Establishing and Maintaining Engagement for a Distributional Equity Analysis

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1.1 Guide Context | About the Guide

This guide is intended to support an organization, such as a utility or nonprofit, in developing an engagement strategy for conducting a distributional equity analysis (DEA) for distributed energy resources (DERs). Drawing upon the work of activists, scholars, and practitioners, this guide points users to key resources and considerations that may address the common barriers to conducting meaningful and accessible engagement. It is not, however, designed to walk through every step of a DEA, engagement approach may differ based on the unique context and application of the analysis.

The guide starts by providing a brief background of a DEA and outlines the expectations and pathways for organizations undertaking the analysis. The following sections break down the guiding principles that underlie a successful engagement strategy throughout a DEA. Depending on their specific context, users should navigate to relevant sections of the guide (more detail on slide 12). Additional information about DEA methods are available in the Distributional Equity Analysis for Energy Efficiency and Other Distributed Energy Resources: A Practical Guide ("Practical Guide") and forthcoming metrics guide. **The output of this guide is establishing and maintaining an engagement approach for the DEA.**

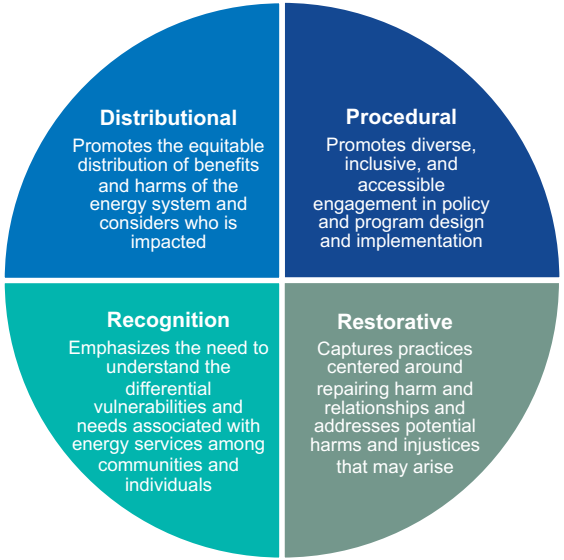
The **Distributional Equity Analysis** (DEA) is an analytical framework that allows for the evaluation of the distributional equity of utility resource investments in combination with benefit-cost analysis (BCA). Compared to the BCA framework which assesses equity across a system, the DEA focuses on the differential impacts of investments across different customer groups.

1.2 Guide Context | What is a DEA?

The benefits and burdens of the energy system are not shared equally across customers, and many negative impacts of the system have disproportionately impacted low-income communities, communities or color, indigenous communities, and rural communities. As legislators and regulators across the country have increasingly recognized these distributional injustices with respect to the energy system, a DEA was developed to allow for assessment of the distribution of costs and benefits across customers with different characteristics. This method complements benefit-cost analyses used when considering utility investments in DERs and is intended to answer questions such as: "(a) whether to pursue or invest in a proposed DER program or continue to support an existing one; (b) whether to modify or redesign a proposed or existing DER program; and (c) how to prioritize investments across multiple DER programs" (Woolf et al., 2024).

Energy equity is a broad concept that is typically scaffolded by four foundational pillars: distributional, procedural, recognitional, and restorative (shown in the figure on the right from the Practical Guide). Addressing inequities among each of these pillars may employ a system-wide approach to energy equity, where energy inequities are addressed comprehensively within the four dimensions (Woolf et al., 2024). A DEA, however, is focused primarily on distributional equity, but can potentially touch on other pillars (see more on the next slide).

Figure 1. Energy Justice Pillars



(Adapted from the Energy Equity Project, 2022)

1.3 Guide Context | Energy Equity Pillars in the DEA

Table 1. Crosswalk of DEA steps, energy equity pillars, and relevant sections in this engagement guide

Energy Equity Pillars	DEA Steps						
	1. Establish Engagement Process	2. Articulate DEA Context	3. Identify Priority Populations	4. Develop DEA Metrics	5. Apply DEA Metrics to Priority Populations	6. Present and Interpret Results	7. Make Resource Decision Using BCA and DEA
Recognition	2.1-2.7		3.1, 3.2				
Procedural	2.5, 2.6, 4.1, 5.1-5.5	4.2, 4.3	3.1, 3.4	4.4, 4.5	4.4, 4.6	4.7	
Distributional		5.2-5.4	4.5	4.4, 4.5	4.4, 4.5, 4.6	4.5, 4.7	
Restorative							

1.4 Guide Context | Theory of Change Across Equity Dimensions

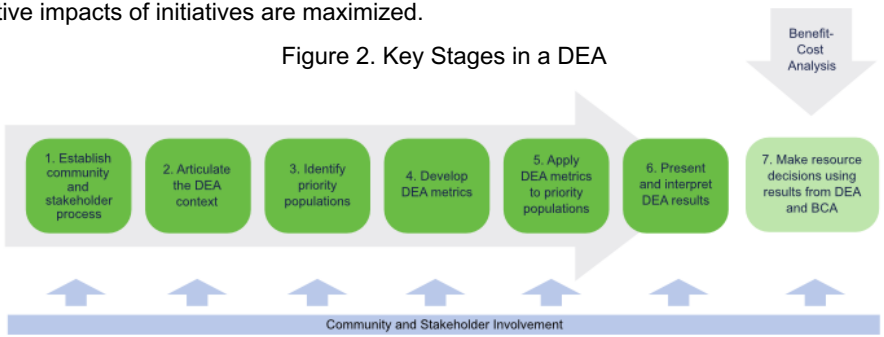
Historically, communities of color, indigenous people, and rural and low-income communities have been underrepresented in legislative and regulatory practices. (Farley et al., 2021). This is a manifestation of embedded and overlapping challenges that have hindered meaningful participation and representation from these groups. Factors contributing to this reality may include physically or financially inaccessible participation options; language barriers; lack of awareness of the policy process and information about specific meetings; and unfamiliarity with the terminologies, boundaries, requirements, structures, and regulatory cultures that intervenors must navigate to influence the outcome ” (Woolf et al., 2024).

