



**November 10, 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 November 10, 2025**

- **Economic signals remained subdued amid ongoing data delays.** With most federal data still unavailable due to the government shutdown, private indicators continued to suggest weakness entering Q4. The University of Michigan's consumer sentiment index fell 2.7% m/m and 27.6% ytd through late October, signaling weaker household confidence and spending. High-yield borrowing costs rose 0.7 percentage points w/w to 12.6%, while Fed Funds futures held near 3.9%, widening the low-credit-quality premium to 8.7%, the highest since June. The Philadelphia Fed's ADS Index continued to indicate below-trend growth entering Q4.
- **Oil prices softened as market attention shifted to supply risks.** WTI crude prices fell 5.7% w/w to \$57.76/bbl as of November 7, as traders balanced tighter Russian sanctions against slower Chinese growth and rising OPEC+ output. Near-term futures aligned with their historical mean-reversion target, implying stable market expectations through 2026. U.S. petroleum net exports fell 0.6 mb/d to 3.8 mb/d, while inventories rose 5.2 million barrels but remained 11% below the five-year average.
- **Natural gas prices strengthened amid seasonal demand and robust exports.** Futures rose 4.8% w/w to \$4.32/mmBtu as of November 7, supported by seasonal pricing strength despite high storage levels. Working gas in storage increased 0.9% to 3.92 tcf, near the top of the five-year range. U.S. net exports rose 30% y/y to a record 16.6 bcf/d in October, driven by strong LNG demand, while consumption edged 0.7% higher to 79.2 bcf/d.
- **Chart of the Week: Productivity gains sustain record Texas output despite fewer wells.** Texas oil and natural gas production reached new highs in September—5.9 mb/d of crude oil and 36.5 bcf/d of natural gas—even with 11.5% fewer active wells since 2015. TXOGA analysis shows that high-output wells more than doubled for oil and increased more than five-fold for gas, lifting total energy-equivalent output nearly 60% since 2015 and demonstrating how efficiency gains—not drilling growth—continue to drive Texas' record energy performance.

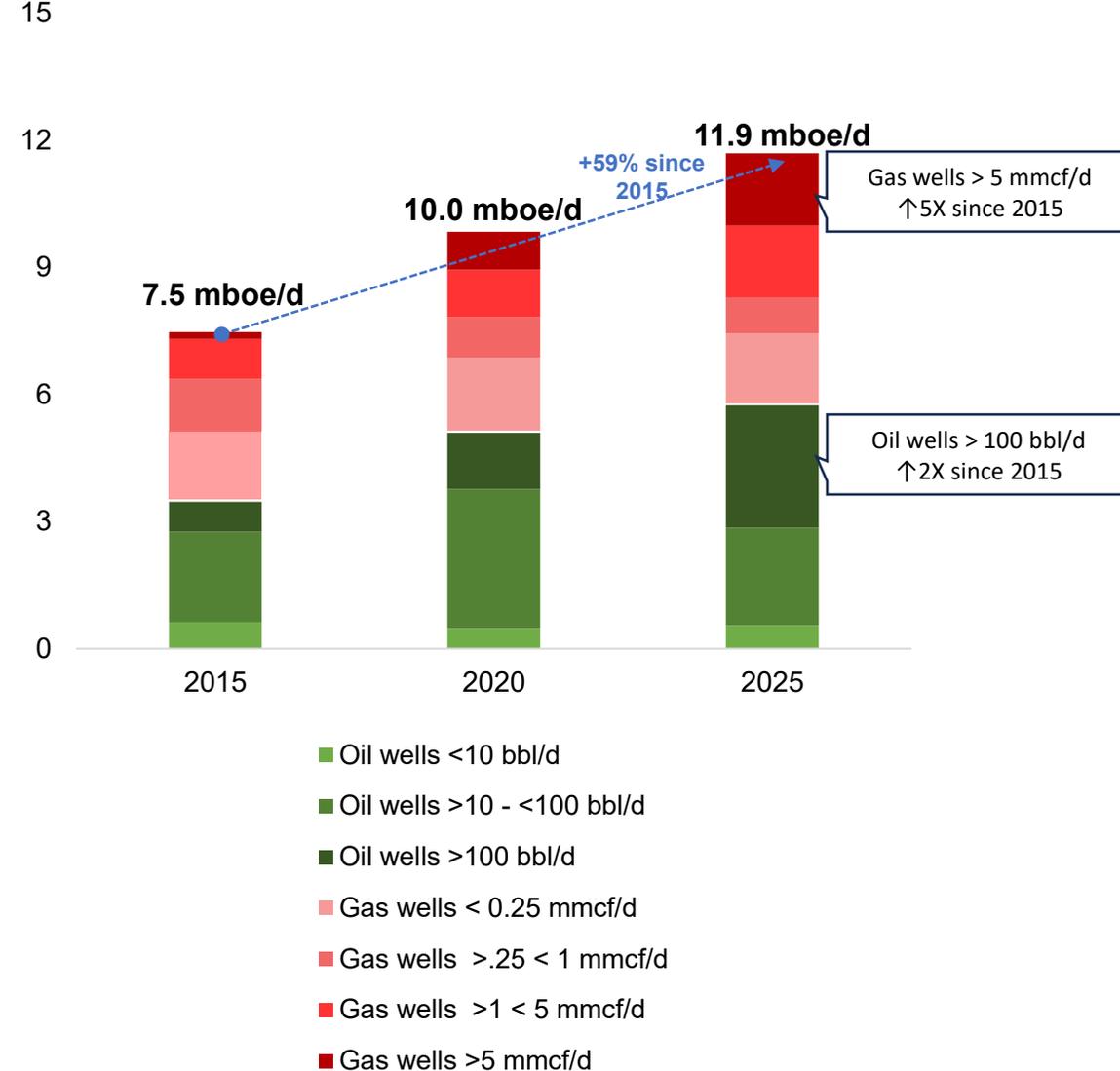


# Chart of the Week: Productivity gains – not higher drilling activity – have sustained record Texas energy output despite fewer active wells

