



GECF

Gas Exporting
Countries Forum

MONTHLY GAS MARKET REPORT

JULY 2024



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About GECF

The Gas Exporting Countries Forum (GECF) is an intergovernmental organisation gathering the world's leading gas producers and exporters, whose objective is to provide a framework for the exchange of views, experiences, information and data, while developing the cooperation and collaboration amongst its members in gas-related matters. The GECF gathers 20 countries, including 12 full members and 8 observer members (GECF Member Countries) from four continents. Algeria, Bolivia, Egypt, Equatorial Guinea, Iran, Libya, Nigeria, Qatar, Russia, Trinidad and Tobago, United Arab Emirates and Venezuela have the status of full members, while Angola, Azerbaijan, Iraq, Malaysia, Mauritania, Mozambique, Peru and Senegal have the status of observer members.

The GECF Monthly Gas Market Report (MGMR) is a monthly publication of the GECF focusing on short-term developments in the global gas market related to the global economy, gas consumption, gas production, gas trade (pipeline gas and LNG), gas storage and energy prices.

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Contents

Highlights.....	1
Feature Article: Impact of the Artificial Intelligence revolution on the gas industry.....	2
1 Global Perspectives	4
1.1 Global economy.....	4
1.2 Other developments.....	7
2 Gas Consumption	8
2.1 Europe	8
2.1.1 European Union	8
2.1.2 United Kingdom	13
2.2 Asia.....	14
2.2.1 China	14
2.2.2 India	14
2.2.3 Japan	15
2.2.4 South Korea	15
2.3 North America	16
2.3.1 US.....	16
2.3.2 Canada	16
2.4 Weather forecast.....	17
2.4.1 Temperature	17
2.4.2 Precipitation.....	17
3 Gas Production	18
3.1 Europe	18
3.1.1 Norway.....	18
3.1.2 UK.....	18
3.1.3 Netherlands	18
3.2 Asia Pacific.....	19
3.2.1 China	19
3.2.2 India	19
3.2.3 Australia	19
3.3 North America	20
3.3.1 US.....	20
3.3.2. Canada	20
3.4 Latin America and the Caribbean (LAC).....	21
3.4.1 Brazil	21
3.4.2 Argentina	21
3.5 Other developments.....	22
3.5.1 Upstream tracker	22
3.5.2 Other regions	23
4 Gas Trade	24
4.1 PNG trade	24
4.1.1 Europe.....	24
4.1.2 Asia	26
4.1.3 North America	27
4.1.4 Latin America and the Caribbean	27

4.1.5	Other developments	27
4.2	<i>LNG trade</i>	28
4.2.1	LNG imports	28
4.2.2	LNG exports	31
4.2.3	Global LNG reloads	33
4.2.4	Arbitrage opportunity	33
4.2.5	Maintenance activity at LNG liquefaction facilities	34
4.2.6	LNG shipping	35
4.2.7	Other developments	36
5	Gas Storage	38
5.1	<i>Europe</i>	38
5.2	<i>Asia</i>	39
5.3	<i>North America</i>	39
6	Energy Prices	40
6.1	<i>Gas prices</i>	40
6.1.1	Gas & LNG spot prices	40
6.1.2	Spot and oil-indexed long-term LNG price spreads	43
6.1.3	Regional spot gas & LNG price spreads	43
6.1.4	Gas & LNG futures prices	45
6.2	<i>Cross commodity prices</i>	46
6.2.1	Oil prices	46
6.2.2	Coal prices	46
6.2.3	Carbon prices	47
6.2.4	Fuel switching	48
Annexes	49
	<i>Gas Balance</i>	49
	<i>Abbreviations</i>	51
	<i>References</i>	54

List of Figures

Figure 1: GDP growth	4
Figure 2: Inflation rates	5
Figure 3: Monthly commodity price indices	5
Figure 4: Interest rates in major central banks	6
Figure 5: Exchange rates	6
Figure 6: Gas consumption in the EU	8
Figure 7: Trend in electricity production in the EU in June 2024 (y-o-y change)	8
Figure 8: Gas consumption in Germany	9
Figure 9: Trend in gas consumption in the industrial sector in Germany (y-o-y change)	9
Figure 10: Trend in electricity production in Germany in June 2024 (y-o-y change)	9
Figure 11: German electricity mix in June 2024	9
Figure 12: Gas consumption in Italy	10
Figure 13: Trend in gas consumption in the industrial sector in Italy (y-o-y change)	10
Figure 14: Trend in electricity production in Italy in June 2024 (y-o-y change)	10
Figure 15: Italian electricity mix in June 2024	10
Figure 16: Gas consumption in France	11
Figure 17: Trend in gas consumption in the industrial sector in France (y-o-y change)	11
Figure 18: Trend in electricity production in France in June 2024 (y-o-y change)	11
Figure 19: French nuclear capacity availability	11
Figure 20: Gas consumption in Spain	12
Figure 21: Trend in gas consumption in the industrial sector in Spain (y-o-y change)	12
Figure 22: Trend in electricity production in Spain in June 2024 (y-o-y change)	12
Figure 23: Spanish electricity mix in June 2024	12
Figure 24: Gas consumption in the UK	13
Figure 25: Trend in gas consumption in the industrial sector in the UK (y-o-y change)	13
Figure 26: Trend in electricity production in UK in June 2024 (y-o-y change)	13
Figure 27: UK electricity mix in June 2024	13
Figure 28: Gas consumption in China	14
Figure 29: Y-o-Y electricity production May 2024	14
Figure 30: Gas consumption in India	14
Figure 31: India's gas consumption by sector in May 2024	14
Figure 32: Gas consumption in Japan	15
Figure 33: Nuclear availability in Japan	15
Figure 34: Gas consumption in South Korea	15
Figure 35: HDD in South Korea (y-o-y change)	15
Figure 36: Gas consumption in the US	16
Figure 37: Electricity production in the US in June 2024 (y-o-y change)	16
Figure 38: Gas consumption in Canada	16
Figure 39: HDD in Canada (y-o-y change)	16
Figure 40: Temperature forecast July to September 2024	17
Figure 41: Precipitation forecast July to September 2024	17
Figure 42: Europe's monthly gas production	18
Figure 43: Gas production in key European countries	18
Figure 44: Trend in gas production in China	19
Figure 45: Trend in gas production in India	19
Figure 46: Trend in gas production in Australia	19
Figure 47: Trend in CBM production in Australia	19
Figure 48: Trend in shale gas production in the US	20
Figure 49: DUC wells count in the US	20
Figure 50: Trend in gas production in Canada	20
Figure 51: Trend in gas production in Brazil	21
Figure 52: Distribution of gross gas production in Brazil	21
Figure 53: Trend in gas production in Argentina	21
Figure 54: Trend in shale gas production in Argentina	21
Figure 55: Trend in monthly global gas rig count	22
Figure 56: Monthly gas and liquid discovered volumes	22
Figure 57: Discovered volumes in May 2024 by region	22
Figure 58: Monthly PNG imports to the EU	24
Figure 59: Monthly EU PNG imports by supplier	24
Figure 60: Year-to-date EU PNG imports by supplier	24
Figure 61: Y-o-y variation in EU PNG supply	24
Figure 62: EU PNG imports by supply route	25
Figure 63: PNG imports to the EU by supply route (6M 2024 v 6M 2023)	25
Figure 64: Monthly PNG imports in China	26
Figure 65: Year-to-date PNG imports in China	26
Figure 66: Monthly PNG imports in Singapore	26
Figure 67: Monthly PNG imports in Thailand	26
Figure 68: Historical net PNG trade in the USA	27
Figure 69: Monthly PNG exports from Bolivia	27

Figure 70: Trend in global monthly LNG imports	28
Figure 71: Trend in regional LNG imports	28
Figure 72: Trend in Europe's monthly LNG imports	29
Figure 73: Top LNG importers in Europe.....	29
Figure 74: Trend in Asia's monthly LNG imports.....	29
Figure 75: Top LNG importers in Asia Pacific	29
Figure 76: Trend in LAC's monthly LNG imports.....	30
Figure 77: Top LNG importers in LAC.....	30
Figure 78: Trend in MENA's monthly LNG imports	30
Figure 79: Top LNG importers in MENA.....	30
Figure 80: Trend in global monthly LNG exports.....	31
Figure 81: Top 10 LNG exporters in June 2024.....	31
Figure 82: Trend in GECF monthly LNG exports	32
Figure 83: GECF's LNG exports by country.....	32
Figure 84: Trend in non-GECF monthly LNG exports.....	32
Figure 85: Non-GECF's LNG exports by country	32
Figure 86: Trend in global monthly LNG reloads.....	33
Figure 87: Global LNG reloads by country.....	33
Figure 88: Price spreads & shipping costs between Asia & Europe spot LNG markets.....	34
Figure 89: Maintenance activity at LNG liquefaction facilities during April (2023 and 2024)	34
Figure 90: Number of LNG export cargoes.....	35
Figure 91: Changes in LNG cargo exports	35
Figure 92: Average LNG spot charter rate	36
Figure 93: Average price of shipping fuels.....	36
Figure 94: LNG spot shipping costs for steam turbine carriers.....	36
Figure 95: Monthly average UGS level in the EU	38
Figure 96: Net gas injections in the EU	38
Figure 97: UGS in EU countries as of June 30, 2024.....	38
Figure 98: Total LNG storage in the EU.....	38
Figure 99: LNG in storage in Japan and South Korea.....	39
Figure 100: Monthly average UGS level in the US	39
Figure 101: Daily gas & LNG spot prices	40
Figure 102: Daily variation of spot prices	40
Figure 103: Monthly European spot gas prices.....	41
Figure 104: Monthly Asian spot LNG prices	41
Figure 105: Monthly North American spot gas prices.....	42
Figure 106: Monthly South American spot LNG prices.....	42
Figure 107: Asia: Spot and oil-indexed price spread	43
Figure 108: Europe: Spot and oil-indexed price spread	43
Figure 109: NEA-TTF price spread.....	44
Figure 110: NBP-TTF price spread.....	44
Figure 111: NWE LNG-TTF price spread	44
Figure 112: NWE LNG – SA LNG price spread	44
Figure 113: NEA-HH price spread	44
Figure 114: TTF-HH price spread	44
Figure 115: Gas & LNG futures prices	45
Figure 116: Variation in gas & LNG futures prices.....	45
Figure 117: Monthly crude oil prices	46
Figure 118: Monthly coal parity prices	47
Figure 119: EU carbon prices.....	47
Figure 120: Daily TTF vs coal-to-gas switching prices.....	48
Figure 121: EU + UK monthly gas balance.....	49

List of Tables

Table 1: New LNG sale agreements signed in June 2024	37
Table 2: EU + UK gas supply/demand balance for June 2024 (bcm)	49
Table 3: OECD's gas supply/demand balance for April 2024 (bcm)	50
Table 4: India's gas supply/demand balance for May 2024 (bcm).....	50

Highlights

Global economy: Global GDP growth for 2024 has been maintained at 3.0% as reported by Oxford Economics, reflecting steady growth in the first half of the year, despite downside risks. On a regional level, GDP growth is expected to be 2.3% in the US, 0.8% in the Euro area, and 4.8% in China. Looking ahead to 2025, global economic growth is expected to accelerate slightly, with a forecasted global GDP growth of 3.3%. Additionally, global inflation is anticipated to continue its downward trend, reaching an annual average of 4.5% in 2024 and 3.4% in 2025.

Gas consumption: In June 2024, the EU gas consumption decreased by 3.4% y-o-y, mainly due to gas demand reduction measures and high output from hydro, nuclear, solar and wind power generation. In contrast, US gas consumption increased by 5.8% y-o-y to 70 bcm, driven by heightened demand for cooling. In May 2024, China's apparent gas demand, derived from domestic production, pipeline gas, and LNG imports, rose by 6.7% y-o-y to 36 bcm, fuelled by a recovery in economic activities and lower LNG prices.

Gas production: In June 2024, the US total gas production declined by 3% y-o-y to stand at 92.5 bcm, driven by announced production cuts amidst low Henry Hub gas prices. In May 2024, Europe's gas production witnessed a strong rebound, with total output of 14.9 bcm and a 7% y-o-y rise, mainly driven by the surge in Norway's gas output. In Asia, China maintained its consistent gas production growth, with a 7% y-o-y uptick, driven by the significant rise in coal bed methane output. Additionally, in June 2024, the number of global gas drilling rigs declined by 9 units m-o-m to stand at 346 rigs.

Gas trade: In June 2024, global LNG imports declined for the second consecutive month, dropping by 0.8% y-o-y to 32.2 Mt, the lowest monthly level since October 2023. Regionally, Europe and the LAC region led the decrease, offsetting higher imports in the Asia Pacific and MENA regions. The decline in Europe resulted from weaker gas consumption, high storage levels, increased pipeline gas imports, and a wider price spread between spot LNG prices in Asia Pacific and Europe. Furthermore, there were 13.0 bcm of pipeline gas imports to the EU during the month, which was a 4% decrease from the previous month. Meanwhile, the increase in LNG imports in the Asia Pacific region was driven by stronger gas demand, particularly in the electricity sector, and LNG restocking. There was also significant activity in LNG infrastructure development, highlighted by the FIDs taken for the 9.6 Mtpa Ruwais LNG project in the UAE and the 3.3 Mtpa Cedar FLNG project in Canada.

Gas storage: In the EU, there was a continuation of the healthy rate of gas restocking in June 2024. As a result, the average volume of gas in storage increased to 76.1 bcm during the month, representing an average regional capacity of 73%. In the US, the average gas storage level increased to 86.8 bcm, or 65% of the country's capacity, while remaining higher than the five-year range. In Asia, the combined volume of LNG in storage in Japan and South Korea was estimated to be 15.2 bcm.

Energy prices: Gas and LNG spot prices in Europe and Asia continued to climb driven by supply concerns due to outages and extended maintenance activities at several facilities, as well as increased demand for cooling. The average TTF spot price rose to \$10.81/MMBtu, reflecting a 7% m-o-m increase. Similarly, the average NEA spot LNG price saw a sharp 15% m-o-m increase to \$12.41/MMBtu. Additionally, in the US, Henry Hub prices reached a five-month high, averaging \$2.53/MMBtu. Looking ahead, spot prices are likely to be supported by higher-than-usual temperatures, leading to increased gas demand for cooling.

Feature Article:

Impact of the Artificial Intelligence revolution on the gas industry

In recent years, Artificial Intelligence (AI) has been revolutionizing numerous industries around the world, and the energy sector, specifically the gas industry, is no exception. The integration of AI in the energy industry is transforming the way energy is produced, distributed, and consumed. Multiple energy companies have taken important steps to leverage the recent advancements in AI, with the aim of improving operational efficiency. According to S&P Global Commodity Insights, integrating AI technologies has the ability to produce performance improvements for the energy sector in the range of 10% to 25%.

Notably, the exploration and production sector has undergone a profound transformation as a result of AI integration. With regard to exploration, AI technologies, with its capabilities of analysing huge amounts of geology and geophysical data, play an increasingly significant role in areas such as seismic acquisition, processing, and interpretation. As a result, of the success ratio in exploration is higher and costs lower.

With regard to production, AI data analytics have been integrated into drilling operations through AI-driven predictive models that analyse geological data, drilling parameters and environmental conditions, to trigger a warning in case of potential risk or hazard. This has led to an elevated level of safety measures, a reduction in drilling problems and eventually a decrease in the overall drilling costs. Additionally, in the oil and gas production activities, the use of machine learning tools has transformed the way reservoir modelling and simulation are performed, leading to a better optimization of field development and an increase in the ultimate hydrocarbon recovery.

Furthermore, the application of AI technologies can assist energy companies in improving operational performance across the full supply chain, including the upstream, midstream and downstream sectors. For example, by analysing historical maintenance data, downtime data, equipment age, and sensors data, AI can help forecast the time when operators need to interfere with preventive maintenance. This can produce a significant reduction in downtime and maintenance cost. Furthermore, in the power generation sector, integrating AI technologies in the Demand Response Management (DRM) is a critical measure for the optimization of power consumption and the stabilization of the power grids, while ensuring the proper balance between supply and demand during peak loads.

AI technologies may also play a key role in advancing the decarbonisation of the gas industry, in support of the climate change mitigation. In this regard, AI improves the analysis of the massive amounts of data on methane and CO₂ emissions, while correlating data received from satellites with data recorded by land-based sensors, to establish multi-scale monitoring and reporting systems. Moreover, AI technologies are well-placed to accelerate the decarbonisation of the power sector, which is the major gas consuming sector, with opportunities arising for optimising generation, transmission and distribution infrastructure.

Another application of AI in the industry is its usage in energy trading. AI models have the ability to proactively process extensive amounts of market dynamics data in terms of supply, demand and prices. This enables traders to make educated trading decisions, with higher chances of profitability and more accurate assessments of market volatility and uncertainties.

GECF is proactively engaged in the promotion of AI technologies in the energy sector in line with the GECF Long-Term Strategy, specifically strategic goal #3 “Advance modern technologies in the natural gas industry”. Notably, the 2nd GECF Workshop on AI in the Oil and Gas Industry took place on 12 June 2024. One of the key takeaways was that AI presents a wealth of opportunities for the industry, from enhancing exploration and production efficiency, to optimising supply chains and enabling predictive maintenance. As this technology continues to evolve, it is imperative that robust governance frameworks are established to ensure AI's ethical and responsible development and deployment.

In the meantime, the active deployment of AI technologies across numerous industries relies on the establishment of data centers. This involves extensive data processing and storage, which has another critical impact on the energy industry. The rising number of established data centers, combined with their high electricity intensity, has caused a sharp increase in electricity demand. It is worth noting that electricity demand from AI-related data centers is increasing at a much faster rate compared to that from non-AI data centers. According to IEA, data centres, cryptocurrencies, and artificial intelligence consumed 460 TWh of electricity worldwide in 2022, almost 2% of total global electricity demand.

Data centers require reliable and dispatchable electricity supply to ensure higher computational power, guarantee cooling efficiency and avoid costly downtimes. However, non-hydro renewable energy sources, such as wind and solar, are notable for intermittency, which poses a challenge for data centers. In this regard, natural gas as an environmentally-friendly, affordable, reliable, flexible, versatile and abundant energy source has a huge potential to meet the growing electricity demand from data centers. Offering a stable and scalable power source, natural gas plants can quickly ramp up electricity output to meet fluctuating electricity demand.

The data center development is not confined to any single region, but is distributed worldwide. However, further extensive expansion of data center infrastructure in Europe and Asia may be hampered by limitations such as high electricity tariffs and a shortage of electricity, which may be overcome with additions of gas-fired electricity generation. In Asia, specifically in the leading countries of China and India, whose electricity mix is dominated by coal, there are significant incentives to increase gas-fired electricity generation and promote coal-to-gas switching.

In this context, the GECF member countries, possessing abundant natural gas resources, are thus well-positioned to contribute to the expansion of both AI-related and non-AI data centers. Firstly, these countries are capable of stepping-up gas supply (in the form of both pipeline gas and LNG) to energy import-dependent countries in such regions as Europe and Asia, which may need natural gas to increase their dispatchable electricity output for a smooth performance of data centers. Secondly, these countries have the potential to strengthen their positions as emerging growth points for the global data center industry. As of today, all GECF member countries have data centers on their territories. That is based on their own technological advancement in digital transformation, which is ably supported by their competitiveness in terms of electricity tariffs. Most of them are among the countries with the lowest electricity tariffs, as a consequence of their extensive gas-fired electricity generation. That has already encouraged various transnational companies to move their data centers to the GECF member countries, and this trend is expected to ramp up in the short and medium term.

1 Global Perspectives

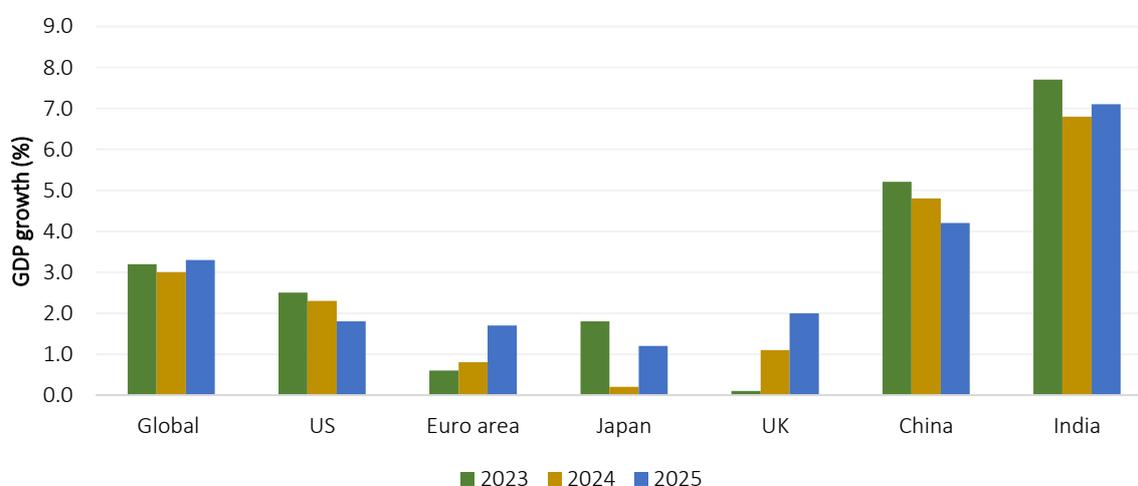
1.1 Global economy

As of July 2024, Oxford Economics has maintained its forecast for global GDP growth for 2024 at 3.0%, based on purchasing power parity. In the US, the GDP growth forecast has been revised downward by 0.1 percentage points to 2.3%, due to lower-than-expected performance in H1 2024 based on incoming data. In the Euro area, the GDP growth forecast has been maintained at 0.8%, with economic growth in H1 2024 supported by easing inflation and a continued recovery in industrial activity. The GDP growth forecast for China has been revised upward by 0.1 percentage points to 4.8%, reflecting robust growth in industrial production and exports, as well as resilient external demand. Meanwhile, in India, the GDP growth forecast for 2024 has been maintained at 6.8%.

Furthermore, the Organization of Petroleum Exporting Countries (OPEC) has revised its global GDP growth forecast for 2024 upward by 0.1 percentage points to 2.9%, based on purchasing power parity. This revision reflected steady economic growth in major economies in H1 2024. Additionally, expectations for more accommodative monetary policies in H2 2024 are likely to support growth. Similarly, the World Bank, in its Global Economic Prospects June 2024 report, revised its global GDP growth forecast for 2024 upward by 0.2 percentage points to 3.1%, based on purchasing power parity. This revision was influenced by stronger-than-expected growth despite heightened geopolitical tensions and high interest rates.

Looking ahead to 2025, the global GDP growth forecast has been maintained at 3.3% by Oxford Economics. In the US, economic growth is expected to decelerate with the GDP growth forecast maintained at 1.8%. In the Euro area, the GDP growth forecast of 1.7% has also been maintained. Meanwhile in China, the GDP growth forecast has been revised upward by 0.1 percentage points to 4.2%. Similarly, in India, GDP growth forecast was revised upward by 0.1 percentage points to 7.1% (Figure 1).

Figure 1: GDP growth



Source: GECF Secretariat based on data from Oxford Economics

Note: Global GDP growth calculated based on purchasing power parity.

Global inflation is expected to average 4.5% in 2024, declining from 6.2% in 2023, according to Oxford Economics. Furthermore, in 2025, global inflation is projected to fall to 3.4%. In the

Euro area, inflation is projected to fall to 2.3% in 2024 and 1.4% in 2025. In the UK, inflation is expected to be 2.5% in both 2024 and 2025. In the US, inflation is expected to decline to 3.2% in 2024 and 2.7% in 2025 (Figure 2).

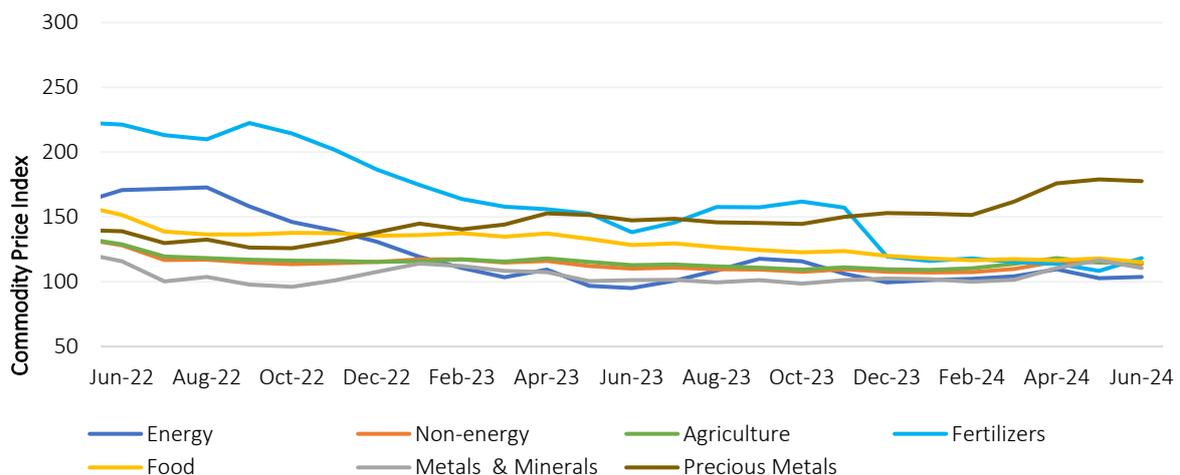
Figure 2: Inflation rates



Source: GECF Secretariat based on data from Oxford Economics

In June 2024, commodity prices in the energy sector increased, reversing some of the previous month's losses. The energy price index experienced increases of 1% m-o-m and 9% y-o-y. Higher oil, gas and coal prices during the month drove this increase. Additionally, the non-energy price index declined by 1% m-o-m but reflected a 3% increase y-o-y. Declines in the metals and minerals, and precious metals indices contributed to the lower non-energy price index compared to the previous month. Meanwhile, the fertilizer price index experienced a 9% increase m-o-m but remained 15% lower y-o-y (Figure 3).

Figure 3: Monthly commodity price indices



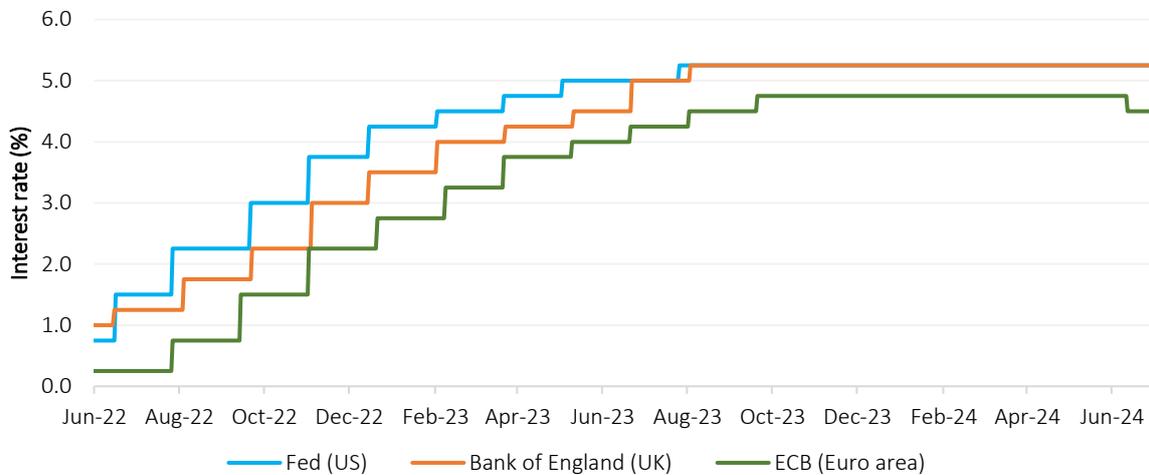
Source: GECF Secretariat based on data from World Bank Commodity Price Data

Note: Monthly price indices based on nominal US dollars, 2010=100. The energy price index is calculated using a weighted average of global crude oil (84.6%), gas (10.8%) and coal (4.7%) prices. The non-energy price index is calculated using a weighted average of agriculture (64.9%), metals & minerals (31.6%) and fertilizers (3.6%).

