

October 2024

# Longreach Energy Holdings LLC

### FIRM INFORMATION

Investment Manager Longreach Alternatives Ltd ABN 25 082 852 364 AFSI 246747

Sub-Advisor Longreach Energy Holdings LLC Delaware registered #565928

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### 1.0 Market and Portfolio Commentary

### 1.1 Macro Industry Commentary

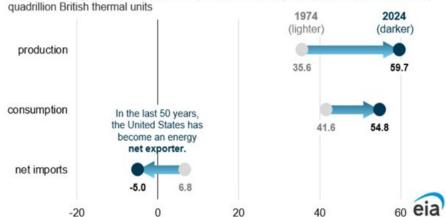
US Henry Hub prompt gas prices fell in October as the US experienced relatively warm autumn weather. Month on more the prompt fell from \$2.93/mmbtu at close on 30 September to \$2.71/mmbtu at close on 31 October. Calendar 2024 also fell, beginning October at \$3.14/mmbtu and closing, with only the December contract left to trade at the prompt \$2.71/mmbtu. Calendar 2025 fell from \$3.39/mmbtu to \$3.03/mmbtu over the month.

Oil prices rose modestly primarily due to increased political tension in the Middle East. The prompt began October at \$68.17/bbl and closed the month at \$69.26/bbl. Calendar 2024 started the month at \$67.88/bbl and closed at \$69.97/bbl. Calendar 2025 increased from \$66.80/bbl to 68.16/bbl.

In October 1974, the Federal Energy Administration – the predecessor of the US Department of Energy – published the first issue of the Monthly Energy Review (MER), an overview of energy produced and consumed in the United States. In the 50 years since the first publication, the US energy sector has transformed.

Between January and July 2024 – the most recent data available – total US energy production was 68%, or 24.0 quadrillion British thermal units (quads), more than the same period in 1974 (Figure 1). US energy consumption has increased steadily since 1974, although total consumption growth is less than total production growth. Between January and July 2024, US energy consumption was 32%, or 13.2 quads, more than the same period in 1975.

Figure 1: US Total Energy Production, Consumption and Net Imports (Jan-Jul 1974 vs 2024) (Source: EIA)



U.S. total energy production, consumption, and net imports (Jan–Jul, 1974 vs. 2024) quadrillion British thermal units

Data source: U.S. Energy Information Administration, Monthly Energy Review

Note: Positive net imports mean the United States imported more energy than it exported, while negative net imports mean the United States exported more energy than it imported. Data are for the first seven months of 1974 and 2024. Total energy includes coal, natural gas, petroleum, nuclear, and renewables. See primary energy consumption in the EIA Glossary.

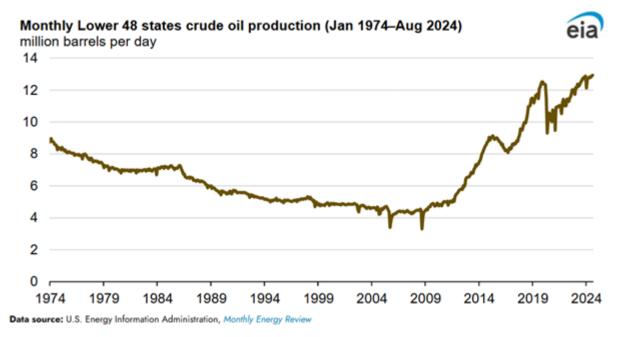
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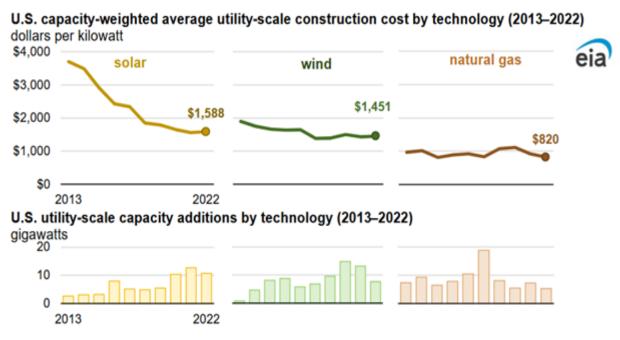
The increase in energy production over the last two decades (Figure 2) has turned the United States into the world's largest crude oil and natural gas producer today and from a net energy importer to a net energy exporter starting in 2019.





