Energy Intelligence 2024 Outlook

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Endless Turmoil

Welcome to the Energy Intelligence 2024 Outlook. We expect this to be a year of ongoing turmoil, as the world confronts two major conflicts, a momentous US election and a resurgence of climate pressures.

The Middle East has quickly returned to the boil after a short period of improved relations and relative calm. Despite efforts at containment, tensions at the start of 2024 have spiraled into broader conflict as the Israel-Gaza war spills over and inflames Arab public opinion.

Oil and gas markets have largely adjusted to the disruptions of the Ukraine crisis, but that conflict is far from over – and with a stalemate on the battlefield, this year's divisive US election could shape the trajectory. A victory for former US President Donald Trump would bring pressure to end the war, alongside a host of other changes for the energy business – from climate policies to international relations. The US election's significance was clearly recognized by respondents in our annual survey (see Section 2).

At the same time, the COP28 summit in Dubai showed the low-carbon transition moving back up the agenda, buoyed by technology advances, supportive policies and geopolitical drivers. The oil and gas industry has reclaimed its place at the climate table but is now under pressure to show clear progress on methane emissions and low-carbon projects.

In essence, the energy industry finds itself navigating two realignments of the global order – toward a more multipolar system and a lower-carbon world. Either would involve a tumultuous period of adjustment. With both, the world faces sustained disruption.

At such times, reliable information and intelligent analysis are essential. Energy Intelligence has a long tradition of expertise in energy geopolitics, alongside our other core strengths in the low-carbon transition, oil markets, gas and LNG, and competitive intelligence. This combination – with our integrated team of journalists, research analysts and data specialists – gives us a unique advantage in interpreting and mapping periods of change. This Outlook provides a taste of that advantage, with a broad outline of our thinking for the year ahead.

David Pike
Editor-in-Chief

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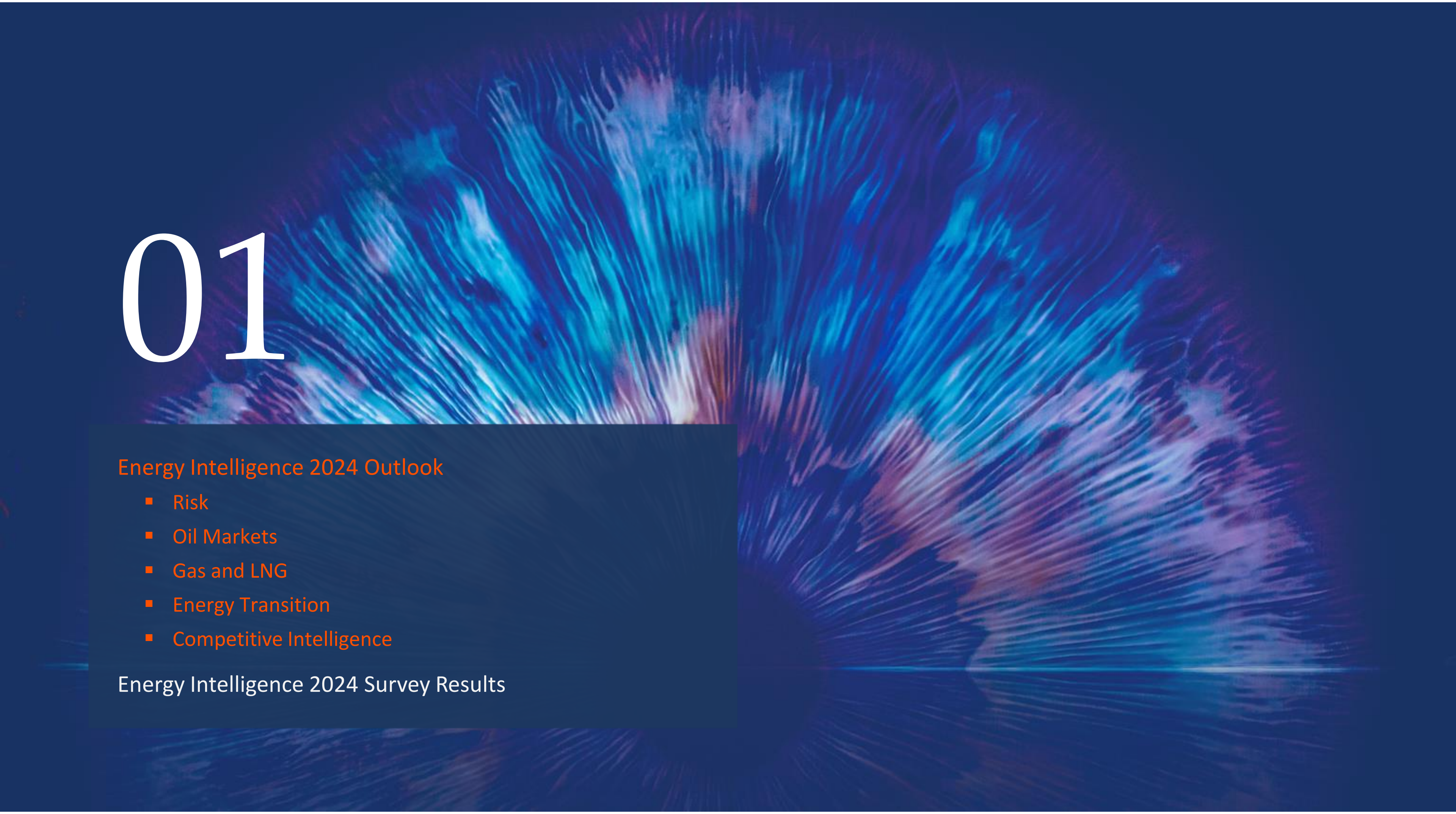

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Energy Intelligence 2024 Outlook

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Energy Intelligence 2024 Survey Results

Russia-Ukraine War Drags Into Third Year

Political developments in the US are key to the course of the conflict in 2024

The Ukraine war looks headed for another costly stalemate this year. Kyiv's failed counteroffensive, Moscow's resilience and the West's waning support mean the balance is shifting toward Russia. The odds of a diplomatic breakthrough remain low.

US political developments, including stalled Ukraine funding and November elections, will be decisive. Continuation of US military aid will be critical as Ukraine's manpower and economic pressures grow.

If US aid remains stalled, Moscow could press its advantage militarily. It could also eye a Trump victory – and major shift in US foreign policy.

A messy campaign or weak Democratic performance in Congress could also erode US political and popular support. A convincing Biden win would see renewed support, prolonging stalemate.

Moscow will want any negotiations to be on its terms, without compromise on territory.

What to Watch:

- How far will Western support for Kyiv erode in 2024? Will the US/Europe find ways to sustain aid?
- If Western support weakens, how far would Russia go in pressing its military advantage?
- How far will Biden go in ramping up sanctions to maintain pressure?
- Will Russia's economy remain resilient? Could another mobilization take place?

Energy Intelligence Ukraine Scenarios, 2024 Probability

Stalemate	High	• After neither side achieved a military breakthrough in 2023, the odds of a stalemate are high. • This scenario hinges on vital Western military support continuing, particularly from the US. • There is a good chance Western support will weaken through 2024 – the main risk to this scenario.
Russia Gains Upper Hand	Medium	• If US funding is delayed or ends, the implications for Ukraine on the battlefield would be dire. • European support would likely continue but would not make up the shortfall. • Russia could press its military advantage, strengthening its hand in any negotiations. • If Moscow pushes too hard, it could re-galvanize US support.
Diplomatic Breakthrough	Low	• The chances of a diplomatic breakthrough remain thin, but the outcome of US elections will be key. • A Trump victory would see pressure to end the war amid an isolationist shift in US foreign policy. • A weak Democratic win, and reduced political support, could also raise pressure to wrap things up. • A convincing Biden win could renew US funding, prolonging the stalemate.

Source: Energy Intelligence

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Mideast Risks Hit Boiling Point

Hopes of a new era of stability, based on improved intra-regional relations, proved short-lived.

Tensions have soared as the Gaza conflict escalates, challenging regional and US attempts at containment.

The Middle East looks destined for turmoil throughout 2024.

Diplomatic efforts, aided by the Saudi-Iran rapprochement, initially helped limit escalation. But tensions spiraled in early 2024 to Yemen and Lebanon, broadening the conflict.

The future of the Gaza Strip is very uncertain, creating an enduring source of tension – particularly among Arab public opinion. Israeli sentiment has hardened, with potentially serious ramifications.

Washington's standing has been damaged, particular in the Global South.

Existing peace treaties with Israel have held so far, but could come under pressure from any further deterioration or escalation.

What to Watch:

- Will Biden become embroiled in a wider Mideast conflict in an election year?
- Will the flare-up in Yemen encourage or undermine diplomatic progress toward ending its war?
- Will Iraq's fragile political stability survive, given the influence of Iran-aligned militias?
- Can Libya sustain oil production amid lack of progress resolving deep political fissures?
- Will Iranian oil exports remain robust or be targeted by Washington?
- Will East Mediterranean gas developments still move ahead?

Multipolar Shift Stirs Up Region

- The world's shift toward a multipolar system is eroding old alignments and creating new ones (e.g. expanded Brics, China-Saudi Arabia-Iran, Russia-Opec)
- State/nonstate actors are positioning for the new order – becoming bolder, more assertive, less constrained.
- Erosion of anchors is fostering turmoil, conflict.
- Gulf Arab states are more independent, promoting own interests + balancing alliances e.g. US (security), Russia (oil policy), China (economy).
- US pushback through Israel-Saudi normalization has backfired.
- Israel is less constrained by US.
- Hamas, Houthis, others are asserting interests violently.
- Iran is pushing back at increased US-Israel influence, while trying to avoid a direct clash.
- Iran-Saudi rapprochement reflects realignments, region seeking own solutions.

US Election Outcome Will Shape Global Outlook

Victory by Trump would set stage for major geopolitical, economic and energy policy shifts

We see heightened geopolitical uncertainty from upcoming US elections, particularly if former President Trump wins.

The US faces a highly unpredictable and divisive election.

A Trump win would upturn US domestic and foreign policy. Relations with Europe would be strained, and Washington's approach to Russia and Ukraine re-evaluated. Iran and Venezuela sanctions could be tightened, but Mideast Gulf relations could improve. Tensions with Beijing would stay strained. The prospects of trade wars with China and others would reignite.

Domestically, Trump would seek to roll back many of Biden's signature policies, including climate change provisions of the Inflation Reduction Act. Trump would seek to boost the domestic oil and gas sector, expanding federal land access and lowering taxes.

A Biden victory would see the US continue in its current direction, but with even deeper legislative gridlock if Republicans retain control of at least one house of Congress. Biden could pursue climate policies more aggressively in his final term.

What to Watch:

- Could Trump's bid still be scuppered by legal problems, challengers?
- Will the campaign generate deeper legislative gridlock or greater political instability?
- How will US allies and rivals position, particularly for a Trump victory?
- Who will win control of Congress?

Other Risks to Watch

- We are keeping an eye on a host of geopolitical risks beyond Russia, the Middle East and US.
- China's slowing economy helped guide a slight warming with the US and EU in 2023, but the balance remains fragile. Tensions over US technology sanctions and de-risking supply chains will continue.
- China's ongoing disputes (Taiwan, South China Sea) present ongoing strains and potential flash points. Economic pressures could see Beijing ease its investment and aid in the developing world.
- Further US sanctions relief for Venezuela will be tied to political progress. Caracas' saber-rattling over Guyana's oil-rich Essequibo region is a concern.
- In Africa, coups in the Sahel region, punctuated by the Sudanese civil war, are increasing risk of regional instability, conflict spillover and refugee flows.
- Upcoming elections in major oil and gas provinces — including the UK, Mexico, Venezuela and Namibia — could have major impacts. Europe also faces important elections.
- North Korea remains a perennial flash point.

