

Equity and Buildings: A Practical Framework for Buildings Practitioners



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Residential Retrofits
for Energy Equity

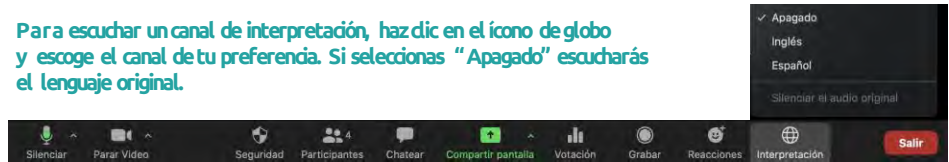
Buildings UP
The Buildings Upgrade Prize

This webinar outlines a practical framework for buildings practitioners—energy efficiency and electrification program administrators, policymakers, and others—to ensure their work is designed to serve all residents and is informed by and accountable to community priorities. Working off the 2021 Equity and Buildings Framework developed by the Urban Sustainability Directors Network, speakers will discuss best practices and concrete steps for meaningfully involving community members in planning and implementation of building upgrades programs and policies. The webinar will also cover how buildings practitioners can promote community capacity building, power shifting in decision making, and achieving program outcomes that advance community equity priorities. We will discuss opportunities for addressing intersectional community-wide issues in buildings work; developing an equity definition that fits your community’s needs; and different prompts, tools, and exercises that can help you center equity in your buildings work and remain accountable to equity goals.

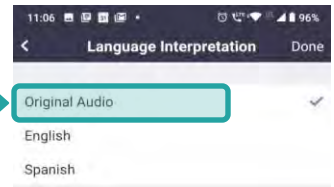
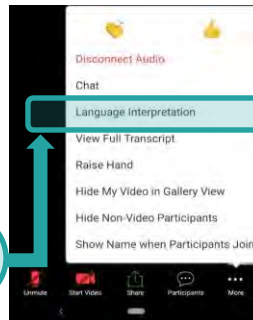
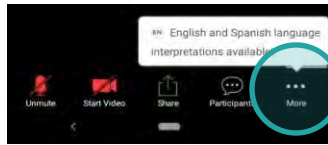
JAV Interpretation



Para escuchar un canal de interpretación, haz clic en el icono de globo y escoge el canal de tu preferencia. Si seleccionas "Apagado" escucharás el lenguaje original.



To listen to the interpreter, please select the globe icon and choose the language of your preference. If you choose "Off" you'll hear the original language.



Housekeeping Announcements

- We are **recording** this webinar and will be making it available to all registrants within a few business days.
- To ask a question during the webinar, please submit it via the **Q&A button** at the bottom of your screen.
- You can **upvote** questions in the Q&A box that you would like us to prioritize.
- **Our Ask:** 1) Share space 2) Together, we know a lot 3) Learning and unlearning
- Use the chat to engage in respectful and productive discussion with other participants.
- **Code of conduct:** R2E2 will not tolerate behaviors that cause harm or disrupt the learning environment. Please direct message **Mandy Lee** if you feel unsafe in this space. Disruptive participants may be removed from the webinar. Thank you for helping to create a positive learning environment for everyone here today.

Buildings UP

The Buildings Upgrade Prize

AMERICAN
MADE
U.S. DEPARTMENT OF ENERGY



Kassandra (Kassie) Grimes

U.S. Department of Energy Building Technologies Office

The Buildings Upgrade Prize (Buildings UP)

Buildings UP is designed to rapidly scale energy efficiency and efficient electrification building upgrades in communities across the country. The prize is envisioned to consist of four phases over approximately five years.



Phase 1: Concept

- \$22M+ in Prizes to Teams & Technical Assistance
- Applications due by July 18, 2023
- Seeking 20-60 teams to join the “coopetition.”



www.heroX.com/buildingsUP

Buildings UP | U.S. Department of Energy

Prize Goals

Buildings UP aims to address persistent non-technical barriers to improving building energy efficiency and reducing on-site emissions (e.g., administrative, financial, social, and other barriers).

Buildings UP is a capacity-building prize to support teams with solutions that:

- **Accelerate building upgrades** for efficiency and on-site emissions reductions beyond current best practices in the applicant's identified area of focus
- **Demonstrate scalability and replicability** across building type(s), climate zone(s), and/or, community type(s)
- **Advance holistic and lasting energy efficiency and efficient electrification** initiative development
- **Benefit underserved communities** by ensuring that benefits accrue to equity-eligible buildings, their occupants, and surrounding communities.

*Equity-eligible buildings include buildings in disadvantaged communities; low- and moderate-income (LMI) households; and underserved commercial, nonprofit, and public buildings.

Phase 1: Pathways & Prizes

Equity-Centered Innovation Pathway

\$400,000 in cash prizes for each winning team

- Develop replicable, scalable, innovative building upgrade initiatives **in equity-eligible buildings (i.e., 80% equity-eligible).**

Open Innovation Pathway

\$200,000 in cash prizes for each winning team

- Develop replicable, scalable, innovative building upgrade initiatives. **May include a focus on equity but are not required.**

Access to Technical Assistance is awarded to winning teams in both pathways.

Equity-Eligible Buildings

Geographic Location (Justice 40
Census Tracts, Tribal
Lands, Territories)

Affordable Housing
(Subsidized, Naturally
Occurring)

Underserved Commercial
(including Title 1
Schools, Community
Services, Non-profits)

Team-Defined

Additional information is in Section 3.5 of the official rules.

Example Projects

A rural electric cooperative partners with a local CBO and the county to help LMI single-family home residents transition from propane heat to efficient electric heat pumps.



A CBO in a mid-sized town in the southeast partners with the local government to bring heat pumps (and air conditioning!) to affordable housing buildings throughout the community.



A business improvement district in a large city neighborhood partners with local houses of worship



to bring efficient electric heating and cooling equipment to small businesses.

A K-12 school district and an energy services company partner to electrify district buildings.



A national residential property owner teams up with multiple local governments and utilities on an initiative to electrify its properties in three major markets.



+Innovations!

Minimum technologies and strategies teams must include in their initiatives:

- Weatherization and envelope improvements (e.g., insulation, air sealing, window improvements) where needed to reduce energy costs
- Efficient electric heating and cooling equipment (e.g., heat pumps and/or heat pump water heaters).

