



GECF

Gas Exporting Countries Forum, GECF  
GECF Headquarters  
P.O. Box: 23753, Tornado Tower  
47th & 48th Floors, West Bay, Doha



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Annual Statistical Bulletin 2024

# Annual Statistical Bulletin 2024

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# Annual Statistical Bulletin 2024

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For inquiries over the data introduced on this publication:  
[statistics@gecf.org](mailto:statistics@gecf.org)

Gas Exporting Countries Forum, Data and Information Services Department  
Tornado Tower 47th & 48th Floors West Bay. Doha Qatar.  
T: +974 4404 8400  
F: +974 4404 8415



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# Authors and Contributors

## Project Leader

Hichem Kimouche  
Data & Information Department Acting Head

## Data & Statistics Team

Hesham Marzouk, Databank Analyst  
Tricia Singh, Energy Data Analyst  
Widad Berriche, Energy Statistician

## IT Development

Diana Cueto, ICT Assistant

## Administrative & Design Support

Asma Chenideur, Secretary

## Design

Al Jazeera Printing Press

## About the GECF



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Algiers, Algeria

The Gas Exporting Countries Forum (GECF or Forum) is an intergovernmental organisation established in May 2001. It became a fully-fledged organisation in 2008, with headquarters in Doha, the State of Qatar.

As of December 2024, the GECF comprises twelve Members and Eight Observer Members (hereafter referred to as the GECF Countries) from four continents. The Member Countries of the Forum are Algeria, Bolivia, Egypt, Equatorial Guinea, Iran, Libya, Nigeria, Qatar, Russia, Trinidad and Tobago, United Arab Emirates and Venezuela (hereafter referred to as Members). Angola, Azerbaijan, Iraq, Malaysia, Mauritania, Mozambique, Peru and Senegal have the status of Observer Members (hereafter referred to as Observers).

Cooperation has been extended to technology with the establishment of the Gas Research Institute in 2019, headquartered in Algiers, the People's Democratic Republic of Algeria.

In accordance with the GECF Statute, the organisation aims to support the sovereign rights of its Member Countries over their natural gas resources and their abilities to develop, preserve and use such resources for the benefit of their peoples, through the exchange of experience, views, information and coordination in gas-related matters.

In accordance with its Long-Term Strategy, the vision of the GECF is "to make natural gas the pivotal resource for inclusive and sustainable development", and its mission is "to shape the energy future as a global advocate of natural gas and a platform for cooperation and dialogue, with the view to support the sovereign rights of Member Countries over their natural gas resources and to contribute to global sustainable development and energy security".

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# Foreword

In today's rapidly evolving global energy landscape, reliable data is more than a resource — it is the foundation of informed and strategic decision-making. For the natural gas industry, where market dynamics are complex and fast-changing, access to reliable, high-quality data is indispensable. It empowers governments and businesses, driving actionable insights, guiding strategic planning, and enabling decision-makers to navigate uncertainties with clarity and confidence. For the Member Countries of the Gas Exporting Countries Forum (GECF), data is a critical tool in shaping energy policies, supporting sustainable energy development, and adapting to shifts in global energy markets.

At the GECF, we recognize data as the foundation of sound policy development and resource management, ensuring that natural gas remains a vital component of the global energy mix for the foreseeable future.

I am honored to introduce the 8th edition of the GECF Annual Statistical Bulletin (ASB). This flagship publication provides a comprehensive analysis of the natural gas industry and markets developments in 2023, offering essential insights for industry stakeholders. The ASB represents a comprehensive compilation of meticulously curated, primary official data and statistics provided by our Member Countries. Notably, this year's edition also includes selected indicators from our Observer Countries, further enhancing the scope of the publication.

In 2023, natural gas markets began to stabilize following a period of extreme volatility. Spot gas prices experienced a notable decline, driven primarily by two consecutive mild winters, though prices remain above historical averages. This price reduction spurred renewed demand for natural gas, as many countries once again favored it over alternative energy sources. In response, global natural gas production increased to meet this growing demand. The global liquefied natural gas (LNG) trade continued to thrive, marked by the Philippines and Viet Nam joining the ranks of LNG importers. A record level of new LNG regasification capacity commissioned, laying the foundation for further expansion in 2024. At the same time, the surge in long-term LNG contracts, with some extending beyond 2050, underscores natural gas's enduring role as a reliable energy source and a key feedstock for chemicals and fertilisers.

The 8th edition of the ASB demonstrates the crucial role of the GECF Member Countries in ensuring global energy security and facilitating a just, orderly, and equitable energy transitions. Collectively, they account for nearly 70% of the world's proven natural gas reserves. In 2023, they played a pivotal role in meeting global energy demand, contributing over 40% of the world's marketed natural gas production. Furthermore, with 37 liquefaction plants and a combined capacity exceeding 240 Mtpa and supported by a fleet of 155 LNG carriers, they command nearly half of the world's LNG trade.

Looking ahead, natural gas will remain integral to achieving a balance between sustainable development and addressing climate change, particularly for GECF Countries. As a cleaner, reliable, and versatile energy source, natural gas drives economic growth, enhances energy security, and supports environmental protection. By championing its role in global energy markets, GECF Member Countries are ensuring that natural gas continues to provide solutions that harmonise development with sustainability.

Natural gas will not only remain an essential sustainable energy source and commodity today but also serve as a driving force in building a resilient, cleaner, and more sustainable future. Through their leadership in advancing technologies like Carbon Capture, Utilization, and Storage (CCUS) and blue hydrogen, GECF Member Countries are

positioning natural gas as a key enabler of the United Nations Sustainable Development Goals (SDGs), particularly in poverty alleviation, energy access, and environmental sustainability.

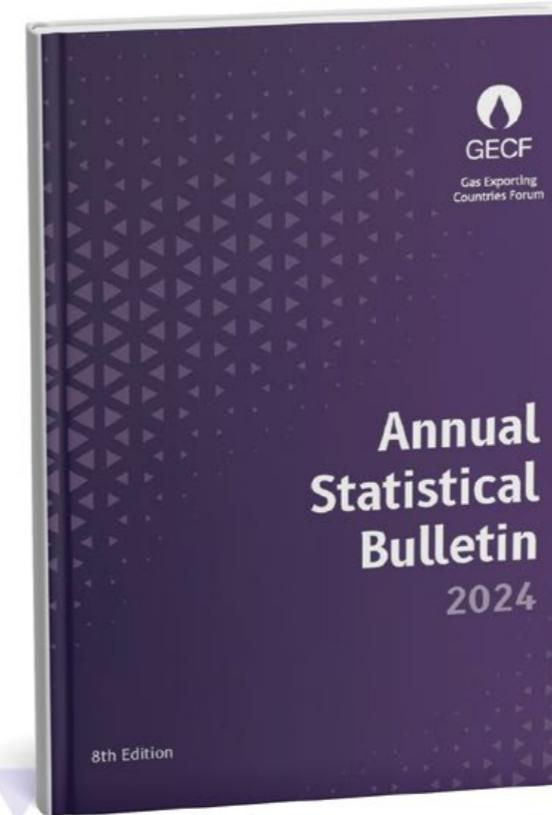
I extend my heartfelt appreciation to the special envoys for data and statistics from our Member Countries, as well as to the GECF Secretariat team, whose efforts and dedication have made this publication possible.

**Mohamed Hamel**  
Secretary General



Discover More

# Annual Statistical Bulletin



## 2024 GECF Members

- |   |                                     |
|---|-------------------------------------|
| 1 People's Democratic Republic of Algeria | 7 Federal Republic of Nigeria       |
| 2 Plurinational State of Bolivia          | 8 State of Qatar                    |
| 3 Arab Republic of Egypt                  | 9 Russian Federation                |
| 4 Republic of Equatorial Guinea           | 10 Republic of Trinidad and Tobago  |
| 5 Islamic Republic of Iran                | 11 United Arab Emirates             |
| 6 State of Libya                          | 12 Bolivarian Republic of Venezuela |

## 2024 GECF Observers

- |                           |                                   |
|---------------------------|-----------------------------------|
| 13 Republic of Angola     | 17 Islamic Republic of Mauritania |
| 14 Republic of Azerbaijan | 18 Republic of Mozambique         |
| 15 Republic of Iraq       | 19 Republic of Peru               |
| 16 Malaysia               | 20 Republic of Senegal            |



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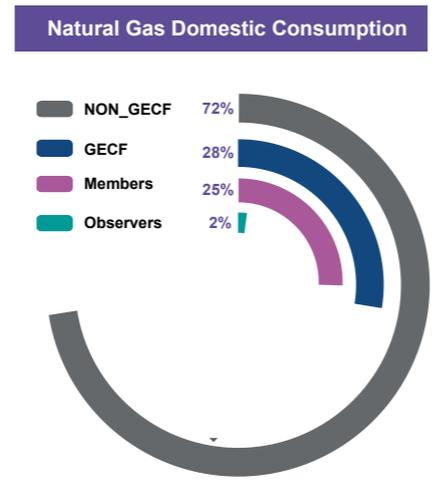
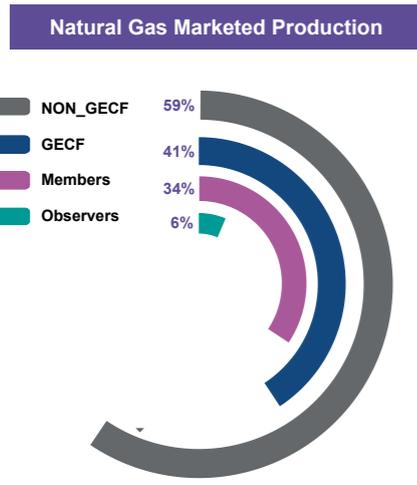
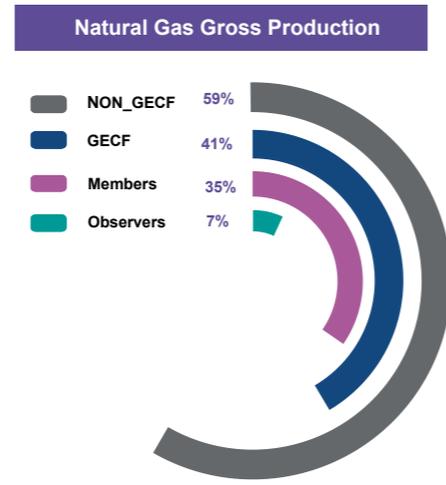
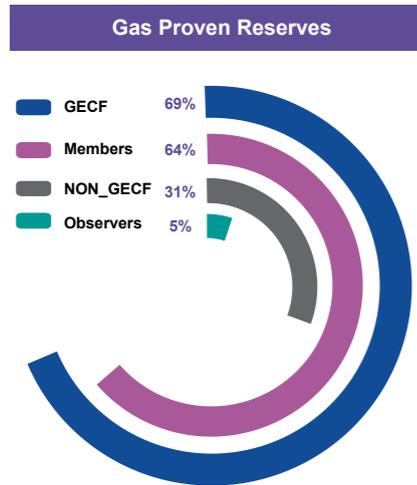
SECTION  
**01**

**Executive  
Summary**

The GECF Annual Statistical Bulletin 2024 showcases the significant impact of GECF Countries on the global natural gas sector, emphasizing key achievements and trends through 2023. This summary offers an overview of their contributions to reserves, production, trade, infrastructure, and economic resilience.

### 1.1. GECF: A Leader in Global Natural Gas

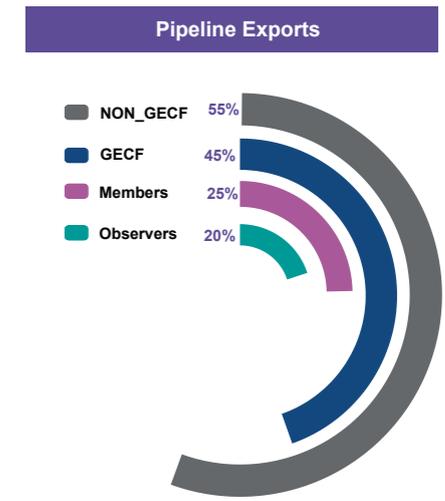
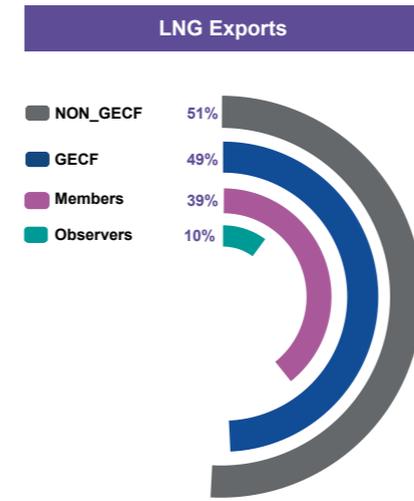
In 2023, GECF countries continued to demonstrate their **dominance** in the natural gas sector, holding more than **69%** of the world's proven reserves, equivalent to almost **145,000 Bcm**. This **unrivalled share** underscores the long-term resource security offered by GECF Countries, led by major reserve holders like Russia, Iran, and Qatar. Collectively, GECF countries contributed **41%** of global marketed production, solidifying their role as **reliable** suppliers to meet global energy demand. In the realm of consumption, GECF Countries represent **28%** of global domestic consumption.



### 1.2. Key Contributions in Global / Regional Trade

The lower consumption share, relative to production (28%), highlights GECF's significant role **as net exporters** in the natural gas markets. GECF's influence is particularly pronounced in exports, where they hold **49%** and **45%** shares of the LNG and pipeline exports respectively.

GECF countries retained their position as **leaders in LNG trade**, accounting for **more than 49%** of global LNG exports. Qatar remained the **top LNG exporter** more than **107 Bcm**, catering to growing demand in Asia and Europe.

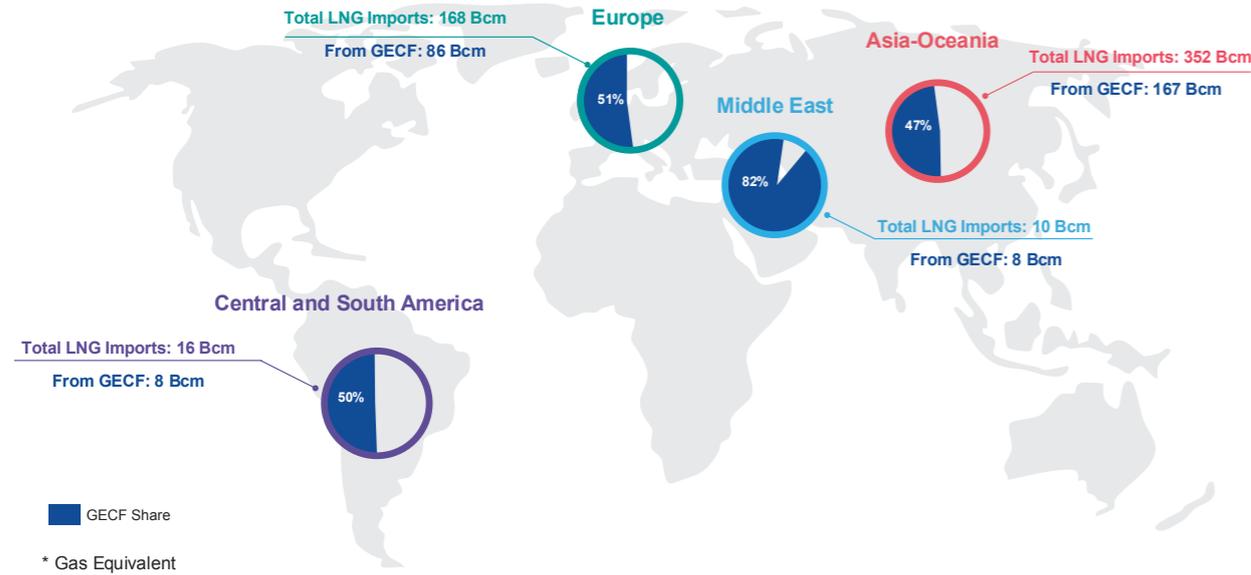


**Asia's** LNG demand rebounded to 352 Bcm, with **47% (167 Bcm)** supplied by GECF Countries.

**Europe** increased its LNG imports to 168 Bcm, with **51% (86 Bcm)** coming from GECF Countries to enhance energy security.

