Deloitte.

US natural gas and LNG

October 2025

Important trends in US natural and LNG markets

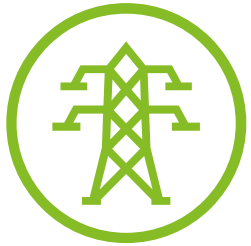
What will happen with US natural gas prices? What factors could influence their trajectory?

US natural gas prices

Are prices on a long-term upward trajectory?

Supply-side trends

How could oil prices and new infrastructure shape production and pricing?



Demand-side trends

Will the power sector continue to drive domestic demand growth?

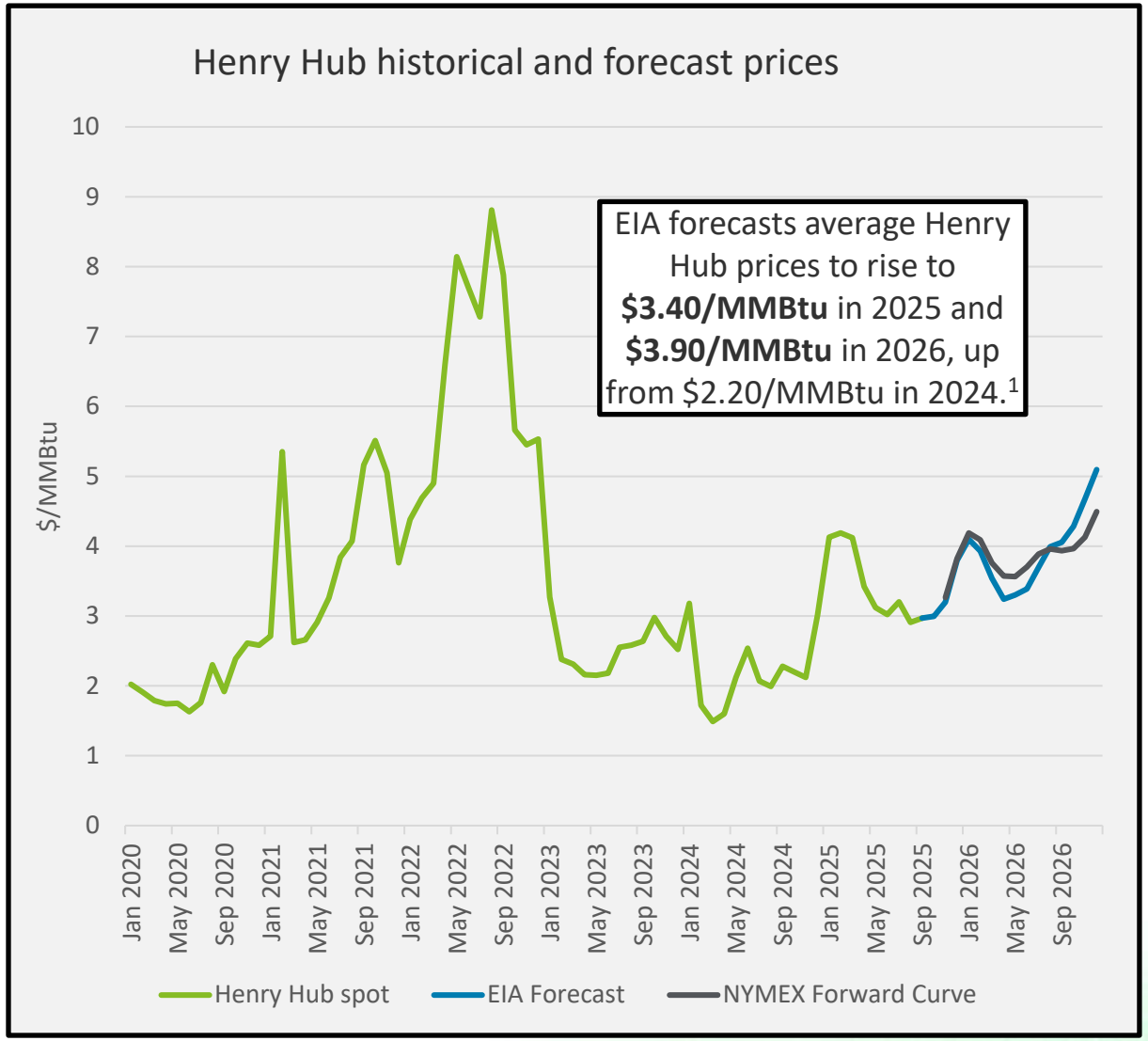
US LNG exports

How much are LNG exports from the US expected to rise?

Global LNG markets

Are global LNG markets headed toward a supply glut?

Due to several factors, US natural gas prices are expected to rise over the next 18 months



Sources: [1]EIA STEO October 2025.

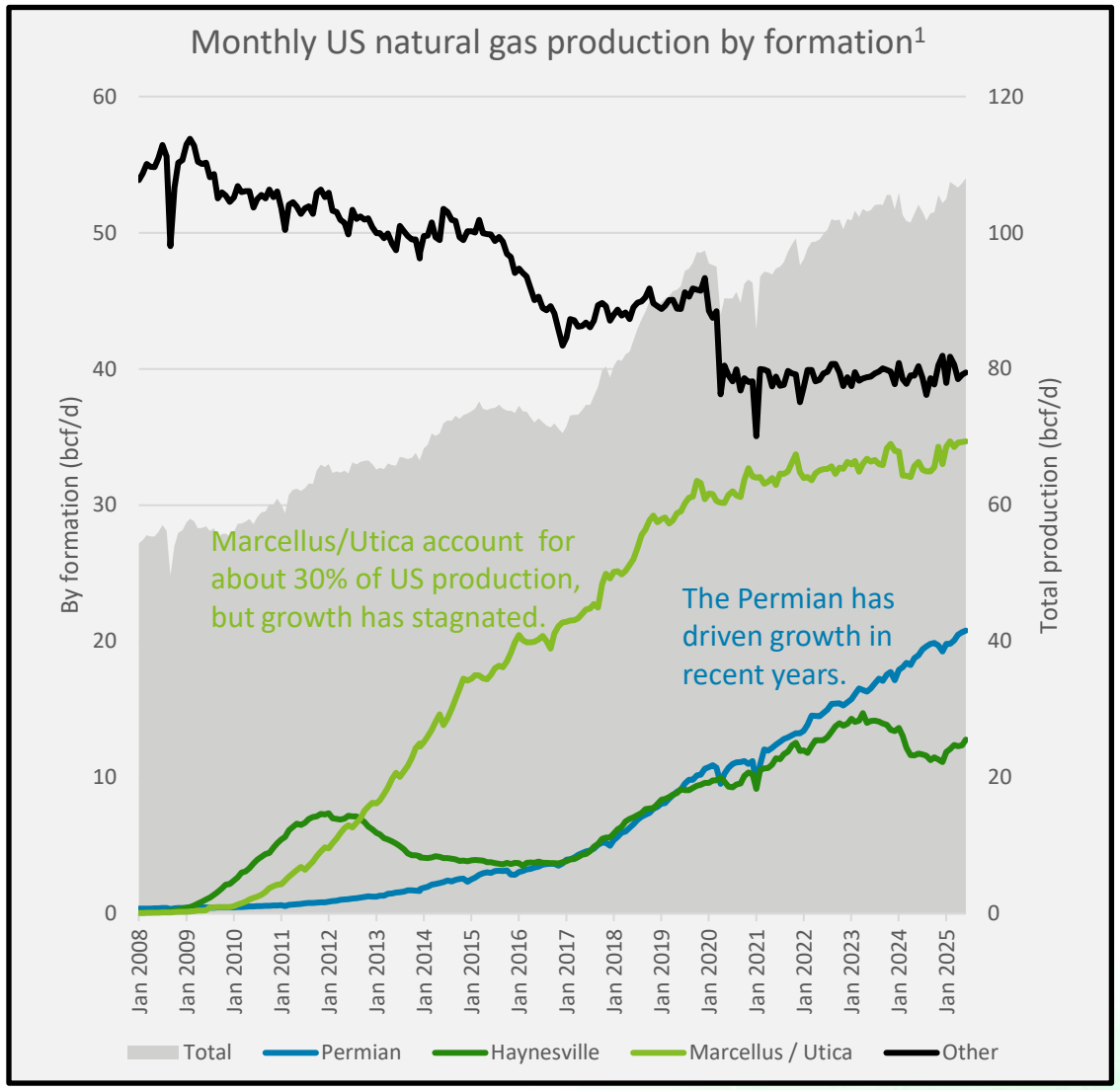
Why does this matter?

