



October 6, 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 6, 2025

- **Economic signals weakened.** The ADS Index pointed to flat Q3 growth, with consumer sentiment down 5.5% m/m and payrolls up only 22,000 in August as unemployment rose to 4.3% (September data delayed). BEA's Q2 GDP revision showed investment flat y/y despite modest industrial output gains. High-yield borrowing costs held steady at 11.7%, with Fed Funds futures at 4.1%, leaving a low-credit-quality premium of 7.7%.
- **Chart of the Week: Texas production set new record highs.** EIA data showed July crude oil output at 5.8 million barrels per day (mb/d), marketed natural gas at 34.8 billion cubic feet per day (bcf/d), and NGLs at 4.1 mb/d. TXOGA's September estimates put crude oil at 5.9 mb/d and gas at 34.8 bcf/d, with Texas supplying 42.7% of U.S. crude and 29.3% of marketed gas year-to-date—reinforcing its central role in U.S. energy growth.
- **Oil markets weakened,** with WTI down 7.0% w/w to \$61.10/bbl on expectations of higher OPEC+ output. Futures flattened between late-2025 and 2026, U.S. petroleum demand eased 0.6 mb/d, net exports slipped to 3.1 million barrels per day (mb/d), and crude inventories rose 1.8 million barrels while remaining at the low end of the 5-year range.
- **Natural gas markets strengthened.** Prices rose 18.5% w/w to \$3.36 per million Btu as of October 3, driven by smaller storage builds and seasonal contract rolling. Working gas in storage increased 1.5% w/w to 3.56 tcf, in line with the 5-year range. Net exports hit a record 16.1 bcf/d in September (+22.9% y/y), while consumption eased 2.6% y/y to 78.8 bcf/d.
- **ERCOT leaned heavily on dispatchable resources,** which supplied up to 94.4% of load—including 70.7% from natural gas—between September 25 and October 1.

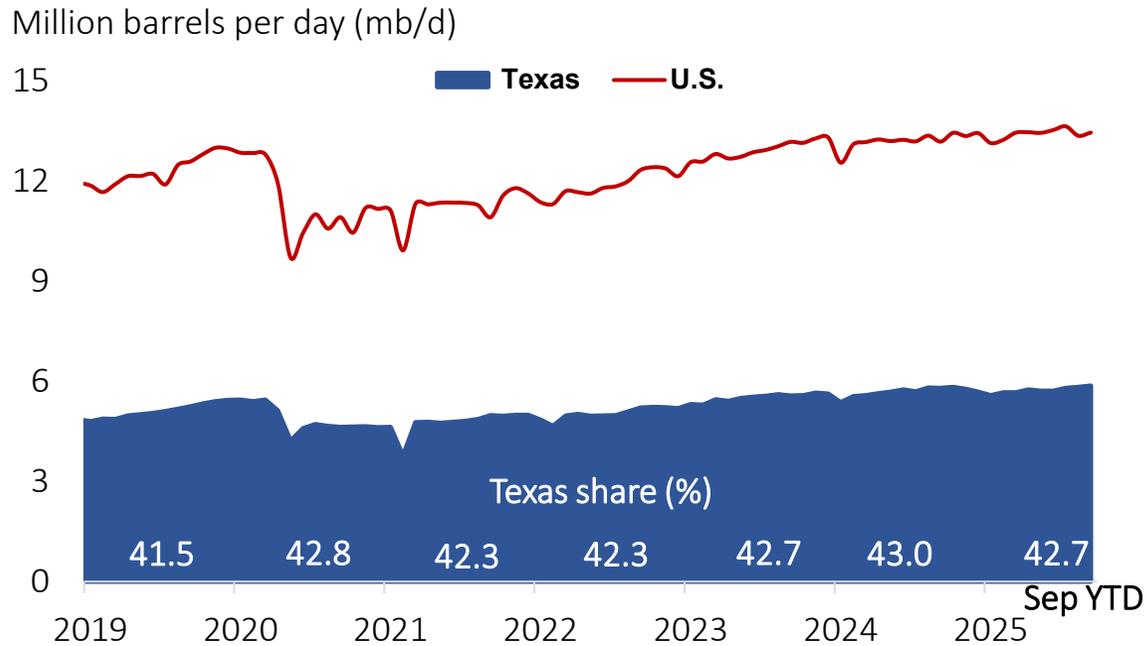


Chart of the Week: Texas production set new record highs, driving U.S. energy growth

