

ENVIRONMENTAL JUSTICE TOOLKIT 2.0

A Climate, Energy, and Air Quality EJ Community Engagement and Policy Guide for Local Governments

January 2026



Metropolitan Washington
Council of Governments

ENVIRONMENT JUSTICE TOOLKIT 2.0: AN ENGAGEMENT AND POLICY GUIDE FOR LOCAL GOVERNMENTS

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The Metropolitan Washington Council of Governments (COG) is an independent, nonprofit association that brings area leaders together to address major regional issues in the District of Columbia, suburban Maryland, and Northern Virginia. COG's membership is comprised of 300 elected officials from local governments, the Maryland and Virginia state legislatures, and U.S. Congress.

CREDITS

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BACKGROUND AND PURPOSE OF EJ TOOLKIT 2.0

This Environmental Justice Toolkit 2.0 is an update to COG's [2017 Environmental Justice \(EJ\) Toolkit](#) which was designed to provide recommendations for local governments to engage vulnerable and disfavored communities more effectively and appropriately on issues related to climate, energy, and air quality. Its purpose is to highlight best practices, gathered from community leaders and local governments, for enhancing and maintaining engagement with environmental justice communities, and to include examples and resources for additional information.

Environmental and justice issues can feel intractable and are often underfunded. This region has been making environmental justice strides, and COG is excited to share new examples. The Toolkit is meant to encourage continued conversation between members and communities, affirm the need to keep climate justice at the forefront of local decisions, programs, and policies, and to stimulate new and positive ways of addressing climate justice engagement. As this is a Toolkit for achieving Environmental Justice through improving engagement with populations burdened by environmental issues, it is beneficial to define a few terms up front.

- **Environmental Justice (EJ)** embraces the principle that all people and communities are entitled to equal protection under environmental law. It means fair treatment of all people — regardless of race, color, or national origin — and requires participant involvement in the implementation and enforcement of environmental laws, regulations, and policies (U.S. Environmental Protection Agency, 2016ⁱ). Here are the [17 Principles of Environmental Justice](#) adopted at the National People of Color Environmental Leadership Summit in 1991ⁱⁱ.
- COG has defined **equity** as the commitment to promote fairness and justice in the formation of priorities, policy, and programs. Equity is achieved when all people are fully able to participate in the region's economic viability, contribute to the region's readiness for the future, and connect to the region's assets and resources. Most members of COG have also developed [definitions](#) of equity.
- **Meaningful Engagement:** Full engagement means that all people with a stake in any action resulting in the use, conservation, or development of natural resources affecting the environment participate in the development, implementation, and enforcement of laws affecting that use. The International Association for Public Participation [Spectrum of Participation](#)ⁱⁱⁱ chart shows the gradation between informing a community and empowering a community.
- **Vulnerable Populations** are identified using demographic indicators such as race, income, and language, and environmental indicators including exposure to air pollution, water pollution, and waste management.

Vulnerable populations may include:

- Low-income
- Black, Indigenous, and People of Color (BIPOC) communities
- Marginalized and underrepresented groups
- Women
- Pregnant women
- Persons in sub-standard housing and unhoused

- People with limited English proficiency
- Older adults
- Children
- People with chronic health problems
- People with disabilities

Environmental Justice (EJ) is an iterative process that results in policies and decisions that are inherently more equitable in the long term (2017 EJ Toolkit). [The Energy Justice Workbook](#) by The Initiative for Energy Justice^{iv} distinguishes two forms of environmental justice: Achieving equity in both the social and economic **participation** in the energy system, and **remediating** social, economic, and health burdens on those frontline communities historically harmed.

When local governments engage community leaders and residents as partners in generating EJ solutions and in the implementation process, we see more equitable and politically sustainable policies that can address concerns across all our communities ([Equinival Partners, LLC Report to COG, June, 2025](#)). To effectively reduce greenhouse gas emissions and have a more climate resilient and energy efficient society, everyone needs to be aware of the issues and to be a part of the solution.

Areas of concern for Environmental Justice include, but are not limited to, air and water quality, infrastructure investments, access to green spaces, and human health and safety. This Toolkit is more narrowly focused on climate justice issues, which comprise air quality, heat islands, flooding, and access to and affordability of energy and clean energy, including electric vehicle charging stations, solar, and household high-efficiency heat pump systems for heating and cooling.

Research by [Equinival Partners, LLC \(Equinival\)](#) found that metropolitan Washington communities were most concerned about air quality, energy costs and reliability, and climate change impacts that include urban heat islands and flooding. Northern Virginia communities and Prince George's County representatives expressed concerns over data centers as well. These same issues of air quality, urban heat island, and flooding were noted by COG members in the local government listening sessions. Personal health, environmental health, trash, and household energy costs followed these prior mentioned issues in terms of magnitude of concern.

SPOTLIGHT ON TWO ENVIRONMENTAL JUSTICE ISSUES

Energy Burden

The American Council for an Energy-Efficient Economy (ACEEE) defines energy burden as “the percentage of gross household income spent on home energy costs.” When more than six percent of income is spent on home energy, it is considered to be a high energy burden.^v Multiple factors combine to create energy burden, including poor housing stock, energy-inefficient housing, low household incomes, greater energy demand (e.g., increased reliance on air conditioning), and higher energy costs.^{vi} The National Energy Assistance Directors’ Association (NEADA), based on December 2025 information, projects that natural gas and electricity costs could climb at a rate three times inflation, exacerbating the rate and level of energy burden. Energy burden compounds other

household costs of food, water, childcare, and healthcare, and can lead to difficult decisions, such as incurring greater debt or foregoing necessities such as food and medicines, and sometimes risky coping strategies to keep warm, such as burning trash or leaving a stove lit.^{vii}

Figure 1: Drivers of household energy burden

Type of driver	Examples
Physical	Inefficient and/or poorly maintained HVAC systems
	Heating system and fuel type
	Poor insulation, leaky roofs, and inadequate air sealing
	Inefficient large-scale appliances (e.g., refrigerators, dishwashers) and lighting sources
Economic	Weather extremes that raise the need for heating and cooling
	Chronic economic hardship due to persistent low income (see text box "Income Inequality and Energy Affordability")
	Sudden economic hardship (e.g., severe health event or unemployment)
	Inability or difficulty affording the up-front costs of energy efficiency investments
Policy	Insufficient or inaccessible policies and programs for bill assistance, weatherization, and energy efficiency for low-income households
	Certain utility rate design practices, such as high customer fixed charges, that limit the ability of customers to respond to high bills through energy efficiency or conservation
Behavioral	Lack of access to information about bill assistance or energy efficiency programs
	Lack of knowledge about energy conservation measures
	Increased energy use due to age or disability

Source: Community Climate Collaborative. Lessening the Load: Energy Burden and Unaffordability in Richmond, VA. (2025)

Additionally, the Southeast Energy Efficiency Alliance^{viii}, the Energy Justice Lab^{ix}, and ACEEE^x report that Black, Indigenous, and People of Color households have higher energy use intensities (use more energy per square foot of housing) despite using less energy overall.

In 2024, the documented number of residents whose electricity or natural gas was shut off as a result of lapsed bill payment were as follows:

- DC: 14,931
- MD: 111,401
- VA: 435,122

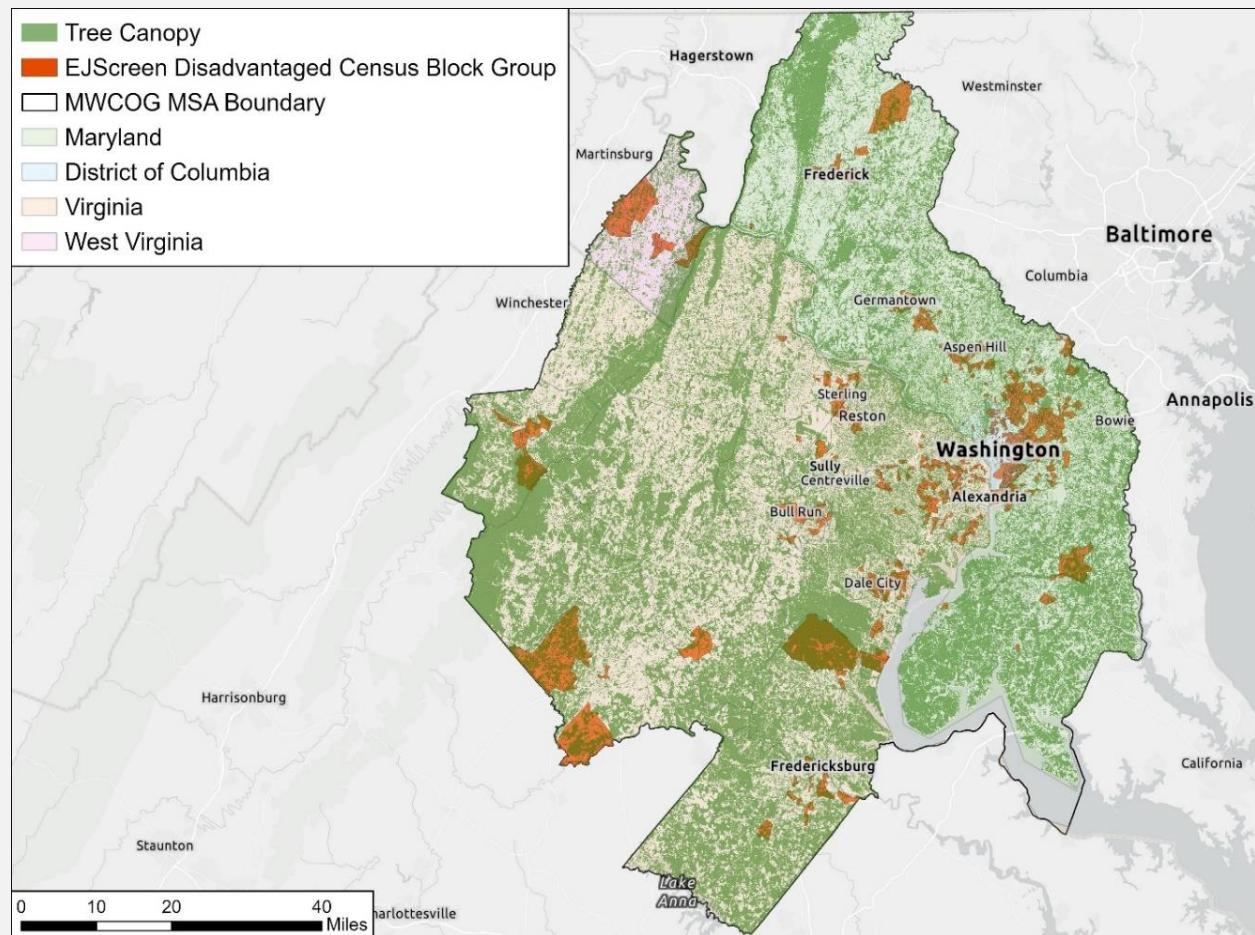
Source: Energy Justice Lab, Utility Disconnections Dashboard

