

# Utility Transformation Challenge

November 2021



## Clean + Modern Grid

Regulatory and Business Innovation | Grid Integration | Electrification

# Vision

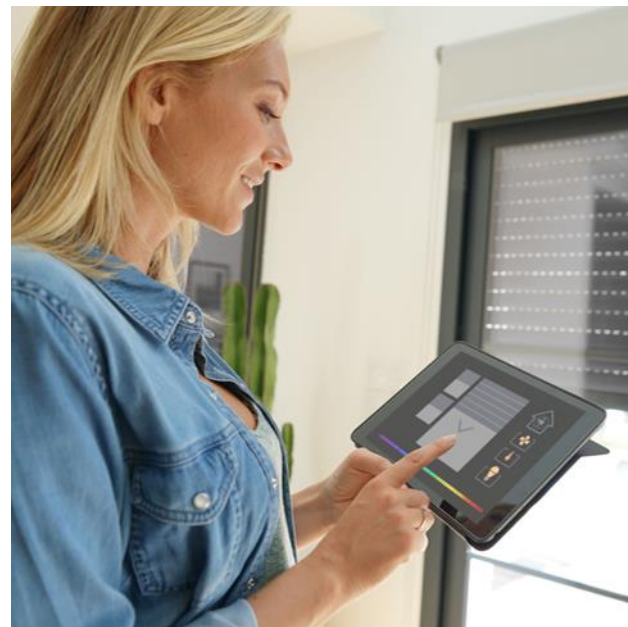
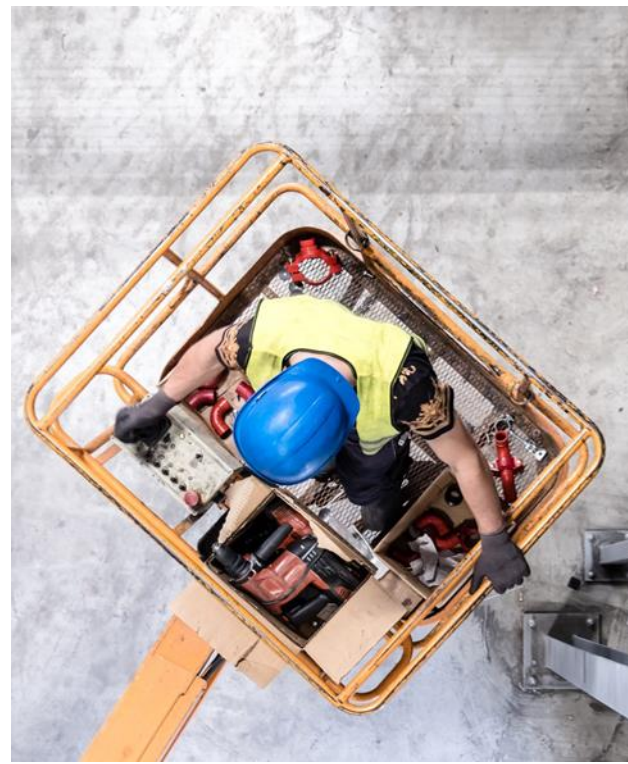
A carbon-free energy system by 2050