- Several factors indicate that US natural gas prices will likely rise over the next 18 months; although uncertainties still exist.
- This could potentially put upward pressure on electricity prices in the US, impacting generators, consumers, and businesses downstream.
- At the same time, a global supply glut is expected to emerge between 2026-29 as global liquefaction capacity rises nearly 40%.
- However, lower global LNG prices could boost demand from price-sensitive countries in South and Southeast Asia.

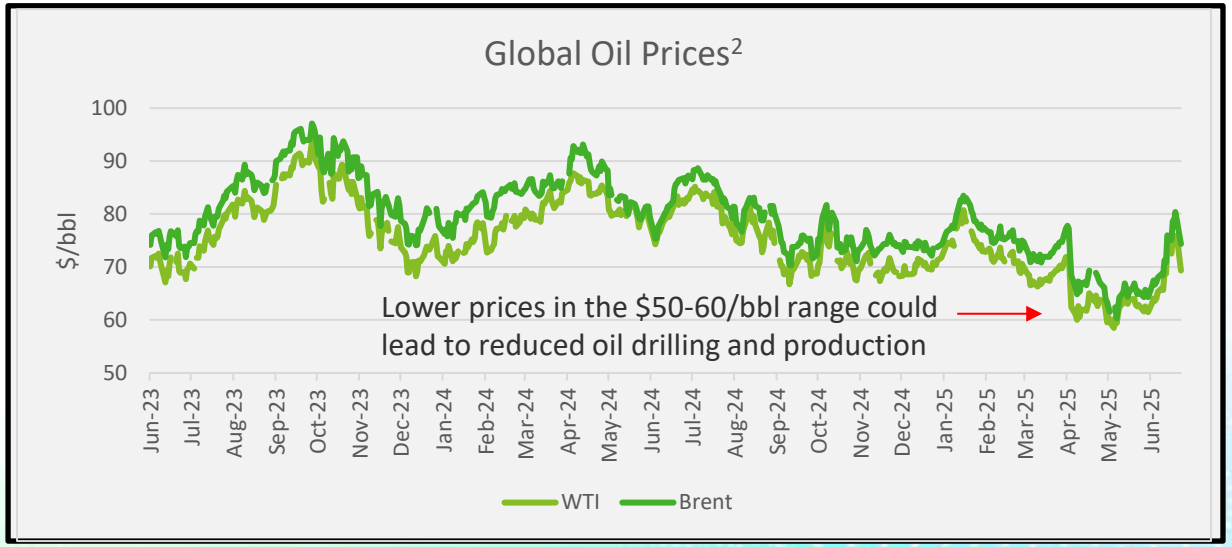
Four factors play key roles in influencing prices:

1. Oil prices: About 37% of US natural gas is produced as a byproduct of oil production, so oil prices could influence natural gas production.
2. Power demand: Demand for natural gas from the power sector could be impacted by trends in electrification and data center grwoth.
3. Infrastructure: In the longer term, increased pipeline capacity from low-cost supply areas could help lower prices (at least regionally).
4. LNG exports: LNG exports are expected to rise through 2026 as 6.4 bcf/d of US LNG export capacity comes online.

US natural gas production continues to grow, reaching record highs of 108 bcf/d in July 2025