**Africa** emerged as a key supplier, with countries leveraging their resources to meet global demand like Algeria, Nigeria, and Mozambique which achieved a milestone by entering the LNG market, signalling its growing role in global energy trade and further diversified GECF Countries LNG portfolio, while expanded liquefaction capacity (up to **241 MTPA**) and a fleet of **155 LNG** carriers ensured seamless delivery to global markets.

**Figure 1.2.1** 2023 GECF Share in the global LNG (Bcm\*) supply by region

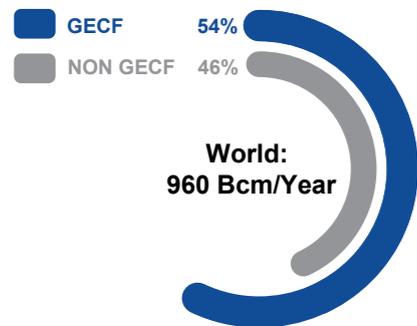


### 1.3. Infrastructure Strength and Global Impact

In 2023, GECF Countries reinforced their global position through significant investments in natural gas infrastructure operating **37 liquefaction plants (70 Trains)** with a combined capacity of over **241 MTPA**, ensuring reliability and scalability in LNG exports.

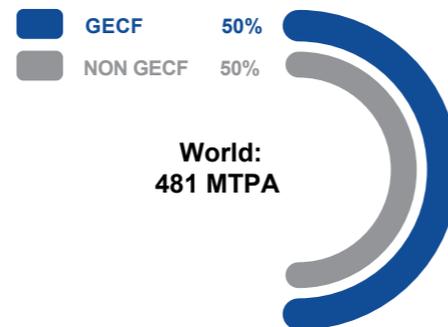
The pipeline network, spanning thousands of kilometres, remained a critical component for regional and cross-border gas transportation. GECF Countries continued to **optimize** their pipeline systems to meet changing trade flows, particularly considering shifting energy policies and geopolitical pressures. **Notable contributors** to pipeline stability include Algeria, which sustained exports to Europe, and Russia, which maintains one of the **largest pipeline infrastructures globally**.

#### Operating Transnational Pipeline Capacity (Bcm/Year)



GECF Countries currently use 28 pipelines for their international gas exports with a design capacity of 522 Bcm/Year.

#### Operational LNG Liquefaction Capacity (MTPA)

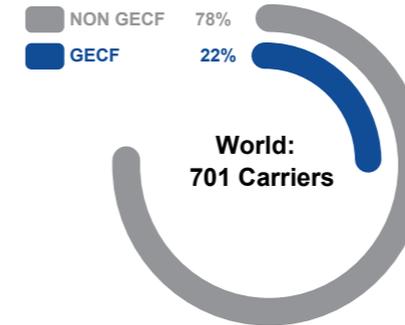


GECF Countries operate **37** LNG plants with a combined installed capacity of **241 MTPA** as of end of 2023.

LNG shipping logistics further enhanced GECF's competitive edge. Member countries collectively operated a fleet of **155 LNG carriers**, capable of transporting large volumes across long distances. These carriers ensured the flexibility and accessibility of natural gas, making LNG a cornerstone of the global energy transition.

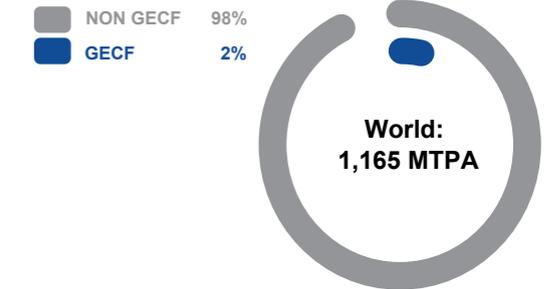
The combined strength of liquefaction plants, pipelines and LNG fleets showcases **GECF's commitment** to delivering reliable and efficient natural gas supplies, maintaining **its position as a leader** in the global energy market.

#### Active LNG Carriers



LNG fleets have witnessed significant growth in GECF Countries, with **155** LNG carriers in operation as of end 2023.

#### Operational Regasification Capacity (MTPA)



GECF Countries operate **5** Regasification terminals with a combined installed capacity of **20.4 MTPA**.

### 1.4. Gas Market Prices and Stabilization

In 2023, global natural gas markets experienced welcome **stabilization** following the extreme price **volatility** of 2022. This year marked a return to the relative balance between supply and demand, as energy markets adapted to geopolitical shifts and infrastructure developments. Key benchmarks reflected this shift, with **Henry Hub** prices averaging **\$3.50/MMBtu**, a substantial decline from the elevated levels of 2022, driven by strong U.S. production and steady exports. In Europe, **TTF prices** settled at an average of **\$15/MMBtu**, significantly lower than the spikes of the previous year. This adjustment was underpinned by robust LNG supply chains, increased storage levels, and diversification efforts across European importers.

The **stabilization** of gas prices in 2023 underscores the **adaptability of GECF** countries in responding to market needs. By leveraging their robust production and export infrastructure, particularly in LNG, GECF nations played a central role in rebalancing global gas markets. Shipping costs for LNG also **normalized**, easing logistical pressures that had amplified market disruptions in 2022. The global LNG fleet, including GECF member-operated carriers, played a **pivotal role** in facilitating smoother trade flows. These developments ensured the continued delivery of LNG to key regions, particularly Europe and Asia, where demand remained strong.

## 1.5. Economic Resilience and Rising Domestic Demand

The population of GECF Member Countries reached approximately **900 million** in 2023, this significant population base fueled a steady rise in domestic energy demand and supported the expansion of a **robust labor force** essential for industrial growth and economic diversification. Across Member Countries, natural gas played a vital role in meeting these growing energy needs, with domestic gas consumption **rising by 2.8%**, reaching a total of **1042 Bcm**. This increase reflects enhanced access to energy and sustained economic growth, particularly in countries such as Iran, Egypt, and Nigeria, where industrialization and urbanization have driven higher gas demand.

The economic stability of GECF Countries remained closely tied to their natural gas sectors, which continued to **act as a cornerstone** of their national economies. Countries like Qatar and the UAE demonstrated **robust GDP growth**, underpinned by revenues from LNG exports and strong global demand for reliable energy supplies. Trade balances **were buoyed** by these exports, which played a pivotal role in regions like Europe. For example, Algeria emerged as key exporters to Europe, **leveraging their proximity** and infrastructure to capitalize on shifting trade dynamics.

The power generation sector remained the largest consumer of natural gas, accounting for **45%** of total domestic consumption, followed by residential demand at **30%**. Countries like Russia, Iran, and Nigeria led this growth, with Russia increasing its domestic consumption by **9.18 Bcm** and Iran adding **6.36 Bcm**, driven by expanding industrial demand and urban population growth. Nigeria's domestic consumption rose by a notable **13.2% (+1.71 Bcm)**, reflecting **its push** toward greater utilization of natural gas in transportation and economic development.

The economic and demographic dynamics of GECF Countries highlight their **ability to balance** growing domestic demand with international export commitments. By prioritizing investments in infrastructure and energy distribution networks, GECF member countries are **ensuring reliable and affordable** energy for their populations while maintaining their position as global leaders in natural gas markets.

Table 1.5.1 GECF Countries Main Figures in 2023

	Population (Million Inhabitants)	GDP (current billions US\$)	GDP Growth (annual %)	Exports of Goods and Services (current billions US\$)	Imports of Goods and Services (current billions US\$)	Gas Proven Reserves (Bcm)	Natural Gas Gross Production (Bcm)	Natural Gas Marketed Production (Bcm)	Natural Gas Exports (Pipeline, Bcm)	Natural Gas Exports (LNG, Bcm)	Natural Gas Domestic Consumption (Bcm)
<b>Members</b>											
Algeria	46.55	239.99	4.10	60.37	50.44	4,504	186.91	105.48	34.49	17.78	52.90
Bolivia	12.17	45.46	3.08	11.61	14.06	253	13.47	13.01	8.08	-	4.74
Egypt	112.72	395.93	3.76	71.93	84.51	1,784	63.30	59.33	0.45	5.17	61.86
Equatorial Guinea	1.71	12.12	-5.69	5.79	4.76	39	9.47	7.10	-	4.57	2.36
Iran	89.17	401.50	4.95	114.99	108.03	33,988	343.83	266.25	15.82	-	255.50
Libya	6.89	50.49	-1.67	34.65	20.85	1,505	27.17	12.27	2.34	-	9.94
Nigeria	223.80	362.81	2.86	82.86	101.14	5,943	71.54	51.74	0.82	20.09	14.68
Qatar	2.72	213.00	1.20	NA	NA	23,831	215.40	170.97	20.67	107.12	43.19
Russia	143.83	2,021.42	3.60	466.60	378.93	47,152	639.40	620.20	90.86	42.34	495.60
Trinidad and Tobago	1.37	NA	NA	7.78	8.95	NA	26.03	25.74	-	10.12	13.64
United Arab Emirates	9.52	504.17	3.40	570.17	470.50	8,210	91.05	58.60	-	6.92	73.26
Venezuela	28.84	97.12	4.0	16.91	18.03	5,476	41.47	22.68	-	-	16.62
<b>Observers</b>											
Angola	36.68	84.72	0.86	33.78	22.59	129	10.74	6.00	-	4.80	1.20
Azerbaijan	10.11	72.36	1.12	35.49	25.02	1,900	48.30	36.70	23.85	-	15.29
Iraq	45.50	250.84	-2.94	109.71	86.75	3,714	35.26	10.22	-	-	20.63
Malaysia	34.31	399.65	3.68	273.43	253.48	2,112	84.13	71.38	2.31	36.22	36.05
Mauritania	4.86	10.45	3.38	4.62	5.45	1,061	-	-	-	-	-
Mozambique	33.90	20.60	5.00	NA	NA	650	8.92	8.91	4.18	3.58	1.15
Peru	34.35	267.60	-0.55	72.49	63.75	237	19.16	14.65	-	5.02	9.63
Senegal	17.76	31.01	3.70	7.93	13.61	243	0.00	0.00	-	-	0.00

### 1.6. Navigating Change: GECF Members' Performance in 2023

Marketed production across GECF Members experienced a decline of 18.65 Bcm, representing a **1.3% drop** compared to the previous year. In contrast, several Member Countries demonstrated **robust growth**, with Nigeria achieving the highest increase at 7.46 Bcm, representing a remarkable 16.8% growth. Other contributors included Algeria, which increased production by 4.05 Bcm (4.0% growth), and the United Arab Emirates, which added 3.02 Bcm for a 5.4% y-o-y growth rate. These increases reflect these countries' capacity to sustain output despite market challenges.

Domestic consumption across GECF Countries rose by **28.79 Bcm**, an **increase of 2.8%**, marking the **3rd consecutive** year of growth. This rise highlights the growing importance of natural gas for power generation and residential use across countries. Russia led in domestic consumption increases, adding 9.18 Bcm, followed by Iran, which saw a rise of 6.36 Bcm (2.4% growth) as it continued to expand its use of natural gas for industrial and residential utilization. Nigeria also showed strong growth, with consumption increasing by 13.2%, reflecting its efforts to integrate gas more deeply into its energy mix.

**Table 1.6.1** Main Gas Indicators: year-on-year changes in GECF Members

Indicator Name Country	Marketed Production		Domestic Consumption		Total Exports		LNG Exports		Pipeline Exports	
	y-o-y (Bcm)	y-o-y (%)	y-o-y (Bcm)	y-o-y (%)	y-o-y (Bcm)	y-o-y (%)	y-o-y (Bcm)	y-o-y (%)	y-o-y (Bcm)	y-o-y (%)
Algeria	4.05	4.0%	1.08	2.1%	3.17	6.5%	4.17	30.6%	-1.00	-2.8%
Bolivia	-1.96	-13.1%	0.29	6.4%	-2.32	-22.3%			-2.32	-22.3%
Egypt	-7.68	-11.5%	0.86	1.4%	-6.42	-53.3%	-6.14	-54.3%	-0.29	-38.7%
Eq. Guinea	-1.00	-12.4%	0.04	1.8%	-1.17	-20.3%	-1.17	-20.3%		
Iran	6.36	2.4%	10.60	4.3%	-2.23	-12.3%			-2.23	-12.3%
Libya	-0.30	-2.4%	-0.15	-1.5%	-0.14	-5.6%			-0.14	-5.6%
Nigeria	7.46	16.8%	1.71	13.2%	-4.68	-18.3%	-4.72	-19.0%	0.04	4.6%
Qatar	0.56	0.3%	1.19	2.8%	-4.63	-3.5%	-1.25	-1.2%	-3.37	-14.0%
Russia	-27.13	-4.2%	9.00	1.8%	-39.59	-22.9%	-1.51	-3.4%	-38.08	-29.5%
Trinidad and Tobago	-1.79	-6.5%	-0.48	-3.4%	-0.47	-4.4%	-0.47	-4.4%		
United Arab Emirates	3.02	5.4%	3.76	5.4%	-0.36	-5.0%	-0.36	-5.0%		
Venezuela	0.37	1.6%	2.76	19.9%						
<b>Total</b>	<b>-18.04</b>	<b>-1.3%</b>	<b>30.72</b>	<b>2.8%</b>	<b>-58.84</b>	<b>-13.5%</b>	<b>-11.44</b>	<b>-5.1%</b>	<b>-47.39</b>	<b>-22.0%</b>

### 1.7. Progress in Reducing Gas Flaring in 2023

In 2023, GECF Countries made **significant strides** in reducing gas flaring, contributing to lower greenhouse gas emissions and improved resource efficiency. In Africa, Algeria achieved a **slight reduction**, cutting flaring by 0.4 Bcm, representing a 5% decrease and reflecting its commitment to efficient gas usage and sustainable energy practices. Nigeria reduced gas flaring by 4%, bringing levels down to 5.10 Bcm, showcasing consistent efforts to lower emissions.

In South America, Trinidad and Tobago **stood out** with a remarkable 33% decrease, lowering flaring to 0.06 Bcm. Bolivia achieved a 30% reduction, cutting flaring to 0.09 Bcm, signalling significant progress despite smaller initial volumes. Peru cut gas flaring by 8%, bringing levels down to 0.11 Bcm. Venezuela made **substantial progress**, reducing flaring by 18% to 14.31 Bcm, a step forward in its commitment to improved gas management.

In the Middle East, Iraq registered a 2% reduction, lowering flaring levels to 15.85 Bcm, reflecting **incremental improvements** in environmental performance. In Southeast Asia, Malaysia recorded a 12% decrease, reducing flaring to 0.90 Bcm. In Eurasia, Russia achieved **significant reductions**, cutting flaring by 23%. This marked a **notable advancement** in its environmental practices. **Altogether**, these efforts resulted in a total reduction of 50.79 Bcm in gas flaring for 2023. These achievements highlight the global momentum toward sustainable energy practices and reducing the environmental impacts of gas flaring.