There is a risk of even greater energy insecurity as the cost of electricity is expected to rise. In Virginia, the average residential price of electricity rose by 14% between January and August 2025, and by 8.8% in Maryland, according to the [Washington Post](#) (November 24, 2025).

Tree Canopy and Greenspace

“Redlining,” the historical U.S. practice of refusing home loans or insurance to whole neighborhoods based on a racially motivated perception of safety for investment, has present-day heat island effects. Surface temperatures are approximately 2.6 °C warmer in redlined areas than in non-redlined areas.”^{xi} These trends are due both to historical housing policies and a greater ratio of impervious area to tree cover in redlined neighborhoods.

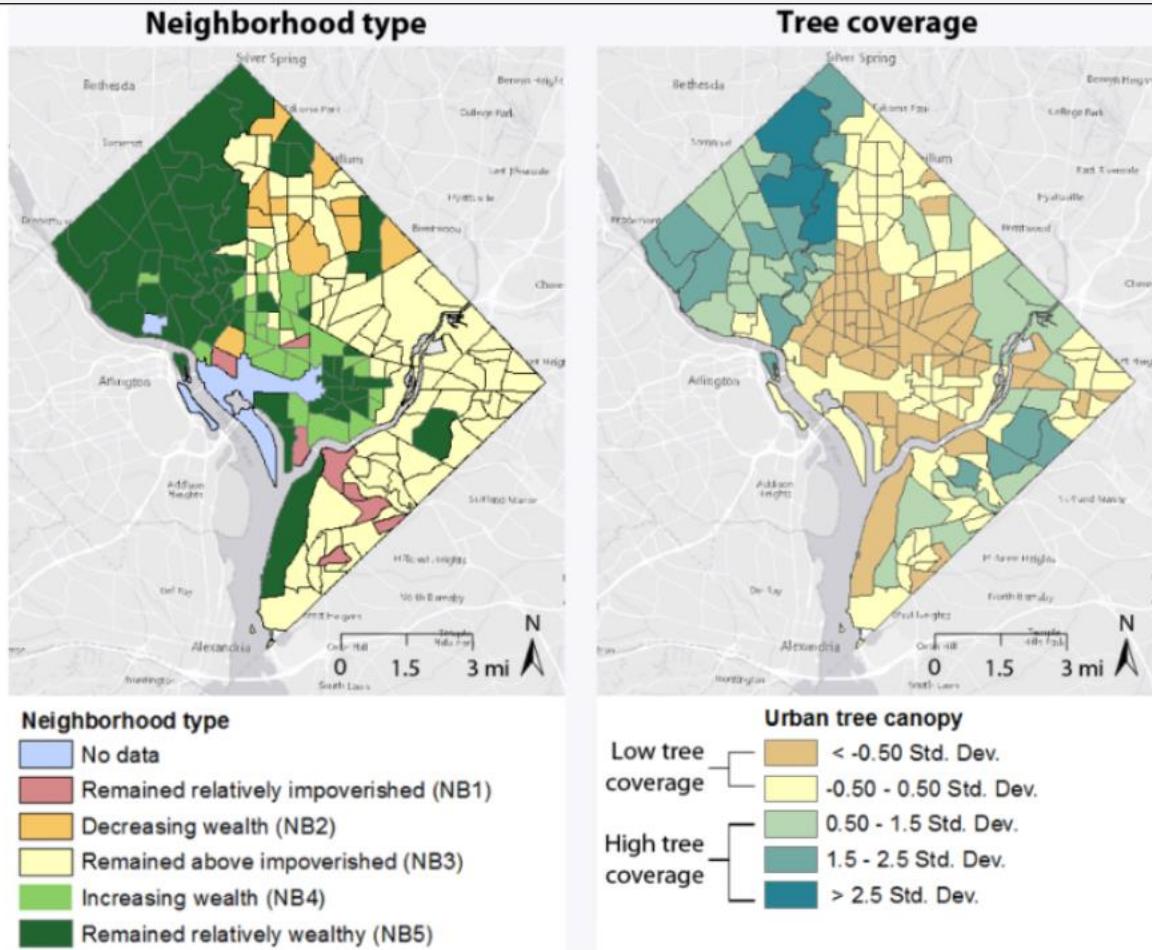
Figure 2: COG’s Climate Action Plan image showing tree canopy cover overlaid with Low Income and Disadvantaged Communities (LIDAC).



Source: COG’s Climate Action Plan^{xii}

Gaps in wealth can also equate to lesser tree canopy. In 2017, WAMU 88.5 wrote a piece entitled [“Why Do D.C.’s Poorer Neighborhoods Have Fewer Trees?”](#) and provided a side-by-side comparison of wealth in the District of Columbia relative to tree canopy cover, showing a correlation between wealth and tree canopy, as shown in Figure 3.

Figure 3: Neighborhood Type and Tree Coverage



Annotated map excerpts from the report, “Tree canopy change and neighborhood stability: A comparative analysis of Washington, D.C. and Baltimore, MD”.

Wen-Ching Chuang, annotations by Aditi Bhandari / U.S. Environmental Protection Agency

In addition to shade, tree canopy has wide-ranging benefits, including improving air quality and flood resiliency. A growing body of research suggests that tree canopy improves physical and mental health outcomes^{xiii xiv, xv} such as reductions in risks of asthma, depression, and cardiovascular disease.

COG has set a 50% Tree Canopy goal for the region by 2050.^{xvi} While this goal is an average, multiple COG jurisdictions are targeting tree planting efforts in neighborhoods with the greatest need to attain equitable canopy coverage across the whole city or county. A tool to assist with access to trees is the American Forests [Tree Equity Score](#)^{xvii} tool.

The 2017 EJ Toolkit broke EJ engagement into approaches. This edition contains eight approaches updated with new research, recommendations, and examples from around the region and country.

Approach 1: Identifying Potentially Vulnerable Populations

Approach 2: Providing Meaningful Engagement Opportunities

Approach 3: Developing Metrics

Approach 4: Providing Data, Information, and Resources for Communities

Approach 6: Bolstering Community Leadership

Approach 7: Augmenting Economic and Workforce Development

Approach 8: Mainstreaming EJ into Public Policy, Planning and Programs

A lot has happened since COG first developed its [Equity Emphasis Areas \(EEAs\)](#) as a regional transportation planning tool to elevate equity and inform future growth and investment decisions, and COG's first EJ Toolkit in 2017. Local governments have hired Equity Officers, and COG formed a Chief Equity Officer's Committee in 2020. Many local governments have developed their own EJ and equity frameworks, have held equity trainings, updated hiring and procurement practices and policies, formed community advisory committees, and included equity tools and tracking in city or county Plan development, including climate and energy plans, forest management plans, and natural resource strategies.

Likewise, COG's equity work has also progressed. In 2020, COG published its [2030 Climate and Energy Action Plan](#) which established 35 collaborative actions, twenty-five of them focused on mitigation and ten focused on resilience, for area governments and partners, Equity is woven throughout all of the Plan's actions, with four specific equity actions: 1) Identity energy burden and support equitable access for EV charging in underserved communities, 2) Address Heat Islands, 3) Flooding, and 4) Sea Level Rise. COG developed the [Region United Framework](#) in 2020 (updated in 2022) unifying four regional priorities: Equity Emphasis Areas (EEAs), High-Capacity Transit Station Areas (HCTs), 2030 Regional Housing Targets, and the 2030 Climate Goal. In March of 2024, the COG Board passed a [Resolution Adopting Regional Principles for Equitable Development](#).

METHODOLOGY FOR EJ TOOLKIT 2.0

The EJ Toolkit 2.0 has primarily utilized a two-pronged approach to gather feedback about what is working for EJ engagement and where challenges remain.

This includes (1) Equinival's interviews of community members and leaders from community-based organizations (CBOs), and (2) Listening sessions with COG's local governments.

1. Community Engagement

Under contract with COG, Equinival Partners, LLC, a consultancy specializing in equity-focused collaborative decision-making, engaged metropolitan Washington community leaders in Spring 2025 on local climate, energy, and air quality issues to capture their perspectives about how communities can better participate in shaping climate and energy policy. The Equinival methodology was as follows:

- Equinival used COG's Equity Emphasis Areas (EEAs) tool to provide geographic context and identify potential interviewees in regions with the most EEAs.
- Equinival then conducted three rounds of interviews utilizing individual and small group discussions, capturing feedback from forty-four community leaders. Equinival asked leaders from CBOs and local non-government organizations (NGOs) to provide their perspectives on how local governments engage with their communities to address climate, energy, and air quality issues.