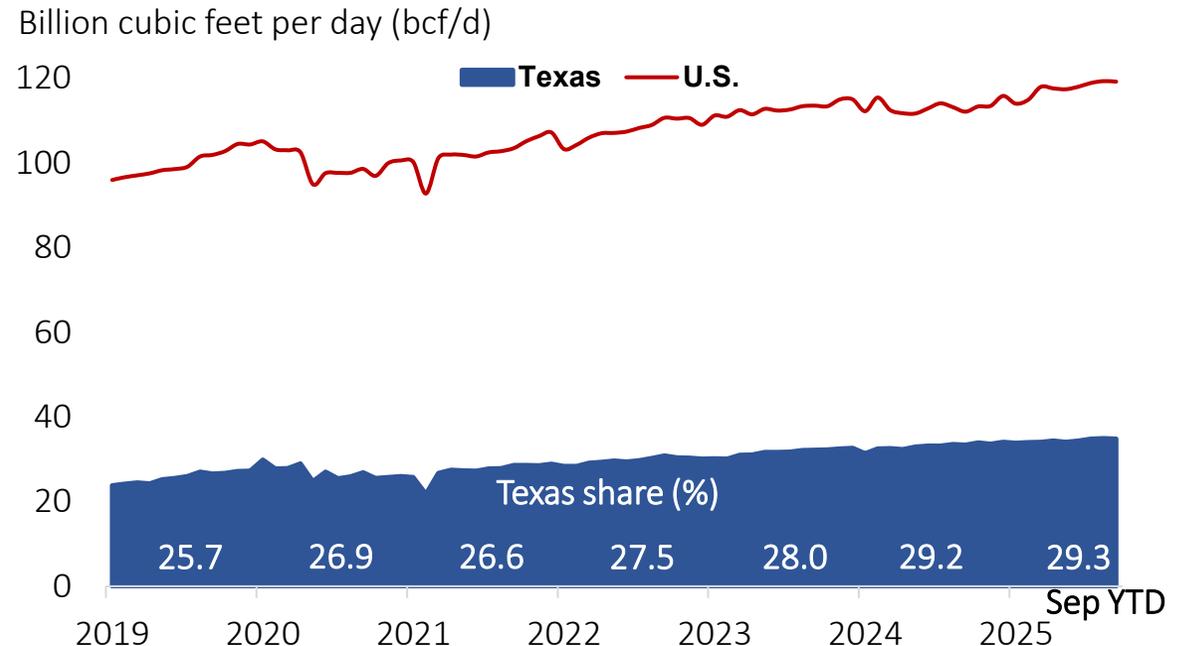


- ▶ **Record highs.** EIA data for July show Texas crude oil production at 5.8 mb/d; marketed natural gas production at 34.8 bcf/d; and, NGL production of 4.1 mb/d.
- ▶ **In September 2025,** TXOGA estimates that Texas produced 5.9 mb/d of crude oil, 34.8 bcf/d of marketed natural gas, and 4.1 mb/d of NGLs. Through the first three quarters of 2025, with Texas supplying 42.7% of U.S. crude and 29.3% of marketed gas year-to-date—reinforcing Texas’ central role in U.S. energy growth.
- ▶ Compared with EIA’s Texas production data released on September 30, 2025, TXOGA’s July estimates (published August 4) proved accurate within 0.4% for crude oil, 0.1% for gross and marketed natural gas, and 0.3% for NGLs.

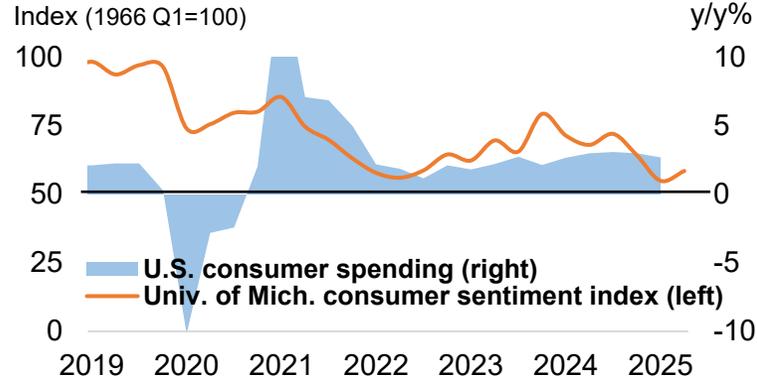
U.S. and Texas crude oil production, Jan. 2019 – Sep. 2025



U.S. and Texas natural gas marketed production

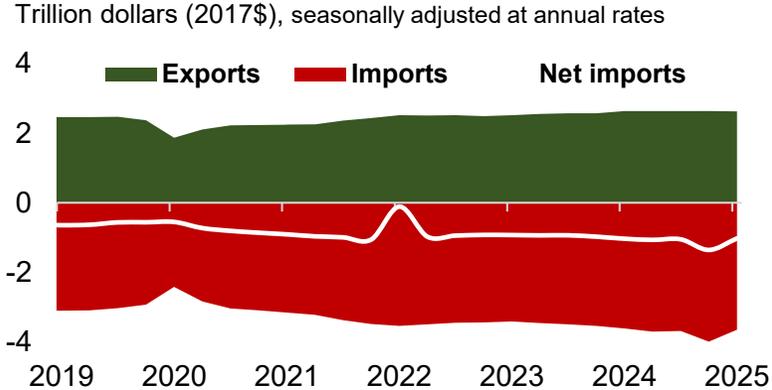


Consumer sentiment vs. spending



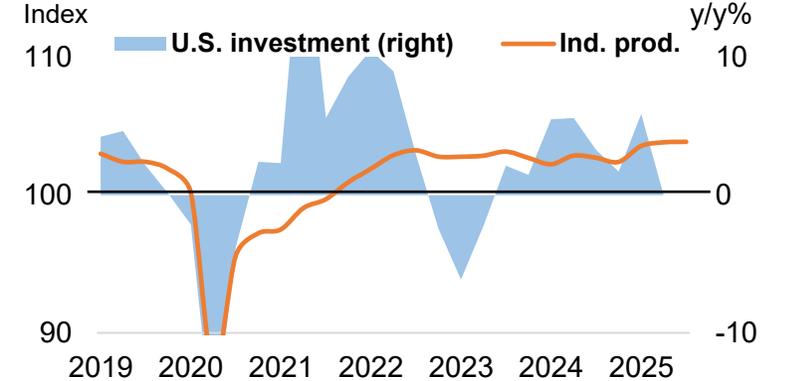
Consumer sentiment—a leading indicator of household spending—fell 5.5% month-over-month (m/m) in the University of Michigan's survey, signaling a potential moderation in Q3 2025 spending growth. According to the BEA's revised estimate of Q2 2025 GDP, consumer spending rose 2.7% year-over-year (y/y), down 0.4 percentage points from Q1.

Real net exports of goods and services



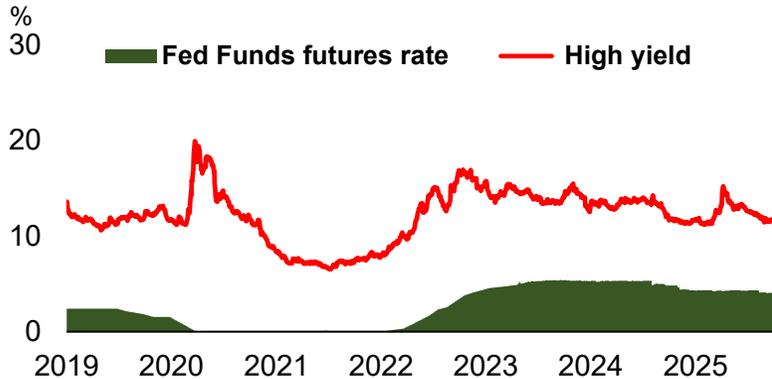
The BEA's initial Q2 2025 GDP report showed the U.S. trade deficit narrowed to an annualized \$1.0 trillion (SAAR), down from a record \$1.4 trillion in Q1, as imports declined more than exports. On a nominal basis, the petroleum trade surplus rose by an upward-revised \$9.9 billion to \$72.2 billion—more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

