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**Third Quarter 2025 Outlook**

**September 4, 2025**



## Global, U.S., and Texas Economies

- International Monetary Fund (IMF) lifts 2025 global GDP forecast to 2.6% on stronger trade and financial conditions; risks from fiscal deficits, geopolitics, and trade policy persist
- Dollar weakness continues to support oil prices
- U.S. household debt at record \$18.4T; rising delinquencies—especially student loans—could weigh on growth
- ADS Index signals stalled U.S. GDP growth in Q3

## Global Oil Market

- Energy Information Administration (EIA) projects record oil demand through 2026; 2025 forecast +0.2 mb/d, 2026 +0.3 mb/d
- Non-OPEC supply growth led by U.S. expected to exceed demand, pressuring prices lower in EIA's view
- U.S. crude stocks remain historically low despite SPR replenishment
- Futures prices near historical mean-reversion threshold, with more upside than downside potential

## Natural Gas Markets

- Record 2025 demand; ~75% of 2025–2026 growth from emerging markets, especially Asia
- North America to supply ~85% of 2025 LNG growth, led by Gulf Coast projects
- U.S. gas output and exports to hit records per EIA; Texas leads with major LNG capacity additions
- Working gas storage in top 25% of 5-year range; contango signals higher price expectations

## Productivity, Jobs, and Wages

- Rig productivity up in Permian (+3.9% y/y) and Eagle Ford (+2.5%), flat in Haynesville due to dry gas price cycles
- Texas oil & gas output rising despite fewer rigs; DUC completions limited in Permian

## Global, U.S., and Texas Economies

- [Front-loading has shaped economic activity in 2025](#)
- [The historical relationship between U.S. dollar depreciation and upward oil price pressure has remained strong](#)
- [Consumer strain intensifies: Student loan delinquencies jump post-forbearance](#)
- [ADS Index points to stalled U.S. GDP growth in Q3](#)

## Oil Markets

- [EIA raises global oil demand forecast on stronger-than-expected economic performance](#)
- [EIA and IEA project global oil supply growth to exceed demand growth](#)
- [Global oil supply projected by EIA to outpace demand through 2026, pressuring prices lower](#)
- [U.S. crude oil stocks remain low despite SPR replenishment](#)
- [Crude oil futures prices are currently in line with their historical mean-reversion threshold](#)

## Natural Gas Markets

- [Record 2025 global gas demand projected, driven largely by emerging markets](#)
- [North America to lead 2025 LNG supply growth, driven by Texas and Gulf Coast projects](#)
- [U.S. natural gas production and exports set to reach consecutive records](#)
- [U.S. gas storage remains robust, in the top 25% of the 5-year range](#)
- [Contango reflects market expectations for higher natural gas prices ahead](#)

## Productivity, Jobs, and Wages

- [Texas rig productivity rises in Permian and Eagle Ford, flat in Haynesville](#)
- [Texas oil and gas output rises despite fewer rigs, underscoring efficiency gains](#)



# Global, U.S. and Texas Economies

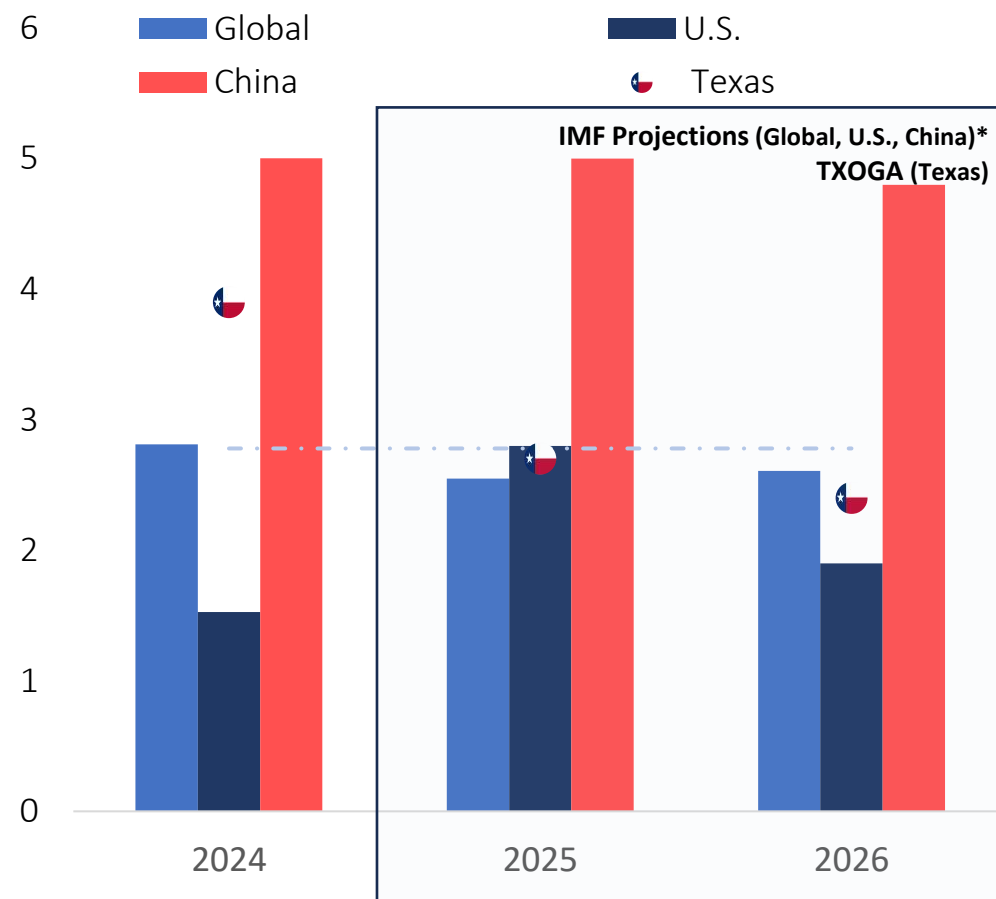




- At the end of July, the International Monetary Fund (IMF) **raised** its global real GDP growth projections **0.2% to 2.6%** in 2025 and **2.5%** 2026, due to advanced international trade, lower-than-expected trade policy shocks (vs. April), and improvement in global financial conditions
- Growth this year remains uneven: **5.0%** in China, **1.9%** in the U.S., and **0.7%** in Japan. While a global recession is not the base case, a downturn could shave **0.5–1.0** percentage points from annual growth
- Trade policy** appears to be the source of greatest uncertainty in the IMF's view, seconded by **geopolitical risks**—including ongoing Russia-related sanctions, Middle East uncertainties, and trade policy volatility with China — that have eased but continue to add complexity to the outlook for economics and energy markets
- Fiscal vulnerabilities** – given a number of economies, including Brazil, France, and the United States, are projected to run large fiscal deficits – amid a backdrop of historically high levels of public debt could raise term premia, tighten global financial conditions, and increase volatility, especially if they interact with concerns about geoeconomic fragmentation and the future of the international monetary system centered on the dollar

