TXOGA CHARTBOOK™

December 1, 2025

The TXOGA Chartbook is an essential resource for our members and those interested in understanding the data reflecting ongoing developments within the economy and the oil and gas sectors, both internationally and domestically, including specific trends in Texas.

Key points – Week of December 1, 2025

- **Economic signals softened at the margins, with the ADS index pointing to Q3 slowing and Q4 steadiness as high-yield borrowing costs eased slightly but remained elevated.** The Philadelphia Fed's ADS Index—an early read on real-time activity—continued to indicate weak momentum through late November, consistent with a downshift from Q2's rebound. Meanwhile, high-yield borrowing costs slipped 10 bps w/w to 12.7%, though spreads held near their highest levels since May, reflecting tighter financial conditions for lower-quality issuers. Other indicators were unchanged this week but continue to show a mixed backdrop of firm labor markets, moderating consumption, and stalled investment.

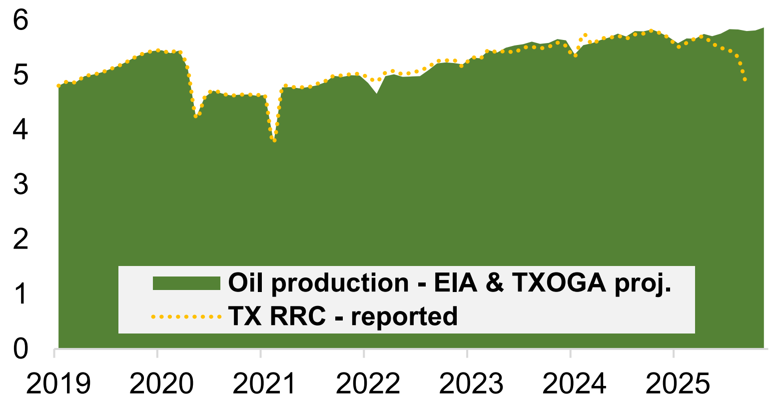
- **Oil markets were steady but directionless, with prices range-bound and fundamentals mixed.** WTI edged up 0.8% w/w to $58.55 per barrel, supported by historically low inventories and firm demand but capped by strong current supply and OPEC's continued pause on further cuts. U.S. petroleum demand improved to 20.2 mb/d, up 0.8 mb/d from the prior week, while net exports slipped to 3.2 mb/d. Crude inventories rose by 2.8 million barrels yet remained within the lower end of the five-year range. Futures momentum stayed weak and without clear direction, underscoring a market still searching for a catalyst.

- **Natural gas markets tightened modestly as prices firmed, exports surged, and storage eased seasonally.** Prompt-month futures rose 5.9% w/w to $4.85 per mmBtu amid colder-weather expectations, while near-term contracts continue to trade above their historical mean-reversion target, signaling greater upside risk than downside. Working storage dipped to 3.94 tcf — still 7% above the five-year range — as seasonal withdrawals began. Net exports climbed sharply, up 42% y/y to 17.5 bcf/d on continued LNG strength, and consumption increased 2.5% y/y to 93.1 bcf/d. Futures momentum turned positive into late November, reinforcing the recent firmness in sentiment.

- Chart of the Week: **Texas production has grown even as rig counts have declined.** Crude oil output approached 5.9 mb/d in November and natural gas marketed production neared 36 bcf/d. Remarkably, Texas' combined crude oil and natural gas production rose 5.8% year-to-date through November despite operating with 20.4% fewer rigs.

Chart of the Week: Texas oil and natural gas production has continued near record highs

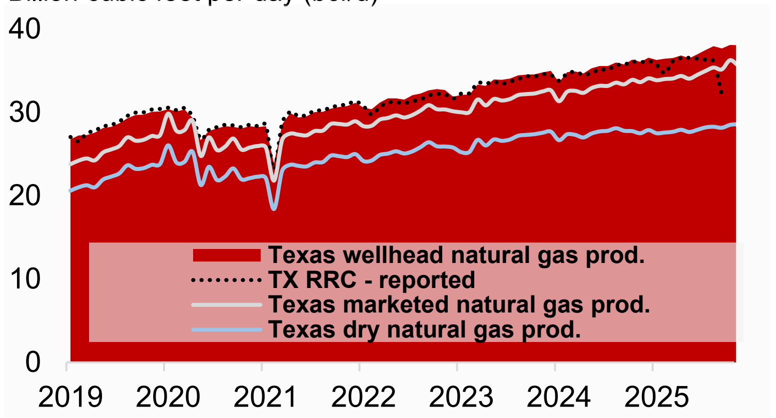
Texas crude oil production, Jan. 2019 – Nov. 2025



Estimated record production. Texas crude oil output held near record highs at **5.8 mb/d** in **September 2025 (EIA)**, with TXOGA estimates showing production **rising to 5.9 mb/d in November**, the highest on record.

Texas natural gas production, Jan. 2019 – Nov. 2025

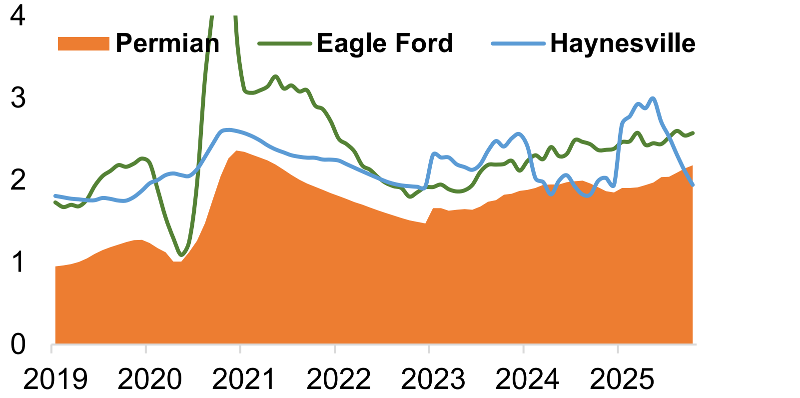
Billion cubic feet per day (bcf/d)



Natural gas production remains near record levels. Texas produced 37.7 bcf/d in gross withdrawals and 35.2 bcf/d in marketed production (EIA). TXOGA estimates indicate November marketed output near 36 bcf/d.

