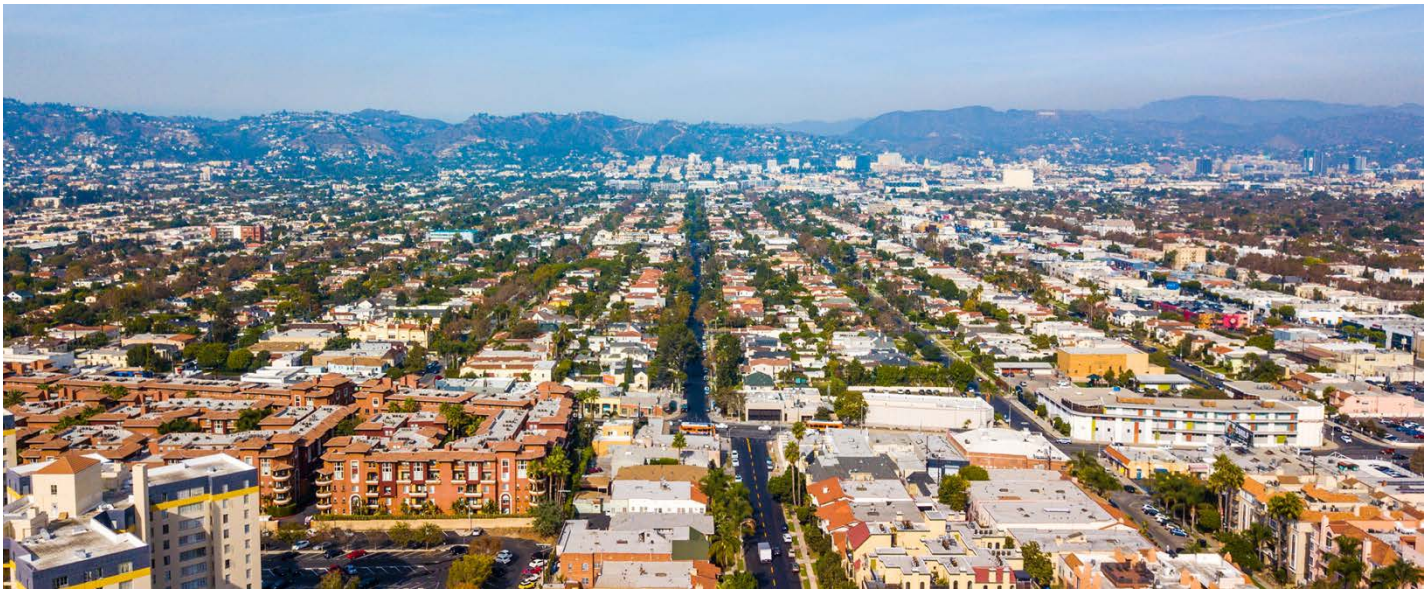
LA100 EQUITY STRATEGIES



# Chapter 4: Lessons Learned and Options for Community Engagement in Los Angeles

**FINAL REPORT: LA100 Equity Strategies**

Patricia Romero-Lankao, Nicole Rosner, and Lis Blanco

LA DWP

NREL Transforming ENERGY

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November 2023

# LA100 EQUITY STRATEGIES

Produced under direction of the Los Angeles Department of Water and Power by the National Renewable Energy Laboratory (NREL) under Work for Others Agreement number ACT-18-00039.

# Preface

The Los Angeles 100% Renewable Energy Study, or LA100, revealed that although all communities in Los Angeles will share in the air quality and public health benefits of the clean energy transition, increasing equity in participation and outcomes will require intentionally designed policies and programs. The LA100 Equity Strategies project was specifically designed to help Los Angeles identify pathways to such policies and programs in the form of equity strategies. The project aimed to do this by incorporating research and analysis to chart a course toward specific, community-prioritized, and equitable outcomes from the clean energy transition outlined in the LA100 study.

### *The Project Partners*

The Los Angeles Department of Water and Power (LADWP), the National Renewable Energy Laboratory (NREL), and the University of California Los Angeles (UCLA) partnered on the LA100 Equity Strategies project to develop strategies for engaging communities, funding equitable technology and infrastructure investments, expanding existing programs, and designing new programs and policies to improve equity by incorporating what community members themselves know is needed to achieve a more equitable energy future.

### *The Project Approach*

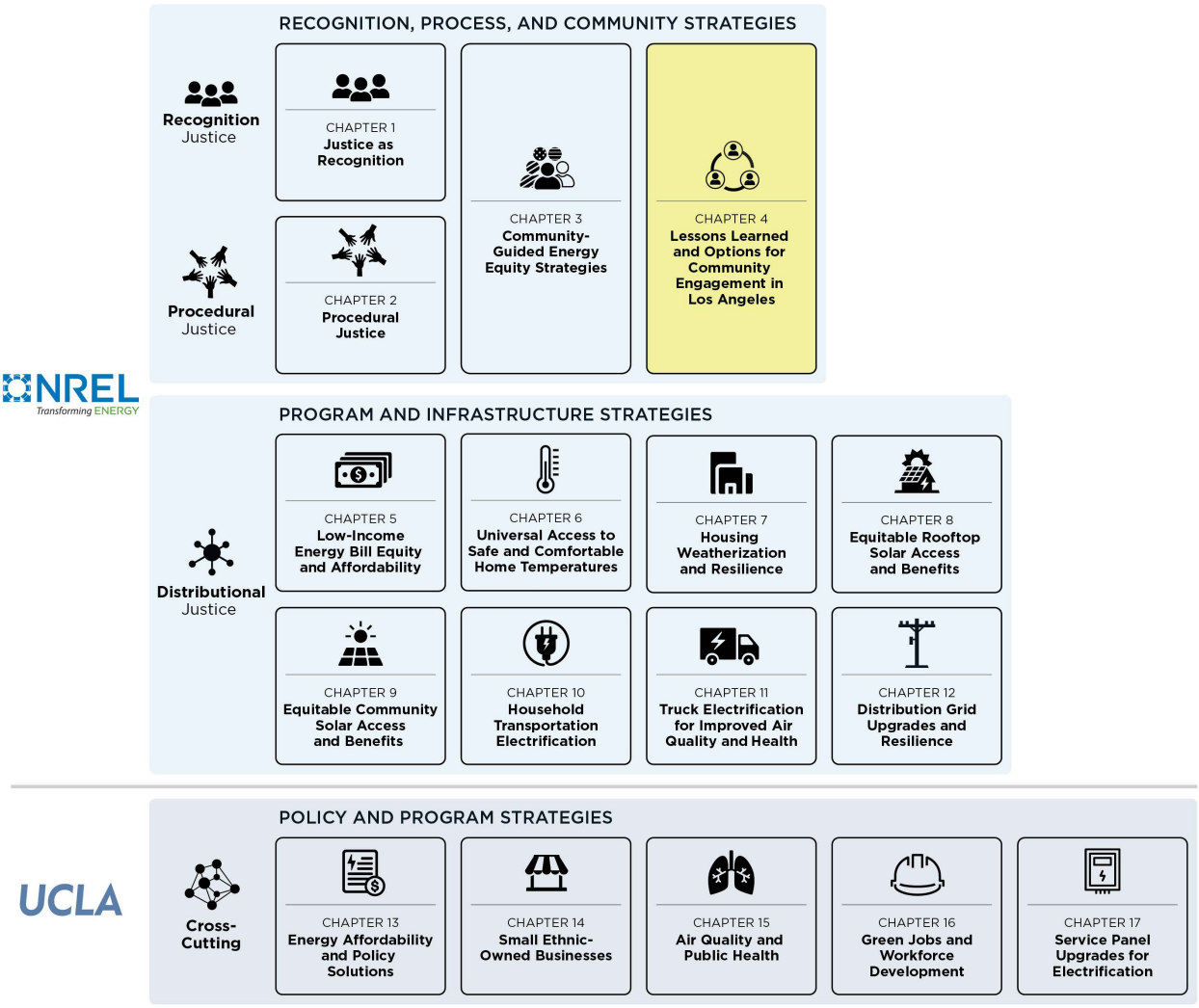
LA100 Equity Strategies employs a unique mixed-methodological approach utilizing three distinct—but connected—research efforts. Through these efforts, NREL and UCLA developed a range of strategy options for increasing equity in LA's transition to 100% clean energy.

### *A Project Summary*

To get a high-level overview of the project, you can dive into the executive summary, interactive data visualizations, and more on the LA100 Equity Strategies website at maps.nrel.gov/la100/equity-strategies.

### *The Full Report*

NREL's final full report for the LA100 Equity Strategies project encompasses seventeen chapters. The first twelve chapters, authored by NREL, are organized around the three tenets of justice. Chapters 1–4 address recognition and procedural justice, while Chapters 5–12 address distributional justice. The final five chapters, authored by UCLA, provide crosscutting policy and program strategies. Each chapter provides data, methods, insights, and strategies to help LADWP make data-driven, community-informed decisions for equitable investments and program development.




## NREL Chapters

**Chapter 1:** Justice as Recognition

**Chapter 2:** Procedural Justice

**Chapter 3:** Community-Guided Energy Equity Strategies

**Chapter 4:** Lessons Learned and Options for Community Engagement in Los Angeles

**Chapter 5:** Low-Income Energy Bill Equity and Affordability

**Chapter 6:** Universal Access to Safe and Comfortable Home Temperatures

**Chapter 7:** Housing Weatherization and Resilience

**Chapter 8:** Equitable Rooftop Solar Access and Benefits

**Chapter 9:** Equitable Community Solar Access and Benefits

**Chapter 10:** Household Transportation Electrification

**Chapter 11:** Truck Electrification for Improved Air Quality and Health

**Chapter 12:** Distribution Grid Upgrades for Equitable Resilience and Solar, Storage, and Electric Vehicle Access

## UCLA Chapters

**Chapter 13:** Energy Affordability and Policy Solutions Analysis

**Chapter 14:** Small Ethnic-Owned Businesses Study

**Chapter 15:** Air Quality and Public Health

**Chapter 16:** Green Jobs Workforce Development

**Chapter 17:** Service Panel Upgrade Needs for Future Residential Electrification



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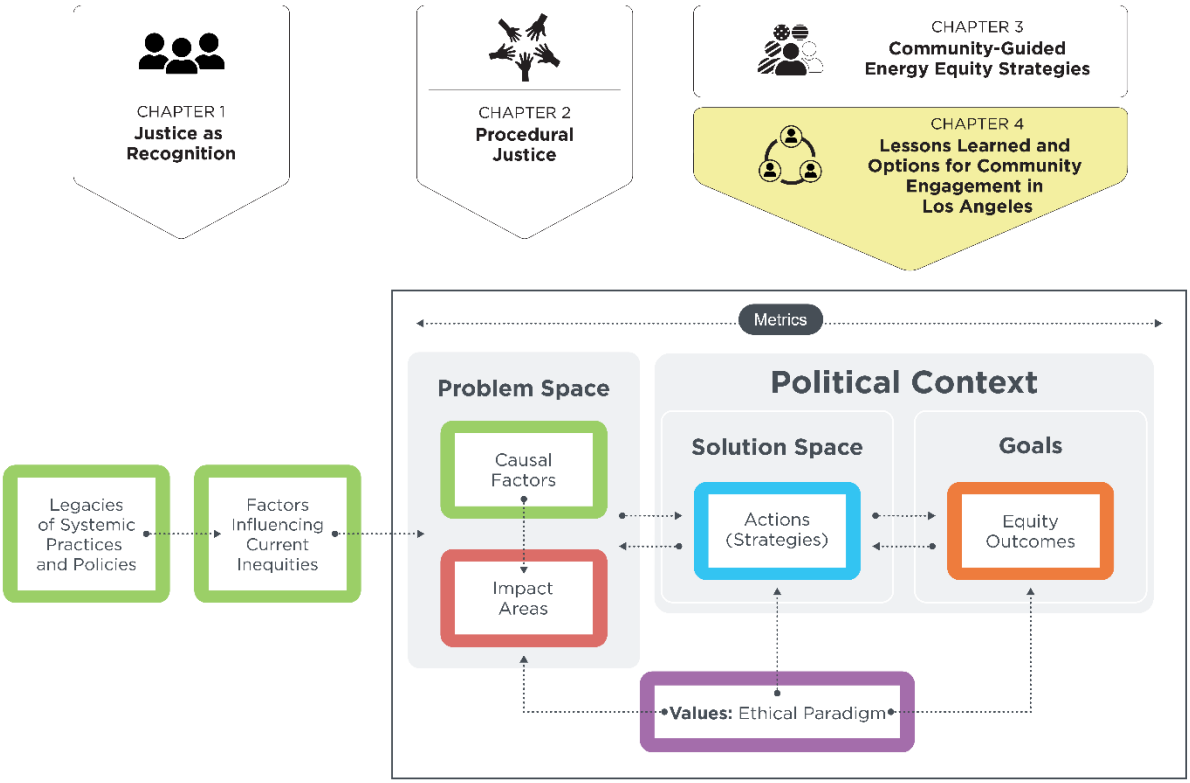
### *About Chapters 1–4*

In Chapters 1–4, NREL presents community-grounded research and analysis results on recognition justice and procedural justice, community-guided equity strategies and future options for community engagement by LADWP. Across these chapters, a mixed-methodological approach is applied, including a systematic literature review, statistical analysis of access to LADWP programs, and qualitative research with communities and community-based organizations to examine understandings of energy transition needs, barriers, and priorities. This work informs modeling and development of equity strategies by analyzing (1) the distribution of benefits of LADWP programs and strategies in the city and (2) historical and current factors contributing to this distribution and other energy inequities in the city.



