



December 8, 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 8, 2025

- **Economic signals softened modestly, with mixed momentum across credit, activity, and production.** High-yield borrowing costs eased to 12.4% even as the premium over Fed Funds remained elevated at 8.7%, signaling financing conditions that are still tight for lower-quality issuers. The Philadelphia Fed’s ADS Index stayed negative and continues to imply weak real-time activity—consistent with this week’s [Chart of the Week](#), which shows the ADS-implied Q4 real GDP growth rate tracking near 1.2%, a pace indicative of an anemic economy despite earlier-quarter strength. Industrial production ticked up 0.1% m/m in September, but broader investment was flat year-over-year, reinforcing a picture of an economy slowing at the margins even as select indicators show incremental improvement.
- **Oil markets remain steady but directionless, with fundamentals supportive yet not strong enough to break the range.** WTI futures continue to track their long-run mean-reversion path, and prompt-month prices rose 2.8% w/w to \$60.18 per barrel while staying firmly range-bound amid offsetting forces: historically low inventories and steady demand on one side, and robust current supply plus OPEC+’s extended cuts on the other. Net exports rose to 3.4 mb/d, crude inventories increased slightly, and futures momentum showed no clear directional signal — all pointing to a balanced but muted near-term outlook.
- **Natural gas markets strengthened further, driven by higher prices, strong exports, and elevated seasonal consumption.** Prompt-month futures rose 10.7% w/w to \$5.37 per mmBtu on expectations of colder weather, even as storage remained near the top of its five-year range. Net exports climbed 42% y/y to 17.5 bcf/d in November, reflecting continued LNG strength and rising pipeline flows. Consumption increased to 93.1 bcf/d, while futures momentum improved but softened late in the week. Overall, the balance of indicators points to a firm market with upward seasonal pressure and persistent export demand.

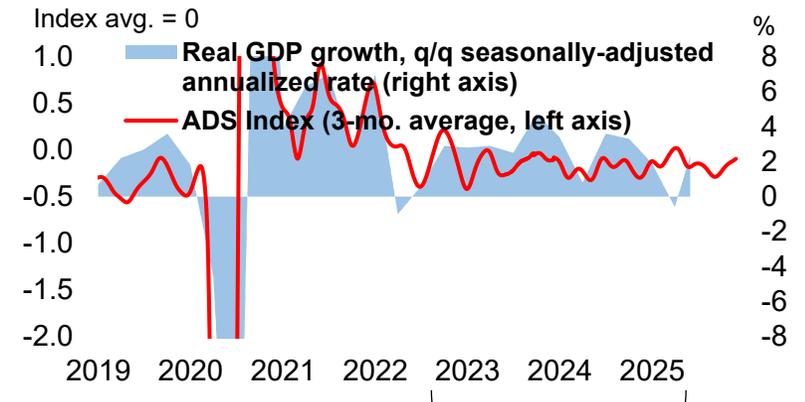


Chart of the Week: The ADS Index points to anemic U.S. real GDP growth

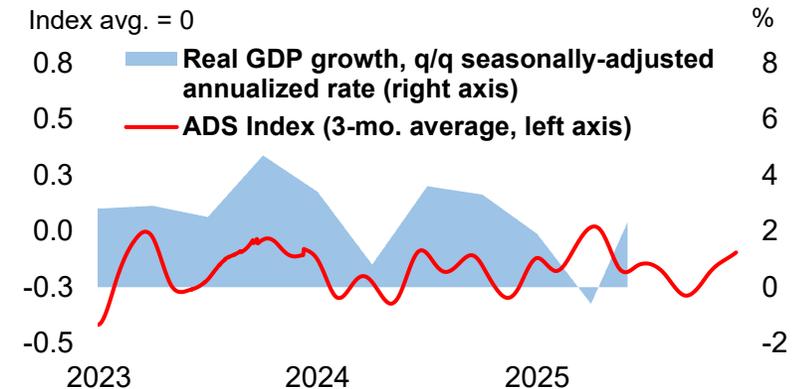


- With key government data still delayed, analysts are seeking timely signals of U.S. economic momentum. Many readers have asked about TXOGA's tracking of the Philadelphia Federal Reserve Bank's ADS Index relative to real GDP growth.
- The ADS Index incorporates both high-frequency and low-frequency indicators--including seasonally adjusted weekly jobless claims, monthly payroll employment, industrial production, real personal income less transfers, real manufacturing and trade sales, and quarterly real GDP. This blend provides a near-real-time read on economic activity.
- In the Chartbook, we model the relationship since 2019 between the ADS Index (3-month average) and seasonally adjusted annualized real GDP growth. Because GDP data are currently over five months in arrears, we center on post-2023 data and regress the ADS Index on time trends and seasonal factors to estimate the implied growth rate. Together, these factors explain 83% of the variance in GDP growth and indicate Q4 2025 real GDP tracking at roughly 1.2%.
- Weak growth and softening labor market conditions--paired with inflation that has resumed rising toward 3.0% y/y--create a difficult policy backdrop for the Federal Reserve, underscoring the importance of real-time indicators like the ADS Index.

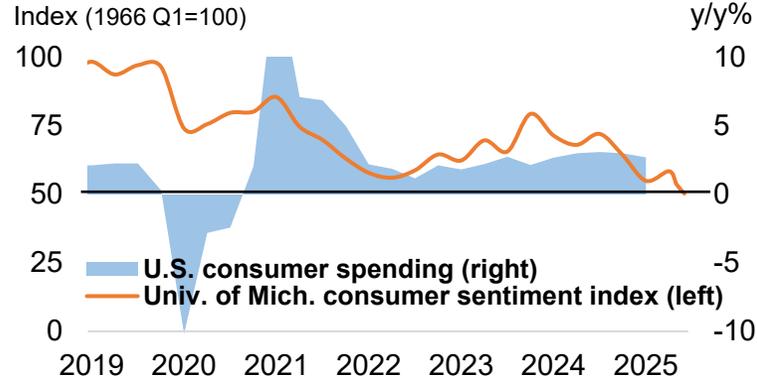
ADS Index and real GDP growth, 2019-2025



