

## Distributional Equity Analysis Guidance Advisory Committee Meeting

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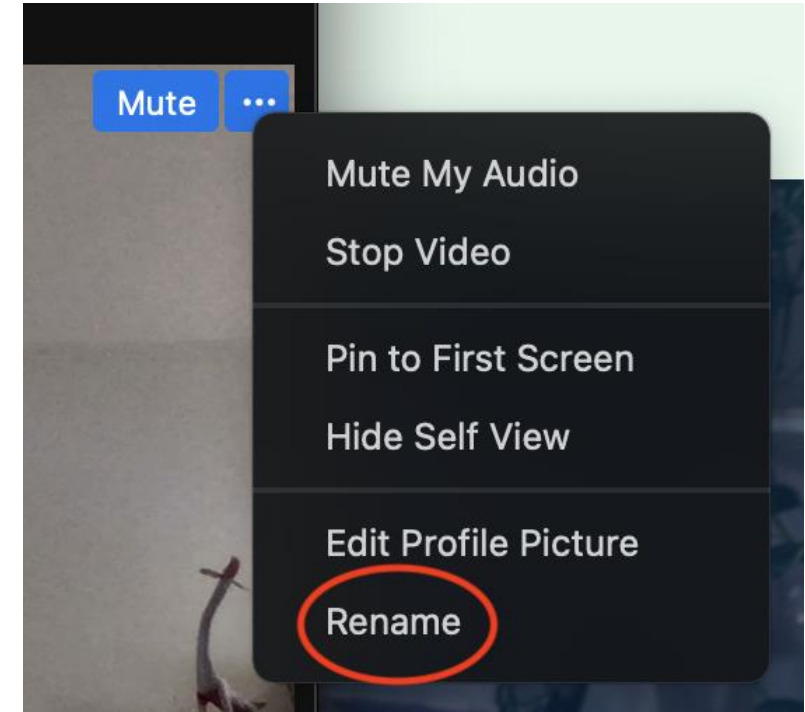
February 7, 2023

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Office under Contract No. DE-AC02-05CH11231 and E4TheFuture.*



# Housekeeping

- Add your affiliations and pronouns to your Zoom name – let's get to know each other!
- Please mute yourself when you are not speaking.
- If you have a comment or question, please raise your hand or use the chat.
- We will be recording the session to share with advisory committee members that could not attend this call.



# Agenda

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- Introductions and Advisory Committee role
- High-level outline update
- Overview of Advisory Committee comments received
- Project schedule and next steps



