



Longreach Energy Holdings LLC

FIRM INFORMATION

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1.0 Market and Portfolio Commentary

1.1 Macro Industry Commentary

US Henry Hub prompt gas prices fell in December with continued warm weather and resulting low draws from gas storage. The prompt was \$2.80/mmbtu at close on 30 November and finished at \$2.51/mmbtu at close on 29 December. Calendar 2024 also fell, beginning December at \$2.97/mmbtu and closing at \$2.67/mmbtu.

Oil prices also fell. The prompt began December at \$75.96/bbl and closed the month at \$71.65/bbl. Calendar 2024 started the month at \$74.87/bbl and closed at \$71.17/bbl.

The latest Baker Hughes rig count data follows. In December, US total land rigs fell by 2 from 603 to 601. Total oil rigs fell by 4 from 505 to 501 while gas rigs rose from 116 to 118.

Baker Hughes rig count



Rotary Rig Count

1/5/24

Location	Week	+/-	Week Ago	+/-	Year Ago
Land	601	-1	602	-153	754
Inland Waters	0	0	0	-2	2
Offshore	20	0	20	4	16
United States Total	621	-1	622	-151	772
Gulf Of Mexico	18	0	18	2	16
Canada	125	39	86	-64	189
North America	746	38	708	-215	961
U.S. Breakout Information	This Week	+/-	Last Week	+/-	Year Ago
Oil	501	1	500	-117	618
Gas	118	-2	120	-34	152
Miscellaneous	2	0	2	0	2
Directional	46	0	46	0	46
Horizontal	564	-1	565	-136	700
Vertical	11	0	11	-15	26

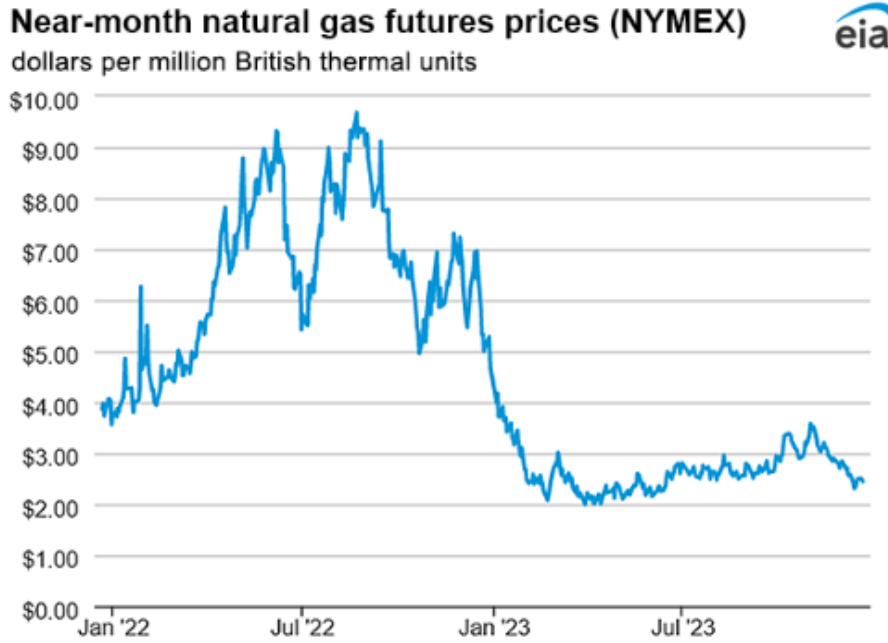
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Gas Market

In December, prompt Henry Hub gas futures fell. Relatively warm early-winter temperatures (reducing demand) and strong production combined to deliver smaller than anticipated storage withdrawals over the month (Figure 1).

Figure 1: Near Month Henry Hub Futures (Source: EIA)

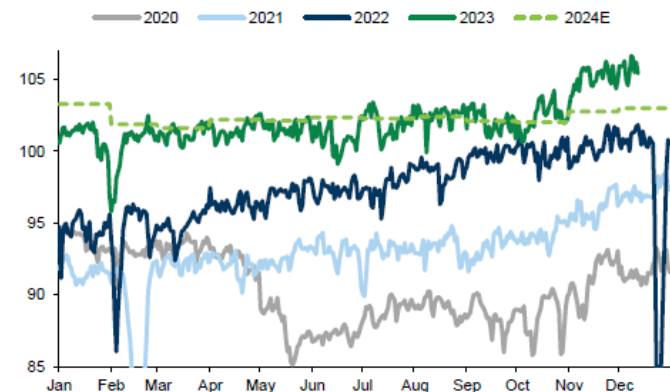


Data source: CME Group as compiled by Bloomberg, L.P.

