# Forecasting Digital Demand to Future-Proof the Grid

Assessing the Impact of Data Centers, AI, and Crypto Mining on Grid Load for EPRI (2024–2030)



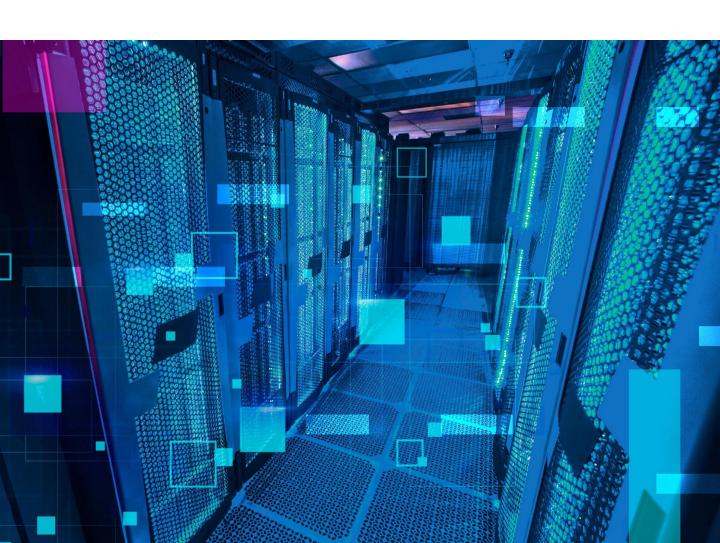
# Business challenge

The EPRI, a leading nonprofit research institute advising utilities, regulators, and policymakers, needed clarity on a fast-emerging challenge.

Digital infrastructure, especially AI and crypto mining, was accelerating electricity demand in ways that traditional forecasts could not capture.

With projections scattered across inconsistent sources, the client needed a single, validated model to identify where and how grid pressures would intensify.

The goal was to enable more confident infrastructure, policy, and investment decisions across both mature and rapidly growing regions.



# 70+ regions

**50** US states



**2**Canadian provinces



Mexican state



## 20 countries and 26 key cities in:



Europe



Asia



Middle East



Latin America

## Forecast Horizon

2024-2030

## **Data Sources**

1000+ public reports, databases, and search engines Interviews with subject matter experts

# Model Inputs

Over 1 million data points analyzed

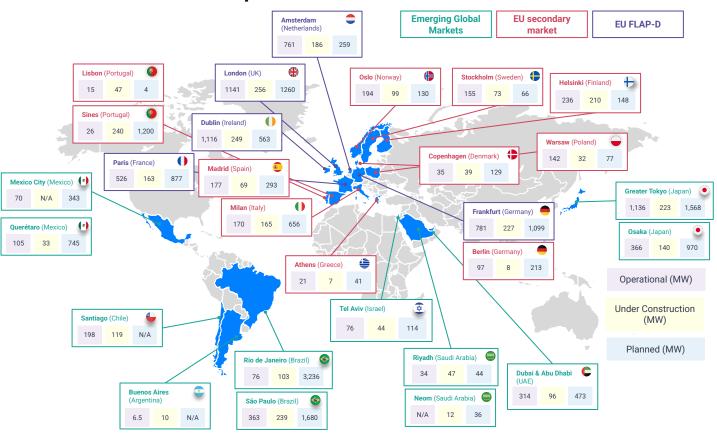
## **Strategic Output**

4 modular intelligence briefs and two interactive dashboards designed for scenario modeling and cross-team alignment. A comprehensive market intelligence suite delivered in under 3 months.

# Key findings

Mapping the global landscape, we identified that the current data center landscape is marked by the rise of Type B and Type C markets\*.