Seeking Innovations to Address Non-Technical Challenges to Widespread Building Upgrades

- **Lack of contractor and occupant familiarity** with technologies
- **High first costs for upgrades**, limited short-term payback
- **Lack of retrofit materials** and equipment
- **Insufficient workforce** to complete upgrades
- **Lack of reach of funding and incentive programs** to historically underserved households and building owners
- **Inconsistent quality of work** and consumer mistrust.

Next Steps for Competitors

- **Follow the prize on HeroX.com**, read the [rules](#), and review the [FAQs](#).
- **Register for an Office Hours session:** July 6 at 3:30pm ET
- **Create an account on HeroX** and click on the “Solve this Challenge” button.
- **Team up and submit a Phase 1 “Concept” application** via HeroX by July 18, at 5pm ET.



Follow www.HeroX.com/BuildingsUP
Questions: buildingsUP@nrel.gov



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Buildings UP
The Buildings Upgrade Prize

Meet Your Presenters



Avni Jamdar
Regional Director, Northern California
Emerald Cities Collaborative



Karen Campblin
Chair, Environmental and Climate Justice
Virginia State Conference NAACP



Carolyn Conant
Technical Assistance Coordinator
ACEE



Residential Retrofits for Energy Equity (R2E2) is a nationwide initiative that provides trainings to state, local, and tribal governments as well as community-based organizations and other partners to jumpstart energy upgrades for affordable housing that will lower utility bills, reduce greenhouse gas emissions, improve residents' health, create good-paying local jobs, and help advance racial equity. R2E2 is supporting the Buildings Upgrade Prize by providing training and technical assistance to applicants and awardees.

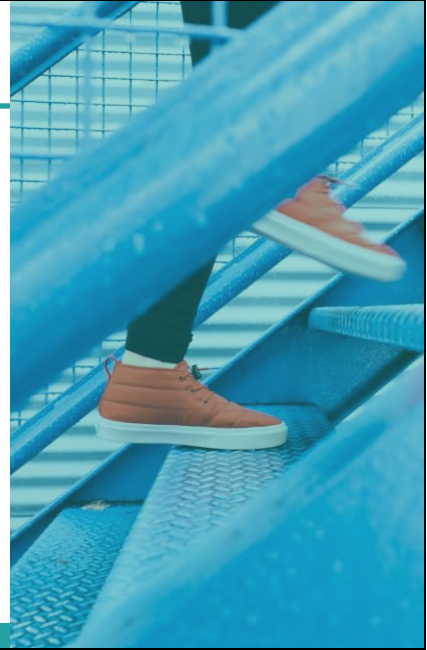


Agenda

- 1 About the Equity & Buildings Framework
- 2 Principles of Practice
- 3 Equity Fundamentals
- 4 Critical Intersectional Issues & Program Examples
- 5 Additional Tools for Advancing Equity in Buildings Work
- 6 Action Items & Next Steps
- 7 Resources & Q&A

Learning Goals

- Define equity in the context of your work as it relates to your community's needs
- Recognize intersectional opportunities to advance equity in your building upgrades planning
- Prepare to do equity work as an ongoing component of your buildings work



Buildings UP Scoring Overview

Phase 1 Concept Plans (due July 18) are scored against scoring statements under each prize criterion.

One narrative is required for each criterion. The summation of narratives constitutes the Concept Plan.

Learn more details about the criteria and scoring by viewing a recorded informational webinar:

<https://www.herox.com/BuildingsUP/229-upcoming-webinars-recordings>

This webinar is most relevant to the following prize criteria:

Buildings UP Phase 1 Scoring Criteria (equally weighted)

- 1. Assessing & Prioritizing Challenges**
2. Addressing Challenges Through Innovation: Initiative Scope and Impacts
- 3. Scaling & Replicating Innovation through Community Involvement**
4. Demonstrating Capabilities & Team Characteristics Critical for Success
- 5. Achieving Equitable Building Upgrade Strategies (an additional criterion: Equity-Centered Innovation Pathway)**

The background of the slide is a dark blue gradient. On the right side, there is a stylized image of a city skyline at night, with several skyscrapers illuminated. Overlaid on this image are several glowing blue and purple lines representing financial charts or data trends. The lines are jagged and fluctuate across the skyline. The overall aesthetic is modern and tech-oriented.

For the chat:

**What does equity in the
context of buildings
work mean to you?**

About the Equity & Buildings Framework

 Residential Retrofits
for Energy Equity

Why this Framework?

- The Need: Local government sustainability staff from across the country wanted help integrating equity into building and energy programs
 - The field of building energy programs has several critical documents focused on equity guidance for specific types of buildings work (e.g., Equity and Benchmarking Document, Greenlining's equitable electrification work)
 - The field also has high level overviews of engagement and the buildings sector (e.g., NAACP's Community Involvement Guidelines)
- However, there was not a practical framework for thinking about **equity and buildings** for practitioners

- The purpose of this framework is to foster stronger relationships between and provide some shared language for government staff, community-based organizations (CBOs), and national nonprofits to address equity in their buildings work.
- The original intended audience for this framework was all local government staff whose work engages with building upgrade initiatives, but the principles of practice and other tools provided in the framework are applicable to a broad range of buildings practitioners and policymakers.
- The framework aims to help change how we define "high-impact" programs to go beyond GHGs and include multiple, sustainable benefits, especially for Black and Brown communities and others on the front lines of climate change and social inequities.

Inequities in Buildings



Home Ownership



Energy Burden



**Energy Efficiency
Program
Participation**



Health

- We can't talk about equity and buildings without naming some specific types of *inequities* related to the built environment.
- These are just a few examples of aspects related to the built environment that have outcomes that are heavily skewed along racial lines and other identities, including income level, primary language, and status as a homeowner vs renter.
- For one, homeownership rates continue to skew dramatically by race
 - 72% of white Americans are homeowners, compared to only 43% of Black Americans, 62% of Asian Americans, and 51% of Hispanic Americans
- Over one third of renters face a high energy burden, with rental homes consuming an average of 15% more energy per square foot than owner-occupied homes. 67% of low-income households face a high energy burden; and Black, Hispanic, Native American, and older adult households, as well as families residing in low-income multifamily housing, manufactured housing, and older buildings experience disproportionately high energy burdens.
- These same groups, plus rural populations and non-English speakers, have lower-than-average rates of participation in available utility incentive programs, and are not equitably benefitting from the rebates, energy savings, and improvements to comfort that those programs can offer.
- Black, Indigenous, and other communities of color also suffer from higher rates of health

harms that are worsened by poor housing conditions, including asthma, heart attack, stroke, and high blood pressure

- Black families are 60% more likely than white families to be living with inadequate housing conditions that can trigger asthma, such as mold and insufficient heating and cooling
- Black children are more than twice as likely as white children to suffer from asthma
- This is not a comprehensive list of how inequities show up in the built environment, but provides an overview of some crucial discrepancies that we as buildings practitioners have the opportunity to address with our programs and policies.