Industrial production and investment growth



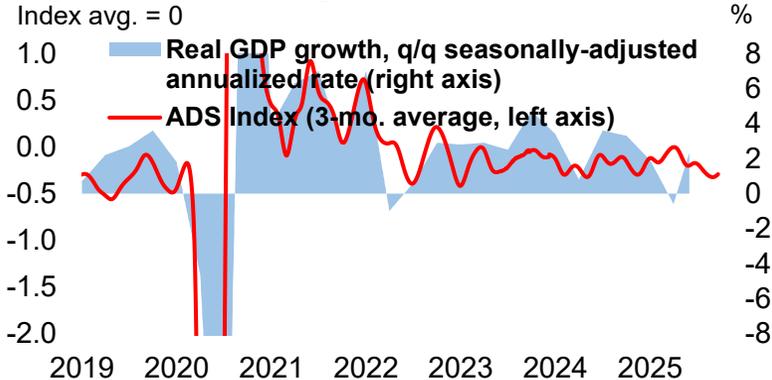
Macro uncertainties stalled investment in Q2 2025. According to the revised GDP report, economy-wide investment was flat y/y in BEA's September revision, diverging from industrial production, which typically leads investment trends. Industrial production rose 0.1% m/m in August, corresponding with capacity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

Fed Funds rate and CCC and lower corporate bond yields



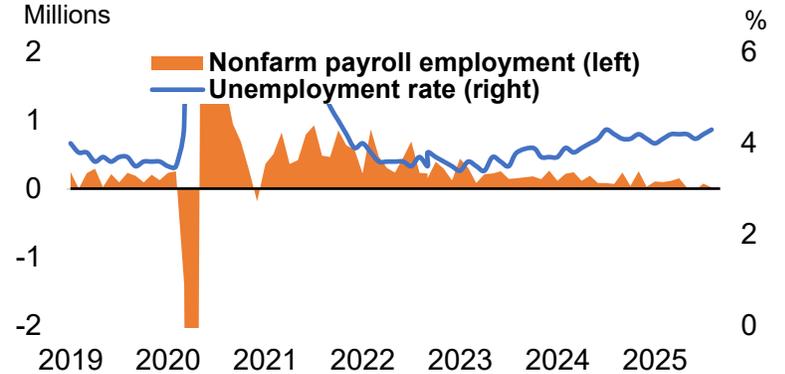
The bond premium for low-credit-quality issuers held steady. As of Oct. 3m high-yield borrowing costs remained steady at 11.8% with Fed Funds futures at 4.1%, resulting in a low-credit-quality premium of 7.7%.

Aruoba-Diebold-Scotti Business Conditions Index (qtr. avg.) vs. U.S. 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.

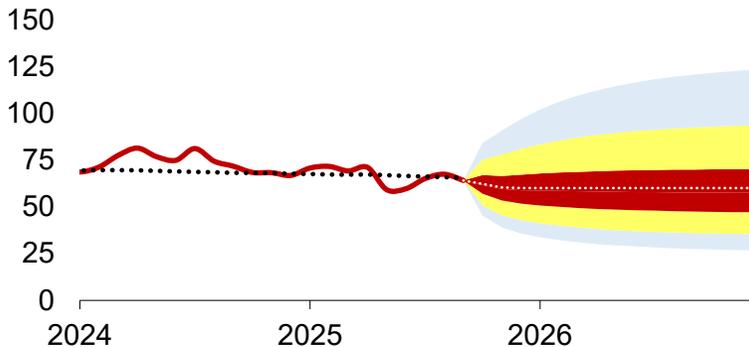
Nonfarm payroll employment & unemployment rate



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 crude oil price mean reversion analysis

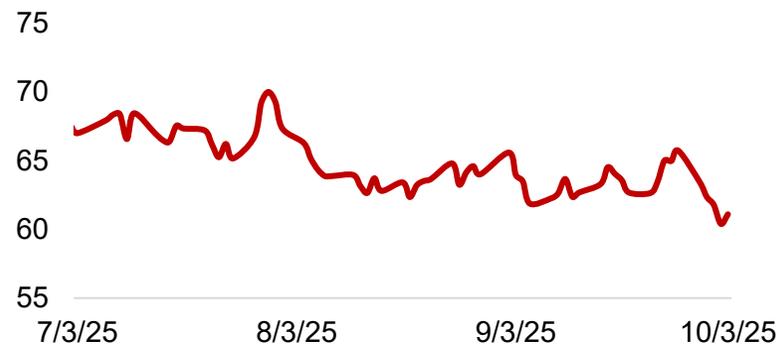
Dollars per barrel (2025\$)



Near-term futures remain near their historical mean-reversion threshold, but the strip has shifted from backwardation—where futures trade below spot prices—to nearly flat between the November 2025 and December 2026 contracts.

WTI crude prompt month futures prices

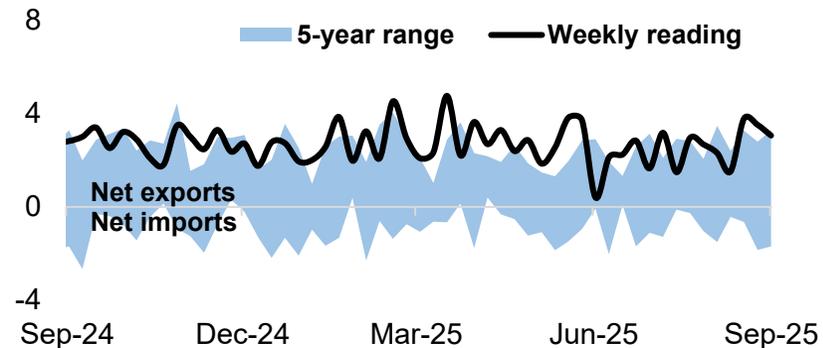
Dollars per barrel



WTI crude oil prices fell 7.0% w/w to \$61.10/bbl as of October 3, reflecting market expectations for increased OPEC+ output in November.

U.S. petroleum net exports (imports)

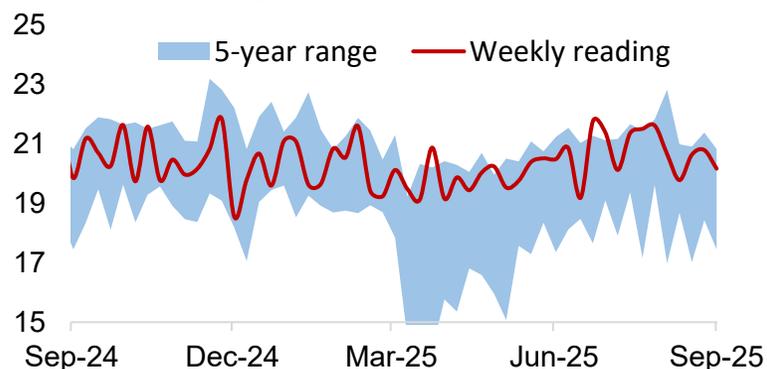
Million barrels per day, mb/d



Petroleum net exports fell to 3.1 mb/d for the week ended September 26, a decrease of 0.5 mb/d from the prior week.