Lower 48 natural gas production reached 105 bcf/d in December (LHS Figure 2). This is primarily due to timing of new wells as producers seek to maximise exposure to the higher demand winter season. Combined with relatively warm weather this strong supply has driven prices down. Goldman expects that production will now decline as flush production rates unwind and low prices encourage producers to delay drilling activity until demand from the new LNG facilities currently being constructed begins towards the end of this year.

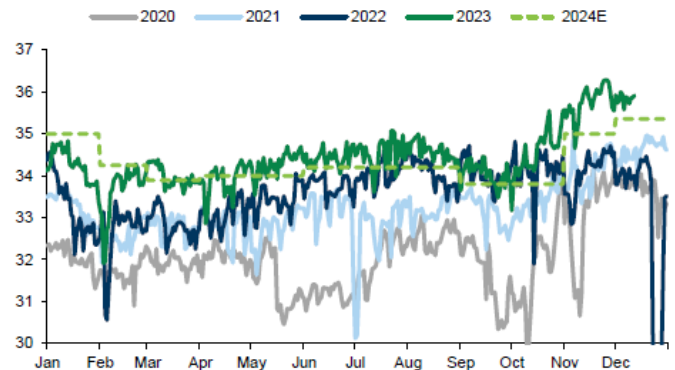
Figure 2: US Natural Gas Production (Source: various, via GS)

Exhibit 1: We expect gas production roughly flat yoy in 2024 on average, but down from its current high levels
US Lower 48 gas production, Bcf/d



Source: Wood Mackenzie, Goldman Sachs Global Investment Research

Exhibit 2: Seasonality and flush production drove an increase in Appalachia output, which we expect to partly unwind
Appalachia gas production, Bcf/d

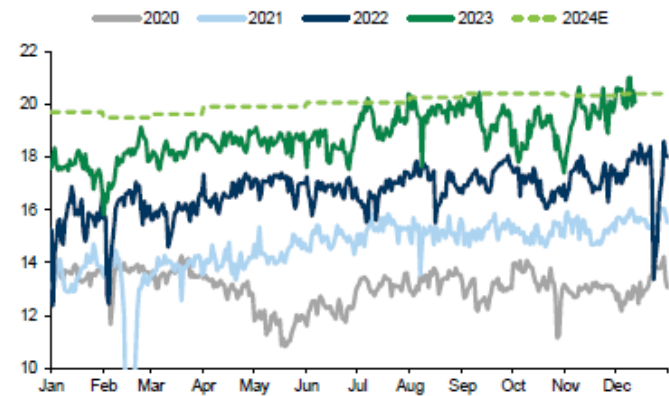


Source: Wood Mackenzie, Goldman Sachs Global Investment Research

Among the larger gas producing basins, Appalachia is expected to decline modestly (RHS Figure 2), the Permian to increase modestly on the back of increased associated gas being produced from primarily oil wells (LHS Figure 3) and the Haynesville to decline until prices exceed what Goldman estimates to be a \$3.75/mmbtu marginal development cost (RHS Figure 3).

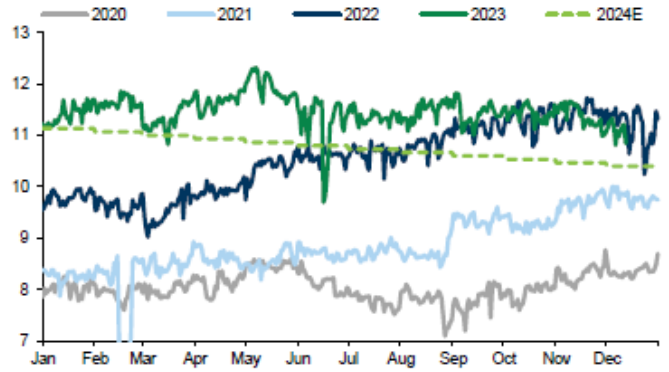
Figure 3: Permian and Haynesville Gas Production (Source: various, via GS)

Exhibit 3: Permian production is likely to increase next year
Permian gas production, Bcf/d



Source: Wood Mackenzie, Goldman Sachs Global Investment Research

Exhibit 4: We expect Haynesville production to continue declining given an unfavorable price environment for producers
Haynesville (North Louisiana) gas production, Bcf/d