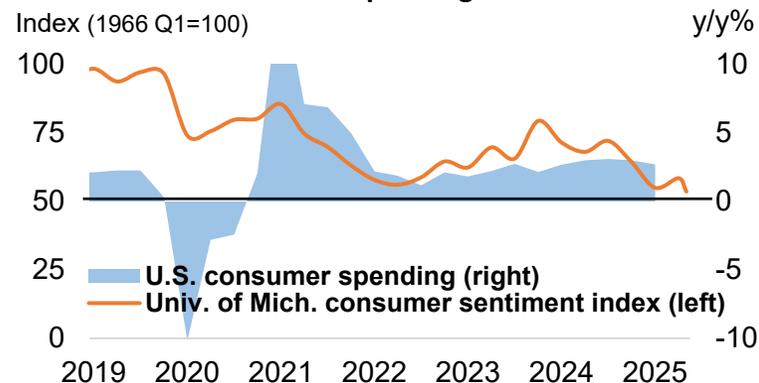


- ▶ Texas oil and natural gas production continue to set new records—reaching **5.9 million barrels per day of crude oil** and **36.5 billion cubic feet per day of natural gas** in September, according to TXOGA estimates.
- ▶ Driven by newer, more productive wells, total oil and natural gas output has increased by nearly 60% since 2015 on an energy-equivalent basis.
- ▶ Yet during that time, the number of active oil and gas wells has fallen by 11.5%.
- ▶ Texas Railroad Commission data show that:
  - **Oil wells producing more than 100 BOPD** more than doubled to ≈17 000 in 2025 (from ≈8 000 in 2015).
  - **Gas wells > 5 mmcf/d** increased more than five-fold to ≈500 (from fewer than 90 in 2015).
  - As a result, gas expanded its share of Texas energy production.
- ▶ EIA rig-productivity data by basin, combined with RRC well counts, show that Texas production from the most prolific wells has more than quintupled since 2015.
- ▶ Despite discussions about higher decline rates, **steady improvements in well productivity have enabled Texas to set repeated production records—even with fewer wells being drilled.**

Texas oil + natural gas production by well productivity group (million barrels per day, oil-equivalent energy)\*

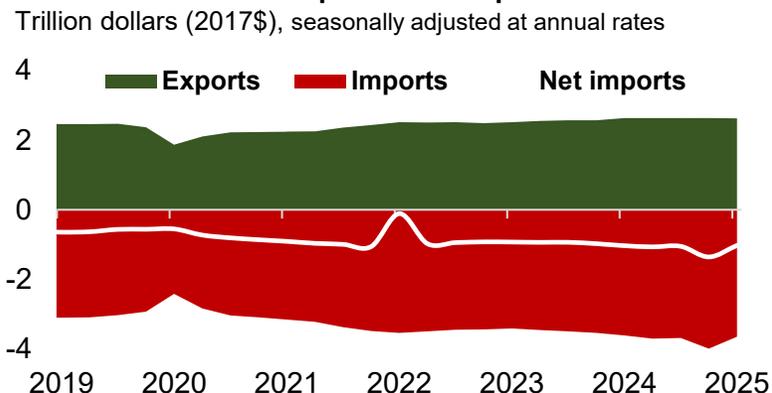


## Consumer sentiment and spending trends



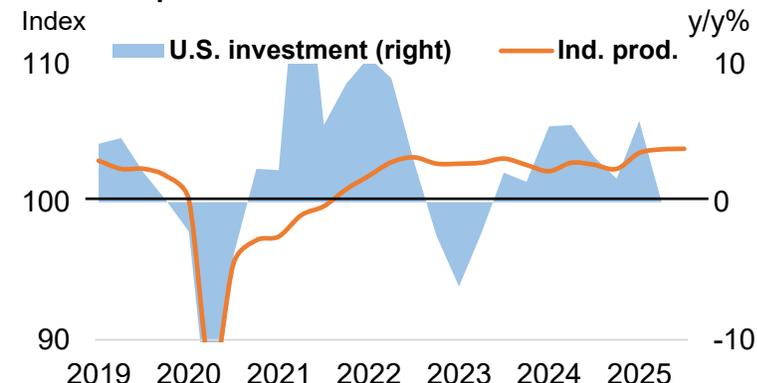
In the University of Michigan's survey, **consumer sentiment—a leading indicator of household spending—fell 2.7% m/m and 27.6% ytd** through October, pointing to weaker household confidence and slower spending. BEA's revised Q2 GDP data showed consumer spending up 2.7% year-over-year, 0.4 percentage points slower than in Q1.

## U.S. trade balance and petroleum exports



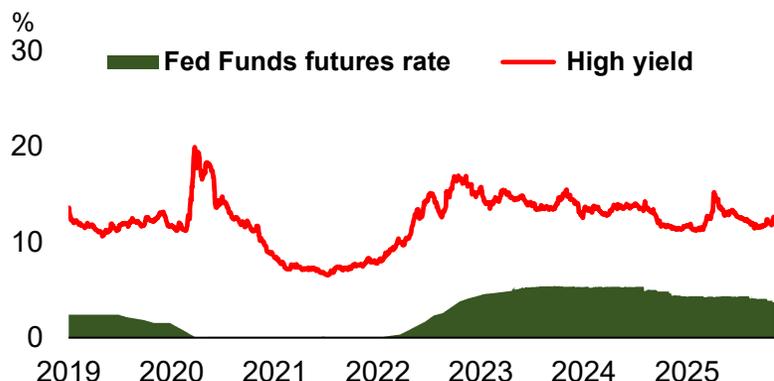
The BEA's initial Q2 2025 GDP report showed the **U.S. trade deficit narrowed to an annualized \$1.0 trillion (SAAR)**, down from \$1.4 trillion in Q1, as exports exceeded imports. The **petroleum trade surplus rose \$9.9 billion to \$72.2 billion**, more than double its level a year ago.

## Industrial production and investment



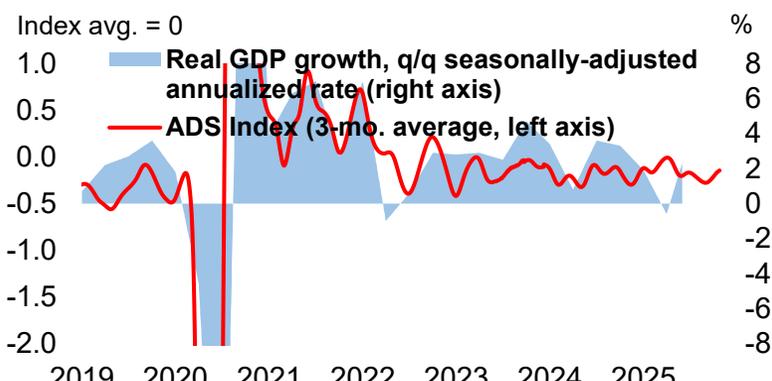
**Macro uncertainties stalled investment in Q2 2025.** Revised BEA data show **economy-wide investment flat year-over-year**, diverging from industrial production, which rose **0.1% m/m in August**. Capacity utilization held at **77.4%**, per the Federal Reserve.

