



# How States Value Energy Efficiency as a Resource

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Presented at the 2019 ACEEE National Conference on  
Energy Efficiency as a Resource

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# Why Does Cost-Effectiveness Matter?

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- Cost-effectiveness is an assessment of whether benefits outweigh costs
- Most states use cost-effectiveness tests to determine whether energy efficiency investments are an appropriate use of ratepayer funding
- If an energy efficiency program's benefits do not exceed its costs, then the program is not implemented
- If cost-effectiveness tests are flawed or do not capture all benefits, then efficiency resources are undervalued and, therefore, underinvested
- **If utilities underinvest in efficiency - the cheapest resource - then ratepayer funding is spent on more expensive resources that likely emit more greenhouse gas emissions**

# The National Efficiency Screening Project

The National Efficiency Screening Project's (NESP) mission is to improve cost-effectiveness screening practices for distributed energy resources (DERs).

NESP joins organizations and individuals with a common interest in improving the way that utility customer-funded energy efficiency and other DERs are assessed for cost-effectiveness and compared to other resource investments.

## NESP's products:

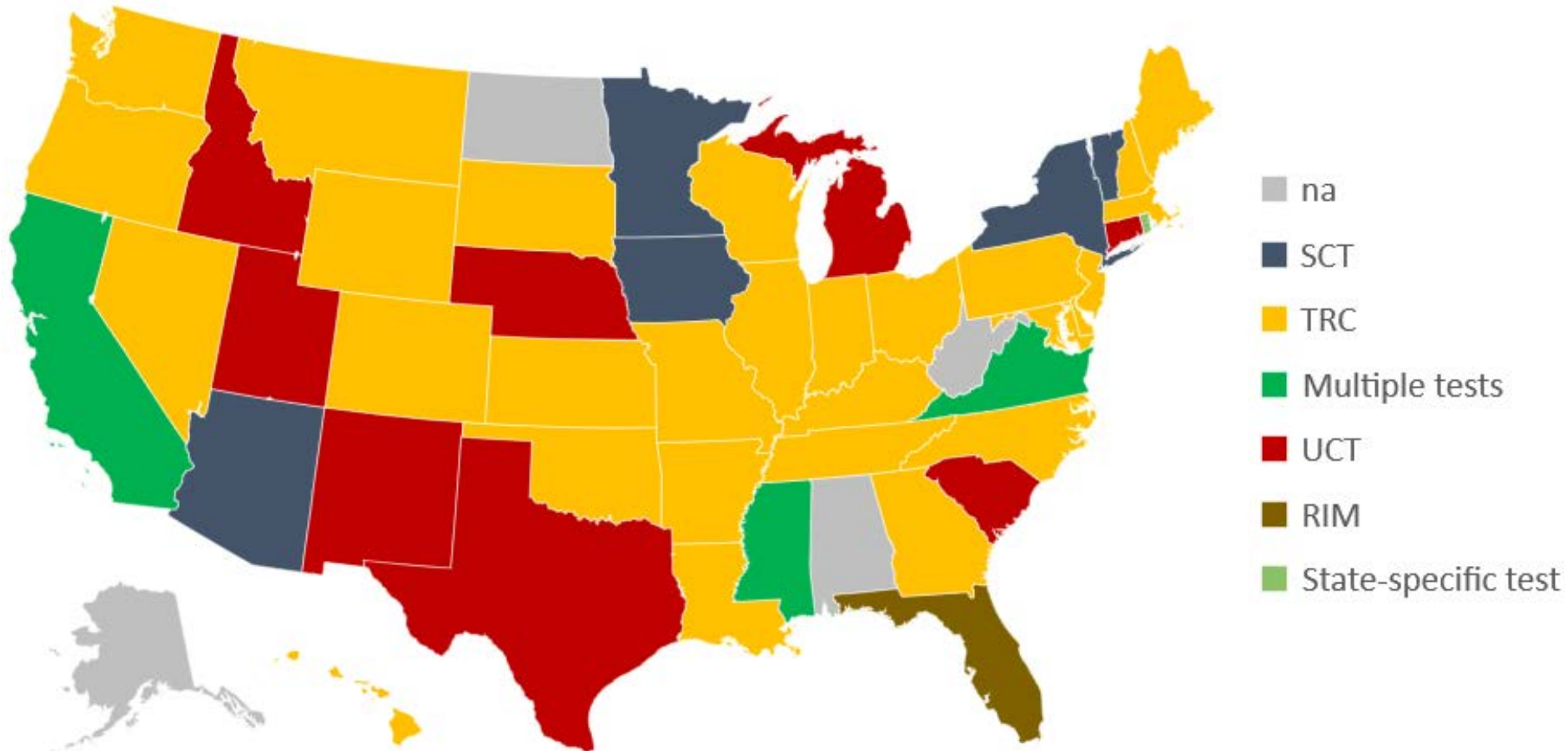
- May 2017: National Standard Practice Manual (NSPM) for Energy Efficiency
  - Julie Michals to discuss
- September 2019: Database of State Efficiency Screening Practices (DSESP)
  - *Today's presentation!*
- 2020: NSPM for DERs

