The energy equity framework that benefits customers, utilities, and underserved communities

Sarah Baker, Jesse Hitchcock,
Liza Minor, Ben Nathan, Vince Ruggeri,
Miriam Stein, and Amy Schmidt

E Source

What is energy equity?

Equity means understanding people's unique circumstances and working with them to identify solutions to address their needs. Energy equity aims to minimize the negative impacts of our energy systems and maximize the benefits for all utility customers. Historically, these impacts and benefits haven't been equitably distributed.

Today, many utility customers aren't being served as well as wealthier members of society. These customers are often underrepresented in customer programs and disproportionately burdened with negative energy impacts:

- Low income

- Black, Indigenous, and people of color (BIPOC)

- Non-English speakers

- Older people

- Renters

- Small business

- Rural

As the Energy Equity Project (PDF), a research organization that's a part of the University of Michigan, says:

> " Historically, the energy sector echoes racial and class disparities in housing, education, and economic development. Despite the semblance of uniform utility rates and ubiquitous service, the negative outcomes of power shut-offs and cost burdens—and the positive benefits of weatherization, retrofits, and renewable energy—are not evenly distributed.

Diversity, equity, and inclusion (DEI) isn't a new concept for utilities, which started offering diversity training in the 1990s. And for decades utilities have had to use diverse suppliers, often by regulatory mandate. But as social justice movements sweep across the globe, governments and regulators are reconsidering how utilities can equitably distribute the benefits and costs of the transition to clean energy.

Utilities have offered low-income assistance programs to make energy more accessible, but less than 2% of eligible households participate in these programs, according to ACEEE's Assessing the Potential for Energy Efficiency in Low-Income Households under the Clean Power Plan (PDF). States and utilities will need to increase low-income participation to meet their carbon-reduction goals.

And income isn't the only factor that affects energy access or burden. For instance, in cities where more EV charging stations are available, many are in majority-white areas, according to the Washington Post article Without access to charging stations, Black and Hispanic communities may be left behind in the era of electric vehicles. Utilities can use an equity lens to expand their reach beyond low-income programs to minimize the impacts and maximize the benefits of clean and affordable energy for everyone.

To make sure everyone has access to clean, affordable, reliable energy, utilities need to first address historical inequalities, like the effects of redlining policies on energy burdens. To do this, utilities are applying a DEI lens to their demand-side management (DSM), distributed energy resource (DER), transportation, billing, and payment programs. They're also considering DEI in their marketing and communications, internal operations, and trade ally engagement. Some utilities are creating new, more-holistic initiatives to address DEI internally and externally. Others are adapting their existing programs based on new equity metrics, often mandated by states and local utility regulators.

Why utilities should care about energy equity

By failing to account for customers' differences, utilities risk losing valuable energy-savings opportunities that would benefit their operations, customers, and the society they serve. If only some customers benefit, utility investments in energy efficiency, load management, and electrification will be undervalued, underutilized, and less cost-effective.

New savings opportunities. When utilities design programs from an equity perspective, they're likely to expand program participation among traditionally underserved customers. This creates new savings opportunities. And these programs can increase the efficiency of older buildings that have higher energy intensities, which are often in low-income communities.

Reduced financial risk. Programs that save energy and lower costs for customers with high energy burden will reduce arrears. This decreases the financial risk for utilities and customers. Preventing customers from falling into arrears can be more successful and cost-effective than charging late fees and disconnecting their power, according to consulting firm Empower Dataworks's white paper Comprehensive Guide to Quantifying Energy Equity.

What's energy burden?

Energy burden is determined by how much of a household's income it spends on energy. A household has a high energy burden if it spends more than 6% of its income on energy expenses.

Non-energy benefits (NEBs). Most tests utilities use to measure a program's cost-effectiveness leave out NEBs, which undervalues the program's benefits. Accounting for these NEBs can turn a costly program into a cost-effective one. Utilities can then serve more customers and achieve more energy savings. Including NEBs is especially valuable for customers with lower incomes. Low- and moderate-income (LMI) customers need greater incentives to invest in energy efficiency, so LMI programs are rarely cost-effective from an energy-savings perspective.

Improved reputation. Equity programs can improve a utility's reputation because customers are more likely to positively engage with utilities that show a high level of corporate responsibility and customer care. And according to our market research, "Positive image" is the top driver of utility customer satisfaction. High customer satisfaction often links to greater shareholder value and creates long-term confidence in leadership, according to the Empower Dataworks white paper.

Meeting regulatory mandates. Regulated utilities will have to comply with mandates around energy equity at the local, state, provincial, and federal level. Like energy-efficiency programs, including LMI offerings, these mandates may come with performance incentives and penalties.

What utilities can do about it

Utilities may recognize this critical opportunity, but they may not know where to start or how to navigate this complex subject. They may feel paralyzed and not do anything or hire expensive consultants without much to show for it. At E Source, we often hear questions like, How can we define equity goals and metrics? How can we reach underserved customers? And who do we partner with to maximize our impact? To get answers to these questions, we used our industry-wide perspective to make sense of the many ways program administrators integrate equity into their DSM programs and operations. Using case studies from the US and Canada, we created a framework to identify opportunities to address equity and find creative and holistic solutions.