## Interest rates and high-yield borrowing costs



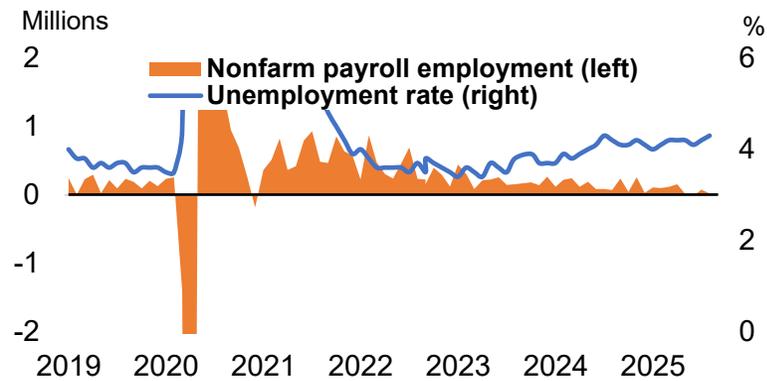
**Credit costs for lower-quality issuers increased.** As of November 7, high-yield borrowing costs increased 0.7% w/w to 12.6%, while Fed Funds futures held steady at 3.9%, widening the low-credit-quality premium to 8.7%, the highest since June.

## 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..

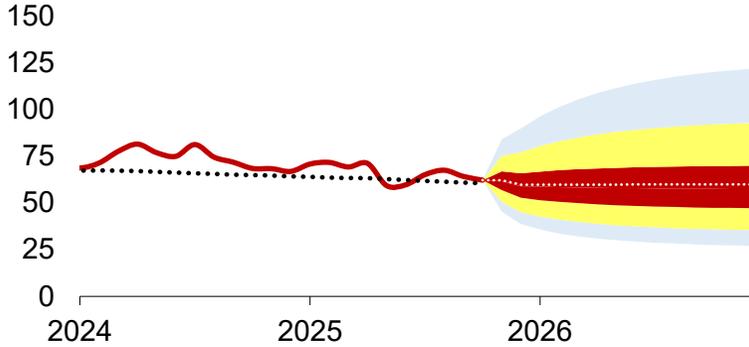
## Employment and unemployment trends



**Labor market conditions weakened further.** Nonfarm payrolls increased by **22,000 in August**, while the **unemployment rate rose 0.1 points to 4.3%**, according to the Bureau of Labor Statistics.

## WTI futures mean reversion analysis

Dollars per barrel (2025\$)



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

## WTI crude prompt month futures prices

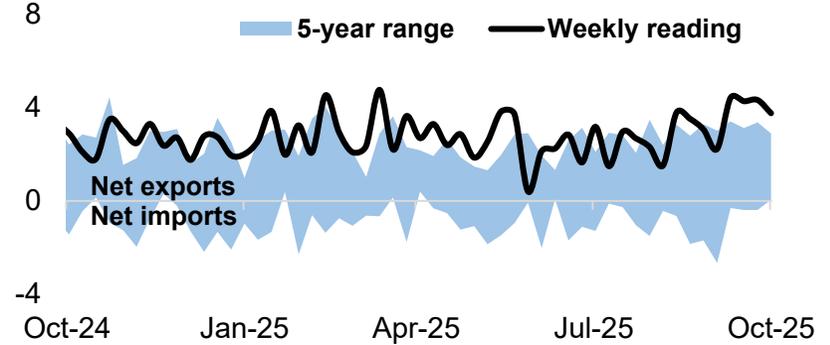
Dollars per barrel



**WTI crude prices fell 5.3% w/w** to \$57.76 per barrel as of November 7, as markets weighed the potential impact of tighter Russian sanctions against persistent concerns over slower growth in China and rising OPEC+ supply.

## U.S. petroleum net exports (imports)

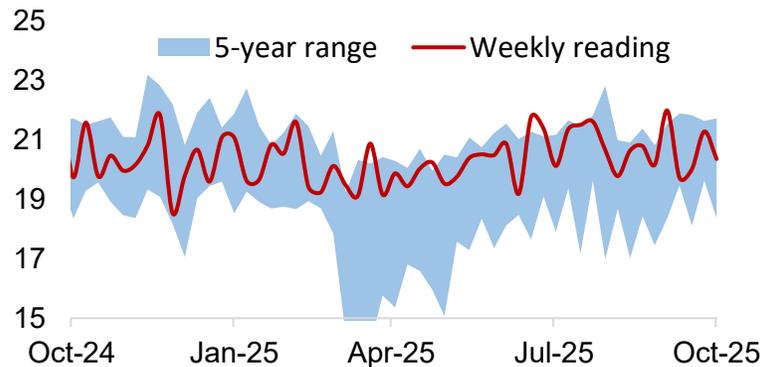
Million barrels per day, mb/d



**U.S. petroleum net exports fell to 3.8 mb/d** for the week ended October 31, down 0.6 mb/d (13.1%) from the prior week.

## U.S. petroleum demand

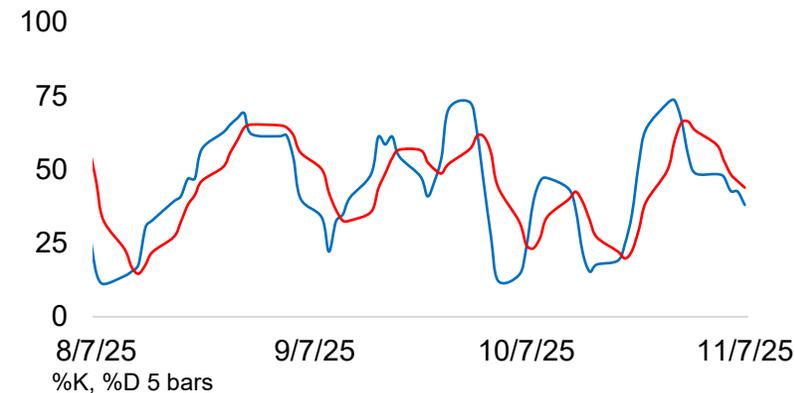
Million barrels per day (mb/d)



