ACEC Market Intelligence Brief

Energy & Utilities

Market Scope

The energy and water utilities markets are experiencing shifts driven by supply chain delays, rising energy demand, artificial intelligence, population growth, climate change, and aging infrastructure. A recent change in Administration priorities continues to shape the energy landscape, redirecting focus from renewable energy projects like offshore wind to an increased emphasis on oil and gas production. This aligns with data from the U.S. Energy Information Administration (EIA) and ExxonMobil's future projections that more than half of energy demand will still be met by oil and natural gas in 2050. Surging demand from manufacturing and data centers will drive the need for reliable energy solutions. Nuclear energy is gaining renewed attention as a clean power source to fill the energy gap of retired coal plants. These trends collectively influence investment strategies and policy decisions that will shape the future of the markets.

Top Clients

The list below features the top 10 energy companies operating in the United States by revenue. Understanding who the key players are in the energy industry is essential to identifying market tends and investment opportunities.

Rank	Energy Sector Companies	Revenue
1.	ExxonMobil Corporation	\$340 B
2.	Chevron Corporation	\$196 B
3.	Marathon Petroleum Corporation	\$139 B
4.	Phillips 66	\$138 B
5.	Valero Energy Corporation	\$122 B
6.	Energy Transfer LP	\$83 B
7.	Enterprise Products Partner L.P.	\$57 B
8.	ConocoPhillips	\$56 B
9.	World Kinect Corporation	\$40 B
10.	Schlumberger Limited	\$36 B

Source: Yahoo! Finance NYSE-NASDAQ and Stockviz

5 Current Market Trends

1. The Price of Power - Rising Costs and Delays: Electricity demand is set to surge 35-50% from 2024 to 2040, fueled by the rise of manufacturing and data centers, yet critical supply chain delays threaten to slow progress (American Clean Power). Natural gas, the backbone of U.S. electricity generation at 46% (see below), faces hurdles as gas turbines—the heart of power plants—require 7-8 years to secure. At the same time, transformers—which are essential for grid stability—come with a 50-120-week lead time and prices are 80% higher than pre-pandemic levels (NIAC Report). The AI revolution adds urgency, but the U.S. struggles with mineral shortages needed for energy infrastructure, ranking second to last in mining development time with a staggering 29-year lead time from discovery to production (S&P Global). These bottlenecks create a compounding challenge: as demand grows rapidly, the slow pace of supply chain solutions

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Spring 2025



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Current Market Trends, continued

and resource development risks leaving industries and consumers in an energy crunch.

2. Domestic Manufacturing Growth Drives Energy Demand: The U.S. manufacturing sector has seen significant expansion, with design and construction spending (CPIP) rising 22% from 2023 to 2024 (U.S. Census Bureau). This growth has been driven by a steady increase in energy consumption since 2010 (EIA), as industries scale up production due to legislation like the CHIPS and Science Act and the Inflation Reduction Act, which have fueled rapid investment in computer, electronic, and electrical manufacturing, triggering a surge in new projects. Over 100 initiatives across 28 states have secured \$32 billion in grants from the Advanced Manufacturing Investment Credit (Section 48D), reinforcing domestic production capacity (Semiconductor Industry Association). Additionally, recent tariff policies are expected to further accelerate onshoring efforts, enhancing U.S. manufacturing competitiveness in the global market.

▶ 3. EV Sales Surge Amid Policy and Infrastructure Shifts: Used EV sales surged 69% year-over-year as of Q3 2024, while new EV sales rose 8% (see chart below), highlighting growing consumer adoption (*Kelley Blue Book & Cox Automotive*). This rapid growth accelerates the need for expanded charging infrastructure. PwC projects a 250% increase in chargers by 2030 to keep pace with demand. Policy changes add complexity; President Trump's recent executive order called for significant changes to vehicle emissions and fuel economy standards while withdrawing federal funding for EV charging stations. Consumer tax credits and state-level incentives remain intact, although federal tax incentives could be eliminated in the tax bill moving through Congress. Meanwhile, private investment remains strong, driving EV manufacturing expansion. Major automakers now adhere to the North American Charging Standard (NACS), Tesla Inc.'s charging interface, signaling broader industry alignment on infrastructure. These converging trends suggest a dynamic EV market for the road ahead.

- 4. Drinking Water Scores a C- in Latest Report Card: While the U.S. water supply market is rapidly expanding—critical infrastructure struggles to keep pace. The American Society of Civil Engineers (ASCE) rated America's drinking water service lines a C- in its 2025 Infrastructure Report Card, citing aging systems and chronic underfunding as major obstacles. The EPA estimates that \$625 billion (over \$1 trillion when combined with wastewater infrastructure) will be needed over the next 20 years to modernize the nation's water infrastructure (FMI). Meanwhile, concerns over emerging contaminants like per-and polyfluoroalkyl substances (PFAS), or "forever chemicals," are growing as these pollutants infiltrate drinking water supplies. The outlook is even more worrisome for wastewater and stormwater infrastructure, which earned a D-, underscoring the need for urgent investment and systemic reform.
- 5. Data Centers Drive Rising Energy Demand and Grid Challenges: The rapid expansion of data centers is fueling a surge in electricity demand, now consuming 6-8% of total U.S. power generation, with 75% of major utilities reporting rising strain on the grid (*Deloitte*). As companies race to meet escalating demand, data center, distributed energy and nuclear job postings have climbed 344%, 136% and 56%, respectively, reflecting the sector's growing need for energy solutions. To support continued expansion, a recent executive order allows non-federal entities to lease land for data center development, though infrastructure limitations remain a pressing challenge (see GA section on page 3).