Construction of natural gas-fired utility scale electricity generation remains cheaper than solar or wind alternatives (Figure 3). Construction costs for natural gas-fired electricity generators decreased by 11% between 2021 and 2022. Average construction costs for solar generators increased by 1.7% in 2022, and for wind turbines they increased by 1.6%.



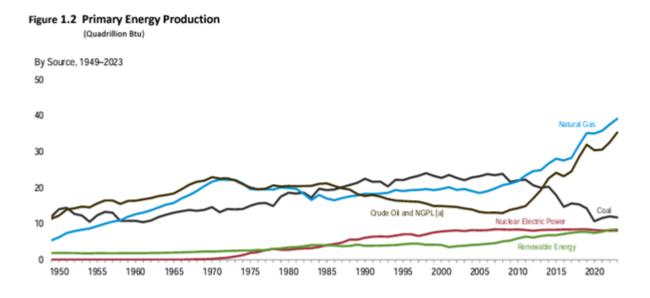


Data source: U.S. Energy Information Administration, Electric Generator Construction Costs and Annual Electric Generator Inventory

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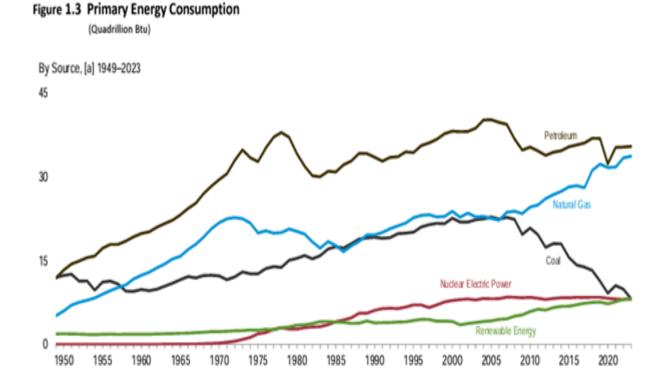
### The October MER highlights continued growth in US natural gas and oil production (Figure 4).

Figure 4: US Primary Energy Production (Source: EIA)



Energy consumption is also dominated by petroleum and natural gas (Figure 5).

Figure 5: US Primary Energy Consumption (Source: EIA)



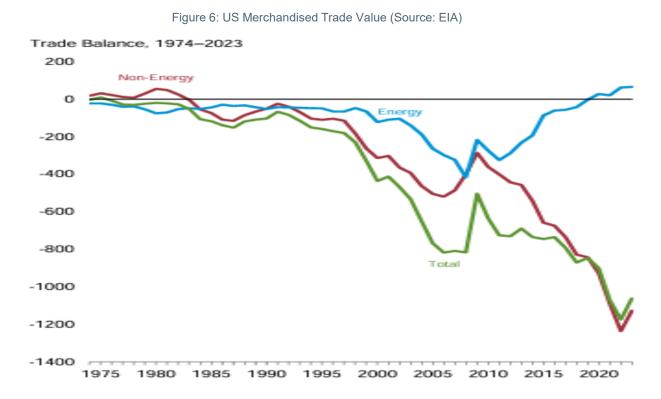
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Transformation of US energy balance from net importer to net exporter has had a large impact on the US trade balance (Figure 6).



Efficiency gains have delivered modest declines in energy consumption per capita since the late 1970's while primary energy consumption per real dollar of GDP has seen steady material declines, underwriting US economic competitiveness (Figure 7).