ADS Index and real GDP growth, 2023-2025

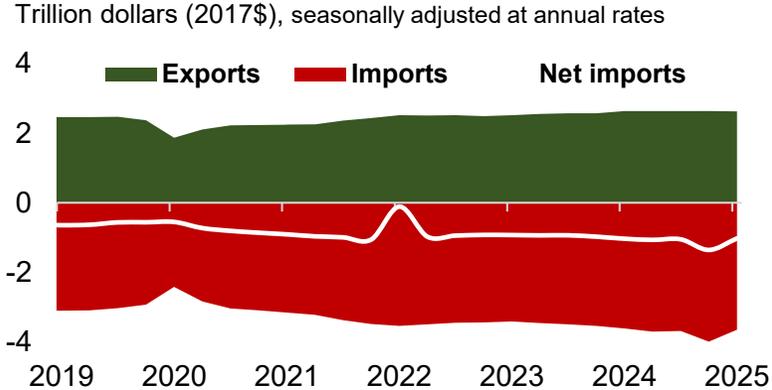


Consumer sentiment and spending trends



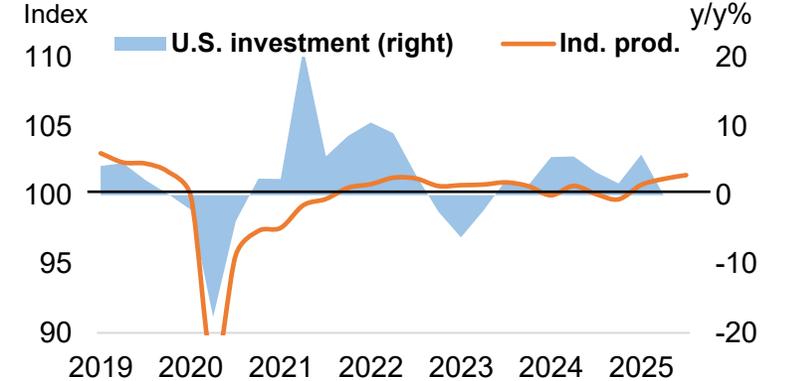
In the University of Michigan's survey, **consumer sentiment—a leading indicator of household spending—fell 6.2% m/m and 32.0% ytd** through early November, pointing to weaker household confidence and slower spending. BEA's revised Q2 GDP data showed consumer spending up 2.7% year-over-year, 0.4 percentage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

U.S. trade balance and petroleum exports



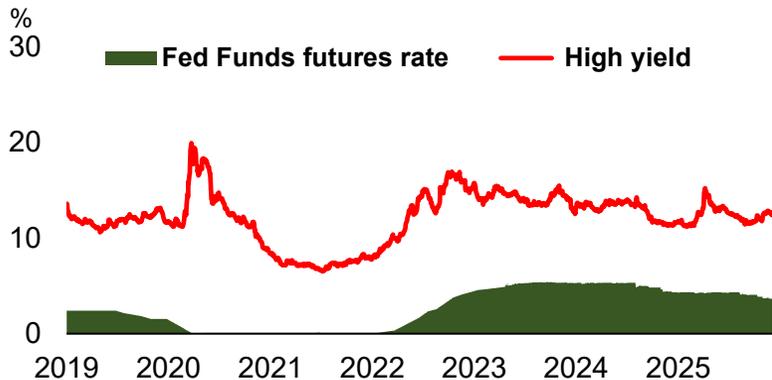
The BEA's initial Q2 2025 GDP report showed the **U.S. trade deficit narrowed to an annualized \$1.0 trillion (SAAR)**, down from \$1.4 trillion in Q1, as exports exceeded imports. The **petroleum trade surplus rose \$9.9 billion to \$72.2 billion**, more than double its level a year ago.

Industrial production and investment



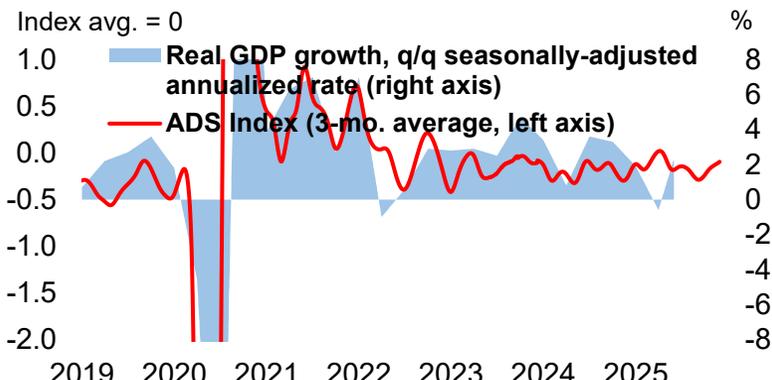
Macro uncertainties stalled investment in Q2 2025. Revised BEA data show **economy-wide investment flat year-over-year**, diverging from industrial production, which rose **0.1% m/m in September**. Total industry capacity utilization remained flat at 75.9%.

Interest rates and high-yield borrowing costs



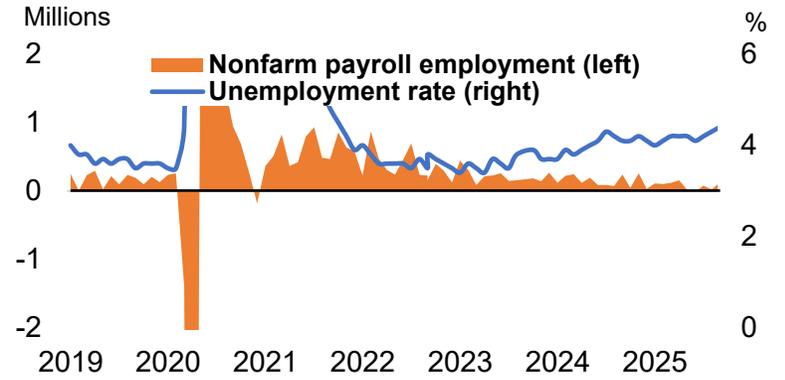
Credit costs for lower-quality issuers decreased. As of December 5, high-yield borrowing costs fell 0.3% w/w to 12.4%, while Fed Funds futures held steady at 3.7%, resulting in a premium of 8.7%.

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.

