



Q4 in review

As the last guarter of the second pandemic year draws to a close, we continue to see heightened contrast between the medical and economic points of view. While COVID-19 cases are close to their all-time highs, so are equity prices, and a leading investment bank declared (on 2 December, 2021 after the Omicron outbreak in South Africa) that it was "optimistic about the possibility of a vibrant 2022." When news of the variant hit in late November, the markets were rocked by the prospect of yet another round of local mobility restrictions and an interrupted return to normal international travel patterns, on top of the Biden Administration's announced release of 50 million barrels of crude from the US Strategic Petroleum Reserve. So far though, with OPEC standing by its planned gradual return to normal production, oil prices have stabilized, albeit below where they were in mid-November. Henry Hub prices, always at the mercy of the weather, responded predictably to a warmer-than-normal early winter in the US, falling from US\$6.60/MMBtu in early October to below US\$4.00/MMBtu by mid-December. In Europe and Asia, following a short reprieve at the start of the guarter, piped natural gas prices have spiked again on concerns triggered by Russian troop buildups on the Ukraine border and uncertainties surrounding the Nordstream 2 pipeline. Looking forward, OPEC and the U.S. Energy Information Administration (EIA) in their last forecasts of the year both projected that 2022 oil demand would be above what we saw in 2019. Although time will tell if those forecasts are realized and other events could intervene, the response to new virus outbreaks is well-practiced and the trade-off between public health and economic reality has tipped toward a cautiously optimistic view.



Andy Brogan
EY Global Oil & Gas Leader
abrogan@uk.ey.com



Gary Donald
EY Global Oil & Gas Assurance Leader
gdonald@uk.ey.com





Q1 theme

The theme for Q1 is **divergence**. Oil and gas markets moved downward during the quarter, but for completely different reasons, while LNG markets were unfazed by the emergence of the Omicron variant or the possibility of tightening by central banks to control inflation. Doubts about the long-term future of petroleum are at odds with the economics of oil and gas in the here and now and widely accepted projections of global demand.

The Organization for Economic Cooperation and Development (OECD) Economic Outlook, published in December, shows "strong but imbalanced" growth with inflation subsiding but settling at rates higher than they were before the COVID-19 pandemic. The connection between economic growth and oil demand is well-established, and the most recent U.S. EIA International Energy Outlook calls for demand growth just below 1% for as far as the eye can see. The macroeconomic environment is always a risk, and the tapering of the central bank COVID-19 stimulus in response to inflation is inevitable. The most recent measure of consumer prices in the US showed increases at rates not seen since the early 1980s, and Eurozone inflation is currently running at its highest point in the history of the euro.

Economic growth and predictions of continued oil demand growth mean positive medium- and long-term fundamentals for oil, gas and LNG, notwithstanding conventional wisdom about the future of petroleum. IOC financial results in Q3 were strong, and equity prices increased at double the rate of the broader market. In spite of this, the funding for upstream oil and LNG projects is still difficult to pinpoint. Consensus capital spending estimates for oil and gas majors for 2022 are 21% higher than 2021, but just over half of what they were in 2014.

- What will the impact of the Omicron variant be on governments, central banks, consumers and companies?
- Will monetary restraint impact economic growth and energy demand?
- When will the long-standing connection between economic growth and oil demand start to break down?
- How will supplies needed to meet growing oil and gas demand be funded?



Q1 trends

Henry Hub and LNG take different paths

Warmer-than normal weather in the US combined with recovering production interrupted the rally in Henry Hub prices, while uncertain Russian supplies and stressed infrastructure drove prices in Europe to record levels.

IOC investment to grow marginally

The 2014-2015 downturn was a turning point for IOC capital spending. The pandemic gave the industry another reason to hold the line on investment, and 2022 projections show only small increases.

OPEC dominance clear

OPEC's ability to influence the supply and demand balance was openly questioned during previous oversupply episodes. Recovery from the 2020 crisis has been entirely OPEC-led and given us valuable clues for how the market might be managed as energy transition pressures oil demand.