# List of Abbreviations and Acronyms

| | |
|---|---|
| CBO | community-based organization |
| DER | distributed energy resource |
| DOE | U.S. Department of Energy |
| EMDI | Equity Metrics Data Initiative |
| EV | electric vehicle |
| G&T | generation and transmission |
| IAP2 | International Association for Public Participation |
| LADWP | Los Angeles Department of Water and Power |
| LIHEAP | Low-Income Home Energy Assistance Program |
| NREL | National Renewable Energy Laboratory |

# Executive Summary

## Rising to the Challenge

The LA100 Equity Strategies project synthesizes community guidance with robust research, modeling, and analysis to identify strategy options that can increase equitable outcomes in Los Angeles' clean energy transition. Grounded in the analysis of past and ongoing energy inequities and engagement with underserved communities, the project presents community-guided strategies that aim to operationalize recognition and procedural justice. Building on the community-identified problems and solutions, and the analysis of the 11 strategies described in Chapter 3, this chapter continues to focus on the solution space through the lens of recognition and procedural justice. It centers the role of community engagement in energy utility planning and project development with a specific focus on how the Los Angeles Department of Water and Power (LADWP) can engage and work equitably with Los Angeles communities to cocreate a clean and just energy future for LA.

LA100 Equity Strategies is rooted in the crucial role community engagement plays in restructuring the energy systems of cities, states, and nations. Scholarship on wind, solar, and other transitional energy technologies and projects has documented that such engagement is commonly used as a top-down mechanism for adapting social practices to fit new technological innovations (Devine-Wright 2005; Baxter et al. 2020; Boudet 2019). Yet, understanding how the clean energy transition—with related changes in technologies, infrastructures, practices, and costs—will fit equitably into the existing socio-political context is a challenge that requires substantive collaboration with local communities. Any form of community engagement opens up government officials and utilities to opposition from their public (Baxter et al. 2020). Meaningful engagement methods turn such dissent into a strength, embracing critical feedback—particularly from communities historically excluded from decision-making—as contributing to more grounded design and effective implementation. Leveraging this collaborative model to further rectify past and ongoing inequities in the social, cultural, and institutional scaffolding of LA, this chapter presents options and methods to support LADWP in launching a just and equitable clean energy transition. We approach community engagement as a critical process linking recognition, procedural, and distributional justice, outlining how LADWP could learn from past engagement, coordinate such knowledge organization-wide, and use engagement as a key tool for achieving energy justice and equity.

## Goal and Approach

To support an equitable clean energy transition, we analyzed how past and ongoing LADWP engagement channels, actions, and findings can be harnessed to build stronger, more substantive relationships with underserved Angelenos. We conducted a systematic literature review of energy-related community engagement to inform and ground an exploratory analysis of 57 U.S. utility community engagement efforts from 52 utility companies. We utilized this exploratory analysis to understand how U.S. utilities currently connect community engagement with energy equity in their regions. We then analyzed data from listening sessions and co-identified constraints and options for embedding energy justice into LADWP organization. These findings allowed us to examine potential opportunities for LADWP engagement practices. Finally, we explored opportunities for LADWP to use community engagement as a catalyst for advancing energy justice in Los Angeles.

We consider *what* community engagement is, and what it can be. We also elaborate on what tools and activities community engagement entails (see also Chapter 3), as well as *how* LADWP can design, implement, and evaluate those tools and activities. Thus, by considering community engagement as a foundational process for co-defining distributional and recognition justice goals, this chapter sets the methodological stage for the distributional equity strategies that follow in Chapters 5–12.

## Key Findings and Takeaways

With a focus on community engagement as a holistic approach to achieve energy equity in the clean energy transition in Los Angeles, we organize this chapter's main findings in three groups of options and potential next steps for LADWP moving forward.

### *Results from Exploratory Analysis of Community Engagement in U.S. Utility Programs*

We used the Spectrum of Public Participation, developed by the International Association for Public Participation (IAP2), to assess 57 community engagement programs from 52 U.S. utilities according to the five levels of increasing community impact on decision-making: (1) inform, (2) consult, (3) involve, (4) collaborate, and (5) empower. We also analyzed *if* and *how* utilities target distributional, procedural, and recognition justice in their engagement.

We found that more than 50% of the analyzed programs do not mention any engagement with communities in their public-facing material (i.e., websites), and nearly 25% of the utilities mention informing and consulting communities for their energy projects (see Table ES-1). From our content analysis of information available on utility websites, we found that none of the 57 programs evaluated demonstrate the more collaborative and empowering levels of engagement on public-facing online material (see Table ES-1).

As for how utilities target the three justice tenets, 81% of utility programs that demonstrate engagement primarily target distributional justice, followed by procedural justice (45%); only 29.8% target recognition justice (Figure ES-1). Thus, there is a lack of demonstrated engagement addressing procedural and recognition justice.

**Table ES-1. Community Engagement in Program or Initiative Development by U.S. Utilities**

| Level of Community Engagement | Number of Programs |
|---|---|
| Utility informed | 2 |
| Utility consulted | 10 |
| Utility involved | 12 |
| Utility collaborated | 0 |
| Utility empowered | 0 |
| Engagement is suggested | 3 |
| Utility did not engage | 29 |
| Unclear | 1 |
| **Total** | **57** |

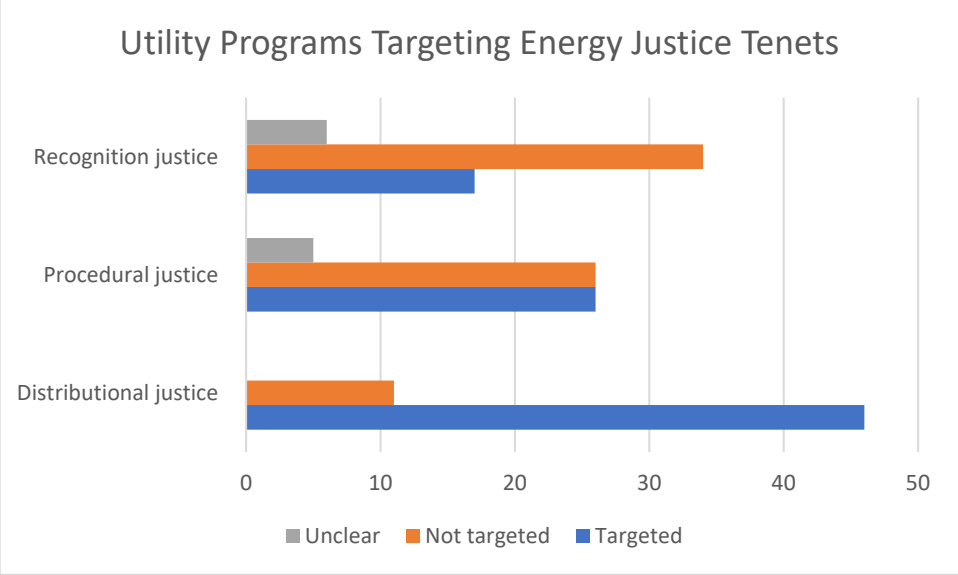



**Figure ES-1. Utility programs and initiatives targeting energy justice tenets**

## *A Literature Review to Guide LADWP's Community Engagement Staging*

Moving beyond the Spectrum of Public Participation into co-creation via community engagement (see the Glossary, page 25), we connect LADWP's potential for fostering a collaborative engagement platform to lessons learned from energy engagement scholarship (Drakellis 2022; Waters 2015; First Solar n.d.; New York State Department of Environmental Conservation 2009; Lezberg, Dane, and Mullins 2010; Ross and Day 2022; Ziegler and Forbes 2010). These scholars suggest a series of phases to structure an effective engagement process:

- **Phase 1:** In the initial planning, LADWP would need to understand why it is engaging, with what goal (or whom) it plans to engage, and with what intended outcome or result—e.g., site infrastructure, create jobs, reduce health impacts.
- **Phase 2:** The next phase involves two components: a mapping of relevant actors created with residents, and understanding actors' aspirations, interests, and lived experiences. Equally

important is to understand their potential to contribute to the goals of the project, and the ways in which the project can benefit them (or avoid burdening them).

- **Phase 3:** Building relationships with local actors is the next phase, where LADWP needs to select the engagement techniques, the engagement points in the process, the message(s), and the approaches to solicit and include residents' input.
- **Phase 4:** The final phase involves maintaining relationships and evaluating and redefining LADWP's strategy. Because engagement is an iterative and dynamic process, updating and adapting the engagement approach using evaluation tools is crucial to understand: 1) if the engagement efforts are working; 2) how to report back to your actors with progress and updates; 3) how to manage expectations; and 4) how to reflect new information and changing circumstances.

Although these best practices offer options for community engagement in specific initiatives and programs, a collaborative platform could inform LADWP's long-term, multisectoral, and systemic energy transition programs, technologies, and policies. Furthermore, it could help LADWP integrate conflicting sectoral and local interests (e.g., market value versus equity) into citywide energy transition goals (Koontz and Johnson 2004; Scott, Thomas, and Magallanes 2019).

### *A Collaborative Platform*

To involve communities equitably and effectively in the clean energy transition, LADWP could build on its existing entities and programs to develop a collaborative platform, or customized institutional approach, defined as a set of decision-making processes and organizational structures that:

- Engage community-based organizations (CBOs), trusted messengers, communities, and other relevant actors constructively and continuously.
- Are formal, consensus-oriented, and iterative, involving processes of co-producing goals, strategies, and the means to share responsibilities, capabilities, and resources.
- Foster a sense of shared purpose, belonging, and trust (Lee 2022; Patricia Romero-Lankao et al. 2023).

Our findings indicate that the collaborative platform could be an effective organizational means to realize a just and equitable transition to clean energy. Here we present four primary actionable options related to the collaborative platform as a methodological toolkit that could benefit LADWP community engagement in the short and long term. First, the Corporate Strategy Communications Division and the Diversity, Equity, and Inclusion Office, and the Customer Service Operations at LADWP could be responsible for this collaborative platform. These entities could allocate dedicated personnel and resources to co-design, implement, and evaluate the multiple energy equity projects, technologies, and programs involved in Los Angeles' just energy transition.

Second, functioning as a stable, flexible, and agile organizational structure, this platform could formalize the current LA100 Equity Strategies Steering and Advisory Committees and other partnerships and collaborations into long-term agreements to maintain a continuous feedback loop between LADWP, their community partners, and residents. This feedback loop would allow partner CBOs, trusted messengers, and communities to benefit from and contribute to LADWP's success. As trusted sources of knowledge and opportunities in their community, community

committees, CBOs, and trusted messengers (e.g., health promoters [*promotoras de salud*]) could become critical platform nodes in LADWP's engagement network, connecting community challenges, needs, and priorities to institutional decision-making and policymaking. For instance, like the CBOs in LADWP's LA100 Equity Strategies Steering Committee, an LADWP Community Committee could gather a group of representative local community members from underserved communities across Los Angeles to collectively review the accessibility and suitability of LADWP programs and services and suggest community-tailored adaptations.