In June 2024, the US Federal Reserve (Fed) maintained its benchmark interest rate within the range of 5.25% to 5.50%. The Fed's last rate hike occurred in July 2023 (Figure 4). Similarly, the

Bank of England (BOE) kept its key interest rate at 5.25%, following its last increase in August 2023. However, the European Central Bank (ECB) implemented its first rate cut on 12 June, 2024, lowering its key interest rates by 0.25 percentage points, based on its assessment of inflation trends. Accordingly, the main refinancing operations, marginal lending facility and deposit facility rates have been lowered to 4.25%, 4.5% and 3.75%, respectively.

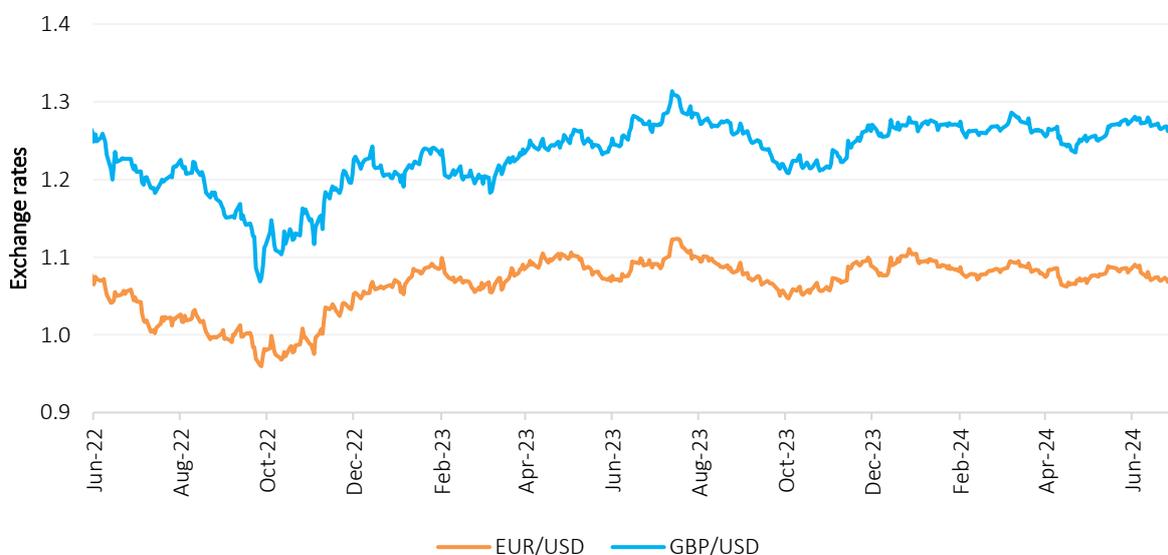
Figure 4: Interest rates in major central banks



Source: GECF Secretariat based on data from US Federal Reserve, European Central Bank and Bank of England

In June 2024, the Euro depreciated slightly against the US dollar, resulting in an average exchange rate of \$1.0765. This represented declines of 0.4% m-o-m and 0.8% y-o-y. Meanwhile, the British pound appreciated against the US dollar, as the average exchange rate reached \$1.2717 reflecting increases of 1% m-o-m and y-o-y (Figure 5).

Figure 5: Exchange rates



Source: GECF Secretariat based on data from Refinitiv Eikon

1.2 Other developments

Bonn Climate Change conference: The annual Bonn Climate Change conference took place on 3-13 June 2024 in Bonn, Germany. This conference plays a pivotal role in setting the stage for decision-making at the upcoming COP29 scheduled to be held on 11-22 November 2024 in Baku, Azerbaijan. The topic of climate finance and the New Collective Quantified Goal (NCQG) dominated discussions. The disparity of views on this critical issue between developed and developing countries made very slow progress, with no concrete outcome. By the end of COP29, all the parties should agree on a NCQG to guide the provision of climate finance, which is supposed to replace the \$100 billion target after 2025.

G7: The G7 Summit took place on 13-15 June 2024 in Apulia, Italy. The leaders of the seven countries, as well as the President of the European Council and the President of the European Commission attended the summit. On the topic of energy, climate and the environment, the G7 leaders reiterated their “determination to address the triple global crisis of climate change, pollution, and biodiversity loss. We remain steadfast in our commitment to the Paris Agreement and keeping a limit of 1.5°C global temperature rise within reach, and note with deep concern the findings of the first Global Stocktake at the UN Climate Change Conference (COP28) that there is a significant gap between global current emissions trajectories and this commitment.” Furthermore, the G7 leaders, alongside Côte d’Ivoire, Ethiopia, Kenya, Mozambique, Nigeria, Republic of Congo, and South Africa, launched the G7’s “Energy for Growth in Africa” initiative, which aims to develop clean energy projects, attract private capital and overcome barriers to investments in clean energy across Africa.

China: On 19 June 2024, China's National Energy Administration (NEA) adopted a policy aimed at improving the efficiency of its natural gas sector and optimizing its energy consumption mix to ensure supply security. It includes measures to improve how natural gas is priced, including through the implementation of a mechanism to link upstream and downstream prices, as well as differential gas pricing policies for regions of the country with large seasonal differences in demand. Moreover, the policy identifies priority users including households, city-gas users such as hospitals and schools, and industrial consumers. Meanwhile, gas-based manufacturing of methanol and other petrochemicals will be restricted under the new policy. It will be effective from August 1, 2024, and applies to both domestic and imported natural gas.

Nigeria Oil and Gas Week Conference and Exhibition: The 23rd Nigeria Oil and Gas Week Conference and Exhibition (NOG Energy Week 2024) took place on 30 June - 2 July 2024 in Abuja, Nigeria. In his keynote address, Mr Mele Kyari, Group Chief Executive Officer of the Nigerian National Petroleum Corporation (NNPC), announced measures aimed at boosting and sustaining Nigeria’s oil and gas production. These measures include replacing decades-old pipelines and introducing a rig-sharing programme with the company’s partners. Furthermore, he urged all industry players to collaborate in reducing production costs and increasing output to meet targeted levels. Additionally, the Secretary General of the GECF, HE Eng. Mohamed Hamel, in his keynote address, extended congratulations to Nigeria on declaring this decade as the “Decade of Gas”, with the goal of transforming into a gas-powered economy by 2030. Moreover, he highlighted that natural gas “plays a crucial role in ensuring energy security and reducing indoor pollution and deforestation, improving urban air quality, lowering greenhouse gas emissions, and providing stability to renewable energy systems.”

2 Gas Consumption

2.1 Europe

2.1.1 European Union

In June 2024, gas consumption in the EU recorded a y-o-y decrease of 3.4%, which was mainly driven by the continuous implementation of the gas demand reduction measures and high hydro, nuclear, solar and wind output in the power generation sector (Figure 6).

In the industrial sector, gas consumption showed a recovery in major industrialized European countries, boosted by the fall in gas prices.

In the residential sector, gas consumption dropped in some countries amidst unusually warm weather. In June 2024, the average temperature in Europe was 1.57°C above the 1991-2020 June average, marking it as the joint-second warmest June on record for the continent. Southeastern countries experienced the most significant temperature increases, while Western Europe and Northwestern countries saw temperatures near or below average, as stated by the Copernicus Climate Change Service/ECMWF.

In the power generation sector, gas consumption recorded a 22% y-o-y decline, while total electricity production rose by 4% y-o-y, reaching 190 TWh driven by cooling demand. This significant decrease in gas consumption within the power sector can be attributed to increased outputs from hydro, solar, wind and nuclear. Conversely, electricity generated from coal witnessed a decline (Figure 7). Within the current power mix, non-hydro renewables held the largest share at 37%, followed by nuclear at 24%, hydro at 16%, gas at 14%, and coal at 9%.

Figure 6: Gas consumption in the EU

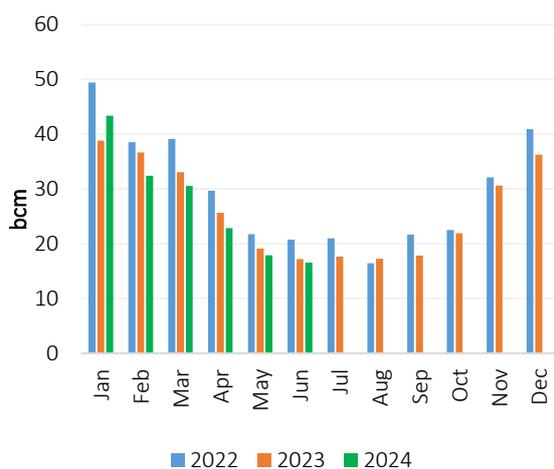
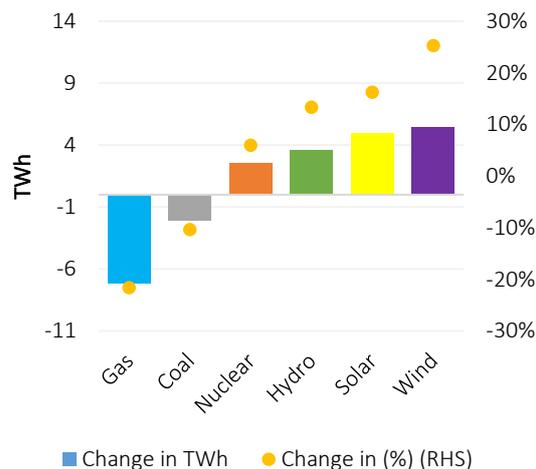


Figure 7: Trend in electricity production in the EU in June 2024 (y-o-y change)



Source: GECF Secretariat based on data from Entsog and Refinitiv

Source: GECF Secretariat based on data from Ember

In H1 2024, EU's overall gas consumption declined by 4.1% y-o-y to reach 164 bcm.

2.1.1.1 Germany

In June 2024, Germany witnessed a 7.6% y-o-y growth in gas consumption, reaching 3.7 bcm, after four consecutive months of decline (Figure 8). This growth was observed across all sectors of the gas industry. The average temperature for the month was 16.6°C, or 0.4°C above the norm, with western regions slightly cooler and eastern regions warmer. Gas consumption in the industrial sector rose by 7.5%, amidst the stabilization of gas prices (Figure 9).

Figure 8: Gas consumption in Germany

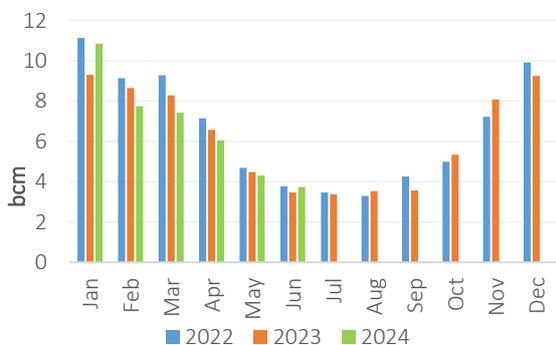
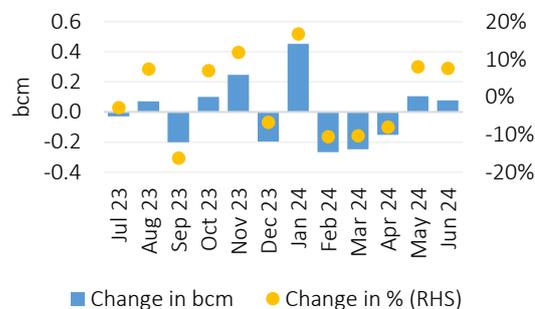


Figure 9: Trend in gas consumption in the industrial sector in Germany (y-o-y change)



Source: GECF Secretariat based on data from Refinitiv

Gas-fired power generation recorded an increase of 1.5% y-o-y, while overall electricity production rose by 6.4%, totalling 34 TWh. Notably, electricity production from coal decreased by 11% due to the closure of several coal-fired power plants following the Easter period. Conversely, hydro, solar and wind energies experienced substantial increases, driven by favourable weather conditions (Figure 10). In the electricity mix, non-hydro renewables led with a 59% share, followed by coal and gas at 19% and 16% respectively and hydro at 6% (Figure 11).

Figure 10: Trend in electricity production in Germany in June 2024 (y-o-y change)

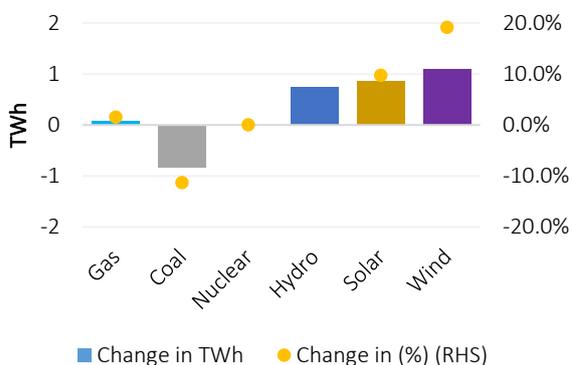
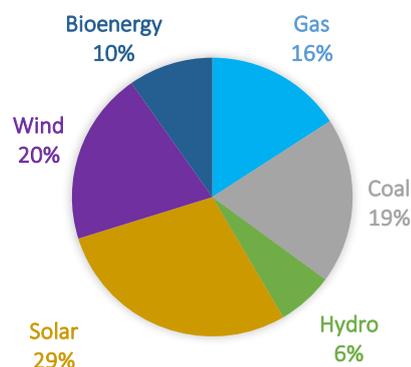


Figure 11: German electricity mix in June 2024



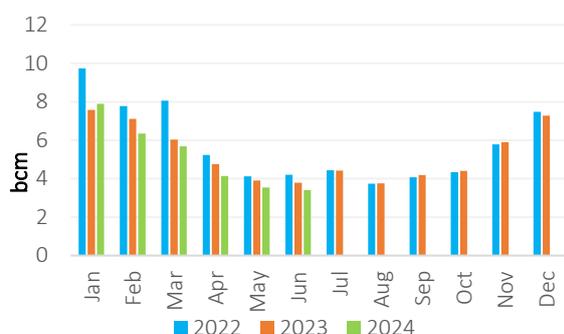
Source: GECF Secretariat based on data from Refinitiv and Ember

In H1 2024, Germany's overall gas consumption decreased by 2% y-o-y to reach 41 bcm.

2.1.1.2 Italy

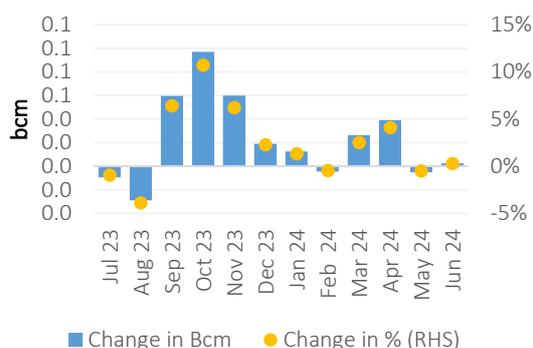
In June 2024, Italy's gas consumption decreased by 9.9% y-o-y to total 3.4 bcm (Figure 12). This decline was primarily due to reduced consumption in the power generation sector, largely influenced by increased hydro and renewables output. The residential sector recorded a 1% increase in consumption, growing to 0.96 bcm. Italy experienced a contrast in weather conditions – the central and southern regions were warm and dry, while the northern regions were cool and rainy. Italy's average temperature was 20.3°C, which is 1.0°C higher than the usual norm. In the industrial sector, gas consumption has rebounded, showing a positive trend after last month's decline, with a 0.3% y-o-y increase, reaching 0.9 bcm (Figure 13).

Figure 12: Gas consumption in Italy



Source: GECF Secretariat based on data from Snam

Figure 13: Trend in gas consumption in the industrial sector in Italy (y-o-y change)



Gas-based electricity production declined by 15% y-o-y to 1.4 bcm, while total electricity production decreased by 1% y-o-y, reaching 19.8 TWh. Notably, there was a significant y-o-y increase in energy generation from non-hydro renewables (wind + solar) by 20%, which reduced the role of natural gas in the power generation mix (Figure 14). Meanwhile, gas remained the dominant fuel in the power mix with 37% of the share followed by non-hydro renewables with 34% (Figure 15).

Figure 14: Trend in electricity production in Italy in June 2024 (y-o-y change)

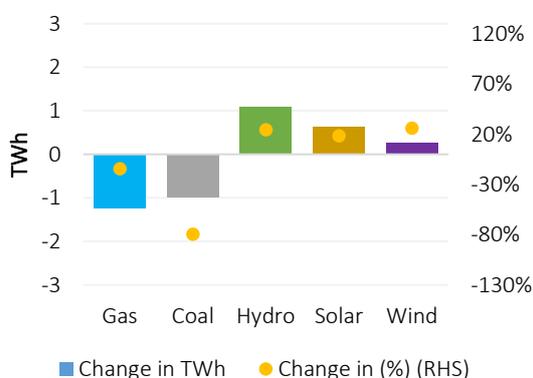
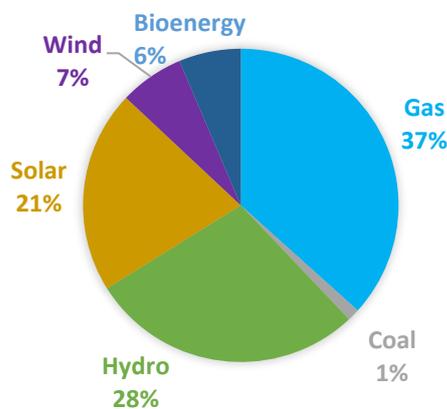


Figure 15: Italian electricity mix in June 2024



Source: GECF Secretariat based on data from Refinitiv and Ember

In H1 2024, Italy's overall gas consumption decreased by 6% y-o-y to reach 31 bcm.

2.1.1.3 France

In June 2024, France experienced a fifth consecutive monthly decline in gas consumption, with a drop by 5.3% y-o-y to 1.4 bcm (Figure 16). The primary driver of this decline was the power generation sector, which recorded higher output from nuclear and hydro sources. In contrast, gas consumption in the residential sector increased by 22% y-o-y, despite France experiencing near-average temperatures, with a minor anomaly of -0.03°C. This ended a historic streak of 28 consecutive months with above-average temperatures, the longest ever recorded in any European country. Meanwhile, the industrial sector recorded a third consecutive month of growth, exhibiting 6% y-o-y, with consumption totalling 0.8 bcm (Figure 17).

Figure 16: Gas consumption in France

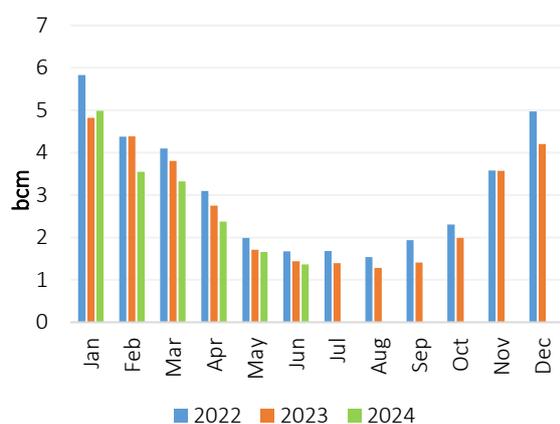
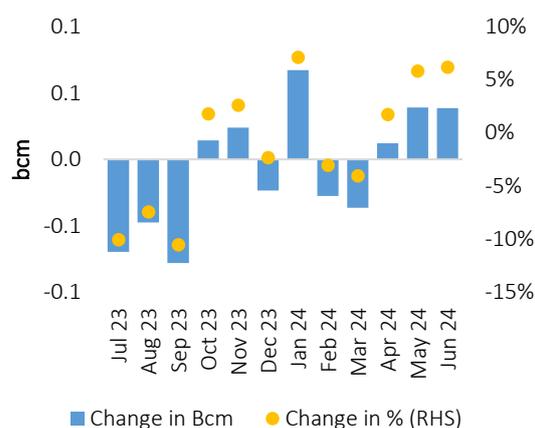


Figure 17: Trend in gas consumption in the industrial sector in France (y-o-y change)



Source: GECF Secretariat based on data from GRTgaz

Electricity production from gas in France dropped by 76% y-o-y, while the country's total electricity production rose by 9.3% y-o-y to reach 38 TWh. Conversely, electricity production from hydro, wind and nuclear witnessed substantial increases (Figure 18). The availability of nuclear capacity increased by 20% y-o-y (Figure 19). In France's electricity mix, nuclear power continued to be the dominant source, accounting for a 70% share, followed by hydro (15%), non-hydro renewables (14%) and gas (1%).

Figure 18: Trend in electricity production in France in June 2024 (y-o-y change)

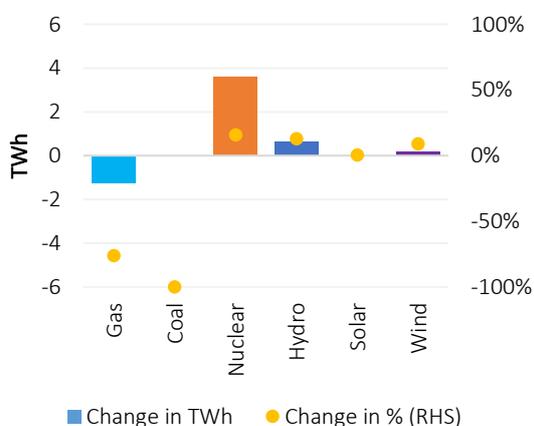
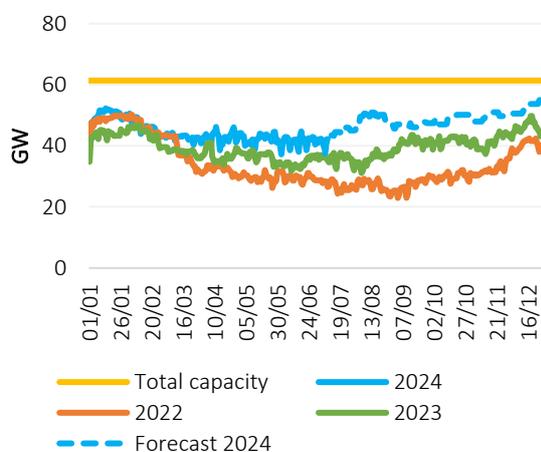


Figure 19: French nuclear capacity availability



Source: GECF Secretariat based on Refinitiv and RTE

Source: GECF Secretariat based on data from Ember

In the first half of 2024, France's gas consumption dropped by 9% y-o-y to reach 17.3 bcm.

2.1.1.4 Spain

In June 2024, Spain's gas consumption decreased by 20% y-o-y to reach 1.9 bcm (Figure 20). The decrease mainly stemmed from less gas use in the power generation, industrial and residential sectors. A significant rise in hydroelectric, solar and wind production led to a continued decrease in the power sector's gas demand. The average temperature in Spain was 19.9°C, or 0.2°C below the 1991-2020 average, which made it the first colder-than-usual month on the peninsula since April 2022. Similarly, industrial sector consumption recorded a decline of 1% y-o-y, fuelled by lower gas usage across several industries (Figure 21).

Figure 20: Gas consumption in Spain

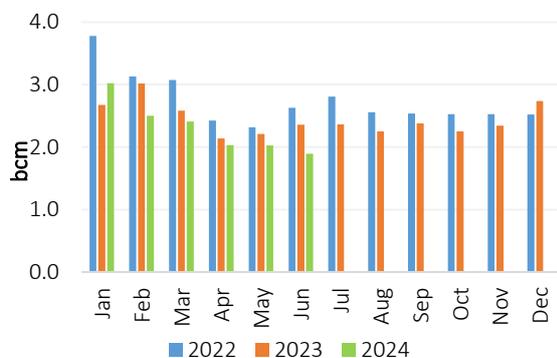
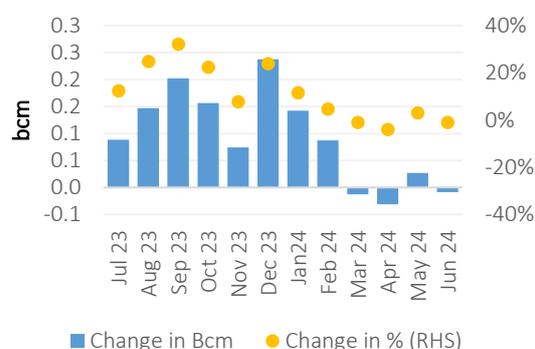


Figure 21: Trend in gas consumption in the industrial sector in Spain (y-o-y change)



Source: GECF Secretariat based on data from Enagas

Electricity generation from gas experienced a 49% y-o-y decrease, while the overall electricity production in the country rose by 1% y-o-y to 19 TWh. Additionally, there was a notable reduction in electricity production from coal. In contrast, a significant increase in electricity generation from hydro (+33%), solar (19%) and wind (41%) was observed during the month (Figure 22). Non-hydro renewables maintained the dominant position in the power mix, accounting for 51%, while natural gas represented 14% (Figure 23).

Figure 22: Trend in electricity production in Spain in June 2024 (y-o-y change)

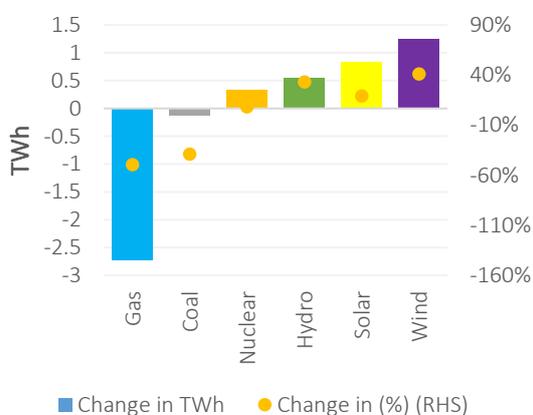
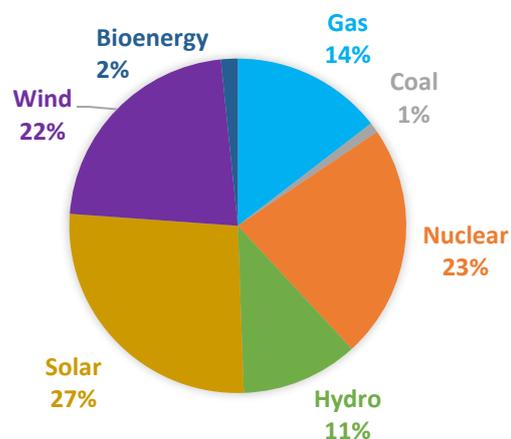


Figure 23: Spanish electricity mix in June 2024



Source: GECF Secretariat based on data from Ember and Ree

In the first half of 2024, Spain's gas consumption decreased by 7% y-o-y to reach 14 bcm.