Data sources:

- Homeownership: <https://www.nar.realtor/blogs/economists-outlook/racial-disparities-in-homeownership-rates>
- Rental homes, renters & energy burden: <https://www.aceee.org/energy-equity-for-renters>
- Energy burden: <https://www.aceee.org/sites/default/files/pdfs/u2006.pdf>
- Program participation: <https://www.aceee.org/sites/default/files/pdfs/B2301.pdf>
- Health: <https://www.aceee.org/sites/default/files/pdfs/h2201.pdf>

Collaboration Team



American Cities
Climate Challenge



UPRIGHT
Consulting Services

- The framework document was created by a partnership of organizations to support local government sustainability departments. These organizations are:

Advisory Committee

- Alison Sutter, City of Grand Rapids
- Antonio Diaz, People Organizing to Demand Environmental and Economic Justice (PODER)
- Chandra Farley, Partnership for Southern Equity
- Corrine Van Hook-Turner, Movement Strategy Center
- Faith Graham, Network for Energy, Water, and Health in Affordable Buildings (NEWHAB)
- Jenna Tatum, Building Electrification Institute (BEI)
- Jennifer Gremmert, Energy Outreach Colorado
- Karen Campbell, NAACP
- Laurien (Lala) Nuss, City and County of Honolulu
- Leah Obias & Dennis Chin, Race Forward
- Linda Swanston, Stewart Dutfield & Nicola Lashley, City of Toronto
- Maria Thompson, City of Denver
- Robert Hart, City of Providence
- Sergio Cira-Reyes, Urban Core Collective
- Shelby Buso, City of Atlanta
- Sradha Mehta, City and County of San Francisco
- Soo Schacke, formerly of Faith Action

Equity & Buildings Project



1. Advisory Committee

- Committee of national non-profits, grassroots organizations, and leading cities and counties from the U.S. and Canada to advise workshop development for framework document

2. Workshop Series

- Four-part workshop series supported by exercises and a draft framework
- 34 cities participated in April 2021

3. Framework Document

- Document codifying learnings from the Advisory Committee and workshops

Equity & Buildings Framework Goals

- **Provide practical guidance** to help cities **center equity** within their building upgrade initiatives and support community-based organizations (CBOs) collaborating with local governments
- **Foster shared understanding**, language and relationships between cities, CBOs, and national nonprofits
- Demonstrate how equitable building work can help **meet pressing community needs**



Principles of Practice

 Residential Retrofits
for Energy Equity

Overview: Principles of Practice

- Provide a set of key strategies for successfully approaching work in Equity and Buildings based on the experience of practitioners across the field
- Reflect and distill the key concepts from the document
- Be digestible and accessible



- Contributors to USDN's Buildings and Equity Framework identified these twelve Principles of Practice to help practitioners center equity in their buildings initiatives.
- These principles underpin the framework and wider building and equity practice. These principles of practice are at the heart of this framework document and this work.

Principles of Practice



1. **Make impacted communities**, which are continuing to lead equity and building work nationwide, **central to planning and projects**.



2. **Build stronger initiatives** by actively centering equity.



3. **Understand the people (the "who")** of buildings.



4. **Collaborate across departments and disciplines** to produce policies and programs that better address inequities.

Principles of Practice



5. Address root causes of inequities in the built environment.



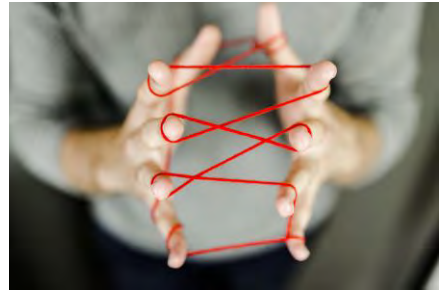
6. Prioritize reparations over reducing additional harm for deeper healing and better outcomes.



7. Shift funding and financing structures to directly support increased capacity in impacted communities.



8. Share data and information transparently.



Principles of Practice



9. Orient work and goals around **shifting power and self-determination.**



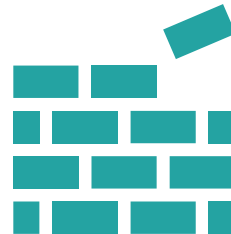
10. Prioritize **making economic opportunities work** for marginalized communities.



11. Lay a foundation of **equitable decision-making processes** and **transparent accountability** measures.



12. **Tie success directly to equity.**



For the chat:

Are any of these principles of practice missing from your work?

- Make impacted communities central to planning
- Build stronger initiatives by actively centering equity
- Understand the people of buildings
- Collaborate across departments and disciplines
- Address root causes of inequities
- Prioritize reparations
- Shift funding and financing structures
- Share data and information transparently
- Shift power and self-determination
- Make economic opportunities work for marginalized communities
- Lay a foundation of equitable decision-making processes
- Tie success directly to equity

Framework Overview

 Residential Retrofits
for Energy Equity



EQUITY AND BUILDINGS:

A PRACTICAL FRAMEWORK
FOR LOCAL GOVERNMENT DECISION MAKERS



**Part I – Equity
Fundamentals**



**Part II – Critical
Issues at the
Intersection of
Equity and
Sustainable Buildings**



Part III – Next Steps

Source: Urban Sustainability Directors Network
(USDN), Equity & Buildings Framework (2021)

- This framework document is advised by and evolved from the longstanding efforts of BIPOC-led organizations and leaders, and provides guidance for government staff who are shaping building upgrade initiatives.
- This document is intended to provide practical guidance that will help local, state, and tribal governments and other buildings practitioners center equity within their initiatives planning for the built environment.