## Real GDP growth outlook\*

y/y%



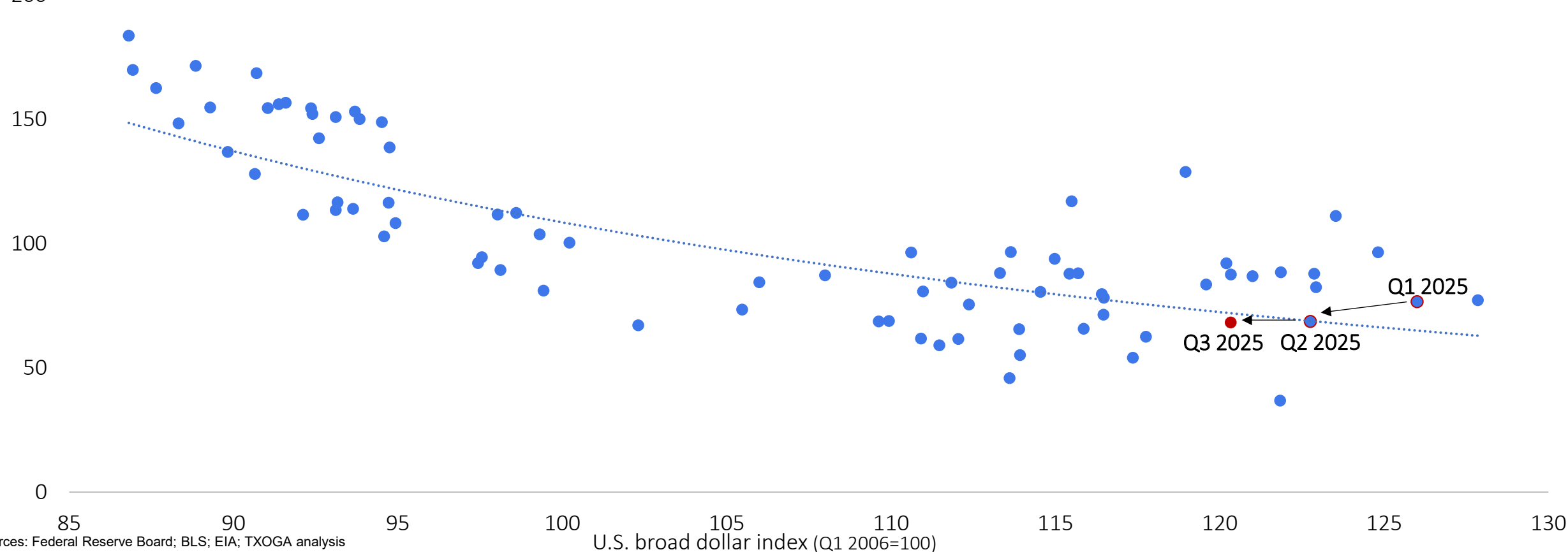
\* Based on real GDP (2019 constant dollars) for 205 countries weighted on a market exchange rate basis  
sources: International Monetary Fund; World Bank; TXOGA analysis

# The historical relationship between U.S. dollar depreciation and upward oil price pressure has remained strong

- While many factors influence global oil prices, the U.S. dollar's strength has historically shown an inverse relationship with oil prices, given its central role in oil pricing, global commodity trading, trade balances, and monetary policy transmission
- A weaker dollar typically supports higher oil prices by reducing the cost of crude for foreign buyers and boosting demand—an established non-linear relationship that strengthened in Q2 2025

## U.S. broad dollar index and Brent crude oil prices, Q1 2006-April 2025

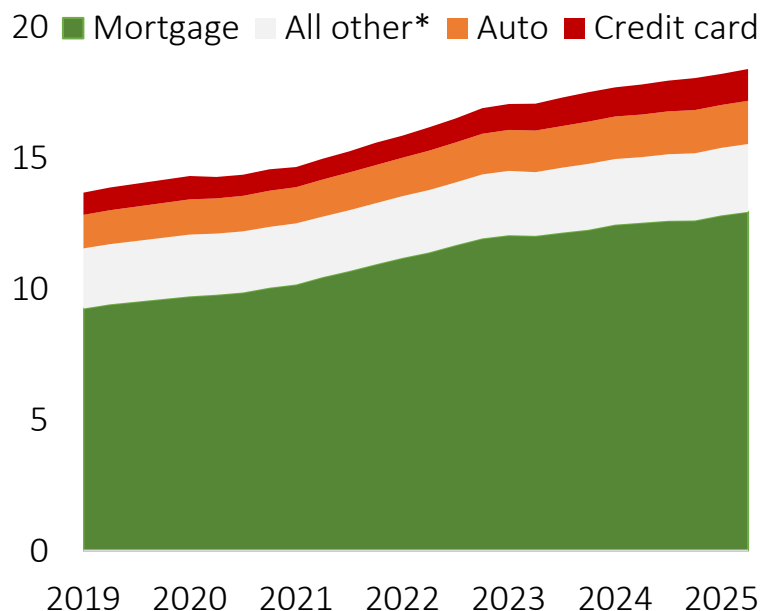
Brent crude oil (2025 constant dollars per barrel)  
200





- U.S. household debt rose to a record \$18.4 trillion in Q1 2025, according to the New York Federal Reserve
- Serious delinquencies (90+ days past due) on student loans neared 13%, while delinquency rates on credit cards, home equity lines of credit (HELOCs), and other forms of debt also remained elevated
- The continued increase in delinquencies could tighten access to credit and weigh on consumer spending—which comprises roughly 70% of U.S. GDP—and pose a potential headwind to economic growth

## U.S. consumer debt



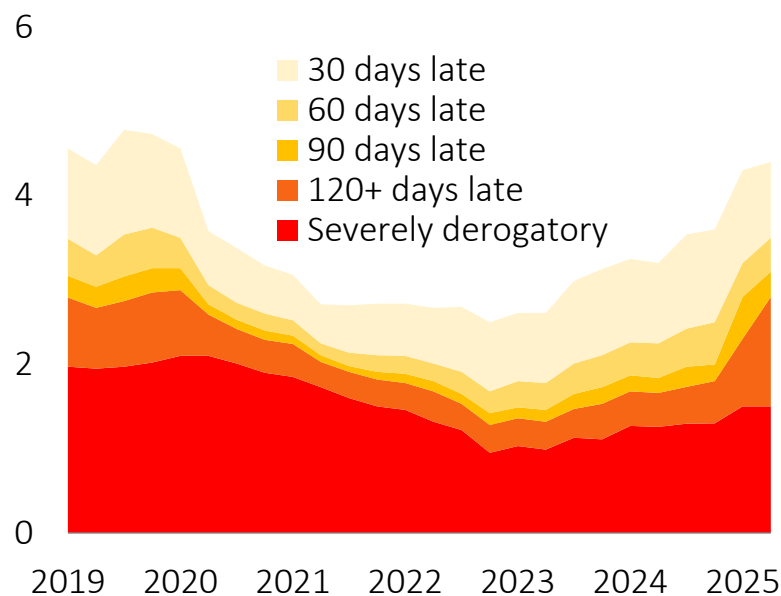
\*All other debt includes student loans, home equity revolving, and other