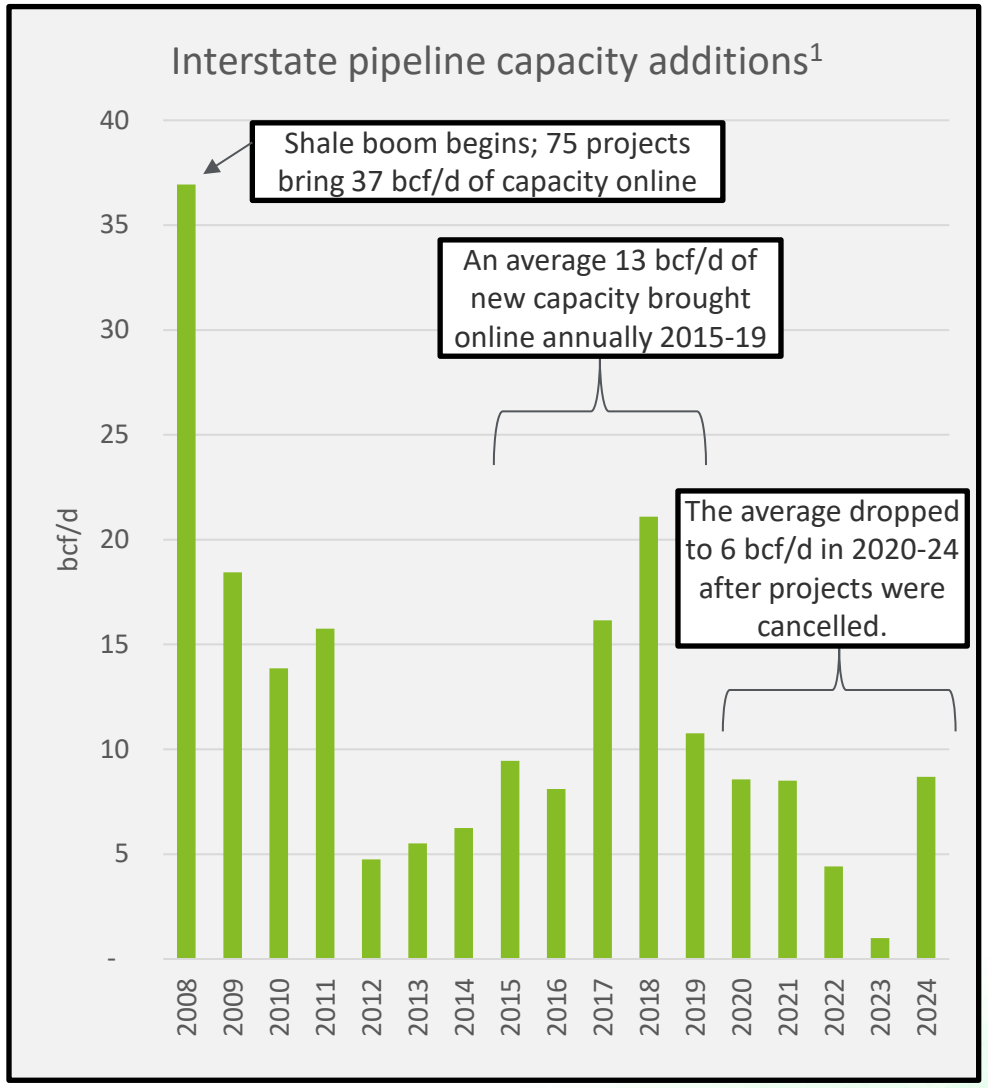


- In 2025, US dry gas **production hit record highs**, driven by the Permian Basin, which surpassed 20 bcf/d in April.[1]
- Since most **Permian** gas is a byproduct of oil production, lower oil prices could reduce both oil and gas output. Producers may have to move to higher cost sources of natural gas production.
- While breakevens are low in the **Marcellus/Utica** ($2.00-2.50/MMBtu), production has stalled due to limited pipeline capacity stemming from permitting challenges in the 2010s.[3]
- Breakevens in the **Haynesville** range from $2.00-2.50/MMBtu in core areas to $3.50-3.75/MMBtu in emerging areas. Haynesville is likely to benefits from being close to new sources of LNG exports.[3]

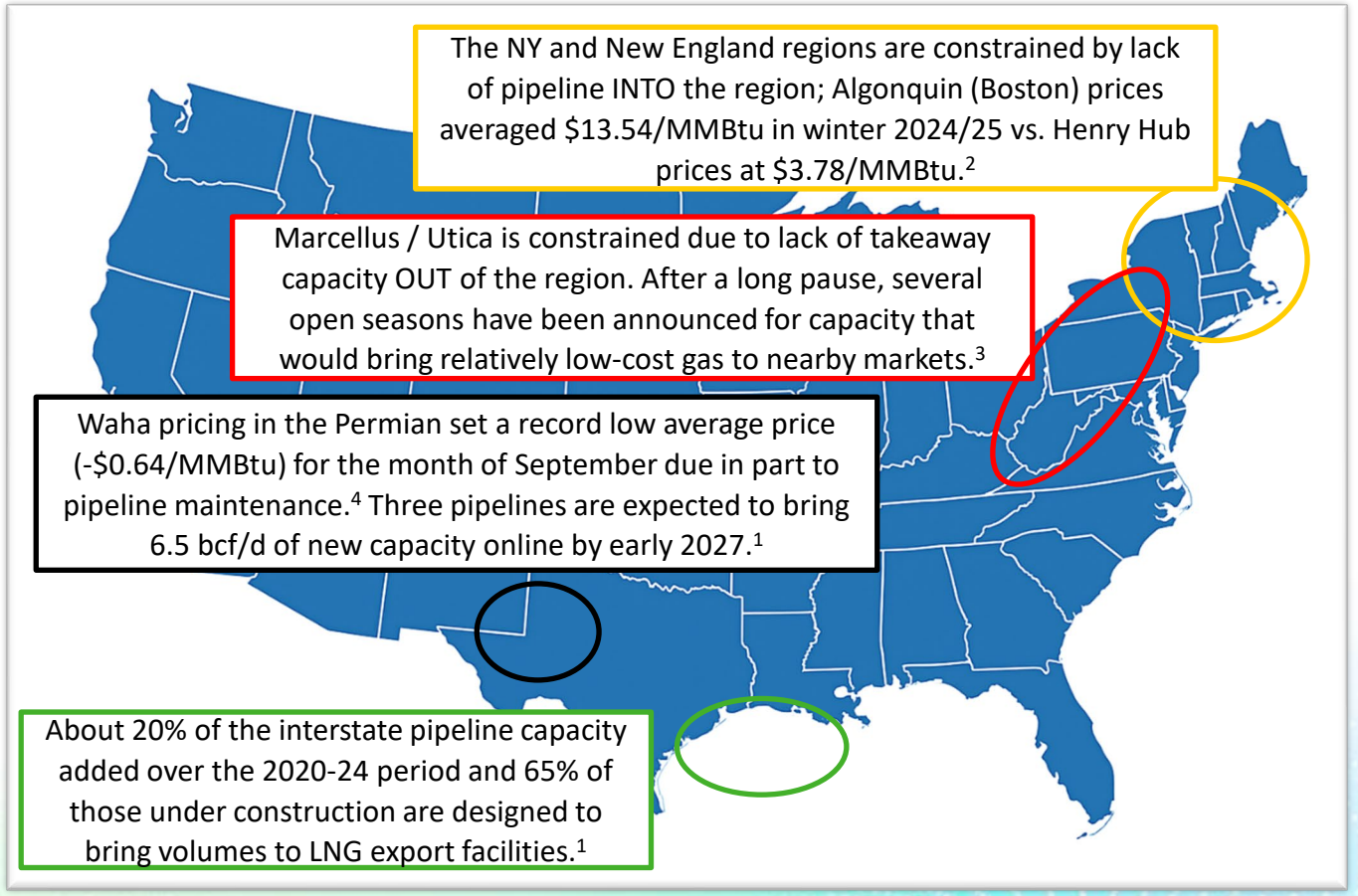


Sources: [1]EIA Production data, accessed September 2025; [2]EIA, Petroleum & Other Liquids, accessed September 2025; [3] EQT Corporation, Q1 2025 Results Presentation, slide 4; Oil & Gas Journal, "Aethon president: Natural gas needs to top $5 to spur Haynesville investment," January 8, 2025.

New pipeline capacity could debottleneck several areas, impacting regional pricing



