Microsoft



Environmental justice in renewable energy procurement

Lessons learned from Microsoft and Volt Energy Utility

October 2022

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Foreword

Microsoft has made commitments to environmental sustainability, diversity and inclusion, and racial equity. An important point of intersection for these is environmental justice, which is the process and outcome by which all individuals are equitably protected from environmental risk, and equitably empowered to participate in environmental decision-making processes. Those most affected by industrial pollution have usually contributed the least to its causes, and often face structural barriers to full participation in economic and governance systems. Environmental justice begins with acknowledging past and present harms to communities of color, low-income communities, and other communities on the front lines of the climate crisis. It redirects leadership, resources, and decision-making to the hands of these communities who are most impacted and previously excluded.

The environmental benefits of the clean energy transition are well-established; so too are the potential social impacts that are possible with a reimagined energy sector. To support environmental justice process and outcomes, Microsoft is in its third year of modeling an energy procurement approach that links achieving its own renewable energy commitments with the resourcing of community-led clean energy and resiliency projects.

Volt Energy Utility is a key partner to Microsoft in establishing new models for community impact in the United States through "equity PPAs" – power purchase agreements that go beyond bringing new renewable energy online to also create new opportunities for frontline communities by equitably distributing the benefits of the clean energy economy. As an African-American owned national utility-scale solar developer, Volt occupies a unique position in the energy sector. Prepared with over a decade of previous solar developer experience, Gilbert Campbell founded Volt Energy Utility in 2020. Volt Energy Utility develops utility-scale projects that definitively meet the clean energy, environmental, and diversity goals of its clients. Reflective of its commitment to advance environmental health and economic justice through clean energy development, Volt has established a separate entity, The Sharing the Power Foundation, to support environmental justice programs and organizations.

With hope and determination, we invite other renewable energy industry stakeholders to embrace the opportunity and responsibility to leverage renewable energy procurement towards meaningful social impact in our most impacted and under-resourced frontline communities.

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Imperatives for action

Highlights of the opportunity and need
1. **Corporates can lead in catalyzing a clean energy transition.** Corporate renewable energy commitments are spurring exponential growth in energy generation infrastructure development. This means companies have significant influence over the contours of the renewable energy sector and can set the stage for a justice-led reimagining of energy access, ownership, and control. **Jump to section >>>**
2. **Renewable energy procurement can provide much-needed resiliency and decarbonization funding for environmental justice communities.** Thoughtfully crafted power purchase agreement (PPA) contract and pricing structures can be leveraged to create a new source of funding for locally led clean energy and sustainability projects in frontline communities. **Jump to section >>>**
3. **New forms of partnership can connect environmental justice advocates with corporate sustainability efforts.** Large corporate renewable buyers can amplify the work already underway by energy democracy and environmental justice nonprofits by resourcing mutual partnership networks that use inclusive decision-making models. For these efforts to be successful, corporate representatives must commit to shifting power and decision-making to community leaders. **Jump to section >>>**
4. **Now is the time to diversify the ownership, workforce, and supply chain in the energy sector.** Beyond the pollution prevention benefits, the energy sector's transition away from fossil fuels and toward renewable sources presents a rare opportunity to diversify the sector's ownership, workforce, and supply chain. Corporate renewable energy buyers can drive this change by injecting supplier and workforce diversity requirements into renewable energy supply chains. **Jump to section >>>**

The following sections provide a deeper look at these learnings, including a specific call to action for each, reflecting the key steps we believe are required to help drive environmental justice outcomes.

1. Corporates can lead in catalyzing a clean energy transition

Microsoft is committed to building a more just and equitable sustainable future in the United States and around the world. The company has taken significant steps to address greenhouse gas emissions, announcing in in January 2020 a corporate-wide commitment to be carbon negative for scope 1, 2, and 3 emissions by 2030 (including scope 3 emissions[1] from suppliers). Furthermore, in 2021 the company announced that by 2030 Microsoft will have 100 percent of our electricity consumption, matched by zero carbon energy purchases 100 percent of the time, with co-benefits for under-resourced communities. These commitments will continue to spur exponential growth in corporate clean energy power purchase agreements[2] (PPAs).

Within the United States, the scale of corporate renewable energy procurement can contribute significantly to carbon reduction *and* an equitable clean energy transition. From 2016 to 2020, large corporates entered agreements to purchase power from 21.78 gigawatts of new wind and solar developments, which is estimated to result in over $16 billion in revenue over the agreements' lifetimes.[3] In 2021, recording-setting growth in corporate PPAs added 17 gigawatts of new generation to the country's development pipeline.

Developers commonly fund community initiatives near project site locations, but those projects are not always connected to community resiliency, decarbonization, or energy asset ownership. Based on efforts to engage Microsoft's renewable energy supply chain to reimagine community benefits towards driving positive environmental justice outcomes, 5 to 10 percent of that revenue can be directed toward community investments that further drive carbon reductions while

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1 Carbon emissions are classified into three categories known as "scopes." Scope 1 emissions are directly created by human activities (such as burning diesel for datacenter emergency generators). Scope 2 emissions are indirectly created by producing electricity. Scope 3 emissions are indirectly created by all other activities in which we're engaged, including those of our suppliers (but excluding those of our lease providers, which contribute to Scopes 1 and 2).

2 An overview of PPAs and other renewable energy procurement mechanisms can be found here: Renewable Energy Procurement - CEBA (cebuyers.org)

3 Based on data from REBA Deal Tracker, EIA average capacity factors, and LevelTen PPA Price Index; assumes minimum 12 year term length, 60/40 split between wind and solar technologies, and average dollar/megawatt-hour of $22 for wind and $28 for solar. Data accessed on September 10, 2020.

empowering the populations on the front lines of industrial pollution and climate change.

The approach described in this paper provides a way to direct resources to the community-led initiatives that are most impactful in remedying historical negative impacts of the fossil fuel industry.

CALL TO ACTION:

Engage in deep learning about environmental justice and embrace your role in driving a just transition.

2. Renewable energy procurement can provide much-needed resiliency and decarbonization funding for environmental justice communities.

