

OIL

Spot prices elevated during February, pre-war

The WTI (West Texas Intermediate) and Brent spot oil prices stayed elevated in February reflecting elevated geopolitical concerns, especially around Iran and a net long speculative position that nearly doubled over the month. Brent and WTI closed the month at around \$71/bl and \$67/bl respectively, with an estimated \$5-10/bl of near-term risk premium. War commenced in the Middle East on the final day of the month, leading to sharply higher prices thereafter.

While not explicitly happening in February, we note that Brent oil prices have risen to over \$80/bl in early March (at the time of writing) as shipping is disrupted through the Strait of Hormuz and Middle Eastern producers start to shut in oil production. Discussion around potential energy scenarios for the war are covered in this month's Managers Comments section.

NATURAL GAS

Global gas prices weaker, then rallied hard on war

US, European and Asian gas prices all weakened in February as the cold weather receded. Record inventories reductions in the US and seasonally low European gas inventories were supporting factors. European and Asian gas prices rallied strongly at the start of March as LNG (liquefied natural gas) supplies were affected at the start of the war in the Middle East.

Asian and European LNG prices rose sharply at the start of March as 20% of global LNG supplies transit the Strait of Hormuz and the world's largest LNG producer, QatarEnergy LNG, temporarily shut in production. More details in our Managers Comments section.

EQUITIES

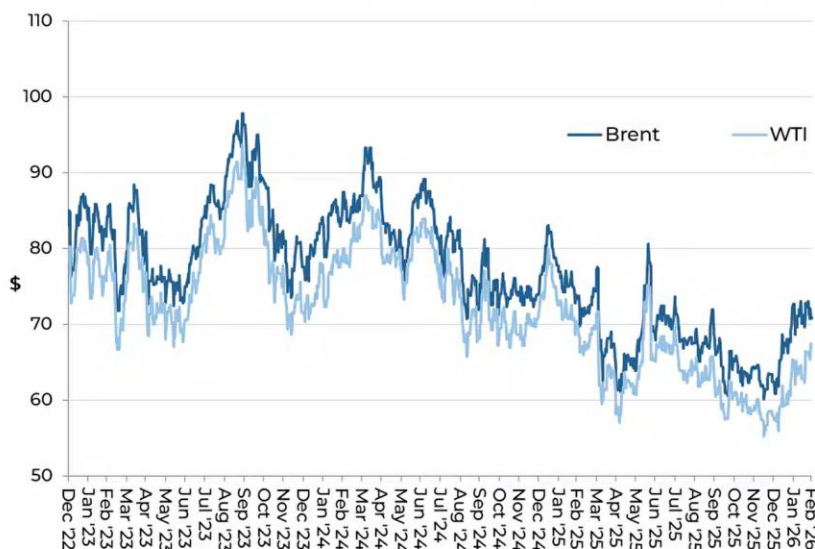
Energy outperforms the broad market in February

The MSCI World Energy Index (net return) rose by 8.9% (USD) in February, outperforming the MSCI World Index (net return), which rose by 0.7%.

FEBRUARY IN REVIEW

Oil market

Oil price (WTI and Brent \$/barrel): December 2022 to February 2026



Source: Bloomberg; Guinness Atkinson

The West Texas Intermediate (WTI) oil price began February at \$65/bbl and traded in a reasonably tight range during the month before closing on its highs at \$67/bbl. WTI has averaged just over \$62/bbl so far this year, having averaged \$57/bbl in 2025, \$76/bbl in 2024 and \$78/bbl in 2023. In contrast, Brent oil opened at \$73/bbl and closed lower at just under \$71/bbl. Brent has averaged around \$69/bbl so far in 2026, having averaged \$62.5/bbl in 2025, \$80/bbl in 2024 and \$83/bbl in 2023. The gap between the WTI and Brent benchmark oil prices closed over the month, ending February at around \$4/bbl. The Brent-WTI spread has averaged around \$5/bbl in recent years.

Factors which strengthened WTI and Brent oil prices in February:

- **Increased geopolitical risk, especially around Iran**

February saw elevated geopolitical risk especially focused around the threat of military action in the Middle East. Our Managers Comments discusses three scenarios relating to the war that commenced on the last day of the month. Prior to the start of hostilities, we believe that a risk premium of around \$5-10/bbl was present in the oil price.

- **Chinese inventory purchasing**

Based on analysis from Morgan Stanley, China's pace of inventory building accelerated towards the end of 2025 (reaching 2.3m b/day in December) and continued at an elevated rate (over 1m b/day) in January 2026. While absolute data is hard to come by, Morgan Stanley estimate that China's crude oil inventories rose by around 240m barrels in 2025, effectively taking 0.6-0.7m b/day of production out of the global oil market.

Factors which weakened WTI and Brent oil prices in February:

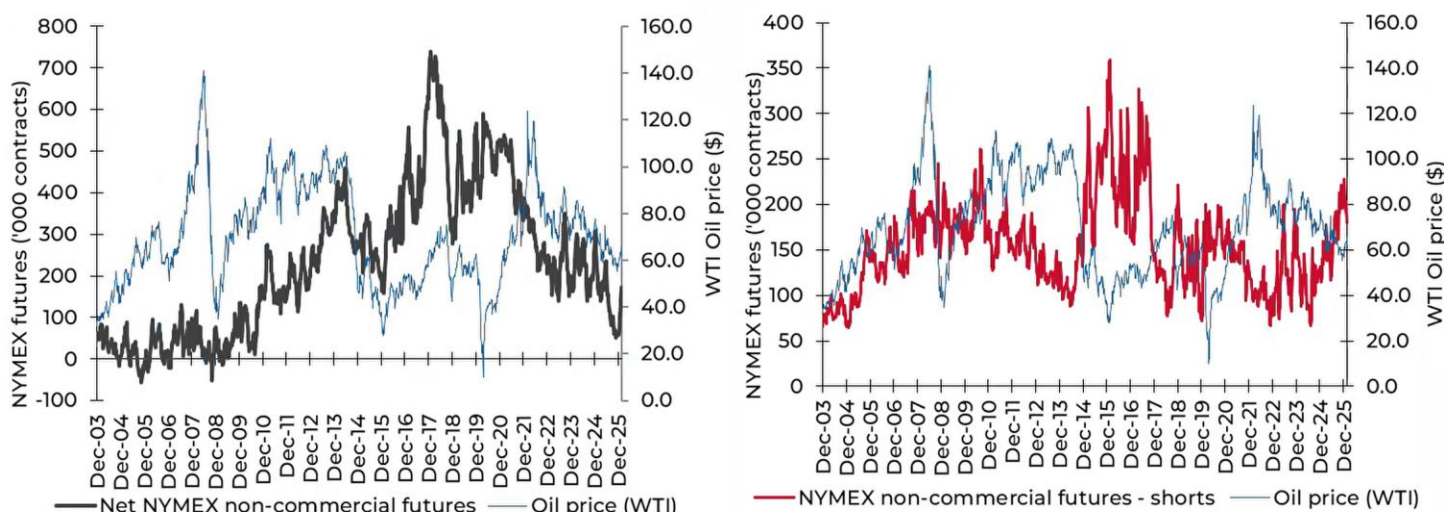
- **Oversupplied oil market**

During 2025, the OPEC+ group unwound quota cuts of around 2.5m b/day, leading to around 1.5m b/day of oil entering the market. While OPEC+ have recently stopped unwinding these quota cuts, the global oil market remains in oversupply, although the scale of the oversupply is debatable. The IEA estimate in excess of 3m b/day of oversupply while OPEC sees the market in small deficit.