Additional Resources

- Advancing Equity in Utility Regulation (Farley et al., 2021)
- Who Holds the Power: Demystifying and Democratizing Public Utilities Commission (Patterson & Hua, 2022)

By practicing engagement at the beginning and throughout the multiple decision points, a DEA framework discussed in the Practical Guide aims to address some of the procedural barriers encountered by underrepresented communities while enabling distributional equity outcomes in utility resource allocation. In particular, robust DEA engagement includes representatives from **priority populations**, or the identified group where equity concerns are the focus in a DEA. A DEA developed with input from these groups will be more likely to foster buy-in, provide a durable foundation for future policies, build trust, and ensure the positive impacts of initiatives are maximized.

Figure 2. Key Stages in a DEA



(Woolf et al., 2024)

1.5 Guide Context | Why DERs?

Among the ongoing transformation of the energy system, DERs offer a unique opportunity to shift the engagement landscape. These resources - largely sited on the customer side of the meter - have a growing presence in communities across the country and underscore the shifting role of the energy user from passive to active participants in the energy transition (Sovacool et al., 2020).

Distributional equity is a growing concern as the energy transition may exacerbate pre-existing social inequities in terms of who may benefit from reduced pollution, affordable and more resilient energy sources, and employment and innovation opportunities (Carley and Konisky, 2020). Research has illuminated, for example, disparities in the deployment of rooftop solar for Black- and Hispanic-majority communities compared to their white counterparts (Sunter et al., 2019) as well as disparities in grid capacity for Black-identifying and disadvantaged census block groups (Brockway et al., 2021).

Additional Resources

- State Approaches to Equitable Distributed Energy Resource Deployment (National Governors Association, 2023)
- Equitable Access to Solar Energy, (U.S. DOE)

1.6 Guide Context | Engagement pathways and expectations [1/2]

Organizations may have different starting points that will influence their engagement approach. Accordingly, they should expect varying levels of time and resource investment to accomplish a DEA. The boxes below group organizations based on their experience and provide a rough estimate of anticipated commitment for the core steps of the DEA.

Group A
Trusted and Well-Informed

Time: ~6mos. – 1 year

These organizations have strong existing relationships with the priority population, and have continuously engaged in dialogue and consultation with this community. For example, a trusted non-profit conducting a DEA may have conducted surveys and focus groups to understand barriers to and motivations for DER adoption in low-income communities. With the baseline level of trust and relevant engagement insights, the nonprofit may not need to allocate as much time and resources to the relationship and trust-building aspects of a DEA engagement approach.

Group B
Familiar and Aware

Time: ~1 – 2 year

These organizations are generally known within the priority population, but may not have strong relationships or a foundation of trust with the organization facilitating a DEA. This may influence the quality of information an organization has about the priority population and require a slower and more intentional approach to building relationships, trust, and accountability with community partners.

Group C
Unfamiliar

Time: ~2+ years

Organizations without existing relationships or familiarity with the target population will likely need additional time to conduct a DEA. A grounded understanding of the priority population's needs and interests is critical to the success of a DEA.

1.6 Guide Context | Engagement pathways and expectations [2/2]

While all organizations are encouraged to review each section of this guide, the following sections may be particularly useful for organizations in each category:

Group A
Trusted and Well-Informed

- Frame the DEA
- Enable Accessible Engagement
- Maximize Benefits of the Engagement

Group B
Familiar and Aware

- Build Trust and Accountability
- Ground Efforts in Community Dynamics
- Frame the DEA
- Enable Accessible Engagement
- Maximize Benefits of the Engagement

Group C
Unfamiliar

The steps are the same as Group B but each step may take more resources.

- Build Trust and Accountability
- Ground Efforts in Community Dynamics
- Frame the DEA
- Enable Accessible Engagement
- Maximize Benefits of the Engagement

Move at the speed of trust

- adrienne maree brown in Emergent Strategy

Trust between and among participants is the backbone that facilitates an authentic engagement process. Particularly when engagements may involve difficult conversations or bring new community members into the decision-making process, it is important for the process to "move at the speed of trust," as stated by adrienne maree brown (brown, 2017).

While trust cannot be built overnight, the following pages will offer a few reflections and resources to encourage the trust-building process within the context of a DEA. Beyond the application of a DEA, however, these approaches may also be used to build and sustain community trust.

