

Utility Transformation Challenge

November 2021



Clean + Modern Grid

Regulatory and Business Innovation | Grid Integration | Electrification

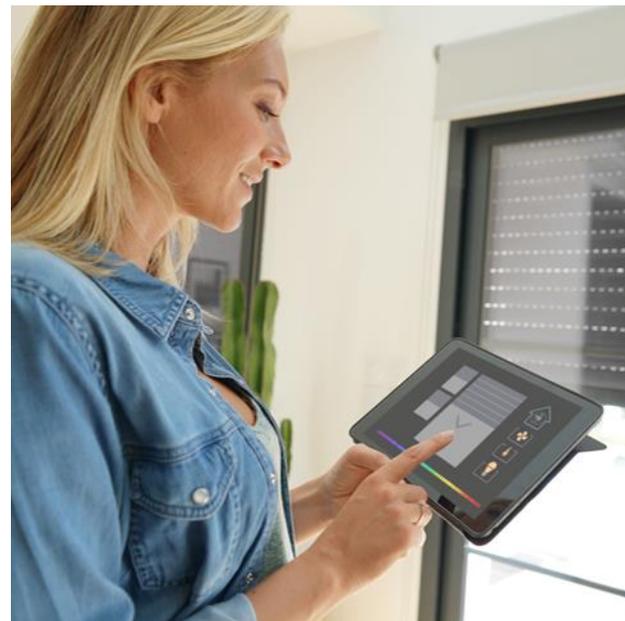
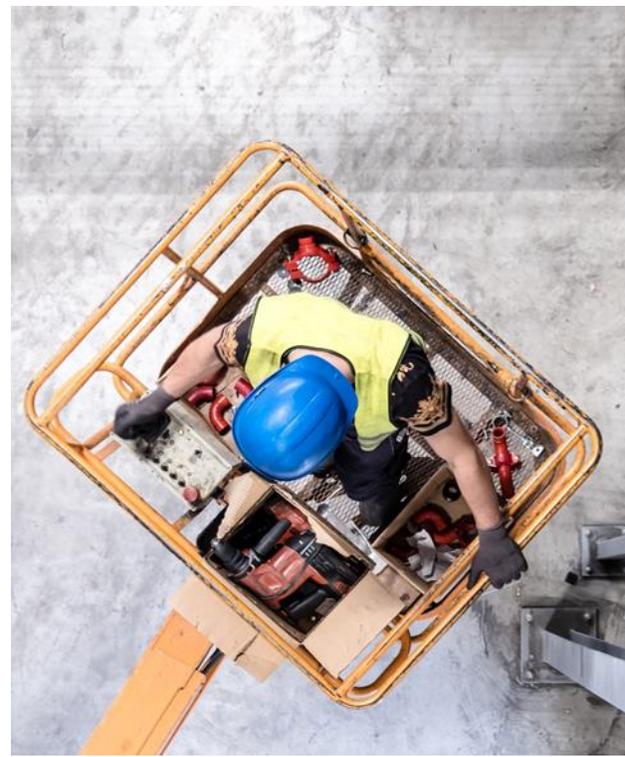
Vision

A carbon-free energy system by 2050

Mission

To facilitate the electric power industry's **smart transition** to a clean and modern energy future.

Who Are We?



A membership organization



Founded in 1992

Staff of ~ 50



Research, Education, Collaboration & Standards

Based in Washington, D.C.



Unbiased

No Advocacy – 501c3



Technology Agnostic



>1,160
Total Members

Membership

SEPA is an **alliance** of over 1,160 members made up of utilities, technology solution providers, regulators, and other stakeholders.