**"Be a student your entire life.
Equity is hard, arguably harder than
reducing climate emissions."**

- Lylianna Allala, Climate Justice Director, Seattle Office of Sustainability and
Environment

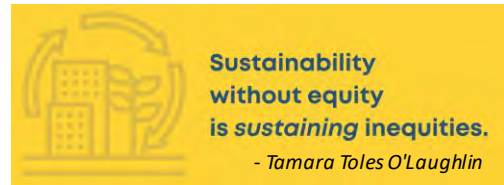
Source: Urban Sustainability Directors Network
(USDN), Equity & Buildings Framework (2021)

Equity Fundamentals

 Residential Retrofits
for Energy Equity

Why Equity in Buildings Programs?

- Government has a duty to **be inclusive**
- Government has a duty to **repair harm**
- **People and communities must be centered** in buildings initiatives
- It is important to **honor and reconnect to cultural practices**
- Identify a **bold vision** and build broad constituencies of support
- Government has a duty to **be intentional about impacts**



Source: Urban Sustainability Directors Network (USDN), Equity & Buildings Framework (2021)

What Do You Mean When You Say Equity?

Defining Equity

Common Components of Equity Definitions:

- Lead with race
- Differentiate between *process* and *outcomes*
- Focus on systems
- Include an analysis of power
- Center accountability to impacted communities
- Focus on repairing harm
- Include a historical perspective
- Tailor to local context

- Defining equity in your work is one of the most foundational steps.
- What does this mean for your department, city, organization, or Buildings UP team? Why is it important for you to advance equity?

Crafting a Why Statement

A why statement answers the question, "What is the purpose of integrating equity in building upgrades planning?"

Strong why statements include four components:

- 1. Lead with vision and values.** This could include building upgrade initiatives and personal stories from residents.
- 2. Describe the structural drivers of inequity.** This can include historic and current policies or programs and should be race-explicit.
- 3. Describe the solution and collective benefit your work would generate.** Name and be specific about the social, environmental and economic benefits of your work.
- 4. Invite your audience to take specific action.** Create calls to action for the city, community partners, and others who you will need to move the work forward.

Example from the NAACP: Defining Equity

Communities of color and low-income communities bear the brunt of the impacts of unhealthy, energy inefficient, and disaster vulnerable buildings through poor health and financial impacts of high energy bills, as well as the disproportionate negative effects of climate change, to which buildings contribute as a major consumer of fossil fuel-based energy. **Yet**, as one looks around the tables or worksites of the sustainable and regenerative building sector, **there is little representation of the populations most impacted....**

Our aim as the nation's oldest and largest civil rights organization is to be a beacon of inspiration and transformation in centering equity in the sustainable building sector....

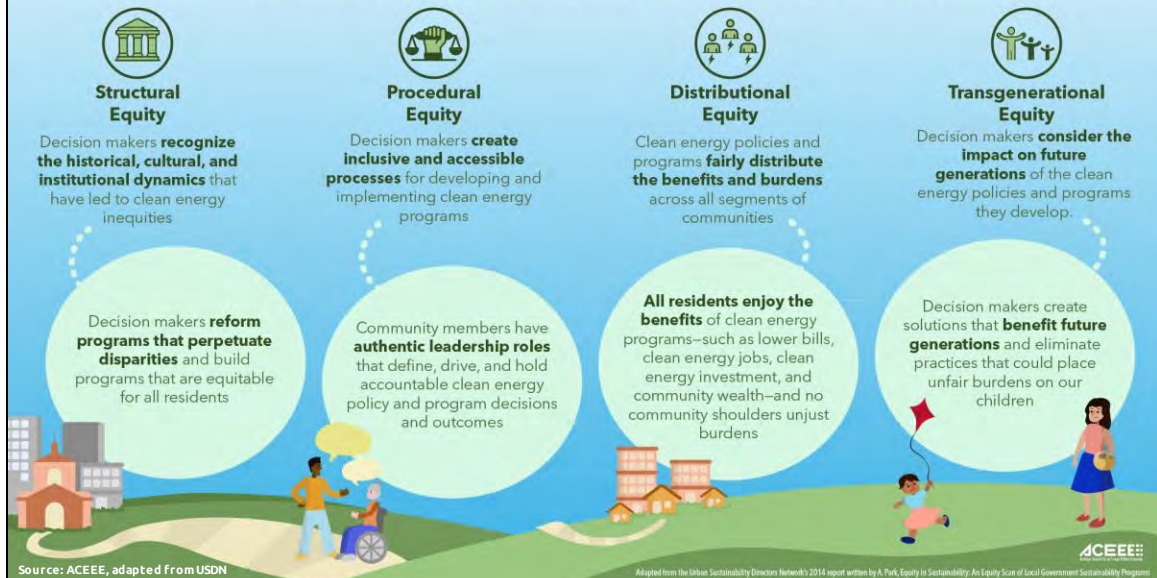
Through this effort, we will develop a replicable model of ensuring the **centering of equity in all aspects of sustainable, healthy, safe, and regenerative buildings**, including access, affordability, co-benefits, cultural resonance, inclusive decision-making, financing, service provision, procurement, contracting, employment, communications, monitoring and evaluation, and so much more.

Source: National Association for the Advancement of Colored People (NAACP), Centering Equity in the Sustainable Building Sector Initiative (2019)

- Example of how equity is defined within the context of the NAACP's work on the Centering Equity in the Sustainable Building Sector Initiative.

https://www.vaaccvb.org/uploads/1/3/4/3/134313943/671d5c_7b4c5bbad78c4c82a36fd8390d9b9873.pdf

How Can We Achieve an Equitable Energy System?



- At ACEEE, we find it helpful to define equity in the context of the energy system as the focus of our work is advancing energy efficiency across the housing, transportation, industry, and utility sectors.
- This graphic is adapted from a USDN resource outlining these four dimensions of equity – structural, procedural, distributional, and transgenerational - which ACEEE has applied to the context of an equitable energy system.
- Specifically applying these four dimensions, or pillars, of equity to the context of the energy system helps illustrate opportunities that ACEEE has through our technical assistance, research, and advocacy work to advance different dimensions of equity.
- This is a useful exercise for organizations that are newer to equity work or that haven't traditionally considered advancing equity as within their scope of work or organizational priorities, and will help to create opportunities for more expansive partnerships and better alignment with the priorities of the communities that you're serving or otherwise engaging with through your work on buildings.