**U.S. petroleum demand increased.** As of October 31, deliveries averaged 20.4 mb/d, down 0.9 mb/d from the prior week.

## WTI futures momentum indicator

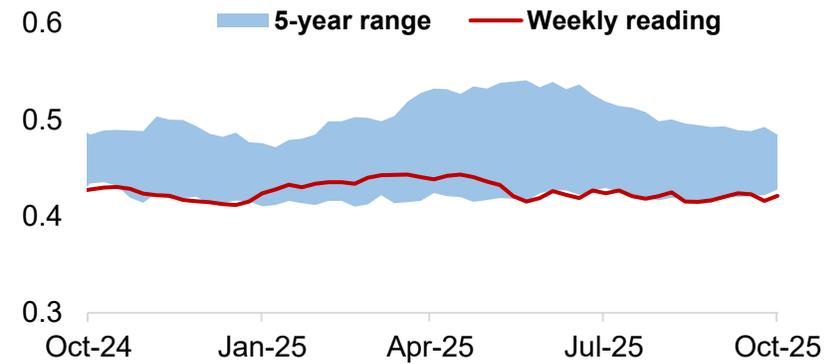
Index level



**Price momentum fell** during the week ended November 7.

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

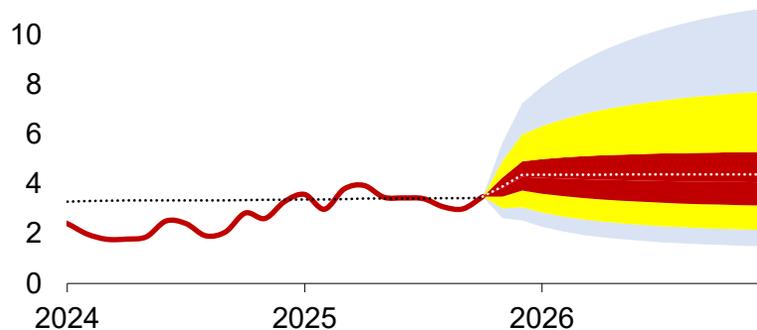
Billion barrels



**U.S. crude oil inventories increased** by 5.2 million barrels for the week ended October 31. Stocks remained 11% below the five-year range.

## Natural gas futures mean reversion analysis

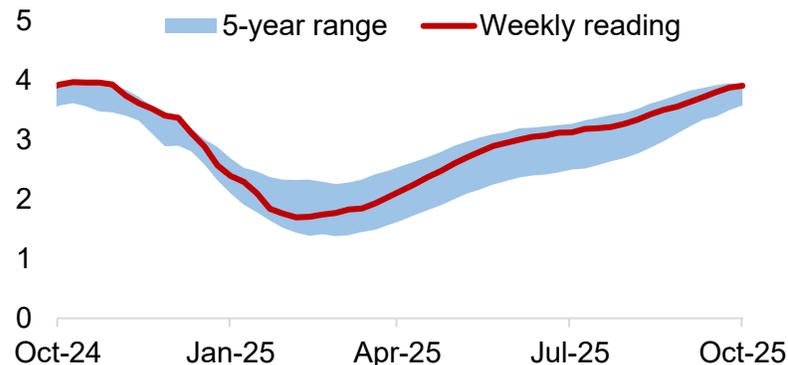
Dollars per mmBtu (2025\$)



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

## Working natural gas storage

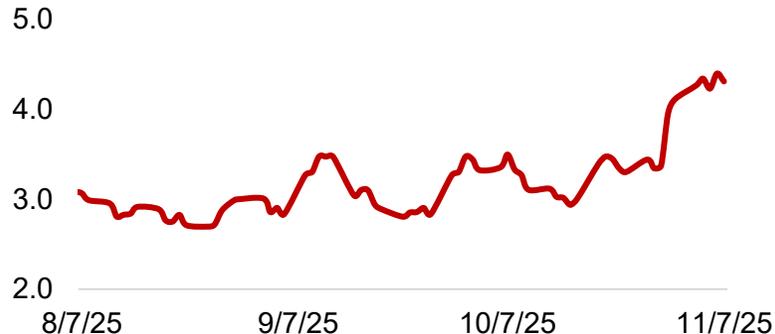
Trillion cubic feet (tcf)



Working natural gas storage increased 0.9% w/w to 3.92 tcf as of October 31, rising into the top 5% of the five-year range.

## Natural gas prompt month futures prices

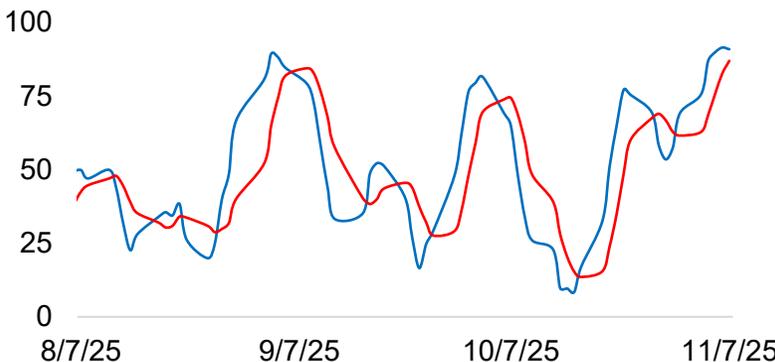
Dollars per million Btu



Natural gas prices rose 4.8% w/w to \$4.32 per mmBtu as of November 7, reflecting seasonal futures pricing strength despite continued robust storage builds.

## Natural gas futures momentum indicator

Index level

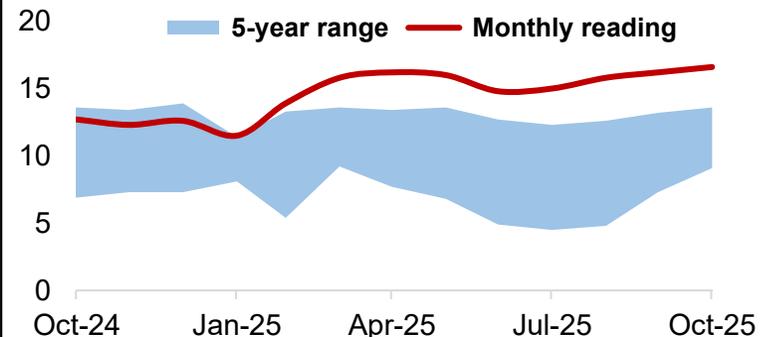


%K, %D 5 bars

Price momentum continued to rise during the week ended November 7.