These discussions included:

- Individual interviews with eighteen leaders from Maryland, thirteen from DC, and thirteen from Virginia.
- Participation in six community outreach events.
- Interviews with members of COG's Air and Climate Public Advisory Committee (ACPAC); and
- Facilitation of two ACPAC community listening sessions with community leaders.
- Equinival synthesized the information from the individual interviews, small group discussions, outreach events, and ACPAC meetings and developed a report of recommendations to COG.

2. Local Government Listening Sessions

COG held two iterative local government listening sessions to absorb best practices in use for engaging hard-to-reach and underserved communities.

The first was on February 14, 2025, and the second was on March 13, 2025, via MS Teams webinar platform, which included polling questions. The purpose was to gather input from outreach and sustainability staff about which EJ engagement processes are most successful, as well as remaining challenges and needs. The February 14th listening session included eighteen staff from sixteen COG jurisdictions. The March 13th listening session gathered fourteen staff from eleven COG members.

The local government webinar summaries and Equinival's Report are in the Appendix.

3. Supplemental Research

Additionally, COG staff have learned about EJ Engagement through supplemental processes and EJ Conferences listed below.

1. [COG's Clean Air Partner's Opinion Works survey results](#), as reported to the Metropolitan Washington Air Quality Committee's (MWAQC) February 2025, provided helpful information about community engagement, though it was not focused on environmental justice communities.
2. [DC Climate Week](#) Conference, held April 2025, had a track entitled Creating an Inclusive Climate Future, which featured speakers with EJ engagement expertise.
3. Metropolitan Washington Air Quality Committee (MWAQC) [EJ Subcommittee](#) process for the development of COG'MWAQC's [Resource Guide for Air Quality Action](#), May 2025.
4. COG's [Regional Blue-Green Infrastructure Community Engagement and Planning Project](#), to address flooding in the Watts Branch, Arundel Canal, and Oxen Run subwatersheds, held a [Regional Open House](#) on May 22, 2025, which included a panel of community-based organizations and leaders^{xviii} with expertise in EJ engagement.
5. The COG Climate Pollution Reduction Grant Comprehensive Climate Action Plan (CCAP) Outreach Strategy enlisted the help of the consultant team [ICF](#) and [PRR](#), who facilitated an [Outreach Strategy](#) webinar on September 4, 2025. Webinar participants included local governments, chairs from local environmental councils and green teams, and leaders from regional CBOs.

In addition to highlighting regional perspectives on the challenges, benefits, opportunities, and successes of EJ engagement. COG conducted a literature review of the most environmentally progressive cities in the United States to provide national examples of other EJ engagement strategies. This provided well-rounded case studies and models.

The EJ Toolkit 2.0 is illustrative, not intended to be comprehensive, and captures a point in time. While examples are provided throughout, there is more great EJ Engagement work being done in the COG region than is captured here.

EJ TOOLKIT 2.0: REFRESHING THE APPROACHES WITH BEST PRACTICES AND RESOURCES

Findings from the local government listening sessions and interviews with regional EJ climate leaders, combined with online research, are summarized below. The Toolkit 2.0 focuses on common themes that emerged from the local government and community processes.

Approach 1: Identifying Potentially Vulnerable Populations

COG members have utilized numerous EJ screening and mapping tools. COG's Equity Emphasis Areas (EEAs) combined with federally-developed tools^{xix} such as the Environmental Protection Agency's (EPA) [EJ Screen](#), the White House Council on Environmental Quality's [Climate and Economic Justice Screening Tool](#) (CEJST), and the Center for Disease Control's (CDC) [Social Vulnerability Index \(SVI\) mapping tool](#) can identify communities that may be most affected by changing climate conditions and most under-engaged or underrepresented. The [American Community Survey](#) provides a more frequent (annual) community snapshot compared to the full five-year Census. Federal tools largely have been removed from agency websites in 2025, but the status of the tools, links to access them, and a comparison of their uses are outlined in [this table](#) from Public Environmental Data Partners^{xx}. The District of Columbia uses [DC Atlas Pro](#), and Virginia uses Virginia [EJScreen](#). Maryland's screening tool, [EnviroScreen^{xxi}](#), provided an [EJ score](#); however, EnviroScreen was revamped in September 2025 after losing access to some federal data. While the new tool provides a climate change vulnerability score, it no longer uses race, ethnicity, or language as factors in calculating an area's environmental justice score.

“Equity maps are a starting point, but local knowledge is key.”

—Amanda Campbell, City of Rockville

still be recognized by community partners or through other government programs. For example, climate staff said they worked with EJ communities that had not fit the EEA profile but were identified by the County through free and reduced lunch eligibility.

Federally Developed Screening and Mapping Tools:
[EJ Screen](#)
[CEJST](#)
[Social Vulnerability Index](#)

State and Local Tools:
[DC Atlas Pro](#)
[Maryland EnviroScreen](#)
[Montgomery County](#)
[MDEnviroScreen](#)
[VA EJScreen](#)

While these tools, and others, are good starting points for doing vulnerability assessments, they should not be relied upon exclusively. These tools use Census tracts that may not be fine scale enough and could leave out some EJ communities. EJ communities not identified through the EEA or other tools may

The Urban Institute November 2022 report, **Screening for Environmental Justice: A Framework for Comparing National, State, and Local Data Tools^{xxii}**, provides an excellent detailing of EJ Tool Limitations. They developed an analytical framework to compare 31 national, state, and local environmental justice data tools. The core findings can be summarized as follows:

- EJ Tools need local context: It is best to engage communities in self-identifying and ground-truth their findings.
- Race and ethnicity ought to be explicitly factored (disaggregated) to accurately account for environmental racism.
- Tools that have environmental indicators may overlook key issues or their health and mental health effects.
- Tools need to be kept up to date.

Approach 2: Providing Meaningful Engagement Opportunities

Community engagement can be formal or informal. Informal is defined as hyperlocal community engagement, such as civic group meetings, whereas formal methods of engagement include participation on a government-created advisory committee and submitting comments during public comment periods. Equinval spoke with community leaders who asked how the informal engagement networks can influence policymaking if there are gaps between these informal policy networks and the formal methods. The challenge arises in how to bridge those gaps.

Formal methods of engagement can present logistical challenges for communities due to work, transportation, and childcare. Meanwhile, it is important to acknowledge that there are also local government and CBO staffing constraints for EJ engagement. Staffing capacity is an issue for evening meetings since events are time-consuming and often outside of regular 9:00 A.M.-5:00 P.M. schedules, and only some of COG's local governments have staff with outreach as their primary role.

Local governments and CBOs have recommendations on how to maximize EJ community engagement. They are summarized into two sections: Building Trust and Best Practices for Meetings.

BUILDING TRUST

It takes time and commitment to build any relationship. For EJ communities, trust is especially challenging due to a history of being left out of decisions and a legacy of environmental health burdens. Engagement processes that are not done well can leave community leaders feeling their voices have a negligible impact on decision-making processes. It is important to work on building relationships, in addition to focusing on the “issue.” Sustaining relationships with EJ Communities can also be challenging. Local governments noted staff capacity and staff turnover as key reasons.

What are your biggest challenges (barriers*) and successes in making initial contacts within EJ communities in your jurisdiction?

child care time initial way Language barrier jobs
Expectation for funding Distrust of government Language barrier jobs
Personal referrals Language distrust Staff capacity
Government Government distrust
Government cold Identifying communities

What are your biggest challenges (barriers*) and successes in building sustained relationships with EJ communities in your jurisdiction?

opportunities staff capacity face
Transition Program
Losing interest Communication pathways

Source: Poll responses from COG's March 13, 2025, Local Government Listening Session

Both local government staff and community leaders cited trust as the primary barrier for working together.

From local government listening sessions:

They identified distrust as one of the biggest challenges to making initial contacts with EJ communities, saying distrust of government can be a significant barrier among historically underserved and overburdened populations.

From Equival's Report:

There is a lack of trust that leaders will genuinely listen to community concerns. In their view, many residents feel disempowered, believing that their voices have little impact on decision-making processes.

Below are some recommendations for building trust with EJ communities:

1. Partner with an intermediary or trusted source in the community, such as leaders of faith-based institutions and civic associations, community advocates, and local nonprofit organizations that already have strong community ties. With these relationships, local governments can tap into informal community networks to improve connections with their constituents, gather information from those networks on policy issues, and bring that information to the formal decision-making process.

2. Meet in safe spaces such as libraries, schools, and other community-friendly locations.
3. Notice who is missing. Observe who is not present and consider how to seek and include those missing voices.^{xxiii}
 - Make the engagement process multi-generational. Local governments, CBOs, and Indigenous leaders alike spoke about the importance of including and listening to youth. Examples could include establishing a youth EJ advisory committee or advertising opportunities for engagement in middle and high school civics classes.
4. Engage communities early to give communities ownership and opportunities for involvement.
 - An example is the Parkside Community in the District of Columbia. This community worried about displacement once green infrastructure improvements were made. Residents were involved directly in designing a stormwater capture park. The stormwater park manages stormwater and won regional recognition. This approach shows that prioritizing local voices is key to dispelling misinformation about green gentrification and ensuring that green projects benefit, rather than displace, long-term residents.
 - Furthermore, the Chesapeake Bay Trust says community ownership is essential for funding as well as long-term success. Funders often look for projects that foster community pride and ownership. When residents are directly involved, the impact tends to be more extensive and longer lasting.
5. Be consistent: Consistent programming over time to sustain engagement and avoid losing community interest once people are involved.
6. Be transparent about how decisions are made. PRR Consulting recommends the following processes to aid with transparency:
 - a. Create a transparency plan or protocol.
 - b. Communicate how decisions are reached, what data was used, and why the resulting decisions were made.
 - c. Share a summary of findings and major decisions.
7. Encourage storytelling. Matt Scott, Director of Storytelling and Engagement, [Project Drawdown](#), and Dr. Yiselle Santos Rivera, Howard University School of Civil Engineering^{xxiv}, tout the benefit of storytelling to get people to connect to their “why.” Stories inspire others to think about their role in climate change solutions.