# DSESP Background, Purpose, Scope

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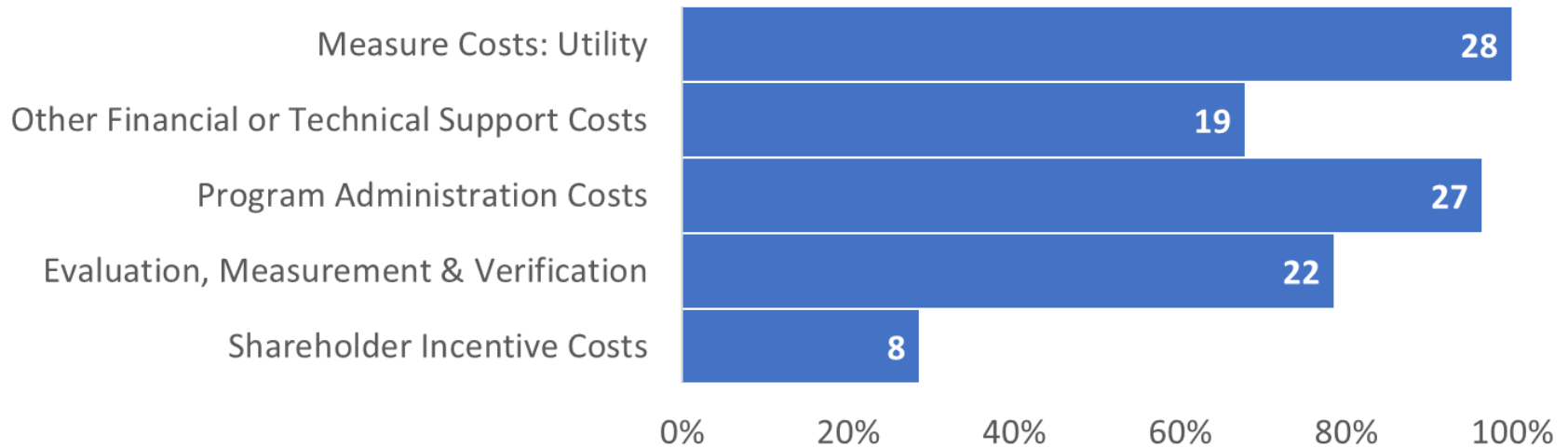
- An **Excel database** created by Synapse for E4theFuture with input from ACEEE and NESP Advisory Committee
- **Purpose** is to provide information regarding state screening practices for ratepayer-funded electric efficiency programs
- Summarizes state cost-effectiveness **test details**, including discount rates, costs, benefits, and other key inputs
- First released in October 2018. Last released **September 2019.**
- Now includes **52 U.S. jurisdictions**
- **User-friendly**, including data sorting, maps, and figures
- Includes **sources** for every data point for every jurisdiction
- Is a **living** database, updated as state practices change

# State Primary Cost-Effectiveness Test



Source: DSESP. DSESP is actively being updated with new information, so this figure is illustrative and may be updated soon.

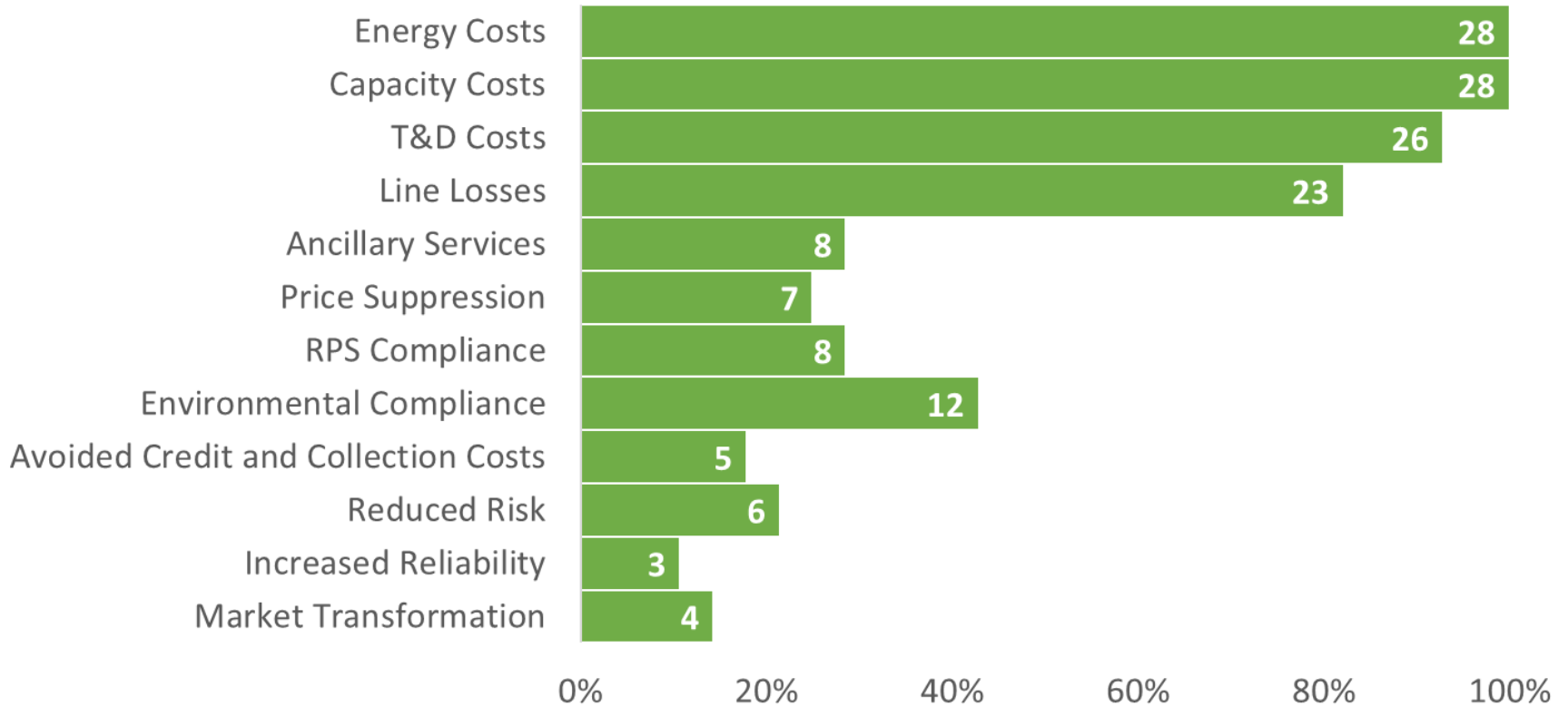
# Utility System Costs in 28 TRC States



*Source: DSESP. DSESP is actively being updated with new information, so this figure is illustrative and may be updated soon.*

