

SEPA snapshots

Sneak Peek

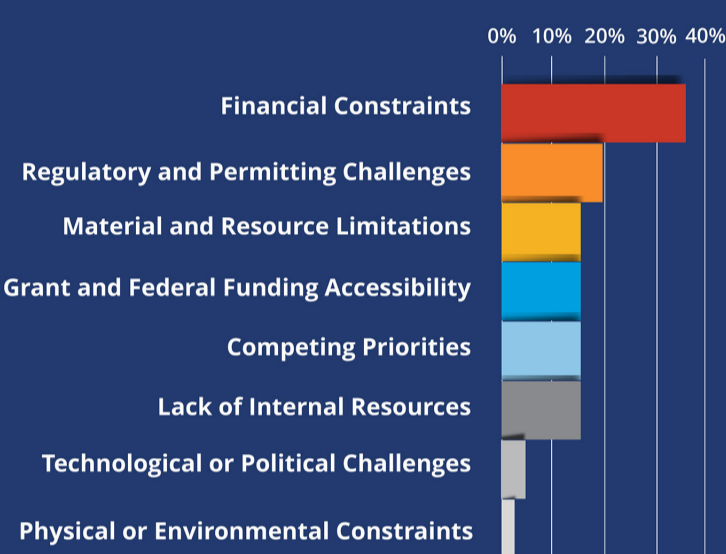
Where Do Electric Utilities Currently Stand in the Clean Energy Transition?

Using data sourced from SEPA's annual Snapshots Utility Pulse Survey from earlier this year, we identified key findings among our six focus areas:



Resilience

Barriers to Implementing or Planning Resilience-related Initiatives



76%

of utilities reported utilizing federal funding related to resilience, suggesting that these opportunities are becoming more accessible.

“Grant funding is the only way that we can afford resilience projects. Without grant funding, we are incorporating grid resilience equipment in its normal 10 year work plan, but these projects will take years to complete.”

External funding sources play a critical role in implementing and de-risking comprehensive resilience measures, as demonstrated in the response.



Transportation

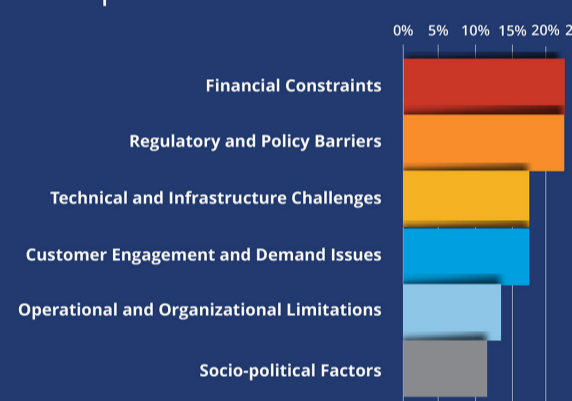


The Path to Transportation Electrification hinges on:

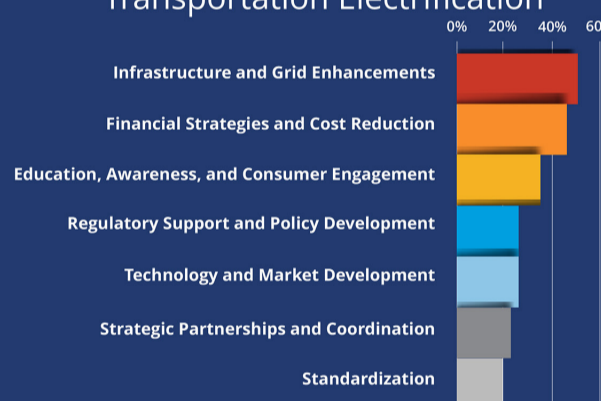
- Enhancing Charging Infrastructure
- Implementing Effective Financial Strategies
- Boosting Customer Interest and Experience

Each factor serves as both a key enabler and a significant barrier.

Challenges in Implementing Transportation Electrification Initiatives



Enablers of Transportation Electrification



“Simplified customer experience, reliable and plentiful charging infrastructure, simple and non-invasive managed charging that creates value for customers and utilities.”

A utility respondent summarizes what is needed to further enable transportation electrification across the industry as a whole.

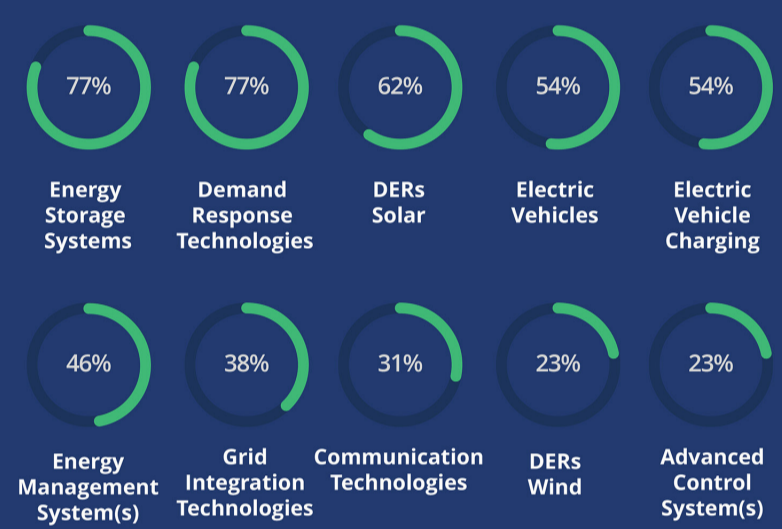


Emerging Technology

33%

of utility respondents that are currently planning or designing Virtual Power Plants (VPP). This emerging technology is top-of-mind for electric utilities in 2024.