\*\*90 days or more delinquent

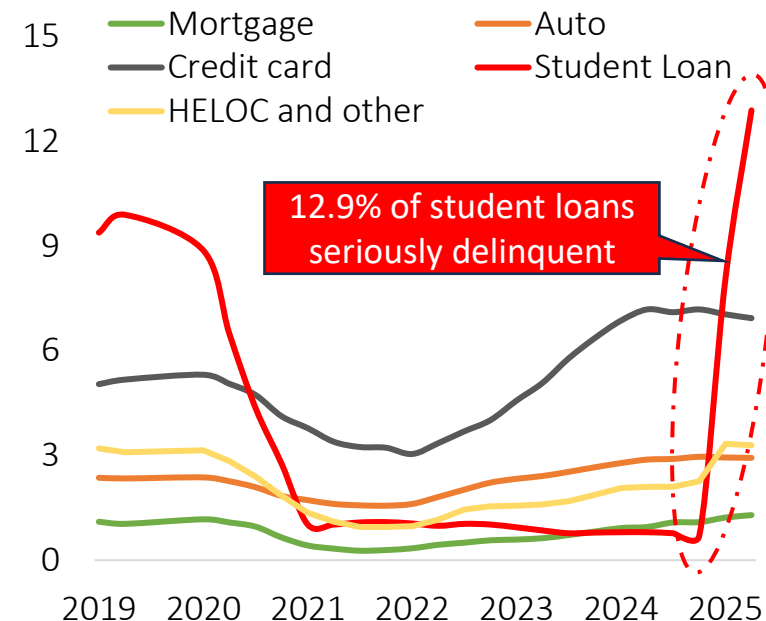
source: New York Federal Reserve Bank

## Total balance by delinquency status

Percent of balance



## New seriously delinquent balances by type\*\*

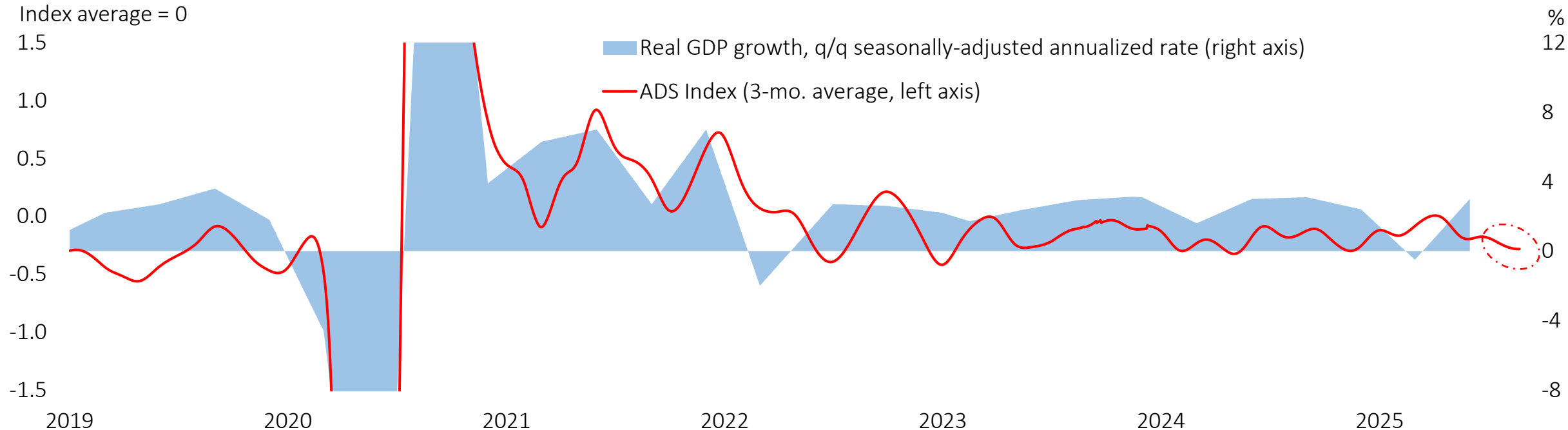




- The ADS Business Conditions Index from the Philadelphia Fed—an early gauge of economic momentum—was sharply revised downward on August 2. While real GDP growth showed a mixed rebound in Q2 2025, the latest ADS reading now signals little to no growth in Q3 2025
- The weaker ADS reading suggests slowing economic momentum that could weigh on industrial activity, energy demand, and business investment through the remainder of 2025

## ADS business conditions index vs. U.S. real GDP growth

Index average = 0



\* The ADS Index includes weekly initial unemployment claims (source: DOL); monthly payroll employment (BLS); monthly industrial production (FRB); monthly real personal income less transfer payments (BEA); monthly real manufacturing and trade sales (BEA, CB); quarterly real GDP (BEA)







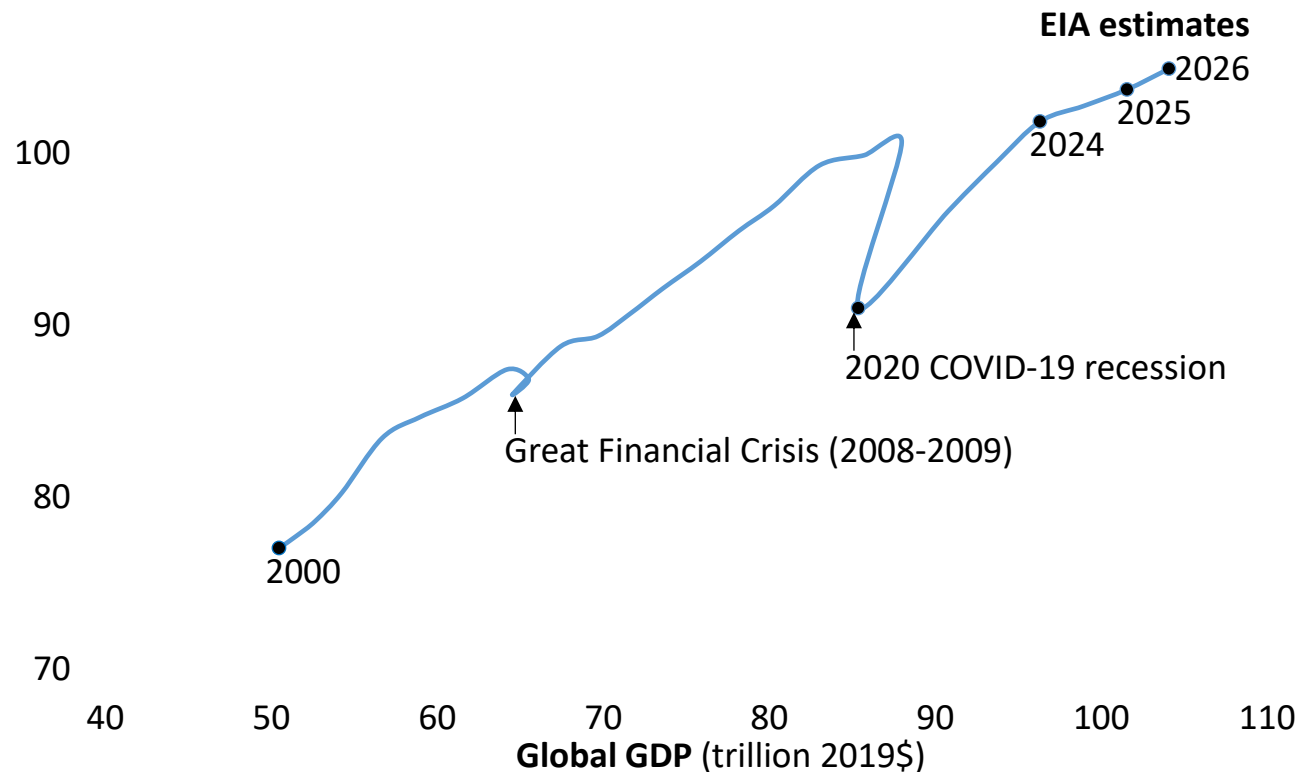
# EIA raises global oil demand forecast on stronger-than-expected economic performance