## **Global Data Center Map**



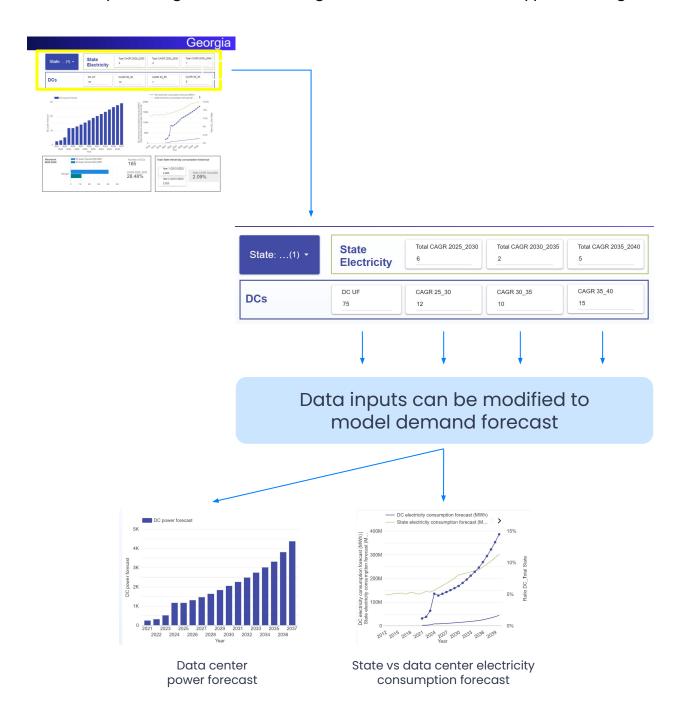
<sup>\*</sup>The types of markets are masked due to client confidentiality.

## **5 Key Market Drivers**



# Key findings

For the US market, PreScouter created an interactive dashboard for scenario planning and forecasting of data centers and crypto mining.

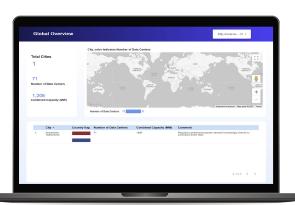


The dashboards and reports were quickly adopted across multiple internal teams and are now being used to support infrastructure planning, regulatory strategy, and investment prioritization.









## Client feedback

With data center markets and techs evolving so quickly, forecasting their impact on our members and energy demand in general is very complex. PreScouter's ability to identify, ingest, and interrogate real-time intelligence, analyze the key trends, and provide expert guidance enhanced the confidence in our model of this space. With PreScouter's support we were able to prepare for our live events faster and have richer insights to share with our members.

--- EPRI Team

What PreScouter provided me in 4 months could have taken us a year to complete. Their agile process and quick responses allowed me to more confidently understand the Data Center market at a granular level by segmenting individual countries and states as well as the impact of AI and Crypto on these regions. I trust PreScouter to provide data-based insights on not just what is happening today, but what the coming years will look like in this complex area.

--- Poorvi Patel, former Strategic Insight Manager, EPRI

## **About PreScouter**

Strategic Intelligence Through Stage-Gated Research Excellence

## **Our Proven Approach**



## **Intelligence Briefs**

Break topics into focused research segments



#### **Bi-Weekly Reviews**

Progress reviews & objective setting for next iteration



#### **Actionable Insights**

Strategic recommendations for immediate implementation

## **What Clients Rely On Us For**



### **Technology Intelligence**

- · Technology & company landscaping
- · Market trends, analysis & research
- Market sizing & forecasting
- · Supplier identification
- · Sample procurement



#### Research & IP

- IP landscaping & analysis
- · Regulatory landscape mapping
- · Academic literature reviews
- Partner vetting & due diligence



## **Competitive Intelligence**

- · Competitive landscape mapping
- · Trends identification & analysis
- Early warning & monitoring systems
- Industry expert consultations



#### **Data & Analytics**

- Custom dashboards & platforms
- Anonymous market outreach
- Al consumer insights
- Data analysis & recommendations

## Comprehensive Primary & Secondary Research Sources

**Technology & Company Landscaping** 

Supplier Identification

Sample Procurement

Market Trends, Analysis, Research, & Sizing

Regulatory Landscape

**Trends Mapping** 

**Anonymous Outreach** 

Academic Literature Review

Partner Vetting & Due Diligence

Early Warning, Monitoring, & Detection Systems

Consult With Industry Subject Matter Experts