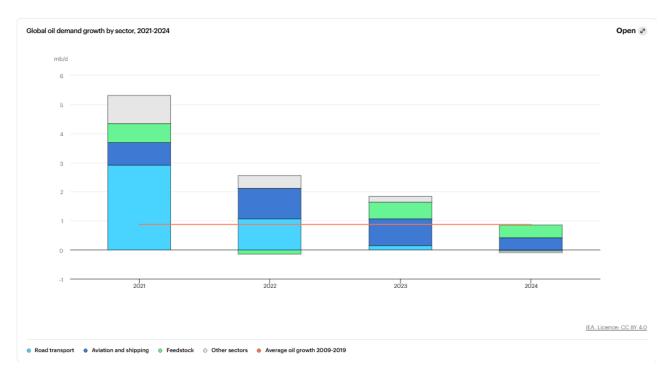
Global Oil & Gas Demand – Shifts and Implications

Introduction

The global energy landscape is in constant change, currently navigating a complex period defined by significant shifts in oil and gas demand. While the immediate aftershock of the COVID-19 pandemic saw a robust rebound in oil consumption, recent data indicates a deceleration in growth, influenced by factors ranging from the maturation of post-pandemic mobility recovery to the increasing adoption of electric vehicles and renewable energy sources. Simultaneously, global gas demand has shown resilience, partly driven by transitions away from higher-carbon fuels. This article explores the intricate web of forces shaping these demand patterns, including critical geopolitical developments, the accelerating momentum of the energy transition, and emerging technological impacts, ultimately examining the implications for the global market and the specific challenges faced by Kazakhstan.

Oil & Gas Demand Trends

Global oil demand experienced unprecedented volatility in recent years, with the COVID-19 pandemic causing a historic 20% crash in April 2020 to 80.6 million barrels per day [mbd], the sharpest decline since 1980. However, the recovery proved remarkably swift, with consumption rebounding to 94.7 mbd by Q4 2020 and surpassing pre-pandemic levels by 2022. This resilience set the stage for new demand records in 2023-2024. On the other hand, the demand growth is cooling down. According to the recent report from International Energy Agency [IEA], the demand growth slowed down by more than twice to 830 thousand barrels per day [kbd] in 2024, compared with 2.3 mbd in 2023. In addition, the same report from IEA reveals that growth is expected to slow further through 2025-2026, with a decrease reaching 730 kbd in 2025 and 690 kbd in 2026.



Source: International Energy Agency, Global Energy Review [April 2025]

The slowing growth level of oil demand is related to the end of the post-pandemic mobility recovery period and the development of electric vehicles [EV] and renewable energy transports. This is particularly relevant to road transport, whose share in oil demand decreased since 2022. People started to actively use EV and work remotely after the pandemic, thus reducing the demand for automotive transport. The main sector which maintained oil demand growth in 2024 was petrochemical feedstock. This is due to the development of chemical industry manufacturing feedstocks in China. The US, EU states and Japan also experienced a deceleration of demand in the non-feedstock sector and a rise in petrochemical feedstocks. On the contrary, in India and Southeast Asian countries, the fuel demand in the non-feedstock industry continued to grow.

According to the <u>recent Monthly Oil Market Report</u> [MOMR] from OPEC, the global oil demand in 2025 is expected to grow by 1.3 mbd, which is in line with the last month's assessment. OPEC also suggests that in 2026, world oil demand is projected to rise by 1.3 mbd as well. This estimate is also unchanged from last month's assessment. While OPEC and IEA present notably different figures, their established reputations suggest that averaging their estimates provides a sound approach. Therefore, we consider 1.0 mbd, the approximate midpoint of their range, to be a reliable estimate.

