# Investing for the Electrification of the United States

**The US has now reached an inflection point where immediate and prolonged investment in electrification is required to maintain global economic and technological leadership, creating a multi-decade opportunity for investors.**

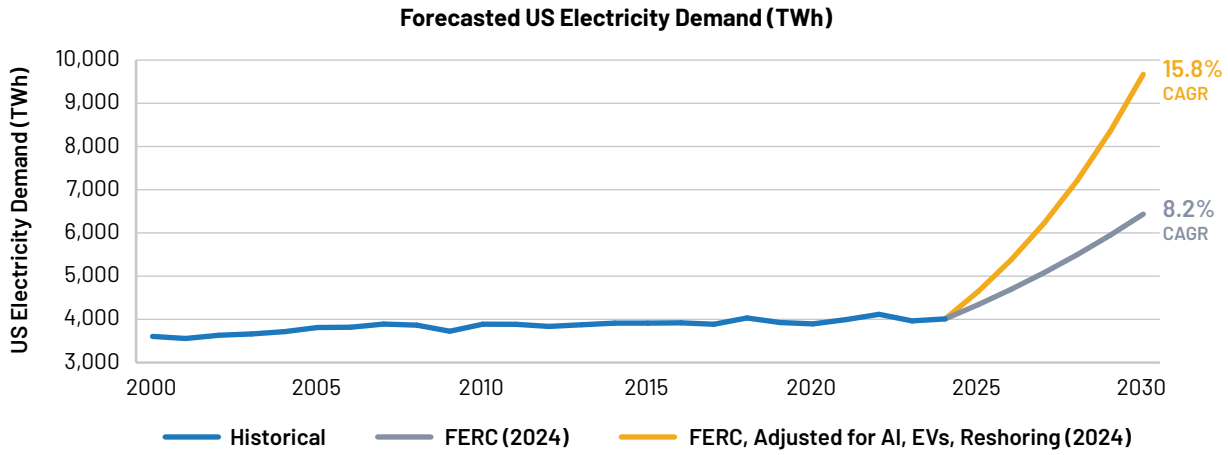
March 2025

## Soaring US Power Demand

Total US electricity sales growth has been muted over the past 20 years, growing at an annualized 0.4%, but electricity demand, driven by rapidly advancing technology, commercial efficiency, and regulatory requirements, is beginning to surge.[1] US electricity demand is expected to grow in excess of 8% through 2029,[2] far above expected GDP growth, due to a variety of fundamental tailwinds including:

- Artificial intelligence (AI)/data center development
- Evolving national security concerns
- The energy transition of conventional fossil fuels to renewable technologies
- Expanding electric vehicle infrastructure
- Manufacturing reshoring

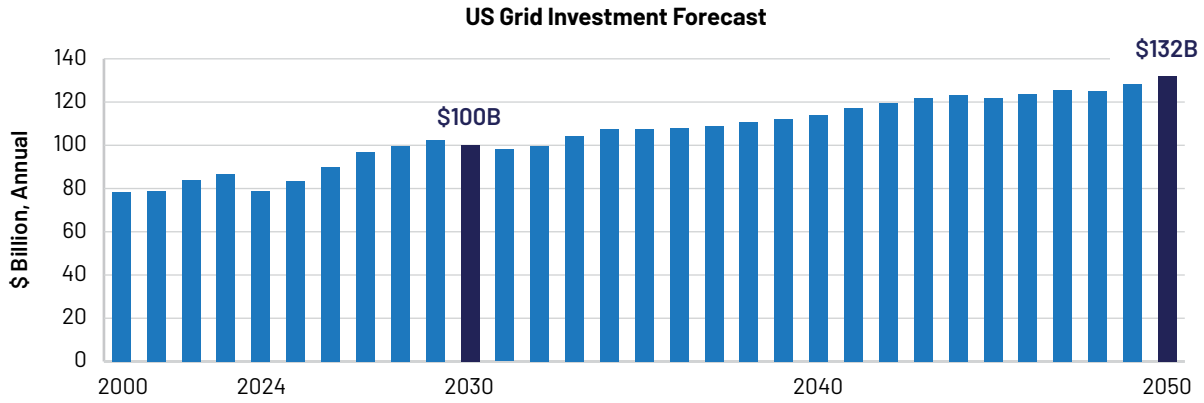
Notably, the last time electricity demand grew at a rate equal to or greater than GDP growth was in the 1930-40s and 1960s, aided by technological advances in refrigeration and air conditioning. New-age advancements pose a fresh wave of challenges for US electricity generation imbalances and underinvested grid infrastructure, exemplified by energy-intensive data centers which are expected to consume 11-15% of total US electricity generation by 2030, a sharp increase from 6-8% total consumption today.[3]