EY Price Point: global oil and gas market outlook

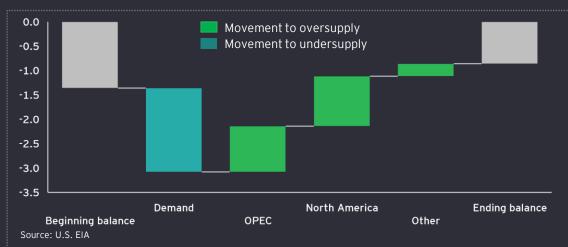
Market resilient despite multiple shocks

Since April 2020, oil prices have increased by a factor of 5 and gone up in 14 of the last 19 months. This steady, consistent rebound has occurred in the face of unprecedented political, social and economic turmoil.



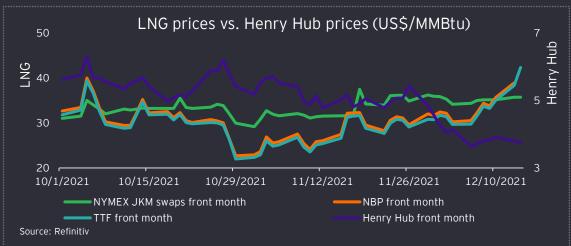
Market fundamentals

Supply expected to outpace demand



- Oil markets continued to be undersupplied in the fourth quarter. Global oil demand grew 2% from the previous quarter, while OPEC, North American producers and others increased their production.
- Global oil demand increased during the start of the quarter due to robust gasoline consumption and easing international travel restrictions. As has been the case for the past two years, COVID-19 hangs over the marketplace, and the recent pause in market recovery was a direct result of the emergence of a new variant. The IEA, EIA and OPEC have lowered their demand projections for the rest of 2021 and early 2022. Those agencies expect global oil demand to expand by 3.3 million barrels per day (mmb/d), 3.5 mmb/d and 4.2mmb/d, respectively, in 2022.
- Supply uncertainty continues as well. OPEC+ has been remarkably disciplined in restoring output to pre-pandemic levels in step with demand, but analysts forecasted production could outpace demand. As this upward trend extends into 2022, the US, Canada and Brazil look set to pump at their highest-ever annual levels, lifting overall non-OPEC+ output by 1.8 mmb/d in 2022.

LNG and Henry Hub prices move in opposite directions

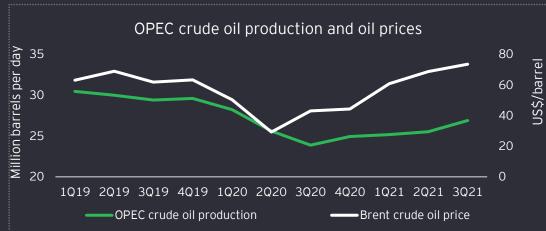


- LNG and natural gas markets have recently moved in opposite directions. After reaching US\$6.32/MMBtu, at the beginning of the quarter, Henry Hub futures have fallen to US\$3.75MMBtu while the international natural gas spot prices including JKM and Dutch TTF rose strongly at 2% and 8%, respectively, during the same period. European LNG prices reached US\$42/MMBtu, which was the highest in four years.
- Natural gas prices are always strongly influenced by the weather. On a weightedaverage basis, heating degree days in the US are 14% below normal. Historically, that translates to a roughly 7 Bcf/day reduction in natural gas demand from a base of about 100 Bcf/day. Production continues to come back from its pandemic lows. Output at the end of Q3 was 4 Bcf/day higher than in Q3 2020, which was 5 Bcf/day lower than Q3 2019.
- European prices have skyrocketed after a brief reprieve. A colder-than-expected winter, low inventory, tight Russian supplies and the recent escalated tensions between Ukraine and Russia have conspired to keep traders nervous and prices high.