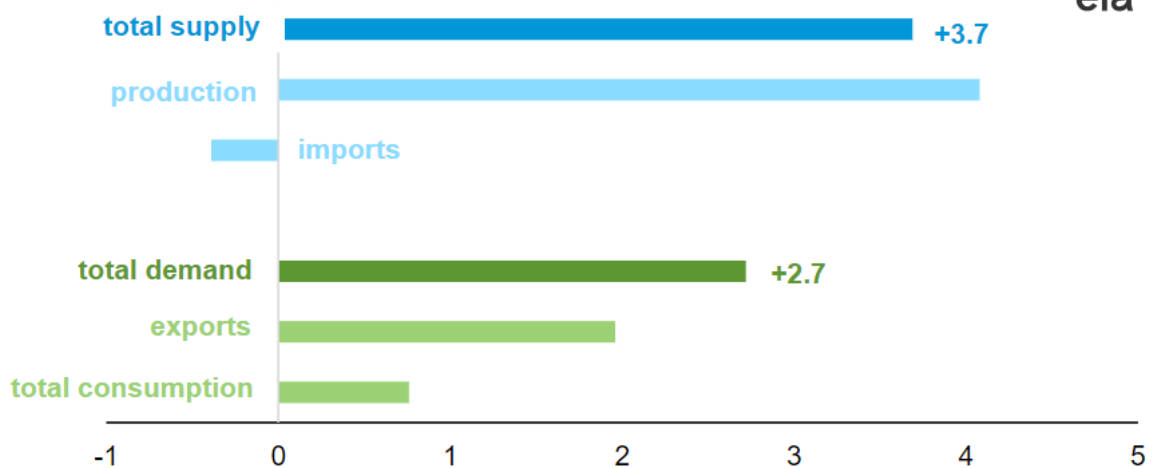
Source: Wood Mackenzie, Goldman Sachs Global Investment Research

In 2023, overall natural gas demand in the US increased by 3% in 2023 compared to 2022 (Figure 4). Increased exports and a slight increase in natural gas consumed for electricity generation offset lower residential and commercial sector consumption. LNG exports rose 12% in 2023 compared to 2022, and natural gas exports by pipeline to Mexico increased by 9% over the same period.

The EIA estimated that US dry natural gas production averaged a record-high 104 bcf/d in 2023, 4% higher than the 2022 annual average. This record production was the primary driver of lower prices in 2023.

Figure 4: US Natural Gas Supply and Demand Balance 2023 vs 2022 (bcfd) (Source: EIA)

Natural gas supply and demand balance, 2023 versus 2022 (Bcf/d)



Data source: U.S. Energy Information Administration, *Short-Term Energy Outlook*

Note: Total supply=production+imports. Total demand=exports+total consumption. Total consumption=residential+commercial+electric power+industrial.

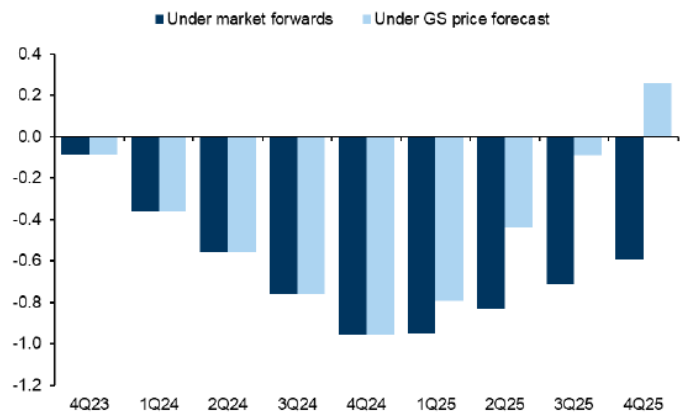
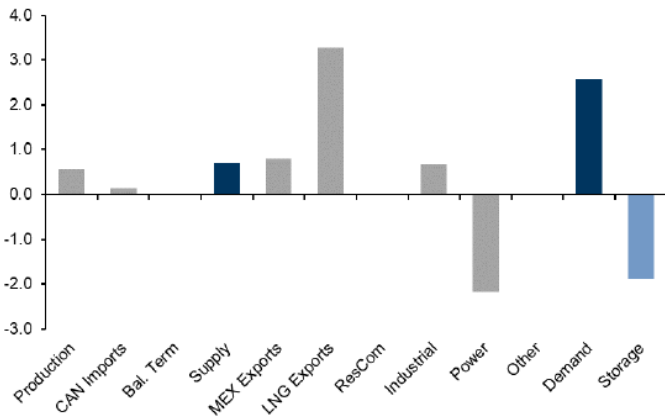
The growth in US gas production has no doubt been influenced by producers' anticipation of forthcoming ramp-up in LNG demand. While the gas market is currently well-supplied, the rapid demand growth coming in summer 2025 will create the need for substantial further growth in US gas production, which will support higher prices for 2025 and beyond (Figure 5).