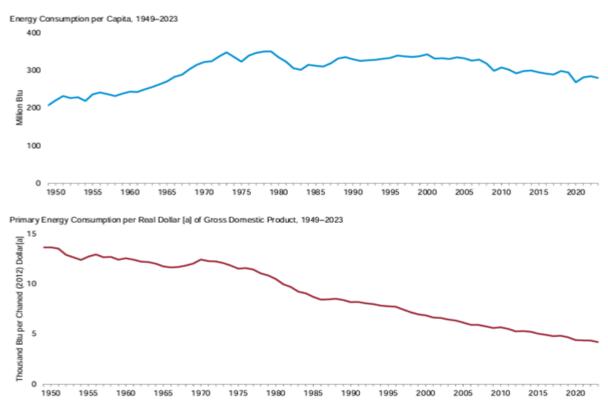


Figure 1.7 Primary Energy Consumption and Energy Expenditures Indicators

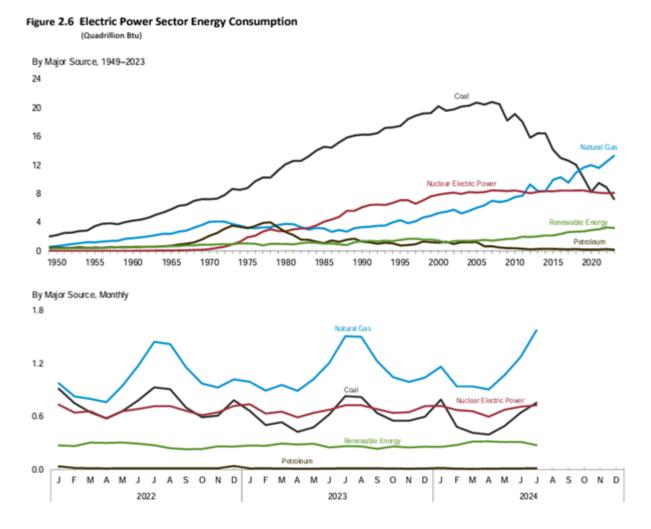
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Electric power generation is dominated by natural gas (top Figure 8). The flexibility of natural gas generation with resultant seasonal demand swings is shown bottom of Figure 8.

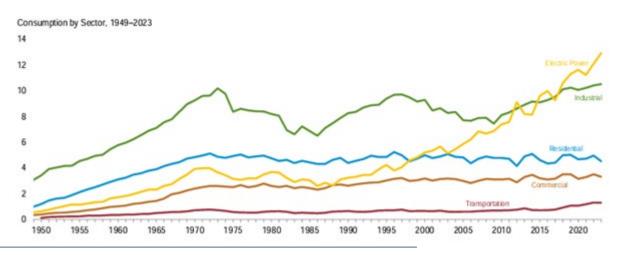
#### Figure 8: Electric Power Sector Energy Consumption (Source: EIA)



Sector analysis of natural gas demand shows rapid growth in electric power, steady growth in industrial while residential, commercial and transportation sector demand is relatively flat (Figure 9).



Natural Gas (trillion cubic feet)

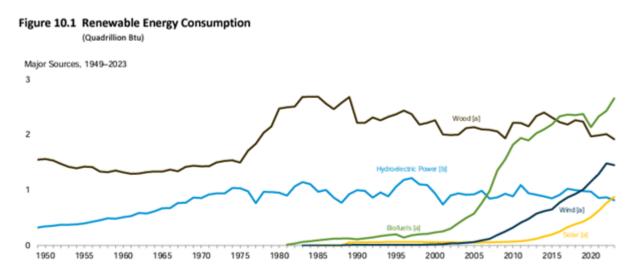


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Renewable energy consumption is dominated by wood and biofuels, followed by wind and then solar and hydroelectric power (Figure 10).

