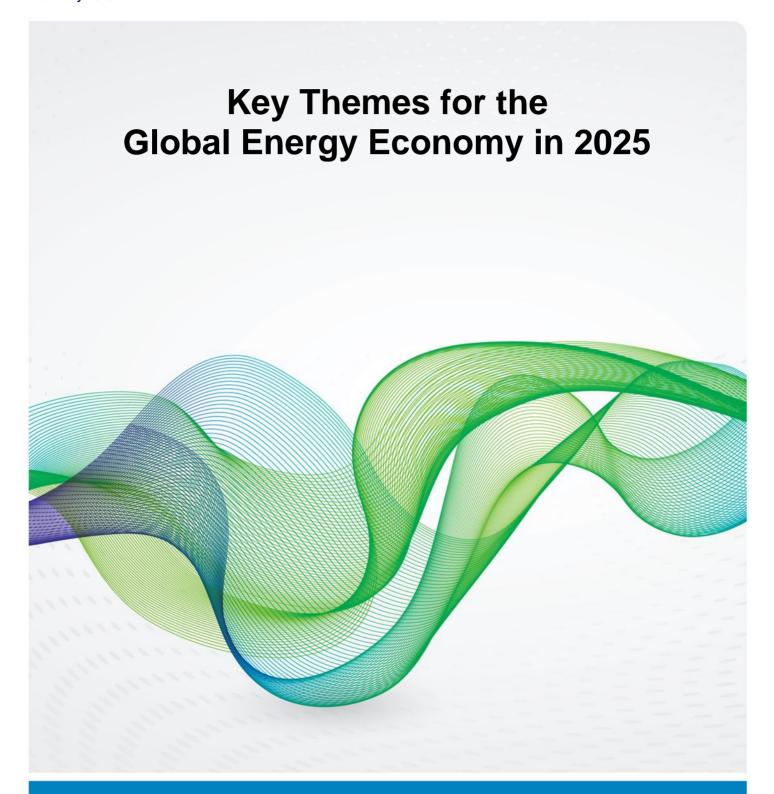


January 2025



OIES Paper: SP 35



The contents of this paper are the authors' sole responsibility. They do not necessarily represent the views of the Oxford Institute for Energy Studies or any of its members.

# Copyright © 2025 Oxford Institute for Energy Studies (Registered Charity, No. 286084)

This publication may be reproduced in part for educational or non-profit purposes without special permission from the copyright holder, provided acknowledgement of the source is made. No use of this publication may be made for resale or for any other commercial purpose whatsoever without prior

permission in writing from the Oxford Institute for Energy Studies.

ISBN 978-1-78467-262-1



# **Contents**

1. Introduction – Energy trends clouded by fractured world order in 2025	1		
2. Strong LNG demand growth will drive prices in 2025  3. Trump 2.0 will test new approaches to old geopolitical problems  4. COP process risks losing relevance in 2025  5. China faces year of consolidation in 2025  6. European summer gas storage refills – LNG's counter seasonal driver  7. OPEC+ will hold to market management approach amid market uncertainties  8. Slow grind for Russian gas marketing pivot in 2025			
		Figures	
		Figure 6.1: EU-27 Gas Storage Stocks and Targets (Bcm)	11
		Figure 6.2: EU-27 and UK LNG sendout (MMcm/d)	
		Figure 7.1: Global balance	13



#### 1. Introduction – Energy trends clouded by fractured world order in 2025

The start of Donald Trump's second term in the White House will inevitably dominate the headline flow in the first quarter of 2025 and beyond. Trump's confrontational style will likely disrupt multiple layers of the global economy, from trade to labour, monetary policy to energy. While his unquestionable influence on a series of geopolitical standoffs will be felt, energy markets also continue to be driven by more familiar, plain vanilla economic challenges.

As the energy transition gradually builds momentum, new market trends are being reinforced. In the oil market, China's role as a driving force of annual demand growth diminished in 2024, with electrification (EVs) and gasification (LNG trucks) of the transport fleet reducing demand for gasoline and diesel, but demand for petrochemical feedstocks growing healthily. China's reliance on manufacturing and exports remains solid but the energy mix behind its economic expansion is shifting away from liquids towards renewables with gas demand growth also significant albeit from a low base. China's world-leading EV sector will continue to grow and reduce liquids demand in 2025, with the new five-year plan giving additional clues about Beijing's policy priorities.

For the Chinese economy, the year is set to be one of consolidation amid the external headwinds from the new US administration and elsewhere. The big risk remains deflation, something that Beijing is determined to address through its focus on deeper development of science and technology.

In the broader oil market, the OPEC+ alliance is set to continue its successful market management approach. Historically high spare production capacity and some growth of non-OPEC oil supply has left OPEC+ to balance the market, preventing stocks from building and keeping forward curves backwardated, reducing the economic incentives for traders to buy and hold barrels. While prices are expected to ease somewhat, OPEC's effectiveness in its market balancing mission has limited price volatility, stabilizing the industry amid the growing uncertainties of oil trade sanctions and the risks that multiple global conflicts bring to oil infrastructure and trade around the globe.

Europe's shift away from Russian gas continues to weigh on global gas and LNG markets. The halt to Russian gas transiting Ukraine into Europe at the end of 2024, rebounding European industrial gas demand and declining European gas production has meant that additional LNG cargoes are needed on the continent, a new demand pull in a global market where strong Asian demand growth has been a feature in 2023-2024. While 2025 will mark the early ripples of the new wave of supply expected from major US projects, LNG will be tight this year, with Europe's mandated storage refill expected to keep the pressure on through the summer months when the bulk of storage injection typically occurs. Price will be the only means of balancing the market, eliminating some of the more price-sensitive demand in Asia. Look for the rally in global gas benchmarks seen since late 2024 to extend this year.