Figure 5: Sum 2025 YoY Supply and Demand Changes and Haynesville Future Production
(Source: WoodMac, GS)

Goldman Sachs Rapid LNG demand growth in Sum25 will create the need for US gas production to grow

Sum25 year-on-year change in S&D under market forwards, Bcf/d

Haynesville cumulative production growth vs 3Q23 under different price scenarios, Bcf/d

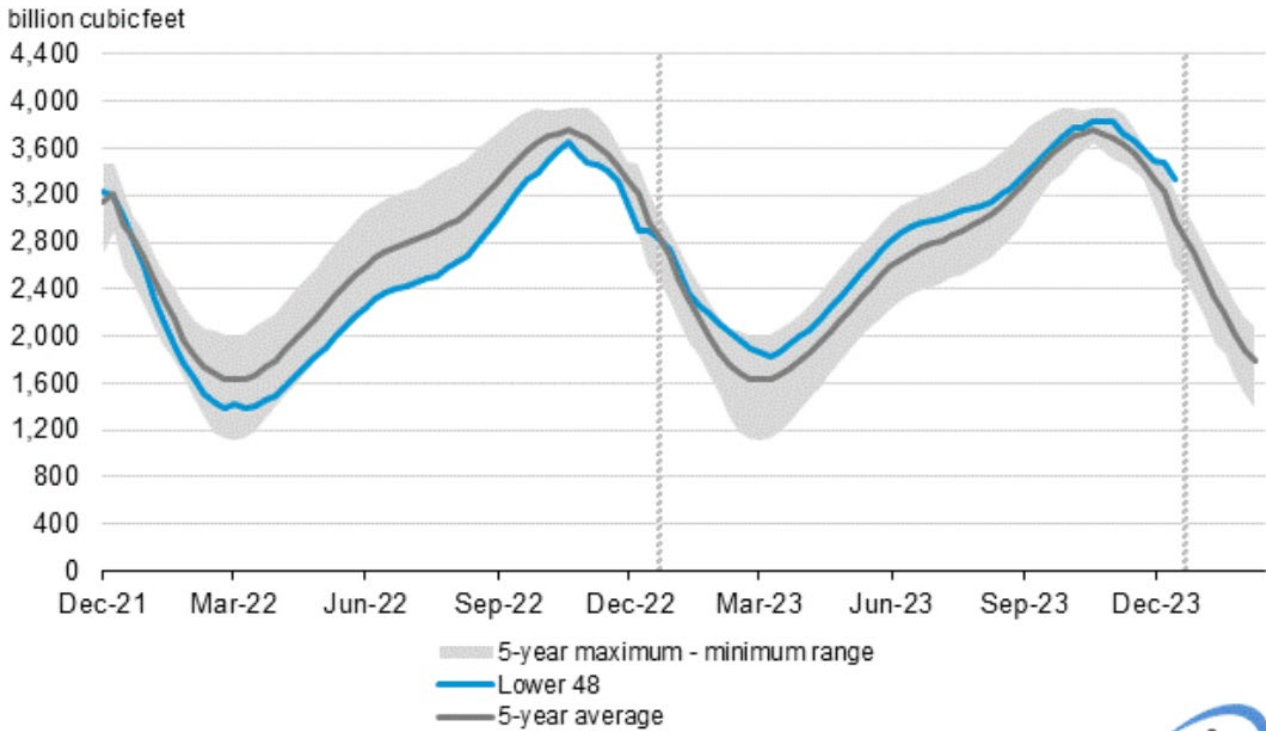


Source: Wood Mackenzie, Goldman Sachs Global Investment Research

Net withdrawals from storage totalled 14bcf for the week ending 29 December. Working natural gas stocks now total 3,476bcf, which is 399bcf more than the five-year average and 553bcf more than last year at this time (Figure 6). At 3,476 bcf, total working gas is above the five-year historical range.

Figure 6: US Lower 48 Weekly Working Gas in Underground Storage (Source: EIA)

Working gas in underground storage compared with the 5-year maximum and minimum



Data source: U.S. Energy Information Administration



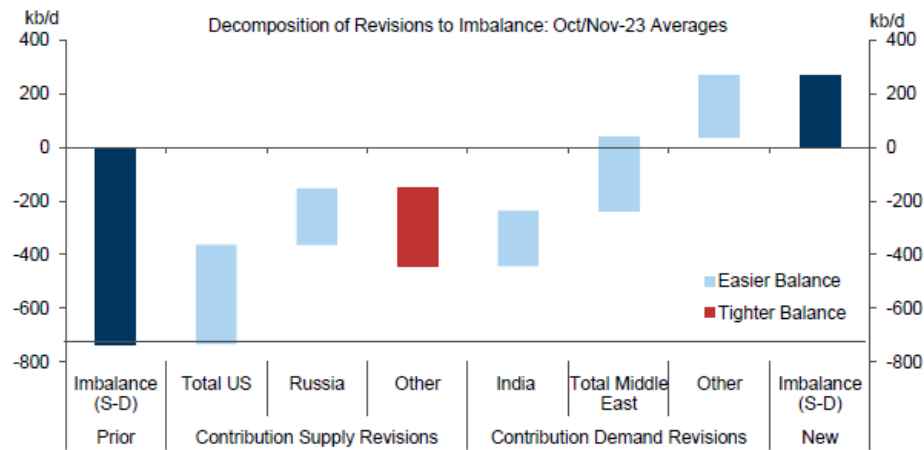
Note: The shaded area indicates the range between the historical minimum and maximum values for the weekly series from 2019 through 2023. The dashed vertical lines indicate current and year-ago weekly periods.

