

Look in the Mirror, then Move Forward: Improving the Diversity Equity and Inclusion of the Energy Efficiency Industry

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ABSTRACT

A successful energy transition must be just, and part of achieving that goal requires the Energy Efficiency industry to take a hard look at itself. We aim to rapidly scale learnings from decades of programs to avert climate change, but our results are not always equitable. Low-income and supplier diversity programs have made some strides, but they still could make significant progress towards addressing racial wealth, home ownership, and business ownership gaps. New technologies being counted on to reach net zero will further the potential racial divide. The industry thrives on data, but there is very little on the race of who benefits from EE interventions and even less on the racial diversity of the workforce. The industry itself has the typical diversity of people in the U.S. with advanced science degrees, which is biased toward white men. The energy efficiency industry may have more gender diversity than others, but racial diversity is lacking. This paper will assess the pictures from past industry events and survey attendees of multiple events to extrapolate what the few Black and Brown people experienced there. The only way to double energy efficiency as required by our climate goals is to recenter and get solutions from Black and Brown people we add to our own workforce. This paper provides a broad look at the lack of racial diversity in the industry using available data, targeted surveys, and suggests specific actions the industry could take to grow to reflect the greater diversity of the U.S. population.

Introduction

This paper explores the parallels between the evolving content and diversity of industry events and their relationship to the energy efficiency industry. The document has four primary objectives: (1) Explore what equity means, (2) Explore what an equitable energy transition looks like, (3) Examine how industry events may be a reflection of this transition, and (4) Hear directly from professionals from marginalized groups about how they experience this industry and what it will take to bring more minorities and women into conference halls and, crucially, the programs that we all design, implement and evaluate.

The paper just begins to explore the impact of industry events on our equitable energy transition goals. The results of this research are intended to start the conversation, not draw statistically significant conclusions on the diversity of conferences or the energy efficiency industry as a whole. The small sample size of the interviews and the limited response to the survey means we must continue to collect data and explore how we can work towards more diversity and equity within our industry and industry events.

Defining Equity

When talking about equity, we are really attempting to describe outcomes. Equity means that any person, regardless of their identity, experiences the same outcomes or benefits. To achieve this, it may require an unequal distribution of resources and benefits to some folks who have historically not fairly benefited. If we think about equity in terms of clean energy programs, it is examining how people engage, experience, and benefit from programs. Are there certain folks being left behind simply because of who they are? To apply an equity lens to clean energy conferences, we must examine who is not invited, attending, or being well represented because of who they are. There are multiple aspects of equity, and each one impacts a person's experience.

Table 1. Dimensions of Equity

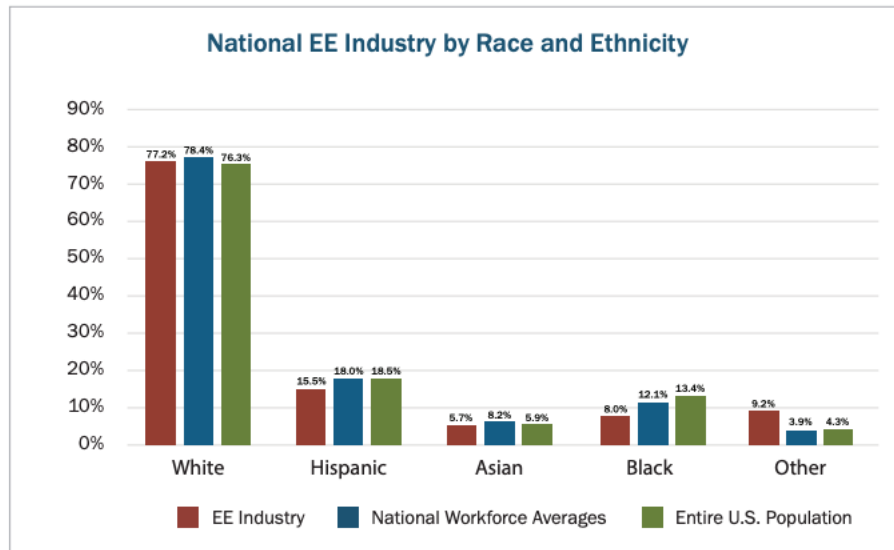
Structural	Procedural	Distributional
Decision-makers recognize the historical, cultural, and institutional dynamics that have led to energy inequities	Decision-makers create inclusive and accessible processes to develop and implement energy programs	Energy policies and programs fairly distribute benefits and burdens across all segments of communities