The energy equity framework

The E Source energy equity framework explains the steps for planning, executing, and improving on programs that serve all customers (**figure 1**). All four stages guide and inform one another. For example, a utility's definition of equity will inform its stakeholder engagement and equity program design.

Figure 1: The E Source energy equity framework

While utilities may be in different stages, this framework can help them better understand energy equity opportunities, effective program implementation, and continuous improvement.
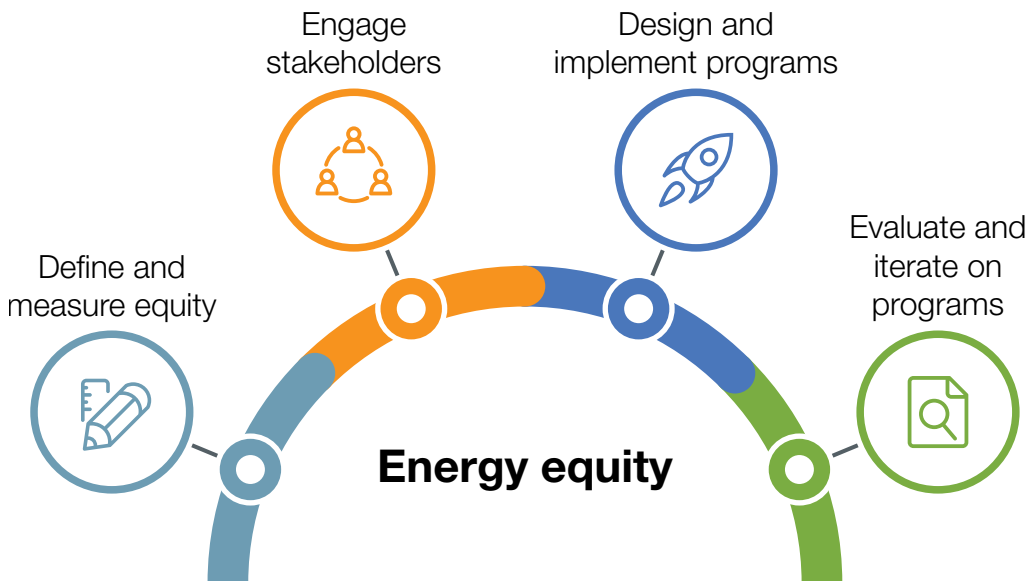
Define and measure equity

Define equity

Utilities need to define what energy equity means for their business and customers before they can create and measure goals for energy equity. They can also use the definitions, goals, or metrics found in existing frameworks and legislation. Various industry thought leaders have created definitions that are good starting points for utilities, including:

- The Southeast Energy Efficiency Alliance's (SEEA) Energy Equity Action Planner categorizes three types of overlapping challenges: access, inclusion, and intergenerational.

- ACEEE's Leading with Equity Initiative provides four overarching strategies to achieve an equitable energy system: structural equity, procedural equity, distributional equity, and transgenerational equity.

- The Initiative for Energy Justice sets these equity dimensions: process, restoration, decision-making, benefits, and access.

It might also be helpful to look at equity-focused legislation and initiatives at the local, state, provincial, and federal level:

- Equity-focused mandates include New York's Climate Leadership and Community Protection Act, Illinois's Clean Energy Jobs Act, Massachusetts's Bill S.9, and Washington's Clean Energy Transformation Act.

- New Jersey's Office of Clean Energy Equity is coordinating equity efforts across the state, as explained in a press release on the topic.

- British Columbia's CleanBC Roadmap to 2030 (PDF) calls for an equity focus in its long-term energy planning.

- California and Oregon have robust energy equity mandates and activities underway. Read more about them in the California Office of Environmental Health Hazard Assessment's SB 535 Disadvantaged Communities and the Oregon Public Utility Commission's 2021 Legislative Session.

- The US government is providing more funding opportunities, through the Justice40 Initiative, for equity-focused energy investment. Read more about it in the White House's fact sheet about executive actions to tackle the climate crisis.

ACEEE summarizes many of the US legislative changes in its databases on Equity Metrics and Workforce Development and Equitable Climate Action and Energy Planning.

Apply DEI internally

To develop equitable programs in a utility's service territory, it's also important to consider what equity means for its internal organization. Internal DEI efforts can help make sure that utility hiring, culture, and decision-making reflect the customers and communities they serve. The US Chamber of Commerce webinar How Businesses Can Create an Effective DEI Framework discusses how strong organizational DEI is vital for a company's success. In the webinar, one executive said, "Our DEI strategy is connected right to our profitability because we're improving retention, creating [career advancement] pathways, and diversifying our white-collar workforce and our executive team at the same time."

Working with our peers on energy equity

Achieving energy equity requires an intentional and concerted effort by leaders in science, academia, policy, and industry according to Pacific Northwest National Laboratory's Energy Equity web page. It also requires direct collaboration with communities. Advocacy, research, and institutional groups have studied and defined energy equity, created frameworks for its advancement, and informed our own research.