2.1.2 United Kingdom

In June 2024, the UK recorded its fifth consecutive month of declining gas consumption, falling by 7.4% y-o-y to 2.7 bcm (Figure 24). This reduction was driven by a decline in the power generation sector amidst strong wind and hydro output. By contrast, the industrial sector experienced a 3.7% growth (Figure 25). The residential sector witnessed an increase of 22%, influenced by colder weather on some days during the month. The UK experienced a temperature anomaly of 0.4°C below average, particularly in the west, with a cool first half and warmer later days, resulting in a dry, cool and sunny month compared to the historical average.

Figure 24: Gas consumption in the UK

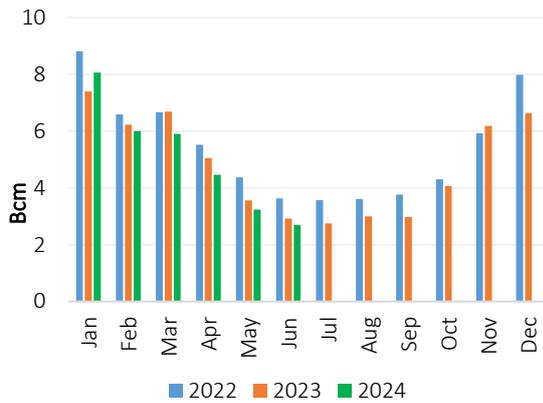
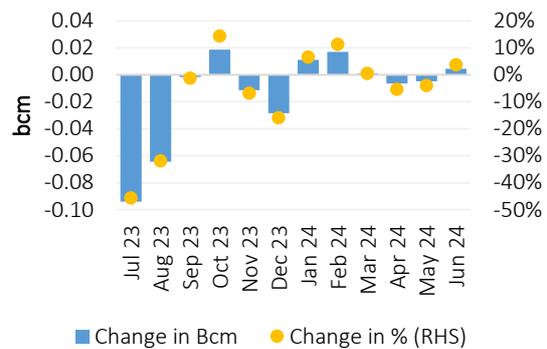


Figure 25: Trend in gas consumption in the industrial sector in the UK (y-o-y change)



Source: GECF Secretariat based on data from Refinitiv

Electricity production from gas witnessed a 44% y-o-y decrease, while total electricity production dropped by 5.5% y-o-y to 16 TWh. Electricity generation from hydro, wind, solar and nuclear energy saw increases (Figure 26). In the power mix, non-hydro renewables took the lead with 52% of the total electricity production, followed by gas at 26% and nuclear at 21% (Figure 27).

Figure 26: Trend in electricity production in UK in June 2024 (y-o-y change)

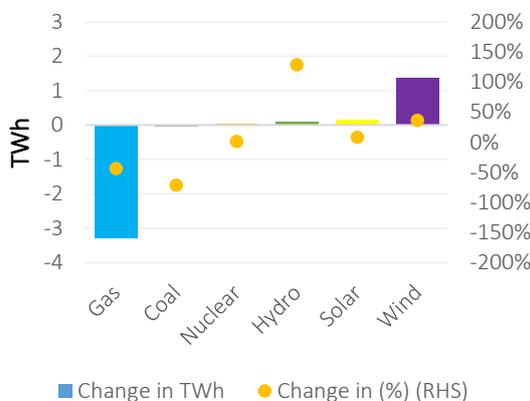
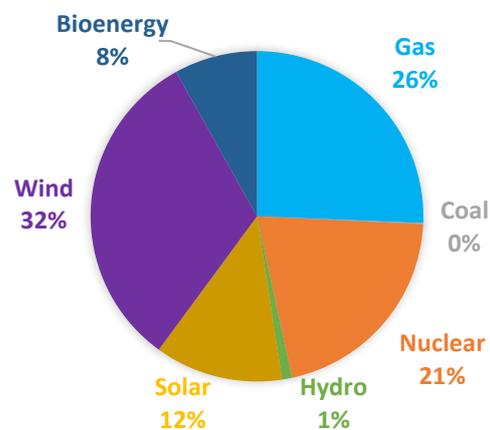


Figure 27: UK electricity mix in June 2024



Source: GECF Secretariat based on data from Refinitiv

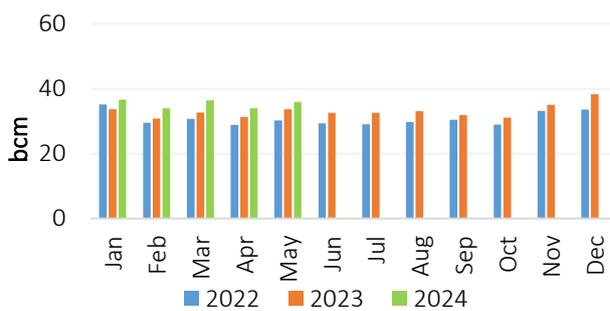
In the first half of 2024, the UK gas consumption dropped by 5% y-o-y to reach 30 bcm.

2.2 Asia

2.2.1 China

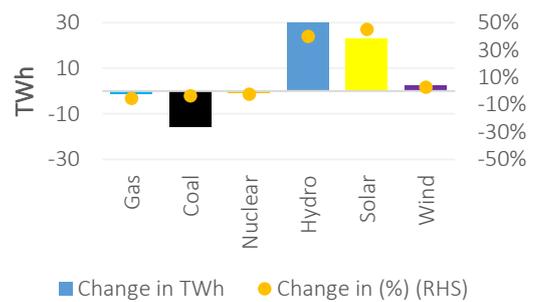
In May 2024, China's apparent gas demand, which is estimated from domestic production, pipeline gas and LNG imports, rose by 6.7% y-o-y to reach 36 bcm, driven by a recovery in economic activities and lower LNG prices (Figure 28). Electricity production from gas decreased by 5% y-o-y, while total electricity production rose by 6% to reach 767 TWh driven by cooling demand in the southern regions (Figure 29). Coal remained the dominant fuel in the power mix with 55%, followed by non-hydro renewables (22%), hydro (15%), nuclear (5%) and gas (3%). It is worth mentioning that in the first five months of 2024 gas consumption from industrial users and city gas distributors in Jiangsu province grew by 9% y-o-y, reaching 8.5 bcm. Jiangsu, the second-largest gas demand region in China, consumed 33.4 bcm in 2023.

Figure 28: Gas consumption in China



Source: GECF Secretariat based on data from Refinitiv

Figure 29: Y-o-Y electricity production May 2024



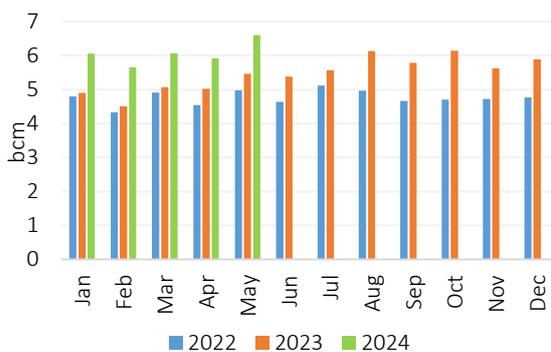
Source: GECF Secretariat based on data from Ember

In the first 5 months of 2024, Chinese gas consumption increased by 9% y-o-y to 177 bcm.

2.2.2 India

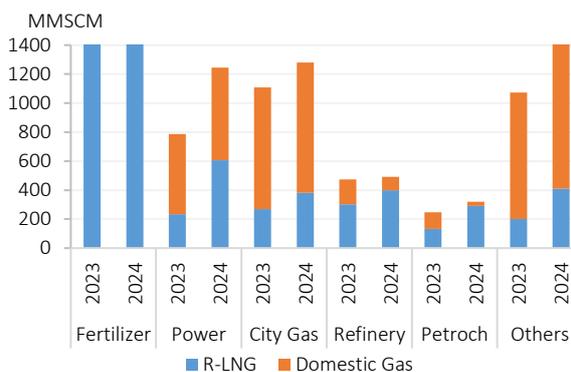
In May 2024, India's gas consumption increased by 21% y-o-y to 6.6 bcm, marking its seventeenth consecutive month of y-o-y growth (Figure 30). In the sectoral breakdown, the fertilizer sector accounted for 25% of gas demand, followed by city gas distribution (20%), power generation (19%), refining (7%) and the petrochemical sector (5%) (Figure 31). Indian gas-based power utilities operated at full capacity following the power ministry's directive for them to increase generation during the extreme heatwave.

Figure 30: Gas consumption in India



Source: GECF Secretariat based on data from PPAC

Figure 31: India's gas consumption by sector in May 2024



In the first 5 months of 2024, India's gas consumption increased by 21% y-o-y to 30 bcm.

2.2.3 Japan

In June 2024, Japan's gas consumption dropped by 10% y-o-y to 6 bcm (Figure 32). The month was notably warm, with a temperature anomaly of +1.3°C, making it the second warmest June on record, following 2020. Despite an increase in power demand for cooling, gas consumption in the power generation sector dropped by 16% y-o-y amidst increased nuclear power availability (Figure 33). The city gas sector also saw a 2.3% y-o-y decrease in consumption due to lower demand from commercial and industrial users.

Figure 32: Gas consumption in Japan

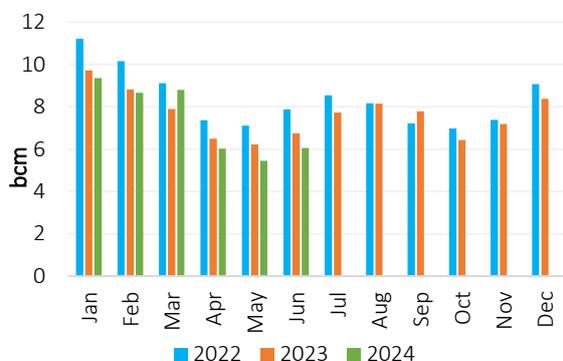
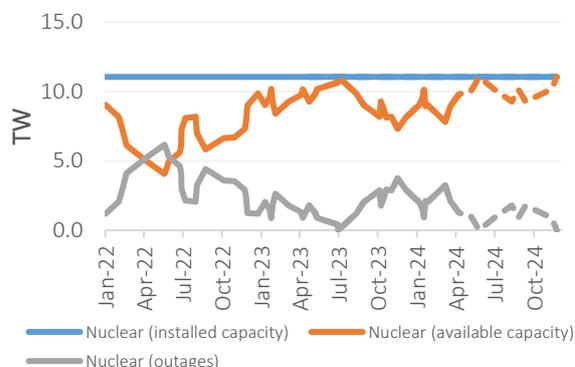


Figure 33: Nuclear availability in Japan



Source: GECF Secretariat based on data from Refinitiv

In the first 6 months of 2024, Japan's gas consumption decreased by 3% y-o-y to 44 bcm.

2.2.4 South Korea

In June 2024, South Korea's gas consumption declined by 5% y-o-y to 3.3 bcm (Figure 34). This decrease was driven by a 7% y-o-y drop in the power generation sector and a 2% decrease in the city gas sector. Additionally, the HDD in South Korea decreased by 10% y-o-y. June 2024 in South Korea averaged 22.7°C, or +1.3°C above normal, with heatwaves breaking numerous records in the country (Figure 35).

Figure 34: Gas consumption in South Korea

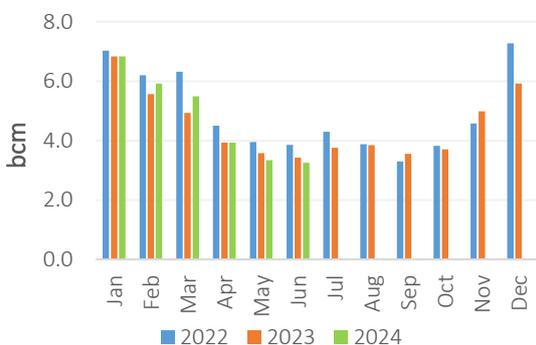
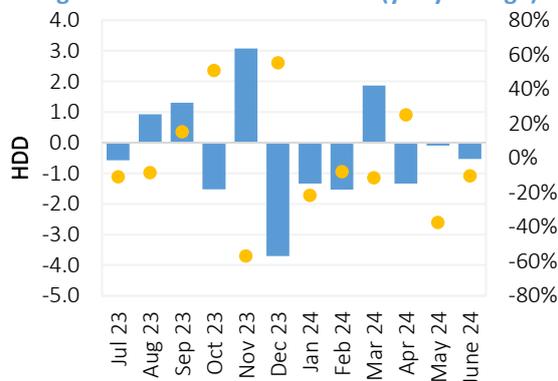


Figure 35: HDD in South Korea (y-o-y change)



Source: GECF Secretariat based on data from Refinitiv

In the first 6 months of 2024, South Korea's gas consumption rose by 2% y-o-y to 29 bcm.

2.3 North America

2.3.1 US

In June 2024, US gas consumption increased by 5.8% y-o-y to 70 bcm (Figure 36). The power generation sector led the growth, driven by a surge in cooling demand amidst warmer-than-normal weather. Similarly, the residential and commercial sectors recorded a growth in gas consumption, however the industrial sector experienced a decrease of 0.4% y-o-y.

Power generation from gas saw an 8% y-o-y increase, whereas the overall electricity production rose by 16%. The month saw an increase in generation from coal, nuclear, hydro, solar and wind sources, driven by heightened electricity demand for cooling (Figure 37). In the power mix, gas continued to lead with a 43% share, followed by non-hydro renewable (19%), nuclear (17%), coal (16%) and hydro (5%).

Figure 36: Gas consumption in the US

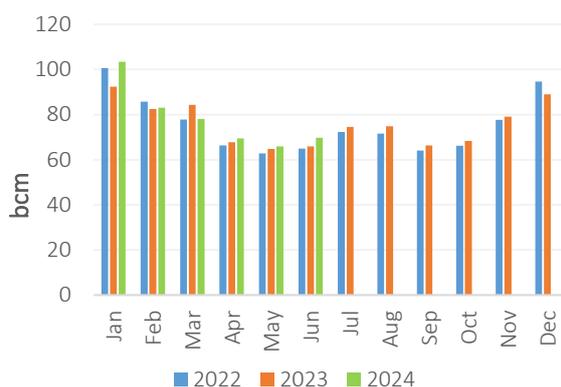
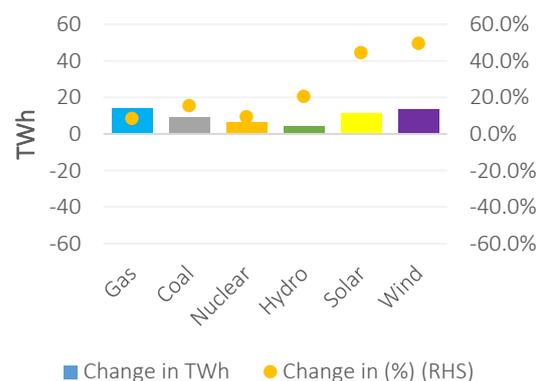


Figure 37: Electricity production in the US in June 2024 (y-o-y change)



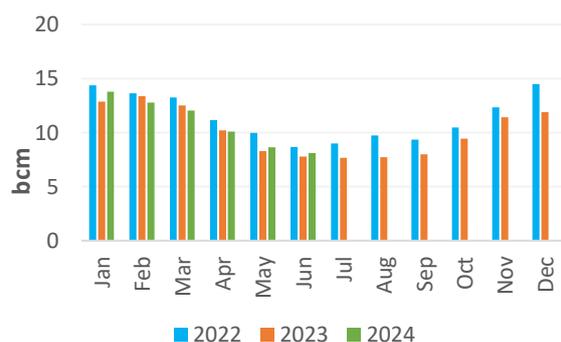
Source: GECF Secretariat based on data from EIA, Ember and Refinitiv

In the first 6 months of 2024, the US gas consumption increased by 2% y-o-y to reach 468 bcm.

2.3.2 Canada

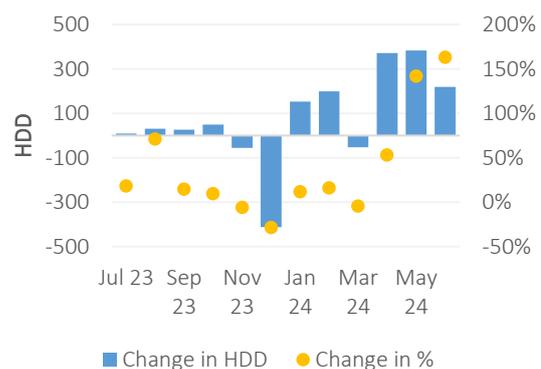
In June 2024, Canada's gas consumption rose by 4% y-o-y to reach 8.1 bcm (Figure 38). This rise was driven by the power generation/industrial sector with an increase of 3.6% y-o-y (Figure 39). Similarly, the residential and commercial sectors recorded a rise of 11% and 6% y-o-y respectively.

Figure 38: Gas consumption in Canada



Source: GECF Secretariat based on data from Refinitiv

Figure 39: HDD in Canada (y-o-y change)

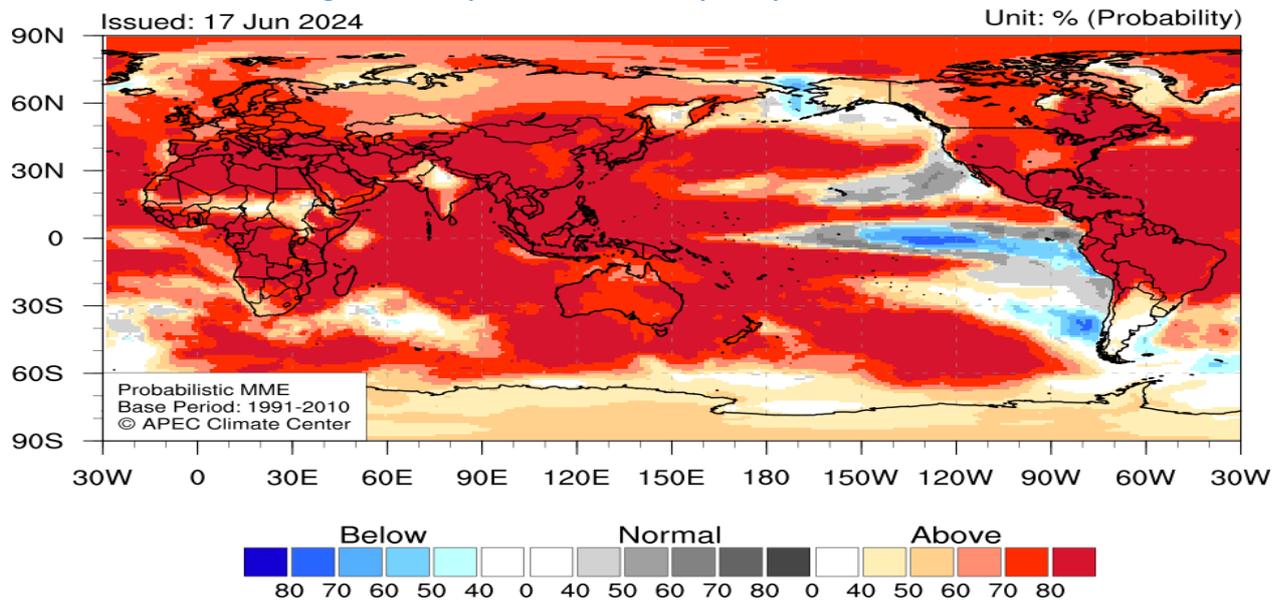


2.4 Weather forecast

2.4.1 Temperature

According to the APEC Climate Center, a pronounced likelihood of above normal temperatures is predicted for most of the globe (excluding central and eastern equatorial Pacific and the eastern subtropical North Pacific) for the period July to September 2024 (Figure 40).

Figure 40: Temperature forecast July to September 2024

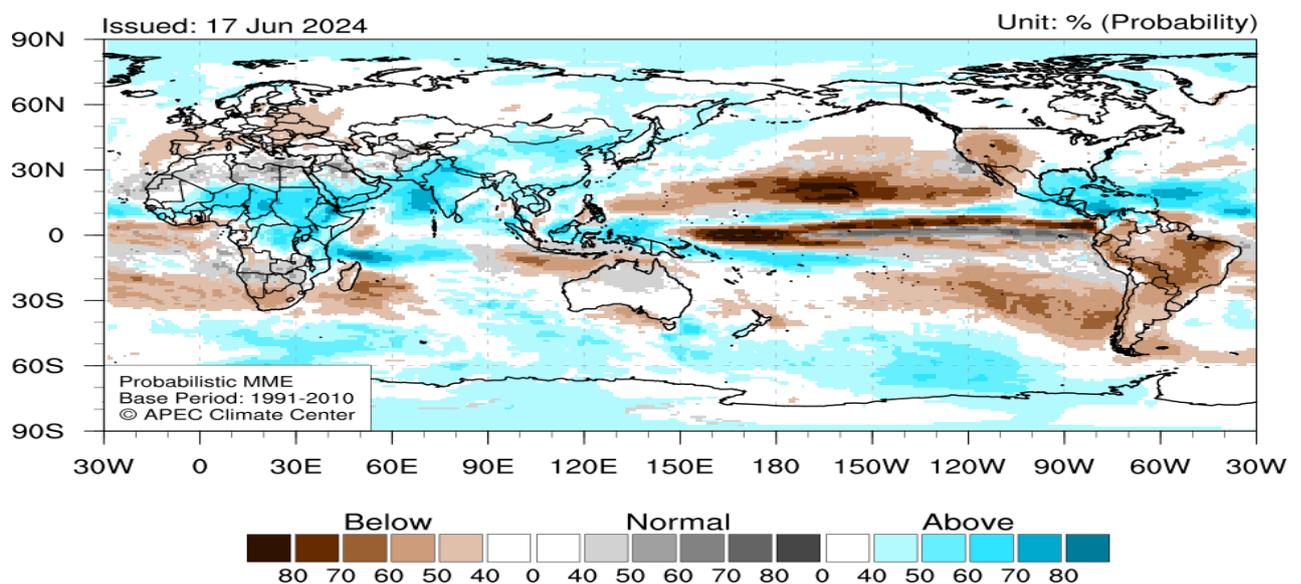


Source: APEC Climate Center

2.4.2 Precipitation

According to the same source, above normal precipitation is predicted for the region spanning central Africa, the western Indian Ocean, the Arabian Sea, South Asia, the off-equatorial western South Pacific, Central America, the Caribbean Sea, the Gulf of Mexico, and the tropical North Atlantic for the period July to September 2024 (Figure 41).

Figure 41: Precipitation forecast July to September 2024



Source: APEC Climate Center

3 Gas Production

3.1 Europe

In May 2024, Europe witnessed a strong rebound in its monthly gas production, with a 7% y-o-y rise, resulting in a total output of 14.9 bcm (Figure 42). This increase primarily originated from the significant rise in the Norway’s gas production, overcoming continuous decline in the UK and the Netherlands’ output. For the period Jan-May 2024, the cumulative gas production in Europe reached 82 bcm, representing a 2.6% y-o-y rise.

3.1.1 Norway

Norway's gas production rose by 15% y-o-y to achieve 10 bcm (Figure 43). This high output was driven by the near absence of maintenance outages in May 2024. Only, the 25.8 mmcm/d Aasta Hansteen gas field underwent a planned maintenance, which reduced its output capacity to 19.8 mmcm/d for one day. For the period Jan-May 2024, cumulative gas production in Norway reached 54.4 bcm, representing a 5% uptick, driven by an increase in gas output from the giant Troll field.

3.1.2 UK

UK gas production declined by 9% y-o-y to 2.6 bcm. Unplanned outages in the 10.2 mmcm/d Bacton Perenco and the 7.4 mmcm/d Bacton Seal gas terminals reduced their capacities for a period of one and half days. For the period Jan-May 2024, the cumulative gas production in the UK reached 14.3 bcm, representing a 5% y-o-y reduction, mainly driven by the sustained decline in the gas output from mature UK fields.

3.1.3 Netherlands

The Netherlands experienced a 5% y-o-y decline in its gas output, which stood at 0.8 bcm. For the period Jan-May 2024, cumulative gas production in the Netherlands reached 4.7 bcm, representing a 19% decline compared to the same period in 2023. This decrease in gas production is mainly attributed to reduced output from ageing Dutch fields.

Figure 42: Europe’s monthly gas production

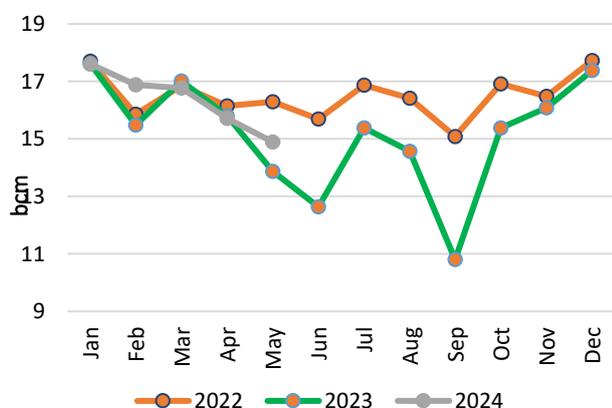
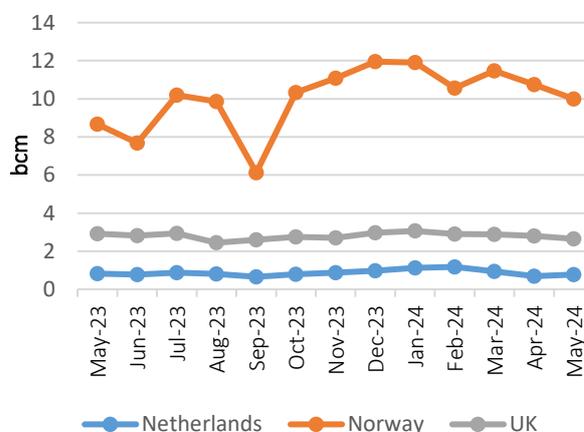


Figure 43: Gas production in key European countries



Source: GECF Secretariat based on data from Refinitiv and the Norwegian Offshore Directorate

3.2 Asia Pacific

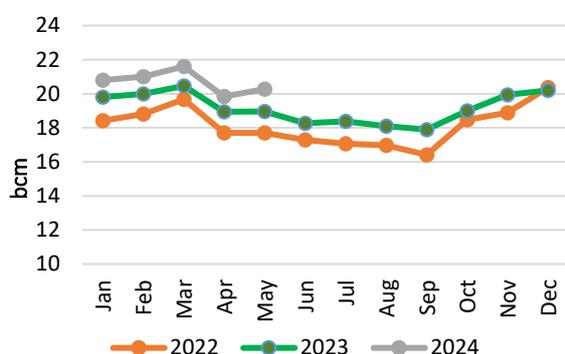
3.2.1 China

In May 2024, China’s gas production reached 20.3 bcm, representing a 7% y-o-y rise (Figure 44). Coal bed methane production continued its remarkable growth to stand at 1.45 bcm, with a 33% y-o-y rise. Notably, Sinopec announced a major breakthrough in shale gas development in Sichuan basin, with the drilling of 2 additional wells, with a targeted production of 1.4 bcma. It is worth noting that China’s TRR of shale gas are mainly located in Tarim, Sichuan and South Sea basins, and Sinopec is aiming to reach a shale gas output of 13 bcm in 2025. For the period Jan-May 2024, Chinese gas production totalled 103.5 bcm, with a 5.4% y-o-y rise.