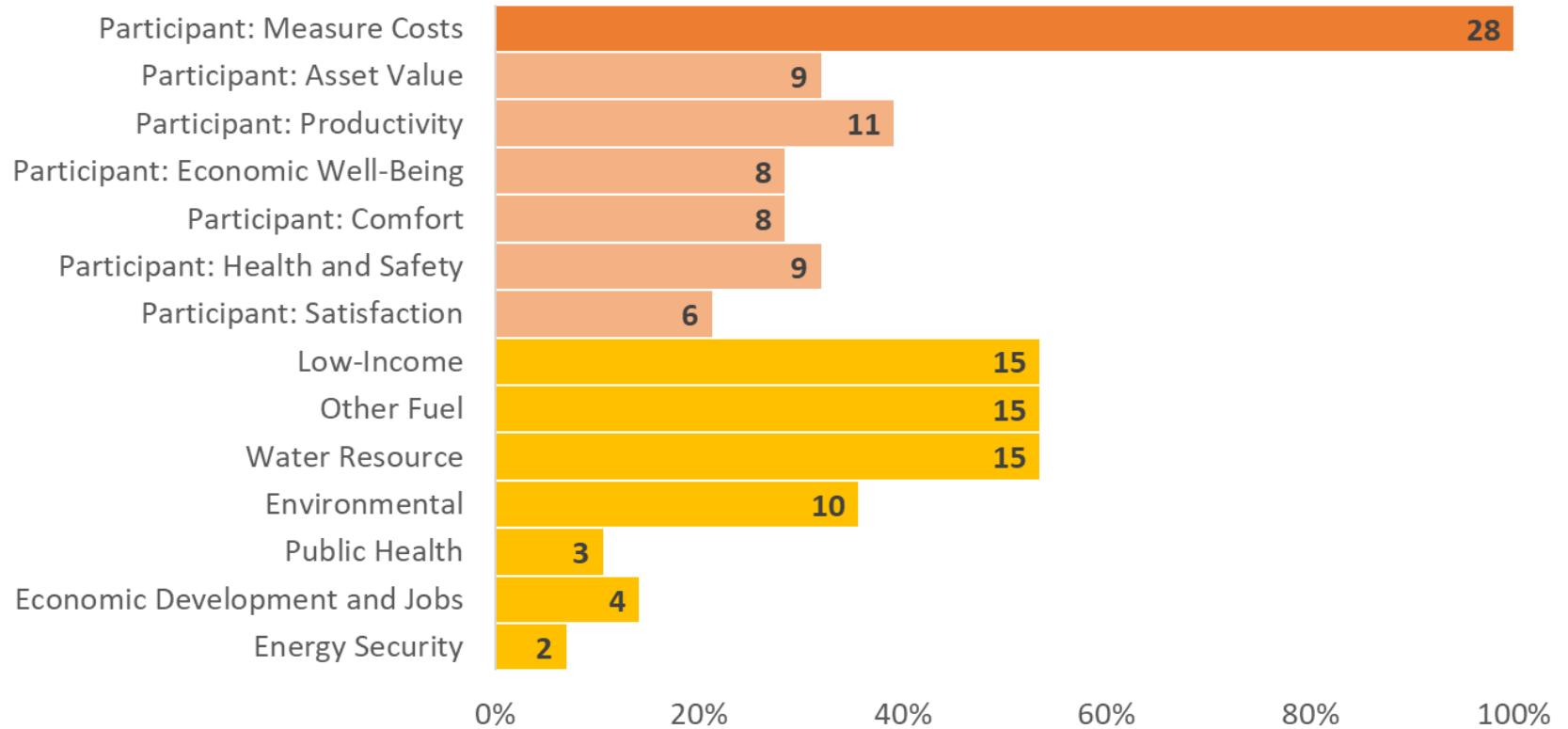
Utility system impacts represent the entire utility structure used to provide electric or gas service to retail customers.

# Utility System Benefits in 28 TRC States



Source: DSESP. DSESP is actively being updated with new information, so this figure is illustrative and may be updated soon.