## U.S. natural gas net exports

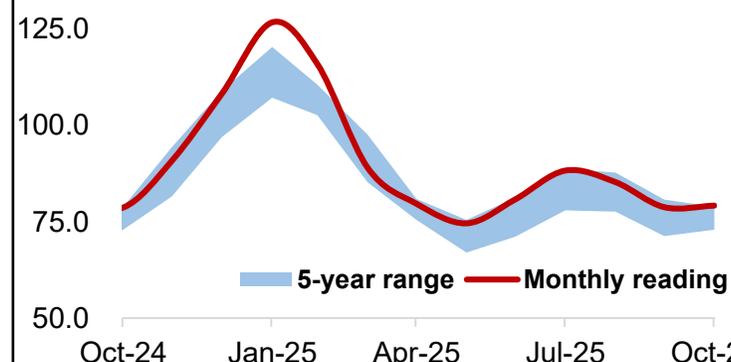
Billion cubic feet per day, bcf/d



According to EIA estimates, U.S. natural gas net exports rose 30% y/y to a record 16.6 bcf/d in October, supported by continued LNG strength.

## U.S. natural gas consumption

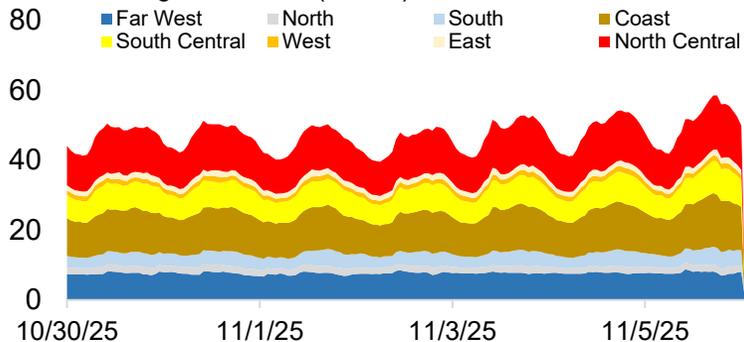
Billion cubic feet per day, bcf/d



Consumption rose 0.7% y/y to 79.2 bcf/d in October, led by lower residential and power sector demand, according to EIA estimates.

## ERCOT electricity load by region

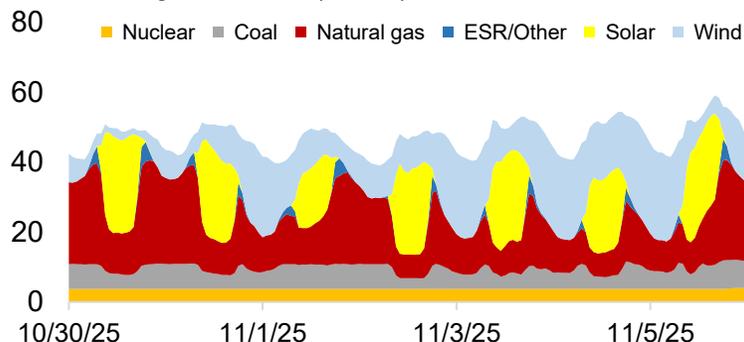
Thousand megawatt-hours (kMWh)



For Oct. 30-Nov. 5, ERCOT's average hourly electricity load was 47.4 kMWh, down 9.3% w/w, while the maximum hourly load of 58.5 kMWh fell by 11.5% w/w. Variability was the highest in the North Central and Coast regions.

## ERCOT hourly electricity generation by source

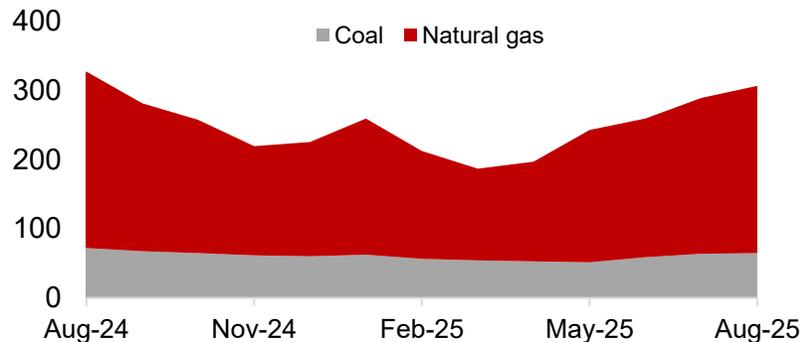
Thousand megawatt-hours (kMWh)



**Dispatchable generation dominated ERCOT's supply.** From Oct. 30-Nov. 5, thermal and other dispatchable resources supplied as much as 88.9% of ERCOT's total generation, including 63.6% from natural gas. Hourly generation ranged between 39 and 59 thousand MWh, with a standard deviation of 4.5 thousand MWh, indicating stable but lower seasonal load.