Speculative and investment flows

New York Mercantile Exchange (NYMEX) net non-commercial crude oil futures open position was 173,000 contracts long at the end of February versus 97,000 contracts long at the end of February. The net position peaked in February 2018 at 739,000 contracts long. Typically, there is a positive correlation between the movement in net position and movement in the oil price. The gross short position fell to 180,000 contracts at the end of February versus 198,000 at the end of the previous month.

NYMEX Non-commercial net and short futures contracts: WTI January 2004 – February 2026



Source: Bloomberg LP/NYMEX/ICE (2026)

OECD stocks

OECD total product and crude inventories at the end of January (latest data point) were estimated by the IEA to be 2,813m barrels, down by 30m barrels versus the level reported for the previous month. The move in January compares to a 10-year average (pre-COVID) draw of 8m barrels, implying that the OECD market was undersupplied by around 0.7m b/day. The significant oversupply situation in 2020 pushed OECD inventory levels close to maximum capacity in August 2020 (about 3.3bn barrels), with subsequent tightening taking inventories below normal levels.

OECD total product and crude inventories, monthly, 2010 to January 2026



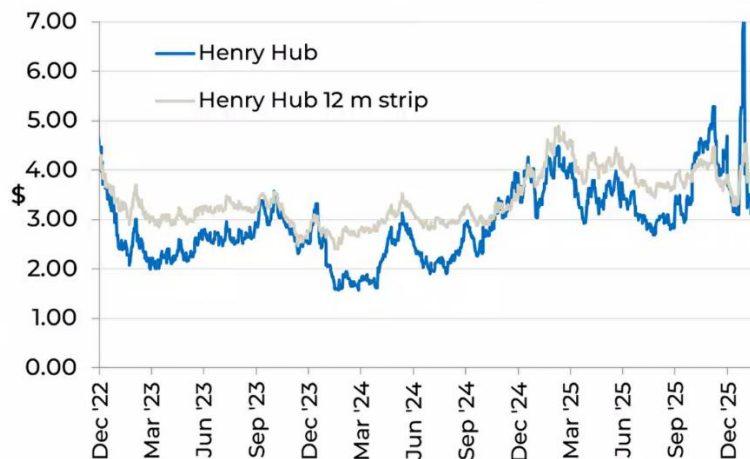
Source: IEA Oil Market Reports (February 2026 and older)

Natural gas market

The US natural gas price (Henry Hub front month) opened February at \$4.35/Mcf (1,000 cubic feet) and weakened steadily during the month to close at \$2.86/Mcf. The spot gas price has averaged \$3.66/Mcf so far in 2026, having averaged \$3.63/Mcf in 2025, \$2.41/Mcf in 2024 and \$2.67/Mcf in 2023.

The 12-month gas strip price (a simple average of settlement prices for the next 12 months' futures prices) traded in a similar but less extreme pattern, opening at \$4.53/Mcf and closing at \$3.58/Mcf. The strip price has averaged \$3.72/Mcf so far in 2026, having averaged \$4 in 2025, \$2.98 in 2024 and \$3.19 in 2023.

Henry Hub gas spot price and 12m strip (\$/Mcf): December 2022 to February 2026



Source: Bloomberg LP, February 2026

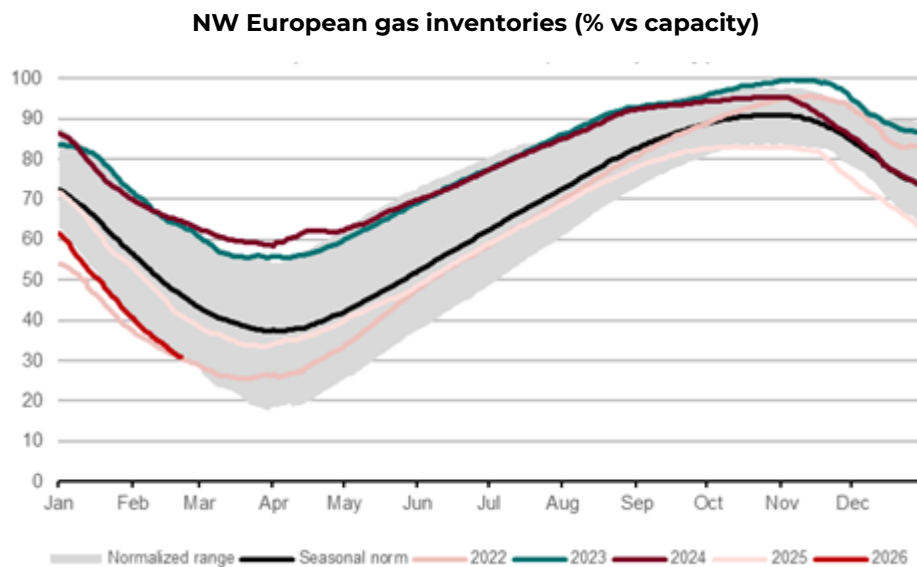
Factors which strengthened the US gas price in February included:

- **US arctic blast**

The arrival of winter storm Fern caused significant short-term problems for the US gas market during January and the residual effect was still felt (albeit in a declining manner) in US markets during February. The cold snap caused wellhead freeze-offs (production losses) that peaked at 16-17 bcf/day, representing around 15% of total US supply, while heating loads surged to around 62 bcf/day, around 15 bcf/day higher than normal seasonal levels. The withdrawal from inventory for the week ending 30 January 2026 was a record 360bcf.

- **Low European natural gas inventories**

Gas prices in Europe were also affected as winter weather kept heating demand high while inventories remained below normal levels as the market was positioned to receive greater levels of US LNG in the coming months. Inventories currently sit at around 30% full, substantially lower than the seasonal norm of around 45% at this time of year. Wood Mackenzie believe that European natural gas storage is on course to end the winter season at 22% full, the lowest level since March 2018.

