



October 13, 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 October 13, 2025

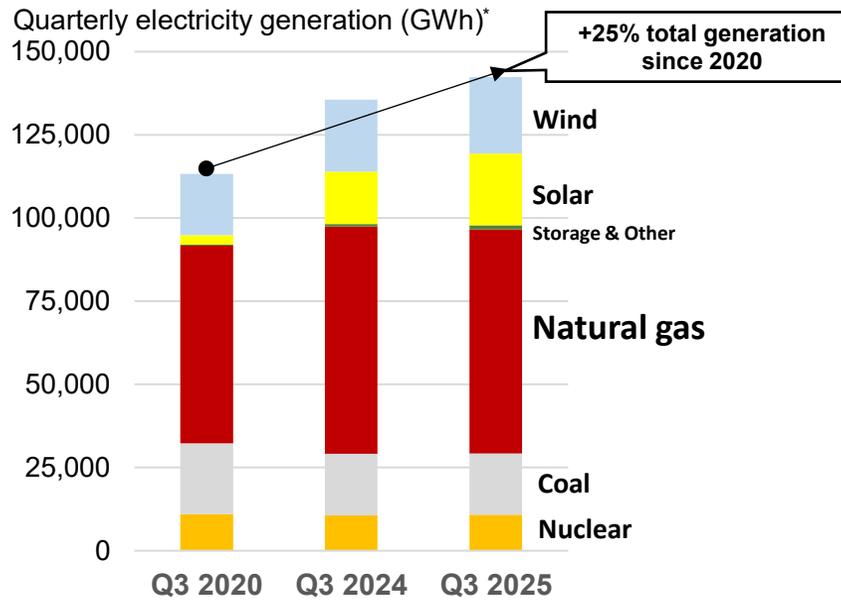
- **Consumer sentiment weakened while credit costs climbed, signaling headwinds for Q3 growth.** The University of Michigan's index fell 6.1% m/m and 23.2% ytd through early October, pointing to softer confidence and slower spending. BEA's revised GDP data showed consumer spending up 2.7% y/y in Q2 — 0.4 points slower than in Q1 — while high-yield borrowing costs rose to 12.2%, widening the low-credit-quality premium to 8.1%, the highest since July. With federal data on employment and the ADS Index delayed by the shutdown, underlying momentum appears to be easing heading into Q4.
- **Oil prices softened while demand and inventories rose, highlighting mixed market signals.** WTI crude fell 3.0% w/w to \$58.90/bbl as markets priced in a lower Middle East risk premium and expectations of higher OPEC+ supply. Near-term futures fell below their historical mean-reversion range, with forward prices flat through late 2026, indicating limited expectations for a rebound amid strong supply. U.S. petroleum demand rose to 22.0 mb/d, the highest since December 2022, while inventories (ex-SPR) increased 3.7 million barrels but remained near the bottom of the five-year range.
- **Chart of the Week: Natural gas remains the cornerstone of ERCOT's growth and reliability.** As Texas power demand has risen nearly 25% since 2020, natural gas has continued to anchor ERCOT's supply — providing 47.6% of total generation in Q3 2025, more than wind and solar combined. Dispatchable resources, led by natural gas, supplied at least half of ERCOT's power in over 90% of all hours last quarter, underscoring their essential role in meeting record demand.
- **Natural gas prices eased as storage rose despite record exports.** Futures fell 5.1% w/w to \$3.16/mmBtu as of October 10, giving back part of last week's gains amid stronger storage builds, which rose 2.2% to 3.64 tcf, near the top of the five-year range. U.S. natural gas net exports surged 23.7% y/y to a record 16.2 bcf/d in September, while consumption declined 2.6% to 78.8 bcf/d. Near-term futures remain aligned with their historical mean-reversion range, suggesting limited downside risk.

- As the ERCOT grid has experienced the strongest growth in the nation — up nearly 25% since 2020 — natural gas has remained the backbone of Texas' power supply, providing the flexibility and reliability that enable the nation's largest share of renewables-based generation
- In Q3 2025, natural gas supplied 47.6% of ERCOT's electricity, more than wind and solar combined
- Dispatchable generation — led by natural gas — supplied at least half of ERCOT's power in more than 90 % of hours this quarter, highlighting its essential role in meeting record demand

How to Read This Chart: Each point on the red line shows the share of total generation provided by thermal and dispatchable resources for a given fraction of hours in Q3 2025. The farther right you go, the larger the share of hours included. The higher the curve, the greater the share of generation from thermal sources. For example, the chart shows that thermal generation met at least 50% of ERCOT's load during 91.7% of all hours in Q3 2025, and exceeded 90% of generation during about 6% of hours.

ERCOT Power Generation Mix

Total ERCOT generation rose 25% since 2020; natural gas remained the largest source of supply

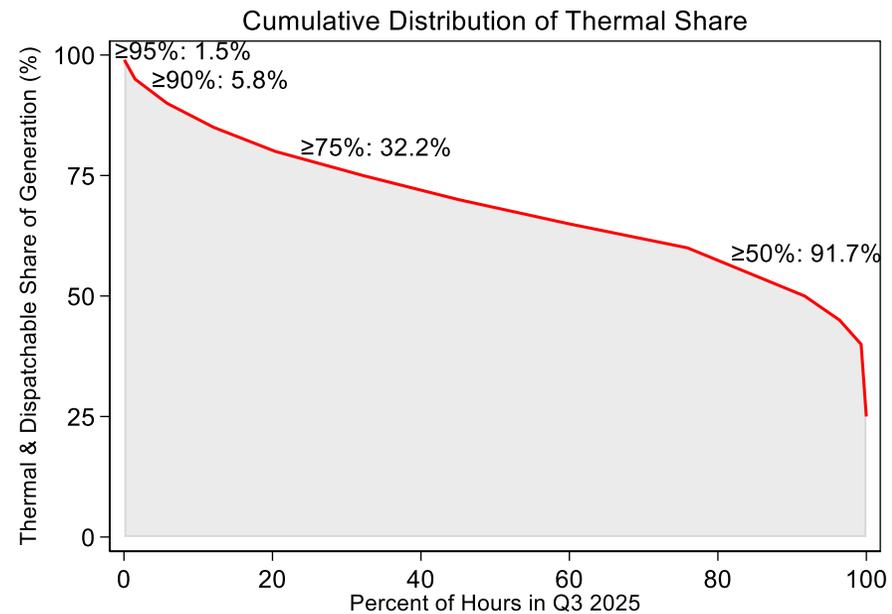


Natural gas remained the backbone of ERCOT's power supply, complemented by record output from wind and solar. Total generation rose nearly 25% in five years, underscoring Texas' growing electricity demand