Oil Market

Oil prices dropped modestly in December with strong production from both US and Russia offsetting lower production from OPEC and lower than expected demand from India and the Middle East. These factors combined to deliver a modest supply surplus compared to prior projections of a deficit (Figure 7).

Figure 7: Revisions to Global Oil Supply and Demand (Source: GS)

Exhibit 1: Supply Beats in the US and Russia and a Miss in Middle Eastern Demand Led to a Modest Surplus (Against Deficit Expectations)

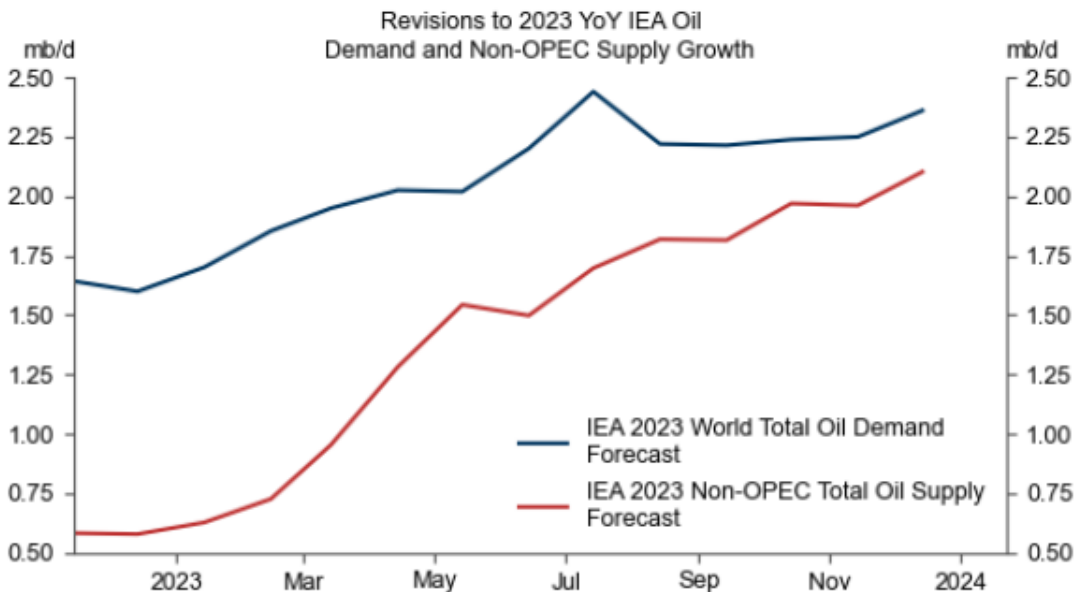


Source: IEA, Kpler, JODI, EIA, National Sources, Goldman Sachs Global Investment Research

Non-OPEC oil supply, mainly from the US, is growing faster than expected (Figure 8).

Figure 8: Revisions to Global Oil Demand and Non-OPEC Oil Supply (Source: IEA, GS)