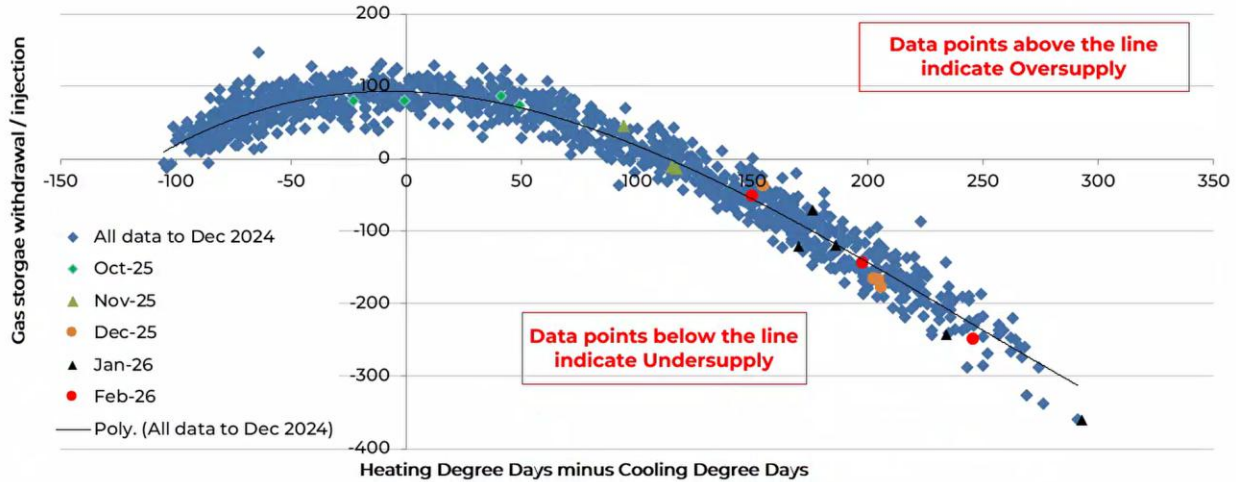


source: DNB

- **Market undersupplied (ex-weather effects)**

Adjusting for the impact of weather, the US gas market was, on average, around 2-3 bcf/day undersupplied during January and February. This is a change to the looser markets over the earlier part of the summer, as illustrated in the chart below.

Weather-adjusted US natural gas inventory injections and withdrawals



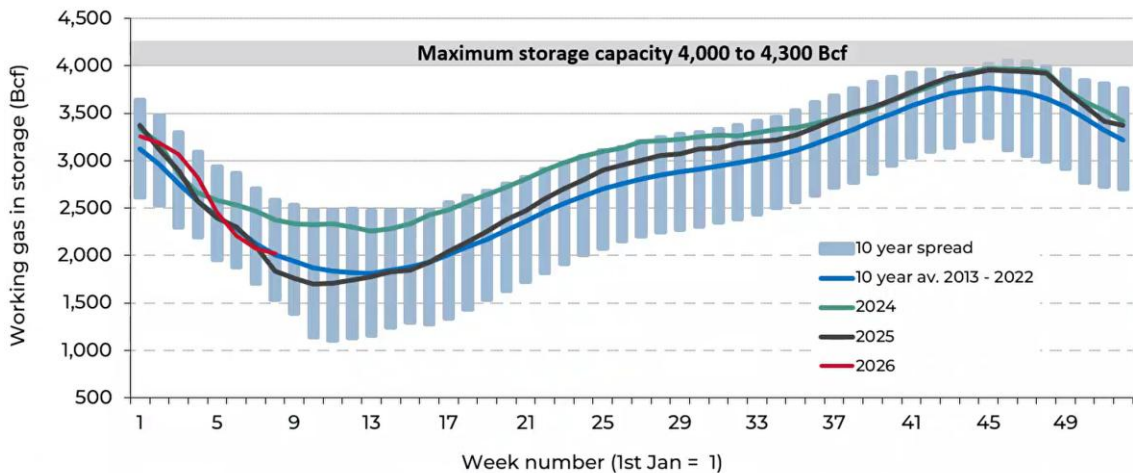
Source: Bloomberg LP; Guinness Atkinson; February 2026

Factors which were negative for the US gas price in February included:

- **Natural gas in inventories just above the 10-year average**

Unlike the European gas market, US natural gas inventories started February above 10-year average levels. While they drew to the ten-year average during the month, the greater inventory cushion limited positive price movement.

Deviation from 10yr US gas storage norm



Source: Bloomberg; Energy Information Administration (EIA), February 2026

MANAGERS' COMMENTS

War in the Middle East: three energy scenarios

This month we replicate a report that we published on Monday 2nd March that considers three broad scenarios following the outbreak of conflict in the Middle East with associated oil, gas and energy equity implications.

The three scenarios considered, with escalating impact to the energy sector, are as follows:

Scenario one: the conflict is short-lived, with limited disruption to physical oil supplies and parties return to a negotiated outcome.

Scenario two: the conflict is protracted, with physical shipments of oil and natural gas impacted but not stopped entirely, despite Iranian efforts.

Scenario three: the conflict is protracted and becomes a wider war as other countries get involved. Iran is successful in shutting off a higher proportion of oil & gas supply through the Strait of Hormuz for a prolonged period.

As a reminder, Iran currently produces around 3.5 million barrels per day (3.5% of world oil supply) of which around 1.7m b/day is exported, predominantly to China. Iran holds the world's fourth-largest oil reserves and second-largest gas reserves. There have been several years of Iranian export volatility, driven by western sanctions against the country's nuclear program.

Current situation

Before reviewing the scenarios, the following is a summary of events at the time of originally writing this report (around midday on Monday 2nd March):

- The United States and Israel have commenced military strikes on Iran with the stated aim of regime change in Iran.
- Iran has announced its intention to shut the Strait of Hormuz and a number of oil tankers have been attacked. Tanker flow has slowed sharply, with around two hundred tankers dropping anchor close to the Strait.
- Ayatollah Ali Khamenei, Iran's supreme leader, has been killed along with several key military and political leaders.
- Iran has announced its intention to shut the Strait of Hormuz and a number of oil tankers have been attacked. Tanker flow has slowed sharply, with around two hundred tankers dropping anchor close to the Strait.
- A number of oil majors and trading houses have suspended tanker sailings through the Strait of Hormuz for several days.
- OPEC has announced 0.2m b/day of quota increase for April 2026 loadings.

Scenario one

The conflict is short lived with limited disruption to physical oil supplies and parties return to a negotiated outcome.

This is the least disruptive scenario which sees the conflict conclude quickly.

For oil supply in this scenario, there is limited disruption through the Strait of Hormuz, a 21-mile-wide stretch of water separating Iran from the UAE and Oman. The strait is a vital corridor that represents a critical chokepoint in global energy logistics as it facilitates the transit of approximately 20m b/day of crude oil, condensate, and oil products—equivalent to around 20% of global oil supply and 30% of seaborne oil trade. It also facilitates the transit of 20% of global liquefied natural gas (LNG) production.

