5 questions utilities should consider at the intersection of energy affordability and equity

By Jamie Wimberly
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Affordability has long been a challenge for the utility industry. The latest US Census Bureau data for 2021 reveals that 37.9 million Americans—11.6%—live below the poverty line. Simultaneously, energy prices continue to rise. According to 2022 data from the US Bureau of Labor Statistics Consumer Price Index, energy prices increased more than 13%.

As a result, many households face what's called an energy burden—the percentage of household income spent on energy. In fact, according to the Energy Efficiency Impact Report, more than 60% of low-income households in the US face a high energy burden, with some paying more than 20% of their income on utility bills. High energy burdens can also lead households to make sacrifices: 27% of all households reported some sort of energy insecurity, leading them to forego other necessities to pay an energy bill or to maintain their home at an unsafe temperature.

Weave equity and affordability into your utility's business model

Fill out this short form to start a conversation about your needs and how we can help.

Despite customers' clear need for assistance, demand-side management programs designed for low- and moderate-income (LMI) customers reached just 5% of income-eligible households in 2019, according to the American Council for an Energy-Efficient Economy report Meeting the Challenge: A Review of Energy Efficiency Program Offerings for Low-Income Households. Moreover, an analysis of Low-Income Home Energy Assistance Program (LIHEAP) data by the Rocky Mountain Institute found that millions of eligible households aren't receiving any assistance and most states have less than 20%

participation in the program.

At the same time, concern is growing about energy equity in the utility industry. Equity is different from affordability, and the two shouldn't be conflated. Utilities have long understood affordability challenges and offer programs to address affordability, though they may not be as effective as we'd like.

The complexities of energy equity

Equity is a newer concept that also has significant consequences for customers, and there's no single definition. For me, it means understanding people's unique circumstances and working with them to address their needs. In this blog post, we'll focus on energy needs. And I don't just mean LMI households (income isn't the only factor affecting energy-related challenges), but rather working closely with historically underserved communities to maximize the benefits for all customers. In many cases, these communities are often of color and often overlooked, with outdated and inefficient infrastructure, buildings, and transportation systems—the consequences of historical and current discrimination and disinvestment.

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This idea of equity has become critically important as we transition to a clean energy economy. Many in the industry, including myself, are concerned that clean energy investments will have the most positive impact on wealthier Americans, while rate increases will impact all consumers—including the most vulnerable.

Negative pollution and public health impacts from legacy energy, building, and transportation infrastructure have already and will continue to fall on underserved and vulnerable communities if we don't act decisively and now.

Five questions focused on outcomes

This is where affordability and equity intersect—and we're approaching a crisis. The actions we take now to make good on the promises of clean energy will have far-reaching, long-lasting impacts. Let's get it right the first time.

And, by the way, what I'm describing is a win-win for utilities and consumers.

We encourage utilities to define what equity means for their business and customers before creating and measuring goals, and we recognize that utilities are at different stages in their equity and affordability programs and journeys.

Even so, these five questions need to be answered:

- Who are our customers?
- How can we best serve our customers?
- Do our customers know what we have to offer?
- Isn't it our job to treat all ratepayers the same?
- What is the business case?

Who *are* our customers?

Utilities often think that their customer segmentation practices are sufficient and, therefore, don't need changing. I disagree. The ever-growing availability of customer data can be examined through the lens of data science to deliver much more visibility into customers at the most granular level. We call it Audience of One.

Then you can start asking questions that will impact outcomes, such as:

- What problem are we trying to solve for the communities we serve?
- What problem are we trying to solve for customers who struggle to pay their utility bills or face a high energy burden?
- What's the opportunity cost of not giving underserved communities equal access to new, clean energy technologies?

From our experience working with utilities, you may be surprised at what you will learn about your customers. For example, E Source conducted an LMI project with the Edison Electric Institute and several utilities. We discovered that LMI customers who often look demographically the same can have different challenges. Compared to those who keep up with their bills, those who struggle the most generally:

- Contact their utility more often
- Participate in energy efficiency programs at lower rates
- Are more weather sensitive (particularly those who pay more per unit for electric heating)
- Live in older homes with a lower market value
- Have younger heads of household

How can we best serve our customers?