3.2.2 India

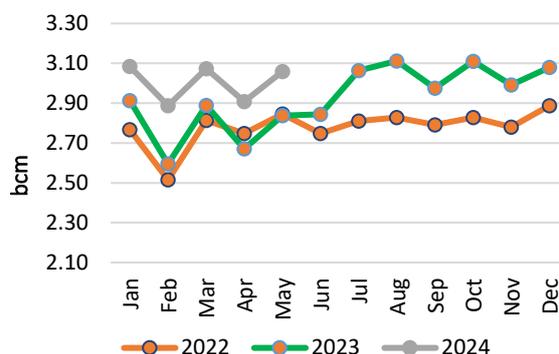
In May 2024, India’s gas production rose by 7% y-o-y to reach 3.06 bcm (Figure 45). The offshore gas fields’ output increased by 11% y-o-y to reach 2.2 bcm, with a 73% share of total production. For the period Jan-May 2024, cumulative gas production reached 15 bcm, an 8% y-o-y rise.

Figure 44: Trend in gas production in China



Source: GECF Secretariat based on data from the National Bureau of Statistics of China

Figure 45: Trend in gas production in India

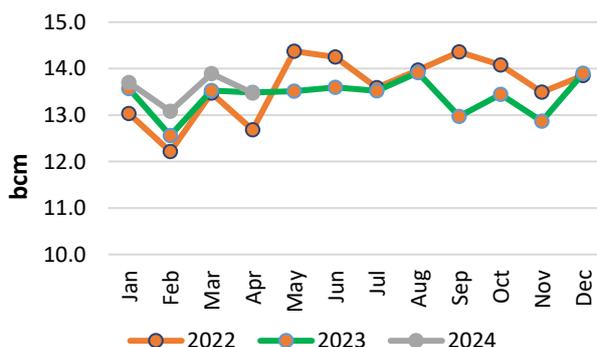


Source: GECF Secretariat based on data from the Ministry of Petroleum and Natural Gas (PPAC)

3.2.3 Australia

In April 2024, Australia’s gas production reached 13.5 bcm, mirroring last year production level (Figure 46). Gas production from CBM fields rose by 2% y-o-y to 3.5 bcm, representing 25% of the total domestic production (Figure 47). For the period Jan-Apr 2024, cumulative gas production reached 54.2 bcm, representing a 4% y-o-y rise.

Figure 46: Trend in gas production in Australia



Source: GECF Secretariat based on data from the Australian Department of Energy

Figure 47: Trend in CBM production in Australia



3.3 North America

3.3.1 US

In June 2024, the US total gas production witnessed a 3% y-o-y decline to reach a monthly output of 92.5 bcm (Figure 48), driven by announced cuts in gas production by some major producers amidst low Henry Hub gas prices. In terms of distribution, shale gas production in Appalachia region accounted for 31% of the total gas production, while the Permian shale oil play with its associated gas production represented 21%.

Figure 48: Trend in shale gas production in the US

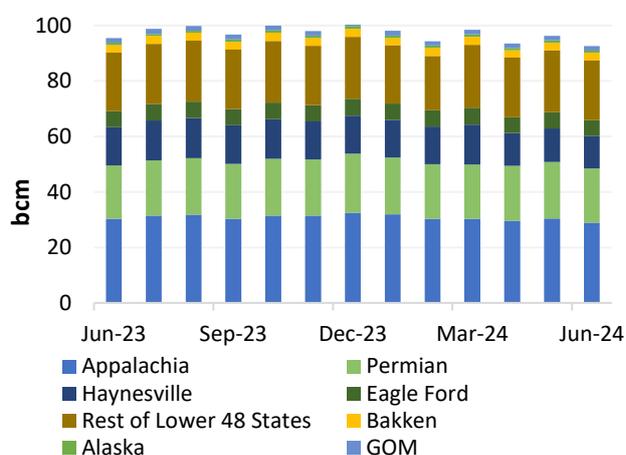
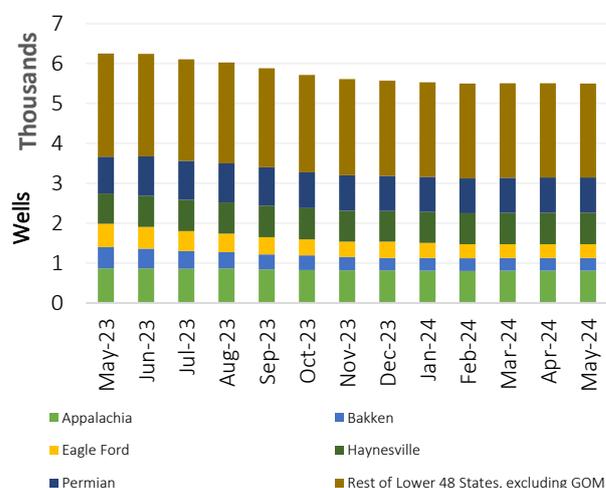


Figure 49: DUC wells count in the US



Source: GECF Secretariat based on data from the EIA

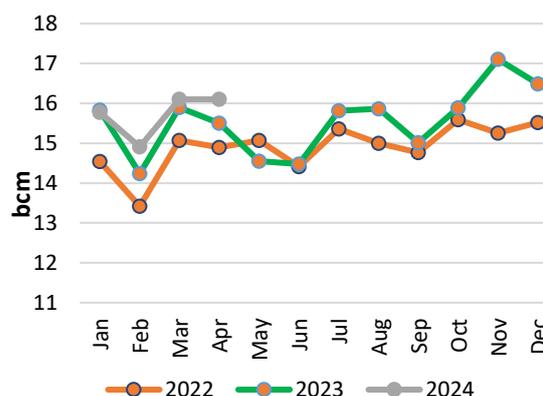
As of May 2024, the number of oil and gas drilling rigs operating in the seven key shale oil and gas regions in the US stood at 574, representing a reduction by 12 rigs compared to April 2024, driven by the reduction in number of rigs in Eagle Ford. The Permian basin accounted for the major share of the current drilling rigs with more than 55%. Additionally, in May 2024, the total number of drilled but uncompleted (DUC) wells in the seven major regions amounted to 5,495, marking a 9-well m-o-m decrease (Figure 49). With the current low Henry Hub prices, private producers are expected to slow down their drilling activity, aiming to reduce cost burden, and therefore relying on their inventory of DUCs.

3.3.2. Canada

In April 2024, Canada's gas production reached 16.1 bcm, representing a 4% y-o-y increase (Figure 50). The State of Alberta accounted for 9.6 bcm, representing 60% of the total Canadian gas production.

For the period Jan-Apr 2024, cumulative gas production reached 62.9 bcm, a 2.5% y-o-y rise.

Figure 50: Trend in gas production in Canada



Source: GECF Secretariat based on data from CER

3.4 Latin America and the Caribbean (LAC)

3.4.1 Brazil

In May 2024, Brazil’s marketed gas production declined by 9% y-o-y to reach 1.4 bcm (Figure 51), driven by the increased reinjection. Notably, pre-salt fields were responsible for more than 78% of production, with the Tupi field in the Santos pre-salt basin emerging as the largest gas-producing field at 0.4 bcm. The cumulative output for the period Jan-May 2024 reached 7.1 bcm, representing a 5% y-o-y decline. In the meantime, 55% of gross production was reinjected into reservoirs, while gas flaring represented 2% of gross production (Figure 52).

Figure 51: Trend in gas production in Brazil

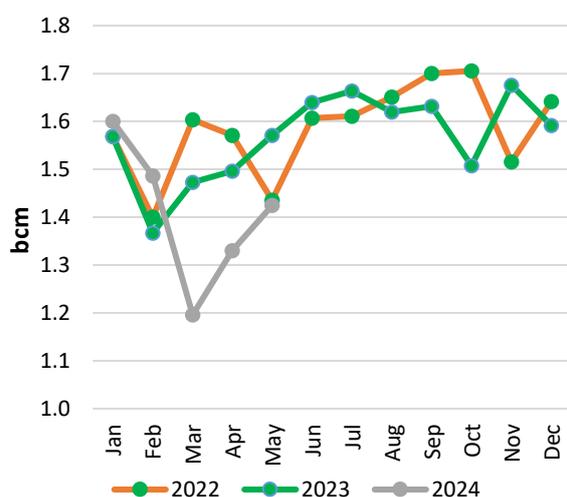
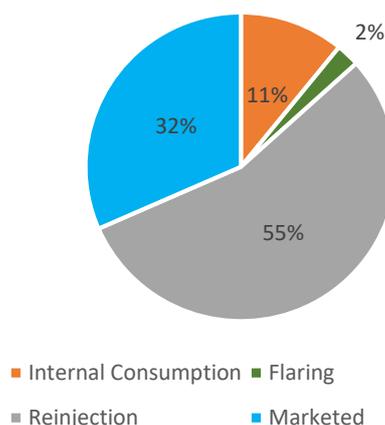


Figure 52: Distribution of gross gas production in Brazil



Source: GECF Secretariat based on data from the Brazilian National Agency of petroleum (ANP)

3.4.2 Argentina

In May 2024, Argentina’s gas production increased by 8% y-o-y to reach a total output of 4.6 bcm (Figure 53). Shale gas production rose by a remarkable 35% y-o-y to reach 2.4 bcm, representing 51% of the total production, driven by increased output and the debottlenecking of the Vaca Muerta shale gas basin (Figure 54). In addition, tight gas reservoir production reached 0.6 bcm, representing a 13% share. For the period Jan-May 2024, the accumulated gas output stood at the level of 20.6 bcm, representing a 4.9% y-o-y increase.

Figure 53: Trend in gas production in Argentina

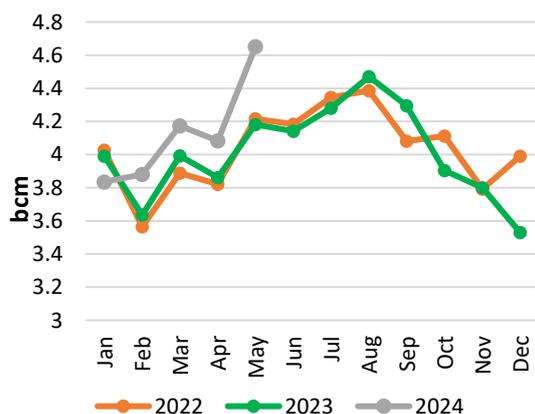


Figure 54: Trend in shale gas production in Argentina

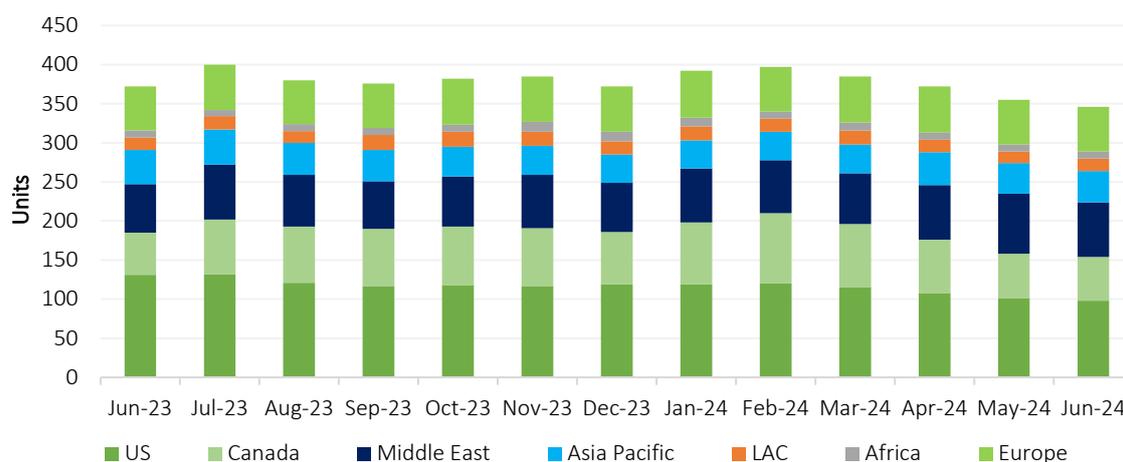


Source: GECF Secretariat based on data from Argentinian Ministry of Economy

3.5 Other developments

3.5.1 Upstream tracker

Figure 55: Trend in monthly global gas rig count



Source: GECF Secretariat based on data from Baker Hughes

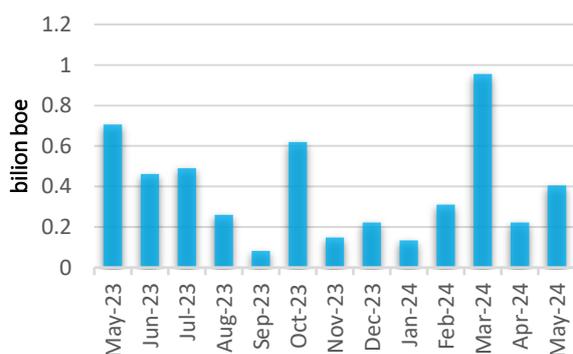
Note: Excludes data for Eurasia and Iran

In June 2024, the global number of gas drilling rigs continued its declining trend and dropped by 9 units m-o-m to reach 346 rigs, driven by the decrease in gas rigs throughout the Middle East and the US, by 7 and 3 rigs, respectively (Figure 55). This market development was mainly driven by the slowdown in the drilling activity in Saudi Arabia, in addition to the low Henry Hub gas prices in North America.

In May 2024, the total volume of discovered gas and liquids amounted to 400 million barrels of oil equivalent (boe) (Figure 56). Of this, natural gas accounted for the majority with 65% (45 bcm), while liquid oil constituted 35% (140 million bbl). 6 new discoveries were announced, 5 of them were offshore. In terms of regional distribution, Asia Pacific dominated the new discovered volumes with 38%, mainly in Indonesia, while the Middle East accounted for 29%, followed by Africa with 20% (Figure 57). The Tangkulo ultra-deepwater gas discovery, located in the South Andaman area, offshore Indonesia, was the most significant announced gas discovery, with estimated recoverable gas resources of 33 bcm.

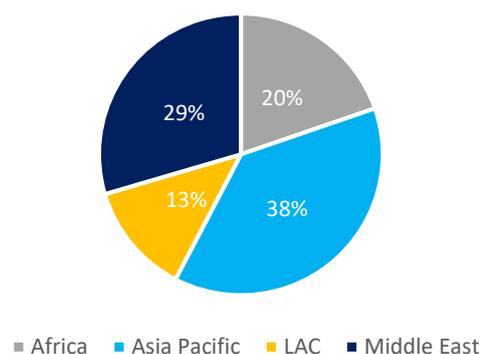
Cumulative discovered volumes in the period Jan-May 2024 amounted to 2.2 billion boe.

Figure 56: Monthly gas and liquid discovered volumes



Source: GECF Secretariat based on Rystad Energy

Figure 57: Discovered volumes in May 2024 by region



3.5.2 Other regions

Saudi Aramco announced gas expansion progress for Jafurah Phase II project: According to the Saudi Aramco announcement, the company awarded contracts worth more than 25 billion USD to progress its strategic gas expansion, which targets gas production growth of more than 60% by 2030. The contracts are related to phase two development of the vast Jafurah unconventional gas field, phase three expansion of Aramco's Master Gas System, new gas rigs and ongoing capacity maintenance. In his comment over the new contracts, Saudi Aramco's CEO remarked that "These contract awards demonstrate our firm belief in the future of gas as an important energy source, as well as a vital feedstock for downstream industries".

Malaysia witnessed the production startup from Jerun gas field: According to TotalEnergies' announcement, the company announced the production startup from its Jerun gas field, offshore Sarawak in Malaysia. The Jerun field, which was initially discovered in 2015, has estimated reported proven reserves of 85 bcm, with a maximum production capacity of 5.7 bcma. The produced gas will be transported onshore to provide a feedgas for Malaysia's 30 Mtpa Bintulu export terminal.

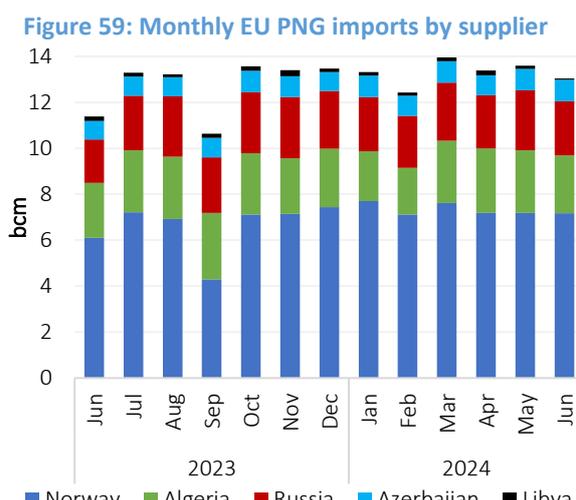
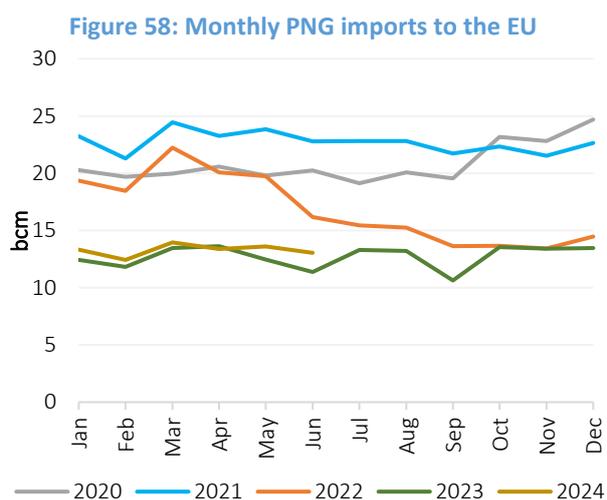
Nigeria approved the FID of the Ubeta Gas Development: According to TotalEnergies and Nigerian National Petroleum Corporation Ltd (NNPCL) announcement, the FID for the development of the Ubeta gas field has been approved. The field located 80 km northwest of Port Harcourt in Rivers State, is planned to be developed using a new 6-well cluster, with the production tied into the existing production facilities in Obite via an 11 km pipeline. First production is expected in 2027, with a plateau production level of 3.1 bcma. The produced gas is planned to be supplied to Nigeria LNG plant (NLNG) for liquefaction.

4 Gas Trade

4.1 PNG trade

4.1.1 Europe

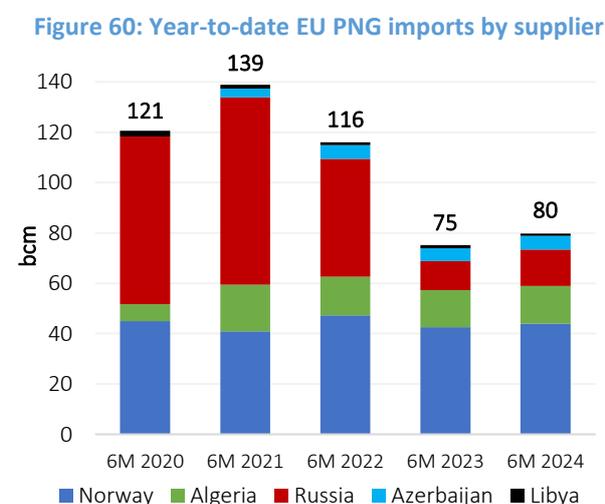
In June 2024, EU PNG imports decreased by 4% m-o-m to reach 13.0 bcm (Figure 58). However, this quantity was 15% higher than a year ago. PNG imports from all five gas suppliers declined in June 2024 (Figure 60). Since the conclusion of the winter season, the monthly level of PNG imports has stabilised, in the context of lower gas demand in the region, as well as the smaller storage stockbuild required this year.



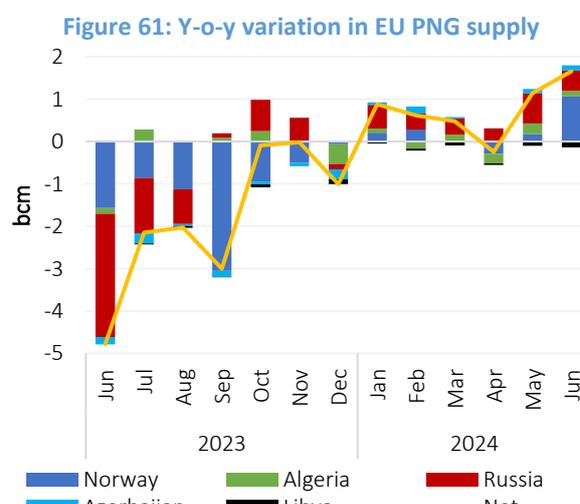
Source: GECF Secretariat based on data from Refinitiv

Source: GECF Secretariat based on data from Refinitiv

Over the first half of 2024, PNG imports by the EU totalled 80 bcm, an increase of 6% or 4.5 bcm, when compared with the volume imported during the same period in 2023 (Figure 59). During this period, there was a 24% y-o-y increase in PNG imports from Russia. The next highest increase was attributed to Norway, which supplied 3% or 1.5 bcm more PNG to the region compared with the first half of 2023. PNG imports from Russia and Azerbaijan have been higher in each month of 2024, compared with the corresponding months in 2023 (Figure 61).



Source: GECF Secretariat based on data from Refinitiv

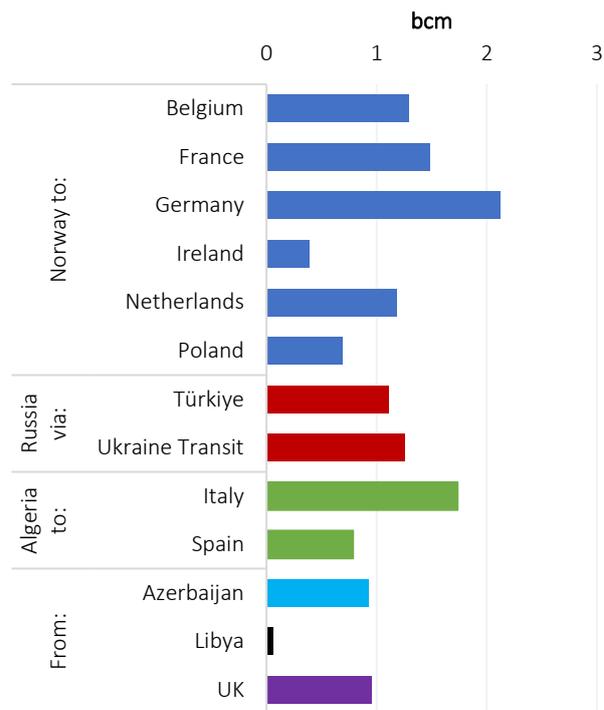


Source: GECF Secretariat based on data from Refinitiv

Figure 62 shows the PNG imports to the EU via the major supply routes in June 2024. Norway's supply to the Netherlands rose by 31% m-o-m, which was the highest increase among all supply routes. On the other hand, Russian supply to central Europe, and Algerian supply to Spain were relatively unchanged compared with the previous month. With the decrease in imports from all five suppliers, there were 1.0 bcm of regasified LNG supply imported from the UK, which was an increase of 18% m-o-m.

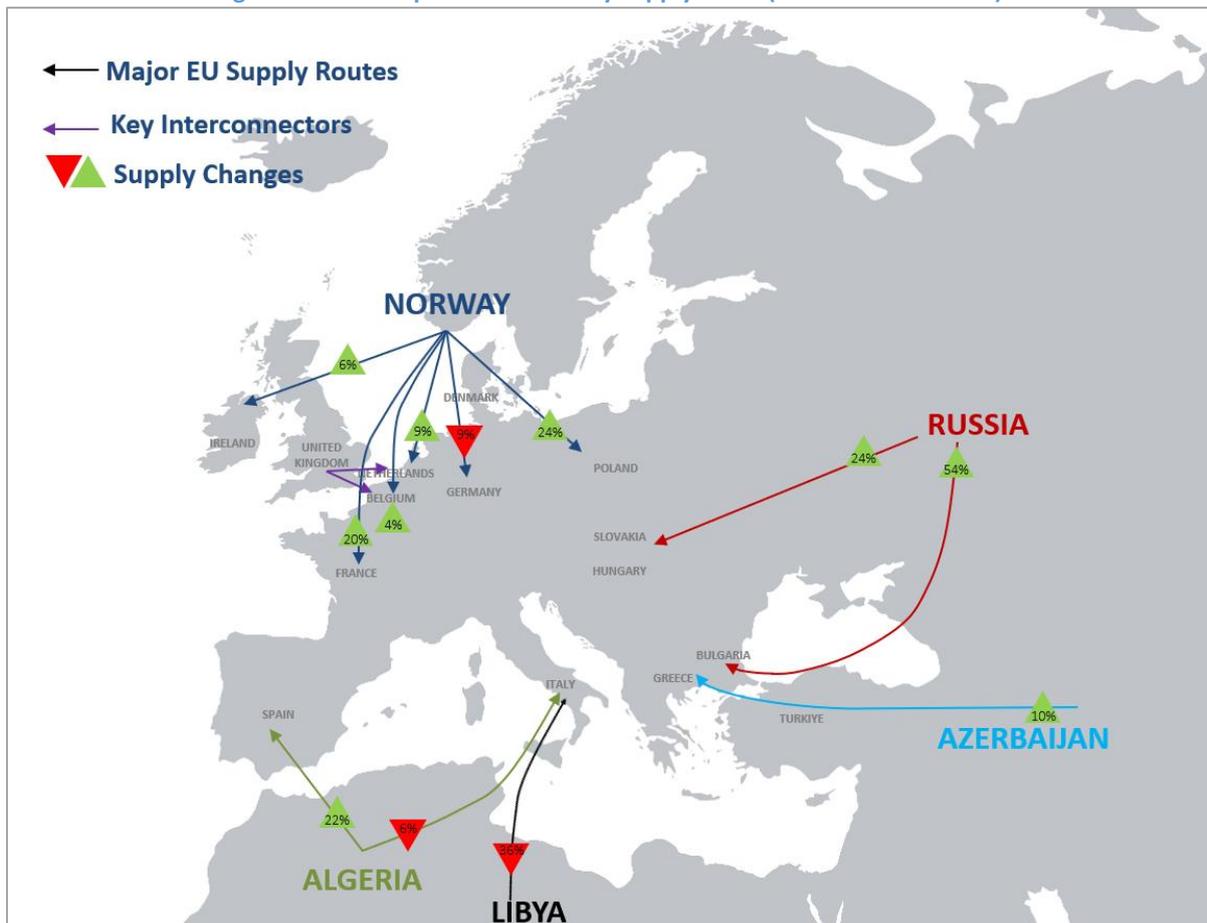
Figure 63 displays the PNG imports to the EU via the major supply routes during the first half of 2024, versus the same period in 2023. Imports from Russian via Turkstream rose by 54% y-o-y, while imports via central Europe rose by 24%. Algeria's exports to Spain increased by 22%. There has been just 2.2 bcm of net PNG flows from the UK, which was a decrease of 72% compared with 2023.

Figure 62: EU PNG imports by supply route, in June 2024



Source: GECF Secretariat based on data from Refinitiv

Figure 63: PNG imports to the EU by supply route (6M 2024 v 6M 2023)



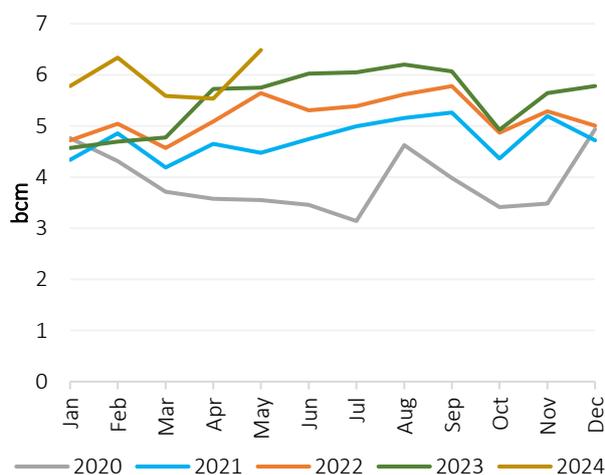
Source: GECF Secretariat based on data from Refinitiv

4.1.2 Asia

China continued boosting its PNG imports, setting a new monthly high in May 2024, while surpassing the previous record recorded in February of this year. There were 6.5 bcm of PNG imported in May 2024, which was an increase of 17% m-o-m (Figure 64). April was the only month in 2024 when Chinese PNG imports were slightly lower than in the previous year. In the same context, the import volume for May 2024 was 13% higher than the volume imported one year ago. The share of PNG imports in the total gas imports for May was 42%.