Texas rig productivity by basin – new monthly prod. per rig

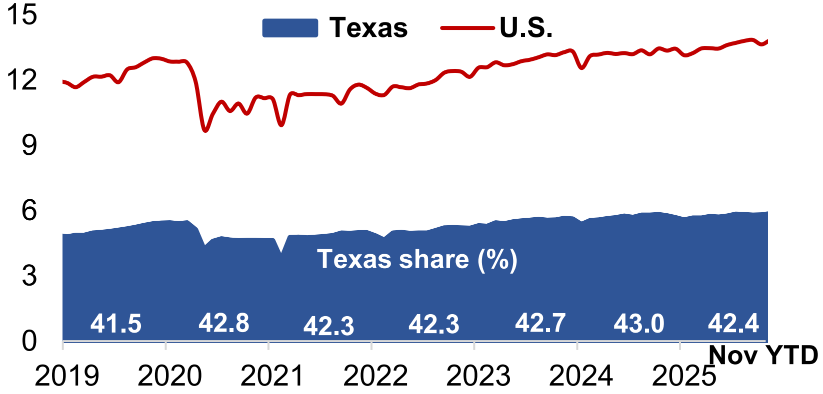
Thousand barrels per day oil-equivalent, kb/doe



Rig productivity rose in the Permian and Eagle Ford. EIA estimates for October 2025 show rig productivity up 14.1% y/y in the Permian and 8.7% in the Eagle Ford, but down 2.5% in the Haynesville.

U.S. and Texas crude oil production, Jan. 2019 – Nov. 2025

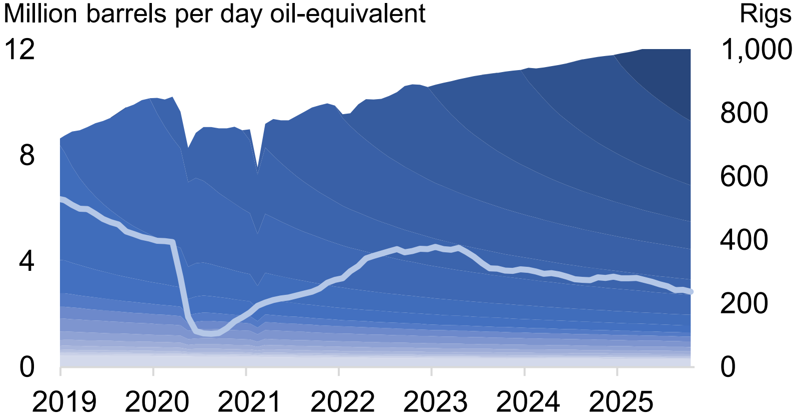
Million barrels per day (mb/d)



Texas share of U.S. production. Through the first 11 months of 2025, Texas accounted for **42.4%** of total U.S. crude oil production.

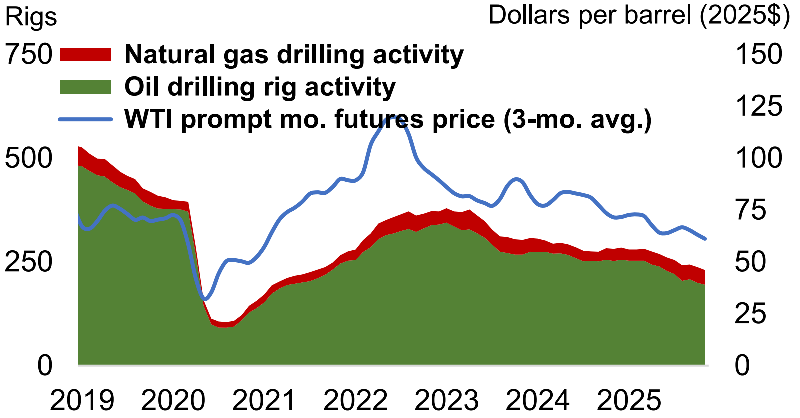
Texas shale basin wellhead oil & natural gas production

Million barrels per day oil-equivalent



EIA estimates show continued production growth across major Texas shale basins in October 2025, including the Permian (+0.9% y/y) and Haynesville (+5.2% y/y), while the Eagle Ford declined 3.9% y/y.

Texas drilling activity and WTI crude oil futures prices

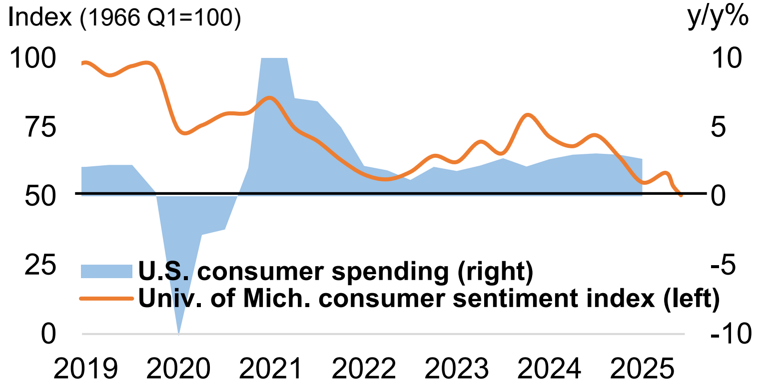


Texas drilling activity and prices. As of November 26, Texas had **189 oil-directed rigs** (down 8 rigs w/w) and **37 gas-directed rigs** (up 1 rig w/w), according to Baker Hughes.

sources: U.S. Energy Information Administration; Texas Railroad Commission; Baker Hughes; CME Group; TXOGA analysis

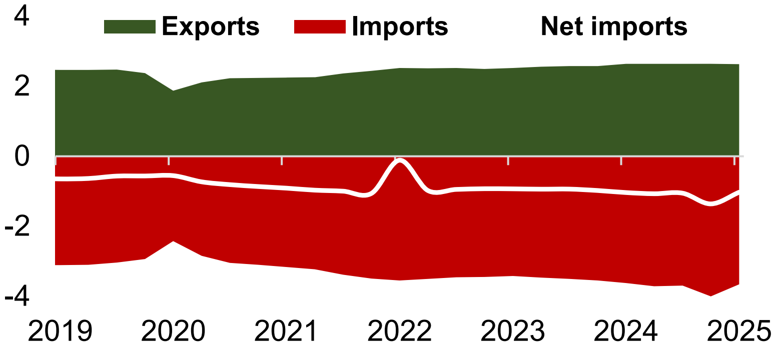
U.S. economic indicators

Consumer sentiment and spending trends



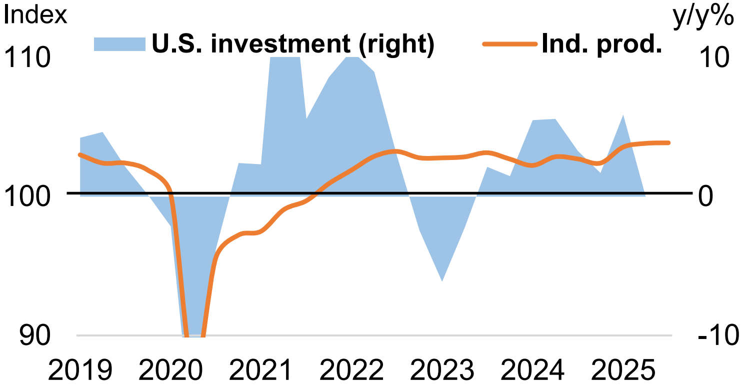
In the University of Michigan's survey, **consumer sentiment—a leading indicator of household spending—fell 6.2% m/m** and **32.0% ytd** through early November, pointing to weaker household confidence and slower spending. BEA's revised Q2 GDP data showed consumer spending up 2.7% year-over-year, 0.4 percentage points slower than in Q1.