BEST PRACTICES FOR MEETINGS

1. Engage communities early in processes and clearly articulate the goal and scope of the engagement. Where possible, consider ways to partner with community leaders in the planning and execution of engagement strategies and activities. As the District of Columbia's Department of Energy and Environment (DOEE) [*A Guide to Community-Centered Engagement in the District of Columbia*](#)^{xxv} puts it: "Clarify and articulate why community engagement is necessary. What will you do with decisions or feedback from the community? Do you want to accomplish anything else beyond informing a plan or project, such as building trust or building local knowledge of issues? All these decisions will influence choices about who to include and what to cover, so make sure to carefully reflect on the goals of the project." DOEE also calls this "develop your ask," cautioning that the "ask" may evolve and change as understandings grow deeper or priorities shift.
2. Remove as many barriers to meeting as possible.^{xxvi} ^{xxvii} This can be achieved by asking communities to help select meeting dates, times, and locations, and asking what would make it easier for them to participate. This includes addressing constraints such as transportation, childcare, food, and language. Local governments recognize that lack of childcare is a huge barrier for residents to join or attend evening Board, Council, or Commission meetings. Providing childcare and making it known that childcare will be provided at a public meeting can increase attendance.

A. Address locational barriers

As a local government official said, "We know the communities will not be seeking us out, so we must go to them," and community members repeatedly stressed the importance of showing up where the community gathers—whether at civic associations or local events—to engage across generations effectively. COG members have found success in "meeting people where they are," such as securing an invitation to join an existing community meeting or participate in community festivals and events, rather than planning a separate activity.

- Meet face-to-face whenever possible. Face-to-face connections are especially important for developing any kind of relationship. In-person interactions make concerns more real and help everyone be seen as individual people, not just as organizations and affected groups.^{xxviii}
- Partner organizations may be able to assist with safe physical spaces for people to gather and meet and provide community members with access to resources they may not have otherwise known about.
- Regional CBOs suggested setting up roundtable discussions and online input tools to get more input from residents and to gauge their concerns.

Equally Important: Provide virtual options for those unable to attend in person. Virtual options should include "call in" options, for those with limited internet access.

Equinival found that community leaders would like more [Resiliency Hubs](#) that would serve as places for information sharing and to work together on community projects. This could include securing grant funding, developing outreach materials, and hosting meetings. An example of a successful metropolitan Washington Resilience Hub is the District's [FH Faunteroy Center and Resilience Incubator](#). It began by launching an environmental literacy initiative, breaking down terminology to empower residents to participate meaningfully.

B. Address cultural and linguistic barriers

- Improve data literacy for understanding reports and charts of findings.
- Have an open style of communication and understand that groups from other cultures may have entirely different norms for communication. Be willing to adapt and step outside of comfort zones. A local example is a city staff member who provided a composting presentation in a hijab when she presented to an Islamic society out of respect for their cultural norms.
- There is a persistent need for more translation of information. Metropolitan Washington has a very diverse set of languages spoken at home, as shown in the northern Virginia section of this [Storymap of Virginia languages](#). Some local governments have developed policy, standard operating procedures, tools, resources, and guidance for creating broader access for those who are non-English speakers.
 - The District of Columbia Office of Human Rights' [Language Access Program](#) guarantees the right of District residents to receive information and services from District government and its affiliates. It applies to spoken and written languages, but not ASL.
 - Fairfax County has a robust [language access program](#) that includes in-house translation services for Spanish and Korean and social media channels in multiple languages.
 - Portland's [Citywide Language Access Program](#) is another example. For virtual meetings, utilize platforms that have multiple language interpretation options, and for hearing-impaired community members, include sign language interpreters for all virtual and in-person meetings.
 - Other local governments have successfully partnered with organizations that can provide translation services.
- Create a two-way dialogue with opportunities to provide ideas, ask questions. Michele Heyward^{xxix}, Founder and CEO of [PositiveHire](#) and Equinival,^{xxx} recommends shifting the frame from “experts” to “co-creators”, from top-down decision-making to community-led design, and from transactional relationships to forming long-term partnerships.

C. Address financial barriers

- When possible, provide stipends for participants in training to sustain community involvement.
- Meeting locally, providing bus or Metro vouchers to defray the costs of travel, and providing childcare at meetings increases the feasibility of meeting participation.
- One local government member said his philosophy is to “come bearing gifts” such as information on rebates, incentives, and information that will help community members save money or upgrade their homes.

EJ engagement leaders in metropolitan Washington have said that providing food is an effective way to increase participation in meetings.^{xxxii} There is a significance in providing nutritious meals, not just as a gesture of hospitality, but to draw people in and show care for their well-being.

“Stories of real-life impacts shared by community members can lead to the most meaningful sets of solutions.”

—Julie Kimmel, ACPAC Member

3. Maximize time effectively and be respectful of time.

- A community leader stressed the importance of starting and ending meetings on time, recommending keeping them to one hour to maintain engagement and respect participants' schedules.
- Another recommendation is to meet at times that are convenient for that particular community, and/or vary meeting times. For example, some events are held in the evenings or on weekends, so that those working in the labor sector can attend the meetings. One option may be to partner with a local civic group to host meetings during one of their regular events. This strategy can also bridge the informal-formal network divide.

Approach 3: Developing Metrics

EJ Engagement Metrics could include:

- **Participation & Support** (Inclusion and participation by EJ community members increases)
- **Reach & Engagement** (number of events and participants, social media engagement, outreach materials distributed)
- **Trusted Messengers & Partnerships** (Track how many CBOs and EJ organizations are engaged, residents reached, joint events held)
- **Trust & Transparency** (Gauge through resident satisfaction surveys, shared neutral data, and via collaborations with CBOs)

When asked about metrics for measuring community satisfaction with engagement, most local governments participating in COG's listening sessions said they do not have formal metrics for EJ engagement. One COG member asks community members how they heard about an event or program. Another gauges the number of individuals reached through community outreach initiatives and the number of people who have navigated to resources and programs on their website. They use testimonials and feedback from partners to qualitatively gauge the effectiveness of their engagement efforts and ensure that the information provided is culturally sensitive and understandable. Their metrics were developed as part of the reporting requirements for an EPA environmental justice grant, which helped them establish a structured approach to measuring engagement. Another local government said they have metrics like "Number of community listening sessions hosted and participation rate."

A few recommendations for measuring EJ community satisfaction included in DOEE's [A Guide to Community-Centered Engagement in the District of Columbia are:](#)

- Do a mid-course check-in with EJ community members to gauge how well meetings and dialogues meet expectations. This allows for course corrections. For example, review whether there is diverse representation, or whether additional community members not at the table can be invited; are decisions being recorded and effectively shared; should meetings have breakout rooms to allow for small group discussions; and/or would electronic forms be helpful for community members to voice additional ideas after the meeting, such as additional questions or information needs, or concerns.
- Use a screening tool in collaboration with committee members to assess whether solutions and strategies identified during the engagement processes are addressing racial and social equity.

While local governments continue to develop and roll out programs and initiatives that focus on achieving the region's clean energy and air goals with an equity lens, keen attention should be given to removing the legacy of uneven distribution of benefits and burdens of these programs. For example, there should be equitable access to EV charging and solar opportunities, and to clean energy jobs and business ventures.

Statistics from the [National Energy Assistance Directors Association](#)^{xxxiii} reveal that the average residential monthly electricity bills in DC, Maryland, and Virginia between 2021 and 2025 increased by 54.7%, 45.7%, and 27.9% compared to the national average increase of 28.8%, which is alarming. The full impact of these increases has yet to be seen on frontline communities.

Therefore, a transition to a cleaner and more environmentally just region that elevates the whole of society should include programmatic and policy metrics rooted in mitigating, and most importantly, abating historical burdens placed on frontline communities.

These metrics might include:

Expanded and increased energy assistance programs (ex. expand assistance beyond one-time occurrences and increased dollar assistance per occurrence).

- Fully funded relief/assistance programs.
- Utility shut-off penalties and reconnection fees are eliminated.
- Pass utility debt cancellation policy.
- Ban utility shut-offs for at-risk populations during extreme weather (at state, federal level).
- Stop utilities from selling debt to credit collection businesses.

Local governments should collaborate with community organizations grounded in the needs of their community to further develop and evaluate their programs.

Approach 4: Providing Data, Information, and Resources for Communities

ENSURE THAT INFORMATION IS RELEVANT FOR EJ COMMUNITY MEMBERS

Community and local government leaders agree that better information (both access to data and quality and level of trust in the data) is critical to better engagement. Better information can lead to greater confidence among community leaders to engage with local government officials to assess that data together and identify potential strategies and actions to address concerns. Some specific ideas are below.

A. Equivinal found that communities want information that they can act upon:

- **Localized** – the data and information should describe an issue (air quality, energy use, flooding impacts) at a level that shows impacts on their neighborhoods or households.
- **Predictive** – the data and information should help reviewers understand when or how often a specific impact might occur.