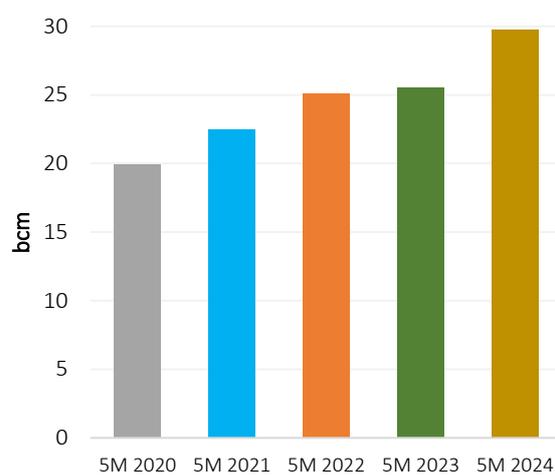
During the period Jan-May 2024, China imported 30 bcm, which represented a 17% increase compared with the same period in 2023 (Figure 65).

Figure 64: Monthly PNG imports in China



Source: GECF Secretariat based on data from Refinitiv and General Administration of Customs China

Figure 65: Year-to-date PNG imports in China

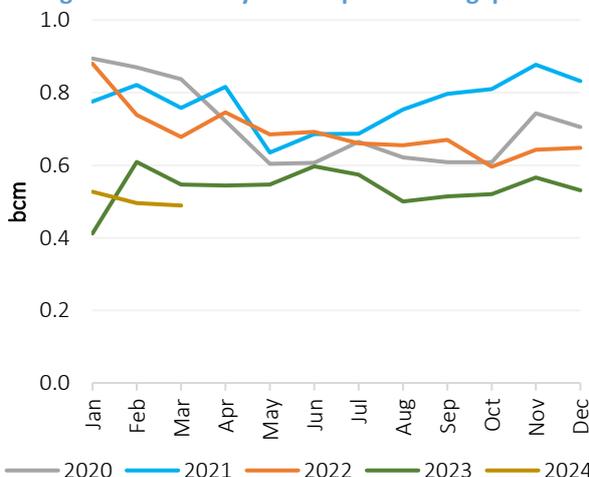


Source: GECF Secretariat based on data from Refinitiv and General Administration of Customs China

In March 2024, Singapore imported 0.49 bcm of PNG from Indonesia and Malaysia, which was 1% less than in the previous month, and 11% lower y-o-y (Figure 66).

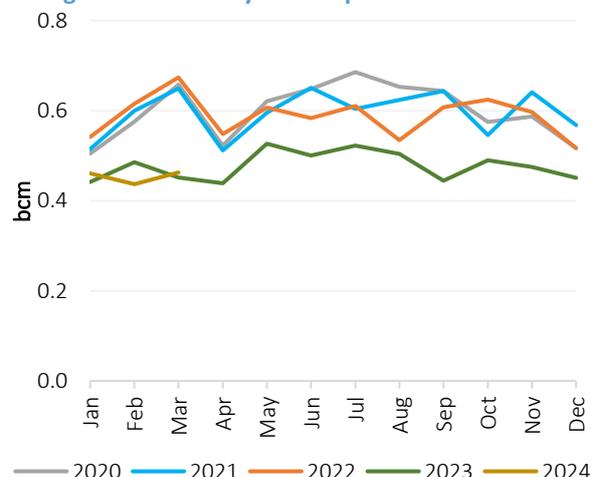
In the meantime, Thailand increased its PNG imports from Myanmar by 6%, to reach 0.46 bcm (Figure 67). Moreover, this volume represented a 2% increase compared with one year ago.

Figure 66: Monthly PNG imports in Singapore



Source: GECF Secretariat based on data from JODI Gas

Figure 67: Monthly PNG imports in Thailand

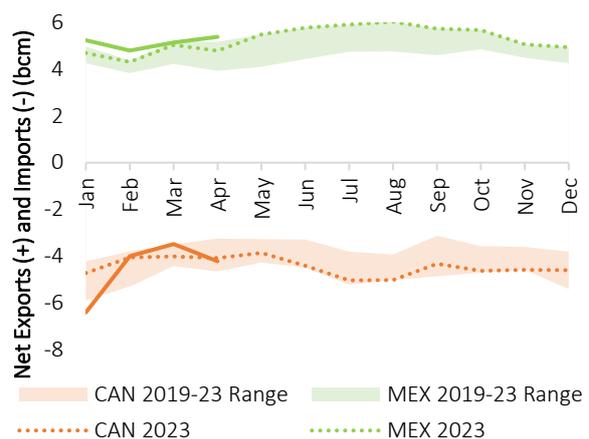


4.1.3 North America

In April 2024, there were 4.2 bcm of net PNG flows from Canada to the US, which was 21% higher m-o-m, and 3% more than in the previous year (Figure 68). In addition, there were 5.4 bcm of PNG exports from the US to Mexico during the month, representing a 5% increase m-o-m, and a 12% rise compared with the previous year.

Net flow of PNG from the US to the other countries reached 1.2 bcm during the month. The average monthly flows in the region in April 2024 comprised 6.3 bcm from Canada to the US, and 2.1 bcm from the US to Canada.

Figure 68: Historical net PNG trade in the USA



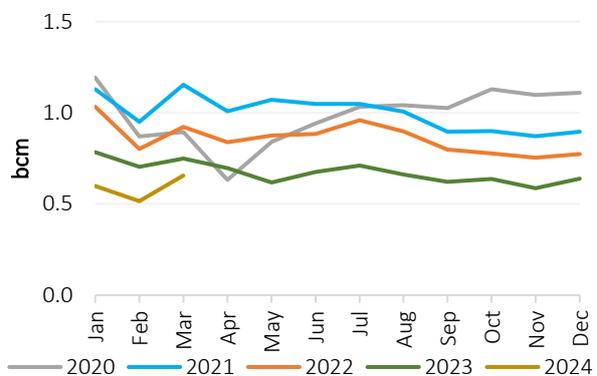
Source: GECF Secretariat based on data from US EIA

4.1.4 Latin America and the Caribbean

In March 2024, exports of Bolivian PNG to Brazil and Argentina reached 0.66 bcm (Figure 69). In a reversal of the previous month's trend, this volume was 27% higher m-o-m, but was 13% less than the level recorded one year ago.

In March 2024, Argentina exported 0.30 bcm of PNG supply to Chile. This represented a 7% increase compared to the previous month, as well a 10% rise compared with the previous year.

Figure 69: Monthly PNG exports from Bolivia



Source: GECF Secretariat based on data from JODI Gas

4.1.5 Other developments

Developments in pipeline gas trade in South America: Having commissioned the Nestor Kirchner Pipeline in 2023, which provides capacity to transport gas from Vaca Muerta to the capital, Buenos Aires, Argentina is now embarking on new projects which will increase the capacity, as well as facilitate exports to Brazil in the future. In the meantime, to cover additional gas demand during the winter season, Argentina has signed an agreement for pipeline gas imports from Chile, on an as-required basis. In addition, the pipeline gas imports agreement with Bolivia has been amended, to extend the contract to September 2024.

Russia to supply natural gas to Iran: During the visit of a Gazprom delegation headed by Alexey Miller, Chairman of the Company's Management Committee, to the Islamic Republic of Iran, Gazprom and the National Iranian Gas Company (NIGC), in the presence of Mohammad Mokhber, Acting Executive Head of Iran, signed the strategic memorandum on the elaboration of arrangements for pipeline supplies of Russian natural gas to Iran.

4.2 LNG trade

4.2.1 LNG imports

In June 2024, global LNG imports declined for the second consecutive month, falling by 0.8% (0.27 Mt) y-o-y to 32.22 Mt, the lowest monthly level since October 2023 (Figure 70). Weaker LNG exports in April 2024 may have contributed to the lower imports. At a regional level, Europe and the LAC region drove the decline, which offset higher imports in the Asia Pacific and MENA regions (Figure 71). During the first half of 2024 (H1 2024), global LNG imports grew by 0.9% (1.78 Mt) y-o-y, reaching 206.86 Mt.

Figure 70: Trend in global monthly LNG imports

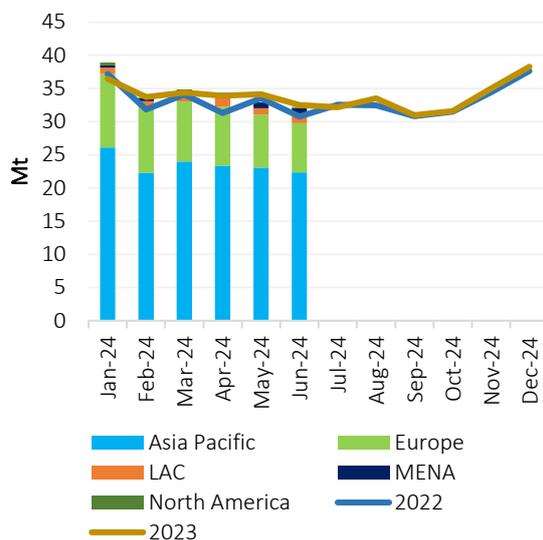
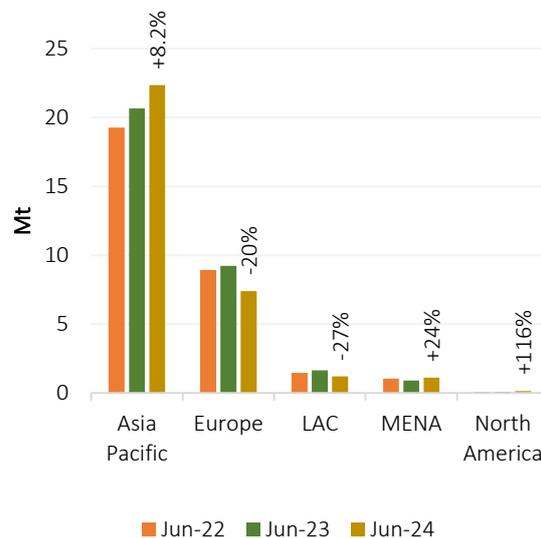


Figure 71: Trend in regional LNG imports



Source: GECF Secretariat based on data from ICIS LNG Edge

4.2.1.1 Europe

In June 2024, Europe’s LNG imports were 7.40 Mt, marking a significant 20% (1.81 Mt) y-o-y fall and the 12th consecutive monthly y-o-y decline (Figure 72). This is the lowest level since October 2021. The drop was due to weaker gas consumption, high gas storage levels, higher pipeline gas imports, and a significant price spread between spot LNG prices in the Asia Pacific and Europe. At the country level, France, Italy, Lithuania, the Netherlands, Spain, and the UK led the decline, offsetting an increase in Germany (Figure 73). In H1 2024, European LNG imports fell sharply by 19% (11.31 Mt) y-o-y to 47.22 Mt.

The drop in French LNG imports was driven by increased pipeline gas imports from Norway, lower gas consumption, and high gas storage levels. In Italy, an increase in pipeline gas imports from Azerbaijan, Norway, and Russia, along with weaker gas consumption and maintenance on the Toscana FSRU, reduced LNG imports. Lithuania’s LNG imports fell due to decreased gas consumption and reduced pipeline gas exports to neighbouring countries. In the Netherlands, lower gas consumption, increased pipeline gas imports from Norway and the UK, and strong gas inventories contributed to the decline in LNG imports. Spain saw a drop in LNG imports due to higher pipeline gas imports from Algeria and weaker gas consumption. Similarly, stronger pipeline gas imports from Norway and lower gas consumption decreased the UK’s LNG imports. Conversely, Germany’s LNG imports increased due to the ramp-up of new regasification terminals.

Figure 72: Trend in Europe’s monthly LNG imports

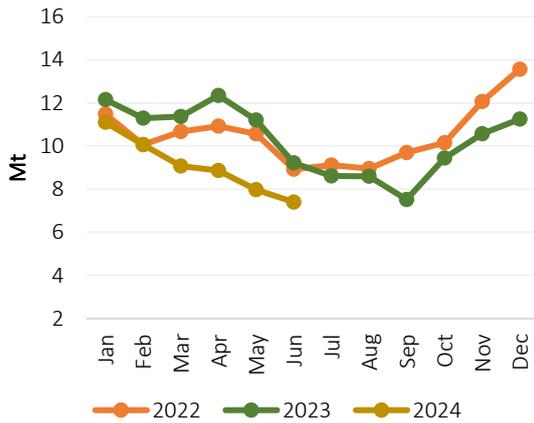
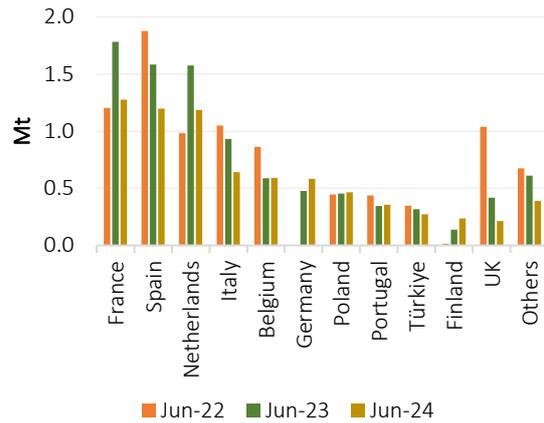


Figure 73: Top LNG importers in Europe



Source: GECF Secretariat based on data from ICIS LNG Edge

4.2.1.2 Asia Pacific

In June 2024, Asia Pacific’s LNG imports grew by 8.2% (1.69 Mt) y-o-y, reaching a record high of 22.36 Mt for the month (Figure 74). This increase was driven by stronger gas demand, particularly in the electricity sector, and LNG restocking. India, South Korea, Taiwan, and Thailand led the rise in LNG imports, offsetting declines in Japan, Bangladesh and China (Figure 75). During H1 2024, LNG imports in the Asia Pacific region increased by 10% (13.06 Mt) y-o-y to 141.16 Mt.

India’s LNG imports in June surged to the highest level since October 2020 due to increased gas demand for electricity generation caused by a severe heatwave. South Korea saw a rise in LNG imports due to increased restocking, while Taiwan's increase was driven by stronger gas demand in the electricity sector due to lower nuclear output. Thailand's higher LNG imports were also attributed to increased gas demand for electricity production. Conversely, Bangladesh's LNG imports dropped due to lower regasification capacity after the FSRU Summit LNG was damaged by a cyclone, with operations expected to resume in mid-July. Additionally, Chinese LNG imports recorded their first y-o-y decline in June since January 2023, driven by strong hydro, coal, and renewable output and high LNG prices, which discouraged spot LNG purchases.

Figure 74: Trend in Asia’s monthly LNG imports

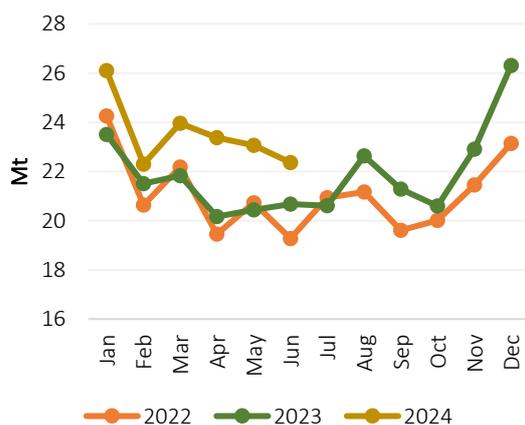
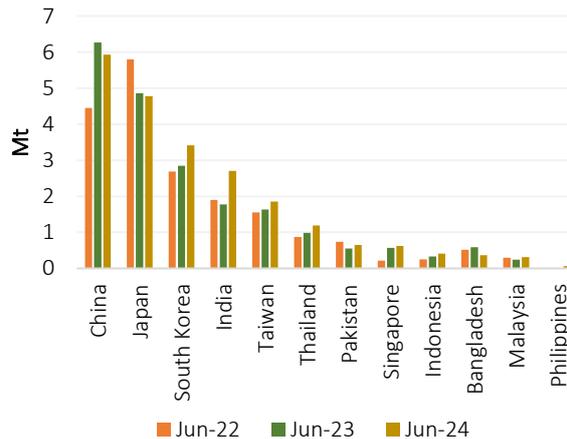


Figure 75: Top LNG importers in Asia Pacific



Source: GECF Secretariat based on data from ICIS LNG Edge

4.2.1.3 Latin America & the Caribbean (LAC)

In June 2024, LNG imports in the LAC region continued to decline, falling by 27% (0.44 Mt) y-o-y to 1.20 Mt (Figure 76). This marks the second consecutive monthly decline. Argentina accounted for most of the decline in the region's LNG imports, offsetting an increase in the Dominican Republic (Figure 77). In H1 2024, LNG imports in the LAC region grew by 10% (0.61 Mt) y-o-y to 6.48 Mt.

The decline in Argentina's LNG imports is attributed to higher domestic gas production and weaker gas demand for heating due to above-normal temperatures in June. Conversely, the increase in the Dominican Republic's LNG imports was driven by stronger gas demand in the electricity sector and higher LNG storage capacity.

Figure 76: Trend in LAC's monthly LNG imports

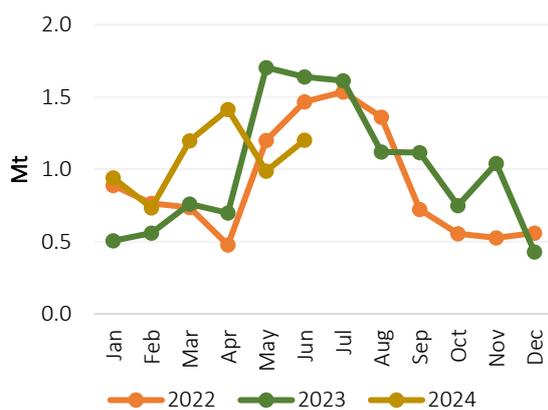
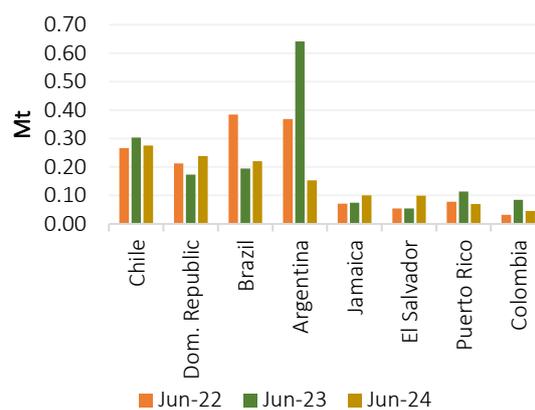


Figure 77: Top LNG importers in LAC



Source: GECF Secretariat based on data from ICIS LNG Edge

4.2.1.4 MENA

In June 2024, the MENA region's LNG imports rose sharply by 24% (0.21 Mt) y-o-y to 1.12 Mt (Figure 78) driven mainly by higher imports in Jordan and the United Arab Emirates (Figure 79). During H1 2024, the MENA region's LNG imports increased by 37% (1.02 Mt) y-o-y to 3.81 Mt. The LNG cargo imported into Jordan was likely purchased for consumption in Egypt, with the regasified LNG transported from the Aqaba FSRU to Egypt via pipeline. In the United Arab Emirates, the increased LNG imports originated from the US.

Figure 78: Trend in MENA's monthly LNG imports

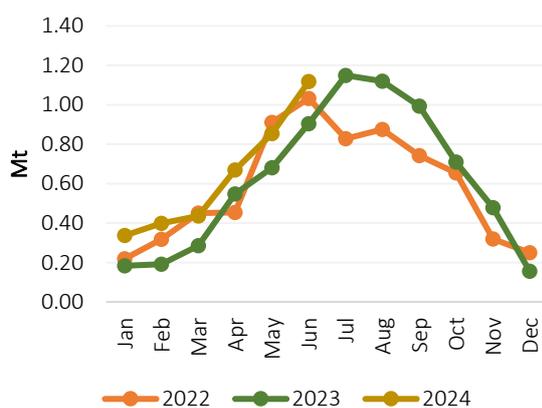
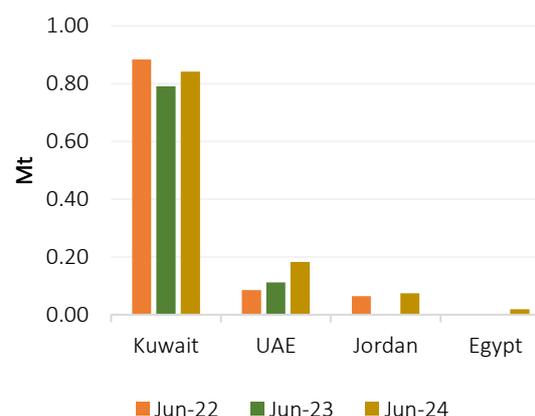


Figure 79: Top LNG importers in MENA



Source: GECF Secretariat based on data from ICIS LNG Edge

4.2.2 LNG exports

In June 2024, global LNG exports increased by 3.9% (1.23 Mt) y-o-y to 33.12 Mt, which is the highest y-o-y increase since January 2024 (Figure 80). The growth in LNG exports was driven by non-GECF countries, which offset weaker LNG reloads, while GECF's LNG exports remained stable. Non-GECF countries were the largest LNG exporters in June, with a market share of 53.8%, up from 51.0% a year earlier. Meanwhile, the market shares of GECF Member Countries and LNG reloads declined from 48.0% and 1.0% in June 2023 to 46.1% and 0.1%, respectively. In H1 2024, global LNG exports grew by 1.3% (2.55 Mt) y-o-y to reach 206.33 Mt. The US, Australia and Qatar maintained their positions as the top three LNG exporters, respectively (Figure 81).

Figure 80: Trend in global monthly LNG exports

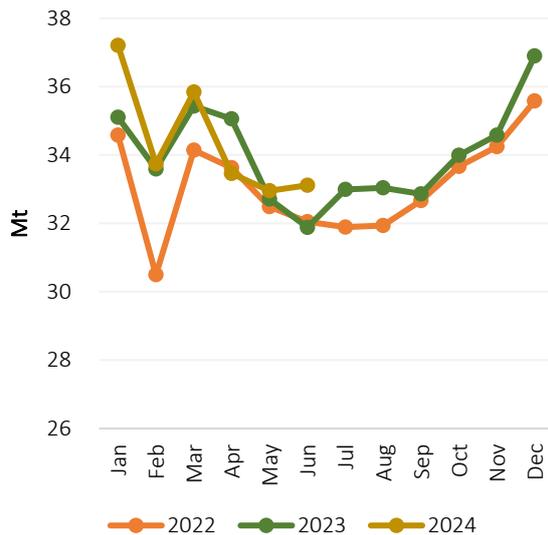
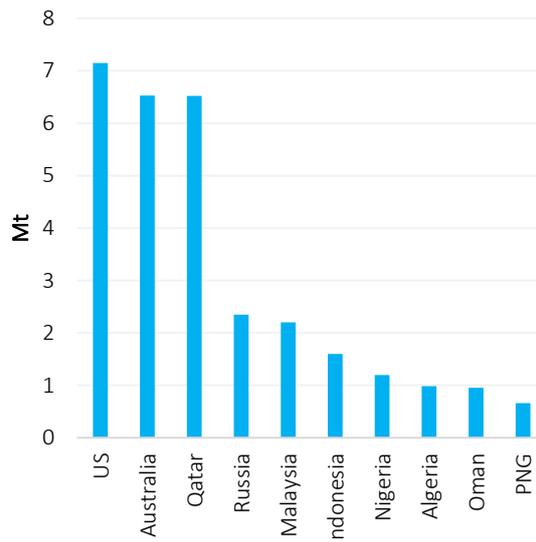


Figure 81: Top 10 LNG exporters in June 2024



Source: GECF Secretariat based on data from ICIS LNG Edge

4.2.2.1 GECF

In June 2024, LNG exports from GECF Member and Observer Countries were relatively unchanged from the previous year at 15.27 Mt following two consecutive monthly y-o-y declines (Figure 82). At a country level, Malaysia, Mozambique, Nigeria and Russia recorded significant increases in LNG exports, offsetting lower exports from Algeria, Qatar and Trinidad and Tobago (Figure 83). During H1 2024, total LNG exports from the GECF grew slightly by 0.3% (0.30 Mt) y-o-y to 97.36 Mt.

The increase in LNG exports from Malaysia and Nigeria may be attributed to higher feedgas availability in both countries. In Mozambique, the ramp-up in production from the Coral South FLNG facility boosted its LNG exports. Lower planned maintenance activity at the Yamal LNG facility, compared to June 2023, offset a decrease in LNG exports from the Sakhalin 2 LNG facility and drove Russia's LNG exports higher. Conversely, the decline in Algeria's LNG exports originated from the Arzew LNG facility. In Qatar, higher planned maintenance activity compared to a year earlier led to a drop in its LNG exports. Furthermore, lower feedgas availability contributed to the decline in Trinidad and Tobago's LNG exports.

Figure 82: Trend in GECF monthly LNG exports

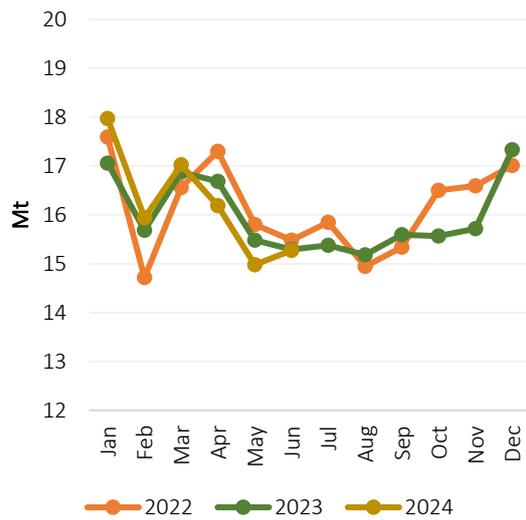
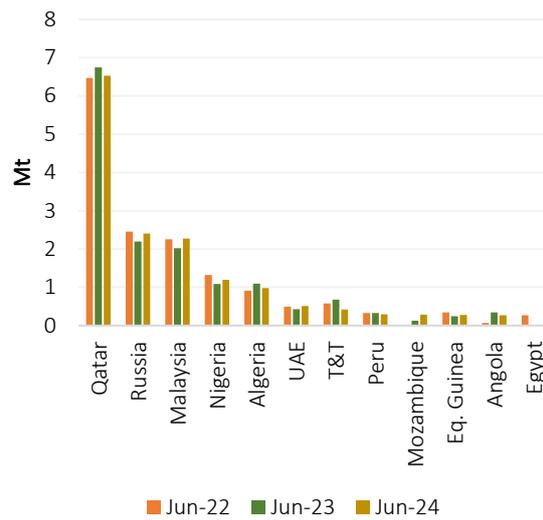


Figure 83: GECF's LNG exports by country



Source: GECF Secretariat based on data from ICIS LNG Edge

4.2.2.2 Non-GECF

In June 2024, LNG exports from non-GECF countries jumped by 9.6% (1.57 Mt) y-o-y to 17.82 Mt, which is a record high for the month of June (Figure 84). The stronger LNG exports were driven by Australia, Brunei, Indonesia, Norway, Oman and the US (Figure 85). In H1 2024, non-GECF's LNG exports expanded by 3.9% (4.01 Mt) y-o-y to stand at 107.86 Mt.