### 1.8. 2023 in Focus: A Milestone Year in GECF's Decade of Energy Leadership

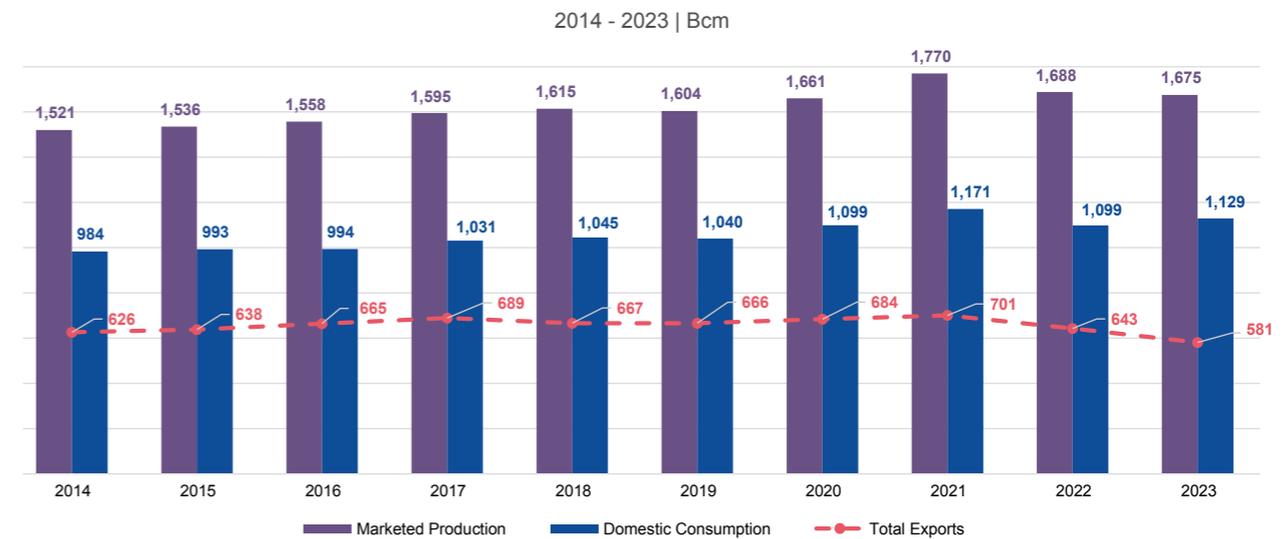
The year 2023 demonstrated the remarkable **resilience, adaptability, and leadership** of GECF Countries, even amid global energy market fluctuations. GECF Countries collectively maintained their **crucial role** in global energy security by balancing domestic needs with international trade, advancing infrastructure investments, and supporting a steady growth trajectory for natural gas.

**Gross production** of natural gas across GECF Countries remained **robust** in 2023, reaching approximately **2,068 Bcm**. While marketed production experienced a slight decline of **1.6%**, this stability reflects the capacity of GECF Countries to adapt to evolving global demand, with increased contributions from countries like **Algeria, Nigeria, and Iran** offsetting reductions elsewhere.

**Domestic consumption** reached a decade-high of **1,129 Bcm**, continuing its upward trend as natural gas remained a key energy source for power generation and residential needs. This growth underscores GECF Countries' commitment to meeting their populations' rising energy demands while supporting economic growth and industrial expansion. At the same time, GECF Countries contributed **581 Bcm** to global natural gas exports, reaffirming their role as reliable suppliers to international markets.

As demand for cleaner, more reliable energy sources **continue to grow**, the achievements of 2023 position GECF Countries **as indispensable players** in driving the transition to a more sustainable global energy system. With a stable foundation in production, consumption, and trade, GECF Countries are well-prepared to meet the opportunities and challenges of the years to come.

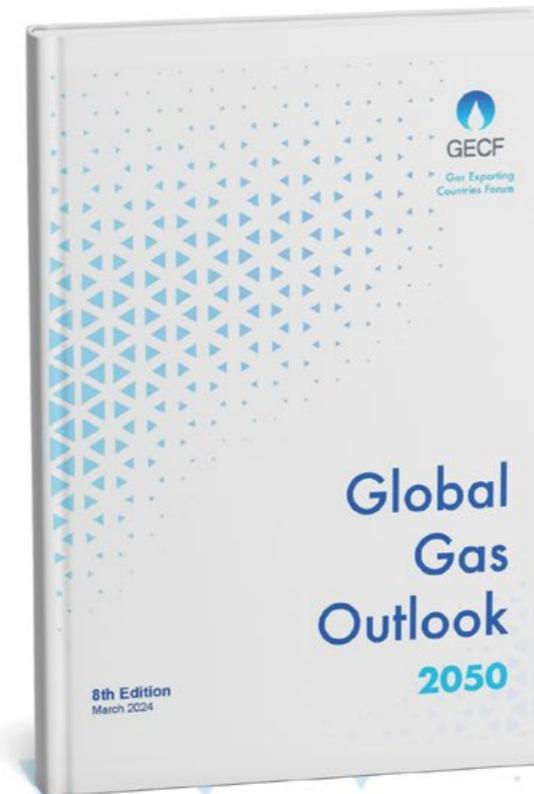
**Figure 1.7.1** GECF Natural Gas Marketed Production, Domestic Consumption and Exports



Discover More



# Global Gas Outlook 2050



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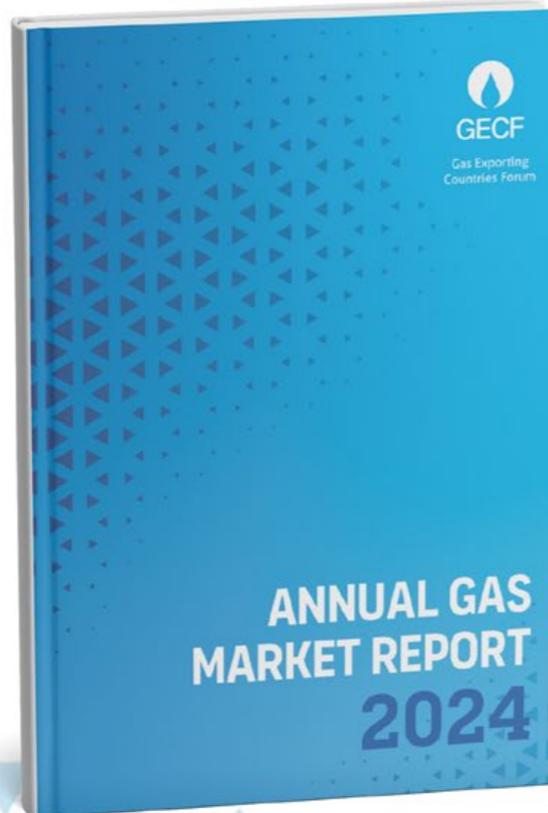
SECTION  
**02**

**GECF Macro  
& Energy Economics**

Discover More



# Annual Gas Market Report



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## 2.1 Macroeconomics

### 2.1.1 Population

Table 2.1.1.1 GECF Countries Population (Million Inhabitants)

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	% Change 22/23	CAGR (2014-2023)
<b>Members</b>												
Algeria	39.10	40.07	40.84	41.70	42.63	43.42	44.23	44.62	45.83	46.55	1.6%	2.0%
Bolivia	10.69	10.85	11.02	11.18	11.35	11.51	11.68	11.84	12.01	12.17	1.4%	1.5%
Egypt	90.42	92.44	94.45	96.44	98.42	100.39	102.33	104.26	110.99	112.72	1.6%	2.5%
Equatorial Guinea	1.30	1.35	1.40	1.45	1.50	1.55	1.60	1.63	1.67	1.71	2.4%	3.2%
Iran	79.96	81.79	83.31	84.51	85.62	86.56	87.29	87.92	88.55	89.17	0.7%	1.2%
Libya	6.10	6.19	6.28	6.38	6.48	6.57	6.65	6.74	6.81	6.89	1.1%	1.4%
Nigeria	176.40	181.14	185.96	190.87	195.87	200.96	206.14	211.40	221.06	223.80	1.2%	2.7%
Qatar	2.21	2.41	2.60	2.71	2.77	2.81	2.76	2.69	2.70	2.72	0.8%	2.3%
Russia	144.24	144.64	145.02	145.29	145.40	145.45	145.25	144.75	144.24	143.83	-0.3%	0.0%
Trinidad and Tobago	1.35	1.35	1.35	1.36	1.36	1.36	1.37	1.37	1.37	1.37	0.1%	0.2%
United Arab Emirates	8.84	8.92	8.99	9.07	9.14	9.21	9.29	9.37	9.44	9.52	0.8%	0.8%
Venezuela	30.19	30.53	30.74	30.56	29.83	28.97	28.49	28.20	28.30	28.84	1.9%	-0.5%
<b>Observers</b>												
Angola	27.13	28.13	29.15	30.21	31.27	32.35	33.43	34.50	35.59	36.68	3.1%	3.4%
Azerbaijan	9.54	9.65	9.76	9.85	9.94	10.02	10.09	10.14	10.14	10.11	-0.3%	0.7%
Iraq	36.75	37.76	38.70	39.62	40.59	41.56	42.56	43.53	44.50	45.50	2.3%	2.4%
Malaysia	30.61	31.07	31.53	31.98	32.40	32.80	33.20	33.57	33.94	34.31	1.1%	1.3%
Mauritania	3.84	3.95	4.05	4.16	4.27	4.38	4.50	4.61	4.74	4.86	2.7%	2.6%
Mozambique	26.04	26.84	27.70	28.57	29.42	30.29	31.18	32.08	32.97	33.90	2.8%	3.0%
Peru	30.35	30.71	31.13	31.61	32.20	32.82	33.30	33.72	34.05	34.35	0.9%	1.4%
Senegal	13.97	14.36	14.75	15.16	15.57	16.00	16.44	16.88	17.32	17.76	2.6%	2.7%

Figure 2.1.1.1 GECF Countries Population

2014 - 2023 | Million Inhabitants



Note: GECF figures incorporate data from Members and Observers, reflecting their membership for each particular year.

## 2.1.2 Nominal GDP

Table 2.1.2.1 GECF Countries GDP (Current Billion US\$)

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
<b>Members</b>										
Algeria	213.81	165.98	160.13	167.40	173.88	171.76	145.01	163.42	194.99	239.99
Bolivia	33.24	33.24	34.19	37.78	40.58	41.19	36.90	40.70	44.33	45.46
Egypt	305.60	329.37	332.44	235.73	249.71	303.08	365.25	404.14	476.75	395.93
Equatorial Guinea	21.77	13.19	11.24	12.20	13.10	11.36	10.10	12.22	13.49	12.12
Iran	460.38	408.21	457.95	486.63	329.69	283.65	239.74	359.10	413.39	401.50
Libya	57.37	48.72	49.91	67.16	76.68	72.08	65.69	47.79	55.94	50.49
Nigeria	546.68	486.80	404.65	375.75	397.19	448.12	432.29	440.78	477.39	362.81
Qatar	206.22	161.74	151.73	161.10	183.33	176.37	144.41	179.73	235.77	213.00
Russia	2,059.24	1,363.48	1,276.79	1,574.20	1,657.33	1,693.12	1,493.08	1,843.39	2,266.03	2,021.42
Trinidad and Tobago	28.20	25.54	23.44	24.15	24.64	23.79	20.81	24.53	30.07	28.14
United Arab Emirates	414.11	370.28	369.26	390.52	427.05	417.99	349.47	415.18	507.53	504.17
Venezuela	203.82	323.60	279.25	143.84	98.44	63.96	47.26	57.67	92.10	97.12
<b>Observers</b>										
Angola	135.97	90.50	52.76	73.69	79.45	70.90	48.50	66.51	104.40	84.72
Azerbaijan	75.24	53.08	37.87	40.87	47.11	48.17	42.69	54.83	78.81	72.36
Iraq	228.42	166.77	166.74	187.22	227.37	233.64	180.90	209.69	286.64	250.84
Malaysia	338.06	301.35	301.26	319.11	358.79	365.28	337.01	372.70	406.31	399.65
Mauritania	6.59	6.17	6.40	6.80	7.47	7.89	8.26	9.22	9.74	10.45
Mozambique	17.98	16.21	12.07	13.26	15.02	15.51	14.24	16.17	18.41	20.60
Peru	200.79	189.80	191.90	211.01	222.60	228.35	201.41	226.35	246.49	267.60
Senegal	19.78	17.77	19.04	20.99	23.12	23.40	24.53	27.52	27.62	31.01

Table 2.1.2.2 GECF Countries GDP per capita (Current US\$)

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
<b>Members</b>										
Algeria	5,468.29	4,141.96	3,920.78	4,014.47	4,079.01	3,955.41	3,278.74	3,662.80	4,254.20	5,155.20
Bolivia	3,110.61	3,063.28	3,103.54	3,378.69	3,576.20	3,577.86	3,159.95	3,436.93	3,692.31	3,735.57
Egypt	3,379.56	3,562.93	3,519.87	2,444.29	2,537.13	3,019.09	3,569.21	3,876.36	4,295.41	3,512.58
Equatorial Guinea	16,804.92	9,788.98	8,035.31	8,410.40	8,719.19	7,317.39	6,198.94	7,473.93	8,052.26	7,066.62
Iran	5,757.54	4,990.94	5,497.24	5,758.59	3,850.75	3,276.75	2,746.42	4,084.20	4,668.46	4,502.55
Libya	9,408.75	7,867.51	7,945.00	10,529.12	11,838.30	10,972.90	9,872.11	6,018.45	7,095.00	8,211.38
Nigeria	3,098.99	2,687.48	2,176.00	1,968.57	2,027.78	2,229.86	2,097.09	2,085.03	2,184.42	1,621.12
Qatar	93,126.15	66,984.91	58,467.24	59,407.70	66,264.08	62,827.40	52,315.66	66,858.74	87,480.42	69,540.00
Russia	14,055.47	9,277.71	8,663.16	10,658.91	11,211.89	11,447.70	10,108.33	12,521.52	15,445.24	13,817.05
Trinidad and Tobago	20,925.97	18,889.96	17,293.97	17,781.24	18,100.04	17,424.71	15,222.25	17,946.65	22,031.78	18,332.96
United Arab Emirates	46,865.96	41,525.14	41,054.54	43,063.97	46,722.27	45,376.17	37,629.17	44,332.34	53,707.98	52,976.81
Venezuela	6,784.28	10,757.16	9,354.68	4,892.14	3,407.64	2,242.96	1,661.81	2,045.05	3,254.22	3,367.72
<b>Observers</b>										
Angola	5,011.98	3,217.34	1,809.71	2,439.37	2,540.51	2,191.35	1,450.91	1,927.47	2,933.48	2,309.52
Azerbaijan	7,890.84	5,500.50	3,880.69	4,147.20	4,739.79	4,805.75	4,229.91	5,408.05	7,770.59	7,155.08
Iraq	6,215.99	4,416.94	4,308.85	4,725.19	5,601.47	5,621.18	4,250.74	4,816.78	6,441.92	5,512.48
Malaysia	11,045.58	9,699.60	9,555.67	9,979.70	11,073.98	11,132.10	10,164.34	11,134.62	11,993.19	11,648.67
Mauritania	1,715.39	1,562.73	1,579.20	1,634.64	1,749.95	1,800.88	1,836.29	1,998.39	2,057.38	2,149.41
Mozambique	690.44	603.84	435.76	464.29	510.38	512.22	456.58	504.04	558.30	608.44
Peru	6,614.83	6,180.12	6,163.86	6,676.31	6,912.10	6,956.50	6,047.48	6,713.66	7,239.11	7,789.87
Senegal	1,417.09	1,238.13	1,290.75	1,385.20	1,484.23	1,462.68	1,492.48	1,630.70	1,594.99	1,745.97

## 2.1.3 Annual Real GDP growth

Table 2.1.3.1 GECF Countries Real GDP Growth (%)