# 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

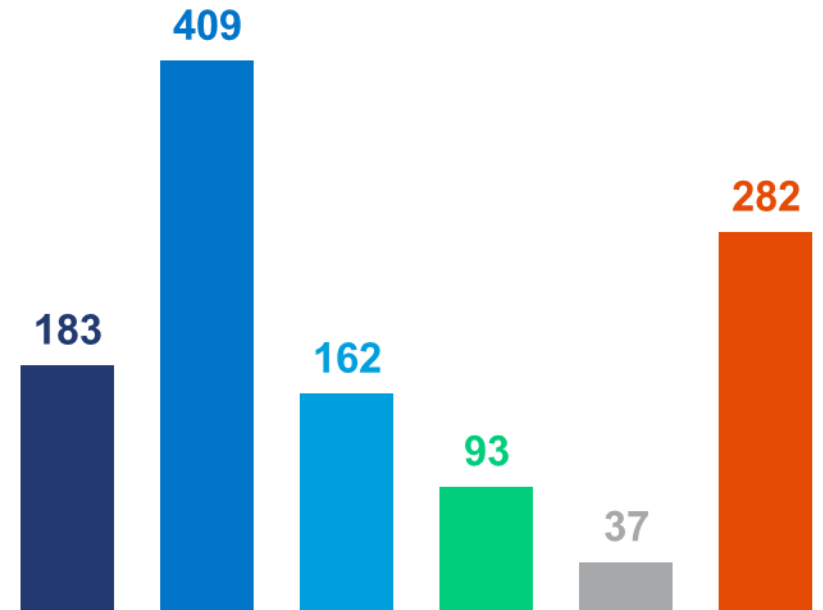


**80%**  
of utilities with  
carbon-free or net-zero  
emissions goals



**72%**  
of utility commissions

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

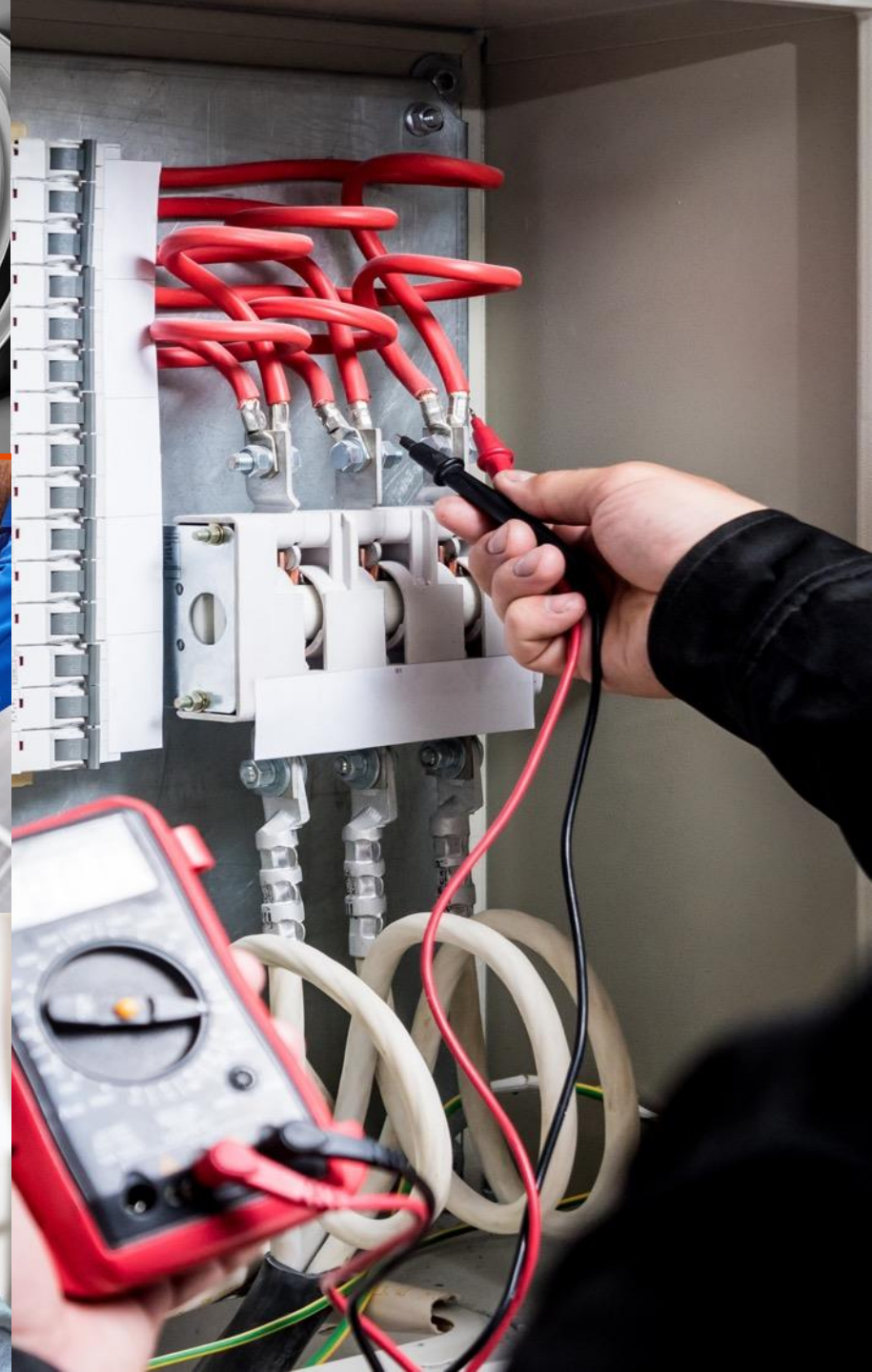




# What is the Utility Transformation Challenge?

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