U.S. petroleum demand

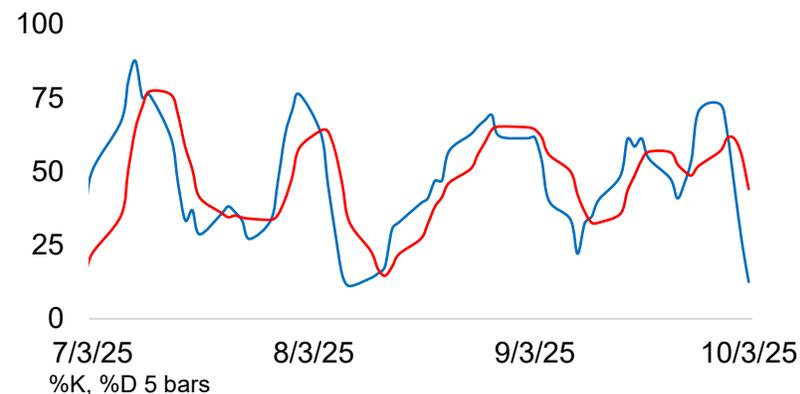
Million barrels per day (mb/d)



Petroleum demand decreased. U.S. petroleum demand as of September 26, as measured by deliveries, decreased by 0.6 mb/d from the prior week to 20.2 mb/d.

WTI crude prompt month futures slow stochastic

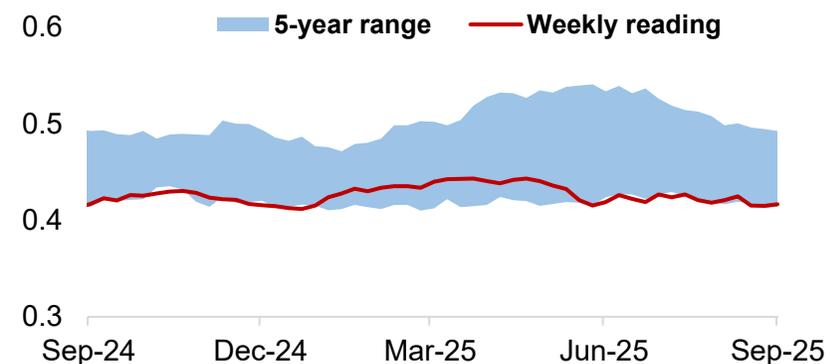
Index level



Price momentum turned down for the week ended October 3.

U.S. ending stocks of crude oil (excluding the SPR)

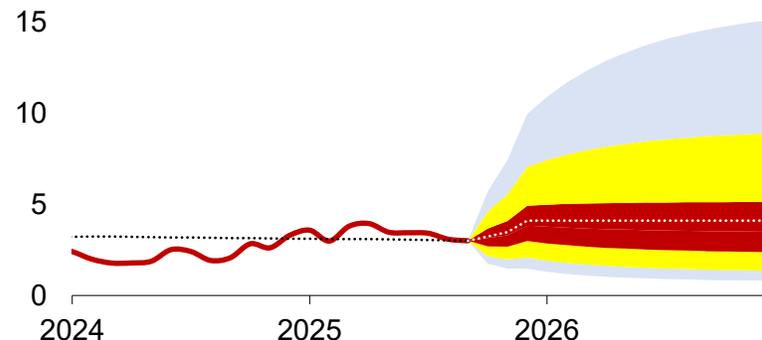
Billion barrels



Inventories increased. U.S. ending stocks of crude oil excluding the Strategic Petroleum Reserve (SPR) increased by 1.8 million barrels (mb) for the week ended September 26 – but remained at the bottom of the 5-year range.

Natural gas price mean reversion analysis

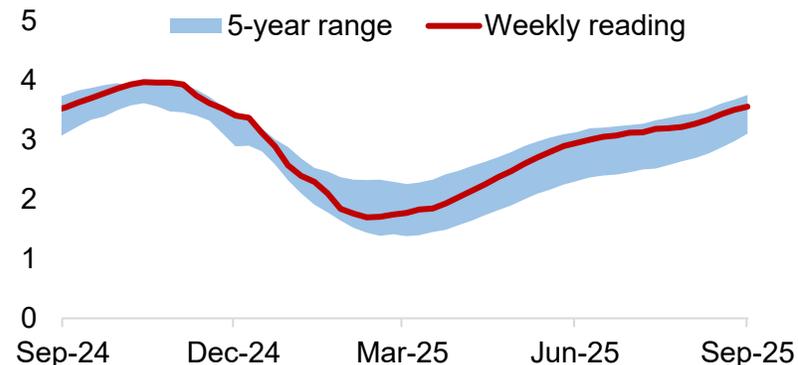
Dollars per mmBtu (2025\$)



Near-term futures prices rose and 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.

U.S. weekly working gas storage

Trillion cubic feet (tcf)



Working natural gas storage increased. Underground storage rose by 1.5% w/w to 3.56 trillion cubic feet (tcf) as of September 26, top 30% within the 5-year range.

Natural gas prompt month futures prices

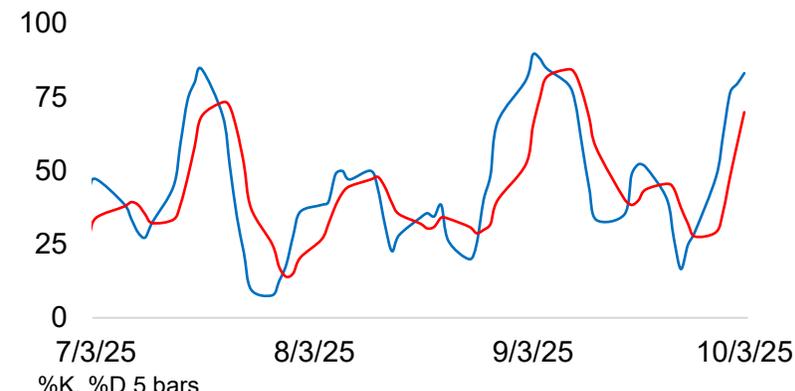
Dollars per million Btu



Natural gas prices climbed 18.5% w/w to \$3.36 per million Btu as of October 3, driven by smaller storage builds and seasonal rolling into the November 2025 futures contract.