Market fundamentals

OPEC+ in charge

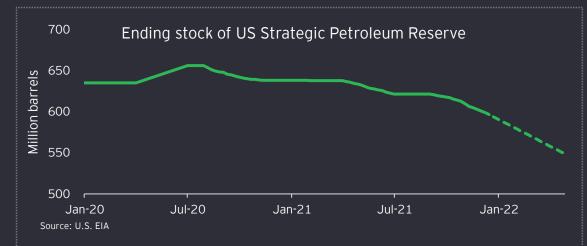


Source: OPEC Monthly Oil Market Report and U.S. EIA

- The pandemic has reinforced our views on the influence OPEC+ has on the global oil markets. The oil market recovered from the initial shock of COVID-19 because of OPEC+ production discipline. Between January and April 2020, OPEC+ countries cut production by 19%, with Saudi Arabia alone curtailing its output by 500 thousand barrels, while non-OPEC production fell by only 9% during the same period. This supported the oil prices to climb almost without interruption since mid-2020.
- At its most recent Ministerial Meeting, OPEC+ agreed to hold to its previous plan to increase production by 400 thousand barrels/day. The decision came amid the emergence of a new COVID-19 variant and its potential to impact oil demand with renewed travel restrictions. However, the cartel remains optimistic about the demand growth but is also flexible to swiftly adjust production in the future.
- Going forward, as the structural demand comes in and the focus on decarbonization accelerates, OPEC oil is likely to have a competitive advantage due to its low cost and low carbon intensity. This would further give OPEC a larger market share and even more influence on prices.

EY Price Point: global oil and gas market outlook

US and others release strategic reserves

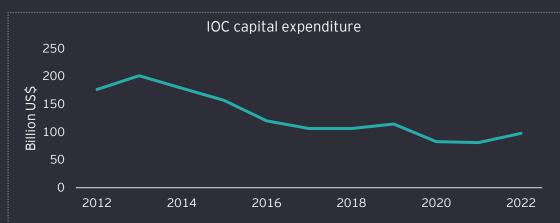


- In November, the US Government announced a decision to release 50 million barrels from its Strategic Petroleum Reserve (SPR) with the intention of lowering gasoline prices for American consumers. The US coordinated this release with five other countries (including four Asian countries), as OPEC rebuffed requests to increase production. The volume of the US release was the largest in its history and unconventional as this was the first time the SPR was tapped in order to control prices.
- In the wake of the announcement on 23 November, crude oil prices increased. The release had been telegraphed for some time, and January WTI futures had declined seven percent in the two weeks prior. Three days following the announcement, WTI prices fell over \$10/bbl when the first wave of Omicron variant cases were reported in South Africa, making the move moot for the moment.
- Analysts are skeptical that the move will have any sustained or significant impact on the markets. The volumes, while large in absolute terms, are relatively small when spread out over a meaningful horizon and compared to the potential for OPEC+ members to offset it with output cuts or foregone output increases.



Market fundamentals

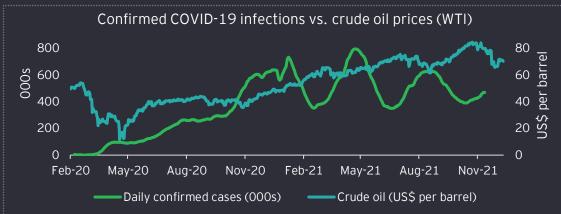
IOC investment to remain muted in 2022



Source: S&P Capital IQ

- Capital expenditures by IOCs* are less than half of what they were almost a decade ago. In 2012, companies invested US\$176 billion but only US\$81 billion in 2021. The crude oil price crash of 2014 triggered IOCs to focus on capital discipline, an ethic that was reinforced by the 2020 COVID-19 pandemic-driven oil price crash.
- Although crude oil prices have now recovered from the pandemic lows, capital and production discipline continues. In 2022, IOC capital expenditures are projected to grow by 21% year over year to US\$98 billion, nearly 15% lower than the pre-pandemic 2019 capital expenditures of US\$114 billion. The tepid recovery in spending can no doubt be attributed to company and shareholder resistance to grow an asset base that is commonly believed to be reaching a sunset stage.
- IOCs will continue to invest in their core oil and gas businesses. Although their overall hydrocarbon investment will largely remain flat in 2022, IOCs plan to ramp up spending in short-cycle resources to accelerate cash flow generation. With growing shareholder pressure to reduce emissions, IOCs are increasingly exploring biofuels, carbon capture and storage, hydrogen and programs to reduce operational emissions.