Third, the collaborative platform could move beyond ad-hoc, individual project engagement efforts by enhancing engagement practices and procedures that (1) disseminate accessible, community-tailored information about concerns, opportunities, and costs for residents to benefit from LADWP's energy equity strategies, and (2) create a consistent and agile feedback loop between LADWP and residents that impacts the course of Los Angeles' energy transition toward more just outcomes.

Fourth, as LADWP further expands its engagement efforts in LA communities, its current equity metrics could be refined to assess the design, evaluation, and implementation of its energy equity strategies. LADWP could utilize ongoing engagement efforts to develop community-grounded indicators; they could build a more robust equity measurement methodology to evaluate the outcomes of LA100 Equity Strategies implementation over time. This would include quantitative LADWP indicators, such as the number of power outages per census tract per month, and qualitative LADWP indicators, such as the level of customer satisfaction on customer service calls related to power outages (Chapter 3, Table ES-1). As these indicators come closer to measuring the concrete experiences of a community, they will offer better insights into the effects of the Los Angeles clean energy transition on the lived experiences and realities in these communities.

Besides guaranteeing distributional justice in the equitable distribution of resources, this coordinated equity approach would expand the potential for advancing procedural and recognition justice in current and future engagement processes. Section 5 maps how this toolkit of methods moves beyond the Spectrum of Public Participation into co-creation, connecting community engagement practices and procedures to lessons learned from energy engagement scholarship.

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# 1 Introduction

In the transition from fossil fuels to clean energy infrastructures in cities, states, and nations, technologies and social and institutional practices will change (Dubash et al. 2022). Community engagement is commonly used as a top-down mechanism for adapting social practices to fit new technological innovations (Devine-Wright 2005; Baxter et al. 2020; Boudet 2019). Furthermore, a growing body of energy justice literature finds community engagement does not necessarily result in more equitable energy outcomes or the perception thereof (Upham, Sovacool, and Ghosh 2022; Carley and Konisky 2020). Understanding how the existing context will be most *equitably* impacted by the clean energy transition—with its related changes in technologies, infrastructures, practices, and costs—is a challenge that requires substantive collaboration with local communities. Any form of community engagement opens up government officials and utilities to opposition from the public (Baxter et al. 2020).[1] Meaningful engagement methods turn such dissent into a strength, embracing critical feedback—particularly from communities historically excluded from the decision-making process—as contributing to more grounded design and effective implementation. From this collaborative approach, public critique is understood as a mechanism of accountability and an opportunity for adapting institutional actions to local needs, priorities, and aspirations, rather than a barrier to the energy transition (Sillak, Borch, and Sperling 2021).

This chapter presents a series of procedural and recognition justice findings, tools, and methods to support the Los Angeles Department of Water and Power (LADWP) as they develop a more equitable distribution of energy benefits and burdens in Los Angeles. We approach community engagement holistically, seeing it as a critical process linking recognition, procedural, and distributional justice. By working *with* Los Angeles' underserved communities and their community-based organizations and institutions, LADWP can: (1) identify past and ongoing historical inequities affecting historically underserved communities, (2) partner with these communities and their trusted institutions to redress identified problems and suggested solutions, and (3) operationalize those community-guided decisions in the more equitable distribution of clean energy benefits and burdens. Thus, by considering community engagement as a foundational process for co-defining distributional justice goals, this chapter lays the methodological groundwork for the distributional equity strategies that follow in Chapters 5–12.

Here, we outline how LADWP could learn from past engagement and centralize such knowledge across their organization. This effort aims to build a foundation for developing more accessible and transparent energy-related communication and engagement with underserved communities, committing to continuity, and providing tools for accountability. To do so, we move from lessons learned from other utility companies to those developed by LADWP. Thus, this chapter includes an analysis of how other utilities from across the United States connect community engagement with energy justice in their projects and programs, to inform LADWP's equity strategies via engagement methods. To support an equitable clean energy transition, we also consider how past and ongoing LADWP engagement channels, actions, and findings can be

[1] For example, scholars have documented opposition to wind and smart grid projects because of concerns about security, privacy, noise, and uncertainty about potential health and socioeconomic impacts (Devine-Wright 2005; Baxter et al. 2020; Boudet 2019).

harnessed to build stronger, more substantive relationships with underserved communities in Los Angeles. We combine a literature review and an exploratory analysis of 57 utility programs and initiatives that can inform LADWP's engagement process (Section 3). We then analyze findings from listening sessions and the institutional constraints and options for embedding energy justice into the organization (Section 4). Finally, we offer closing remarks on opportunities for LADWP to use community engagement as a catalyst for advancing energy justice in Los Angeles (Section 5).

# 2 Community Engagement and Energy Justice

Community engagement and energy transition projects are already impacting communities globally in positive and negative ways (Carley and Konisky 2020). For instance, a study of transportation inequities within 36 U.S. cities found unequal access to health, livelihood, and economic benefits as well as unequal health and energy burdens (Patricia Romero-Lankao, Wilson, and Zimny-Schmitt 2022). Therefore, scholars are calling for examination of the meanings and uses of community engagement and energy equity. In this section, we examine the definitions of these concepts to understand the links between engagement and equity in LA energy transition projects.

## 2.1 Participation and Community Engagement

Internationally, community engagement has increasingly become a prominent method employed by local governments, organizations, and corporations to "incorporate representative community opinions into decision-making" (Johnston 2010). Community engagement has come to signify a series of steps or levels, often defined as a form of public participation. The Spectrum of Public Participation, developed by the International Association for Public Participation (IAP2), is one highly utilized model that operationalizes community engagement into five levels of increasing community impact on decision-making: (1) inform, (2) consult, (3) involve, (4) collaborate, and (5) empower.[2]

In the United States, the origins of the community engagement approach to public participation lie in the critique of centralized, top-down urban planning in the 1960s and 1970s (Jacobs 2016; Arnstein 1969). Scholars and activists promoted the development of participatory planning processes that fostered partnerships with residents to increase citizen control over their cities, including the infrastructures that shape their experience of everyday life (Jacobs 2016; Arnstein 1969). In the 1980s and into the 1990s, participatory governance was eclipsed by austerity measures and a focus on economic, rather than socioeconomic, development. However, by the end of the 1990s and into the 2000s, community participation in governance and development gained renewed force as social and environmental concerns returned to the political forefront in U.S. domestic and foreign policy (Aitken, Haggett, and Rudolph 2016).

In the 2010s, as clean energy became increasingly promoted as a form of environmental justice, energy researchers emphasized the need for community engagement in the clean energy transition (Aitken, Haggett, and Rudolph 2016). In 2022, the Biden Administration's environmental justice agenda institutionalized incentives to include local communities in an energy decision-making process that "ensures [the] equitable distribution of the benefits of many [existing government] programs" (White House 2022). Thus, community engagement has become a key method employed in government efforts to advance energy justice.

Community engagement in and of itself does not denote substantive and equitable inclusion in decision-making and policymaking processes. In the literature on community engagement in energy transition programs, a line of scholarship[3] connects participation and engagement with

[2] For more detail on the IAP2 public participation model, see cdn.ymaws.com/www.iap2.org/resource/resmgr/pillars/Spectrum_8.5x11_Print.pdf.

[3] See Glossary of Terms for how participation and engagement are defined in the literature.

social acceptance of energy projects and policies (Boudet 2019; Segreto et al. 2020; Stadelmann-Steffen and Dermont 2021a). Following this school of thought, Boudet (2019) understands public ambivalence or disapproval of energy-related programs as one of the most substantial barriers to inclusively achieving clean energy targets. Scholars such as Segreto et al. (2020) Upham, Sovacool, and Ghosh (2022), and Hindmarsh (2010), however, see community engagement as an essential component of procedural justice and energy democracy, critical for building trust, buy-in, and advancing equity in the distribution of benefits and burdens. In our research, community engagement is a critical process for connecting recognition, procedural, and distributional justice.

## 2.2 Community Engagement and Just Energy Transitions

The transition to cleaner and more equitable energy systems requires the development and/or improvement of decision-making processes and the policies that structure them. Projects and programs created to achieve a just transition can prompt not only support but also opposition, even with the deployment of community engagement tools and strategies (Boudet 2019; Devine-Wright 2005; Devine-Wright and Devine-Wright 2009). Numerous examples are available of such public oppositions to nuclear energy, wind energy, and infrastructure siting, resulting from concerns about security, privacy, pollution (i.e., air, sound), and potential health and socioeconomic impacts (Boudet 2019; Devine-Wright 2005; Devine-Wright and Devine-Wright 2009). Therefore, energy justice scholars and advocates highlight the need to understand the challenges and opportunities of participation and engagement in decision-making and policymaking processes (Baxter et al. 2020; Kallis et al. 2021).

Over the past decade, a large and substantive body of scholarship (Carley and Konisky 2020; Electric Power Research Institute 2021; Sovacool et al. 2016; Heffron and McCauley 2017) has revealed how energy transition projects across the globe affect local communities, disproportionately impacting underserved social groups. This research includes analyzing how the lack of participation in the design and implementation of energy projects can increase inequities in community access to health, well-being, and economic benefits, further intensifying existing health and energy burdens (Romero-Lankao, Wilson, and Zimny-Schmitt 2022). Therefore, advocates for energy justice support a shift in the way underserved communities participate in the energy decision-making process, as well as the policies that shape those decisions.

This literature offers a perspective on how community engagement practices can be developed as a key tool for achieving more equitable energy outcomes. Therefore, to incorporate justice goals in the energy transition, clean energy projects should include: (1) *procedural justice* by substantively partnering with underserved communities to co-develop analysis of technology risk perception and guide the decision-making process throughout the design, implementation, and evaluation of energy projects and programs; (2) *distributional justice* concerns related to the equitable distribution of project benefits and negative impacts, as well as the effects of perceived technology risks on technology and infrastructure deployment (Boudet 2019); and (3) *recognition justice* commitments to redress historical inequities that are reproduced in the current distribution of investments, programs, health impacts, and other energy benefits and burdens. Research on energy-related community engagement practices highlights the positive correlation between procedurally just engagement and community trust in utility companies and

other associated institutions (Segreto et al. 2020; Prosperi, Lombardi, and Spada 2019; Delicado, Figueiredo, and Silva 2016).

However, *how* engagement is designed and implemented determines the potential for equitable impact. This body of scholarship also emphasizes that engaging and developing participatory methods does not guarantee just outcomes. One reason participation alone is not sufficient is that dominant, institutionalized approaches tend to focus on transactional relationships that impose preconceived solutions disconnected from local realities. For example, one type of transactional engagement process consists of utilities that present large-scale energy projects to the public as necessary social costs for advancing technical innovation and progress, rather than events that can influence community members' energy burdens and day-to-day lives (Walker and Baxter 2017; Dunlap 2018; Mejía-Montero, Alonso-Serna, and Altamirano-Allende 2020).

Critical knowledge gained from evaluations of existing energy equity projects has shown the significance of actively engaging underserved communities and community-based organizations (CBOs) in defining more equitable priorities, goals, and strategies (Patricia Romero-Lankao and Nobler 2021). However, the below analysis of community engagement practices promoted by 52 U.S. utility companies (Section 3), as well as results from the LA100 Equity Strategies community engagement activities, reveals that while several energy utilities in the United States are incorporating public participation in energy project implementation, most of these efforts prioritize *distributional justice* without including *recognition* and *procedural justice*.

As Chapter 2 discusses in detail, the process of community engagement is critical to procedural justice "conceived in terms of the way decisions are made, who is involved and has influence, and access to the formal justice system" (Williams and Doyon 2019, 147). Procedural justice also requires reassessing the legislation, policies, programs, investments, and procedures that inform the development of pathways toward a more just future. This idea was recurrently stated by community members in LA100 Equity Strategies listening sessions. For these Angelenos, understanding *how* and *why* projects related to the energy transition fail to address inequities is a crucial part of achieving energy justice, in all its tenets. Understanding how community engagement strategies have been developed is a way of identifying the underlying factors that produce current inequities in Los Angeles, then co-developing solutions with affected communities to realize a more equitable energy transition.

This community engagement process is critical to achieving *procedural justice* in energy decision-making. Those decisions inform the design and implementation of energy-related programs that aim to address *recognition* and *distributional injustices.* Realizing a more inclusive energy transition necessitates analyzing how past engagement strategies and tools have been understood and assessed in local communities. Accordingly, it is necessary to carefully analyze both the definitions of those concepts (i.e., community engagement, participation, and their links with energy equity and justice) and the ways they are operationalized in the design and implementation of all energy projects and programs.