Red Sea & Strait of Hormuz shipping routes showing prior Houthi attacks



Source: Al Jazeera. March 2026

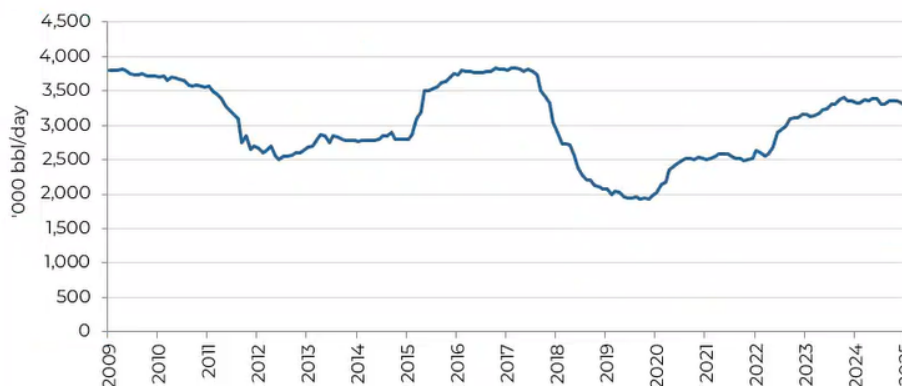
With conflict over, the global oil market likely returns to the prior forecasted oversupply in 1Q 2026. Spot oil prices likely recede to the mid \$60s and the forward curve remains flat, reflecting a very modest risk premium for the unsteady equilibrium in the region and the market balance. Similarly, the supply of LNG is not materially impacted and European and Asian gas pricing starts to reflect fundamental supply and demand factors. Energy equities act rationally and fall on the conclusion of the war but maintain a risk premium.

Scenario Two

The conflict is protracted, with physical shipments of oil and natural gas impacted but not stopped entirely, despite Iranian efforts.

Trump's comments on Sunday 1st March suggest that the main phase of the conflict could last for around four weeks. Beyond that, the lack of an obvious 'end game' increases the risk of a power vacuum and raises the spectre of lower Iranian oil production and oil exports (currently at around 3.5m b/day and 1.7m b/day respectively) as political chaos could impact production facilities (as seen historically in Iraq and Libya).

Iranian oil production (000s b/day)



Source: Bloomberg. Data as of January 2026

In this scenario, Iranian efforts to shut the Strait of Hormuz are partially successful in that some tanker traffic chooses to not pass through the Strait owing to the risk of attack. To circumvent the Strait, Saudi likely re-routes some of its oil exports through to the Red Sea and the UAE re-routes some volumes via onshore pipelines to the Gulf of Oman (there is thought to be around 3-4m b/day of total spare pipeline capacity here). Nevertheless, the global oil and LNG markets suffer supply constraint. Houthi rebels and other Iranian militias disrupt shipping in the Red Sea around the Bab al-Mandeb Strait causing the re-routing of large volumes of seaborne oil and LNG around the Cape of Good Hope at the southern tip of Africa. Consuming countries rely on ample strategic storage for their short-term oil supplies, which will be politically acceptable in the near term but not a solution if the disruption persists.

Oil prices in this scenario likely rise to a \$80-100/bl range, also pulling the forward curve for oil higher. Beyond inventory consumption, there are limited short-term supply responses available to make up such a shortfall. While OPEC could increase quotas and promise to satisfy the market, most of its spare capacity would likely also be caught up in the Strait of Hormuz disruption.

In terms of natural gas, around 75-80 million tonnes per annum of LNG (around 20% of global LNG supply, predominantly from Qatar) transits the Strait of Hormuz, with Asia as its primary destination. A supply disruption here could be arguably more impactful than for crude oil since there is no other option for these LNG volumes to bypass the Strait (leaving them effectively locked out of the market) and because natural gas inventories in Europe (the marginal consumer of global LNG) are currently at particularly low levels.

In Europe, despite winter coming to an end, there is a significant need to start the summer inventory refill process. Europe would need to compete for global LNG volumes (as it did in the aftermath of the Russian invasion of Ukraine) meaning that prices could be biased sharply higher, potentially exceeding \$20/mcf (thousand cubic feet). Asian consumers, especially China, would likely curtail LNG demand at these prices and switch demand towards cheaper domestically produced coal for power generation.

Taking the bottom end of our \$80-100/bl price range for this scenario: if energy equities reflected \$80/bl as a long-term Brent oil price, we see around 30% equity price appreciation, relative to pre-conflict valuations.

Scenario Three

The conflict is protracted and becomes a wider war as other countries get involved. Iran is successful in shutting off a higher proportion of oil & gas supply through the Strait of Hormuz for a prolonged period.

In this scenario, Iran and its allies thwart US and Israeli efforts to force regime change and a broader conflict ensues, both militarily and economically. Equity risk premia likely increase and equity markets suffer as more countries become embroiled in the conflict, which drags on.

The effect on the oil markets would be an amplified version of scenario two, with spot oil prices rising to \$100/bl and above, leading ultimately to demand destruction. Forward oil prices rise in sympathy.

European and Asian gas prices likely act in a similar manner. The most recent analogy for European gas would be the Russian invasion of Ukraine, when gas prices spiked to around \$40/mcf (\$240 per barrel of oil equivalent) to balance the market: i.e. stifle demand and incentivise significant other supply. The loss of all LNG volumes through the Strait would be equivalent to around two thirds of Russian pipeline gas volumes to Europe pre-invasion in 2021.

Global oil refining margins likely suffer as a weakening global economy limits global oil product demand.

In this scenario, energy equities would likely be a safer haven in weaker global equity markets. For reference, if energy equities priced in \$100/bl as a long-term oil price, with equity risk premia unchanged, we see it implying around 90% equity upside.


















Conclusion

The big questions concern the duration of the conflict and the extent to which oil and gas supply disruption in the Strait of Hormuz persists. At 3.5m b/day, Iran is a material oil producer, and at 20m b/day, the Strait of Hormuz is by a distance the most important oil shipping lane in the world. Against these risks, we must weigh the fact that the global oil market was oversupplied in 2025 and that inventories are at comfortable levels.

Stepping back, the common thread in all three scenarios is that energy markets are likely to embed a more persistent geopolitical risk premium in oil and gas prices than was evident prior the outbreak of current hostilities. In scenario one, that premium fades but does not disappear; in scenarios two and three, the premium extends. Energy equities have rallied but continue to discount relatively conservative long-term commodity price assumptions.

The Guinness Atkinson Global Energy Fund is entirely invested in oil and gas companies and is positioned to benefit directly from strength in oil and gas markets. Today's portfolio is diversified across energy majors, mid-cap integrators, exploration and production, services, refiners and midstream companies in North America, Europe and Asia.

Key themes in the Guinness Global Energy Fund

Theme	Example holdings	Weighting (%)
1 Higher free cashflow generation	  	23.8%
2 Oil & gas majors	  	24.5%
3 US shale oil production	  	14.2%
4 North American gas infrastructure	 	11.1%
5 Rising international oil & gas spending	 	9.9%
6 Refining-focused	 	9.3%
7 Undervalued international natural gas	 	6.0%
8 Other (incl cash)		1.2%
		100.0%

Source: Guinness Atkinson. Data as of 01.31.2026

OUTLOOK

Oil market

The table below illustrates the difference between the growth in world oil demand and non-OPEC supply since 2015:

	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025E	2026E
											IEA	IEA
World Demand	95.3	96.4	98.2	99.5	100.7	91.8	97.4	100.0	102.2	103.1	104.0	104.9
Non-OPEC supply (inc NGLs)	62.1	61.5	62.5	65.0	67.0	64.4	65.0	66.9	69.3	70.4	72.1	73.3
OPEC NGLs	5.2	5.3	5.4	5.5	5.3	5.2	5.3	5.5	5.5	5.5	5.6	5.9
Non-OPEC supply plus OPEC NGLs	67.3	66.8	67.9	70.5	72.3	69.6	70.3	72.4	74.8	75.9	77.7	79.2
Call on OPEC (crude oil)	28.0	29.6	30.3	29.0	28.4	22.2	27.1	27.6	27.4	27.2	26.3	25.7
Congo supply adjustment	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Gabon supply adjustment	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Eq Guinea supply adjustment	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Call on OPEC-9 (crude oil)	27.4	29.0	29.7	28.4	27.8	21.6	26.5	27.0	26.8	26.6	25.7	25.1

Source: Bloomberg; IEA; Guinness Atkinson, January 2026

Global oil demand in 2019 was 13m b/day higher than the pre-Financial Crisis (2007) peak. The demand picture for 2020, down by around 9m b/day, was heavily clouded by the impact of the COVID-19 virus and efforts to mitigate its spread. Demand rebounded between 2020 and 2024 by over 11m b/day, leaving overall consumption in 2024 2.4m b/day higher than the 2019 peak.