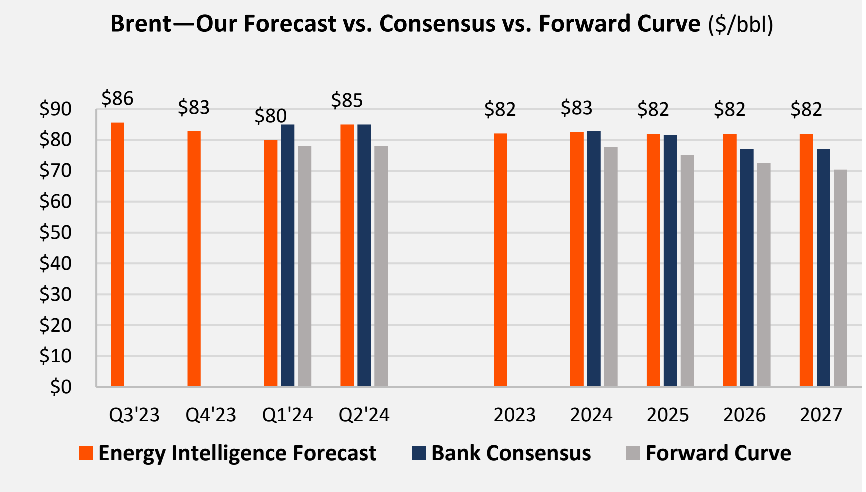
Oil Price Forecast: Brent Price Range Cut to $75-$85

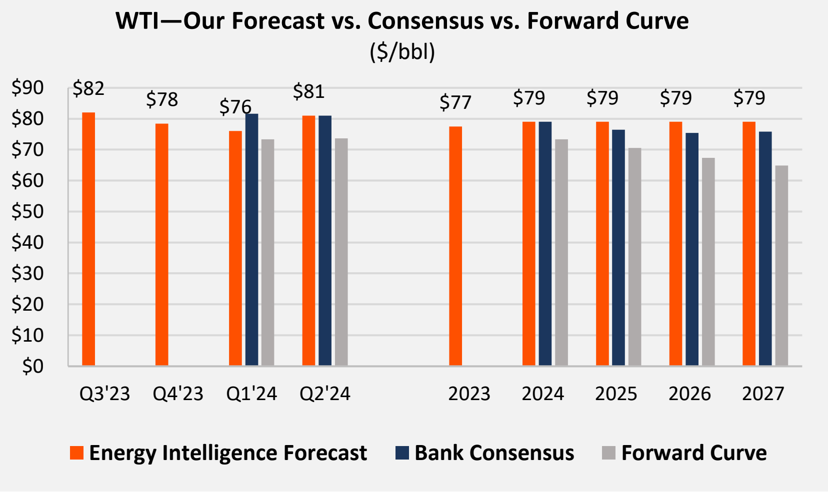
Supports for prices remain, but chronic tightness concerns dissipate

Energy Intelligence has lowered its expected normalized band for Brent prices to $75-$85/bbl for 2024, from $80-$90 previously.

Key market themes shape our 2024 outlook:

- **Demand Continues to Expand, But at Slower Pre-Covid-19 Growth Rate** — We see oil demand growth dropping back to about 1.1 million b/d in 2024, solid but below other, more bullish forecasts.
- **Non-Opec-Plus Supply Continues to Keep Pace With Demand Growth** — Led by growth in the Americas, non-Opec-plus supply is set to largely cover gains in demand (as in 2023) and help quell supply concerns in the coming years.
- **Opec-Plus Faces a Dilemma Over Unwinding Deep Cuts** — We see limited room for the group to add supply back (ex-Iran), unless there is outperformance on demand.
- **Capex Rises and Signs of Supply Crunch Fade** — Project pipeline and spare capacity appear ample for 2020s demand.
- **Oil Demand to Keep Growing -** We see continued growth until 2030, with a lower peak (106 million b/d) than many.





Source: Energy Intelligence

2024 Demand Growth Returns to Pre-Covid Rates

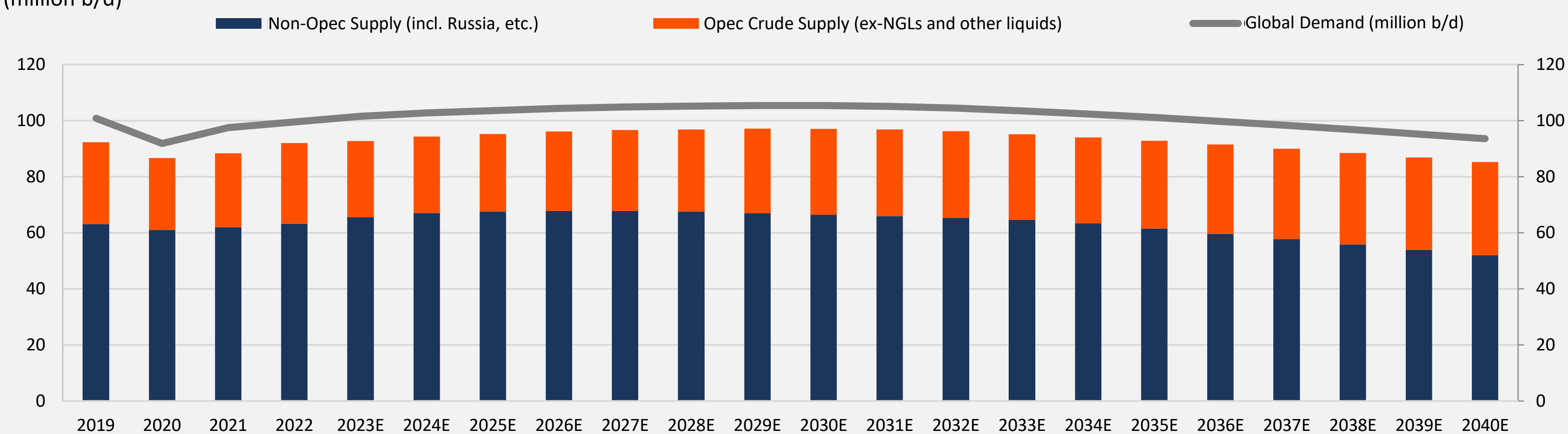
Call on Opec-plus supply is deferred with surge in Americas

We expect oil demand growth to moderate to around 1.1 million b/d in 2024 from 2 million plus b/d in 2023, in a return to the typical rates seen before the Covid-19 pandemic. Some forecasts point to more bullish growth, but we remain cautious on the economy and see only limited pent-up demand (some jet fuel) left from the Covid downturn.

Even if demand growth surprises to the 1.5 million-2 million b/d range, we see non-Opec-plus supply growth of 1.5 million b/d (crude 1 million b/d) largely covering this. This puts the continued onus on Opec-plus to balance the market.

Adequate spare production capacity and large Chinese inventories will also serve to keep a cap on prices. Any major supply disruption or further elevation of Mideast risk could still present upside potential, although the market will be wary of pricing this in before actual impacts.

Energy Intelligence Outlook: Global Oil Supply and Demand
(million b/d)



Source: Energy Intelligence

Demand Trajectory Key for Opec-Plus Cuts

Producer group will want strong demand growth to counter supply pressures

Opec-plus will be pressured again in 2024 by non-Opec-plus supply. Demand will be key to unwinding cuts.

Opec-plus is expected again to favor a price range around $80-$90 Brent, viewing sub-$70 as too low and swings above $100 as harming demand.

Another year of strong non-Opec-plus supply growth will constrain Opec-plus. Demand will be key to inventories, prices and Opec-plus' room for maneuver.

- Modest demand growth (as forecast by Energy Intelligence) could oblige the group to sustain voluntary cuts all year to keep fundamentals tight.
- Strong demand growth (as projected by Opec) or a major supply disruption would provide room to start unwinding.
- Any unwinding is expected to be gradual and pro rated.

Challenges for 2024 include a production baseline review, based on independent assessments of capacity, due to set the foundation for agreements from 2025. Disagreement on this prompted Angola to quit.

Core relations between Russia and Saudi Arabia remain strong, underpinned by geopolitical alignment, leadership support and enhanced market clout.

What to Watch:

- How will demand track? Will post-Covid-19 buoyancy continue, or will growth return to historical norms?
- Will non-Opec-plus supply grow as strongly as projected?
- Could a major supply disruption upend forecasts for 2024?
- How readily will six Opec-plus members agree to extend voluntary Q1 cuts, if needed?
- How hard will some countries resist downgrades of baselines?
- Will compliance with quotas weaken if prices rise?
- Will the US election campaign spill into oil markets?
- What role will Brazil play as a data-sharing member? Could other non-Opec producers join? Or will production growth take priority?

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European Market Still Key to Global Pricing in 2024

Comfortable storage points to market weakness, but expect volatility to persist

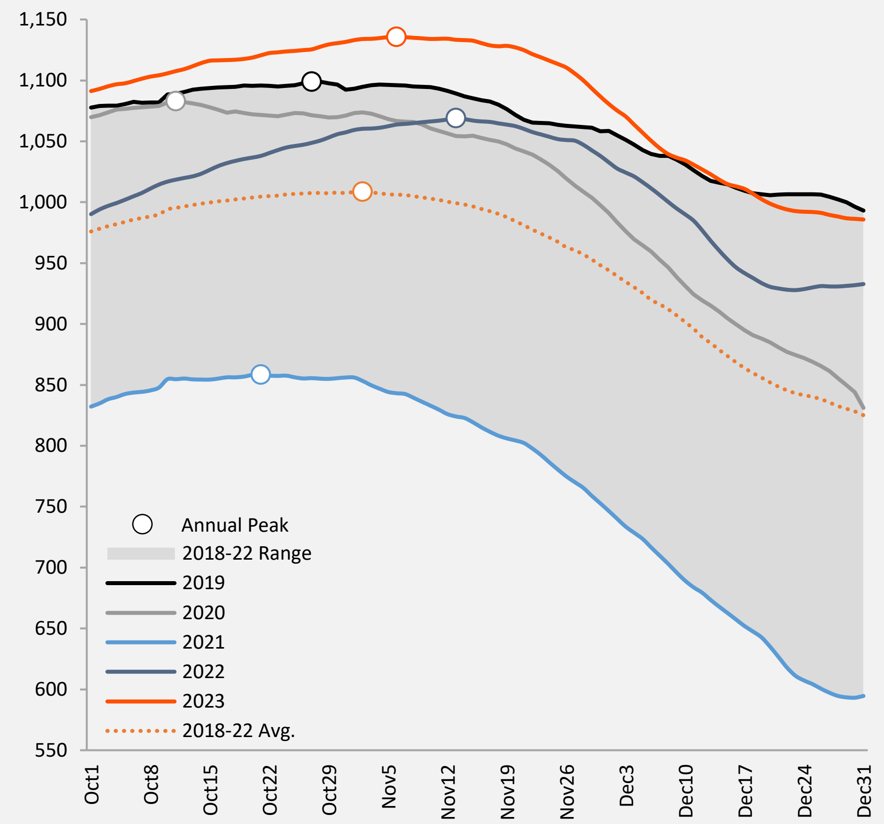
The European gas market will, again, drive prices globally in 2024. Europe's gas storage remains comfortable, but the crisis is not over. Several small increments of new LNG supply are expected, but European prices will remain volatile this year.