When researching how leading organizations describe equity, the consensus is that both the workforce and participation in energy efficiency products and services should be representative of the communities and markets they serve. Historical structural, procedural, and distributional inequities are the probable root cause of the lack of diversity in energy. These inequities will not be dismantled easily. It is important to understand that an equitable transition means addressing and resolving inequities in multiple dimensions.

An Equitable Energy Transition

In researching diversity within the energy industry, organizations have started collecting data and analyzing the lack of representation within the energy industry as a whole, but few organizations investigate workforce disparities within the sub-industry of energy efficiency. A 2020 report developed by E2 and E4TheFuture showed a significant gender disparity in the industry, with 25 percent women and 75 percent men. The graphic below illustrates Race and Ethnic diversity.

Table 2. National EE Industry by Race and Ethnicity



Source: E2 and E4TheFuture

This was the only report we found that featured data specific to energy efficiency. The lack of data specific to our sub-industry has multiple consequences. First, we are likely to use energy industry data, which is more widely available, as a proxy for energy efficiency demographics. While it is not unreasonable to use this data set to use to draw broad conclusions, the energy efficiency industry may not mirror the energy industry as a whole, given that the entire industry includes sectors like oil, gas, and renewables. According to the 2021 United States Energy and Employment Report, the energy sector is less diverse than the nation and has overall fewer women and black people. This corroborates the findings of the E2 and E4TheFuture report.

The second consequence of a lack of data specific to the energy efficiency industry is the *acknowledgment* of the lack of data. Acknowledging that most available demographic data represents the energy industry, not the energy efficiency sub-industry, is an important context. We must also recognize that most utilities, event organizations, and programs do not collect demographic data — and even if they are collecting data, it is not publicly available. With the data this is available to use, it is logical to conclude that there is a lack of diversity within the industry workforce. If there is a connection between the diversity of the industry and the diversity of program participants, it may also be logical to conclude that there is a gap in the distribution of benefits to communities that have historically been underrepresented in energy efficiency programs. This inequity of benefits distribution results in underinvestment in communities and organizations lived in and owned by historically marginalized groups, such as people of color, women, people with varying abilities, and the LGBTQ community. These inequities also impact the distribution of dollars to diverse-owned organizations and, ultimately, how these dollars flow into households and communities.

To mitigate some of these inequities, NGOs and government entities have developed multiple initiatives and strategies intended to redirect dollars to disadvantaged communities. The Biden Administration's Justice40 Initiative directs 40 percent of overall benefits from federal investments to flow to disadvantaged communities. This directive attempts to redirect federal spending to communities that have historically been marginalized or disproportionately impacted

by pollution. Within private and public organizations and regulated utilities, there is a push to ensure dollars are being invested in communities that have historically been underrepresented in utility programs, as well as with diverse-owned companies.

If workforce diversity, equitable distribution of benefits, and increased representation of diverse businesses are all indicators of an equitable energy future, how do we know we are making progress in the absence of data that tracks demographics? How can we, as an industry, move towards a more equitable future when we do not have data to confirm or dispute diversity assumptions? For many, the lack of visible representation at industry events provides ample evidence that there is work to be done, while others seek data to validate those assumptions.