While the energy transition has been a common theme, 2025 will be a year where multilateral commitments come under fresh pressure from the Trump White House, which has signalled it will again withdraw from international climate commitments. This is another headwind for the UN's COP process but hardly the only one. The poor record of progress in recent years on climate finance, mitigation and adaptation and the role of fossil fuels remain thorns in the side of a global energy transition, where climate advocacy struggles to overcome the reality that oil and gas demand continues to grow, despite the incremental gains on the road to decarbonization.

Finally, one of the world's largest hydrocarbon resource holders Russia may find opportunity as well as setbacks from the change in the White House. After losing its European pipeline gas market, Moscow has worked hard to pivot its gas marketing strategy east, a challenge made all the tougher by a somewhat reluctant China, who are slow-walking their bid to take more Russian gas. Facing a new round of oil sanctions in the last days of the Biden administration, Russia's need for progress here is becoming more urgent. Trump's plans for resolving the Ukraine war may change the calculus on Russian oil and gas significantly, but even if they do not, Russia remains a key potential moving part in global energy markets.

Bill Farren-Price (bill.farren-price@oxfordenergy.org)



#### 2. Strong LNG demand growth will drive prices in 2025

A gradual start to the new wave of LNG projects that will dominate most of the second half of the decade and a year of projected strong growth in demand globally means that after a slow year for LNG trade in 2024, the year ahead will be quite a contrast. In fact, it seems likely that higher prices will be needed to choke off some price sensitive demand in order to balance the market relative to what looks like an underpriced forward curve.

2024 saw a slowdown in LNG trade growth with supply being much weaker than anticipated at the start of the year, as a result of delays to new projects and maintenance, technical and feedgas issues at some export plants. Overall growth was some 5 Bcm, but the picture was mixed regionally, with strong growth in LNG imports in Asia especially, led by China, India and Korea, while Japan demand levelled out after years of decline. ASEAN growth began to slow towards the end of the year, after three years of very rapid growth. Elsewhere, outside Europe¹, there was also solid growth, including Egypt as domestic production declined. In total non-European LNG imports grew by 35 Bcm, while Europe's LNG imports were down some 30 Bcm.

2025 is looking very different with four new projects due online. Plaquemines (US), Corpus Christi Phase 3 (US) and Greater Tortue (Senegal/Mauritania) have already begun production and LNG Canada is expected to start up in the second half of the year. Golden Pass (US) and Energia Costa Azul (Mexico), which were due on in 2025 are now delayed until 2026. Additional growth in supply will also come from the ramping up of volumes from new 2024 projects such as Tangguh Train 3 (Indonesia), Congo LNG and Altamira FLNG (Mexico). Darwin LNG in Australia is also expected to resume operations, with new feedgas from the Barossa field. There are also a number of projects recovering from constraints and outages in the US, Malaysia, Nigeria, Trinidad, Australia and Russia. The growth will be offset by the closure of one train at Northwest Shelf in Australia and extended maintenance at other Australian plants. In total LNG export capacity is expected to grow by some 39 Bcm in 2025.<sup>2</sup>

While this represents healthy growth in supply, demand growth is also expected to be strong, particularly in Europe, which has lost some 15 Bcm of Russian transit gas via Ukraine, following the ending of the transit agreement at the end of 2024. In addition, European storage was some 15 Bcm lower at the end of 2024 than at the end of 2023. If storage is to be replenished in line with the EU's storage targets, then this would require another 15 Bcm of gas supply. If European demand, production and non-Russian pipe imports remain broadly unchanged, then an additional 30 Bcm of LNG could be required, reversing the 2024 decline.

Demand growth could also remain strong in the rest of the world, especially in Asia. China gas demand is estimated to have grown by close to 30 Bcm in 2024 and a similar level of growth is projected for 2025. This growth is likely split evenly between domestic production, pipeline imports (with the final ramp up of the Power of Siberia from Russia) and LNG imports. This would suggest some 10 Bcm growth in LNG imports in China in 2025. Even with Japan, Korea and Taiwan expected to be flat overall in 2025 – with growth in Taiwan offsetting a small decline in Japan – in the rest of Asia, further growth in LNG imports is expected. This is especially true in the ASEAN region, with imports now picking up in Vietnam and Philippines and continuing strength in Indonesia. India was also buoyant in 2024 although that market is notoriously price sensitive, casting doubt on the outlook as prices trend higher.

Overall, potential LNG import growth is almost 50 Bcm globally, which would outstrip LNG supply growth by some 10 Bcm or so. This is a significant change from some three months ago when the market looked more balanced. The reason for this is the depletion of storage in Europe with the colder weather and drop in wind power, in the last guarter of 2024.

<sup>&</sup>lt;sup>1</sup> Europe includes Turkey and the non-EU Balkan countries

<sup>&</sup>lt;sup>2</sup> In their last Medium Term Gas Market Report, the IEA projected a 30 Bcm increase although it is not clear whether this included the turnround in constraints and outages.



Something will have to give in this scenario and that will be price, which is likely to be driven up, choking off some demand in key LNG importing countries. The real tightening of the market is likely in the summer, especially in Q3, as Europe strives to refill storage. This could make 2025 almost a repeat of 2021, when European storage was depleted in Q1 as Asia drew LNG away from Europe, leaving Europe to refill storage in the second half of the year. Between June and October of 2021, TTF prices more than doubled, albeit from much lower levels than currently.

Current TTF prices³ for February (M+1) are around €47/MWh (\$14/MMBTU) and the forward curve is flat through Q2 and Q3, before declining a little in the winter Q4 2025 and Q1 2026. On the basis of the LNG supply/demand balance outlined here, the forward curve looks somewhat underpriced – assuming Europe attempts to refill storage to 2024 levels by October this year.