The past year provided a successful supply-demand blueprint for navigating the Ukraine-related crisis. Europe is now well-positioned to survive another winter due to a considerable gas cushion. The 2022/23 winter demonstrated how a seasonal exit with above-average inventories provided both a head start for next season's storage build and a bearish price signal.

But 2023 also showed that the European market remains volatile. Gas flow disruptions prompted several price spikes of 25%+. Limited new supply growth failed to tame volatility last year, and only small supply increments are expected in 2024. Dutch TTF prices, Europe's benchmark gas hub, remain elevated at the $10-$11 per million BTU level, compared with a $5-$6/MMBtu average from 2015-19.

We expect a similar pattern this year if inventories hold, helped by ongoing deliveries of flexible LNG and subdued demand. Increased Asian buying could upset the balance, although any resulting price rise would limit that activity.

Europe: Gas Storage (TWh)



Source: GIE AGSI

Asian LNG Market Faces Headwinds

Several countries will increase imports, but muted activity by others will weigh on market

Ongoing weakness in Asia's LNG market indicates that European – more than regional – demand will drive Asian prices in 2024.

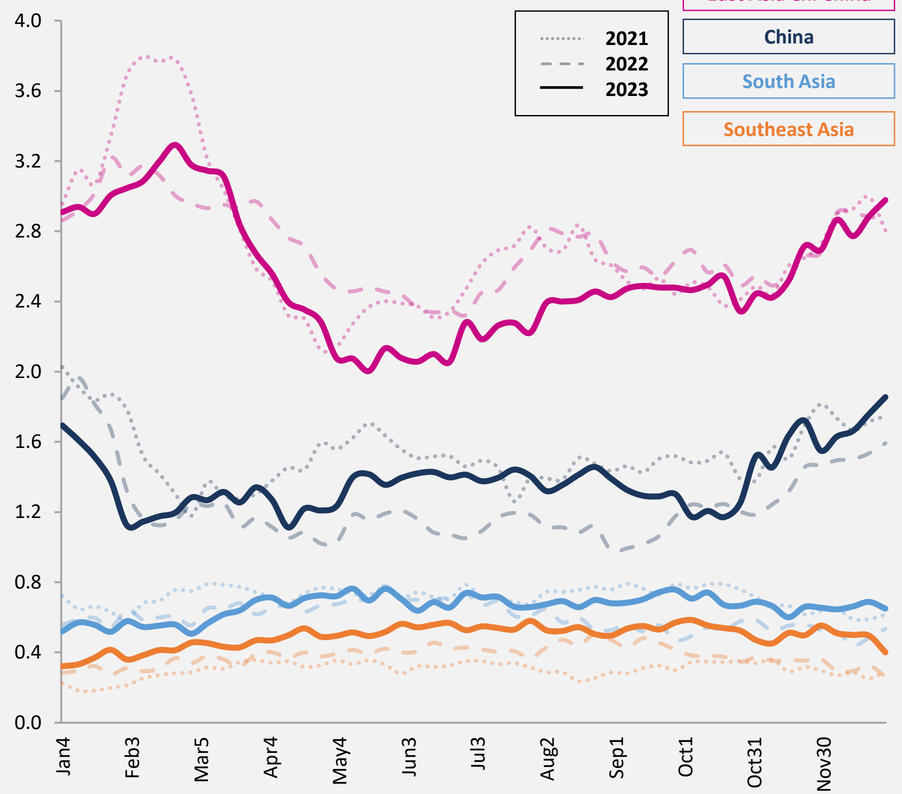
Asian LNG imports grew by 4% in 2023, weighed down by Japan and, to a lesser extent, South Korea. Chinese, South Asian and Southeast Asian markets rebounded strongly from 2022. But their spot market impact was constrained.

We expect a similar dynamic to play out in 2024.

- Japanese nuclear restarts played a significant role in the country's 8% LNG demand decline, and additional restarts in 2024 will support this trend.
- China's LNG imports grew by 13% in 2023 but still lagged 2021 levels by 9%. China's spot buying and price impact will remain constrained in 2024 by price sensitivity, term LNG supply, economic challenges, and competition from domestic and pipeline gas supply, in addition to other fuels. China's growing role as a swing LNG supplier through resales will develop over the medium to long term.
- Price-sensitive Asian buyers such as China, India and Bangladesh will ramp up spot buying when prices allow.

Europe's impact on Asian prices looks set to continue until the next LNG wave materializes in 2025.

Asia: LNG Imports, Four-Week Moving Average by Region
(million tons)



Source: Kpler

LNG Projects Poised for Bumper Year

Delayed projects bolster the 2024 FID outlook, extending the next supply wave to 2028-29

We see LNG ventures totaling around 69 million tons per year getting the green light in 2024, reinforcing market confidence in long-term LNG requirements. The projects will support a wave of new capacity that should pressure prices and support demand later this decade.

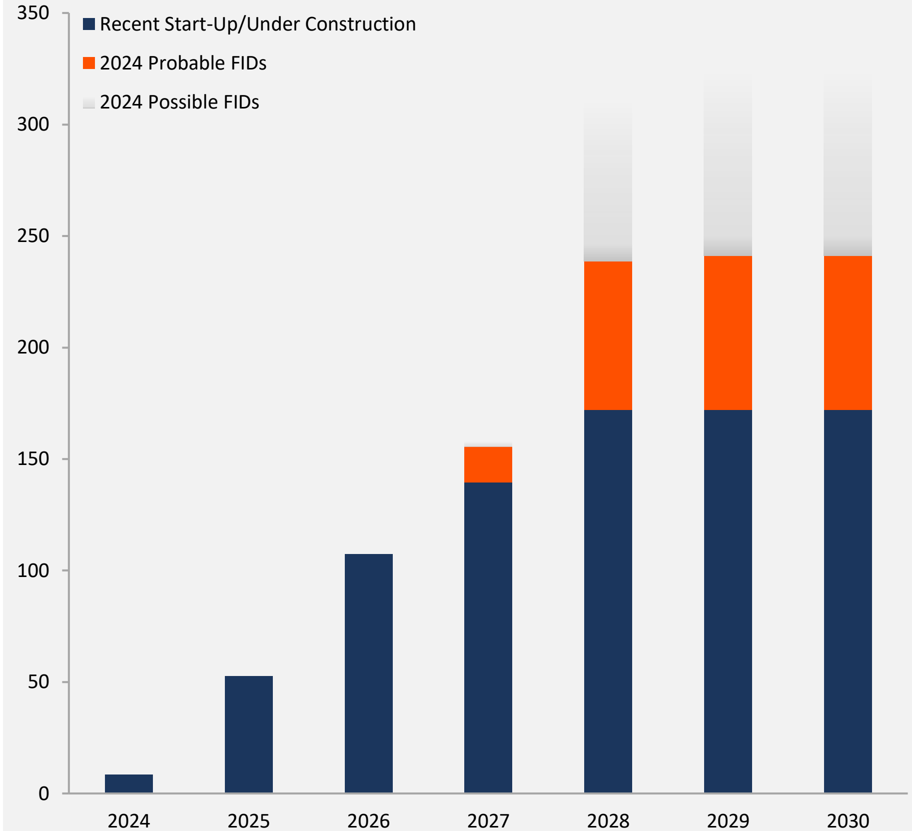
The 2024 outlook includes several projects that slipped from our 2023 forecast. Still, momentum remains strong following more than 40 million tons/yr in foundation supply agreements over the last two years, supporting projects that include Delfin, Saguaro, Commonwealth and CP2 in North America.

This could be the most significant year for final investment decisions (FIDs) since 2019, when more than 70 million tons/yr was sanctioned. The new approvals stand to increase capacity under construction by 40%. They will extend the next supply wave, starting in 2025, until well into 2028-29.

Project development headwinds such as cost inflation remain a concern. But several ventures reaching FID in 2023 navigated these challenges, with equity investment playing a growing role in financing.

US regulatory developments are a key area to watch in 2024 as the Biden administration re-evaluates climate impacts in project export license approvals. Any changes slowing US execution should open opportunities for ventures elsewhere.

LNG Supply: Potential Gross Capacity Additions to 2030
(million tons/yr)



Source: Energy Intelligence Gas and LNG Research

Energy Transition Sees Reinforced Momentum

Firmer momentum behind the transition, but electoral politics pose key risks in 2024

The energy transition is showing signs of stronger momentum, despite multiple geopolitical and economic trials in recent years. The transition faces more tests in 2024, now centering on political and financial resolve.

Multiple challenges – energy supply concerns, interest rates, inflation, supply chains – have weighed on the transition, but not altered its overall trajectory. Decarbonization efforts remain uneven but continue to advance. The key test now is political: Critical elections could undermine climate policy efforts.

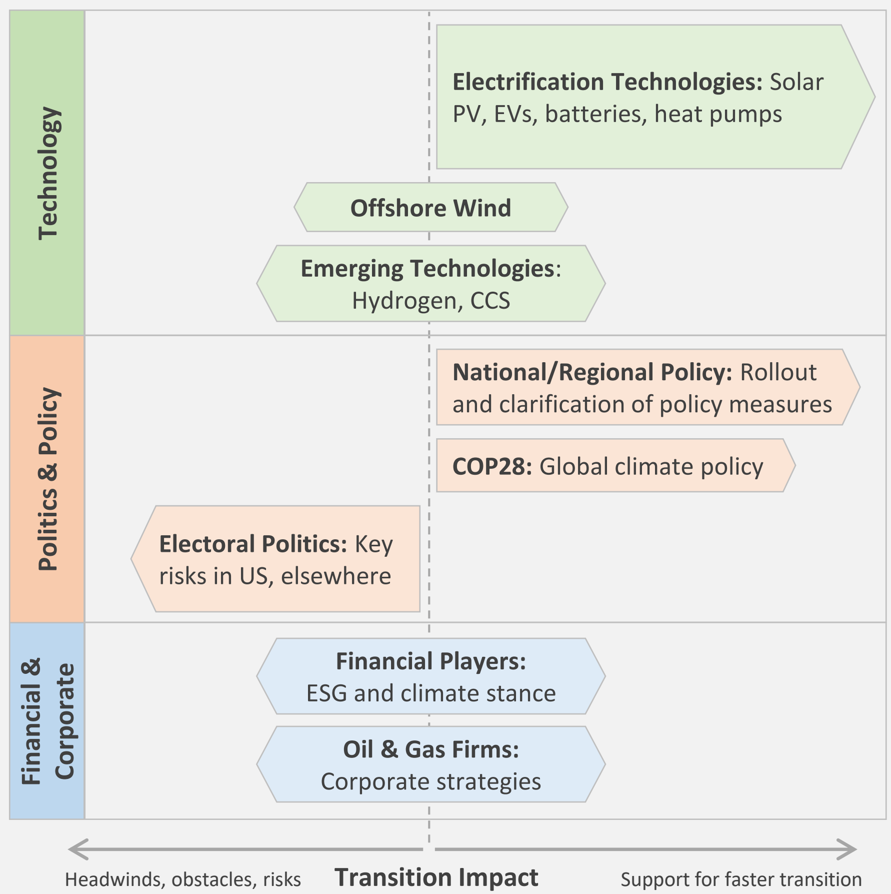
Strong tailwinds are also at play. Countries agreed broad priorities at COP28, despite differences. Energy security concerns have fueled transition efforts. Renewable power and batteries are scaling up fast, with costs declining again.

