Energy Opportunities Coalition 2022 Report

Deconstructing Accessibility of the Clean Energy Transition for Low-Income Communities in Texas

TEPRI
Texas Energy Poverty Research Institute

Energy Opportunities Coalition
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Final Report of the 2022 Energy Opportunities Coalition

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The Texas Energy Poverty Research Institute (TEPRI) convenes the Energy Opportunities Coalition (EOC) as one way to collaborate across sectors to achieve TEPRI's mission of advancing equitable energy solutions for affordable, reliable, and clean energy to underserved communities so all people can thrive. TEPRI thanks our funding partner, the Energy Foundation, for supporting our efforts to carve out new opportunities in the energy sector in Texas, and Terra Lumina Consulting for facilitating the EOC meetings and developing EOC work products, including this report. We would also like to extend our thanks to all the EOC members who participated in EOC meetings and/or provided important feedback to forward the EOC's shared goals:

Susan Alvarez, City of Dallas Office of Environmental Quality & Sustainability

Pharr Andrews, City of Dallas Office of Environmental Quality & Sustainability

Johanna Arendt, Travis County

Shaun Marie Auckland, South-Central Partnership for Energy Efficiency as a Resource (SPEER)

Phil Audet, EnerChoice LLC

Ariane Beck, The University of Texas at Austin

Keree Brannen, Austin Energy

Elise Burke, Green Mountain Energy Company

Stefani Case, Texas-New Mexico Power (TNMP)

Sarah Chatterjee, Electric Power Engineers (formerly with Austin Energy)

Nakhia Crossley, SunRun

Vince Drieling, Ameresco, Inc.

Katelynn Essig, Foundation Communities

Joanna Gomez, Oncor

Doug Hairgrove, Community Action Corporation of South Texas

Matt Hull, Texas Association of Community Development Corporations

Meredith Jennings, Houston Advanced Research Center (HARC)

La Shon Johnson, CenterPoint Energy

Shane Johnson, Sierra Club, Lone Star Chapter

Garry Jones, Oncor

Jasmine King-Bush, Texas Gas Service

Faye Kinner, Atmos Energy

Fernando Liaño Berjano, City of El Paso

Jordan Mendiola, AEP Texas

Max Morales, Travis County

Deborah Nabaloga, HARC

Morgan Nielsen, TNMP

Adele Noel, Travis County

Edna Oceguera, Community Development Corporation of Brownsville

James Orenstein, Trinity River Community Solar Systems

Pete Parsons, Texas Solar Energy Society

Audrey Pi, Family Promise of Irving

David Pickles, ICF

Preston Poole, Texas Association of Community Health Centers

Edwin Velázquez, Frontier Energy

Tracy Wallace, Green Careers Dallas

Kaiba White, Public Citizen

Introduction

In 2020, the Texas Energy Poverty Research Institute (TEPRI) formed the Energy Opportunities Coalition (EOC) to promote statewide collaboration in support of clean energy opportunities for underserved[1] communities in Texas and to aid in the COVID-19 economic recovery effort. The initial EOC cohort met from November 2020 through September 2021, culminating in the Energy Opportunities Coalition 2021 Report *Advancing Clean Energy Solutions in Underserved Texas Communities*.

TEPRI welcomed a second cohort of the EOC in March 2022 to continue building awareness and promoting informed research on the critical issues of energy poverty and energy equity. Cohort 2 included a blend of returning participants from Cohort 1 and some new members to provide expanded perspective. Collectively, Cohort 2 represented a geographically and organizationally diverse group of individuals from across the energy, housing, health, environmental, and research sectors. EOC Cohort 2 participants sought to:

- **Strengthen the coalition** through new and expanded relationships
- **Deepen knowledge on how to achieve an equitable energy transition** with low-income households and catalyze economic opportunities through clean energy
- **Collaborate on a project** to support low-income Texans' participation in an equitable energy transition
- **Document outcomes, lessons learned, and recommendations**

This report summarizes the EOC Cohort 2's approach and insights and presents a proposed project to meet EOC members' shared goal of advancing energy equity with low-income Texans.