Natural gas futures slow stochastic

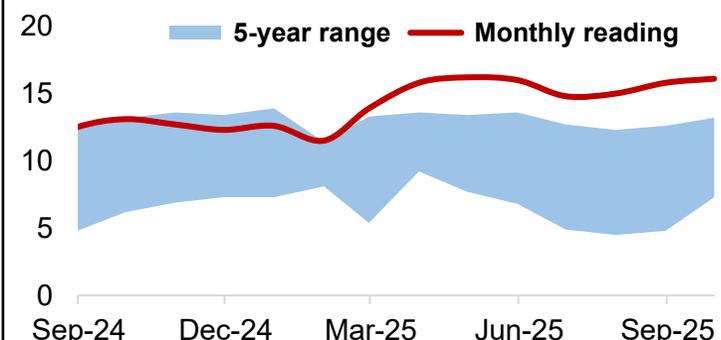
Index level



Natural gas price momentum rose for the week ended October 3.

U.S. natural gas net exports

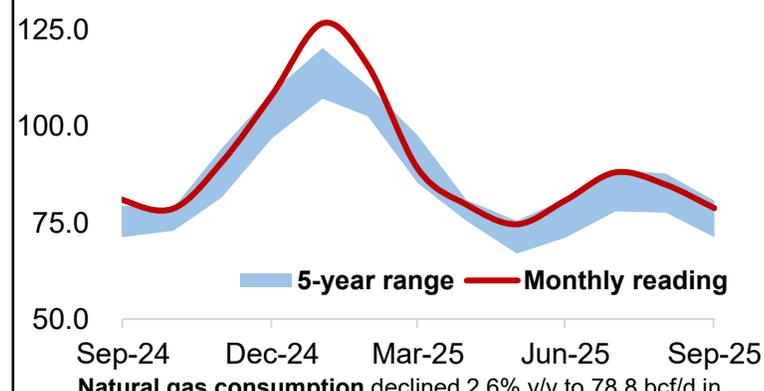
Billion cubic feet per day, bcf/d



According to the EIA estimates, U.S. natural gas net exports increased 22.9% y/y to a record-high 16.1 bcf/d in September.

U.S. natural gas consumption

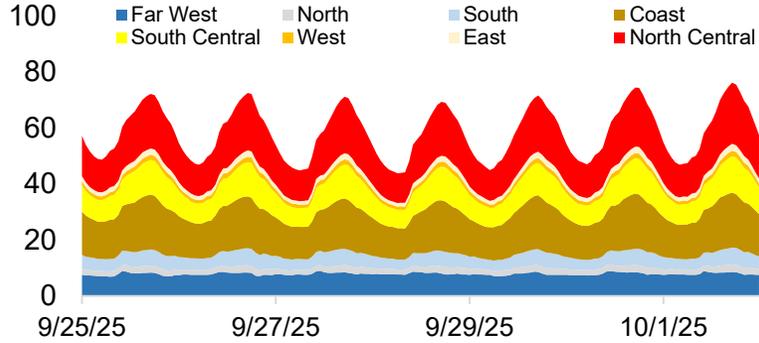
Billion cubic feet per day, bcf/d



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

ERCOT electricity load by region

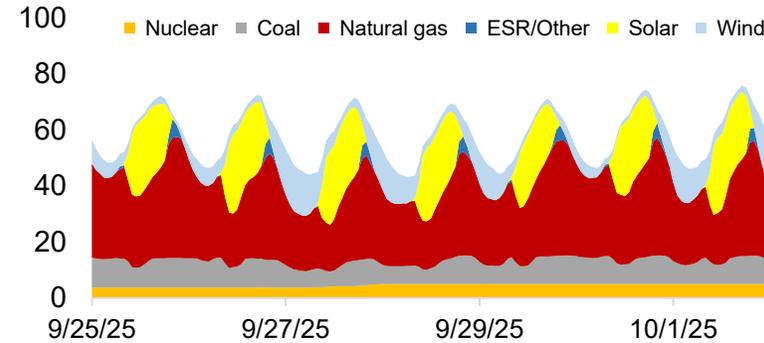
Thousand megawatt-hours (kMWh)



For Sep. 25-Oct. 1, ERCOT's average hourly electricity load was 58.6 kMWh, down 9.2% w/w, while the maximum hourly load of 76.3 kMWh fell by 4.4% w/w. Variability was the highest in the North Central and South Central regions.

ERCOT hourly electricity generation by source

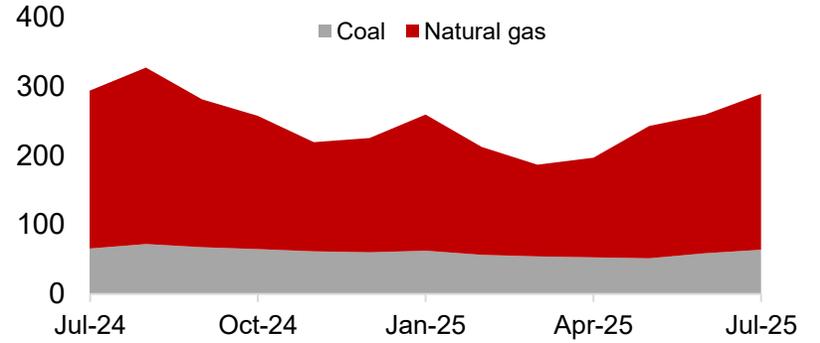
Thousand megawatt-hours (kMWh)



Thermal and other dispatchable resources supplied as much as 94.4% of ERCOT's electricity. From Sep. 25-Oct. 1, hourly generation ranged between 43–76 kMWh, with a standard deviation of 9.3 kMWh. On the night of Sep. 25, dispatchable sources met 94.4% of load—including 70.7% from natural gas.