Now that we know more about our customers and what their challenges are, what can we do *differently* to serve them better?

Here's a legacy approach ripe for improvement. How are LMI households typically treated when they sign up for utility services? These customers are often "red flagged" and required to undergo a lengthy identification and background-check process. Once the customer has completed that process, they must pay a cash security deposit to have the service turned on.

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Can you imagine a worse way to start a relationship?

Utilities have several customer touchpoints, and we need to do a better job of learning from each. I'm talking about a fundamentally different approach based on industry research to innovate and improve processes and programs. For example, how can you prioritize making the verification and enrollment process as stress-free and easy as possible for your customers?

Strategies could include the following:

- Allow customers to self-certify their eligibility for participation in your programs
- Accept documents from other income-qualified assistance programs to categorically qualify customers for eligibility
- Tailor your outreach to eligible customers and communities
- Partner with community action agencies to manage your customer qualification and application process
- Expand program eligibility thresholds to customers who wouldn’t otherwise qualify
- Automatically enroll qualified customers to fast-track their applications
- Adopt community-based enrollment and qualification strategies based on emerging socioeconomic and demographic criteria to drive energy equity

Members of the E Source Demand-Side Management Service can read more in our report Increase income-qualified DSM program uptake by improving your customer enrollment and verification strategy. Everyone else can watch the recording of a recent webinar on the same topic, Strategies for income-qualified program enrollment and customer eligibility.

Enrollment among income-eligible customers is at an all-time low. Easing enrollment requirements can boost program uptake.

Do our customers know what we have to offer?

You can offer the best programs in the world, but if your customers don’t know about them you aren’t improving outcomes. Imagine if your energy assistance programs had 80% participation instead of single digits. Far fewer customers would be in arrears, get hit with late fees they can’t pay, and end up getting disconnected—leaving you with bad debt.

As we all know, optimizing program impact reduces financial risk for utilities. Unfortunately, traditional programs and communications haven’t moved the needle far enough. Using data to know who our customers are at a granular level and asking about specific challenges is key to designing more-targeted programs. And now that we know who our customers are, we also know how to reach them.

Isn’t it our job to treat all ratepayers the same?

Equality isn’t equity, and, as we’ve learned, treating all customers the same without concern for who benefits can negatively impact our most vulnerable customers. As we transition to clean energy, these disparities will become much worse if we don’t rethink our approach to low-income rate design, among other outcome-based initiatives.

Designing rates for equity

For more information on using rate design to reduce energy burden, read the E Source report Equity in a clean energy economy requires rethinking low-income rates.

Traditionally, utilities implement low-income rates as a discount to base residential rates, which means utilities foot the bill to cover the difference. We need to take a different approach to designing low-income rates—one that achieves a targeted average energy burden for eligible customers. This approach allows non-LMI residential customers to share in covering low-income energy burdens.

Regulators and policy-makers are increasingly open to considering innovative rate design and cost-sharing, but getting buy-in can be difficult. Developing compelling proposals with thorough cost justification and legally supported rationale is among the best ways of getting these conversations started.

What is the business case?

There are several reasons utilities should care about energy equity and affordability.

New savings opportunities. Expanding program participation among traditionally underserved customers creates savings opportunities. Lower-income communities are where energy efficiency programs such as weatherization and retrofits can have the most impact.

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Non-energy benefits (NEBs). Accounting for NEBs can turn a costly program into a cost-effective one. Peak load reduction, transmission and distribution savings, and reduced arrearages result in less debt written off, lower collection costs, and fewer customer calls. And these are just a few examples.

Improved reputation. According to E Source market research, “Positive image” is the top driver of utility customer satisfaction. And research from Empower Dataworks links high customer satisfaction with greater shareholder value and long-term confidence in leadership.

Meeting regulatory mandates. For regulated utilities, complying with mandates around energy equity and affordability at the local, state, provincial, and federal levels may come with performance incentives—and penalties.
