



September 2, 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.

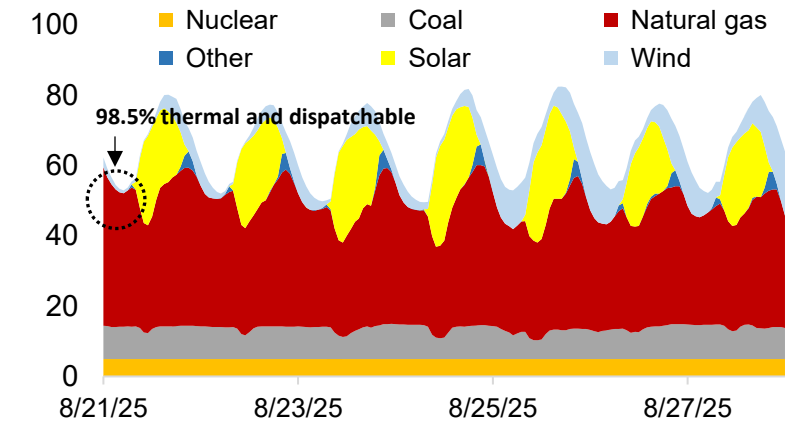
Key points – Week of September 2, 2025

- **Economic signals softened further.** Q2 GDP was revised slightly lower, with business investment down 0.4% y/y but consumer spending largely unchanged. The U.S. trade deficit narrowed to **\$1.0T** (SAAR) as imports fell more than exports, while the petroleum trade surplus doubled. Credit markets eased, with high-yield borrowing costs down to **11.5%** and the low-credit premium narrowing to **7.4%** as Fed Funds futures held at **4.1%**. The ADS Index was revised down again, consistent with little or no Q3 growth. Labor markets weakened: July payrolls rose just **73,000**, while downward revisions since April subtracted **334,000 jobs**; unemployment ticked up to **4.2%**.
- **Oil prices firmed as inventories tightened.** WTI crude rose **0.5% w/w to \$63.97/bbl**, supported by historically low inventories and continued U.S. dollar depreciation. Petroleum demand edged up to **21.6 mb/d**, while net exports slipped to **2.7 mb/d** but stayed above the 5-year range. Crude stocks (ex-SPR) fell **2.4 mb w/w** to the bottom of the 5-year range, with price momentum strengthening through late August before pausing on August 29.
- **Natural gas prices rebounded in line with mean reversion.** Henry Hub rose **9.7% w/w to \$2.97/MMBtu** on August 29. Storage increased to **3.22 tcf** but eased from the top 20% to the top 25% of the 5-year range. Net exports climbed **42% y/y** in July, while U.S. consumption slipped **2.6% y/y**.
- **Chart of the Week – ERCOT's Capacity vs. Reality.** ERCOT now leads the nation with **40 GW of wind** and **14 GW of batteries** while ranking #2 in both natural gas and solar. Yet on August 21, dispatchable resources (natural gas, coal, nuclear) supplied **96%+ of the grid's electricity for eight straight hours — peaking at 98.5%, including 72.1% from natural gas**. The chart underscores the gap between installed renewable capacity and the dispatchable power needed to reliably meet demand.

- In the Electric Reliability Council of Texas' (ERCOT) latest capacity report, the grid is supported by **66.8 GW** of natural gas, **32.6 GW** of solar, **40.0 GW** of wind, and **14 GW** of batteries — ranking #1 nationally in wind and batteries, and #2 in natural gas and solar.
- Yet despite ERCOT's leadership in renewables and storage, it was **dispatchable sources — natural gas, nuclear, and coal — that carried the grid**. Last week, they supplied as much as **98.5%** of ERCOT's electricity, including **72.1%** from natural gas. On August 21, dispatchable resources provided **96%** or more of the grid's power for eight consecutive hours. The lesson is clear: no matter how much intermittent capacity is added, **thermal and dispatchable generation must be sufficient to meet nearly all demand**.
- Meanwhile, **EIA's latest data on electricity prices tells a strong story**. Even with natural gas prices higher year-over-year — and with natural gas continuing to backstop the grid — Texas electricity prices in June declined from both May 2025 and June 2024 levels. A year ago, Texans were paying a significant premium compared with Louisiana and New Mexico. But over the past five months, **prices in all three states have converged**.

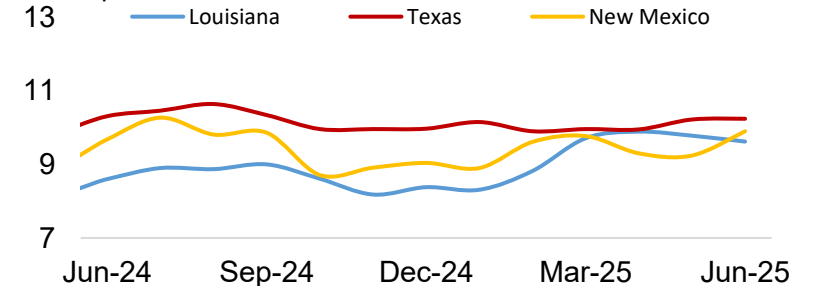
ERCOT hourly electricity generation by source

Thousand megawatt-hours (kMWh)



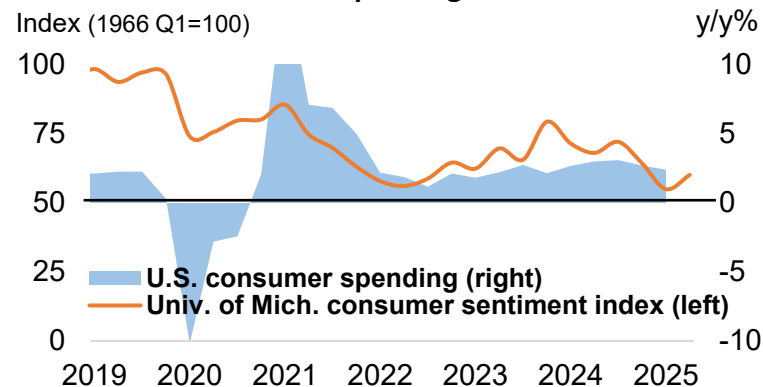
Electricity prices – average across all end-use sectors

Cents per kilowatt-hour



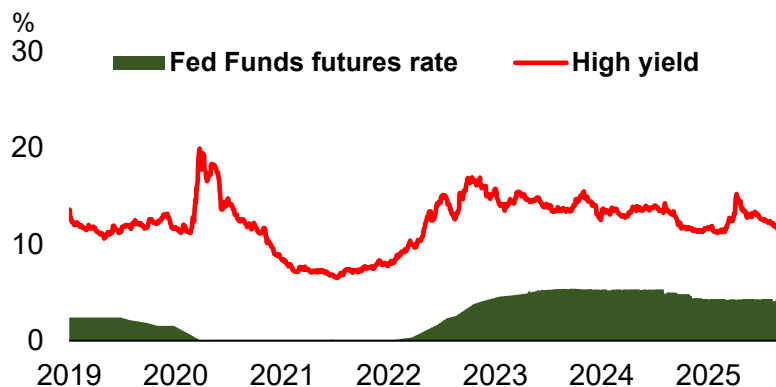
Texas electricity prices were steady in June 2025. The state average edged up 0.2% m/m but was down 0.7% y/y to 10.24 cents per kWh, compared with 9.62 in Louisiana and 9.90 in New Mexico.