Texas electricity plant receipts of natural gas and coal

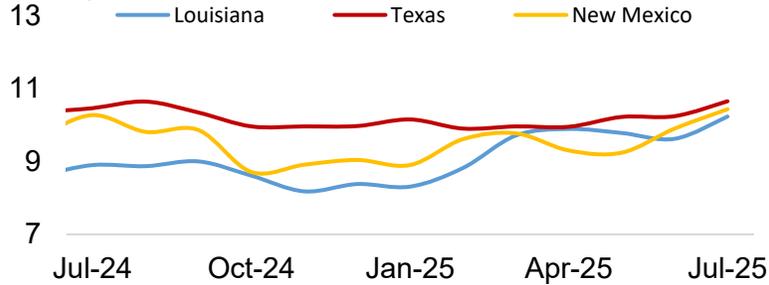
Trillion Btu



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

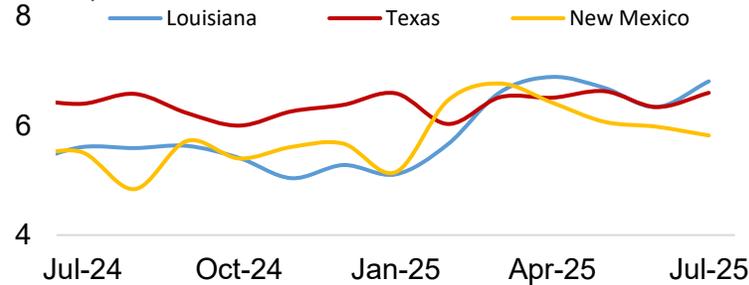
Cents per kilowatt-hour



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

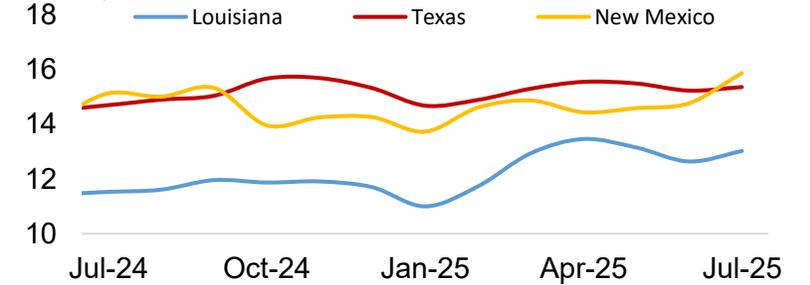
Cents per kilowatt-hour



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

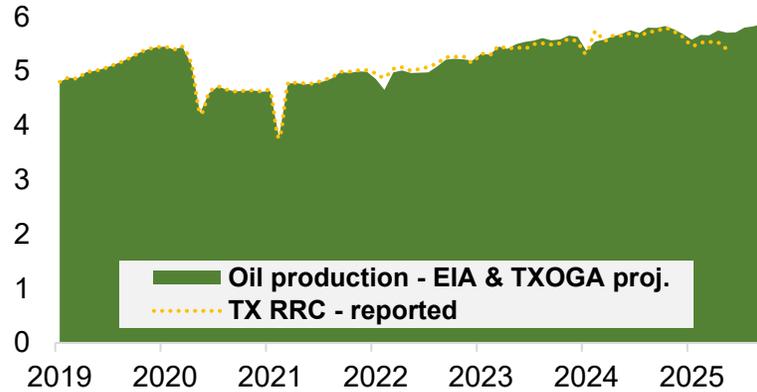
Cents per kilowatt-hour



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

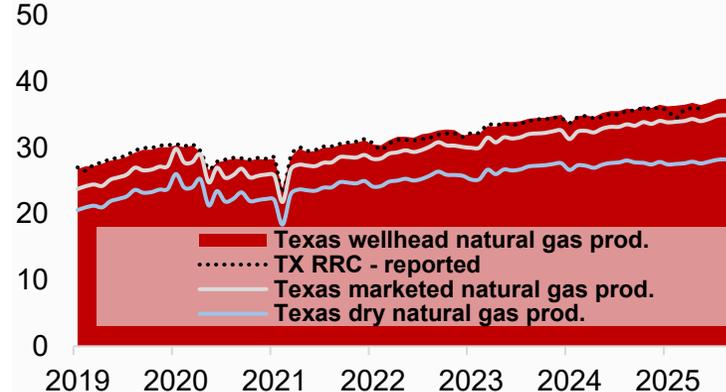
Million barrels per day (mb/d)



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

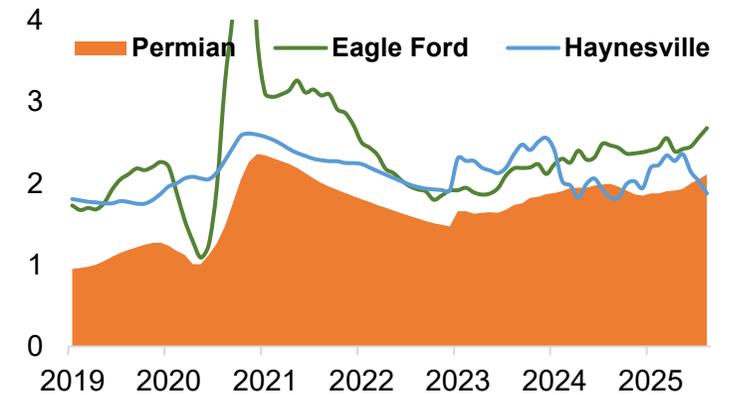
Billion cubic feet per day (bcf/d)



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

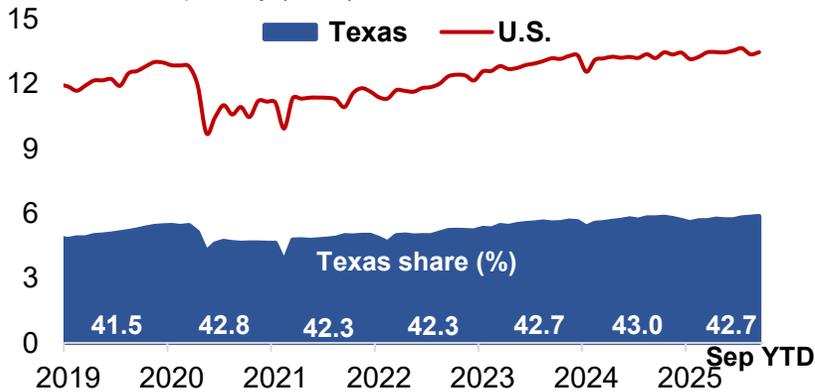
Thousand barrels per day oil-equivalent, kb/doe



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

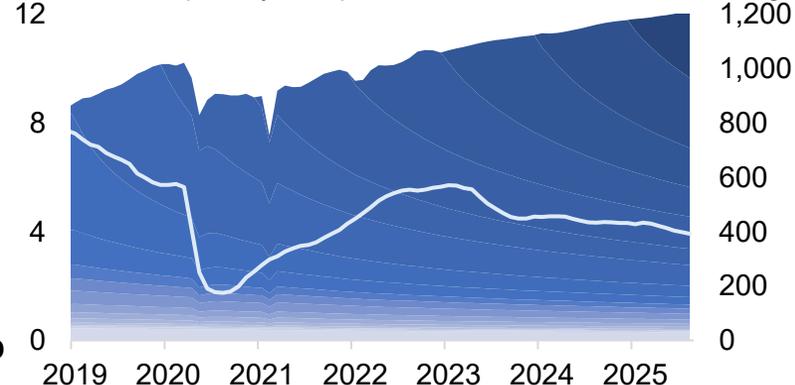
Million barrels per day (mb/d)