## Texas electricity plant receipts of natural gas and coal

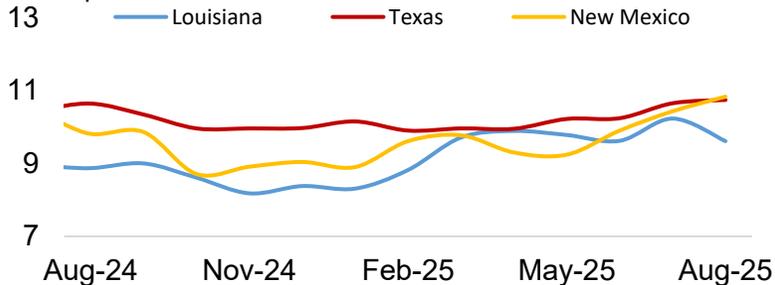
Trillion Btu



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

## Electricity prices – average across all end-use sectors

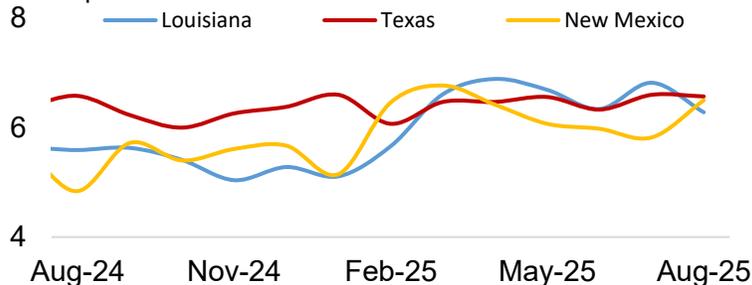
Cents per kilowatt-hour



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

## Industrial electricity prices

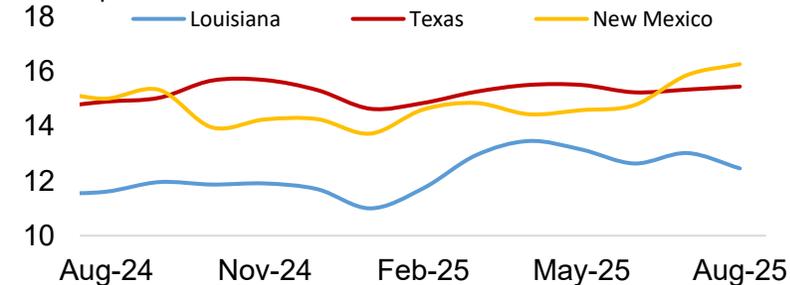
Cents per kilowatt-hour



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

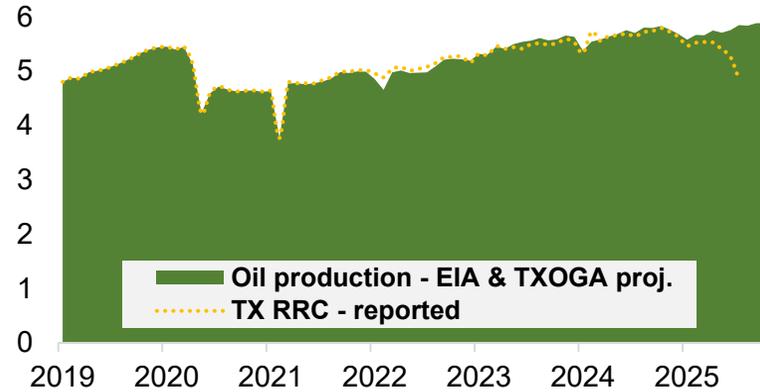
## Residential electricity prices

Cents per kilowatt-hour



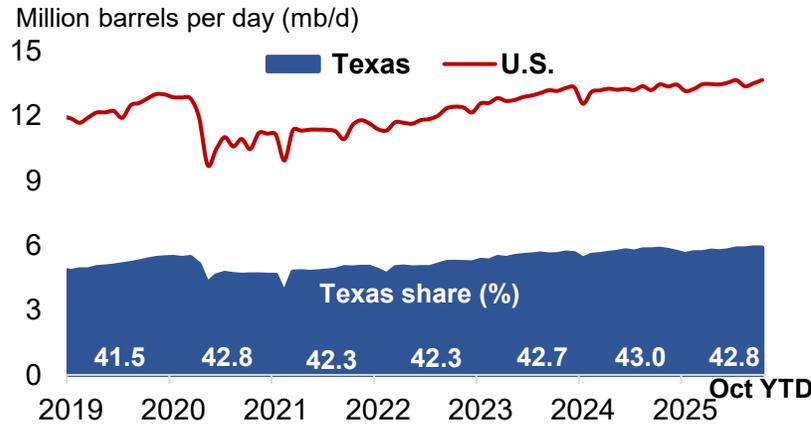
**Residential rates rose but remained competitive.** Residential electricity prices in Texas increased 0.7% m/m and 3.7% y/y to 15.45 ¢/kWh in August. Rates also rose 7.3% y/y in Louisiana and 8.4% y/y in New Mexico, though Louisiana's remained roughly 19% below Texas averages.

### Texas crude oil production, Jan. 2019 – Oct. 2025



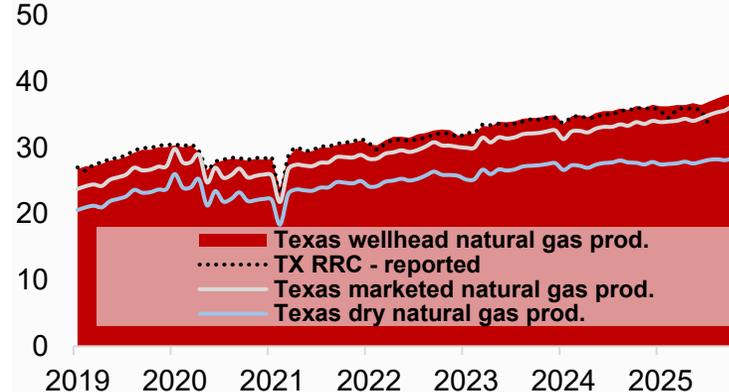
**Estimated record production.** Texas crude oil output held near record highs at **5.84 mb/d** in **August 2025 (EIA)**, with TXOGA estimates showing production **rising to 5.89 mb/d in October**, the highest on record.

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



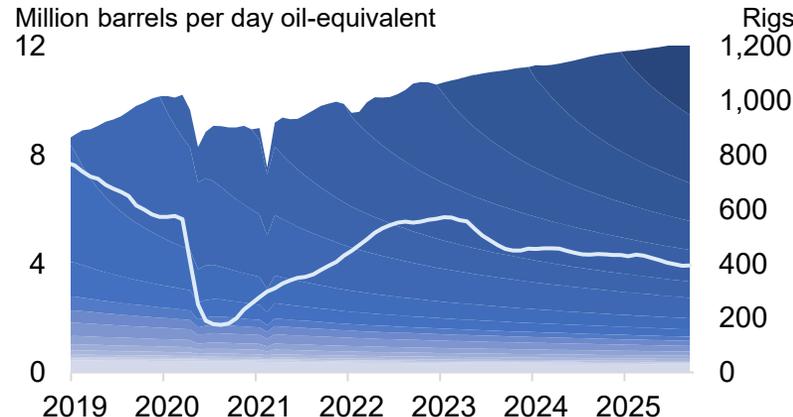
**Texas share of U.S. production.** Through the first ten months of 2025, **Texas accounted for 42.8% of total U.S. crude oil production**, underscoring its continued leadership in national output.

### Texas natural gas production, Jan. 2019 – Oct. 2025



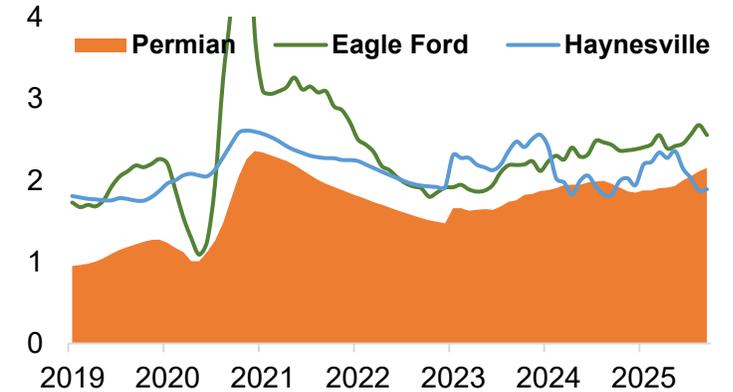
**Natural gas production records.** Texas produced **record-high natural gas volumes** in August 2025—**38.0 bcf/d** in gross withdrawals and **35.4 bcf/d** in marketed production (EIA). TXOGA estimates indicate October marketed output above **36 bcf/d**.