# Non-Utility System Impacts in 28 TRC States

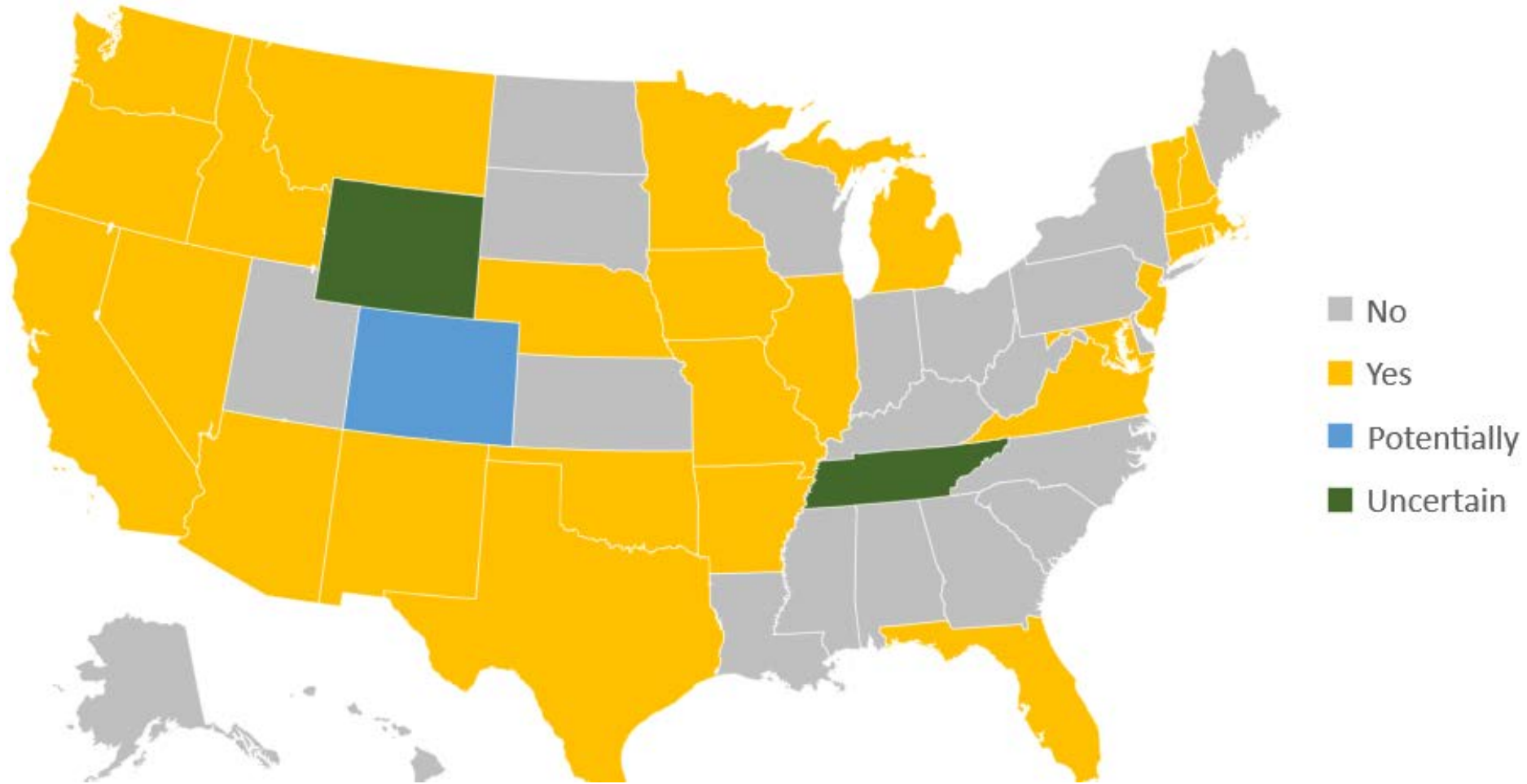


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Non-utility system impacts represent the costs and benefits that result from energy efficiency resources that are outside the utility structure.

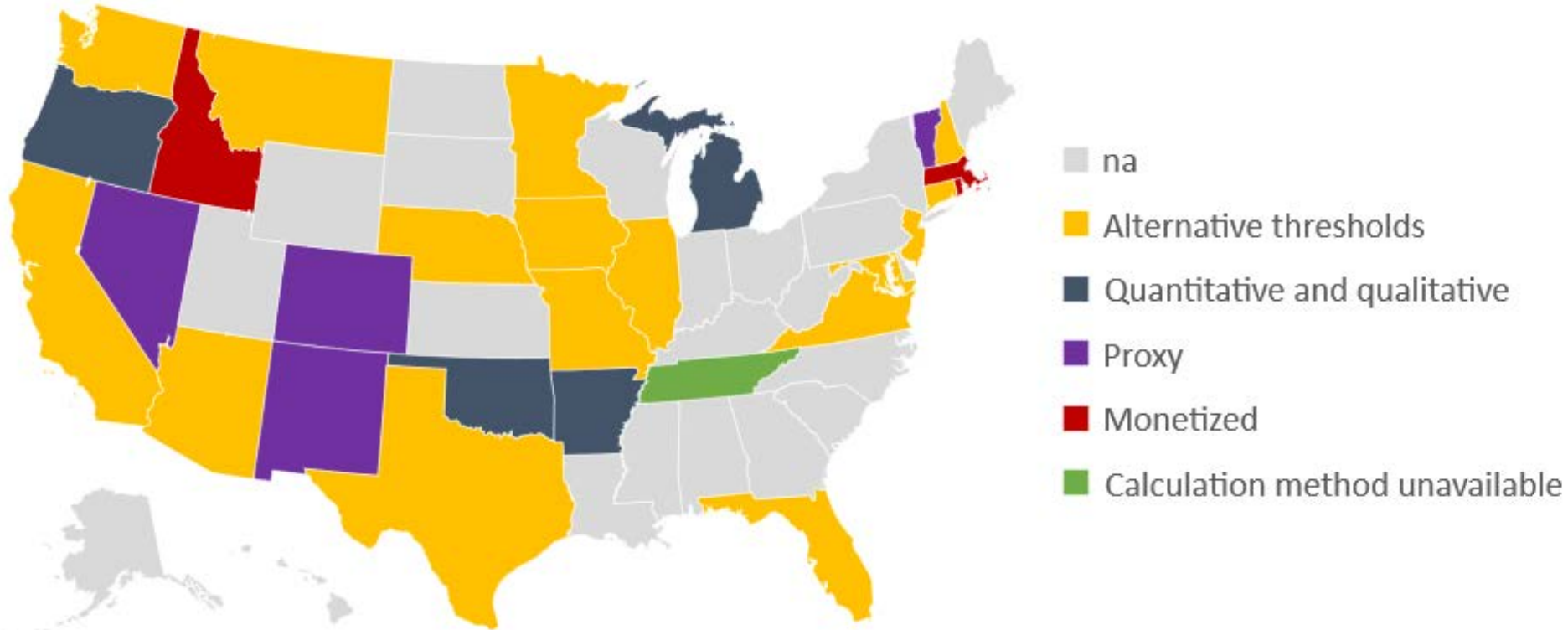


# Low-Income Customer Benefits in 51 Jurisdictions



Source: DSESP. DSESP is actively being updated with new information, so this figure is illustrative and may be updated soon.

# Calculating Low-Income Customer Benefits in 51 Jurisdictions



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# ACEEE Topic Brief

ACEEE TOPIC BRIEF  
JULY 2019



## A New Tool to Improve Energy Efficiency Practices

The Database of State Efficiency Screening Practices (DSESP)

**ACEEE**  
American Council for an Energy-Efficient Economy

- The types of information in the DSESP
- How states account for utility and non-utility impacts, with examples
- How key stakeholders can use the DSESP to improve cost-effectiveness policies, practices, and methodologies

# Key Takeaways

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## 1. DSESP exists

It's a tool from which users can learn other states' practices and readily access policies, processes, and studies

## 2. DSESP has a lot of information

The database provides in-depth information on a wide array of topics, including source documentation

## 3. DSESP will evolve

Keep checking back for new information, and please send us your feedback

# Thank you!

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For more information on NESP, NSPM, or DSESP visit

[www.nationalefficiencyscreening.org](http://www.nationalefficiencyscreening.org)

or email

[NSPM@nationalefficiencyscreening.org](mailto:NSPM@nationalefficiencyscreening.org)

# Synapse Energy Economics

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- Founded in 1996 by CEO Bruce Biewald
- Leader for public interest and government clients in providing rigorous analysis of the electric power sector
- Staff of 30 includes experts in energy and environmental economics and environmental compliance