Figure 10: Renewable Energy Consumption (Source: EIA)



The latest Baker Hughes rig count data follows. In October US total land rigs rose by 2 from 566 to 568. Total oil rigs fell remained at 479, gas rigs were also unchanged at 102. Oil and gas rig totals include 16 offshore rigs working in September.

| Baker Hughes ≽            | <b>NORTH AM</b><br>1/11/2024 | ERICA | Rotary Rig Co | ount |          |
|---------------------------|------------------------------|-------|---------------|------|----------|
| Location                  | Week                         | +/-   | Week          | +/-  | YearAgo  |
| Inland Waters             | 1                            | 0     | 1             | -2   | 3        |
| Land                      | 568                          | 0     | 568           | -26  | 594      |
| Offshore                  | 16                           | 0     | 16            | -5   | 21       |
| United States Total       | 585                          | 0     | 585           | -33  | 618      |
| Gulf of Mexico            | 14                           | 0     | 14            | -5   | 19       |
| Canada                    | 213                          | -3    | 216           | 17   | 196      |
| North America             | 798                          | -3    | 801           | -16  | 814      |
| U.S. Breakout Information | This Week                    | +/-   | Last Week     | +/-  | Year Ago |
| Gas                       | 102                          | 1     | 101           | -16  | 118      |
| Oil                       | 479                          | -1    | 480           | -17  | 496      |
| Miscellaneous             | 4                            | 0     | 4             | 0    | 4        |
| Directional               | 50                           | -4    | 54            | -4   | 54       |
| Horizontal                | 517                          | 4     | 513           | -32  | 549      |
| Vertical                  | 18                           | 0     | 18            | 3    | 15       |

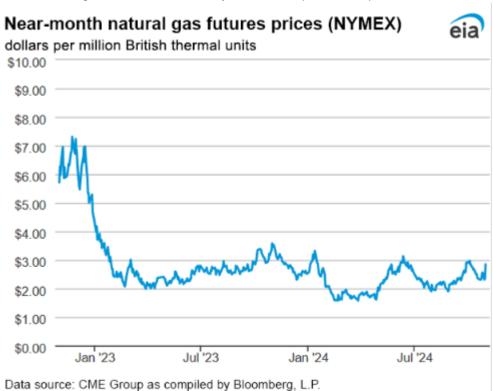
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### Gas Market

Henry Hub prompt prices declined early in October before recovering back towards \$3.00/mmbtu towards the end of the month (Figure 11).

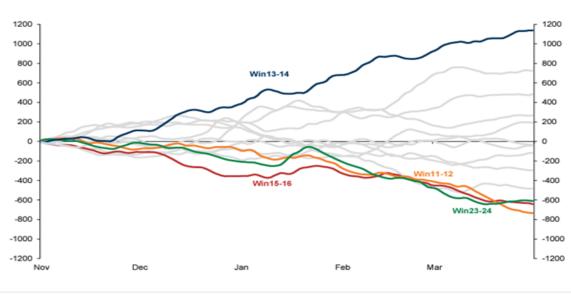
Figure 11: Near Month Henry Hub Futures (Source: EIA)



October and early November weather was relatively warm however, because early autumn weather is usually mild, the reduction in gas demand from this weather was only about 73 bcf. The historic range of demand outcomes over the course of the winter heating season is over 1,800 bcf (Figure 12).

Figure 12: Winter Weather Cumulative Impact on US Gas Demand (Source: Maxar, GS)

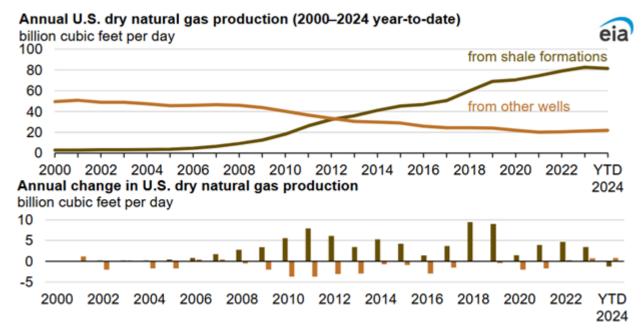
Exhibit 2: The historical range of the US winter's cumulative impact on gas demand is over 1.8 Tcf Winter weather cumulative impact on US gas demand since 2011; Bcf



Source: Maxar, Goldman Sachs Global Investment Research

Low prices have had their expected impact on natural gas supply. US natural gas production from shale and tight formations, which accounts for 79% of dry natural gas production, decreased slightly in the first nine months of 2024 compared with the same period in 2023 (Figure 13). If the trend holds for the remainder of 2024, it would mark the first annual decrease in US shale gas production since the EIA started collecting these data in 2000.