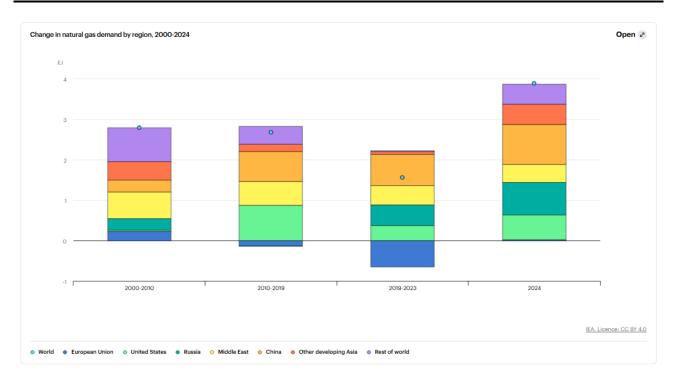
							Change 2025/24	
World oil demand	2024	1Q25	2Q25	3Q25	4Q25	2025	Growth	%
Americas	24.94	24.77	24.89	25.32	25.20	25.05	0.10	0.41
of which US	20.42	20.23	20.40	20.67	20.72	20.51	0.09	0.43
Europe	13.51	12.80	13.62	14.06	13.50	13.49	-0.01	-0.09
Asia Pacific	7.21	7.58	6.98	6.93	7.39	7.22	0.02	0.21
Total OECD	45.66	45.16	45.48	46.31	46.08	45.76	0.10	0.23
China	16.65	16.86	16.68	17.03	17.04	16.90	0.25	1.50
India	5.55	5.70	5.84	5.50	5.91	5.74	0.19	3.39
Other Asia	9.66	9.90	10.28	9.75	9.75	9.92	0.26	2.72
Latin America	6.78	6.81	6.92	6.99	6.94	6.92	0.13	1.98
Middle East	8.78	8.75	8.66	9.21	9.08	8.93	0.14	1.65
Africa	4.57	4.78	4.41	4.61	4.99	4.70	0.12	2.71
Russia	3.98	4.02	3.85	4.04	4.19	4.03	0.05	1.13
Other Eurasia	1.26	1.37	1.29	1.18	1.32	1.29	0.03	2.51
Other Europe	0.80	0.79	0.83	0.77	0.87	0.82	0.01	1.40
Total Non-OECD	58.05	58.98	58.77	59.08	60.10	59.24	1.19	2.05
Total World	103.70	104.14	104.26	105.39	106.19	105.00	1.30	1.25
Previous Estimate	103.75	104.16	104.25	105.35	106.41	105.05	1.30	1.25
Revision	-0.05	-0.02	0.01	0.05	-0.22	-0.05	0.00	0.00

Table 4 - 1: World oil demand in 2025*, mb/d

Note: * 2025 = Forecast. Totals may not add up due to independent rounding. Source: OPEC.

Source: OPEC MOMR [May 2025]

The growth of global gas demand, in contrast to oil, experienced an upward trend in 2024 by reaching 115 billion cubic meters. Interestingly, the rise of global gas demand growth is highly interlinked with the declining demand growth of global oil. In fact, more states are switching from oil to natural gas consumption to reduce carbon dioxide emissions. A major part of high global gas demand belongs to emerging and developing economies. Demand growth mainly arose from industry and electricity generation sectors [75%]. Extreme weather conditions even further accelerated the demand for natural gas. In 2024, there were heat waves in densely populated China, India and the US, which led to high consumption of gas power. On the contrary, gas demand for power generation in the EU declined by 5% due to the growing role of renewables. Although demand for gas continued to grow in its industrial sector due to low prices. In 2025, by IEA estimations the growth rate of global gas demand is expected to <u>slow down by 1.5%</u>. Gas demand in Asian countries will decline from 5.5% to 2%, although they will remain a major contributor to global demand growth.

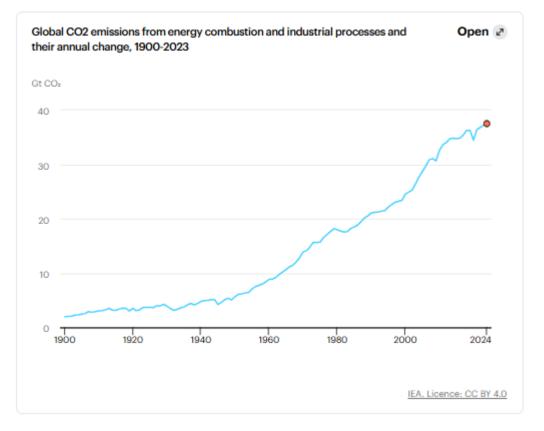


Source: International Energy Agency, Global Energy Review [April 2025]

Global oil and gas demand shifts are affected by several factors. One of them is related to the geopolitical situation in the world. The 2024 elections in the US, <u>the largest producer</u> and <u>consumer of oil and gas</u>, have certainly affected the energy industry worldwide. The new US administration under the leadership of President Trump has prioritized the production of fossil fuel resources. To enable a large and accelerated production, the process of getting approval on environmental regulations has become <u>simplified</u> for oil and gas companies. The issue of export permits for liquified natural gas also became possible, as the new administration removed the restrictions imposed by President Biden. President Trump is interested in lowering oil prices to sustain a high consumption in the US, along with keeping them high for American producers to enable more production growth. Furthermore, this year, the US launched trade tariffs on several states, including China, the world's second largest energy consumer.