- 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)
- U.S. refined product demand rose 0.8% y/y through August 8, led by diesel and jet fuel. Gulf Coast crack spreads (\$26.33 per barrel in mid-August) remain strong but are sensitive to export trends and global refining capacity shifts

## Global oil demand vs. GDP

**Global oil demand** (million barrels per day, mb/d)  
110



sources: U.S. Energy Information Administration (August 2025); TXOGA analysis

## Global oil demand headlines

**Why the oil market is tight despite big OPEC+ output hikes**

Reuters, August 8, 2025

**OPEC+ gets lucky as it brings back oil output amid uncertainty**

Reuters, August 5, 2025

**What if India and China stop buying Russian oil?**

DW, August 7, 2025

**Top Petrochemical Segments Driving Global Market Growth**

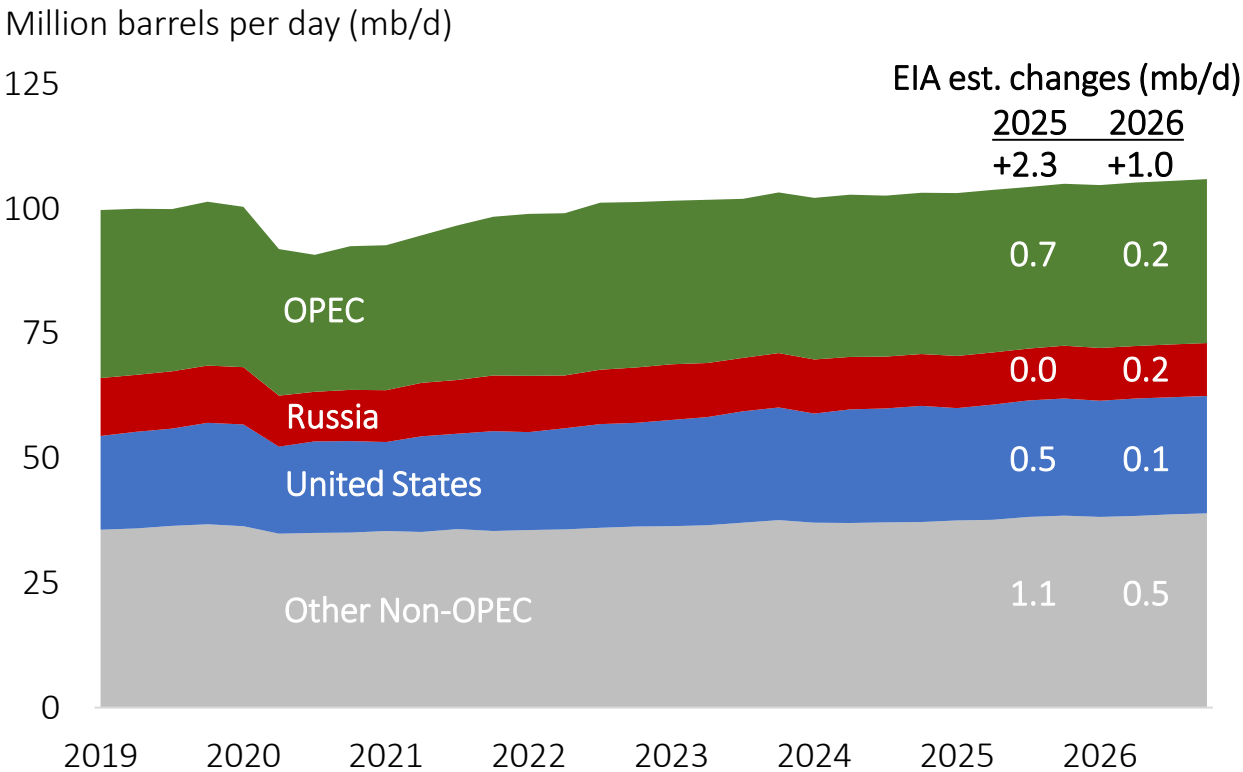
imarc group, August 11, 2025

# EIA and IEA project global oil supply growth to exceed demand growth



- EIA’s August outlook raises 2025 supply growth to 2.3 mb/d, more than double its projected 1.0 mb/d demand growth — suggesting potential oversupply risks
- The U.S. and other non-OPEC producers account for 1.6 mb/d of the 2.3 mb/d global supply growth forecast for 2025, assuming only partial compliance with OPEC+ output targets

## Oil production by region



## Global oil supply headlines

OPEC lifts 2026 oil demand view and trims supply growth from rivals

Reuters, August 12, 2025

Global Oil Markets Face Record Supply Glut Next Year, IEA Says

Bloomberg, August 13, 2025

Russia to Spread Out Oil Cuts to Compensate OPEC+ Through 2025

August 13, 2025

Weaker Chinese Demand for Saudi Oil Signals Shift to Urals, EA Says

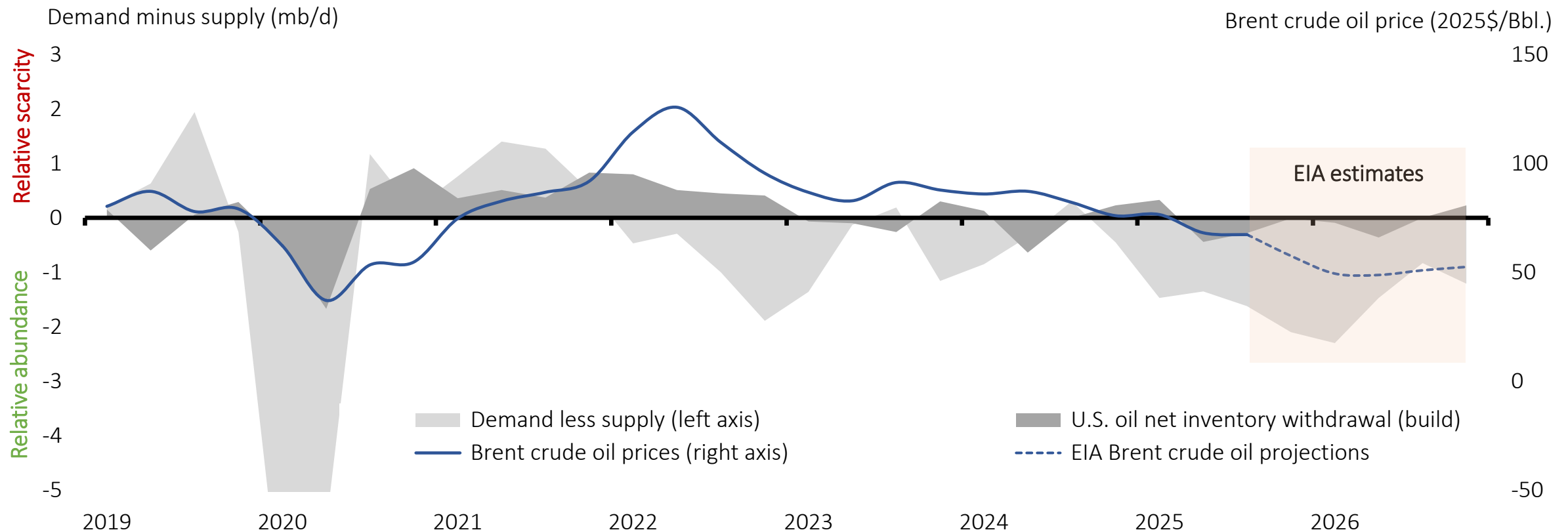
Rigzone, August 13, 2025

# Global oil supply projected by EIA to outpace demand through 2026, pressuring prices lower



- EIA forecasts ongoing global stock builds, with Brent crude averaging \$67/bbl in 2025 and \$51/bbl in 2026 — down from ~\$65 today and a prior 2026 projection of \$58
- EIA expects the U.S. market to remain relatively balanced, while global oversupply is driven by OPEC, Russia, and other non-OPEC producers