Mike Fulwood (mike.fulwood@oxfordenergy.org)

<sup>&</sup>lt;sup>3</sup> As of Jan 15th



## 3. Trump 2.0 will test new approaches to old geopolitical problems

Donald Trump's second presidential term could lead to one of the biggest changes to the geopolitical horizon since Russia's 2022 invasion of Ukraine – potentially affecting that war, Middle East conflicts, the US relationship with China and trading relations between the US and the rest of the world. Whether Trump's bark is worse than his bite remains to be seen. The incoming president has certainly brought his influence to bear on foreign affairs before his inauguration. But follow-through will demand patience and technocratic skill from his team, both unknown quantities in the new administration.

The grid of live geopolitical hotspots impact major energy production, transportation or consumption, underlining the unbreakable link between geopolitics and energy supply chains. Trump's team have stressed his second term will be far from business-as-usual, which has left US allies and foes alike braced for more volatility and uncertainty. With the status quo not an option, Trump 2.0 may also mark a bolder US push to deploy energy as a key geopolitical lever in global affairs.

For energy, the macro and geopolitical rifts that could roil energy markets are potentially more impactful than the domestic energy policy measures that the new administration will enact. Not that domestic US energy policy is insignificant. With Liberty Energy's Chris Wright, a shale patch advocate and climate denier, set for confirmation as Energy Secretary and North Dakota Governor Doug Burgum set to take on an energy brief as interior secretary, the foundation for upstream growth in pursuit of US energy dominance is the aim, even if growth itself is likely to be more elusive. Biden's freeze on approvals for new LNG projects will be lifted as a day one priority. The bigger challenge will be unshackling the investment needed to underpin a maximalist oil and gas export strategy. But with fresh White House support, that does not seem impossible over time, especially if inflated services costs can be contained.

The corollary of this pro-oil and gas approach will be a wave of deregulation aimed at unpicking climate policy, in the form of the Inflation Reduction Act, as well as government support for hydrocarbons and the nuclear sector. Internationally, the shock waves from such a climate volte-face will be felt in multi-lateral fora like COP, although whether such a move will further slow already struggling multilateral efforts on climate – or whether it will simply herald a shake-up in global climate policy leadership outside the US - is a fair question.

Despite his America First strategy and expectations for a transactional approach to foreign affairs, Trump's second term will be potentially hugely impactful on global problems like the Ukraine war and several Middle East conflicts. Whether Trump and his team have the patience to craft a strategy more than headlines on Ukraine and Russia remains to be seen. Any reduction in US military support for Ukraine will force European nations to confront their own shortcomings and face up to the realities of a changing NATO defence picture. But under a putative Trump-backed ceasefire or peace negotiation, is there space for increased Russian gas flows into Ukraine or Europe? Will the US ease limits on sanctioned Russian LNG? Or will it increase sanctions on Russian oil and gas exports in an effort to dominate the European markets with its own exports? These are all potential pressure points for US-Russia negotiations, and could also sow the seeds of sharp tensions between the US and EU powers. A disruptive second term can only go so far before it risks undermining the global markets in which it seeks to achieve export growth.

In the Middle East, the collapse of the Assad regime in Syria and Israel's decimation of Hezbollah in Lebanon and Hamas in Gaza has dealt a significant blow to Iran, putting the Islamic Republic and its regional proxies on the back foot. But whether the US will be prepared to support Israel's desire to go further and fundamentally reshape the power balance in the region is unclear. What those who follow oil markets already know is that unless there is a realistic and widescale threat to physical oil and gas production and exports, these conflicts tend to generate headlines but not long-term market reactions. Sanctions and the extent to which they are applied remain a bigger supply lever than military action or internal unrest, at least for the major oil and gas producers. In the near term, the focus will be on whether the US wishes to maintain Biden's last-minute tightening of oil sanctions on Russia – and/or whether it will seek to enforce existing sanctions against Iran's oil exports – in both cases, a primary source of state finance.



Finally, Trump's threat to upend trading relations with its neighbours and partners further afield through new tariffs may prove to be more a warning shot than a policy plan. The risk that a reset in global terms of trade slows GDP is real enough and arguably the threat alone is damaging business confidence. Trump's team see energy exports and cheap domestic energy as a means of achieving greater economic domination. Yet softer global energy balances – already visible in oil and soon to spread to LNG later in 2025/26 - will pull prices lower all else equal. The dangers are that a weaker growth outlook amid greater trading frictions, bullish supply and exports policy and a rehabilitated Russia would compound that cyclical trend, holding prices down and starting a fresh cycle of shut-ins for uneconomic producers.

Trump's dominance of market headlines should not obscure the shifting tectonic plates outside the US, where other geopolitical powers are pushing to consolidate their economies and take advantage of energy market opportunities. For China, the global leader in renewable power manufacturing, multi-year EV and renewable power targets hit years early in 2024 are helping the country limit its reliance on imported energy. In OECD Asia on the other hand, a more realistic approach to the shortcomings of energy transition may see governments adjust decarbonization targets, prioritizing economic energy affordability and security, thereby boosting demand for gas/LNG for longer. In Europe, domestic political upheaval means populist right-wing parties are emerging in force – another factor that could moderate the climate policy orthodoxy that has been in place for at least the last decade. Half way through the decade, 2025 could well mark a pivotal change for energy markets in economies that are starting to push back against climate policies that undermine economic competitiveness. This factor, combined with a more assertive US approach abroad, sets the stage for a grand showdown in 2025 that will test the success of geopolitical and economic powers in new ways. What is for sure is that the status quo is under threat.

Bill Farren-Price (bill.farren-price@oxfordenergy.org)



#### 4. COP process risks losing relevance in 2025

The COP process is entering a critical phase in 2025, with many people now questioning its efficacy and purpose. COP29 in Baku failed to resolve big question marks over a number of critical issues, with the result that COP30 in Belem, Brazil could become a make-or-break event for the UN's initiatives on climate change. Climate finance, mitigation targets, plans for adaptation, the role of fossil fuels and whether the second Donald Trump presidency will again pull back from its climate commitments will all be critical issues. Whether a multilateral approach to climate discussions is even viable in the wake of several years of limited progress means that COP itself may become overshadowed by unilateral measures and new climate leadership of one kind or another.

