



### LNG & DC Demand Driving US Nat Gas Higher Compared to 50 years ago (1970s), there is very little geopolitical risk premium in today's

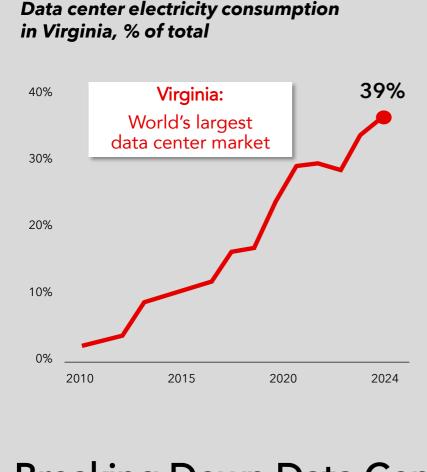
well-supplied global energy markets. However, given US leadership as the world's #1 LNG exporter and data center (DC) developer, demand-driven US natural gas markets diverged sharply from European markets, driving prices significantly higher in late 2025.

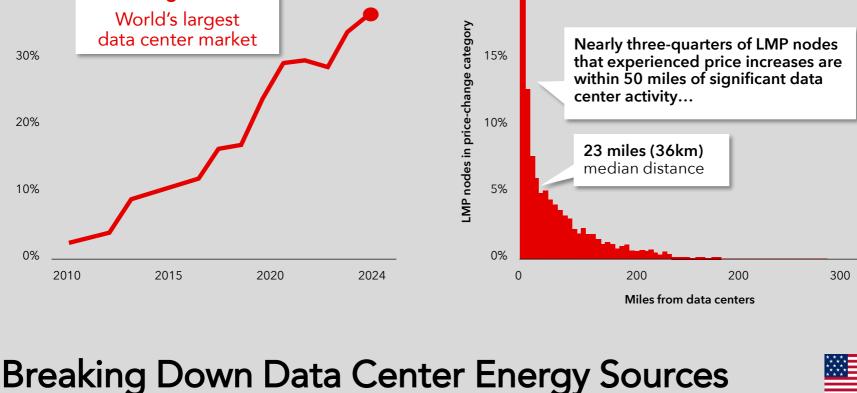


## Data Centers Consume a Growing Share of Electricity Data centers are a major driver of the surge in energy costs and are the largest source of

new power consumption in certain US regions. According to data analyzed by Bloomberg, electricity costs have risen over 200% over the last five years in areas located near significant data center activity. In Virginia, the world's largest data center market, data centers account for 39% of total electricity consumption in the state. Distance from significant data center activity for

20%





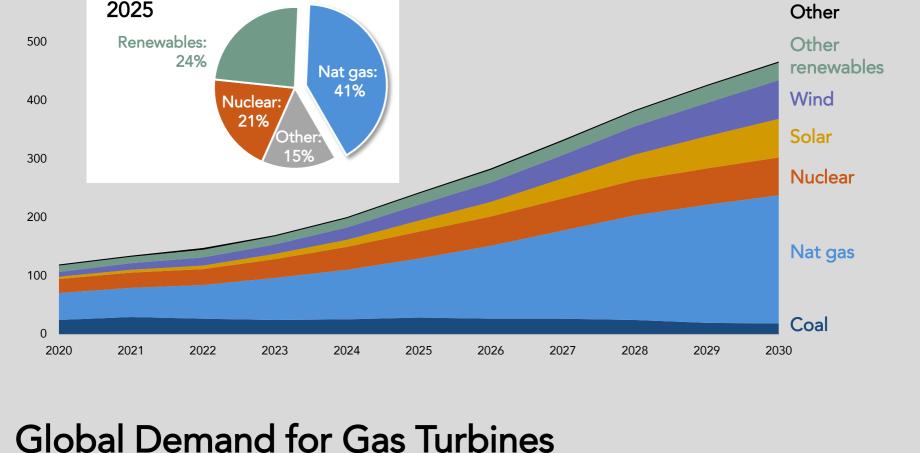
LMP nodes and change in the median wholesale

electricity prices (2020-2025)

### center electricity needs as of 2024. Reliance on natural gas extends from its ability to provide dependable and scalable electricity critical to the 24/7 demands of hyperscale data center infrastructure.