74%
of MWh sold

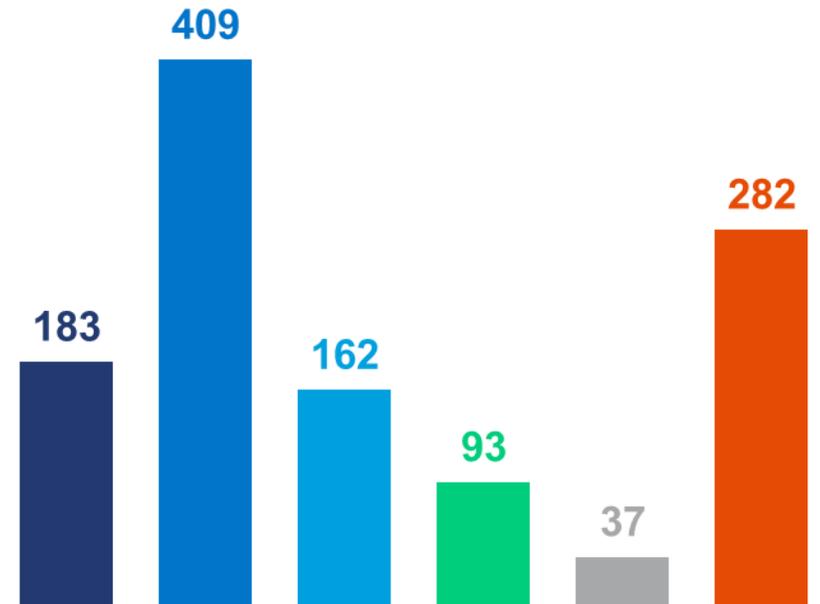


80%
of utilities with
carbon-free or net-zero
emissions goals



72%
of utility commissions

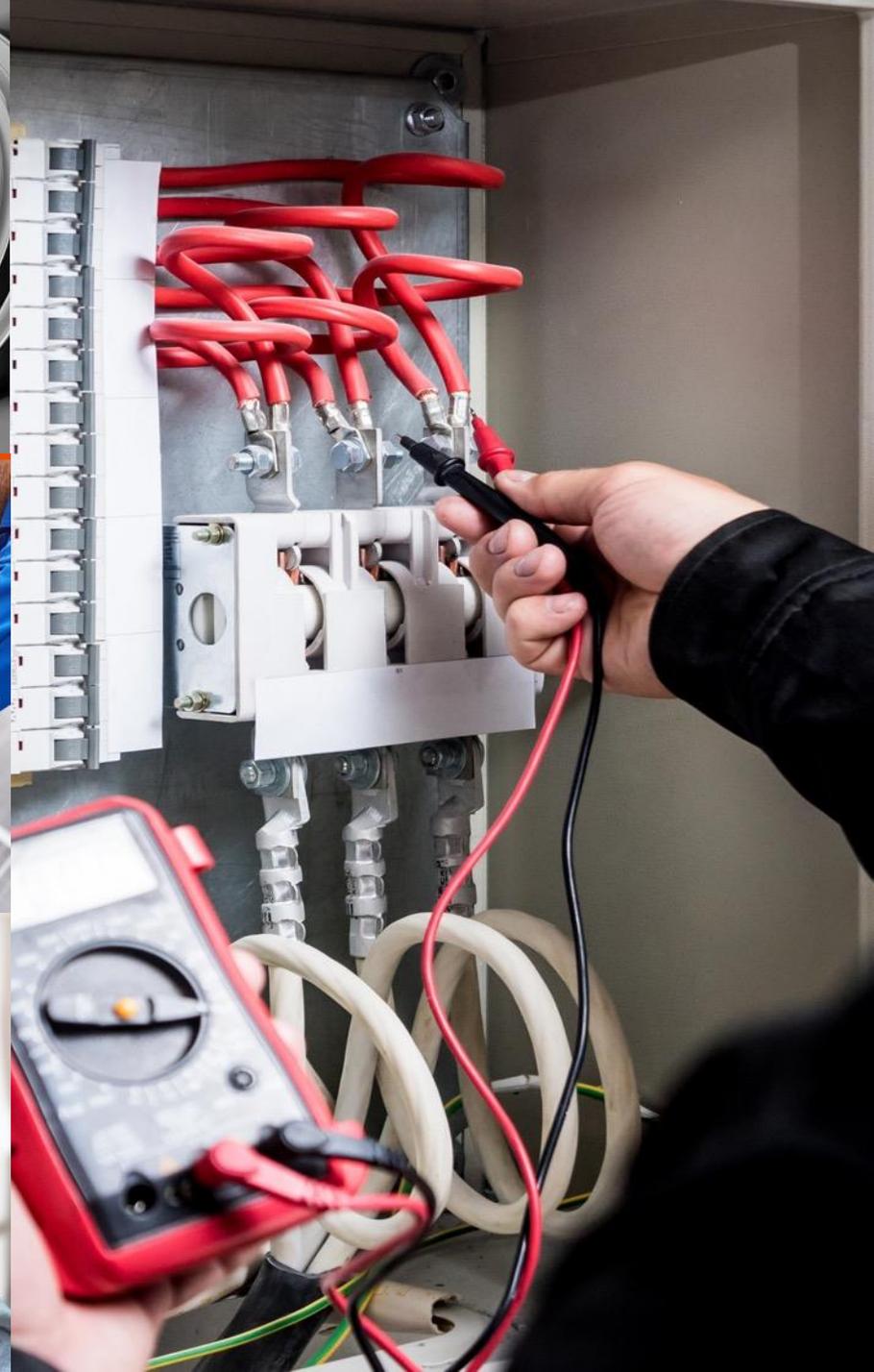
- Government/Non-profit/Education
- Public Power Utilities
- Cooperative Utilities
- Investor Owned Utilities
- Other Utilities
- Corporations