* In Q3 2025, ERCOT's generation averaged ~62 GW, up from ~50 GW in 2020
sources: ERCOT; EIA; TXOGA analysis

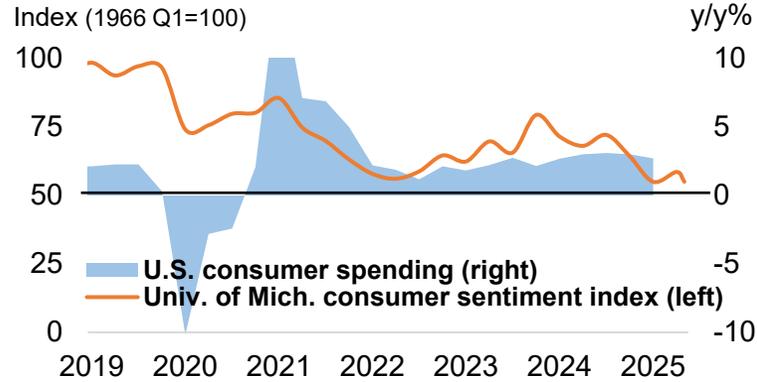
Thermal and Dispatchable Resources Underpin Reliability

Thermal generation supplied $\geq 50\%$ of ERCOT's power in 92% of hours during Q3 2025



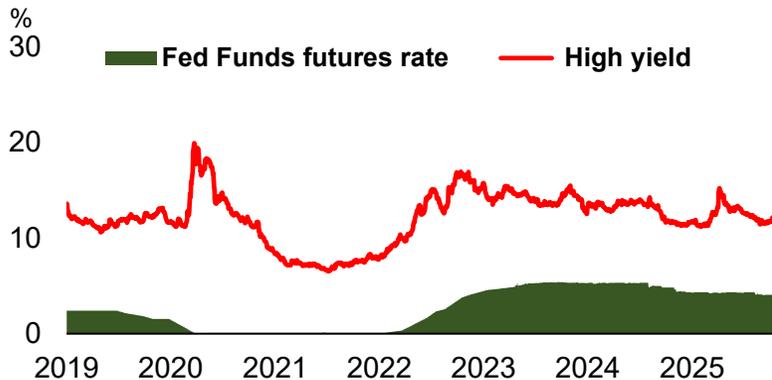
Thermal resources provided $\geq 50\%$ of generation during >90% of the quarter's hours

Consumer sentiment and spending trends



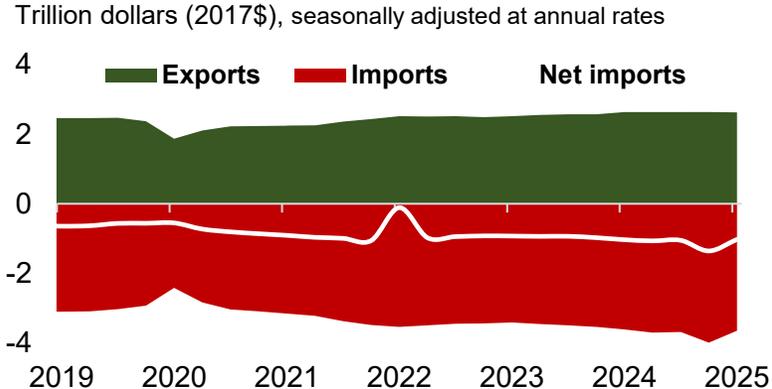
In the University of Michigan's survey, **consumer sentiment—a leading indicator of household spending—fell 6.1% month-over-month and 23.2% year-to-date through early October**, suggesting a potential moderation in Q3 2025 spending growth. BEA's revised estimate for Q2 2025 GDP showed consumer spending up 2.7% year-over-year, 0.4 percentage points slower than in Q1.

Interest rates and high-yield borrowing costs



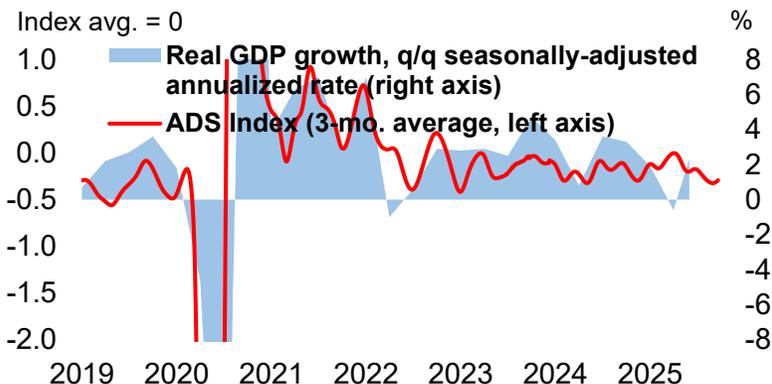
The bond premium for low-credit-quality issuers increased. As of Oct. 10, high-yield borrowing costs increased by 0.4% to 12.2% with Fed Funds futures at 4.1%, resulting in a low-credit-quality premium of 8.1%—the highest since July 2025.

U.S. trade balance and petroleum exports



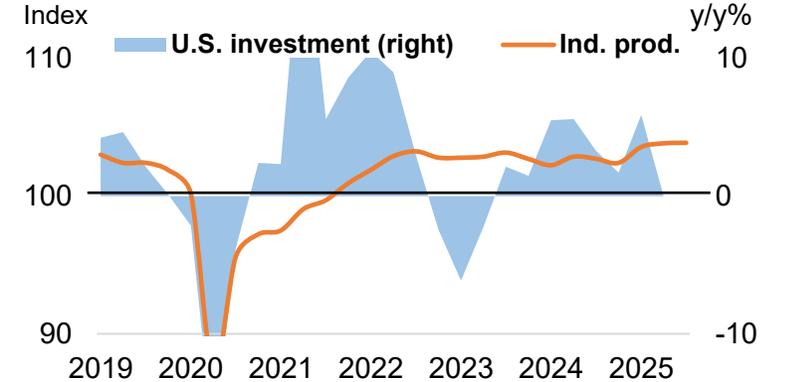
The BEA's initial Q2 2025 GDP report showed the U.S. trade deficit narrowed to an annualized \$1.0 trillion (SAAR), down from a record \$1.4 trillion in Q1, as imports declined more than exports. On a nominal basis, the petroleum trade surplus rose by an upward-revised \$9.9 billion to \$72.2 billion—more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

ADS Index and real GDP growth



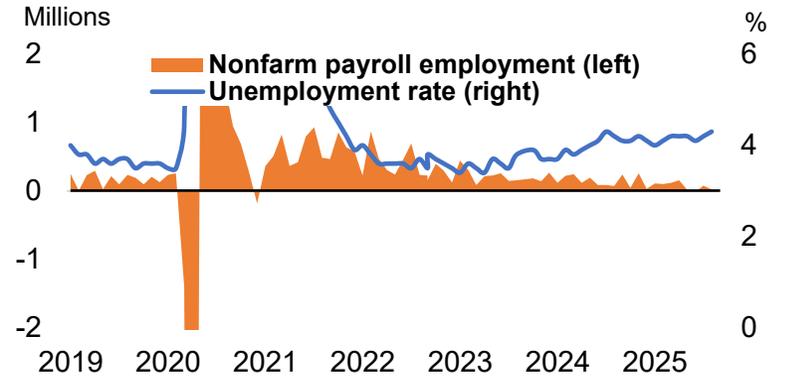
ADS Index suggests Q3 slowing. While real GDP growth posted a mixed rebound in Q2 2025, the ADS Business Conditions Index from the Philadelphia Fed—an early signal of economic momentum—currently points to weak growth in Q3 2025.