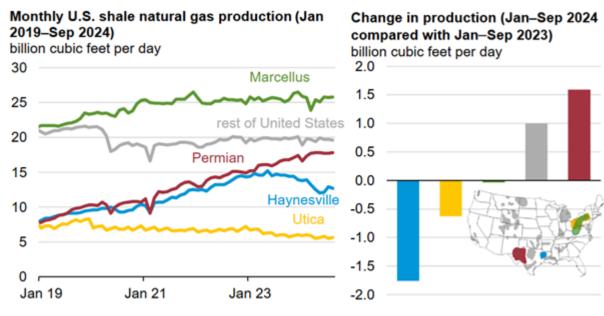




Data source: U.S. Energy Information Administration, *Short-Term Energy Outlook* Note: The formations included in our U.S. shale natural gas production estimates are determined by identified tight and shale formations. Year-to-date 2024=January-September.

The decline in shale gas production so far this year has been driven primarily by decline in production in the Haynesville and Utica plays (Figure 14). From January through September 2024, shale gas production decreased by 12% (1.8bcfd) in the Haynesville and by 10% (0.6bcfd) in the Utica compared with the same period in 2023. Over the same period, shale gas production in the Permian play grew by 10% (1.6bcfd). Production in the Marcellus play, which leads US shale gas production, remained flat.





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

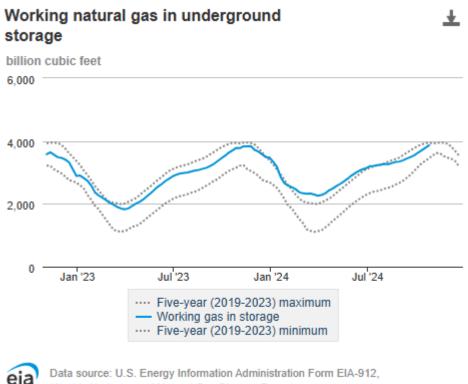
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Working inventories of natural gas totalled 3,863 bcf in the week ended 25 October (Figure 15). This is 178 bcf (5%) more than the five-year average and 107 bcf (3%) more than last year at this time. The average rate of injections into storage has been 22% lower than the five-year average through the refill season (April through October).

Figure 15: US Working Gas Inventories (Source: EIA)



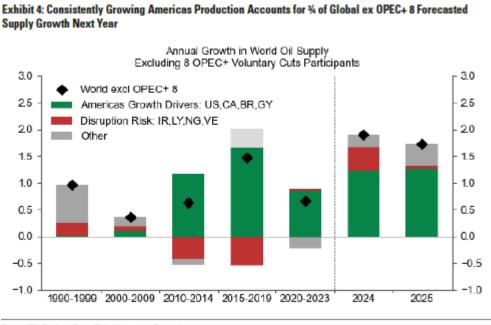
Data source: U.S. Energy Information Administration Form EIA-912, Weekly Underground Natural Gas Storage Report



#### **Oil Market**

The US continues to drive growth in non-OPEC+ (OPEC plus Russia) oil supply (Figure 16).

Figure 16: Annual Growth in World Oil Supply excluding OPEC+ (Source: IEA, via GS)



Source: IEA, Goldman Sachs Global Investment Research

Geopolitical risk has provided support to oil prices over recent months. Israel's retaliation after recent attacks from Iran were considered relatively mild thereby reducing this risk premium. The immediate market response was a 6% fall in the primary international benchmark Brent contract (Figure 17).