Approach

The EOC Cohort 2 met eleven times from March through September 2022. Cohort 2's work was divided into two phases as shown in Figures 1 and 2. In Phase 1 from March through May, the group focused on building relationships and generating shared definitions and knowledge around energy equity concepts. In Phase 2 from June through September, the EOC transitioned to brainstorming a project to pursue together to meet the group's shared goal of supporting an equitable energy transition with low-income households in Texas. Phase 2 also included EOC member and guest speaker presentations from the City of Austin's Climate Ambassadors program, ICF's research on disparities in energy burden and energy efficiency program participation, and Green Careers Dallas' solar workforce training program.

[1] The term underserved communities includes communities that have been systematically denied a full opportunity to equitably participate in aspects of economic, social, and civic life, including those communities identified as low-income. Low-income communities are characterized as earning 200% or less of the Federal Poverty Level.

Figure 1. EOC Cohort 2 Phase 1: Relationship & Knowledge Building

Figure 2. EOC Cohort 2 Phase 2: Collaborative Project Development

Key Insights

The following insights emerged from the conversations held among EOC Cohort 2 participants:

Developing a common understanding of terms and metrics is foundational to achieving equitable energy outcomes. The diverse energy, housing, health, and environmental justice backgrounds of the EOC participants and the complexity of energy and equity topics can make dialogue—let alone action—towards energy equity difficult. Terms and definitions vary across sectors. For example, financial and housing professionals may think of equity in terms of the monetary value of a property or business less any outstanding debts, while others may gravitate towards social definitions of equity related to the quality or state of something being fair and/or just. During early discussions, some Cohort 2 members also mentioned that commonly used terms and how they are used shift over time, which can make setting and measuring progress towards goals such as energy equity and energy poverty alleviation even more difficult. The group also noted the importance of being mindful of the impact of language regardless of intent.

To establish a common understanding and to minimize unintended impacts of word choice, TEPRI and the EOC developed an Energy Equity Primer that provided a solid foundation for their continued work together. A key takeaway from developing the primer was that ***achieving energy equity requires a redistribution of benefits and costs.*** The group noted the importance—and difficulty—of disaggregating data about households and their energy use to design programs and offerings that prioritize benefits and minimize costs for Black, Indigenous, and people of color (BIPOC), low-income individuals, and others who historically have been and presently continue to be the most harmed by energy choices. By designing energy offerings to reverse the distribution of who most benefits and who is most harmed, we can work towards a truly just energy transition.

Addressing energy burdens requires an intersectional approach. Midway through Cohort 2, three EOC members shared examples of currently inequitable energy scenarios that are occurring in their communities: unjust power plant and refinery siting in El Paso, electric vehicle charging deserts in Austin, and burdensome citizenship and income verification requirements to participate in the statewide Comprehensive Energy Assistance Program. Discussing these three scenarios and trying to imagine more equitable versions of these situations solidified the group's awareness that ***achieving energy equity is inextricably bound up with broader social inequities*** including political and decision-making representation, income/wealth distribution, health disparities, and housing segregation.

It became clear that energy overlaps with many other facets of life that compete for awareness and attention of low-income individuals, which reinforces the need to 1) meet low-income individuals where they are and 2) address their needs based on self-identified priorities and according to their ability to participate in the energy transition. Some EOC members noted that a commonly perceived norm of prioritizing individualism over collectivism can be a barrier to achieving greater equity in energy and other areas. This sentiment reinforces the need for more interdisciplinary spaces, such as the EOC, for individuals and organizations across the spectrum of social services to join in collective responsibility for providing accessible services and opportunities with and for low-income Texans.

Trust is a key ingredient in making the energy transition accessible to all. Cohort 2 members continued to explore the theme from EOC Cohort 1 about representation and inclusion in designing energy programs and policies that affect underserved and marginalized populations. The common challenges that the group identified, such as lack of representation among decision-makers and program providers, inconsistent, confusing, or inaccessible communication, and untrusted or inconvenient meeting locations are rooted in ***lack of trust.*** Often the distrust is from marginalized groups towards governmental agencies, utilities, and others due to cultural norms, past promises not being kept, and information being misused. Other times the mistrust manifests as service providers' fear of interacting with low-income communities and/or communities of color due to cultural conditioning. Mistrust, fear, and/or insufficient financial motivation can also prevent clean energy businesses from locating in low-income communities, which can reduce economic and educational opportunities for low-income individuals to participate in the energy transition.

