



Utility Transformation Challenge

Accelerating Transformation

Regulatory and Business Innovation | Grid Integration | Electrification

Mission

To accelerate the transformation to a carbon-free energy system through actionable solutions

Vision

A carbon-free energy system that is safe, affordable, reliable, resilient and equitable

Who Are We?



A membership organization



Staff of ~50



No Advocacy – 501c3



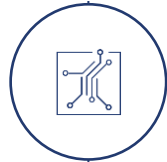
Founded in 1992



Unbiased



**Research, Education,
Collaboration
and Standards**



Technology Agnostic



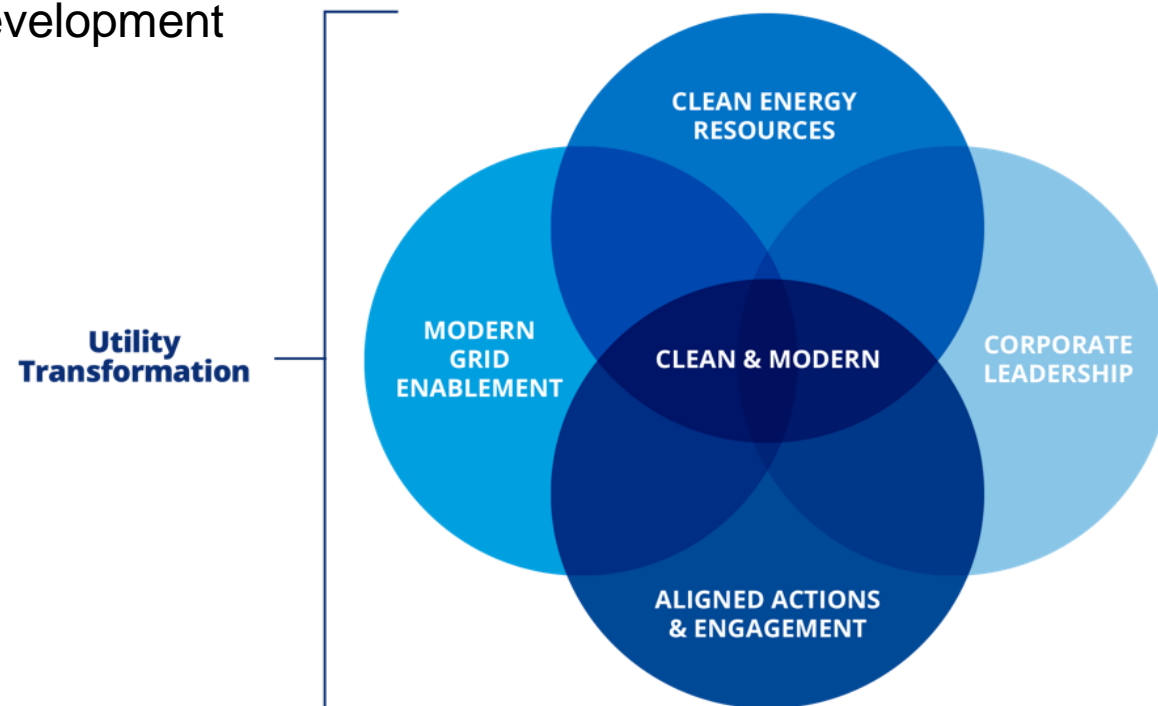
**Local, State and
National Focus**



Utility Transformation Challenge: Overview

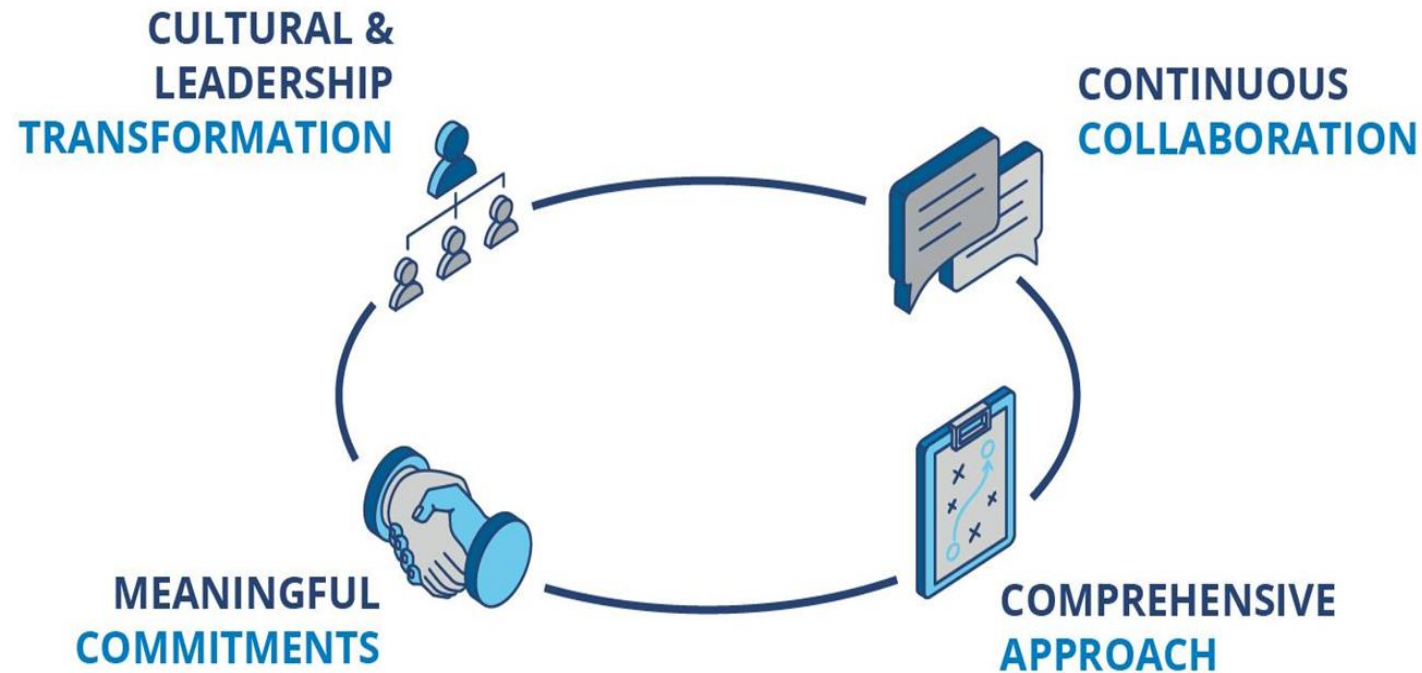
An comprehensive assessment of U.S. utility progress towards a carbon-free system.