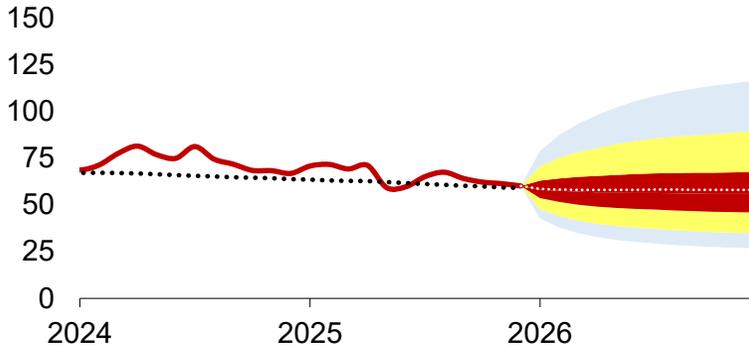
Employment and unemployment trends



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.

WTI futures mean reversion analysis

Dollars per barrel (2025\$)



WTI futures hold close to their long-run mean-reversion target, with the forward curve shifting into mild backwardation through 2026. This pattern suggests traders anticipate similar market conditions ahead, with spot prices remaining modestly above futures and no strong directional pressures in the near term.

WTI crude prompt month futures prices

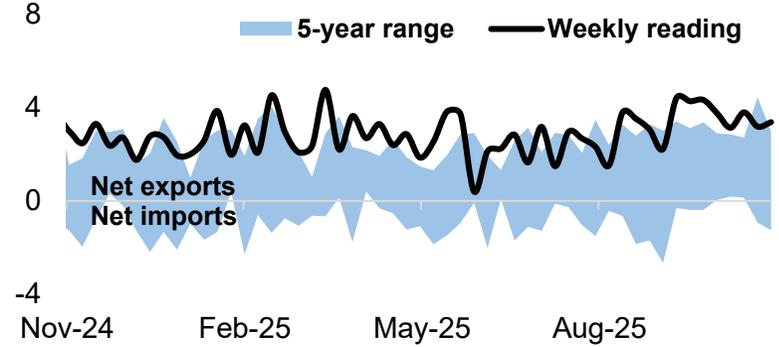
Dollars per barrel



WTI crude prices edged up but remained range-bound amid opposing market forces. WTI rose 2.8% w/w to \$60.18 per barrel as of December 5, 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)

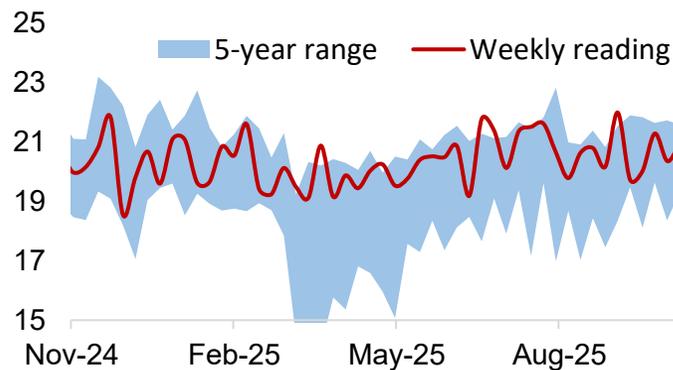
Million barrels per day, mb/d



U.S. petroleum net exports rose to 3.4 mb/d for the week ended November 28, up 0.2 mb/d (6.0%) from the prior week.

U.S. petroleum demand

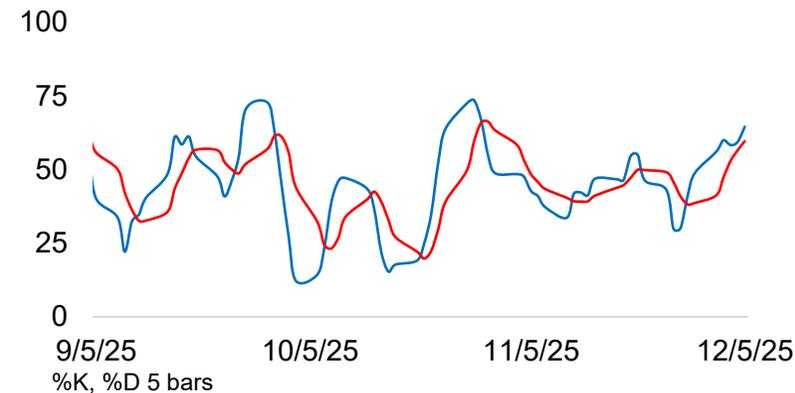
Million barrels per day (mb/d)



U.S. petroleum demand remained steady. As of November 28, deliveries averaged 20.2 mb/d, steady versus the prior week and at the top of the 5-year range.

WTI futures momentum indicator

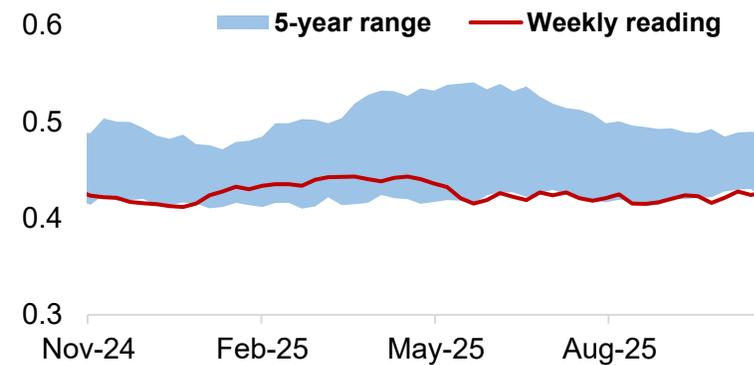
Index level



Price momentum improved modestly but remained mixed, with the stochastic indicators firming late in the week ended December 5 without signaling a clear directional trend.

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

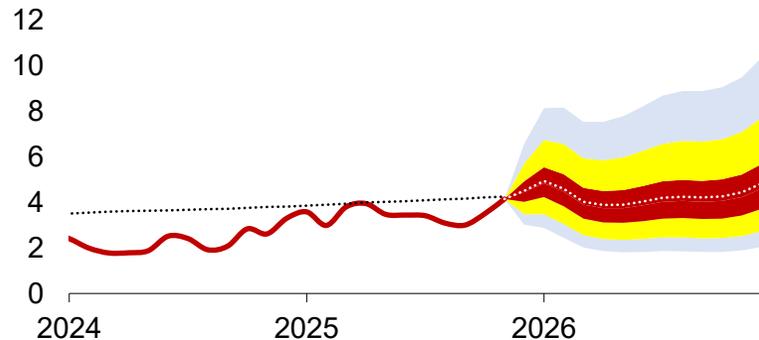
Billion barrels



U.S. crude oil inventories increased by 0.6 million barrels for the week ended November 28.