Additional Resources

- The Role and Importance of Building Trust (Penn State College of Agricultural Sciences)
- Building Trust in Environmental Justice Communities (Union of Concerned Scientists)
- The Role of Relationships and Trust-building in Environmental Justice and Protection (The Ohio State University, Marmara Municipal Union)
- Spectrum of Community Engagement to Ownership (Facilitating Power)

2.2 Build Trust and Accountability

Approach a community with cultural humility

In circumstances where the organization conducting a DEA is not intimately familiar with the target population (Groups B and C), it is particularly valuable to approach a community with cultural humility. Cultural humility is an ongoing commitment to self-evaluation and critique that recognizes power imbalances to develop mutually beneficial partnerships (Chavez, 2017). Organizations can embody cultural humility by:

- **Examining their own history/background and social position** related to different identities, beliefs, and cultures, and how these factors impact interpersonal interactions.
- **Reflecting on how interpersonal interactions and relationships** are impacted by the history, biases, norms, perception, and relative position of power of one's professional organization.
- **Gaining deeper realization, understanding, and respect of cultural differences** through active inquiry, reflection, reflexivity, openness to establishing power-balanced relationships, and appreciation of another person's/community's/population's expertise on the social and cultural context of their own lives (lived experience).
- **Recognizing areas in which they do not have all the relevant experience and expertise** and demonstrate a nonjudgmental willingness to learn from a person/community/population about their experiences and practices (Centers for Disease Control and Prevention, n.d.).

Additional Resources

- Embrace cultural humility and community engagement (Centers for Disease Control and Prevention)
- Cultural Competence & Cultural Humility (Project READY)
- Cultural Humility (The Center for Health Equity Advancement)

2.3 Build Trust and Accountability | Recognize past and ongoing harms

Recognition justice, one of the key tenets of energy equity, emphasizes the need to understand different types of vulnerability and specific needs associated with energy services among social groups (especially marginalized communities) (Lee and Byrne, 2019). Recognition justice can how a DEA engagement process is designed and implemented, leading to actions such as:

- Acknowledging historic burdens and disparities a community has faced in relation to the distribution system
- Developing specialized outreach strategy for communities traditionally underserved
- Explicitly considering whose voices are heard and not heard, and the weight of their input throughout the DEA process
- In evaluating potential DER programs or outcomes, communicating the likelihoods of future burdens and benefits (Energy Equity Project, 2022).

Additional Resources

- Climate and Economic Justice Screening Tool (Council on Environmental Quality)
- EJ Screen (U.S. EPA)
- Cumulative Impacts Chart (Tishman Environment and Design Center)
- EJ Community Definitions Chart (Tishman Environment and Design Center)

2.4 Build Trust and Accountability | Reflect internally within organization

Organizations can begin reflecting internally by asking the following questions:

Does the organization's staff reflect the diversity of the community?
Part of building long-term trust involves having staff that share lived experiences with the community organizations they are trying to serve. This does not, however, mean that the few staff that hold these identities should be tokenized or expected to fulfill roles outside of their job requirements or expectations.

Are we coordinating our efforts with other agencies/organizations?
Evaluate opportunities to align efforts with other organizations, whether they are internal or external to the organization.

Are we operating in a way that is consistent with our organization and community's values?
Trust can be built when an organization is in a position to be considered a community leader. This may occur when an organization's actions and goals are consistent with the broader community's values and interests. For example, an organization in Group B or C may strengthen relationships with the community through outreach events, participation in existing community meetings and activities, and by providing financial support to community initiatives.

Additional Resources

- Creating System Change: How Government Builds Trust with Community-Based Organizations Serving BIPOC Communities (Center of Urban and Regional Affairs)
- How can local governments earn community trust? (Center for Public Impact)
- Exploring Individual and Institutional Positionality (Urban Institute)

2.5 Build Trust and Accountability | Make an engagement plan [1/2]

Developing an engagement plan at the beginning of a DEA will make the continuous touch points with the community more streamlined. The following are a few questions, adapted from the City of Eugene, Oregon's Public Participation Guidelines, that the plan may to address:

1. Do I work with anyone whom I should talk to before doing this activity?
2. Are there existing community networks that I can work with?
3. If I want to talk to a group of people, should I go to a pre-existing community meeting or should I create a meeting and invite community members to it?
4. What kind of incentive can I provide?
5. If I am serving food, did I consider participant dietary needs?
6. What/how am I going to advertise this event to reach the desired population?
7. Should I use technology to help advertise the event or collect input?
8. How can I use local media for this activity?
9. How can I make written and verbal communication understandable to the target population?
10. Does the meeting date conflict with any religious holidays or community events that may involve your target population?
11. Have we considered ways to make the event align with the goals and values of our and our partners' organizations?
12. Are the engagement accessible to a broad range of individuals such as those with limited English proficiency, disabilities, and childcare obligations?

2.5 Build Trust and Accountability | Make an engagement plan [2/2]

Templates and Examples

- MN Department of Transportation Strategic Framework for Public Engagement Planning
- OR Department of Environmental Quality Community Engagement Planning Template
- WA Commerce Environmental Justice Community Engagement Plan
- Brooklyn Park Community Engagement Planning Guide

Additional Resources

- Creating a Community and Stakeholder Engagement Plan (U.S. DOE)
- Community Energy Planning: Best Practices and Lessons Learned in NREL's Work with Communitiesn (NREL)
- Public participation budget planning tool (Energy Equity Project)
- Beyond Inclusion: Equity in Public Engagement (A Guide for Practitioners, SFU)

2.6 Build Trust and Accountability | Evaluate and adapt the plan

Evaluation of a DEA engagement process can be useful for adapting and integrating the current approach or highlighting lessons learned and best practices for future engagements. This can occur at any point during or after the engagement process and employ methods that focus on the evaluation dimensions of processes and outcomes. Methods may include surveys, focus groups, or observations.