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
<b>Members</b>										
Algeria	3.8	3.8	3.3	1.6	1.4	0.8	-4.9	3.4	3.6	4.1
Bolivia	5.5	4.9	4.3	4.2	4.2	2.2	-8.7	6.1	3.6	3.1
Egypt	2.9	4.4	4.3	4.2	5.3	5.6	3.6	3.3	6.6	3.8
Equatorial Guinea	0.4	-9.1	-8.8	-5.7	-6.2	-5.5	-4.8	0.9	3.7	-5.7
Iran	5.0	-1.4	8.8	2.8	-1.8	-3.1	3.3	4.7	3.8	5.0
Libya	-23.0	-0.8	-1.5	32.5	7.9	-6.0	-58.3	153.5	1.3	-1.7
Nigeria	6.3	2.7	-1.6	0.8	1.9	2.2	-1.8	3.6	3.3	2.9
Qatar	5.3	4.8	3.1	-1.5	1.2	0.7	-3.6	1.6	4.2	1.2
Russia	0.7	-2.0	0.2	1.8	2.8	2.2	-2.7	5.6	-2.1	3.6
Trinidad and Tobago	3.9	-0.8	-7.5	-4.8	-0.6	0.4	-9.1	-1.0	1.5	2.1
United Arab Emirates	4.2	6.8	5.6	0.7	1.3	1.1	-5.0	4.4	7.9	3.4
Venezuela	-3.9	58.8	-13.7	-48.5	-31.6	-35.0	-26.1	1.0	8.0	4.0
<b>Observers</b>										
Angola	4.8	0.9	-2.6	-0.1	-1.3	-0.7	-5.6	1.2	3.0	0.9
Azerbaijan	2.8	1.1	-3.1	0.2	1.5	2.5	-4.3	5.6	4.7	1.1
Iraq	0.2	4.7	13.8	-1.8	2.6	5.5	-12.0	1.5	7.6	-2.9
Malaysia	6.0	5.1	4.4	5.8	4.8	4.4	-5.5	3.3	8.7	3.7
Mauritania	4.3	5.4	1.3	6.3	4.8	3.1	-0.4	0.7	6.4	3.4
Mozambique	7.7	7.4	4.7	2.6	3.5	2.3	-1.2	2.4	4.4	5.0
Peru	2.4	3.3	4.0	2.5	4.0	2.2	-10.9	13.4	2.7	-0.6
Senegal	6.2	6.4	6.4	7.4	6.2	4.6	1.3	6.5	3.8	3.7

## 2.1.4 Export and Imports of Goods and Services

Table 2.1.4.1 GECF Countries Export of Goods and Services (Current Billion US\$)

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	% Change 22/23
<b>Members</b>											
Algeria	64.66	38.58	33.40	37.94	44.56	39.01	25.11	38.64	65.53	60.37	-7.9%
Bolivia	14.39	10.26	8.37	9.41	10.55	10.28	7.48	11.33	14.46	11.61	-19.7%
Egypt	43.53	43.42	34.39	37.29	47.23	53.04	47.87	44.85	71.93	71.93	0.0%
Equatorial Guinea	14.36	7.47	5.78	7.18	7.81	5.81	4.04	5.51	7.72	5.79	-25.0%
Iran	105.11	76.42	96.91	110.64	102.59	66.61	46.57	82.01	110.86	114.99	3.7%
Libya	18.50	10.83	7.28	18.27	30.38	29.74	9.67	32.87	38.09	34.65	-9.0%
Nigeria	100.78	51.92	37.30	49.49	61.55	63.73	35.08	47.34	68.12	82.86	21.6%
Qatar	140.23	92.29	72.40	85.20	102.56	92.05	70.93	105.86	161.69	NA	-
Russia	558.28	391.37	330.11	410.72	510.35	481.54	381.07	548.80	635.07	466.60	-26.5%
Trinidad and Tobago	13.83	10.18	7.25	8.80	9.68	7.22	5.54	8.66	13.33	7.78	-41.6%
United Arab Emirates	401.37	361.25	360.63	384.04	392.86	404.05	335.24	425.15	532.80	570.17	7.0%
Venezuela	80.52	37.25	27.61	33.89	33.60	20.68	8.24	10.10	17.70	16.91	-4.5%
<b>Observers</b>											
Angola	60.77	26.93	14.84	21.37	32.44	28.92	18.58	31.75	46.35	33.78	-27.1%
Azerbaijan	32.56	20.06	17.58	19.84	25.48	23.63	15.21	25.49	47.27	35.49	-24.9%
Iraq	88.95	57.56	46.87	63.50	92.77	88.90	50.20	78.26	127.08	109.71	-13.7%
Malaysia	249.47	209.29	201.17	223.41	245.97	238.38	207.80	264.02	313.21	273.43	-12.7%
Mauritania	2.46	1.86	2.17	2.35	2.73	3.35	3.42	3.68	4.81	4.62	-3.9%
Mozambique	5.89	5.28	4.27	5.44	6.84	5.76	4.67	6.52	9.67	NA	-
Peru	45.39	40.40	43.37	52.16	56.08	54.89	46.35	65.97	71.25	72.49	1.7%
Senegal	4.31	4.03	4.11	4.60	5.31	5.85	5.08	6.78	7.42	7.93	6.9%

**Table 2.1.4.2** GECF Countries Import of Goods and Services (Current Billion US\$)

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	% Change 22/23
<b>Members</b>											
Algeria	68.31	60.81	56.09	55.60	56.24	49.97	40.60	43.02	43.06	50.44	17.1%
Bolivia	13.95	12.32	10.91	12.01	12.63	12.95	9.31	12.70	15.58	14.06	-9.8%
Egypt	69.30	71.35	66.16	69.09	73.33	78.01	75.43	81.94	104.39	84.51	-19.0%
Equatorial Guinea	8.36	5.57	4.63	5.32	5.77	4.97	3.67	3.89	5.43	4.76	-12.3%
Iran	103.68	84.51	88.05	107.10	90.50	77.35	58.46	77.33	102.45	108.03	5.4%
Libya	25.41	16.89	13.24	13.67	18.53	24.95	14.10	25.01	24.38	20.85	-14.5%
Nigeria	68.06	51.92	46.55	49.51	69.55	88.74	35.59	47.34	72.27	101.14	39.9%
Qatar	64.00	59.27	63.48	62.19	65.81	66.77	59.06	61.33	74.52	NA	-
Russia	426.06	281.64	263.83	327.21	344.52	352.81	305.01	376.52	345.18	378.93	9.8%
Trinidad and Tobago	10.71	8.76	7.98	6.95	7.76	6.36	4.89	5.79	6.25	8.95	43.2%
United Arab Emirates	277.89	266.28	270.44	290.78	281.54	295.60	246.89	347.53	417.03	470.50	12.8%
Venezuela	151.45	36.50	17.98	13.36	13.51	7.19	8.41	12.00	18.00	18.03	0.2%
<b>Observers</b>											
Angola	47.10	29.99	13.32	17.13	20.29	12.08	13.40	17.77	26.41	22.59	-14.5%
Azerbaijan	19.72	18.47	16.53	17.10	17.70	17.71	15.54	16.34	21.27	25.02	17.6%
Iraq	68.62	58.50	44.15	48.42	56.84	72.28	54.26	50.71	69.16	86.75	25.4%
Malaysia	218.12	186.60	181.13	201.50	221.90	210.89	186.31	236.99	283.75	253.48	-10.7%
Mauritania	3.57	2.91	2.51	3.01	3.93	4.03	3.75	4.47	5.36	5.45	1.7%
Mozambique	15.02	10.73	9.05	8.58	11.88	10.62	9.55	11.60	15.28	NA	-
Peru	48.68	45.32	43.73	48.10	52.18	52.30	42.77	59.14	69.87	63.75	-8.8%
Senegal	7.26	6.29	6.19	7.51	8.98	9.19	9.65	12.31	14.69	13.61	-7.4%

## 2.2 Energy Economics

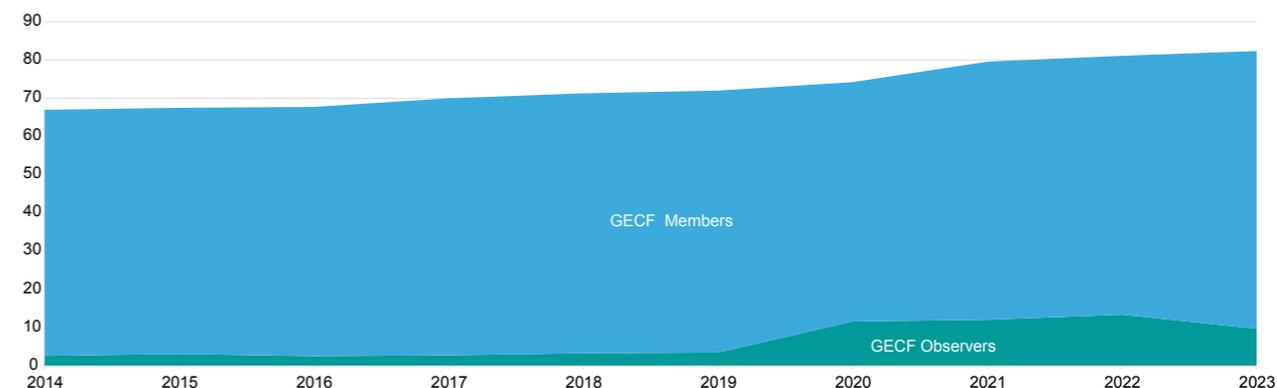
### 2.2.1 Primary Energy Consumption (EJ)

**Table 2.2.1** GECF Countries Primary Energy Consumption (EJ)

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	% Change 22/23
<b>Members</b>											
Algeria	2.40	2.56	2.47	2.48	2.69	2.77	2.65	2.86	2.96	2.97	0.3%
Bolivia	0.30	0.31	0.34	0.35	0.35	0.35	0.31	0.38	0.40	0.41	2.5%
Egypt	3.53	3.46	3.75	4.01	3.99	4.23	3.87	4.22	4.28	4.36	1.9%
Equatorial Guinea	0.12	0.09	0.12	0.12	0.10	0.09	0.09	0.10	0.10	0.10	-1.5%
Iran	10.23	10.70	10.26	11.56	11.20	11.56	11.45	12.45	13.17	13.47	2.2%
Libya	0.92	0.88	0.90	1.00	0.90	0.77	0.63	0.77	0.77	0.82	6.8%
Nigeria	5.90	5.94	6.02	6.12	6.30	6.41	6.54	7.22	7.39	7.38	0.0%
Qatar	1.91	1.85	1.84	1.98	1.97	2.04	2.02	2.06	2.05	2.17	5.9%
Russia	31.74	31.03	32.07	32.60	33.92	33.84	33.11	35.32	34.43	34.47	0.1%
Trinidad and Tobago	0.88	0.87	0.77	0.78	0.78	0.73	0.64	0.68	0.65	0.66	1.4%
United Arab Emirates	3.60	3.98	3.98	3.82	3.81	4.09	4.07	4.21	4.27	4.44	4.0%
Venezuela	2.80	2.70	2.61	2.40	1.94	1.61	1.27	1.39	1.46	1.37	-6.5%
<b>Observers</b>											
Angola	0.50	0.52	0.55	0.53	0.51	0.50	0.49	0.54	0.56	0.61	9.2%
Azerbaijan	0.61	0.60	0.58	0.60	0.59	0.66	0.65	0.69	0.69	0.70	1.2%
Iraq	1.71	2.15	1.53	1.75	1.79	1.93	1.73	1.83	2.27	2.42	6.7%
Malaysia	3.62	3.38	3.55	3.95	4.14	4.22	3.72	3.71	3.98	4.17	4.7%
Mauritania	0.05	0.06	0.05	0.07	0.08	0.08	0.09	0.08	0.09	0.10	5.0%
Mozambique	0.41	0.42	0.43	0.43	0.44	0.45	0.44	0.46	0.47	0.51	8.6%
Peru	0.94	0.97	1.05	1.03	1.03	1.07	0.96	1.10	1.17	1.22	4.1%
Senegal	0.14	0.15	0.14	0.15	0.16	0.17	0.16	0.18	0.20	0.21	5.0%

**Figure 2.2.1** GECF Countries Primary Energy Consumption

2014 - 2023 | EJ



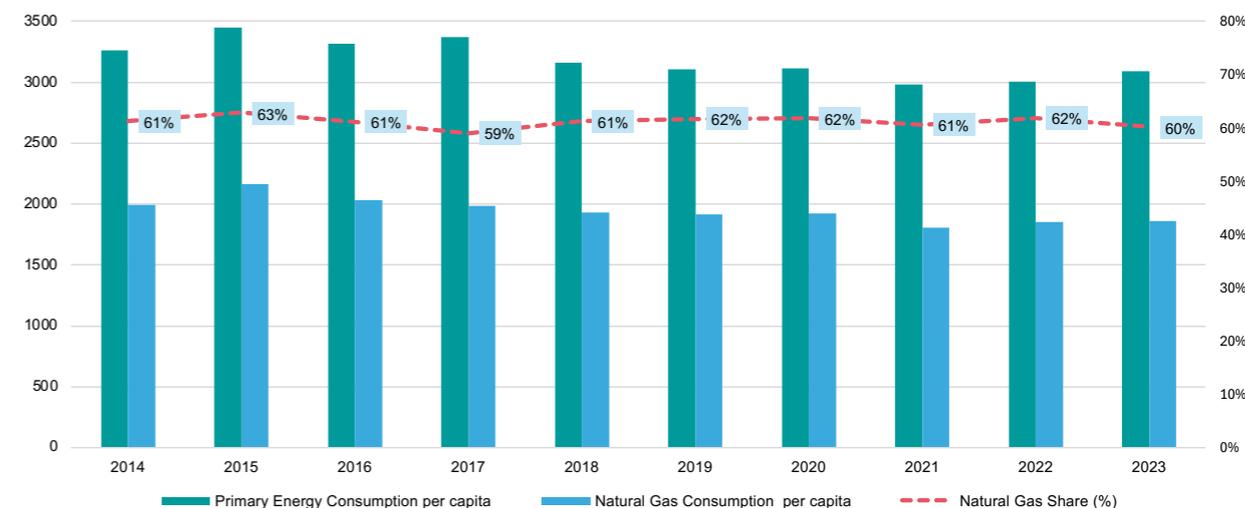
Note: GECF figures incorporate data from Members and Observers, reflecting their membership for each particular year.

## 2.2.2 Primary Energy Consumption per capita

Table 2.2.2 GECF Countries Primary Energy Consumption (GJ per capita)

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	% Change 22/23
<b>Members</b>											
Algeria	61.33	63.92	60.55	59.46	63.00	63.74	59.84	64.13	64.69	63.85	-1.3%
Bolivia	27.65	28.47	30.91	31.50	30.98	30.27	26.63	31.75	32.98	33.36	1.2%
Egypt	39.09	37.42	39.71	41.54	40.54	42.15	37.84	40.47	38.52	38.65	0.3%
Equatorial Guinea	89.65	63.83	85.97	79.65	68.67	56.49	56.15	63.29	59.88	57.61	-3.8%
Iran	127.96	130.88	123.11	136.76	130.80	133.52	131.20	141.60	148.78	151.03	1.5%
Libya	151.30	142.86	143.53	157.54	138.51	116.46	94.70	114.32	112.32	118.67	5.7%
Nigeria	33.47	32.79	32.37	32.05	32.15	31.91	31.72	34.17	33.42	33.00	-1.3%
Qatar	863.65	766.01	707.98	729.25	710.27	726.64	730.88	765.74	759.86	798.77	5.1%
Russia	220.08	214.53	221.15	224.36	233.29	232.67	227.99	244.03	238.74	239.64	0.4%
Trinidad and Tobago	651.72	647.76	570.30	575.68	576.70	534.79	466.83	500.63	476.01	481.85	1.2%
United Arab Emirates	407.28	446.17	442.15	421.15	416.81	444.17	438.31	449.11	452.46	466.97	3.2%
Venezuela	92.70	88.40	84.96	78.56	65.00	55.63	44.44	49.39	51.67	47.43	-8.2%
<b>Observers</b>											
Angola	18.61	18.40	18.91	17.64	16.35	15.47	14.75	15.76	15.76	16.70	6.0%
Azerbaijan	63.55	62.32	59.85	60.55	59.06	65.63	64.41	67.86	68.29	69.32	1.5%
Iraq	46.48	56.99	39.61	44.05	44.04	46.37	40.69	42.12	51.00	53.23	4.4%
Malaysia	118.13	108.74	112.46	123.38	127.79	128.61	112.04	110.61	117.40	121.55	3.5%
Mauritania	13.55	14.81	13.32	16.16	19.03	19.23	19.15	17.91	19.63	20.07	2.3%
Mozambique	15.75	15.80	15.59	15.19	14.97	14.72	14.03	14.49	14.29	15.10	5.7%
Peru	30.92	31.73	33.70	32.53	31.93	32.70	28.73	32.77	34.47	35.55	3.1%
Senegal	9.84	10.14	9.66	10.07	10.12	10.82	9.83	10.72	11.39	11.66	2.4%

Figure 2.2.2 GECF Countries Primary Energy Consumption per capita and Natural Gas Consumption per capita 2014 - 2023 (GJ/capita)



Note: GECF figures incorporate data from Members and Observers, reflecting their membership for each particular year.