- Be cautious of using data that may be slanted toward a company that could benefit financially. Examine the motive behind the data.
- **Prescriptive** – the data and information should help reviewers identify a course of action to address that impact.

B. Tailor information to each community:

- It is important to address community-specific priorities and needs. As a community member put it, “we have layers [of needs].”
- Place strategic emphasis on what local communities care about. This could range from agricultural or land impacts from climate change to urban heat island effects.
- Tailor resources and messaging to different generational audiences to ensure broader reach and impact.
- Low-income community members need different sources of information than people with higher incomes, and renters need different information than homeowners.
- Make information accessible using photos and graphics, and multiple languages.

C. COG's [Clean Air Partners Public Awareness and Program Research Final Report \(2024\)](#) found that framing is important for achieving action:

- The survey respondents said they were more motivated by positive framing: Working towards improving air quality versus frames about reducing air pollution. Positive news is motivating and spurs people to drive faster towards the goal.
- Community members need to feel personal agency. If they do not perceive that they can personally make a difference (e.g., that the issue requires bigger actions than they themselves can take, such as corporations, institutions, and/or government), then it undermines the efforts to have people engaged.
- Knowing the “why” an action is important can be motivating.
- The action should be accessible and easy.
- Show momentum and a shared commitment. Impacts should be quantified in a way that shows the value of their personal actions versus on a macro societal level.
- Social norming or social diffusion is an effective motivator for behaviors: People want to get on board with momentum from everyone around them.

LEVERAGE TRUSTED COMMUNITY INSTITUTIONS & NETWORKS

Trusted community organizations can be important liaisons for COG and local governments to bridge the gaps between formal and informal policy networks by building on pre-existing community capacity, resources, and roles. Faith-based institutions, civic associations, and local nonprofits can play important roles as these organizations already have strong community ties, intergenerational reach, and communication channels like newsletters and meeting spaces, which can be utilized for outreach.^{xxxiv}

Diverse partnerships also amplify value in the eyes of funding organizations. The District's [FH Faunteroy Center and Resilience Incubator](#) has found success in a multi-partner approach that includes community members, academia, government, and the private sector. Understanding and communicating the unique value each partner brings, whether as a connector, translator, or intergenerational bridge, can help to build sustained community support and funding.

Some ways in which community partners can help provide data, information, and resources include:

- Providing translation of materials and interpretation at meetings and checking that messaging content is clear.
- Partnering on grant applications.
- Community champions can share messages, vouch for the authenticity of programs, and help build trust among community members. Word-of-mouth can be an effective way for other members of the community to learn about programs.
- Community-based organizations can spread the word about government programs through their local channels, increasing enrollment.
- Providing meeting space.

A. Examples of Effective Partnerships with Community-based Organizations

Local Examples

- **Fairfax County's** [AC Rescue program](#) began as a volunteer effort to provide portable or window air conditioning units to forty low- and moderate-income households. The county recognizes that heat stress is the most fatal natural hazard in Fairfax County. The AC Rescue Program has become a formalized partnership between Fairfax County and [Rebuilding Together-AFF](#).
- **Mobilize Frederick** is a non-profit organization that is supporting the City of Frederick's 40% tree canopy goal. Mobilize Frederick received a grant from the Maryland Forest Service's Community Forestry Catalyst Fund for its [Cooler Neighborhoods Project](#), which will support workforce development and result in 240 trees being planted in 2025-26 in priority Census tracts.
- **Montgomery County's** Department of Environmental Protection launched the Climate Justice Co-Creation Initiative, partnering with frontline organizations including the Montgomery County Collaboration Council, Latin American Youth Center, CASA, and the Faith Alliance for Community Equity and Sustainability (FACES), to involve communities most impacted by climate and racial injustice as collaborators and co-creators. Frontline community members as well as Montgomery County staff across several departments have been trained in Climate Justice 101, providing a common orientation around the co-creation of policies and initiatives.
- **Prince George's County** has an [Office of Community Relations](#) that is designed to serve as a bridge between county government and its residents.
- **Faith Alliance for Climate Solutions** has partnered with several COG local governments, including Fairfax County and Arlington County, to advance their climate and energy strategies. An example is Fairfax County's Office of Environmental and Energy Coordination partners with the Faith Alliance for Climate Solutions to reach congregations with information about tax credits for solar retrofits^{xxxv} on their places of worship. This partnership is incredibly effective: Faith-based institutions are the predominant sector to take advantage of the [Going Solar](#) tax credits.

- [Interfaith Power and Light](#) works with faith-based congregations in metropolitan Washington to address climate change, reduce energy, and go green.
- **The District's [Ward 7 Resilience Hub Community Coalition \(RHCC\)](#)** is a perfect example of a long-standing community organization with partnerships that include DOEE, EPA, and NOAA among others. RHCC was formed in 2019 by a dedicated group of Ward 7 residents who had a vision for what multi-function resiliency hubs would mean for building community resilience pre-, during, and post- an emergency by providing year-round resources and information as well as social support services.

National Examples

- **Berkeley, California**, has a [Climate Equity Pilot](#) grant program to provide funding to local non-profit partners to reduce GHG emissions and climate change impacts on disadvantaged communities in the city. One example is the [Ecology Center's Climate Equity Collaborative](#) which provides a space for BIPOC community members to convene, elevate their voices, and enhance their capacity.
- **Denver's [Promotoras Climáticas](#)** program works with Community-Based Organizations on engagement and public outreach to address extreme heat and water scarcity. One program partner is the Park People, a private nonprofit organization that works with the local Denver communities to plant trees and improve the parks in Denver's underserved and marginalized "NEST Neighborhoods."

B. Partner with other government programs and agencies

Partnering with other government programs and sister agencies that provide essential services can expand reach, not only by contacting a wider audience, but by addressing multiple needs simultaneously and in a coordinated fashion. Climate and energy issues may not be at the forefront of residents' minds. Partnering with the Health Department at a community event can make climate issues more relevant, such as preventing heat stroke on high heat days and asthma on poor air quality days and help residents to view these issues as interconnected. Climate outreach staff have also noted success partnering with libraries and Title 1 schools, both as trusted community institutions.

Local Examples

- **Arlington County** advertises the following [free places](#) throughout the County to keep cool during heat waves: libraries, community centers, spray grounds, and shopping malls. Additionally, the Department of Human Services has a [Heating/Cooling Assistance program](#) that aids with expenses associated with heating and cooling a home. The assistance program aims to help those in the county with low socio-economic status pay their heating and cooling bills, which will in turn help environmentally vulnerable people stay cool/warm under extreme weather conditions.
- **City of Alexandria** also lists recreation centers, such as Patrick Henry Recreation Center, and libraries, such as the Charles E. Beatley Jr. Center Library, as available cooling centers for those seeking relief during heat waves.

National Examples

- **Denver** has opened [cooling centers](#) when the local National Weather Service office issues a heat advisory warning for the area. These cooling centers are often located in recreation centers and libraries during normal business hours, allowing anyone who is seeking relief from the heat to access air conditioning.

Approach 5: Using Community Science

Community involvement in data gathering has grown into a core environmental justice practice. With guidance—such as the EPA’s [Enhanced Air Sensor Guidebook](#) (2023)^{xxxvi} and the [Air Sensor Toolbox](#)^{xxxvii}, which provide standard methods for siting, calibration, QA/QC, and communication—citizens around the COG region are getting involved in air quality monitoring. These tools reduce barriers for community groups, schools, and local agencies to generate defensible datasets. Federal actions have validated these efforts: The [AirNow Fire & Smoke Map](#)^{xxxviii} displays corrected PurpleAir data alongside federal monitors during wildfire smoke events, indicating that citizen science can inform real-time public health guidance. EPA’s American Rescue Plan Enhanced Air Quality Monitoring program funded over 120 projects across the U.S.^{xxxix}, [NOAA’s Urban Heat Island mapping campaigns](#)^x mobilized volunteers nationwide, including metropolitan Washington, to document neighborhood-level heat disparities.

The COG region has embraced these tools to improve public understanding and inform policy. Examples below highlight how community science can democratize data while also influencing tangible interventions. When paired with robust QA/QC and open platforms, they provide both transparency and credibility, enabling residents to play an active role in environmental monitoring and decision-making.

Local Examples

- **The District of Columbia Department of Energy and Environment (DOEE) PurpleAir Sensor Project**^{xli} installs and maintains monitors for residents, creating a publicly accessible stream of hyperlocal PM2.5 data. Another good example is the [Community Mobile Air Project](#) where the District neighborhoods of Mayfair, Buzzard Point, and Ivy City, which have been disproportionately impacted by poor air quality. In 2024, program expanded to reach more neighborhoods, covering about half of the District. A third project the District undertook was partnering with Air Ambassadors to teach residents about air quality and how to use handheld sensors, like Plume Flow or Atmotube.
- **Prince George’s County:** [Cheverly Air Quality Partnership](#) worked with Maryland Department of the Environment (MDE) and community organizations to deploy a network of sensors, identifying localized pollution hotspots and prompting targeted enforcement and health outreach^{xiv xv}.
- **Montgomery County** [2022 Urban Heat Island](#) mapping effort mobilized volunteers to measure temperature differences of up to ten degrees Fahrenheit, producing actionable data that has influenced tree planting priorities, cooling center siting, and resilience hub planning^{xvi xvii}.
- **Loudoun County:** [Air Monitoring – Loudoun Climate Project](#)
- **Frederick County:** Air Quality Monitoring Network - [Air Quality Monitoring Network | Frederick County MD - Official Website](#)
- **Maryland** uses the app [My Coast](#) as a community flood reporting app for riverain and inland flooding.