Climate change and pollution impacts do not affect all Americans equally. Black Americans, on average, are exposed to 1.54 times more hazardous pollution than white Americans, regardless of income. Black Americans breathe 56 percent more pollution than they create, and all People of Color in the United States are more likely to live near highways, airports, refineries, and other sources of hazardous air pollutants. To help counteract this, corporate buyers can leverage their procurement processes to promote community investment mechanisms that (1) ensure that pollution-affected communities are involved in decision-making, and (2) promote equitable access to clean energy and the resources needed to protect communities from climate change impacts, such as modernized stormwater infrastructure, reliable clean electricity supply, and extreme-weather resistant built environments.

The financing and incentive programs traditionally available to households, community-serving organizations, and small businesses for energy efficiency and renewable energy access and are not sufficient to meet the needs of communities on the front lines of the climate crisis.[4] Advocacy organizations working to address acute needs in environmental justice

4 York, D., C. Cohn, D. Morales, and C. Tolentino. 2022. Building Decarbonization Solutions for the Affordable Housing Sector. Washington, DC: American Council for an Energy-Efficient Economy: https://www.aceee.org/sites/default/files/pdfs/u2204.pdf; Drehobl, A., and K. Tanabe. 2019. Extending the Benefits of Nonresidential Energy Efficiency to Low Income Communities. Washington, DC: American Council for an Energy-Efficient Economy: https://www.aceee.org/sites/default/files/publications/researchreports/u1910.pdf

communities are also under-resourced, with such organizations in the United States receiving only about 0.5 percent of all donations to environmental non-profits. Funding from corporate renewable energy procurement creates the potential to address these gaps and accelerate transformative models for justice-aligned decarbonization of the built environment and community renewables development in under-resourced communities.

Funding energy efficiency and renewable energy access in frontline communities would (1) help spur community-wide decarbonization, (2) empower under-resourced communities to benefit financially from the clean energy transition, and (3) reduce pollution burden.

CALL TO ACTION:

Incorporate environmental justice elements, such as a community fund rider, in renewable energy procurement to create co-benefits for under-resourced communities.

3. New forms of partnership can connect environmental justice advocates with corporate sustainability efforts

Large corporate renewable buyers like Microsoft can amplify the work already underway by energy democracy and environmental justice nonprofits by resourcing mutual partnership networks that use inclusive decision-making models.

To date, internal sustainability teams, large environmental nonprofits, and consultancies set corporate sustainability agendas. Such organizations typically lack racial and ethnic diversity and links to frontline environmental justice organizations. This contributes to a disconnect between corporate sustainability initiatives and the imperatives of well-established frontline environmental justice organizations.

One example is the global energy democracy movement, which strengthens democracy by merging the technological transition to renewable energy sources with decentralization of generation sources and local energy ownership. Within the United States, energy democracy advocates are gaining momentum in promoting enabling policy

instruments at state and local levels, such as Illinois' Climate and Equitable Jobs Act. However, so far there has been minimal coordination with the large corporate renewable buyers to catalyze the development of voluntary commitments, collaboration opportunities, mutual partnership networks, and inclusion models for corporate and institutional decision-making. In this paper we discuss the partnership between Microsoft and Volt, as well as Microsoft's collaboration with environmental justice networks like the Just Transition PowerForce.

CALL TO ACTION:

Go beyond preexisting relationships to engage in authentic community outreach and forge connections with environmental justice organizations.

4. Now is the time to diversify the ownership, workforce, and supply chain in the energy sector

Beyond the pollution prevention benefits, the energy sector's transition away from fossil fuels and toward renewable sources presents a rare opportunity to diversify the sector's ownership, workforce, and supply chain diversity. Women and Black Americans have long been underrepresented in the U.S. energy sector workforce (and business enterprises in particular). Without deliberate effort, this situation will likely persist in the renewable energy sector (according to the 2017 and 2020 U.S. Energy and Employment Reports, both wind and solar workforces have lower-than-average employment percentages in these categories). Further, the energy sector and its median pay are expanding at a faster pace than other areas of the economy. Clean energy job growth is outpacing fossil fuel job growth, which creates economic opportunities for historically underrepresented groups.

The significant wealth gap between white Americans and People of Color in the United States, which remains persistently wide (particularly for Black households), underscores the importance of high-quality employment and business ownership opportunities for under-resourced communities. The inequity contributes to health disparities, high poverty rates, higher pollution exposure, and greater climate impacts. Corporate renewable energy buyers can introduce supplier diversity criteria and catalyze

investment in incubator models that position diverse-owned[5] businesses to become valuable participants in the clean energy transition while counteracting the persistent forces that lead to higher unemployment and lower income for these populations.

The renewable energy industry is an influential and growing sector of the economy. A lack of diversity in the industry, especially at the leadership level, could set the stage for the development of energy infrastructure that continues to sideline under-resourced communities' needs. Diversifying the renewable energy sector is a step toward addressing fossil fuel pollution's unequal effects on Americans.

CALL TO ACTION:

Diversify networks, invest in workforce development, and create employment opportunities for historically under-employed or under-represented populations.

[5] Defined as small/emerging, BIPOC-owned, women-owned, veteran-owned, and other types of diverse businesses. BIPOC is defined as Black, Indigenous, and People of Color.

Paths to progress

Microsoft and Volt uncovered three key ingredients as we worked together to build a new model for incorporating environmental justice into renewable energy procurement. The first, "Build a case for equity in energy deals," covers making the case internally to proceed with a new approach to renewable energy procurement. The second, "Increase diversity in the industry," illustrates the importance of internal diversity and inclusion and approaches to contracting with diverse-led and emerging suppliers. The third, "fund community-led environmental justice projects," describes the opportunity for direct positive impact in under-resourced communities when approached intentionally. The Appendix includes contract language excerpted from the Microsoft-Volt equity PPA as a resource for other corporate renewable energy offtakers and developers entering PPAs.

Build a case for equity in energy deals

In 2020 many companies made statements about or commitments to addressing racial injustice in the United States, and adoption of corporate net-zero climate and sustainability targets has been on the rise. Renewable energy procurement presents a tangible opportunity to address the uneven impacts of pollution and climate change on marginalized communities due to systemic inequities. Corporate buyers can learn how to enable environmental justice outcomes meaningfully.