## 2.2.4 Energy Intensity

Table 2.2.4 GECF Countries Energy Intensity (MJ per current USD of GDP)

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	% Change 22/23
<b>Members</b>											
Algeria	11.22	15.43	15.44	14.81	15.44	16.11	18.25	17.51	15.20	12.39	-18.5%
Bolivia	8.89	9.30	9.96	9.32	8.66	8.46	8.43	9.24	8.93	8.93	0.0%
Egypt	11.57	10.50	11.28	17.00	15.98	13.96	10.60	10.44	8.97	11.00	22.7%
Equatorial Guinea	5.33	6.52	10.70	9.47	7.88	7.72	8.87	8.47	7.43	8.15	9.6%
Iran	22.22	26.22	22.39	23.75	33.97	40.75	47.77	34.67	31.87	33.54	5.3%
Libya	16.08	18.16	18.07	14.96	11.70	10.61	9.59	16.11	13.68	16.19	18.4%
Nigeria	10.80	12.20	14.88	16.28	15.86	14.31	15.13	16.39	15.47	20.35	31.5%
Qatar	9.27	11.44	12.11	12.28	10.72	11.57	13.97	11.45	8.69	10.19	17.3%
Russia	15.42	22.76	25.12	20.71	20.47	19.99	22.18	19.16	15.20	17.05	12.2%
Trinidad and Tobago	31.09	34.23	32.94	32.34	31.81	30.66	30.66	27.91	21.62	23.42	8.3%
United Arab Emirates	8.69	10.74	10.77	9.78	8.92	9.79	11.65	10.13	8.42	8.81	4.7%
Venezuela	13.73	8.34	9.35	16.69	19.69	25.20	26.79	24.15	15.88	14.08	-11.3%
<b>Observers</b>											
Angola	3.71	5.72	10.45	7.23	6.44	7.06	10.16	8.18	5.37	7.23	34.6%
Azerbaijan	8.05	11.33	15.42	14.60	12.46	13.66	15.23	12.55	8.79	9.69	10.2%
Iraq	7.48	12.90	9.19	9.32	7.86	8.25	9.57	8.74	7.92	9.66	22.0%
Malaysia	10.69	11.21	11.77	12.36	11.54	11.55	11.04	9.96	9.81	10.43	6.4%
Mauritania	7.90	9.47	8.43	9.88	10.88	10.68	10.43	8.96	9.54	9.34	-2.1%
Mozambique	22.81	26.16	35.77	32.72	29.33	28.73	30.72	28.74	25.58	24.84	-2.9%
Peru	4.67	5.13	5.47	4.87	4.62	4.70	4.75	4.88	4.76	4.56	-4.2%
Senegal	6.95	8.19	7.49	7.27	6.81	7.40	6.59	6.58	7.14	6.68	-6.5%

## 2.2.3 Natural Gas Consumption per capita

Table 2.2.3 GECF Countries Natural Gas Consumption (GJ per capita)

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	% Change 22/23
<b>Members</b>											
Algeria	36.16	38.21	37.64	38.11	40.24	40.60	38.69	42.21	42.96	43.18	0.5%
Bolivia	13.48	13.83	15.43	15.19	16.26	14.99	11.70	13.11	14.09	14.80	5.0%
Egypt	20.19	19.65	20.63	22.91	23.66	22.94	22.34	23.13	20.88	20.85	-0.1%
Equatorial Guinea	42.46	35.82	43.17	41.26	38.49	36.34	30.90	51.31	52.52	52.25	-0.5%
Iran	89.35	94.30	96.32	97.92	101.12	101.50	101.43	104.27	105.09	108.88	3.6%
Libya	54.98	53.60	48.34	48.63	48.80	48.56	43.95	56.09	56.29	44.53	-20.9%
Nigeria	2.83	2.33	1.81	2.20	2.36	2.29	2.43	2.49	2.23	2.49	11.8%
Qatar	695.32	644.46	566.67	532.80	562.01	562.12	557.34	547.91	592.18	604.17	2.0%
Russia	122.51	116.91	116.35	121.09	127.80	125.66	120.48	135.49	128.20	130.94	2.1%
Trinidad and Tobago	470.69	468.52	422.57	413.03	421.76	423.28	368.49	404.88	392.90	378.96	-3.5%
United Arab Emirates	283.41	309.94	303.26	300.03	291.19	281.46	289.52	281.80	279.71	292.51	4.6%
Venezuela	24.91	31.01	31.67	31.79	27.06	23.02	19.77	19.13	18.60	21.90	17.7%
<b>Observers</b>											
Angola	0.42	1.04	1.04	0.99	1.41	1.53	1.40	1.31	1.29	1.24	-3.8%
Azerbaijan	43.33	44.90	43.60	41.95	42.37	47.01	47.68	49.24	52.25	57.45	10.0%
Iraq	7.03	6.95	8.29	9.72	12.50	16.01	16.77	16.87	16.53	17.23	4.2%
Malaysia	43.68	38.84	38.92	39.57	40.34	42.82	38.01	39.18	40.45	39.93	-1.3%
Mauritania	-	-	-	-	-	-	-	-	-	-	-
Mozambique	2.63	2.69	2.48	2.36	1.73	1.85	1.72	1.47	1.44	1.29	-10.4%
Peru	9.60	9.47	10.40	9.00	9.33	9.56	8.15	9.03	10.50	10.65	1.4%
Senegal	0.10	0.06	0.06	0.05	0.03	0.04	0.04	0.02	0.01	0.01	-19.0%

## 2.2.5 Natural Gas Consumption per GDP

Table 2.2.5 GECF Countries Natural Gas consumption per GDP (MJ Per Current USD of GDP)

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	% Change 22/23
<b>Members</b>											
Algeria	6.61	9.23	9.60	9.49	9.86	10.26	11.80	11.52	10.10	8.38	-17.1%
Bolivia	4.33	4.51	4.97	4.50	4.55	4.19	3.70	3.81	3.82	3.96	3.8%
Egypt	5.97	5.51	5.86	9.37	9.33	7.60	6.26	5.97	4.86	5.94	22.1%
Equatorial Guinea	2.53	3.66	5.37	4.91	4.41	4.97	4.88	6.86	6.52	7.39	13.4%
Iran	15.52	18.89	17.52	17.00	26.26	30.98	36.93	25.53	22.51	24.18	7.4%
Libya	5.84	6.81	6.08	4.62	4.12	4.43	4.45	7.91	6.85	6.08	-11.4%
Nigeria	0.91	0.87	0.83	1.12	1.16	1.03	1.16	1.19	1.03	1.54	48.9%
Qatar	7.47	9.62	9.69	8.97	8.48	8.95	10.65	8.20	6.77	7.70	13.8%
Russia	8.58	12.40	13.21	11.18	11.21	10.80	11.72	10.64	8.16	9.32	14.2%
Trinidad and Tobago	22.46	24.76	24.41	23.20	23.27	24.27	24.20	22.57	17.85	18.42	3.2%
United Arab Emirates	6.05	7.46	7.39	6.97	6.23	6.20	7.69	6.36	5.20	5.52	6.1%
Venezuela	3.69	2.93	3.49	6.75	8.20	10.43	11.92	9.36	5.72	6.50	13.7%
<b>Observers</b>											
Angola	0.08	0.32	0.58	0.41	0.55	0.70	0.96	0.68	0.44	0.54	22.2%
Azerbaijan	5.49	8.16	11.24	10.11	8.94	9.78	11.27	9.10	6.72	8.03	19.4%
Iraq	1.13	1.57	1.92	2.06	2.23	2.85	3.95	3.50	2.57	3.13	21.8%
Malaysia	3.95	4.00	4.07	3.97	3.64	3.85	3.75	3.53	3.38	3.43	1.5%
Mauritania	-	-	-	-	-	-	-	-	-	-	-
Mozambique	3.80	4.45	5.69	5.09	3.39	3.61	3.77	2.92	2.58	2.12	-17.7%
Peru	1.45	1.53	1.69	1.35	1.35	1.37	1.35	1.34	1.45	1.37	-5.7%
Senegal	0.07	0.05	0.05	0.04	0.02	0.03	0.03	0.01	0.01	0.01	-26.0%

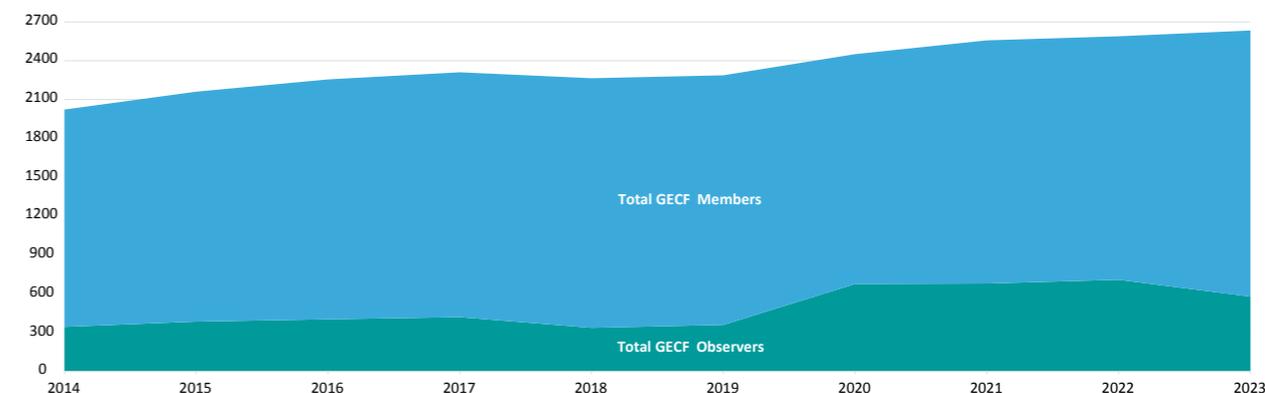
## 2.2.6 Domestic Consumption of Electricity

Table 2.2.6 GECF Countries Domestic Consumption of Electricity (TWh)

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	% Change 22/23
<b>Members</b>											
Algeria	52.42	56.28	57.90	61.94	62.67	66.61	64.73	68.95	72.39	76.38	5.5%
Bolivia	7.51	7.81	8.09	8.32	8.54	8.78	8.61	9.34	9.79	10.05	2.6%
Egypt	153.10	162.76	167.64	173.96	180.92	178.49	169.83	190.21	195.88	195.34	-0.3%
Equatorial Guinea	0.94	1.06	1.14	1.09	1.11	1.14	1.15	1.17	1.14	1.17	2.3%
Iran	231.37	254.51	267.23	283.11	288.77	287.51	310.95	318.43	327.98	331.84	1.2%
Libya	27.91	26.14	23.21	23.73	27.39	28.96	21.99	24.06	24.16	24.77	2.5%
Nigeria	41.16	43.21	45.59	46.96	49.07	50.54	52.26	55.39	57.39	60.00	4.5%
Qatar	34.32	36.81	37.53	40.41	42.50	44.24	45.12	48.73	50.19	50.51	0.6%
Russia	925.01	975.88	1,034.44	1,041.30	1,059.62	1,060.26	1,037.02	1,093.86	1,071.27	1,076.74	0.5%
Trinidad and Tobago	8.90	9.04	8.90	8.81	8.72	8.68	8.72	8.75	9.00	8.79	-2.3%
United Arab Emirates	109.68	119.90	122.61	126.58	130.38	132.73	131.62	144.78	148.05	154.49	4.4%
Venezuela	86.14	83.14	78.99	75.57	68.01	60.53	55.29	59.72	62.11	65.21	5.0%
<b>Observers</b>											
Angola	8.24	8.43	9.46	9.31	11.34	13.74	14.59	14.64	15.44	15.91	3.1%
Azerbaijan	20.81	20.92	21.55	22.41	23.17	23.91	24.33	25.79	26.70	27.23	2.0%
Iraq	65.99	72.59	81.64	92.25	101.47	119.58	117.97	125.05	130.89	134.25	2.6%
Malaysia	134.08	138.10	148.95	154.91	161.79	169.70	164.97	169.92	176.72	183.79	4.0%
Mauritania	0.88	0.98	0.99	1.11	1.20	1.43	1.45	1.38	1.76	1.80	2.0%
Mozambique	12.29	12.93	13.31	13.77	13.61	14.26	13.51	14.05	14.75	16.73	13.4%
Peru	40.60	43.01	46.13	47.98	49.97	52.96	49.32	55.24	57.58	60.46	5.0%
Senegal	3.64	3.88	4.18	3.98	4.58	4.53	5.25	6.18	6.80	7.14	5.0%

Figure 2.2.6 GECF Countries Electricity Consumption

2014 - 2023 | TWh



Note: GECF figures incorporate data from Members and Observers, reflecting their membership for each particular year.

## 2.2.7 Domestic Electricity Consumption per capita

Table 2.2.7 GECF Countries Domestic Electricity consumption (MWh per capita)

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	% Change 22/23
<b>Members</b>											
Algeria	1.34	1.40	1.42	1.49	1.47	1.53	1.46	1.55	1.58	1.64	3.9%
Bolivia	0.70	0.72	0.73	0.74	0.75	0.76	0.74	0.79	0.82	0.83	1.2%
Egypt	1.69	1.76	1.77	1.80	1.84	1.78	1.66	1.82	1.76	1.73	-1.8%
Equatorial Guinea	0.72	0.79	0.82	0.75	0.74	0.74	0.72	0.71	0.68	0.68	0.0%
Iran	2.89	3.11	3.21	3.35	3.37	3.32	3.56	3.62	3.70	3.72	0.5%
Libya	4.58	4.22	3.69	3.72	4.23	4.41	3.30	3.57	3.55	3.60	1.4%
Nigeria	0.23	0.24	0.25	0.25	0.25	0.25	0.25	0.26	0.26	0.27	3.3%
Qatar	15.50	15.24	14.46	14.90	15.36	15.76	16.35	18.13	18.62	18.60	-0.2%
Russia	6.41	6.75	7.13	7.17	7.29	7.29	7.14	7.56	7.43	7.49	0.8%
Trinidad and Tobago	6.62	6.70	6.57	6.49	6.41	6.37	6.38	6.40	6.59	6.43	-2.4%
United Arab Emirates	12.41	13.45	13.63	13.96	14.26	14.41	14.17	15.46	15.68	16.23	3.5%
Venezuela	2.85	2.72	2.57	2.47	2.28	2.09	1.94	2.12	2.19	2.26	3.0%
<b>Observers</b>											
Angola	0.30	0.30	0.32	0.31	0.36	0.42	0.44	0.42	0.43	0.43	0.0%
Azerbaijan	2.18	2.17	2.21	2.27	2.33	2.38	2.41	2.54	2.63	2.69	2.3%
Iraq	1.80	1.92	2.11	2.33	2.50	2.88	2.77	2.87	2.94	2.95	0.3%
Malaysia	4.38	4.45	4.72	4.84	4.99	5.17	4.97	5.06	5.21	5.36	2.9%
Mauritania	0.23	0.25	0.24	0.27	0.28	0.33	0.32	0.30	0.37	0.37	-0.7%
Mozambique	0.47	0.48	0.48	0.48	0.46	0.47	0.43	0.44	0.45	0.49	10.3%
Peru	1.34	1.40	1.48	1.52	1.55	1.61	1.48	1.64	1.69	1.76	4.1%
Senegal	0.26	0.27	0.28	0.26	0.29	0.28	0.32	0.37	0.39	0.40	2.4%