400,000 10.0% +8% Y/Y 9.0% 350,000 8.0% 300,000 7.0% 250,000 6.0% 200,000 5.0% 4.0% 150,000 3.0% 100,000 2.0% 50.000 1.0% 0.0% 0 2022 Q1 2022 Q2 2022 Q3 2022 Q4 2023 Q1 2023 Q2 2023 Q3 2023 Q4 2024 Q1 2024 Q2 2024 Q3 EV Sales EV Share

New EV Sales Estimate | Steady Demand, Share Growing

Estimating an 8% year-over-year increase in sales volume, and EV share of total sale nears 9%.

Source:

Kelley Blue Book

and Cox Automotive

Government Affairs Action

ACEC advances policy and legislation to promote member firm interests related to climate, clean energy, sustainability, and resilience, and to improve the efficiency of the permitting process. ACEC is currently tracking:

- Al Infrastructure on DOE Lands: The Department of Energy (DOE) plans to build data centers on federal land, co-locating them with power sources to support the Al boom. Energy Secretary Wright highlighted the initiative at NREL in Colorado, where private companies could fund data center development through a public-private-partnership. DOE issued a request for information identifying 16 federal sites for potential Al infrastructure and seeking input on partnerships to address electricity demand. The RFI notes opportunities for nuclear, geothermal, and energy storage and aims to fast-track permitting.
- Water & Environment: The Council on Environmental Quality (CEQ) rescinded NEPA implementing regulations, requiring Federal agencies to update their procedures by February 18, 2026. ACEC urged agencies to ensure consistency and coordination in the updates.
- ✓ Water Infrastructure Funding: Congress passed a Continuing Resolution (CR) in March, extending federal funding through September 2025 at last year's levels. The CR supports EPA's Clean Water and Drinking Water State Revolving Loan Funds (SRFs), providing low-interest loans for water infrastructure projects. Without "earmarks," all funding will support state programs. ACEC supports robust funding for the SRFs and will continue to work with other stakeholders and industry partners to advocate for increased federal funding for water infrastructure.
- ✓ Waters of the United States (WOTUS): On March 12, the EPA and Army Corps of Engineers began revising the WOTUS definition, impacting Clean Water Act permitting. The new definition is expected to align with the U.S. Supreme Court's Sackett decision, limiting jurisdiction to waters with a continuous surface connection to traditional navigable waters.
- 2017 Tax Cuts & Jobs Act: Significant portions of the 2017 tax law will expire in 2026 if Congress does not act. Congress is also considering repealing or rewriting the energy tax provisions in the Inflation Reduction Act of 2022. ACEC is advocating for extension of TCJA and retention of the IRA tax credits for renewable energy.
- √ To join ACEC's Energy or Water and Environment Committees, email Nando Gomez (Energy) at ngomez@ acec.org or Jordan Baugh (Water and Environment) at jbaugh@acec.org.

Business Development Insight

Nuclear Energy: A Critical Boost for U.S. Power Generation

As the U.S. expands clean energy investments, nuclear power is emerging as a critical component of grid stability. The 2024 State of the Markets Report by Federal Energy Regulatory Commission (FERC) highlights major additions, including **Vogtle Unit 4 Nuclear Reactor (1,114 MW)** and large-scale solar projects such as Gemini Solar + Storage (690 MW solar, 380 MW storage), Double Black Diamond Solar (593 MW), and Hecate Energy Fyre Solare (500 MW).

While solar plays a vital role in decarbonization, nuclear provides reliable baseload power, with small modular reactors (SMRs) offering scalable, cost-effective deployment. The Department of Energy (DOE) allocated \$13 million through an **Advanced Nuclear Energy Licensing Grant Program**, while the Nuclear Regulatory Commission (NRC) expects at least 25 SMR and advanced reactor license applications by 2029, reflecting strong industry growth.

With data centers consuming a growing share of U.S. electricity, tech companies are co-locating sites and exploring nuclear power as a stable energy source to ensure uninterrupted operations. With up to 37 sites identified for large reactor expansion (DOE), nuclear remains a key player in ensuring grid resilience and supporting rising power demand for digital infrastructure. See map on page four for States with Nuclear Capacity & Number of Potential Sites for Large Reactors and sites under consideration for data centers on federal lands.

Globally, nuclear expansion continues, with 440 reactors currently operating and 66 more under construction (World Nuclear Association). See below for a list of top ten countries by reactor net capacity under construction.

Rank	Country	Net Capacity (MWe)
1.	China	31,985
2.	Russia	4,903
3.	India	4,768
4.	Turkey	4,456
5.	Egypt	4,400
6.	United Kingdom	3,260
7.	South Korea	2,680
8.	Japan	2,653
9.	Bangladesh	2,160
10.	Ukraine	2,070

Source: World Nuclear Association

Potential New Nuclear & Data Center Site Considerations



Source: DOE & 2024 Evaluation of Nuclear Power Plant and Coal Power Plant Sites for New Nuclear Capacity

Join a Coalition Today!

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