Natural gas futures mean reversion analysis

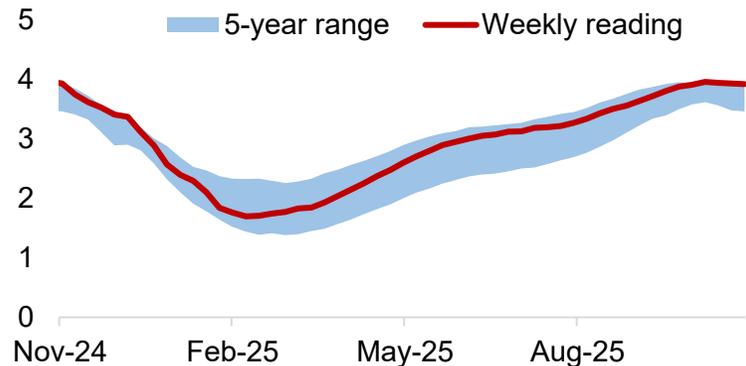
Dollars per mmBtu (2025\$)



Near-term natural gas futures remain above their historical mean-reversion path, and forward prices have moved into backwardation through late 2026. The distribution of outcomes indicates greater upside volatility risk than downside.

Working natural gas storage

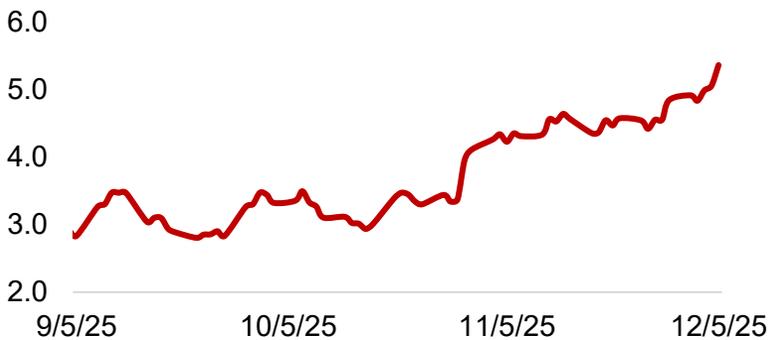
Trillion cubic feet (tcf)



Working natural gas storage decreased 0.3% w/w to 3.92 tcf as of November 28 -- but rose into the top 3% of the five-year range.

Natural gas prompt month futures prices

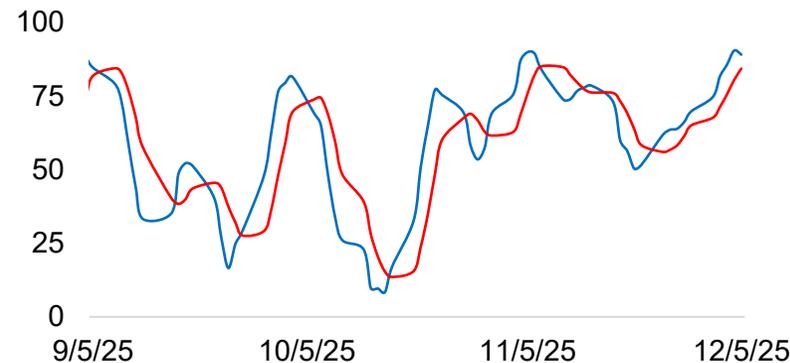
Dollars per million Btu



Natural gas prices rose 10.7% w/w to \$5.37 per mmBtu as of December 5, driven by expectations for colder weather even as storage levels remain strong.

Natural gas futures momentum indicator

Index level

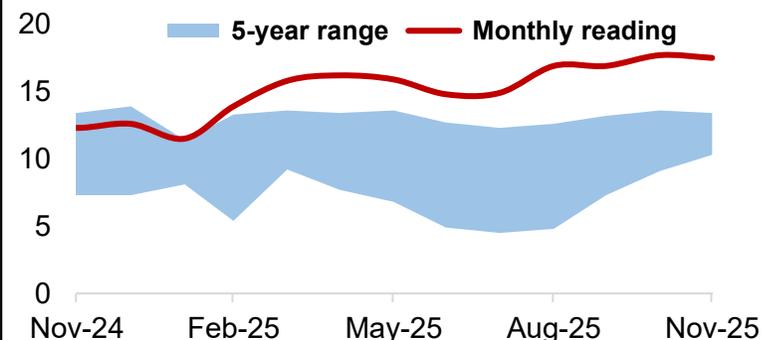


%K, %D 5 bars

Price momentum increased during the week ended December 5.

U.S. natural gas net exports

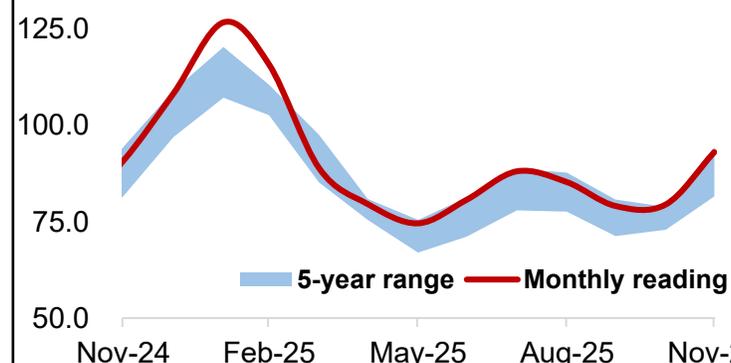
Billion cubic feet per day, bcf/d



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.