Advocacy groups include:

- The Energy Equity Project and the Initiative for Energy Justice

- Research initiatives like ACEEE's Leading with Equity Initiative and the Green & Healthy Homes Initiative

- Institutional agencies and partners like the Urban Sustainability Directors Network (USDN); read about the USDN's efforts in a Guidebook on Equitable Clean Energy Program Design for Local Governments and Partners (PDF)

- Regional energy-efficiency organizations like Northeast Energy Efficiency Partnerships (NEEP), SEEA, Southwest Energy Efficiency Project (SWEEP), and Midwest Energy Efficiency Alliance (MEA)

To learn more about the regional energy-efficiency organizations' efforts, see their resources:

- NEEP's Community Action Planning for Energy Efficiency

- MEA's Diversity, Equity and Inclusion

- SEEA's Energy Equity Action Planner

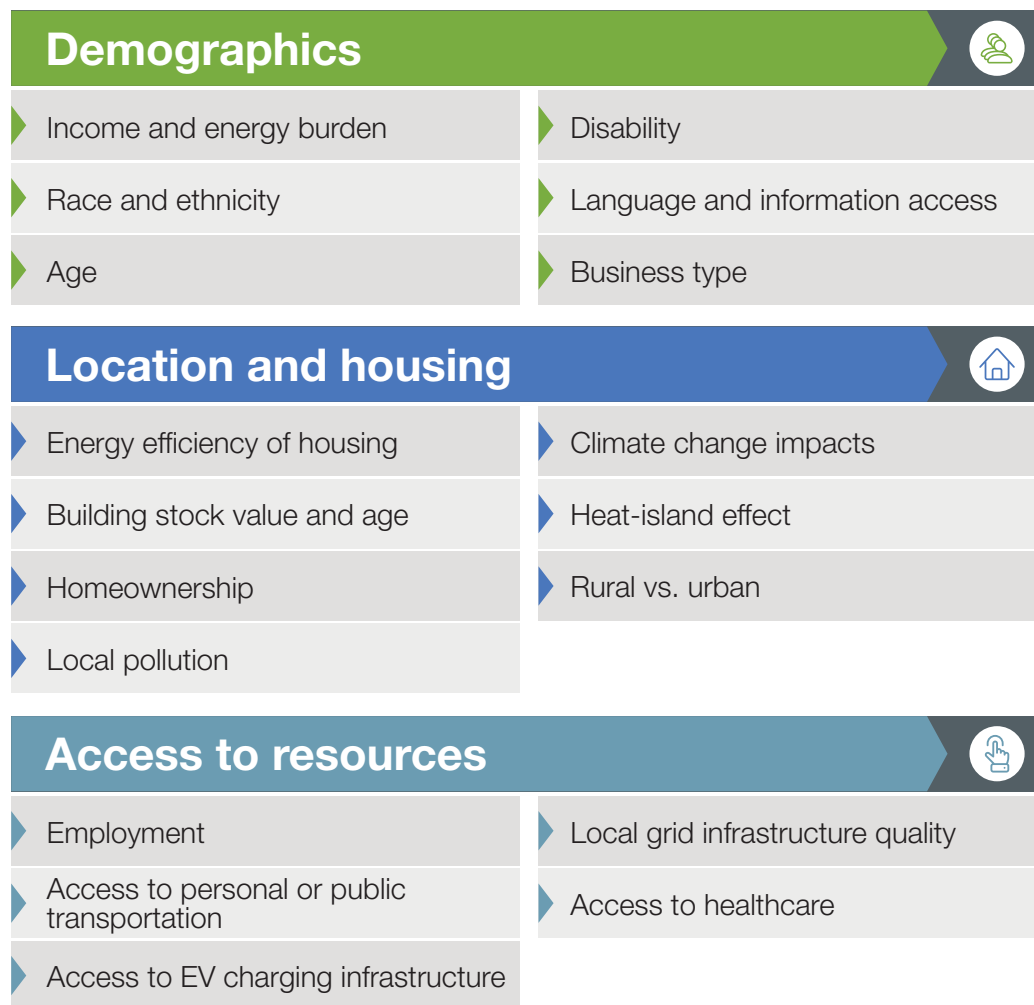- SWEEP's Energy Efficiency and Equity

Identify metrics to measure equity

Choosing metrics. Energy equity metrics are most effective when they're informed by the needs of utility customers. Leading utilities are using metrics like energy burden, race and ethnicity, employment, housing, access to transportation, health, pollution, climate impacts, and language barriers. These metrics help to identify underserved customers and communities and measure how effective the program is at delivering equitable benefits and costs (**figure 2**).

Figure 2: Metrics and customer characteristics utilities are using for energy equity programs

In this diagram we list examples of metrics and customer characteristics a utility might define and focus on in its energy equity efforts.