U.S. trade balance and petroleum exports



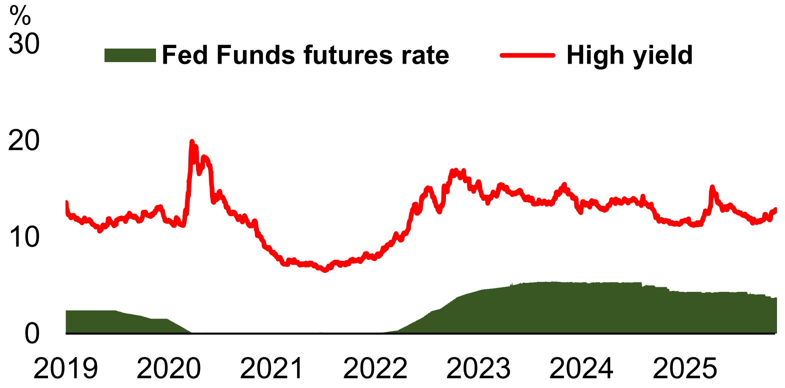
The BEA's initial Q2 2025 GDP report showed the **U.S. trade deficit narrowed to an annualized $1.0 trillion (SAAR)**, down from $1.4 trillion in Q1, as exports exceeded imports. The **petroleum trade surplus rose $9.9 billion to $72.2 billion**, more than double its level a year ago.

Industrial production and investment



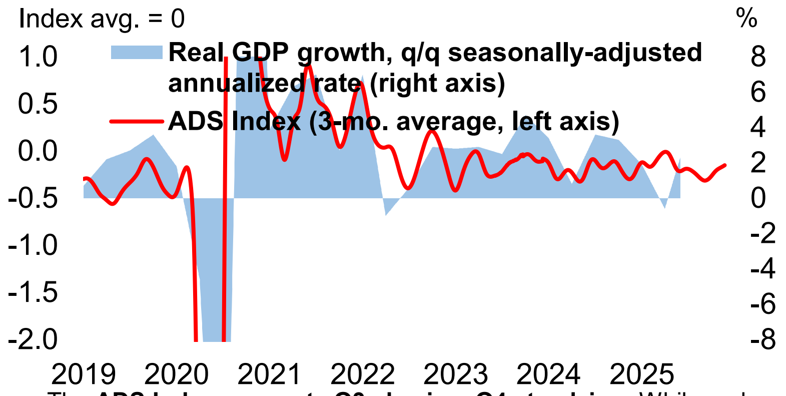
Macro uncertainties stalled investment in Q2 2025. Revised BEA data show **economy-wide investment flat year-over-year**, diverging from industrial production, which rose **0.1% m/m in August**. Capacity utilization held at **77.4%**, per the Federal Reserve.

Interest rates and high-yield borrowing costs



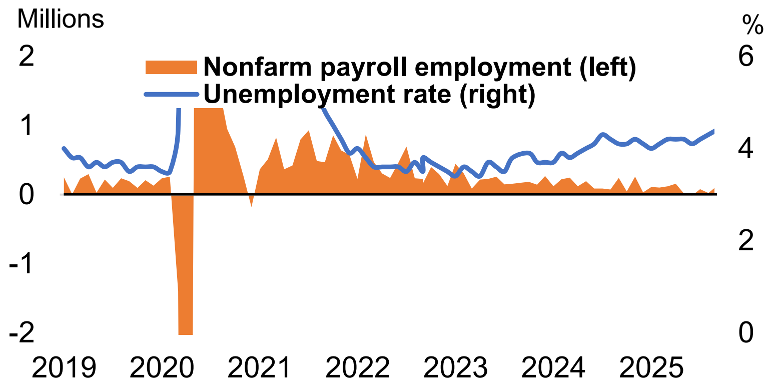
Credit costs for lower-quality issuers held above 9.0%. As of November 28, high-yield borrowing costs fell 10 bps w/w to 12.7%, while Fed Funds futures slipped 4 bps to 3.7%, resulting in a premium of 9%, on par with the highest since May.

ADS Index and real GDP growth



The **ADS Index suggests Q3 slowing, Q4 steadying**. While real GDP growth rebounded in Q2, the Philadelphia Fed's ADS Index—an early signal of economic momentum—continued to indicate weak growth in Q3 and increased growth entering Q4.

Employment and unemployment trends

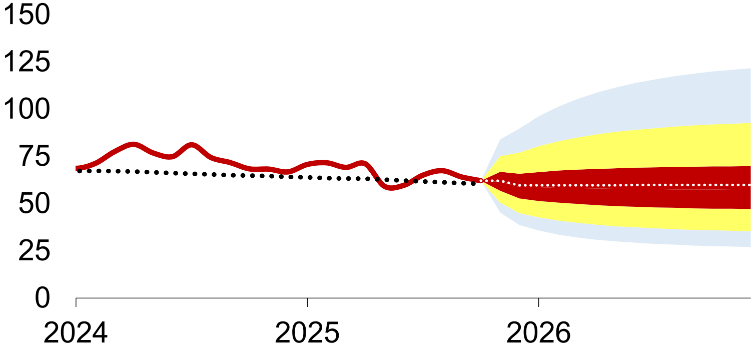


Labor market conditions weakened further. Nonfarm payrolls increased by **119,000 in September**, while the **unemployment rate rose 0.1 points to 4.4%**, according to the Bureau of Labor Statistics.

sources: FRED; Univ. of Michigan; BEA; CME Group; Federal Res. Board; Philadelphia Fed. Res.; Bureau of Labor Statistics