The main goal of COP29 was to reach an agreement on the New Collective Quantified Goal which outlines the annual contribution to be made by developed countries to the developing world to assist with the energy transition and adaptation to climate change. This objective was reached – a \$300 billion figure was agreed, up from the previous \$100 billion – but many countries were left disappointed and dissatisfied. For the developing countries the figure was inadequate (they had been looking for a number closer to \$1 trillion) and poorly defined (it is unclear who will pay what amount, by when and in what form). For developed countries, the commitment is still large in an environment of tight budgets and slow economic growth, and they also failed to get any commitment from richer developing countries such as China or Saudi Arabia to make any contributions. As a result, although a document was signed at the end of COP29, much remains to be discussed in 2025.

The fractious debate over money meant that other important topics at COP29 got lost in the background. The most important of these was the discussion about mitigation and the follow-up to the global stocktake that had been the focus of COP28. No specific mention of fossil fuels was made in the final documents, to the dismay of many, and no countries, including the hosts Azerbaijan, made any commitment to increase their climate ambitions. This is important because by the end of February 2025 countries are meant to have submitted their updated NDCs (Nationally Determined Contributions) which should demonstrate much greater focus on achieving net zero targets. The expectation is that many countries will miss the February deadline, but it will be vital to see if the new targets, which should be ratified at COP30, will add up to an overall trajectory that can suggest that the world is still on target to meet its climate goals or whether COP30 will finally be the time that we are forced to acknowledge that the world will heat up by more than 1.5°, and that perhaps even the 2° target is becoming increasingly difficult to achieve.

In this context, discussions on adaptation are even more critical. But again COP29 failed to deliver much in the way of concrete deliverables, rolling many of the key discussions over to the mid-year negotiations in Bonn, where the next COP agenda is set and ultimately, to the negotiations in Brazil. Bonn will also see further discussion about the wording on the phase-out of fossil fuels, and should be the meeting where a number of other critical issues are raised – the progress in setting up the Loss & Damage Fund and making it operational, the changing role of the World Bank and other multinational development banks in financing the energy transition, the role of Just Energy Transition Partnerships to name just a few.

One other disappointment from COP29 was the lack of focus on methane emissions, which had seen a major breakthrough at COP28. Little mention was made of the promise to "name and shame" major emitters using satellite evidence. As a result, 2025 will be an important year to determine whether the Global Methane Pledge signed by more than 100 countries (promising to reduce emissions by 30% by 2030) will translate into action. Again, the hope is that COP30 will be the arena where greater mention is made on this vital topic.

One area of success for COP29 was the finalisation of Article 6 of the Paris Agreement on voluntary carbon markets. The rules for inter-country trading of carbon credits (Article 6.2) and the establishment of a global carbon market (Article 6.4) were ratified, and this was seen as a major win on day one of the conference. However, a number of delegates felt that the approval had been rushed through and that the regulations will not provide the solid foundation of transparency and trust which the carbon market



needs to establish credibility and prosper. As a result, 2025 will be the year when the impact of the new rules can be seen in action, and it will become clear whether the market for carbon offsets can play a significant role in the energy transition.

Finally, 2025 could also be the year when the credibility of the entire COP process is called into question. It has already been openly challenged by a number of academics, and indeed the unwieldy size of the conference, the difficulty of reaching consensus among countries with very different starting points and objectives, and the multiple roles that the conference plays, from detailed negotiations to climate protest to environmental trade show, make the COP concept a difficult one to define. However, the fundamental goal is to catalyse action from the global community on climate change and to provide finance for the developing world to help it transition, and so if 2025 fails to deliver an adequate collection of NDCs and to resolve the big finance questions then the COP process itself may have to be fundamentally rethought.

James Henderson (james.henderson@oxfordenergy.org)



#### 5. China faces year of consolidation in 2025

An economic slowdown, growing public discontent and rising trade protectionism across the globe meant that 2024 was not an easy year for China. None of these issues have been resolved, and the external environment is set to get even more complicated in 2025. Ironically, though, weak domestic demand and a more constrained external environment could accelerate consolidation in many of China's overcapacity industries such as EVs, solar and refining, positioning it for stronger growth in the following years.

#### Deflation, tariffs and plans

The key issues for the Chinese government coming into 2025 are how to build resilience in the economy and the energy system ahead of looming tariffs by the US; how to ensure that industry remains competitive and how this all fits with the country's medium-term goals, as the 14<sup>th</sup> Five Year Plan (FYP) ends this year and drafting of the next Plan is in full swing.

Sentiment around the Chinese economy has been negative, even though China is likely to reach its "around 5%" GDP growth target in 2024 and issue a similar target for 2025. But generating growth is becoming harder: The real estate sector in China remains in the doldrums, consumer confidence is still low and US President Trump is set to impose tariffs on a wide range of Chinese goods. A number of countries are also introducing trade defence measures against low cost Chinese goods. Both the IMF and the World Bank expect China's GDP to slow in 2025 to 4.5% compared to 4.9% in 2024.

But there are both downside and upside risks depending on the effectiveness of China's stimulus measures and how the trade war unfolds. In 2025, Beijing will likely double down on high-tech manufacturing—given that it has been a source of economic growth and of geopolitical leverage – alongside efforts to boost consumption. It has already initiated a quantitative easing programme that it says will continue. It has pledged a 'moderately loose' monetary policy, harking back to its stance in the aftermath of the Global Financial Crisis. The government has also introduced a massive debt swap for local governments that could help clean up their balance sheets, thereby allowing them to resume salary payments and investment. And indeed, in early January 2025, government workers were given their first pay rise in a decade. The government has also expanded consumer trade-in programmes, including renewing a subsidy programme aimed at boosting sales of fuel-efficient vehicles including electric vehicles (EVs).

