice for collective learning, one-on-one coaching and technical assistance, project proposal development support, and in-person learning opportunities. The initiative also seeks to provide substantial financial support, including over \$4.5 million in grant resources to build dedicated capacity within partner organizations, and a \$1 million

Climate Action and Racial Equity Fund for seed investments. This model aims to cultivate multi-stakeholder partnerships, advance community-led project visions and, ultimately, reverse decades of disinvestment and racist policies by empowering communities to lead their own climate resilience transformations.



SUPPORTS NEEDED

To accelerate the development and deployment of community-based clean energy solutions in the Pacific Northwest and beyond, a variety of organizations and stakeholders need to provide support and resources. Some key areas where support is needed include:

TECHNICAL ASSISTANCE AND CAPACITY BUILDING:

Communities and organizations seeking to develop and implement clean energy projects often need technical assistance and capacity-building support. This could include help with project scoping and feasibility studies, navigating regulatory and permitting requirements, and accessing financing and funding opportunities. Presently, the infrastructure in these communities is still evolving, leading to situations where investments often do not remain within their localities. By prioritizing investments in training programs, capacity-building initiatives, and infrastructure tailored to the specific needs of these areas, we can ensure that funds circulate within communities, promoting local economic growth and sustainability. This approach empowers communities to take control of their transition to a low-carbon economy, fostering resilience and self-reliance amid the challenges posed by climate change. Climate tech accelerators, nonprofits, universities, and government agencies could all play a role in providing this type of support..

PARTNERSHIPS AND COLLABORATIONS:

Fostering partnerships and collaboration among communities, utilities, government agencies, and other stakeholders is critical for the success of community-based clean energy projects. This could include convening working groups or forums to share best practices and lessons learned, or facilitating joint procurement or bulk purchasing programs. Organizations with convening power and expertise in stakeholder engagement, such as nonprofits, trade associations, and government agencies, could play a key role in facilitating these partnerships.

INNOVATIVE FINANCING MODELS:

Access to affordable financing is a major barrier to many community-based clean energy projects. Supporting the development and deployment of innovative financing models like green banks and energy service contracts, could help communities overcome this barrier. Financial institutions, investors, government agencies, and philanthropic organizations could all play a role in developing and scaling these financing models.

ENSURING ENERGY EQUITY AND JUSTICE:

Ensuring that the benefits of clean energy are shared equitably, particularly in low-income and disadvantaged communities, is a critical priority for the clean energy transition. Organizations working on energy equity and justice, including community-based organizations, advocacy groups, and research institutions, could play a key role in developing energy equity metrics and tools, supporting community-led project development, and advocating for policies and programs that prioritize energy equity and justice.

BEST PRACTICES AND SUCCESS STORIES:

Sharing best practices and success stories from community-based clean energy projects can help inspire and guide more communities to take action. A range of organizations, including climate tech accelerators, nonprofits, universities, and media outlets, could play a role in developing case studies and white papers, hosting webinars and workshops, and participating in regional and national forums and conferences to share lessons learned.

LEARNING COMMUNITIES AND COMMUNITIES OF PRACTICE:

Investing in learning communities and communities of practice is vital for those deploying community clean energy projects. These platforms could enable participants to learn from and support each other, fostering knowledge exchange and collaboration. By creating spaces for project developers, community leaders, and other stakeholders to share experiences and solutions, we can accelerate the adoption of best practices and innovative approaches. This collaborative ecosystem could not only enhance the effectiveness of individual projects, but also contribute to the overall growth and maturity of the community's clean energy sector.

In summary, supporting the deployment of community-based clean energy projects requires a collaborative effort from a range of organizations and stakeholders. By working together to provide technical assistance and capacity building, foster partnerships and collaboration, support innovative financing models, advance energy equity and justice, and share best practices and success stories, we can accelerate the transition to a clean energy future that benefits all communities.





CONCLUSION

The deployment of clean energy solutions at the community level is critical for achieving a just and equitable transition to a clean energy future. The Pacific Northwest is a leader in community-based clean energy deployment, with a growing number of successful projects and models that are driving economic, environmental, and social benefits.

However, there are still significant barriers to more community projects, including limited access to financing, lack of technical capacity, regulatory and policy barriers, limited community engagement and ownership, and inequitable access and benefits. Overcoming these barriers will require strong partnerships, innovative approaches, and a commitment to energy equity and justice.

Organizations like VertueLab are well-positioned to support community-based climate and energy tech implementation. By offering technical assistance, capacity building, fostering partnerships, supporting innovative financing models, promoting energy equity and justice, and sharing best practices and success stories, VertueLab and similar organizations can significantly accelerate the transition to a clean energy future that benefits all communities.