OPEC

The last few years have proved testing for OPEC. They have tried to keep prices strong enough that OPEC economies are not running excessive deficits, while not pushing the price too high and over-stimulating non-OPEC supply.

The effect of \$100+/bl oil, enjoyed for most of the 2011-2014 period, emerged in 2014 in the form of an acceleration in US shale oil production and an acceleration in the number of large non-OPEC (ex US onshore) projects reaching production. OPEC met in late 2014 and responded to rising non-OPEC supply with a significant change in strategy to one that prioritized market share over price. Post the November 2014 meeting, OPEC not only maintained their quota but also raised production significantly, up by 2.5m b/day over the subsequent 18 months. This contributed to an oversupplied market in 2015 and 2016.

In late 2016, faced with sharply lower oil prices, OPEC stepped back from their market share stance, announcing plans for the first production cut since 2008. The announcement included a cut in production from Russia (a non-OPEC country), creating for the first time the concept of an OPEC+ group.

OPEC-9 oil production to January 2026

('000 b/day)	31-Dec-19	31-Dec-25	31-Jan-26	Current vs Dec 2019	Current vs last month
Saudi	9,730	10,000	10,000	270	0
Iran	2,080	3,270	3,300	1,220	30
Iraq	4,610	4,370	4,340	-270	-30
UAE	3,040	3,590	3,560	520	-30
Kuwait	2,710	2,560	2,570	-140	10
Nigeria	1,820	1,520	1,490	-330	-30
Venezuela	730	900	820	90	-80
Libya	1,110	1,320	1,280	170	-40
Algeria	1,010	970	970	-40	0
OPEC-9	26,840	28,500	28,330	1,490	-170

Source: Bloomberg; Guinness Atkinson, 2.28.26

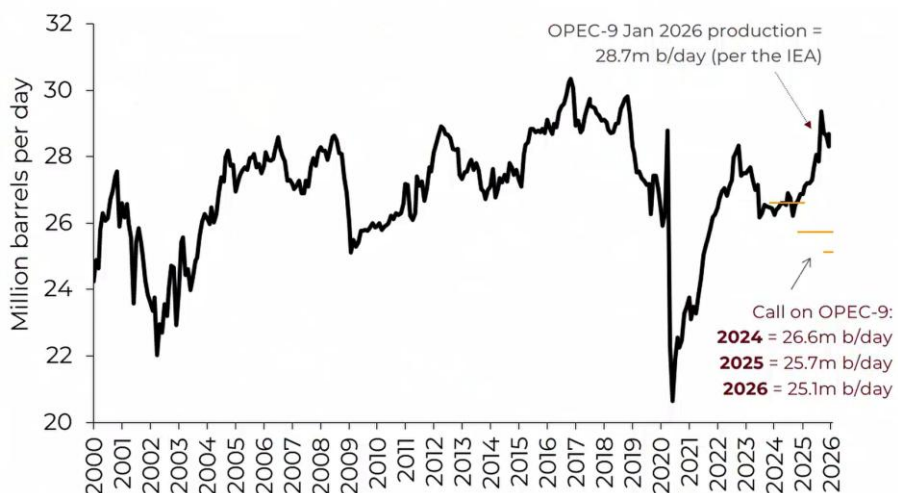
The 2017-19 period continued to be volatile for OPEC, with further production cuts necessary to balance ongoing non-OPEC supply growth.

The challenge for OPEC+ then ballooned in 2020 with the onset of COVID around the world. Initially, OPEC and their non-OPEC partners failed to reach agreement around their response to demand from the spread of the virus, precipitating a fall-out between participants and a short-lived price war. In light of extreme oil market oversupply, OPEC and non-OPEC partners reconvened in April 2020 and confirmed a deal to cut their production by nearly 10m b/day.

In mid-2021, with demand largely recovered after COVID, the OPEC+ group agreed to taper their quota cuts until late 2022. The actions of OPEC through the pandemic gave us confidence that OPEC was looking to do 'what it takes' to keep the market in balance, despite extreme challenges. Since the end of 2022, OPEC has adjusted their production to match

closely the prevailing call on the group, while mindful that any loss of market share must not stretch too far. Most recently, over the summer of 2025, the group has increased quotas sharply, taking advantage of low inventories to bring its oil back to market.

OPEC-9 apparent production vs call on OPEC 2000 – 2026



Source: IEA Oil Market Report (Jan 2026 and prior); Guinness Atkinson estimates

OPEC’s actions in recent years have generally demonstrated a commitment to delivering a reasonable oil price to satisfy their own economies but also to incentivise investment in long-term projects. Saudi’s actions at the head of OPEC have been designed to achieve an oil price that to some extent closes their fiscal deficit (about \$90/bl is needed to close the gap fully), whilst not spiking the oil price too high and over-stimulating non-OPEC supply.

In the shorter term, the COVID-19 and Russia/Ukraine crises have created particularly challenging conditions, adding to oil price volatility. Longer-term, we believe that Saudi seek a ‘good’ oil price, one that satisfies their fiscal needs. Overall, we reiterate two important criteria for Saudi:

1. Saudi is interested in the average price of oil that they get; they have a longer investment horizon than most other market participants.
2. Saudi wants to maintain a balance between global oil supply and demand to maintain a price that is acceptable to both producers and consumers.

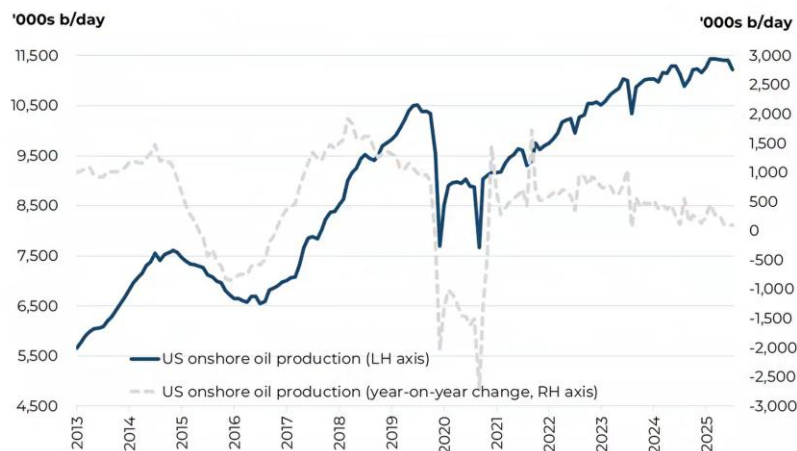
Nothing in the market in recent years has changed our view that OPEC can put a floor under the price – as they did in 2020, 2018, 2016, 2008, 2006, 2001 and 1998.