Deflation, however, remains a chronic concern: disposable household income growth is at an all-time low while household leverage is climbing to record highs, meaning that without structural reforms, households are ill-equipped to drive China's economic recovery. President Xi's pledge to "pursue high-quality development as a top priority, promote greater self-reliance and strength in science and technology<sup>4</sup>" in his New Year's speech suggests structural reforms are not his top priority for now. They might be touted again this year, or even make their way into the 15<sup>th</sup> FYP document but industrial prowess remains the key goal. Meanwhile, on the supply side, deflation may continue to support China's export-oriented growth for a little longer and boost industrial competitiveness globally, even as this has taken a toll on domestic margins.

But sustaining competitive exports goes to the heart of the trade imbalance with many countries, including the US. While Beijing expects President Trump to impose tariffs, their impact on economic growth and therefore the best policy response are still open questions. Will the US impose 60% tariffs from the get-go? When will they be introduced and how effectively will the US be able to enforce them, especially if they lead to higher inflation? Critically, will the US want to and be able to limit transhipments? And how eager will the US be to impose tariffs now that Beijing has an arsenal of export controls and corporate sanctions that it is deploying more readily? The economic risks seem heavily skewed to the downside, but an effective stimulus, some form of staggered or delayed tariffs, a grand bargain with the US, among other factors, could also see some economic upside in China.

<sup>&</sup>lt;sup>4</sup> https://www.mfa.gov.cn/mfa\_eng/xw/zyxw/202412/t20241231\_11524948.html



#### A strong year for power, another weak year for oil

Beyond the complicated macro context, the relationship between macro and energy is also changing. Economic activity was broadly correlated with power and gas use in 2024—with power demand rising slightly faster than GDP and gas consumption growing almost twice as fast as GDP. But oil consumption is becoming more loosely linked with economic performance. In 2024, oil product demand was likely flat, with rising chemical demand offsetting declines in oil product consumption. Gasoline and diesel demand are now falling due to electrification in passenger vehicles and fuel switching in freight.

In 2025, power use will likely remain closely linked to GDP, but with the service and residential sectors increasingly driving power demand. New industries such as EV and solar equipment manufacturing supported power consumption in 2024, but they only partly offset weaker demand from real-estate related activities. Frigid winter temperatures and scorching summer months boosted power demand in 2024 and that trend could continue this year. If consumer spending can be unlocked, it would further boost residential power consumption and demand in the services sector.

Meanwhile, oil product demand will continue to slow due to electrification, which was a key theme in 2024 and will continue in 2025. Guidance from China's ministries suggests renewable and EV deployment could slow due to raging price wars and weak margins. China's wind and solar installations may reach 'only' 200 GW in 2025—compared to close to 300 GW in 2024. EV sales may fall below the significantly important 50% share of total sales, a level they have maintained since July 2024, but they are making significant dents in oil consumption. Gasoline demand has now likely peaked as EVs are cheaper than internal combustion engine vehicles in many parts of China. Gasoline demand will therefore continue to fall in 2025.

But truck fuel switching from diesel to LNG, which supported China's surge in gas use in 2024, could soften. With LNG prices rising globally and diesel demand falling in China, the price differential between diesel and LNG could narrow, prompting a brief recovery for diesel. Unlike EVs, where the shift is structural and lasting, in the freight sector, policies are clearly encouraging a move away from diesel, but how quickly that happens depends on the economics of switching to LNG as well as the availability of electric trucks. Fuel switching is also very regional and depends on refueling station and infrastructure build-out. An uptick in industrial activity and freight this year, combined with higher LNG prices could see appetite for LNG wane slightly. And just as price differentials could slow fuel switching domestically, greater regional arbs could lead to more LNG re-sales globally.

Even though the decline in diesel demand could moderate, it is still poised to fall in 2025. And combined with weaker gasoline use, refining margins will remain squeezed, accelerating a shift to chemicals. For the Shandong independents, which today account for roughly one-third of China's installed refining capacity, the key question will be the availability of sanctioned crudes. With tighter sanctions enforcement, their ability to source crudes and maintain runs will be limited. China's refining sector might finally see some consolidation, along with China's other overcapacity sectors.

Michal Meidan (michal.meidan @oxfordenergy.org)



## 6. European summer gas storage refills - LNG's counter seasonal driver

A perfect storm of factors point to a tighter European gas market in 2025, driven in part by the European Commission's strategic directive that requires member countries to fill their storage sites 90 per cent by 1 November<sup>5</sup> each year, a key measure aimed at assuring security of supply through the higher demand winter months in the wake of the 78 per cent decline in Russian pipline supply between 2021 and 2024. Storage is typically filled during the lower demand summer months in preparation for withdrawals during the winter.

Given that EU-27 gas storage capacity is 1,147.6 TWh (105.95 Bcm), the 90 per cent target equates to stocks of 95.4 Bcm by 1 November 2025. The European Commission has published intermediate storage stock level targets (as a percentage of national storage capacity) for each EU-27 Member State, and making it possible to calculate intermediate targets and monitor progress on injection. In winter 2023/24, the EU-27 continued to build stocks, reaching 104.6 Bcm on 1 November and peaking at 104.8 Bcm on 4-8 November. Stocks at the end of winter, on 1 April 2024 were a record 61.9 Bcm. This implied a net withdrawal of 42.7 Bcm in winter 2023/24, which was only slightly higher than the net withdrawal in winter 2022/23 (39.9 Bcm). In contrast, at the start of the present winter, stocks of 99.9 Bcm were reached on 1 October and just 1 Bcm of further stockbuild was achieved in November, followed by a rapid start to winter withdrawals. By 1 January 2025, stocks of 76.1 Bcm were 14.6 Bcm lower year-on-year.

Several factors suggest that storage withdrawal in Q1 2025 will be higher year-on-year. First is the end of Russian gas transit via Ukraine, which reached 15 Bcm in 2024, equivalent to 1.25 Bcm per month. Second is the return to year-on-year growth in European gas demand in Q4 2024, which may continue in Q1 2025. Third is the ongoing, albeit now gradual, decline in EU gas production. The fourth factor is the limited ability of non-Russian pipeline suppliers to offer significant additional volumes to balance the first three factors.