Industrial production and investment



Macro uncertainties stalled investment in Q2 2025. According to the revised GDP report, economy-wide investment was flat y/y in BEA's September revision, diverging from industrial production, which typically leads investment trends. Industrial production rose 0.1% m/m in August, corresponding with capacity utilization of 77.4%, per the Federal Reserve Board.

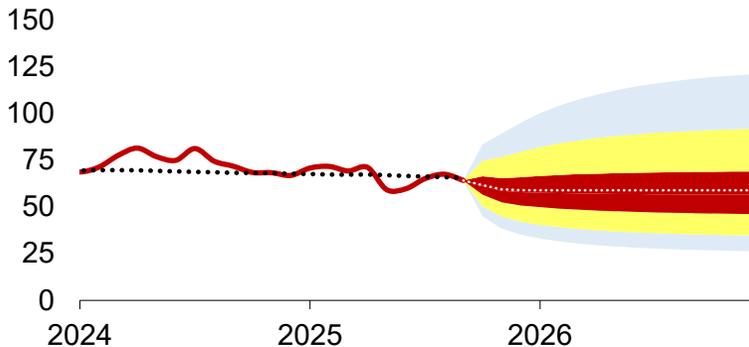
Employment and unemployment trends



Labor market conditions weakened further. Employment is a lagging indicator of GDP growth. Nonfarm payrolls rose by 22,000 in August. The U.S. unemployment rate rose by 0.1 percentage points to 4.3% according to the BLS.

WTI futures mean reversion analysis

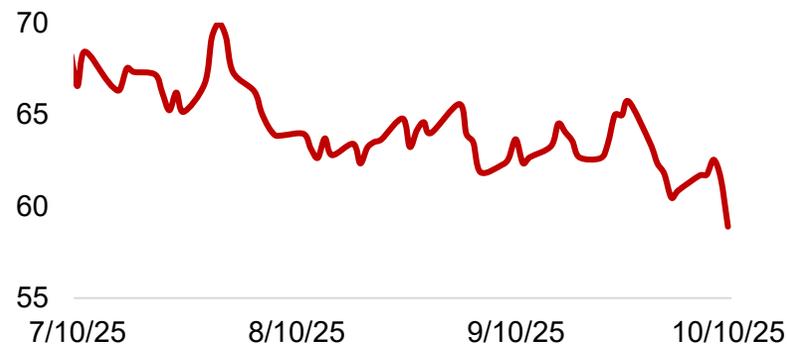
Dollars per barrel (2025\$)



Near-term WTI futures fell below their historical mean-reversion range, with forward prices nearly flat through late 2026, signaling limited expectations for a rebound amid strong supply.

WTI crude prompt month futures prices

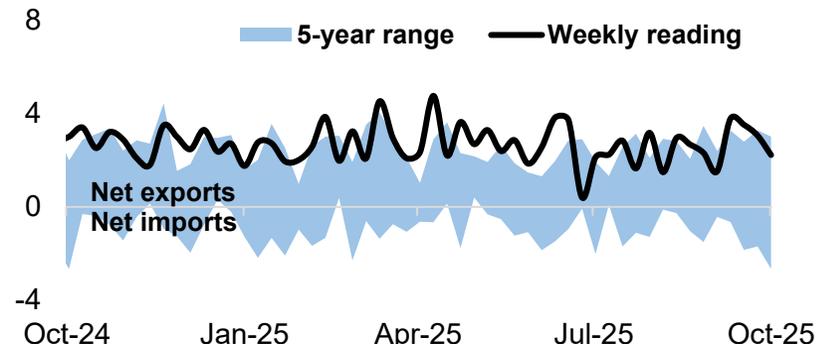
Dollars per barrel



WTI crude oil prices fell 3.0% w/w to \$58.90 per barrel as of October 10, as markets priced in a lower Middle East risk premium and expectations of higher OPEC+ supply.

U.S. petroleum net exports (imports)

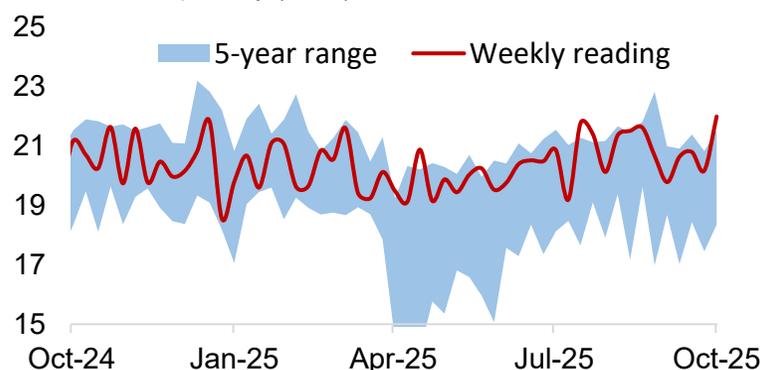
Million barrels per day, mb/d



Petroleum net exports fell to 2.2 mb/d for the week ended October 3, a decrease of 0.8 mb/d from the prior week.

U.S. petroleum demand

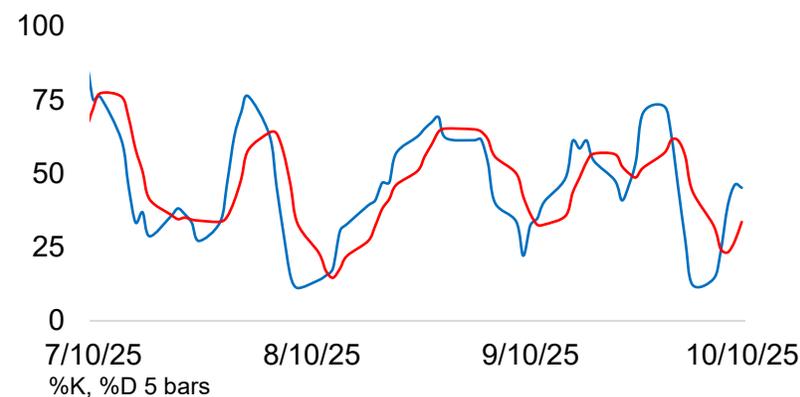
Million barrels per day (mb/d)



Petroleum demand increased. U.S. petroleum demand as of October 3, as measured by deliveries, increased by 1.8 mb/d from the prior week to 22.0 mb/d – the highest weekly reading since December 2022.