Industry Events as an Indicator of Equity

Industry events bring together thought leaders to discuss the most pressing topics facing the energy sector. Conferences such as the American Council for an Energy-Efficiency Economy (ACEEE), Association of Energy Services Professional (AESP), and International Energy Program Evaluation Conference (IEPEC) seek to be the incubators of ideas that will become innovative solutions. While thought-provoking sessions likely spark follow-up conversations that may drive change, are these events in line with our definition of equity? Are they representative of the communities in which we live and work? In researching the demographics of conference attendees, we were faced with a lack of objective data. It was challenging to find data on conference speakers, attendees, or company ownership diversity because organizers haven't historically collected demographic information. The only way to evaluate conference diversity is to make assumptions based on how folks appear, which is likely inaccurate and inappropriate. With these data limitations in mind, we did draw some conclusions.

- Demographic data is becoming more important, and conference organizers are starting to ask for demographic data during registration.
- While there is a general feeling that conferences lack representation, there is very little data to confirm this assumption.

In our attempt to better understand the demographics of industry conferences, the research team developed a simple survey instrument intended to gather information on conference demographics. The survey was launched via LinkedIn, using industry connections to encourage participation. It included five questions:

1. Which energy efficiency conferences have you attended in the last 5 year? Respondents could select:
 - a. ACEEE
 - b. AESP
 - c. IEPEC
 - d. None of these
 - e. Other
2. Were you ever a speaker, moderator, or other type of session presenter at any energy efficiency conference in the last 5 years?
 - a. Presenter/moderator, etc.
 - b. Attendee only did not present
3. What is your race/ethnicity? Respondents could select all that apply.
 - a. American Indian or Alaska Native
 - b. Asian

- c. Black or African American/Non-Hispanic
 - d. Native Hawaiian or Other Pacific Islander
 - e. White/Non-Hispanic
 - f. Hispanic
 - g. Prefer not to answer
4. What gender do you identify as?
- a. Female
 - b. Male
 - c. Gender nonbinary
 - d. Prefer not to answer
 - e. Other
5. From your perspective, is diversity at energy efficiency industry conferences representative of our industry?

The survey was fielded for approximately four weeks, in which period we received 65 completed valid responses. We would have liked greater participation, but there is some sensitivity around demographic questions, which is likely a contributing factor to the overall data gap in the energy efficiency industry. However, the survey responses we did receive yielded some interesting findings.

Key Findings

Those that attend, present, and moderate conferences seem to be overwhelmingly White. Because this survey was fielded through LinkedIn, is this more a representation of the diversity of our networks or of our conference? But then, we could ask ourselves, are they essentially the same?

Table 3. Racial Identity of Conference Attendees

Attendance	Racial Identity	Percent
	American Indian or Alaska Native	4.17%
	Asian	12.50%
	Black or African-American/Non-Hispanic	12.50%
	Middle Eastern	4.17%
	Native Hawaiian or Other Pacific Islander	4.17%
	White/Non-Hispanic	62.50%
Total		100.00%

Table 4. Racial Identity of Conference Presenters and/or Moderators

Conference Role	Racial Identity	Percent
	Asian	15.00%
	Black or African-American/Non-Hispanic	10.00%
	Hispanic	5.00%
	Multiracial	2.50%

	White/Non-Hispanic	67.50%
Total		100.00%

According to the USEER report, 74% of the energy workforce is White. However, if we are looking for equality, this data implies that people who identify as White are actually underrepresented at our conferences. But when we use our equity lens, applying the definition we used at the beginning of the paper, conferences should be representative of the communities and markets we serve, not the current industry workforce. The vast majority of our conference representation is White, which means that we are potentially not providing the opportunity for all voices to be heard and ensuring that our customers are receiving equitable outcomes.

In looking at the gender responses, attendance is closer to equal between individuals who identify as male or female. However, the gap widens when we look at who is being represented on speaker agendas. 60 percent of speakers are male. Combining the racial and gender responses, it appears that our conference agendas are primarily made up of White men.