Which Technologies Power your VPP?



38%

of utility respondents are fully operating or piloting Artificial Intelligence (AI) or Machine Learning (ML) applications. Specific activities include leveraging AI/ML for operating efficiency, load forecasting, vegetation management, and customer service.

“Various small AI / ML applications are being spun up around the company...they are definitely being tested.”

Benefits include automation and less manual effort. Concerns are all security related.”

Utilities recognize that AI/ML offers efficiency and optimization benefits but also acknowledge associated risks, including security, privacy, bias, and technical challenges.



Policy



Leading utilities are publicly disclosing annual carbon emissions data or carbon reduction plans and coordinating customer programs with state implementation of the Federal Home Energy Rebates.



Top utility leaders are currently prioritizing Integrated Distribution System Planning, enhancing Internal Governance structures, and assisting large customers in achieving their carbon-reduction goals.

100%

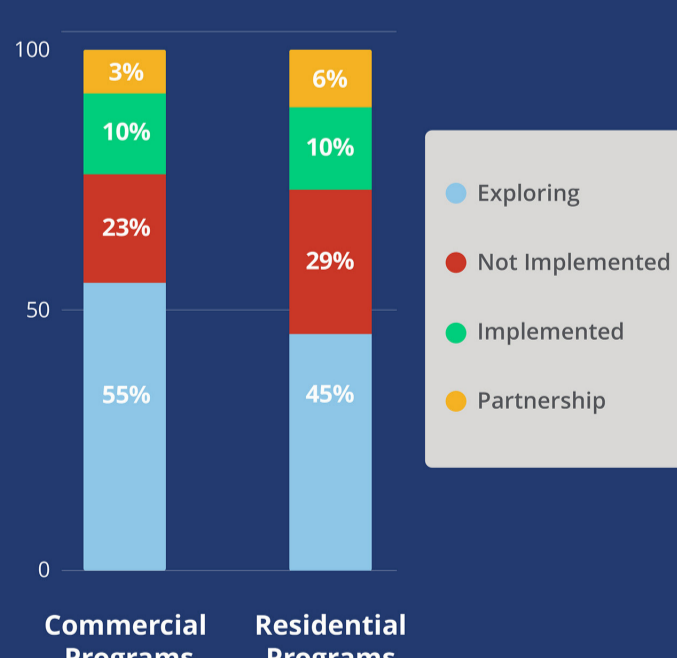
of utility respondents report implementing, piloting, or planning some type of community or customer-focused carbon-reduction program or activity.

“Our utility provides energy audits for our largely commercial customer base. Because industrial machines and processes each have unique needs, there is no one-size-fits-all approach for these customers. The energy audit allows customers to identify areas in which their unique process can reduce GHG. Further, our utility provides rebates and incentives for implementing these efficiencies.”



Energy Storage

Implementation of Customer Storage Incentive Programs



Utilities report low rates of fully implemented customer energy storage incentive programs, but many are planning, researching, or piloting such solutions.

4% The Reported LDES Utility Adoption Rate

Long-duration energy storage technologies (LDES) are far from market ready. But over a third of participating utilities are in the process of exploring these technologies.

39%

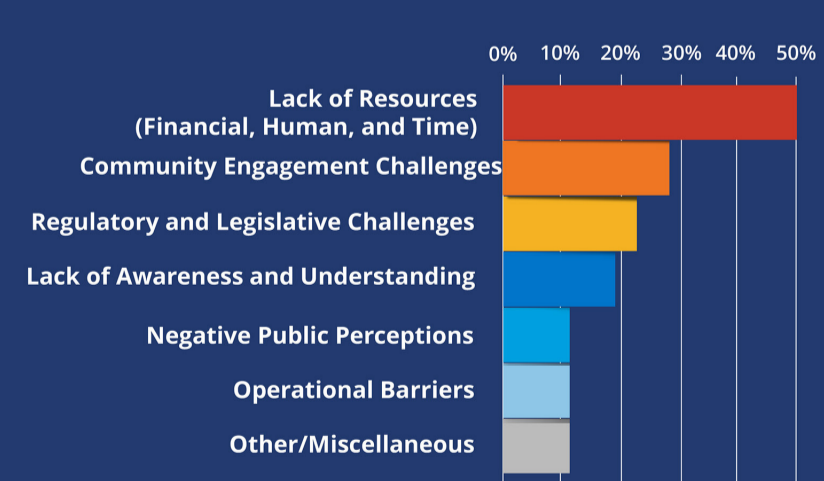
of utilities report cost as the greatest barrier to implementing energy storage-related solutions.

“Increased funding through grants and low-cost loans is essential for overcoming initial storage cost barriers and supporting long-term investments.”



Energy Equity & Inclusion

Barriers of Planning or Implementing Equity-related Initiatives



78%

of utilities report having dedicated personnel for DEI or community engagement.

“We have a DEI team and integrate DEI in our business strategy. There are Employee Resource Groups across different social categories, supporting diversity; and [we] partner with colleges including HBCUs to attract and retain the best talent. Our DEI goals are assessed and updated at least annually.”

The majority of utilities report having dedicated staff or teams to support their DEI: Diversity, Equity and Inclusion goals.