U.S. natural gas consumption

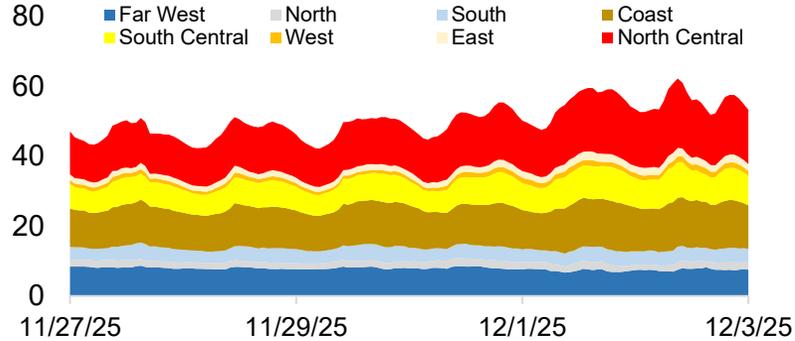
Billion cubic feet per day, bcf/d



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

ERCOT electricity load by region

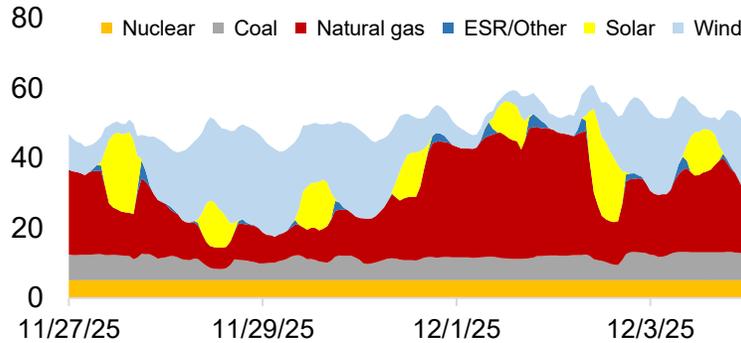
Thousand megawatt-hours (kMWh)



For Nov. 27-Dec. 3, ERCOT's average hourly electricity load was 50.2 kMWh, down 0.7% w/w, while the maximum hourly load of 62.2 kMWh rose by 2.4% w/w. Variability was the highest in the West and East regions.

ERCOT hourly electricity generation by source

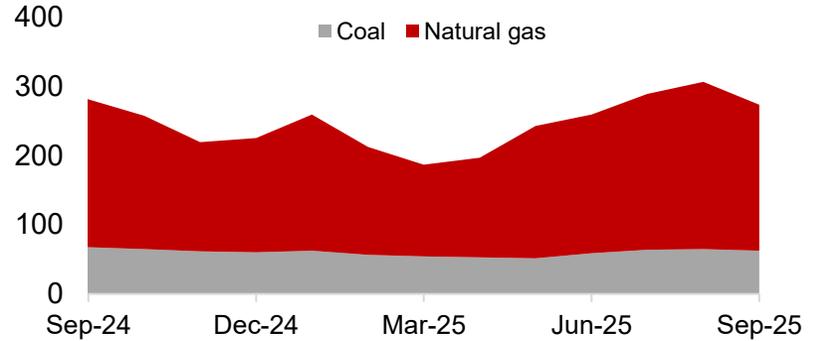
Thousand megawatt-hours (kMWh)



Dispatchable generation dominated ERCOT's supply. From Nov. 27-Dec. 3, thermal and other dispatchable resources supplied as much as 92.1% of ERCOT's total generation, including 68.7% from natural gas. Hourly generation ranged between 42 and 61 thousand MWh, with a standard deviation of 4.6 thousand MWh, indicating lower but steadier seasonal load.

Texas electricity plant receipts of natural gas and coal

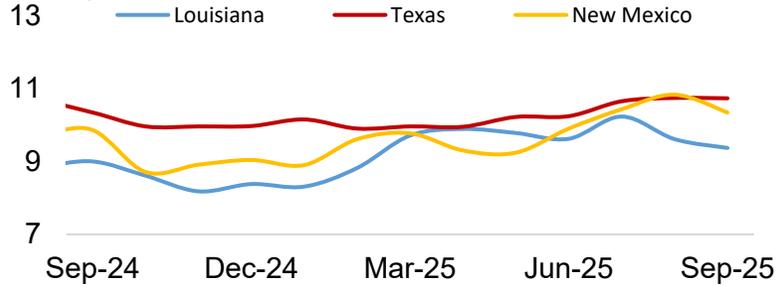
Trillion Btu



Natural gas receipts fell. Power plant receipts of natural gas in Texas decreased in September by 12.7% m/m and 1.3% y/y, while coal receipts fell 3.2% m/m and remained 7.5% below year-ago levels, reflecting fuel-mix shifts toward renewables.

Electricity prices – average across all end-use sectors

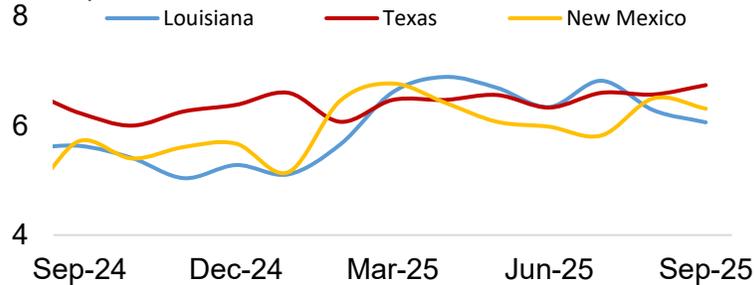
Cents per kilowatt-hour



Texas electricity prices steadied in September. Average statewide electricity prices slipped 0.1% m/m but rose 3.8% y/y to 10.73 ¢/kWh, compared with 9.37 ¢ in Louisiana and 10.34 ¢ in New Mexico.

Industrial electricity prices

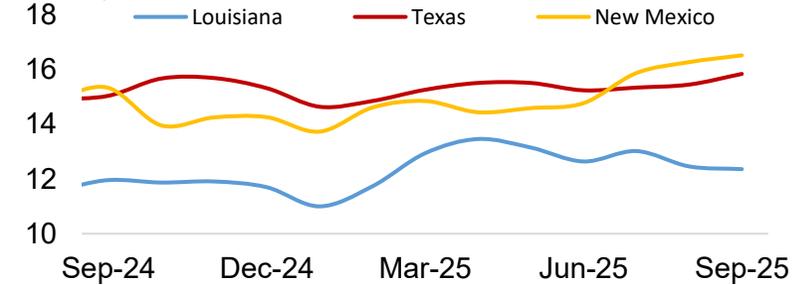
Cents per kilowatt-hour



Industrial electricity prices increased. Industrial rates in Texas rose 2.6% m/m and 8.2% y/y to 6.74 ¢/kWh in September. Prices in neighboring states rose similarly versus last year—7.6% y/y in Louisiana and 10.3% y/y in New Mexico.