Australia's LNG exports increased due to reduced maintenance at the Pluto and QCLNG facilities, which offset lower exports from the North West Shelf and Wheatstone LNG facilities. In Brunei, Norway, and Oman, lower maintenance activity boosted LNG exports. The ramp-up in production from Tangguh LNG train 3 drove higher LNG exports in Indonesia. Meanwhile, stronger LNG exports from the Calcasieu Pass, Freeport, and Sabine Pass LNG facilities offset weaker exports from Corpus Christi. The increase was driven by ramped-up production at Calcasieu Pass and Freeport, and a decrease in planned maintenance at Sabine Pass. Furthermore, the drop in exports from Corpus Christi was due to higher maintenance.

Figure 84: Trend in non-GECF monthly LNG exports

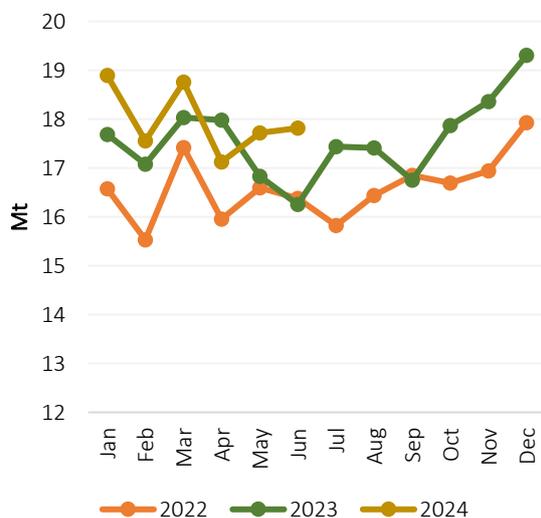
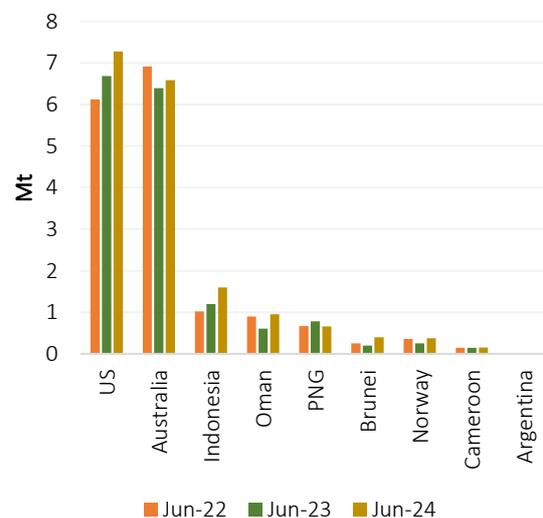


Figure 85: Non-GECF's LNG exports by country



Source: GECF Secretariat based on data from ICIS LNG Edge

4.2.3 Global LNG reloads

In June 2024, global LNG reloads continued to slide, falling by 91% (0.31 Mt) y-o-y to 0.03 Mt, which is the lowest monthly level in five years (Figure 86). Brazil, France and Singapore accounted for the bulk of incremental decline in LNG reloads (Figure 87). During H1 2024, global LNG reloads slumped by 61% (1.75 Mt) y-o-y to 1.11 Mt.

Brazil's LNG reloads decreased from the previous year as less LNG was re-exported to Spain. In June 2023, Brazil re-exported one LNG cargo to Spain, but there were no re-exports in June 2024. The decline in French LNG reloads was due to fewer re-exports to India compared to the previous year. Additionally, weaker LNG demand in China reduced LNG reloads from Singapore. In June 2024, Spain was the only country to reload LNG, with one small-scale cargo re-exported to Italy and small volumes loaded onto the Hoegh Galleon FSRU destined for the Ain Sukhna Product Hub in Egypt.

Figure 86: Trend in global monthly LNG reloads

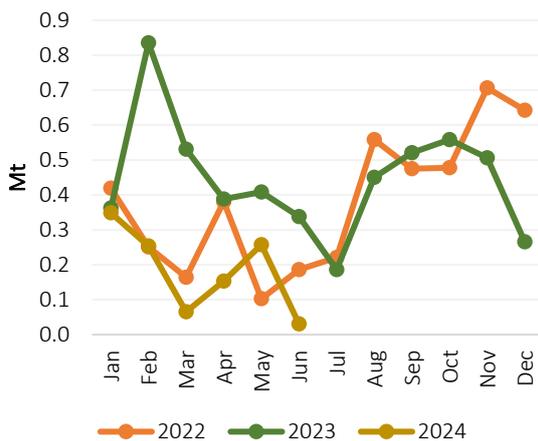
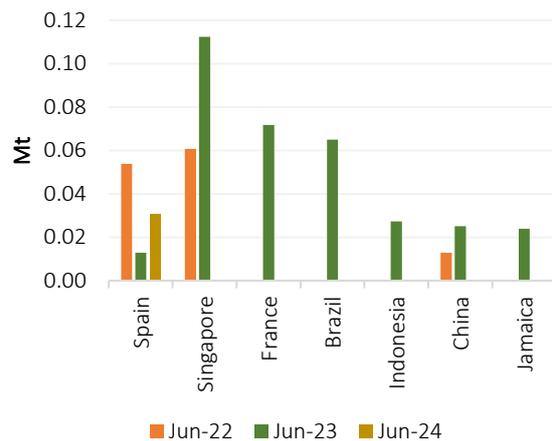


Figure 87: Global LNG reloads by country



Source: GECF Secretariat based on data from ICIS LNG Edge

4.2.4 Arbitrage opportunity

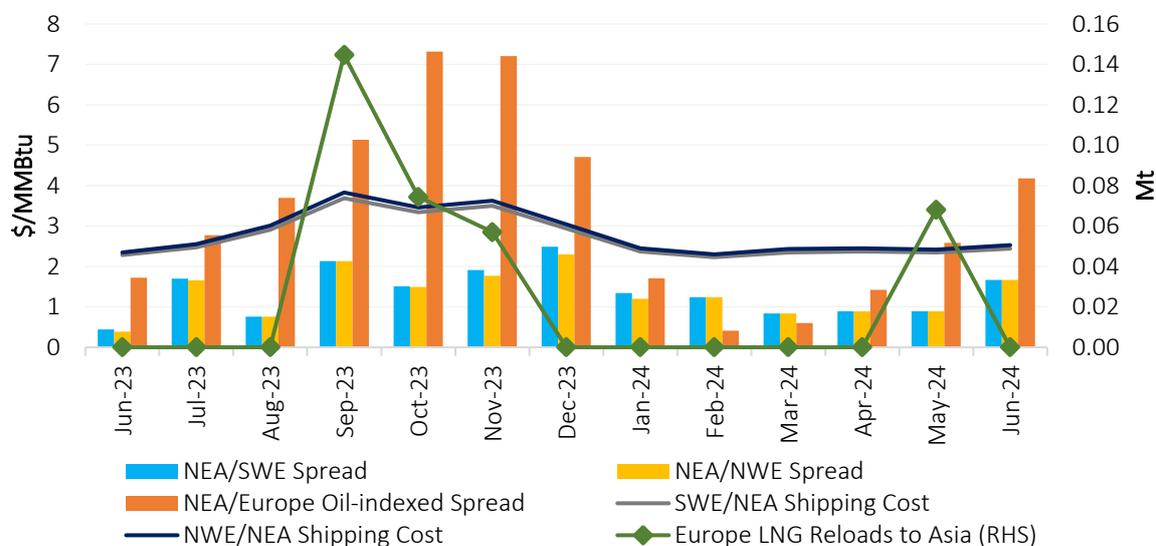
In June 2024, the arbitrage opportunity for LNG reloads from Europe to Asia Pacific remained absent. Despite the widening spot LNG price spreads between the two markets, spot LNG shipping costs from Europe to Asia Pacific continued to exceed these price spreads (Figure 88). Meanwhile, the price spread between spot LNG prices in Asia Pacific and oil-indexed prices in Europe increased its premium over the spot LNG shipping costs.

The NEA/SWE and NEA/NWE price spreads each surged by 87.6% (\$0.78/MMBtu) m-o-m to \$1.67/MMBtu, the highest level since December 2023, driven by a sharper rise in NEA spot LNG prices compared to European spot LNG prices. Similarly, the price spread between spot LNG prices in Asia Pacific and oil-indexed prices in Europe expanded by 62% (\$1.60/MMBtu) m-o-m to \$4.18/MMBtu, also reaching the highest level since December 2023.

Spot LNG shipping costs for the NEA/SWE and NEA/NWE routes increased by 3.8% (\$0.09/MMBtu) and 4.5% (\$0.11/MMBtu) m-o-m to \$2.44/MMBtu and \$2.53/MMBtu, respectively. However, it is important to note that shipping costs can vary based on the specific vessels used, with medium to long-term chartered vessels potentially offering lower costs compared to spot shipping rates. There were no LNG reloads from Europe to Asia Pacific in June 2024.

Compared to June 2023, the NEA/SWE and NEA/NWE price spreads, as well as the price spread between NEA spot LNG and European oil-indexed gas prices, surged by 280% (\$1.23/MMBtu), 328% (\$1.28/MMBtu), and 143% (\$2.46/MMBtu) y-o-y, respectively. Meanwhile, the NEA/SWE and NEA/NWE spot shipping costs increased slightly by 7% (\$0.17/MMBtu) y-o-y.

Figure 88: Price spreads & shipping costs between Asia & Europe spot LNG markets

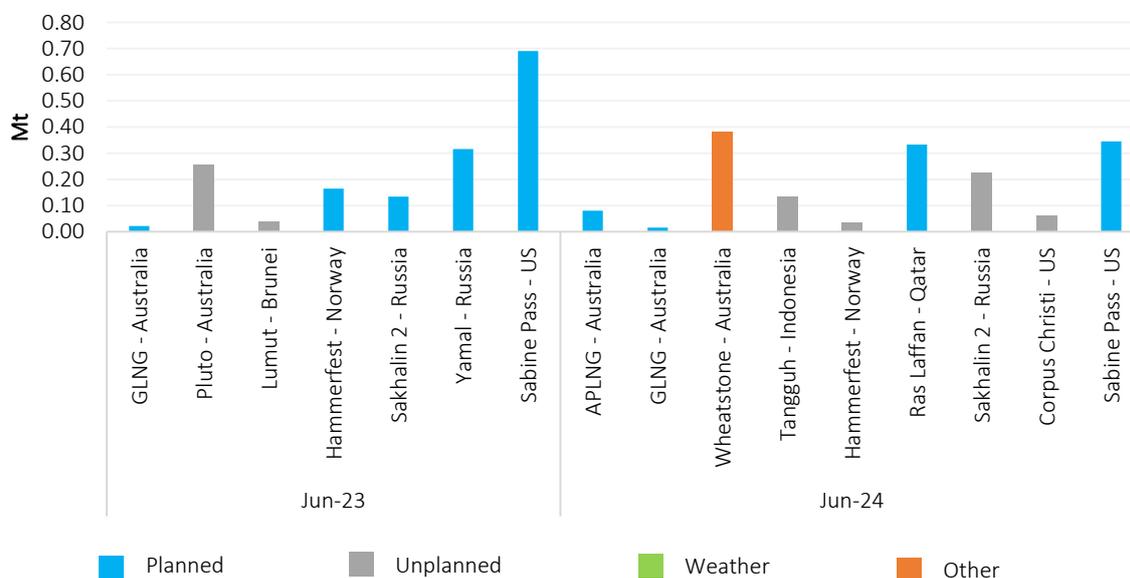


Source: GECF Secretariat based on data from GECF Shipping Model, Argus and ICIS LNG Edge

4.2.5 Maintenance activity at LNG liquefaction facilities

In June 2024, the cumulative impact of scheduled maintenance, unplanned outages and other factors at liquefaction plants globally stood at 1.61 Mt, which was the same level as a year earlier (Figure 89). The major maintenance activities at liquefaction facilities in June 2024 include upstream maintenance for feedgas supply to the Wheatstone LNG facility, planned maintenance activity at the Ras Laffan and Sakhalin 2 LNG facilities and an unplanned outage at the Sabine Pass LNG facility.

Figure 89: Maintenance activity at LNG liquefaction facilities during April (2023 and 2024)

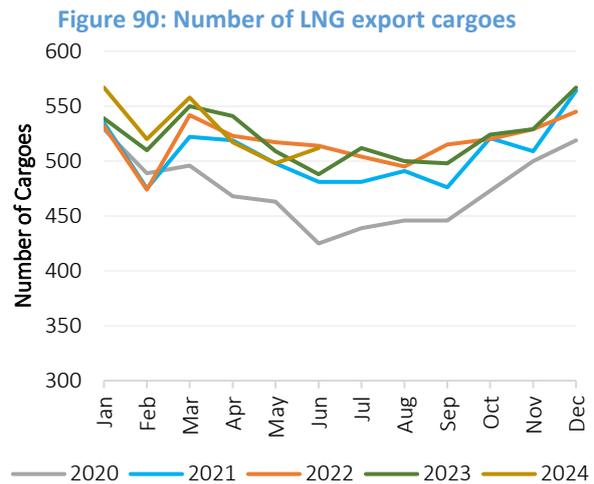


Source: GECF Secretariat based on information from Argus, ICIS LNG Edge and Refinitiv

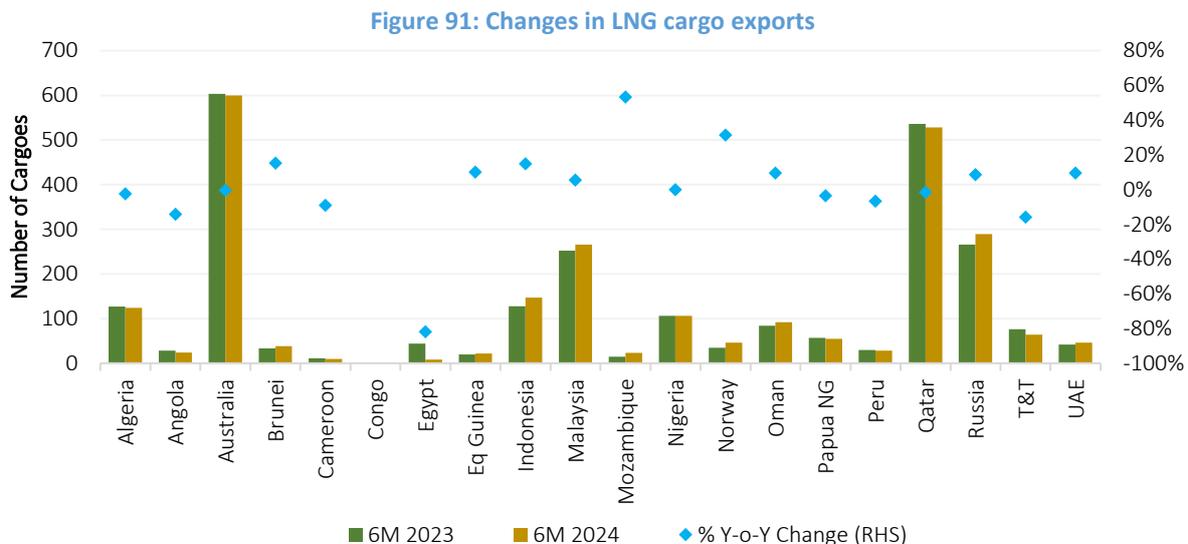
4.2.6 LNG shipping

There were 512 LNG cargoes exported in June 2024, which was 3% more than the number of shipments in the previous month, and 5% more than one year ago (Figure 90). From January to June 2024, there have been a total of 3,172 cargoes exported, an increase of 35 deliveries when compared with the same period in 2023.

In the first half of 2024, Russia increased deliveries by 23 cargoes compared with the same period of 2023, followed by Indonesia with 19 more (Figure 91). Mozambique delivered 53% more cargoes, followed by Norway at 31%.



Source: GECF Secretariat based on data from ICIS LNG Edge



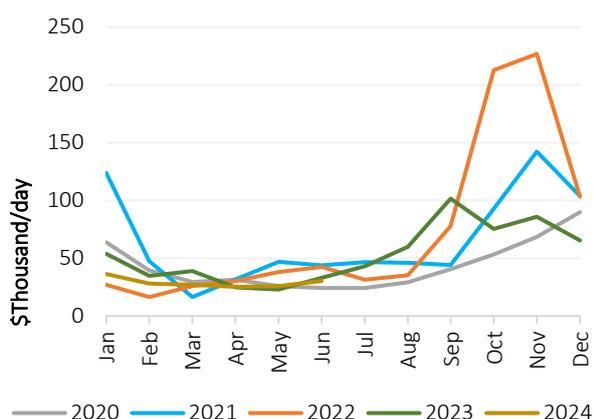
Source: GECF Secretariat based on data from ICIS LNG Edge

The charter market for LNG carriers continued to observe stability in 2024. In this regard, the monthly average spot charter rate for steam turbine LNG carriers increased by 18% in June 2024 to reach \$30,400 per day (Figure 92). This monthly average charter rate was however 8% less than one year ago, and was also \$5,500 lower than the five-year average price for the month. Similar gains were recorded for the other segments of the global LNG carrier fleet as well. The average spot charter rate for TDFE vessels rose by 24% m-o-m to reach \$45,600 per day, while the average spot charter rate for two-stroke vessels increased by 23% m-o-m to reach \$60,400 per day.

There were marginal gains in the daily charter rate during this month. This was primarily driven by a widening inter-basin arbitrage, which supported additional carrier demand for longer voyages, particularly from export terminals in the US Gulf Coast heading towards northeast Asia. This tightness may be alleviated in the coming weeks as the Panama Canal Authority increases the daily number of transits through the waterway.

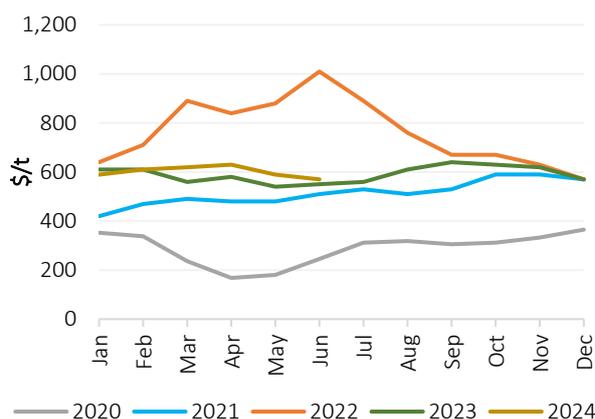
The average price of the shipping fuels reached \$570 per tonne in June 2024, which was 3% lower m-o-m, but 4% higher y-o-y (Figure 93).

Figure 92: Average LNG spot charter rate



Source: GECF Secretariat based on data from Argus

Figure 93: Average price of shipping fuels

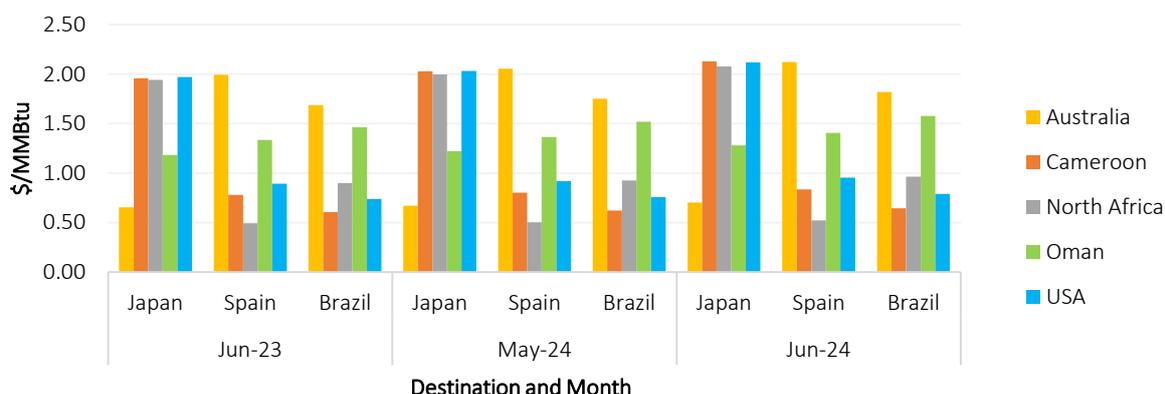


Source: GECF Secretariat based on data from Argus

When comparing June 2024 with the previous month, there were increases in the average LNG carrier spot charter rate and in the delivered spot LNG prices, while on the other hand there was a decrease on the cost of LNG shipping fuels. The net effect was an increase in the LNG spot shipping costs for steam turbine carriers relative to the previous month, by up to \$0.10/MMBtu on certain routes (Figure 94).

Furthermore, when compared with one year ago, the cost of shipping fuels and the delivered spot LNG prices were higher in June 2024, while the monthly average spot charter rate was lower, which resulted in LNG shipping costs of up to \$0.17/MMBtu higher than June 2023.

Figure 94: LNG spot shipping costs for steam turbine carriers



Source: GECF Shipping Cost Model

4.2.7 Other developments

ADNOC Ruwais LNG export project takes FID – On 12 June 2024, the Abu Dhabi National Oil Company (ADNOC) from the United Arab Emirates made a final investment decision (FID) on the 9.6 Mtpa Ruwais LNG export project. A \$5.5 billion engineering, procurement and construction (EPC) contract was awarded to a joint venture led by Technip Energies, which includes JDC and NMDC Energy. The project will feature two electric liquefaction trains supplied by Baker Hughes, with the first LNG train expected to begin operations in 2028. This LNG project will have one of the lowest carbon footprint globally.

Genting awards EPCIC contract for Indonesia’s first FLNG export project – On 20 June 2024, Malaysia’s Genting Berhad awarded an engineering, procurement, construction, installation and commissioning (EPCIC) contract valued at around \$1 billion to Wison New Energies of

China for the development of Indonesia’s first FLNG export project. The 1.2 Mtpa FLNG facility will be located in West Papua, Indonesia, and is expected to begin operations in 2026. The project will be funded through a combination of internal funds and project financing from international lenders.

Cedar FLNG export project takes FID – On 25 June 2024, project partners Haisla Nation and Pembina Co. reached FID on the 3.3 Mtpa Cedar FLNG export project on the Pacific Coast of Canada. The project is anticipated to cost approximately \$4 billion and is expected to commence operations in late 2028. About 60% of the project's cost will be financed through debt, with the remaining 40% covered by equity contributions. Samsung Heavy Industries will construct the FLNG vessel in South Korea, utilizing Black & Veatch’s PRICO technology. The project is expected to have one of the lowest emissions among LNG facilities worldwide, as it will be powered by hydroelectric power from British Columbia.

Aramco signs a HoA for a 25% stake in Port Arthur LNG Phase 2 – On June 25, 2024, Saudi Arabia’s Aramco signed a Heads of Agreement (HoA) with Sempra for a 25% stake in the Port Arthur LNG Phase 2 export project in Texas, US. This expansion project is set to include two liquefaction trains with a combined capacity of 13.5 Mtpa. Both parties will continue negotiations to convert the HoA into a definitive equity agreement.

Increasing crossings through the Panama Canal: Following months of restrictions due to low water levels, the Panama Canal Authority (PCA) is gradually increasing the number of vessel transits through the waterway. This development comes as the water levels in the Gatun Lake, which provides the water for the canal’s locks, stood at a six-month high in June 2024. Moreover, with the expectation of a shift in the weather to a La Nina pattern, even more rainfall is forecast over the coming weeks. As a consequence, effective 22 July 2024, the PCA has increased the total number of daily transits to 34. Of this figure, the neopanamax locks, via which most LNG carriers utilize, are now allowed nine daily transits.

In terms of LNG agreements, five contracts were signed in June 2024 (Table 1).

Table 1: New LNG sale agreements signed in June 2024

Contract Type	Exporting Country	Project	Seller	Importing Country	Buyer	Volume (Mtpa)	Duration (Years)
SPA	Portfolio	Portfolio	TotalEnergies	India	Indian Oil Corp.	0.8	10
HoA	Portfolio	Portfolio	TotalEnergies	South Korea	Korea South-East Power	0.5	5
HoA	US	Rio Grande	NextDecade	Portfolio	Aramco	1.2	20
HoA	D.Trading	Calcasieu Pass 2	Venture Global	Portfolio	D.Trading	2	20
HoA	US	Port Arthur LNG Phase 2	Sempra	Portfolio	Saudi Aramco	5	20

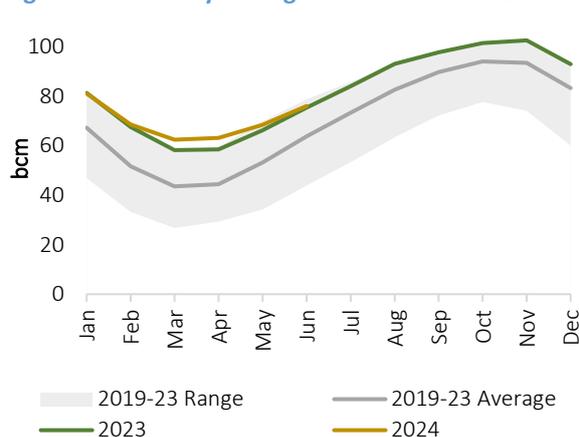
Source: GECF Secretariat based on Project Updates and News

5 Gas Storage

5.1 Europe

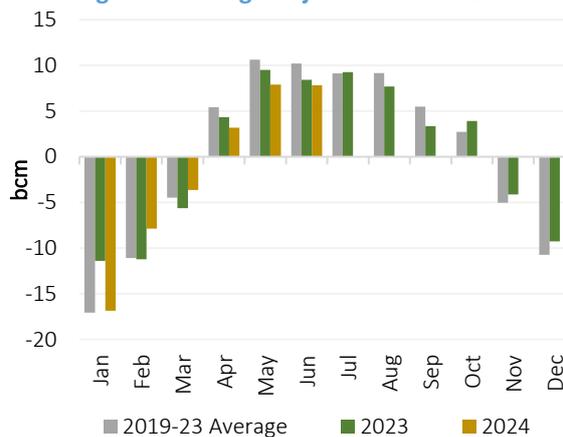
The net gas injection season continues in the countries of the EU. As such, in June 2024, the average daily volume of gas in underground storage in the EU increased to 76.1 bcm, up from 68.5 bcm in the previous month (Figure 95). The average capacity utilisation of UGS sites in the region crept up to 73%. Just as in the previous month, the average storage level in June was within the five-year historical range, but was the second highest on record for that particular month. In addition, the average monthly storage level was just 0.6 bcm higher than the average level recorded one year ago. Moreover, the delta between the gas storage level in June 2024 and the five-year average for the month stood at 12.2 bcm.