- survey of +130 electric distribution utilities
- covering 63% of customer accounts
- addresses multiple dimensions of transformation
- identified leading utilities
- published in April 2021
- version 2.0 currently in development



Source: Smart Electric Power Alliance, 2021

Utility Transformation Challenge: Insights



Utility Transformation Challenge: Recommendations



STRENGTHEN CARBON REDUCTION COMMITMENTS by setting science-based goals backed by detailed plans.



ENGAGE customers, technology partners, peer utilities and regulators early and often.



ADDRESS TRANSFORMATION COMPREHENSIVELY across the organization.



INTEGRATE EQUITY to ensure all community members can participate.



EMBRACE CLEAN ENERGY as a core element of utility mission and culture.

Utility Carbon Reduction

A brief history:

In 2005, Seattle City Light becomes the first utility in the country to achieve a “100% target” - “net-zero GHG emissions”.

In December 2018, Xcel energy becomes the first publicly traded utility company to announce a carbon-free target, “a 100% carbon-free electricity system by 2050.”

In February 2020:

- 48 utilities in the U.S. had publicly announced voluntary carbon reduction target.
- 19 utilities had goals of carbon-free or net-zero by 2050.
- 68% of U.S. customer accounts in the US were served by a utility with a voluntary carbon-reduction goal.

As of April 2022:

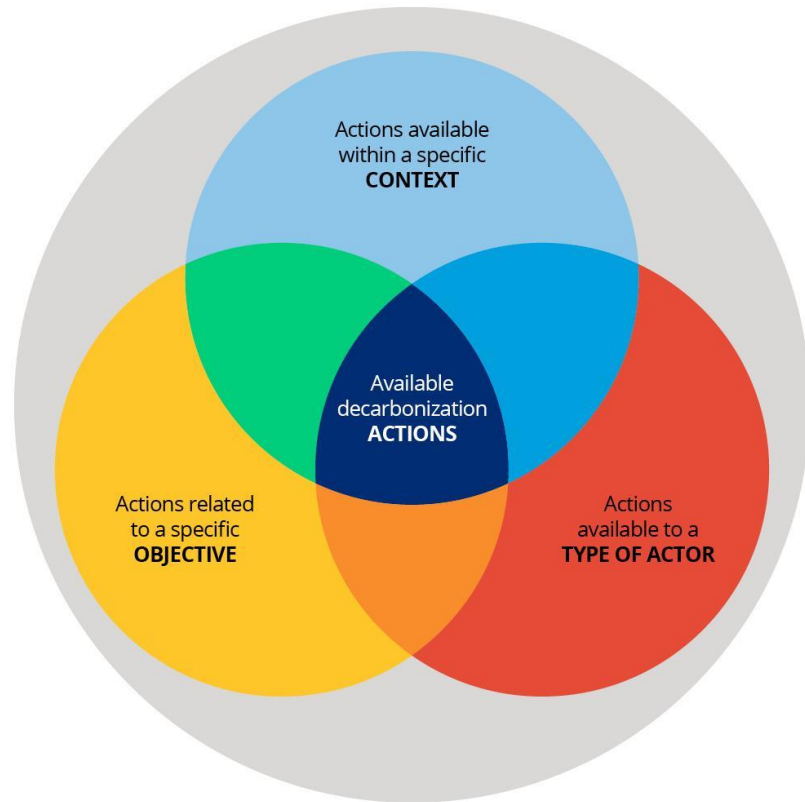
- 67 individual utilities and utility parent companies have voluntary carbon-reduction targets.
- 53 individual utilities and utility parent companies have voluntary 100% carbon-reduction targets.
- 81% of U.S. customer accounts are served by an individual utility with a carbon-reduction target, or a utility owned by a parent company with a carbon-reduction target (also includes utilities with mandatory targets.)

SEPA’s Utility Carbon Reduction Tracker:

<https://sepapower.org/utility-transformation-challenge/utility-carbon-reduction-tracker/>

SEPA's Tiers of Decarbonization: Customer Driven Carbon Reduction

**Figure 1: Identifying Available
Decarbonization Actions**



SEPA's Tiers of Decarbonization:

<https://sepapower.org/resource/tiers-of-electricity-decarbonization/>