Creating the right partnership, such as that between Microsoft and Volt, is a foundational requirement for transactions to incorporate equity and justice in a thoughtful and impactful way. Action can start with one renewable energy agreement. Many established developers have a history of funding community projects via relationships with elected officials. While these can be important to local communities, moving the needle on environmental justice requires a new approach to deeper community engagement. Flexibility, collaboration, and trust are critical in forming an effective partnership, as is expanding the list of potential partners beyond established players (see "Increase diversity in the industry below").

Education and persuading key internal stakeholders on the need and opportunity to include environmental justice in renewable energy procurement can be accomplished by (1) connecting to the company's mission, (2) building on existing company efforts, and/or (3) supporting risk mitigation for the company.

(1) Microsoft's mission is "to empower ever person and every organization on the planet to achieve more." There is a direct line between our mission and our environmental justice efforts. Many company missions address serving customers, the greater good, or similar sentiments and thus environmental justice provides an opportunity to truly fulfill the mission.
(2) Existing company efforts to leverage may include environmental sustainability, philanthropy and social impact, supplier diversity, internal diversity and inclusion, or external efforts to address racial injustice.
(3) Companies face a wide range of risks that equity PPAs can mitigate, including falling short of renewable energy goals or reputation risks from community opposition to development projects. Corporate operations that consume energy and water and generate waste are points of concern for many communities, which may constrain operations. By helping alleviate environmental justice issues like high energy burden, companies prove themselves as good neighbors that bring value beyond short-term construction job creation.

For individual transactions, an effective approach for increasing impact is to include a community fund rider in the PPA where a specified amount of the project's revenue is dedicated to specific initiatives or organizations that advance environmental justice. While this may increase the overall cost of the deal, the increase can be balanced by adjusting terms and conditions in the PPA. A buyer could accept additional risks or uncertainties in a PPA that lower costs by decreasing required risk premiums of the seller and their financing parties. A larger company can balance overall costs and risks across a portfolio of projects. Buyers need to continue to make prudent decisions within their own risk appetite bounds, but with the proper education of decision makers as discussed above, societal benefits can be part of the positive valuation of a contract.

It's worth noting that sustainability and renewable energy procurement already disrupt many procurement processes and norms. By taking on some additional changes, it is possible to introduce holistic benefits to more stakeholders, prioritize those most negatively impacted by industrial pollution, and achieve multiple objectives. At Microsoft, we believe that companies who can do more, should do more. As more companies

innovate to integrate justice and equity into their initiatives, more renewable energy suppliers are likely to align, bringing transformative outcomes within reach.

Increase diversity in the industry

Any entity in the renewable energy industry should consider starting first with their own organization by creating an inclusive environment and hiring and promoting diverse candidates that have direct connections to environmental justice communities. Hiring pipelines often come through established networks with a small number of university and graduate programs and industry convenings. Companies and individuals need to intentionally expand their networks over time, so when full-time positions become available, they can draw upon these relationships.

Further committing to targeting and offering opportunities for diverse businesses to participate in utility-scale projects is also necessary. In both arenas, expanding the pool of diverse businesses can only be ensured through strengthening the pipeline of diverse workforce talent. Additionally, this talent needs to be placed in decision-making positions to truly drive transformation.

As a minority-owned solar developer, Volt understands firsthand the importance of diversity and equity in clean energy projects. While the broader clean and renewable sector has been working to improve African-American and Latinx representation in the industry, more avenues are needed for minority and small businesses to compete for work in supplying the professional services related to the clean energy transition, including engineering, procurement, construction management (EPC providers), project management, community outreach, financing, legal and more.

Engaging HBCUs

Historically Black Colleges and Universities (HBCUs) hold a vast reservoir of talent ready to diversify the clean energy sector. As a graduate of Howard University, Volt's CEO Gilbert Campbell is committed to nourishing and developing HBCU students and has helped Microsoft connect into relevant programs and initiatives. The Sharing the Power Foundation will further enable diverse talent to pursue opportunities in sustainability and clean energy by making significant investments into HBCU students with a

passion for environmental justice and clean energy. The foundation's signature programs include the Environmental Justice Ambassador Fellowship and Clean Energy Fellowship programs. These initiatives aim to create a pipeline of HBCU students into sustainability and clean energy careers by equipping them with the necessary skills, experience, and environmental justice knowledge to address environmental challenges. Importantly, the fellowship programs are designed to provide holistic support to students, including:

- A paid summer internship with a community-centered environmental justice non-profit;
- Weekly professional development workshops;
- Seminars on careers in sustainability;
- Networking opportunities with the nation's top environmental leaders from the private, public, and non-profit sectors; and
- Academic scholarships.

Following their internships, fellows become ambassadors on campus and in their communities by hosting engagement events to raise awareness of the variety of careers in sustainability, clean energy, and environmental justice.

Adjusting procurement norms

When taking a holistic approach to justice and equity, it is important to provide opportunities for diverse suppliers through the value chain. Microsoft committed to increasing its supplier diversity when it began engaging with Volt, and both parties approached the negotiations with a collaborative spirit. Volt brought its experience as a distributed solar company, and Microsoft team members brought their decades of large-scale procurement and energy market experience to the partnership. Microsoft's willingness to engage outside of the traditional clean energy request for proposal (RFP) process in substantive bi-lateral conversations with Volt was instrumental in both companies learning how best to forge an effective partnership. As a result, Volt was able to successfully launch into the utility-scale development space with the support and expertise provided by Microsoft's clean energy procurement team, an outcome that would not happen through a typical procurement process. Meanwhile, Microsoft benefits from Volt's legacy of strong advocacy for diversity, equity, inclusion, and justice in the clean energy industry, connecting Microsoft into a new ecosystem of prospective partners and talent.

The Microsoft-Volt agreement includes the following unique enabling aspects:

Project Delivery:

Pre-commercial operation date (COD) Buyer Termination Rights: Buyers often have unilateral termination rights for a seller's failure to achieve certain pre-COD milestones. These milestones could be restructured as conditions precedent to give the seller more time to mature renewable energy projects and flexibility for early-stage development at a more difficult site (e.g., promoting development in a specific area to serve an under-resourced community but the location makes permitting more complex).