Markets show resilience



Source: Institute for Health Metrics and Evaluation (IHME), S&P Capital IQ

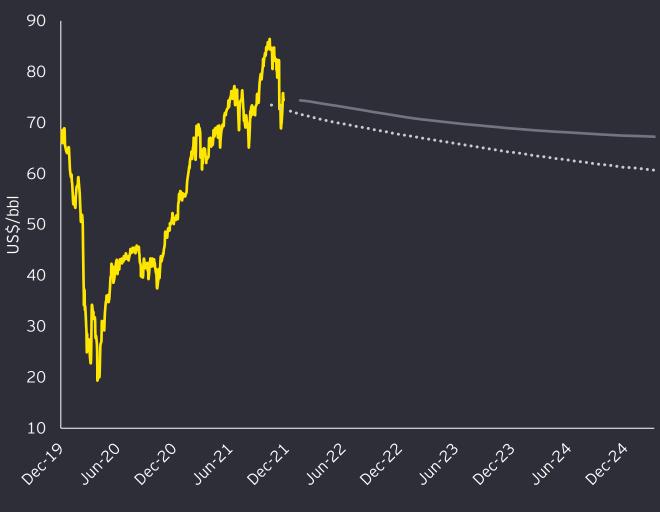
- It has been almost two years since the start of the pandemic when crude oil prices dropped more than 75%. Since then, infections have grown in multiple waves as people have moved indoors and back out, restrictions have been imposed and relaxed, and vaccines have been rolled out. Prices have increased steadily, and in the 19 months since oil markets bottomed out (and went negative), the price of WTI crude has ended the month higher than it began in 2015.
- Resilience in the economy generally and in commodity and equity markets specifically can be explained in two ways. The first is OPEC's track record managing supply and the market's confidence that it will step in as necessary. The second is that people and government have adapted to an environment in which COVID-19 risks are ubiquitous. Companies have created new ways of working, people have grown restless and appear comfortable with the risk of illness, and governments are reluctant to intervene and, in many cases, encourage citizens to resist or ignore restrictions.
- The actual end of the pandemic is nowhere in sight and might never come.
 Notwithstanding, we should expect whatever market reactions occur to be transitory.



^{*}IOCs include: BP, Chevron, ConocoPhillips, ENI, Equinor, ExxonMobil, Shell and Total



Brent futures



Brent futures have increased slightly given global COVID-19 vaccination programs, increased mobility and the continued supply discipline of OPEC+.

Going forward, there will be continued scrutiny on the emergence of new COVID-19 variants, OPEC+ supply discipline, decarbonization and capital allocation that will continue to impact medium- to long-term oil demand and pricing.

Futures data is effective as of 10 December 2021.

·Historical Brent —— Brent futures - December 2021 ······ Brent futures - September 2021

Source: Bloomberg



Oil price outlook

For WTI, banks and brokers (on average) forecast a wider range of oil prices throughout the forecast period. Forecasts for Brent are generally consistent throughout the forecast period.

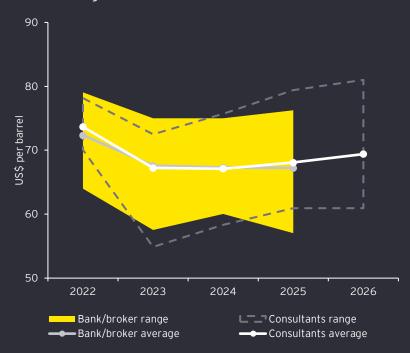
Consultants focus primarily on the analysis of a long-term sustainable oil price, whereas banks and brokers balance their views on the basis of current market conditions.

Consultant ranges include estimates of recognized market consultants. Where consultant estimates are updated only annually (for example, the EIA and the IEA), such estimates are included within the range of estimates from 2024 onward (or combined with short-term estimates published by the same consultant) to prevent near-term ranges being impacted by estimates that are not considered to reflect current market dynamics. Brent price estimates derived under the IEA's "Stated Policies" and "Sustainable Development" scenarios (inflation-adjusted to reflect nominal pricing) are reflected within the consultant ranges from 2024 onward.

This data is effective as of 10 December 2021.

Brent

Bank/broker and consultant price estimates, ranges and averages



Brent: US\$69.4

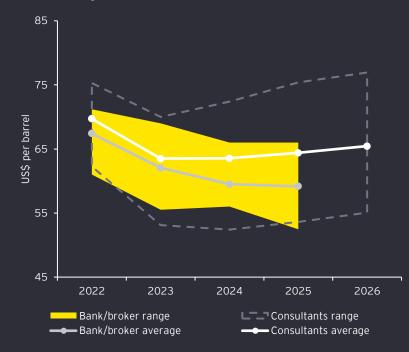
EY Price Point: global oil and gas market outlook

Average price per bbl forecast in 2026 – consultants

Source: Bloomberg; bank/broker reports; consultants' websites and reports

WTI

Bank/broker and consultant price estimates, ranges and averages



WTI: US\$65.5

Average price per bbl forecast in 2026 – consultants

Note: The wide range of long-term price estimates reflects the degree of uncertainty within the market. Both the lower and upper ends of the range provided are supported by the estimates of credible market participants. Given the width of the range, the average of estimates should be used as a starting point for the assessment or generation of estimates.