National Examples

- Berkeley: [UC Berkeley’s FloodNavigator](#)
- Atlanta: [UrbanHeatATL](#)
- New York City: [Community Heat and Air Mapping Project for Environmental Justice](#)

Approach 6: Bolstering Community Leadership

To be empowered to lead, environmental justice communities need access to data and information about climate, energy, and air quality research and programs, technical assistance, and funding. Information needs can range from background information on a particular topic to knowing how to implement practical climate resiliency measures. Developing community leaders may also mean providing information on environmental laws, technical support, and training on how to understand, engage in, and influence government decision-making processes and policies.

Local Examples

- [The Faunteroy Center and Resilience Incubator](#) is the first pilot Resiliency Hub in the District, fitting the [DC Community Resilience Hub](#) paradigm, which is that the “hub” serves the community in daily functions, so the communities are more connected, self-determined, and resourced. Community Resilience Hubs can provide resources from job training to childcare and elder services to resiliency training, in addition to serving as a central place during emergencies.



FH Faunteroy Center & Resilience Incubator

- [Resilient Communities in Maryland](#) is partnering with communities to develop Resiliency Hubs, and [Maryland Resiliency Partnership](#) provides information about flood resiliency, such as flood preparedness and recovery, and flood insurance.
- The [EcoAmbassadors](#) program in Arlington County and Alexandria trains community members in energy conservation measures so that they can help neighbors reduce waste and energy use, electrify their homes, and use eco-friendly transportation choices.

- The [Centro de Apoyo Familiar Youth STEM Program](#), for Hispanic and low-income communities, has a track that trains youth to become Environmental Justice [Eco-Promoters](#).

National Example

- Denver provides residents and businesses with a preparedness training program, [DenverREADY](#). The program is designed to improve disaster preparation. The free training sessions are one hour long, once a month, both in-person and virtually. The program also has a Spanish version, called DenverLISTO.

Approach 7: Augmenting Economic and Workforce Development

Until recently, workforce considerations were a core part of federal climate and infrastructure policy. Programs like the National Electric Vehicle Infrastructure (NEVI) initiative and the Inflation Reduction Act (IRA) tied clean energy investments directly to strong labor and equity standards, and under the former Justice40 Initiative, at least forty percent of federal climate and infrastructure benefits were intended to reach disadvantaged communities. The NEVI Final Rule required all federally funded charging stations to be installed and maintained by Electric Vehicle Infrastructure Training Program (EVITP) certified or registered apprentice electricians. This was to ensure that the transition to clean transportation would generate high-quality, well-paid jobs, expand access to skilled trades, and create pathways for local and underrepresented workers to participate in the growing clean-energy economy.

States and local governments—now more than ever—are supporting and enhancing workforce development in the climate and energy sector.

Local Examples:

- **Prince George's Community College (PGCC)** has expanded its [Skilled Trades](#)^{xlii xliii xlii} offerings to include stackable credentials in electrical and HVAC work, providing a foundation for EVITP certification.
- **The District of Columbia** committed to ensuring that forty percent of the benefits of the program are delivered to disadvantaged communities in several ways, including implementing an online DBE Certification to make it easier for disadvantaged businesses to succeed in the District, as well as developing a local workforce that is EVITP certified through programs such as [Green Trades DC Technical Training Program](#).
- [Emerald Cities Collaborative DC Contractor Incubator](#) supports small, disadvantaged businesses to succeed in the green, climate sector through training and coaching.

National Examples

- **New York City:** [Green City Force](#)
- **National:** [Environmental Career Worker Training Program](#)
- [Project Green Schools](#) and [Brockton High School \(MA\) EV Technician Training](#)

Strategies such as these demonstrate how the region is addressing the workforce not just as an economic development issue, but as integral to delivering on climate goals. Inclusive training pipelines, equity-focused frameworks, and workforce compliance requirements are shaping how projects are scoped, funded, and delivered.

Approach 8: Mainstreaming EJ into Public Policy, Planning and Programs

The goal of mainstreaming EJ is for it to become a natural part of local decision making, widening the scope and effect of policies and programming. Mainstreaming EJ is a part of overcoming historical disenfranchisement by making EJ an integral part of the decision-making process. Done correctly, it allows for inclusion of the greatest number of environmental considerations in the earliest stages of the decision-making cycle, at the time that plans and policies are framed.

Since 2017, civic engagement in the COG region has evolved from transactional processes into a structured, equity-centered practice. Below are highlights from around the region.

Local Examples

- **Arlington County** has a [R.A.C.E. \(Realizing Arlington's Commitment to Equity\)](#) website that has trainings, a Racial Equity Action Plan framework, and details the County's equity initiatives in health, education, housing, technology, transportation, and public safety. However, energy is not a focal point.
- **City of Alexandria** produced a [Racial Equity Toolkit](#) (RET) and [Community Engagement Business Plan](#). The RET is a structured set of prompts that requires staff to evaluate the racial equity impacts of ordinances, programs, and budget requests. The Business Plan provides operational guidance for inclusive engagement, including translation, accessibility, outreach channels, and documentation of results. These mechanisms clarify how staff should implement equitable practices, ensuring consistent engagement expectations across departments and reducing discretion that can perpetuate inequity.
- **City of Gaithersburg** has a [Racial Equity Awareness and Action Plan](#) and an [Environment and Sustainability Element of the Master Plan](#) with a section on Environmental Justice that does in-depth analysis of access and affordability for healthy foods and open space.
- **City of Rockville** appropriated \$1.8 million in FY 2023 for a new Flood Resiliency Master Planning Project in the Capital Improvement Program (CIP) to plan for and mitigate flood impacts worsened by climate change. The Master Plan would identify the issues caused by an increasing number of larger intensity and shorter duration storm events and develop potential solutions, including a project implementation plan to improve flood resilience throughout the city. A stakeholder engagement plan was developed to educate the community on flood risks and ensure equitable solutions that reflect the city's values of justice, equity, diversity, and inclusion while connecting residents with existing flooding resources and programs. For example, the City reached out to the Twinbrook community, which is the location of several flood issues, is diverse, and has the highest concentration of Hispanic and Latino census tracts in the City. Outreach efforts include creating a [flood relief website](#), an online flood impacts survey in English and Spanish, two open houses

(one online, one virtual), direct mailed postcards in multiple languages to over 2,000 households in flood prone areas, and tabling at community events.

- **Rockville** also includes social vulnerability and racial equity analysis in their [Climate Action Plan](#) and has an equity chapter in their [EV Readiness Plan](#).
- **DC's REACH Act** established the [Office of Racial Equity](#) and a permanent Commission, mandating [Racial Equity Impact Assessments \(REIAs\)](#) for most Council legislation. Agencies apply the [Racial Equity Budget Tool \(REBT\)](#) to assess who benefits, who may be burdened, and how barriers are addressed when proposing budgets. By embedding these tools into governance, the District has elevated racial equity from a goal to a statutory requirement, transforming public input into a formal element of decision-making.
 - **The District** has a [Sustainable DC 2.0 website](#) enabling the public to track progress on equity, and a [2024 progress report](#). The District Department of Energy and the Environment's Solar for All Program was a U.S. DOE's Sunny Awards winner for increasing equitable access to solar.
- [Fairfax County's Community-wide Climate and Energy Action Plan \(CCEAP\) Implementation Plan](#) states that equity is a crucial component of climate planning, and a [Public Climate Action Dashboard](#) provides progress transparency. The county-wide [One Fairfax](#) pledges the county to consider equity when making policies and providing services, and each Department or Agency annually develops an [Equity Impact Plan](#).
- **Frederick County** has a dedicated [environmental justice](#) webpage, and Frederick County and Frederick City engaged EJ community members in the development of their Climate and Energy Action Plan, published November 2025.
 - **Frederick County's Green Homes Program** connects education, personalized support, community partnerships, and financial incentives to promote long-term change at the household and neighborhood level. The program focuses on historically underserved and overburdened communities to promote long-term change at the household and neighborhood levels.
- **Loudoun County**, as part of its [2023 Energy Strategy](#), issued an [Energy Equity Status Report](#) to track the County's progress assisting communities experiencing environmental and socioeconomic energy burdens. EJ areas mentioned in their March 2025 Status Report included increasing access to zero emissions vehicles, household weatherization, home energy improvements, and connecting residents to Dominion's EnergyShare energy bill payment assistance program. As part of their outreach, Loudoun County and its Environmental Commission hold an [annual Energy and Environment Forum](#).
- **Montgomery County's** Latino Health Initiative has created an interactive exercise program designed to encourage physical activity and foster social connections among participants. The program also integrates community education on climate and health. Each session features guest speakers from a diverse range of community partner organizations who highlight the link between the impacts of climate change, the natural environment, and individual health and well-being. In-person cohorts are hosted at various community sites, such as recreation centers and public libraries, helping the program not only reach a broader audience but also introduce many participants to County resources and institutions for the first time.
 - [Montgomery County's Climate Action Plan](#) has a racial equity and social justice section for each component of the Plan. The Department of Environmental Protection

staff have been trained in Equitable Community Engagement, and County teachers have received training in climate change and environmental justice.

- **Prince George's County** has an [EJ Commission](#) that meets monthly, in which they make recommendations regarding actions that should be taken to address the gamut of EJ issues.
- **Prince William County's** [Community Energy and Sustainability Master Plan](#) recognizes that social vulnerabilities exacerbate both climate hazards and the ability to adapt to them.