Other issues **hang in the balance.** Emerging technologies like carbon capture and hydrogen face growing pains. Some financial players are responding to low-carbon signals, but others are hesitating. Much of the oil industry committed to a new decarbonization charter, but most firms continue to hedge their bets on strategy. Some have rolled back ambitions.

Our core view – that the transition continues to gather momentum – is reinforced. Drivers for an accelerating transition (especially policy backing and technology deployment) outweigh the drags (including political and electoral uncertainties).

We do not see signs of the rapid, disruptive change needed for the world to hit ambitious net-zero goals, but a faster transition looks more likely than a broad slowdown.

Energy Transition: Status of Key Drivers



Source: Energy Intelligence

Energy Transition Drivers: Climate Policy

Policy momentum continues to grow, but faces gaps on implementation details and electoral challenges

In 2024, growing policy momentum will be supported by geopolitical competition and rising climate urgency. But policy faces important electoral and other tests.

The year starts with **renewed climate policy momentum**, after COP28 signaled a continued role for a multilateralism, further impetus for clean energy, and increased focus on fossil fuels.

Global climate policy will remain a core focus in 2024, ahead of COP29 in Baku in November.

- COP29 host Azerbaijan will face scrutiny as it seeks to balance climate concerns with energy producer interests.
- Governments are set to push for a new global finance goals and renew efforts to agree on carbon trading structures.

However, the most impactful policy action will remain at the **national and regional level**. After rolling out large-scale policy frameworks in recent years, governments will focus on more detailed implementation. Areas to watch include:

- Action on carbon pricing and carbon border taxes;
- Further detail on policy implementation, including US IRA*;
- China's evolving policy stance as clean energy grows fast;
- Tighter rules around gas, especially methane emissions;
- Electric vehicle (EV) incentives, limits on conventional sales.

Critical elections – in the US, UK, EU, Mexico, India and elsewhere – could affect the intensity of policy efforts, with potentially significant impacts on the transition's pace and shape.

What to Watch in 2024: Climate Policy Action

Global/UN Policy	• **Climate Finance:** governments are due to decide on a new climate finance goal at COP29 – but diplomatic fault lines remain
	• **Carbon Offset Trading:** likely further push to overcome obstacles on Paris Article 6, after limited progress at COP28 in Dubai
	• **Increased Climate Ambition:** in focus ahead of COP30 (2025), with countries due to submit new NDCs in line with 1.5°C goals
National & Regional Policy	• **Carbon Pricing:** governments enacting or expanding carbon tax or trading schemes, notably in response to Europe's carbon border tax
	• **Policy Details:** greater clarity needed on subsidies, grants and regulation to support rollout of hydrogen and carbon capture
	• **EV Policy Evolution:** potential tapering or refocusing of subsidies, alongside stronger sales mandates and emissions standards
	• **Renewables Support:** moves to remove obstacles to permitting and grid access, to further accelerate renewable power deployment
	• **Biofuels Mandates:** uptake of biofuels will remain primarily driven by mandate, with growing focus on aviation and maritime uses
	• **Methane Rules:** translation of multiple methane reduction pledges into policy action, including introduction of US fee in 2024

Source: Energy Intelligence. Note: *Inflation Reduction Act.

Energy Transition Drivers: Clean Energy Technologies

Electrification technologies power ahead; other decarbonization technologies need to scale up fast

Mature electrification technologies are now expanding with their own momentum. Other decarbonization technologies need clearer policy and investment backing to scale up.

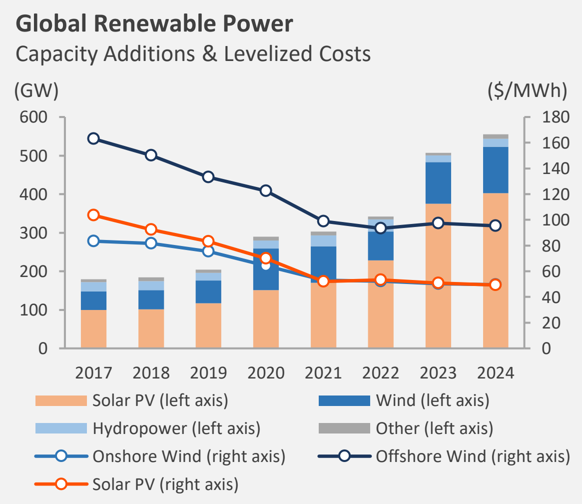
Last year saw further acceleration in **green electrification** with a step change in installation of new renewable power capacity, record growth in EV sales, and expansion in batteries and heat pumps, led by fast-growing production and adoption in China.

Renewables and batteries costs are falling again after supply chain issues interrupted the long-term trend in 2022-23. With added impetus from COP28's renewables pledge, watch for (1) further acceleration of renewables rollout, led by solar, and (2) whether offshore wind can rebound from recent challenges.

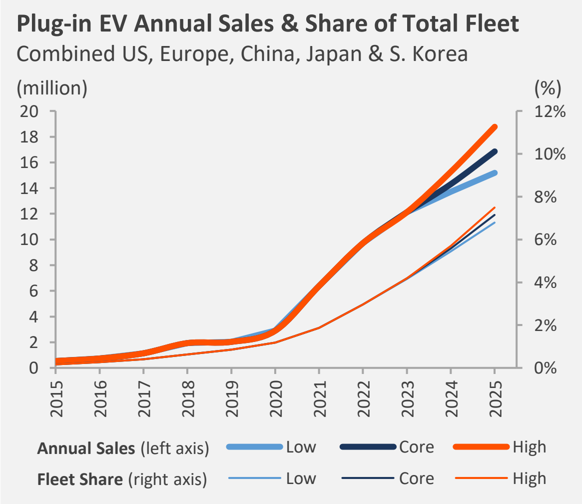
Less mature technologies – carbon capture, hydrogen/ammonia, synthetic fuels and gases – still require major policy backing, technology advances and faster deployment (including more FIDs).

Key to watch are:

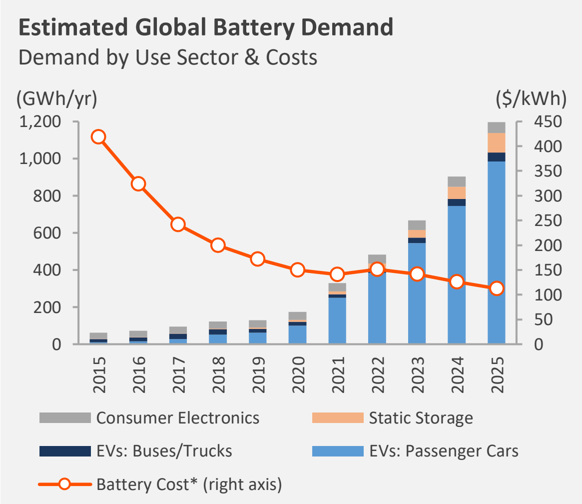
- **Policy and regulatory clarity:** Clearer and more targeted subsidies, regulation and other measures are needed to spur investment.
- **Expansion of critical infrastructure:** Faster progress on a range of infrastructure is needed, including pipelines, hubs and shipping.
- **Demand development:** Consumers and developers must make more progress in developing new markets, including industry, electricity storage and heavy-duty transport.



Source: Energy Intelligence, IEA. Note: Levelized Cost of Energy (LCOE) adjusted for inflation. 2024 LCOE data is provisional. 2024 capacity additions: IEA Accelerated Case.



Source: Energy Intelligence. Note: Low, Core & High represent sales scenario forecasts. 2023 data is estimated, 2024-25 are provisional projections.



Source: Energy Intelligence, IEA, BNEF, industry studies, academic studies. Note: * Average lithium-ion EV battery pack cost, adjusted for inflation.

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Corporate Strategy: Balancing Oil, Gas and Low-Carbon

Western majors' transition strategies will be put to test in 2024

Investors are looking for clear strategies that profitably address near-term energy security concerns and longer-term decarbonization goals in 2024.

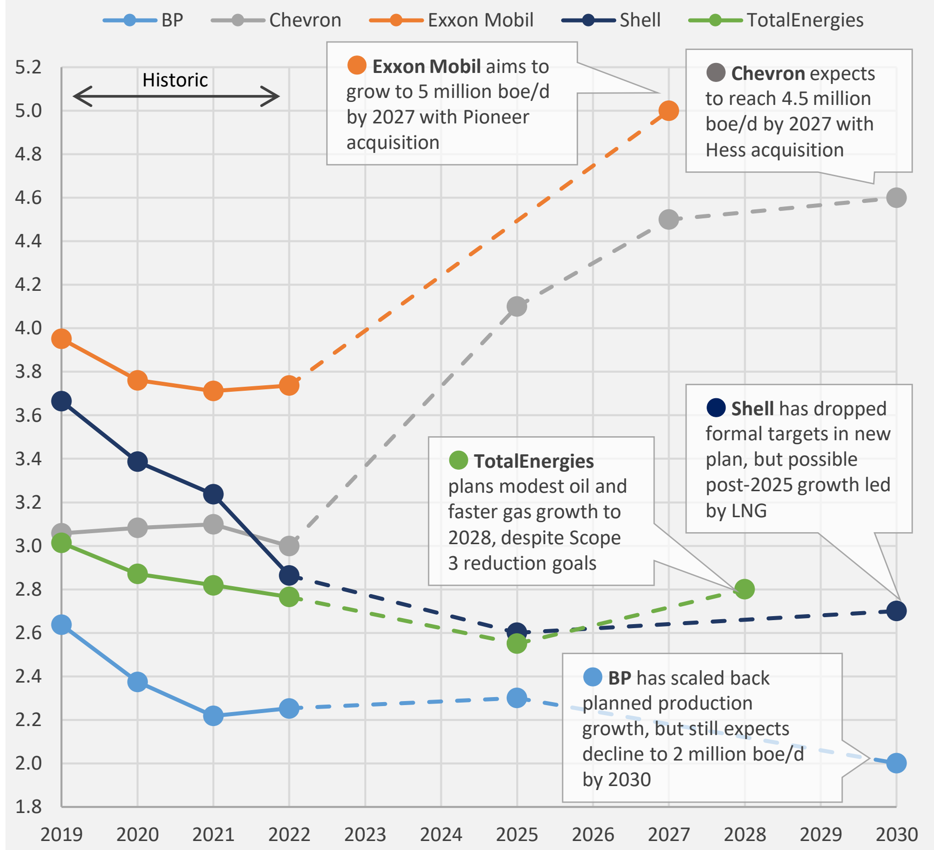
The industry will need to remain focused on building scale, strengthening balance sheets, reducing costs and maintaining strong shareholder returns, while also creating greater portfolio resiliency, expanding low-carbon businesses and meeting emissions reductions goals.

Recent upstream acquisitions by US majors underscore their bullish long-term outlooks for oil and plans for medium-term output growth, but with flexible volumes. European majors, under investor pressure, have staked out paths more oriented to low-carbon investments, with more moderate production trajectories.

We will be monitoring European majors' commitment to that model in 2024 after Shell and BP scaled back plans in renewable power and other transition businesses amid concerns about returns. How these two improve profitability, narrow the valuation gap with US majors and put a distinctive stamp on strategy are key questions.

We also expect stakeholder pressure on Regional Integrated, Independent and NOC peer groups for bolder moves in low-carbon after COP28's agreement to "transition away" from fossil fuels. Companies will be expected to show clear progress this year on methane emissions and implementing hydrogen, CCS and other projects.