Gas price outlook

For Henry Hub, banks and brokers (on average) forecast a wider range of oil prices throughout the forecast period. Consultant forecasts for NBP are generally wider in the short term and narrower in the long term.

Consultants focus primarily on the analysis of a long-term sustainable gas price, whereas banks and brokers balance their views on the basis of current market conditions.

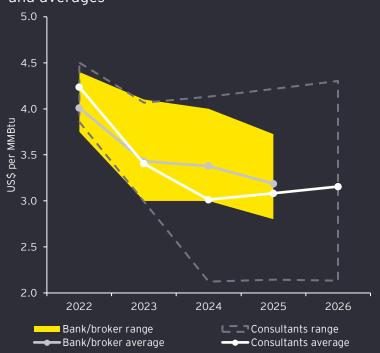
Consultant ranges include estimates of recognized market consultants. Where consultant estimates are updated only annually (for example, the EIA and the IEA), such estimates are included within the range of estimates from 2024 onward (or combined with short-term estimates published by the same consultant) to prevent near-term ranges being impacted by estimates that are not considered to reflect current market dynamics. Henry Hub price estimates derived under the IEA's "Stated Policies" and "Sustainable Development" scenarios (inflationadjusted to reflect nominal pricing) are reflected within the consultant ranges from 2024 onward.

NBP price estimates are scarce, with only six and three forecasts released by banks and brokers and consultants, respectively.

This data is effective as of 10 December 2021.

Henry Hub

Bank/broker and consultant price estimates, ranges and averages



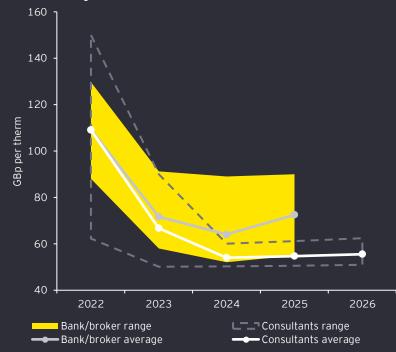
Henry Hub: US\$3.2

Average price per MMBtu forecast in 2026 – consultants

Source: Bloomberg; bank/broker reports; consultants' websites and reports

UK NBP

Bank/broker and consultant price estimates, ranges and averages



UK NBP: GBp55.5

Average price per therm forecast in 2026 – consultants

Note: The wide range of long-term price estimates reflects the degree of uncertainty within the market. Both the lower and upper ends of the range provided are supported by the estimates of credible market participants. Given the width of the range, the average of estimates should be used as a starting point for the assessment or generation of estimates.

*NBP: National Balancing Point



Gas price outlook

For both benchmarks, consultants (on average) forecast a wider range of prices throughout the forecast period.

Consultants focus primarily on the analysis of a long-term sustainable gas price, whereas banks and brokers balance their views on the basis of current market conditions.

Consultant ranges include estimates of recognized market consultants.

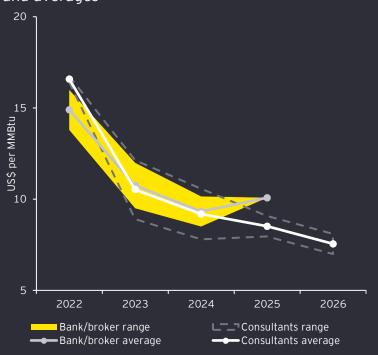
JKM price estimates are scarce, with only two and two forecasts released for banks and brokers and consultants, respectively.

TTF price estimates are scarce, with only two and four forecasts released by banks and brokers and consultants, respectively.

This data is effective as of 10 December 2021.