Implications of Energy Transition

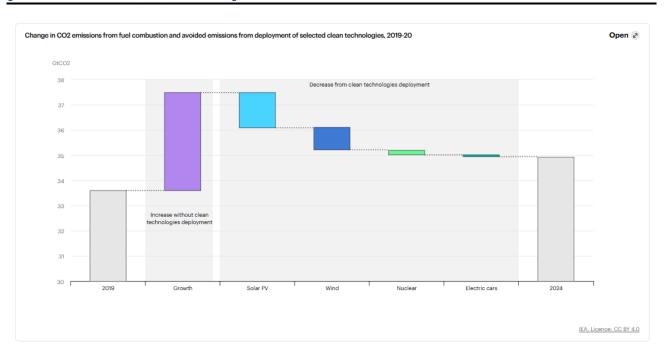
Another crucial factor affecting global oil and gas demand shifts is energy transition. More and more countries are switching from fossil fuel-based energy to low-carbon and renewable energy to mitigate climate change risks. This has a direct adverse impact mostly on oil demand as this fuel type generates more carbon emission compared to natural gas.



Source: International Energy Agency, Global Energy Review [April 2025]

Clean energy is mainly generated from solar, wind and nuclear energies, hydropower, and biofuels. Although their consumption is not as high to stop global warming, they help to prevent 2.6 Gt of emissions each year. In 2024, their share in global electricity generation growth accounted for more than 80%. The IEA forecasts that renewable energy consumption will grow to 60% by 2030. An active energy transition to renewables is particularly relevant to the EU states. They are planning to increase their renewable energy consumption to 42.5% and renewable fuel consumption to 5.5% by 2030. To facilitate this transition, the UK is going to remove restrictions on the development of offshore wind energy, while increasing the taxes on fossil fuel production in the North Sea. Transition to renewable energy is also actively taking place in China and India. The government of China has substantially raised the subsidies for EVs which will increase their number to 50% in the domestic vehicle market.

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Source: International Energy Agency, Global Energy Review [April 2025]

With the growing role of renewable energy sources, investments in fossil fuels are expected to decline over the next few decades, and government regulations are likely to become stricter. To keep their role in the energy sector, oil and gas industries need to adapt to new realities. They can invest in the development of energy-efficiency and low-carbon technologies and integrate them into their operations. Particularly, the integration of carbon capture and storage [CCS] technologies, which help to reduce carbon emissions in industrial facilities, is an important step. CCS projects are efficiently developed in Norway. For example, Norwegian energy company Equinor implements Sleipner CCS Project which captures CO2 from natural gas production in the North Sea and stores it in the Utsira Sand saline aguifer. Since 1996, it has helped to capture about 23 million tons of carbon emissions. In addition, integrating ESG [Environmental, Social, Governance] principles and developing sustainability practices can also restrain the negative effects of energy transition. Investors are more likely to continue investments in companies that adhere to sustainable development. ESG strategies are actively implemented in the European hydrocarbon majors, such as <u>Shell, BP</u>, Total, ENI, and Repsol. Although these measures may have a limited impact on the growth of oil and gas demand, they are essential for ensuring the industry's continued role in the energy sector.

However, the global energy transition is not an overnight process. It's important to note that despite this shift started several decades ago, <u>oil continues to dominate</u> the global energy balance. With that being said, dethroning oil's current intact position in the global energy demand will highly likely take several decades ahead. According to recent developments, some oil giants are <u>even cutting back on their renewable energy investments</u>, focusing instead on traditional oil and gas projects for the foreseeable future.

Cloudy Near-Term Demand Outlook

The near-term outlook for global oil and gas demand is fraught with uncertainty, stemming from a confluence of geopolitical and technological factors. The ongoing war in Europe [Russia-Ukraine], now in its fourth year, continues to disrupt energy markets and supply chains, creating volatility and price fluctuations. The EU has drastically reduced its dependence on Russian oil and gas-imports of Russian gas have dropped by 75% since 2022, and Russian oil is largely banned-forcing Europe to diversify its energy sources and invest heavily in LNG [liquefied natural gas] infrastructure.