Residential electricity prices

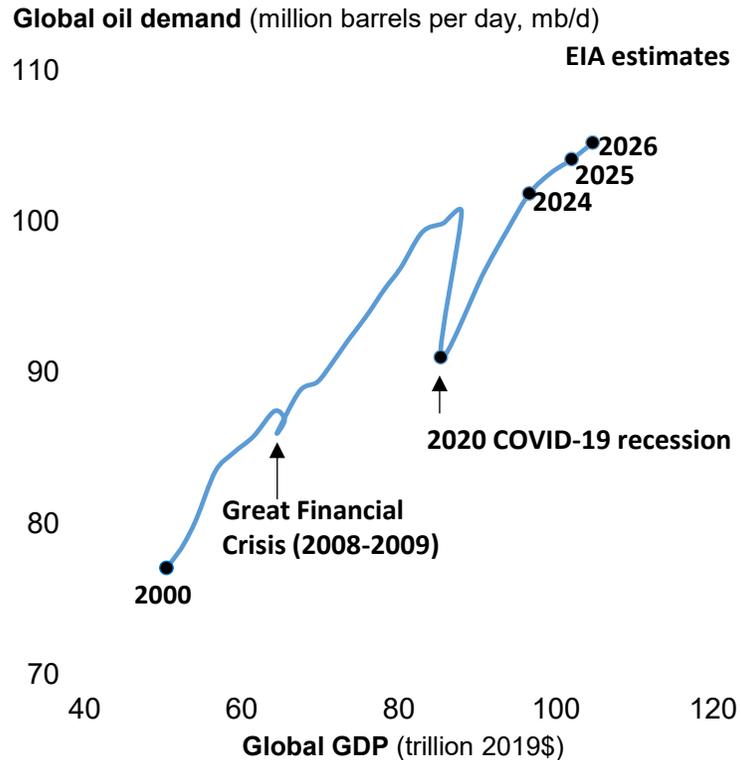
Cents per kilowatt-hour



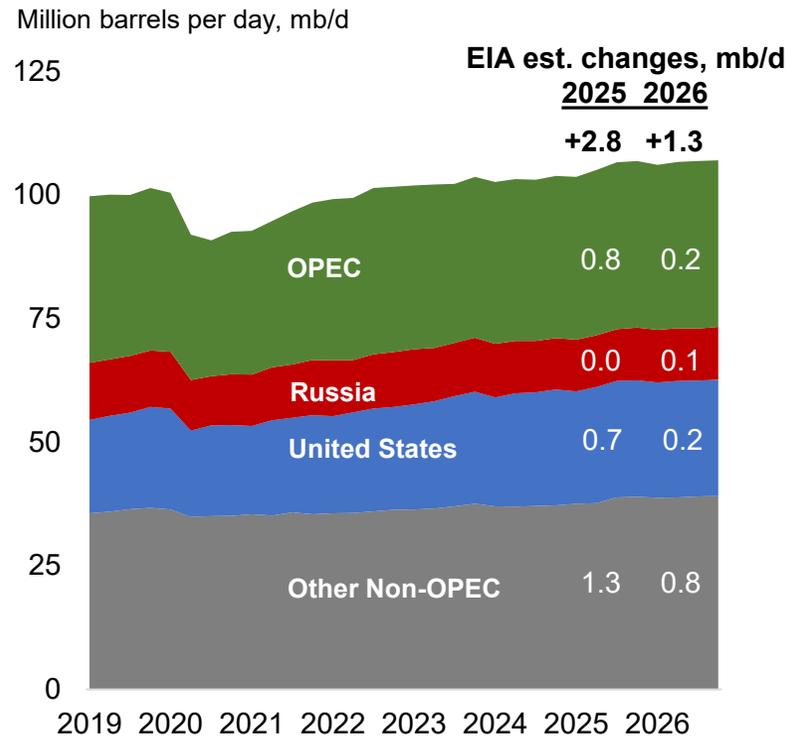
Residential rates rose. Residential electricity prices in Texas increased 2.5% m/m and 5.3% y/y to 15.84 ¢/kWh in September. Rates also rose 3.3% y/y in Louisiana and 7.84% y/y in New Mexico, through Louisiana's rates remained 22% lower than those in Texas.