Figure 95: Monthly average UGS level in the EU



Source: GECF Secretariat based on data from AGSI+

Figure 96: Net gas injections in the EU

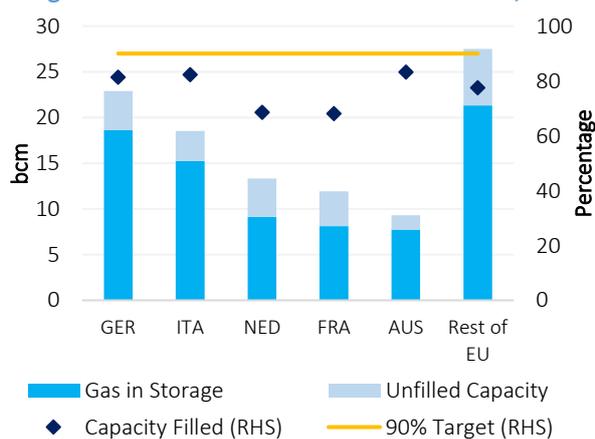


Source: GECF Secretariat based on data from AGSI+

May and June are the typically the months which record the highest level of gas injections in the EU storage. In June 2024, there were 7.8 bcm of net gas injections in storage sites in the region, of which there were 8.5 bcm of gas injections and 0.7 bcm of gas withdrawals (Figure 96). There has been a total of 19.5 bcm of net gas restocked in the EU during the period since the start of the net gas injection season up until the end of June 2024.

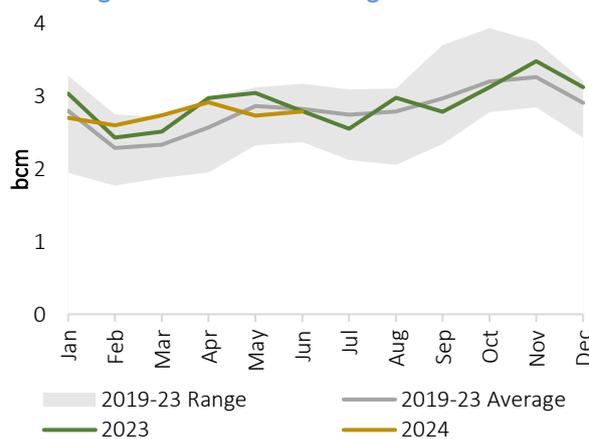
Of the EU countries, average storage levels by the end of June 2024 reached over 80% in Germany, Italy and Austria (Figure 97). In June 2024, the combined amount of LNG stored in the EU countries reached 2.8 bcm, which represented a 2% increase m-o-m, but was at the same level as the five-year historical average for that month (Figure 98).

Figure 97: UGS in EU countries as of June 30, 2024



Source: GECF Secretariat based on data from AGSI+

Figure 98: Total LNG storage in the EU



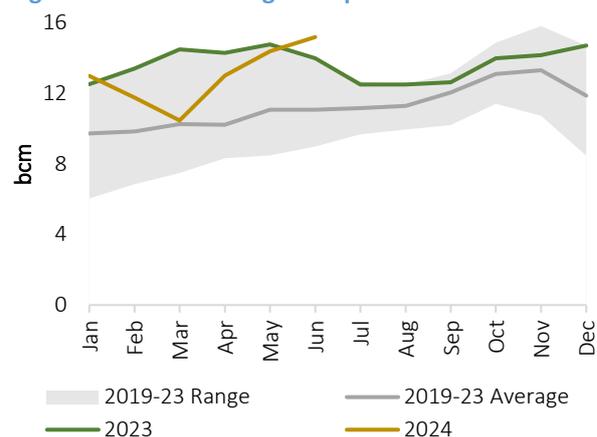
Source: GECF Secretariat based on data from ALSI

5.2 Asia

Japan and South Korea possess a combined capacity of 20 bcm of LNG storage. The combined volume of LNG in storage in both countries was estimated to be 15.2 bcm in June 2024, which represented an increase of 6% m-o-m (Figure 99).

This quantity was 9% higher than one year ago, and was 4.1 bcm higher than the five-year average for the month. Storage in Japan and South Korea accounted for 7.6 bcm in each country.

Figure 99: LNG in storage in Japan and South Korea



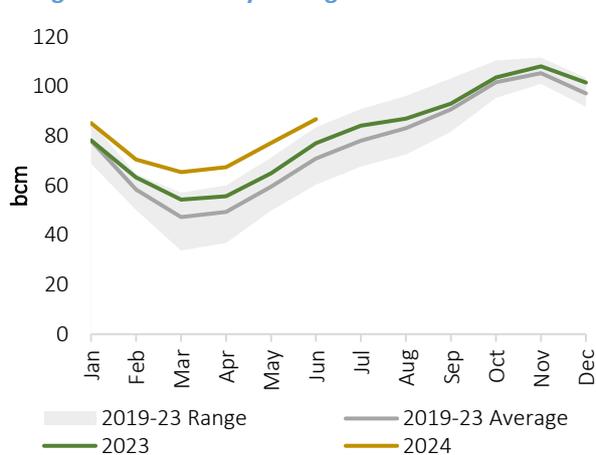
Source: GECF Secretariat based on data from Refinitiv

5.3 North America

In June 2024, the average daily volume of gas in storage in the US increased to 86.8 bcm, up from 77.2 bcm in the previous month (Figure 100). The average capacity utilisation of the UGS sites in the country therefore increased to 65%. With the storage level in 2024 being above the five-year range, the rate of net gas injections in the US has now slowed in June 2024.

Moreover, there was 9.7 bcm more gas in storage than one year ago, and 15.9 bcm more than the five-year average. The total gas stored during the 2024 restocking season in the US thus far has reached 24.8 bcm.

Figure 100: Monthly average UGS level in the US



Source: GECF Secretariat based on data from US EIA

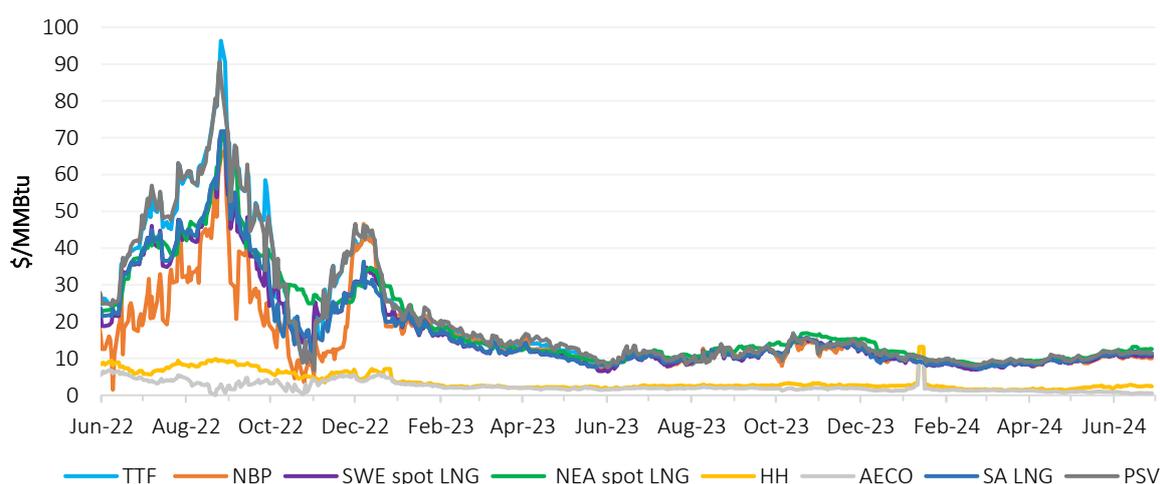
6 Energy Prices

6.1 Gas prices

6.1.1 Gas & LNG spot prices

In June 2024, gas and LNG spot prices in Europe and Asia continued to climb, albeit with relatively low volatility (Figure 101 and Figure 102). Supply-side concerns, including outages and extended maintenance activities at several gas and LNG facilities, drove the upward price trend. Additionally, increased LNG demand in South Asia due to higher-than-usual temperatures contributed to the bullish market sentiment. In the coming months, heatwave developments are likely to support for prices. However, healthy European gas storage levels and muted demand from some major Asian LNG importers may temper price increases.

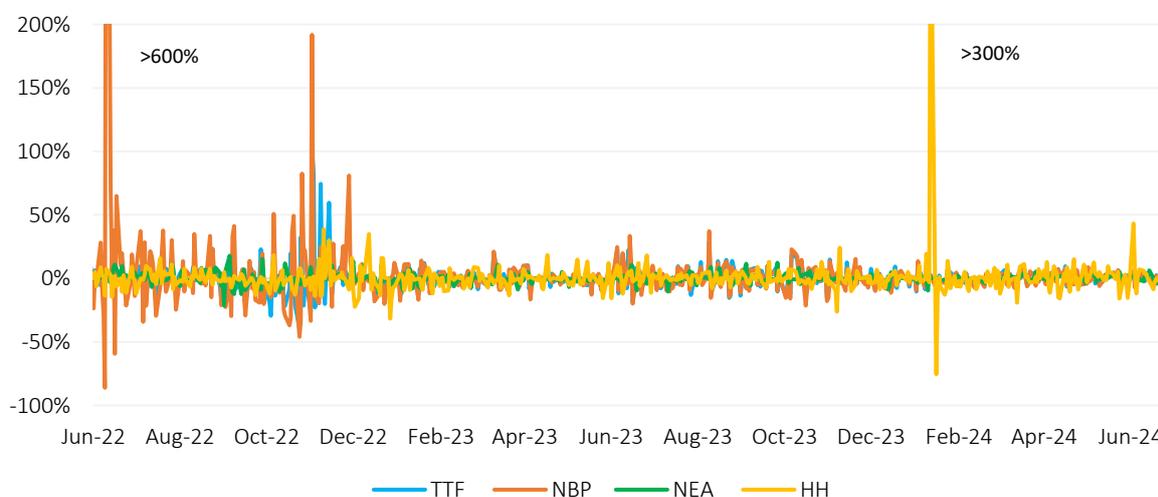
Figure 101: Daily gas & LNG spot prices



Source: GECF Secretariat based on data from Argus and Refinitiv Eikon

Note: SA LNG price is an average of the LNG delivered prices for Argentina, Brazil and Chile based on Argus assessment.

Figure 102: Daily variation of spot prices



Source: GECF Secretariat based on data from Argus and Refinitiv Eikon

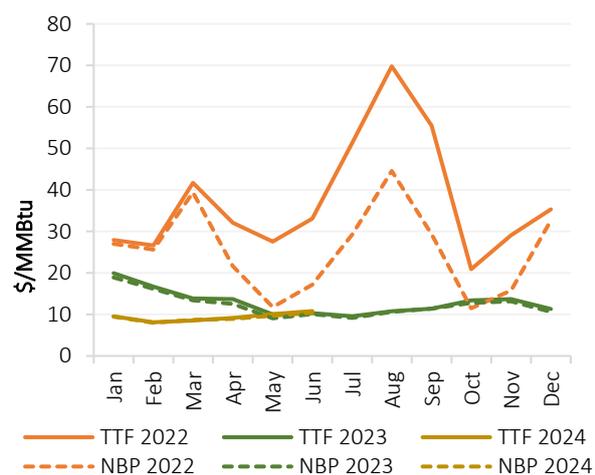
6.1.1.1 European spot gas and LNG prices

In June 2024, TTF spot gas prices averaged \$10.81/MMBtu, reflecting a 7% increase m-o-m and a 5% increase y-o-y. In addition, NBP spot prices averaged \$10.40/MMBtu, reflecting a 7% increase m-o-m and a 3% increase y-o-y (Figure 103). The SWE spot LNG prices averaged \$10.74/MMBtu in June 2024 (8% increase m-o-m and 11% increase y-o-y). In addition, the PSV spot price averaged \$11.59/MMBtu (8% increase m-o-m and 6% decrease y-o-y).

European gas and LNG spot prices continued to climb for the fourth consecutive month driven by supply-side concerns. Several outages and extended maintenance activities at Norwegian gas fields and processing plants, as well as a temporary shutdown at Australia’s Wheatstone gas production platform contributed to the bullish market sentiment. However, full production was resumed at Wheatstone by the end of the month. Daily TTF spot prices rose to a six-month high of \$11.54/MMBtu during this period.

For the period January to June 2024, TTF and NBP averaged \$9.37/MMBtu and \$9.20/MMBtu, respectively, representing substantial declines of 34% and 31% y-o-y, respectively.

Figure 103: Monthly European spot gas prices



Source: GECF Secretariat based on data from Refinitiv Eikon

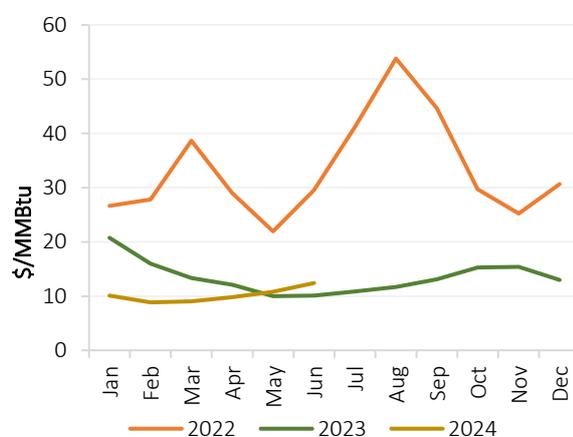
6.1.1.2 Asian spot LNG prices

In June 2024, the average Northeast Asia (NEA) spot LNG price experienced an increase of 15% m-o-m, reaching an average of \$12.41/MMBtu. This represents a 23% increase y-o-y (Figure 104).

Asian LNG prices rose for the fourth consecutive month, primarily driven by higher-than-usual temperatures in South Asia and supply-side uncertainties. Reduced LNG inventory levels in Japan also provided support. Meanwhile, some Chinese buyers remained on the sidelines, as current spot prices remain unattractive. Daily NEA spot LNG prices rose to a six-month high at \$13.17/MMBtu during this period.

For the period January to June 2024, the average NEA spot LNG price stood at \$10.16/MMBtu, representing a decline of 26% y-o-y.

Figure 104: Monthly Asian spot LNG prices



Source: GECF Secretariat based on data from Argus and Refinitiv Eikon

6.1.1.3 North American spot gas prices

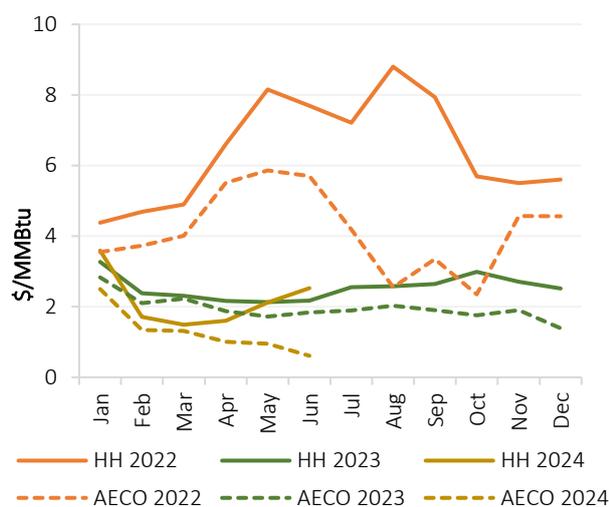
In June 2024, the HH spot gas price averaged \$2.53/MMBtu, reflecting an increase of 19% m-o-m. Additionally, it was 17% higher than the average price of \$2.17/MMBtu observed in June 2023 (Figure 105).

Henry Hub prices continued to climb, reaching a five-month high, primarily driven by a decline in gas production, and warmer temperatures which increased gas demand for cooling. Additionally, slower-than-average storage injections further supported HH prices. During this period, daily HH spot prices rose sharply, reaching a five-month high of \$2.80/MMBtu.

Meanwhile, in Canada, the AECO spot price averaged \$0.61/MMBtu in June 2024, reflecting declines of 36% m-o-m and 67% y-o-y. High domestic gas production continued to weigh on Canadian gas prices.

For the period January to June 2024, the HH spot price averaged \$2.17/MMBtu, representing a decline of 10% y-o-y. Meanwhile, the AECO spot price averaged \$1.29/MMBtu, marking a decrease of 39% y-o-y.

Figure 105: Monthly North American spot gas prices



Source: GECF Secretariat based on data from Argus and Refinitiv Eikon

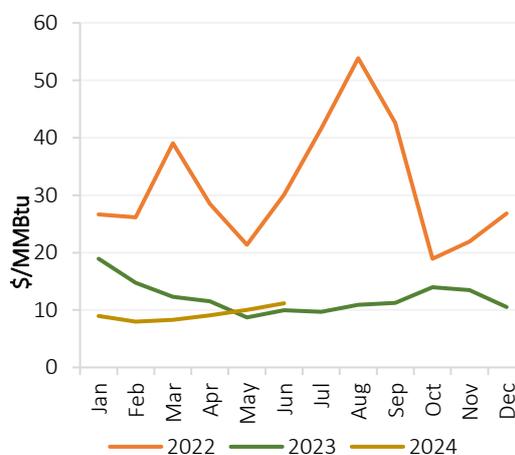
6.1.1.4 South American spot LNG prices

In June 2024, the South American (SA) LNG price experienced a 11% m-o-m increase, averaging \$11.17/MMBtu. Additionally, the SA LNG price was 12% higher compared to the average price of \$9.97/MMBtu observed in June 2023 (Figure 106).

LNG spot prices in South America continued to align with the trends observed in European and Asian spot prices. The average delivered prices for LNG in Argentina, Brazil and Chile averaged \$11.15/MMBtu, \$10.97/MMBtu and \$11.40/MMBtu, respectively.

For the period January to June 2024, the SA LNG spot price averaged \$9.25/MMBtu, representing a decline of 27% y-o-y.

Figure 106: Monthly South American spot LNG prices



Source: GECF Secretariat based on data from Argus
Note: SA LNG price is an average of the LNG delivered prices for Argentina, Brazil and Chile based on Argus assessment

6.1.2 Spot and oil-indexed long-term LNG price spreads

In June 2024, the average Oil-indexed I LNG price was \$12.81/MMBtu, reflecting a 1% increase m-o-m and 3% increase y-o-y. Similarly, the Oil-indexed II LNG price averaged \$10.22/MMBtu, remaining relatively stable m-o-m, but reflecting an 8% increase y-o-y (Figure 107). Furthermore, Oil-indexed I prices traded at a marginal premium of less than \$1/MMBtu over NEA spot LNG prices. Additionally, Oil-indexed II prices showed a discount of \$2/MMBtu over the NEA spot LNG prices.

In Europe, the Oil-indexed III price averaged \$8.23/MMBtu in June 2024, remaining at the same level as the previous month, but representing a 4% decline y-o-y (Figure 108). Moreover, the average Oil-indexed III price held a discount of \$3/MMBtu over the average SWE LNG price.

From January to June 2024, the Oil-indexed I LNG price exhibited a 3% decrease y-o-y, while the Oil-indexed II LNG price showed a 3% increase y-o-y. Additionally, the Oil-indexed III LNG price for the same period was 7% lower y-o-y.

Figure 107: Asia: Spot and oil-indexed price spread

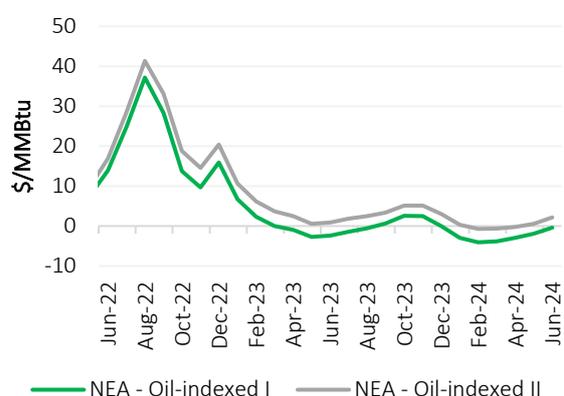
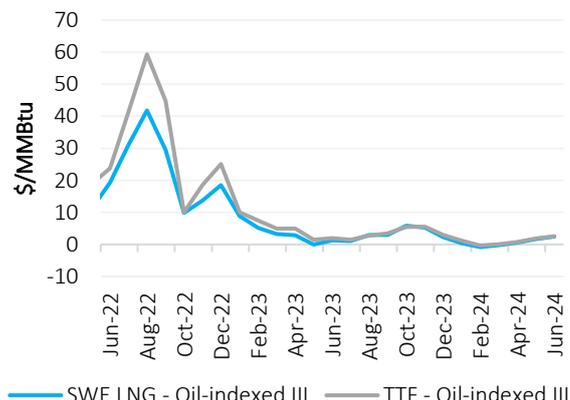


Figure 108: Europe: Spot and oil-indexed price spread



Source: GECF Secretariat based on data from Argus and Refinitiv Eikon

Note: Oil-indexed I LNG prices are calculated using the traditional LTC slope (14.9%) and 6-month historical average of Brent. Oil-indexed II LNG prices are calculated using the 5-year historical average LTC slope (11.4% for 2024) and 3-month historical average of Brent. Oil-indexed III LNG prices are based on Argus' assessment for European oil-indexed long-term LNG prices.

6.1.3 Regional spot gas & LNG price spreads

In June 2024, the NEA-TTF price spread remained positive, increasing compared to the previous month. The average premium of NEA LNG spot price over the average TTF spot price was \$1.60/MMBtu (Figure 109).

NBP continued to trade at a discount to TTF, averaging \$0.41/MMBtu in June 2024 (Figure 110). The negative NBP-TTF spread reflected a loosening UK gas market balance, with increased pipeline gas flows from the UK to Northwest Europe.

Furthermore, the NWE LNG-TTF spread remained negative; however, the NWE LNG spot price traded at a marginal discount of \$0.07/MMBtu compared to TTF, indicating lower utilisation at regas terminals (Figure 111). The NWE LNG-SA LNG price spread was negative, averaging \$0.43/MMBtu (Figure 112). Meanwhile, the NEA-HH and TTF-HH spreads both widened to \$9.88/MMBtu and \$8.28/MMBtu, respectively (Figure 113 and Figure 114). The premium of the Asian and European spot prices over North American spot prices increased compared to the previous month.

Figure 109: NEA-TTF price spread

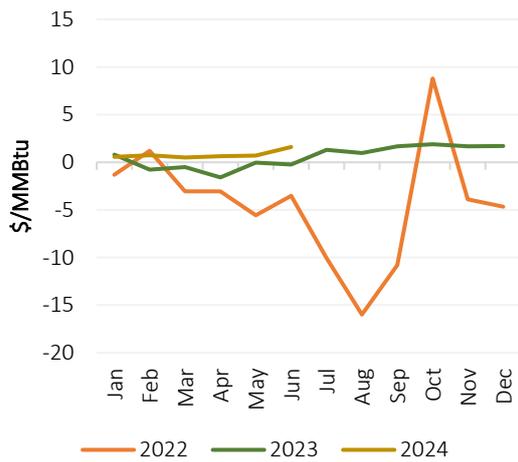


Figure 110: NBP-TTF price spread

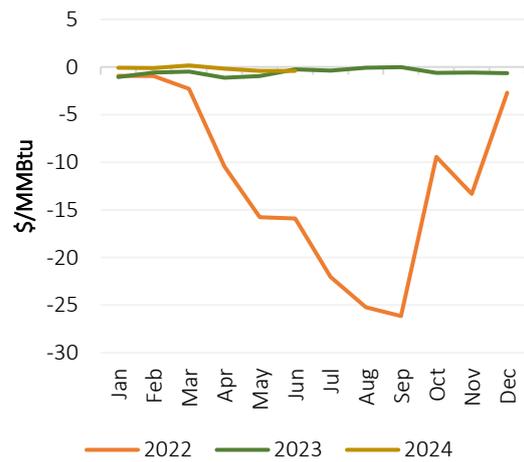


Figure 111: NWE LNG-TTF price spread

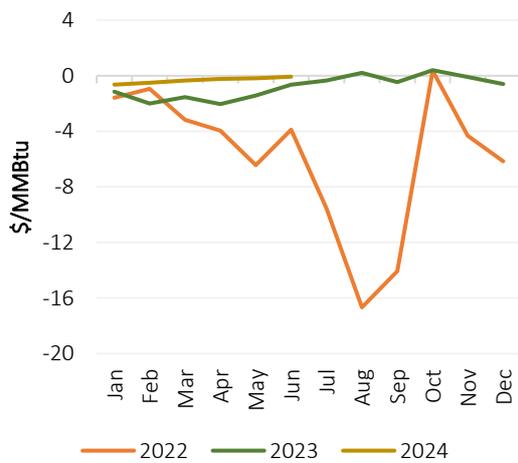


Figure 112: NWE LNG – SA LNG price spread

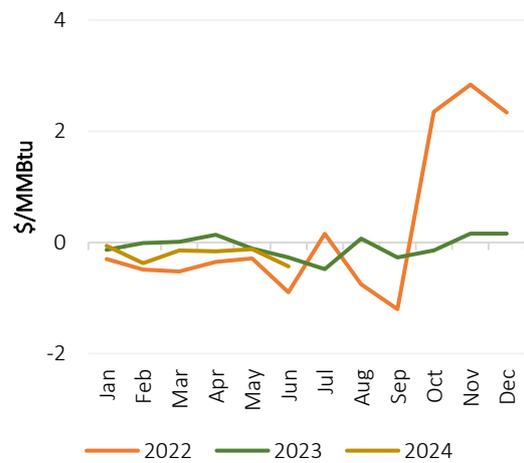


Figure 113: NEA-HH price spread

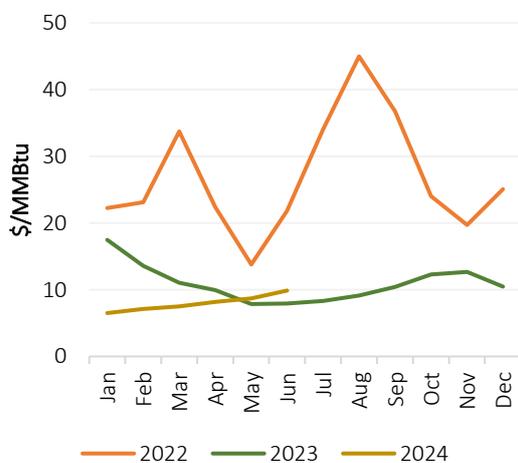
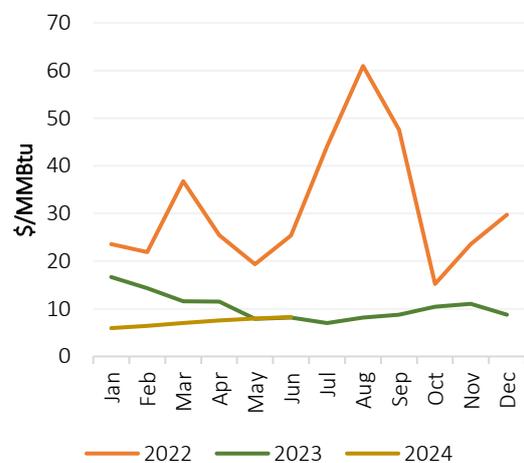


Figure 114: TTF-HH price spread



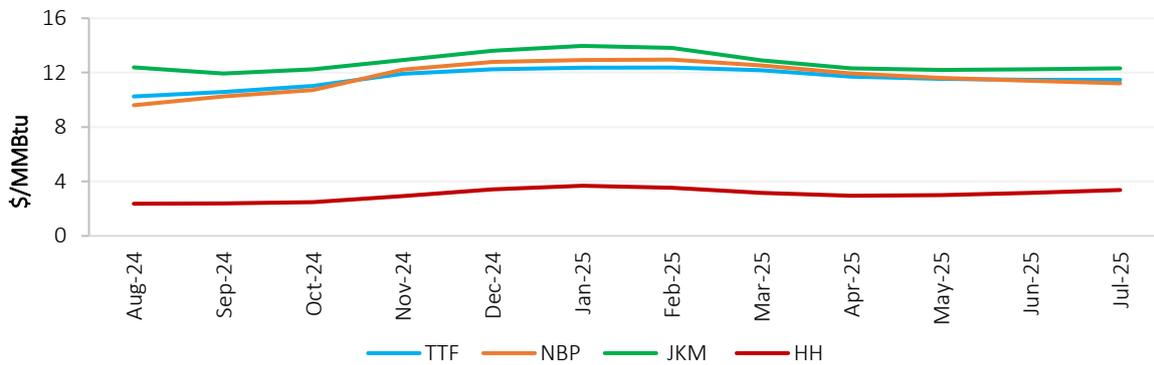
Source: GECF Secretariat based on data from Argus and Refinitiv Eikon

6.1.4 Gas & LNG futures prices

For the six-month period spanning August to January 2024, the JKM-TTF futures price spread is expected to be positive, indicating that Asian LNG prices are likely to maintain a premium over European spot prices. During this period, JKM is expected to trade at a premium of above \$1/MMBtu compared to TTF. Additionally, the NBP-TTF spread is expected to be slightly negative from August to October 2024, with TTF expected to maintain an average premium of \$0.4/MMBtu over NBP spot prices (Figure 115).