# Project Team

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## Berkeley Lab

- Project manager
- Contributor to guidance document



Natalie Mims Frick  
Program Manager



Lisa Schwartz  
Program  
Manager/  
Strategic Advisor

## E4TheFuture

- Lead for Advisory Committee
- Contributor to guidance document



Julie Michals  
Director



Natalie Fortman  
Project Manager

## Synapse

- Lead developer of guidance document



Tim Woolf  
Senior VP



Alice Napoleon  
Principal



# Advisory Committee – Thank you for participating!

Name	Affiliation	Name	Affiliation
Adam Zoet	Minnesota Department of Commerce	Jennifer Yoshimora	Pacific Northwest National Laboratory
Amanda Best	Maryland Public Service Commission	Jennifer Snyder	Washington Utilities and Transportation Commission
Amanda Dewey	American Council for an Energy-Efficient Economy	Jeremy Peterson	Excel Energy
Ankit Jain	California Public Utilities Commission	John Howat	National Consumer Law Center
Anne Dougherty	Illume Advising	Justin Schott	Energy Equity Project
Aubrey Newton	Northwest LECET   NW Cooperation Fund	Kate Strickland	Smart Electric Power Alliance
Bethel Tarekegne	Pacific Northwest National Laboratory	Kelly Crandall	Colorado Public Utilities Commission
Brad Banks	Michigan Public Service Commission	Kelsey Jones	National Association of State Energy Officials
Brian Tyson	Puget Sound Energy	Logan Atkinson Burke	Alliance for Affordable Energy
Briana Parker	Elevate Energy	Liz Doris	US Dept of Energy, Office of Economic Impact and Diversity
Burcin Unel	Institute for Policy Integrity	Marguerite Behringer	Landis & Gyr
Cassandra Kubes	US Environmental Protection Agency	Mary Sprayregen	Oracle
Chandra Farley	City of Atlanta	Mohit Chhabra	Natural Resources Defense Council
Chris Coll	NY State Energy Research and Development Authority	Natalia Cardona Sanchez	Vote Solar
Danielle Sass-Byrnett	National Association of Regulatory Utility Commissioners	Nancy Seidman	Regulatory Assistance Project
Danilo Morales	Massachusetts Department of Energy Resources	Patrick Cicero	Pennsylvania Office of Consumer Advocate
Debra Gore-Mann	Greenlining Institute	Sarah Moskovitz	Illinois Citizen's Utility Board
Divesh Gupta	Baltimore Gas and Electric	Sonja Berdahl	National Renewable Energy Laboratory
Dylan Voorhees	Vermont Energy Investment Corporation	Steve Schiller	Consultant
Elaine Prause	Regulatory Assistance Project	Subin DeVar	Initiative for Energy Justice
Erin Cosgrove	Northeast Energy Efficiency Partnership	Theresa Schmidt	Consumers Energy
Ezell Watson	Oregon Public Utility Commission	Wally Nixon	Arkansas Public Service Commission
Gregory Ehrendreich	Midwest Energy Efficiency Alliance	Will Bryan	Southeast Energy Efficiency Alliance
Jean Su	Center for Biological Diversity		

# Advisory Committee Role

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- Provide input on the DEA guidance outline and review draft guidance materials
- Meet 2-3 times over the course of the year to review draft and final materials
  - Subgroups will be formed to focus on review of selected chapters/sections
- Help spread word/disseminate final guidance document (Fall 2023)
- Materials from Advisory Committee meetings are available [here](https://emp.lbl.gov/publications/distributional-equity-analysis)  
<https://emp.lbl.gov/publications/distributional-equity-analysis>



## DEA Guidance – Overview

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- A practical how-to guide on conducting DEAs in combination with BCAs to inform decision making for utility DER investments.
- Key users/audience includes a variety of practitioners: utilities, public utility commissions, state energy offices, utility consumer advocates, equity advocates, consultants, and others.
- Will build on existing equity initiatives and research.



# DEA Guidance – High-Level Outline Revised

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Executive Summary

Glossary

1. Introduction
2. **\*NEW\*** Stakeholder Input to DEA Process
3. Role of BCA and DEA
4. Target Populations **(or alternative term)**
5. Distributional Equity Metrics
6. Conducting a DEA
7. Using DEA and BCA for Decision-Making
8. Case Study
9. Appendices on Selected Metrics





## Comments by Advisory Committee



# Advisory Committee Comments

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- ▣ Chapter 1. Introduction
  - Purpose
    - Which jurisdictions will the Guidance cover?
    - Which populations (rate classes, customers vs. non-customers) will the Guidance include?
    - Which types of resources will the Guidance cover?
    - Which types of energy decisions will the Guidance consider?
  - Audience
    - Who is the primary audience for the Guidance?
  - Terminology clarifications and modifications



# Advisory Committee Comments (cont.)

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- ▣ \*NEW\* Chapter 2. Stakeholder Input
  - Importance of stakeholder engagement from target/priority community/population
    - Before – Middle – After (ensure transparency and accountability):
      - Input to DEA parameters and metrics
      - Engagement during DEA, data collection
      - Understanding of DEA results
  
- ▣ \*Existing\* Chapter 2. The Role of BCA and DEA
  - Overview of traditional BCA, rate, bill, and participation concepts



# Advisory Committee Comments (cont.)

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- \*Existing\* Chapter 3. Target Populations
  - Terminology clarifications and modifications
  - Defining the target population
    - Will the Guidance define target populations as geographically distinct groups, individuals with impacts seen at the population level, or both?
    - How will the Guidance cover race?