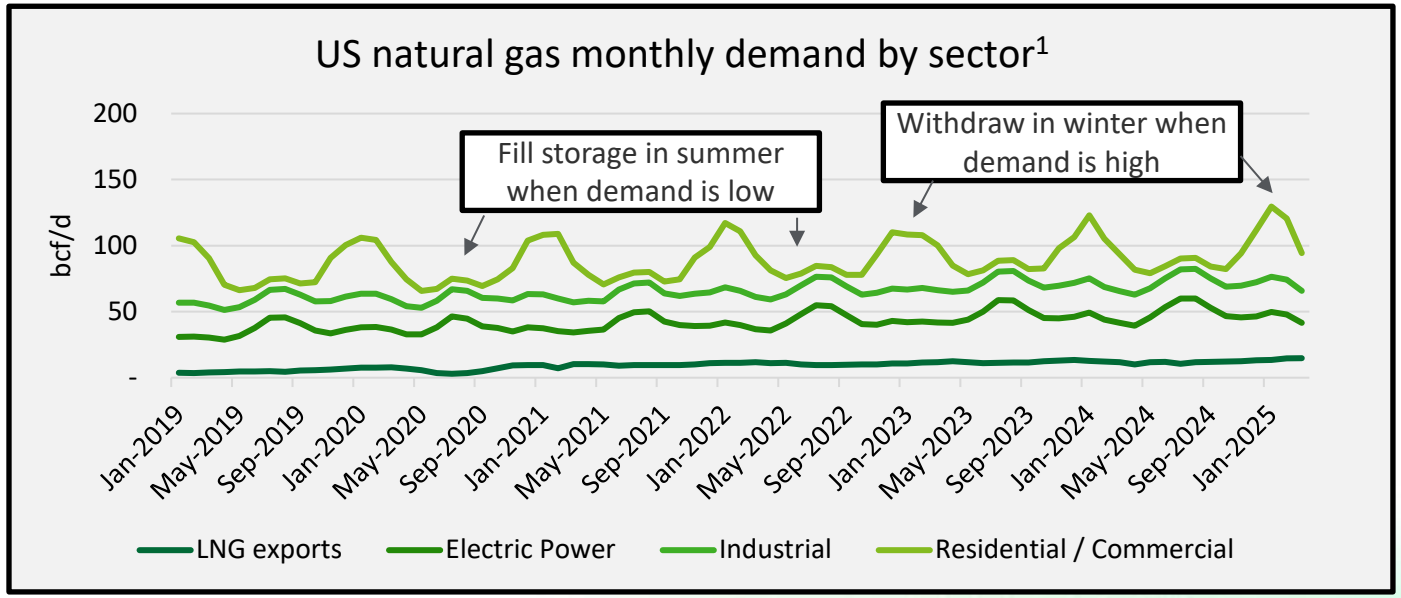
Interstate pipeline buildout stalled in the NE US in 2019/2021 as projects faced legal uncertainty. The current administration has made "unleashing American energy dominance" a priority and that may include streamlining the permitting process, which could lead to more capacity and changes to regional pricing dynamics.

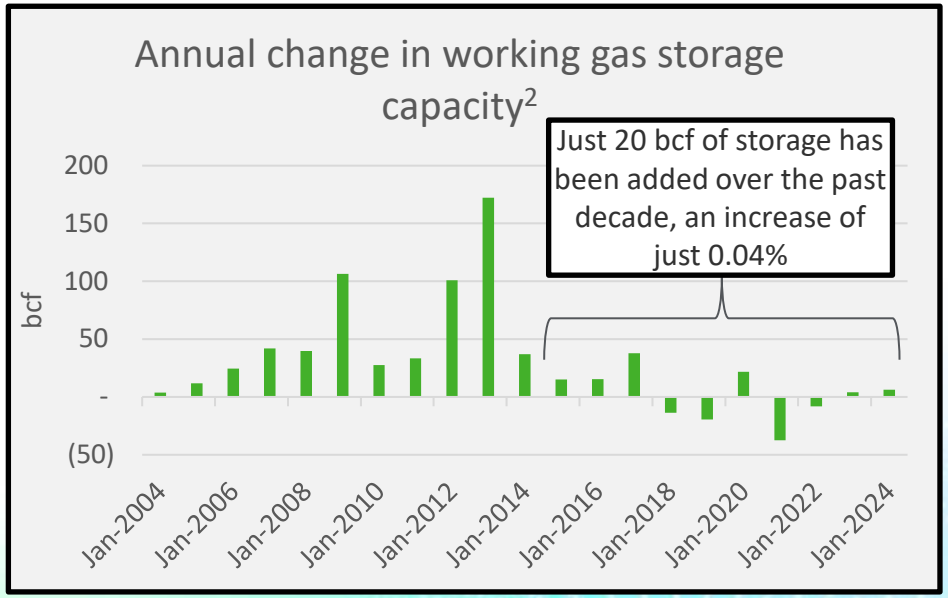


Sources: [1]EIA, "pipeline projects," April 2025; [2]ISONE, "Winter 2025 Quarterly Markets Report," June 4, 2025; EIA, "Henry Hub Natural Gas Spot Price," accessed July 2025; [3]S&P Global, "US Northeast Transco expansion, Constitution Pipeline revivals in the works, Williams says," May 29, 2025; [4] EIA, Natural Gas Weekly Update, October 2, 2025.

Rising price volatility could incentivize more storage capacity

- Natural gas is typically injected into storage during the summer when prices are low and withdrawn in the winter when prices are high. When the price difference between seasons remains large over time, it encourages investment in new storage capacity—at least, that's how it has worked historically.
- However, over the past decade, **seasonal price spreads have narrowed** due to a combination of higher production and higher demand from the power sector. So, while natural gas production grew at a CAGR of 3.7%, working storage capacity has increased by just 0.04% over the same period.[3]
- That could change. An increase in power demand and LNG exports **could raise price volatility**. For example, if a hurricane disrupts LNG exports, several bcf/d of gas could remain in the domestic market, putting pressure on prices. That could incentivize the buildout of more storage capacity—especially salt dome facilities capable of multiple injection and withdrawal cycles per year. Companies could capture value by injecting that volume into storage for future use.
- In short, storage is no longer just about serving seasonal demand. **Intra-seasonal flexibility could become critical.**





Notes: *EIA only reports working gas capacity back to 2012 so total capacity is used as a proxy prior to 2021 with an assumption that working gas capacity accounts for 51% of total capacity.

Sources: [1]EIA, Natural Gas Consumption by End Use, accessed July 2025; [2]EIA, "Underground Natural Gas Storage Capacity", accessed July 2025; [3]EIA, Natural Gas Gross Withdrawals and Production, accessed July 2025.

Domestic gas consumption growth is likely being driven primarily by the electric power sector

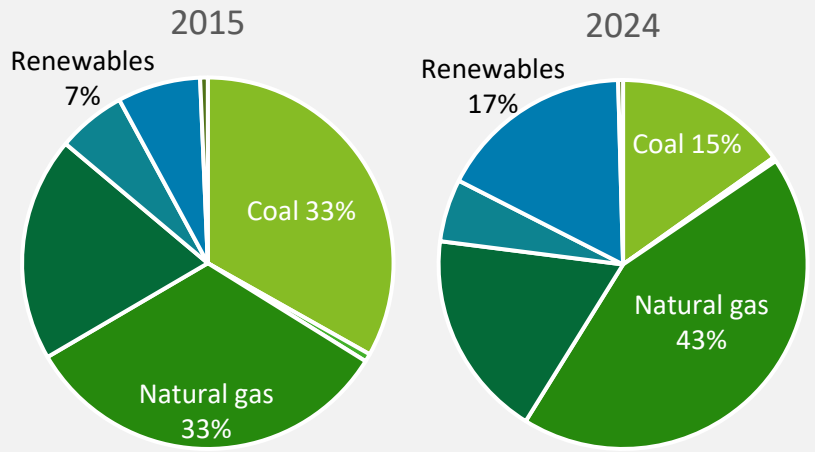
Total net generation rose 0.5% annually[1]