WTI futures momentum indicator

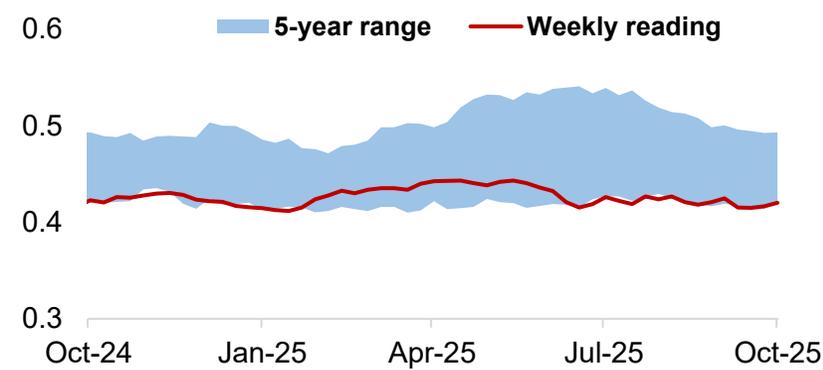
Index level



Price momentum turned positive for the week ended October 10.

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

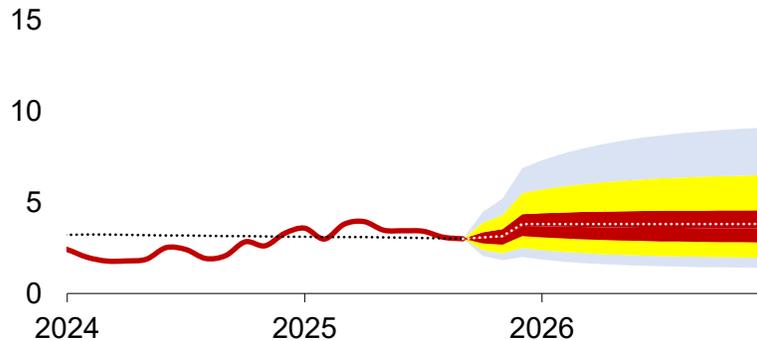
Billion barrels



Inventories increased. U.S. ending stocks of crude oil excluding the Strategic Petroleum Reserve (SPR) increased by 3.7 million barrels (mb) for the week ended October 3 – but remained at the bottom of the 5-year range.

Natural gas futures mean reversion analysis

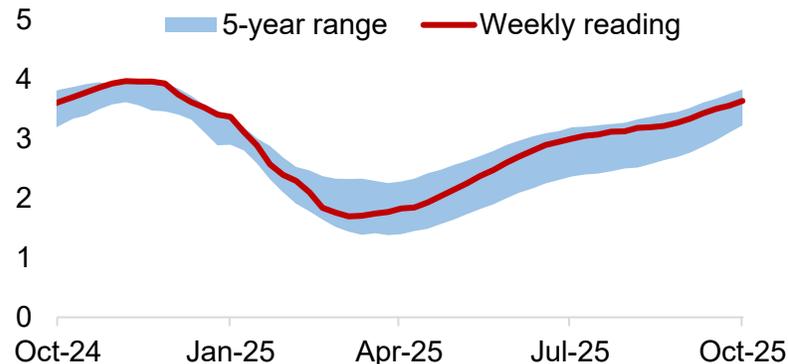
Dollars per mmBtu (2025\$)



Near-term futures are aligned with their historical mean reversion threshold. The futures curve is in contango, with spot prices below forward prices. Historical confidence intervals suggest greater potential for upside price movement than downside risk.

Working natural gas storage

Trillion cubic feet (tcf)



Working natural gas storage increased. Underground storage rose by 2.2% w/w to 3.64 trillion cubic feet (tcf) as of October 3, top 30% within the 5-year range.

Natural gas prompt month futures prices

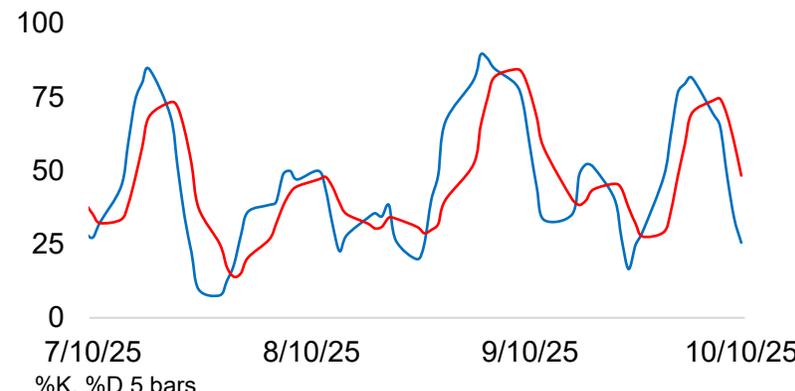
Dollars per million Btu



Natural gas prices fell 6.6% w/w to \$3.11 per million Btu as of October 10, ceding some of last week's gains amid stronger storage builds.

Natural gas futures momentum indicator

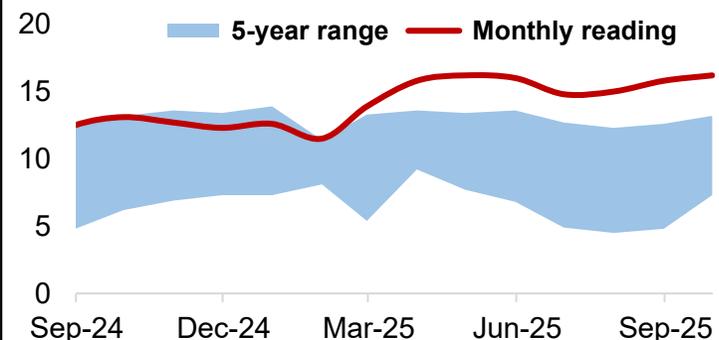
Index level



Natural gas price momentum strengthened early in the week but turned lower by October 10, signaling a potential pause following recent gains.