US electricity generation for data centers by fuel, TWh



New orders for gas turbines are expected to increase to 1,025 units in 2025, a 27% y/y

Germany account for 2/3 of global supply and are struggling to increase production fast

enough to keep up with demand. China by contrast has not deeply penetrated this market,

increase, driven by data center electricity demand. Companies in the US, Japan and

# as natural gas accounts for only 3% of China's domestic electricity production.

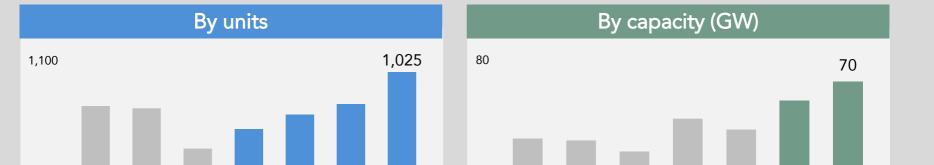
Gas turbine new orders

2019

2020

4,085

2021



2019



2022

2023

2024

2025

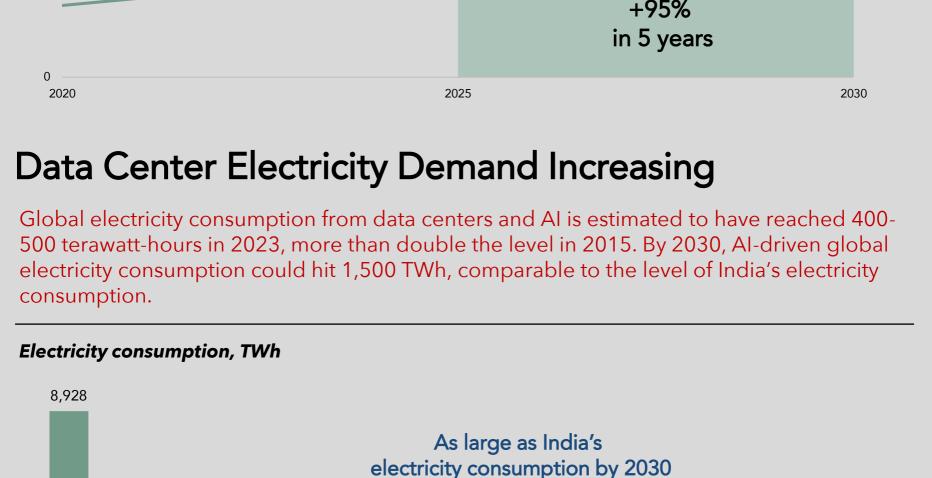


2025

946 TWh

269 TWh

485 TWh



#### 1,500 1,500 1,011 903 608 575 556



### Secure grid connection 16% Cost of power 13%

Power-related factors Access to renewable energy 12% Workforce availability Capital expenditure Network proximity 10% Tax breaks 8% Favorable regulation Proximity to population 5% Community acceptance Water availability

Source: (1-4) Bloomberg. Data as of December 4, 2025. (5-6) Bloomberg, "AI Data Centers Are Sending Power Bills Soaring". GridStatus. DC Byte. Analysis includes a small number of nodes in Canada used by US RTOs. To determine significant data center activity, a dynamic threshold was used that took into account the total data center capacity in the area around any given LMP node. (7-9) Financial Times, "The fallout from the AI-fueled dash for gas". Dora Partners. IEA, "Energy and AI". Data as of April 2025. Forecasts are base case scenario. 2025 is YE forecast. (10) IMF, "World Economic Outlook, April 2025 - Commodity Special Feature." IEA. US EIA. Data for countries as of 2023. 2030 and 2023 estimates are OPEC. (11) Data Center Dynamics. Vertiv. BloombergNEF. Data shows % of respondents who ranked the option in their top three.

# **Capital Markets Strategy Team**

Global Corporate & Investment Banking



**Managing Director** 

(212) 405-7472

Tom.Joyce@mufgsecurities.com





(212) 405-7443