# Advisory Committee Comments (cont.)

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- \*Existing\* Chapter 4. Distributional Equity Metrics
  - Metrics
    - Will the Guidance recommend specific metrics?
    - Will the Guidance address cumulative impacts?
  - Data Collection
    - How can qualitative information be included?
    - Will the Guidance address how to collect sensitive data?



## Advisory Committee Comments (cont.)

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- \*Existing\* Chapter 5. Conducting a Distributional Equity Analysis
  - Process
    - Who will conduct the DEA?
    - Under what circumstances should a DEA be conducted?
- \*Existing\* Chapter 6. Using DEA and BCA for Decision-Making
  - Parameters for decision-making
    - Will the Guidance address the granularity of the analysis and level at which decisions be made?
    - Will the Guidance describe goal-setting?
  - Stakeholder input – now addressed in a new Chapter 2



## Advisory Committee Comments (cont.)

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- ▣ \*Existing\* Chapter 7. Case Study: Washington State
  - Clean Energy Transformation Act (CETA) requires that all customers are benefiting from the transition to clean energy, through the equitable distribution of
    - energy and nonenergy benefits and reduction of burdens to vulnerable populations and highly impacted communities;
    - long-term and short-term public health and environmental benefits and reduction of costs and risks;
    - and energy security and resiliency
  - Pursuant to CETA, Washington State has already made a lot of progress on equity, including establishing metrics and identifying target populations.
  - The project team will provide the WA UTC with a training on DEAs in a month or so, and then a more detailed training in the summer when we will attempt to implement a DEA using actual data.



# Schedule and Next Steps (Updated 2-13-23)

<b>DEA Guidance Project Schedule</b>	<b>Dates (2023)</b>
Develop outline of DEA guidance	Jan to mid-Feb
Advisory Committee call on draft outline	Early Feb
Project team conducts DEA research	Jan to late March
Partial draft DEA guidance (e.g. Ch. 1-5) to Advisory Committee	End of April
Advisory Committee call on partial draft	Mid-May
Full draft DEA guidance to Advisory Committee	Mid-July
Advisory Committee call on full draft	Early to mid-Aug
Issue final DEA Guidance	September 30*

\* Subject to DOE approval of report





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**Thank you!**



## Contacts

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**Synapse:** Tim Woolf ([twoolf@synapse-energy.com](mailto:twoolf@synapse-energy.com)), Alice Napoleon ([anapoleon@synapse-energy.com](mailto:anapoleon@synapse-energy.com))

## For more information (Berkeley Lab and NESP)

**Download** publications from the Electricity Markets & Policy: <https://emp.lbl.gov/publications>

**Sign up** for LBL email list: <https://emp.lbl.gov/mailling-list>

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## Acknowledgements

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# DEA Project Team - Berkeley Lab

- Berkeley Lab's Electricity Markets and Policy Department is managing this project. We inform public and private decision making within the U.S. electricity sector through independent, interdisciplinary analysis of critical electricity policy and market issues. We envision a clean, efficient, reliable, and affordable electricity system that meets the United States' diverse and growing energy needs. This project builds on a strong analytical foundation on [energy efficiency and DERs](#).
- Relevant equity work includes:
  - [Advancing Equity in Utility Regulation](#)
  - [Characterizing local rooftop solar adoption inequity in the US](#)
  - [National Community Solar Partnership](#)
  - [An Assessment of Evaluation Practices of Low- And Moderate-Income Solar Programs](#)
  - [Energy Efficiency Financing for Low- and Moderate-Income Households](#)
  - [Customer outcomes in Pay-As-You-Save programs](#)
  - [Who is participating in residential energy efficiency programs?](#)
  - [Deferred Payment Loans for Energy Efficiency](#)



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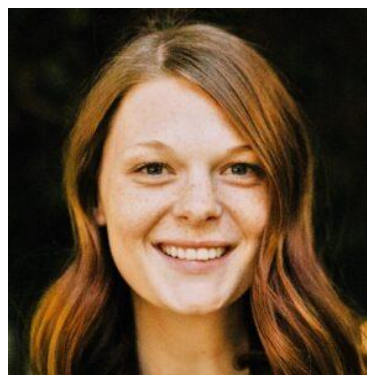