Supermajors: Oil & Gas Production, Historic and Targets
(million boe/d)



Source: Energy Intelligence, company comments and presentations

Capex Outlook: Upstream Growth Targets This-Decade Volumes

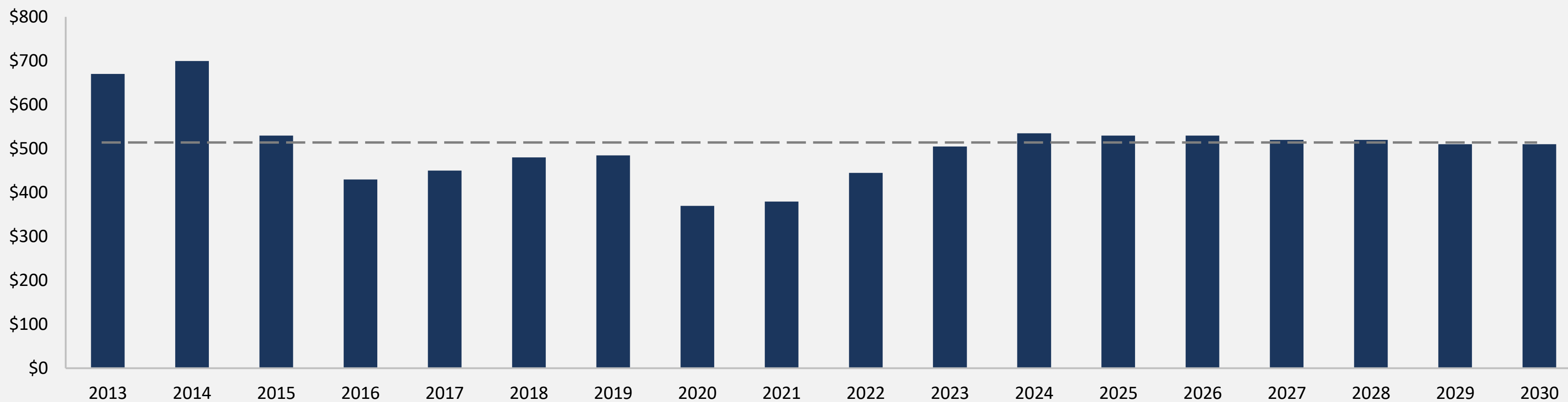
NOCs to lead 2024 spending as E&P boom continues

Upstream oil and gas spending is forecast to grow for a fourth consecutive year in 2024. Energy Intelligence expects global E&P capex to grow by more than 5% to $535 billion this year, with 80% outside North America.

NOCs will drive near-term upstream spending growth. We see Latin American, Mideast and Asian NOCs spending more in 2024 as they focus on boosting capacity. Petrobras will lead Latin America, through operated pre-salt projects. Saudi Aramco continues its ambitious capacity expansion (including gas growth) to 17 million barrels of oil equivalent per day, while Adnoc and QatarEnergy have secured key partners for this-decade growth. Petronas and other Asian NOCs remain focused on domestic expansion obligations as well as international growth options.

In North America, we see Independent E&Ps spending less this year as services pressures abate. That sector's 2023 capex growth was in part fueled by inflation and higher service costs. For the majors, steady capex allocation to advantaged Permian Basin and US Gulf of Mexico portfolios will continue, especially as US Exxon Mobil and Chevron manage recent corporate acquisitions.

Energy Intelligence: Global Upstream Spending Forecast ($ billion)



Source: Company reports, Energy Intelligence forecasts

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Upstream M&A Outlook: Focus Switches to Resiliency

Acquisition activity focuses on strategic positioning for uncertain energy transition

A rebound in upstream deal flow is being driven by portfolio resiliency. In 2024, we see companies continuing to strengthen holdings of advantaged assets — relatively short-cycle and low-carbon reserves — through acquisitions and strategic asset deals, allowing delivery under a wide range of price and demand scenarios.

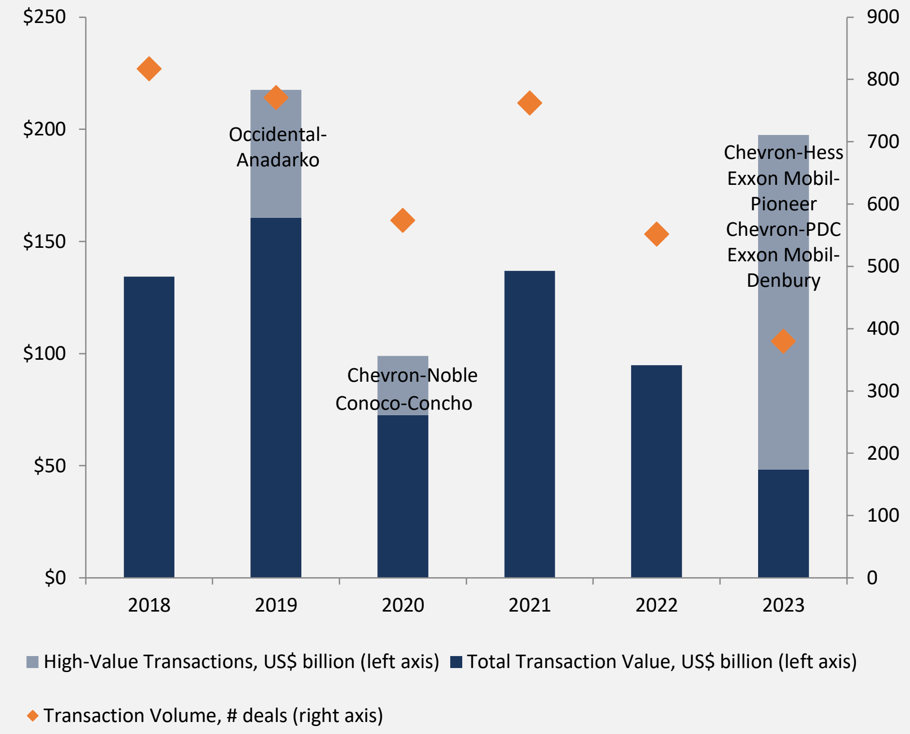
Upstream M&A reached nearly $200 billion last year, headlined by the Exxon Mobil-Pioneer and Chevron-Hess deals (worth $124.5 billion combined). The two deals highlight core resiliency pathways:

- Exxon's acquisition, along with other high-value US deals, underscores trends in US shale: basin consolidation, drilling inventory revival, cost control and cash flow boosts.
- Chevron's Hess acquisition adds portfolio optionality in Guyana and the US Gulf of Mexico.
- Other deals outside North America (Eni/Var-Neptune, TotalEnergies-Cepsa's Mideast portfolio) also improve portfolio resiliency with lower-carbon assets.

M&A in 2024 will be fueled by ongoing shale consolidation and majors' asset sales. We are watching ConocoPhillips, Devon, Marathon and others, following recent APA, Occidental and Chesapeake activity. Outside North America, a few standout acquisitions are likely in advantaged plays.

We expect NOCs to benefit from ongoing asset churn. Growth-focused Petronas, Pertamina, PTT and possibly Petrobras could continue seeking M&A opportunities near term.

Annual Upstream M&A Deal Flow



Data Source: Energy Intelligence, Enverus

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- Energy Intelligence 2024 Survey Results

Energy Intelligence

Results From 2024 Outlook Survey

Geopolitics will remain the big force in energy markets

Energy Intelligence conducted its annual survey of energy industry sentiment in December 2023, using the Energy Intelligence website and social media to gather insights from our clients and market participants.

Key findings include:

- **Geopolitics and broader macroeconomic concerns will continue to drive energy markets this year.** Economic conditions, Opec-plus market management and winter weather topped respondent concerns for oil and gas price outlooks.
- **Survey respondents see energy decarbonization as most defining the energy debate this year.** Decarbonization ranks ahead of energy affordability and energy security, in a reversal from last year. In a new question, respondents were skeptical about the world hitting net-zero emissions targets.
- **Oil prices will end the year at $80 per barrel or less.** This view reflects uncertainty about demand. The year's trajectory will also point to the likelihood of peak demand around 2030, as predicted in another new survey question.
- **A lack of upstream investment again drives the medium-term oil and gas outlook,** while respondents see shareholder returns and portfolio resiliency as key corporate drivers in 2024.
- **Battery storage, followed closely by CCS, is considered the top technology to watch,** aligning with our tracking of industry investments.
- **Survey respondents see a range of geopolitically driven "black swans,"** with a potential constitutional crisis in the US a clear concern.

Survey results were compiled anonymously through SurveyMonkey and will be used to shape the agenda of the 2024 Energy Intelligence Forum, to be hosted by Energy Intelligence in London.

2024 Outlook Survey: Critical Questions Posed

Which issue will most define the energy debate in 2024?

What will be the most impactful geopolitical issues in 2024?

Which factors will most influence oil prices in 2024?

What will the oil price be on Dec. 31, 2024 (Brent $/bbl)?

When will global oil (liquids) demand peak?

Which factors will be most critical to managing global gas and LNG markets in 2024?

What will oil and gas companies prioritize in 2024?

When will the world hit net-zero carbon emissions?

Which transition technology will make the most progress in 2024?

Which trends should energy companies be watching most in 2024?

Which "black swan" event should be on the industry's radar for 2024?

Energy Intelligence

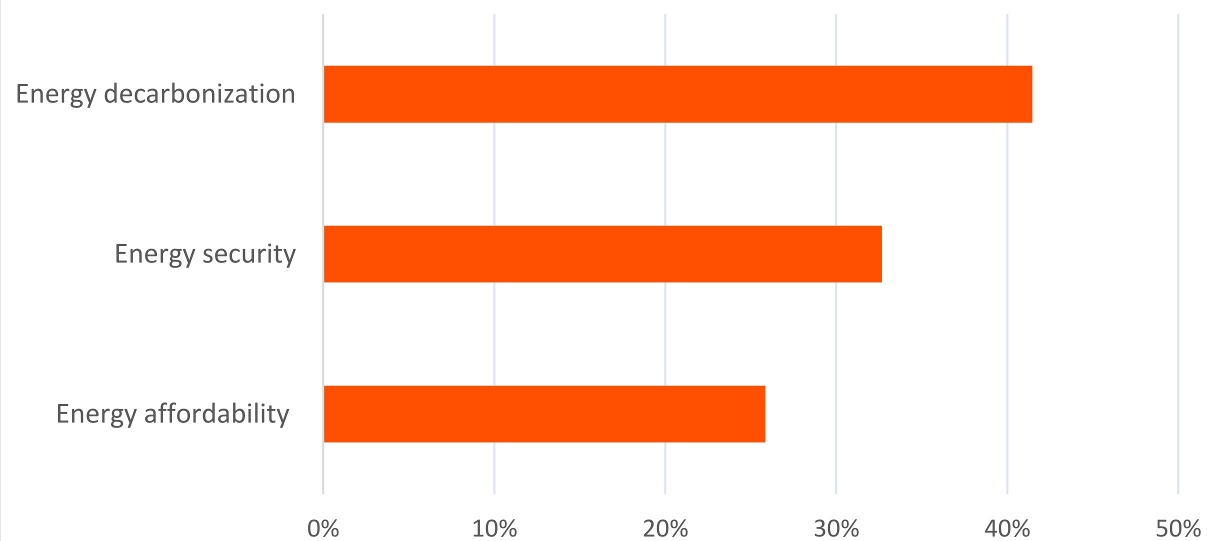
Energy Decarbonization Returns as Top Industry Concern

Impact of energy system shocks managed, as energy transition issues rise in importance again

2024 Outlook Survey

01
Which issue will most define the energy debate in 2024?

(respondents select one)



Energy Intelligence View

- Survey participants believe energy decarbonization will be the leading energy issue in 2024, outpacing energy security and affordability issues that were dominant post-Ukraine invasion.
- Energy Intelligence believes technology advances and adoption, backed by stronger policy support, will continue to drive an accelerating energy transition. COP28 signaled more momentum on low-carbon spending and fossil fuel scrutiny, and the focus is now on translating ambitions into action.