## 2.2.8 Domestic Electricity Consumption per GDP

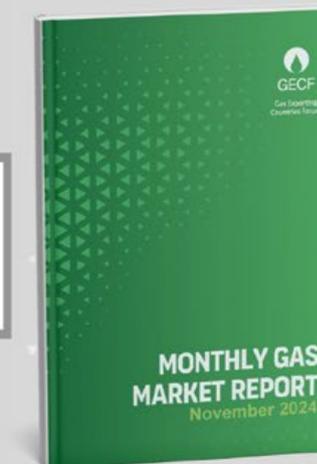
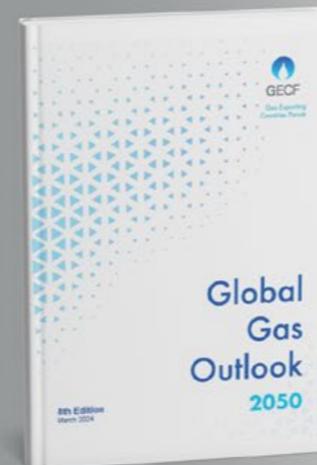
Table 2.2.8 GECF Countries Electricity Domestic Consumption (KWh per Current USD of GDP)

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	% Change 22/23
<b>Members</b>											
Algeria	0.25	0.34	0.36	0.37	0.36	0.39	0.45	0.42	0.37	0.32	-14.3%
Bolivia	0.23	0.24	0.24	0.22	0.21	0.21	0.23	0.23	0.22	0.22	0.1%
Egypt	0.50	0.49	0.50	0.74	0.72	0.59	0.46	0.47	0.41	0.49	20.1%
Equatorial Guinea	0.04	0.08	0.10	0.09	0.08	0.10	0.11	0.10	0.08	0.10	13.9%
Iran	0.50	0.62	0.58	0.58	0.88	1.01	1.30	0.89	0.79	0.83	4.2%
Libya	0.49	0.54	0.47	0.35	0.36	0.40	0.33	0.50	0.43	0.49	13.6%
Nigeria	0.08	0.09	0.11	0.12	0.12	0.11	0.12	0.13	0.12	0.17	37.6%
Qatar	0.17	0.23	0.25	0.25	0.23	0.25	0.31	0.27	0.21	0.24	11.4%
Russia	0.45	0.72	0.81	0.66	0.64	0.63	0.69	0.59	0.47	0.53	12.7%
Trinidad and Tobago	0.32	0.35	0.38	0.36	0.35	0.36	0.42	0.36	0.30	0.31	4.4%
United Arab Emirates	0.26	0.32	0.33	0.32	0.31	0.32	0.38	0.35	0.29	0.31	5.0%
Venezuela	0.42	0.26	0.28	0.53	0.69	0.95	1.17	1.04	0.67	0.67	-0.4%
<b>Observers</b>											
Angola	0.06	0.09	0.18	0.13	0.14	0.19	0.30	0.22	0.15	0.19	27.0%
Azerbaijan	0.28	0.39	0.57	0.55	0.49	0.50	0.57	0.47	0.34	0.38	11.1%
Iraq	0.29	0.44	0.49	0.49	0.45	0.51	0.65	0.60	0.46	0.54	17.2%
Malaysia	0.40	0.46	0.49	0.49	0.45	0.46	0.49	0.46	0.43	0.46	5.7%
Mauritania	0.13	0.16	0.15	0.16	0.16	0.18	0.18	0.15	0.18	0.17	-4.9%
Mozambique	0.68	0.80	1.10	1.04	0.91	0.92	0.95	0.87	0.80	0.81	1.4%
Peru	0.20	0.23	0.24	0.23	0.22	0.23	0.24	0.24	0.23	0.23	-3.3%
Senegal	0.18	0.22	0.22	0.19	0.20	0.19	0.21	0.22	0.25	0.23	-6.5%

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### 3.1 Natural Gas Proven Reserves

Table 3.1.1 Historical Natural Gas Proven Reserves of GECF Countries (Bcm)

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	% Change 22/23	CAGR (2014-2023)
World	201,132	199,583	201,138	204,087	203,171	204,160	202,368	206,472	207,230	208,117	0.4%	0.4%
GECF Totals	141,958	141,370	142,679	142,272	140,905	142,137	144,551	144,345	144,877	144,557	-0.2%	0.2%
Members	135,040	133,822	134,570	134,429	133,589	134,954	125,717	125,784	134,119	132,964	-0.9%	-0.2%
Observers	6,918	7,548	8,109	7,843	7,316	7,183	18,834	18,561	10,757	11,593	7.8%	5.9%
GECF Share	71%	71%	71%	70%	69%	70%	71%	70%	70%	69%		

Note: GECF figures incorporate data from Members and Observers, reflecting their membership for each particular year.

Figure 3.1.1 Natural Gas Proven Reserves (Bcm)

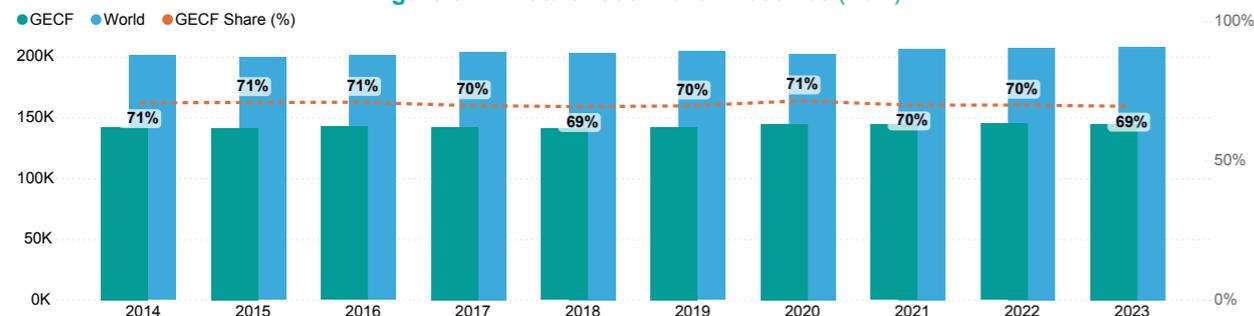


Table 3.1.2 Historical Natural Gas Proven Reserves of Current GECF Countries (Bcm)

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	% Change 22/23	CAGR (2014-2023)
<b>Members</b>												
Algeria	4,504	4,504	4,504	4,504	4,504	4,504	4,504	4,504	4,504	4,504	0%	0%
Bolivia	296	296	296	255	253	253	253	253	253	253	0%	-1.7%
Egypt	2,186	2,086	2,221	2,221	2,221	2,221	2,209	2,209	2,209	1,784	-19.2%	-2.2%
Equatorial Guinea	60	54	47	42	42	39	39	39	39	39	0%	-4.7%
Iran	34,020	33,500	33,721	33,810	33,899	33,988	33,988	33,988	33,988	33,988	0%	0%
Libya	1,505	1,505	1,505	1,505	1,505	1,505	1,505	1,505	1,505	1,505	0%	0%
Nigeria	5,303	5,280	5,475	5,627	5,685	5,761	5,750	5,848	5,913	5,943	0.5%	1.3%
Qatar	24,531	24,299	24,073	23,861	23,846	23,831	23,831	23,831	23,831	23,831	0%	-0.3%
Russia	49,896	50,205	50,617	50,508	49,571	49,154	47,759	47,759	47,759	47,152	-1.3%	-0.6%
Trinidad and Tobago	326	300	281	298	298	298	290	307	326	NA	-	-
United Arab Emirates	6,091	6,091	6,091	6,091	6,091	7,726	7,730	8,200	8,210	8,210	0%	3.4%
Venezuela	5,617	5,702	5,740	5,708	5,674	5,674	5,590	5,541	5,624	5,476	-2.6%	-0.3%
<b>Observers</b>												
Angola	308	308	440	422	384	343	301	301	129	129	0%	-9.2%
Azerbaijan	665	665	665	1,074	1,435	1,917	1,917	1,917	1,917	1,900	-0.9%	12.4%
Iraq	3,158	3,158	3,820	3,744	3,729	3,714	3,714	3,714	3,714	3,714	0%	1.8%
Malaysia	2,849	2,842	2,470	2,346	2,290	2,240	2,130	2,095	2,152	2,112	-1.8%	-3.3%
Mauritania	28	28	28	28	50	212	212	1,061	1,061	1,061	0%	49.8%
Mozambique	75	75	75	186	186	650	650	650	650	650	0%	27.1%
Peru	414	399	456	365	300	287	274	262	237	237	0%	-6.0%
Senegal	1	1	1	1	179	179	243	243	243	243	0%	86.5%

### 3.2 Natural Gas Production

Table 3.2.1 Historical Natural Gas Gross Production (Bcm)

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	% Change 22/23	CAGR (2014-2023)
World	4,336	4,389	4,418	4,567	4,720	4,838	4,728	4,843	4,918	4,985	1.4%	1.6%
GECF Totals	1,984	1,983	2,007	2,091	2,078	2,051	2,093	2,149	2,109	2,069	-1.9%	0.5%
Members	1,717	1,685	1,706	1,793	1,812	1,790	1,642	1,736	1,767	1,726	-2.3%	0.1%
Observers	267	298	301	297	267	260	451	413	342	342	0.2%	2.8%
GECF Share	46%	45%	45%	46%	44%	42%	44%	44%	43%	41%		

Note: GECF figures incorporate data from Members and Observers, reflecting their membership for each particular year.

Figure 3.2.1 GECF Natural Gas Gross Production (Bcm)

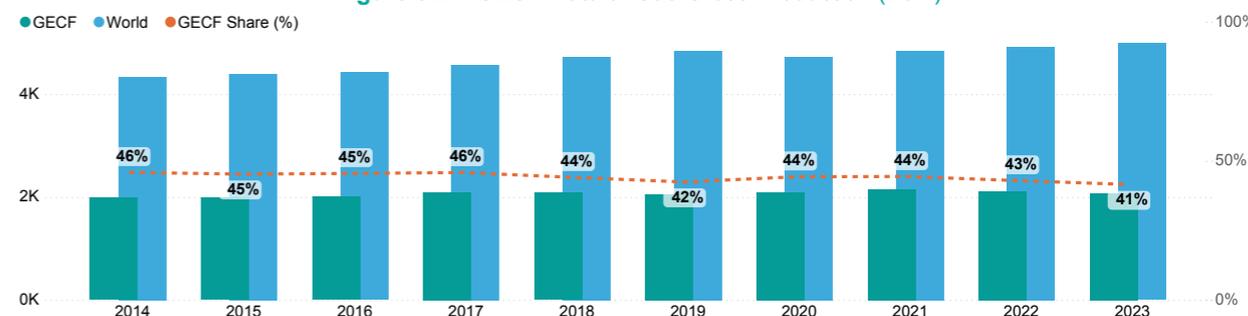


Table 3.2.2 Historical Natural Gas Gross Production of Current GECF Countries (Bcm)

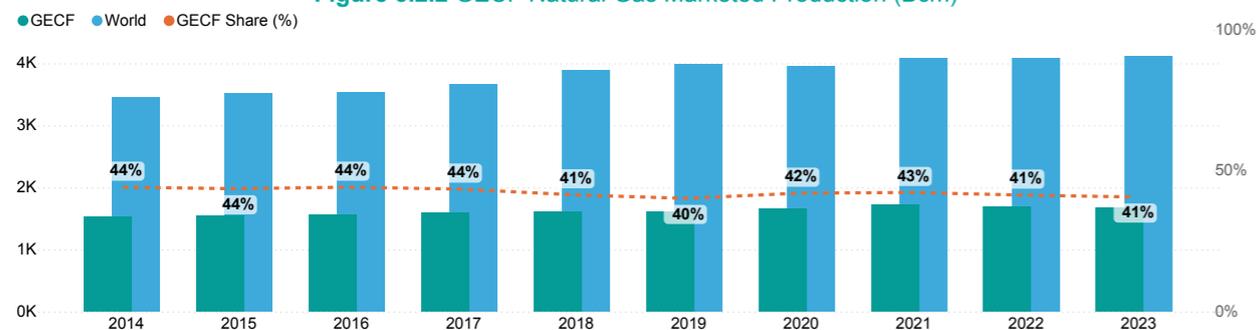
	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	% Change 22/23	CAGR (2014-2023)
<b>Members</b>												
Algeria	186.75	183.83	189.14	188.74	183.55	175.35	168.39	179.04	183.07	186.91	2.1%	0.0%
Bolivia	22.39	22.17	21.33	20.70	19.34	17.05	16.38	16.97	15.52	13.47	-13.2%	-5.5%
Egypt	53.37	49.37	46.90	55.77	65.83	71.99	65.32	74.80	70.86	63.30	-10.7%	1.9%
Equatorial Guinea	13.89	15.45	14.76	13.80	12.66	12.16	11.15	9.97	10.82	9.47	-12.5%	-4.2%
Iran	245.68	256.98	277.39	301.45	310.58	321.42	324.73	336.49	340.30	343.83	1.0%	3.8%
Libya	20.94	22.56	24.59	27.55	30.32	32.66	25.54	26.35	25.29	27.17	7.5%	2.9%
Nigeria	86.27	84.99	76.74	83.14	85.33	86.21	83.00	77.66	71.24	71.54	0.4%	-2.1%
Qatar	206.99	206.45	206.69	207.09	210.55	209.31	211.50	215.02	215.98	215.40	-0.3%	0.4%
Russia	642.81	633.54	640.81	692.00	694.32	677.90	658.54	728.21	672.40	639.40	-4.9%	-0.1%
Trinidad and Tobago	42.03	39.59	34.42	34.70	36.46	36.36	30.87	25.86	27.71	26.03	-6.0%	-5.2%
United Arab Emirates	84.31	90.27	91.40	91.63	95.43	93.66	89.49	88.40	89.20	91.05	2.1%	0.9%
Venezuela	76.00	80.20	82.16	76.89	67.44	56.21	46.88	45.95	45.00	41.47	-7.8%	-6.5%
<b>Observers</b>												
Angola	10.44	10.54	11.71	14.95	13.88	12.91	13.15	11.45	10.59	10.74	1.4%	0.3%
Azerbaijan	29.60	29.00	29.40	28.60	30.50	35.60	37.10	43.90	46.70	48.30	3.4%	5.6%
Iraq	28.88	30.15	34.32	35.15	36.33	37.12	29.45	33.55	33.96	35.26	3.8%	2.2%
Malaysia	80.66	77.94	79.52	86.60	80.43	82.29	76.47	80.24	85.19	84.13	-1.2%	0.5%
Mauritania	-	-	-	-	-	-	-	-	-	-	-	-
Mozambique	5.58	5.69	5.77	5.87	5.47	5.44	5.31	5.54	5.71	8.92	56.2%	5.4%
Peru	18.46	17.29	19.62	18.42	17.11	17.99	16.40	16.09	18.18	19.16	5.4%	0.4%
Senegal	0.04	0.02	0.02	0.02	0.01	0.02	0.02	0.01	0.01	0.00	-16.9%	-21.0%

**Table 3.2.3 Historical Natural Gas Marketed Production (Bcm)**

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	% Change 22/23	CAGR (2014-2023)
World	3,449	3,521	3,528	3,664	3,894	3,992	3,950	4,087	4,089	4,117	0.7%	2.0%
GECF Totals	1,521	1,536	1,558	1,595	1,615	1,604	1,661	1,770	1,688	1,675	-0.7%	1.1%
Members	1,327	1,320	1,341	1,375	1,429	1,423	1,342	1,438	1,431	1,413	-1.3%	0.7%
Observers	193	216	217	220	186	181	319	332	257	263	2.4%	3.5%
GECF Share	44%	44%	44%	44%	41%	40%	42%	43%	41%	41%		

Note: GECF figures incorporate data from Members and Observers, reflecting their membership for each particular year.

**Figure 3.2.2 GECF Natural Gas Marketed Production (Bcm)**



### 3.3 Natural Gas Exports

**Table 3.3.1 Historical Natural Gas Pipeline Exports (Bcm)**

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	% Change 22/23	CAGR (2014-2023)
World	680	702	749	809	809	821	764	807	759	699	-7.9%	0.3%
GECF Totals	404	416	443	466	431	406	404	425	367	312	-15.1%	-2.8%
Members	255	266	288	306	317	298	281	291	221	172	-22.0%	-4.3%
Observers	149	150	155	160	115	108	123	134	146	139	-4.8%	-0.7%
GECF Share	59%	59%	59%	58%	53%	49%	53%	53%	48%	45%		

Note: GECF figures incorporate data from Members and Observers, reflecting their membership for each particular year.