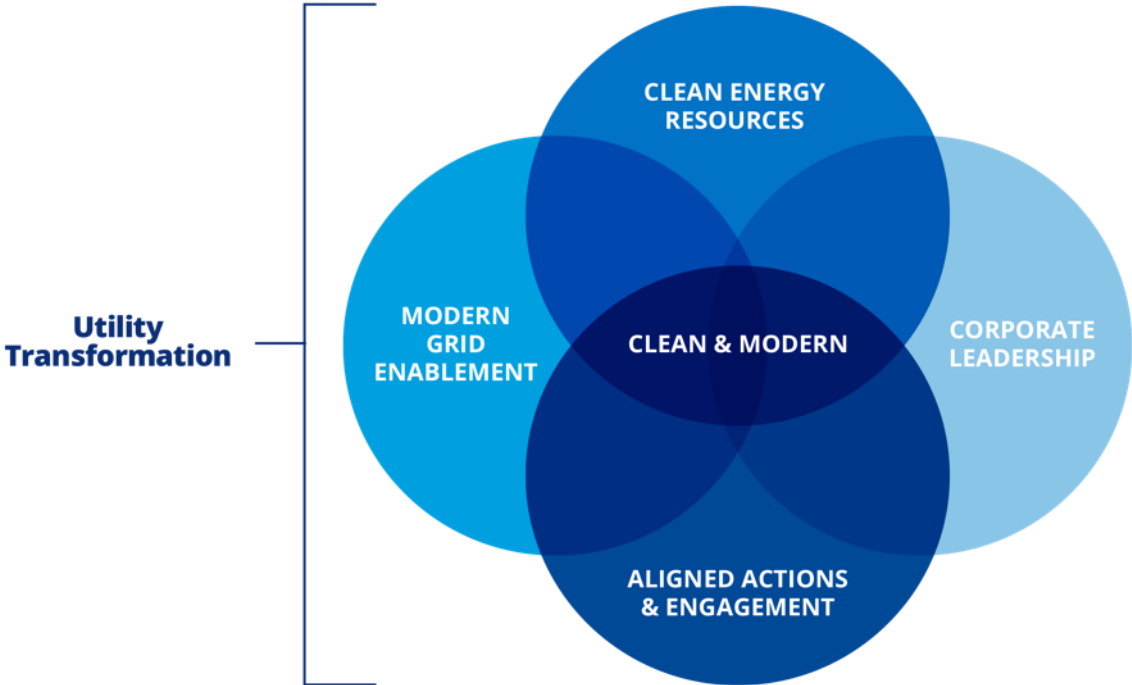
- survey of 130+ utilities
- covering 63% of customer accounts
- addresses multiple dimensions of transformation
- leading utilities identified



# The Analysis

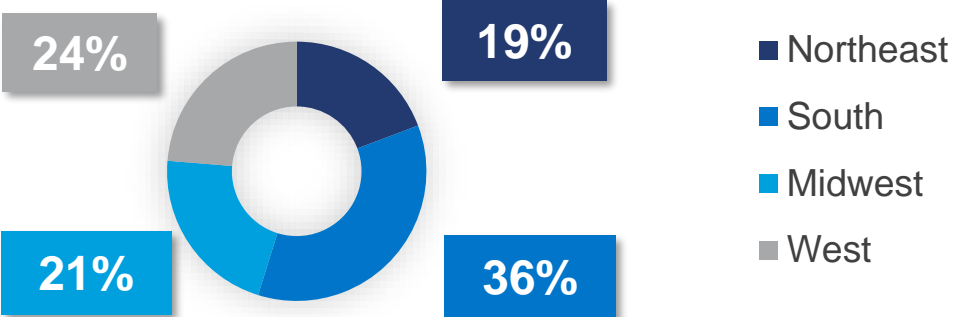


Results are based on a diverse group of utilities across four dimensions of utility transformation.