### Texas shale basin wellhead oil & natural gas production



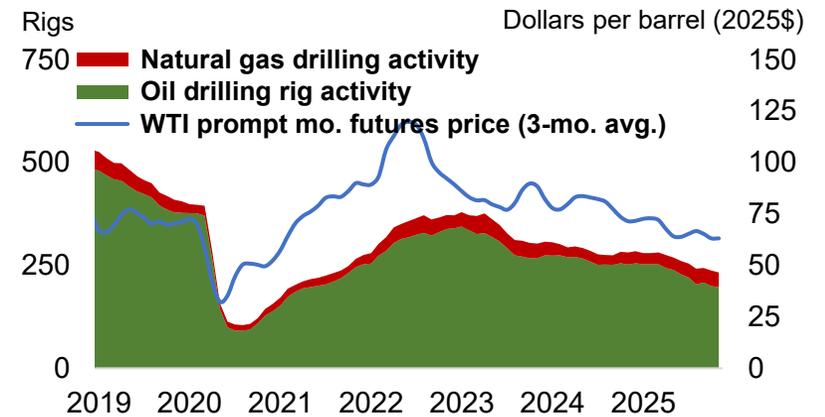
**EIA estimates show oil and natural gas production growth across Texas** shale basins in September 2025, including the Permian (+2.9% y/y), and Haynesville (+11.2% y/y), but a decline of 2.3% y/y in the Eagle Ford.

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



**Rig productivity rose in all major basins.** EIA estimates for September 2025 show rig productivity up **9.8% y/y** in the Permian, **4.9%** in the Eagle Ford, and **3.6%** in the Haynesville, reflecting efficiency gains amid stable drilling activity.

### Texas drilling activity and WTI crude oil futures prices

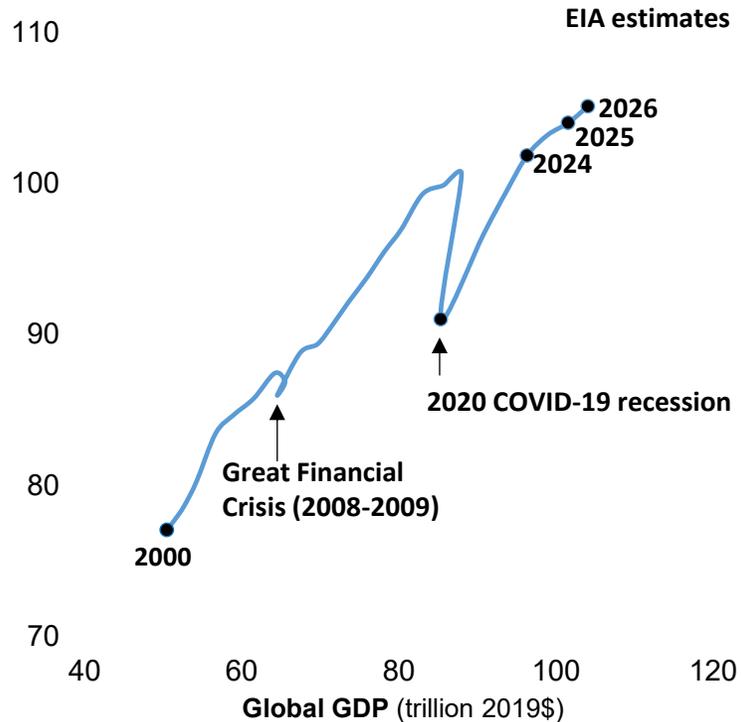


**Texas drilling activity and prices.** As of November 7, Texas had **197 oil-directed rigs (up 1 rig w/w)** and **36 gas-directed rigs (down two w/w)**, according to Baker Hughes.