*Sources: BloombergNEF (historical data) and GridStrategies[2]*
*Data references Federal Energy Regulatory Commission (FERC) implied growth rates as of 12/31/2024.*
*"TWh" refers to terawatt hour. "EVs" refer to electric vehicles. "CAGR" refers to Compound Annual Growth Rate.*

## US Infrastructure and Grid Investment Expected to Rise

Meeting unprecedented electricity demand and improving energy efficiency in the US will require significant new investments in the electric power sector and grid infrastructure. The expansion of AI-driven data centers, efficient industrial manufacturing facilities, and an ongoing shift to electrified transportation necessitates substantial investments in grid infrastructure and electricity generation capacity, with annual grid investment forecasted to reach US$100 billion in the US by 2030.[4] This will require record amounts of capital expenditures (CapEx) from utility and power generators to close a growing power supply gap and increase generation capacity. The next-century infrastructure will embrace the evolution of energy technology across nuclear, wind, solar, and natural gas while modernizing the national transmission grid to align with secular US initiatives and maintaining the highest global standards of reliability, safety, and security.




*Source: BloombergNEF Economic Transition Scenario, base case, as of 10/28/2024*

## An Opportunistic Environment

The US remains at the early stages of this industry transformation with long-term investment opportunities appearing throughout infrastructure and power ecosystems. Considerable public and private investment are expected to drive earnings growth and higher levels of CapEx, where the projected increase in electricity demand is supported by unprecedented private and government spending. Broadly, cyclical sectors are poised to benefit from "The Electrification of Everything" with specific industries positioned to benefit:

- Merchant generators
- Electric and gas utilities
- Developers of new power plant technologies
- Power plant engineering and construction
- Equipment suppliers
- Electrical contractors
- Midstream energy suppliers

In our view, now is an advantageous time for investors to gain exposure to electrification infrastructure. A modernized and enhanced grid infrastructure, capable of supporting several types of energy sources, will be necessary to meet surging energy demand. These and other fundamental tailwinds make for a compelling investment opportunity. With a diverse set of beneficiaries, a portfolio of complementary exposures to this theme may allow for effective growth through compounding returns over the long term without the challenge of concentration that is common in parts of the equity market today.

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(1) *US Energy Information Administration (EIA). (February 2025). Monthly Energy Review. EIA.*
(2) *Wilson, J., Zimmerman, Z., & Gramlich, R. (December 2024). Strategic Industries Surging: Driving US Power Demand. GridStrategies.*
(3) *Keefe, T., Hardin, K., & Nagdeo, J. (December 2024). 2025 Power and Utilities Industry Outlook. Deloitte.*
(4) *BloombergNEF. (October 2024). North America Grid Investment, Net Zero Scenario. BloombergNEF.*

## Definitions

*Capital Expenditures (CapEx): refers to investments in physical assets such as plant and machinery.*

*Compound Annual Growth Rate (CAGR): the mean annual growth rate of an investment or asset over a specified period of time longer than one year.*

*Reshoring: the practice of transferring a business operation that was moved overseas back to the country from which it was originally relocated.*

*Tailwind: a certain situation or condition that may lead to higher profits, revenue or growth.*

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