HUD Exchange provides several resources for evaluating engagement, including an evaluation criteria checklist and a sample participant satisfaction survey (HUD Exchange, n.d.).

Table 2. Metric categories for evaluating the engagement process

Engagement Process Metrics	Engagement Outcome Metrics
• Participation rate • Inclusivity • Fairness • Satisfaction • Transparency • Trust • Communication • Process flexibility	• Policy/decision influence • Agency or organization responsiveness • Trust • Conflict resolution • Effect on planning process • Social, economic, environmental impact

(Adaptation of work by Alter et al., 2017)

Additional Resources

- Evaluating equity in community engagement (Metropolitan Area Planning Council)
- Evaluating Engagement Efforts (PennState College of Agricultural Sciences)
- Evaluating Community Engagement: An Evaluation Guide and Toolkit for Practical Use (Everyday Democracy)

3.1 Ground Efforts in Community Dynamics | Learn about the community

Even beyond a DEA, getting to know a community can facilitate success in community engagement and relationship-building. This can look like:

Meet communities where they are
Community members may not always feel comfortable meeting at locations where organizations operate. Instead, consider offering to host meetings in a neutral space or a location identified by community members and groups.

Collaborate with cultural brokers and community liaisons
Cultural brokers are individuals in communities who bridge, link, or mediate between groups or persons of different cultural backgrounds to effect change [10]. This role has been recognized in formal programs such as the Boulder County Cultural Broker Program and the Hawaii State Energy Office Clean Energy Wayfinders program.

Utilize opportunities to engage in other community events
Part of getting to know a community is to understand the issues they are concerned with. Rather than inviting communities to join your conversation, consider visiting their meetings and forums to learn about their concerns and build relationships.

Translate materials
Translating materials into the community's spoken language(s) can ensure greater inclusion.

Additional Resources

- Reminder for Entering a Community in Appendix A (City of Eugene)
- Five Steps for Utilities to Foster Authentic Community Engagement (RMI)
- Community Liaison Model (Metropolitan Area Planning Council)
- Training: Working with Environmental Justice Communities (Citizens Climate Lobby)

3.2 Ground Efforts in Community Dynamics | Analyze potential participants

Once all potential participants have been identified, it may be useful to take a step back and assess the best methods for engaging and involving the unique audience. A common strategy used to analyze participants is interested party mapping. A interested party map is a “visual or physical representation of the various individuals and groups involved with a particular challenge or system” (Interaction Design Foundation, 2023) and can be used to identify potential participants to engage, to evaluate power and influence dynamics between participants, or to consider social dynamics of participants in a DEA.

This can leverage tools and techniques such as:

- Vulnerability mapping
- Interest and influence matrices
- Intersectional mapping
- Powers analysis (C40 Cities, 2019)

Additional Resources

- Identifying and analyzing stakeholders and their interests (Community Toolbox)

Templates and Examples

- NOAA Stakeholder Analysis Worksheet
- CELICA Stakeholder Analysis Template

3.3 Ground Efforts in Community Dynamics | Make a participant list (1/2)

Organizations conducting a DEA should seek to include members or representatives of priority population(s) in addition to energy justice, environmental justice, and consumer advocates. There are several methods which can be used to identify these interested parties, including:

- **Leveraging insights from interested party mapping** to identify groups and individuals from priority populations and other organizations or communities
- **Brainstorming** with community-based organizations, agencies, or other community partners to crowdsource potential participants
- **Consulting** with organizations that have conducted similar processes

Additional Resources

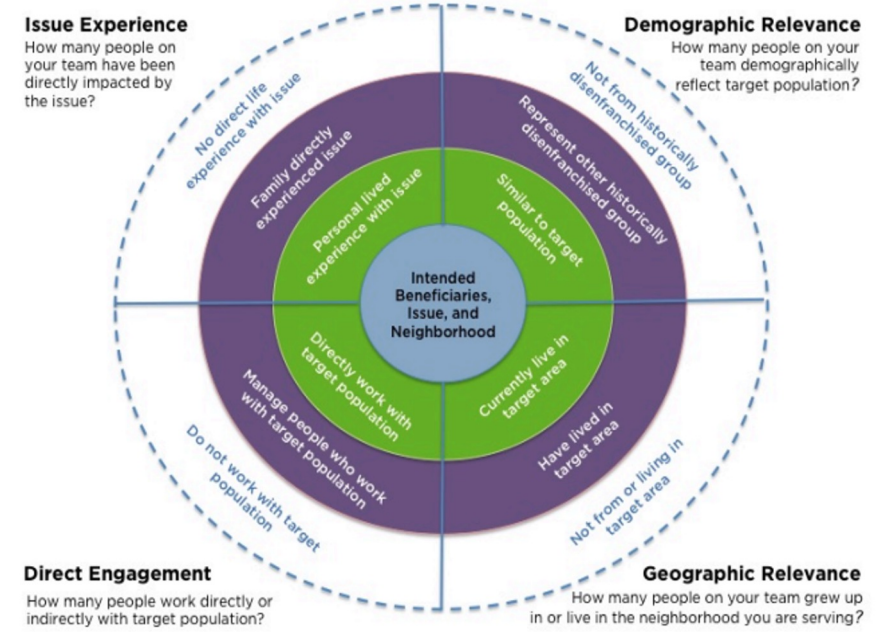
- Identifying and analyzing stakeholders and their interests (Community Toolbox)

3.2 Ground Efforts in Community Dynamics | Make a participant list (2/2)

Once potential participants for a DEA are identified and an initial list made, an organization can evaluate the list to ensure that the right voices are invited to the table. A simple framework, such as the one in Figure 3 developed by the Collective Impact Forum, can help validate that relevant community members are included in both the design and implementation of the engagement process based on their experience and expertise (Collective Impact Forum, 2017).

