

DATA FOR THE PUBLIC INTEREST: UTILITY AND REGULATORY POSSIBILITIES FOR EMPOWERING ENERGY EQUITY WITH DATA

NARUC CENTER FOR PARTNERSHIPS & INNOVATION

MARCH 11, 2021

WHAT IS NARUC

- The National Association of Regulatory Utility Commissioners (NARUC) is a non-profit organization founded in 1889.
- Our Members are the state regulatory Commissioners in all 50 states & the territories. FERC & FCC Commissioners are also members. NARUC has Associate Members in over 20 other countries.
- NARUC member agencies regulate electricity, natural gas, telecommunications, and water utilities.





WHAT IS NARUC'S CENTER FOR PARTNERSHIPS AND INNOVATION?

- Grant-funded team dedicated to providing technical assistance to members.
- CPI identifies emerging challenges and connects state commissions with expertise and strategies.
- CPI builds relationships, develops resources, and delivers trainings.

NARUC CPI Topical Areas

Energy
Infrastructure &
Technology
Modernization

Electricity System Transition

Critical Infrastructure, Cybersecurity, Resilience

Emerging Issues







Commissioner Ann Rendahl, Washington Utilities and Transportation Commission

Panelists:

- Subin DeVar, Co-Founder, Initiative for Energy Justice
- Mariel Thuraisingham, Clean Energy Policy Lead, Front and Centered
- Lauren Ross, Director of Policy, American Council for an Energy Efficient Economy
- Hassan Shaban, Principal, Empower Dataworks



Energy Justice Scorecard

Scoring Key: 1 (No), 2 (A Little Bit), 3 (Somewhat), 4 (Mostly), 5 (Yes)

Question	<u>Score</u>	<u>Explanation</u>	<u>Reference</u>
(1) Process: Have frontline communities participated meaningfully in the policymaking process?	5 4 3 2 1		
(2) Restoration: Does the policy aim to remedy prior harms faced by communities harmed by the fossil-fuel based energy system?	5 4 3 2 1		
(3) Decision-making: Does the policy center the decision-making of traditionally excluded populations?	5 4 3 2 1		
(4) Benefits: Does the policy center economic, social, or health benefits for traditionally excluded populations?	5 4 3 2 1		
(5) Access: Does the policy make energy more accessible or affordable to low-income communities?	5 4 3 2 1		
<u>Score</u>	/25		



Scorecard Framework

- Process: Have marginalized communities participated meaningfully in the policymaking process with sufficient support?
- Restoration: Does the policy aim to remedy prior and present harms faced by communities negatively impacted by the energy system?
- **Decision-making**: Does the policy center the decision-making of marginalized communities?
- **Benefits**: Does the policy center economic, social, or health benefits for marginalized communities?
- Access: Does the policy make energy more accessible and affordable to marginalized communities?