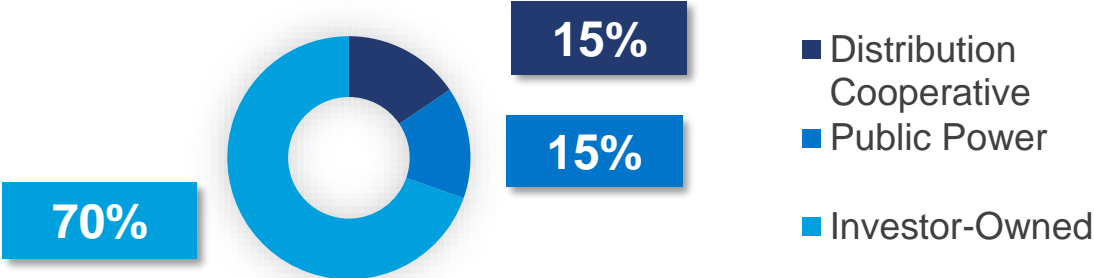


Source: Smart Electric Power Alliance, 2021

## Regional Breakdown

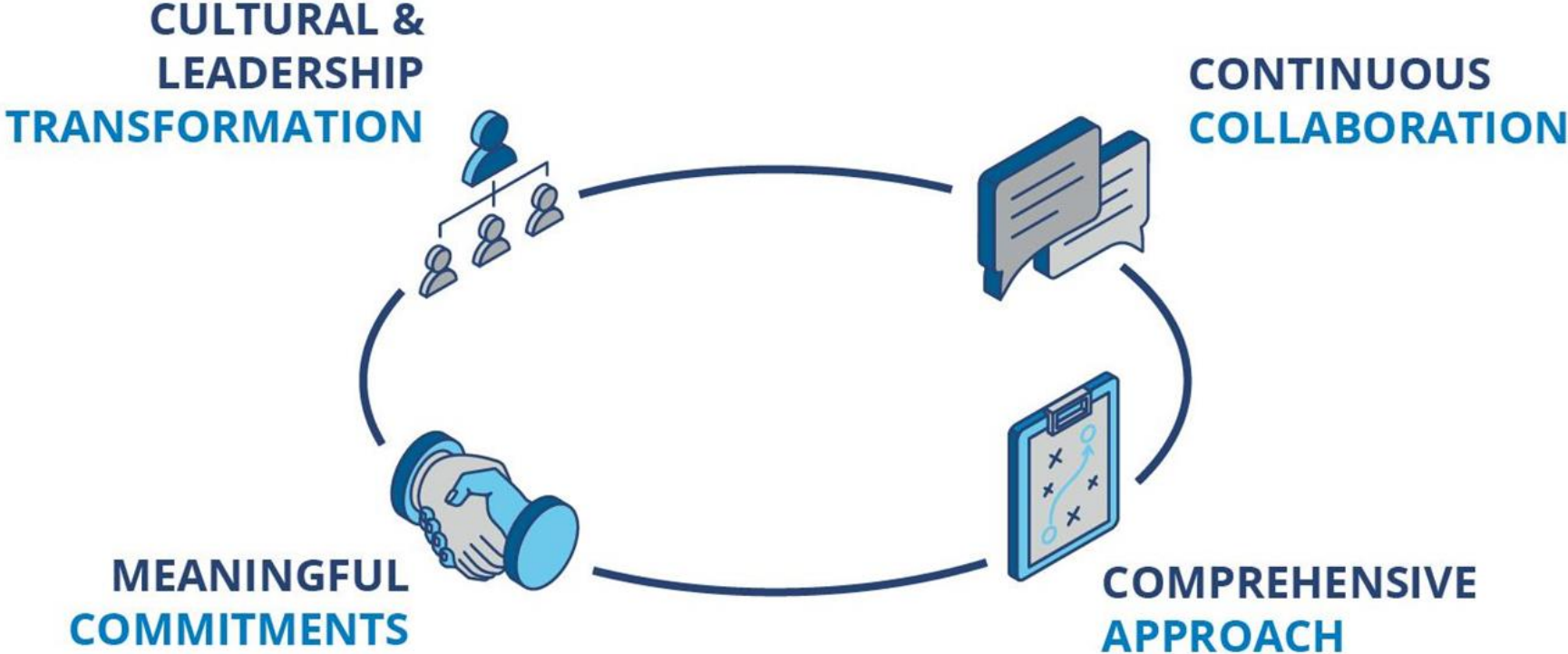