2015: 4.078 billion kWh → 2024: 4.304 billion kWh

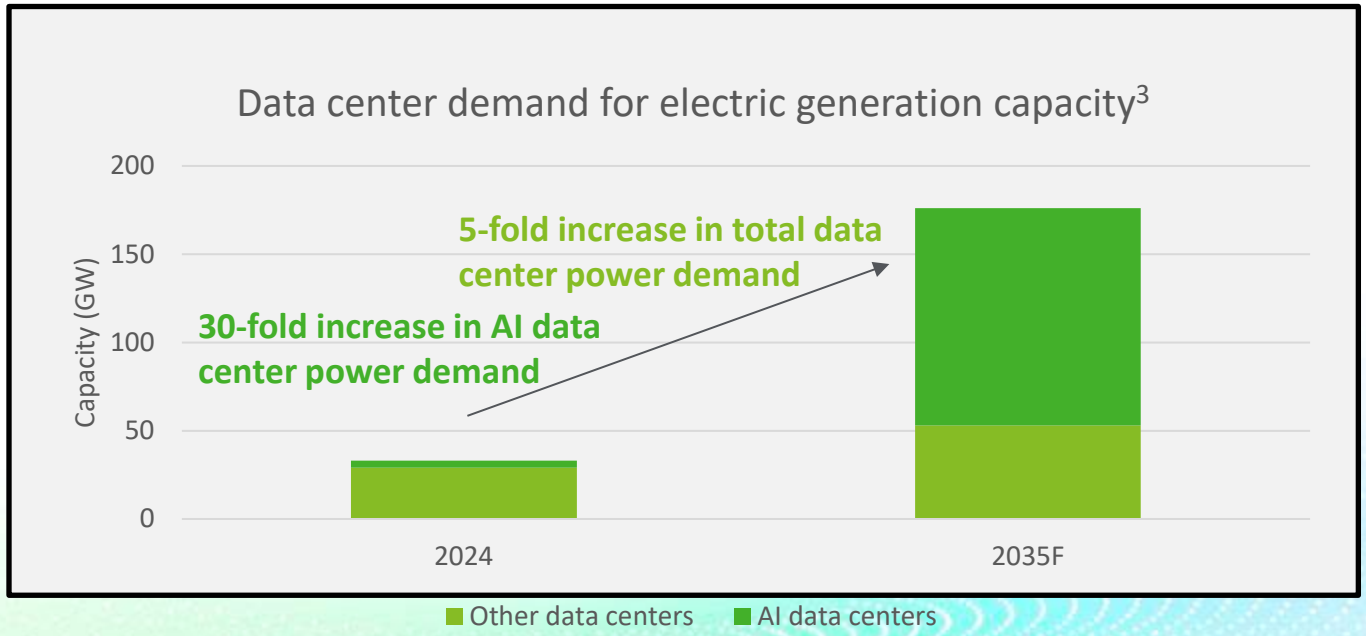
Gas demand from the power sector rose 5.2% annually[2]

2015: 26 bcf/d → 2024: 37 bcf/d

Because the generation mix shifted over the last decade[1]

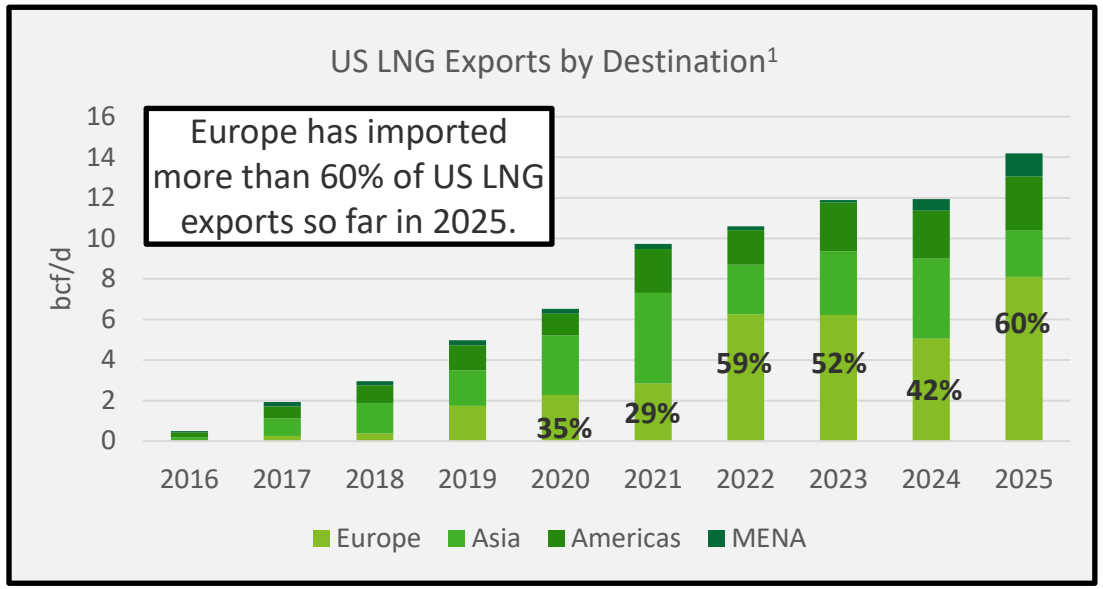


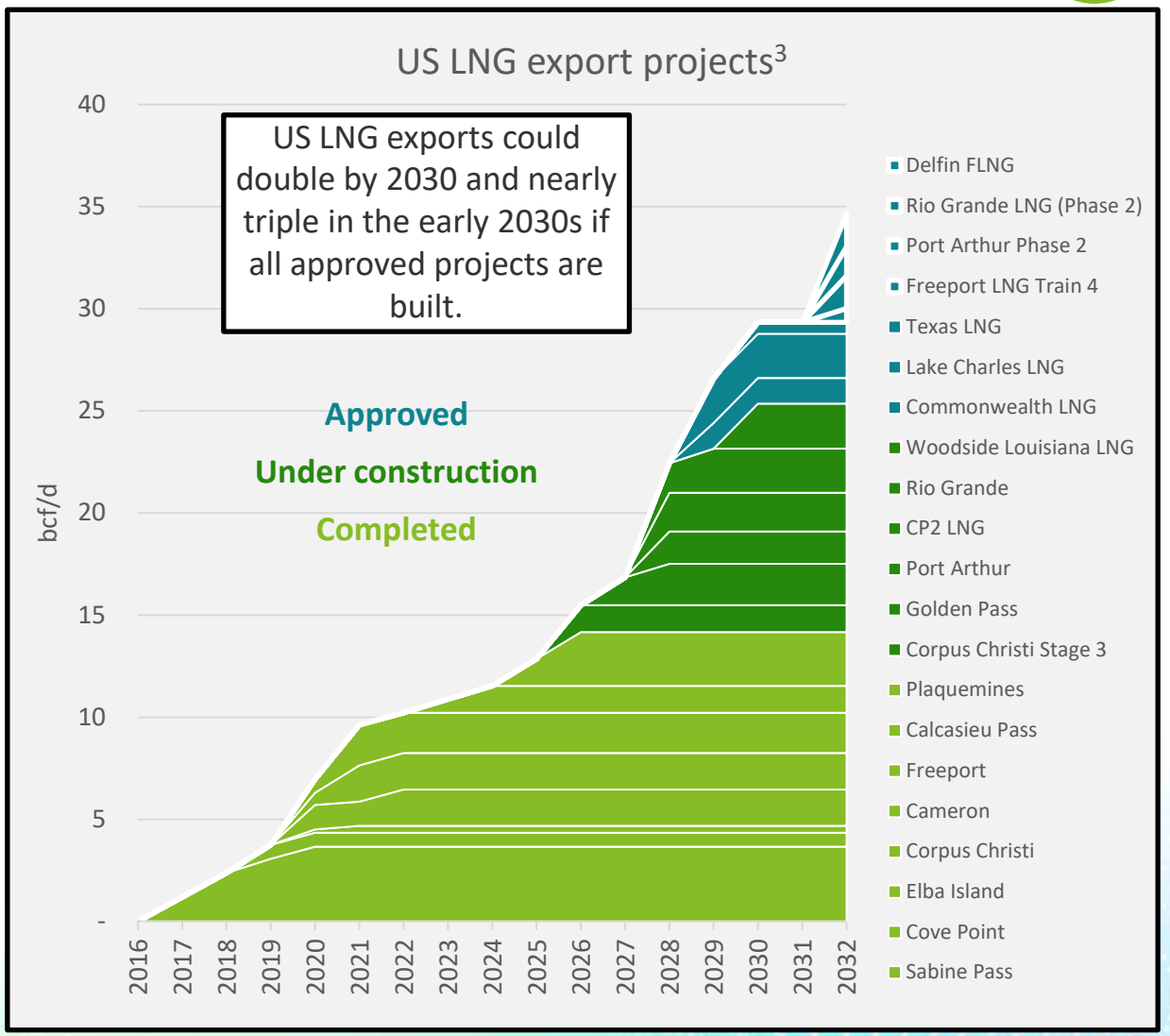
- Looking ahead, **electricity demand could triple** by 2050, driven by data centers , industrial growth, and electrification.[3]
- Data center electricity demand is expected to rise from 33 MW in 2024 to 176 GW in 2035. This could translate into **3-12 bcf/d of incremental gas demand by 2030** from a growing pipeline of natural gas plants.[4]
  - More than 99 GW of gas-fired capacity is planned across 38 states; yet, many top data center markets have constrained gas pipeline capacity.[3]
- **Industrial demand** has grown at a CAGR rate of 1.1% over the past decade and may accelerate due to industrial reshoring and electrification.[2]