JKM

Bank/broker and consultant price estimates, ranges and averages



JKM: US\$7.5

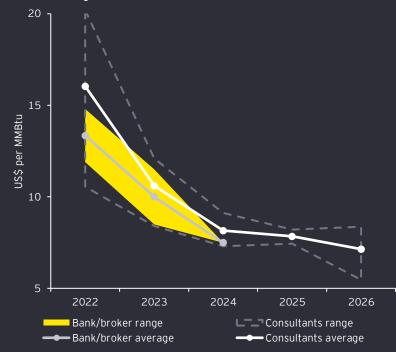
EY Price Point: global oil and gas market outlook

Average price per MMBtu forecast in 2026 – consultants

Source: Bloomberg; bank/broker reports; consultants' websites and reports

TTF

Bank/broker and consultant price estimates, ranges and averages



TTF: US\$7.1

Average price per MMBtu forecast in 2026 – consultants

Note: The wide range of long-term price estimates reflects the degree of uncertainty within the market. Both the lower and upper ends of the range provided are supported by the estimates of credible market participants. Given the width of the range, the average of estimates should be used as a starting point for the assessment or generation of estimates.



Brent oil price estimates

This data is effective as of 10 December 2021.

Bank/broker	2022 (US\$/bbl)	2023 (US\$/bbl)	2024 (US\$/bbl)	2025 (US\$/bbl)	2026 (US\$/bbl)
High	79.1	75.0	75.0	76.3	
Average	72.3	67.6	67.3	67.2	
Median	72.0	67.4	67.3	67.1	
Low	64.0	57.5	60.0	57.0	

Source: Bloomberg; bank/broker reports

EY Price Point: global oil and gas market outlook

Consultant	2022 (US\$/bbl)	2023 (US\$/bbl)	2024 (US\$/bbl)	2025 (US\$/bbl)	2026 (US\$/bbl)
High	78.2	72.5	75.7	79.4	81.0
Average	73.7	67.2	67.1	68.1	69.4
Median	72.5	69.4	67.7	67.4	68.7
Low	70.1	54.9	58.3	60.9	60.9

Source: Consultants' websites and reports; Oxford Economics

Note: Consultant ranges include estimates of recognized market consultants. Where consultant estimates are updated only annually (for example, the EIA and the IEA), such estimates are included within the range of estimates from 2024 onward (or combined with short-term estimates published by the same consultant) to prevent near-term ranges being impacted by estimates that are not considered to reflect current market dynamics. Price estimates derived under the IEA's "Stated Policies" and "Sustainable Development" scenarios (inflation-adjusted to reflect nominal pricing) are reflected within the consultant ranges from 2024 onward.



^{*}Certain price estimates included within the summary above may reflect real vs. nominal pricing as the bank/broker assumptions are not explicitly stated within Bloomberg or the respective reports.

WTI oil price estimates

This data is effective as of 10 December 2021.

Bank/broker	2022 (US\$/bbl)	2023 (US\$/bbl)	2024 (US\$/bbl)	2025 (US\$/bbl)	2026 (US\$/bbl)
High	71.2	69.0	66.0	66.0	
Average	67.4	62.0	59.5	59.2	
Median	67.5	60.8	58.0	59.0	
Low	61.0	55.5	56.0	52.5	

Source: Bloomberg; banks/brokers reports

EY Price Point: global oil and gas market outlook

Consultant	2022 (US\$/bbl)	2023 (US\$/bbl)	2024 (US\$/bbl)	2025 (US\$/bbl)	2026 (US\$/bbl)
High	75.3	70.0	72.4	75.4	76.9
Average	69.7	63.5	63.5	64.4	65.5
Median	70.0	66.3	64.8	64.7	66.0
Low	62.3	53.1	52.5	53.6	55.1

Source: Consultants' websites and reports; Oxford Economics; EY analysis

Note: Consultant ranges include estimates of recognized market consultants. Where consultant estimates are updated only annually (for example, the EIA), such estimates are included within the range of estimates from 2024 onward (or combined with short-term estimates published by the same consultant) to prevent near-term ranges being impacted by estimates that are not considered to reflect current market dynamics.



^{*}Certain price estimates included within the summary above may reflect real vs. nominal pricing as the bank/broker assumptions are not explicitly stated within Bloomberg or the respective reports.

Henry Hub gas price estimates

This data is effective as of 10 December 2021.