## Utility Type



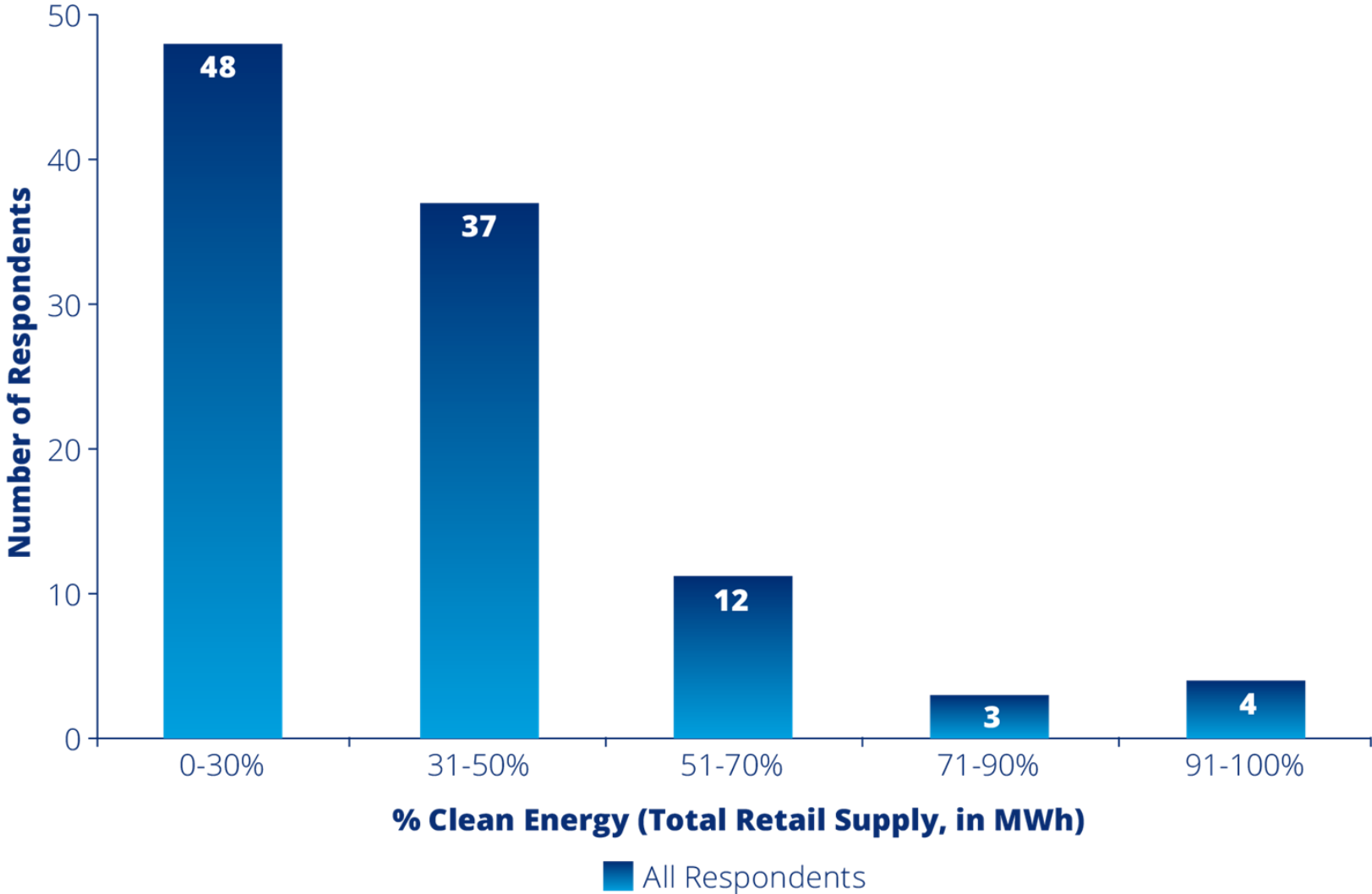
# Insights

What We Learned from Our Analysis



# Clean Energy Resources

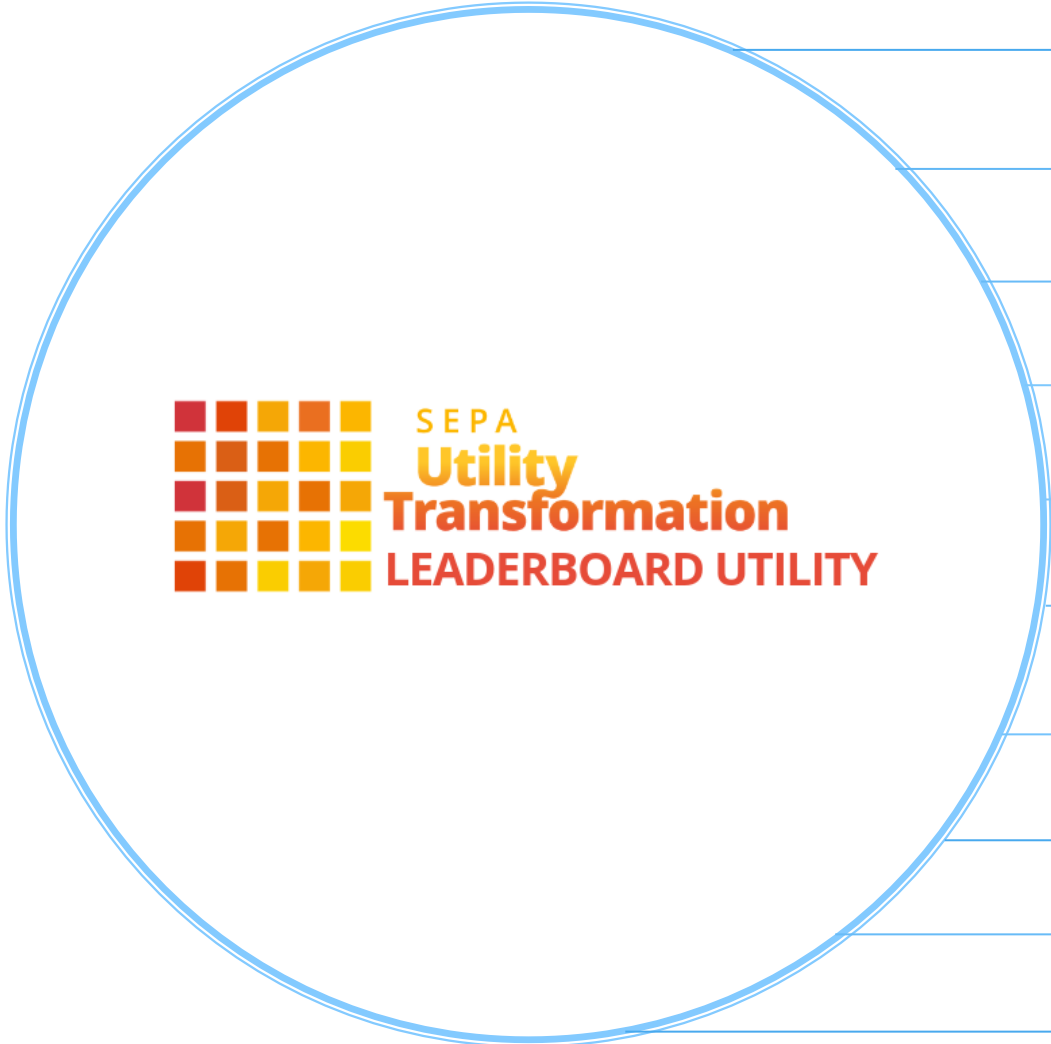
Progress Made, But Much Work Remains