Demographics

Income and energy burden	Disability
Race and ethnicity	Language and information access
Age	Business type

Location and housing

Energy efficiency of housing	Climate change impacts
Building stock value and age	Heat-island effect
Homeownership	Rural vs. urban
Local pollution	

Access to resources

Employment	Local grid infrastructure quality
Access to personal or public transportation	Access to healthcare
Access to EV charging infrastructure	

Local stakeholders can help utilities understand what data is most important to collect for different customer groups. For example, Mass Save's energy equity portfolio is geared toward LMI customers, renters and property owners, small and microbusinesses, and customers who don't speak English. Mass Save describes its equity metrics in detail in its Energy Equity Action Committee Working Group Summary (PDF).

Using data. Utilities use data to inform their program design, establish baselines, and encourage ongoing participation. They also use this data to determine program eligibility and identify opportunities for delivering programs through community-based organizations (CBOs).

For example, Consumers Energy analyzed how its nonwires solution (NWS) pilot program might impact certain communities differently, as described in the 2021 Consumers Energy Four Mile Non-Wires Solutions Pilot Program Evaluation Report (PDF). The evaluation found that the NWS pilot could have the greatest impact on older neighborhoods with low-income residents. These neighborhoods historically had highly loaded systems, high energy use, and a high percentage of older and inefficient building stock.

The California Public Utilities Commission also uses data to inform program design. It created its Environmental and Social Justice Action Plan to integrate data collection into program designs and objectively measure progress.

Set energy equity goals

Utilities should choose energy equity goals that they can measure and achieve. Some of the common goals that utilities set in DSM energy equity programs use metrics like:

- The percentage of participants with specific demographic and socioeconomic characteristics

- Where program money is spent in a service territory (i.e., how much money goes to targeted geographic areas like census tracts with certain household income characteristics)

- Outcomes from energy-saving programs, which impact different communities depending on their energy burdens, housing conditions, locational power quality, and utility infrastructure maintenance

When setting goals, use market research and community engagement to learn more about customers' perceptions of energy and their needs. For example, the City of Longmont in Colorado surveyed its residents on topics like energy burden, affordability, and awareness for its Just Transition program. It also held listening groups and reviewed national and local reports to identify places that might not have access to electricity. Through this process, the city came up with equity recommendations that it combined with its climate action goals. The city lays out its equitable climate action recommendations in its Climate Action Recommendations Report (PDF).

How to go deeper on equity

Rather than defining who to better serve, a better question for utilities to ask is, What are the specific problems customers face that we can solve? For example, a utility might plan to install EV chargers in underserved areas to increase EV adoption in that area. However, it makes more sense for the utility to ask, How can we help bring reliable transportation to residents in this community? This holistic approach requires more work to understand customers' needs and priorities but allows the utility to give tailored solutions.

E Source can address both sides of this equation. We're working closely with multiple utilities across the US on designing more effective and equitable LMI programs using data science and ethnography. E Source Data Science uses data to create groups of customers with similar behaviors. And Management Consulting uses empathy-based ethnographic research to get a deeper understanding of customers' struggles, barriers, and key desires. We analyze this data to help utilities better understand the various personas within customer groups and understand their needs. We use design thinking to develop solutions for unique groups and artificial intelligence to engage them in a more personal manner. This helps the utility offer the right programs to the right customers so that these customers can afford their energy bills every month.

Engage stakeholders

In each element of our energy equity framework, utilities should involve internal and external stakeholders (**figure 3**). Utilities rely on local stakeholder engagement to understand, engage, and serve customers who haven't historically benefited from utility programs. CBOs are often in the best position to understand a community's needs. Utilities can partner with these groups to design programs, conduct outreach, and implement projects. Utilities can also use these partnerships to advance the CBO's existing mission or add new capabilities.