By placing people on the chart based on their issue experience, demographic relevance, direct engagement, and geographic relevance, the leading organization can ensure an appropriate balance between the intended beneficiaries (or groups impacted by the utility investment under consideration) and individuals in the outer rings of the circle.

Figure 3. Framework for Assessing Engagement Participants



3.4 Ground Efforts in Community Dynamics | Determine participant roles

Each participant in a DEA offers a unique perspective to the process and outcome. Prior to initiating the process, roles should be outlined for the convenor, facilitator, priority population, and other interested parties. These roles will also depend on the level of engagement, which is well articulated in the Spectrum of Community Engagement to Ownership developed by Facilitating Power (Gonzalez, 2019).

Figure 4. Expert from the Spectrum of Community Engagement to Ownership

(Gonzalez, 2019)

3.4 Ground Efforts in Community Dynamics | Determine participant roles

When selecting a facilitator for community engagement, it is important for organizations to consider elements such as power dynamics, community context, and skill. NARUC's Stakeholder Engagement Decision-Making Framework provides an example of these considerations (McAdams, 2021):

Table 3. Framework for Assessing Engagement Participants

Facilitation Approach	Advantages	Challenges	Examples
Commission-Led	• Ability to utilize staff with relevant expertise • Well-suited when utility or third-party facilitator may engender perceptions of bias	• Potential perceptions of staff bias • Limits staff capacity	• Ohio PowerForward • Michigan MI Power Grid • Maryland PC44 • Minnesota distribution system planning
Utility-Led	• Relieves staff when capacity is limited • Well-suited to handle complex topics	• Potential perceptions of utility bias, which may impede the ability to reach consensus	• Nevada Senate Bill 146 Investigation • Washington Statewide Advisory Group
Third Party–Led	• Relieves staff when capacity is limited • Allows for more meaningful participation from the commission • Contributes to transparency of the process • Limits perceptions of bias and increases transparency	• Facilitator may not have technical or historical background • Additional costs associated with hiring a third-party facilitator	• Arkansas DER dockets • District of Columbia MEDSIS • Puerto Rico Distribution Resource Plans • Oregon Senate Bill 978 • Rhode Island distribution system planning

4.1 Enable Accessible Engagement and Build Consensus

Evaluate access barriers

Understanding the community and its needs will help to identify and address barriers to engagement. Common barriers that have historically excluded underrepresented groups from influencing public decision-making processes include, but are not limited to:

- Language barriers
- Meeting venues in inaccessible locations with limited access to public transit
- Lack of food or childcare at events
- Meeting times not considering work schedules, holidays, or family or personal needs
- Economic barriers
- Venues that do not accommodate people with disabilities

A variety of resources, such as those from the Institute for Local Government, are available to support organizations overcome these barriers.

Additional Resources

- Zoom Guides for Participants (Involve)
- Equitable Compensation Community Engagement Guidebook (Urban Institute)
- Web Content Accessibility Guidelines

4.2 Enable Accessible Engagement and Build Consensus

Limit fatigue

State and federal policies, regulations, and funding opportunities have increased the call for community engagement in recent years. This has also increased the risk of engagement fatigue among community members and organizations. This risk can be can mitigated by:

- Identifying dates of other workshops or community events that may conflict with the DEA engagement process
- Coordinating with external teams and organizations working on similar topics
- Leveraging other engagement opportunities
- Collecting and synthesizing insights from other initiatives and public engagements
- If planning a workshop or meeting, considering presenting more complex issues earlier in the agenda
- Providing ample breaks and refreshments
- Allowing for iterative feedback and readjustment throughout the engagement process

(California Air and Resources Board, 2023, Alter et al., 2017, People's Climate Innovation Center, 2022)

Additional Resources

- Limiting research fatigue (Montana State University)
- How Public Agencies Can Address Public Input Fatigue (People's Climate Innovation Center)

4.3 Enable Accessible Engagement and Build Consensus

Design targeted outreach

Outreach should be tailored to accommodate the unique needs and barriers of the target community. Elements to considers relating to outreach include:

- Funding for outreach activities
- Outreach timelines
- Multiple modes of outreach to reach different populations
- Engagement fatigue
- Available communication tools
- Staff knowledge and expertise
- Cultural competence and relevance
- Leveraging partnerships
- Developing easy to understand materials
- Compensation and incentives for engagement

Additional Resources

- Encouraging Involvement in Community Work (The Community Toolbox)
- Recruitment Guidelines for Equity in Research (Harvard Catalyst)
- Tools to Inform the Public (EPA)
- Engaging Young People in Open Government: A communication guide (OECD)
- Best Practices: Public Outreach and Education for Geologic Storage Projects (DOE/NETL)

4.4 Enable Accessible Engagement and Build Consensus

Ground participants with necessary education

Utility decision-making processes are complex and technical. A DEA engagement process may require accessible and relevant educational sessions or resources. The presented resources may offer a starting point for developing educational materials that can help foster informed engagement.