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



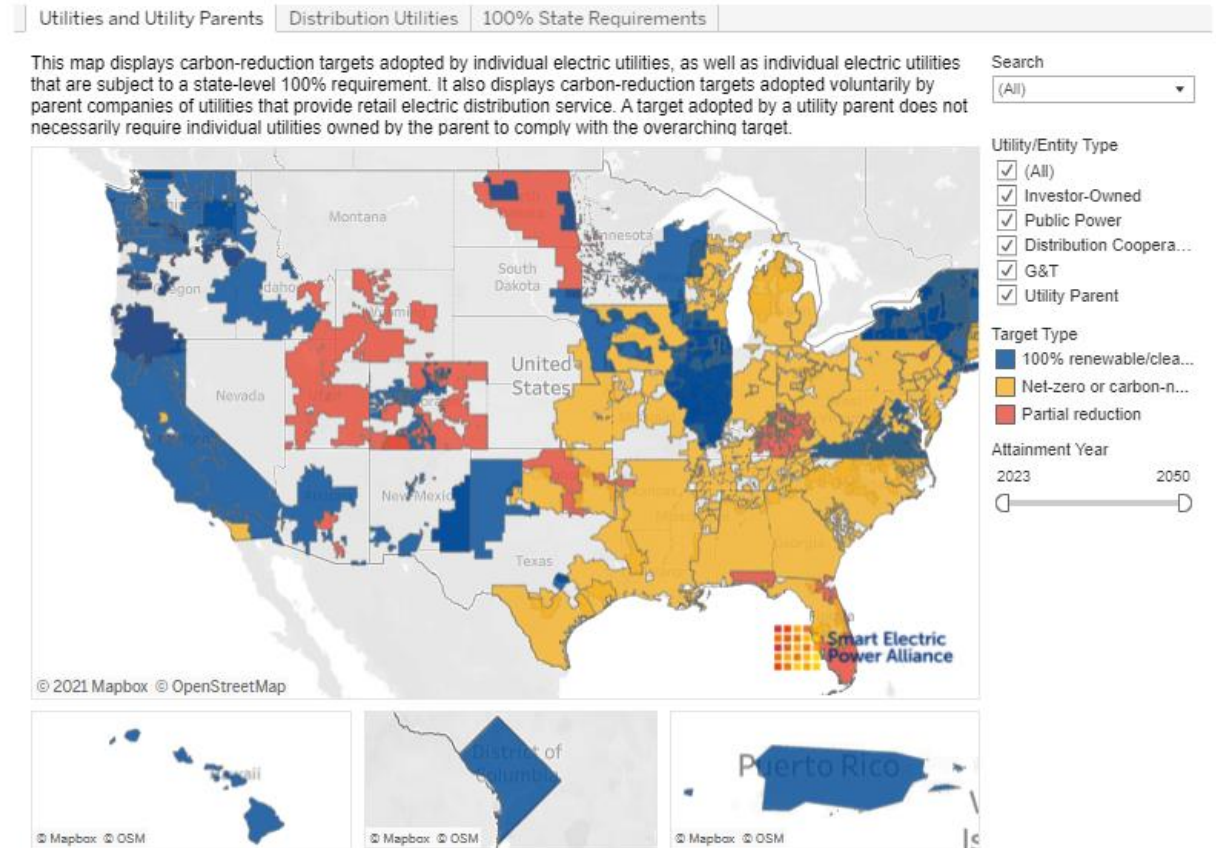
## Updates planned for the Utility Transformation Challenge

- 