National Examples:

- **Grand Rapids, Michigan**, has a [Racial Equity Toolkit](#) with a workbook for developing and tracking EJ commitments.
- **Milwaukee's** [Climate and Equity Plan](#) is their foundation for net-zero energy homes, committing the city to providing energy burdened residents with financial help to improve their homes with new insulation, furnaces, boilers, air conditioners, and more with financial help from the government. Milwaukee also has the [ECO Neighborhoods Initiative](#), which began with Lindsey Heights' neighborhood commitment to environmental justice.
- **Portland, Oregon**, has a [Climate Emergency Workplan](#) which details and offers a multitude of mitigation and adaptation strategies for the city while also focusing on equity. One of the strategies is to convert the East Portland Community Center into a Resilience hub to allow for an energy efficient, resilience center for disasters, such as ice, smoke, extreme heat and cold, power outages, and more. This allows for safe place for East Portland community members to seek refuge when these disasters occur as climate change intensifies through the coming years. Another strategy for the Resilience hubs is to develop neighborhood-scale energy resilience through solar and battery systems which would target communities facing the highest risks. This project involves collaborating with the community and other bureaus and agencies to prioritize what is essential to either the community or city. And thirdly, the city has implemented a PCEF heat response program which involves distributing around 15,000 efficient heat pump cooling units to disadvantaged and vulnerable residents as heat waves are a growing concern.
- **Seattle's** [Transportation Equity Program](#) engages members of their Transportation Equity Workgroup in codeveloping a Transportation Equity Framework, which will help to align its racial justice efforts with local community organizations to work towards healthy and clean environments for communities affected by structural racism in the transportation sector. Seattle also has a [Racial Equity Toolkit](#), which includes an assessment worksheet.

CONCLUSION

In developing this toolkit, the top climate and energy concerns voiced by EJ communities included:

- Air quality,
- Climate extremes exacerbate heat islands and flooding, and
- Equitable access to EV infrastructure, rooftop solar, and other clean energy.

With the AI and data center boom, these issues are likely to be accompanied and heightened by:

- Data center impacts (including land conversion, water and energy usage, backup generator emissions, and noise), and
- The rising cost of electricity, which will intensify the need for energy efficiency upgrades and emergency bill payment assistance.

In the time since the 2017 EJ Toolkit, COG members have made positive strides in identifying EJ communities and moving toward environmental equity. Shortly after the first toolkit was published, the country experienced an equity awakening and an influx of resources to focus on building inclusivity. Most COG members began to build equity considerations into their climate and energy plans. Still, EJ community participation obstacles persist, such as making meeting participation more feasible by offering services like language translation and childcare. It can be difficult to engage a range of ages, including youth. Capacity and funding to sustain relationships over the long haul are challenging for both community members and governments. Metropolitan Washington has a robust network of non-profits, tech start-ups, CBOs, and funders who are coalition builders eager to support local governments and lift historically marginalized and vulnerable communities. By partnering with these entities, local governments can better reach EJ communities and have greater success with implementing climate mitigation solutions and preparing all communities for resilience to extreme weather and storms.

COG's local governments can enhance their climate and energy programs by maintaining relationships with trusted partners, using multiple channels of communication to stay connected with EJ communities, and fostering capacity building within EJ communities. COG, as a regional coordinating body, will continue to shine a light on successful EJ engagement practices, connect people and programs, share information about funding and other resources, and foster dialogues and round tables so that COG members may continue to learn from each other and national examples as climate justice work advances.

APPENDIX

Policy, Legislation, and Executive Orders

A. District of Columbia

The District of Columbia's [REACH Act](#) established the Office of Racial Equity and a permanent Commission, mandating Racial Equity Impact Assessments (REIAs) for most Council legislation. Agencies now apply the [Racial Equity Budget Tool \(REBT\)](#) to assess who benefits, who may be burdened, and how barriers are addressed when proposing budgets. The District of Columbia introduced an Environmental Justice Act (Bill B26-0104) in January of 2025.

B. Maryland

The [VOICE Environmental Justice Executive Order](#) directs state agencies to use the environmental justice screening tool [EnviroScreen](#), to inform policy and decisions; to prioritize opportunities for meaningful engagement with impacted EJ communities; and to form an Advisory Council. Maryland also enacted [Code § 1-701 \(Subtitle 7 – Environmental Justice\)](#) in 2024, which established a statutory framework for environmental justice, including definitions and creating a Commission on Environmental Justice and Sustainable Communities.

C. Virginia

The [Virginia Environmental Justice Act of 2020](#) states that "It is the policy of the Commonwealth to promote environmental justice and ensure that it is carried out throughout the Commonwealth, with a focus on environmental justice communities and fenceline communities," and it defines these communities. In 2020, Virginia also amended [Chapter 26 of Title 2.2 article 36](#), establishing the Virginia Council on Environmental Justice to provide recommendations intended to protect vulnerable communities from disproportionate impacts of pollution and provide such communities meaningful involvement in the decision-making process.

Funding and Other Resources

A. Regional

- Under the Chesapeake Bay Trust, [the Mid-Atlantic Environmental Justice Fund](#) is a grant program that uses forestry to address environmental justice issues in the Mid-Atlantic region.

B. District of Columbia

- [Green Bank](#) provides financing solutions for District businesses and community institutions to invest in solar energy, floodwater resilience, energy-efficient buildings, and transportation electrification. For example, they supported Green Compass in developing a loan facility to support five new stormwater and green infrastructure projects in Wards 5, 7, and 8. The project resulted in improving air and water quality, electricity savings, green jobs for the communities, and much more.

C. Maryland

- [Maryland Department of Housing and Community Development \(DHCD\) Multifamily Energy Efficiency and Housing Affordability \(MEEHA\)](#) program promotes energy efficiency and affordability in multifamily rental developments.
- [Maryland Green Registry](#) is a free, voluntary program that offers resources to aid businesses and other organizations with their own goals in regard to sustainability.
- [MEA's Residential Energy Equity Program](#) provides grants to local governments and non-profits for energy efficiency projects for low-to-moderate income households.
- [Maryland Clean Energy Center](#) (MCEC) is a green bank for clean energy, in which they use private capital and private sector capabilities to aid homeowners and businesses in reducing their energy bills.
- [Montgomery County Green Bank](#) is dedicated to accelerating renewable energy, clean energy, and energy efficiency investment in Montgomery County. They partner with the private sector to deliver a more affordable financial option for County residents and businesses, which correlates with the County's environmental goals.
- Montgomery County's [Healthy, Efficient, Electrified, Climate-Adapted Pilot \(HEECAP\)](#) grants gap funding to enable energy efficiency and electric appliance upgrades in low- and middle-income housing.
- [FSC First](#) Green Energy Loan Program funds public and private investment in clean energy and other innovative green technologies in Prince George's County.

D. Virginia

- [The Virginia Environmental Endowment](#) funds various programs and projects through grant to improve the environmental quality to further prevent pollution, conserve natural resources, and promote environmental literacy.
- [Windward Fund](#) funds the Environmental Justice Data Project, which is working in collaboration with [Resilient Virginia](#) and Virginia Commonwealth University Research Institute for Social Equity. The collaboration is currently working on data collection and community outreach to inform research on the impacts of disasters and environmental hazards on critical infrastructures in three underserved local governments.

E. Foundations and Grants in the COG Region that Support Community-Based Organizations

- [Burroughs Wellcome Fund Climate Change and Human Health Seed Grants](#)
- [Cafritz Foundation](#)
- [Chesapeake Bay Trust's Mid-Atlantic Environmental Justice Fund](#)
Given the nature of federal funding, please check the website or contact the Chesapeake Bay Trust directly for the most up-to-date information.
- [Greater Washington Community Foundation](#)
- [Meyer Foundation](#)
- [Pepco Sustainable Communities Grant Program](#)

F. Utility Payment Assistance

- [National Energy & Utility Affordability Coalition](#)
- **Maryland**
 - [LIHEAP Clearinghouse - MD](#)
 - [Washington Gas/Washington Area Fuel Fund \(WAFF\)](#)
 - [Washington Gas Residential Essential Service \(RES\)/Utility Discount Program \(UDP\)](#)
 - [Dollar Energy Fund – Maryland Programs](#)
 - [Interfaith Works](#) - Emergency Financial Assistance for Montgomery County residents, including emergency financial, rental, and utility assistance.
 - [Fuel Fund of Maryland](#) – offers financial support to supplement government-funded program that operates through MD's Office of Home Energy Programs.
 - [EmPOWER MD](#) - a state program that provides incentives and technical assistance for businesses, homeowners, and renters to reduce drafts, improve insulation, and install energy-efficient appliances in homes and buildings.
- **District of Columbia**
 - [LIHEAP Clearinghouse - DC](#)
 - [PEPCO Residential Aid Discount \(RAD\)](#)
 - [Greater Washington Urban League](#) – Pepco Energy Assistance - provides one-time emergency utility assistance to eligible District residents year-round.
- **Virginia**
 - [LIHEAP Clearinghouse - VA](#)
 - [Dominion Energy Assistance Programs](#)
 - [Northern VA Family Services](#) - Utility assistance for Prince William County (including the cities of Manassas and Manassas Park)
 - [Action in Community Through Service \(ACTS\) Emergency Assistance Programs](#)
 - and [Dominion EnergyShare Program](#)
 - Loudoun County Corps – Emergency assistance with electric and gas utilities.

Reports, Guides, and Programs

Equitable Engagement

- [Achieving Equitable Engagement in Ann Arbor](#) provides recommendations and strategies on how to improve their engagement to make it more equitable, including developing an engagement plan and asking communities to evaluate their satisfaction with engagements.
- American Forests Vibrant Cities Lab [Tree Equity Handbook](#) provides a step-by-step process for increasing access to trees from coalition building and workforce development to changing policy, and the Cool Corridors Action Guide helps communities find site-specific solutions for providing shade for their most vulnerable residents while they are walking or waiting for the bus.
- [Environmental Justice Law and Policy Database](#) is a comprehensive report of every state's environmental justice (including energy justice) policies.
- Environmental Protection Agency's [Meaningful Engagement Policy](#) provides a Public Participation Spectrum to gauge an appropriate level of public participation and tools and practices for achieving the desired engagement.