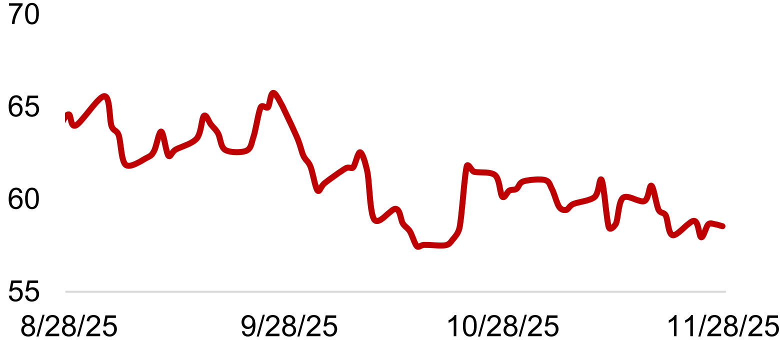
U.S. oil market indicators

WTI futures mean reversion analysis
Dollars per barrel (2025$)



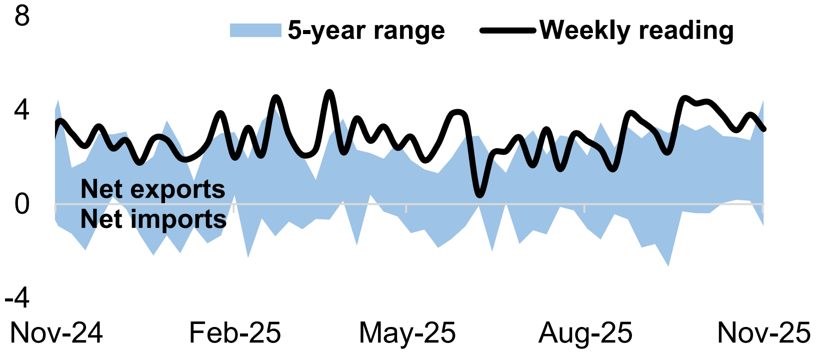
Near-term WTI futures remain aligned with their historical mean-reversion target, with forward prices remaining flat through 2026—suggesting expectations of similar near-term market conditions.

WTI crude prompt month futures prices
Dollars per barrel



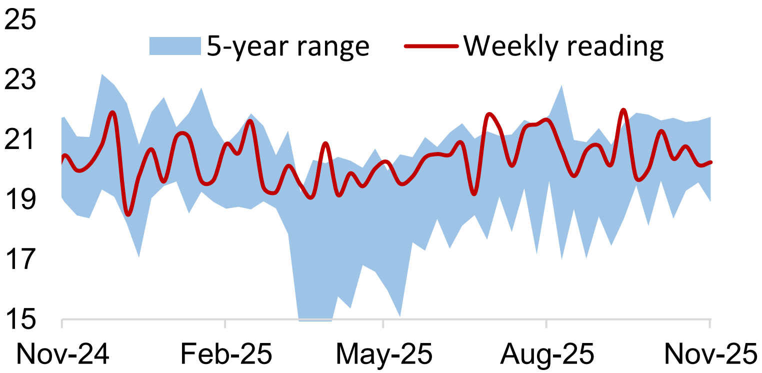
WTI crude prices inched higher but remained range-bound amid opposing market forces. WTI rose 0.8% w/w to $58.55 per barrel as of November 28, supported by historically low U.S. inventories and steady demand, yet capped by strong current supply and OPEC's decision to extend its pause on additional production cuts.

U.S. petroleum net exports (imports)
Million barrels per day, mb/d



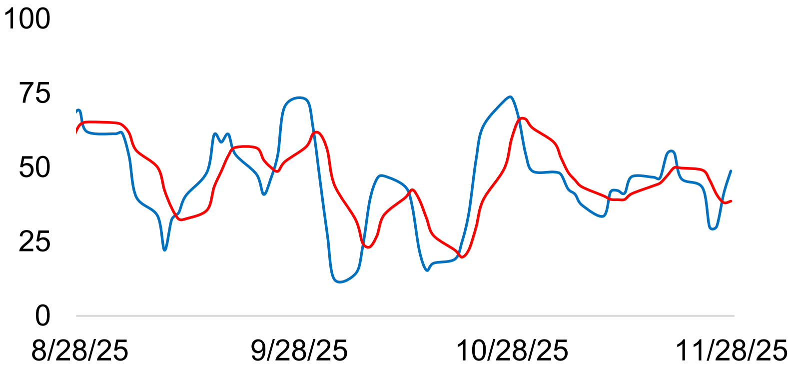
U.S. petroleum net exports fell to 3.2 mb/d for the week ended November 21, down 0.6 mb/d (19.5%) from the prior week.

U.S. petroleum demand
Million barrels per day (mb/d)



U.S. petroleum demand increased. As of November 21, deliveries averaged 20.2 mb/d, up 0.8 mb/d from the prior week.

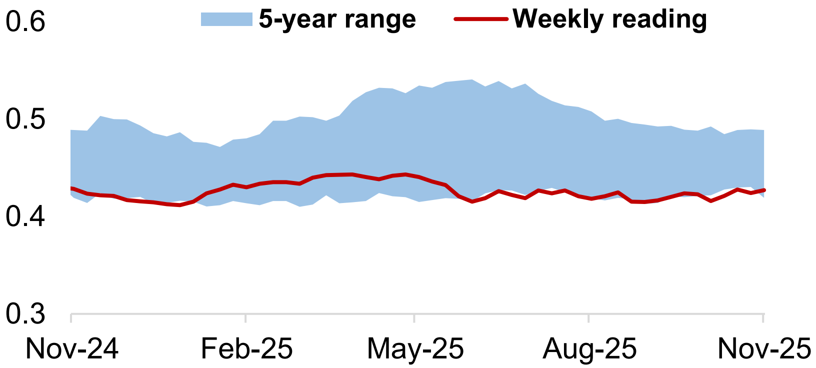
WTI futures momentum indicator
Index level



%K, %D 5 bars

Price momentum remained weak and without clear direction during the week ended November 28.

U.S. crude oil inventories (excluding the SPR)
Billion barrels



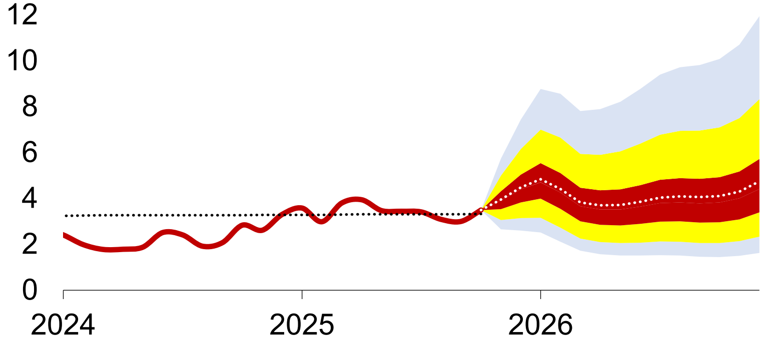
U.S. crude oil inventories increased by 2.8 million barrels for the week ended November 21, which was in the bottom 10% of the five-year range.