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

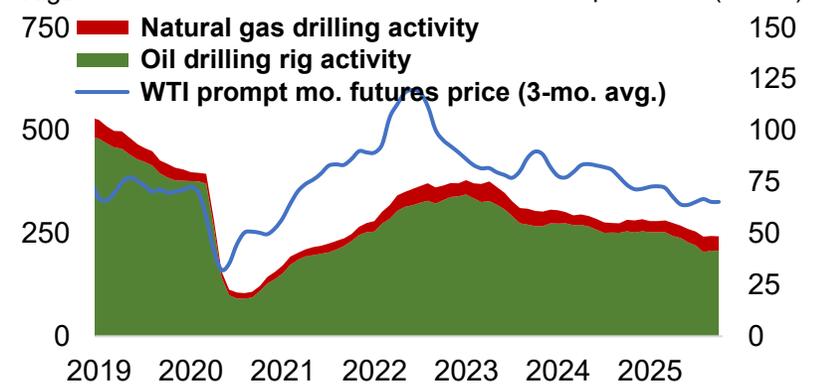
Million barrels per day oil-equivalent



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)

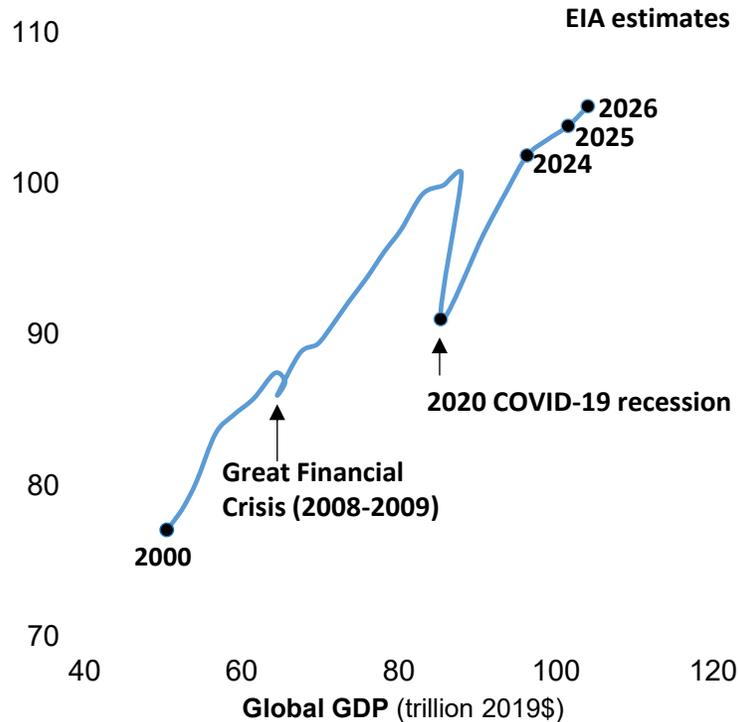


As of October 3, Texas' total rigs decreased, according to Baker Hughes, with 207 oil-directed rigs (down 3 rigs w/w) and 36 natural gas-directed rigs (up 1 rig w/w).

- In its September update, EIA raised its global oil demand estimates, still expecting a third consecutive record, but at higher levels: 102.9 mb/d in 2024 (+0.2 mb/d revision from the prior report), 103.8 mb/d in 2025 (+0.1 mb/d), and 105.1 mb/d in 2026 (+0.2 mb/d)
- EIA held its 2025 global supply growth steady but lifted its 2026 outlook by 0.2 mb/d, driven by higher non-OPEC supply
- Brent crude oil prices are now projected to average \$68 per barrel in 2025 and \$51 in 2026—compared with about \$66 currently