Exhibit 3: Non-OPEC Oil Supply Is Growing Faster than Expected

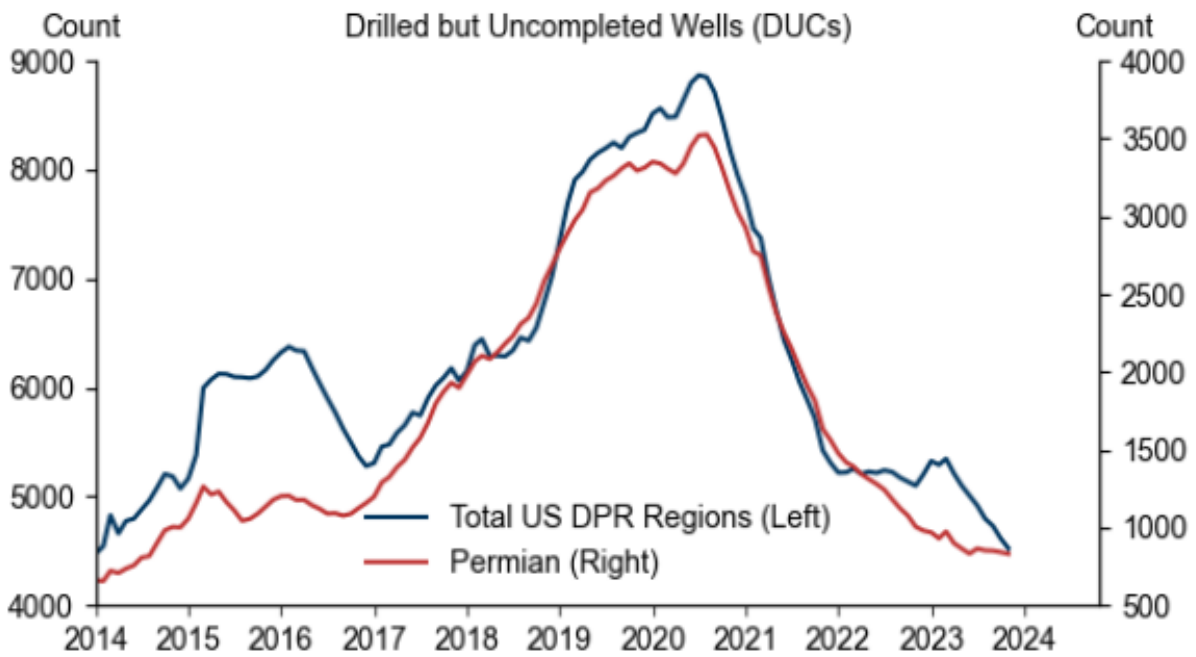


Source: IEA, Goldman Sachs Global Investment Research

The growth in US oil production has been increased by a material decline in the inventory of Drilled but Uncompleted Wells (DUCs). This has delivered a temporary boost to production that cannot be repeated without large increase in new drilling relative to completions (Figure 9).

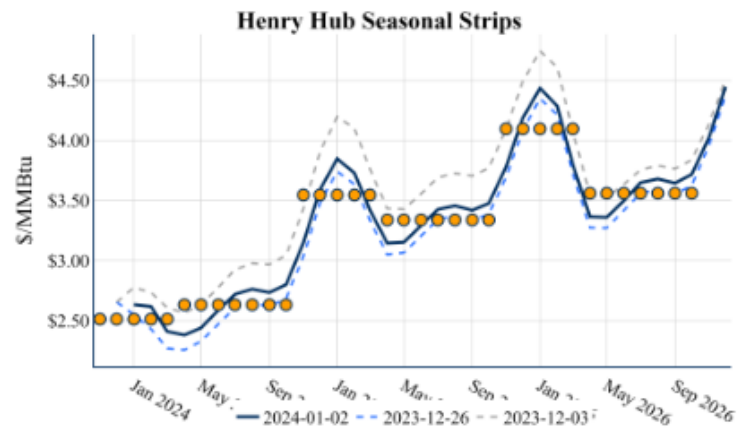
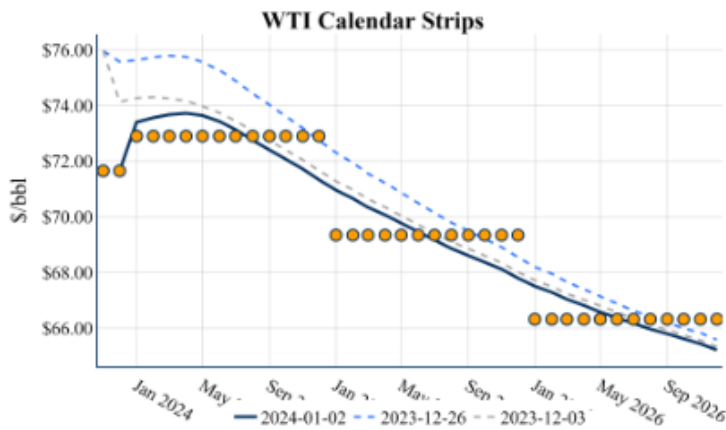
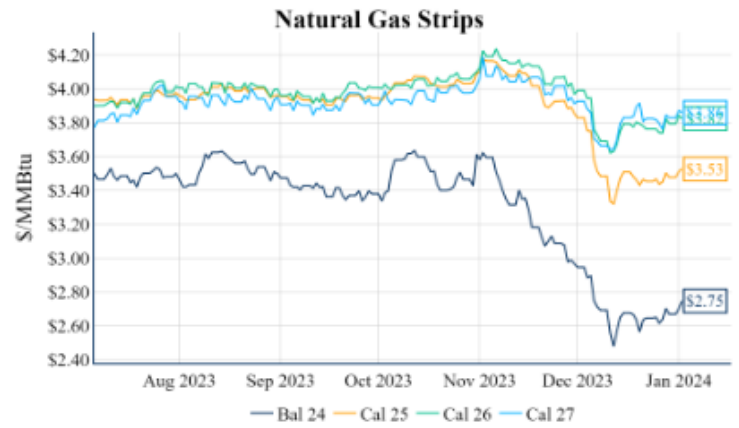
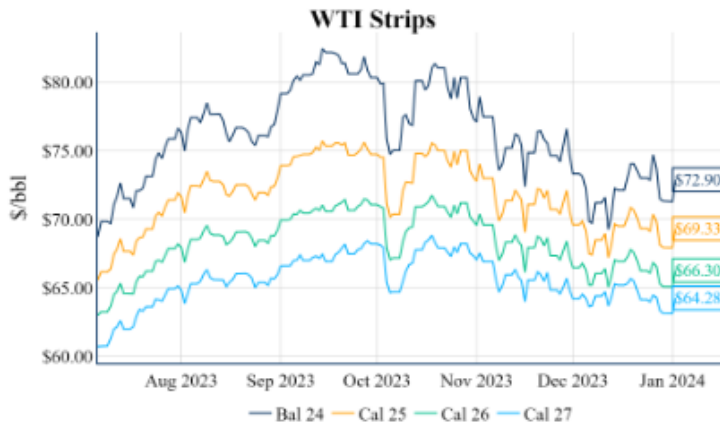
Figure 9: Drilled but Uncompleted Wells (Source: EIA, GS)