The extent of the year-on-year increase in storage withdrawals in response to those four factors depends on the extent of the increase in LNG imports. A year-on-year increase in LNG supply to Europe in Q1 2025 could curb the year-on-year increase in storage withdrawal. However, sendout from EU-27 regasification terminals has been lower year-on-year in 17 of the past 18 months, and the global LNG market remains tight. Taken together, these factors suggest that storage withdrawal in Q1 2025 could be 5 Bcm higher year-on-year, while an increase in demand combined with limited additional LNG imports could see that figure reach 10 Bcm, implying an even greater volume of stockbuild in summer 2025.

Low stockbuild scenario: If net storage withdrawal in Q1 2025 is equal to that of Q1 2024 (28.8 Bcm), the EU-27 will reach 1 April with stocks of 47.3 Bcm, which is 14.6 Bcm lower year-on-year. Meeting the 90 per cent storage filling target of 95 Bcm by 1 November 2025 implies a summer stockbuild of 47.7 Bcm. For comparison, the stockbuild between 1 April and 1 November 2024 was 39.0 Bcm. Therefore, even in a low stockbuild scenario, the EU-27 will require an 8.7 Bcm year-on-year increase in summer stockbuild. In this scenario, the 1 November target is met but stocks on that date are 6 Bcm lower year-on-year.

**High stockbuild scenario:** If net storage withdrawal in Q1 2025 is 5 Bcm greater than in Q1 2024 (totalling 33.8 Bcm), the EU-27 will reach 1 April with stocks of 42.3 Bcm, which is 19.6 Bcm lower year-on-year. Building stocks back to their 2024 levels of 100 Bcm by 1 October, and raising them to 101 Bcm by 1 November, implies a summer stockbuild of 58.7 Bcm. That stockbuild would be 19.7 Bcm higher year-on-year. It has the potential to be higher if the storage withdrawal accounts for a greater share of additional supply in Q1 2025 relative to LNG sendout, meaning that the need for net storage injection in summer 2025 could be as much as 25 Bcm higher year-on-year.

<sup>&</sup>lt;sup>5</sup> https://energy.ec.europa.eu/topics/energy-security/gas-storage\_en

<sup>&</sup>lt;sup>6</sup> https://energy.ec.europa.eu/publications/implementing-regulation-setting-filling-trajectory-intermediary-targets-2025-member-states\_en



Given the lack of potential increase in supply from production and pipeline imports, that additional storage injection in summer 2025 will need to be sourced from higher LNG imports. In the low stockbuild scenario, an additional 9 Bcm in April-October equates to an additional 1.29 Bcm per month. The high stockbuild scenario of 20-25 Bcm more stockbuild equates to 2.85-3.57 Bcm per month. For comparison, EU-27 LNG sendout in April-October 2024 ranged from 6.75 to 9.93 Bcm per month, at an average of 8.1 Bcm per month. Therefore, the low case scenario implies a 16 per cent year-on-year increase in EU-27 summer LNG imports, while the high stockbuild scenario implies an increase of 35-44 per cent increase.

That additional supply will be sourced from a global LNG market that remains tight, following limited supply growth in 2024 and robust growth in non-European LNG demand, with the year-on-year declines in European LNG imports throughout 2024 balancing the global market. Although new supply is arriving from the US (Plaquemines and the Corpus Christi expansion shipped their first cargoes at the end of 2024) and Canada (where LNG Canada is due for launch in 'mid-2025'), continued growth in non-European demand could see the market remain tight, until more new supply reaches the market and/or the growth in non-European demand eases, allowing European buyers to take the incremental supply.

Looking ahead, the potential for a substantial year-on-year increase in European LNG demand in summer 2025 is a major factor keeping forward prices for summer 2025 flat relative to Q1 2025, eliminating the seasonal dip. The situation remains dynamic, as the level of storage stocks held in the EU-27 is monitored and the implied volume of replenishment needed in summer 2025 is constantly recalculated. At present, the TTF forward prices for Q4 2025 and Q1 2026 respectively are at discounts of 0.50 USD/MMBtu and 1.00 USD/MMBtu (1.80 EUR/MWh and 3.30 EUR/MWh) compared to the forward prices for Q2 and Q3 2025, in anticipation of further increases in global LNG supply.

Three factors could change that outlook and bring winter 2025/26 prices back to a premium over summer 2025: 1) Slow progress in Europeans storage replenishment and the anticipation that storage targets may not be met, leading to LNG taking a greater share of European supply relative to storage withdrawals in winter 2025/26; 2) Delays to planned new LNG supply projects; 3) A long-term outage at an existing LNG export terminal, as seen at Freeport and Hammerfest. The tightness of the market means that even relatively small shifts in the supply-demand balance will lead to a price reaction, and that tightness will not ease until a number of new supply-side projects have launched and ramped up throughout 2025 and into 2026.

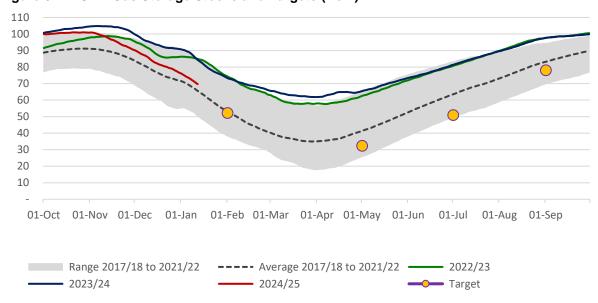


Figure 6.1: EU-27 Gas Storage Stocks and Targets (Bcm)

Source: Data from Gas Infrastructure Europe<sup>7</sup>

<sup>&</sup>lt;sup>7</sup> GIE, 2025. Aggregated Gas Storage Inventory. https://agsi.gie.eu/#/



