AN E SOURCE WHITE PAPER

The pending crisis at the intersection of energy affordability & equity

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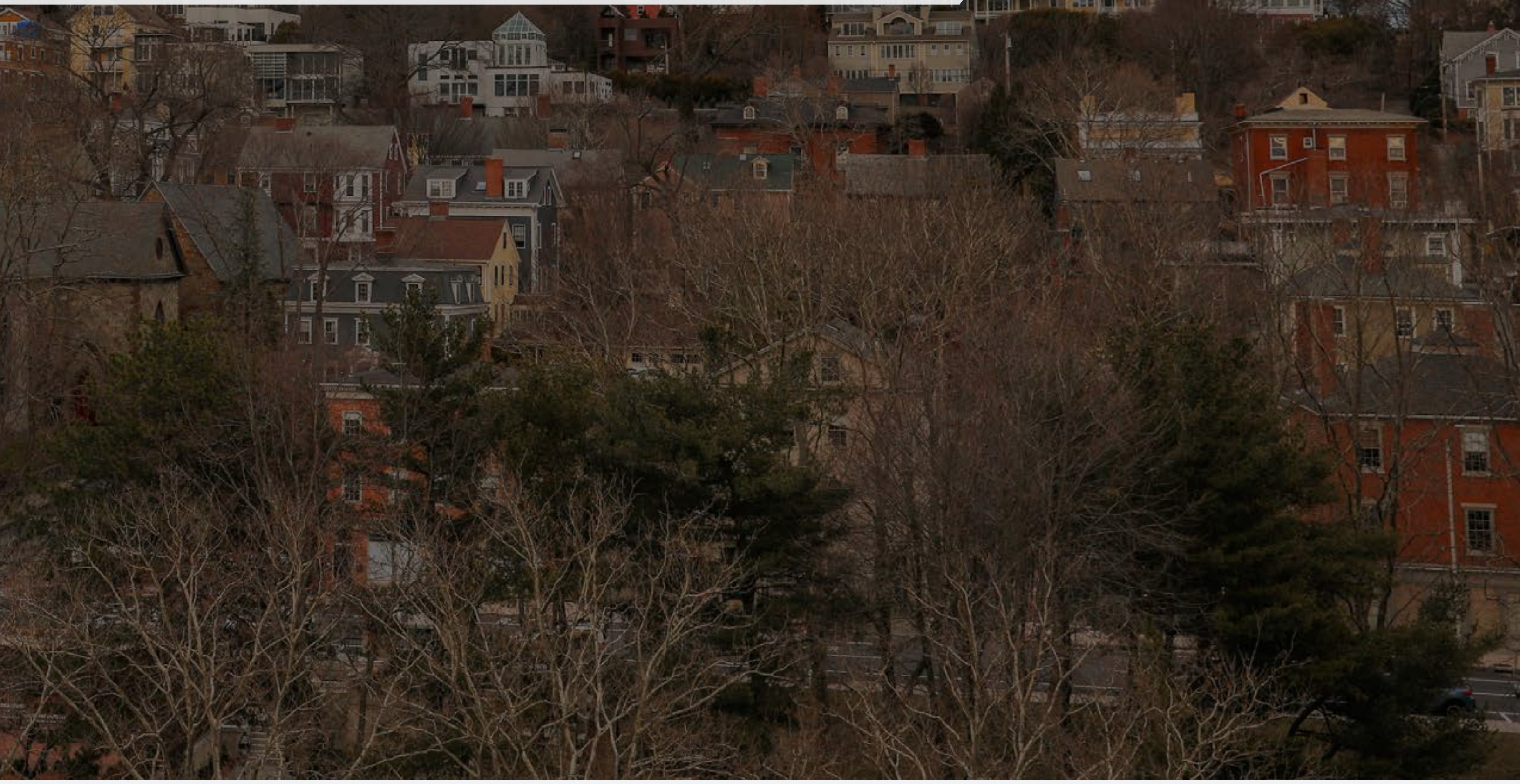

Affordability has long been a challenge for the utility industry. The latest U.S. Census Bureau data for 2021 reveals that 37.9 million Americans—11.6%—live below the poverty level. Simultaneously, utility rate increases continue to rise. The most recent data from the U.S. Bureau of Labor Statistics Consumer Price Index estimates rates in 2022 were up more than 13%.

High energy burdens can lead households to make sacrifices.

As a result, many households face what the industry describes as an "energy burden," or percentage of household income spent on energy. In fact, more than 60% of low-income households in the U.S. 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.

Despite customers' clear need for assistance, demand-side-management (DSM) programs designed for low-to-moderate income (LMI) customers reached just 5% of income-eligible households in 2019, according to the American Council for an Energy-Efficient Economy (ACEEE) 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 that millions of eligible households are not receiving any assistance and most states have less than 20 percent participation in the program.

All this to say, it's clear that current approaches to affordability are ***NOT*** working for far too many households. We must shake up the status quo and focus on improving outcomes, not just continue developing programs based on legacy segmentation approaches, adding some incentives, and hoping customers will participate. Remember Einstein's definition of insanity? Trying the same thing over and over and expecting a different result.

At the same time, there is a growing concern about energy *equity* in the utility industry. Equity is different from affordability, and the two should not be conflated. The industry has long understood affordability challenges and even though they may not be as effective as we'd like, utilities have programs to address affordability.

Equity is a newer concept that also has significant consequences for customers, and there is no single definition. For me, it means understanding people's unique circumstances and working with them to address their needs (for the purposes of this article, we'll focus on "energy" needs). And I don't just mean low-to-moderate income (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 are 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.

Equity is different from affordability, and the two should not be conflated.

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 do not act decisively, now.

This is where affordability and equity intersect – and we are 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 both utilities and consumers.