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For the chat:

What 3 words come to mind when you think about integrating equity into your buildings work?

Preparing to Advance Equity



Assess readiness.

Take stock of current practices and capacities to help identify strengths and weaknesses to address as the equity work moves forward.



Build capacity.

Identify ways to support ongoing learning and the development of new professional competencies necessary to advance equity.



Center marginalized voices.

Research and explore the perspectives of BIPOC communities and other historically marginalized voices. Develop an understanding of the history of systemic racism and inequity in your community.



Articulate power, permission, and authority.

Understanding and shifting power is at the heart of equity work.



Identify funding and resources to support equity work.



Plan for interdepartmental collaboration.

Community Engagement and Relationship Building

Why?

- Learn from the unique expertise of communities that have lived with inequity
- Better understand unintended consequences of initiatives
- Shift power and correct power disparities
- Increase capacity for collaboration
- Substantively address a community's concerns and needs
- Achieve just transition objectives, such as collaborative solidarity, racial equity, climate justice, energy democracy, and an equitable economy

Source: Urban Sustainability Directors Network (USDN), Equity & Buildings Framework (2021)

Who?

- Communities that have been disproportionately affected by and excluded from decision making
- Established CBOs and community leaders
- Tenants, housing rights groups, affordable housing advocates
- People working on health, economic inclusion, racial justice, etc.



- Advancing equity usually requires prioritizing issues and managing tradeoffs.
 - For example, it may require deciding whether to prioritize jobs, building infrastructure to support future electric vehicle parking, or providing access to energy efficiency incentives.
 - Or, it may require deciding how to balance improved living conditions, better health outcomes, energy efficiency, and utility bill savings.
- People who bear the burdens of inequity should guide the decisions about what specific equity outcomes are given priority in any particular building initiative.
- Initiatives and strategies should be specifically accountable to these communities.
- Building trust and relationships takes dedicated time and maintenance outside of planning processes.
- This framework document provides only a high-level outline of some critical elements of community engagement.
- For continued exploration of this topic, see the recording or slides from R2E2's recent "[Introduction to Community-Driven Planning](#)" webinar, led by the People's Climate Innovation Center.

Community Engagement and Relationship Building

How?

- Distinguish between traditional, box-checking community engagement practices and community-driven planning/ authentic community partnerships
- Think creatively about engagement
- Partner with CBOs to design and implement new engagement processes
- Hire facilitators that are trusted by the community
- Compensate people for their time and expertise

Source: Urban Sustainability Directors Network (USDN), Equity & Buildings Framework (2021)

When?

- As early as possible!
- Throughout goal setting, initiative design, implementation, and evaluation
- Follow through on ideas that emerge through engagement
- Be transparent about how engagement influenced the decision-making process




- Engagement strategies and processes should be designed based on the overall purpose and the specific needs of the people or groups involved.
- Traditional community engagement practices are insufficient for the level of authentic community leadership and partnership needed to support equitable buildings work.
 - Box checking includes giving presentations, providing fact sheets, or administering surveys that do not go beyond consultation or translate into action.
 - Authentic engagement and partnership includes co-designing plans, creating a community advisory board or oversight committee, participatory budgeting, and attending existing community forums hosted by trusted community leaders or organizations.
- Think creatively:
 - What existing community forums are available that you could participate in? Summer camps, artist guilds, music festivals – think outside the box
 - How can you make engagement fun or entertaining? Pop up events, incorporating the arts, getting respected or high-profile figures involved
- Community members can be much more valuable than outside consultants in designing effective engagement and providing advice on initiative development. They should be paid accordingly.
- Be transparent about how engagement influenced the planning process and where decisions were shaped or improved by the community.
- People's energy and capacity for engagement dissipates when they do not see their input

shaping decisions or their recommendations being implemented.

Setting Goals and Success Metrics

Equity goals should be:

	EXPLICIT	Equity goals should be explicitly stated throughout the text of building policy. Background reports on and prior local government commitments to equity can inform and equity priorities should be woven throughout goals statements and policy provisions.
	SPECIFIC	Equity goals must be specific, define terms, reference data, and be clear about how success will be measured. A commitment to tangible equity outcomes should be reflected in the strategies, resource allocation, and measurement approaches throughout the policy.
	COEQUAL	Equity goals need to have, at least, the same importance as other policy goals, such as emissions reductions. Establishing equity goals as coequal will help direct implementation and resources and ensure that outcomes are achieved. History has demonstrated that when equity is not a top priority, attention wanes, resources are diverted, and outcomes fail to materialize.

Source: Urban Sustainability Directors Network (USDN), Equity & Buildings Framework (2021)

What equity goals will you include in your Buildings UP concept plan?

- Perhaps the most important and frequently overlooked step in integrating equity into building upgrade initiatives is including it as a coequal, explicitly stated goal.
- Too often, equity is only considered after initiatives are formulated and approved, relegating it to an implementation concern where it competes with other priorities for attention and resources.
- Often equity is treated as an add-on or side dish to the emissions reduction and climate change mitigation entrée.
- To avoid this trap, the USDN's Equity and Buildings Framework recommends that equity goals should be explicit, specific, and coequal.
- Coequal goals receive coequal resources for data collection and evaluation as well as prominent attention in progress reports.
- Equity policy goals are ideally co-created with the communities that are most affected and flow from community engagement and an understanding of community equity needs and priorities.
- One example of an equity-specific goal would be that 80% of the benefits of your building upgrade projects are directed to disadvantaged communities.



Critical Issues at the Intersection of Equity and Buildings



- Using a people-centered approach in thinking about the future of the built environment helps uncover crosscutting issues because buildings are deeply interconnected with our modern lives.
- These systems-level realities mean that related challenges require interdisciplinary approaches and collaborations that cross fields, institutions, and sectors.
- Advancing equitable progress in the built environment goes beyond the scope of work of a single department or organization and has to explore how entities working in neighboring fields, such as housing, mobility, and workforce development, frame critical issues and priorities and how they might work together towards common goals or a shared vision of a more equitable future for their community.