Consumer sentiment vs. spending



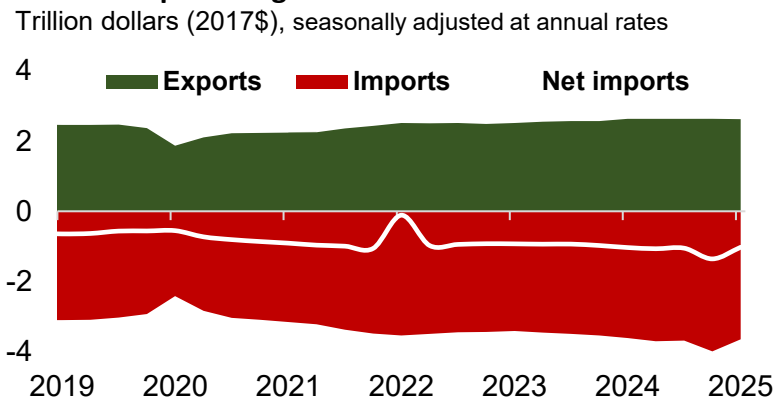
Consumer sentiment—a leading indicator of household spending—fell 5% month-over-month (m/m) in the University of Michigan's preliminary August reading, signaling a potential moderation in Q3 2025 spending growth. According to the BEA's estimate of Q2 2025 GDP, consumer spending rose 2.4% year-over-year (y/y), down 0.3 percentage points from Q1.

Fed Funds rate and CCC and lower corporate bond yields



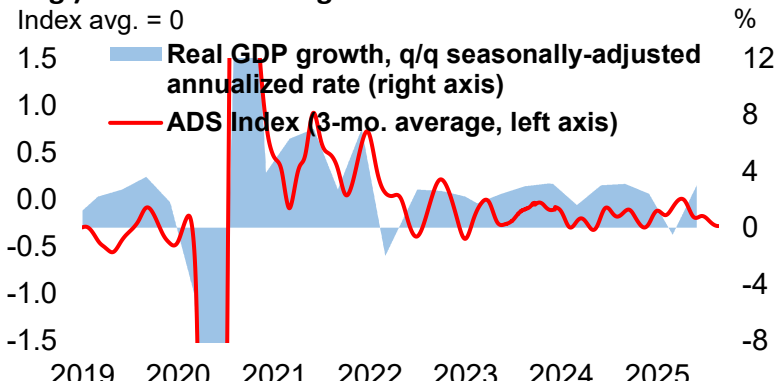
The bond premium for low credit quality decreased. High-yield (HY) borrowing costs fell 0.4% w/w to 11.5% for the week ended Aug. 29, while the 30-day Fed Funds futures rate fell to 4.1%. The low-credit-quality premium edged down to 7.4%.

Real net exports of goods and services



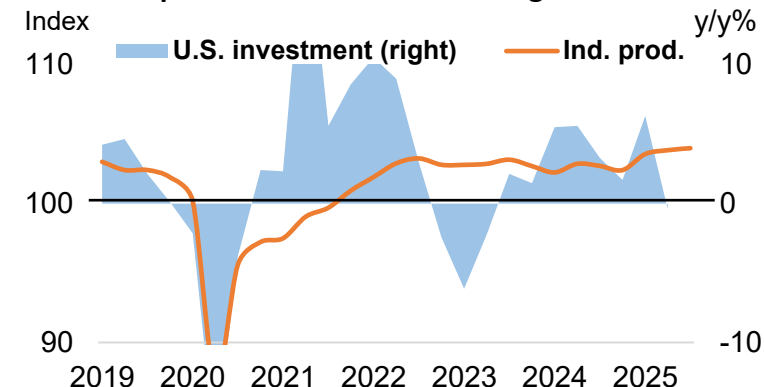
The BEA's initial Q2 2025 GDP report showed the U.S. trade deficit narrowed to \$1.0 trillion, down from a record \$1.4 trillion in Q1, as imports declined more than exports. On a nominal basis, the petroleum trade surplus rose by an upward-revised \$9.9 billion to \$72.2 billion—more than double its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

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



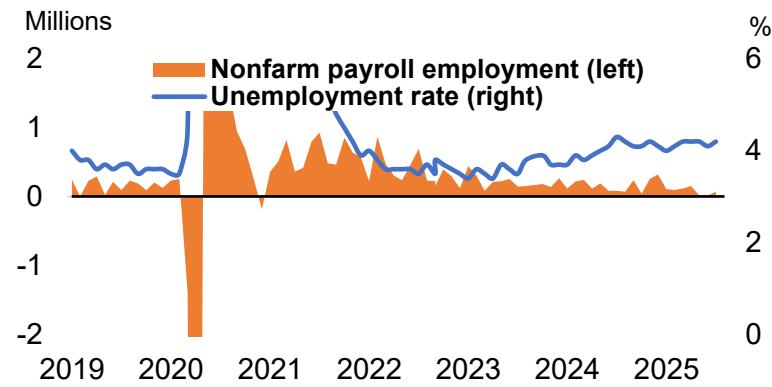
ADS Index revised downward retrospectively. While real GDP growth posted a mixed rebound in Q2 2025, the ADS Business Conditions Index from the Philadelphia Fed—an early signal of economic momentum—was again revised downward on August 16 and currently points to little or no growth in Q3 2025.

Industrial production and investment growth



Macro uncertainties stalled investment in Q2 2025. According to the GDP report, economy-wide investment declined 0.4% y/y in BEA's August revision, diverging from industrial production, which typically leads investment trends. Industrial production fell 0.1% m/m in July, while capacity utilization fell 0.2 percentage points to 77.5%, per the Federal Reserve Board.