What is the Utility Transformation Challenge?

An honest, comprehensive assessment of U.S. electric utility progress towards a modern, carbon-free system.

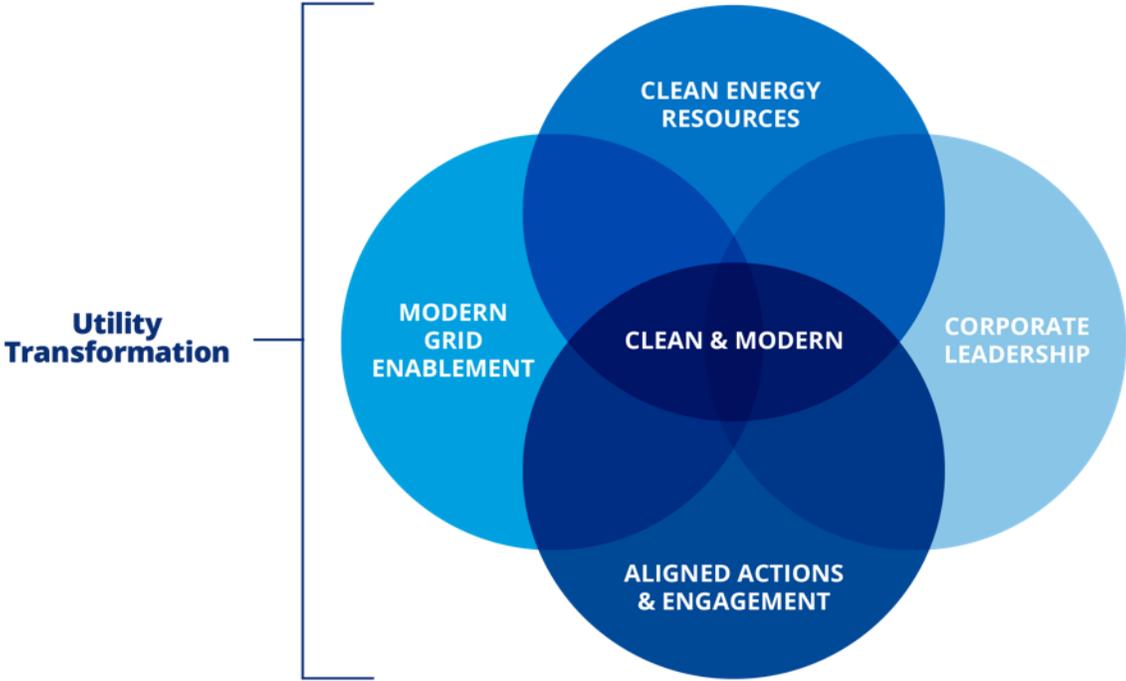
- survey of 130+ utilities
- covering 63% of customer accounts
- addresses multiple dimensions of transformation
- leading utilities identified



The Analysis

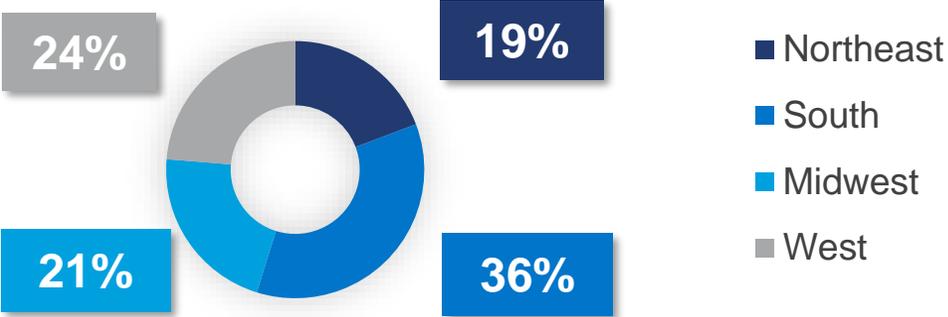


Results are based on a diverse group of utilities across four dimensions of utility transformation.