Accountability Framework

Actions and Indicators

- Utility actions
- Equity indicators

Utility actions Equity indicators

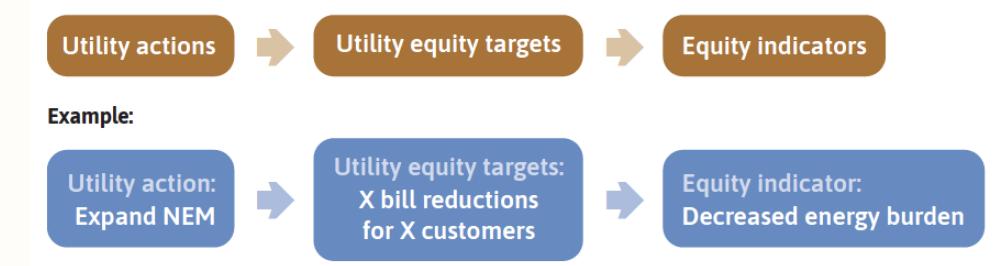
Utility action: Expand NEM

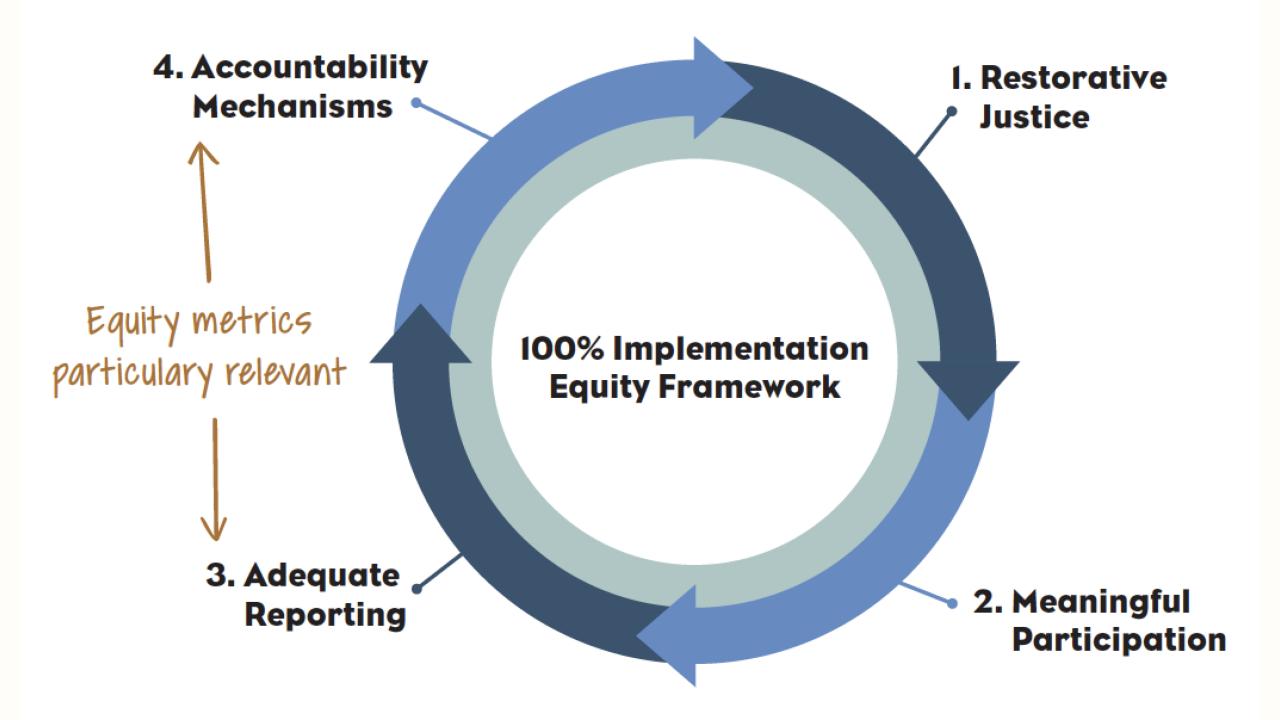
Equity indicator:
Decreased energy burden

Accountability Framework

Actions, Targets, and Indicators

- Utility actions
- Utility equity targets
- Equity indicators





Equity and Energy Efficiency Policy

Lauren Ross, PhD

Data for the Public Interest: Utility and Regulatory Possibilities for Empowering Energy Equity

Thursday, March 11, 2021 | 3:00 - 4:00PM (EST)





The American Council for an Energy-Efficient Economy is a nonprofit 501(c)(3) founded in 1980. We act as a catalyst to advance energy efficiency policies, programs, technologies, investments, & behaviors.

Our research explores economic impacts, financing options, behavior changes, program design, and utility planning, as well as US national, state, & local policy.

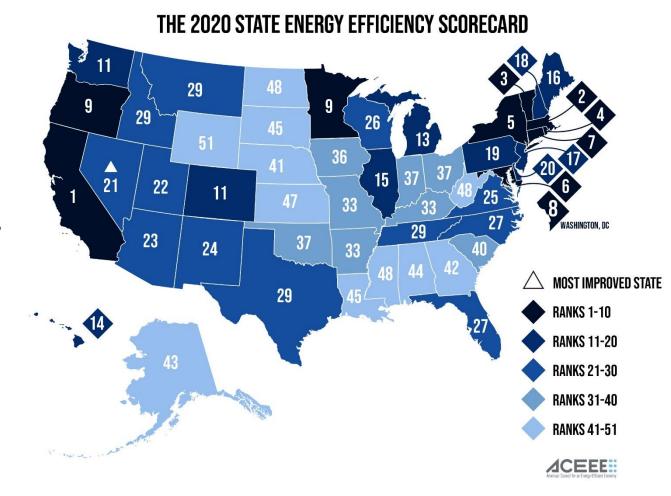
Our work is made possible by foundation funding, contracts, government grants, and conference revenue.

aceee.org @ACEEEdc



Key ACEEE Research

- Energy Efficiency Scorecards:
 - 1. State, 2. Utility, 3. City and 4. Transportation Electrification Scorecards
- State-focused recent research:
 - Energy Efficiency Resource Standards
 - State freight planning
 - Building performance standards
 - Reducing GHG emissions through efficiency programs
 - Electrification
 - EE and electric system reliability
 - Evaluation and cost-effectiveness
 - EE program best practices, including rural programs