**Figure 3.3.1 GECF Natural Gas Pipeline Exports (Bcm)**



**Table 3.2.4 Historical Natural Gas Marketed Production of Current GECF Countries (Bcm)**

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	% Change 22/23	CAGR (2014-2023)
<b>Members</b>												
Algeria	83.30	84.58	94.95	96.60	97.47	89.98	84.60	105.04	101.44	105.48	4.0%	2.7%
Bolivia	21.65	21.49	20.61	20.02	18.70	16.44	15.81	16.37	14.97	13.01	-13.1%	-5.5%
Egypt	48.07	44.32	42.10	50.71	60.84	67.47	60.74	70.44	67.00	59.33	-11.5%	2.4%
Equatorial Guinea	8.17	7.48	7.87	8.30	7.45	6.70	6.05	7.04	8.10	7.10	-12.4%	-1.5%
Iran	188.02	202.97	211.14	217.80	233.06	241.73	248.50	258.85	259.89	266.25	2.4%	3.9%
Libya	16.59	15.15	18.72	18.97	21.29	26.83	20.93	13.01	12.57	12.27	-2.4%	-3.3%
Nigeria	45.42	47.14	42.55	47.44	49.35	50.24	50.78	48.66	44.28	51.74	16.8%	1.5%
Qatar	165.43	165.23	165.22	164.21	165.69	168.87	167.94	169.71	170.41	170.97	0.3%	0.4%
Russia	607.08	608.43	614.56	635.78	667.66	644.09	637.16	701.55	647.33	620.20	-4.2%	0.2%
Trinidad and Tobago	38.99	36.94	32.18	32.78	34.92	35.37	30.16	25.82	27.52	25.74	-6.5%	-4.5%
United Arab Emirates	54.24	60.18	61.86	54.09	47.62	55.10	55.06	54.48	55.57	58.60	5.4%	0.9%
Venezuela	21.62	25.95	28.84	28.29	24.50	20.27	19.40	21.57	22.31	22.68	1.6%	0.5%
<b>Observers</b>												
Angola	0.73	0.77	1.71	5.75	6.47	7.02	7.50	5.93	5.92	6.00	1.4%	26.4%
Azerbaijan	18.64	19.26	19.40	18.93	18.63	23.49	26.03	31.64	35.88	36.70	2.3%	7.8%
Iraq	7.93	7.69	10.42	10.65	11.13	11.54	7.37	9.59	9.93	10.22	3.0%	2.9%
Malaysia	65.41	63.14	64.42	71.35	66.73	68.46	63.42	67.54	72.19	71.38	-1.1%	1.0%
Mauritania	-	-	-	-	-	-	-	-	-	-	-	-
Mozambique	5.58	5.68	5.76	5.86	5.46	5.43	5.30	5.53	5.70	8.91	56.3%	5.3%
Peru	12.97	12.59	14.02	12.97	12.75	13.47	12.08	11.81	13.66	14.65	7.2%	1.4%
Senegal	0.04	0.02	0.02	0.02	0.01	0.02	0.02	0.01	0.01	0.00	-16.9%	-21.0%

**Table 3.3.2 Historical Natural Gas Pipeline Exports of Current GECF Countries (Bcm)**

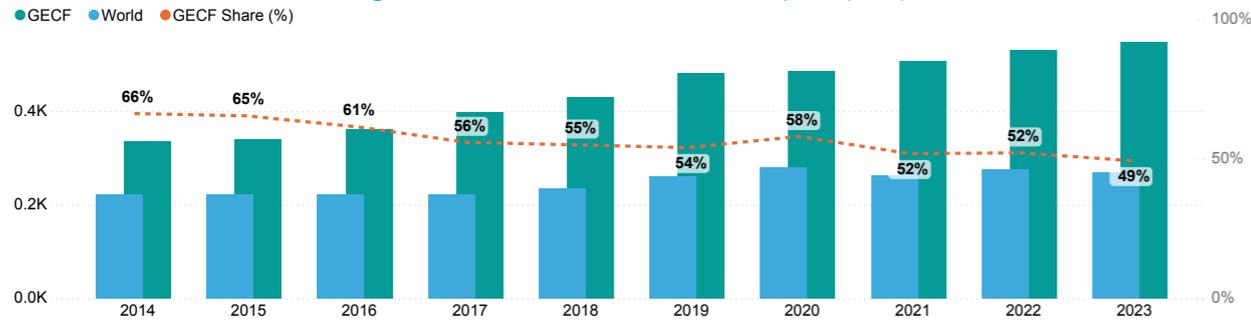
	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	% Change 22/23	CAGR (2014-2023)
<b>Members</b>												
Algeria	27.08	27.04	38.44	37.59	37.95	26.31	25.24	38.96	35.49	34.49	-2.8%	2.7%
Bolivia	17.89	17.60	16.16	15.49	14.06	11.98	12.18	12.17	10.40	8.08	-22.3%	-8.4%
Egypt	0.00	0.00	0.00	0.00	0.00	0.00	0.19	0.57	0.74	0.45	-38.7%	-
Equatorial Guinea	-	-	-	-	-	-	-	-	-	-	-	-
Iran	9.76	8.60	8.65	12.89	13.24	18.35	15.52	17.60	18.04	15.82	-12.3%	5.5%
Libya	6.42	7.03	5.60	5.04	5.63	7.11	4.87	3.07	2.48	2.34	-5.6%	-10.6%
Nigeria	0.89	0.61	0.12	0.39	0.72	0.79	0.89	0.84	0.79	0.82	4.6%	-0.8%
Qatar	20.09	19.75	20.00	21.96	22.36	22.45	22.62	21.68	24.04	20.67	-14.0%	0.3%
Russia	172.60	185.50	198.70	212.80	222.62	211.29	199.20	195.90	128.94	90.86	-29.5%	-6.9%
Trinidad and Tobago	-	-	-	-	-	-	-	-	-	-	-	-
United Arab Emirates	-	-	-	-	-	-	-	-	-	-	-	-
Venezuela	-	-	-	-	-	-	-	-	-	-	-	-
<b>Observers</b>												
Angola	-	-	-	-	-	-	-	-	-	-	-	-
Azerbaijan	8.07	8.14	8.50	8.60	9.60	11.70	13.54	18.90	22.30	23.85	7.0%	12.8%
Iraq	-	-	-	-	-	-	-	-	-	-	-	-
Malaysia	1.84	1.56	1.70	1.50	1.10	1.47	1.70	2.21	2.80	2.31	-17.5%	2.6%
Mauritania	-	-	-	-	-	-	-	-	-	-	-	-
Mozambique	3.78	3.79	3.96	4.08	4.12	3.95	3.89	4.29	4.20	4.18	-0.5%	1.1%
Peru	-	-	-	-	-	-	-	-	-	-	-	-
Senegal	-	-	-	-	-	-	-	-	-	-	-	-

**Table 3.3.3 Historical Natural Gas LNG Exports (Bcm)\***

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	% Change 22/23	CAGR (2014-2023)
World	336	340	362	397	429	481	485	507	530	547	3.2%	5.6%
GECF Totals	222	222	222	223	235	260	280	276	276	270	-2.3%	2.2%
Members	211	201	199	201	206	230	211	212	226	214	-5.1%	0.2%
Observers	11	22	23	22	29	30	69	50	50	55	10.1%	20.1%
GECF Share	66%	65%	61%	56%	55%	54%	58%	52%	52%	49%		

Note: GECF figures incorporate data from Members and Observers, reflecting their membership for each particular year.

**Figure 3.3.2 GECF Natural Gas LNG Exports (Bcm)\***



**Table 3.3.4 Historical Natural Gas LNG Exports of Current GECF Countries (Bcm)\***

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	% Change 22/23	CAGR (2014-2023)
<b>Members</b>												
Algeria	17.11	16.47	15.53	16.41	13.47	16.47	14.22	15.10	13.61	17.78	30.6%	0.4%
Bolivia	-	-	-	-	-	-	-	-	-	-	-	-
Egypt	0.36	0.00	0.99	1.33	2.45	5.89	2.63	9.96	11.31	5.17	-54.3%	34.3%
Equatorial Guinea	6.17	5.57	5.31	5.88	5.40	4.51	3.96	4.69	5.74	4.57	-20.3%	-3.3%
Iran	-	-	-	-	-	-	-	-	-	-	-	-
Libya	-	-	-	-	-	-	-	-	-	-	-	-
Nigeria	31.04	34.52	32.20	34.33	31.11	32.02	31.04	27.72	24.80	20.09	-19.0%	-4.7%
Qatar	104.83	104.53	106.52	104.23	102.41	104.89	104.84	106.27	108.37	107.12	-1.2%	0.2%
Russia	12.63	13.18	14.91	15.03	25.48	39.90	40.25	39.65	43.85	42.34	-3.4%	14.4%
Trinidad and Tobago	18.85	16.90	14.27	14.61	16.67	16.90	13.92	8.94	10.59	10.12	-4.4%	-6.7%
United Arab Emirates	9.93	9.33	9.33	8.78	8.94	9.26	8.77	7.85	7.28	6.92	-5.0%	-3.9%
Venezuela	-	-	-	-	-	-	-	-	-	-	-	-
<b>Observers</b>												
Angola	0.43	0.00	0.91	4.96	5.31	5.72	6.27	4.74	4.71	4.80	2.0%	30.7%
Azerbaijan	-	-	-	-	-	-	-	-	-	-	-	-
Iraq	-	-	-	-	-	-	-	-	-	-	-	-
Malaysia	33.19	32.94	32.47	35.26	32.55	34.09	32.51	33.54	37.45	36.22	-3.3%	1.0%
Mauritania	-	-	-	-	-	-	-	-	-	-	-	-
Mozambique	-	-	-	-	-	-	-	-	0.25	3.58	1330.7%	-
Peru	5.30	4.94	5.47	5.43	4.84	5.22	4.85	3.80	4.52	5.02	11.1%	-0.6%
Senegal	-	-	-	-	-	-	-	-	-	-	-	-

\*Gas Equivalent

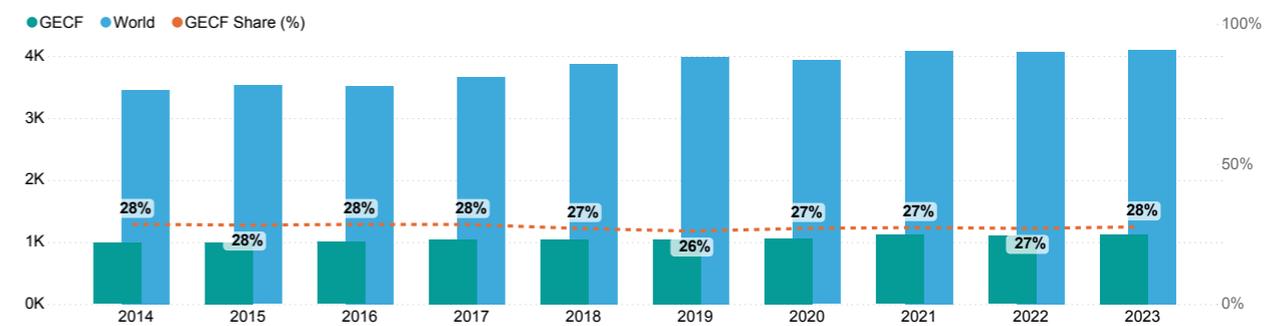
### 3.4 Natural Gas Domestic Consumption

**Table 3.4.1 Historical Natural Gas Domestic Consumption (Bcm)**

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	% Change 22/23	CAGR (2014-2023)
World	3,457	3,525	3,522	3,662	3,874	3,991	3,929	4,079	4,067	4,094	0.7%	1.9%
GECF Totals	984	993	994	1,031	1,045	1,040	1,061	1,116	1,099	1,129	2.7%	1.5%
Members	929	916	921	956	997	988	893	968	1,014	1,042	2.8%	1.3%
Observers	55	77	73	75	48	52	168	148	85	86.37	1.5%	5.2%
GECF Share	28%	28%	28%	28%	27%	26%	27%	27%	27%	28%		

Note: GECF figures incorporate data from Members and Observers, reflecting their membership for each particular year.

**Figure 3.4.1 GECF Natural Gas Domestic Consumption (Bcm)**

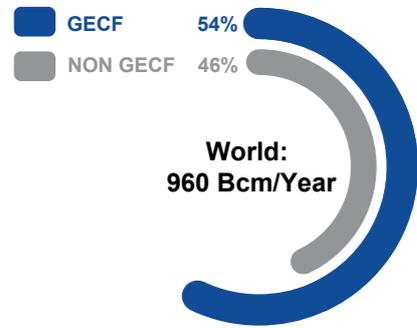


**Table 3.4.2 Historical Natural Gas Domestic Consumption of Current GECF Countries (Bcm)**

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	% Change 22/23	CAGR (2014-2023)
<b>Members</b>												
Algeria	37.21	40.30	40.45	41.82	45.14	46.40	45.03	49.56	51.82	52.90	2.1%	4.0%
Bolivia	3.79	3.95	4.47	4.47	4.85	4.54	3.60	4.09	4.45	4.74	6.4%	2.5%
Egypt	48.04	47.80	51.28	58.16	61.29	60.59	60.17	63.47	61.00	61.86	1.4%	2.8%
Equatorial Guinea	1.45	1.27	1.59	1.58	1.52	1.49	1.30	2.21	2.31	2.36	1.8%	5.6%
Iran	188.02	202.97	211.15	217.76	227.82	231.22	233.00	241.25	244.89	255.50	4.3%	3.5%
Libya	8.82	8.73	7.99	8.16	8.32	8.40	7.70	9.94	10.09	9.94	-1.5%	1.3%
Nigeria	13.13	11.11	8.88	11.07	12.18	12.10	13.19	13.86	12.97	14.68	13.2%	1.2%
Qatar	40.52	40.95	38.70	38.02	40.92	41.53	40.49	38.76	42.00	43.19	2.8%	0.7%
Russia	465.00	445.00	444.00	463.00	489.00	481.00	460.50	516.10	486.60	495.60	1.8%	0.7%
Trinidad and Tobago	16.66	16.64	15.06	14.75	15.09	15.19	13.25	14.57	14.12	13.64	-3.4%	-2.2%
United Arab Emirates	65.90	72.73	71.78	71.60	70.04	68.23	70.76	69.45	69.49	73.26	5.4%	1.2%
Venezuela	19.80	24.91	25.62	25.57	21.24	17.55	14.83	14.20	13.86	16.62	19.9%	-1.9%
<b>Observers</b>												
Angola	0.30	0.77	0.80	0.79	1.16	1.30	1.23	1.19	1.21	1.20	-0.8%	16.7%
Azerbaijan	10.87	11.40	11.20	10.88	11.08	12.40	12.66	13.14	13.94	15.29	9.6%	3.9%
Iraq	6.80	6.90	8.44	10.14	13.35	17.51	18.78	19.32	19.36	20.63	6.6%	13.1%
Malaysia	35.18	31.76	32.29	33.30	34.40	36.97	33.21	34.62	36.12	36.05	-0.2%	0.3%
Mauritania	-	-	-	-	-	-	-	-	-	-	-	-
Mozambique	1.80	1.90	1.81	1.78	1.34	1.47	1.41	1.24	1.25	1.15	-7.9%	-4.9%
Peru	7.67	7.65	8.52	7.48	7.91	8.26	7.14	8.01	9.41	9.63	2.3%	2.6%
Senegal	0.04	0.02	0.02	0.02	0.01	0.02	0.02	0.01	0.01	0.00	-16.9%	-21.0%

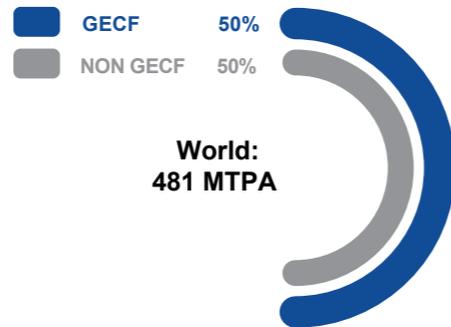
### 3.5 GECF vs World Infrastructure

#### Operating Transnational Pipeline Capacity (Bcm/Year)



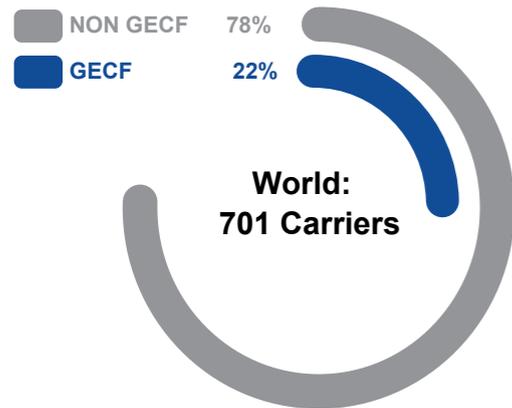
GECF Countries currently use **28** pipelines for their international gas exports with a design capacity of **522 Bcm/Year**.