Supply looking forward

The non-OPEC world has, since the 2008 financial crisis, grown its production more meaningfully than in the period before 2008. The growth was 0.9% p.a. (per annum) from 2001-2008, increasing to 1.7% p.a. from 2009-2024.

Growth in the non-OPEC region since the start of the last decade has been dominated by the development of shale oil and oil sands in North America (up around 8m b/day since 2010), implying that the rest of the non-OPEC region has seen limited growth over this period, despite the sustained high oil price until mid-2014.

US onshore oil production



Source: EIA; Guinness Atkinson, February 2026

The growth in US shale oil production, especially the Permian Basin, raises the question of how much more there is to come and at what price. Our assessment is that US shale oil is capital-intensive but some growth is viable, on average, at around \$70 oil prices. In particular, there appears to be ample inventory in the Permian Basin to maintain volumes into the late-2020s. The rate of development is heavily dependent on the cashflow available to producing companies, and the underlying cost of services to drill and fracture the wells. Since 2019, we have seen increased shareholder pressure successfully applied to US E&P companies to improve their capital discipline and to cut their reinvestment rates.

The collapse in oil prices at the start of 2020 to a level well below \$50/bl changed the landscape, with US E&P companies reducing capital spending further as they attempted to live within their cashflows. Shale oil production dropped by nearly 3m b/day in 2020 (peak to trough) and took nearly three years to recover to the previous peak of late 2019.

Non-OPEC supply growth outside the US has been sustained in recent years, by a handful major project additions, notably in Guyana and Brazil. Net growth remains sluggish, however, as much of the new oil has been required to offset natural declines in more mature basins.

Future demand

The IEA estimate that 2026 oil demand will rise by around 0.9m b/day to 104.9m b/day, 4.2m b/day ahead of the 2019 pre-COVID peak. Post the COVID demand recovery, the world is settling back into annual oil demand growth of plus or minus 1m b/day, led by increased use in the non-OECD region. China has been, and continues to be, a key – although no longer major – part of this growth and signs are emerging that India will also grow well.

The trajectory of global oil demand over the next few years will be a function of global GDP, the pace of the 'consumerisation' of developing economies, the development of alternative fuels, and price. At \$80/bl, the world oil bill as a percentage of GDP is around 2.7%, and this will still be a stimulant of further demand growth. If oil prices were in a higher range (say around \$115/bl, representing 3.8% of GDP), we would probably return to the pattern established over the past five years, with a flatter picture in the OECD more than offset by growth in the non-OECD area. Flatter OECD demand reflects improving oil efficiency over time, dampened by economic, population and vehicle growth. Within the non-OECD, population growth and rising oil use per capita will both play a significant part.

We keep a close eye on developments in the ‘new energy’ vehicle fleet (electric vehicles; hybrids etc). Sales of electric vehicles (pure electric and plug-in hybrid electrics) globally were around 22m in 2025, up from 17.5m in 2024. We expect to see strong EV sales growth again in 2026, up to around 25.5m, exceeding 20% of total global sales. Even applying an aggressive growth rate to EV sales, we see EVs comprising only around 15% of the global car fleet by the end of 2030. Looking further ahead, we expect the penetration of EVs to accelerate, causing global gasoline demand to peak at some point in the middle of the 2020s. However, owing to the weight of oil demand that comes from sources other than passenger vehicles (around 75%), which we expect to continue growing linked to GDP, we expect total oil demand not to peak until the early 2030s.

Conclusions about oil

The table below summarizes our view by showing our oil price forecasts for WTI and Brent in 2025 versus recent history.

Average WTI & Brent yearly prices, and changes

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	Est
Oil price (\$/bl)																						
WTI	75	72	100	62	80	95	94	98	93	49	43	51	65	57	39	68	94	78	76	76	62	
Brent	75	73	99	63	80	111	112	109	99	54	45	55	72	64	43	71	99	83	81	81	65	
Brent/WTI average	75	73	99	62	80	103	103	103	96	51	44	53	68	61	41	70	97	80	78	78	64	
Brent/WTI y-on-y change (%)	15%	-3%	37%	-37%	28%	29%	0%	0%	-7%	-47%	-13%	19%	29%	-11%	-32%	68%	39%	-17%	-2%	0%	-19%	
Brent/WTI (5yr MAV)	51	59	72	75	78	83	89	90	97	91	80	70	63	55	53	58	67	70	73	81	79	

Source: Guinness Atkinson estimates, Bloomberg, February 2026

We believe that Saudi’s long-term objective remains to maintain a ‘good’ oil price, something north of \$80/bl. The world oil bill at around \$80/bl represents 2.7% of 2024 global GDP, well under the thirty-year average level of around 3%.

Natural gas market

US gas demand

On the demand side for the US, industrial gas demand and power generation gas demand (each about 25-35% of total US gas demand) are key. Commercial and residential demand, which make up a further quarter, have been fairly constant on average over the last decade – although yearly fluctuations due to the severity of winter weather can be marked.

US natural gas demand

Bcf/day	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026E
US natural gas demand:															
Residential/commercial	19.2	22.4	23.4	21.4	20.5	20.9	23.4	23.5	21.5	21.5	23.2	21.5	21.0	23.1	23.1
Power generation	24.9	22.3	22.3	26.5	27.3	25.3	29.0	30.9	31.7	30.9	33.1	35.3	36.7	35.8	36.6
Industrial	19.7	20.3	20.9	20.6	21.1	21.6	23.0	23.1	22.3	22.5	23.2	23.3	23.3	23.5	23.8
Pipeline exports (Mexico)	1.8	1.9	1.9	2.7	3.8	4.0	4.6	5.1	5.4	5.9	5.7	6.1	6.4	6.6	6.9
LNG exports	-	-	-	0.1	1.0	2.6	2.8	4.8	6.4	9.7	12.0	12.6	13.1	16.5	18.9
Pipeline/plant/other	6.1	6.7	6.3	6.5	6.4	6.5	7.0	7.8	7.7	7.8	7.4	8.2	7.9	7.9	8.3
Total demand	71.7	73.6	74.8	77.8	80.1	80.9	89.8	95.2	95.0	98.3	104.6	107.0	108.4	113.4	117.6
Demand growth	3.1	1.9	1.2	3.0	2.3	0.8	8.9	5.4	- 0.2	3.3	6.3	2.4	1.4	5.0	4.2

Source: EIA; GS; Guinness Atkinson estimates, Jan 2026

Industrial demand (of which around 35% comes from petrochemicals) trends up and down depending on the strength of the economy and the differential between US and international gas prices. Electricity gas demand (i.e. power generation) is affected by weather, in particular by warm summers, which drive demand for air conditioning, but the underlying trend depends on GDP growth and the proportion of incremental new power generation each year that goes to natural gas versus the alternatives of coal, nuclear and renewables. Gas has been taking market share in this sector: in 2025 40% of electricity generation was powered by gas, up from 22% in 2007. The big loser here is coal, which has consistently given up market share.