Housing affordability



Gentrification and displacement



Health



Economic inclusion



Cultural recognition, identity, and tradition



Resilience to disaster and disruption

Source: Urban Sustainability Directors Network (USDN), Equity & Buildings Framework (2021)

- Initiatives related to buildings and the built environment more broadly require a holistic and integrated approach that matches the scope of community needs and doesn't pass up opportunities to address intersectional issues or maximize benefits to community members, especially community members who have had unequal access to built environment services, like clean energy or stable affordable housing, community members who have had unequal decision-making power in those areas, or those who have been disproportionately negatively impacted by buildings policies or programs.
- The list you see here are areas that were identified as critical issues at the intersection of equity and buildings that present the opportunity for buildings practitioners to engage in those interdepartmental and inter-sectoral collaborations to build stronger partnerships and have more expansive and more meaningful positive impacts on their communities through their work.
- For more ideas about how to engage with stakeholders across different sectors in your buildings work, I encourage you to check out the recording or slides from R2E2's recent ["Engaging Stakeholders in Building Decarbonization Planning" webinar](#).



- Here's an example of how R2E2 thinks about intersectional issues in the context of our work advancing energy efficiency in affordable housing, and how we can use building upgrades to address multiple benefits to communities, especially underserved communities.

Program Example: Empower Me - Alberta, Canada



- Canada's only energy conservation and education change program designed for and delivered by members of diverse, multilingual, and hard-to-reach communities



- Social enterprise addressing a gap in government services
- Focuses on newcomers to Canada by delivering free programming and education to save energy, save money, save the environment, and increase the comfort and safety of their homes



- Program services are available in 16 languages including English, Mandarin, Cantonese, Punjabi, Farsi, Urdu, Hindi, Tagalog, Arabic, Spanish, Korean



Impacts:

- Home energy, safety, and comfort improvements for 10,000 people
- Collaboration with over 360 partners
- Created almost 200 new jobs for Canadian immigrants

Empower Me Energy Mentors in Alberta



Donilba Salazar
Energy Mentor - English & Spanish



Mehrdad Zabihi
Energy Mentor - English & Farsi



Alanda Big Crow
Energy Mentor - English, Okanagan
and Dene



Dhanvir Singh
Energy Mentor - English, Punjabi &
Hindi

Source: <https://empowerme.ca/home-ab/>



More info:

<https://empowerme.ca/home-ab/>

Program Example: Green & Healthy Homes – San Antonio, TX



- Provides assistance to owners and landlords of single-family and multifamily residential properties in creating healthy, safe, energy-efficient and sustainable homes for families earning 80% or below of area median income



- Focuses on serving families with children under five years old and people with asthma
- Works to prevent and correct housing-related health and safety hazards, such as addressing lead-based paint, household asthma triggers, and fire hazards



- Managed within the municipal Neighborhood and Housing Services Department
- Grant program with a five-year restrictive covenant
- Robust collaboration between municipal and county offices, the nonprofit sector, faith groups, and university partners



Source: City of San Antonio, www.sa.gov



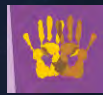
More info:

<https://www.sa.gov/Directory/Departments/NHSD/Housing-Support/Repair/Green-Healthy-Homes#:~:text=The%20City%20of%20San%20Antonio's,homes%20for%20families%20and%20children>

<https://www.sanantonio.gov/Portals/0/Files/NHSD/Repair/SAGHH-Information.pdf>

Poll:

**Which of these
intersecting issues are
you already
addressing through
your buildings work?**

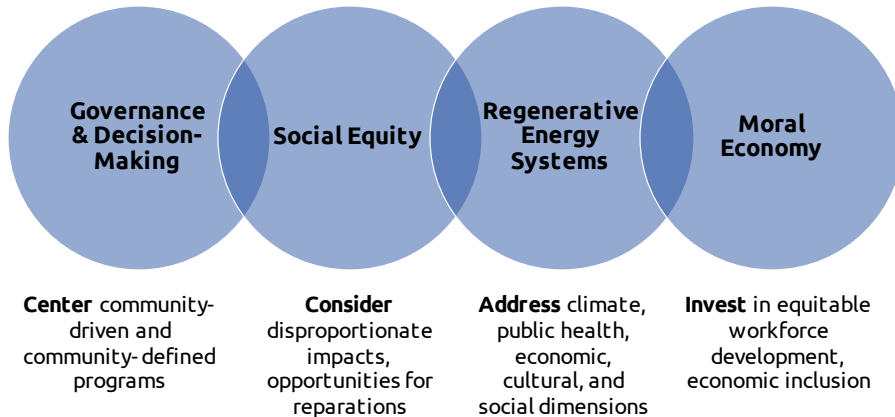




Additional Tools for Equity in Buildings Practice

 Residential Retrofits
for Energy Equity

Emerald Cities' Building Electrification and Energy Democracy Principles



Source: Emerald Cities, Building Electrification Equity Project (2020)



- One additional tool we want to highlight is Emerald Cities' Building Electrification Equity Project.
- This 2020 document is oriented around the premise that building electrification initiatives need to be tested against four core standards related to: a) shared governance/decision-making, b) social equity, c) regenerative energy systems, and d) a moral economy, to evaluate their potential for positive impact.
- The framework outlines principles for achieving true energy democracy and offers several specific actionable guidelines for local electrification program development.

https://emeraldcities.org/wp-content/uploads/2021/04/BEE_Report_Final.pdf

ENERGY DEMOCRACY STRATEGY MAD LIB

Based on the type of your energy economy (extractive, transitional, or energy democracy), identify some immediate next steps to help move towards energy democracy. Some questions to keep in mind:

WHERE WE ARE & WHAT'S IN OUR WAY

My community is primarily _____ on the flipbook and _____ match up to my community vision. The biggest problem or challenge to achieving my vision is _____. Those that are most impacted by the problem are _____, _____, and _____, other: _____.

red/yellow/green
does-does not
ie., political support, education, community organizing, etc.
Class Race
Gender Location

CREATING SOLUTIONS

_____ and _____ will help us address this problem. _____ will benefit from these solutions. _____ will be burdened by _____. The unintended consequences of my solutions include _____.