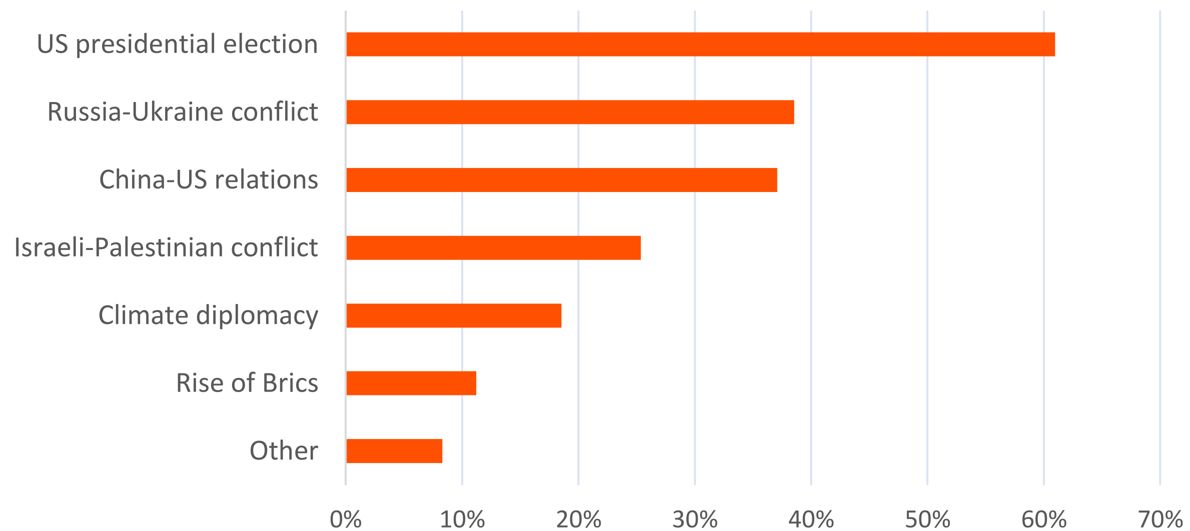
US Elections Seen as Top Geopolitical Risk

Respondents also see regional conflict and geostrategic relations driving 2024 risk outlook

2024 Outlook Survey

02
What will be the most impactful geopolitical issue in 2024?

(respondents select top two)



Energy Intelligence View

- The US elections and conflicts in Ukraine and the Mideast are the energy industry's top geopolitical concerns in 2024. Survey respondents are most concerned about the November 2024 US presidential election, which has a range of implications for sanctions, international relations, climate policy and the course of current conflicts.
- Respondents continue to see US-China relations as an important geopolitical driver, while many write-in risks flagged the potential for conflict between Venezuela and Guyana.

Macroeconomic Outlook Weighs on Oil Price Outlook

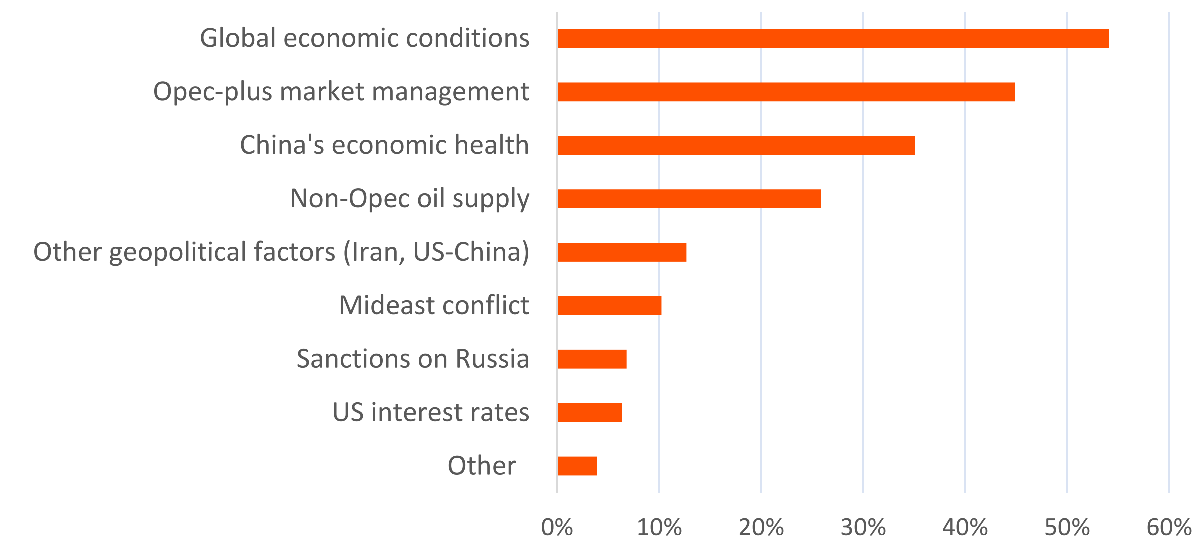
Demand outlook is the key variable for 2024 price formation

2024 Outlook Survey

03

Which factors will most influence oil prices in 2024?

(respondents select top two)



Energy Intelligence View

- A majority of survey participants believe demand issues will most influence oil prices this year, pointing to ongoing macroeconomic concerns and China's economic outlook. Supply issues were secondary, even amid Mideast conflict and other elevated geopolitical risks.
- Energy Intelligence expects strong non-Opec-plus supply to continue in 2024, driven by the US, Brazil and Guyana. However, demand growth is expected to slide back to historical norms around 1 million b/d as the post-Covid-19 rebound ends and economic pressures take their toll.

Energy Intelligence

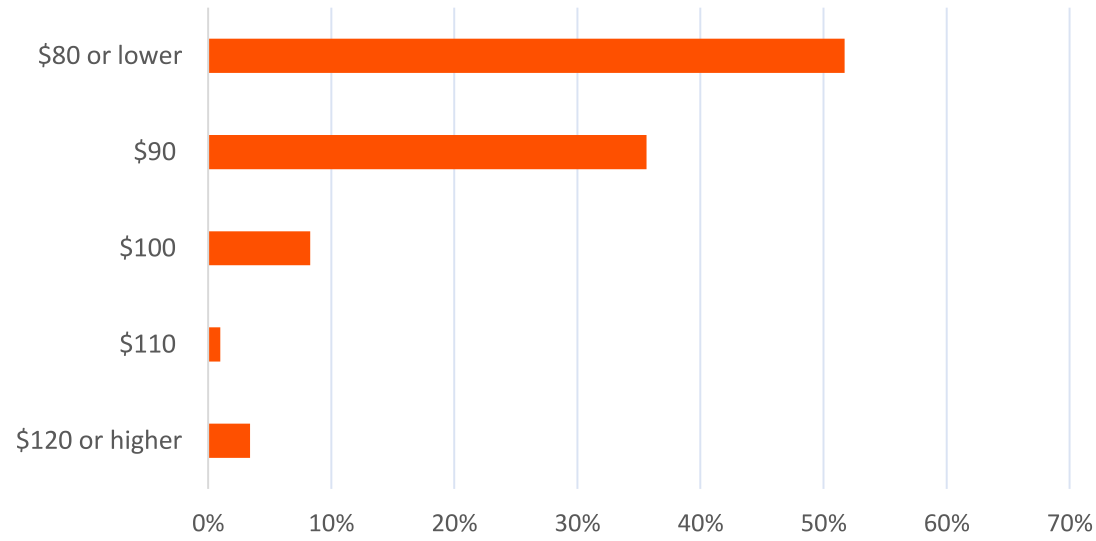
Industry Anticipates $80/bbl Oil Price

Survey respondents are generally bearish about 2024 prices

2024 Outlook Survey

04
What will be the oil price on Dec. 31, 2024 (Brent $/bbl)?

(respondents select one)



Energy Intelligence View

- The majority of participants expect oil prices to be $80/bbl or less at year's end. Economic headwinds underpin downside price views. Few respondents expect levels above $100.
- Energy Intelligence is generally aligned with the survey consensus and sees Brent averaging $82/bbl for the year. We have lowered our expected normalized band for prices to $75-$85/bbl for the year.

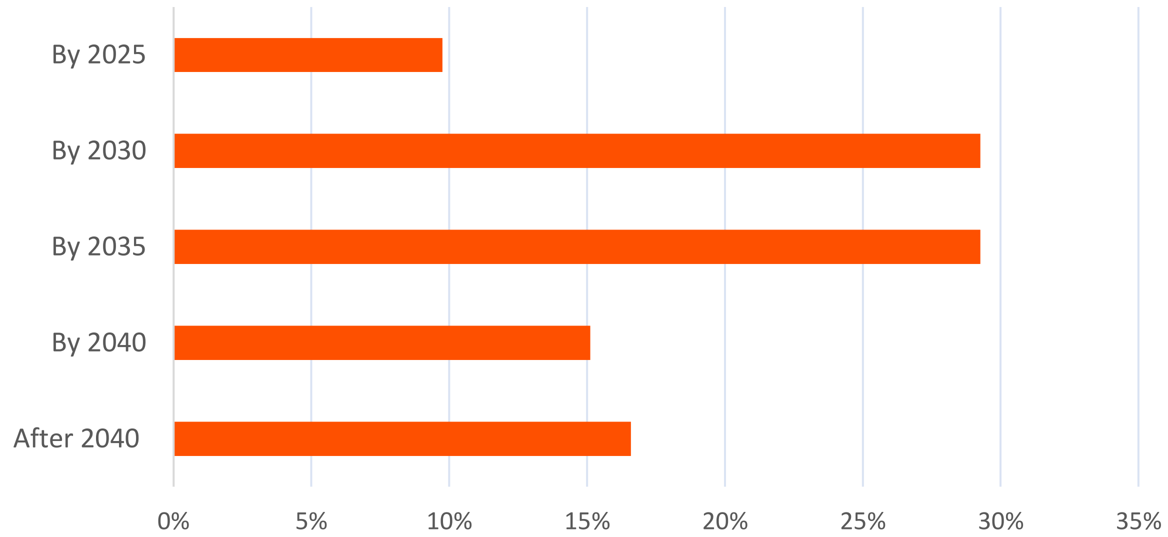
Global Oil Demand to Peak Next Decade

Most respondents see peak oil demand in the late 2020s or early 2030s

2024 Outlook Survey

05
When will global oil (liquids) demand peak?

(respondents select one)



Energy Intelligence View

- In a new question in this year's survey, respondents expect global oil (liquids) demand to peak by 2030 or 2035, in line with the consensus view.
- Energy Intelligence's long-term supply-demand model sees a peak of ~106 million b/d around 2030, followed by a plateau and gentle decline through 2040. There would be declines for transportation segments in the 2030s, but an extended plateau for jet fuel and LPG/naphtha (petrochemicals).