sources: U.S. Energy Information Administration; CME Group; Bureau of Labor Statistics; TXOGA analysis

U.S. natural gas market indicators

Natural gas futures mean reversion analysis

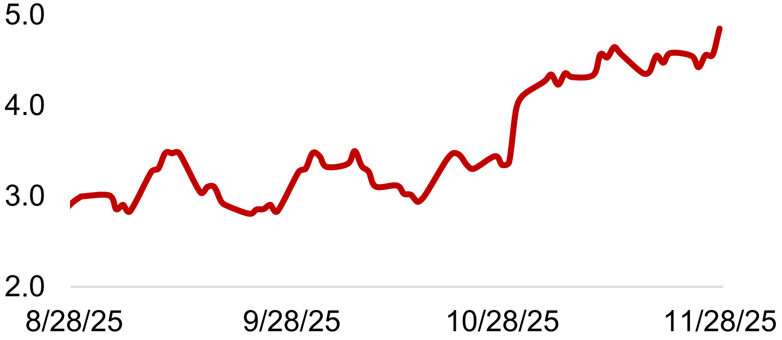
Dollars per mmBtu (2025$)



Near-term futures exceed their historical mean-reversion target, with forward prices in contango (spot prices below futures). Confidence intervals imply greater potential for upside movement than downside risk.

Natural gas prompt month futures prices

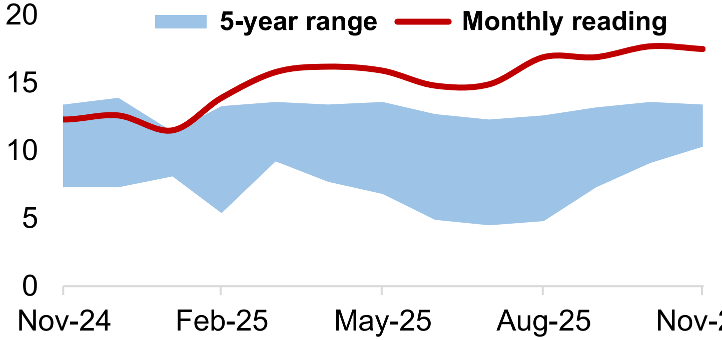
Dollars per million Btu



Natural gas prices 5.9% w/w to $4.85 per mmBtu as of November 28, reflecting expectations for colder weather.

U.S. natural gas net exports

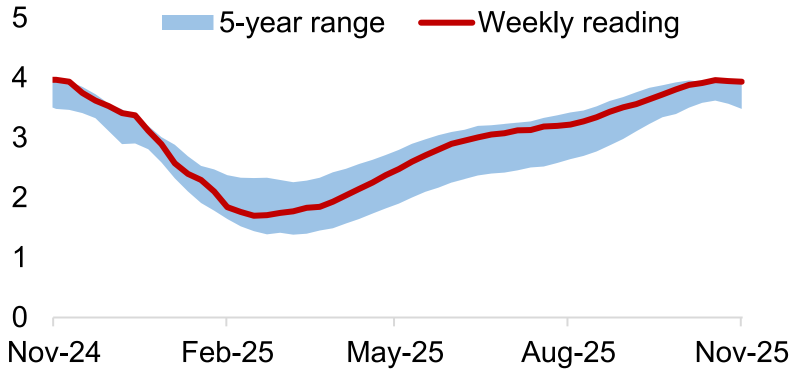
Billion cubic feet per day, bcf/d



According to revised EIA estimates, **U.S. natural gas net exports rose 42% y/y** to 17.5 bcf/d in November, supported by continued LNG strength.

Working natural gas storage

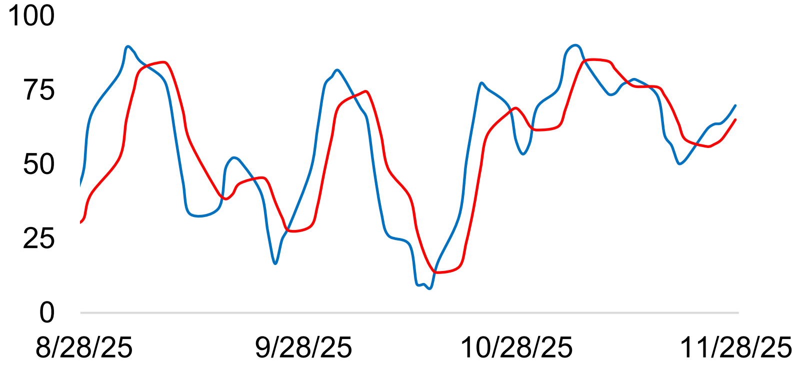
Trillion cubic feet (tcf)



Working natural gas storage decreased 0.3% w/w to 3.94 tcf as of November 21 -- top 7% of the five-year range.

Natural gas futures momentum indicator

Index level

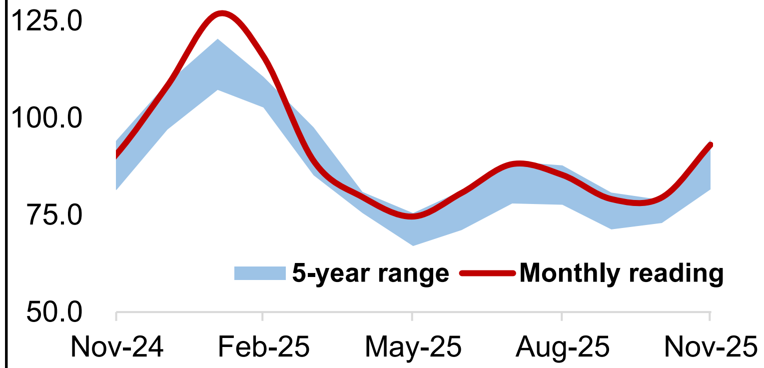


%K, %D 5 bars

Price momentum turned positive during the week ended November 28.