- Seller can replace project(s) in the PPA up to a year ahead of commercial operation date (COD).
- Reduced risk of Buyer termination due to Seller failing to meet milestones pre-COD.
- Seller may bring projects online earlier than expected COD with advance notice to Buyer.
- Termination due to Force Majeure is extended to allow additional time to restore a project following an unforeseeable event beyond Seller's control.

Project Financing:

- Security: Development security amounts are below market to mitigate cost of carrying a letter of credit.
- Minority ownership is protected in the projects; however, assignment provisions are flexible to allow sellers the ability to recycle capital.
- Credit Support: flexibility on credit terms can help support projects in more difficult markets.

Project Performance:

- Delay Damages and Capacity Shortfall Damages: flexibility on damages terms pre-COD can be used to support new developers or developers entering more difficult markets.
- Qualified Operators: PPAs may include a seller covenant that requires the project to be operated by a "Qualified Operator" (or equivalent term). Often, a Qualified Operator is required to possess a certain number of years of experience operating a threshold megawatt amount of renewable energy projects. Accordingly, the number of years and overall megawatt threshold (and/or other qualification metrics) can be reduced to allow new operators an opportunity to participate in these projects.

Since the deal closed, Volt has been securing projects at a rate commensurate with the most experienced developers in the industry, showing how instrumental corporates can be in helping launch diverse enterprises. Executing a 250-megawatt solar PPA with Microsoft enabled Volt to secure new financing, project pipeline, development partners, and clients. As a direct result of the Microsoft/Volt agreement, many corporate buyers are now exploring ways to incorporate environmental and social justice into their renewable energy procurement strategies. Additionally, new contracting opportunities have been created for other diverse solar development firms to develop utility-scale projects.

In moving further up the value chain to solar project construction, it was important to both Microsoft and Volt to include contract terms that require a diverse workforce. This isn't new in the industry as there is an abundance of research on and programs to support diversity in installation jobs. The existing programs have gaps in providing a post-training pathway to high-quality employment and addressing management and professional job classes.

Utility-scale solar or wind projects typically occupy large land areas and therefore are usually sited in rural areas, while the electricity created by those projects is often meant to address consumption in urban or more densely populated areas. Jobs can be created for under-employed populations across these locations. Additionally, since installer jobs are temporary, it is important to increase diversity in longer-term operations and maintenance positions and the broad spectrum of development careers. These include wealth-building opportunities such as project management, finance and accounting, legal, managerial, and executive positions.

Supplier diversity programs have been embraced at large companies like Microsoft for years. It is important to take a proactive approach to enable smaller, emerging, and diverse-led businesses. This involves making adjustments that address barriers for these organizations to secure contracts with large companies, such as obtaining official certifications as a minority or women-owned businesses. To address supplier diversity throughout the value chain, it is important to collaborate with first-tier (also known as direct) suppliers and potentially take a more prescriptive approach or seek out potential subcontractors and "match-make" with the first-tier suppliers.

Volt is integrating into PPA agreements provisions that require best efforts to identify minority and small business opportunities to supply services to

the solar projects. These businesses are ideally situated in the areas in which the projects are located. Volt has mentored, hired, and served as a referral for minority businesses to provide services on renewable projects.

The Microsoft-Volt agreement prioritizes the following to drive diversity in the industry:

1. Creating **employment opportunities in under-resourced communities** or communities disproportionally impacted by pollution
2. Creating career pathways by **enabling job training / placement**
3. Catalyzing job creation for **women and minority leadership** through specific hiring requirements

Fund community-led environmental justice projects

Communities that have experienced environmental injustice also possess tremendous resilience and solutions that should be amplified. Corporates can play an important role in providing funding to community-serving organizations to implement these solutions. While project outcomes such as energy burden relief are important, it is paramount to follow a funding and implementation process that is just and equitable.

It can be tempting for companies with technical expertise in renewable project development to offer a packaged solution like rooftop solar to a community and expect immediate adoption and benefit. However, a more authentic and ultimately beneficial approach is to work through and fund existing organizations who are embedded in the community and have the capability to lead design of a solution that will prioritize community self-determination.

The timeline for authentically proceeding may be different from the quarterly and fiscal year rhythms of corporates. One phrase that has echoed throughout Microsoft's journey so far is "move at the speed of trust." We have been learning how to do this through a collaboration with the Just Transition PowerForce, an advisory committee of U.S.-based environmental and climate justice organizations that work to "align the climate commitments of corporates toward deep investments in the sustainability and climate resilience of frontline communities, enabling self-

determination, economic security, and restorative and transformative justice."[6]

One outcome of the Microsoft-Just Transition PowerForce collaboration is an Environmental Justice Measurement and Evaluation Framework that helps corporates understand environmental justice principles and guides the Microsoft efforts. The PowerForce has also connected us with a network of environmental justice experts across the United States and helped us understand what community leadership and ownership looks like.

The Environmental Justice Measurement and Evaluation Framework contains a list of prerequisite criteria that all projects need to meet to align with environmental justice.

Environmental Justice Project Prerequisites

- Provide direct benefits to under-resourced and historically marginalized populations
- Ensure that community perspectives and leaders are involved in planning and decision-making
- Compensate labor at a living wage
- Limit medium-sized or larger for-profit partners to businesses committed to a clean energy transition
- Deliver climate benefits
- Prevent displacement and disturbance of sensitive land if the project is related to development

The Environmental Justice Measurement and Evaluation Framework is based on the Portland Clean Energy Community Benefits Fund granting process and the Energy Democracy Flipbook, a project facilitated by the Emerald Cities Collaborative and a U.S. network of energy democracy practitioners. The framework was designed for several types of projects: (1) readiness projects, (2) small physical assets, and (3) large physical assets. Readiness projects could include workforce development and addressing operating expenses for organizations that are in earlier stages so that they can continue the community organizing work necessary for their community-led approach. The Framework includes guidance documents

[6] Source: Energy Democracy Advancing Equity in Clean Energy Solutions (emeraldcities.org)

that provide details and examples for users with an important opening message under the title "Intentions and criteria for evaluators."