We also asked survey respondents an opened-ended question: From your perspective, is diversity at energy efficiency industry conferences representative of our industry? Most responded "Yes," concurring that our industry — and our conferences — are largely dominated by White men.

There seems to be an increase in gender diversity among conference attendees, but not racial diversity. However, gender diversity suffers as one moves up the corporate ladder, with less gender diversity at the leadership level. Despite this, respondents were optimistic. There was a theme of change; folks are seeing more racial diversity, but there is obviously room for improvement.

Table 5. Gender Identity of Conference Attendance

Attendance	Gender	Percent
	Female	45.83%
	Male	54.17%

Table 6. Gender Identity of Conference Presenters and/or Moderators

Conference Role	Gender	Percent
	Female	37.50%
	Male	60.00%
	Other, please specify:	2.50%

Table 7. Gender Identity by Conference

Conference	Male	Female	Other
AESP	59%	36%	5%
IEPEC	61%	39%	
ACEEE	63%	37%	

When looking closely at three of the premier conferences in our industry, all were male-dominated. There is very little difference between how people reported gender by conference.

Across the board, conferences are dominated by people that identify as men. The more important finding was revealed in gender identity. Of the three conferences, no one self-reported as non-binary and only one person reported themselves as ‘other.’ According to Pew Research, 1.6 percent of U.S. adults are transgender or nonbinary or their gender is different from the sex they were assigned at birth. 5.1 percent of adults younger than 30 are trans or nonbinary. The lack of reporting in this area could mean many things. There could be more individuals in our industry who consider themselves nonbinary but do not feel comfortable sharing, or the age range that reports more gender diversity may not be attending these conferences. We did not collect information on age.

Conference Evolution

To begin to better understand the evolution of industry conferences, the team investigated at conference content. A review of conference agendas and interviews with organizers of major industry conferences provided some insight into how content development and speaker recruitment have evolved to take diversity and equity into consideration. The review and interviews were designed to answer a few key questions:

- Has there been an intentional effort to ensure speaker and panel diversity? If so, how?
- Has there been a shift in the content devoted to diversity, equity, and inclusion topics? If so, why?
- Does speaker diversity and DEI content impact how we all think about our industry and the delivery of equitable programs?

Key Findings

In speaking with folks who have had some role in designing or planning conference events, all agreed that conference agendas have been more inclusive of topics around diversity, equity, and inclusion. However, while conference organizations are getting these topics on the agenda, tokenism is a pervasive issue and diverse professionals feel frustrated that they are usually the ones asked to speak on these panels. It was pointed out that the demographic of most technical panels continues to be White and male. The interviews revealed several key takeaways.

- **Diversity of agenda shouldn’t be synonymous with DEI content made up of diverse professionals.** The perspective of diverse professionals should be featured throughout the conference, on technical and operational panels, as well as DEI-focused sessions. Only through this approach will we achieve a diversity of perspectives and inclusion of ideas. Aware that this is a critical issue, organizations are investing in resources to improve. AESP has convened a DEI Council to help support conference planning, and BECC hired a Diversity and Inclusion Coordinator to support their efforts.
- **There is a lack of awareness, which creates a big opportunity.** Historically, conference planners or planning groups were not inclusive and thus, they may have paid little attention to the demographic of the conference speakers or panelists. Similarly, there was no intentional effort to ensure panels represented the industry or the community. That is changing. There is now a proactive effort to be inclusive, resulting in intentional outreach to folks who have historically been underrepresented on conference agendas. This extends to the diversity of the folks who are reviewing conference abstracts and papers; some organizers are even adding blind reviews to help mitigate bias.