- 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

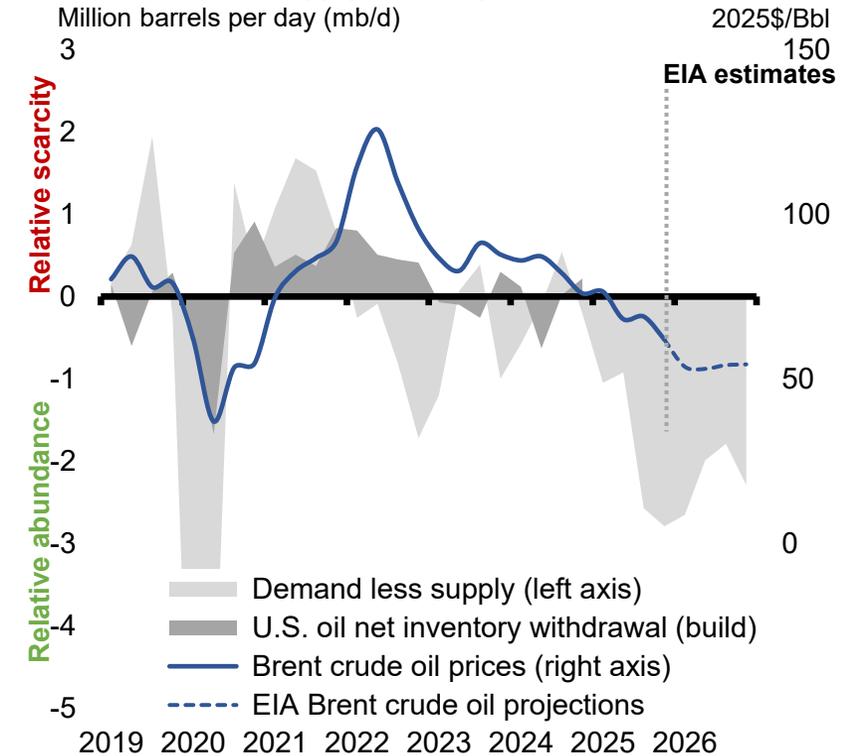
Global oil demand vs. GDP



Oil production by country/region



Global demand/supply & Brent prices

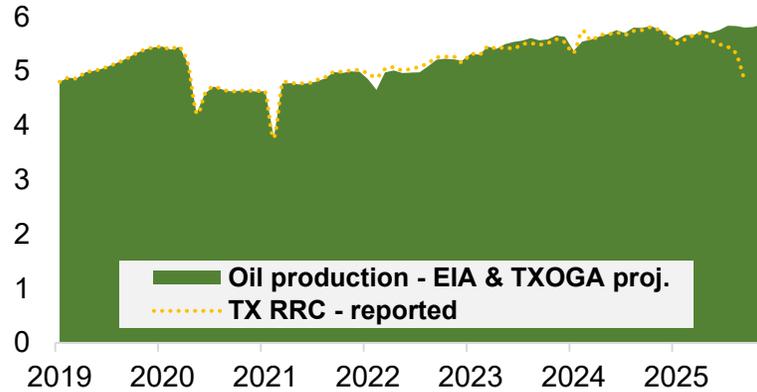




Texas oil and natural gas production has continued near record highs

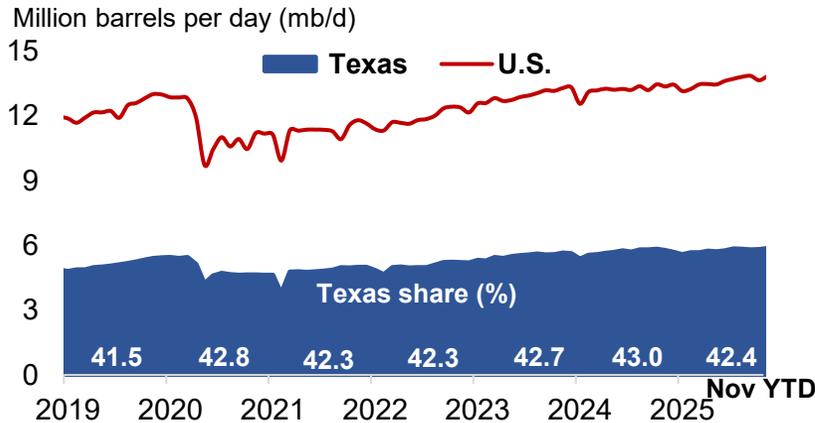


Texas crude oil production, Jan. 2019 – Nov. 2025



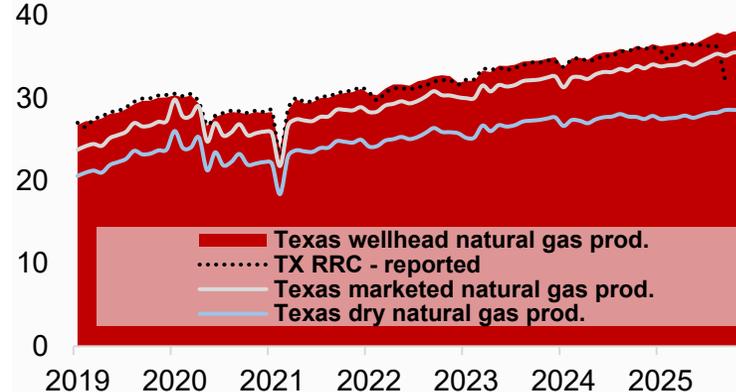
Estimated record production. Texas crude oil output held near record highs at **5.8 mb/d** in **September 2025 (EIA)**, with TXOGA estimates showing production **rising to 5.9 mb/d in November**, the highest on record.

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



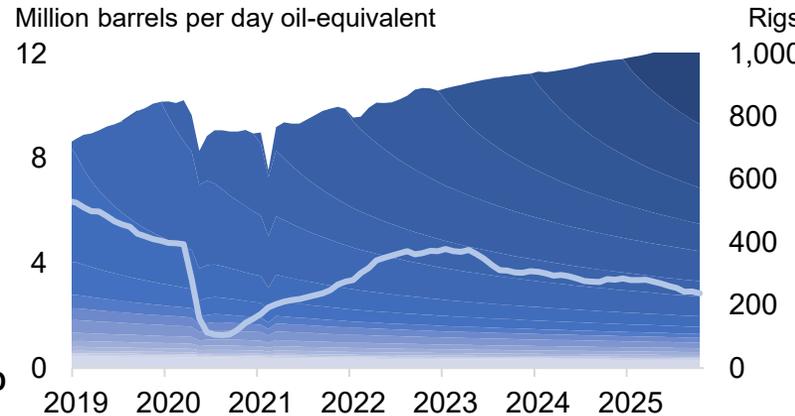
Texas share of U.S. production. Through the first 11 months of 2025, Texas accounted for **42.4%** of total U.S. crude oil production.

Texas natural gas production, Jan. 2019 – Nov. 2025
Billion cubic feet per day (bcf/d)



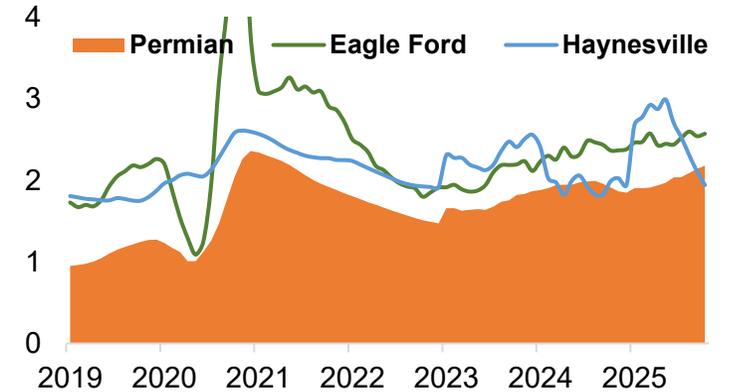
Natural gas production remains near record levels. Texas produced **37.7 bcf/d** in gross withdrawals and **35.2 bcf/d** in marketed production (EIA). TXOGA estimates indicate November marketed output near **36 bcf/d**.