In the context of the Volt-Microsoft PPA, the Framework will be used to guide the use of community funds. The PPA has a community fund rider directing a portion of project revenues to environmental justice projects and workforce development, including programs to increase diversity in the industry by providing training and pathways to hiring. The benefit of the ongoing stream of dollars generated by the rider is that it provides a steady source of funding substantial enough to enable communities to implement large physical assets projects over time that drive community health, wealth and resilience. Volt created a separate organization called the Sharing the Power Foundation, which has a BIPOC board and staff with decades of experience in environmental justice, environmental health, and economic justice. This foundation will administer their own programming, such as the Environmental Justice Ambassador Fellowship. They will also take the lead in disbursing the community funds generated by the PPA, leveraging the Framework. This governance structure is favorable to a buyer and seller making decisions about where the funds are directed, as it shifts power from corporates to community-led organizations.

The types of programs and initiatives that will receive funding from the Sharing the Power Foundation include:

- Operating funding for national and local environmental justice organizations and programs;
- Community clean energy projects in underserved rural and urban communities;
- Scholarships for Students of Color pursuing careers in sustainability and clean energy;
- Support for minority-owned small businesses in the renewable energy sector; and
- Remediation of environmental health concerns by reducing pollution and toxic metal exposure.

The Microsoft-Volt agreement prioritizes the following to drive positive environmental justice impacts:

1. Seller must be **carbon neutral** and maintain that status throughout the term
2. **Impact reporting** requirement following commercial operations
3. **Projects are located in under-resourced communities**, or communities disproportionally impacted by pollution
4. Seller uses best practices to avoid environmentally sensitive property, or **siting** on culturally and historically sensitive property
5. **Reducing harm** from poor air quality and minimizing environmental impacts
6. Clearly articulated **governance, goals, and objectives**
7. Buyer and Seller establish a **Community Investment and Development Agreement**, and a portion of the revenues associated with the PPA are allocated to finding the Community Investment and Development Agreement
8. Regardless of future changes in ownership, the **requirement to continue funding endures**

Looking ahead

Microsoft is pursuing renewable energy commitments with an environmental justice lens so that the clean energy transition delivers benefits across society, starting with those most affected by industrial pollution. While this adds complexity to an already challenging endeavor, it is essential for those shaping the clean energy sector to take on this work. Further, many of the policy and supply chain obstacles that threaten to slow progress on corporate renewable energy goals also thwart the ambitions of communities ready to embrace a new energy system.

Looking ahead, Microsoft will continue seeking deep collaboration with environmental justice organizations to integrate environmental justice into our approaches for meeting environmental sustainability commitments that prioritize community needs. We will continue our efforts to address energy affordability and permitting and interconnection processes for clean energy projects, as well as grid readiness to improve the pace of the energy transition at scales large and small.

Further opportunities beyond utility-scale PPAs

For Microsoft, renewable energy contracting for electricity use is primarily through PPAs with developers building new utility-scale wind and solar generation. Renewable energy buyers with smaller loads or who are using other procurement approaches still have many options for integrating social impact into their approach. In some cases, smaller offtakes may be compatible with more innovative, community-scale projects.

- **Percent for community clean energy benefits**: Regardless of contract size and duration, and whether for just energy attribute certificates (EACs)/renewable energy credits (RECs) or electricity as well, most contracts can be structured to include a provision for a portion of contract revenues to be directed towards established community benefit funds for the enablement of community-led clean energy, sustainability, and resilience projects in frontline communities. Modelled after “percent for art” programs, this

approach allows renewable energy buyers to address the social impacts of the climate crisis without adding significant complexity to their procurement strategy.

- **Anchoring community solar developments:** Community solar developments are uniquely situated for bringing clean energy access and energy burden relief to low-income households, including renters. When held in cooperative ownership or situated within microgrids, these developments can be further optimized for community benefit by more substantively lowering energy costs, protecting subscribers from shutoffs or predatory rate terms, and boosting resilience during grid outages. Corporate renewable energy buyers can support these projects in a variety of ways, including serving as an anchor offtaker for a portion of the system's generation to enable project financing, resourcing predevelopment costs, or serving as a tax equity investor.
- **Sourcing from projects optimized for social impact:** Another avenue for maximizing impact is evaluating the social impact attributes of specific projects and weighting those attributes favorably in selecting projects or suppliers, even at some level of cost premium. This can be integrated into RFPs, or overlaid as preferred criteria when working with brokers to source EACs or bundled offtakes, and can be applied to both utility-scale offtakes or the aggregation of offtakes from distributed generations.

The foundation of pursuing environmental justice is to center communities and those who have been impacted disproportionately by industrial pollution and are more vulnerable to climate change. Missteps are inevitable, as we are all on our individual journeys of understanding systems of oppression and our individual roles in these systems. It is important to move forward with the advisement of experts, and with courage and humility.

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Appendix

Glossary

TERM	DEFINITION
BIPOC	Black, Indigenous, and People of Color.
Energy democracy	An approach to the renewable energy transition that seeks to strengthen communities by advancing both new technologies and new values within the energy sector, with the intent to protect workers, the environment, and fair access to energy resources. The values of the energy democracy movement include the integration of social justice; adopting new cooperative economic models and governing institutions; and prioritizing community health, resilience, and the environment over property rights. Energy democracy advocates focus on advancing decentralized energy systems, such as community-owned distributed solar generation, and ensuring the burden of electrification and the clean energy transition do not fall on the poorest.
Environmental justice	The fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. This goal will be achieved when everyone enjoys the same degree of protection from environmental and health hazards and equal access to the decision-making process to have a healthy environment in which to live, learn, and work.[7] Environmental justice begins with acknowledging past and present harms to communities of color, low-income communities, and other communities on the frontlines of the climate crisis and racial and

[7] "Environmental Justice," The U.S. Environmental Protection Agency, accessed September 28, 2021, https://www.epa.gov/environmentaljustice.