In selecting resources or activities for foundational education, an organization may consider:

- The selection criteria for facilitators and/or expert presenters
- How to mitigate bias in the selection and presentation of education materials
- Various media formats to accommodate different learning styles
- Cultural and historical relevance of educational resources
- Making resources available to reference after an event via a website, handouts, etc.

Utilities and PUC Education Resources

- Utilities 101 (Initiative for Energy Justice)
- Utility Regulation in the U.S.: A Brief Introduction (RAP)
- Introductory videos by the Minnesota PUC
- The People's Utility Commons

Clean Energy Education Resources

- Clean Energy 101, RMI
- Distributed Generation for Resilience Planning Guide, ORNL
- New York's Regional Clean Energy Hubs

4.5 Enable Accessible Engagement and Build Consensus

Facilitate consensus-building

There are several opportunities for participants to reach consensus and agreement throughout the DEA process.

Stage	Action
Identify priority population	Consider whether and how to enable communities to self-designate as a priority population
	Choose the set of indicators for the priority population
	Determine the scope of the priority population
Develop DEA metrics	Develop a full set of system-wide energy equity metrics
	Winnow down system-wide energy equity metrics to a set that is more appropriate for DEA
Apply DEA metrics to priority populations	Incorporate community and interested parties' data collection and analytical tools
	Review and critique data input to the DEA, i.e., ground-truthing
	Protect data privacy and encourage equitable data practices
Present and interpret DEA results	Develop benchmarks for metrics
	Determine importance weights for each metric
Make decisions with BCA and DEA	Define or clarify DEA pass/fail criteria
	Draw conclusions from both the BCA and DEA results

(Adapted from Woolf et al., 2024)

Additional Resources

- Tools for Consensus Building and Agreement Seeking (EPA)
- Resource Guide on Public Engagement (National Coalition for Dialogue & Deliberation)
- Managing Conflict and Difficult Public Issues (PennState)
- Tools to Generate and Obtain Input (EPA)

5.1 Frame the DEA | Agree on the terms of DEA engagement

It may be useful to establish a set of rules and expectations that ground the engagement throughout a DEA. This can help to establish trust at the beginning of the engagement process, particularly if organizations are working together for the first time or may anticipate significant disagreement or conflict. The University of Minnesota Extension suggestions for working agreements (right) (University of Minnesota Extension, 2024) may provide a useful starting point for identifying these community values, but facilitators should allow flexibility for participants to offer suggestions and input.

- **This is a public discussion, not a debate.** The purpose is not to win an argument, but to hear many points of view and explore many options and solutions.
- **Everyone is encouraged to participate.** You may be asked to share what you think, or we may ask for comments from those who haven't spoken. It is always OK to "pass" when you are asked to share a comment.
- **No one or two individuals should dominate a discussion.** If you have already voiced your ideas, let others have an opportunity. When you speak, be brief and to the point.
- **When you speak, state your name and where you live.** In a public meeting, it is helpful to know who is speaking as well as where they live in the community.
- **One person speaks at a time.** Refrain from side conversations. Pay attention to the person speaking. If you think you will forget an idea that comes to mind, write it down.
- **Listen to and respect other points of view.**
- **Do your best to understand the pros and cons of every option**, not just those you prefer. Be as objective and fair-minded as you can be.
- **Seek first to understand, not to be understood.** Ask questions to seek clarification when you don't understand the meaning of someone's comments.

5.2 Frame the DEA | Establish the DEA application (1/2)

A clear vision for engagement is an essential element for a successful DEA. This can ensure that all participants involved in a DEA process are on the same page and are in agreement on the expected outcomes of the process.

For a DEA, this specifically involves identifying a **DEA application.** The application determines the decision that a DEA is intended to inform and may be applied to:

- Assessing a single DER program serving priority populations
- Assessing a single DER program serving all types of customers
- Comparing outcomes across DER programs
- Assessing a portfolio of programs of the same type of DERs
- Optimizing a portfolio of programs of multiple types of DERs (Woolf et al., 2024)

A robust engagement process will determine these objectives with communities.

5.2 Frame the DEA | Establish the DEA application (2/2)

First, it is useful to clarify the decision and the decision-making process. This may involve reaching agreement with participants on a DEA context and addressing the following questions:

1. What are the interests and concerns that can be addressed by this process?
2. What are the interests and concerns that cannot be addressed by this process?
3. What is the role of the target community in helping to determine this? (International Association of Public Participation, 2007)

Figure 5. Scope of Participant Interest and Concerns

(International Association of Public Participation, 2007)

5.3 Frame the DEA | Establish the DEA timeframe

After the application, it is important to determine if the EA will be used to evaluate DER programs prospectively or retrospectively. In addition, there are timeframe decisions to make about the period of analysis, or the lifetime of the DER measure(s), which may not necessarily align with the CBA or larger electricity planning period.