Figure 3: Internal and external stakeholders in equity efforts

In the inner circle, this diagram shows the stakeholders within the utility that should be involved in equity efforts. In the outer circle, it shows the external stakeholders that can support equity initiatives.
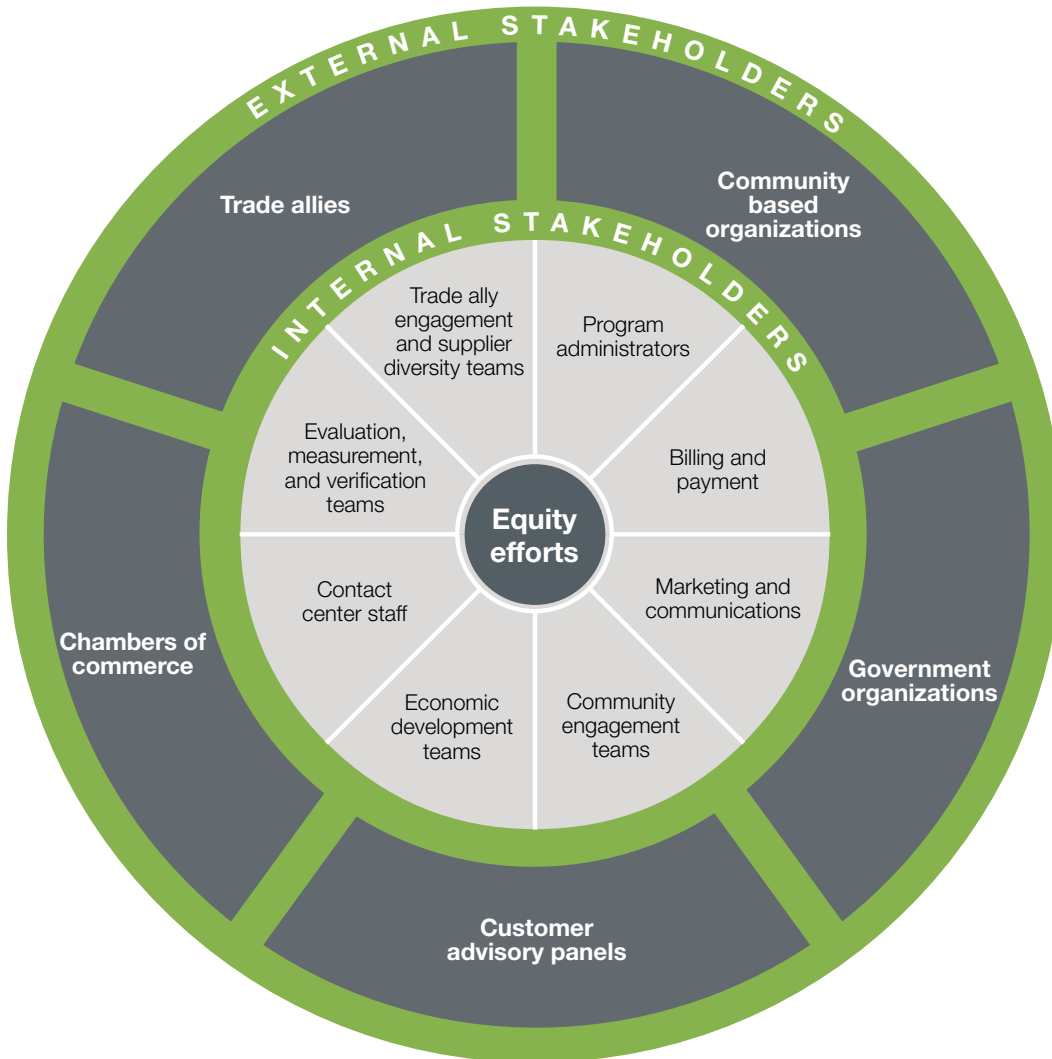
We recommend using the following strategies to engage CBOs, trade allies, and community members.

Partner with CBOs to distribute funding and market programs. Community members trust and are familiar with CBOs. For example, Massachusetts's Low-Income Energy Affordability Network is made up of community action partner (CAP) agencies, utilities, and other stakeholders. Building trust with CAP agencies that understand the low-income community has helped the network succeed.

Engage members of the community as mentors. FortisBC was a founding member and financial partner of the Empower Me program. Empower Me is an energy-conservation program specifically for new immigrants in Canada. The program hires and trains people from local communities to work with participants in

their native language. These energy mentors learn about conducting home energy audits, the Empower Me program, and the utility's other offerings. The program is available in 16 languages.

Offer language-specific resources and use inclusive marketing. SMUD uses professional translation and creative services to review, edit, and provide feedback on all materials. SMUD also includes a group of its own employees who speak diverse languages.

The City of Austin launched a bilingual website to help people apply to the City of Austin Emergency Financial Assistance Plus 1 Program, which helps customers who have experienced financial hardship.

Work with a diverse group of trade allies. Partnering with diverse trade allies for programs will help support their business and increase the diversity of customers enrolled in programs. One of Energy Trust of Oregon's DEI goals was to increase the number of projects completed by minority- and women-owned trade allies. The organization "received feedback from trade partners that providing [job] leads to minority-owned contractors could help drive project volume and remove barriers to participation in [its] programs," according to its 2020 annual report.

Give workforce development opportunities to communities. ComEd created more opportunities for diverse contractors—including minorities, women, and veterans—through an incubator project. For this project, the utility spent six months training 20 contractors at no cost to the contractors. At the end of the course, ComEd added 14 of them to its trade ally network.

Talk to historically underrepresented groups about energy. The City of Austin developed a Community Climate Ambassadors program to engage underserved communities in conversations about climate issues. The city selected 12 ambassadors from different communities. The ambassadors reached out to their communities to talk about climate change and shared their findings with the city. The city compensated the ambassadors for their work and used their findings in the Austin Climate Equity Plan.