Energy Intelligence

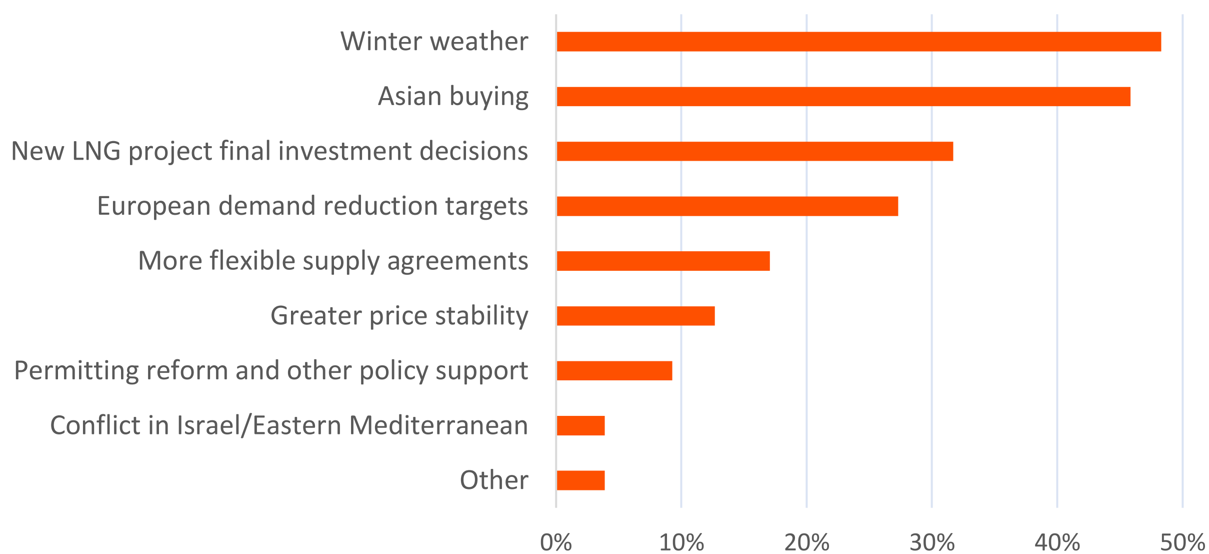
Winter Weather and Asian Buying Critical to Gas Markets

Impact of Russia-Ukraine conflict no longer a major concern for most respondents

2024 Outlook Survey

06
Which factors will be most critical to managing global gas and LNG markets in 2024?

(respondents select top two)



Energy Intelligence View

- Europe is again a key driver of gas and LNG markets in 2024. It survived a full year of sharply lower Russian supplies and managed to keep attracting LNG cargoes and rebuild storage, helped by mild weather and demand policy. All eyes are now on winter weather.
- Energy Intelligence see global gas fundamentals maintaining last year's fragile balance, but with potential risks from geopolitical turmoil, unplanned supply disruptions or stepped-up demand.

Energy Intelligence

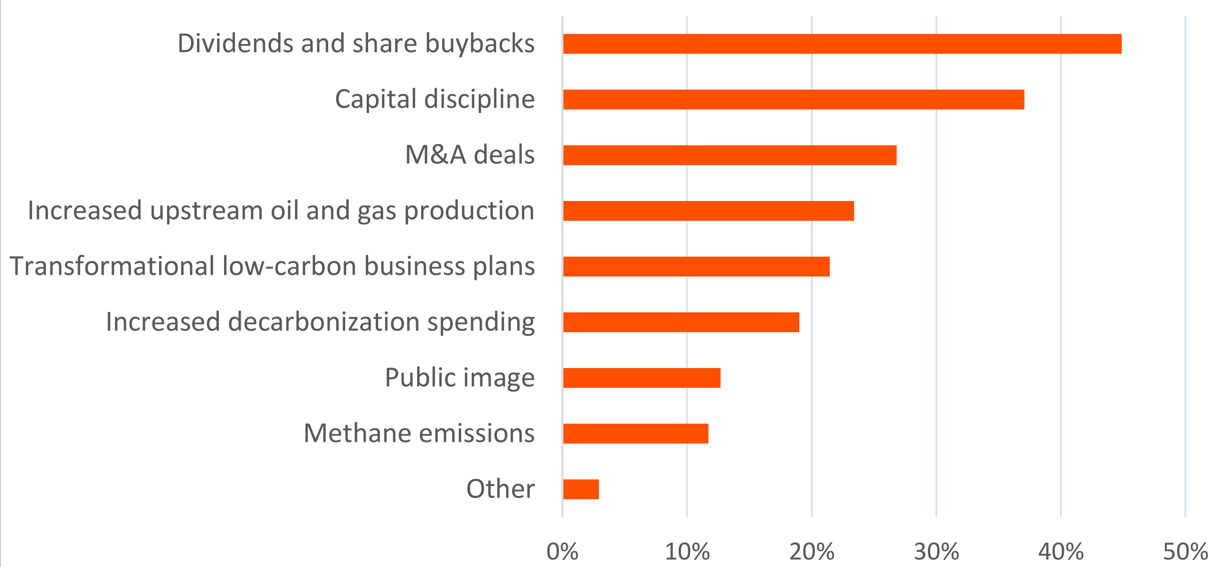
Shareholder Return Is Key Corporate Mandate

Dividends and portfolio resiliency outrank transition-related objectives as 2024 corporate priorities

2024 Outlook Survey

07
What will oil and gas companies prioritize in 2024?

(respondents select top two)



Energy Intelligence View

- Survey respondents expect companies to again prioritize fiscal discipline and portfolio resiliency. Shareholder payouts topped the list of corporate priorities in 2024, while M&A deals joined the list following a flurry of consolidation deals in late 2023.
- Transition-related objectives ranked lower in priority this year, even as COP28 and other industry initiatives pushed emissions issues to the fore. We see companies balancing the allocation of capital between traditional and low-carbon energies, especially as low-carbon capex needs to increase to meet medium-term decarbonization goals.

Respondents Skeptical About Net-Zero Targets

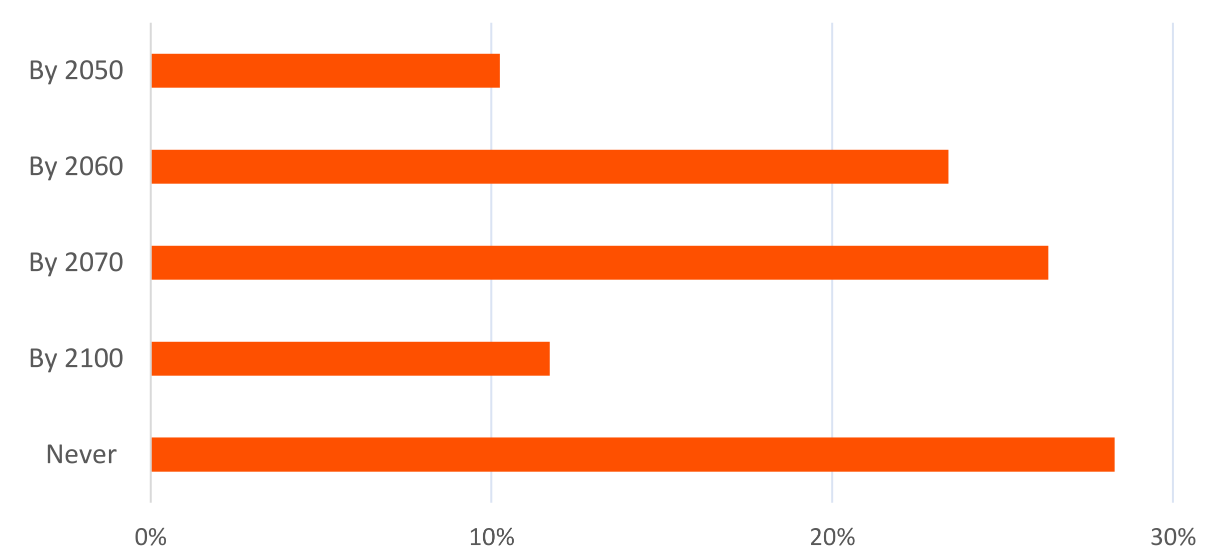
2050 net-zero goals unlikely, according to survey respondents

2024 Outlook Survey

08

When will the world hit net-zero carbon emissions?

(respondents select one)



Energy Intelligence View

- In a new question in this year's survey, respondents were skeptical about the world hitting net-zero carbon emissions by 2050, a common target. Roughly half expect net zero to be hit by 2070, while a good chunk believe it will never be reached.
- The recent COP28 summit acknowledged that the world is not on track to hits its goal for global warming, but tried to step up momentum by calling for a ramp-up in renewables capacity and EVs, while starting to transition away from fossil fuels.

Energy Intelligence

Battery Storage Rises as a Key Transition Technology

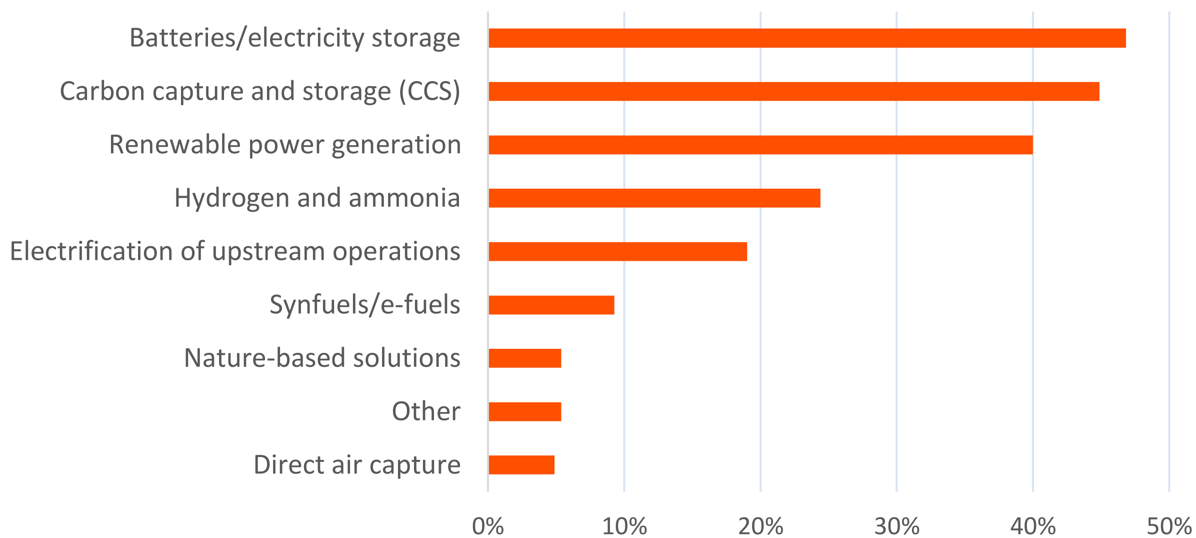
Hydrogen and ammonia drop in industry interest in 2024

2024 Outlook Survey

09

Which transition technology will make the most progress in 2024?

(respondents select top two)



Energy Intelligence View

- Batteries/electricity storage rose to the top spot in a question on transition technologies to watch, with CCS also near the top for the fourth year in a row. Direct air capture remains a niche interest. Respondents also wrote in nuclear under the “other” option.
- Energy Intelligence modeling suggests global battery demand is set to expand fast, rising to over 7 TWh by 2040 from about 500 GWh today. This will be driven mainly by rapid EV adoption, but also by stationary storage use.