Table 4. Retrospective vs Prospective DEA Timeframe

Application	Details about the approach	Critical considerations
Prospective DEA	This analysis takes place before a program has been implemented.	Data and metrics will involve more assumptions and will be based on forecasted estimates or proxy data.
Retrospective DEA	This analysis takes place after a program has been implemented.	Data and metrics will ideally be sourced from actual, historical program data. Retrospective programs should also consider the level of community and interested party engagement that occurred in the development of existing DER programs.

5.4 Frame the DEA | Identify community goals for the DEA

Next, the process should **identify community and priority population goals** with respect to the DERs being evaluated. This will contextualize the data and metrics for the analysis and inform the benchmarked results. This can be done through a community visioning workshop which may:

1. Ask participants to consider historical perspectives on present day challenges
2. Ask participants to identify, both individually and as a group, what is important to the community
3. Have participants transform these ideas and values into specific goals that can be articulated in the context of the DEA (U.S. Department of Housing and Urban Development, n.d.)

Additional Resources

- Community Engagement Toolkit: Building Purpose and Participation (U.S. Department of Housing and Urban Development)

5.5 Frame the DEA | Identify data sources

Utilities are best-positioned to provide consumer data such as median energy bills for customers within the scope of a DEA. Outside of utility data, organizations can estimate broader socioeconomic, climate, environmental, and energy data from sources including:

- Climate and Economic Justice Screening Tool
- Housing and Transportation Affordability Index
- NASA Environmental Justice Data Catalog
- PLACES: Local Data for Better Health
- Social Explorer
- U.S. DOE Energy Justice Mapping Tool
- U.S. DOE Low-Income Energy Affordability Tool
- U.S. DOT Equitable Transportation Community Explorer
- U.S. EPA EJScreen
- U.S. Energy Information Administration

These national tools and data sources can also be used in combination with state- or community-specific screening tools.

If the available data are inadequate for meeting a community's goals, participants can also be engaged in the data collection process. This may take shape in the form of community surveys, crowdsourced data, or collaborative neighborhood mapping (Rodriguez et al., 2024).

Additional Resources

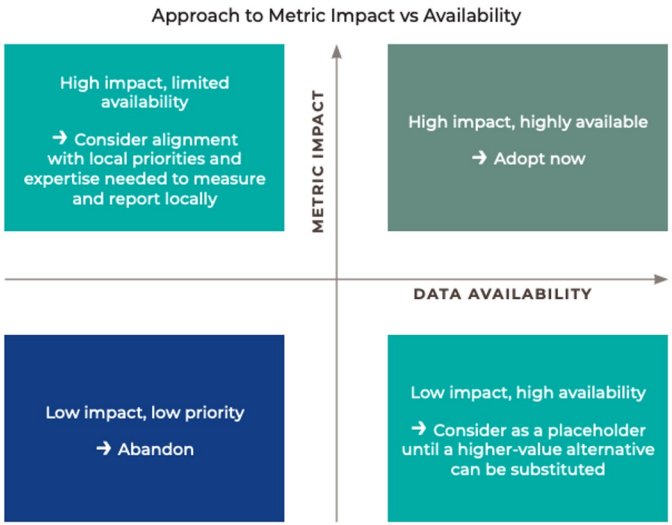
- Data Collection Tools (European Commission)
- Solar Climate Justice Scorecard (Community Climate Collaborative)
- Tools Data Sources (Building EJTool)
- Using Census Tools for Environmental Justice (U.S. Census)
- Establish data sharing relationships as early as possible (U.S. DOE)

5.6 Frame the DEA | Select attainable metrics

DEA metric selection is a key point of convergence in the process. It may be necessary to balance several factors when selecting metrics, including:

- Competing priorities and goals for DERs
- Limited data availability
- Metrics that adequately capture target impact (Energy Equity Project, 2022)

Figure 6. Approach to Metrics Impact vs Availability



(Energy Equity Project, 2022)

Additional Resources

- Justice in 100 Metrics (Initiative for Energy Justice) (Initiative for Energy Justice)
- Metrics for Decision-Making in Energy Justice (Baker et al., 2023)
- Energy Equity Project Report (Energy Equity Project)
- Increasing the Rigor of Quantitative Research with Participatory and Community-Engaged Methods (Urban Institute)

5.7 Frame the DEA | Process and analyze data

As outlined in the Practical Guide, a DEA can lead to three types of results: simple results, benchmarked results, and weighted DEA scores. Participants may be engaged at this step of the process to help:

- Inform how to deal with missing values
- Identify metrics with overlapping definitions or duplicative impacts
- Establish benchmarks
- Assign importance weights to DEA metrics (Woolf et al., 2024)

Table 5. Applicability of DEA Results

Results type	Description	Advantages	Limitations
Simple results (Section 6.2)	Includes unadjusted results for each DEA metric separately for priority population and other customers.	This format is simple, transparent, and does not require policy-based assumptions.	Results for different metrics cannot be compared to each other or aggregated for populations. It may be difficult to draw conclusions about the total equity impact.
Benchmarked results (Section 6.3)	Includes simple results for each metric alongside metric-specific benchmarks.	This format provides additional context for the simple results, allowing analysts to draw equity conclusions for each DEA metric in isolation.	The benchmarks may be interpreted as goals which impact the objectivity of the results. Results for different metrics cannot be compared to each other or aggregated for populations.
Weighted DEA scores (Section 6.4)	Applies MAA techniques, including importance weights, to benchmarked metrics to calculate DEA scores. Weighted scores for each DEA metric can be aggregated to present net scores for priority population and other customers.	This format allows for comparison across different metrics. It also allows for net DEA scores to be calculated for each population. This format provides the most context for overarching conclusions.	This format requires the most policy decisions and assumptions, which can significantly impact the objectivity of the results. If not applied properly and transparently, it can result in misinterpretation of the DEA results.