Exhibit 8: A Temporary Boost to Production from Drawing Inventories of Drilled but Uncompleted Wells (DUCs)



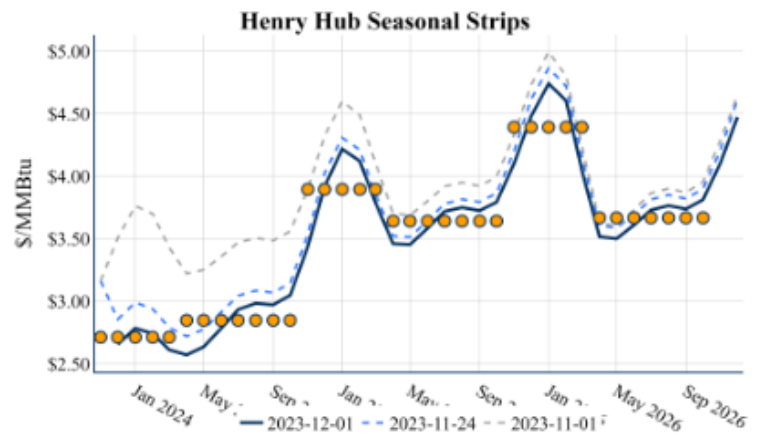
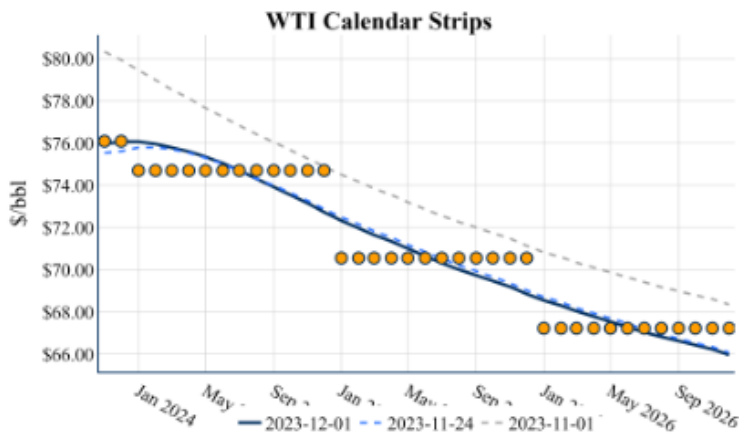
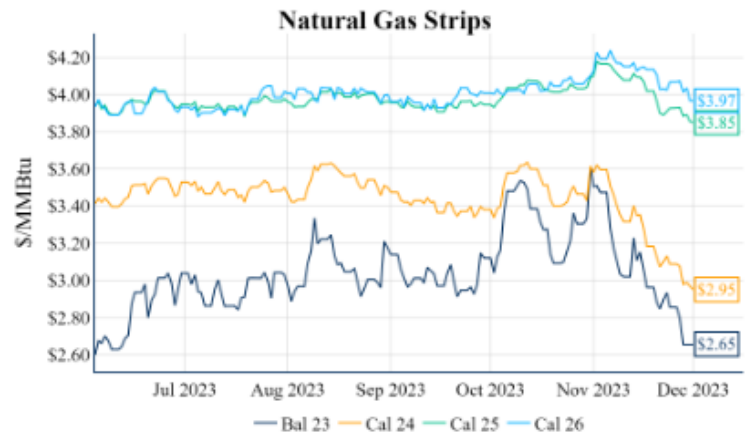
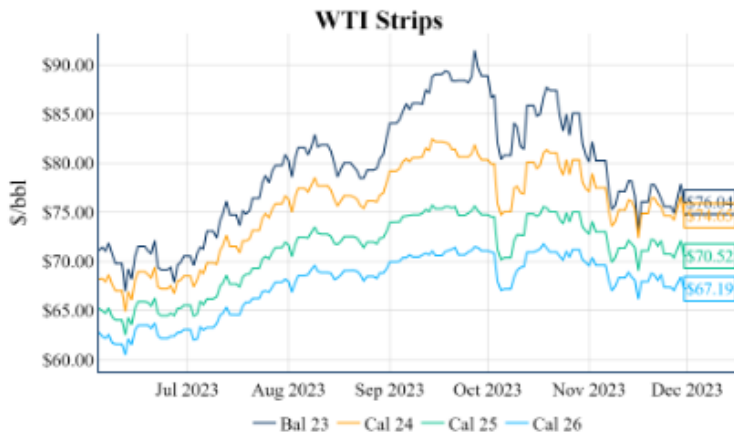
Total US Drilling Productivity Report regions include Anadarko, Appalachia, Bakken, Eagle Ford, Haynesville, Niobrara, and Permian.