Sources: [1]EIA "Electric Power Monthly", accessed July 2025; [2]EIA, Natural Gas Consumption by End Use, accessed July 2025; 3Deloitte, "Can US infrastructure keep up with the AI economy?", June 24, 2025; 4 Zachary Skidmore, "Welcome to Gas Land - how natural gas is powering the US AI boom," Data Center Dynamics, May 1, 2025.

US LNG export growth is expected to drive US natural gas demand over the next five years





- The EIA projects **U.S. LNG exports will rise 37%** from 11.9 to 16.3 bcf/d between 2024 and 2026, while domestic demand grows just 1.2%, from 90.5 to 91.6 bcf/d.[2]
- Since the onset of the Ukraine-Russia conflict in 2022, **Europe's share of U.S. LNG exports has jumped** from 29% to 60% (as of 1H2025), largely at Asia's expense.[1] This shift accelerated in early 2025, driven by:
  - Lower LNG imports from China, due in part to tariffs.
  - Japan and Korea reducing LNG use in favor of nuclear and other energy sources.
- Risks to new development include higher labor and material costs.

Sources: [1]EIA, US Natural Gas Exports and Re-Exports by Country, accessed October 2025; [2]EIA STEO October 2025; [3]EIA, US Liquefaction Capacity, accessed September 2025.

US LNG contract characteristics and their impact on domestic markets

Long-Term Contracts

- **Duration:** U.S. LNG export facilities typically secure long-term contracts ranging from 15 to 20 years.
- **Capacity Commitment:** These contracts often cover 75-80% of the project's nameplate capacity.
- **Take-or-Pay Agreements:** Many of the contracts are structured as take-or-pay agreements, helping with revenue stability for LNG producers by obligating buyers to pay for the contracted volume regardless of actual purchase.

Impact on Domestic Market

- **Incremental Production:** The U.S. natural gas market is expected to adjust to increased LNG export capacity by gradually raising production, leading to controlled domestic price increases.
- **Limited Short-Term Impact:** Due to the high percentage of capacity under long-term contracts, sudden global demand spikes have limited immediate impact on U.S. natural gas prices.

No Destination Clauses

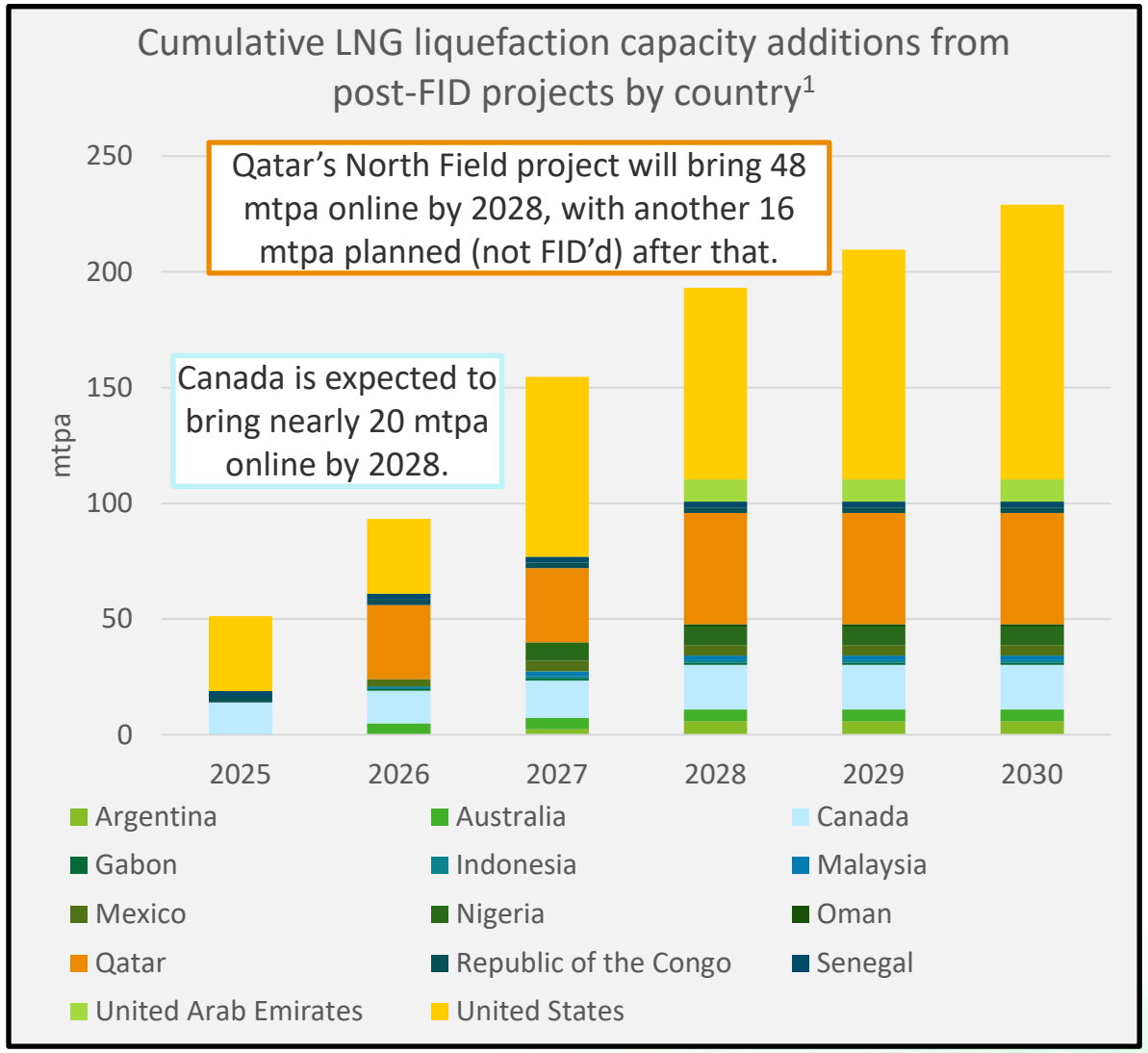
- **Flexibility:** U.S. LNG contracts generally do not include destination clauses, allowing buyers to resell LNG cargoes to different markets.
- **Market Liquidity:** This flexibility enhances global LNG market liquidity and allows for more efficient responses to regional demand fluctuations.