# Appendix

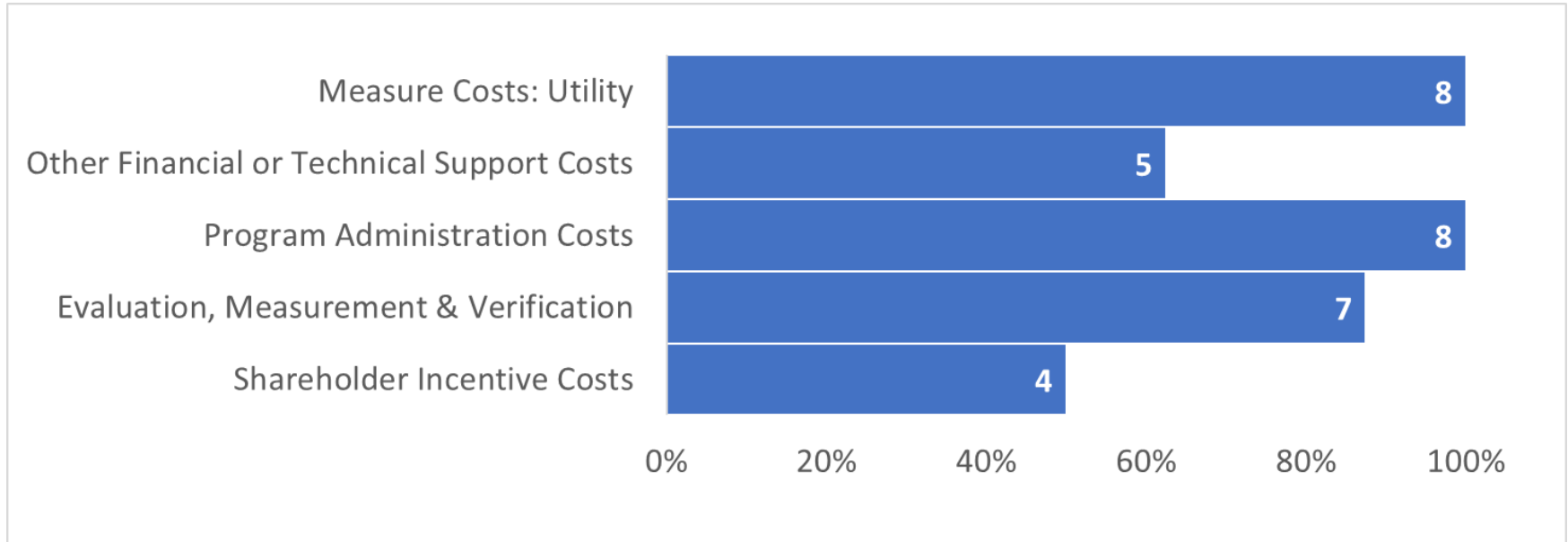
# NSPM's Universal Principles

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1. Recognize that energy efficiency is a **resource**.
2. Account for applicable **policy goals**.
3. Account for all relevant costs and benefits (based on applicable policies), even if **hard to quantify** impacts.
4. Ensure **symmetry** across all relevant costs and benefits.
5. Conduct a **forward-looking**, long-term analysis that captures incremental impacts of energy efficiency.
6. Ensure **transparency** in presenting the analysis and the results.