U.S. natural gas net exports

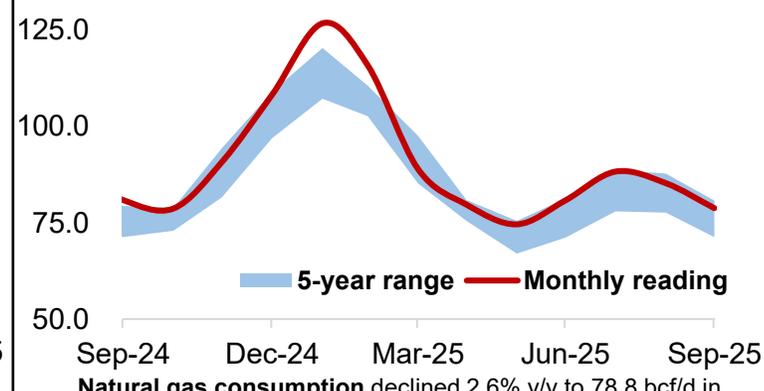
Billion cubic feet per day, bcf/d



According to the EIA estimates, U.S. natural gas net exports increased 23.7% y/y to a record-high 16.2 bcf/d in September.

U.S. natural gas consumption

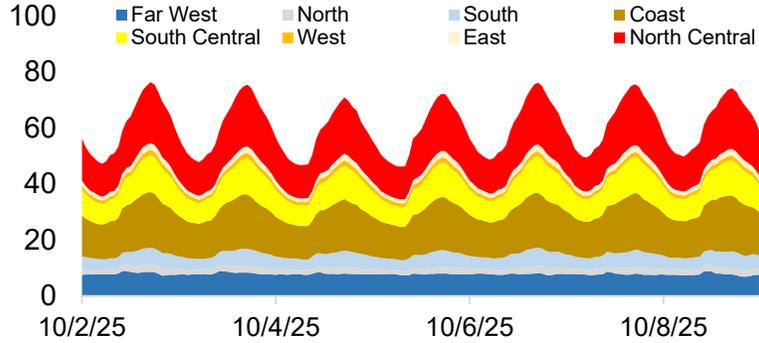
Billion cubic feet per day, bcf/d



Natural gas consumption declined 2.6% y/y to 78.8 bcf/d in September, according to EIA estimates.

ERCOT electricity load by region

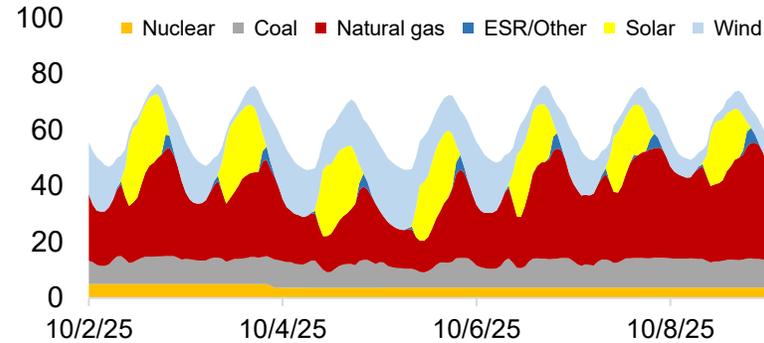
Thousand megawatt-hours (kMWh)



For Oct. 2-8, ERCOT's average hourly electricity load was 60.6 kMWh, up 3.4% w/w, while the maximum hourly load of 76.4 kMWh rose by 0.2% w/w. Variability was the highest in the North Central and South Central regions.

ERCOT hourly electricity generation by source

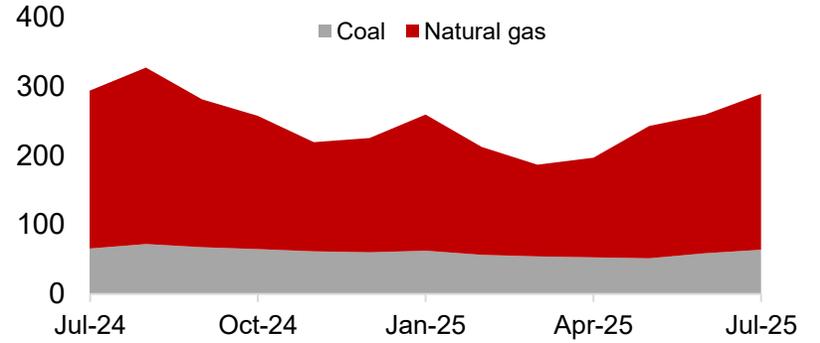
Thousand megawatt-hours (kMWh)



Thermal and other dispatchable resources supplied as much as 89.3% of ERCOT's electricity. From Oct. 2-8, hourly generation ranged between 46–77 kMWh, with a standard deviation of 9.3 kMWh. On the morning of Oct. 8, dispatchable sources met 89.3% of load—including 61.2% from natural gas.

Texas electricity plant receipts of natural gas and coal

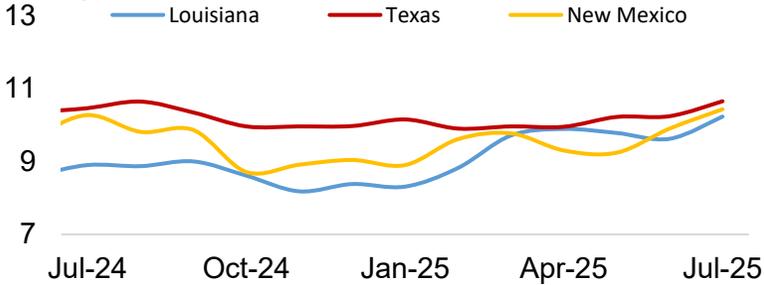
Trillion Btu



Natural gas receipts rose seasonally but remained below year-ago levels in July. Texas power plant receipts of natural gas increased 12.5% m/m but were 1.4% lower than in July 2024. Coal receipts also rose 8.2% m/m yet were down 2.7% y/y.

Electricity prices – average across all end-use sectors

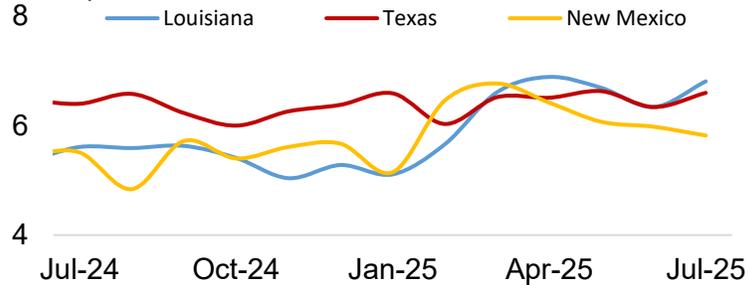
Cents per kilowatt-hour



Texas electricity prices rose in July 2025. The state average increased 4.0% m/m and 1.8% y/y to 10.65 cents per kWh, compared with 10.23 in Louisiana and 10.43 in New Mexico.