Relative Stability of Pricing Arrangements

- **Indexed Pricing:** U.S. LNG contracts often use Henry Hub prices as a benchmark, providing a transparent and market-based pricing mechanism.
- **Price Stability:** The long-term nature of these contracts and the take-or-pay structure may contribute to relative price stability, shielding domestic prices from short-term global market volatility.
- **Predictability:** The predictable nature of contracted volumes helps stabilize the supply chain and manage domestic natural gas market expectations.

Sources: US DOE, Office of Fossil Energy and Carbon Management, "Energy, Economic, and Environmental Assessment of US LNG Exports," December 2024.

Significant LNG export capacity is expected to come online globally through 2030



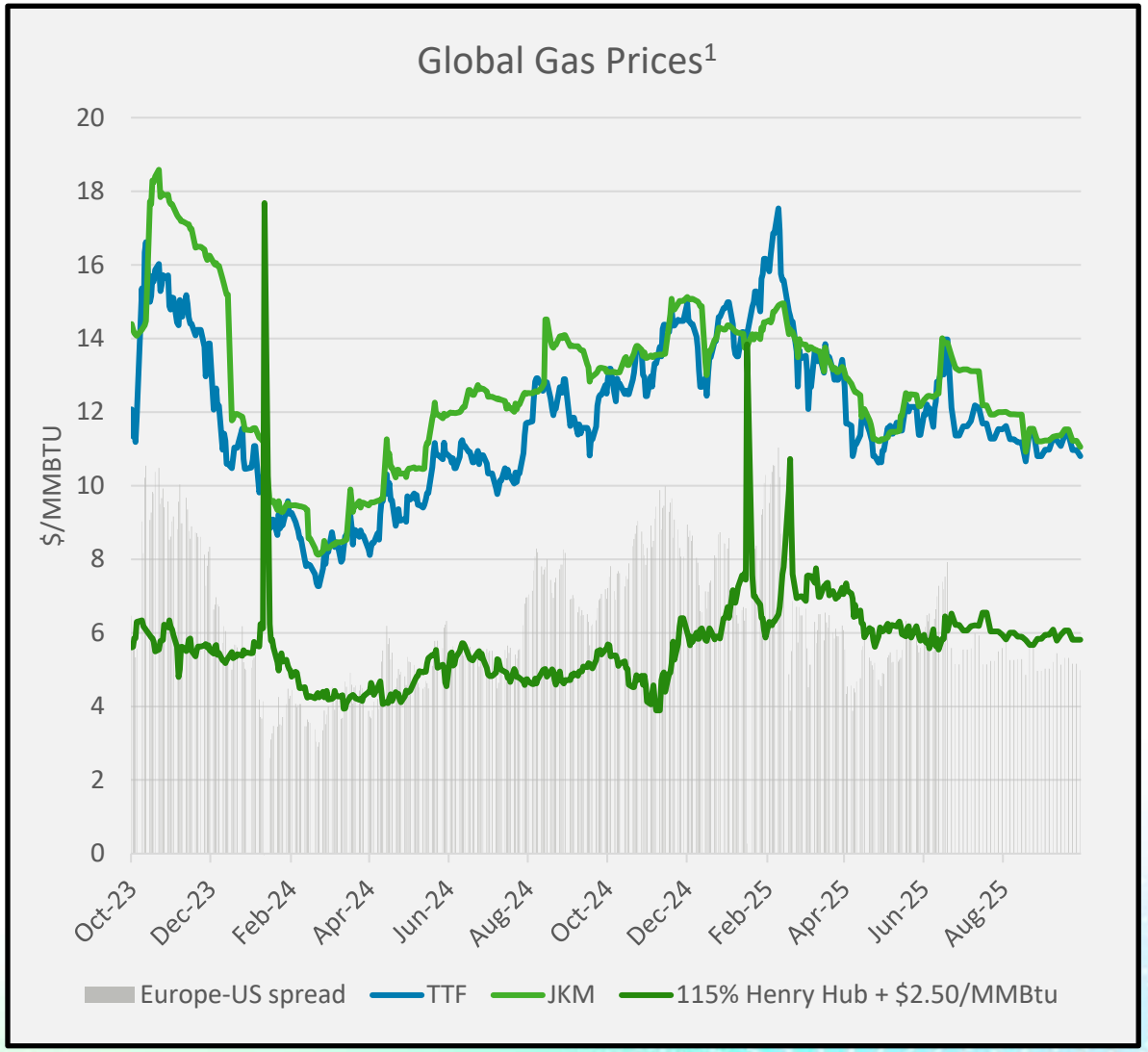
- In 2024, **global liquefaction capacity** was ~485 mtpa,* projected to grow by another 230 mtpa or more than 45% by 2030.[2]
  - The U.S. will contribute 52% of this growth, Qatar 21%, and Canada nearly 8%.[1]
- **Global regasification capacity** stood at 1,188 MTPA in 2024, projected to grow by another 415 MTPA or 35% by 2030.[2] While average utilization rates for liquefaction capacity are >90%, average annual utilization rates for regas facilities are lower at about 40%.[2] These rates result from several factors including:
  - Seasonal demand—Winter heating needs prompt purchases for pre-season storage and reactive purchases during the winter.
  - Security usage—E.g., Brazil imports more LNG during low hydro years.
  - Price sensitive demand—E.g., many South Asian countries rely on a mix of renewables, coal, and LNG and will adjust LNG purchases in line with price and availability.

Notes: *This estimate varies slightly by source. IEA estimates it at 485 mtpa, while GIIGNL estimates it at 492 MTPA.

Sources: [1]IEA, Global LNG Capacity Tracker, September 11, 2025; [2]GIIGNL, Annual Report 2025, accessed June 2025.