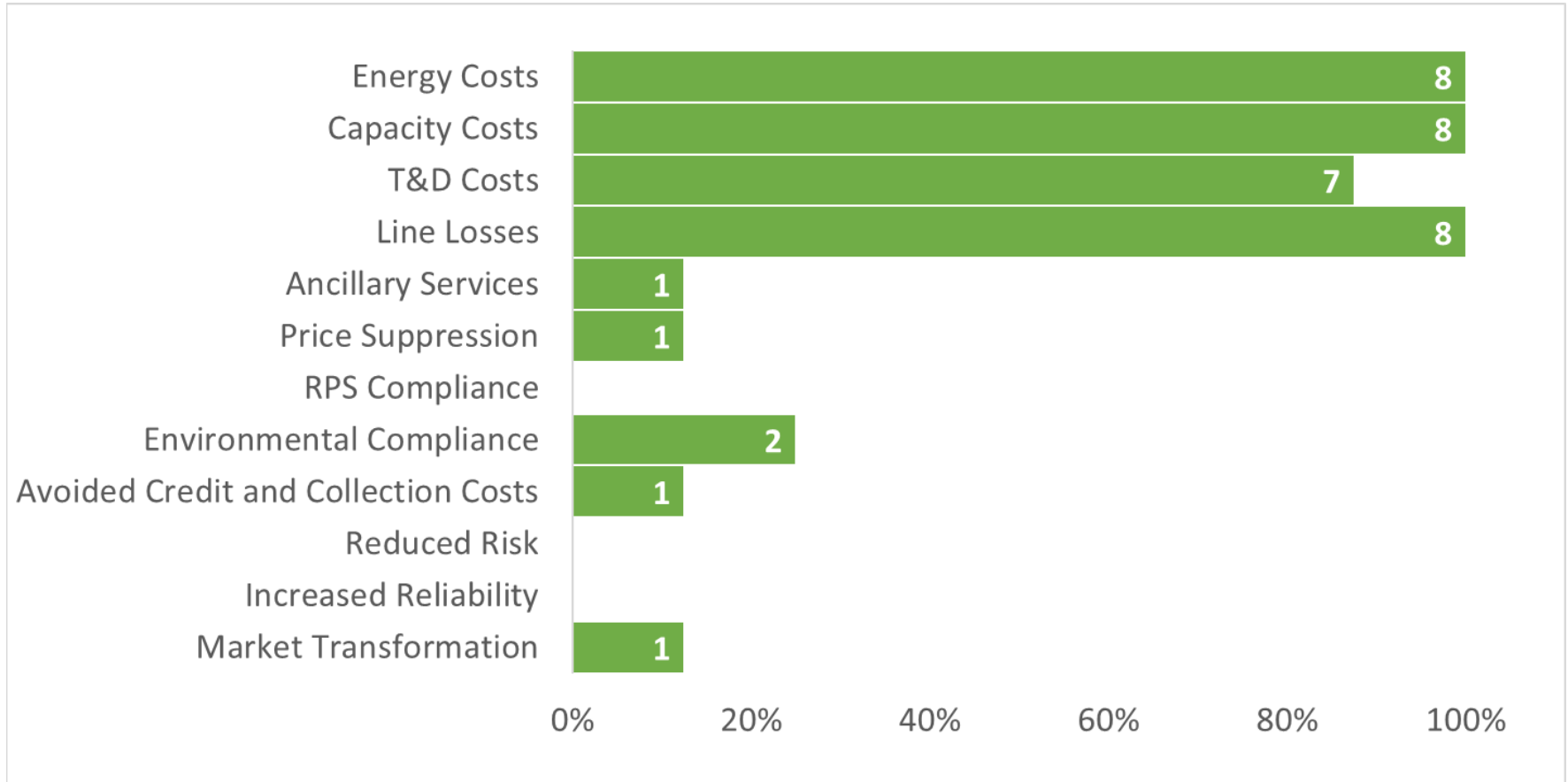


# Utility System Costs in 8 UCT States



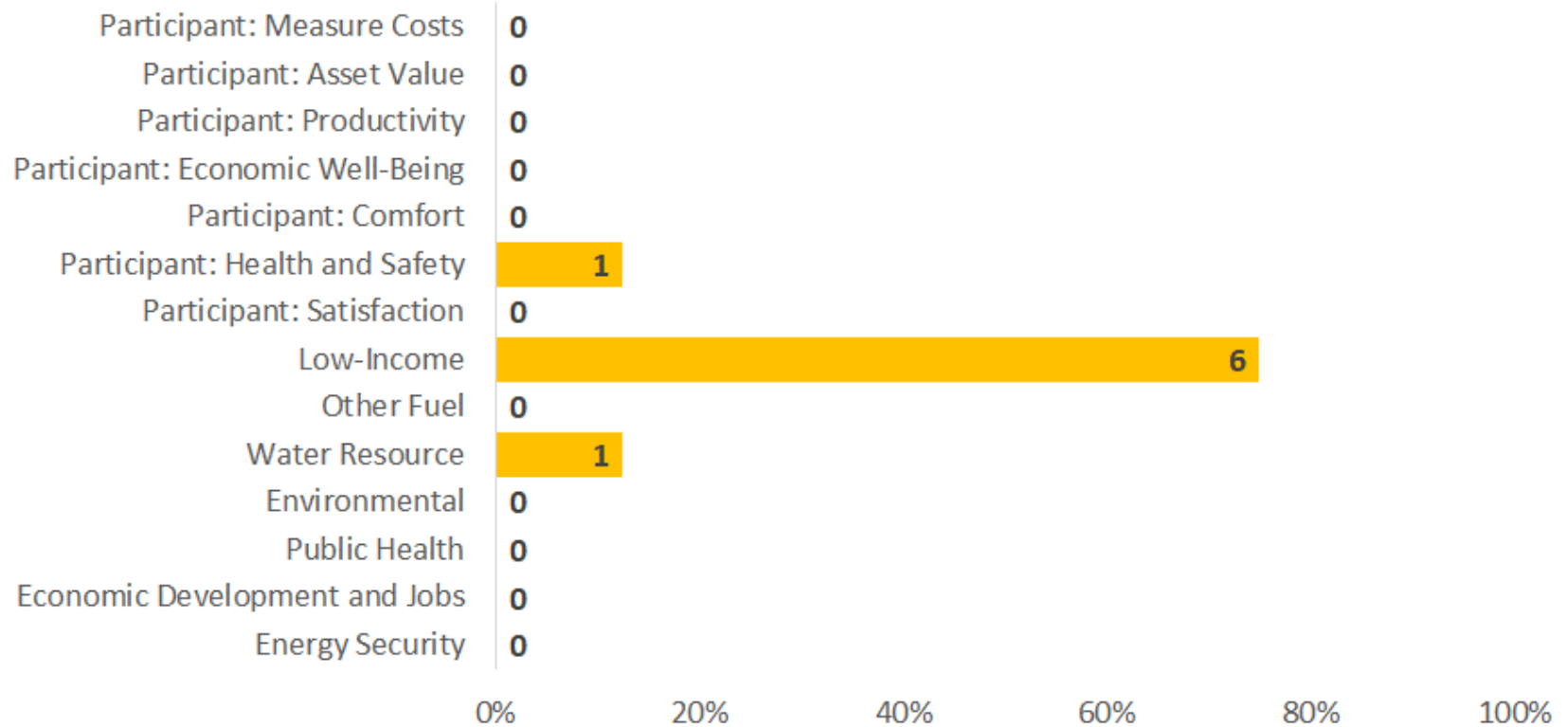
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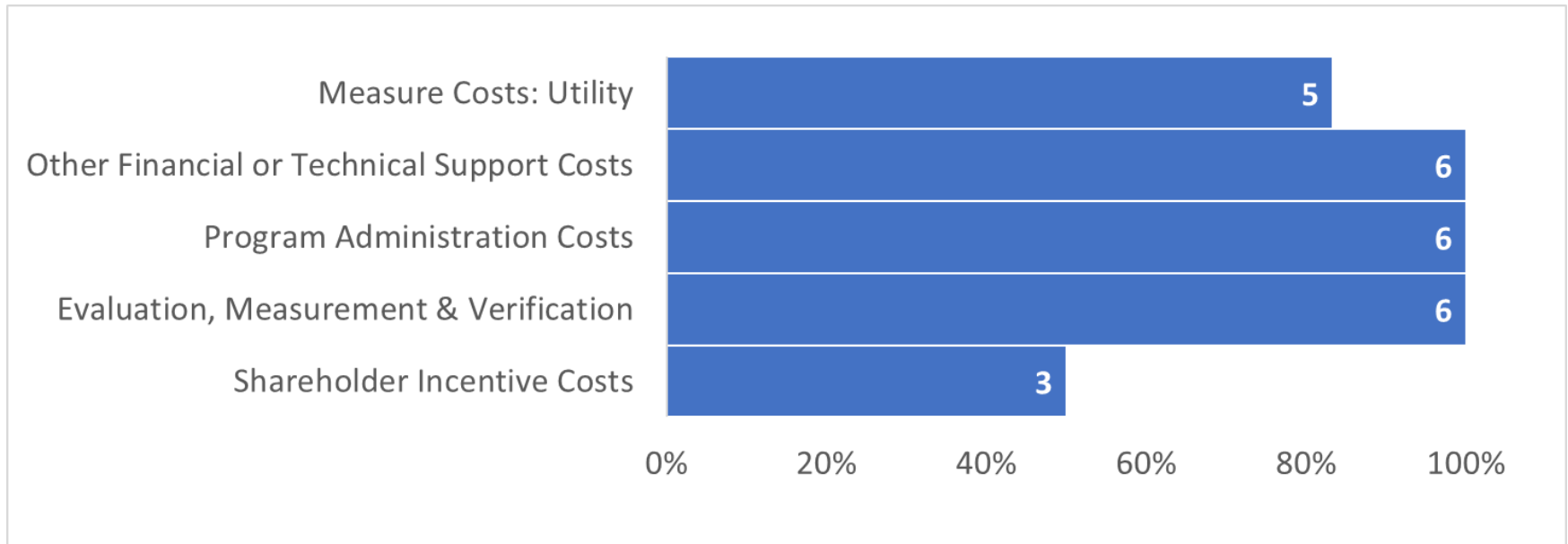
# Non-Utility System Impacts in 8 UCT States