Industrial electricity prices

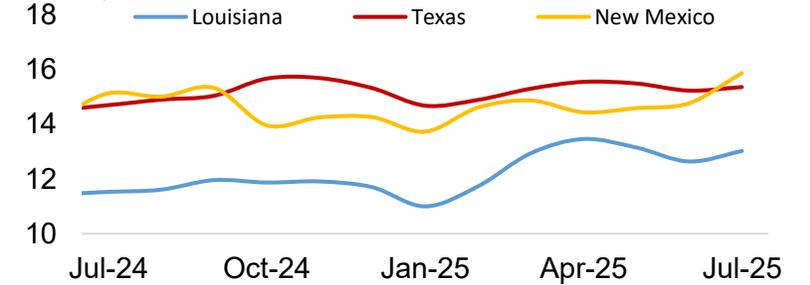
Cents per kilowatt-hour



Texas' industrial electricity prices rose 4.1% m/m and 3.1% y/y to 6.6 cents per kWh in July. Prices in neighboring states also climbed from last year: Louisiana's surged 21.4% y/y to 6.81 cents per kWh—now above the Texas average—while New Mexico's rose 5.6% y/y but remained 11.8% below Texas levels.

Residential electricity prices

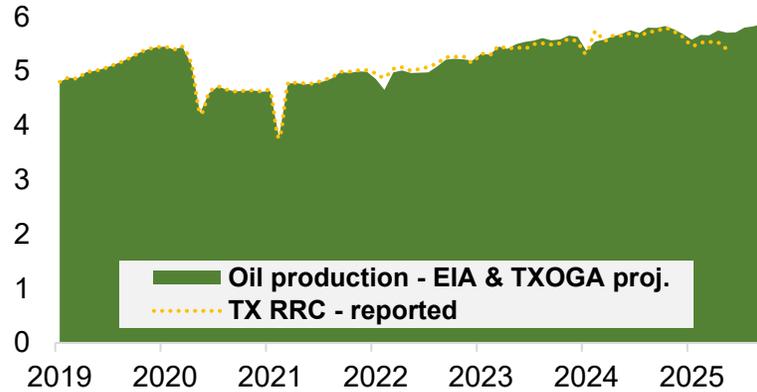
Cents per kilowatt-hour



Texas' residential electricity prices rose 0.9% m/m and 4.5% y/y in July to 15.36 cents per kWh. Rates in neighboring states also climbed—up 12.9% y/y in Louisiana and 4.9% y/y in New Mexico—though Louisiana's remain more than 15% below Texas levels.

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

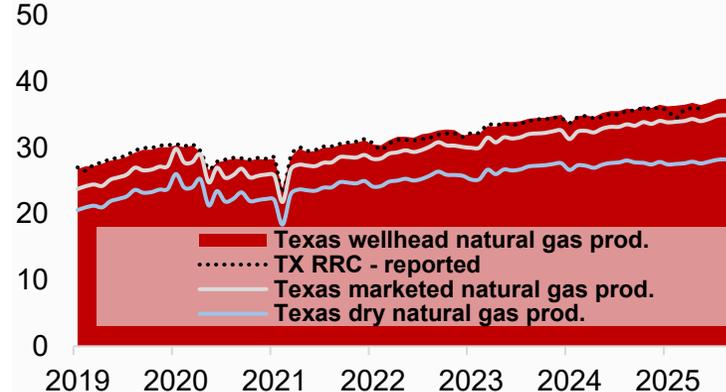
Million barrels per day (mb/d)



Record-high production. Texas crude oil output set a new all-time high at 5.8 mb/d in July 2025 (EIA), with TXOGA estimates showing production rising further to 5.9 mb/d in September.

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

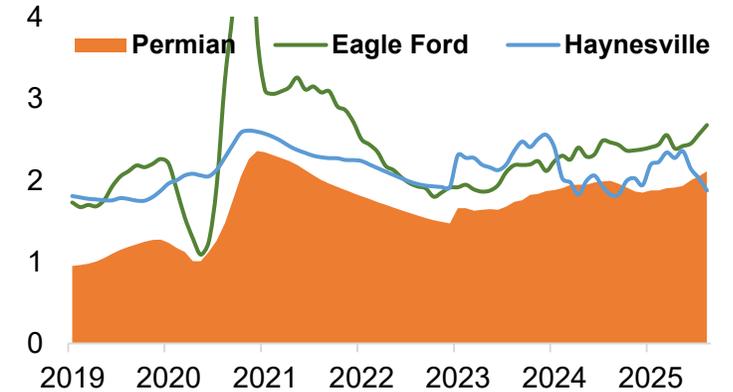
Billion cubic feet per day (bcf/d)



Natural gas production records. Texas produced record-highs of 37.4 bcf/d of natural gas gross withdrawals and 34.8 bcf/d of marketed production in July, per EIA. TXOGA estimates that Texas' marketed production reached 34.9 bcf/d in Aug. and returned to 34.8 bcf/d in Sep.

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

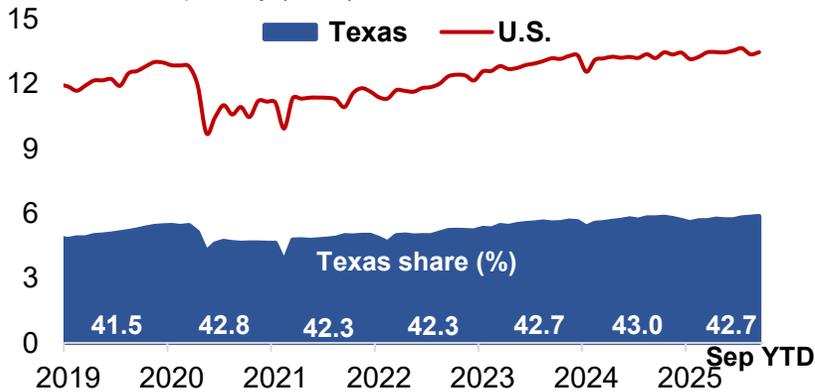
Thousand barrels per day oil-equivalent, kb/doe



Rig productivity rose in August. EIA estimates of rig productivity for August 2025 rose by 5.8% y/y in the Permian Basin, 8.6% y/y in the Eagle Ford, and 2.7% y/y in the Haynesville.