	economic injustice. It redirects leadership, resources, and decision-making into these communities that are most impacted and were previously excluded.
Frontline communities	The populations most impacted by multiple and cumulative sources of pollution and climate impacts due to proximity to toxic factories, fossil fuel refineries, neighborhood oil drilling, freeways, and the like, often without access to clean drinking water or public investment. People who experience oppression because of race, income, gender, sexual orientation, disability, gender identity, age, etc., are more likely to have less resources and protections in society in general and even less access to resources and protections not only to adapt to our changing climate but also to pass policies and legislation that are fair and culturally significant.[8]
Just Transition	Just Transition is a vision-led, unifying, and place-based set of principles, processes, and practices that build economic and political power to shift from an extractive economy to a regenerative economy.[9]
Priority populations	The individuals and communities intended as the primary beneficiaries of environmental and climate justice initiatives. Different locations may define priority populations differently, though generally they will include marginalized, under-resourced, and vulnerable individuals and communities. Consider intersectionality as a factor in determining priority.
Vulnerable populations	Often used synonymously with "frontline communities," "under-resourced communities," or "marginalized populations." Populations including low-income communities, older adults, children, and health-compromised individuals of any race or socioeconomic status that are

[8] "Our Communities, Our Power: Advancing Resistance and Resilience in Climate Change Adaptation," NAACP, accessed September 28, 2021, https://naacp.org/know-issues/environmental-climate-justice.

[9] "Just Transition: A Framework for Change," Climate Justice Alliance, accessed September 28, 2021, https://climatejusticealliance.org/just-transition/.

especially harmed by climate impacts. Due to a lack of resources or presence of biological sensitivities, these populations are more at risk of experiencing adverse effects from climate impacts.

Equity PPA contract language

The below contract language is excerpted from the Microsoft-Volt equity PPA, and is made available to ease the integration of environmental justice elements into PPAs entered by other corporate renewable energy offtakers and developers.

ARTICLE A

REPRESENTATIONS, WARRANTIES AND COVENANTS

A.1 Mutual Representations and Warranties.

[*To be agreed by the Parties*]

A.2 Seller's Representations and Warranties

(a) Minority-Ownership. As of the Effective Date, Seller and Seller's Ultimate Parent are Minority-Owned.

(b) Environmental and Social Justice. Seller is using best practices to avoid any Environmentally Sensitive Property or Culturally or Historically Sensitive Property.

(c) …

ARTICLE B

PRIORITIZING SOCIAL, COMMUNITY & ENVIRONMENTAL IMPACT

B.1 Key Metrics. Seller will maximize the positive environmental, community and societal impact of the development, construction and operation of the Project, as measured by the following key metrics (the "Key Metrics"):

(a) reducing harm caused by air quality burdens and minimizing environmental impact to local communities by providing new renewable generation;

(b) creating prevailing-wage jobs in Under-resourced Communities or Communities Disproportionately Impacted by Pollution;

(c) creating career pathways by funding and/or facilitating job training and placement; and

(d) promoting other community and social impact goals as agreed upon by the Parties and in concert with their collective commitment to the United Nations Sustainable Development Goals.

B.2 Impact Reports. Seller will submit a written report to Buyer within 60 days of the Commercial Operation Date detailing how the Project complies with the Key Metrics to maximize economic, community and societal impact, together with supporting documentation (the "Impact Report"). Each Impact Report will otherwise be in form and substance determined by Seller; provided, that Buyer may in its sole discretion request further supporting documentation from Seller.

B.3 Women and Minority Leadership and Job Creation. Seller will ensure that the Project will help catalyze the creation of women and minority leadership in the renewable energy industry. To further this goal, Seller must provide a plan for and make good faith efforts to comply with the following Minority-Owned and Women-Owned business participation goals:

(a) The Project will be designed and/or constructed by, one or more of the following:

(i) a woman or Minority project manager;

(ii) a woman or Minority construction manager;

(iii) a woman or Minority project engineer;

(iv) a woman-owned or Minority-Owned engineering, procurement and construction firm; or

(v) a woman-owned or Minority-Owned independent engineering firm.

(b) Seller will make good faith efforts to expend at least the following percentages of the total Project construction costs for participation by Women-Owned and Minority-Owned businesses:

(i) [●]% of the total Project construction costs be awarded to Minority-Owned businesses; and

(ii) [●]% of the total Project construction costs be awarded to Women-Owned businesses.

(c) In addition to meeting Sections 13.3(a) and 13.3(b), Seller will request that all primary direct subcontractors submit demographic data indicating the composition of their workforce, including diversity by position type.

B.4 Carbon Neutrality. Seller represents and warrants that it is carbon neutral upon execution of this Agreement and will remain carbon neutral throughout the Term. All emissions from on-site construction of the Project will be offset with carbon offsets.

B.5 Habitat Restoration. Seller will (a) install bee pollinator habitats where feasible as reasonably determined by Seller, and (b) undertake at least two total habitat restoration activities in accordance with Exhibit 1, in each case, for the Project on or near the Site.

B.6 Community Investment and Development Agreement.

(a) The Parties have identified a community investment and development organization (the "Nonprofit Organization") that supports the Parties' goal of an equitable clean energy transition and that will establish a restricted fund dedicated to Under-resourced Communities or Communities Disproportionately Impacted by Pollution (the "Community Fund").

(b) The Parties' intent with respect to the principles, goals, and obligations related to the Community Fund are set forth in a funding agreement attached hereto as Exhibit 2 (the "Funding Agreement").

(c) Within 30 days after having received a payment under each monthly invoice, the Parties will contribute to the Nonprofit Organization for the benefit of the Community Fund as follows:

(i) Seller will pay to the Nonprofit Organization 10% of the Contract Price Payment for the Billing Period, and Buyer will pay to the Nonprofit Organization 10% of the absolute value of the Settlement Amount, if any, paid from Seller to Buyer in the Billing Period.

(ii) Payments to the Nonprofit Organization will be subject to the terms and conditions of the Funding Agreement.

(iii) The contributing Party will provide the other Party with reasonable evidence that such payment was made.

(iv) The Community Fund will be reported as a commitment by both Buyer and Seller, as applicable.

(d) The Parties agree that the Nonprofit Organization selection as negotiated pursuant to Section 13.6(a) and terms reflected in the Funding Agreement negotiated pursuant to Section 13.6(b) will be binding on the Parties as a material obligation under this Agreement.