## Global oil demand-supply balance and Brent prices





# U.S. crude oil stocks remain low despite SPR replenishment

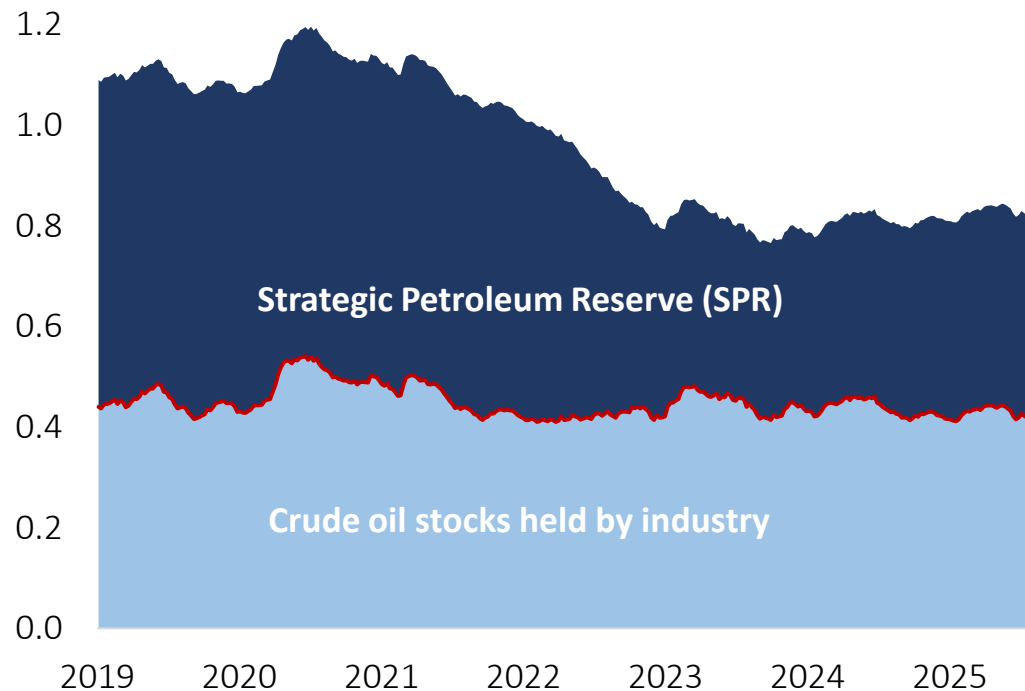


- Strategic Petroleum Reserve (SPR) volumes rose 26.7 million barrels (+7.1% y/y) as of August 8, 2025
- Industry-held crude stocks are 0.9% lower than a year ago (427 million barrels) and remain near the bottom of their 5-year range

## U.S. crude oil stocks by type

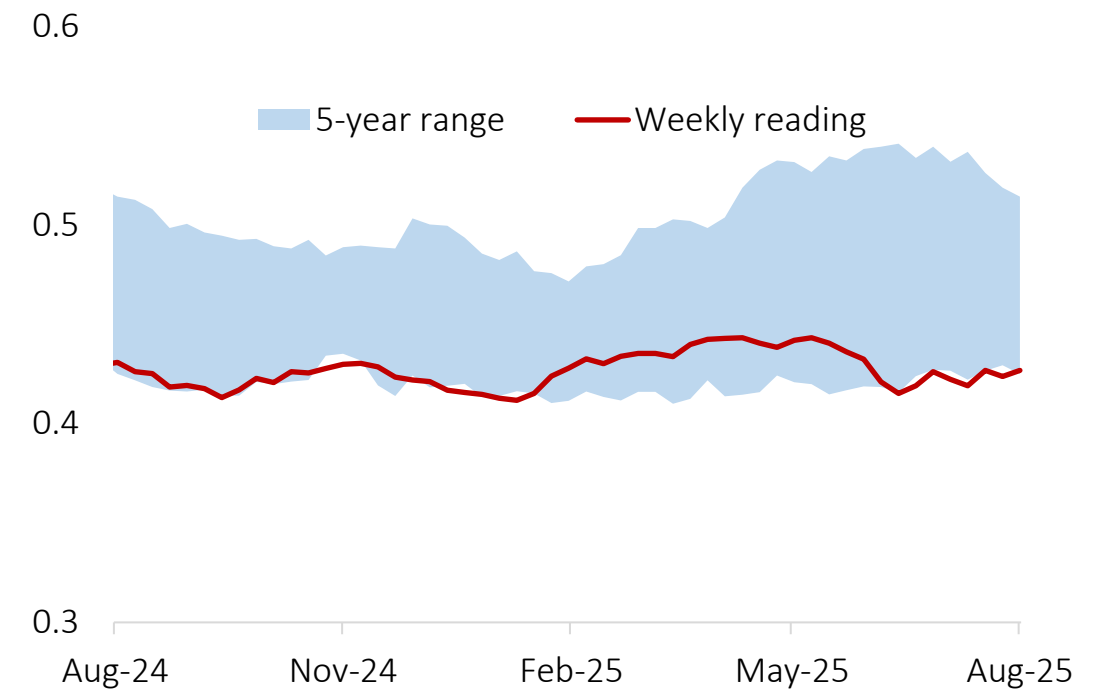
*Strategic Petroleum Reserve (SPR) vs. industry-held stocks*