U.S. natural gas consumption

Billion cubic feet per day, bcf/d



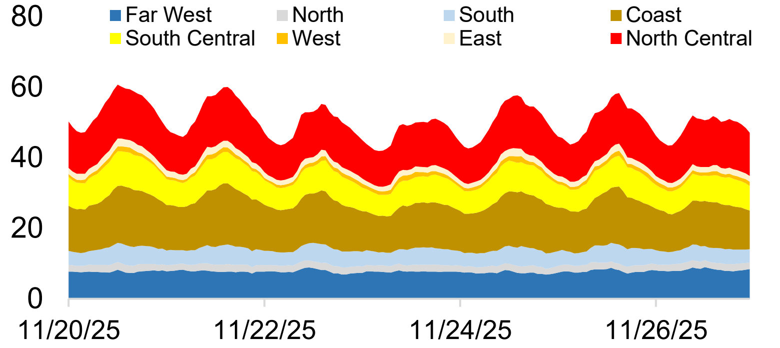
Consumption rose 2.5% y/y to 93.1 bcf/d in November, according to EIA estimates.

sources: U.S. Energy Information Administration; CME Group; Bureau of Labor Statistics; TXOGA analysis

Texas electricity analysis

ERCOT electricity load by region

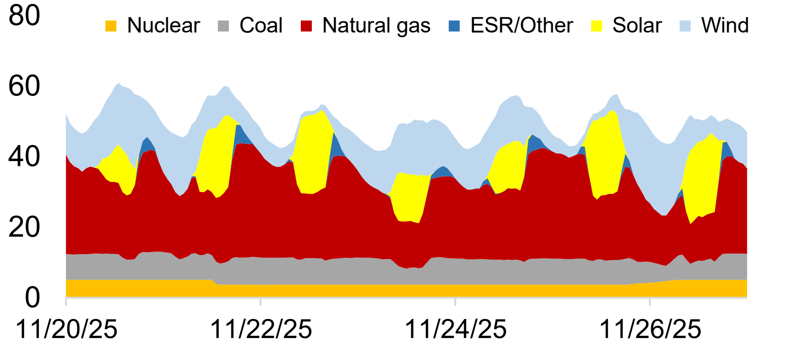
Thousand megawatt-hours (kMWh)



For Nov. 20-26, ERCOT's average hourly electricity load was 50.5 kMWh, down 5.6% w/w, while the maximum hourly load of 60.7 kMWh fell by 7.0% w/w. Variability was the highest in the West and East regions.

ERCOT hourly electricity generation by source

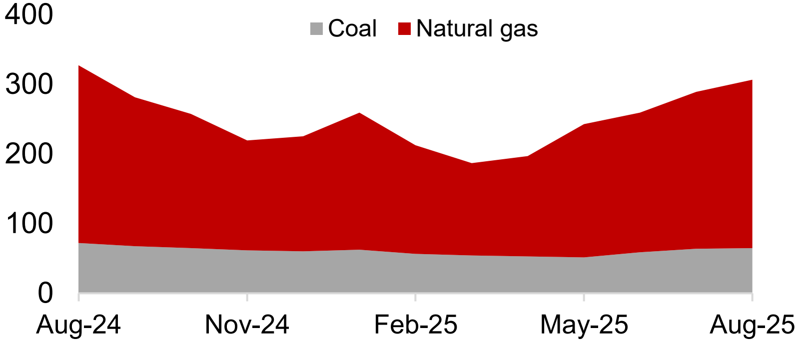
Thousand megawatt-hours (kMWh)



Dispatchable generation dominated ERCOT's supply. From Nov. 20-26, thermal and other dispatchable resources supplied as much as 93.7% of ERCOT's total generation, including 68.2% from natural gas. Hourly generation ranged between 42 and 61 thousand MWh, with a standard deviation of 4.8 thousand MWh, indicating lower but steadier seasonal load.

Texas electricity plant receipts of natural gas and coal

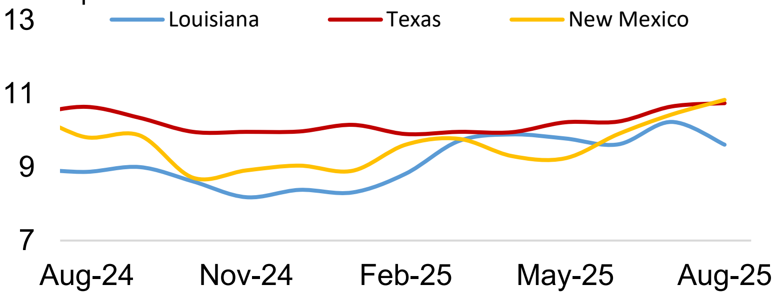
Trillion Btu



Natural gas receipts rose seasonally. Power plant receipts of natural gas in Texas climbed 7.5% m/m in August but were 5.2% lower y/y, while coal receipts rose 1.4% m/m and remained 10.1% below year-ago levels, reflecting fuel-mix shifts toward gas and renewables.

Electricity prices – average across all end-use sectors

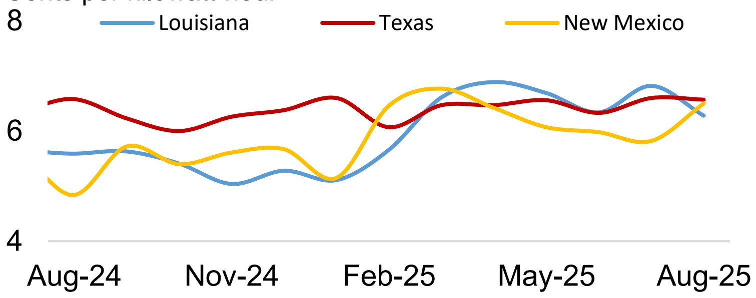
Cents per kilowatt-hour



Texas electricity prices increased in August. Average statewide electricity prices rose **0.8% m/m** and **0.9% y/y** to **10.74 ¢/kWh**, compared with 9.61 ¢ in Louisiana and 10.83 ¢ in New Mexico.

Industrial electricity prices

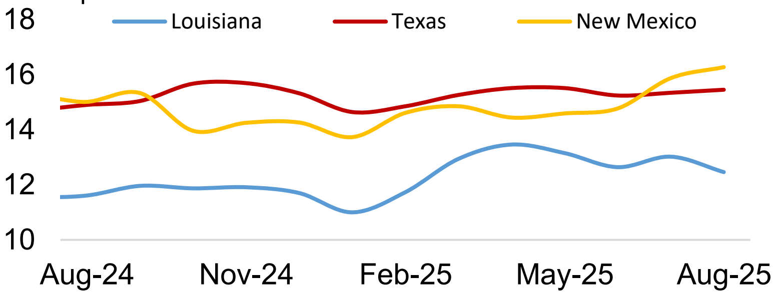
Cents per kilowatt-hour



Industrial electricity prices moderated. Industrial rates in Texas declined **0.5% m/m** and **0.2% y/y** to **6.57 ¢/kWh** in August. Prices in neighboring states rose sharply—**12.3% y/y in Louisiana** and **34.3% y/y** in New Mexico—bringing them roughly in line with Texas levels.