## 2.3 Methods and Data

This chapter uses a mixed-methodological approach (further described in Chapters 1–3), including a literature review (Chapter 1), an exploratory analysis of 57 community engagement and energy equity programs from 52 U.S. utilities, and an analysis of LADWP engagement and equity strategies, with the goal of identifying potential options and next steps for LADWP in this domain.

We expanded the literature review described in Chapters 1–3 to include scholarly research that examines the links between community engagement and equity in energy infrastructure, technologies, and programs. Within this scope, we analyzed a body of literature that connects engagement practices in a wide array of projects and technologies, from solar to infrastructure siting, with the possibilities of enacting an equitable transition to renewable energy (Aitken, Haggett, and Rudolph 2016; Burningham, Barnett, and Thrush, n.d.; Webb, Tingey, and Hawkey 2017; Stadelmann-Steffen and Dermont 2021b). Four questions guided the literature review:

1. How are community engagement and energy equity defined and approached?
2. How are procedural, recognition, and distributional justice targeted?
3. What are the insights on engagement and its links to energy equity in the transition to renewable energy?
4. What lessons and options can be drawn to guide LADWP's engagement efforts?

The literature review allowed us to systematize knowledge on community engagement to inform and ground an exploratory analysis of select U.S. utilities' community engagement efforts. We conducted content analysis (Keller 2011; Romero-Lankao and Gnatz 2019) of 57 programs and initiatives from 52 U.S. utilities targeting community engagement and energy equity via web searches. This research was developed in partnership with the Smart Electric Power Alliance, who provided us with information and data on selected utilities' energy equity programs and initiatives. We included utilities that represent a range of types (i.e., private, public), sizes, and geographic regions, along with a range of programs or initiatives (Section 3). We used the following questions to guide this exploratory analysis:

- What level of community engagement is used in the utility program/initiative?
  - How, and with what level of engagement, is it operationalized?
- Is the utility targeting procedural justice in the program/initiative?
  - What procedures are used, and how are communities involved?
- Is the utility targeting distributional justice in the program/initiative?
  - What metrics are used to identify underserved communities and understand the distribution of benefits and negative impacts or program performance?
- Is the utility targeting recognition justice in the program/initiative?
  - How is the utility addressing the impacts of past inequities?

We utilized this exploratory analysis to understand how U.S. utilities currently connect community engagement with energy equity in their regions. These findings allowed us to identify potential opportunities and limitations for LADWP engagement practices.

We used a set of methodological tools to analyze LADWP's past and current community engagement strategies. These tools included one-on-one meetings with Steering Committee CBOs conducted in November 2021, 15 neighborhood-specific listening sessions conducted throughout 2022, LA100 Equity Strategies Advisory Committee meetings, and elicitation exercises conducted at Steering Committee meetings. We also reviewed the City of Los Angeles Civil Service Commission's current hiring regulations to understand the options and constraints posed by LADWP's internal structure to support engagement work. Finally, we analyzed LADWP Equity Metrics Data Initiative (EMDI) reports and presentations to ground LA100 Equity Strategies' engagement in past LADWP equity efforts.

The opportunities for strengthening LADWP's community engagement strategies, as described in this chapter, derive from an inclusive engagement process. Each of these community engagement activities was transcribed, anonymized to protect participants' personal information, coded[4] to identify key themes and concerns, and used to inform National Renewable Energy Laboratory (NREL) technical models for future energy justice strategies (Chapters 5–12). LADWP compensated all listening session participants for their time and expertise. We use highly mentioned themes (categorized into "codes"), along with the knowledge gained from content analysis of the material described above, to identify windows of opportunity for collaboratively developing LADWP's future equity strategies.

[4] We used qualitative coding to identify categories and concepts in the data and link passages of the CBO interviews, as well as the 15 listening session transcriptions, to themes that became labeled with a particular "code." In this chapter, we analyze a set of high-frequency codes that address how participants experience and understand community engagement led by government entities and how to align future processes with community priorities.

# 3 U.S. Utility Engagement Practices and Programs

This section presents the results of the exploratory analysis of community engagement and energy justice in 57 programs and initiatives developed by 52 energy utilities in the United States.[5] Here, we focus on key findings and programs relevant to LADWP engagement and energy equity efforts and planning.

For these 57 programs, we employed content analysis on their public-facing materials available online to examine how these U.S. utilities engage with their customers, how they target the three justice tenets, and what equity topics they address (section 3.1., Table 4). We also highlight some examples of programs that are relevant for LADWP's efforts to incorporate the suggestions of Angelenos. One main finding from our analysis of these 57 U.S. utility programs is that the majority were run by investor-owned and public power utilities (Table 1 and Table 2). Although there are fewer investor-owned utilities than publicly owned or cooperative utilities, investor-owned utilities tend to be very large, serving three of every four utility customers nationwide (EIA 2019).

**Table 1. Number of Programs by Utility Type**

| Utility Type | n = Programs |
|---|---|
| Power agency/G&T (generation and transmission) | 2 |
| Investor-owned | 36 |
| Public power | 10 |
| Distribution cooperative | 3 |
| Multiple utilities | 4 |
| Other | 2 |
| Unclear | 2 |
| **Total** | **57** |

**Table 2. Number of Programs by Utility U.S. Region**

| U.S. Region | n = Programs |
|---|---|
| East | 13 |
| North | 14 |
| Central | 5 |
| South | 11 |
| West | 14 |
| **Total** | **57** |

[5] See Appendix A for companies and programs analyzed. For the purposes of this content analysis, we counted national utility companies with local presences (i.e., Xcel Energy MN and Xcel Energy CO) that utilized different engagement programs in each locality as separate utility companies.

## 3.1 Utility Programs and Initiatives

Scholars argue that understanding the utility's methods and procedures for community engagement is a prerequisite for analyzing their engagement practices (Stadelmann-Steffen and Dermont 2021a; Chodkowska-Miszczuk, Martinat, and Cowell 2019; Stober et al. 2021). However, in our analysis of public-facing material about utility energy projects, we found that 51% of the utilities do not mention engagement with communities on their websites, and one-quarter mention informing and consulting communities for their energy projects (Table 3). Only 21% of the programs were publicized as involving their communities in program development (Table 3). Integrating community members in the development process is a foundational element of procedural justice. Through procedural justice, community engagement can redress recognition injustices and guarantee a more equitable distribution of benefits and burdens.

**Table 3. Community Engagement in U.S. Utility Program or Initiative Development**

| Level of Community Engagement | Number of Programs |
|---|---|
| Utility informed | 2 |
| Utility consulted | 10 |
| Utility involved | 12 |
| Utility collaborated | 0 |
| Utility empowered | 0 |
| Engagement is suggested | 3 |
| Utility did not engage | 29 |
| Unclear | 1 |
| **Total** | **57** |

Studies have found that engaging in participatory methods does not guarantee that energy equity will be enacted or perceived to be enacted (Aitken, Haggett, and Rudolph 2016; Johnston 2010; Hindmarsh 2010; Devine-Wright 2005; Baxter et al. 2020; Walker and Baxter 2017). They argue that promoters' efforts are thwarted either by a lack of engagement or engagement that utilizes top-down, one-way, instrumental approaches. Both a lack of engagement and instrumental forms of engagement are disconnected from local realities and community lived experiences needed to substantively improve program outcomes (Walker and Baxter 2017; Dunlap 2018; Mejía-Montero, Alonso-Serna, and Altamirano-Allende 2020; see Figure 1). In the table below (Table 4) we can see which topics are addressed by the analyzed programs and initiatives in their public-facing material. Most of the programs are related to workforce development, cross-cutting energy issues, transportation electrification and community engagement.

**Table 4. Number of Programs or Initiatives by Topic**

| Topic | Number of Programs |
|---|---|
| Workforce development | 11 |
| Community engagement | 8 |
| Transportation electrification | 8 |

| Topic | Number of Programs |
|---|---|
| Equity metrics | 6 |
| Renewable energy | 2 |
| Energy efficiency | 2 |
| Diversity, equity, and inclusion plan | 1 |
| Energy affordability | 1 |
| Multiple/crosscutting | 9 |
| Other | 9 |
| **Total** | **57** |

To analyze the engagement approaches used and their potential equity outcomes, we identified how each relates to the three tenets of energy justice. In our content analysis of public-facing materials available online, we found that utility programs and initiatives mostly target distributional justice (81%), followed by procedural justice (45%), and only 30% of the utility programs target recognition justice (Figure 1). Ideally, utilities would be able to incorporate all three tenets of justice and demonstrate that process transparently with the public. Distributional justice tends to focus on the symptoms. Yet it is through understanding recognition and procedural justice that utilities will be able to remedy the causes of these symptoms.

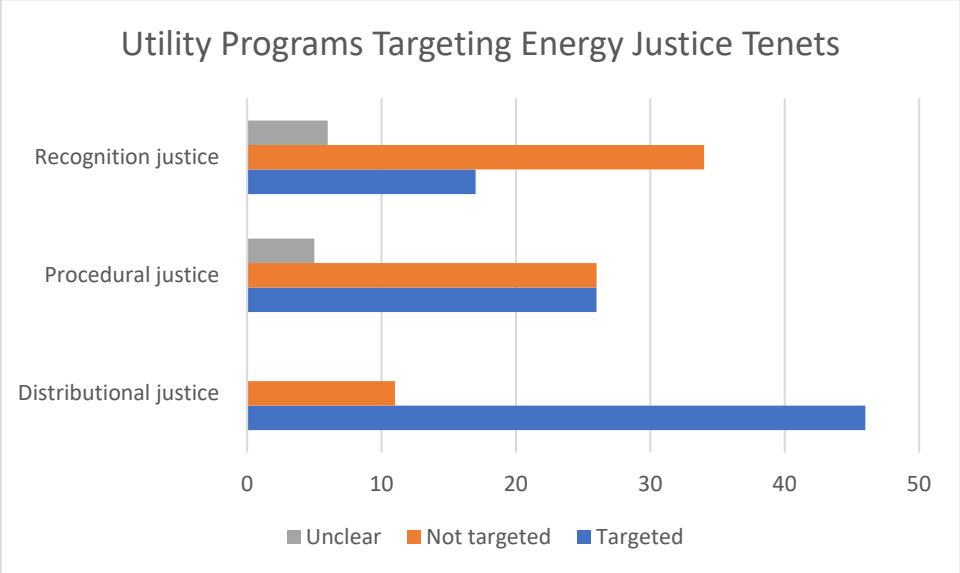


**Figure 1. Utility programs and initiatives targeting energy justice tenets**

Energy justice tenets are presented in the Glossary.

## 3.2 Insights and Lessons

To draw lessons and insights from U.S. utilities' engagement approaches, we analyze how they connect engagement with distributional, recognition, and procedural justice. LADWP can learn from some programs targeting distributional justice (see the list of programs in the appendix); for

instance, the New York Power Authority's Community Distributed Generation and Con Edison's PowerReady Disadvantaged Community Areas. The latter intends to extend access to electric mobility. As part of Community Distributed Generation, the New York Power Authority identified larger customers (ones that use more energy) within underserved communities to serve as anchor tenants in a community solar program. The goals of this program are to increase access to community solar with resulting electric bill savings for low- to middle-income households and to reduce operating costs for affordable housing and nonprofit entities serving underserved communities.

Notable examples of utilities targeting procedural justice in their programs include Madison Gas and Electric, Pacific Gas and Electric, Duke Energy Carolinas, and Seattle City Light. For instance, Duke Energy Carolinas increased funding to educational organizations that specialize in providing utility workforce education and training to underrepresented workers. Madison Gas and Electric undertook a multistep engagement process, including community energy conversations, a customer survey, a community energy workshop, and a technical work group, to inform the development of its Energy 2030 framework (Madison Gas and Electric 2015) for a more sustainable future (list of programs in the appendix).