Cohort 2 identified a possibility for further research into the root causes of mistrust and other barriers to greater clean energy accessibility. By understanding the nuances of what is preventing greater participation in the energy transition, TEPRI and EOC members can work in

their extended networks to remove these barriers, unlocking affordable, reliable, and clean energy for all, especially those most marginalized.

The EOC raised the following ideas that could be explored further to address some of these energy decision-making accessibility challenges:

- Ensuring representation of underserved and marginalized communities on energy service and program provider boards
- Meeting community members where they are on their own terms such as the Austin Community Climate Ambassadors program or providing energy efficiency and bill assistance program information to individuals participating in other assistance programs
- Disaggregating program participation data and addressing any disparities that may exist

Making clean energy technologies accessible for renters is required for a just energy transition. EOC participants identified the overlap among low-income individuals disproportionately living in rental housing, which also tends to be older and less energy-efficient (Housing Matters, 2019; Pivo, 2014). Studies also show race, income, and energy burden disparities among renters. The median income of renters is roughly half that of same-aged homeowners (Joint Center for Housing Studies of Harvard University, n.d.). Among renters, renters of color tend to have lower incomes than white renters across age groups (Joint Center for Housing Studies of Harvard University, n.d.). Low-income, Black, Hispanic, Native American, and renter households all experience energy burdens greater than the national median household (ACEEE, 2020; Ehrhardt-Martinez, Hollis & Hillman, 2022). Research also finds that Black and Hispanic renters struggle with paying energy bills at rates greater than white and Asian renters, and renters who are behind on their energy bills also tend to be behind on their rent payments (ACEEE, 2022).

Clearly renters experience overlapping inequities that lead to them being disproportionately energy burdened. ***Energy efficiency and other clean energy technologies have the potential to alleviate some of this energy burden, yet barriers remain***. For example, nearly 90% of renters pay their electricity bills and 66% of those with gas pay for gas bills separately from their rent (Joint Center for Housing Studies of Harvard University, 2022). Despite having financial responsibility for their energy use, they are not able to make physical energy efficiency improvements, add solar, install electric vehicle chargers, or make other upgrades that could reduce their energy (and transportation) costs. Simultaneously, many property owners are not motivated to make energy upgrades because the financial return accrues to the tenants through reduced utility bills. This "split incentive" problem limits many otherwise desirable energy improvements in rental properties (Melvin, 2018).

Conversely, for properties where energy costs are included in the rent, property owners may be motivated to make energy-saving upgrades, but they may also raise rents to match the perceived and/or real increased value of the improvements, whether the value is from energy cost savings, new appliances, and/or aesthetic appeal. Publicly available research on how energy upgrades affect rental prices is limited, but a study of energy efficiency improvements made to multifmaily rental housing in Sweden—where energy bills typically are included in the rent, and heating is the primary driver of energy consumption—can provide some insights. The study found that smaller retrofit projects generally produced net cost savings for tenants;

whereas larger energy upgrades often resulted in additional cost burden for tenants (von Platten, Mangold, Johansson, & Mjörnell, 2022). The EOC noted ***split incentives and housing cost pressures as persistent barriers*** that Cohort 2 members are interested in exploring further.

In addition, low-income multifamily property owners can be deterred from participating in weatherization and clean energy programs when the programs require consent from each tenant. This can be time-consuming due to language barriers, trust issues, and varying work schedules where some tenants may not be home during business hours. Due to the overlapping challenges of bringing the energy transition to low-income renters, the group identified low-income renters—who are disproportionately also BIPOC individuals—as an area of focus for a potential shared project to begin to address some of the inequities Cohort 2 uncovered.

Recommended Research Project

The EOC Cohort 2 prepared a project proposal to fill a research gap to better understand 1) the composition of low-income multifamily rental properties, property owners, and tenants in Texas and 2) the unique barriers that low-income housing property owners face in making greater investments in energy efficiency.