State Scorecard goals

- 1. Provide an annual benchmark of state energy efficiency policies and progress
- 2. Offer a comparative tool to direct states toward efficiency policies, best practices, and case studies from high-ranking states and regional neighbors



Photo credit: Idaho Office of Energy and Mineral Resources



Photo credit: MA Department of Energy Resources



Photo credit: West Virginia Office of Energy

Approach to addressing energy efficiency and equity in policy implementation

UTILITY PROGRAMS ► Comprehensiveness of low-income and multifamily energy efficiency **CLIMATE AND CLEAN** programs **ENERGY PLANNING** ► Local government funds ► Community engagement weatherization efforts ACCESS ► Equitable decision-making TO TRANSIT ► Accountability to social equity ► Low-income housing and access to **EQUITY** high-quality transit ► Subsidized access to **INCENTIVES** efficient transportation AND FINANCING ► Affordable housing and transit-oriented development ► Incentives and financing WORKFORCE programs that promote DEVELOPMENT energy efficiency in ► Inclusive initiatives, procurement, and afforable housing contracting processes ► Onsite solar generation ► Workforce development programs are that targets lowcomplemented by or associated with income communities energy efficiency or renewable

energy policies



* Representative of what is in ACEEE's City Clean Energy Scorecard

Equity: Room for improvement in the State Scorecard

- Currently track low-income EE spending and special benefit-cost screening adjustments for LI customers
- Moving forward will work with states and utilities to incorporate metrics on community engagement, decision-making, workforce development, and adoption of internal protocols and metrics for accountability to equity, the community, and related goals/targets.
- Larger question how do we assess the social distribution of benefits with limited data?





Goals

- Ensure frontline communities are represented and are helping to drive the development of a full landscape of improved equity-related metrics
- Better understand current utility, state, and city capacity to report data on desired metrics
- Generate proposed changes to each of ACEEE's scorecards, setting the bar in a way that represents real performance on the metrics that matter most to communities.





Activities

- Convene community-based organizations, advocates, and utilities
- Work together to define success for equitable decarbonization
- Embed metrics that match this definition in ACEEE's utility, state, and city scorecards







Lross@aceee.org

Upcoming ACEEE Conferences

Hot Water Forum	March 10–11	Virtual
Energy Efficiency Finance Forum	May 25–26	Virtual
Summer Study on Energy Efficiency in Industry	July 13–15	Virtual

The top convener in energy efficiency. aceee.org/events













Quantitative Energy Equity

The Utility Perspective

Hassan Shaban, PhD

Principal, Empower Dataworks (Wenatchee, Central WA)

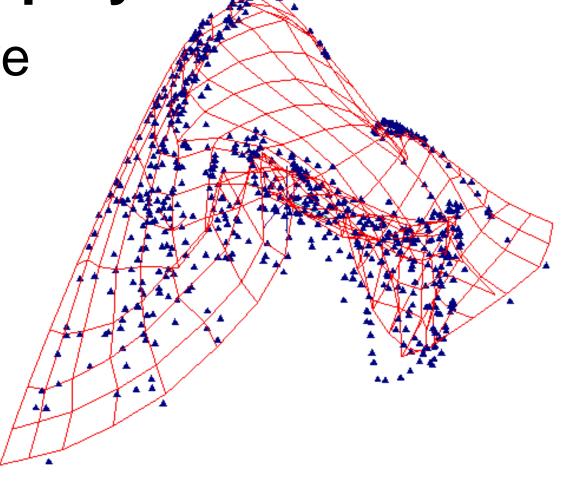
hassan@empowerdataworks.com

Ask me about:

Data and metrics

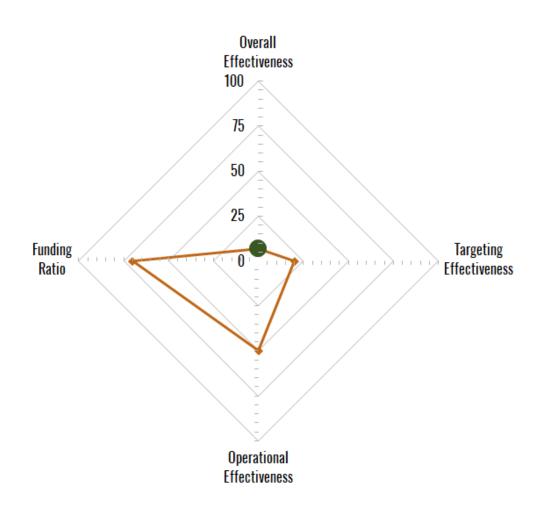
Equity-focused utility programs, planning and marketing

empower dataworks



Where are utilities today in their equity journey?