A few utilities, such as Pacific Gas and Electric and Austin Energy, are targeting the three energy justice tenets (list of programs in the appendix). In the Transportation Electrification chapter of its *2021 Austin Climate Equity Plan*, Austin Energy targets distributional justice by streamlining applications (Austin Energy 2021). This includes removing a program participation barrier in which the utility accepts income verification forms submitted to a separate program as proof of eligibility for the electric utility's programs. If the customer had a federally funded Low-Income Home Energy Assistance Program (LIHEAP) applied to their account within the past 24 months, they can submit a Customer Assistance Program application without additional proof of eligibility. To target procedural justice, this program relies on community climate ambassadors as trusted engagers with communities on topics such as public transit and electric vehicles. The climate ambassadors work with local community partners, grassroots organizations, the Customer Assistance Program, and the City of Austin's affordable housing programs to (a) complete a grassroots needs assessment, (b) hire residents to help conduct the needs assessment, and (c) host community input sessions to build ongoing inclusive relationships that will inform focused outreach to low-income communities and communities of color (Austin Energy 2021). Finally, to target recognition justice, the utility plans to install electric vehicle (EV) charging on publicly owned land and systematically excluded areas (e.g., multifamily properties, parks, community centers, libraries, and low-income communities and communities of color).

When energy utilities focus on equity, we found that five energy equity topics are mentioned in program and initiative descriptions: workforce development, community engagement, multilevel/crosscutting issues, transportation electrification (already discussed above), and equity metrics (list of programs in the appendix). Workforce development initiatives, including LADWP's Utility Pre-Craft Trainee program, range in their scope and reach. Some are clearly and transparently working toward more inclusive workforce development programs. Others lack clarity on their public-facing approach. On the transparent end of the spectrum, programs such as Baltimore Gas and Electric's Smart Energy Workforce Development Program helps students and other members from underserved communities earn jobs within Baltimore Gas and Electric and

its contractor partners. Similar to the Utility Pre-Craft Trainee program, this joint effort brings Baltimore Gas and Electric's staff together with local workforce development organizations and career and technical education high schools to help underrepresented populations develop the necessary skills to compete for job opportunities and lifelong careers (list of programs in the appendix). On the other end, three Duke Energy operating companies are examples of philanthropic efforts to fund equity via CBO grants to support workforce training, initiatives, and projects to attract and retain underrepresented workers. It is unclear, however, how training organizations are selected and what metrics these utilities use in the grant process to ensure funds are reaching underrepresented workers. Utilizing an equity approach, those metrics would be clear and available to the public for transparency and accountability. Therefore, developing community-informed metrics and other evaluation tools is important to assess the performance of these programs—a point we will revisit in Section 5 (see also Chapter 3).

*Powering Our Community's Future: Stakeholder Engagement and Public Input Report* (City Public Service 2022) describes one of the nine utility programs targeting multiple crosscutting issues relevant to LADWP (see the list of programs in the appendix). Published by the public utility City Public Service in 2022, this report describes a process designed to reach out and encourage customers to participate in and inform decision-making by City Public Service's Board of Trustees. It features information about events and engagement tools to gather public feedback on generation planning objectives and portfolio options. It also includes communication toolkits that stakeholders can easily share with their networks, available in English and Spanish and in print and digital formats.

Of the 57 utility programs analyzed, six mention, in their public-facing material, energy equity metrics and tools that can inform their engagement efforts, including one developed by LADWP (see Section 4.2). For example, Seattle Public Utilities has access to a team and tools that center racial equity at early planning stages by determining where inequities are present, shaping and guiding the creation of an equity toolkit, and changing the way they do business, moving the utility toward equitable and inclusive outcomes. Sacramento Municipal Utility District uses a map to identify underserved or distressed areas in its service territory based on data on gaps in five areas of concern: past community engagement efforts, income, affordable housing, employment opportunities, and transportation. The map is intended to aid in future investment and program decision-making.

# 4 LADWP Engagement and Equity Initiatives

In this section, we review LADWP's recent community engagement efforts, options, and potential next steps toward advancing energy justice as LADWP continues institutionalizing diversity, equity, and inclusion into its organization and expands community investments via LA100 Equity Strategies. First, we review a set of current community engagement efforts that lay the groundwork for contextualizing the key engagement findings from the LA100 Equity Strategies listening sessions. Second, we review some of the institutional constraints that shape the possibilities for embedding energy justice into the organization. In Text Box 1, we draw lessons from the three decades of success of the Clean Cities Coalition Network for LADWP to develop a collaborative platform to formalize its existing partnerships with CBOs, trusted messengers, and underserved Angelenos.

**Text Box 1. Learning from a Successful Collaborative Platform**

Historically, efforts to transition away from fossil fuels have faced various social and political challenges (Koontz and Johnson 2004; Scott, Thomas, and Magallanes 2019). Energy utilities and city officials, among other energy actors, find it difficult to devise rules that balance unequal decision-making power and resources to initiate collaborative processes (Newig et al. 2018; Emerson, Nabatchi, and Balogh 2012).

We draw lessons from the long-term success of the Clean Cities Coalition Network,[6] a collaborative form of governance translating high-level policy goals into multiple, ongoing collaborative practices for more than 30 years (Romero-Lankao et al. 2023). Here we point to a series of attributes that explains the long-term success of Clean Cities coalitions as a collaborative platform (Newig et al. 2018).

First, Clean Cities provides a relatively stable *institutional structure* on which and through which more dynamic and distributed processes and activities are organized. Within this framework, the U.S. Department of Energy (DOE) and the national laboratories hold coalitions accountable to standards and requirements that ensure a minimum level of engagement: formal designation and redesignation, cooperative agreements with DOE, and annual reports, along with other expectations guiding their participation in Clean Cities activities (DOE 2023). As we will show in Section 5.1, LADWP could create a similar stable yet flexible structure to formalize its existing partnerships with CBOs, trusted messengers, and underserved Angelenos.

Second, each CBO in Los Angeles could operate like an individual coalition in the Clean Cities network. Each coalition is supported by DOE and its laboratories, yet they are *semiautonomous* organizations, making independent strategic and programmatic decisions. Like the coalitions, rather than representing LADWP, CBO directors would be independently hired, local, entrepreneurial leaders focused on achieving equity and other sustainability goals in the energy transition. This independence has allowed coalitions to build networks, design creative funding streams, and tailor messaging to local contexts in a manner that national labs or other federal entities cannot. Like an individual Clean Cities coalition, each collaborating CBO would require significant support from LADWP and the City of Los Angeles, thus grounding the CBO's independent efforts in an existing support structure.

[6] In 1993, the U.S. Department of Energy (DOE) created Clean Cities in response to a requirement in the Energy Policy Act (EPAct) of 1992 to implement voluntary alternative fuel deployment efforts. See https://afdc.energy.gov/laws/key_legislation#epact92 for why Clean Cities was established.

Third, LADWP's collaborative platform could be structured to create *interdependent modularity*, an organizational property that allows participants to adapt to the complexity of equity in the energy transition. Interdependent modularity has two properties: (a) It is organized to allow inter-organizational coordination and to not require overt managerial control (Furlan, Cabigiosu, and Camuffo 2014); (b) It entails partnerships formed to achieve broader goals, which can change and grow over time, incorporating multiple collaborations around new programs, investments, and activities.

Fourth, integrating the prior attributes into the collaborative platform is crucial to *adaptability*. LADWP could learn from Clean Cities, utilizing that knowledge to facilitate a series of collaborative networks and activities that evolve and adapt to the changing circumstances involved in a just energy transition. Adaptability, defined as "the ability to adjust itself to a complex array of interlocking challenges," (Romero-Lankao et al. 2023) is a crucial attribute LADWP could pursue as they build on their existing administrative offices to create a collaborative platform that continuously reassesses its goals and priorities in partnerships with their communities.

## 4.1 LADWP Institutional Engagement Structure

The principal institutional arm of community engagement that LA100 Equity Strategies participants and NREL engaged with since 2021 is the Community Affairs team at LADWP. This team is made up of 5–7 members and sits within LADWP's Corporate Strategy and Communications Division. This small but mighty group is a stable, flexible, and nimble *institutional engagement structure* handling a wide range of LADWP engagement efforts, including but not limited to:

1. Stakeholder engagement processes
2. Steering Committees and Advisory Groups
3. Point of contact for all Neighborhood Councils
4. Community events (upward of 250–300 per year)
5. Construction outreach for large infrastructure projects
6. Customer service projects
7. The Speakers Bureau program
8. Staff-level speakers at the community level
9. Field trips
10. Tours of facilities.

To maximize their reach and build relationships with local communities over time, members of the team are assigned to certain regions of the city. This geographic approach has helped them build lasting partnerships with CBOs within their assigned regions (LADWP Representatives 2023).

Another important LADWP department for community engagement is the Customer Service Division. This division is responsible for (a) providing customers with information to help

navigate LADWP bills and services; and (b) answering customer questions, investigating, and resolving complaints pertaining to utility billing procedures (211 LA 2023; LADWP News 2023). This division also approaches community engagement geographically, running LADWP's Customer Service Centers in neighborhoods across the city where ratepayers can make payments as well as resolve bill or service issues in person.

To complement its existing geographic representation, LADWP is currently developing a new institutional arm for community engagement that focuses more on Los Angeles' cultural and ethnic communities. This arm will be built out of the utility's Diversity, Equity, and Inclusion Office. Given this effort is still in its infancy, we will focus more on (a) the attributes this institutional engagement structure could nurture to be successful; (b) institutional limitations; (c) lessons learned from past engagement efforts, including LA100 Equity Strategies; and (d) potential future directions for LADWP as they expand their engagement infrastructure.

LADWP could build on its current institutional engagement efforts to outline the goals, programs, and tasks CBOs and other partners would be responsible for over the years leading to the city's 2035 clean energy transition objectives. While CBOs, trusted messengers, and other partners could apply for LADWP and City of Los Angeles programs and resources, they would be semiautonomous and make independent strategic and programmatic decisions. For instance, CBO directors are not representatives of any city agency. Rather, they are independently hired, local leaders that dedicate themselves to the CBO mission. In short, partners would be *semiautonomous* while benefiting from and contributing to LADWP's success.

*Interdependent modularity* (see Text Box 1, page 13) is an organizational property that would let LADWP engage with members of its steering and advisory committees among other network partners on an ongoing basis to adjust to the complex energy transition processes they are launching (i.e., be *adaptable*). Some of these processes involve tailored technical assistance to upgrade roofs, insulate houses, and install electric panels and charging stations, while others entail listening sessions, workshops, and other methods to involve communities in project development. Structured around the partner network that permits coordination of projects and programs while diminishing the need for overt managerial control (Furlan, Cabigiosu, and Camuffo 2014), modularity would allow LADWP to flexibly engage in an array of partnerships—such as advancing affordable and cost-effective clean energy and energy efficient systems—that would grow and change over time, including multiple partnerships, projects, and activities.

A wide range of sources, from listening session participants and NREL and LADWP community engagement professionals to scholarly research (Johnston 2010; Baxter et al. 2020), point to the benefits of using this partner network to developing deep, long-lasting ties with local communities that maintain trust and accountability over time (Chapters 2 and 3). Several approaches can be used to develop long-term feedback loops with local communities. One method is employing community members in public organizations as liaisons and trusted messengers with local expertise (Ishimaru et al. 2016). Another method is developing partnerships with CBOs that already have a network of trusted messengers and community expertise. However, as LADWP further develops its newest wing of community engagement, it must work within the hiring constraints set by the City of Los Angeles.

The upcoming community engagement positions for the Diversity, Equity and Inclusion Office will most likely be within the Management Analyst category (LADWP Representatives 2023). According to the City of Los Angeles Civil Service Commission, the professional duties of a Management Analyst class specification consist of, "researching, assembling, analyzing, and interpreting data and … preparing correspondence and reports with recommendations to management on a wide variety of administrative, fiscal, grants, budgetary, personnel, legislative, and managerial problems" (City of LA Civil Service Commission 1999). While this professional profile is skilled in the analysis of community data, they are not necessarily trained in building the relationships and on-the-ground qualitative research to develop a community engagement process and gather related data (e.g., to develop community-grounded performance measurements). Furthermore, community members applying for a potential community liaison position would most likely not have the skillset required to fill a management analyst position.

Given the City of Los Angeles' current hiring regulations, LADWP does not have the ability to institutionally incorporate local community members with engagement expertise into their organizational structure (LADWP Representatives 2023; City of LA Civil Service Commission 1999). However, there are other approaches to ensure trusted messengers maintain feedback loops with local communities and that their expertise influences internal decisions within LADWP. Section 5 discusses those potential engagement options. The following section lays out how LADWP first connected their community engagement efforts to explicit equity goals.