Bank/broker	2022 (US\$/MMBtu)	2023 (US\$/MMBtu)	2024 (US\$/MMBtu)	2025 (US\$/MMBtu)	2026 (US\$/MMBtu)
High	4.4	4.1	4.0	3.7	
Average	4.0	3.4	3.4	3.2	
Median	4.0	3.4	3.3	3.0	
Low	3.8	3.0	3.0	2.8	

Source: Bloomberg; banks/brokers reports

^{**}Certain price estimates included within the summary above may reflect real vs. nominal pricing as the bank/broker assumptions are not explicitly stated within Bloomberg or the respective reports.

Consultant	2022 (US\$/MMBtu)	2023 (US\$/MMBtu)	2024 (US\$/MMBtu)	2025 (US\$/MMBtu)	2026 (US\$/MMBtu)
High	4.5	4.1	4.1	4.2	4.3
Average	4.2	3.4	3.0	3.1	3.2
Median	4.3	3.3	3.0	3.1	3.2
Low	3.9	3.0	2.1	2.1	2.1

Source: Consultants' websites and reports; Oxford Economics

Note: Consultant ranges include estimates of recognized market consultants. Where consultant estimates are updated only annually (for example, the EIA and the IEA), such estimates are included within the range of estimates from 2024 onward (or combined with short-term estimates published by the same consultant) to prevent near-term ranges being impacted by estimates that are not considered to reflect current market dynamics. Price estimates derived under the IEA's "Stated Policies" and "Sustainable Development" scenarios (inflation-adjusted to reflect nominal pricing) are reflected within the consultant ranges from 2024 onward.



^{*} Where brokers have reported figures in US\$/mcf, we have used a conversion ratio of 1.037 for mcf conversion to MMBtu.

NBP gas price estimates

This data is effective as of 10 December 2021.

Bank/broker	2022 (£/therm)	2023 (£/therm)	2024 (£/therm)	2025 (£/therm)	2026 (£/therm)
High	129.8	91.3	89.0	90.0	
Average	109.2	71.7	64.0	72.5	
Median	108.1	70.0	57.5	72.5	
Low	88.0	58.0	52.0	55.0	

Source: Bloomberg; banks/brokers reports

^{**}Certain price estimates included within the summary above may reflect real vs. nominal pricing as the bank and broker assumptions are not explicitly stated within Bloomberg or the respective reports.

Consultant	2022 (£/therm)	2023 (£/therm)	2024 (£/therm)	2025 (£/therm)	2026 (£/therm)
High	150.0	90.0	60.0	61.2	62.4
Average	109.1	66.7	54.0	54.7	55.5
Median	115.0	60.1	51.8	52.3	53.1
Low	62.2	50.0	50.3	50.5	50.9

Source: Consultants' websites and reports; Oxford Economics

Note: Consultant ranges include estimates of recognized market consultants. Where consultant estimates are updated only annually, such estimates are included within the range of estimates from 2024 onward (or combined with short-term estimates published by the same consultant) to prevent near-term ranges being impacted by estimates that are not considered to reflect current market dynamics.



^{*} Where brokers have reported figures in US\$/mcf, we have used a conversion ratio of 1.037 for mcf conversion to MMBtu and the brokers' forecasted FX rates.

^{*}Where consultants have reported figures in US\$/MMBtu, we have used the particular consultants' forecast FX rate for the purpose of our conversion.

JKM gas price estimates

This data is effective as of 10 December 2021.

Bank/broker	2022 (US\$/MMBtu)	2023 (US\$/MMBtu)	2024 (US\$/MMBtu)	2025 (US\$/MMBtu)	2026 (US\$/MMBtu)
High	16.0	12.0	10.2	10.1	
Average	14.9	10.8	9.3	10.1	
Median	14.9	10.8	9.3	10.1	
Low	13.8	9.5	8.5	10.1	

Source: Bloomberg; banks/brokers reports

EY Price Point: global oil and gas market outlook

Consultant	2022 (US\$/MMBtu)	2023 (US\$/MMBtu)	2024 (US\$/MMBtu)	2025 (US\$/MMBtu)	2026 (US\$/MMBtu)
High	16.8	12.1	10.6	9.1	8.1
Average	16.6	10.5	9.2	8.5	7.5
Median	16.6	10.5	9.2	8.5	7.5
Low	16.4	8.9	7.8	8.0	7.0

Source: Consultants' websites and reports

Note: Consultant ranges include estimates of recognized market consultants.



