

# How can Load Growth Supercharge the Energy Transformation?



**Pranava Raparla**  
Presidential  
Innovation Fellow,  
U.S. DOE



**Nat Sahlstrom**  
Chief Energy Officer,  
Tract



**Lucia Tian**  
Head of Clean Energy  
& Decarbonization  
Technologies,  
Google



**Justin Tomljanovic**  
Senior Vice President, Utility  
Finance and Corporate  
Development,  
Xcel Energy

# U.S. ELECTRICITY DEMAND BY THE NUMBERS

U.S. electricity demand is growing with: onshoring of manufacturing, electrification of vehicles, and data center expansion with cloud and AI; all signs of a healthy economy.

We've successfully met the demand spikes in the past, and the U.S. has more tools at the DOE and across government to meet them today. ([Read more](#))

2023

4%

Data center share of total U.S. electricity demand

2030

9%

Projected data center share of total U.S. electricity demand

Next Decade

15-20%

Projected growth in U.S. electricity demand

# DOE'S APPROACH TO LOAD GROWTH


- **Spring:** Started engaging data center developers, utilities, state/local officials, community orgs, other stakeholders
- **Summer:** Published existing DOE resources at [energy.gov/electricitydemand](https://energy.gov/electricitydemand)
- **Fall:** Held convenings with the industry
  - White House convening on [convening on critical AI infrastructure](#)
  - Load flexibility workshop at Lawrence Berkeley National Lab
  - Nuclear tour and workshop at Idaho National Lab
  - Capacity building for energy assets with DOE's FECM
  - Participated in convenings hosted by: NARUC, NCSL, NASEM, FERC, SCSP, etc.

# DOE'S APPROACH TO LOAD GROWTH

- **DOE is focusing on four solution areas:**
  - Revitalizing existing infrastructure
  - Behind the meter flexibility
  - Innovative rate and regulatory designs
  - Commitments for longer-term technologies
- **Select resources at [energy.gov/electricitydemand](https://energy.gov/electricitydemand)**
  - [Coal Site Redevelopment](#)
  - [Financial and technical assistance resources](#)
  - [Expanding Clean Energy Generation on DOE Lands](#)
  - [Pathways to Commercial Liftoff](#) (recent: nuclear, load growth)
- **Data Center Engagement Team** with support from every DOE office
  - Contact us at: [businesshub@hq.doe.gov](mailto:businesshub@hq.doe.gov)

# TODAY'S DISCUSSION AT DEPLOY24

- How is demand growth shifting industry dynamics?
- How is demand growth being leveraged to unlock commercialization of clean energy solutions?
- What are the next set of opportunities for clean firm energy deployments to meet this moment?



DEPLOY24