Opportunities Solutions
Who
Who increased taxes
penalties/responsibilities

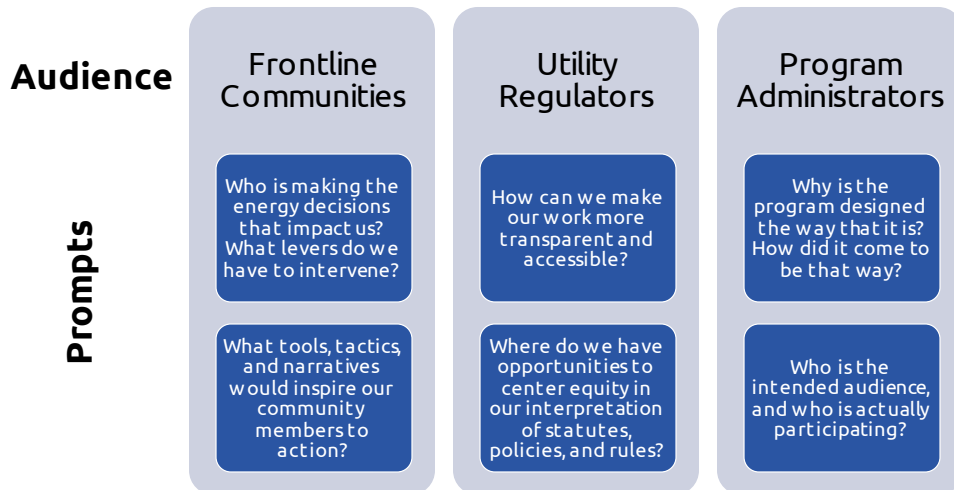
Source: Emerald Cities, Energy Democracy Flipbook



- Another resource from Emerald Cities, their Energy Democracy Flipbook, advances a framework for radical shifts and meaningful change to help achieve energy democracy.
- Shown here is an example of a resource from the Flipbook, an "energy democracy strategy mad lib", which is a fun and creative way to start conversations with your partners around issues facing your community and what opportunities your work has to advance solutions to those issues and achieve your vision for an equitable community and energy system.

https://emeraldcities.org/wp-content/uploads/2021/04/Energy-Democracy-FINAL_Flipbook.pdf

The Energy Equity Project's Equity Prompts



Source: Energy Equity Project Report (2022)



- Another great resource for buildings practitioners is the University of Michigan's Energy Equity Project, which developed the first standardized national framework for comprehensively measuring and advancing energy equity.
- The Energy Equity Project Report includes resources like:
 - Guiding principles for the four dimensions of energy equity
 - 148 potential energy equity metrics for measuring progress,
 - And equity prompts and considerations for engaging different audiences around energy equity planning, including templates for creating an energy equity plan.

https://energyequityproject.com/wp-content/uploads/2022/08/220174_EEP_Report_8302022.pdf

Key Takeaways

- Define equity in the context of your work, as it relates to your community's needs
 - What do you mean when you say equity? What inequities are you trying to address? What is the purpose of integrating equity into your work?
- Recognize intersectional opportunities to advance equity in your building upgrades initiative planning
 - Preserve housing affordability; prevent displacement; improve health; promote economic inclusion; support cultural recognition; enhance resilience
- Apply Principles of Practice to your buildings work
 - Center people; work collaboratively; address root causes; build capacity in impacted communities; shift power; tie project/program success directly to equity
- Prepare to incorporate equity as an ongoing component of your buildings work

Action Items and Next Steps

Learning

- USDN's [Equity Foundations](#) training
- Race Forward's [racial justice trainings](#)
- [Vision, Power, Solutions workshops](#) for community-driven planning for climate justice
- Common Spark's [Energy \(in\)Equity training](#)

Doing

- **Work toward a shared understanding of equity** and how it will factor into your building upgrade initiative with your B-UP partners
- **Integrate community priorities** in your building upgrade zone and concept plan
- **Set equity-specific goals and accountability processes** in your concept plan

Resources

- Equity fundamentals:
 - Urban Sustainability Directors Network's (USDN) [Equity Foundations Training](#)
 - Government Alliance on Race & Equity's [Racial Equity Toolkit](#)
 - Initiative for Energy Justice's [Energy Justice Workbook](#)
- Examples of equity readiness assessments:
 - Western States Center's [Racial Justice Assessment Tool](#)
 - Coalition of Communities of Color's [Tool for Organizational Self-Assessment Related to Racial Equity](#)
 - USDN's [Equity & Buildings Readiness Assessment](#)
- Centering equity in buildings work:
 - NAACP's [Centering Equity in the Sustainable Building Sector](#)
 - The Greenlining Institute's [Equitable Building Electrification framework](#)
 - USDN's [Ensuring Equity in Energy Innovation and Transformation](#)
 - Emerald Cities and PolicyLink's [Inclusive Procurement and Contracting](#)
- Community engagement and relationship building:
 - Emerald Cities' [Climate Equity & Community Engagement in Building Electrification Toolkit](#)
 - Race Forward's [Equity Assessment Tool of the Zero Cities Project](#)
 - The 100% Network's [Comprehensive Building Blocks for a Regenerative and Just 100% Policy](#)
 - Facilitating Power's [Process Guide for City-Community Collaboration](#)
 - Facilitating Power's [Spectrum of Community Engagement to Ownership](#)
 - National Association of Climate Resilience Planners' [Community-Driven Resilience Planning Framework](#)
 - Southwest Network for Environmental and Economic Justice's [Jemez Principles for Democratic Organizing](#)

Resources (cont.)

- Energy justice and equity mapping tools:
 - [DOE's Energy Justice Dashboard](#): A pilot data visualization tool that displays DOE-specific investments in communities across the country experiencing disproportionately high and adverse economic, human health, climate-related, environmental, and other cumulative impacts to track Justice40 investments from DOE activities.
 - [DOE's Energy Justice Mapping Tool](#): This tool is intended to allow users to explore and produce reports on census tracts that DOE has categorized as disadvantaged communities. DOE's working definition of *disadvantaged* is based on cumulative burden. There are 36 burden indicators that reflect fossil dependence, energy burden, environmental and climate hazards, and socio-economic vulnerabilities.
 - [DOE's Energy Justice Mapping Tool for Schools](#): The Energy Justice School Dashboard builds on the Energy Justice Mapping Tool, and shows school district boundaries, overlaid with disadvantaged communities in blue, and federally recognized tribal lands as well as U.S. territories in green.
 - [DOE's LEAD Tool](#): Offers general insights into information on the median energy burden (as a percent of income), median annual energy cost, and housing costs at the county, city, or census tract level.
 - [NREL's ComStock & ResStock data visualizations](#): Interactive datasets that provide additional detail on energy usage and building characteristics.
 - [EPA's EJScreen](#): Displays several indicators associated with environmental justice such as presence of lead, proximity to polluting sites such as incinerators, demographic data, and presence of food deserts.
 - [US Census Demographic Data Map Viewer](#): Mapping of key demographic information down to the census tract-level.
 - [US Housing and Urban Development \(HUD\) Community Planning & Development Maps](#): Map and generate reports from a variety of different HUD data sources.
 - [National Housing Preservation Database](#): Map of publicly subsidized housing properties.