## 4.2 Equity Metrics Data Initiative

Beginning in 2016, LADWP planned and conducted a focused engagement process to develop the Equity Metrics Data Initiative (EMDI). The EMDI sought to establish a data-driven framework to evaluate the geographic and demographic distribution and use of all LADWP programs, services, and resources (LADWP 2016). The goal of EMDI was to ensure LADWP "provide(s) fair and reasonable services to all ratepayers. Stakeholder outreach and participation have been an important part of this initiative to ensure equity for our customers" (Stone 2018).

The EMDI's engagement process was designed to focus on refining preliminary evaluation measurements iteratively over time. LADWP describes its methodological approach to EMDI as follows:

> "LADWP began gathering information on these metrics upon Board approval in August 2016, and reported its findings March 7, 2017. Reports will follow every six months thereafter, concurrent with our reporting of our Rates Metrics. After the initial report, the LADWP will fine-tune the metrics to include any other areas that should also be evaluated and remove others that may be redundant or duplicative. In the formation and the development of EMDI, LADWP received many valuable suggestions from various stakeholders. Here [50 metrics] are suggestions and methods that were not included in the 15 selected metrics for the EMDI but will be regularly reconsidered for evaluation and reevaluation as EMDI is implemented and refined. LADWP presents the Equity Metrics Data Initiative (EMDI) Report to the Board of Water and Power Commissioners on a semiannual basis. Stakeholder meetings are also being held to seek input from interested

> parties about how equity metrics are used on LADWP programs and services" (LADWP 2022).

The foundational EMDI engagement process took place from 2016 to 2017 and included the following steps (derived from LADWP [2016]) to elicit and incorporate key stakeholder feedback from Los Angeles communities into the development of their equity metrics:

- Presenting "current and future programs for Equity Metrics Data Initiative and get[ing] feedback and direction from the [LADWP] Board [of Commissioners]"
- Working "with communication and operating organizations to get input from key stakeholders on the development of Equity Metrics"
- Establishing an electronic communications channel to receive input from stakeholders
- Hiring additional staff to support this initiative
- Conducting a follow-up meeting "with key stakeholders to review and finalize the equity metrics"
- Collecting data to develop the Equity Metrics
- Finalizing an "Initial Report on Equity Metrics" to present to the LADWP Board of Commissioners
- Developing semiannual reports moving forward that coincide with LADWP's Rates Metrics reporting.

The last engagement activity published on LADWP's website related to EMDI is a report of results from the February 2021 EMDI Stakeholders Workshops spearheaded by LADWP Board of Commissioners Vice President Susana Reyes. Along with that material, the last LADWP Rates and Equity Metrics Semi-Annual Report available to the public on LADWP's website is from February 2022. Section 5 points to the opportunities still available for incorporating the knowledge gained and relationships built during the EMDI into further LADWP engagement and equity efforts moving forward. The wealth of material gathered during the EMDI process from stakeholder engagement, as well as the expertise that was co-constructed with stakeholders during this engagement process and the partnerships it nurtured, are all valuable resources for advancing energy equity in Los Angeles. These results could be incorporated into a database of past and ongoing engagement resources that form part of an LADWP collaborative platform (see Section 5.1 for details).

## 4.3 LA100 Equity Strategies

> From the … last meeting we had, we talked about this being a follow-up, hopefully to the equity matrix [Equity Metrics Data Initiative]. I'm a stakeholder of that process. And I'm really hoping that it is. Because all of us engaged with [the EMDI] with the understanding that it was going to go forward. There was a deep commitment by [LA]DWP to go forward. … There should not be a question about equitable distribution of resources. Or even an analysis of where communities are. … And so, I think the real question is, why does it appear we are gathering the same information we gathered? It's not dated, I mean it hasn't been a decade. It may have been 4 years. …Why are we back asking the same questions, when the commitment was made? … So, it's almost as if we are being asked to participate in a circular communication. … So, our real question is, what

> is the commitment of [LA]DWP to carry out what it has already publicly made a statement it's committed to? Its commission has said it's publicly committed. There has been even rate increases since then, in order to fund it. So, why ask the same questions again?
>
> – South LA Listening Session Participant

The opening quote in this section points to both the consistencies of LA100 Equity Strategies—inviting some of the same community members and CBOs to participate in energy justice engagement—as well as the discontinuity of the process. The EMDI and LA100 Equity Strategies, while related, were not developed together via ongoing, connected engagement. Rather, their engagement processes were experienced by some listening session participants as a "circular communication" that is "asking the same questions" and inducing stakeholder fatigue. While LADWP's commitment to equity may have remained consistent from 2016 to today, these community stakeholders are not able to understand the throughlines between these two equity initiatives.

One reason for that lack of clarity and consistency is that LADWP does not currently have an internal organizational structure where all community engagement work is centrally stored for all LADWP departments to access and utilize. Thus, there is an opportunity for developing a master vision and coordinated knowledge of LADWP community engagement (LADWP Representatives 2023). This centralization can take the form of an internal database for storing information on past and ongoing community engagement strategies. Such a coordinated resource is both a tool and an institutional collaborative platform for guaranteeing accountability and continuity that allows LADWP to plan holistically across departments and maintain a transparent and continuous approach over time. For example, if specific equity issues are related to electrical upgrades in a particular neighborhood, a centralized engagement database could help LADWP locate the most relevant CBOs to engage on that topic. Furthermore, such a centralization of engagement efforts would allow LADWP employees working with community engagement to utilize equity metrics to develop solutions to track and hold their teams accountable (LADWP Representatives 2023). Beyond only guaranteeing distributional justice in the equitable distribution of resources, this coordinated equity approach would expand the potential for advancing procedural and recognition justice in current and future engagement processes.

While Chapters 1–3 provide a more detailed discussion of energy justice methods and our analysis of LA100 Equity Strategies' qualitative data, here, we highlight some key themes of importance related to engagement processes. Listening session comments related to "engagement continuity" and "circular conversations" became two key sub-themes within NREL's analysis code called "Building Trust and Confidence." This code describes segments of listening session narratives that relate to a need for an engagement process—i.e., practices and procedures—that builds community trust and confidence in government agencies, including LADWP. The codes, "Building Trust and Confidence" and "Lack of Accessible Information" were the two highest-frequency codes within the supra-category "Participation, Outreach, and Communications" that gathered participant narratives related to the community engagement process. Narratives related to "Building Trust and Confidence" were identified 104 times throughout the listening sessions, and the code "Lack of Accessible Information" was identified 132 times in segments of listening session narratives that relate to a need for community-tailored energy-related information that is

easily accessible and comprehensible for all Angelenos. That is, when listening session participants referred to the community engagement process, their highest concerns reveal significant priorities for LADWP to:

1. Focus on building long-term relationships with community members and institutions that develop trust and confidence in the utility.
2. Simultaneously provide those local stakeholders with accessible information related to LADWP programs, services, and updates on Los Angeles' transition to clean energy.

Those two engagement priorities—trust-building and information access—create the groundwork for allowing community members to shape both the design of LADWP projects as well as their evaluation post-implementation (Chapter 3). Listening session participants also requested forms of guaranteeing that community members have decision-making power in their city's energy transition, including developing tools that allow ratepayers to hold LADWP accountable for their decisions (Chapter 3).

One such tool was related to transparency in the allocation of LADWP equity-related funds. In one specific listening session, the question of community access to LA100 Equity Strategies' budget for investing in their communities came up as a critical prerequisite for informed decision-making and substantive engagement on this topic. As one participant asked, "Has LADWP put forth a budget to say 'hey, this is how many dollars we are going to put into this'? Because that's really what's going to set how big the program is: have they committed money only for this, and how much?" He then elaborated on his initial question, linking his request "to know what the numbers are" to a community-driven effort "so that we can really start figuring out how […] we use this money. And where do we put it." Another participant added, "if there is hypothetically $100 million set aside, what does that look like and who goes first? ... What percentage comes to our communities?" This discussion that links financial transparency with community guidance in investments reveals an opportunity space for LADWP to ground their energy justice decision-making process and accountability mechanisms in the priorities of historically underserved and overburdened Los Angeles communities.

This request for budget transparency recalls an established method of participatory planning and democratic deliberation and decision-making called "participatory budgeting" (Cabannes 2004; Sintomer, Herzberg, and Röcke 2008; Avritzer 2009). First developed in Brazil in 1989, this process has expanded to cities across the globe, where public authorities design participatory budgeting processes that place the power to make decisions about how particular public funds are allocated into the hands of ordinary residents. Los Angeles is among those cities, with a new initiative called L.A. REPAIR (Los Angeles Reforms for Equity and Public Acknowledgement of Institutional Racism), which began in nine communities last year. This is one mechanism of strengthening LADWP's community engagement process as a form of developing more accessible information, building community trust, dedicating resources to collective decision-making, and holding LADWP accountable to their commitments.

# 5 Energy Justice and Community Engagement: Lessons and Options for LADWP

This section concludes with insights, lessons, options, and potential next steps for LADWP community engagement as a catalyst for advancing energy justice in Los Angeles. Some of these include *what* community engagement is and can be and what tools and activities it entails, while others point to *how* those goals can be accomplished or implemented. LADWP can learn from both the successes and challenges of U.S. utility programs seeking to enhance eligibility and increase parity in access for tenants and low- to moderate-income customers. This includes learning from efforts to streamline applications and remove barriers such as proof of eligibility. Focusing on accessibility, they can also develop community-tailored outreach and communication tools available in different languages and formats (Chapter 3).

While utilities tend to focus on distributional justice, energy justice scholarship as well as Chapters 1–3 have found that broadening transition approaches to other justice tenets is crucial to developing more equitable energy outcomes. Along with considering the distribution of benefits and burdens of their projects and programs, LADWP can take additional steps to ensure a more equitable energy transition in Los Angeles. Incorporating recognition and procedural justice includes (a) considering the legacies of past practices and policies that create energy inequalities and (b) creating an ongoing engagement approach that seeks to redress the social, cultural, and institutional processes of exclusion through which these inequalities are (re)produced.

Moving beyond the Spectrum of Public Participation into co-creation (see Glossary) via community engagement, we connect the below options to lessons learned from energy engagement scholarship. These scholars suggest a series of phases to structure a grounded engagement process (Drakellis 2022; Waters 2015; First Solar n.d.; New York State Department of Environmental Conservation 2009; Lezberg, Dane, and Mullins 2010; Ross and Day 2022; Ziegler and Forbes 2010):

- **Phase 1:** In the initial planning, LADWP would need to understand why it is engaging, with what goal (or whom) it plans to engage, and with what intended outcome or result (e.g., site infrastructure, create jobs, reduce health impacts).
- **Phase 2:** The next phase involves two components: a mapping of relevant actors created with residents, and understanding actors' aspirations, interests, and lived experiences. Equally important is to understand their potential to contribute to the goals of the project, and the ways in which the project can benefit them (or avoid burdening them).
- **Phase 3:** Building relationships with local actors is the next phase, where LADWP needs to select the engagement techniques, the engagement points in the process, the message(s), and the approaches to solicit and include residents' input.
- **Phase 4:** The final phase involves maintaining relationships and evaluating and redefining LADWP's strategy. Because engagement is an iterative and dynamic process, updating and adapting the engagement approach using evaluation tools is crucial to understand: 1) if the engagement efforts are working; 2) how to report back to your actors with progress and updates; 3) how to manage expectations; and 4) how to reflect new information and changing circumstances.

Although these best practices offer options for community engagement in specific initiatives and programs, a collaborative platform to be discussed in the next section could coordinate LADWP's long-term, multisectoral, and systemic energy transition programs, technologies, and policies. Furthermore, it could help LADWP integrate conflicting sectoral and local interests (e.g., market value versus equity) into citywide energy transition goals (Koontz and Johnson 2004; Scott, Thomas, and Magallanes 2019).

## 5.1 A Collaborative Platform

Given LADWP's institutional constraints on internal hiring, there are significant opportunities to build engagement via a collaborative platform that enables and facilitates a network of CBOs and trusted messengers to implement energy equity strategies with underserved communities (see Text Box 1, page 13). Engagement methods utilized by LADWP's Community Affairs team and LA100 Equity Strategies via the Steering Committee have already revealed the potential of this collaborative platform (Scott, Thomas, and Magallanes 2019). As for how these processes could be developed, the Corporate Strategy and Communications Division and the Diversity, Equity and Inclusion Office could enable and orchestrate a *collaborative platform* with dedicated personnel and resources for facilitating its multiple energy equity projects and programs in collaboration with CBOs, trusted messengers, and underserved communities.