Based on the insights gleaned from the first few months together, the EOC Cohort 2 used a prioritization and reflection process to identify a project of mutual interest to consider as a next step in their work together. The group initially prioritized finding "ways to make it easier for BIPOC/low-income homeowners and/or renters (single and multifamily) to participate in the energy transition through energy efficiency, community solar, electric vehicles, energy resilience, improvements to energy efficiency/bill assistance programs, etc." This idea was further narrowed to specifically focus on making energy efficiency improvements more accessible for low-income renters and owners of multifamily properties that serve low-income tenants.

The EOC members desired to address the following priority areas through their project:

- Capture the **untapped energy efficiency potential** of existing low-income multi-family rental properties through strategies such as:
    - **Overcoming the barriers presented by soaring demand in a tight housing market** making housing unaffordable for more people while dampening property owners' motivation to undertake upgrades
    - Promoting **all-bills-paid buildings** to incent owners to invest in energy cost savings and other strategies to address the split incentive barrier
    - Providing **technical assistance** for energy improvements such as building electrification, HVAC maintenance and efficiency upgrades
- Provide **mutual benefits for (small, non-corporate) property owners and tenants**. Benefits could include:
    - Creating **energy and cost savings**
    - Making communities more **resilient** in the face of climate change
    - Providing job creation/wealth building opportunities through energy efficiency **workforce training**

    - **Improving health outcomes**, which could **reduce public spending** on other social services
- Take advantage of **near-term federal funding** to address low- and medium-hanging fruit, and braid funding from multiple sources to amplify benefits like:
    - Addressing **structural and health & safety repairs** before investing in energy efficiency
    - **Deepening energy and cost savings**
    - Allowing **more people to qualify**
- Develop a **long-term sustainable funding model** to address deeper barriers and provide ongoing funding. Options for further exploration and development include:
    - **Revolving loan fund** (such as LoanSTAR)
    - **Tax reform/incentives** for property owners
    - **Property Assessed Clean Energy (PACE)** financing
    - **On-bill repayment tariffs**

While the "split incentive" problem is well documented (Bird & Hernandez, 2012; Hynek, Levy & Smith, 2012), less data exists showing how the split incentive and other barriers impede low-income multifamily rental property owners in Texas from pursuing energy efficiency improvements. This research need is more critical in the wake of the COVID-19 pandemic, as some property owners are financially strained by tenants' inability to keep up with rent payments and rising borrowing costs. One consequence of reduced revenues is owners' reduced investment in property maintenance and improvements (de la Campa & Reina, 2021). Even when owners make energy improvements, a lack of publicly available data exists to measure the rent impact of energy efficiency improvements, namely whether energy cost savings are offset by rising rents.

The findings from Cohort 2's proposed research project could inform a broader strategy to address recalcitrant barriers to energy efficiency projects in low-income multifamily rental communities that could unlock long-term energy savings for tenants and owners and help mitigate the rising affordability crisis across many Texas communities, urban and rural. Potential deliverables from the project could include:

1. a summary report with methodology, findings, and recommendations, and
2. a heat map of low-income multifamily rental properties by characteristics of interest (e.g., energy burden, tenant demographics, history of energy outages) that could be used to inform and prioritize program and policy design and implementation.

Conclusion

The key insights and proposed project concept put forward in this document are intended to serve as recommendations for future work among the EOC members and beyond, as well as to inform TEPRI's future research agenda. TEPRI has already begun to integrate some of the recommendations from EOC Cohort 1. For example, TEPRI is developing the Community Voices in Energy Efficiency Network to gain a more grassroots perspective of the needs and opportunities of low-income energy efficiency and bill assistance service providers and their clients. TEPRI also has embarked on a Low-Income Energy Relationship Reporting project to document the profiles of low-income energy burdened households across the state, which will help to elevate the voices of energy burdened communities in shaping energy policy and program design.

TEPRI hopes that Cohort 2 members will continue to pursue their proposed project to uncover the unique characteristics and barriers that impede energy efficiency investment in low-income multifamily rental properties. The findings from the project will help enhance energy efficiency programs and policies to provide greater benefits to tenants and property owners. The project will also support the goal of providing more robust participation of diverse top-down and bottom-up stakeholders in the energy transition for these often overburdened and underserved communities. TEPRI also intends to convene a third EOC cohort in early 2023 to continue to 1) ensure that the energy transition does not have unintended burdens and consequences for low-income people and 2) increase awareness, education, and relationships to advance energy equity in Texas.