- **Energy equity and environmental justice topics aren't just add-ons to other industry topics.** Now, these topics are getting tracks on their own and even becoming the highlight of conference agendas. The Behavior, Energy and Climate Change (BECC) 2022 conference theme is Engaging All Voices, while the 2022 ACEEE Summer Study is focused on Climate Solutions: Efficiency, Equity and Decarbonization. Conference organizers are recognizing that equity must be prioritized if we are to push forward a clean energy transition.
- **There is a desire to have more equity content and different perspectives on the agenda, and an acknowledgment that these perspectives are needed.** Conversations are starting to evolve from simply stating that we have an equity problem to examining what we are going to do about it. According to one conference organizer, people are now more willing to have upfront conversations. Some organizers feel this is driven not just by the racial and social injustices that the country has experienced, but by a generation of emerging professionals who are demanding change and refuse to accept the status quo.
- **Conference planners are diving into demographics.** ACEEE is asking age, sex/gender and race/ethnicity questions during registration, while AESP has added identity information to user profiles. These conference planners want to better understand the demographics of who they are talking to, the workforce, and the energy efficiency community.
- **Representation matters.** Conferences must provide a platform for folks from different perspectives and backgrounds to be heard. It is critical for the majority to hear directly from those that have been marginalized, so we can all approach solutions from new angles.

The Voice of the Diverse Professional

To provide additional context to the research, a small number of interviews were conducted with women and minority professionals who work within the industry and regularly attend industry events. The research team spoke to women and men who work for small and large organizations within the industry. The objective was to hear directly from those who have lived experiences within both their companies and at these events, and to gain insights from owners/employees of diverse companies on how the equity transition is supporting or leaving their organizations behind. Due to the very small sample size (n=5), these findings are not intended to represent the opinions of all people of marginalized backgrounds. These individuals shared their perspectives, which allows us to be more thoughtful as we continue to research and learn how to bring more voices into the “room”. The research objectives were:

- Understand an equitable energy future from the perspective of a diverse professional.
- Learn how the different initiatives such as Justice40 and Supplier Diversity Programs could or already impact diversity within the industry.
- Examine why there is a lack of diversity at industry events and is it truly a mirror of the industry as a whole.
- How do we sustain this momentum to drive equity?

Key Findings

In conversations with these individuals, four key themes emerged: (1) No one person can represent any identity group, and we must take into consideration that a different approach may be needed to ensure folks feel like they are being treated fairly and heard. (2) An equitable energy future should serve the entire population. A person's experience with energy efficiency shouldn't be impacted by any identity factor. (3) There is no way for this industry to create an equitable energy future if we ourselves do not reflect the community. (4) There is some skepticism around different equity-focused energy initiatives, such as Justice40 and utility sponsored supplier diversity programs.

They were not speaking on behalf of all people. As a heavily data-driven industry, we want to be able to collect data and extrapolate these findings across an entire population. This is critically important to do when verifying savings. However, the desire to collect significant quantitative data in order to draw conclusions may not be the right approach when addressing equity, within and outside industry events. We likely need to become more comfortable with smaller sample sizes that may not be statistically significant but still yield insights. We may also need to start weighing qualitative data as highly as quantitative data.

Underrepresentation of certain demographics could be the result of fundamental problems within our industry. Interviews identified the lack of outreach, the lack of community presence, and discomfort as potential barriers to certain historically marginalized communities engaging and participating in energy efficiency programs. One interviewee said, "The future looks like everyone is able to receive the same benefits, no matter their gender, race, ethnicity, religion, etc..." Interviewees were comprehensive in their assessment of equity; they spoke of sectors such as urban versus rural, single-family versus multifamily, and small versus large business. The idea is that all folks are given an opportunity to have equitable outcomes from energy efficiency programs.

It is possible that these same barriers — lack of outreach, lack of community presence, and discomfort — could contribute to why we do not see more diverse professionals at industry events? One interviewee said that they do not feel welcome at conferences. Being the "only one" is a very real feeling; many marginalized people may feel this way when attending industry events and thus self-select out of attendance and participation. There could be parallels here to why people choose not to participate in energy efficiency programs.