As illustrated in Text Box 1, LADWP could rely on this organizational structure to formalize these partnerships into long-term agreements in ways that maintain a continuous feedback loop with community collaborators. This feedback loop would allow partner CBOs, underserved communities, and other actors to be semiautonomous, while benefiting from and contributing to LADWP success. As trusted sources of knowledge and opportunities in their communities, CBOs and trusted messengers could become critical nodes in LADWP's engagement network, connecting community challenges, needs, and priorities to institutional decision-making.

Our literature review showed that this approach has been found to be an effective means to further develop more effective and equitable community engagement strategies by partnering with community institutions and actors on co-designing, implementing, and evaluating energy initiatives to guarantee collective action and mutual benefits.[7] LADWP's Corporate Strategy and Communications Division and Diversity, Equity and Inclusion Office could enable and orchestrate this collaborative platform with dedicated personnel and resources to facilitate multiple collaborative energy equity projects and programs (Ansell and Gash 2008). As such, both the division and office would constructively strengthen LADWP's network of CBOs, trusted messengers, and other community actors around its just transition energy programs and services.

Scholars have identified four attributes for this collaborative platform to be successful: a stable and adaptable institutional engagement structure, semiautonomous collaborators, interdependent modularity, and adaptability (see Text Box 1, page 13). As we illustrate in Text Box 1, this platform could build on LADWP's long-term experience to allow communities, trusted messengers, and CBOs to be semiautonomous by benefiting from programs, making their own

[7] Newig et al. 2018; Emerson, Nabatchi, and Balogh 2012; for an analysis of the Clean Cities Coalition, a U.S. example of a collaborative platform, see Romero-Lankao et al. 2023.

organizational decisions, and contributing to LADWP's success (Lee 2022; Patricia Romero-Lankao et al. 2023; Emerson, Nabatchi, and Balogh 2012; Scott, Thomas, and Magallanes 2019). LADWP would also need to strive for *interdependent modularity* by developing long-lasting reciprocal interdependencies around LADWP's programs and projects with communities, CBOs, and trusted messengers. To lessen the need for overt managerial control, interdependent modularity would involve a coordinated, long-lasting, and multi-directional engagement in the development of programs, technologies, and services. Lastly, this collaborative platform would need to be *adaptable*, to adjust itself to and take advantage of the complex series of interconnected challenges and opportunities involved in the just energy transition (Text Box 1, page 13).

This opportunity also implies a commitment to, as one listening session participant put it, "authentically engaging with us [community members] in the decision-making process." Authentic engagement entails moving away from status quo outreach practices, which often consist of one-off activities that community members experience as transactions to simply "check the box," rather than a process aimed at building a continuous, substantive relationship (Chapters 2 and 3).

Community members indicated that LADWP's commitment to authentic engagement that includes communities in the decision-making processes must be demonstrated with "intentional actions," rather than simply stated. Repairing existing community mistrust necessitates that LADWP invest time and build trust in these communities—trusting their knowledge and expertise—and allow that knowledge to inform institutional understanding and decision-making within the collaborative platform. Starting with the community and learning how to identify problems and solutions via their lived experiences, is a procedural shift in engagement methodology. For the community members' lived experiences to align with LADWP objectives, the suggested collaborative platform can enhance engagement practices and procedures that (1) disseminate accessible community-tailored information about concerns and opportunities for local residents to benefit from LADWP's energy equity strategies, and (2) create a consistent and flexible feedback loop between LADWP and local underserved residents that impacts the course of Los Angeles' energy transition toward more just outcomes.

## 5.2 Investing and Trusting in Community Knowledge and Capabilities

LADWP can learn from other utilities (see Section 3) and from participants' knowledge and capabilities by providing community members with the tools, information, and platform needed to help guide LADWP decision-making in their communities. Participants in LA100 Equity Strategies' engagement process offered various suggestions to strengthen LADWP's investment and trust in their knowledge, expertise, and capacities. One participant requested a participatory framework where LADWP asks community members for their expert advice by laying out their actions: "here are the decisions and the entry points" for community guidance. Another participant highlighted the importance of learning from successful community educational practices employed by other city departments. She suggested developing training opportunities such as those proposed by LA's Climate Emergency Mobilization Office, where leadership academies would "train community members with the vocabulary [and] narratives, so they can go out into the community."

The investment in community knowledge about energy practices, LADWP programs, and the energy transition provides residents with a toolkit for making informed decisions about their own energy future. Partnering with local trusted messengers as a form of knowledge sharing is a powerful educational method for providing residents with such a toolkit. Examples of such forms of knowledge sharing include the *promotora* method, described in Chapter 3, as well as the climate ambassadors used by Austin Energy (Section 3). While the *promotoras* are primarily utilized within the public health sector in Latinx communities, Angelenos' familiarity with this methodology—the existing knowledge and trust *promotoras* have already garnered—could be harnessed as its educational subject matter is adapted to energy justice. Adding energy to the *promotoras* educational repertoire could greatly expand LADWP's engagement reach, building both knowledge and trust in these communities via a robust network of trusted community members with local knowledge that informs their communities about Los Angeles' energy transition options and opportunities.

Another method of investing and trusting in community knowledge is by creating a dedicated institutional space for community members to share their expertise with LADWP. Chapter 3 presents a series of community-guided strategies for developing more grounded engagement practices. In this chapter, we highlight the suggestion to develop a Community Committee—another method that resonated with LADWP's current engagement objectives as they expand their diversity, equity, and inclusion efforts beyond their department. Like the CBOs in LADWP's LA100 Equity Strategies Steering Committee, an LADWP Community Committee could gather a group of representative local community members from underserved communities across Los Angeles to collectively review the accessibility and suitability of LADWP programs and services and suggest community-tailored adaptations. While these community members might be affiliated with local CBOs, they would not be employees of those organizations. This semi-autonomy would allow committee members to share their own experiences as ordinary LADWP ratepayers, rather than promoting organizational objectives. Thus, this consistent institutionalized feedback loop between community members and LADWP could help the utility develop community-driven program design and evaluation that is adapted to different underserved communities.

## 5.3 Co-Develop Community-Grounded Equity Metrics

As LADWP further expands their engagement efforts in LA communities, they could refine and elaborate on their current equity metrics through two additions to their current approach. Firstly, by utilizing ongoing engagement activities and long-term feedback loops to develop community-grounded indicators. Secondly, by building a more robust equity measurement methodology to evaluate the results of the implementation of LA100 Equity Strategies over time. This methodology could turn what EMDI currently defines as "metrics" into "indicators." With this refinement of the approach, an indicator, developed from either quantitative or qualitative data, is "used to measure, approximate, or translate aspects of social, economic, or environmental reality [qualitative data] or used to quantify the effort of allocating resources or producing goods and services by public/private organizations" (Jannuzzi 2021, 1; United Nations 1989). An example of a quantitative LADWP indicator could be the number of power outages per census tract per month. An example of a qualitative LADWP indicator could be the level of customer satisfaction on customer service calls related to power outages.

These indicators would be combined with others to develop a series of equity metrics. In this framework, a metric is understood as a composite measure based upon the two or more indicators or measures that are weighted in the calculation of the full metric. While they can be based upon qualitative and quantitative data, metrics are always quantitative measures. Metrics help place a variable in relation to one or more other dimensions. The more indicators are based on concrete experiences of a community, population, etc., the closer their metrics will be to measuring the effects of changes in these communities' experiences and realities. We call this community-grounded indicators aimed at building socially informed metrics (Blanco and Rosner 2023). A metric for the quantitative indicator discussed above could be equitable grid resilience, measuring the levels of grid resilience across the City of Los Angeles by creating a combined measurement that weighs several indicators, including the number of power outages per census tract per month.

LADWP's 50 "Additional Proposed Equity Metrics for Consideration" provide several options for transforming suggested equity metrics into critical indicators for assessing the equitable implementation of LA100 Equity Strategies. Transforming these suggested metrics into indicators implies a shift in methodology. Operationalizing this framework requires an iterative process where, "as soon as the social phenomenon—or public action—is proxied through preliminary versions of an indicator, its analyses and use allow us to evaluate its validity and go further into a new specification of concept—or action—and propose other possible 'approximate measures,' 'proxies,' or 'indicators'" (Jannuzzi 2021, 1–2; Neufville et al. 1975). This iterative refinement process is developed through the collaborative platform, that co-creates indicators and metrics with local communities and their trusted institutions. This methodological shift allows for more fine-tuned measurements that target specific equity priority areas co-defined with community members.

# 6 Glossary

**Actions/Strategies:** the means used to solve identified problems in an impact area; actions and strategies involve programs such as bills, regulations, rates, subsidies, and investments and how they are designed, implemented, and evaluated (Dubash et al. 2022)

**Causal Factors:** "Events, incidents, happenings that lead to the occurrence or development of a phenomenon" (Buckley and Waring 2013, 156).

**Climate Justice:** the remediation of the impacts of climate change on poor people and people of color, and compensation for harms suffered by such communities due to climate change (Burkett 2008)

**Co-Creation:** "a process through which two or more public and private actors attempt to solve a shared problem, challenge, or task through a constructive exchange of different kinds of knowledge, resources, competences, and ideas that enhance the production of public value in terms of visions, plans, policies, strategies, regulatory frameworks, or services, either through a continuous improvement of outputs or outcomes or through innovative step-changes that transform the understanding of the problem or task at hand and lead to new ways of solving it" (Torfing et al. 2019, 802)

**Community Engagement:** Community engagement often entails public participation through an ongoing, two-way or multidirectional process, ideally with an emphasis on relationships and trust-building rather than instrumental decisions. The latter are processes where engagement becomes the instrument to achieve social acceptance (Stober et al. 2021).

**Disadvantaged Community:** "Disadvantaged communities refers to the areas which most suffer from a combination of economic, health, and environmental burdens. These burdens include poverty, high unemployment, air and water pollution, presence of hazardous wastes as well as high incidence of asthma and heart disease. One way that the state identifies these areas is by collecting and analyzing information from communities all over the state. CalEnviroScreen, an analytical tool created by the California Environmental Protection Agency (CalEPA), combines different types of census tract-specific information into a score to determine which communities are the most burdened or "disadvantaged"" (California Public Utilities Commission 2023).

**Energy Equity:** the equitable distribution of social, economic, and health benefits and burdens of energy across all segments of society (Jenkins 2017)

**Energy Justice:** the provision of safe, affordable, and sustainable energy to all individuals, across all areas, (Jenkins 2017); this is done with a framework informed by justice movements, including attention to three core tenets:

- *Distributional justice* seeks to ensure a just and equitable distribution of benefits and negative impacts of the clean energy transition.
- *Justice as recognition* seeks to understand and address past and current energy inequities by analyzing structural causes of exclusion and vulnerability and specific needs associated with energy services among social groups.

- *Procedural justice* aims to actively engage partners and communities throughout the project, to co-design the analysis, and shape the resulting equity strategies (Energy Equity Project 2022).

**Energy Transition**: a large-scale or deep societal change in the production, distribution, and use of energy; this transition can entail transformations in social-technical systems and systems of policy and governance intended to substantially improve the outcomes out of unsustainable pathways, such as fossil fuel use (Carley and Konisky 2020)

**Environmental Justice:** the distribution of environmental hazards and access to all natural resources; it includes equal protection from burdens, meaningful involvement in decisions, and fair treatment in access to benefits (U.S. EPA 2023)

**Equity Outputs:** Equity outputs are the immediate, easily measurable effects of an action aimed at achieving equity (Dubash et al. 2022).

**Equity Outcomes:** Equity outcomes are the ultimate changes that a policy will yield (Dubash et al. 2022).

**Equity:** Equity refers to a measurement of fairness and justice. Unlike equality, which refers to the provision of the same to all, equity aims to recognize the historical and ongoing differences in experiences and outcomes between people, groups, and communities to redress those imbalances.

**Frontline Community**: a community, frequently a low-income community of color, that experiences the first and worst consequences of environmental and climate change including floods, heatwaves, and other climate extremes as well as the impacts of facilities that are used to extract, produce, process, and transport energy resources.