Texas shale basin wellhead oil & natural gas production



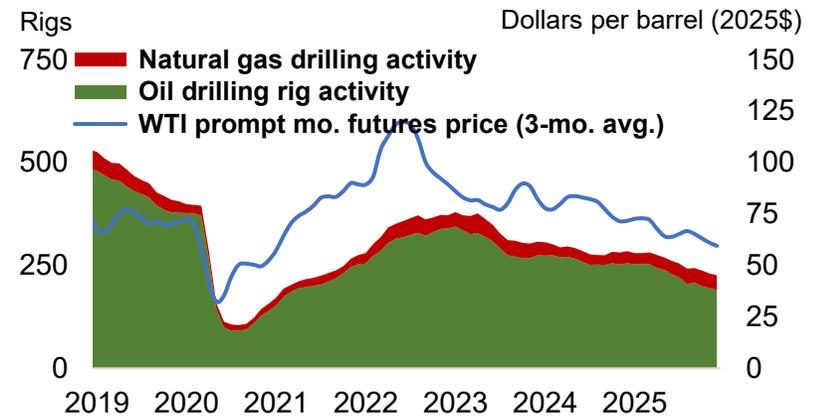
EIA estimates show continued production growth across major Texas shale basins in October 2025, including the Permian (+0.9% y/y) and Haynesville (+5.2% y/y), while the Eagle Ford declined 3.9% y/y.

Texas 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.

Texas drilling activity and WTI crude oil futures prices



Texas drilling activity and prices. As of December 5, Texas had **190 oil-directed rigs** (up 1 rig w/w) and **36 gas-directed rigs** (down 1 rig w/w), according to Baker Hughes.



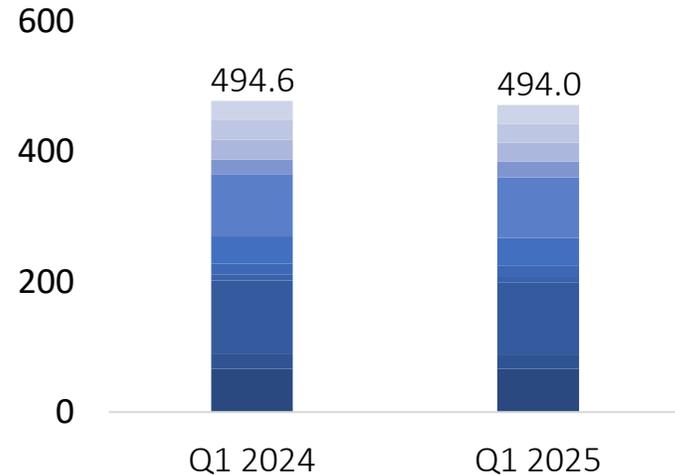
Texas oil & gas jobs dipped, wages reached record high in Q1 2025



- ▶ 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.

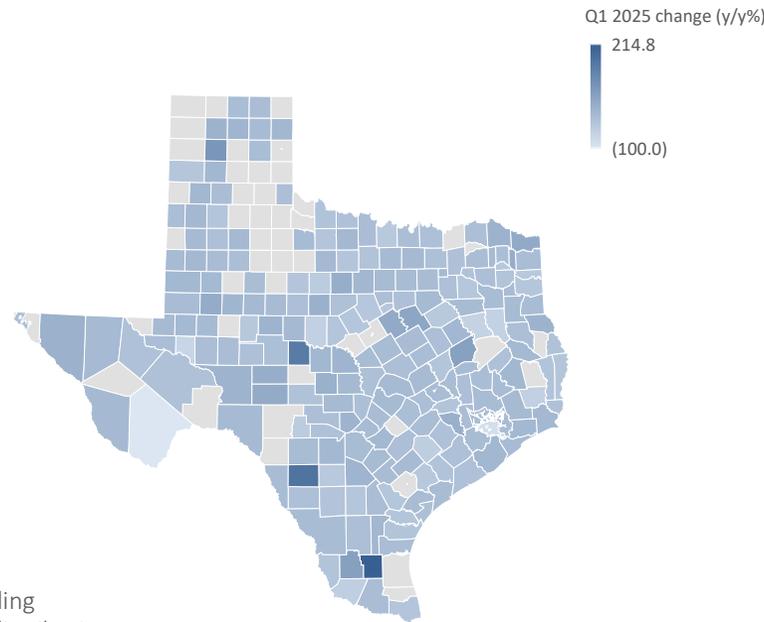
Texas oil and natural gas industry direct employment fell by +0.1% y/y in Q1 2025

Thousand Jobs



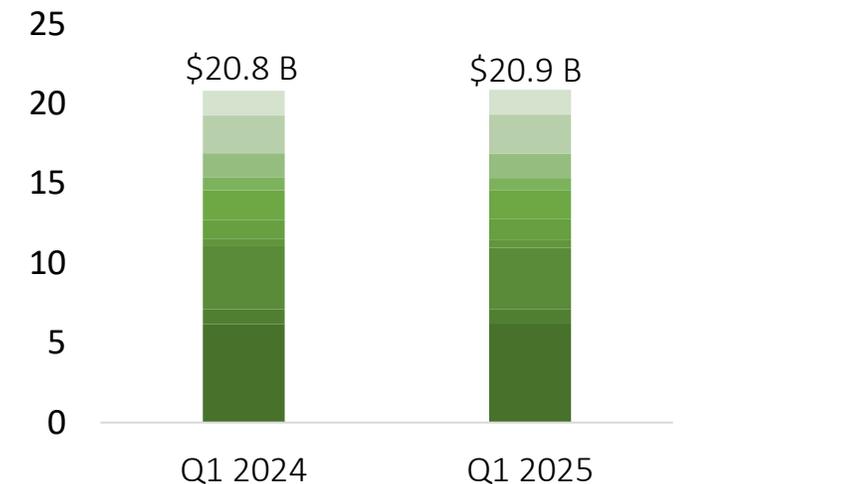
- Oil & gas extraction
- Support activities for o&g ops.
- Petroleum refineries
- Gas stations & fuel dealers
- All other*
- Pipeline construction
- Oil & gas drilling
- Natural gas distribution
- Petrochemical mfg.
- Pipeline transportation
- Oil & gas field mach. and eq. mfg.

* 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.



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

Billion dollars



- Pipeline construction
- All other*
- Gas stations & fuel dealers
- Petroleum refineries
- Support activities for o&g ops.
- Oil & gas extraction
- Oil & gas field mach. and eq. mfg.
- Pipeline transportation
- Petrochemical mfg.
- Natural gas distribution
- Oil & gas drilling



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