# DEA Project Team – E4TheFuture

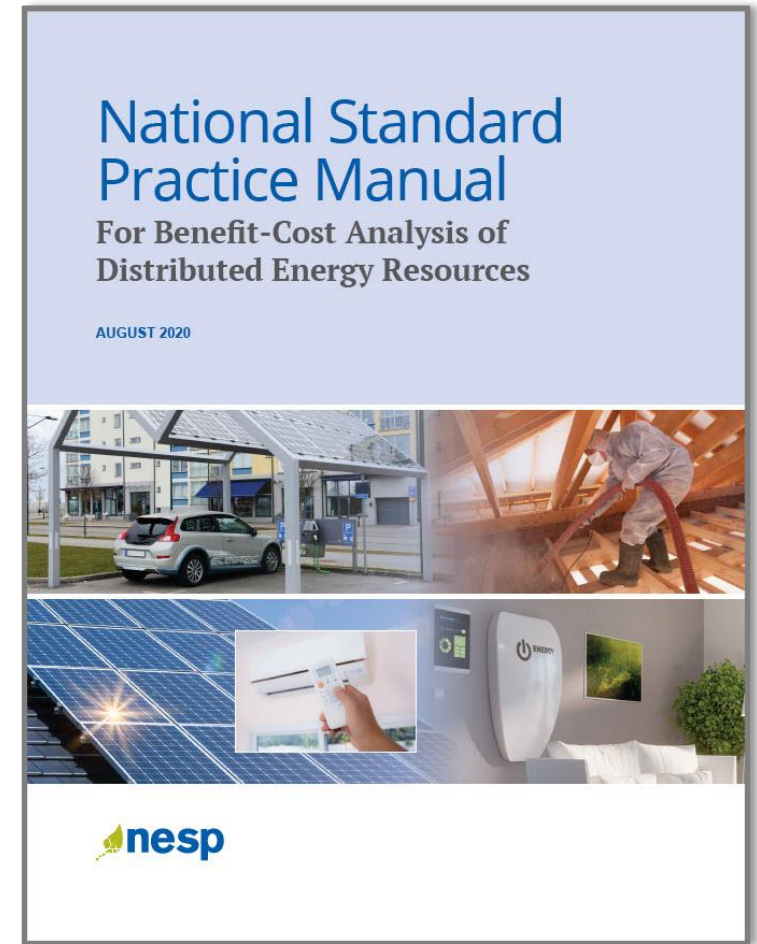
- E4TheFuture – manages and coordinates the National Energy Screening Project, a stakeholder organization that works to improve cost-effectiveness screening practices for distributed energy resources (DERs).
- Key products to date:
  - [National Standard Practice Manual for DERs](#)
  - [Methods, Tools and Resources Handbook for Quantifying DER Impacts for Benefit-Cost Analysis](#)
  - [Database of Screening Practices](#)



Julie Michals  
Director Valuation



Natalie Fortman  
Project Manager



# DEA Project Team – Synapse Energy Economics

- Synapse Energy Economics
  - ▣ Founded in 1996 by CEO Bruce Biewald
  - ▣ Leader for public interest and government clients in providing rigorous analysis of the electric power and natural gas sectors
  - ▣ Staff of 40+ includes experts in energy, economic, and environmental topics
- Tim Woolf
  - ▣ Senior Vice President, Synapse Energy Economics
  - ▣ Lead author of National Screening Practice Manual and companion documents
- Alice Napoleon
  - ▣ Principal, Synapse Energy Economics
  - ▣ In charge of Synapse equity initiatives
- Synapse is committed to providing meaningful data and analysis to support important dialogue and efforts towards an equitable distribution of energy system benefits and burdens.