Residential electricity prices

Cents per kilowatt-hour

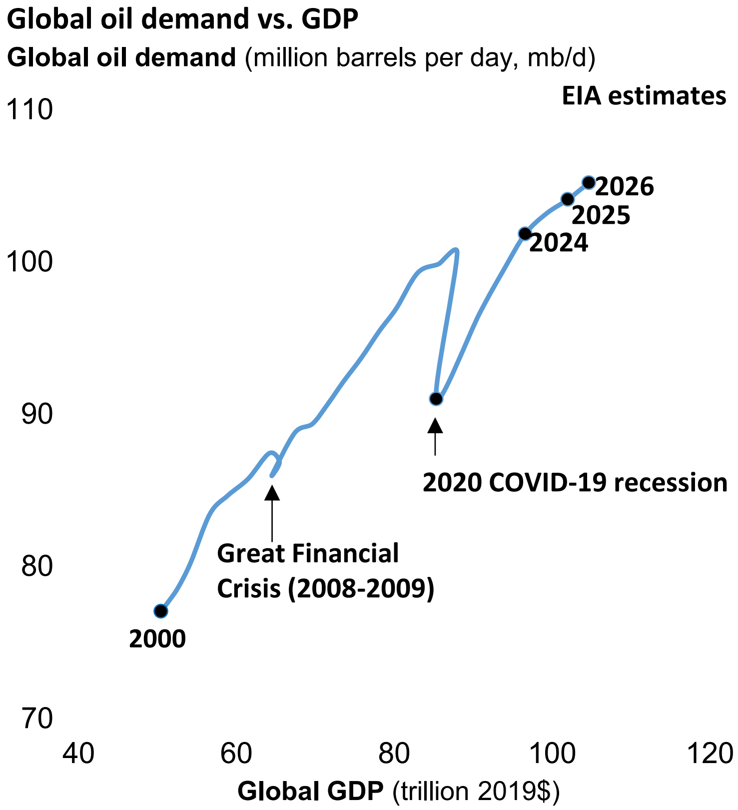


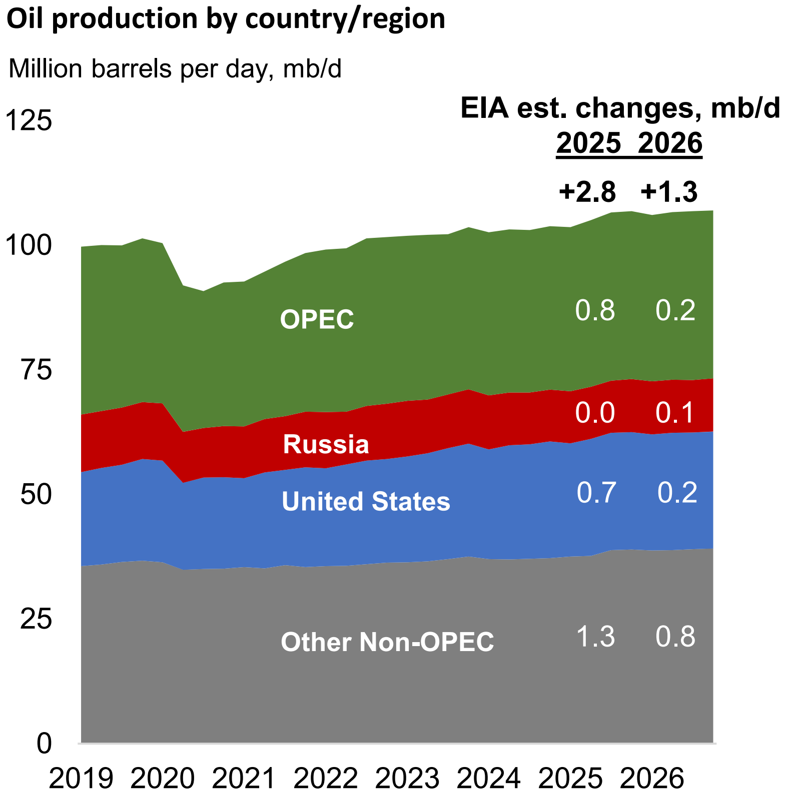
Residential rates rose but remained competitive. Residential electricity prices in Texas increased **0.7% m/m** and **3.7% y/y** to **15.45 ¢/kWh** in August. Rates also rose **7.3% y/y in Louisiana** and **8.4% y/y in New Mexico**, though Louisiana's remained roughly **19% below Texas averages.**

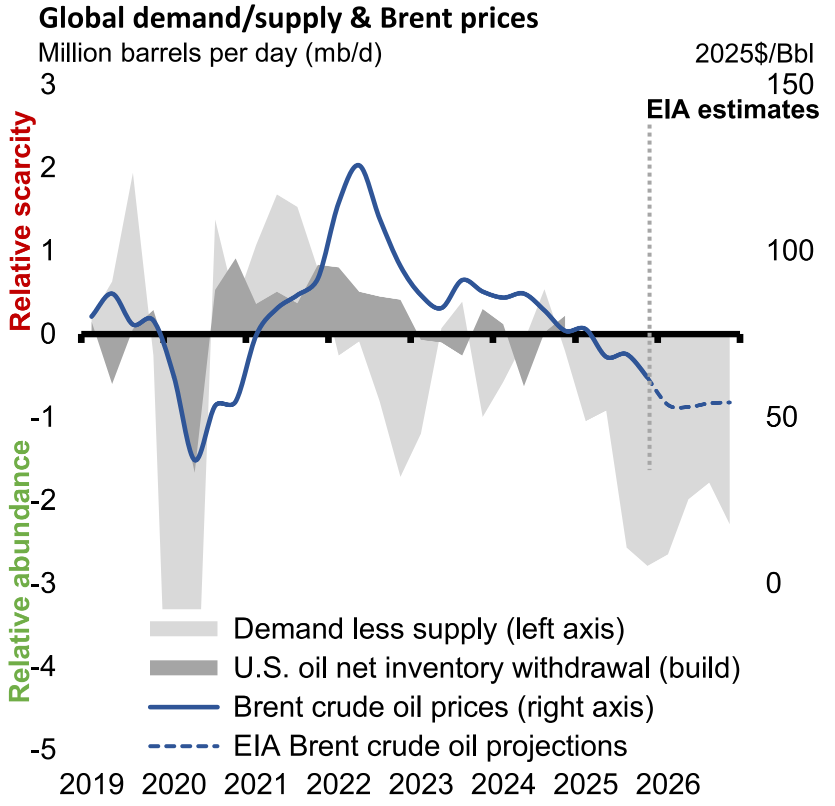
sources: ERCOT; EIA; TXOGA analysis

Global oil demand outlook upgraded

- In its November update, EIA raised its 2025 global oil demand estimates, still expecting a third consecutive record, but at higher levels: 104.1 mb/d in 2025 and 105.2 mb/d in 2026 (+0.1 mb/d vs. prior report) – on top of revisions that added 0.5 mb/d from 2024 onward two months ago
- EIA also raised its global supply growth by 0.1 mb/d in 2025 and 2026, with higher supply from the U.S. and other non-OPEC producers
- Brent crude oil prices are now projected by EIA to average \$69 per barrel in 2025 and \$55 in 2026 (+\$3 per barrel vs. prior outlook)—compared with about \$63 currently