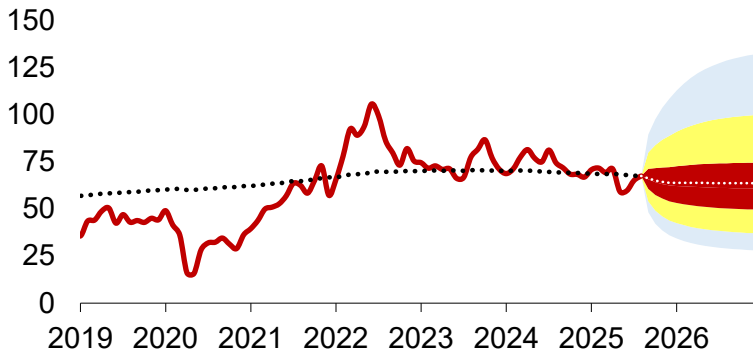
Nonfarm payroll employment & unemployment rate



Labor market conditions weakened – and were downgraded retroactively. Employment is a lagging indicator of GDP growth. Nonfarm payrolls rose by 73,000 in July, but cumulative downward revisions since April have subtracted 334,000 jobs from earlier estimates. The U.S. unemployment rate rose by 0.1 percentage points to 4.2% according to the BLS.

WTI crude oil price mean reversion analysis

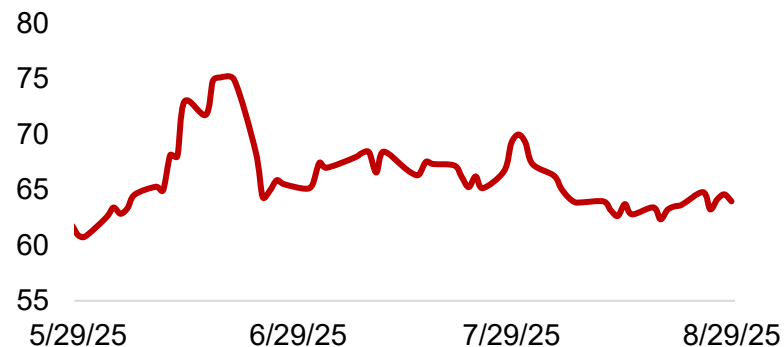
Dollars per barrel (2025\$)



Near-term futures prices have aligned with their historical mean reversion threshold. The futures strip remains in backwardation (i.e., futures prices are below spot prices).

WTI crude prompt month futures prices

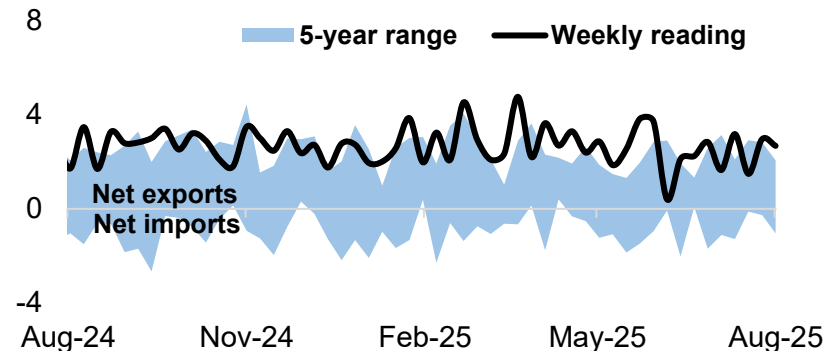
Dollars per barrel



WTI crude oil prices rose 0.5% w/w to \$63.97 per barrel as of August 29, supported by historically low crude oil inventories and continued U.S. dollar depreciation.

U.S. petroleum net exports (imports)

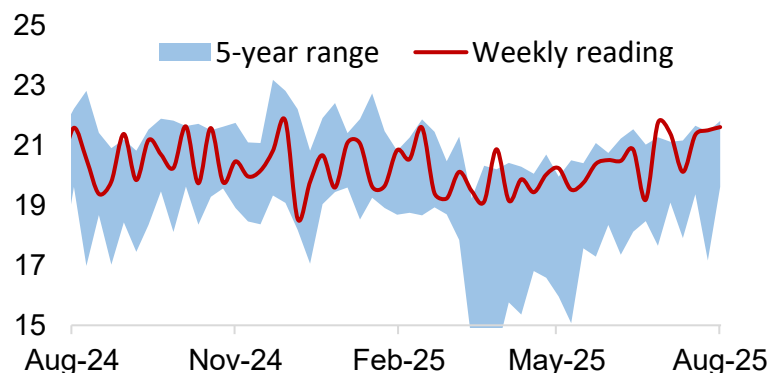
Million barrels per day, mb/d



Petroleum net exports fell to 2.7 mb/d for the week ended August 22, a decrease of 0.3 mb/d from the prior week but sustained above the 5-year range.

U.S. petroleum demand

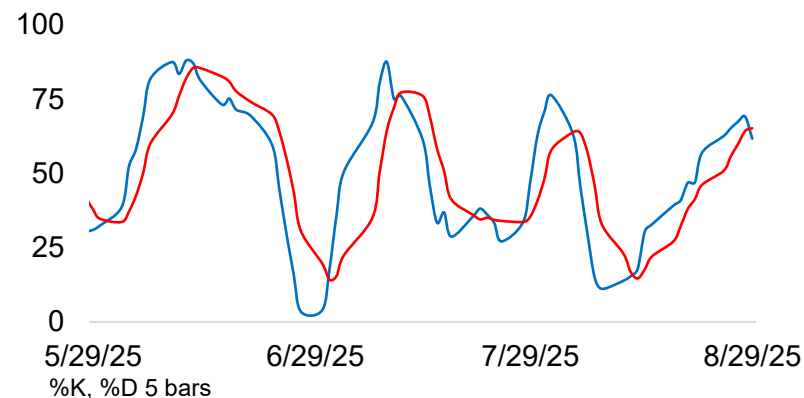
Million barrels per day (mb/d)



Petroleum demand edged up. U.S. petroleum demand as of August 22, as measured by deliveries, increased by 0.1 mb/d from the prior week to 21.6 mb/d.