^{*} Where brokers have reported figures in US\$/mcf, we have used a conversion ratio of 1.037 for mcf conversion to MMBtu.

^{**}Certain price estimates included within the summary above may reflect real vs. nominal pricing as the bank/broker assumptions are not explicitly stated within Bloomberg or the respective reports.

TTF gas price estimates

This data is effective as of 10 December 2021.

Bank/broker	2022 (US\$/MMBtu)	2023 (US\$/MMBtu)	2024 (US\$/MMBtu)	2025 (US\$/MMBtu)	2026 (US\$/MMBtu)
High	14.8	11.5	7.5		
Average	13.4	10.0	7.5		
Median	13.4	10.0	7.5		
Low	11.9	8.5	7.5		

Source: Bloomberg; banks/brokers reports

^{**}Certain price estimates included within the summary above may reflect real vs. nominal pricing as the bank/broker assumptions are not explicitly stated within Bloomberg or the respective reports.

Consultant	2022 (US\$/MMBtu)	2023 (US\$/MMBtu)	2024 (US\$/MMBtu)	2025 (US\$/MMBtu)	2026 (US\$/MMBtu)
High	20.2	12.1	9.1	8.2	8.4
Average	16.0	10.6	8.2	7.8	7.1
Median	16.7	11.0	8.0	7.9	7.6
Low	10.6	8.4	7.3	7.5	5.5

Source: Consultants' websites and reports

Note: Consultant ranges include estimates of recognized market consultants.



^{*} Where brokers have reported figures in US\$/mcf, we have used a conversion ratio of 1.037 for mcf conversion to MMBtu.

Key contacts

Important notice

Price outlook data included in this publication is effective as of 10 December 2021. Given the rapidly evolving nature of the market and views of market participants, analysis can quickly become outdated. It should be noted that EY analysis is not for the purpose of providing an independent view of the outlook for oil and gas prices. Instead, we are collating the views of market participants.

Price outlook data should not be applied mechanistically. Instead, careful consideration should be given to the purpose of any value assessment, with price forecasts assessed in the context of other key assumptions, such as resources and reserves classification, production rates, discount rates, and cost escalation rates together with an appreciation of the key sensitivities in any such analysis.



Andy Brogan
EY Global Oil & Gas
Leader
+44 20 7951 7009



Gaurav Ghoge
EY Global Oil & Gas
Strategy Execution Leader
+ 1 713 750 4890



Derek Leith
EY Global Oil & Gas
Tax Leader
+44 1224 653 246



Gary Donald
EY Global Oil & Gas
Assurance Leader
+44 20 7951 7518



David Johnston
EY US West Strategy &
Transactions Energy Leader
+1 713 750 1527



EY | Building a better working world

EY exists to build a better working world, helping create long-term value for clients, people and society and build trust in the capital markets.

Enabled by data and technology, diverse EY teams in over 150 countries provide trust through assurance and help clients grow, transform and operate.

Working across assurance, consulting, law, strategy, tax and transactions, EY teams ask better questions to find new answers for the complex issues facing our world today.

EY refers to the global organization, and may refer to one or more, of the member firms of Ernst & Young Global Limited, each of which is a separate legal entity. Ernst & Young Global Limited, a UK company limited by guarantee, does not provide services to clients. Information about how EY collects and uses personal data and a description of the rights individuals have under data protection legislation are available via ey.com/privacy. EY member firms do not practice law where prohibited by local laws. For more information about our organization, please visit ey.com.

How EY's Global Oil & Gas team can help you

As changing demand and pricing volatility transforms the oil and gas industry, companies must reshape to thrive in this new energy world. But how do you balance the immediate cost and regulatory pressures of "now" with investment in what comes "next?" EY's Global Oil & Gas team brings together the breadth of experience and talent needed to approach the entire transformation process. By considering four key pillars of change – structure and culture, customers, technology, and skills and capabilities – we can help you adapt for today and reap the opportunities of tomorrow. And together we can build a better working world.

© 2022 EYGM Limited. All Rights Reserved.

EYG no. 011148-21Gbl ED None

This material has been prepared for general informational purposes only and is not intended to be relied upon as accounting, tax, legal or other professional advice. Please refer to your advisors for specific advice.

ey.com