However, the abrupt cessation of Russian gas flows through Ukraine at the start of 2025 <u>caused acute regional shortages</u>, particularly impacting Slovakia, the Czech Republic, Moldova, and highlighting the fragility of supply chains in the face of geopolitical shocks. New or additional tariffs, especially those imposed by the United States, and ongoing sanctions on Russia and Iran, have further clouded the global oil demand outlook and contributed to market volatility.

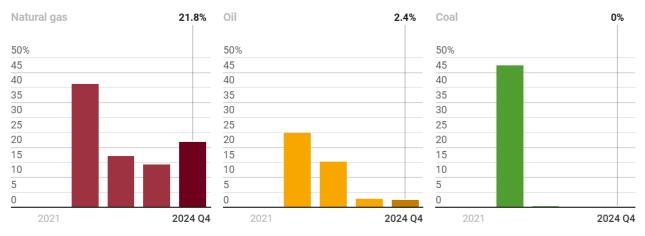


Figure 1. Russia's share of European imports of natural gas, oil and coal, 2021-24

Source: Elcano Royal Institute [April 2025]

Furthermore, there is a new military conflict between two other large countries. The recent rapid escalation between India and Pakistan adds another layer of risk, threatening regional stability and potentially impacting energy infrastructure. According to Forbes, India is one of the largest consumers with an average of 5.4 million barrels per day, nearly 90% of which is imported, and is on track to account for 25% of global oil demand growth in 2025. When such a large energy consumer is involved in a military conflict, it always adds a thin layer of uncertainty for the global energy markets.

Let us also keep in mind that the world's two largest economies – US and China – are currently amid the trade war between each other with aggressive mutual tariffs. According

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to press, there were positive developments in this direction as a <u>"trade deal" was announced</u> <u>recently</u>. However, it is also crucial to understand that now, the deal means only temporarily slashing reciprocal tariffs for 90 days. While this is positive for the global trade of the world's two superpowers, there is no guarantee that the deal will be extended for longer. This is a large factor that should be monitored closely as a new chapter of the US-China trade war will certainly weigh on the global energy demand.

From the positives perspective, there is a rapid pace of AI adoption across various sectors. As we mentioned in our previous article called <u>"Powering the Digital Age – Energy Perspective"</u>, the accumulating AI momentum is a notable factor that is poised to drive energy demand growth. There are various scenarios of the energy demand growth triggered by AI data centers, but the overall trend is clear – more computational power will inevitably drive energy demand. On the other hand, this is a shift that will have a notable effect on energy demand over decades while geopolitical developments outweigh over the shorter-term horizons.

As a result of risks and uncertainties dominating in the near term, prominent industry analysts are adopting a highly defensive stance, with several recent downgrades to Brent crude price forecasts. Over the last few weeks, we saw cautious 2025-2026 oil price outlooks from JP Morgan, Morgan Stanley, Goldman Sachs, and UBS. Brent crude price forecasts for 2025 by JP Morgan and UBS were contracted by 7% to \$66, while Morgan Stanley cut its forecast by 5% to \$62. For 2026, Goldman Sachs envisages a further decline in Brent crude prices to \$58. In addition, during the Q1 2025 earnings call of Exxon Mobil, the company's management emphasized "the significant downward pressure on prices and margins".

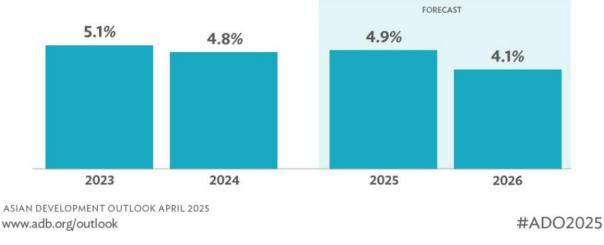
Kazakhstan: Navigating The Challenging Environment

The global near-term energy demand uncertainty is an adverse factor for the economy of Kazakhstan as the governmental budget heavily relies on taxation from hydrocarbon revenues and profits. Kazakhstan's economy is projected to grow by 4.9% in 2025 and 4.1% in 2026 by Asian Development Bank estimations, but this growth is largely dependent on revenues from oil production growth on Tengiz. Oil and gas account for over 30% of Kazakhstan's GDP and over 75% of its exports, according to Forbes. A decline in global oil demand or prices could significantly impact Kazakhstan's fiscal stability.