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

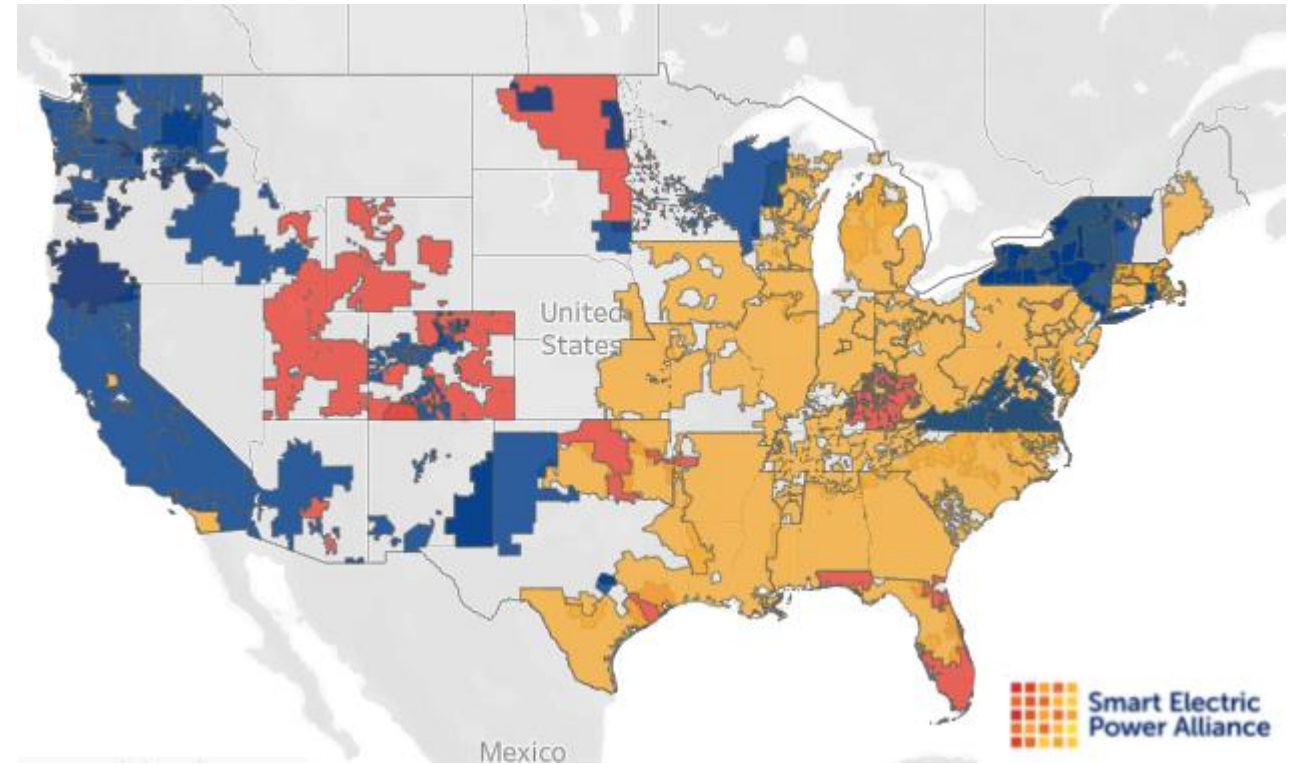
Utility parent companies have adopted a voluntary 100% carbon-reduction target