When applicable, utilities can prioritize Indigenous and First Nations communities. These communities are among the most underserved in the US and Canada, both socioeconomically and in the energy system. PNM has a long history of building relationships with the 23 tribes in New Mexico, as explained on its Tribal Relations page. The utility engages with the tribes in several ways, including:

- Bringing tribal leaders into policy and regulatory discussions
- Having utility reps attend tribes' public meetings
- Funding a workforce training scholarship to help send members of the Navajo Nation to local colleges for energy-related careers
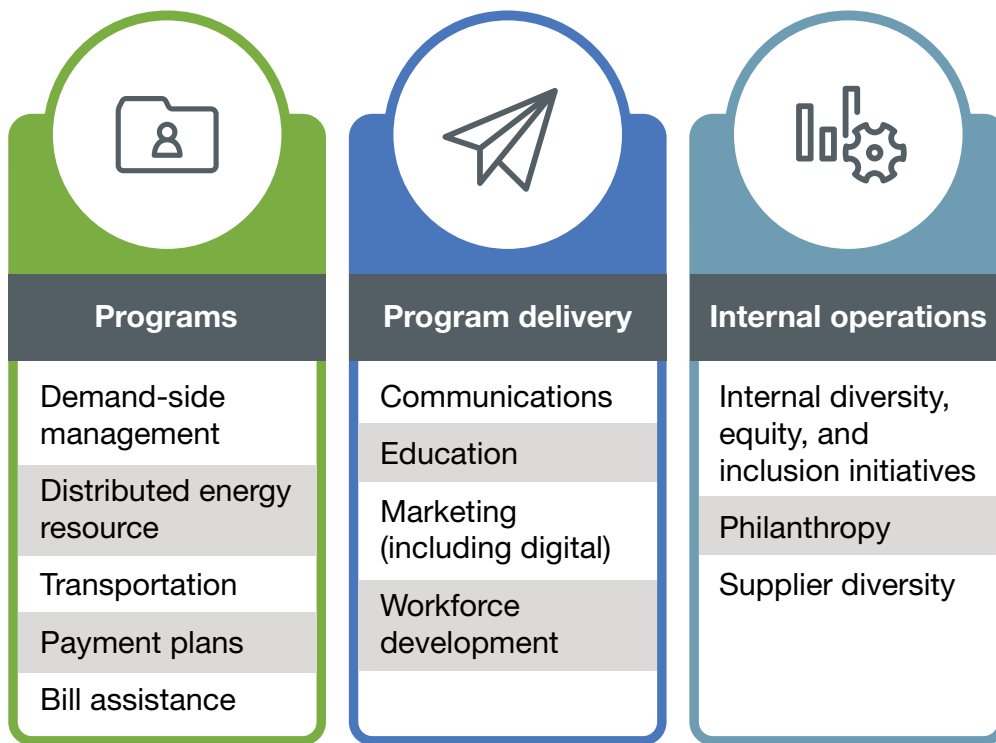
Design and implement energy equity programs

Utilities can incorporate equity into any program type and the internal operations associated with programs (**figure 4**). In this section, we list tips for how utilities can keep equity in mind as they design and implement programs.

Figure 4: Areas to incorporate energy equity into

This diagram lists examples of the program types and internal operations that utilities can build energy equity into.

Programs	Program delivery	Internal operations
Demand-side management	Communications	Internal diversity, equity, and inclusion initiatives
Distributed energy resource	Education	Philanthropy
Transportation	Marketing (including digital)	Supplier diversity
Payment plans	Workforce development	
Bill assistance		

Identify and target disadvantaged communities. Southern California Edison's Self-Generation Incentive offers low-cost installation incentives for solar-plus-storage systems. The utility determines the incentive with its Equity Resiliency Eligibility Matrix (PDF), which uses a variety of socioeconomic and health metrics. And in the transportation space, Xcel Energy's Transportation Electrification Plan and Con Edison's PowerReady Electric Vehicle Program use a variety of equity metrics to give disadvantaged communities higher incentives for EV charging infrastructure.

Encourage local job growth through DER programs. SMUD aims to create jobs in underserved communities with its Energy Careers Pathways program. The program is part of SMUD's Sustainable Communities initiative to bring education, workforce development, and renewable energy to underserved communities in

Sacramento County. It partners with Habitat for Humanity to install rooftop solar, EV-ready infrastructure, and other electric equipment in homes.

Make it easy for customers to enroll in bill-assistance and energy-efficiency programs. Eugene Water & Electric Board makes it easy for participants of the Low-Income Home Energy Assistance Program (LIHEAP) to enroll in other assistance programs. Customers participating in LIHEAP don't need to prove eligibility for other assistance programs. Similarly, Seattle City Light and Seattle Public Utilities work with the Seattle Housing Authority to identify income-eligible customers and automatically enroll them into Payment Assistance Programs.

Design programs based on feedback from stakeholders. City Light partners with other Seattle departments in a citywide collaboration to support its electrification transportation plan (PDF). The municipal utility prioritizes three values: equity, environment, and grid reliability.

To address equity, City Light conducted a racial equity analysis for transportation electrification. It used the City of Seattle's Race and Social Justice Initiative Racial Equity Toolkit (PDF) and conducted in-depth customer interviews. City Light prioritized the solutions based on feedback from Seattle's Environmental Justice Committee, regional stakeholders, and CBOs. This allowed the utility to prioritize certain efforts to hit equity metrics. Its priorities are:

- **Educate customers and stakeholders on transportation electrification.** Many environmental justice community members are unfamiliar with EVs. Communicating in local languages and highlighting communities of color in advertising can help increase equitable access.