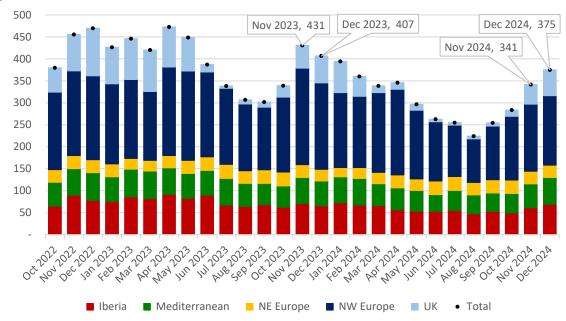


Figure 6.2: EU-27 and UK LNG sendout (MMcm/d)

Source: Data from Gas Infrastructure Europe<sup>8</sup>

Jack Sharples (jack.sharples@oxfordenergy.org)

<sup>&</sup>lt;sup>8</sup> GIE, 2025. Aggregated LNG System Inventory. https://alsi.gie.eu/#/historical/1



## 7. OPEC+ will hold to market management approach amid market uncertainties

Amid a raft of fundamental uncertainties for both demand and supply, OPEC+ looks set to hold with the market management approach that has served it well in recent years when oil markets have been buffeted by global shocks of various kinds.

The hands-on OPEC+ strategy is aimed at achieving two key related objectives: controlling the change in crude stocks and supporting a backwardated oil market term structure. To date, the approach has delivered. Despite the downward revision in global oil demand in the second half of 2024, global crude oil stocks remained 137 million barrels below their 5-year average and floating oil storage fell to lows last seen in 2018, at below 50 mbbls compared to a record high of nearly 250 million barrels in 2020, according to Kpler data. As of October 2024, the latest data point available, OECD crude oil stocks were down by nearly 10 mbbls from a year ago, remaining 49.4 million barrels below the 5-year average. In terms of the forward curve, Brent, WTI and Dubai were mostly in backwardation in 2024. Another notable feature has been low oil price volatility despite the unstable geopolitical context and the weak macro outlook, with Brent confined within the \$75-85/b range for most of the year (70% of total trading days), the tightest in years.

Given OPEC+ 'forward guidance' on production, with a gradual increase over an extended timeframe, assuming full compliance, our model projects a fairly balanced oil market in 2025, registering a small deficit of 130 kb/d even if OPEC+ decides to proceed with its planned output hike from April 2025 (see **Figure 1**). As a result, OECD crude stocks are projected to remain below the 5-year average for 2025.

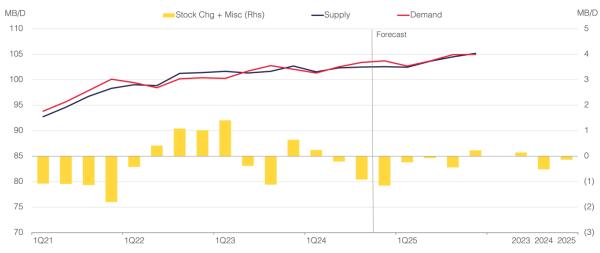


Figure 7.1: Global balance

Source: OIES

But as 2024 has shown, uncertainty around oil market balances is wide on both the demand and supply sides. Last year saw major revisions to global oil demand growth which was revised down from 1.4 mb/d at the start of the year to 1 mb/d by the end, largely driven by the slowdown in China's oil demand growth. There has also been a sectoral switch in demand, with petrochemical feedstocks naphtha and LPG accounting for the lion's share of total demand growth. Looking forwards to 2025, uncertainty on the demand side is bound to increase with the second Trump administration entering office. Rising risks of trade wars, a further deterioration in US-China relations and slower expected monetary easing by the Fed will be macro headwinds that will drag on oil demand. On the upside, China's stimulus measures could help but the evidence so far of a major new economic impetus in China is limited. Global oil demand for 2025 is projected to grow by 1.3 mb/d, with the 2024 growth pattern in the products mix expected to continue with petrochemicals leading the annual gains followed by jet fuel and gasoline, while diesel demand growth expected to post a small y/y recovery after contracting in 2024.



Global oil supply has also been responsible for its share of revisions. Non-OPEC+ supply in 2024 was revised lower by 300 kb/d from 1.1 million b/d to 800 kb/d, almost offsetting demand revisions. The biggest revision was for Brazil, which ended the year flat despite earlier projections for 340 kb/d growth. US growth stood at 140 kb/d, compared to 1.1 mb/d in 2022/23. After a lacklustre 2024, non-OPEC+ crude production is projected to register a robust 1 mb/d of growth with delayed 2024 projects coming through in 2025.

Oil's unpredictable geopolitical drivers are set to rise in 2025, with the continuation of the Russia-Ukraine war, the fall of the Assad regime in Syria and heightened US-Iran and Iran-Israel tensions. But these influences are somewhat nuanced and oil markets rarely respond in any sustained way to geopolitical instability unless there is a physical threat or impact on oil production and trade, something that has been confined to Libya in 2024. Russian oil exports have proven resilient, pivoting towards India and China and hovering around 3.4 mb/d, similar to 2019 levels. Iran and Venezuela remain under US sanctions, but oil exports from these two countries increased during the Biden Administration. In 2024, exports from Iran and Venezuela reached new high levels at 1.55 mb/d and 640 kb/d, respectively, on an annual basis.5 The Trump Administration could tighten Iran sanctions reversing some of those gains. This will depend in large part on the willingness of Chinese refineries to stop buying Iranian crude, a potential bargaining chip with the new US administration. Recently, the outgoing Biden administration has toughened sanctions on Russia's oil sector targeting Russian firms, individual oil tankers and opaque trading companies willing to sell and ship Russian oil.