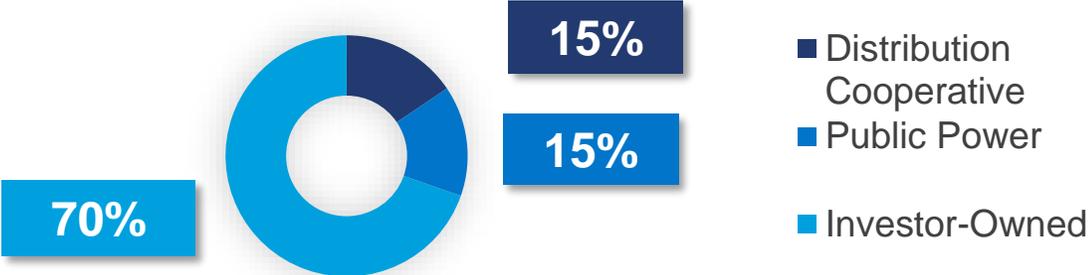


Source: Smart Electric Power Alliance, 2021

Regional Breakdown

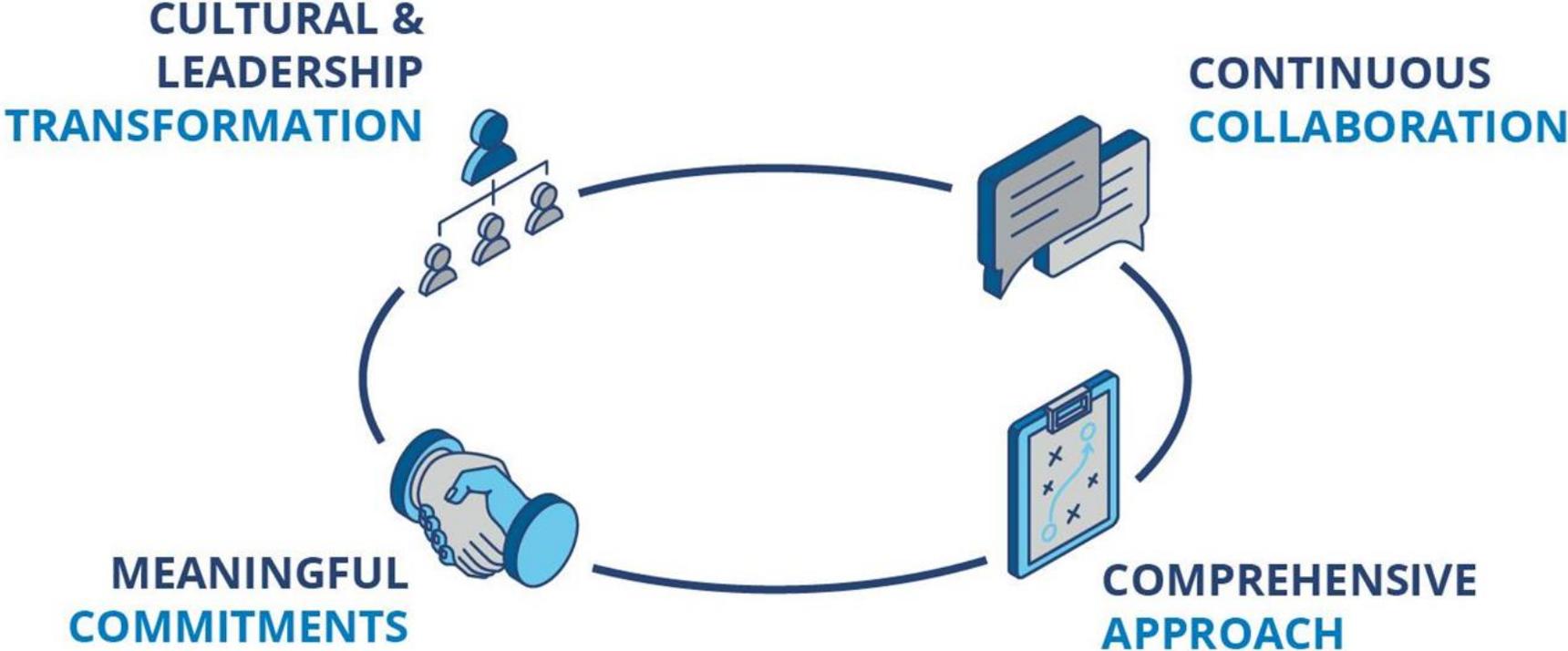


Utility Type



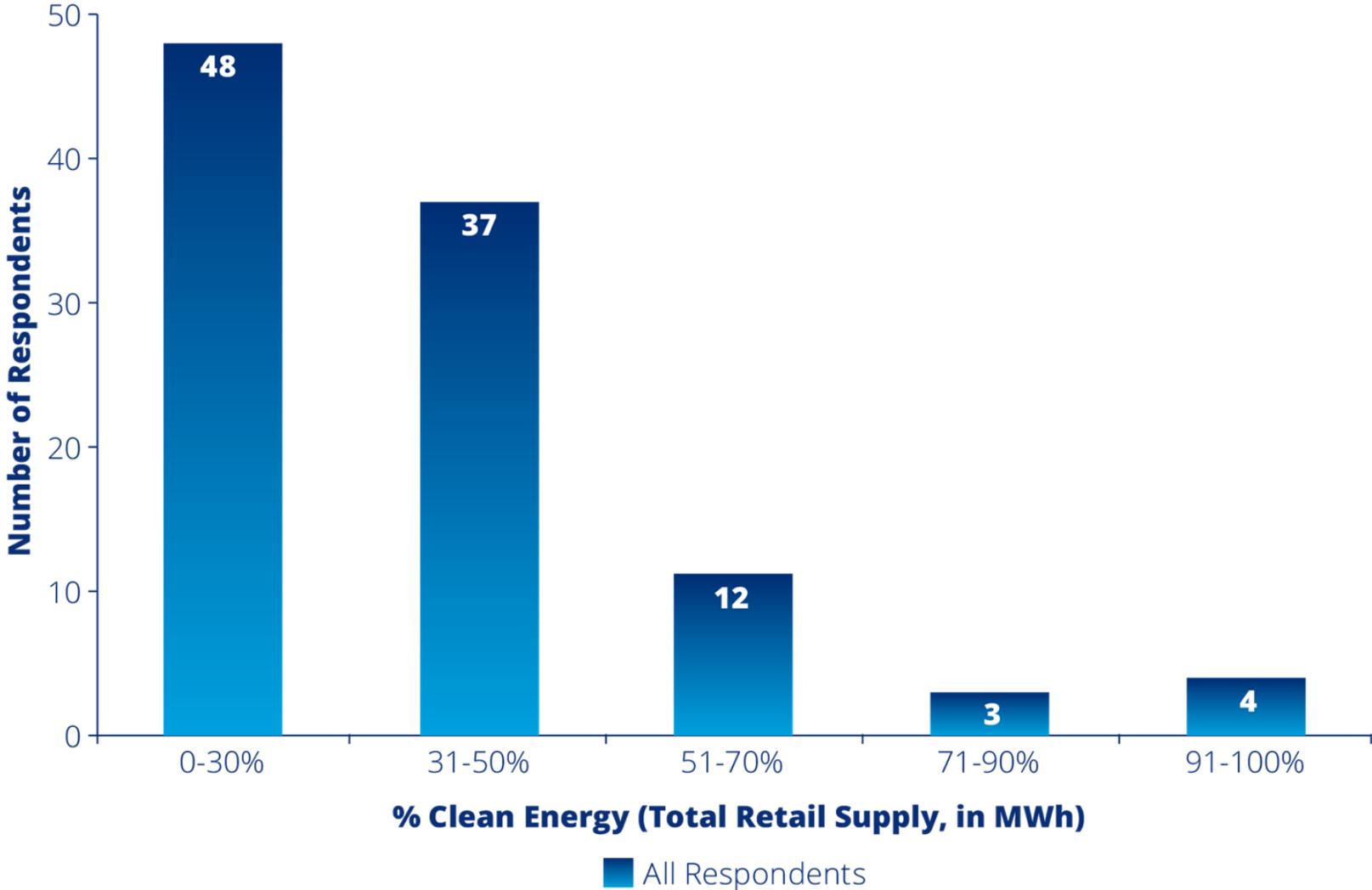
Insights

What We Learned from Our Analysis



Clean Energy Resources

Progress Made, But Much Work Remains



Source: Smart Electric Power Alliance, 2021

Leaderboard Utilities