Billion barrels



## Industry crude oil stocks vs. 5-year range

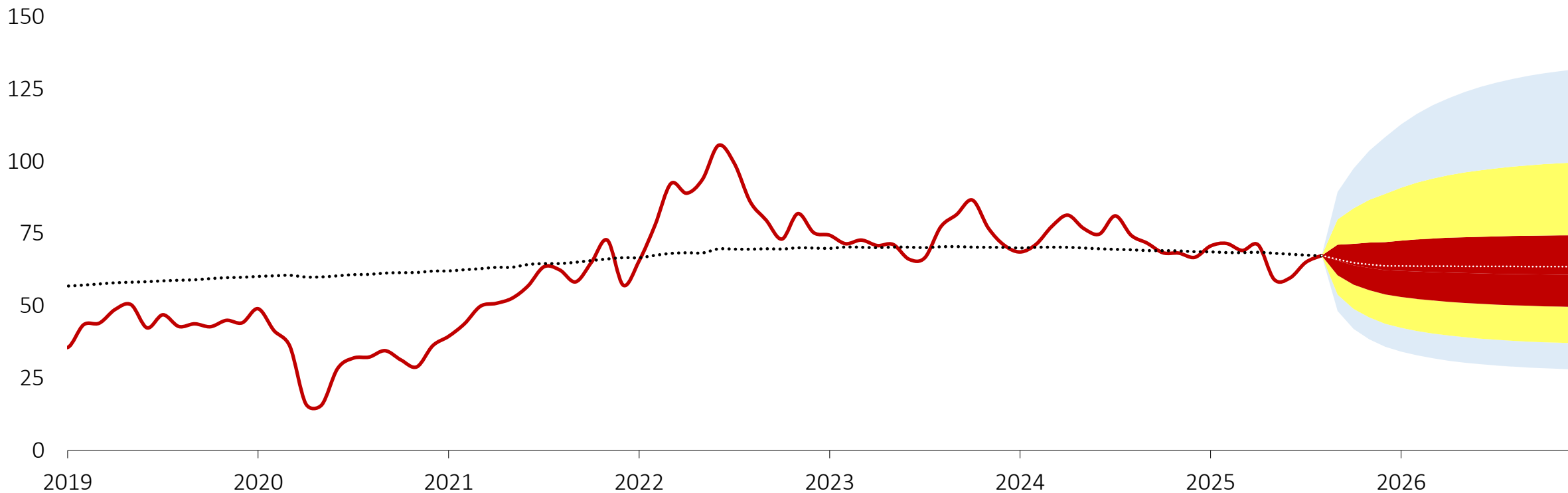
Billion barrels



- Futures curve remains in backwardation, with prices near historical mean reversion levels
- Confidence intervals based on past prices show the potential for greater upside than downside

## WTI crude oil price mean reversion analysis

Dollars per barrel (2025\$)





# Record 2025 global gas demand projected, driven largely by emerging markets



- ▶ Global natural gas demand reached a record 148.7 trillion cubic feet in 2024 and is projected to rise by 1.8% in 2025 and 1.5% in 2026
- ▶ About 75% of global natural gas demand growth through 2026 is expected from emerging markets and developing economies. Continued LNG infrastructure expansion will be critical but remains subject to trade policy developments
- ▶ Much of this growth hinges on Asia, where a rebound in Chinese LNG demand and broader regional import capacity expansions are expected to drive the recovery

## Global natural gas demand vs. GDP\*

Trillion cubic feet (tcf)

175

150

125

100

75

40

2000

2020 COVID-19 recession →

EIA/IEA estimates

2024  
2025  
2026

Real GDP (Trillion 2019\$)

\*Market exchange rate basis sources: EIA; IEA; IMF; TXOGA analysis

## Global natural gas headlines

**Sluggish Chinese LNG Demand Could Set Stage for Strong Rebound in 2026**

Natural Gas Intelligence, Aug. 1, 2025

**U.S. LNG Export Boom at Risk from Proposed Shipbuilding Rules**

Global Trade Magazine, Aug. 11, 2025

**Global natural gas demand growth set to accelerate in 2026 as more LNG supply comes to market**

IEA, July 22, 2025

**Structural risks in long-term LNG contracts indexed to Brent and Henry Hub | Daily Sabah**

Daily Sabah, Aug. 12, 2025



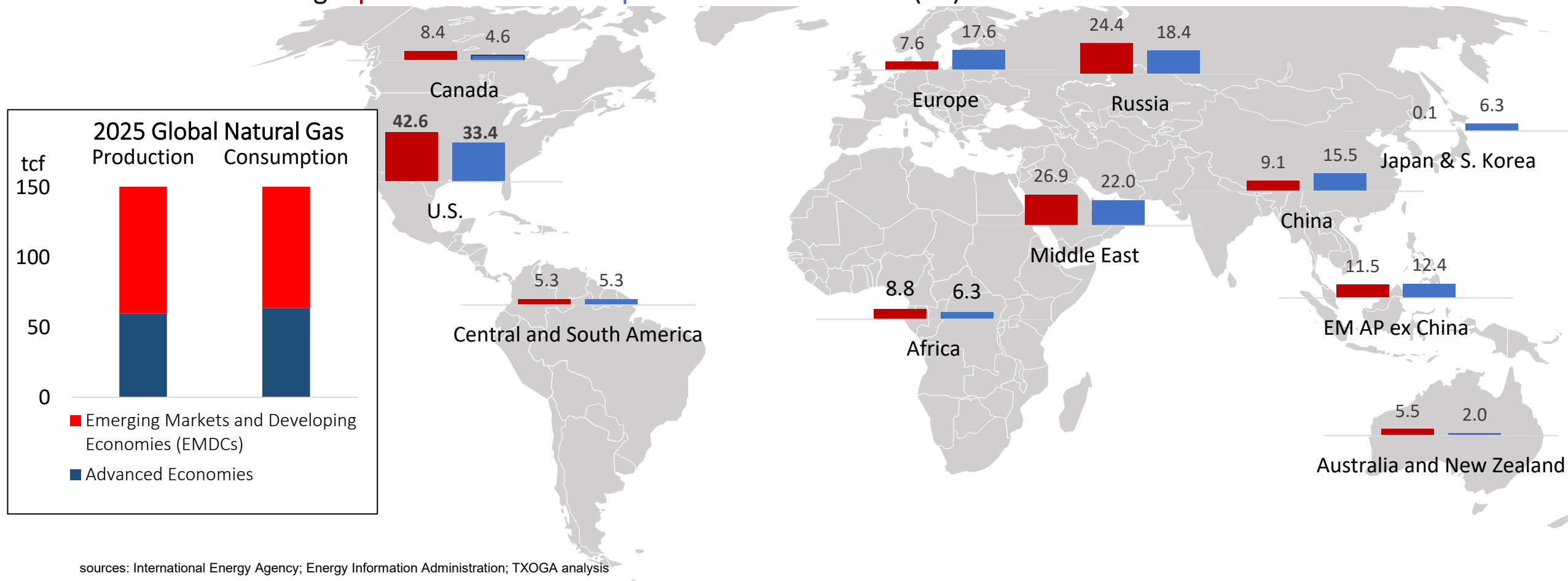


# North America to lead 2025 LNG supply growth, driven by Texas and Gulf Coast projects



- Emerging economies remain the primary driver of global natural gas production and consumption growth
- The IEA projects global LNG supply to rise 5% y/y in 2025, with North America providing roughly 85% of incremental growth — led by Plaquemines LNG Phase 1, Corpus Christi Stage 3, and LNG Canada
- While North America will likely dominate supply gains, most incremental demand will come from Asia and other emerging markets, underscoring the importance of trade flows and infrastructure connectivity.