Today, price arbitrage opportunities still exist between the US and European and Asian markets

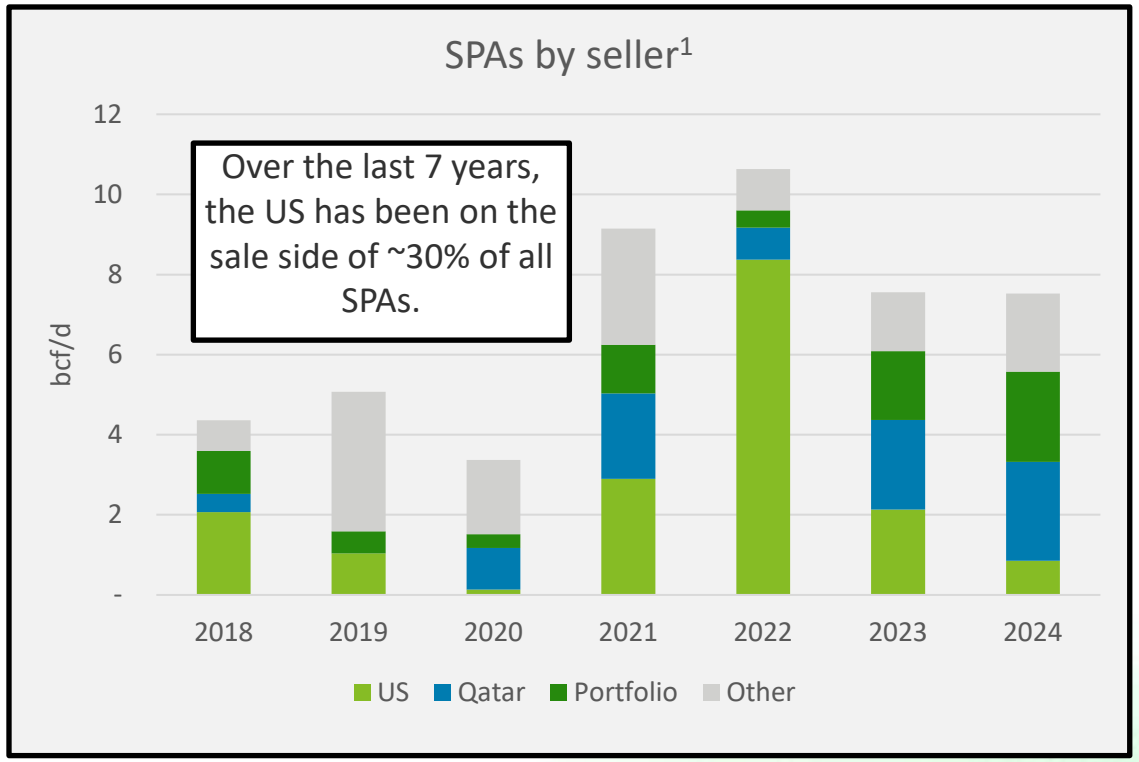
- US LNG is often sold for 115% of Henry Hub plus a liquefaction charge that can vary—usually between $2-3/MMBtu. Today, that still leaves a $5/MMBtu spread between US and European prices, which is significantly more than what would be needed to cover current shipping costs.[1]
- Many in the market are **expecting weaker LNG prices in the coming years** as more export capacity comes online.
- However, lower LNG prices, could incentivize price-sensitive buyers to re-enter the market, providing a price floor.
- One unknown is how US LNG (and other energy products) may be used in some trade / tariff negotiations.
- **Other factors that could impact LNG markets through 2030 include**:
  - Rising demand for gas to power at data centers,
  - Increased labor and material costs for new capacity additions,
  - Changes to trade restriction on Russia or other countries,
  - Global LNG transit disruptions due to geopolitical or climate-related issues.

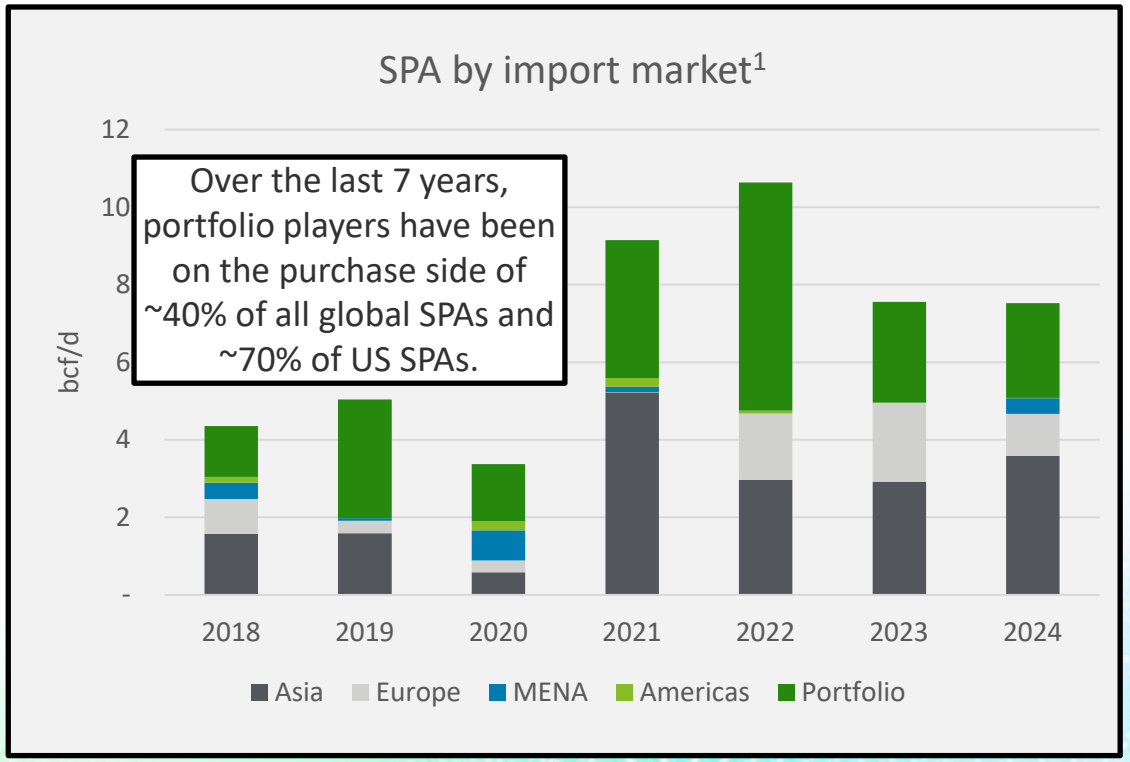


Sources: [1]EIA, "Henry Hub Natural Gas Spot Price," accessed September 2025, ICE Dutch TTF Natural Gas Futures Pricing, CME LNG Japan/Korea Market (Platts).

A record number of LNG contracts were signed in 2021-22. Will activity slow in 2025?

- Over the last 20 years, **LNG trading has evolved** from point-to-point deals under bespoke contracts between LNG owners and utility companies to a dynamic market of diverse players trading cargoes under long-term Sales and Purchase Agreements (SPAs) and spot contracts.
- In recent years, **portfolio players—also known as LNG aggregators—have emerged as the largest group of counterparties for new SPAs,** accounting for 40% of all SPA purchases and 30% of all SPA sales. For US projects, portfolio players have secured 70% of SPA volumes over the last seven years.[1]
- According to the IEA, portfolio players re-sell about half their contracts via long-term agreements and the rest on the spot market, which now represents 30-35% of annual LNG trade.[2] **With a potential supply glut looming, it may be worth watching who signs new SPAs in 2025.**





Sources: [1]GIIGNL, Annual Report 2025, accessed June 2025; [2]IEA, Global Gas Security Review 2023, July 2023, p.50-55.

Questions?

Connect with the Deloitte Research Center for Energy & Industrials with any questions or comments on the content of this presentation.

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