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

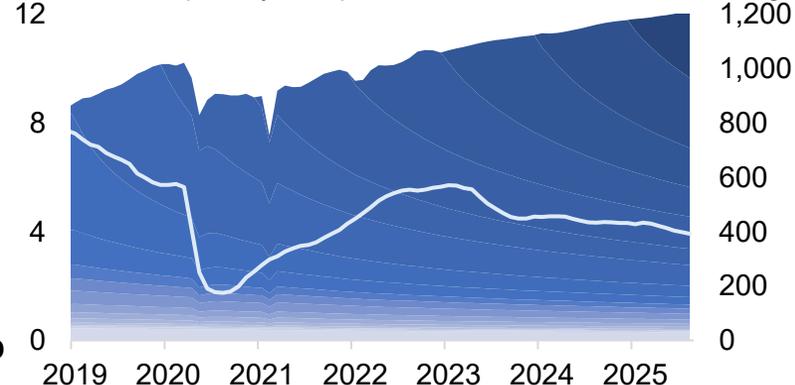
Million barrels per day (mb/d)



In the first three quarters of 2025, Texas accounted for **42.7%** of total U.S. crude oil production.

Texas shale basin wellhead oil & natural gas production

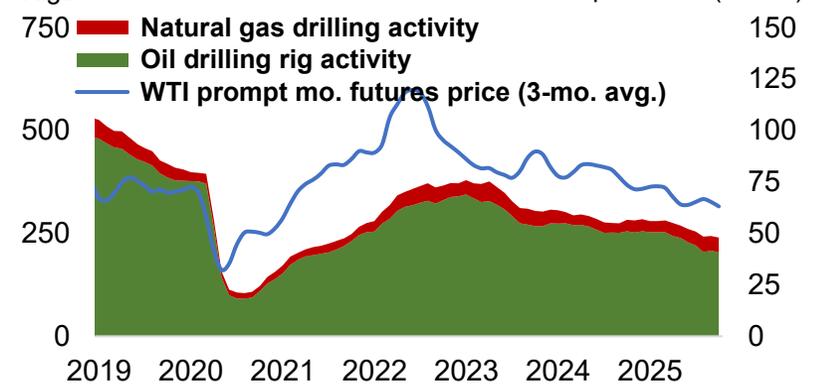
Million barrels per day oil-equivalent



EIA estimates show oil and natural gas production growth across Texas shale basins in August 2025, including the Permian (+3.4% y/y), Eagle Ford (+1.0% y/y), and Haynesville (+10.3% y/y).

Texas drilling activity and WTI crude oil futures prices

Rigs (left axis) and Dollars per barrel (2025\$) (right axis)

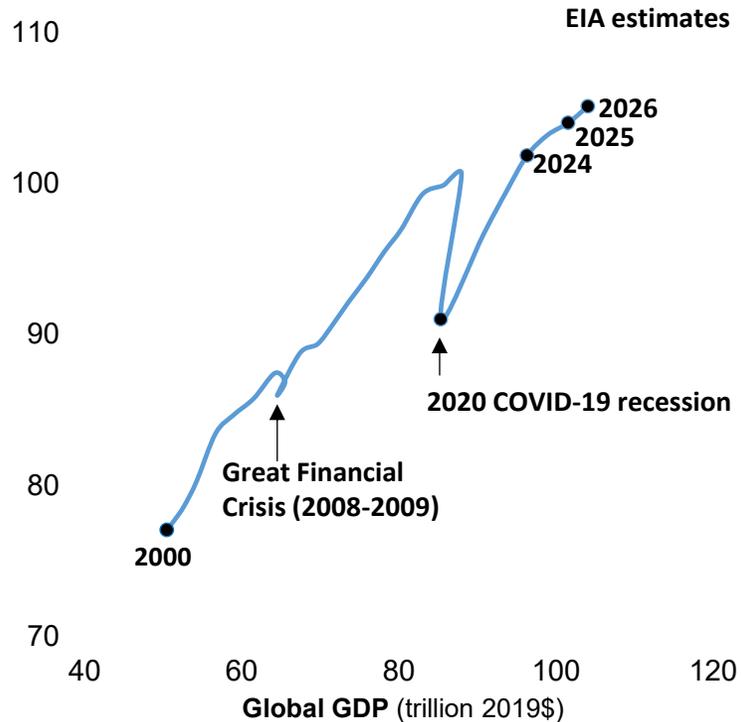


As of October 10, Texas' total rigs decreased, according to Baker Hughes, with 200 oil-directed rigs (down 7 rigs w/w) and 37 natural gas-directed rigs (up 1 rig w/w).

- In its October update, EIA raised its 2025 global oil demand estimates, still expecting a third consecutive record, but at higher levels: 104.0 mb/d in 2025 (+0.2 mb/d vs. prior report) and 105.1 mb/d in 2026 (unchanged), effectively advancing demand.
- EIA raised its 2025 global supply growth by 0.3 mb/d and its 2026 outlook by 0.2 mb/d, with higher supply from all sources
- Brent crude oil prices are now projected to average \$69 per barrel in 2025 and \$52 in 2026—compared with about \$66 currently

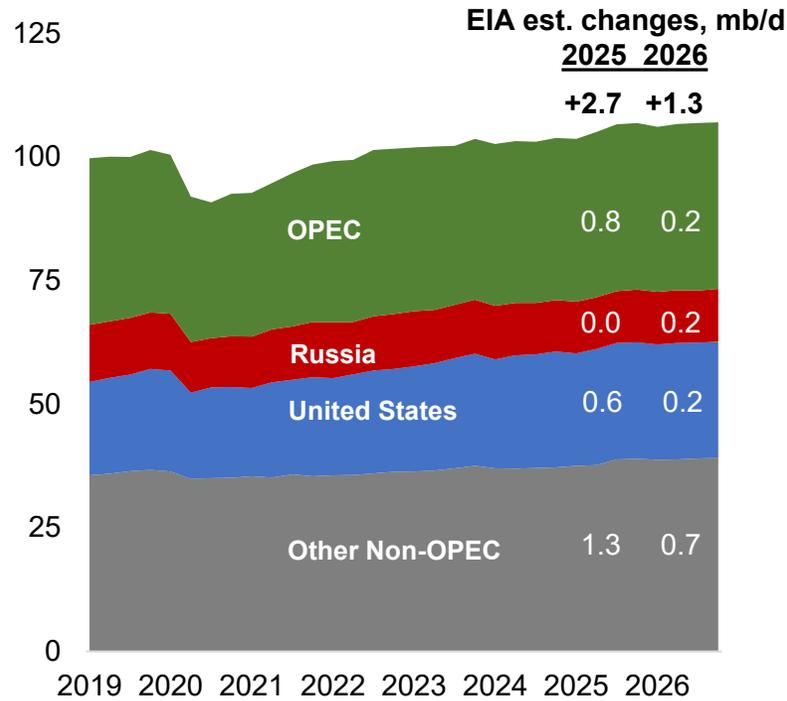
Global oil demand vs. GDP

Global oil demand (million barrels per day, mb/d)