## 2025 Global natural gas **production** vs. **consumption** – Trillion cubic feet (tcf)



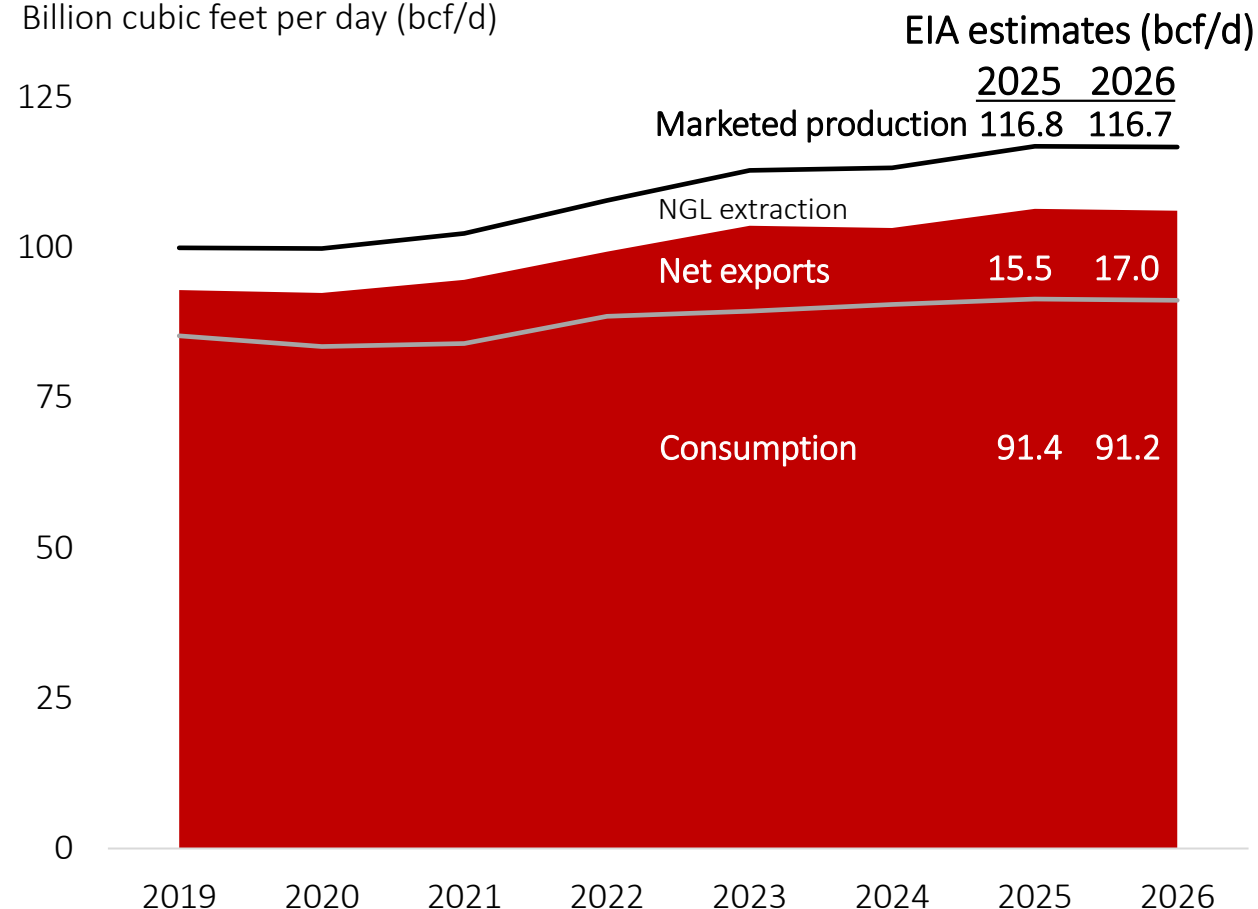
# U.S. natural gas production and exports set to reach consecutive records



- EIA now projects U.S. marketed natural gas production at 116.8 bcf/d in 2025 (+1.5% from prior estimate) and 117.0 bcf/d in 2026 (−0.2%)
- New LNG export capacity is expected to lift U.S. natural gas net exports to record highs — up 24% y/y to 15.5 bcf/d in 2025 and 9.7% y/y to 17.0 bcf/d in 2026
- Through July, Texas accounted for 34.3 bcf/d — 29.5% of total U.S. marketed natural gas production
- Texas' production leadership and expanding LNG export capacity — with 1.5 bcf/d being commissioned and 6.5 bcf/d under construction, per EIA — position the Lone Star State as a primary driver of U.S. LNG export growth to meet rising global demand

## U.S. natural gas production and disposition, 2019-2026

Billion cubic feet per day (bcf/d)



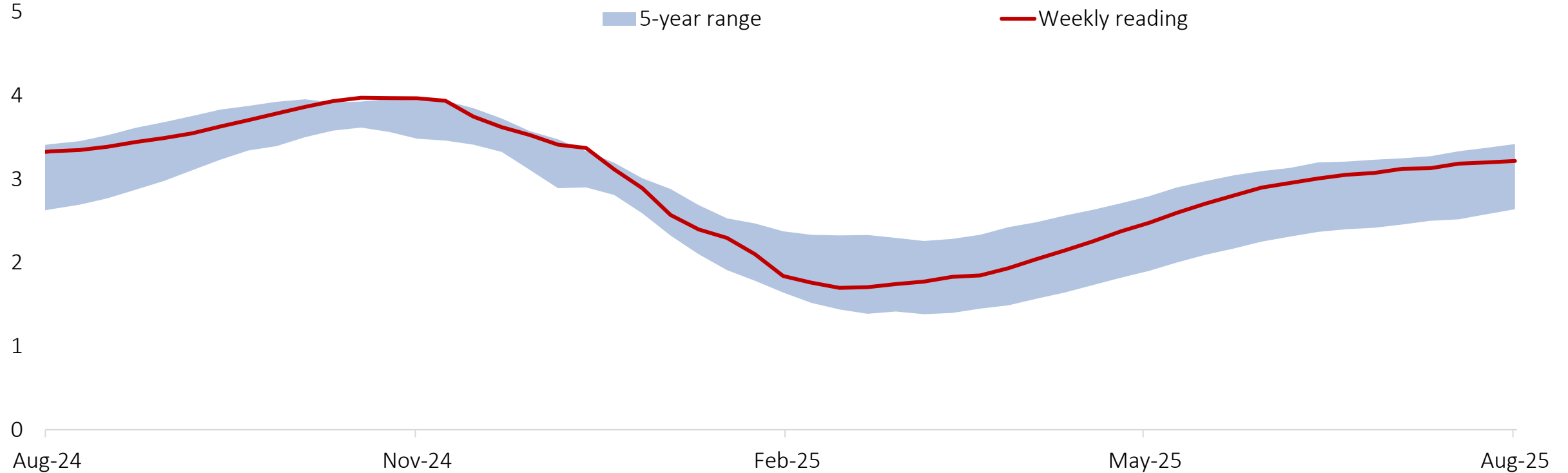
# U.S. gas storage remains robust, in the top 25% of the 5-year range



- ▶ Strong working gas storage levels reflect economic and seasonal factors that are pressuring prices lower but do not eliminate winter volatility risks
- ▶ Underground storage rose 0.6% w/w to 3.22 tcf as of August 22, placing inventories in the top 25% of the 5-year range

## U.S. weekly working gas storage

Trillion cubic feet (tcf)



# Contango reflects market expectations for higher natural gas prices ahead



- Near-term futures recently rose to align with their historical mean reversion threshold
- Futures remain in contango — spot prices below futures prices — with historical confidence intervals suggesting greater upside potential than downside risk
- Summer inventories remained in the top 20% of the five-year range, but weather variability and LNG supply changes could still drive price swings

## Natural gas price mean reversion and historically-based ranges\*

Dollars per million Btu (2025\$)

10

8

6

4

2

0

2019

2020

2021

2022

2023

2024

2025

2026

99%

90%

50%

\*Colored bands represent estimated confidence intervals based on historical volatility  
sources: U.S. Energy Info. Admin.; CME Group; Bureau of Labor Statistics; TXOGA analysis