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Achieving better outcomes

We've never had a better opportunity than we have now, with new money from the Inflation Reduction Act and other federal and state programs, to create real, meaningful change in our communities. Change in how we approach affordability, equity, and climate change. Changing how we allocate investment dollars to ensure *everyone* is well served. Changing *outcomes*, not programs.

The first, perhaps most important, step we can take is to start asking better questions. Historically, utilities have treated rate payers in big buckets—LMI, residential, commercial, industrial, etc. We're all familiar with these "segments," but do we really know what each person or business within these segments really needs? Have we ever asked?

If we're being honest, none of our rate payers fit as neatly into their respective segment as we'd like, and that has many ramifications – none of them good. It's time to stop seeing customers as a rate class and start examining instead the myriad, unique needs that truly make up our neighborhoods and communities and the outcomes that would have the most impact.

We will not put a dent into affordability and equity challenges until we start asking the right questions and putting our focus – and money – on outcomes. And, yes, there is a clear business case to be made.

Five questions focused on outcomes

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:

Question 1: 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.

Now 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 Edison Electric Institute (EEI) and several utilities, and we discovered that LMI customers that 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

Question 2: How can we best serve our customers?

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

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 process. Once the customer has completed that process, they must pay a cash security deposit in order to have the service turned on.

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 of these. I'm taking about a fundamentally different approach based on industry research to innovate and improve processes and programs. For example, how can you prioritze making the verification and enrollment process as stress-free and easy as possible for your customers?

Some strategies could include:

- 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

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

Question 3: 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 income 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—and 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.

Question 4: Isn't it our job to treat all rate payers the same?

Equality isn't equity, and, as we've learned, treating all customers the same without concern for who benefits can negatively impacts 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.

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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 has non-LMI residential customers share in covering low-income energy burdens.

Regulators and policymakers 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.

Question 5: What is the business case?

There are several reasons that 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.
- **Reduced financial risk:** programs that save energy and lower costs for customers with high energy burden will reduce arrears, which is more successful and cost effective than punishing customers.
- **Non-energy benefits (NEBs):** accounting NEBs can turn a costly program into a cost-effective one. Peak load reduction, transmissions and distributions savings, reduced arrearages result in less debt written off, lower collection costs, and fewer customer calls, for example – and there are many more.
- **Improved reputation:** according to our market research, “Positive image” is the top driver of utility customer satisfaction, and research from Empower Dataworks links high customer satisfaction and greater shareholder value, as well as 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 level may come with performance incentives and *penalties*.

Affordability & equity are the defining challenges of the clean energy transition

Too many utility customers aren't being well served while other, more affluent members of society benefit most from the investments we've made so far. The utility industry has a once-in-a-lifetime opportunity to flip the script and lead the charge to a clean energy economy, but we can't be successful if we don't radically change our approach to serving our communities.

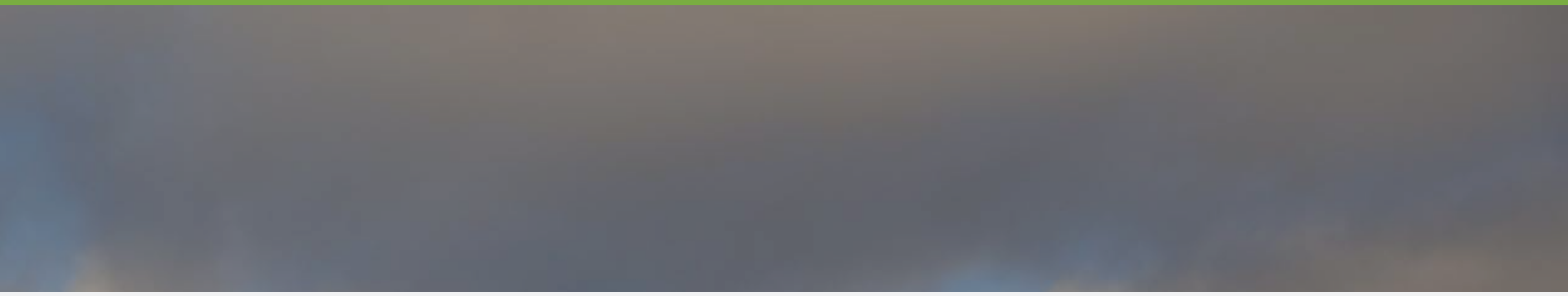
At E Source, we believe that it's possible to deliver benefits to our communities and the bottom line if we can inject equity and affordability into the utility business model from the beginning. With rising rate pressure and increasing inequality in our communities, we are approaching crisis.

At the same time, the current administration is investing heavily in the clean energy transition. The time is right, and the time is now, to make transformative investments that not only accelerate the transition to a clean energy economy, but also spread its many benefits equitably.

Author's note: Each of the questions I've outlined above is worthy of much more discussion, and I plan to address them in more detail in future articles. In the meantime, let me know what you think. How are your energy affordability and equity efforts going? What's working for your utility, and what's not? Where do you need help? E Source has abundant content on equity to help you get started.

About the author

Jamie Wimberly has more than 25 years of experience in energy, working with leading technology innovators, executive teams at major investor-owned utilities and energy retailers, thought leaders, and regulators. His expertise includes general management and operational consulting, customer engagement and strategy, program and offering design, marketing and communications, and customer service. Before founding DEFG (which was acquired by E Source in 2022) and serving as its CEO, Jamie cofounded and served as president of the Center for the Advancement of Energy Markets, a nonprofit think tank focused on the energy sector. He served as vice president of the Consumer Energy Council of America, the oldest public interest organization in the nation focusing on energy, telecommunications, and other network industries providing essential services to consumers. Jamie earned his MA in international economics with a focus on energy at Johns Hopkins School of Advanced International Studies.



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