WTI crude prompt month futures slow stochastic

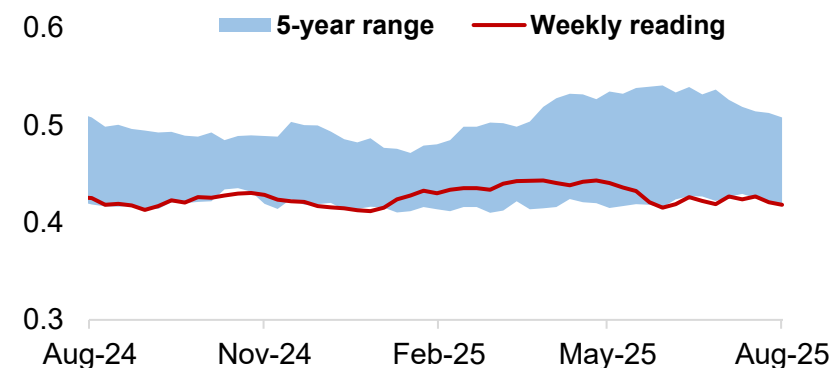
Index level



Price momentum strengthened through late August but paused on August 29

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

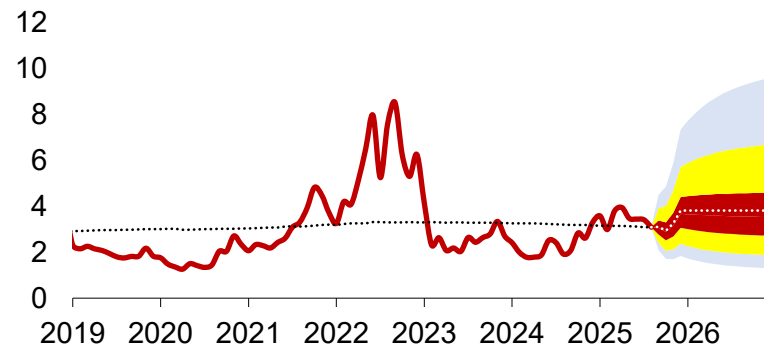
Billion barrels



Inventories decreased. U.S. ending stocks of crude oil excluding the Strategic Petroleum Reserve (SPR) decreased by 2.4 million barrels (mb) for the week ended August 22 – and remained at the bottom of the 5-year range.

Natural gas price mean reversion analysis

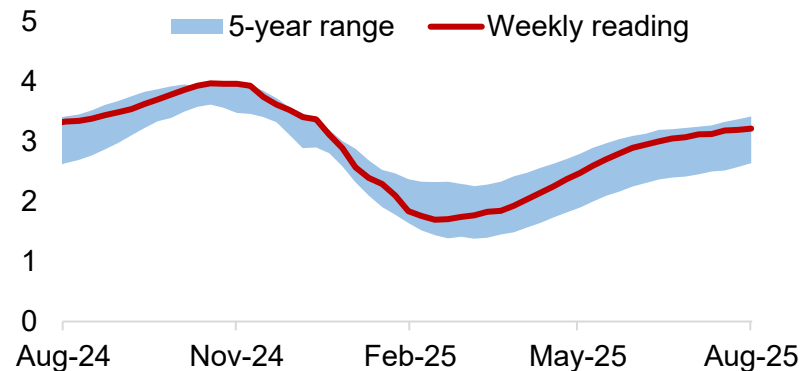
Dollars per mmBtu (2025\$)



Near-term futures prices rose to align 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

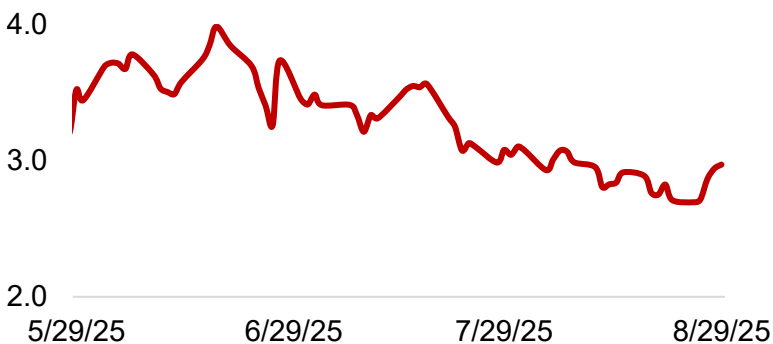
Trillion cubic feet (tcf)



Working natural gas storage increased. Underground storage rose by 0.6% w/w to 3.22 trillion cubic feet (tcf) as of August 22.

Natural gas prompt month futures prices

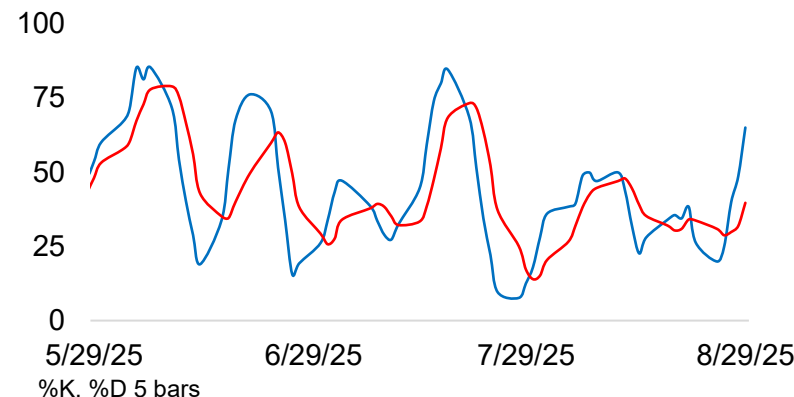
Dollars per million Btu



Henry Hub natural gas prices rose 9.7% w/w to \$2.97 per million Btu for the week ended August 29, as inventories increased but slipped from the top 20% to the top 25% of the 5-year range, with markets positioning ahead of the winter heating season.

Natural gas futures slow stochastic

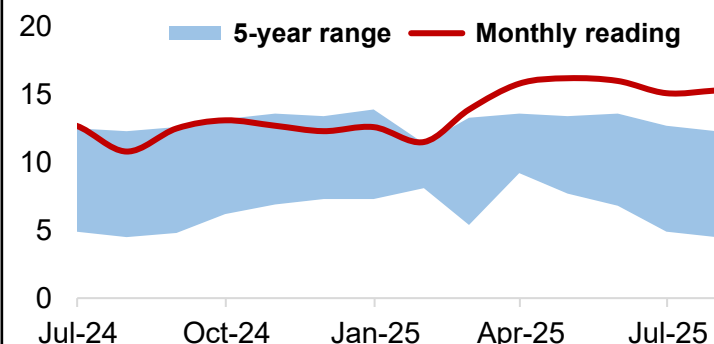
Index level



Natural gas price momentum turned positive during the week ended August 29.

U.S. natural gas net exports

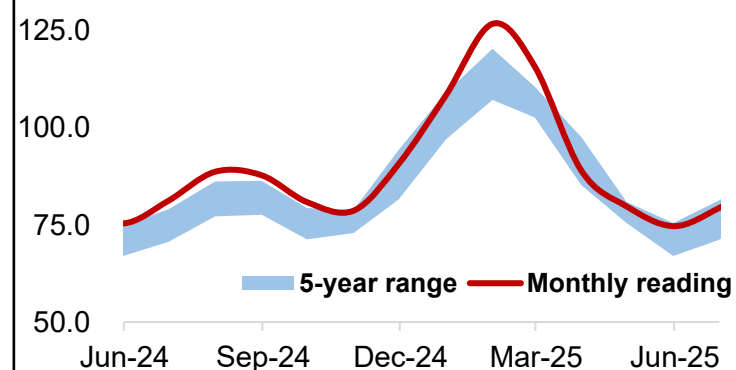
Billion cubic feet per day, bcf/d



According to the EIA's August-revised estimates, U.S. natural gas net exports increased 42% y/y to 15.3 bcf/d in July.