Source: EIA, Goldman Sachs Global Investment Research

Gas and Oil Prices 2 January 2024


Swap Pricing	Bal 24	Cal 25	Cal 26
NYMEX WTI	\$72.91	\$69.35	\$66.32
ICE Brent	\$77.52	\$74.23	\$71.66
LLS	\$75.60	\$71.96	\$69.02
Mars	\$72.67	\$68.40	\$64.57
West TX Sour (WTS)	\$72.76	\$68.90	\$65.82
Dubai	\$76.94	\$73.49	\$70.62
Dated Brent	\$75.85	\$74.27	\$71.70
WCS-WTI	-\$15.60	-\$13.94	\$0.00

Swap Pricing	Month 1	Winter 23/24	Summer 24	Winter 24/25	Summer 25
Henry Hub Fixed	\$2.634	\$2.529	\$2.640	\$3.543	\$3.351
Eastern Gas South	-\$0.610	-\$0.603	-\$0.964	-\$0.879	-\$1.181
Waha	-\$0.467	-\$0.741	-\$0.710	-\$0.406	-\$0.689
TETCO M3	\$1.449	\$0.597	-\$0.896	\$0.472	-\$1.098
Houston Ship Channel	-\$0.168	-\$0.251	-\$0.315	-\$0.114	-\$0.309
Columbia Gulf Mainline	-\$0.243	-\$0.234	-\$0.283	-\$0.282	-\$0.298
Panhandle East	\$0.101	-\$0.047	-\$0.443	\$0.175	-\$0.393
NGPL MidCon	\$0.101	-\$0.019	-\$0.360	\$0.016	-\$0.412
SoCal	\$1.076	\$0.592	\$0.318	\$1.698	\$0.360
AECO	-\$1.080	-\$1.040	-\$1.180	-\$1.150	-\$1.070
Chicago City-Gates	\$0.255	\$0.106	-\$0.238	\$0.287	-\$0.278

Gas and Oil Prices 1 December 2023


Swap Pricing	Bal 23	Cal 24	Cal 25	Cal 26
NYMEX WTI	\$76.09	\$74.70	\$70.56	\$67.23
ICE Brent	\$80.81	\$78.85	\$75.17	\$72.35
LLS	\$79.03	\$77.17	\$72.60	\$69.93
Mars	\$76.59	\$74.37	\$69.88	\$65.48
West TX Sour (WTS)	\$76.44	\$74.52	\$70.13	\$66.73
Dubai	\$80.99	\$78.29	\$74.37	\$71.76
Dated Brent	\$0.00	\$78.97	\$75.29	\$72.42
WCS-WTI	-\$22.93	-\$15.67	-\$15.39	\$0.00

Swap Pricing	Month 1	Winter 23/24	Summer 24	Winter 24/25	Summer 25
Henry Hub Fixed	\$2.799	\$3.653	\$2.719	\$2.857	\$3.892
Eastern Gas South	-\$0.680	-\$1.211	-\$0.631	-\$1.073	-\$0.834
Waha	-\$0.040	-\$0.890	-\$0.387	-\$0.994	-\$0.491
TETCO M3	\$2.608	-\$1.055	\$1.425	-\$0.923	\$0.865
Houston Ship Channel	\$0.285	-\$0.295	\$0.107	-\$0.328	-\$0.094
Columbia Gulf Mainline	-\$0.260	-\$0.272	-\$0.262	-\$0.268	-\$0.255
Panhandle East	\$0.400	-\$0.481	\$0.162	-\$0.444	\$0.082
NGPL MidCon	\$0.296	-\$0.461	\$0.112	-\$0.408	-\$0.041
SoCal	\$2.450	\$0.596	\$1.684	\$0.750	\$2.020
AECO	-\$0.870	-\$1.114	-\$0.847	-\$1.170	-\$1.177
Chicago City-Gates	\$0.590	-\$0.287	\$0.380	-\$0.230	\$0.289

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