# 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

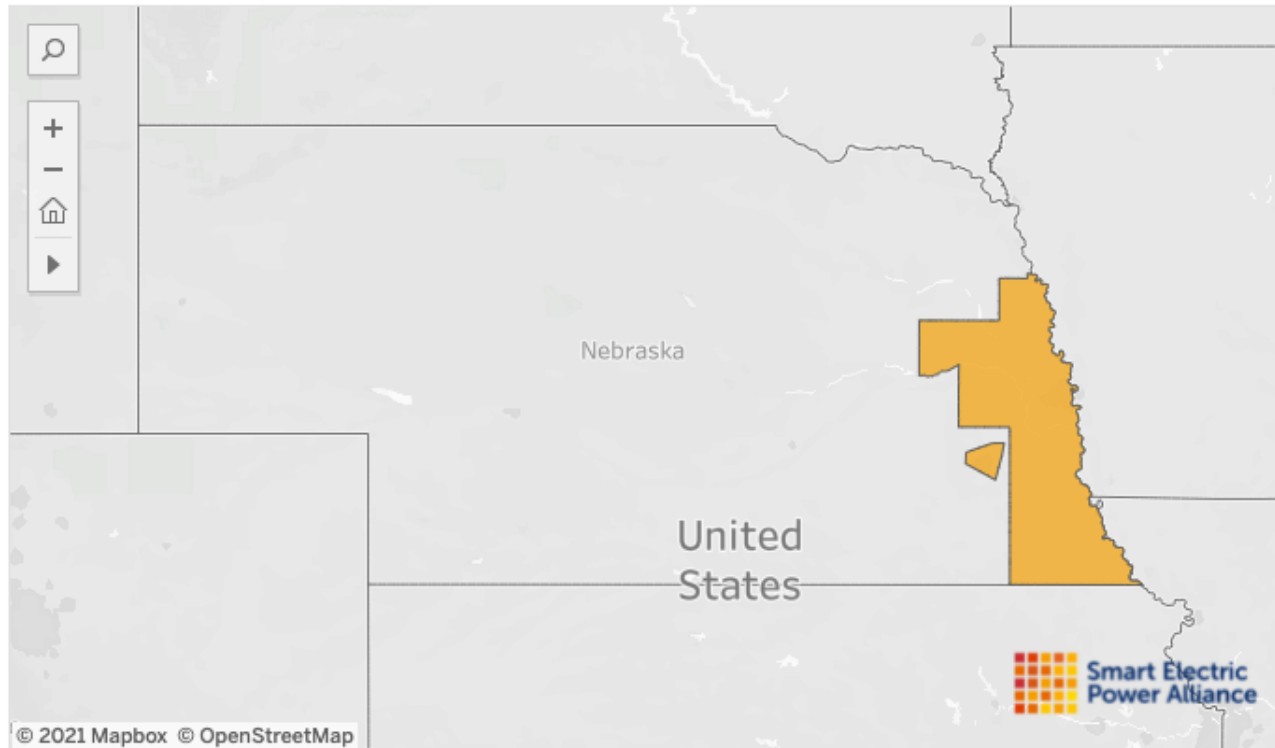




# Nebraska Utilities with Carbon-Reduction Commitments

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/](https://sepapower.org/utility-transformation-challenge/profile/)

SEPA's Utility Carbon Reduction Tracker:  
[sepapower.org/utility-transformation-challenge/utility-carbon-reduction-tracker/](https://sepapower.org/utility-transformation-challenge/utility-carbon-reduction-tracker/)

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