Figure 17: Brent Crude, S&P 500 and Geopolitical Risk (Source: various, via GS)

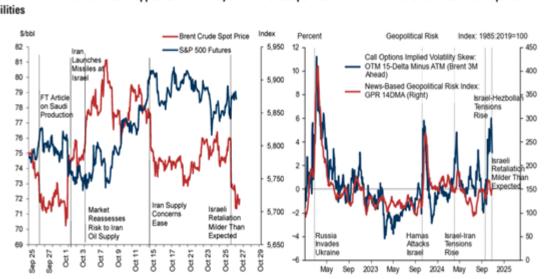


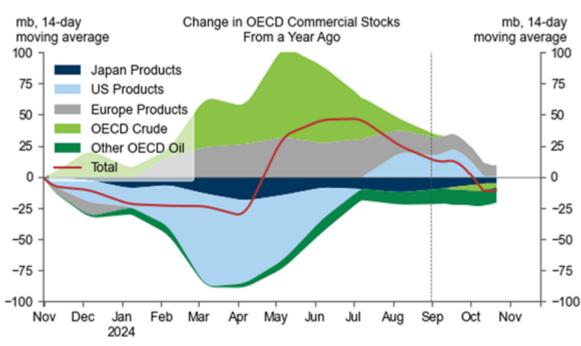
Exhibit 1: The Brent Crude Price Dropped 6% on Monday on a Lower Geopolitical Risk Premium as Israeli Retaliation Spared Iranian Energy Facilities

Source: ICE, Bloomberg, Haver, Goldman Sachs Global Investment Research



OECD commercial oil stocks are 19 mmbbl lower than they were in October 2023 however projections indicate a well-supplied global oil market through 2025 (Figure 18).





### Exhibit 10: Our OECD Commercial Stocks Nowcast Is Down 19mb From Its October 2023 Level

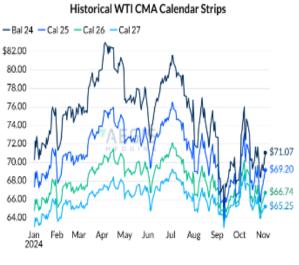
The dotted line indicates the latest realized observation from the IEA (end of June).

Source: IEA, Kpler, DOE, Euroilstocks, PAJ, ARA PJK, Haver, Goldman Sachs Global Investment Research

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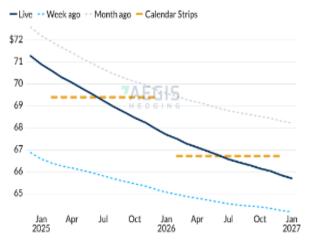
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#### Gas and Oil Prices 1 November 2024



Updated - 2024-11-05 08:00

WTI CMA Calendar Strips



Updated - 2024-11-05 18:45

### **Crude Oil Swap Pricing**

|                       | Bal 24   | Cal 25   | Cal 26   |
|-----------------------|----------|----------|----------|
| NYMEX WTI             | \$71.56  | \$69.56  | \$67.03  |
| LLS                   | \$73.43  | \$71.84  | \$69.86  |
| Mars                  | \$70.30  | \$68.04  | \$65.31  |
| Dubai                 | \$74.48  | \$72.47  | \$70.61  |
| WCS-WTI               | -\$13.36 | -\$13.73 | -\$15.35 |
| ICE Brent             | \$75.27  | \$73.51  | \$71.29  |
| Dated Brent           | NaN      | \$73.55  | \$71.31  |
| West TX Sour<br>(WTS) | \$71.09  | \$69.17  | \$66.53  |

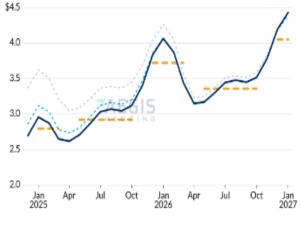
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#### Henry Hub Seasonal Strips



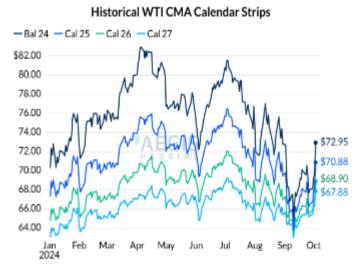


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#### Natural Gas Basis Swap Pricing