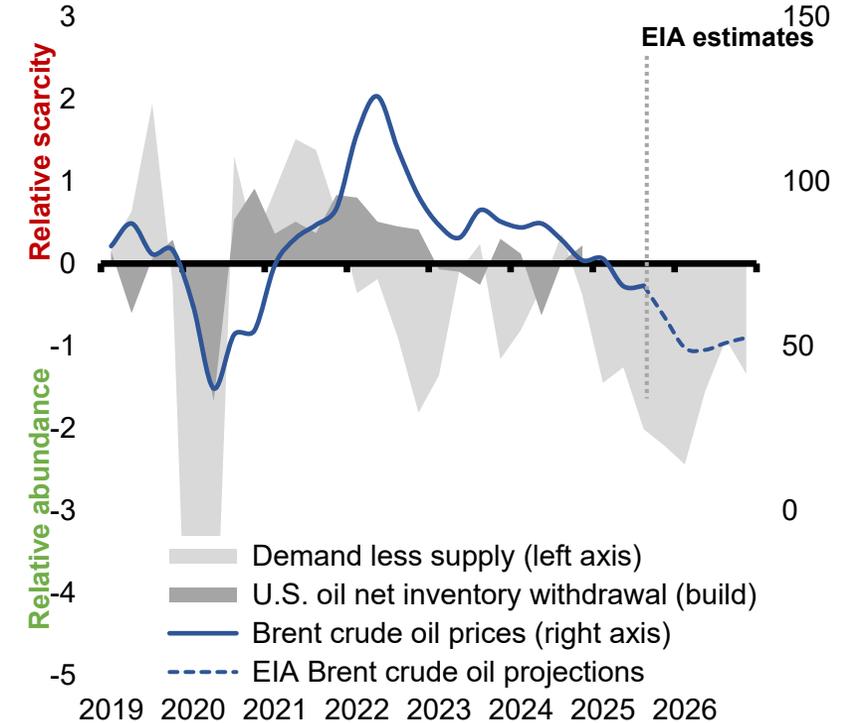
Oil production by country/region

Million barrels per day, mb/d



Global demand/supply & Brent prices

Million barrels per day (mb/d)





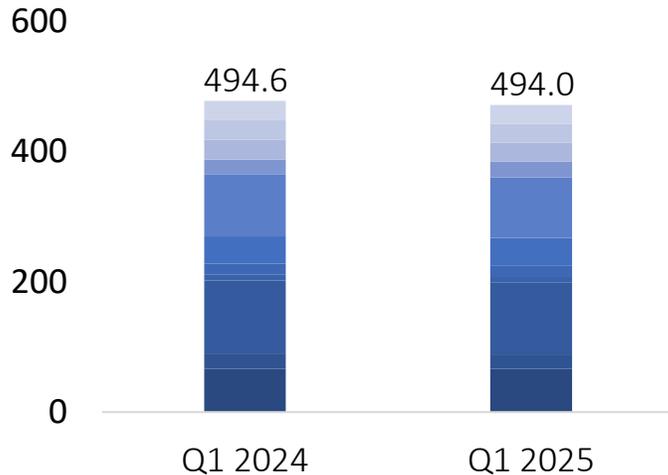
Texas oil & gas jobs dipped, wages reached record high in Q1 2025



- ▶ 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.

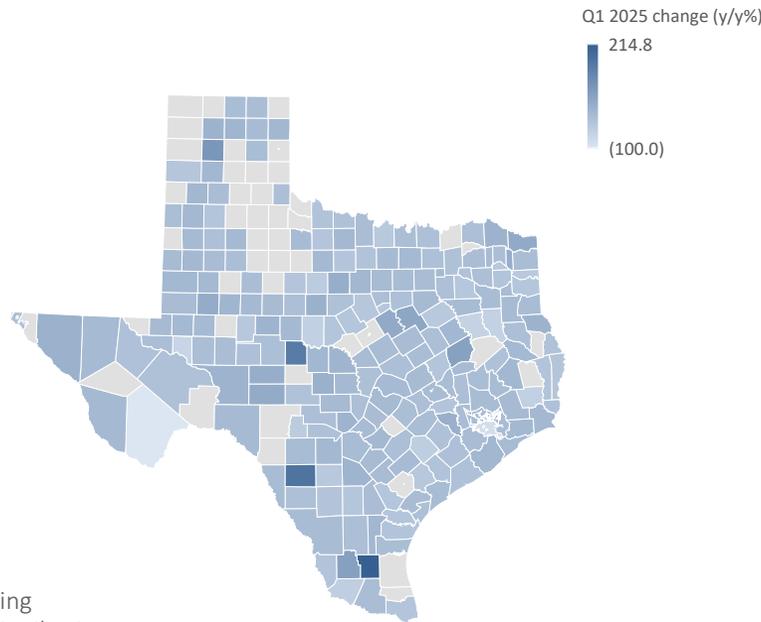
Texas oil and natural gas industry direct employment fell by +0.1% y/y in Q1 2025

Thousand Jobs



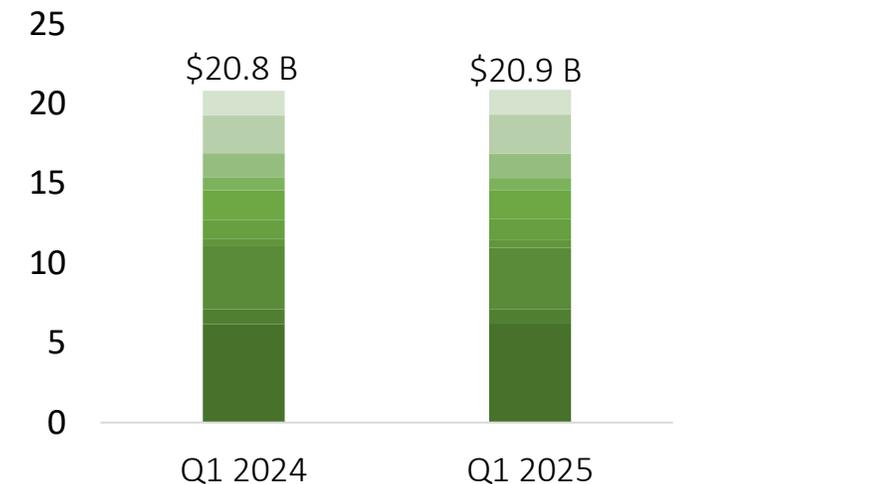
- Oil & gas extraction
- Support activities for o&g ops.
- Petroleum refineries
- Gas stations & fuel dealers
- All other*
- Pipeline construction
- Oil & gas drilling
- Natural gas distribution
- Petrochemical mfg.
- Pipeline transportation
- Oil & gas field mach. and eq. mfg.

* 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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