Definitions

"Communities Disproportionately Impacted by Pollution" means communities that (a) are disproportionally impacted by job losses related to pollution (such as mercury, benzene, formaldehyde, particulate matter, SOx, or NOx) or the energy transition away from fossil fuels, (b) are within approximately 20 miles of an existing or recently shuttered coal plant, (c) are within approximately 20 miles of an existing or recently shuttered coal mine, (d) are within approximately 20 miles of an existing or recently shuttered oil or gas refineries, (e) are within approximately 20 miles of an existing or recently shuttered nuclear plant, (f) are within approximately 5 miles from an EPA Superfund Site, (g) bear PM2.5 pollution exposure and demographic disadvantages (according to the EPA's "EJ Index: PM2.5") higher than the national median as defined in the EPA's EJScreen database, or (h) communities with a Brownfield Site.

"Culturally or Historically Sensitive Property" means property where there is a medium to high risk of cultural or historic damage if the Project were developed thereon, including any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion on the National Register of Historic Places, including artifacts, records, any material remains of past human life or activities which are of archaeological interest and at least 100 years old related to such a property or resource, as defined by the National Historic Preservation Act, 54 U.S.C. Sec. 300308.

"Minority" means an individual who is a U.S. citizen and who is of one or more of American Indian or Alaska Native, Asian, Black or African American, Native Hawaiian or Other Pacific Islander, or Hispanic or Latino descent.

"Minority-Owned" means, with respect to any business entity (including publicly-owned businesses), having at least 51% of the equity interests of such entity owned by one or more Minorities.

"Under-resourced Communities" means (a) "Low to Moderate Income" communities, as defined by U.S. Housing and Urban Development, (b) communities within "Opportunity Zones", as defined by the U.S. Community Development Financial Institutions Fund, (c) communities that bear an "Energy Burden" or "Annual Average Housing Energy Costs" that are higher than the national median as defined in the US Department of Energy's Low-income Energy Affordability Data (LEAD) Tool, or (d) communities with disproportionately high unemployment rates compared to the national average.

"Women-Owned" means, with respect to any business entity (including publicly-owned businesses), having at least 51% of the equity interests of such entity owned by one or more women.

Exhibit 1

HABITAT RESTORATION ACTIVITIES

Pursuant to Section **Error! Reference source not found.** of the Agreement, Seller will undertake at least two habitat restoration activities for the Project on or near the respective Site. Such habitat restoration activities may be from the following non-exhaustive list; *provided*, that each habitat restoration activity must include the support of technically trained biologists or ecologists to ensure environmentally compliant implementation.

1. Field margin habitat development, including biodiversity enhancements that benefit plants, invertebrates, ground-nesting birds, reptiles and small mammals.

2. Hedgerows planted with native plants to support invertebrates, birds, reptiles and mammals.

3. Creating new ponds or wetlands or maintaining already-present ponds and wetlands that include shady and sunlit areas, shallow and deeper waters, plans to maintain water quality, and support for amphibians, birds, and reptiles.

4. Artificial structures to provide habitat for nesting, roosting and hibernation, including:

    a. Hibernacula such as log, rock and stone piles that create conditions for reptiles and amphibians to hibernate;

    b. Habitat for invertebrates such as mixtures of hardwoods and softwoods left in sunny and shady places that allow for decomposition;

    c. Roosting and nesting structures for birds and pollinators, such as boxes, planks or insect and apiary structures affixed to solar frames.

5. Grassland habitat established at boundaries of or throughout the Site that contain native uncropped grasses and wildflowers.

6. Low intensity grazing between solar structures.

7. Woodland habitat established on the northern boundary or along borders that includes native species and a varied planting pattern.

8. Invasive plant removal.

9. A solution not listed above that is mutually agreed upon in writing by both Parties

Exhibit 2

FUNDING AGREEMENT

This funding agreement (this "Agreement"), dated as of _____, (the "Effective Date") by and between [●] ("Buyer"), [●] ("Seller") (together with Buyer, the "Funding Parties"), and [●], a [●] (hereinafter "Foundation") (collectively referred to herein as the "Parties" and each separately a "Party").

RECITALS

WHEREAS, Foundation has applied for tax-exempt status under Section 501(c)(3) of the Internal Revenue Code of 1986, as amended (the "Code"), and has requested status as a private foundation under Section 509(a) of the Code;

WHEREAS, Foundation's mission is to advance environmental justice and support an inclusive clean energy future;

WHEREAS, the Funding Parties have entered into those certain Renewable Energy Purchase Agreements (the "PPAs") referenced in Appendix A attached hereto with respect to the renewable energy projects listed therein (collectively, the "Projects"), and seek to ensure an equitable clean energy transition and strive to maximize positive social, community and environmental impact of such Projects;

WHEREAS, the Funding Parties desire to support environmental justice and related causes consistent with the Microsoft Environmental Justice Framework;

WHEREAS, in furtherance of the foregoing, the Funding Parties wish to make a series of payments to Foundation with funds generated by the Projects to support Foundation's environmental justice and related causes aligned with the Microsoft Environmental Justice Framework (the "EJ Initiative(s)"), based on certain conditions contained herein;

WHEREAS, Foundation desires to accept the payments from the Funding Parties and to comply with the conditions contained herein; and

WHEREAS, Foundation has determined that entering into this Agreement will further its charitable mission.

NOW, THEREFORE, the Parties hereby agree as follows:

1. Definitions.

"**Microsoft Environmental Justice Framework**" means the Microsoft Environmental Justice Measurement and Evaluation Framework and applicable guidance documents available at https://emeraldcities.org/our-work/just-transition-

powerforce/, as may be amended from time to time.

2. Term. This Agreement will begin on the Effective Date and end on the date that is [●] months after the Effective Date ("Term"). No later than [●]days prior to the expiration of the Term, the Parties will discuss whether to extend the Term, which such extension will require mutual written agreement of all Parties.

3. Funding.

(a) During the Term, the Funding Parties will make the following series of payments to Foundation: (1) Seller will pay to Foundation [●]% of the monthly revenues received from Buyer under the PPAs, and (2) Buyer will pay to Foundation [●]% of the absolute value of the monthly revenues received from Seller to Buyer (if any) (the "Payments"). The Funding Parties will make the Payments to Foundation in cash and will transfer the Payments to Foundation within [●]days after having received a payment under each monthly invoice under the PPAs.