U.S. natural gas consumption

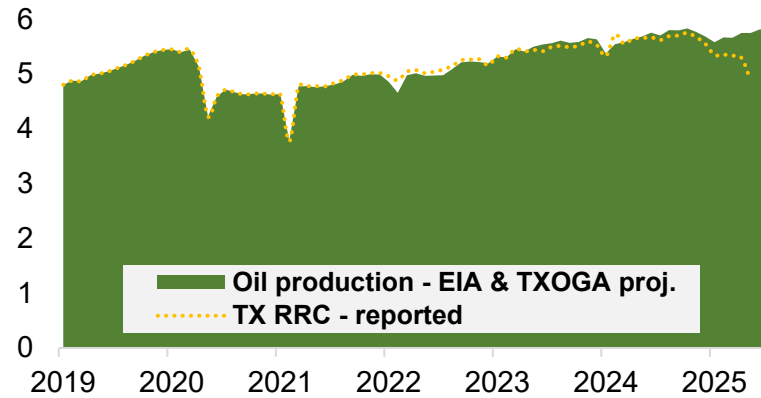
Billion cubic feet per day, bcf/d



Natural gas consumption rose seasonally but declined 2.6% y/y to 86.4 bcf/d in July, according to August 2025-revised EIA estimates.

Texas crude oil production, Jan. 2019 – July 2025

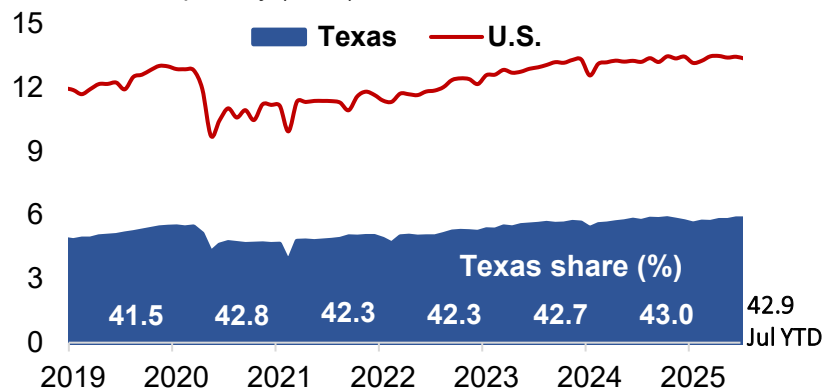
Million barrels per day (mb/d)



Record-high estimated oil production. Texas' oil production averaged 5.75 mb/d in May, according to the EIA. TXOGA estimates that production eclipsed 5.8 mb/d in July and likely reached a new record high.

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

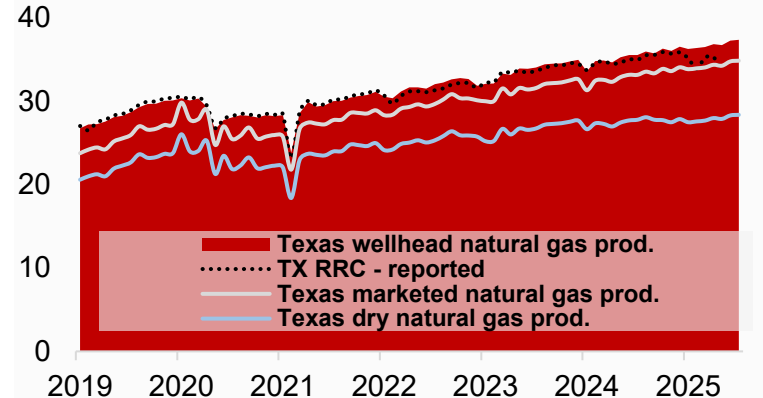
Million barrels per day (mb/d)



In the first seven months of 2025, Texas accounted for 42.9% of total U.S. crude oil production.

Texas natural gas production, Jan. 2019 – July 2025

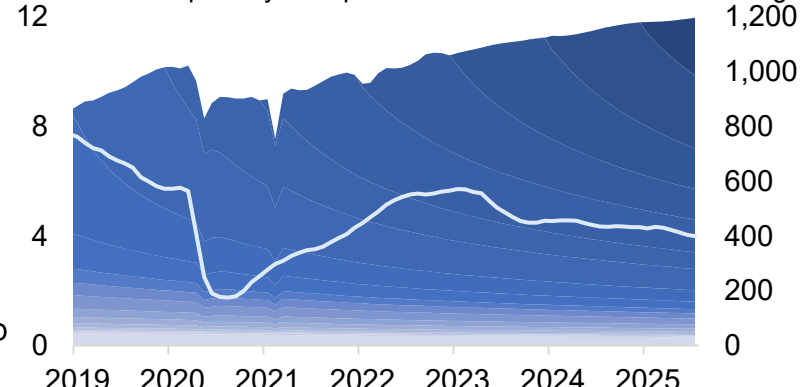
Billion cubic feet per day (bcf/d)



Natural gas production increased. Texas produced 36.7 bcf/d of natural gas gross withdrawals and 34.3 bcf/d of marketed production in May – both 0.3% below record highs set in April, per EIA. TXOGA estimates that Texas' marketed production rose to 34.9 bcf/d in July.

Texas shale basin wellhead oil & natural gas production

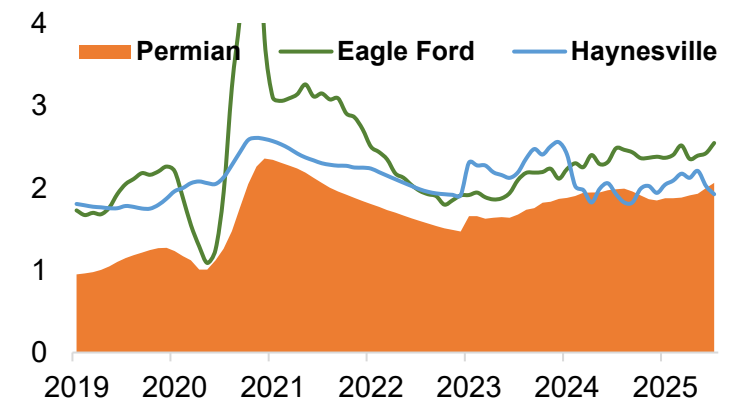
Million barrels per day oil-equivalent



EIA estimates show oil and natural gas production growth across Texas shale basins in July 2025, including the Permian (+3.7% y/y), Eagle Ford (+1.4% y/y), and Haynesville (+11.1% y/y).