We cannot support equitable programs if we don't represent the individuals we are trying to help. The individuals being sent to conferences represent the companies they work for. Are companies only sending individuals they feel have the most impact or hold certain positions in organizations? Are the individuals who hold influential positions primarily White men? Interviewees had two thoughts on why industry conferences lack diversity, noting that either:

- There is no diversity in the organization; therefore, they cannot send diverse representatives, or
- There is diversity within the organization, but diverse individuals aren't being sent to conferences for various reasons, such as their lack of influence or budget constraints.

Some said having more diversity in management and leadership positions would increase the number of individuals at conferences who represent diverse backgrounds. Increased visibility is important and representation matters. Interviewees felt racial diversity is important, but the industry also lacks diversity among many identity characteristics, including gender, religion, and culture.

While the energy professionals we spoke to are all hopeful that initiatives such as supplier diversity programs and Justice40 would result in real change, **there was uncertainty around how these initiatives would be executed and if they would have a lasting impact on communities and on the industry.** According to interviewees, there has been a lot of conversation around what Justice40 could mean for environmental justice communities, but not a lot of action. There is a general sense that the industry may be running out of time to memorialize these policies before there is an administration change that could reverse the progress that has been made.

When discussing supplier diversity programs, some felt they have become a performative, check-the-box activity that may not result in long-term change that will promote sustained diversity within the industry. Adding percentage thresholds to contracts is a good start, but there was a general feeling that in order to truly move the market, we must go beyond spend requirements.

Conclusion

The literature review, survey, conversations with conference organizers, and conversations with diverse professionals all align to support the thesis that the energy efficiency industry has opportunities for improvement. The workforce and our conferences fail to fully represent the population we serve. Given that diverse professionals don't feel comfortable at industry events due to a general lack of representation, are not being asked to attend industry events by their organizations, and are skeptical about the initiatives to diversify our industry, it is little wonder that there is a lack of representation at conferences. Could these same barriers, among others, be stopping folks from participating and engaging in our programs? Even with the significant effort now being put into equity and environmental justice issues on conference agendas, will that change the demographic of our industry events?

If representation matters, if the key to innovation is diversity, and if this generation is no longer going to accept insufficient attention to equity and diversity, then our conferences could be an incubator of change. Conference organizers should continue their path of engaging more voices, bringing them into the room for *all* conversations. This means not allowing conversations without diverse perspectives, while also not solely putting the burden of diversity and equity-related on those from marginalized communities. Energy efficiency organizations should take a close look at their company demographics and examine which individuals they choose to send to conferences and why. It is time to collect conference data to support our assumptions, implement strategies to better engage with and hear from communities that have historically been unheard, and measure how well we are doing. Ironically, these recommendations for industry conferences could also promote change in our industry as a whole, driving us toward a more equitable and just energy transition.

References

Fazeli, S. 2021. Energy Sector Workforce Diversity, Access, Inclusion, and the Policy Case for Investment: Recommendations for State Energy Office Action: National Association of State Energy Officials (NASEO). https://www.naseo.org/Data/Sites/1/documents/tk-news/workforce-diversity-report_final2%5B2%5D.pdf

Drehobl, A. 2021. ACEEE's Leading with Equity Initiative: Key Findings and Next Steps. Washington, DC: American Council for an Energy Efficient Economy. [aceee.org/whitepaper/](https://www.aceee.org/whitepaper/)

E2 and E4theFuture 2020. Energy Efficiency Jobs in America
e4thefuture.org/wpcontent/uploads/2020/11/EE_Jobs_America_2020.pdf

US Department of Energy 2022. United States Energy and Employment Fact Sheet
https://www.energy.gov/sites/default/files/2022-06/USEER%202022%20Fact%20Sheet_0.pdf

Brown, A.2022. About 5% of young adults in the U.S. say their gender is different from their sex assigned at birth: Pew Research Center <https://www.pewresearch.org/fact-tank/2022/06/07/about-5-of-young-adults-in-the-u-s-say-their-gender-is-different-from-their-sex-assigned-at-birth/>