(b) Foundation will use the Payments solely to support the EJ Initiatives and the administrative costs for operating Foundation, including accounting, insurance, staff, fundraising and other related administrative costs ("Foundation Overhead"). All Payments, including any income received and disbursements paid out, will be held by Foundation and used solely for the EJ Initiatives and Foundation Overhead. Foundation will not use greater than [●]% of the Payments to pay Foundation Overhead. The Funding Parties must provide prior written approval of any changes by Foundation in the purposes or use for which Payments are spent.

4. Foundation's Responsibilities.

(a) Foundation will use the Payments to disburse funds for EJ Initiatives to advance (a) energy access, (b) the development of small-scale distributed renewable energy projects with an individual project expected nameplate capacity of no greater than [●] MWac, (c) energy conservation and energy efficiency, (d) pollution remediation, (e) sustainability and resilience projects in states where the Projects are located, (f) reducing the energy burden in states where Projects are located, (g) workforce training and educational programs focused on underserved communities and workers of color to promote fair and inclusive clean energy transition, and (g) other societally impactful investments in local communities where the Projects are located or otherwise identified by the Funding Parties and Foundation.

(b) Foundation will comply with all Applicable Laws in its use of the grant funds and its development and operation of the EJ Initiatives, including without

limitation:

i. Foundation will not use funds provided under this Agreement, directly or indirectly, in support of activities: (a) prohibited by U.S. laws related to combatting terrorism; (b) with persons on the List of Specially Designated Nationals (www.treasury.gov/sdn) or entities owned or controlled by such persons; or (c) with countries against which the U.S. maintains comprehensive or targeted sanctions, unless such activities are fully authorized by the U.S. government under applicable law and specifically approved by both the Funding Parties.

ii. Foundation will not offer or provide money, gifts, or other things of value directly or indirectly to anyone in order to improperly influence any act or decision relating to the Funding Parties or the EJ Initiatives, including by assisting any party to secure an improper advantage.

iii. Foundation acknowledges that the Payments have not been provided with any direction or requirement to support lobbying activities or to otherwise support attempts to influence legislation. Foundation represents and warrants that its activities are and will be conducted in compliance with the lobbying rules and exceptions applicable to Foundation under Code Sections 501(c)(3), 501(h) and related regulations.

(c) In fulfilling its responsibilities under this Agreement, Foundation will submit (i) quarterly written financials and (ii) annual written reports to the Funding Parties no later than [●] of each year detailing the performance of the EJ Initiatives and each active disbursement during the preceding calendar year (the "Impact Report"). Each Impact Report will include an evaluation of how each disbursement, and the EJ Initiatives in general, complies with the Microsoft Environmental Justice Framework to maximize economic, community and societal impact, and will identify any impediments to administration of any disbursement or the successful performance of the EJ Initiatives. The Impact Reports will align with the Microsoft Environmental Justice Framework and will otherwise be in form and substance determined from time to time by the Funding Parties. Each Impact Report will be signed by an authorized officer, director, or trustee of Foundation.

(d) Foundation will comply with the substantiation requirements of Section 170(f)(8) by providing the Funding Parties with a contemporaneous written acknowledgement of the Payments meeting the requirements of Treas. Reg. Section 1.170A-13(f).

(e) Foundation may not, in connection with or in consideration for the Payments, provide any goods, services, or other privileges to the Funding Parties.

5. Non-discrimination. Foundation agrees that, in carrying out the EJ Initiatives, it will not unlawfully discriminate in its employment practices, volunteer opportunities, or

the delivery of programs or services, on the basis of race, color, religion, gender, gender identity/expression, national origin, ancestry, age, medical condition, disability, veteran status, marital status, sexual orientation, or any other characteristic protected by law.

6. Indemnification.

7. Nature of Agreement. This Agreement will not create the relationship of employer and employee or a partnership. Foundation will control the details and means by which it performs its obligations under this Agreement, and will be responsible for maintaining books and records for its own operations and will pay all costs of conducting its operations, including but not limited to the expense and responsibility for any and all applicable insurance, city, county, state and federal licenses, permits, taxes and assessments of any and all regulatory agencies, boards or municipalities.

8. Compliance with Agreement Terms. Each Funding Party has the right at its discretion to terminate or suspend this Agreement or withhold payment if (i) Foundation fails to comply with any term or condition of this Agreement or (ii) the Foundation removes a Funding Party's Designated Member from the Foundation's Advisory Board without the consent of the Funding Party.

9. Return of Payments. In the event that there is a substantial adverse change in circumstances, the Funding Parties will meet and will direct Foundation in writing to apply the Payments to a project agreed on by the Funding Parties. In the event that the Funding Parties cannot agree on a project, then Foundation will return to each Funding Party such Funding Party's Payments. For purposes of this Section 9, a "substantial adverse change in circumstances" means failure of Foundation to obtain tax-exempt status under Section 501(c)(3) of the Code; a fundamental change in the mission of Foundation; or any development that significantly affects the operations of Foundation such that the EJ Initiatives cannot be completed.

10. Public Announcements.

11. Notices.

12. Oversight. So long as any portion of the Payments funds remain unexpended, Foundation will continuously maintain the funds or assets in a separate bank account which will be dedicated and restricted to the specific charitable purposes described in Section 4(a) of this Agreement. For the avoidance of doubt, funds in such account also may be used to pay Foundation Overhead, as provided in Section 3(b).

13. Audit Rights.

14. Governing Law. This Agreement will be governed by and interpreted according to the laws of the [●].

15. Assignment.

16. Confidentiality.

17. LIMITATION OF LIABILITY.

18. Amendments.

19. Entire Agreement.

20. Severability.

21. Counterparts.

[SIGNATURE PAGE FOLLOWS]

* * *

BUYER:

_____
[●]

By: _____
_____

Its: _____

SELLER:

_____
[●]

By: _____
_____

Its: _____

FOUNDATION:

_____
[●]

By: _____
_____

Its: _____

APPENDIX A

RENEWABLE ENERGY PURCHASE AGREEMENTS

1. Renewable Energy Purchase Agreement dated as of [●]…
2. ….

APPENDIX B

NOTICES

[To be provided by the Parties]