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

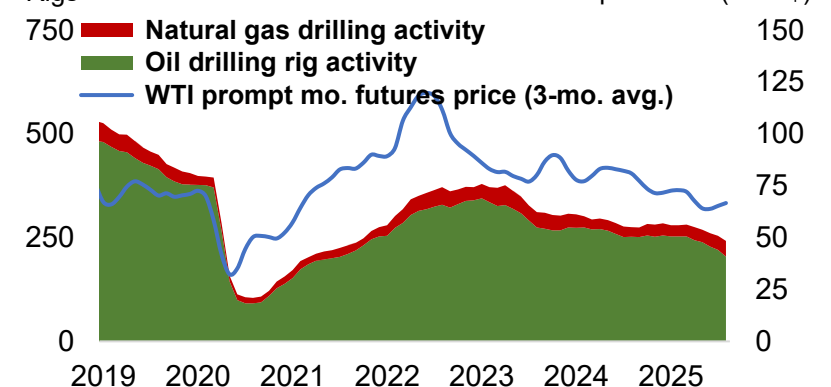
Thousand barrels per day oil-equivalent, kb/doe



Rig productivity gains were mixed in July. EIA estimates of rig productivity for July 2025 rose by 3.9% y/y in the Permian Basin and 2.5% y/y in the Eagle Ford, but remained flat in the Haynesville.

Texas drilling activity and WTI crude oil futures prices

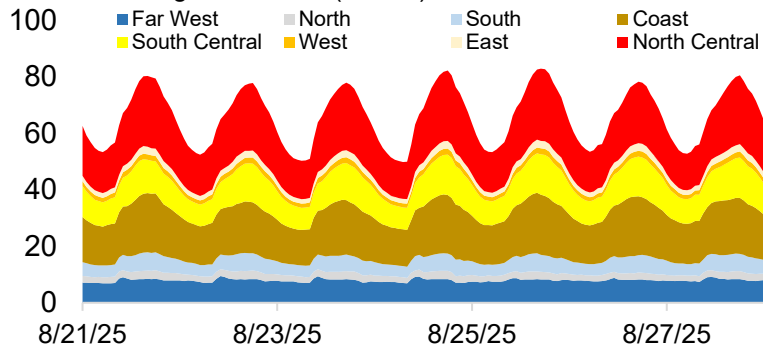
Rigs Dollars per barrel (2025\$)



As of August 29, Texas' total rigs increased, according to Baker Hughes, with 205 oil-directed rigs (up 2 rigs w/w) and 36 natural gas-directed rigs (down 1 rigs w/w).

ERCOT electricity load by region

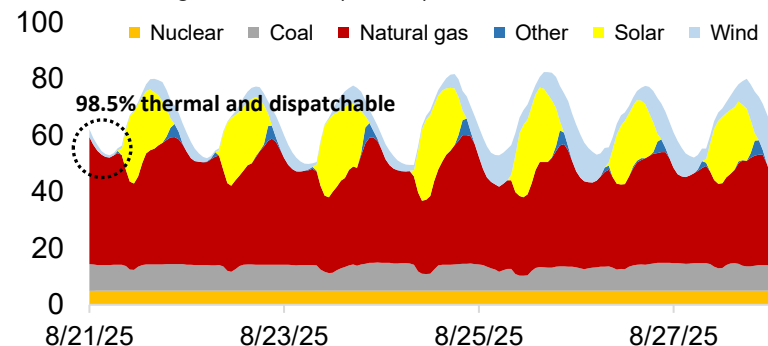
Thousand megawatt-hours (kMWh)



For Aug. 21-27, ERCOT's average hourly electricity load was 66.4 kMWh, down 4.6% w/w, while the maximum hourly load of 83.0 kMWh fell by 1.1% w/w. Variability was the highest in the North Central and South Central regions.

ERCOT hourly electricity generation by source

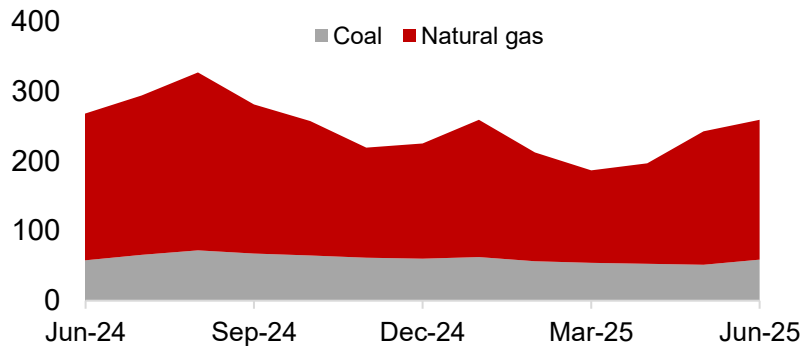
Thousand megawatt-hours (kMWh)



Thermal and other dispatchable resources supplied as much as 98.5% of ERCOT's electricity. From August 21-27, hourly generation ranged between 50–83 kMWh, with a standard deviation of 9.9 kMWh. On the morning of August 21, dispatchable sources met 98.5% of load—including 72.1% from natural gas—and sustained 96% or more of the grid's power for eight consecutive hours.

Texas electricity plant receipts of natural gas and coal

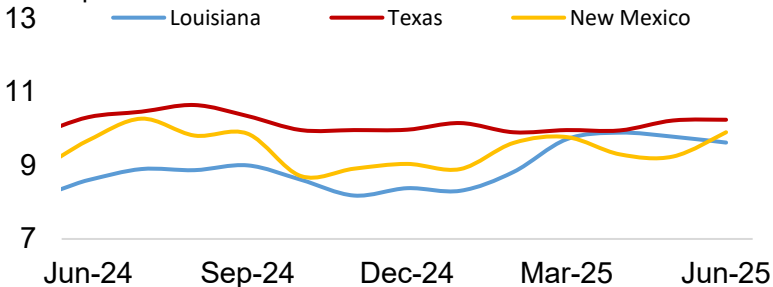
Trillion Btu



Natural gas receipts rose seasonally but remained below last year's level in June. Texas electricity plant receipts of natural gas increased 4.7% m/m but were 5.0% lower than in June 2024. Coal receipts climbed 14.1% m/m and 1.7% y/y.

Electricity prices – average across all end-use sectors

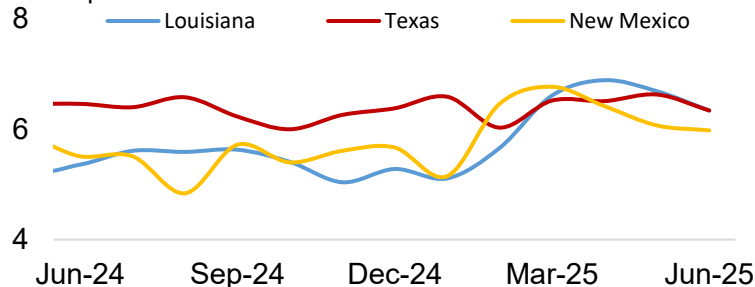
Cents per kilowatt-hour



Texas electricity prices were steady in June 2025. The state average edged up 0.2% m/m but was down 0.7% y/y to 10.24 cents per kWh, compared with 9.62 in Louisiana and 9.90 in New Mexico.