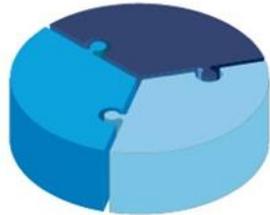
Recommendations



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.

Looking Forward



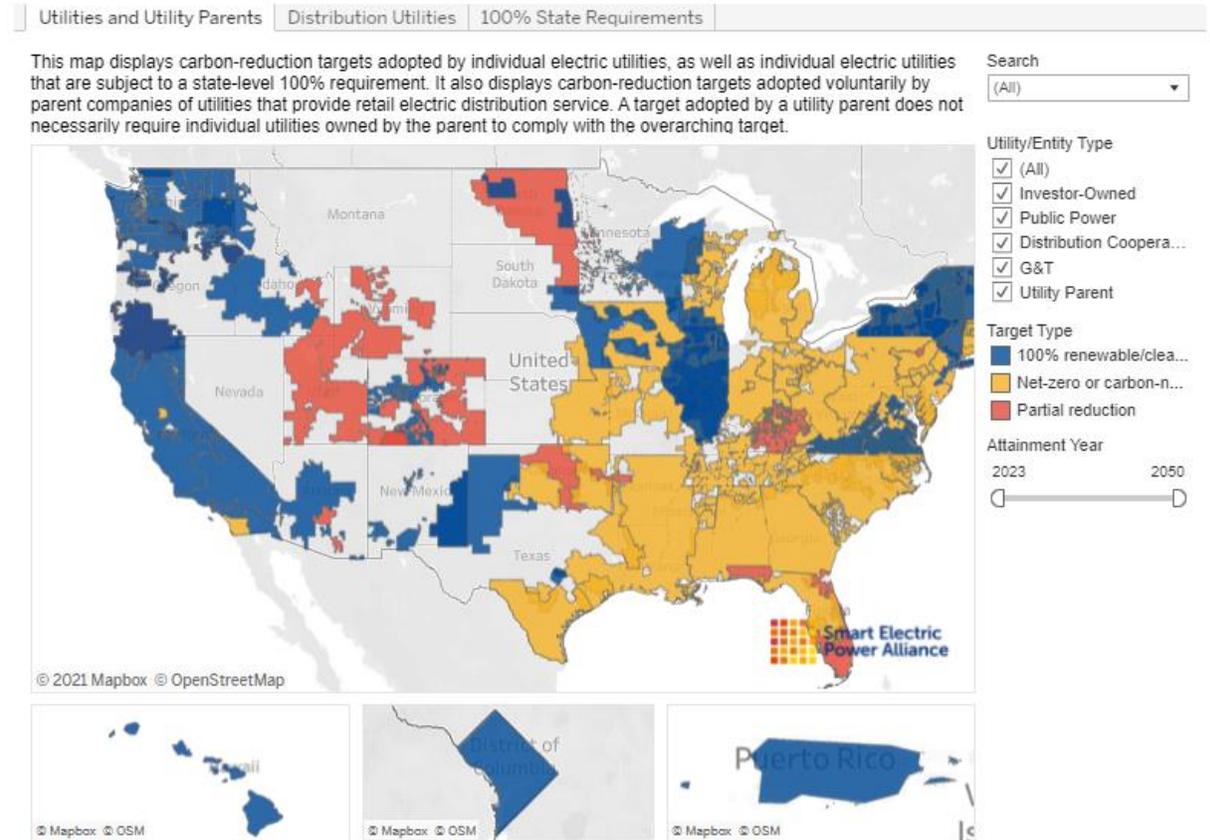
Updates planned for the Utility Transformation Challenge

- Monitoring utility commitments via SEPA's Utility Carbon Reduction Tracker
- Continual review of publicly-available utility decarbonization & clean energy plans
- Determining areas of scope expansion

Focused on providing a platform that enables:

- Insight into best practices, exemplar activities, and biggest gaps
- Utilities to proactively communicate their progress and navigate the “voice” of progress in the industry

Utilities' path to a carbon-free energy system





Utility Carbon-Reduction Tracker



What is the Utility Carbon-Reduction Tracker?