- 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

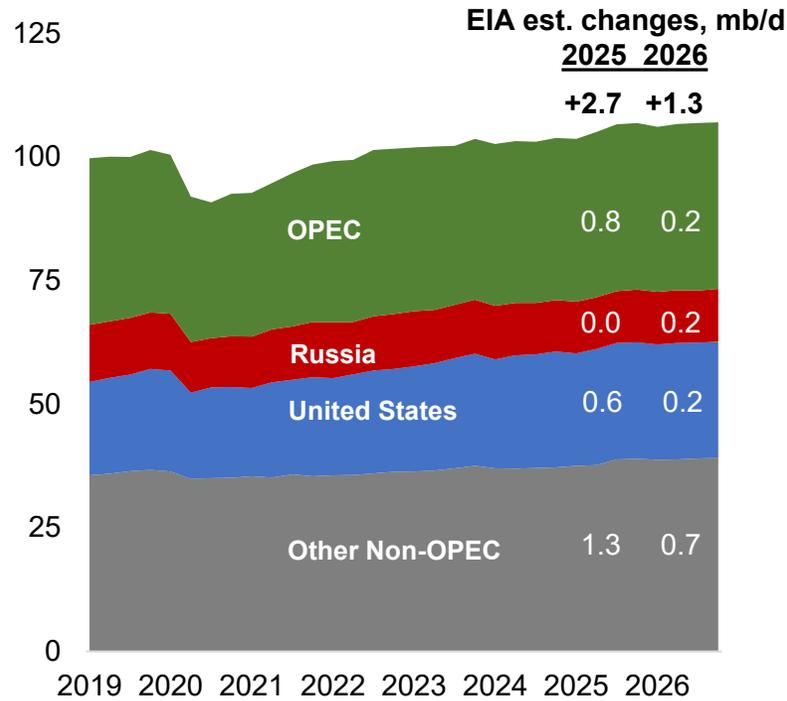
## Global oil demand vs. GDP

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



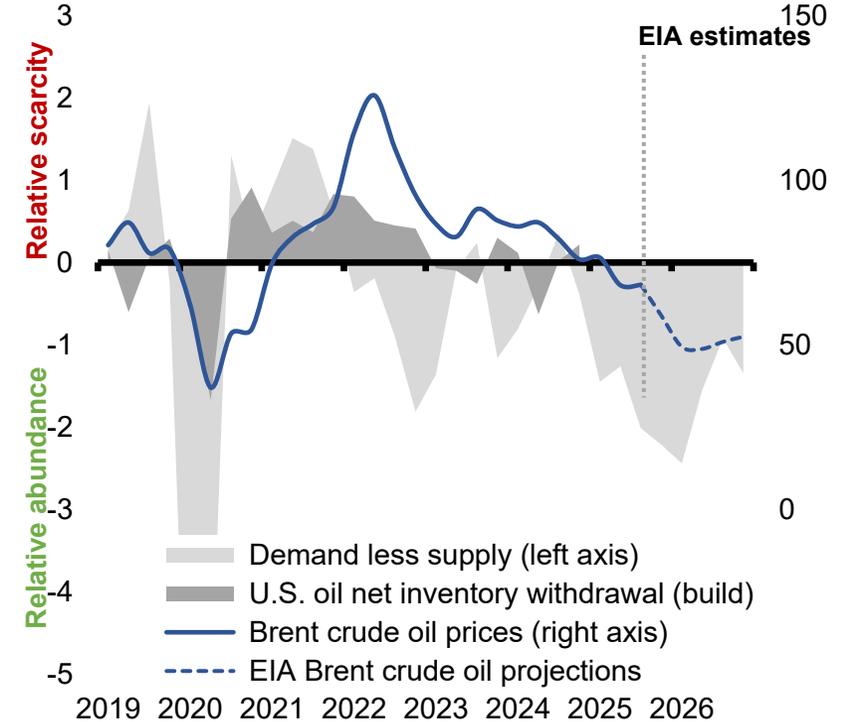
## Oil production by country/region

Million barrels per day, mb/d



## Global demand/supply & Brent prices

Million barrels per day (mb/d)





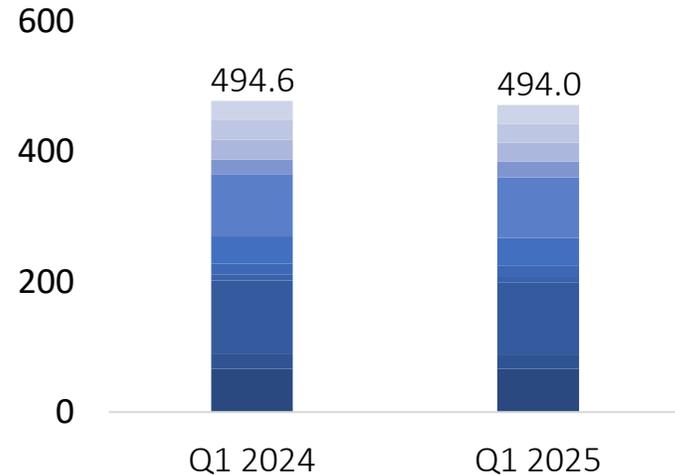
# Texas oil & gas jobs dipped, wages reached record high in Q1 2025



- ▶ 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.

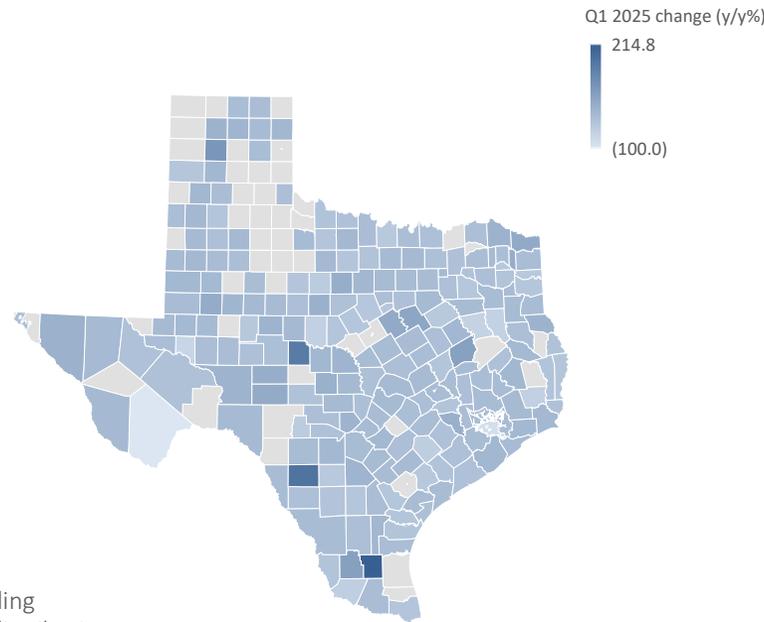
## Texas oil and natural gas industry direct employment fell by +0.1% y/y in Q1 2025

Thousand Jobs



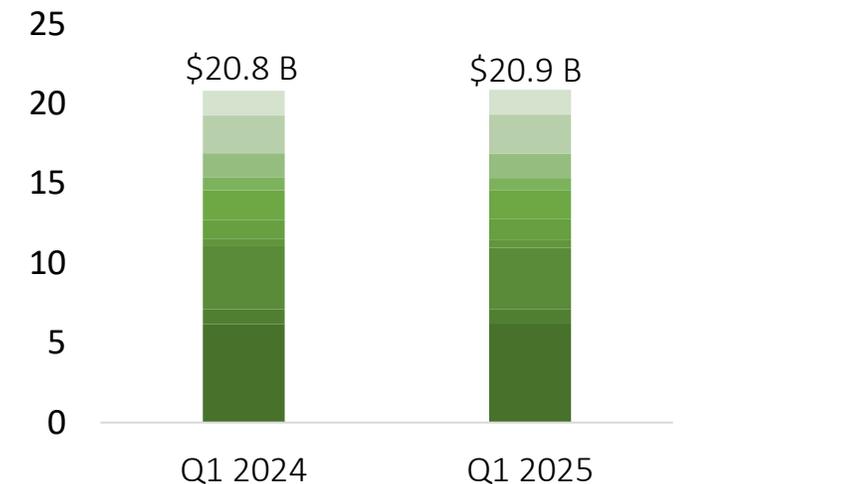
- Oil & gas extraction
- Support activities for o&g ops.
- Petroleum refineries
- Gas stations & fuel dealers
- All other\*
- Pipeline construction
- Oil & gas drilling
- Natural gas distribution
- Petrochemical mfg.
- Pipeline transportation
- Oil & gas field mach. and eq. mfg.

\* 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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