Total gas demand in 2025 (including Mexican and LNG exports) was around 113.4 Bcf/day, up by 5.0 Bcf/day versus 2024 and ~18 Bcf/day higher than the pre-COVID level in 2019. The biggest contributor to the growth in demand in 2025 was LNG exports.

We expect US demand growth in 2026 of around 4.2 Bcf/day. Growth is expected to be driven by higher LNG exports and greater power generation demand. Beyond 2025, we expect to see a material increase in US LNG export capacity as higher international gas prices incentivise new LNG export investment. Proposed projects imply capacity growth of around 5-6 Bcf/day in 2026-2028, bringing total export capacity to over 20 Bcf/day by 2028.

US gas supply

Overall, while gas demand in the US has been strong over the past five years, it has been overshadowed by a rise in onshore supply, holding the gas price lower.

The supply side fundamentals for natural gas in the US are driven by three main moving parts: onshore and offshore domestic production, pipeline imports of gas from Canada, and LNG imports. Of these, onshore supply is the biggest component, making up over 90% of total supply.

US natural gas supply

Bcf/day	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026E
US natural gas supply:															
US (onshore & offshore)	65.7	66.3	70.9	74.2	73.4	73.6	84.3	91.4	91.1	91.8	97.4	102.5	101.8	106.5	110.6
Net imports (Canada)	5.4	5.0	4.9	4.9	5.5	5.8	5.4	4.7	4.4	5.1	5.6	5.2	5.8	5.8	5.7
LNG imports & other	0.8	0.6	0.5	0.5	0.4	0.3	0.1	0.1	-	-	0.1	-	0.6	0.6	0.9
Total supply	71.9	71.9	76.3	79.6	79.3	79.7	89.8	96.2	95.5	96.9	103.1	107.7	108.2	112.9	117.2
Supply growth	2.4	-	4.4	3.3	- 0.3	0.4	10.1	6.4	- 0.7	1.4	6.2	4.6	0.5	4.7	4.3
(Supply)/demand balance	- 0.2	1.7	- 1.5	- 1.8	0.8	1.2	-	- 1.0	- 0.5	1.4	1.5	- 0.7	0.2	0.5	0.4

Source: EIA; GS; Guinness Atkinson estimates, Jan 2026

Since 2010, the weaker gas price in the US reflects growing onshore US production driven by rising shale gas and associated gas production (a by-product of growing onshore US oil production). Interestingly, the overall rise in onshore production has come despite a collapse in the number of rigs drilling for gas, which has dropped from a 1,606 peak in September 2008 to a trough of 68 in July 2020, before recovering to 134 at the end of February 2026. However, offsetting the fall, the average productivity per rig has risen dramatically since 2020 as producers focus their attention on the most prolific shale basins, while associated gas from oil production has grown handsomely.

The outlook for gas production in the US depends on three key factors: the rise of associated gas (gas produced from wells classified as oil wells); expansion of the newer shale basins, principally the Marcellus/Utica, and the decline profile of legacy gas fields.

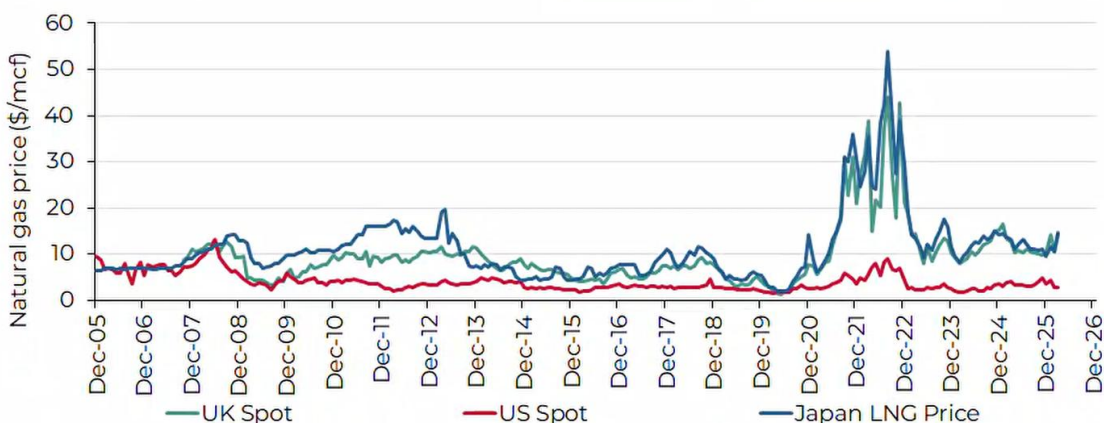
Associated gas production is expected to rise again in 2026 albeit at a slower pace (around 1 Bcf/day) than in 2022 (+5.5 Bcf/day) and 2023 (+3.6 Bcf/day). Lower supply growth is expected from onshore properties as weaker natural gas prices have brought a lower rig count and lower investment.

Outlook for US LNG exports – global gas arbitrage

We expect the LNG market is going to be quite finely balanced over the next couple of years. In the event of moderate Chinese LNG demand and “normal” European winters, LNG supply and demand appear to be roughly in balance and global LNG prices appear to be fairly priced at around \$10/Mcf. However, stronger Asian demand (including South Korea and Japan as well as China) or a colder than expected European winter could easily see LNG in tight supply and cause international gas prices spike, although it is unlikely that they revert to the \$40-\$50 levels seen in winter 2022/2023.

Looking further ahead, we see international gas prices settling in a \$9-11/Mcf range. This price range should be sufficient to incentivise new US LNG supply to come online from 2025. It would also allow Europe to displace permanently almost all its Russian gas imports. An international gas price in the \$9-11/Mcf is well down on the highs seen in 2022, but would leave the market at a higher price point than that seen in the few years prior to COVID and the Russian invasion of Ukraine.