*Note: includes states that use proxies, which primarily apply to participant impacts, and may not specify specific impacts.*

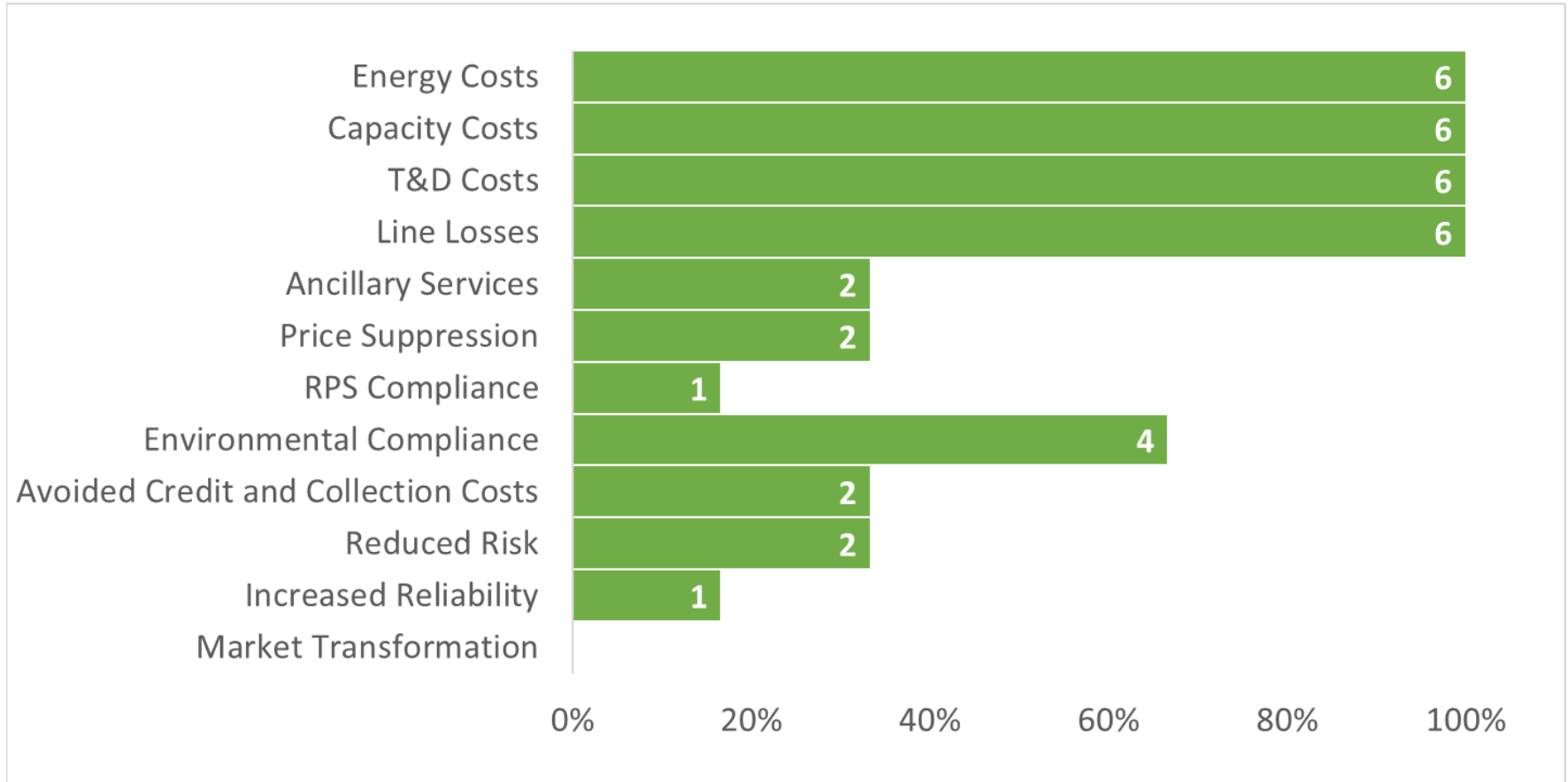
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# Utility System Costs in 6 SCT States