Tracking Progress of Energy Assistance Programs



- **Funding Ratio:** How much funding is available for assistance programs relative to the need?
- Operational effectiveness: How effective are programs at reducing energy burden?
- Targeting effectiveness: How effective are programs at reaching customers who need it the most?

What is Equitable Power Planning?

Energy efficiency & demand response programs

Housing Quality

Utility operations, forecasting, modeling



Reliability

Affordability

Clean Energy

Community or advocacy organization

Inclusive Process



Source:



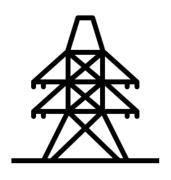
DIVERSITY, EQUITY AND INCLUSION SYSTEM INTEGRATION FORUM

https://www.nwcouncil.org/meeting/sif-2021-power-plan-and-dei-february-19-2021 (Link in chat)

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How can Commissions support utilities in their equity work?

#1: Accountability in the Right Places + Cross-cutting Collaboration



Utilities



Community
Based
Organizations



Distributed Energy Resource Vendors



Regional Power Organizations (BPA, TVA)

#2: Clear Goals, Flexible Execution

To assist households with low incomes, particularly those with the lowest incomes that pay a high proportion of household income for home energy, primarly in meeting their immediate home energy needs.

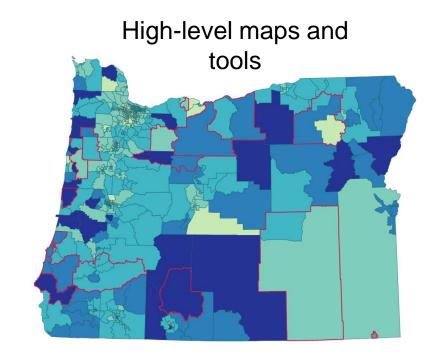
VS

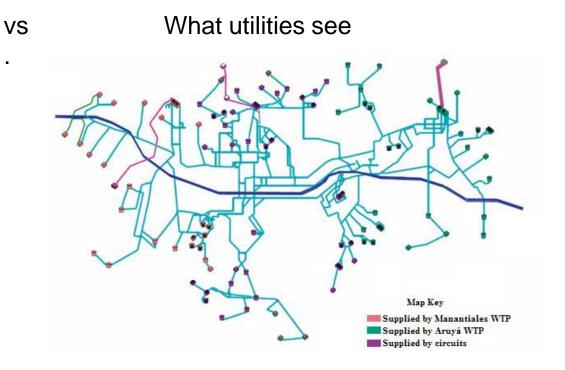
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Reduce energy assistance need by 90% by 2040.

#3: Metrics should be Bottom-Up Aggregates, tied to Operations/Planning and Reward Targeting

- Customers, meters and neighborhoods not census tracts
- Distributions not averages
- Tied to energy use and environmental quality





#4: The Equity Data Problem has (mostly) been Solved



We can't find equity-related data.

There's actually way too much of this data that we're now trying to standardize.



It's too expensive to collect and analyze data.

Relative to what? Data costs are less than 1% of program budgets.



The data is only 70-80% accurate. That's less than 100%.

So what? You only need to be better than random, untargeted decisions.

#5: We asked utility staff what would make them act on energy equity. This is what they said...



Bottom line:

Utility staffers are supportive of energy equity, but policy/regulations by themselves won't necessarily result in change

What would make Commissions act on energy equity?

https://www.menti.com/gjouyoez46

Or go to menti.com and enter this code: **8974 5163**

What next? Start with the Quantitative Energy Equity white paper:

empowerdataworks.com/energy-equity



Q&A

SUBMIT USING THE QUESTIONS PANE IN THE CONTROL PANEL

NARUC Innovation Webinar series



Hosted one Thursday each month from 3:00 p.m. to 4:00 p.m. ET

 Initiative on Cybersecurity in Solar Projects: Cybersecurity Advisory Team for State Solar (CATSS)

April 15, 2021 | 3:00 - 4:00 pm Eastern

 Staffing the Evolving PUC Workforce: Exploring Recruitment, Retention, and Alternative Tactics

May 13, 2021 | 3:00 – 4:00 pm Eastern

Register at: https://www.naruc.org/cpi-1/emerging-issues/innovation-webinars/

NARUC thanks the U.S. Department of Energy for support for this series.





THANK YOU



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