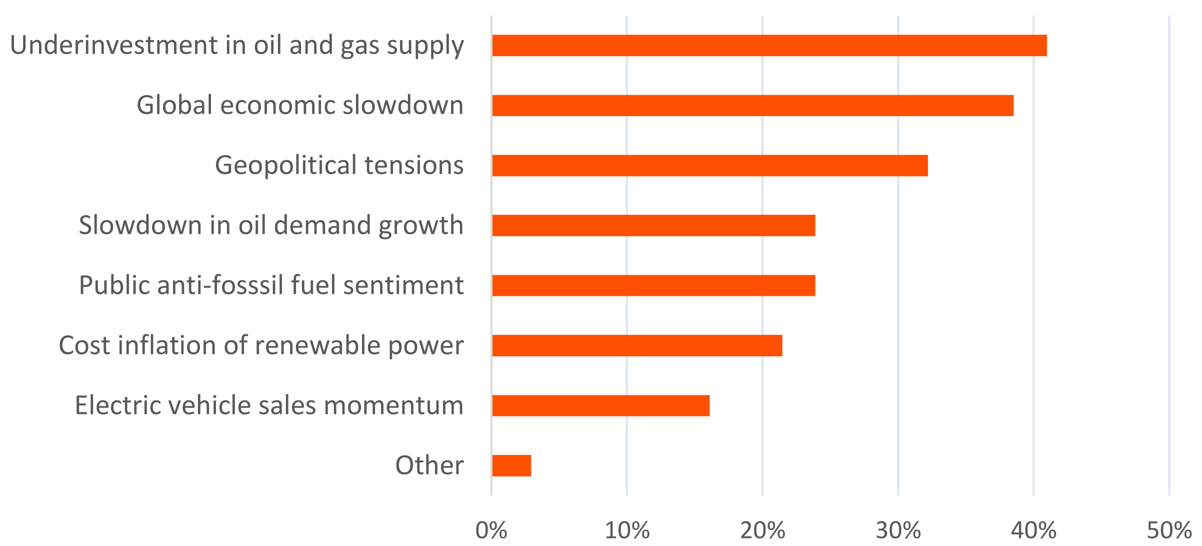
Upstream Underinvestment Back as Top Industry Concern

Respondents believe energy companies should focus on supply

2024 Outlook Survey

10
Which trends should energy companies be watching most in 2024?

(respondents select top two)



Energy Intelligence View

- While decarbonization may sit at the top of the energy agenda for 2024, respondents still see underinvestment in oil and gas supply as key concern. This priority sits at odds with survey results on corporate priorities, where upstream investment ranked fourth after dividends, capital discipline and M&A.
- Energy Intelligence sees upstream capex spending increasingly slightly in 2024 to over $530 billion, a level set to be maintained for several years. The bulk of upstream spending is weighted toward natural gas investment and capacity expansions by key national oil companies.

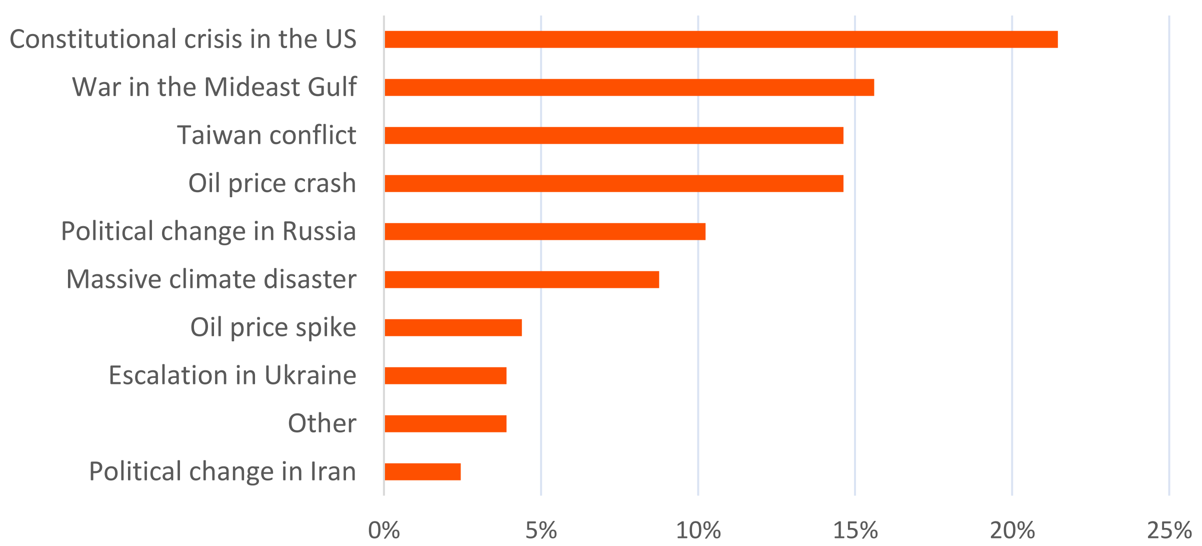
Industry Expects Various 'Black Swan' Events

The potential for conflict, in many forms, is the primary concern

2024 Outlook Survey

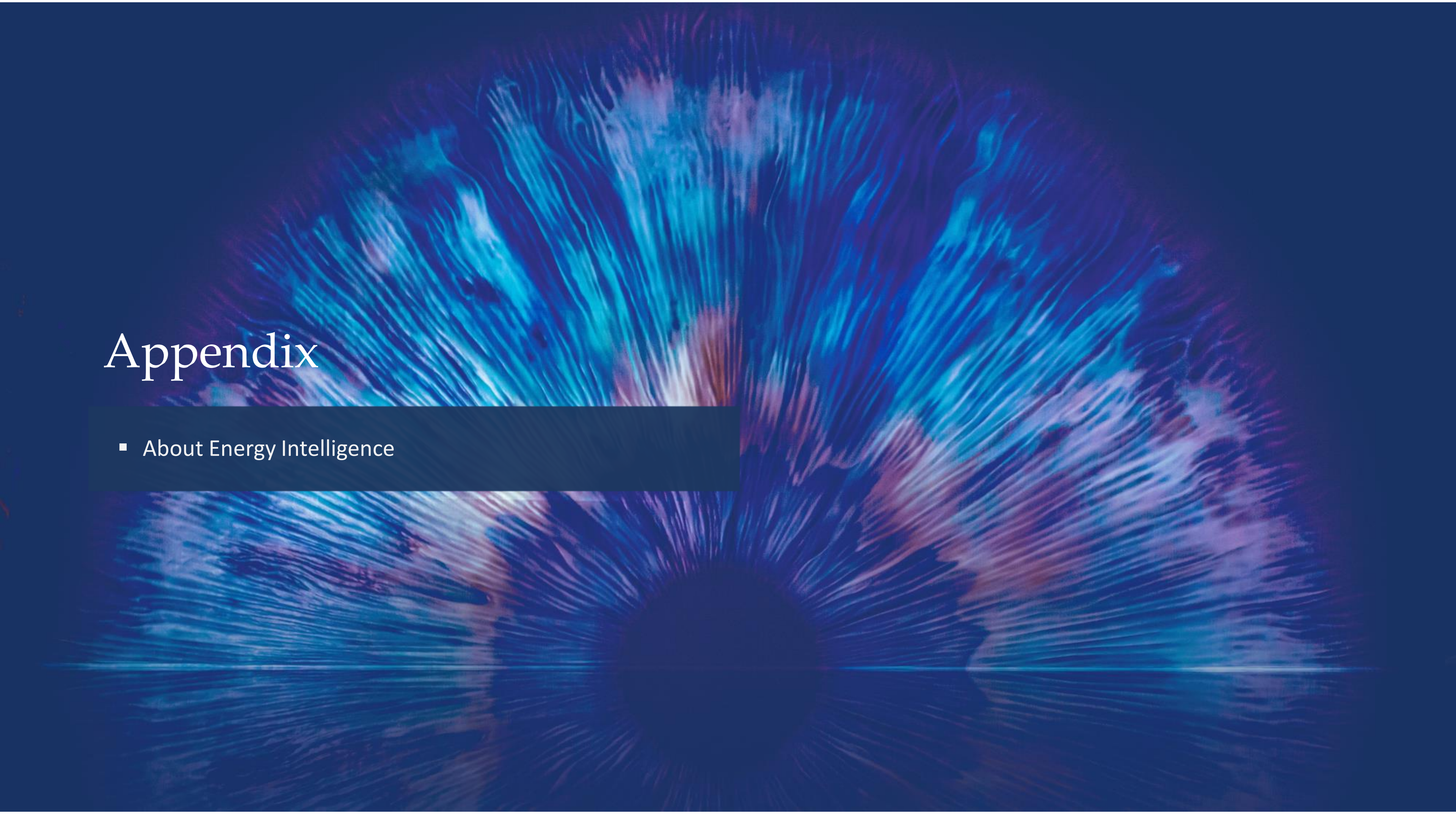
11
Which "black swan" event should be on the industry's radar for 2024?

(respondents select one)



Energy Intelligence View

- For the second year, we asked respondents to chose "black swan" events on their radar for 2024. Votes were broadly spread, with a US constitutional crisis at the top of the list, followed by conflicts in the Mideast and Taiwan. "Other" write-in options included resumption of pipeline gas from Russia to Europe.
- Illustrating how concerns can shift quickly with events, issues flagged in last year's survey focused on very different issues: change in Russia and Iran, nuclear escalation in Ukraine and the prospect of an oil price spike.



Appendix

- About Energy Intelligence

About Energy Intelligence

Your essential guide to navigate the changing world of energy

Energy Intelligence is the leading energy information company, helping clients to navigate the changing world of energy with expert news, analysis, research, data and advisory services.

We are a critical partner for the biggest players in the energy industry because of our core expertise in oil markets, LNG, geopolitics, competitive intelligence and the energy transition. At our annual Energy Intelligence Forum, we bring together the world's energy leaders to debate and shape sustainable solutions to the energy challenges of the 21st century.

The Energy Intelligence Difference:

- **NEAR-TERM MARKET INSIGHTS**
  We focus on the issues driving markets today, with actionable insights in the zero to five-year window. If it moves the needle, it's covered by Energy Intelligence.
- **ACCESS TO PRIMARY SOURCES**
  Energy Intelligence talks to decision-makers: ministers, CEOs, owners and operators. We are the best in the business at providing the inside track to the global energy business.
- **ENERGY EXPERTS WITH EXPERIENCE**
  Information "by experts, for experts." Our award-winning journalists, editors and analysts break the most important energy stories and correctly predict trends that others miss.
- **INDEPENDENT, OBJECTIVE AND TRUSTED**
  Our standards are recognized at the highest levels and used widely.

With a history dating back to 1951 and our team of award-winning experts, we help our clients navigate today's obstacles and take advantage of tomorrow's opportunities.

Learn more about the Energy Intelligence difference at energyintel.com and energyintelligenceforum.com

What We Do

Access more of Energy Intelligence's insights and expertise through our core services

Understand the pace and trajectory of the low-carbon energy transition, and how it is impacting the oil and gas industry's investment decisions.

At a time of accelerating change, our holistic coverage of the energy transition delivers the actionable insights you need to formulate and implement your low-carbon strategy.

Keep track of the factors that are forming today's oil price, and the drivers of supply and demand, with our inside view on global oil markets.

Our near-term, market-oriented focus allows our analysis to respond nimbly to market changes, so we can deliver fundamentals data and insights that are more closely aligned with market realities.

Understand how the gas and LNG landscape will evolve in a changing energy market, using our robust market outlooks, independent assessments and access to our experts.

Our holistic view of gas and LNG market movements places developments within the broader energy industry context, providing the perspective you need to understand increased market liquidity.

Monitor the intersection between geopolitics and energy, to help you make better decisions and diversify your portfolio.

Our integrated assessments of the country, geopolitical and energy transition risks for the energy industry give you the actionable insights you need to formulate and execute your investment strategies.

Benchmark your position against peers, competitors and partners and manage shareholder expectations.

Our systematic coverage of corporate strategies places developments within the broader industry context, giving you an unbiased perspective and the clarity to make confident investment decisions.

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