(Woolf et al., 2024)

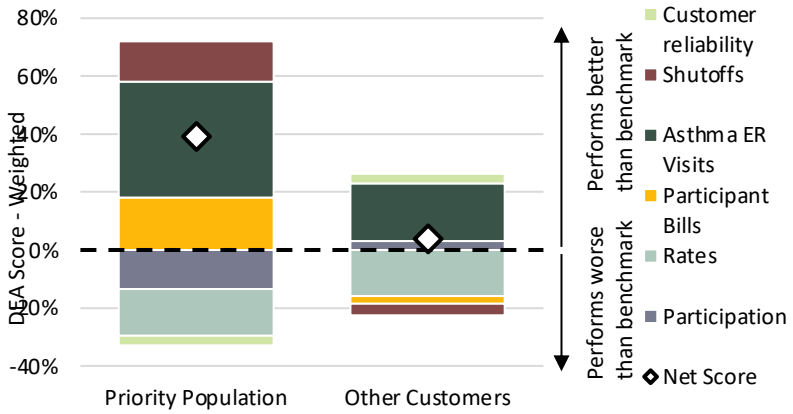
Additional Resources

- Do No Harm Guide: Additional Perspectives on Data Equity, Urban Institute
- Tools and Resources for Participatory Data Analysis, American Evaluation Association
- Participatory data analysis, University of Oxford

5.8 Frame the DEA | Present and interpret results

The participants should have a key role in helping to interpret the results of a DEA. This can be facilitated by providing results that are in a digestible format with clear visualizations.

Figure 7. Illustrative Example of Weighted DEA Scores



(Woolf et al., 2024)

Additional Resources

- Dissemination in Community-Engaged Research: Guidelines for Practice (Stanford Our Voice Initiative)
- Dissemination as Dialogue: Building Trust and Sharing Research FIndings Through Community Engagement (McDavitt et al., 2016)
- Online Knowledge Translation Toolkit (MSKTC)
- How Can Renewable Energy Engineers Communicate Project Benefits to Non-Technical Stakeholders? (Renewable Central)
- Tactical Data Engagement Playbook (Sunlight Foundation)

6.1 Maximize Benefits of the Engagement

Set the stage for sustainable engagement

In addition to influencing the decision-making process, DEA engagement can provide broader benefits to a community. A well-crafted engagement approach can solicit feedback and input from a community and offer opportunities to expand an organization or individual's energy/utility/regulatory knowledge. The DEA engagement process may include:

- Relationship-building between participants
- Peer-to-peer learning opportunities
- Knowledge transfer from industry veterans
- Skills-building and training
- Data-sharing

Building knowledge in the community may allow for greater access and inclusion in energy decision-making spaces.

Additional Resources

- Collective Benefit (Community Research Collaborative)

6.2 Maximize Benefits of the Engagement

Increase participant agency via knowledge transfer and technical assistance

Organizations can connect communities to educational opportunities or technical assistance to support their understanding and expand their knowledge of energy system planning, processes, and decision-making. The resources can both support DEA community engagement and lay a foundation for more meaningful engagement in the future. For example in Washington State, Puget Sound Energy provided training to public meeting participants to help them submit comments to the state public utilities commission.

Examples of Technical Assistance Opportunities

- Technical Assistance Fund, Clean Energy Group
- Clean Energy to Communities Program, U.S. Department of Energy
- Community First Resource Bank

Examples of Educational Resources on Engagement in Utility Planning

- Community Voices in Energy
- Participating in Power: How to Read and Respond to Integrated Resource Plans, RAP and IMT
- Engaging with Public Utilities and Public Service Commissions, NAACP

6.3 Maximize Benefits of the Engagement

Identify data sharing and reporting opportunities

Within the energy sector, there is a growing interest to advance procedural justice by enabling data sharing between the utility and third parties (such as local governments or community groups). This includes measures to increase transparency of utility data and encourage public data reporting (Energy Equity Project, 2022).

Data sharing can provide benefits beyond the context of the DEA, such as by highlighting community-level vulnerabilities. Accompanying these calls for greater transparency, however, are the necessary and warranted concerns regarding data privacy and security (McChalicher, 2021). Therefore, consumer and grid protection measures must be carefully balanced with data-sharing efforts.

Organizations are recommended to establish data-sharing relationships as early as possible and provide clear and concise data requests (U.S. Department of Energy). Fulfillment of these requests may also be accompanied by training or tools to facilitate the efficient transfer of knowledge.

Additional Resources

- State and Local Policy Database: Energy Data Access (American Council for an Energy Efficient Economy)
- NARUC Grid Data Sharing Playbook (NARUC)
- Data Sharing Toolkit (State Data Sharing Initiative)
- Facilitating Access to Community Energy Usage Data (ACEEE)
- Accountable Communities for Health Data-Sharing Toolkit (Center for Healthcare Organizational and Innovation Research)
- Data Walks: An Innovative Way to Share Data with Communities (Urban Institute)

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