# Productivity, Jobs, and Wages





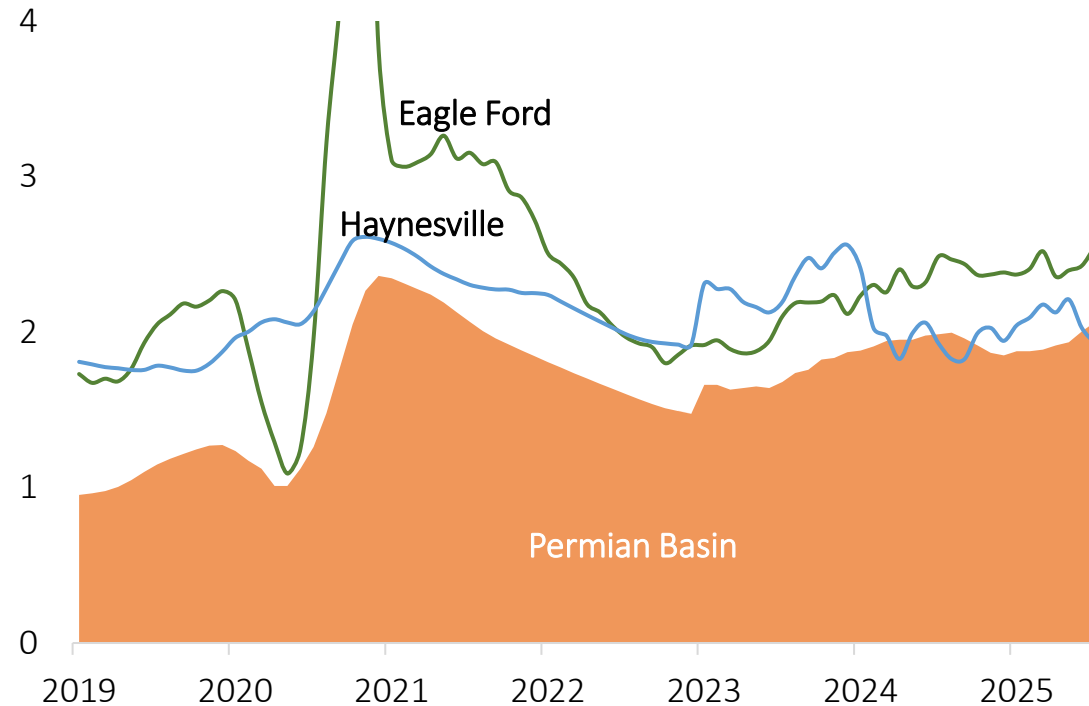
# Texas rig productivity rises in Permian and Eagle Ford, flat in Haynesville



- In July 2025, EIA estimates show rig productivity up 3.9% y/y in the Permian Basin and 2.5% y/y in the Eagle Ford, while holding steady in the Haynesville
- Productivity in the Permian and Eagle Ford has been relatively stable in recent years, whereas the Haynesville — a predominantly dry natural gas play — has seen larger swings due to historically low domestic gas prices and the resulting cyclical, selective drilling activity

## Texas rig productivity by basin — new monthly production per rig

Thousand barrels of oil-equivalent per day (kb/doe)



## Oil & Gas technology headlines

Sliding US rig count outpaces efficiency gains, threatening onshore oil output

Reuters, Aug. 5, 2025

Tight oil production in Permian drives growth in onshore U.S. Lower 48 states production

EIA, June 2, 2025

Is overlooked gas the new investor darling over oil thanks to AI?

Fortune, Aug. 9, 2025

How AI drove data optimization for oil and gas capital projects

EY, Aug. 13, 2025

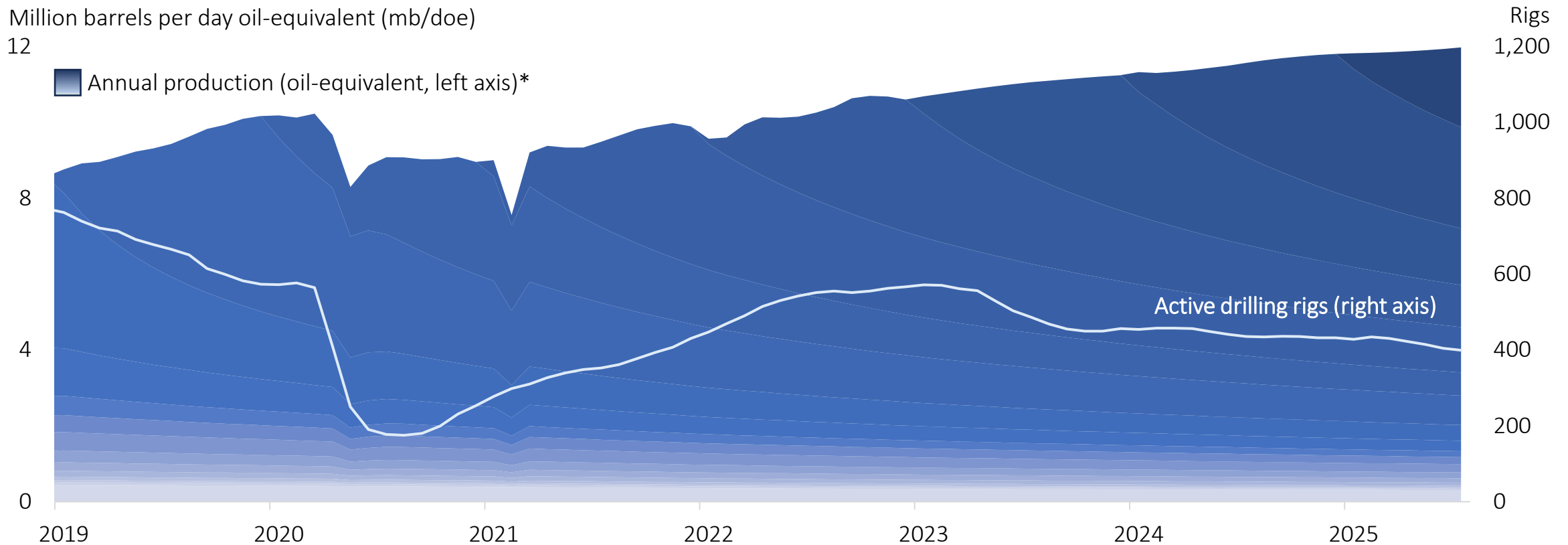
# Texas oil and gas output rises despite fewer rigs, underscoring efficiency gains



- ▶ In July 2025, EIA estimates show oil and gas production up across Texas shale basins: Permian (+3.7% y/y), Eagle Ford (+1.4% y/y), and Haynesville (+11.1% y/y)
- ▶ Year-to-date through July, drilled but uncompleted wells (DUCs) have contributed to only 1% of Permian completions, compared with 9.8% in the Eagle Ford and 10.9% in the Haynesville, per EIA

## Texas shale production and rig activity

Million barrels per day oil-equivalent (mb/doe)  
12



\*Crude oil, condensates, natural gas gross withdrawals from Texas' Anadarko, Eagle Ford, Haynesville, and Permian Basin production regions.

sources: Energy Information Administration; TXOGA analysis

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