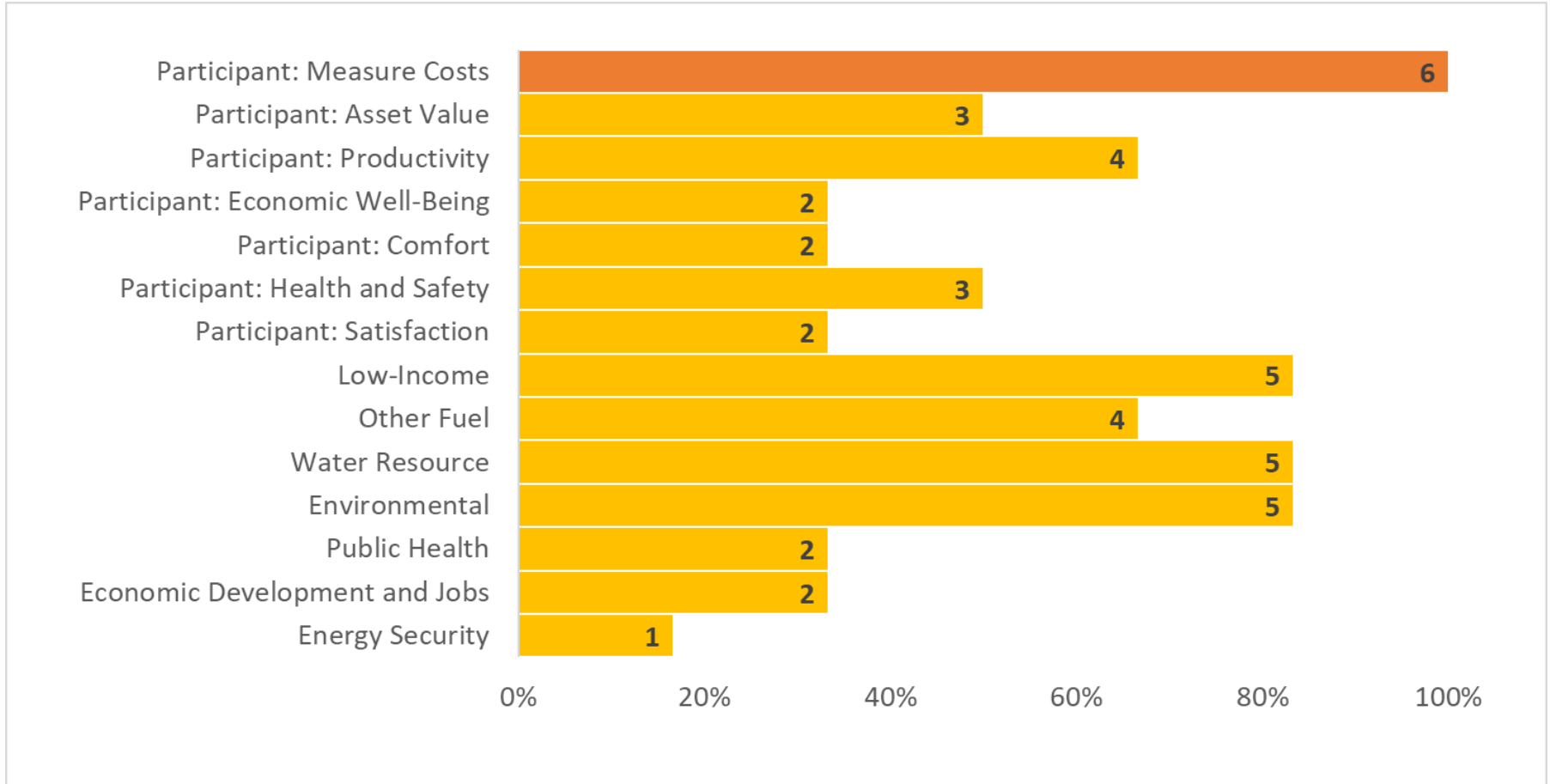
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# Utility System Benefits in 6 SCT States



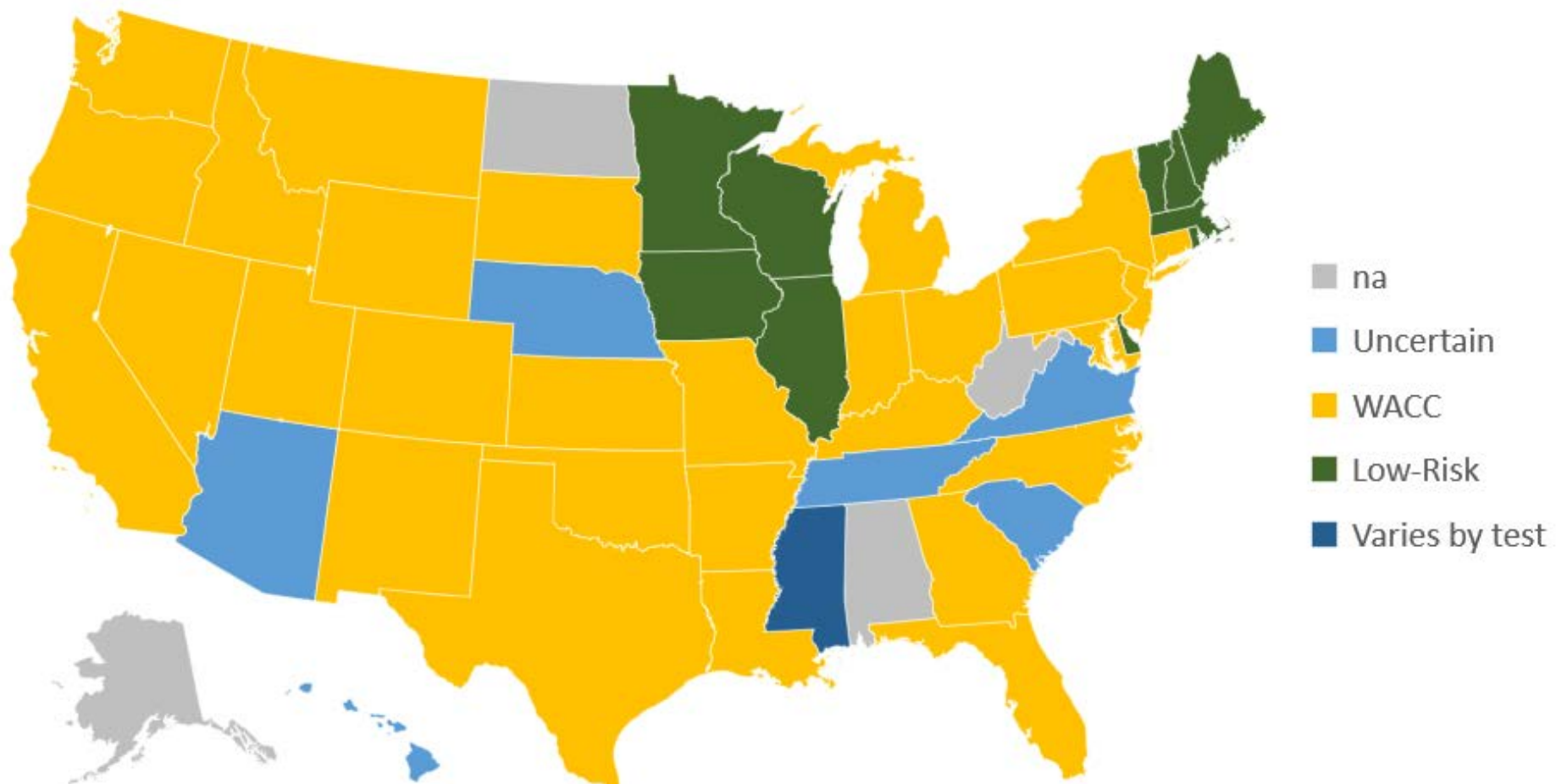
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# Non-Utility System Impacts in 6 SCT States



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# Discount Rate in States Primary Cost-Effectiveness Test



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