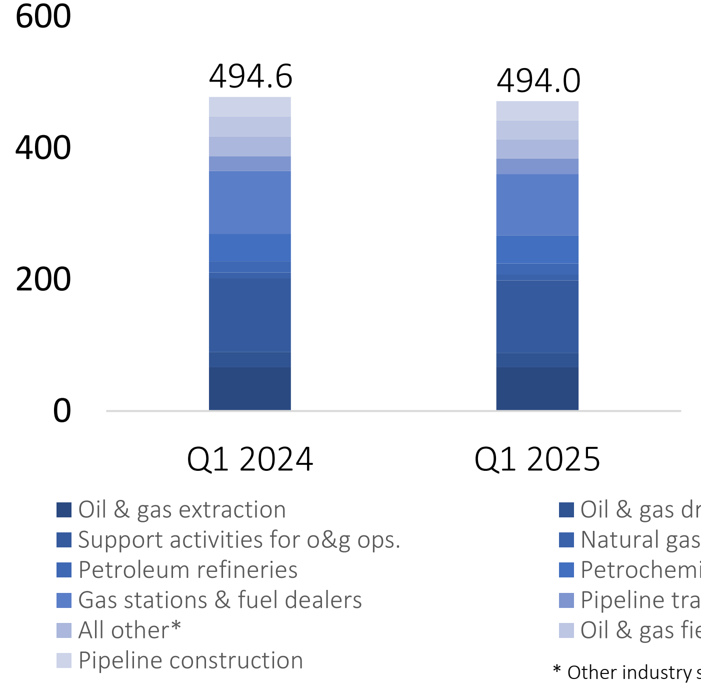


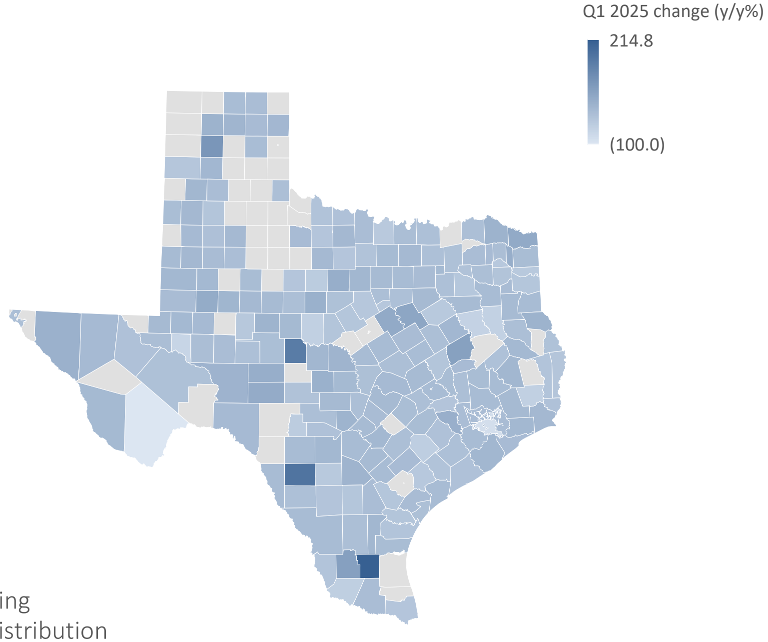
sources: U.S. Energy Information Administration (Nov. 2025); TXOGA analysis

Texas oil & gas jobs dipped, wages reached record high in Q1 2025

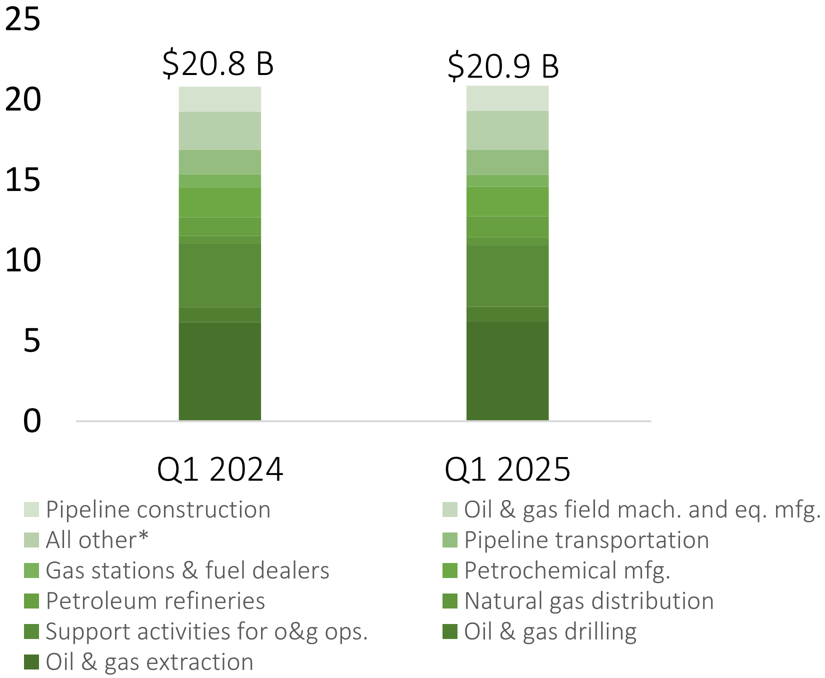
- Texas oil and natural gas industry employment fell 0.1% year-over-year (y/y) in Q1 2025 to 493,958 jobs, while industry wages edged up 0.2% y/y to $20.9 billion—the highest on record.
- Although overall employment held steady, several industry segments posted notable changes. Petroleum refinery employment rose 10.8% y/y to 51,732 jobs; petrochemical manufacturing expanded 4.0% y/y to 18,279 jobs; nitrogenous fertilizer manufacturing jumped 15.6% y/y to 578 jobs; and industrial sand mining fell 26.4% y/y to 3,789 jobs, according to data from the U.S. Census Bureau and the Texas Workforce Commission.

Texas oil and natural gas industry direct employment fell by +0.1% y/y in Q1 2025





Texas oil and natural gas industry direct wages rose by +0.2% y/y in Q1 2025



* Other industry segments include petroleum and pet. product wholesalers, lubricant mfg., asphalt mfg., industrial sand mining, nitrogenous fertilizer mfg., basic organic chem. mfg., plastics and resin mfg.

sources: U.S. Census Bureau; Texas Workforce Commission

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