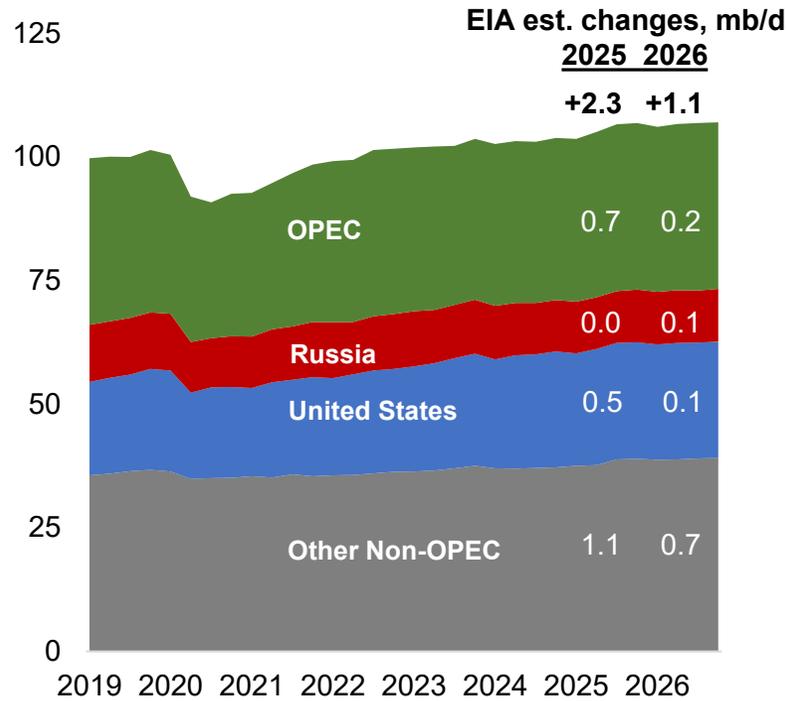
Global oil demand vs. GDP

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



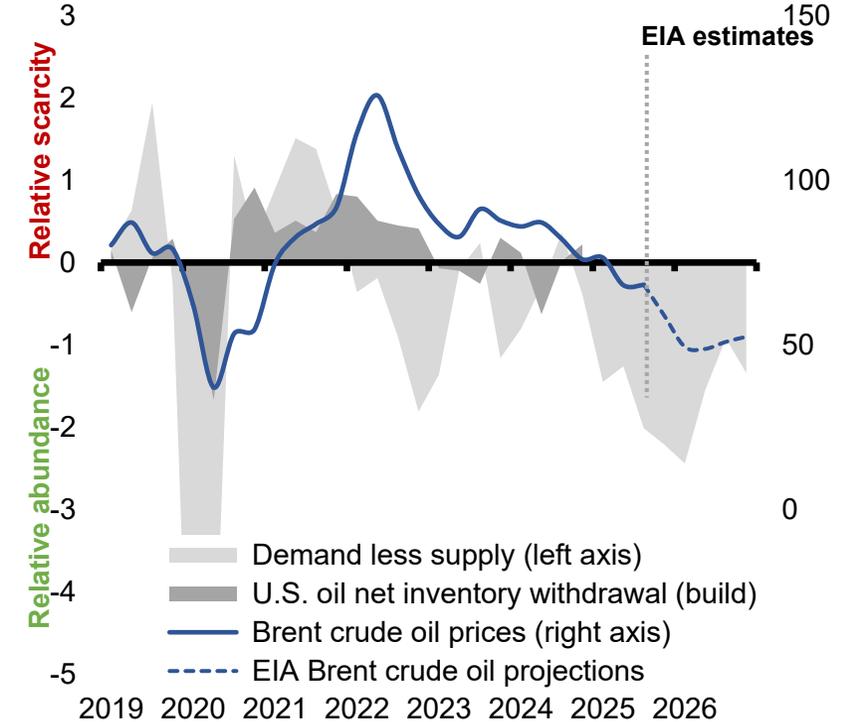
Oil production by country/region

Million barrels per day, mb/d



Global demand/supply & Brent prices

Million barrels per day (mb/d)





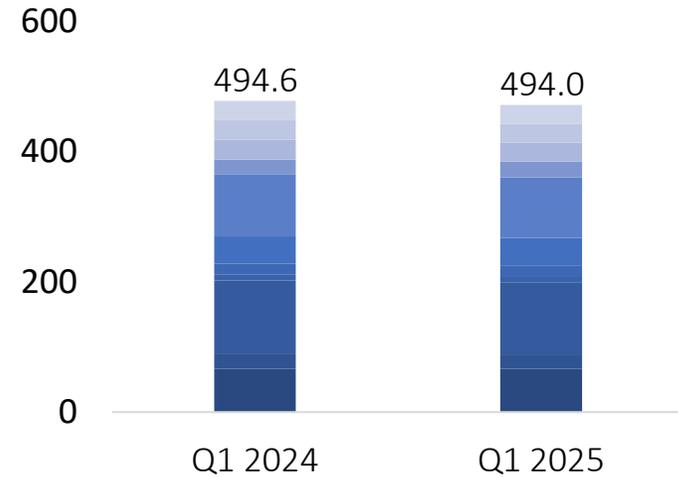
Texas Oil & Gas Jobs Dipped, Wages Reached Record High in Q1 2025



- ▶ 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.

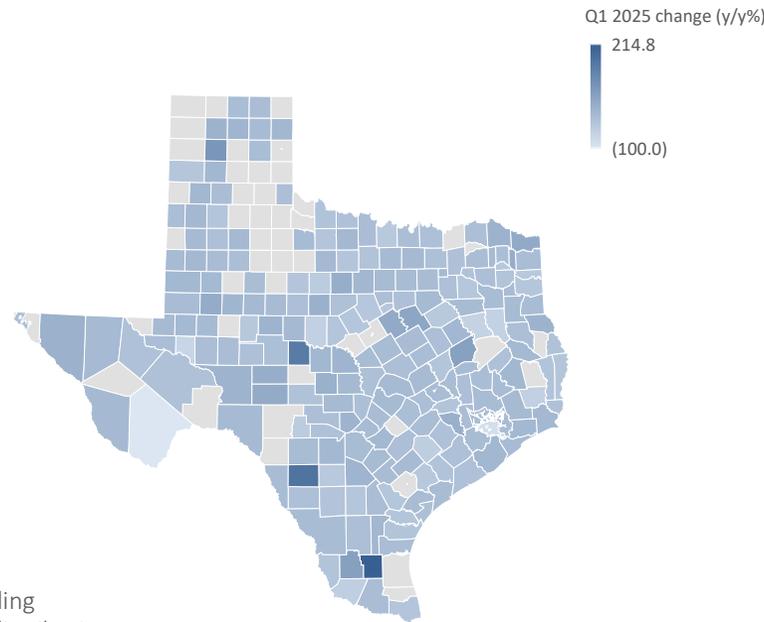
Texas oil and natural gas industry direct employment fell by +0.1% y/y in Q1 2025

Thousand Jobs



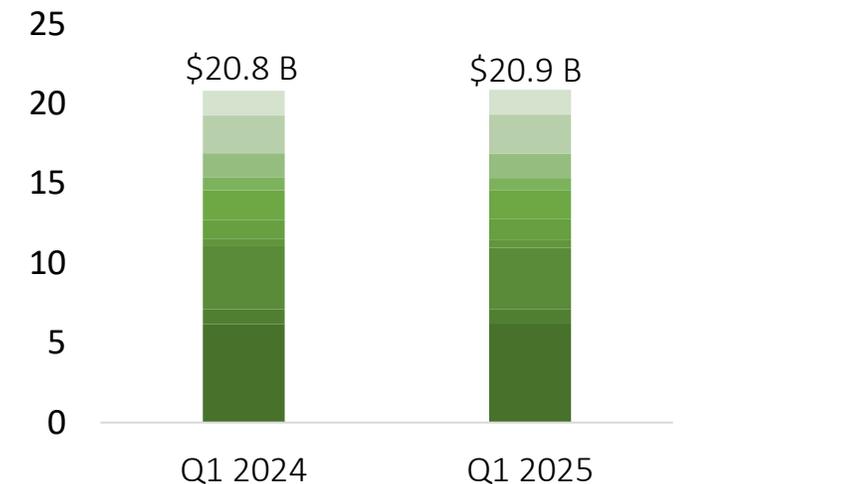
- Oil & gas extraction
- Support activities for o&g ops.
- Petroleum refineries
- Gas stations & fuel dealers
- All other*
- Pipeline construction
- Oil & gas drilling
- Natural gas distribution
- Petrochemical mfg.
- Pipeline transportation
- Oil & gas field mach. and eq. mfg.

* 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



R. Dean Foreman, Ph.D.
dforeman@txoga.org