Amidst the wide uncertainty in 2025, our reference scenario forecasts a lower oil price in the \$70/b and \$85/b range on a monthly basis, averaging around \$77/b for the full year (in 2024, Brent averaged \$81/b, \$1/b lower than our forecast in December 2023).4 For some observers, the projected lower price suggests OPEC+ policy is becoming less effective, in turn increasing the risk of a policy reversal. However, to gauge the effectiveness of OPEC+ current policy, it is important to evaluate the counterfactual: What if OPEC+ did not implement these production cuts? How would have financial markets reacted to a rise in inventories and shift in the term structure? Would participating countries have achieved higher revenues? Also, OPEC+ does not have a price target. This does not imply that the oil price level is not a key variable that producers monitor, and higher oil revenues are preferred to lower oil revenues. But the Declaration of Cooperation between producers is not predicated on achieving an optimal price target.

It is also often argued that OPEC+ faces the more fundamental challenge of not having the room to increase its production in the next few years without undermining market balance. By OPEC+ withholding its production, the opportunity arises for higher cost producers to invest and increase their production to satisfy the growth in demand, thus reducing OPEC+ market share, according to this argument. This becomes more important in the context of the energy transition as demand growth slows. But OPEC+ has no explicit policy around market share. For Saudi Arabia, the one producer within OPEC+ that could pursue an effective and impactful market share strategy, there is no indication yet that the calculus of the trade-offs has changed sufficient to shift the current strategy.

Thus, rather than the price level or market share considerations, it is full compliance and compensation for historical overproduction that will remain the key focus for OPEC+ in 2025 and 2026. These criteria are essential for the group's cohesion and for the agreement to have its desired effects on market balances and shaping market expectations. Achieving these criteria will also provide OPEC+ with more flexibility to navigate current market uncertainties.

Andreas Economou (andreas.economou@oxfordenergy.org)

Bassam Fattouh (bassam.fattouh@oxfordenergy.org)

\_

<sup>&</sup>lt;sup>9</sup> Crude exports estimates are seaborne only based on Kpler data.



#### 8. Slow grind for Russian gas marketing pivot in 2025

Russian gas producers have a long hard road ahead in 2025 as they seek to rebuild their export marketing strategy through the pivot to Asia. Following recording breaking profits made in 2022 thanks to high gas prices catalysed by Russia's invasion of Ukraine, the subsequent two years were much more challenging due to the sharp decline in export volumes, the retreat of global gas prices to a more "normal" range and the impact of sanctions on Russian LNG. The two Russian gas exporters most exposed to these pressures, Gazprom and Novatek, have been attempting to re-shape their marketing to cope with these challenges. As such, 2025 will be a critical year for both as they look to rebuild their gas export strategies while also maintaining a strong domestic market presence.

Gazprom's pipeline gas exports to the EU have fallen from around 150Bcm in 2021 to 15 Bcm in January 2025, leaving a huge hole in the company's revenues and heralding the company's first financial loss in two decades in 2023. Although a recovery to profit is expected when 2024 full-year figures are published, the search for alternative export markets remains urgent. Although domestic Russian prices have risen sharply, much of the extra revenue is being paid straight to the Russian budget in higher taxes. The status of European exports worsened at end-2024 when the transit of gas through Ukraine ended leaving the Turk Stream pipeline as the only remaining route for Russian gas to Europe. This underlines the increased importance of Turkey both as a transit route and as the largest western market for Russian gas. The year ahead could see further attempts to establish a "gas hub" in the country as a means to facilitate further distribution of Russian gas co-mingled with exports from the Caspian region and the global LNG market, although progress to date has been slow.

More dynamic gas marketing opportunities lie in Asia. Gazprom and the Kremlin have been looking at the countries of Central Asia as potential new markets for Russian gas. Initial deals have been signed with Uzbekistan and Kyrgyzstan and Gazprom will be hoping to expand the former to a possible 11Bcm per annum. Kazakhstan is also becoming more important as a transit route both to the rest of Central Asia and also potentially to China, with Gazprom signing a cooperation agreement to build infrastructure in the north-east of the country close to the eastern export route. This could compete with Turkmenistan's plans to expand its own sales to China and so 2025 may be a year in which the balance of power and influence in the region becomes more contentious. Added to this, President Putin has also announced his hope to expand gas sales to Iran and Gazprom is also looking to increase sales to Azerbaijan. As a result, Russia's southern gas export strategy could provide some interesting developments next year.

As far as the East is concerned, China remains the key market and Gazprom's big hope is that a 50 Bcma contract for sales via Power of Siberia 2 will be signed. Given Beijing's slow-walk on this front, this seems unlikely in 2025 and so Russia's focus in the meantime will be on ensuring that 10Bcma of sales via the Far East route from Sakhalin Island can start on schedule in 2027. This will involve either or both the development of the South Kirinskoye field offshore Sakhalin Island and the connection of the Power of Siberia 1 pipeline to the line from Sakhalin to Vladivostok and into northeast China. Activity on both should progress in 2025 and it will be important to monitor whether the 2027 timetable remains feasible.

On the LNG front, Novatek will face continuing challenges with regard to its Arctic LNG-2 project. Despite that fact that LNG was first produced in early 2024, none has actually reached a customer due to sanctions both on the ice-breaking transport vessels and on the sale of the cargoes themselves. As a result, eight cargoes remain either on ships or in storage vessels with no immediate prospect of them reaching a market. This has now become a bellwether for the future of Russian LNG as a whole. Even existing production from the Yamal LNG project has been banned from being trans-shipped in Europe. Although output from the Sakhalin 2 project in the Far East is reaching Asian markets, there are now serious question marks about whether Novatek will proceed with further trains at Arctic LNG-2 and with the development of its planned Murmansk LNG project, while Gazprom's Baltic LNG scheme must also be in doubt. In 2025 we may well find out more about the domestic liquefaction technology which Novatek has been developing for its new projects, but it will also become clear whether the commercial sanctions imposed by the US and the EU have effectively stopped Russia's LNG plans in their tracks.

James Henderson (james.henderson@oxfordenergy.org)