- **Electrify buses.** Low-income and BIPOC communities are more likely to rely on buses for their transportation needs. Electrifying public transit will reduce the air and noise pollution in the communities that use it most.

- **Electrify commercial fleets in environmental justice communities.** Similar to electrifying buses, electrifying commercial fleets in environmental justice communities reduces harmful tailpipe emissions in those areas.

- **Expand at-home and near-home charging for multifamily residents.** Multifamily units often don't have access to EV charging. Just over half of City Light's customers are renters and most of them live in multifamily properties. Expanding nearby charging solutions for these residents in environmental justice communities would make EVs more accessible to them.

- **Electrify high-mileage, ride-hailing vehicles.** Vehicles used for Uber or Lyft drive three to five times more than regular passenger vehicles, which makes them a priority for electrification. Targeting these drivers with incentives to electrify will reduce emissions.

What's an environmental justice community?

An environmental justice community is a region or neighborhood that's disproportionately exposed to environmental dangers like poor air quality or polluted water.

Evaluate and iterate on energy equity programs

Utilities will need the right metrics to monitor energy equity outcomes, and they'll need to include those metrics in program evaluations and annual reports. Findings from these evaluations will help utilities improve or redesign programs as needed. This section highlights utilities and jurisdictions that are leading the way in evaluating their energy equity efforts. It also outlines strategies for building an evaluation framework when first planning a new energy equity program or project.

Measure the cost-effectiveness of energy equity initiatives

Some energy equity metrics include benefits that aren't related to energy. Evaluating NEBs is still a relatively new process in the industry and it can introduce regulatory challenges. Typically, utilities use the Total Resource Cost (TRC) test for benefit-cost analysis. But making a business case for energy equity programs using the TRC test can be hard because the TRC test excludes societal benefits like economic development or improved air quality. There are several ways utilities can better account for energy equity in cost-benefit testing.

Adopt a new cost-benefit test. The National Energy Screening Project (NESP) has proposed a new Resource Value Test (RVT). This test considers three categories of NEBs: those benefiting the utility, the participant, and society (**figure 5**). The NESP's National Standard Practice Manual for Assessing Cost-Effectiveness of Energy Efficiency Resources (PDF) gives advice on how to quantify hard-to-monetize costs and benefits. Rhode Island was the first state to replace the TRC with its own RVT, the Rhode Island Test (PDF), which increased the cost-effectiveness of programs by 64%.

Figure 5: NEBs that benefit the utility, participant, and society

Societal benefits are typically more difficult to quantify than utility and participant benefits. Cities and states, not utilities, usually measure societal benefits.

Utility benefits

- Peak load reduction
- Transmission and distribution savings
- Reduced arrearages
- Reduced carrying costs
- Less debt written off
- Lower collection costs
- Fewer customer calls

Participant benefits

- Operation and maintenance cost savings
- Health benefits
- Increased comfort
- Increased employee productivity
- Increased property values
- Benefits to low-income customers

Societal benefits

- Public health and welfare
- Improved air quality
- Water quality and quantity
- Fewer coal ash ponds and coal combustion residuals
- Economic development
- Increased employment
- Energy security
- Benefits to low-income families

Adjust existing cost-benefit tests to include more NEBs. Energy Trust worked with the Oregon Public Utilities Commission to develop a framework that allows the organization to consider more measures with NEBs. This has helped Energy Trust include measures for LMI programs that wouldn't otherwise be cost-effective. If a measure isn't deemed cost-effective initially, Energy Trust can apply for a measure exception and prove its non-energy value. See the Cost-Effectiveness Board Learning Paper (PDF) for more on the framework.

Reward utilities for energy equity performance. Hawaii uses performance-based regulation to reward utilities for meeting specific goals. In 2021, the State of Hawaii Public Utilities Commission approved a new LMI energy-efficiency performance metric. This metric incentivizes the utility and the energy-efficiency

program administrator, Hawaii Energy, to support LMI customers. For details, see the press release Hawaii PUC Approves Portfolio of Performance Mechanisms for Hawaiian Electric (PDF).

Other utilities, like Ameren Illinois, ComEd, Consumers Energy, and DTE Energy, are required to track and meet certain energy equity metrics in their DSM portfolios to receive performance incentives from the state. The ACEEE report Snapshot of Energy Efficiency Performance Incentives for Electric Utilities (PDF) outlines the equity metrics within each utility's performance incentive plan.

Use data to evaluate energy equity programs

Several utilities and regions use data-based mapping tools to identify target regions and evaluate the impact of energy equity programs. These tools help utilities define what energy equity looks like for their service territories. They can also help utilities iterate and revisit metrics as customers change over time. We found several examples of utilities using these tools:

- SMUD created an interactive Sustainable Communities Resource Priorities Map to analyze development, income, housing, employment, and transportation data. The utility uses the tool to identify underserved or distressed areas and invest in energy equity.

- Utilities in California use the CalEnviroScreen tool to inform programs for disadvantaged communities. The mapping tool uses environmental, health, and socioeconomic information for every census tract in the state.