Industrial electricity prices

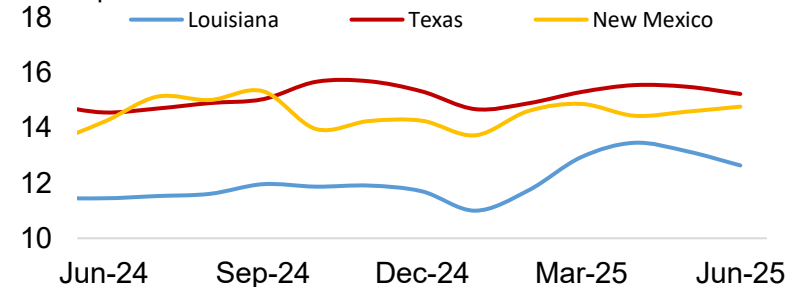
Cents per kilowatt-hour



Texas' industrial electricity prices fell by 4.4% m/m and 1.9% y/y to 5.98 cents per kWh in June, while those in neighboring Louisiana and New Mexico remained on par or lower than prices in Texas. Notably, Louisiana's average industrial electricity price escalated by 18.3% y/y in June and by 8.0% y/y over the first half of 2025.

Residential electricity prices

Cents per kilowatt-hour



Texas' residential electricity prices fell 1.7% m/m in June but were still up 4.6% y/y at 15.23 cents per kWh — above rates in Louisiana (12.64) and New Mexico (14.77).

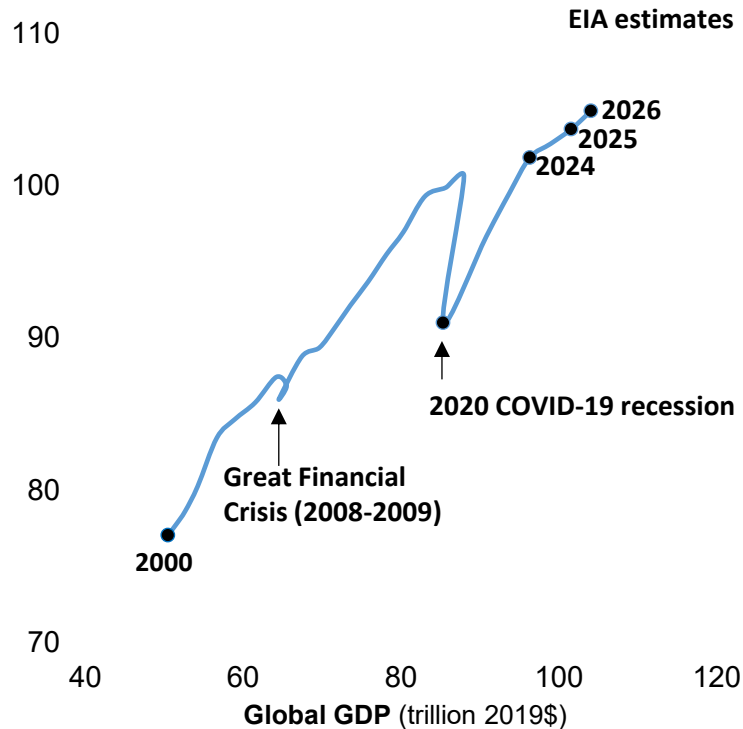
Global oil market outlook: EIA sees record oil demand and higher 2025 supply, lower 2026 prices



- In its August update, EIA raised its global oil demand forecast, now expecting a third consecutive record: 102.7 mb/d in 2024, 103.7 mb/d in 2025 (+0.2 mb/d vs. prior forecast), and 104.9 mb/d in 2026 (+0.3 mb/d)
- The EIA raised its 2025 global supply growth forecast by 0.5 mb/d to 2.3 mb/d, led by gains from the U.S. and OPEC producers, but trimmed its 2026 outlook by 0.1 mb/d to 1.0 mb/d.
- Brent crude oil prices are now projected to average \$67 per barrel in 2025 and \$51 in 2026—compared with about \$65 currently and a prior 2026 projection of \$58.