- Living, public resource that aggregates and summarizes electric utility commitments to carbon reduction.
- Interactive tool that allows users to toggle between a selection of characteristics, including:
 - utility type,
 - target type, and
 - attainment year.
- Public dataset of industry commitments, available for download on SEPA's website.

The resource is a compilation of the following target types:

Voluntary carbon-reduction targets adopted by individual electric utilities (including G&Ts)

Voluntary carbon-reduction targets adopted by parent companies of utilities that provide retail electric distribution service.

Mandatory carbon-reduction targets for individual electric utilities subject to a state-level 100% requirement.

30

Individual utilities have adopted a voluntary 100% carbon-reduction target



21

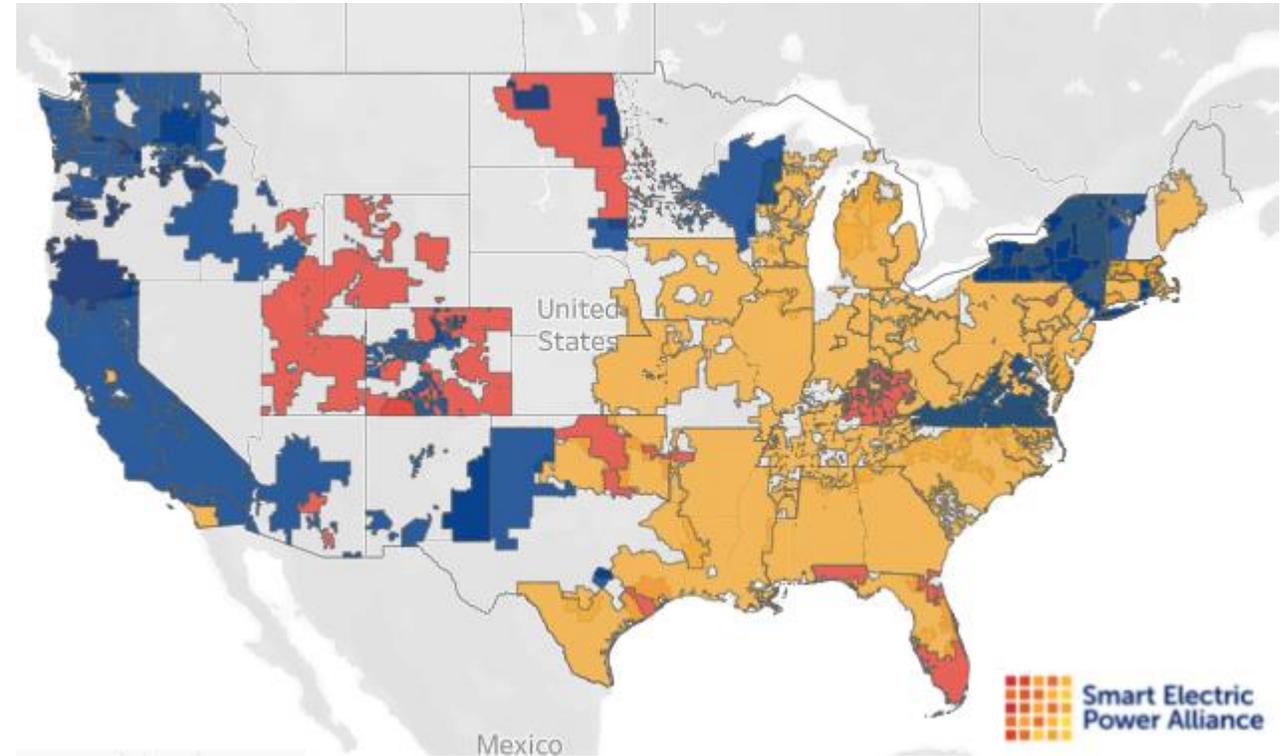
Utility parent companies have adopted a voluntary 100% carbon-reduction target