- Montgomery County's [Office of Legislative Oversight Report: Community Engagement for Racial Equity and Social Justice](#) provides recommendations to the county, but is applicable for anyone, for deepening engagement of BIPAC and low-income communities for racial equity and social justice.

Resources for Communities

- [Centro de Apoyo Familiar \(CAF\)](#) works to “transform communities through economic, social, and educational empowerment in collaboration with community and faith-based organizations” to promote environmental justice and workforce development through a variety of training programs.
- [Emerald Cities Collaborative DC Contractor Incubator](#) supports small, disadvantaged businesses to succeed in the green, climate sector through training and coaching.
- [Greater Washington Region Clean Cities Coalition Environmental Justice programs](#) provide workforce development and job training in clean energy for underrepresented communities, including veterans.
- [Resilience Hub Collaborative](#) has guidance on how to form resilience hubs.
- [Thriving Earth Exchange](#) “empowers communities through science” to address environmental issues. This is done by pairing community leaders with Community Science Fellows, who provide project management support, and Volunteer Scientists who lend technical support.

Utility and Energy Equity

- [Community Power Map](#), by the Institute for Local Self-reliance, scores eighteen categories of state policies that either support or hinder local power.
- [Energy Equity Project](#) in Ann Arbor is aimed at ensuring that environmental justice communities have energy security and can transition to clean energy.
- [Energy Equity Report](#), Loudoun County (2025) identifies energy equity communities in Loudoun County, which are groups facing a disproportionately high energy burden and limited representation in energy-related decisions and solutions.
- [Energy Justice Lab](#) is a collaboration of Indiana University and the University of Pennsylvania to study and improve energy justice and equity as society shifts from fossil fuels to alternative energy.
- [Utility Disconnections Dashboard](#) allows for the search of specific utility companies, explores state policies that protect customers, with downloadable data, graphics, and more. The data are fully updated through 2024.
- [Utility Bills Are Rising: An Analysis of How Utility Bills are Impacting American Energy Consumers and Who Determines Them](#), a report by the non-profit PoweLines, documents the rising costs of energy utility bills and impacts to ratepayers.

Community and Youth Engagement

- [Center for Engagement, Environmental Justice, and Health \(CEEJH\)](#) serves as a bridge between underserved communities and community-based organizations, faith-based groups, health professionals, researchers, environmental advocacy groups, government agencies, and policy makers in identifying and addressing environmental justice and health issues.

- [Young, Gifted, and Green](#) -Originating out of the Flint, Michigan lead crisis, its mission is to provide resources to Black, Indigenous, and Latinx youth to affect policies to achieve greater environmental justice through training, mentorship, and advocacy. They have a training program to develop Millennial and Gen Z leadership called the [EJ Griot Project](#), available in the District.
- [Youth Eco-Promoters Publications](#), Centro de Apoyo Familiar (CAF) has youth-made virtual books created to promote environmental awareness for children. CAF is a non-profit that supports communities in the areas of housing, food distribution, environmental health and justice, and workforce development.

References

1. Summaries from COG's Local Government EJ Toolkit Listening Sessions
 - [February 14, 2025](#)
 - [March 13, 2025](#)
 - [CCAP Climate Leaders Outreach Strategy webinar summary](#)
2. [Equinival's EJ Toolkit Final Report \(June 2025\)](#)
3. [Clean Air Partners Public Awareness and Program Research Final Report \(2024\)](#)

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Endnotes

i U.S. Environmental Protection Agency. (2016). *Environmental Justice*. Retrieved from U.S. Environmental Protection Agency: <https://www.epa.gov/environmentaljustice>

ii Principles of Environmental Justice (printable 1-page PDF version; en Español).

Environmental Justice Platform adopted at The First People of Color Environmental Leadership Summit, 1991. <https://ejnet.org/ej/>

iii International Association for Public Participation's Spectrum of Public Participation (1999). <https://www.iap2.org/page/SpectrumEvolution>

iv The Initiative for Energy Justice. The Energy Justice Workbook (December 2019).

v American Council for an Energy-Efficient Economy. *How High Are Household Energy Burdens?* (Drehobl, A., L. Ross, and R. Ayala). (2020).

vi Community Climate Collaborative. Lessening the Load: Energy Burden and Unaffordability in Richmond, VA. (2025).

vii Behavioral and financial coping strategies among energy-insecure households, (S. Carley, M. Graff, D. M. Konisky, T. Memmott; Edited by D. Massey), Proceedings of the National Academies of Science, (August 2022)

viii <https://storymaps.arcgis.com/stories/4c4d46e0ae654156a83e77f5367beac2>

ix "Which households are energy insecure? An empirical analysis of race, housing conditions, and energy burdens in the United States." (M. Graff, S. Carley, D. M. Konisky, T. Memmott), Energy Research & Social Science, (September 2021).

x <https://www.aceee.org/energy-burden>

xi The Effects of Historical Housing Policies on Resident Exposure to Intra-Urban Heat: A Study of 108 US Urban Areas (Jeremy S. Hoffman, Vivek Shandas, and Nicholas Pendleton). Climate 2020, 8(1).

xii COG's Comprehensive Climate Action Plan (November 2025)

xiii <https://www.nature.org/en-us/what-we-do/our-priorities/build-healthy-cities/cities-stories/benefits-of-trees-forests/>

xiv <https://psychology.uchicago.edu/news/marc-berman-thinks-you-should-take-walk-park>

xv <https://healthytreeshealthylives.org/>

xvi <https://www.mwcog.org/newsroom/2024/04/11/cog-board-adopts-a-new-regional-tree-canopy-goal--climate--energy-conservation-forestry-urban-forestry/>

xvii <https://www.treeequityscore.org/>

xviii Regional Blue Green Infrastructure Community Engagement and Planning Project *Regional Open House Summary of Panel 2: Implementation Partnerships- Lessons Learned for Stakeholder and Community Engagement* (May 22, 2025).

xix The EJScreen, developed by the U.S. Environmental Protection Agency, and the CEJST developed by the Department of Energy being hosted by Harvard University DataVerse since being removed from federal websites in February 2025.

xx The Public Environmental Data Partners is a coalition of volunteers dedicated to preserving federal environmental datasets and tools and providing public access to public data. A Guide for Environmental Data Mapping and Investment Tools (June 2025).

vi. MDEnviroScreen (portal): https://mde.maryland.gov/Environmental_Justice/Pages/MDEnviroScreen.aspx.

xxii Urban Institute. *Screening for Environmental Justice: A Framework for Comparing National, State, and Local Data Tools* (C. Balakrishnan, R. H. Johnson, C. R. Smith). (November, 2022).

xxiii COG's Regional Blue-Green Infrastructure Community Engagement and Planning Project Community Engagement Panel (May 22, 2025).

xxiv Matt Scott and Yiselle Santos Rivera were speakers for the April 29, 2025, Designing a More Inclusive Climate Future session of the DC Climate Week Conference.

xxv Georgetown Climate Center's report entitled A Guide to Community-Centered Engagement in the District of Columbia (November 2018).

xxvi DDOE's A Guide to Community-Centered Engagement in the District of Columbia (2018).

xxvii COG's Regional Blue-Green Infrastructure Community Engagement and Planning Project Community Engagement Panel (May 22, 2025).

xxviii COG's Regional Blue-Green Infrastructure Community Engagement and Planning Project Community Engagement Panel (May 22, 2025).

xxix Michel Heyward created and facilitated a DC Climate Week 2025 track entitled Creating an Inclusive Climate Future.

xxx Equival Report. *Environmental Justice Toolkit Community Engagement Findings and Recommendations* (June 2025).

xxxi COG's Regional Blue-Green Infrastructure Community Engagement and Planning Project Regional Open House Community Engagement Panel (May 22, 2025).

xxxii COG's CCAP Outreach Measure webinar (September 4, 2025).

xxxiii <https://neada.org/wp-content/uploads/2025/11/EnergypicesNov25.pdf>

xxxiv Panelist. COG's Regional Blue-Green Infrastructure Community Engagement and Planning Project Community Engagement Panel (May 22, 2025).

xxxv The federal tax credit program for solar is set to expire December 31, 2025.

vii. https://www.epa.gov/system/files/documents/2023-06/TR_Enhanced%20Air%20Sensor%20Guidebook_QA_Final.pdf

xxxvii <https://www.epa.gov/air-sensor-toolbox>

xxxviii <https://www.airnow.gov/sites/default/files/2021-07/Fire%20and%20Smoke%20Map%20FAQS%207.15.2021.pdf>

xxxix <https://www.epa.gov/arp/arp-enhanced-air-quality-monitoring-communities-competitive-grant>

xl <https://www.heat.gov/pages/mapping-campaigns>

xli https://doee.dc.gov/sites/default/files/dc/sites/ddoe/service_content/attachments/PurpleAir%20Sensor%20Project%20Flyer.pdf

xlii PGCC Skilled Trades Center: <https://www.pgcc.edu/skilledtrades/>

xliii PGCC Electrical & Residential Wiring (NCCER): <https://www.pgcc.edu/programs-courses/continuing-education/construction-and-skilled-trades/electrical-and-residential-wiring-nccer/>

xliv PGCC Course Listings (search): <https://selfservice.pgcc.edu/Student/Courses>



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