Global gas prices

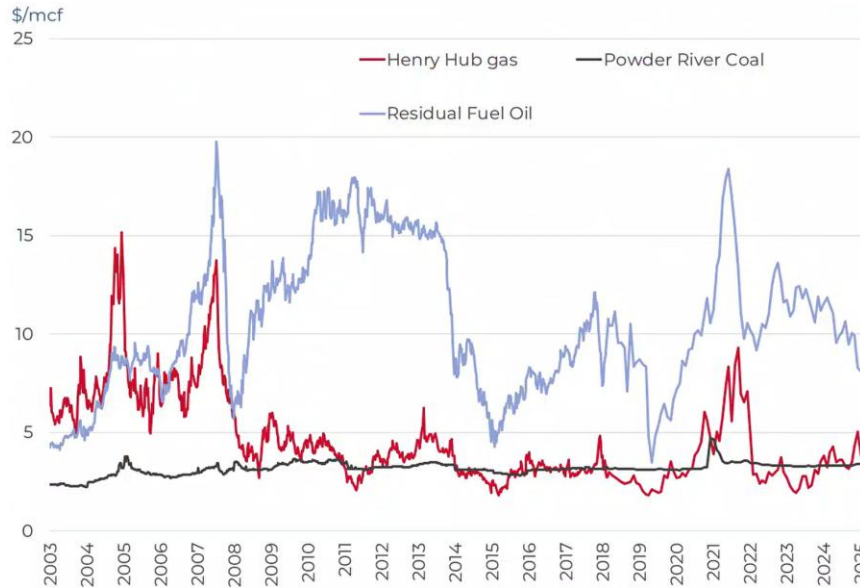


Source: Bloomberg; Guinness Atkinson Feb 2026

Relationship with oil and coal

The following chart of the front month US natural gas price against heating oil (No 2), residual fuel oil (No 6) and coal (Sandy Barge adjusted for transport and environmental costs) seeks to illustrate how coal and residual fuel oil switching provide a floor and heating oil a ceiling to the natural gas price. When the gas price has traded below the coal price support level (2012 and 2016), resulting coal-to-gas switching for power generation was significant.

Natural gas versus substitutes (fuel oil and coal) - Henry Hub vs residual fuel oil, heating oil, Sandy Barge (adjusted) and Powder River coal (adjusted)



Source: Bloomberg; Guinness Atkinson Feb 2026

Conclusions about US natural gas

The US natural gas price since 2010 has mainly fluctuated between \$2 and \$4/Mcf. The extremes of this range have tended to coincide with warm and cold winters, and any sustained recovery over \$3.50/Mcf has generally been muted by strength in gas supply. With inflationary pressures, we estimate that new onshore supply has an incentive price of around \$3.50/Mcf. Assuming normal weather in 2025, we expect a Henry Hub price at around this level.

Performance

Within the Fund, the strongest performers were Canadian Natural Resources, Baker Hughes, Helix Energy Solutions, Imperial Oil and Repsol while the weakest performers were Sinopec, BP, PetroChina, Diamondback and Chevron.

As of 2/28/2026	YTD	1 Year	3 Years	5 Years	10 Years
GAGEX	22.37%	37.59%	13.74%	18.63%	8.59%
MSCI World Energy Index NR	22.69%	32.12%	14.22%	20.25%	10.21%

As of 12/31/2025	YTD	1 Year	3 Years	5 Years	10 Years
GAGEX	16.90%	16.90%	5.63%	18.24%	5.52%
MSCI World Energy Index NR	13.32%	13.32%	6.06%	19.53%	7.62%

All returns after 1 year annualized.

Inception 06.30.2004 Expense ratio* 1.46% (net); 2.13% (gross)

Performance data quoted represents past performance; past performance does not guarantee future results. The investment return and principal value of an investment will fluctuate so that an investor's shares, when redeemed, may be worth more or less than their original cost. Current performance of the Fund may be lower or higher than the performance quoted. Performance data current to the most recent month end may be obtained by visiting www.gafunds.com or calling 800-915-6566.

* The Advisor has contractually agreed to reduce its fees and/or pay Fund expenses (excluding Acquired Fund Fees and Expenses, interest, taxes, dividends on short positions and extraordinary expenses) in order to limit the Fund's Total Annual Operating Expenses to 1.45% through June 30, 2028. To the extent that the Advisor absorbs expenses to satisfy this cap, it may recoup a portion or all of such amounts absorbed at any time within three fiscal years after the fiscal year in which such amounts were waived or absorbed, subject to the expense cap in place at the time recoupment is sought, which cannot exceed the expense cap at the time of the waiver. The expense limitation agreement may be terminated by the Board of the Fund at any time without penalty upon 60 days' notice.

Top 10 Fund Holdings as of 2/28/26:

1.	Exxon Mobil Corp	5.37%
2.	Chevron Corp	4.75%
3.	TotalEnergies SE	4.62%
4.	Valero Energy Corp	4.57%
5.	Shell PLC	4.43%
6.	BP PLC	4.30%
7.	ConocoPhillips	4.16%
8.	Canadian Natural Resources Ltd	3.90%
9.	Suncor Energy Inc	3.66%
10.	Imperial Oil Ltd	3.63%

MSCI World Energy Index is designed to capture the large and mid cap segments across 23 Developed Markets countries. All securities in the index are classified in the Energy sector as per the Global Industry Classification Standard.

Brent Crude is the price benchmark used for the light oil market in Europe, Africa, and the Middle East, originating from oil fields in the North Sea between the Shetland Islands and Norway.

West Texas Intermediate (WTI) is the price benchmark for the US light oil market and is sourced from US oil fields.

Short futures position in oil is when a trader sells an oil's future contract in the belief that the price of oil will decrease before the contract expires.

Organization for Economic Cooperation and Development (OECD) is an intergovernmental organization with 38 member countries meant to stimulate economic progress and world trade.

OPEC+, or the Organization of the Petroleum Exporting Countries Plus, is a loosely affiliated entity consisting of 12 OPEC members and 10 of the world's major non-OPEC oil-exporting nations.

Permian Basin is a large oil and gas-producing area in the United States that spans parts of West Texas and southeastern New Mexico.

Henry Hub is a natural gas pipeline located in Erath, Louisiana, that serves as the official delivery location for futures contracts on the New York Mercantile Exchange (NYMEX).

The International Energy Agency (IEA) is an international intergovernmental organization based in Paris that was established in 1974. Its stated mandate is to maintain the stability of the international oil supply, although its mission has expanded to emphasize the promotion of renewable energy sources.

MSCI World Index captures large and mid cap representation across 23 Developed Markets countries. With 1,546 constituents, the index covers approximately 85% of the free float-adjusted market capitalization in each country.

The MSCI World Index (Net Return) measures the performance of large and mid-sized companies across 23 Developed Markets countries. It reflects both share price movements and dividends, with dividends reinvested after accounting for local withholding taxes.

Capital expenditure (capex) are funds used by a company to acquire, upgrade, and maintain physical assets such as property, plants, buildings, technology, or equipment.

Fund holdings and/or sector allocations are subject to change at any time and are not recommendations to buy or sell any security.

One cannot invest directly in an index.

Earnings Growth is not a measure of future performance.

Opinions expressed are subject to change, are not guaranteed and should not be considered investment advice.

The Guinness Atkinson Global Energy Fund's investment objectives, risks, charges and expenses must be considered carefully before investing. The statutory and summary prospectuses contain this and other important information and can be obtained by calling 800- 915-6565 or visiting www.gafunds.com. Read and consider it carefully before investing.

GAGEX

Guinness Atkinson Global Energy Fund

March 2026 Update



The Fund invests in foreign securities which will involve greater volatility and political, economic and currency risks and difference in accounting methods. The risks are greater for investments in emerging markets. The Fund also invests in smaller and mid-cap companies, which will involve additional risks such as limited liquidity and greater volatility than larger companies. The Fund's focus on the energy sector to the exclusion of other sectors exposes the Fund to greater market risk and potential monetary losses than if the Fund's assets were diversified among various sectors.

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