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 goal



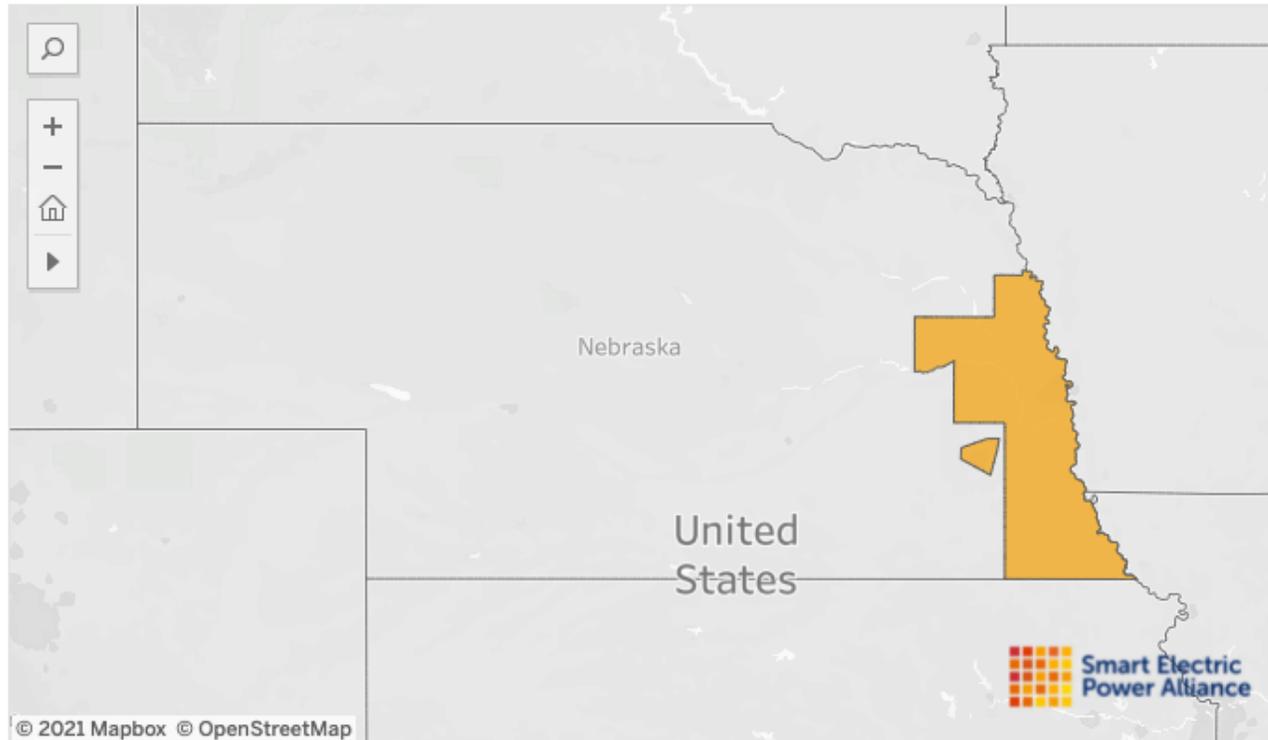
Utility Carbon-Reduction Targets



Nebraska Utilities with Carbon-Reduction Commitments

Utilities and Utility Parents | Distribution Utilities | 100% State Requirements

This map displays carbon-reduction targets adopted by individual electric utilities, as well as individual electric utilities that are subject to a state-level 100% requirement. It also displays carbon-reduction targets adopted voluntarily by parent companies of utilities that provide retail electric distribution service. A target adopted by a utility parent does not necessarily require individual utilities owned by the parent to comply with the overarching target.



Lincoln Electric System

- Net-zero CO2 emissions by 2040.

Omaha Public Power District

- Net-zero carbon emissions by 2050.

State of Nebraska

- ~ 49% of metered customers are served by a utility with a carbon-reduction commitment.



Resources

Download the Utility Transformation Profile:
sepapower.org/utility-transformation-challenge/profile/

SEPA's Utility Carbon Reduction Tracker:
sepapower.org/utility-transformation-challenge/utility-carbon-reduction-tracker/

Lakin Garth
Senior Manager, Research and Industry Strategy
lgarth@sepapower.org
(503) 998-4501