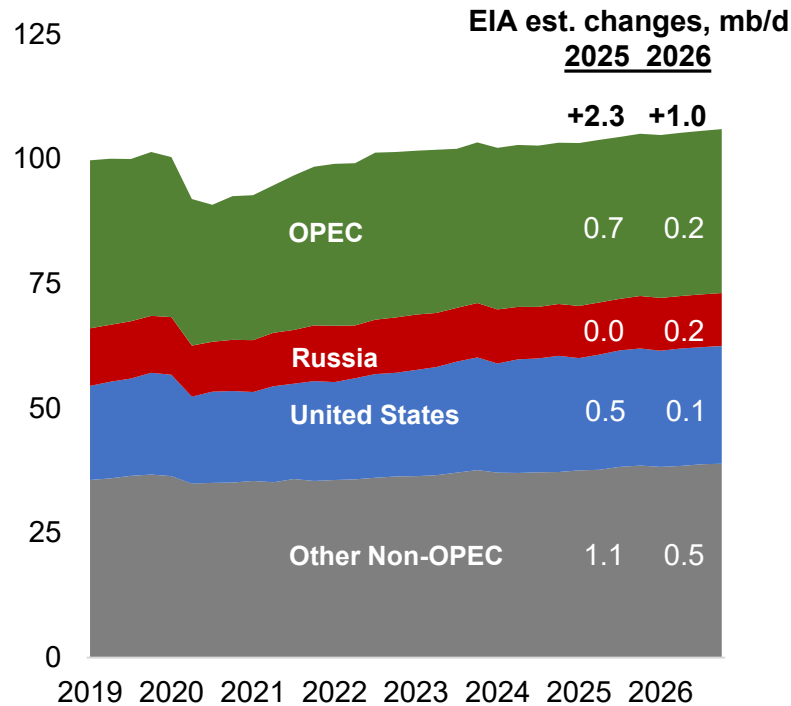
Global oil demand vs. GDP

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



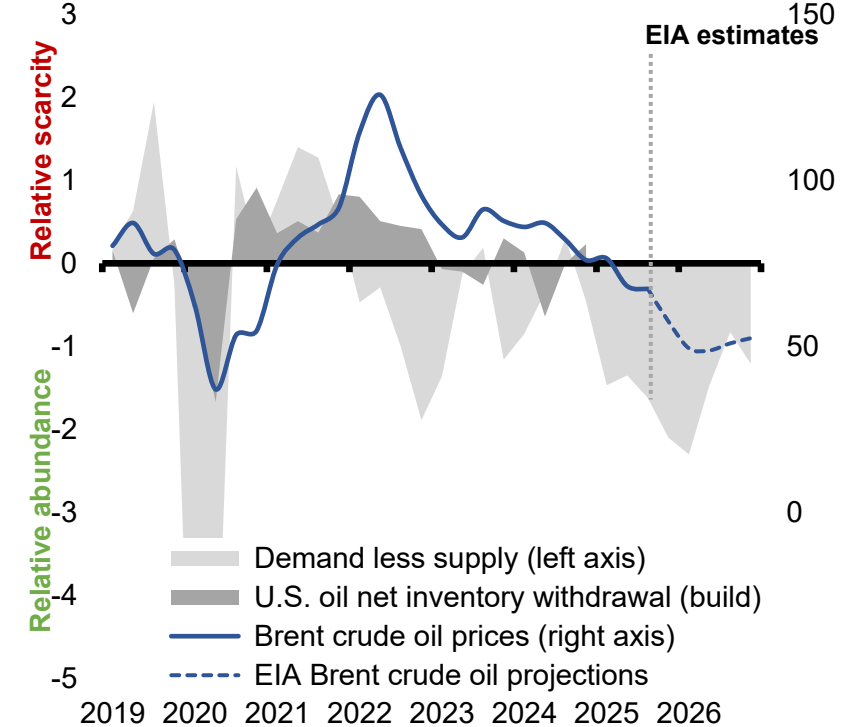
Oil production by country/region

Million barrels per day, mb/d



Global demand/supply & Brent prices

Million barrels per day (mb/d)





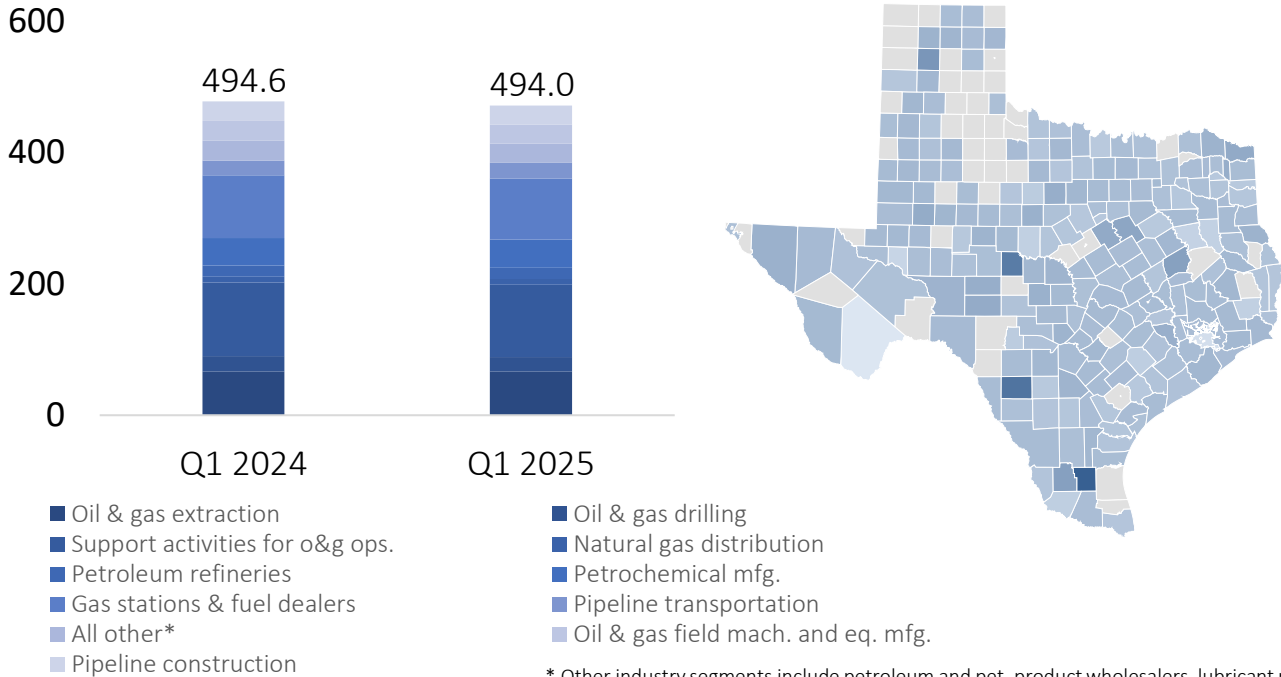
Texas Oil & Gas Jobs Dipped, Wages Reached Record High in Q1 2025



- Texas oil and natural gas industry employment slipped by 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

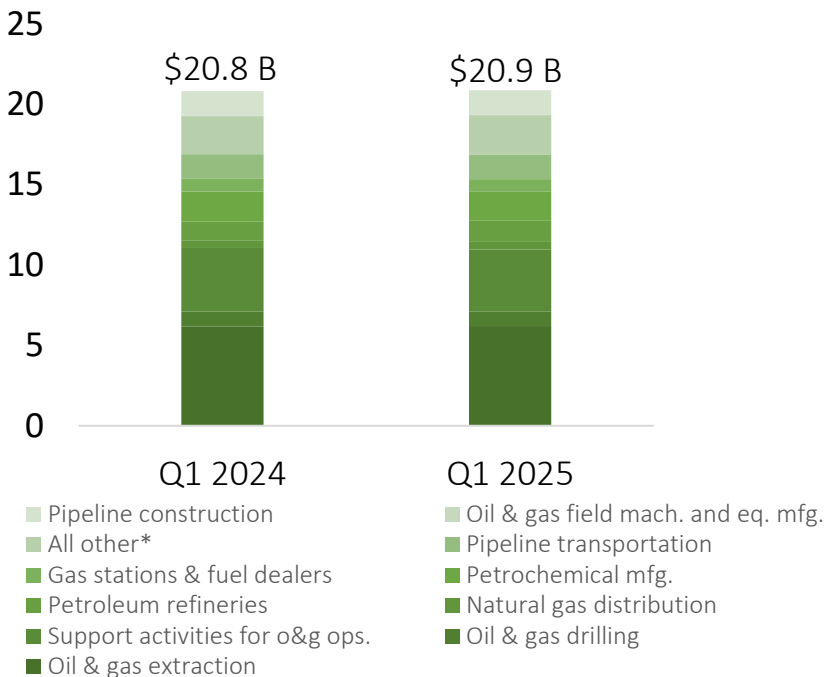
Thousand Jobs



* 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





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