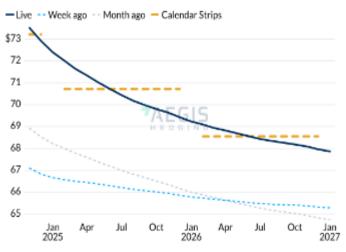
|                           | prompt   | Winter<br>24/25 | Summer<br>25 | Summer<br>26 | Winter<br>25/26 |
|---------------------------|----------|-----------------|--------------|--------------|-----------------|
| Henry Hub<br>Fixed        | \$2.781  | \$2.867         | \$2.951      | 3.383        | \$3.748         |
| Panhandle<br>East         | -\$0.276 | \$0.079         | \$-0.490     | -0.520       | \$0.110         |
| Eastern Gas<br>South      | -\$0.626 | \$-0.563        | \$-0.806     | -0.962       | \$-0.721        |
| Waha                      | -\$3.016 | \$-1.604        | \$-1.779     | -1.641       | \$-1.463        |
| TETCO M3                  | -\$0.456 | \$0.444         | \$-0.657     | -0.803       | \$0.523         |
| Houston Ship<br>Channel   | -\$0.436 | \$-0.293        | \$-0.396     | -0.447       | \$-0.364        |
| Columbia<br>Gulf Mainline | -\$0.176 | \$-0.162        | \$-0.242     | -0.275       | \$-0.178        |
| NGPLTXOK                  | -\$0.326 | \$-0.317        | \$-0.377     | -0.404       | \$-0.307        |

#### Gas and Oil Prices 1 October 2024



As of yesterday's settle

#### WTI CMA Calendar Strips

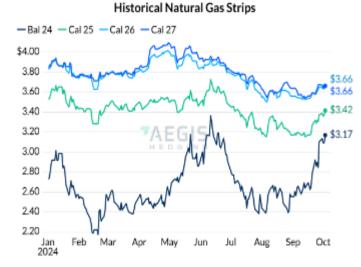


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### **Crude Oil Swap Pricing**

|                       | Bal 24   | Cal 25   | Cal 26   |
|-----------------------|----------|----------|----------|
| NYMEX WTI             | \$73.83  | \$71.14  | \$68.72  |
| LLS                   | \$75.91  | \$73.67  | \$71.52  |
| Mars                  | \$72.45  | \$69.96  | \$66.96  |
| Dubai                 | \$76.82  | \$74.66  | \$72.98  |
| WCS-WTI               | -\$13.54 | -\$13.89 | -\$16.40 |
| ICE Brent             | \$77.68  | \$75.46  | \$73.39  |
| Dated Brent           | NaN      | \$75.53  | \$73.30  |
| West TX Sour<br>(WTS) | \$73.62  | \$70.59  | \$68.21  |

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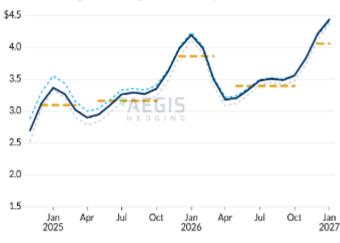
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As of yesterday's settle

#### Henry Hub Seasonal Strips





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#### Natural Gas Basis Swap Pricing

|                         | Month 1  | Summer<br>25 | Winter<br>24/25 | Summer<br>26 | Winter<br>25/26 |
|-------------------------|----------|--------------|-----------------|--------------|-----------------|
| Henry Hub<br>Fixed      | \$2.660  | \$3.160      | \$3.089         | 3            | \$3.856         |
| Panhandle<br>East       | -\$0.405 | \$-0.515     | \$0.117         | -1           | \$0.087         |
| Eastern Gas<br>South    | -\$0.800 | \$-0.927     | \$-0.634        | -1           | \$-0.803        |
| Waha                    | -\$1.025 | \$-1.214     | \$-0.785        | -1           | \$-1.157        |
| TETCO M3                | -\$0.603 | \$-0.780     | \$0.539         | -1           | \$0.587         |
| Houston Ship<br>Channel | -\$0.380 | \$-0.438     | \$-0.310        | -0           | \$-0.430        |



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