Buildings UP

The Buildings Upgrade Prize

AMERICAN
MADE
U.S. DEPARTMENT OF ENERGY



Thank You – Q&A



Follow: www.HeroX.com/BuildingsUP
Questions?: BuildingsUP@nrel.gov



Appendix: Additional Tools & Prompts

Buildings and Equity Workshop Workbook

Session 1

Prework:

1. Pre-read the relevant sections of the framework (Sections 1: Introduction through Section 4: Preparing to Do Equity Work)
2. Locate and prepare to share any equity definitions that your team or department use in their work. Equity definitions spell out what we mean when we say equity. They create a shared understanding of terms and concepts for people working together. If your team is not currently working with a shared definition, that is okay. Write down the steps you might take to create one.
3. Locate and prepare to share any "Why Statements" from your climate action plan or other work as it pertains to buildings. Why statements describe the purpose of addressing equity in your sustainability or buildings work. If you do not have one, it is okay; you will be exposed to more examples and have time to work on a statement during Session 1.
4. Your equity definitions and Why Statement might be contained in one document or in several documents. Copy and paste relevant portions below.

Buildings and Equity Workshop Workbook

- For the critical issue(s) you want to focus on in your buildings work, what are key stakeholders or resources that you need to advance the work?
- What are strategies to foster interdepartmental collaboration and relationship building for your department?
- Homework: Refine your notes above to identify key stakeholders working in your issue area(s) and have conversations with other departments identified in the framework or relevant CBOs and local organizations and how their work intersects with the city's proposed projects.

Source: Urban Sustainability Directors Network (USDN), Equity & Buildings Framework workshop series



USDN Equity Foundations Prompts

- With your team, identify three to five examples of the historical role of government in creating and maintaining racial inequity, with at least two from your own community.
- What has been the historic relationship between communities of color and other marginalized communities in your jurisdiction around topics of sustainability and environment?
- What opportunities do **you** have to advance racial equity through your work? (e.g. show disparities, talk to people, ask staff how they can advance equity, tap into community advocacy, form an equity committee, etc.).
- Describe a way you might embed racial equity into rules, policies, programs, and budgets so that equity benefits are sustained beyond your specific opportunity/work and become the normal way your community works.

Source: USDN Equity Foundations Training, <https://www.usdn.org/equity-foundations-training.html>



USDN Equity Foundations Training: Equity Project Planning Worksheet

- 1. Project Purpose:** Describe your project in concrete terms (What is the goal? What will you actually do? Why did you choose this project?) Try to describe your project in terms of your goal for eliminating racial inequities and for improving overall community conditions.
- 2. Desired Results, Outcomes, and Data Evidence:** What specific outcome is your project aiming to achieve? Will achieving this outcome address a specific identified racial inequity? How? What is the historical and current data disaggregated by race that informed the development of your project goal and desired outcome? What does the data tell you about barriers or gaps?
- 3. Collaboration and Engagement:** How will your project engage and collaborate with others? Who will be your internal and external partners supporting development and implementation of the project? Who may be hard to reach and/or highly impacted, and how will you include them in project development and implementation? How can you develop and/or expand cross-sector partnerships that will achieve systemic change?

Source: USDN Equity Foundations Training, <https://www.usdn.org/equity-foundations-training.html>



USDN Equity Foundations Training: Equity Project Planning Worksheet (cont.)

4. Strategies: What strategies and tools will you use in your project and how will they advance racial equity (Tools include Equity Atlas, Empowerment Congress, Race Matters, Racial Equity Tools, and others)? How will you ensure that your equity goals carry through program implementation? How could your strategies be more than one-offs, for example by changing a practice that allows institutional racism to persist?

5. Communication, Education, and Capacity Building: How will you communicate about your project? Who are your target audiences and what are your key messages for each audience? What are your strategies for building the capacity of your own team and organization to advance racial equity? What are your strategies for building the capacity of your key external partners to advance racial equity? Who will provide education about racial equity for your project?

6. Evaluation: How will you know whether your project is successful? What are the milestones and measures that will tell you if you are making progress? How will you track progress in implementation so you can make mid-project corrections?

Source: USDN Equity Foundations Training, <https://www.usdn.org/e-equity-foundations-training.html>



Equity Dimensions Considerations: The Energy Equity Project

AUDIENCE	RECOGNITION CONSIDERATIONS	PROCEDURAL CONSIDERATIONS	DISTRIBUTIONAL CONSIDERATIONS	RESTORATIVE CONSIDERATIONS
Frontline communities	Data gaps, undercounts/ underrepresentation, misrepresentation of local realities	Understanding of complex regulatory processes, resources, partners and expertise to engage effectively	Workforce development and clean energy business benefits, health, energy savings, wealth creation, climate resilience	Defining and communicating a vision of an equitable energy and climate future that centers frontline communities
Regulators and government agencies	Community definitions; documenting historical legacies on the record; staff and commissioner representation	On-going engagement; decision-making and co-creation; informal opportunities to participate; range of supports and compensation to participate	Use of most inclusive societal cost tests; support for decentralized and cooperatively owned and managed systems; establishing mandatory targets for specific benefits (energy savings, jobs and wages)	Ensuring basic human rights and needs/ protecting human health and well-being; considering historical legacies and cumulative impacts; precautionary approach to infrastructure investment
Policy-makers	Community definitions and prioritization methodologies	Meeting with frontline communities	Mandating equitable targets for investments and benefits with strong implementation and accountability	Exceeding the proportionality/Justice40 standard

Source: Energy Equity Project

https://energyequityproject.com/wp-content/uploads/2022/08/220174_EEP_Report_8302022.pdf