**Impact Areas:** particular sectors and subsectors of the energy system impacted by causal factors

**Just Energy Transition:** a deep societal change in the energy system that fulfills at minimum three of the tenets of justice: recognition justice, procedural justice, and distributional justice (McCauley and Heffron 2018)

**Justice** involves removing barriers that prevent equity through energy actions (strategies) that offer individuals and communities equal access to energy resources and options to self-determine their energy goals (Romero-Lankao and Nobler 2021).

**Participation** relates to the involvement of the public in infrastructure siting and other clean energy decisions and policies (Stober et al. 2021). Participation is an umbrella concept that includes processes of community engagement and public decision-making (Stober et al. 2021). Participatory decision-making denotes inclusion of actors such as underserved communities in an energy project as a decision-maker. Direct participation refers to the level of economic and/or political involvement of a local community or municipality in an energy project.

**Underserved Community**: a community, frequently a low-income community of color, that (a) does not benefit from energy programs, investments, and technologies, (b) is not recognized, considered, or able to participate in energy decision-making (Klinsky et al. 2017)

**Values:** the ethical paradigm that structures the sociocultural norms, beliefs, and practices guiding how a group of people prioritize and relate to the current energy transition (Jenkins 2017)

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# Appendix: Energy Utility Programs and Initiatives by Key Indicators

**Table A-1. Energy Utility Programs and Initiatives by Key Indicators**

| Utility Operating Company | Title | Utility Type | Region | Topic | Community Engagement Process | Community Engagement Level | Procedural Justice Targeted | Distributional Justice Targeted | Recognition Justice Targeted |
|---|---|---|---|---|---|---|---|---|---|
| Ameren Illinois | Market Development Initiative | Investor-owned | North | Energy Efficiency | Yes | 3 | Yes | Yes | Unclear |
| Ameren Missouri | Charge Ahead | Investor-owned | South | Transportation Electrification | No | — | No | Yes | No |
| AEP Ohio | Smart Columbus | Investor-owned | North | Transportation Electrification | No | — | No | Yes | No |
| Austin Energy | Austin Climate Equity Plan: Transportation Electrification | Public power | Central | Transportation Electrification | Yes | 3 | Yes | Yes | Yes |
| Eugene Water & Electric Board | Fast Track Approval - Income-Based Assistance Eligibility | Public power | West | Energy Affordability | No | — | Yes | Yes | No |
| Consumers Energy | Listen Up: Renewable Energy Program Design for All | Investor-owned | North | Renewable Energy | Yes | 2 | Yes | Yes | No |
| Consolidated Edison Company of New York, Inc. | PowerReady Disadvantaged Community Areas | Investor-owned | East | Transportation Electrification | No | — | No | Yes | No |
| CPS Energy | Powering Our Community's Future: Stakeholder Engagement and Public Input Report | Public power | Central | Community Engagement | Yes | 3 | Yes | Yes | No |
| Dominion Energy | Climate Report 2022 | Investor-owned | South | Multiple/ Crosscutting | Yes | 2 | Yes | Yes | No |
| DTE Energy | Stakeholder Engagement Matrix | Investor-owned | North | Community Engagement | Yes | 2 | Yes | No | No |
| Duke Energy (FL) | Duke Energy ignites Florida's workforce with $697,000 in training, development grants | Investor-owned | South | Workforce Development | No | — | No | Yes | No |
| Duke Energy Carolinas, LLC | Duke Energy helps build North Carolina workforce with $615,000 in grants to community colleges, HBCUs and nonprofits | Investor-owned | South | Workforce Development | No | — | No | Yes | No |

| Utility Operating Company | Title | Utility Type | Region | Topic | Community Engagement Process | Community Engagement Level | Procedural Justice Targeted | Distributional Justice Targeted | Recognition Justice Targeted |
|---|---|---|---|---|---|---|---|---|---|
| Duke Energy Indiana | Duke Energy boosts Indiana's workforce readiness with more than $330,000 in training grants | Investor-owned | North | Workforce Development | No | — | No | Yes | No |
| Duquesne Light Co. | EV ChargeUp Pilot | Investor-owned | East | Transportation Electrification | No | — | No | Yes | No |
| Tampa Electric Company | Drive Smart | Investor-owned | South | Transportation Electrification | No | — | No | Yes | No |
| Evergy Missouri Metro | Community Involvement Program | Investor-owned | South | Community Engagement | Yes | 1 | No | No | No |
| Eversource Energy, Massachusetts | Petition of NSTAR Electric Company, doing business as Eversource Energy, pursuant to G.L. c. 164, § 94 and 220 CMR 5.00, for Approval of a General Increase in Base Distribution Rates for Electric Service and a Performance-Based Ratemaking Plan | Investor-owned | East | Other | Yes | 4 | Yes | Yes | Unclear |
| Eversource Energy, Massachusetts | Beyond Awareness: An In-Depth Look at Participation Barriers | Investor-owned | East | Community Engagement | Yes | 2 | Yes | Yes | No |
| Baltimore Gas & Electric | Smart Energy Workforce Development Program | Investor-owned | East | Workforce Development | No | - | Unclear | No | Yes |
| Commonwealth Edison Company | Diverse Energy Efficiency Service Provider Incubator Program | Investor-owned | North | Workforce Development | No | - | No | Yes | Unclear |
| Commonwealth Edison Company | Energy and Equity Agreement with City of Chicago | Investor-owned | North | Other | Yes | 4 | Yes | Yes | Yes |
| Potomac Edison Co. | N/A | Investor-owned | North | Transportation Electrification | No | - | No | Yes | No |
| Green Mountain Power | Vermont Electric Co-op and Green Mountain Power Announce New Broadband Deployment Program to Leverage Utility Infrastructure to Increase Access and Affordability for Hardest-to-Reach Customers | Investor-owned | East | Other | No | - | No | Yes | No |
| Hawaiian Electric | Integrated Grid Planning - Stakeholder and Community Engagement | Investor-owned | West | Community Engagement | Yes | 2 | Yes | No | No |
| Madison Gas & Electric Company | Energy 2030 Framework: Community Engagement | Investor-owned | North | Community Engagement | Yes | 3 | Yes | No | No |

| Utility Operating Company | Title | Utility Type | Region | Topic | Community Engagement Process | Community Engagement Level | Procedural Justice Targeted | Distributional Justice Targeted | Recognition Justice Targeted |
|---|---|---|---|---|---|---|---|---|---|
| Central Hudson Gas & Electric Corporation, Consolidated Edison Company, National Grid, New York State Electric & Gas Corporation, Orange and Rockland Utilities, Rochester Gas and Electric Corporation | NY DPS Docket 18-E-0138: Proceeding on Motion of the Commission Regarding Electric Vehicle Supply Equipment and Infrastructure | Multiple utilities | East | Transportation Electrification | No | — | No | Yes | No |
| Connecticut utilities | Connecticut Docket No. 22-06-29 (DER [distributed energy resource] Interconnection) | Multiple utilities | East | Other | No | — | Unclear | Yes | Unclear |
| Eversource, National Grid, Unitil, Fitchburg Gas & Electric, Cape Light Compact | MassSave Data [website] | Multiple utilities | East | Multiple/ Crosscutting | No | — | No | Yes | Yes |
| Massachusetts Electric Co | Reflecting on Incorporating Energy Equity Across Your Utility Organization | Investor-owned | East | Equity Metrics | No | — | Yes | Yes | No |
| Niagara Mohawk Power Corporation | NYS Workforce Development | Investor-owned | East | Workforce Development | Unclear | — | Unclear | Yes | No |
| New York Power Authority | Community Distributed Generation | Power Agency/G&T | East | Renewable Energy | No | — | No | Yes | No |
| Florida Power & Light Co. | STEM Grants & Scholarships | Investor-owned | South | Workforce Development | No | — | No | Yes | No |
| NYSERDA | Energy & Climate Equity Strategy | Multiple utilities | East | Community Engagement | Yes | 2 | Yes | Yes | Yes |
| Pacific Gas & Electric | California Docket No. A-21-06-022 (Pacific Gas & Electric - Microgrids) | Investor-owned | West | Other | No | — | Yes | Yes | Yes |
| Arizona Public Service | APS's plan for closing coal plants could be a gamechanger, analysts say, but who will pay? | Investor-owned | West | Multiple/ Crosscutting | No | — | No | No | Yes |

| Utility Operating Company | Title | Utility Type | Region | Topic | Community Engagement Process | Community Engagement Level | Procedural Justice Targeted | Distributional Justice Targeted | Recognition Justice Targeted |
|---|---|---|---|---|---|---|---|---|---|
| Portland General Electric | Creating an equitable energy future | Investor-owned | West | Multiple/ Crosscutting | Yes | 4 | Yes | Yes | Yes |
| Public Service Electric & Gas | Supplier Diversity Mentorship Program | Investor-owned | South | Workforce Development | No | — | No | Yes | No |
| Puget Sound Energy | Clean Energy Implementation Plan Process | Investor-owned | West | Multiple/ Crosscutting | Yes | 2 | Yes | No | No |
| Puget Sound Energy | Integrating Local Community Interests into Utility DER Procurement | Investor-owned | West | Other | No | — | Yes | Yes | No |
| Sacramento Municipal Utility District | Sustainable Communities Resource Priorities Map | Public power | West | Equity Metrics | Yes | 3 | Yes | Yes | Yes |
| Seattle City Light | Racial Equity Planning and Analysis Tools and Steps // see also, as applied in the Transportation Electrification Strategic Investment Plan | Public power | West | Equity Metrics | Yes | 3 | Yes | Yes | Unclear |
| Snohomish County PUD | N/A | Public power | West | Community Engagement | Yes | 3 | Yes | Yes | No |
| Los Angeles Dept of Water and Power | Equity Metrics Data Initiative | Public power | West | Equity Metrics | No | — | No | Yes | Unclear |
| Multiple | 2021 Transformation Report: Moving to Equity | Investor-owned | South | Diversity, equity, and inclusion plan | No | — | No | Yes | No |
| Tacoma Power | 2020 – 2021 CONSERVATION PLAN | Public power | Central | Multiple/ Crosscutting | Yes | 2 | No | Yes | No |
| Tennessee Valley Authority | Home Uplift Program | Power Agency/G&T | South | Energy Efficiency | Yes | 3 | Yes | Yes | Yes |
| Wisconsin Electric Power Company | Pathway to a Clean Energy Future: 2022 Climate Report | Investor-owned | North | Workforce Development | Yes | 1 | No | No | No |
| Xcel Energy, Colorado | Xcel Energy Partners in Energy Program—report for Pueblo County | Investor-owned | Central | Other | Yes | 2 | Unclear | Yes | No |

| Utility Operating Company | Title | Utility Type | Region | Topic | Community Engagement Process | Community Engagement Level | Procedural Justice Targeted | Distributional Justice Targeted | Recognition Justice Targeted |
|---|---|---|---|---|---|---|---|---|---|
| Xcel Energy, Minnesota | 2021 ANNUAL REPORT: PERFORMANCE METRICS AND INCENTIVES, DOCKET NO. E002/CI-17-401 | Investor-owned | North | Multiple/ Crosscutting | Yes | 3 | Yes | Yes | Yes |
| Xcel Energy, Minnesota | Xcel Energy's Conservation Improvement Plan Workforce Development program | Investor-owned | North | Workforce Development | No | — | Unclear | Yes | Yes |
| LADWP | LADWP Utility Pre-Craft Trainee program and others | Public power | West | Workforce Development | Yes | 3 | Yes | Yes | Yes |
| Tacoma Power | The 2030 Tacoma Climate Action Plan | Public power | West | Equity Metrics | Yes | 3 | Yes | Yes | Yes |
| Energy Trust of Oregon | OR UM1158 - Equity Metrics for Energy Trust of Oregon | Other | West | Equity Metrics | Yes | 3 | Yes | Yes | Yes |
| Delta-Montrose Electric Association | Delta-Montrose Electric Association Broadband Buildout | Distribution Cooperative | Central | Other | No | — | No | No | Yes |
| Holston Electric Co-op | Holston Electric Co-op looks Seeks Member Input on Broadband Access | Distribution Cooperative | South | Other | Yes | 2 | No | No | No |
|  | Low Income Solar Pilot Program | Distribution Cooperative | North | Multiple/ Crosscutting | No | — | No | Yes | No |
| North Dakota Association of Rural Electric Cooperatives | NDAREC's Rural Development Program | Other | North | Multiple/ Crosscutting | No | — | No | No | Yes |

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