KAZAKHSTAN GDP GROWTH FORECAST

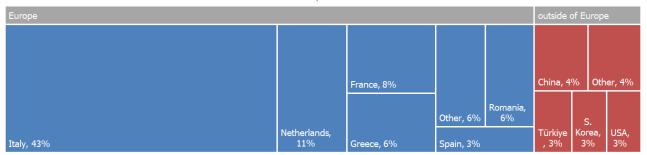




Source: Asian Development Bank

The <u>World Bank</u> is also quite optimistic on the country's GDP growth forecast for 2025-2026. However, their analysts identify the declining global oil demand as a key downside risk for Kazakhstan's economy. From the longer-term perspective, the <u>IMF</u> highlights the potential adverse impacts of economic greening and transformation on Kazakhstan, especially on the most vulnerable population groups. In addition, it is crucial to recall that <u>circa 70%</u> of Kazakhstan's oil is exported to Europe, a region that was disrupted by the aforementioned war between Russia and Ukraine. As we can see from the below chart, major consumers of Kazakhstan's oil are Eurozone countries. The picture does not look very good for our country as there were several GDP growth forecast downgrades for the Eurozone recently. For example, 2025 GDP growth forecasts were revised down to 0.5% [from 0.9%] by <u>UBS</u>, to 1% [from 1.3%] by <u>OECD</u>, and to 0.8% [from 1.0%] by the <u>IMF</u>. This is a potential notable headwind for Kazakhstan as decelerating economic growth for the major Kazakhstani oil importers will not only undermine price but will highly likely adversely affect volumes.





Source: compiled based on data from Kazakhstan State Revenue Committee [kgd.gov.kz]

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From the perspective of natural gas, the situation differs somewhat, as Kazakhstan does not export it as heavily as oil. As we mentioned in the <u>"Natural Gas Balance 2024 – Actuals and Forecasts" article</u>, export sales on average represented quite modest 11% over the last four years [2021-2024]. This indicates that the natural gas industry is significantly less susceptible to macroeconomic developments outside of Kazakhstan. Consequently, the primary challenges for industry remain consistent, irrespective of the broader economic climate; these challenges center on enhancing (sour) natural gas processing capacity to maximize its contribution to the national economy.

To navigate such a challenging environment, our country's oil and gas industry should adapt quickly. Without resilience and readiness to weather the storm, the economy might suffer some swift adverse movements. This adaptation requires a multi-faceted approach, including investing in technological innovation to <u>enhance efficiency and reduce costs</u>, <u>diversifying export routes</u> to mitigate reliance on any single transit corridor, expanding capacity of the country's hydrocarbon processing industry, and attract long-term investments by sound and predictable tax regime. Industry should also prioritize environmental sustainability to align with global decarbonization trends and maintain access to international markets.

The Bottom Line

The long-term imperative of energy transition points towards a future with reduced reliance on fossil fuels, yet near-term demand remains susceptible to geopolitical volatility, trade dynamics, and even new energy-intensive technologies like AI. For Kazakhstan, the path ahead demands adaptability to secure a viable future in a rapidly evolving global energy market. A comprehensive strategy is needed to maximize the growth potential of both new initiatives and existing strengths. This transformation presents significant challenges, as it necessitates driving large, complex projects that enhance the efficiency of current assets, develop new processing capabilities, and diversify export routes.

ENERGY Insights & Analytics

Analytical center "ENERGY" LLP (ENERGY Insight & Analytics) is a joint venture between <u>the KAZENERGY Association</u> and IT company <u>AppStream</u>. The company aims to become a priority source of data, analytical information, and recommendations for Kazakhstan's oil, gas, and electric power industries, allowing decision-makers to analyze and predict the most significant industry indicators with details on leading market players. Activities of ENERGY Insight & Analytics incorporate the whole analytics cycle with consequent stages: Descriptive, Diagnostic, Predictive, and Prescriptive analytics.

The key tool and product of ENERGY Insight & Analytics is internally developed software - the Analytical Platform EXia, aimed to identify, localize, format, and present data most efficiently for the specified use cases.

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