Tim Woolf  
Senior VP



Alice Napoleon  
Principal



## What is Distributional Equity Analysis?



## Energy Equity

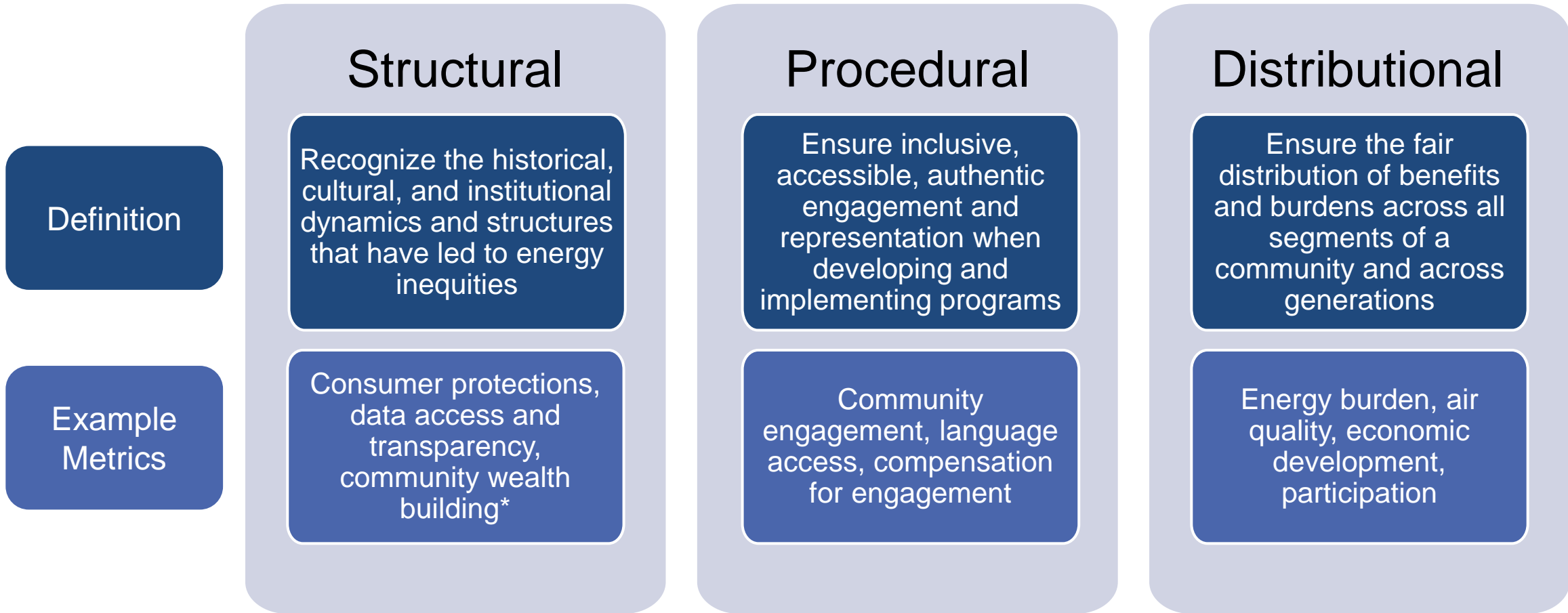
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An equitable energy system is one where the economic, health, and social benefits of participation extend to all levels of society, regardless of ability, race, or socioeconomic status. ***Achieving energy equity requires intentionally designing systems, technology, procedures, and policies that lead to the fair and just distribution of benefits in the energy system.***

PNNL 2021- <https://www.pnnl.gov/projects/energy-equity>







- Many structural/recognition metrics, like building community wealth, don't necessarily intersect with a regulatory process.

Adapted from ACEEE's [Leading with Equity White Paper](#)



# Comprehensive Decision-Making Framework for DER Investments =

## Benefit-Cost Analysis

Compares costs and benefits to all customers on average

Typical Metrics:

- Costs
- Benefits
- Net benefits
- Benefit-cost ratio

+

## Distributional Equity Analysis

Compares impacts on target populations relative to other customers

Typical Metrics:

- Rate impacts
- Bill impacts
- Participation rates
- Energy burden
- Reliability
- Resilience
- Public health
- Other