- New York created a Climate Justice Working Group to establish new criteria for defining disadvantaged communities. It uses the Department of Environmental Conservation's Potential Environmental Justice Areas and New York State Opportunity Zones as interim metrics.

Review and iterate on energy equity programs

It's important to regularly review and iterate on energy equity program design to make sure the programs continue to provide benefits. Use the strategies below to use data to improve energy equity programs.

Use customer participation data to adjust program design and targeting. Energy Trust uses the findings from its Customer Insights Study to adjust its residential programs each year. Energy Trust's 2020 Customer Insights Study Final Report (PDF) showed that several groups had significantly lower participation in and awareness of efficiency programs. These included low-income groups, African American or Black, and Hispanic or Latinx communities, as well as rural customers and renters. The analysis also showed that using census tracts for customer

targeting wasn't working as planned and the tracts weren't reliable metrics to predict race. Going forward, Energy Trust plans to assess the equity of its programs through original survey research rather than census data on race.

Assign a manager to track and report on each energy equity metric. The Los Angeles Department of Water and Power (LADWP) established its Equity Metrics Data Initiative in 2016. It measures and reports on the status of 15 equity metrics in the LADWP Rates and Equity Metrics Semi-Annual Report (PDF). The utility assigns each metric to a manager who regularly provides updated data on the metrics. The report includes plans to revise programs as needed to meet goals.

Regularly review demographic and geographic data of all participants. Illinois passed the Energy Transition Act (PDF) in 2021, which establishes methods to measure and correct the impact of racial discrimination. Under this law, utilities in Illinois will collect demographic and geographic data for applicants, contractors, and business owners involved in programs. The act requires utilities to publish the information annually and collect data to verify compliance each quarter.

Next steps toward energy equity

Everyone deserves equitable access to energy efficiency and clean energy. But making energy more equitable is one of the most complex problems facing the utility industry. E Source offers a comprehensive suite of solutions to help utilities in their energy equity journeys:

- **Practical insights and peer connections.** Research and Advisory services give utilities insights based on what strategies are working at leading utilities and connects utilities to peers to share lessons learned.

- **Data-driven decision-making tools.** E Source OneInform, our industry-leading suite of Data Science solutions, uses artificial intelligence to help you match the right customers with the right programs to achieve utility equity goals and energy sustainability.

- **A deep understanding of individual customers.** Management Consulting provides services throughout the customer life cycle. It includes ethnographic research that brings customers to life and helps utilities use design thinking to design and implement programs.

To learn more about how we can help you set and meet equity goals, check out our energy equity offerings.

Energy equity isn't just another catchphrase. It makes good business sense for utilities, saving money and generating new revenue opportunities. It meets regulatory mandates, serving all customers with reliable, affordable, and resilient service while reaching increasing energy-savings and emissions-reductions goals. And it helps utilities deploy next-generation infrastructure and end uses throughout service territories.

We're prioritizing our work to advance practical, actionable solutions to help utilities and cities integrate equity into their customer-side programs and operations. This white paper is just one step in our effort to support The Sustainable Utility™—a utility that is committed to being environmentally responsible, delivering reliable energy, innovating, and serving all customers equitably.

So how do we move from words to action? At E Source, we'll continue to:

- Use our industry-wide perspective to collect case studies and identify solutions

- Share our findings so clients can learn from and build on the work of their peers

- Collect data and assess programs

- Stay on top of industry trends by consulting with clients

- Bring utilities, cities, and experts together to discuss these issues

And we'll continue to learn about and promote energy equity principles and strategies. We're committed to serving as thought leaders to drive industry change. We're also looking inwardly to see how our own organization can better reflect the values of DEI. Let's drive our industry forward in a thoughtful, sustainable way. Let's work together to advance an energy system that serves and benefits utilities and all customers and communities.

E Source's past work on energy equity

For more than 35 years, E Source has helped utility clients solve their most complex challenges, including applying a DEI lens to better serve their community, customers, and employees. We continue to work on these issues with utilities because we're a trusted adviser and can solve complex problems. Working with almost every major utility in the US and Canada, E Source has decades of data and experience including:

- Insights on program design and participation

- Strategies for effective marketing outreach

- Tips for DEI and social justice initiatives

- Ethnographic and voice-of-customer market research reflecting customers' lived experiences

- Using data science to predict how customers will act

E Source is the data authority for the utility industry. From primary research, consulting, and operational data systems selection and implementation expertise to breakthrough predictive data science services and AI applications, E Source enables energy and water utilities to collect, enhance, and use data to transform their operations and solve their sustainability, safety, reliability, equity, and cost challenges. With hundreds of clients, an exclusive focus on utilities spanning 35 years, and a growing arsenal of data-driven solutions, E Source brings to each engagement an unrivaled understanding of what works and how to implement it, increasing speed to value. Owned by Align Capital Partners, a growth-oriented private equity firm managing $775 million in committed capital, E Source is headquartered in Boulder, Colorado, with offices across the US.

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