Moreover, as of July 9, 2024, the average futures prices for TTF, NBP and JKM during the same six-month period are \$11.40/MMBtu, \$11.42/MMBtu and \$12.84/MMBtu, respectively. Furthermore, gas and LNG futures prices for TTF, NBP and JKM for the six-month period from August to January 2024, (as of July 9, 2024) are higher than the futures prices expectations considered on June 6, 2024 (as reported in the GECF MGMR May 2024). Additionally, the average Henry Hub futures price is \$2.88/MMBtu, which is also lower than previous expectations (Figure 116).

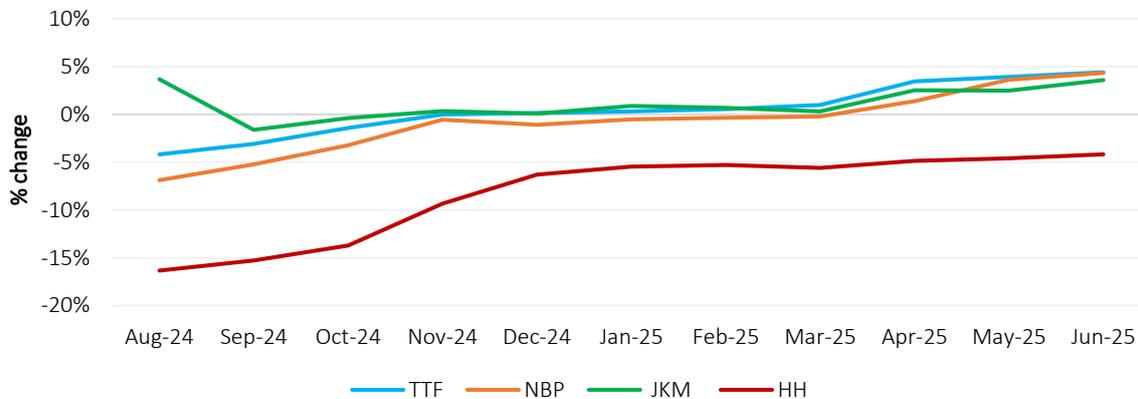
Figure 115: Gas & LNG futures prices



Source: GECF Secretariat based on data from Refinitiv Eikon

Note: Futures prices as of July 9, 2024.

Figure 116: Variation in gas & LNG futures prices



Source: GECF Secretariat based on data from Refinitiv Eikon

Note: Comparison with the futures prices as of June 6, 2024, as reported in GECF MGMR June 2024.

6.2 Cross commodity prices

6.2.1 Oil prices

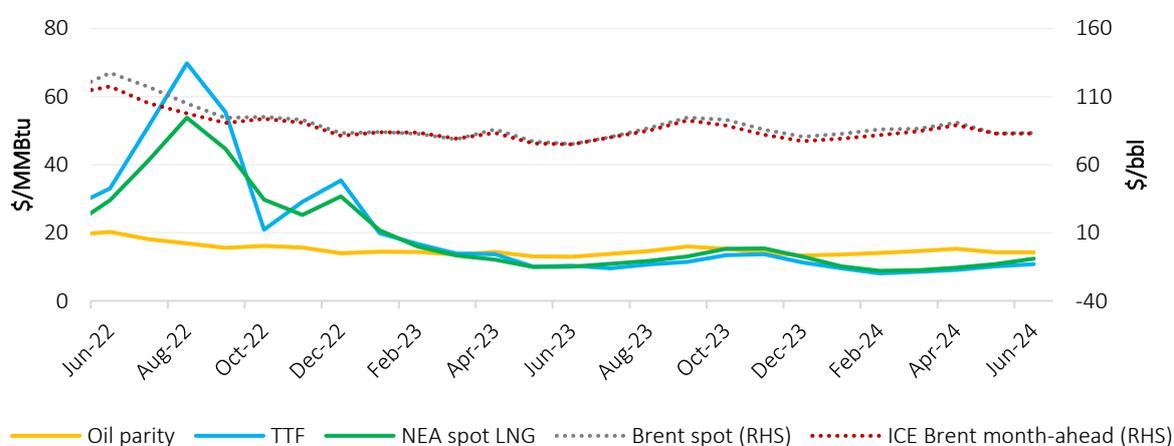
In June 2024, the average Brent spot price was \$83.48/bbl, reflecting a slight increase of 1% m-o-m, and was 11% higher y-o-y (Figure 117). The Brent month-ahead price averaged \$83.00/bbl, remaining at the same level as the previous month, but was 11% higher y-o-y.

Oil prices rebounded after a slight decline in the previous month. This price movement was influenced by concerns over escalating geopolitical tensions, weather-related supply disruptions and a larger-than-expected drop in US crude inventories. Additionally, robust growth in China's manufacturing sector also supported prices.

Furthermore, in June 2024, TTF spot prices traded at a discount of \$4/MMBtu to the oil parity price. Similarly, NEA LNG spot prices maintained a discount of \$2/MMBtu to the oil parity price.

From January to June 2024, the average Brent spot price was \$85.35/bbl, representing a 6% increase y-o-y. Similarly, the average Brent month-ahead price was \$83.42/bbl, representing a 4% increase y-o-y.

Figure 117: Monthly crude oil prices



Source: GECF Secretariat based on data from Argus and Refinitiv Eikon

Note: Conversion factor of 5.8 was used to calculate the oil parity price in \$/MMBtu based on the ICE Brent month-ahead price.

6.2.2 Coal prices

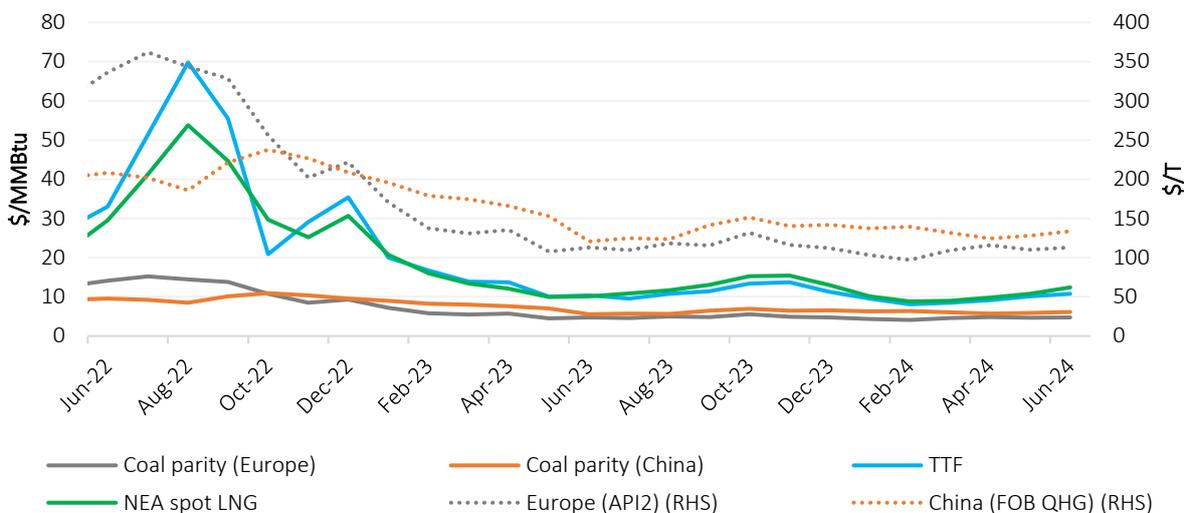
In June 2024, the European coal price (API2) averaged \$112.79/T, reflecting a 2% increase m-o-m, and was at the same level compared to the previous year. Meanwhile, in China, the QHG coal price averaged \$133.72/T, reflecting a 4% increase m-o-m and a 11% increase y-o-y (Figure 118).

European coal prices increased in the month, tracking gains in TTF spot prices, although demand in the region remained relatively weak. In China, coal prices increased for the second consecutive month, driven by higher domestic demand.

The premium of TTF spot price over the API2 parity price increased by 28% to \$5/MMBtu in June 2024. Additionally, the premium of NEA spot LNG price over the QHG parity price increased by 21% m-o-m to \$5/MMBtu.

From January to June 2024, the European API2 averaged \$108.05/T, representing an 18% decrease y-o-y. Meanwhile, the Chinese QHG price averaged \$132.49/T, reflecting a 20% decline y-o-y.

Figure 118: Monthly coal parity prices



Source: GECF Secretariat based on data from Argus and Refinitiv Eikon

Note: Conversion factors of 23.79 and 21.81 were used to calculate the coal prices in \$/MMBtu for Europe (API2) and China (QHG) respectively.

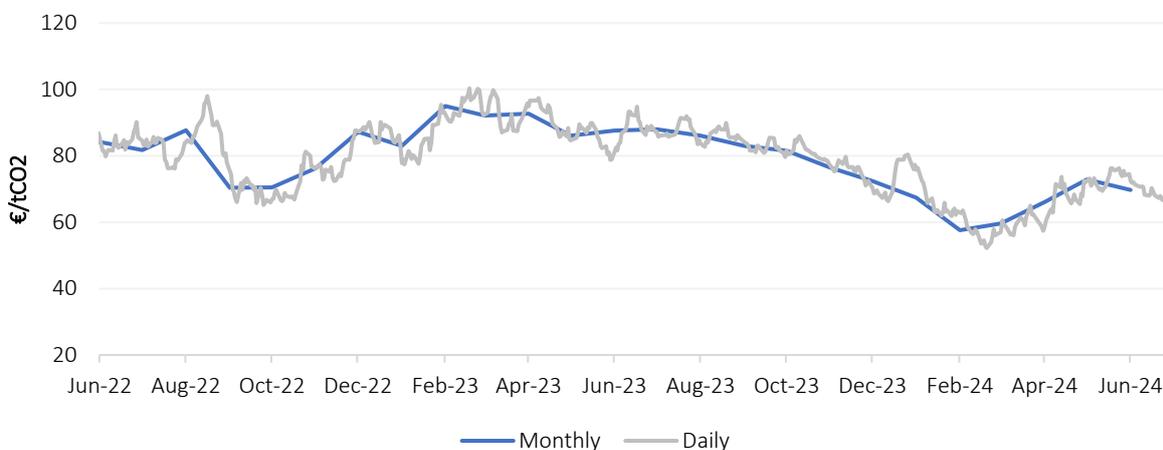
6.2.3 Carbon prices

In June 2024, EU carbon prices averaged €69.69/tCO₂, reflecting a 4% decrease m-o-m, and a 20% decline y-o-y (Figure 119).

EU carbon prices dipped following a three-month rally, as new auctions increased the supply of EU allowances, weighing on the market.

For the period January to June 2024, EU carbon prices averaged €65.55/tCO₂, representing a decline of 27% y-o-y.

Figure 119: EU carbon prices

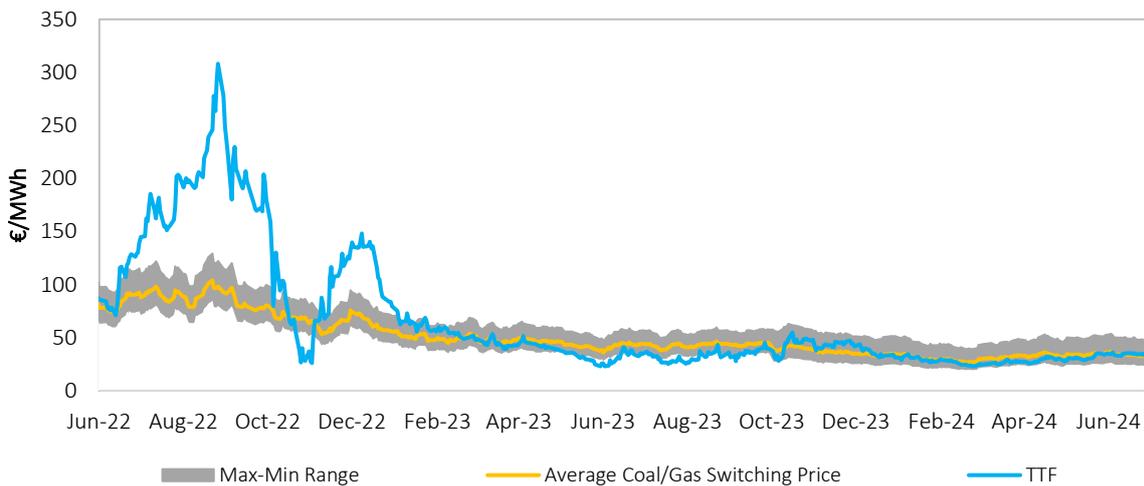


Source: GECF Secretariat based on data from Refinitiv Eikon

6.2.4 Fuel switching

In June 2024, daily TTF spot prices remained within the range that is favourable for coal-to-gas switching. However, in mid-June, daily TTF spot prices rose above the average coal-to-gas switching price. The average coal-to-gas switching price experienced a decrease of 2% m-o-m to reach €33.79/MWh. Notably, the average monthly spread between the TTF spot price and the coal-to-gas switching price turned slightly positive for the first time this year, averaging €1/MWh (Figure 120). Looking ahead to August 2024, the TTF spot price is likely to remain within the coal-to-gas switching range, however higher gas prices may limit coal-to-gas switching in the region.

Figure 120: Daily TTF vs coal-to-gas switching prices



Source: GECF Secretariat based on data from Refinitiv Eikon

Note: Coal-to-gas switching price is the price of gas at which generating electricity with coal or gas is equal. The estimate takes into consideration coal prices, CO₂ emissions prices, operation costs and power plant efficiencies. The efficiencies considered for gas plants are max: 56%, min: 46%, avg: 49.13%. The efficiencies considered for coal plants are max: 40%, min: 34%, avg: 36%.

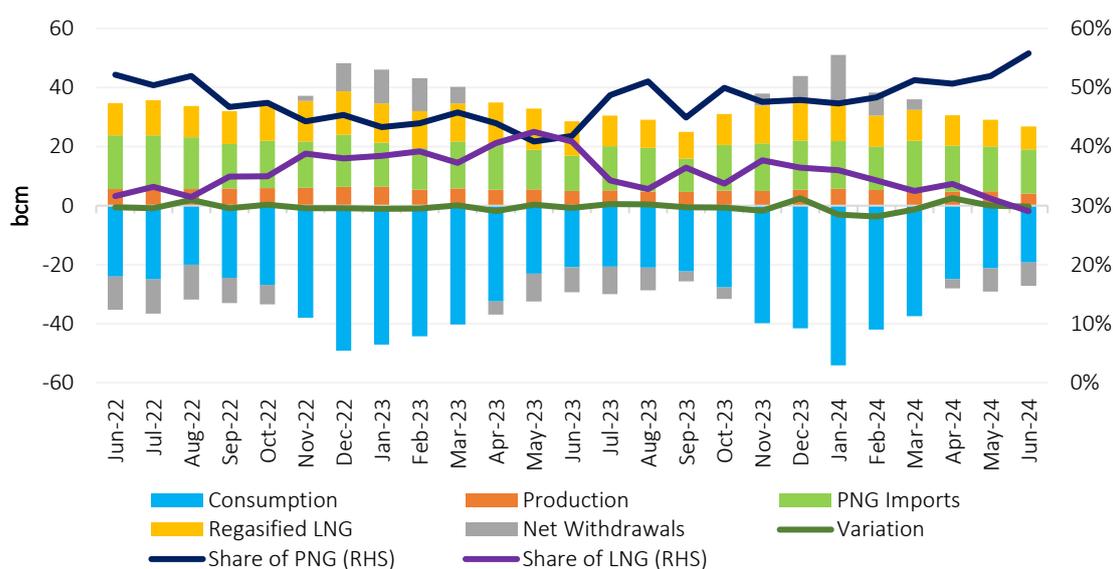
Annexes

Gas Balance

1) EU + UK

In June 2024, the share of regasified LNG in the EU and UK sub-region's combined gas supply continued to decrease, falling from 31% in May 2023 to 29%, and down sharply from 41% a year earlier. Conversely, the share of pipeline gas imports in the EU and UK's gas supply increased from 52% in May to 56% in June and also increased significantly from 42% in June 2023 (Figure 121). The decline in the monthly share of regasified LNG send-out was primarily due to a notable decrease in LNG send-out, while pipeline gas imports saw only a slight decrease. Moreover, the substantial y-o-y decline in LNG send-out, offset by higher pipeline gas imports, contributed to the reduced share of regasified LNG in the overall gas balance.

Figure 121: EU + UK monthly gas balance



Note: Variation refers to losses and statistical differences

Source: GECF Secretariat based on data from AGSI+, JODI Gas and Refinitiv

Table 2 below provides data on the gas supply and demand balance for the EU + UK for the month of June 2024.

Table 2: EU + UK gas supply/demand balance for June 2024 (bcm)

	2023	Jun-23	Jun-24	H1 2023	H1 2024	Change* y-o-y	Change** 2024/2023
(a) Gas Consumption	380.85	20.90	19.30	207.90	198.85	-8%	-4%
(b) Gas Production	63.46	4.95	4.06	33.42	30.02	-18%	-10%
Difference (a) - (b)	317.39	15.95	15.24	174.49	168.83	-4%	-3%
PNG Imports	174.88	11.94	14.97	85.69	93.13	25%	9%
Regasified LNG	143.59	11.67	7.80	78.59	60.45	-33%	-23%
Net Withdrawals	-4.86	-8.44	-7.82	5.94	9.43	-7%	59%
Variation	3.78	0.77	0.30	4.26	5.82		

Source: GECF Secretariat based on data from AGSI+, JODI Gas and Refinitiv

(*): y-o-y change for June 2024 compared to June 2023

(**): y-o-y change for H1 2024 compared to H1 2023

2) OECD

Table 3 below provides data on the gas supply and demand balance for all OECD countries, including OECD Americas, OECD Asia Oceania and OECD Europe for the month of April 2024.

Table 3: OECD's gas supply/demand balance for April 2024 (bcm)

	2023	Apr-23	Apr-24	YTD 2023	YTD 2024	Change* y-o-y	Change** 2024/2023
(a) OECD Gas Consumption	1769.4	137.0	130.2	664.5	661.4	-5.0%	-0.5%
(b) OECD Gas Production	1699.8	140.6	138.4	563.0	568.8	-1.5%	1.0%
Difference (a) - (b)	69.6	-3.6	-8.3	101.5	92.6	130.9%	-8.8%
OECD LNG Imports	329.9	29.0	25.7	124.0	111.1	-11.5%	-10.4%
LNG Imports from GECF	140.8	12.2	10.8	53.4	46.8	-11.2%	-12.4%
LNG Imports from Non-GECF	189.1	16.8	14.9	70.6	64.3	-11.8%	-8.9%
OECD LNG Exports	238.4	20.5	18.7	79.7	81.5	-9.1%	2.3%
Intra-OECD LNG Trade	154.9	14.0	12.0	56.2	53.2	-14.1%	-5.3%
OECD Pipeline Gas Imports	499.2	43.2	37.2	178.1	164.3	-13.9%	-7.7%
OECD Pipeline Gas Exports	480.2	41.3	36.1	170.4	155.4	-12.5%	-8.8%
Stock Changes and losses	40.9	13.9	16.3	-49.4	-54.1		

Source: GECF Secretariat based on data from ICIS LNG Edge and IEA Monthly Gas Statistics

(*): y-o-y change for Apr 2024 compared to Apr 2023

(**): y-o-y change for YTD 2024 compared to YTD 2023

3) India

Table 4 below provides data on the gas supply and demand balance for India for the month of May 2024.

Table 4: India's gas supply/demand balance for May 2024 (bcm)

	2023	May-23	May-24	YTD 2023	YTD 2024	Change* y-o-y	Change** 2024/2023
(a) India Gas Consumption	62.15	5.69	5.71	25.57	27.64	0.3%	8.1%
(b) India Gas Production	35.09	2.84	3.06	13.91	15.01	7.8%	7.9%
Difference (a) - (b)	27.06	2.85	2.65	11.66	12.64	-7.1%	8.4%
India LNG Imports	30.27	2.83	3.39	11.84	14.90	19.7%	25.8%
LNG Imports from GECF	23.57	2.15	2.32	9.59	11.35	7.6%	18.4%
LNG Imports from Non-GECF	6.70	0.68	1.07	2.25	3.55	57.6%	57.5%
Stock Changes and losses	3.21	-0.02	0.74	0.18	2.27		

Source: GECF Secretariat based on data from ICIS LNG Edge and India's PPAC

(*): y-o-y change for May 2024 compared to May 2023

(**): y-o-y change for YTD 2024 compared to YTD 2023

Abbreviations

Abbreviation	Explanation
AE	Advanced Economies
AECO	Alberta Energy Company
bcm	Billion cubic metres
bcma	Billion cubic metres per annum
bcm/yr	Billion cubic metres per year
CBAM	Carbon Border Adjustment Mechanism
CBM	Coal bed methane
CCS	Carbon, Capture and Storage
CCUS	Carbon Capture, Utilization and Storage
CDD	Cooling Degree Days
CNG	Compressed Natural Gas
CO ₂	Carbon dioxide
CO _{2e}	Carbon dioxide equivalent
CPI	Consumer Price Index
DOE	Department of Energy
EC	European Commission
ECB	European Central Bank
EEXI	Energy Efficiency Existing Ship Index
EMDE	Emerging Markets and Developing Economies
EU	European Union
EU ETS	European Union Emissions Trading Scheme
EUA	European Union Allowance
Fed	Federal Reserve
FID	Final Investment Decision
FSU	Floating Storage Unit
FSRU	Floating Storage Regasification Unit

G7	Group of Seven
GDP	Gross Domestic Product
GECF	Gas Exporting Countries Forum
GHG	Greenhouse Gas
HDD	Heating Degree Days
HH	Henry Hub
IEA	International Energy Agency
IMF	International Monetary Fund
IMO	International Maritime Organization
JKM	Japan Korea Marker
LNG	Liquefied Natural Gas
LAC	Latin America and the Caribbean
LT	Long-term
MMBtu	Million British thermal units
mmcm	Million cubic metres
MENA	Middle East and North Africa
METI	Ministry of Trade and Industry in Japan
m-o-m	month-on-month
Mt	Million tonnes
Mtpa	Million tonnes per annum
MWh	Megawatt hour
NEA	North East Asia
NBP	National Balancing Point
NDC	Nationally Determined Contribution
NGV	Natural Gas Vehicle
NZBA	Net-Zero Banking Alliance
OECD	Organization for Economic Co-operation and Development
PNG	Pipeline Natural Gas

PPAC	Petroleum Planning & Analysis Cell
PSV	Punto di Scambio Virtuale (Virtual Trading Point in Italy)
QHG	Qinhuangdao
R-LNG	Regasified LNG
SA	South America
SPA	Sales and Purchase Agreement
SWE	South West Europe
T&T	Trinidad and Tobago
TANAP	Trans-Anatolian Natural Gas Pipeline
TCFD	Task Force on Climate-Related Financial Disclosure
Tcm	Trillion cubic metres
tCO₂	Tonne of carbon dioxide
TTF	Title Transfer Facility
TWh	Terawatt hour
UGS	Underground Gas Storage
UAE	United Arab Emirates
UK	United Kingdom
UQT	Upward Quantity Tolerance
US	United States
y-o-y	year-on-year

References

- Argus. (n.d.). *Argus LNG Daily and Global LNG*.
- Baker Hughes. (n.d.). *Worldwide Rig Counts*. Retrieved from <http://phx.corporateir.net/phoenix.zhtml?c=79687&p=irol-rigcountsintl>
- Balkan Green Energy News. (2023, April 6). *Firms from Energy Community can now use EU's joint gas purchasing platform*. Retrieved from Balkan Green Energy News: <https://balkangreenenergynews.com/firms-from-energy-community-can-now-use-eus-joint-gas-purchasing-platform/>
- Bank of England. (2024). *Official bank rate*. Retrieved from <https://www.bankofengland.co.uk/boeapps/database/Bank-Rate.asp>
- BloombergNEF. (n.d.). Retrieved from <https://www.bnef.com/>
- China's Chongqing Petroleum & Gas Exchange. (n.d.). Retrieved from <https://www.chinacqpgx.com/information/informationBulletinDetails.htm?type=14&id=4559&rownumber=3>
- Enagas Spanish Transport System Operator. (n.d.). Retrieved from <https://www.enagas.es/>
- European Central Bank (ECB). (2024). *Official interest rates*. Retrieved from https://www.ecb.europa.eu/stats/policy_and_exchange_rates/key_ecb_interest_rates/html/index.en.html
- European Commission. (2024). *EU Energy Platform*. Retrieved from European Commission: https://energy.ec.europa.eu/topics/energy-security/eu-energy-platform_en
- GECF Secretariat. (n.d.). GECF Shipping Model.
- GIE AGSI+. (n.d.). *Gas Infrastructure Europe - Aggregated Gas Storage Inventory*.
- GIE ALSI. (n.d.). European LNG Storage.
- GRTgaz French Transport System Operator. (n.d.). Retrieved from <https://www.smart.grtgaz.com/>
- ICIS. (n.d.). *ICIS LNG Daily and Global LNG Market*.
- ICIS. (n.d.). ICIS LNG Edge.
- India's Petroleum Planning & Analysis Cell (PPAC) . (n.d.). Retrieved from <https://www.ppac.gov.in/>
- National Bureau of Statistics of China . (n.d.). Retrieved from <http://data.stats.gov.cn/english/easyquery.htm?cn=A01>
- Organization of Petroleum Exporting Countries (OPEC). (n.d.). *Monthly Oil Market Reports*. Retrieved from https://www.opec.org/opec_web/en/publications/338.htm
- Oxford Economics. (2024). *World Economic Prospects Monthly*.
- Refinitiv. (n.d.). Refinitiv Eikon Database.
- Rystad Energy Ucube. (2024).
- Snam, Italian Transport System Operator . (n.d.). Retrieved from <https://www.snam.it/>
- U.S Energy Information Administration (EIA). (n.d.). Retrieved from <https://www.eia.gov>
- US Federal Reserve. (2024). *Selected interest rates*. Retrieved from <https://www.federalreserve.gov/releases/h15/>
- World Bank. (2024). World Bank Commodity Price Data.



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