#### Operational LNG Liquefaction Capacity (MTPA)



GECF Countries operate **37** LNG plants with a combined installed capacity of **241 MTPA** as of end of 2023.

#### Active LNG Carriers



LNG fleets have witnessed significant growth in GECF Countries, with **155** LNG carriers in operation as of end 2023.

#### Operational Regasification Capacity (MTPA)



GECF Countries operate **5** Regasification terminals with a combined installed capacity of **20.4 MTPA**.

### 3.6 GECF Countries Infrastructure

#### 3.6.1 Algeria

Table 3.6.1.1 Existing Natural Gas Export Pipelines

Pipeline	Connection			Start Year	Owner(s)	Operator(s)	Type	Capacity (Bcm/Year)
	From	To	Via					
Enrico Mattei (TransMediterranean)	Algeria	Italy	Tunisia	1982	Sonatrach, Sotugat, ENI	Sonatrach, TMPC, TTPC	Export	33.5
Medgaz	Algeria	Spain	Med Sea	2011	Sonatrach, Naturgy	Medgaz	Export	10.7
<b>Total Capacity</b>								<b>44.2</b>

Table 3.6.1.2 Liquefaction Plants

Plant	Liquefaction (No. of Trains)	Status	Start Year	Owner(s)	Operator(s)	Capacity (MTPA)
GL1Z	6	Existing	1978	Sonatrach	Sonatrach	10.1
GL2Z	6	Existing	1981	Sonatrach	Sonatrach	10.5
GL1K	1 Mega	Existing	2013	Sonatrach	Sonatrach	6
GL3Z	1 Mega	Existing	2014	Sonatrach	Sonatrach	5.8
<b>Total Capacity</b>						<b>32.4</b>

Table 3.6.1.3 LNG Carrier Fleet

Ship Name	Owner(s)	Delivered Year	Capacity (Cubic meters)
Lalla Ftama N'soumer	Sonatrach Group	2004	145,450
Berge Arzew	Sonatrach Group	2004	138,000
Energy Spirit	Syngapore Carbon Hydrogen Shipping LMT	2006	74,130
Cheikh El-Mokrani	Sonatrach Group	2007	75,500
Cheikh Bouamama	Sonatrach Group	2008	75,500
Tessala	Sonatrach Group	2016	171,800
Ourgata	Sonatrach Group	2017	171,800
<b>Total</b>			<b>852,180</b>

#### 3.6.2 Bolivia

Table 3.6.2.1 Existing Natural Gas Export Pipelines

Pipeline	Connection			Start Year	Owner(s)	Operator(s)	Type	Capacity (Bcm/Year)
	From	To	Via					
GASBOL	Bolivia	Brazil	-	1999	Gas TransBoliviano	Gas TransBoliviano	Export	11
Yabog Gas Pipeline	Bolivia	Argentina	-	1972	YPFB, TecGas NV, Compañía General de Combustibles S.A., Total S.A., Petronas	YPFB Transporte, TGN (Transportadora de Gas del Norte SA)	Export	2.2
Cuiabá Pipeline	Bolivia	Brazil	-	2002	GasOriente Boliviano	GasOriente Boliviano	Export	1.5
GIJA (Juana Azurduy)	Bolivia	Argentina	-	2011	YPFB Transporte	YPFB Transporte	Export	10.2
<b>Total Capacity</b>								<b>24.9</b>

Table 3.6.2.2 Liquefaction Plants

Plant	Liquefaction (No. of Trains)	Status	Start Year	Owner(s)	Operator(s)	Capacity (MTPA)
Rio Grande LNG	1	Existing	2016	YPFB	YPFB	0.07
<b>Total Capacity</b>						<b>0.07</b>

### 3.6.3 Egypt

Table 3.6.3.1 Existing Natural Gas Export Pipelines

Pipeline	Connection			Start Year	Owner(s)	Operator(s)	Type	Capacity (Bcm/Year)
	From	To	Via					
Arab Gas Pipeline	Egypt	Jordan, Syria, Lebanon	-	2003	EGAS, ENPPI, GASCO, PETROJET, SPC, GASCO	Egyptian FAJR	Export	10
EMG	Israel	Egypt	-	2020	EMG	Israel Natural Gas Lines (INGL)	Import	9
<b>Total Capacity</b>								<b>19</b>

Table 3.6.3.2 Liquefaction Plants

Plant	Liquefaction (No. of Trains)	Status	Start Year	Owner(s)	Operator(s)	Capacity (MTPA)
IDKU Egyptian LNG	2	Existing	2005	Shell, EGAS, EGPC, Petronas, ENGIE	ELNG	7.2
Damietta	1	Existing	2005	EGAS, EGPC, ENI	DLNG	4.8
<b>Total Capacity</b>						<b>12</b>

### 3.6.4 Equatorial Guinea

Table 3.6.4.1 Liquefaction Plants

Plant	Liquefaction (No. of Trains)	Status	Start Year	Owner(s)	Operator(s)	Capacity (MTPA)
Equatorial Guinea (EG) LNG	1	Existing	2007	Marathon, Sonagas, Marubeni	EG LNG	3.7
<b>Total Capacity</b>						<b>3.7</b>

### 3.6.5 Iran

Table 3.6.5.1 Existing Natural Gas Export Pipelines

Pipeline	Connection			Start Year	Owner(s)	Operator(s)	Type	Capacity (Bcm/Year)
	From	To	Via					
Tabriz-Ankara	Iran	Turkey	-	2002	NIOC, Botas	NIOC, Botas	Export	14
Jolfa-Nakhchivan	Iran	Azerbaijan	-	2005	NIGC, SOCAR	NIGC, SOCAR	Swap	10
Tabriz-Sardanian	Iran	Armenia	-	2006	NIOC, Armenia Gazprom	NIOC, Armenia Gazprom	Export	2.3
Dauletabad-Khangiran	Turkmenistan	Iran	-	2007	Turkmengaz	Turkmengaz	Import	12
Asaluye-Baghdad	Iran	Iraq	-	2017	NIOC, INOC	NIOC, INOC	Export	12.8
IGAT 6 Gas	Iran	Iraq	-	2018	National Iranian Gas Company	National Iranian Gas Company	Export	39.9
<b>Total Capacity</b>								<b>91</b>

Table 3.6.5.2 Liquefaction Plants

Plant	Liquefaction (No. of Trains)	Status	Start Year	Owner(s)	Operator(s)	Capacity (MTPA)
Iran FLNG	1	Under Construction	2025	-	-	21
<b>Total Expected Capacity</b>						<b>21</b>

### 3.6.6 Libya

Table 3.6.6.1 Existing Natural Gas Export Pipelines

Pipeline	Connection			Start Year	Owner(s)	Operator(s)	Capacity (Bcm/Year)
	From	To	Via				
Green Stream	Libya	Sicily	-	2004	Green Stream	Green Stream	11
<b>Total Capacity</b>							<b>11</b>

### 3.6.7 Nigeria

Table 3.6.7.1 Existing Natural Gas Export Pipelines

Pipeline	Connection			Start Year	Owner(s)	Operator(s)	Type	Capacity (Bcm/Year)
	From	To	Via					
Nigeria	Ghana	Benin-Togo	2006	WAGP	Chevron	Export	5	
<b>Total Capacity</b>							<b>5</b>	

Table 3.6.7.2 Liquefaction Plants

Plant	Liquefaction (No. of Trains)	Status	Start Year	Owner(s)	Operator(s)	Capacity (MTPA)
NLNG 1 & 2	2	Existing	1999	Nigeria LNG	Nigeria LNG	7
NLNG 3	1	Existing	2002	Nigeria LNG	Nigeria LNG	3.3
NLNG 4	1	Existing	2005	Nigeria LNG	Nigeria LNG	4.1
NLNG 5	1	Existing	2006	Nigeria LNG	Nigeria LNG	4.1
NLNG 6	1	Existing	2007	Nigeria LNG	Nigeria LNG	4.1
Greenville LNG 1-3	3	Existing	2022	Greenville	Greenville LNG	0.74
NLNG 7	1	Under Construction	2024	Nigeria LNG	Nigeria LNG	7
<b>Total Capacity*</b>						<b>23.34</b>

\*excludes plants under construction

Table 3.6.7.3 LNG Career Fleet

Ship Name	Owner(s)	Delivered Year	Capacity (Cubic meters)	Ship Name	Owner(s)	Delivered Year	Capacity (Cubic meters)
LNG Edo	Bonny Gas Transport	1980	126,500	LNG Benue	BW Gas	2006	145,700
LNG Rivers	Bonny Gas Transport	2002	137,200	LNG Lokoja	BW Gas	2006	148,300
LNG Sokoto	Bonny Gas Transport	2002	137,200	LNG Borno	NYK Line	2007	149,600
LNG Bayelsa	Bonny Gas Transport	2003	137,500	LNG Ogun	NYK Line	2007	149,600
LNG Akwa Ibom	Bonny Gas Transport	2004	141,000	LNG Kano	BW Gas	2007	148,300
LNG River Orashi	BW Gas	2004	145,910	LNG Ondo	BW Gas	2007	148,300
LNG Adamawa	Bonny Gas Transport	2005	141,000	LNG Imo	BW Gas	2008	148,300
LNG Cross River	Bonny Gas Transport	2005	141,000	LNG Bonny II	Bonny Gas Transport	2015	133,000
LNG Enugu	BW Gas	2005	145,000	LNG Finima II	Bonny Gas Transport	2015	133,000
LNG Oyo	BW Gas	2005	140,500	LNG Lagos II	Bonny Gas Transport	2015	122,000
LNG River Niger	Bonny Gas Transport	2006	141,000	LNG Port-Harcourt II	Bonny Gas Transport	2015	122,000
LNG Abuja II	Bonny Gas Transport	2016	126,500				
<b>Sub Totals</b>			<b>1,533,810</b>	<b>Sub Totals</b>			<b>1,674,600</b>
<b>Total Capacity</b>				<b>Total Capacity</b>			<b>3,208,410</b>

### 3.6.8 Qatar

Table 3.6.8.1 Existing Natural Gas Export Pipelines

Pipeline	Connection			Start Year	Owner(s)	Operator(s)	Type	Capacity (Bcm/Year)
	From	To	Via					
Dolphin	Qatar	United Arab Emirates, Oman	-	2007	Dolphin Energy	Dolphin Energy	Export	33.1
<b>Total Existing Capacity</b>								<b>33.1</b>

Table 3.6.8.2 Liquefaction Plants

Plant	Liquefaction (No. of Trains)	Status	Start Year	Owner(s)	Operator(s)	Capacity (MTPA)
N(1)	3	Existing	1996 1997 1998	QatarEnergy in 2022	QatarEnergy LNG	9.9
S(1)	2	Existing	1999	QatarEnergy, ExxonMobil, Korea Ras Laffan LNG, Itochu, LNG Japan	QatarEnergy LNG	6.6
S(2)	3	Existing	2004	QatarEnergy, ExxonMobil, OPIC Middle East Natural Gas	QatarEnergy LNG	14.1
N(2)	2	Existing	2009	QatarEnergy, ExxonMobil, TotalEnergies	QatarEnergy LNG	15.6
N(3)	1	Existing	2010	QatarEnergy, ConocoPhillips, Mitsui	QatarEnergy LNG	7.8
S(3)	2	Existing	2010	QatarEnergy, ExxonMobil	QatarEnergy LNG	15.6
N(4)	1	Existing	2011	QatarEnergy, Shell	QatarEnergy LNG	7.8
North Field Expansion 1	4	Under Construction	2025	QatarEnergy, ExxonMobil, Total Energies, Shell, ConocoPhillips, ENI	Construction Phase	33
North Field Expansion 2	2	Under Construction	2027	QatarEnergy, Total Energies, Shell, ConocoPhillips	Construction Phase	16
<b>Total Capacity*</b>						<b>77.4</b>

\*excludes plants under construction

Table 3.6.8.3 LNG Carrier Fleet

Ship Name	Owner(s)	Delivered Year	Size (1000 Scm)	Ship Name	Owner(s)	Delivered Year	Size (1000 Scm)
AL KHOR	QET	1996	137,350	Al Safiyya	Nakilat/Pronav	2007	210,130
AL ZUBARAH	QET	1996	137,570	Al Areesh	Nakilat/SEAPEAK	2007	151,820
AL RAYYAN	QET	1997	137,420	Ejnan	Nakilat/NYK	2007	145,690
AL WAJBAH	QET	1997	137,310	Al Gharrafa	Nakilat	2008	216,200
AL WAKRAH	QET	1998	137,370	Al Hamla	Nakilat	2008	216,200
BROOG	QET	1998	137,530	Al Ghuwairiya	Nakilat	2008	263,300
ZEKREET	QET	1998	137,480	Mozah	Nakilat	2008	266,250
AL BIDDA	QET	1999	137,340	Umm Slal	Nakilat	2008	266,360
DOHA	QET	1999	137,260	Bu Samra	Nakilat	2008	266,460
AL JASRA	QET	2000	137,230	Al Oraiq	Nakilat/"K"Line	2008	210,180
Fuwairit	Nakilat/MOL	2004	136,190	Umm Al Amad	Nakilat/"K" Line	2008	210,180
Milaha Ras Laffan	Milaha/ Pronav	2004	138,270	Al Ghariya	Nakilat/Pronav	2008	210,130
Al Deebel	Nakilat/MOL	2005	143,520	Duhail	Nakilat/Pronav	2008	210,130
Al Thakhira	Nakilat/ KLINE	2005	143,520	Maran Gas Asciepius	Nakilat/Maran Gas	2008	145,820
Lusail	Nakilat/NYK	2005	143,480	Al Aamriya	Nakilat/MOL	2008	210,190
Umm Bab	Nakilat/Maran Gas	2005	145,890	Fraiha	Nakilat/MOL	2008	210,150
Al Marrouna	Nakilat/SEAPEAK	2006	151,820	Murwab	Nakilat/MOL	2008	210,170
Milaha Qatar	Milaha/Pronav	2006	145,600	Al Sahla	Nakilat/NYK	2008	216,200
Simaisma	Nakilat/Maran Gas	2006	145,890	Al Thumama	Nakilat/NYK	2008	216,200
Al Khuwair	Nakilat/Teekay	2006	217,450	Al Utouriya	Nakilat/NYK	2008	216,200
Al Gattara	Nakilat	2007	216,200	Al Daayen	Nakilat/Teekay	2008	148,850
Tembek	Nakilat	2007	216,200	Al Huwaila	Nakilat/Teekay	2008	217,430
Al Jassasiya	Nakilat/Maran Gas	2007	145,910	Al Kharsaah	Nakilat/Teekay	2008	217,450
Al Ruwais	Nakilat/Pronav	2007	210,140	Al Shamal	Nakilat/Teekay	2008	217,450
<b>Sub Totals</b>			<b>3,673,940</b>	<b>Sub Totals</b>			<b>5,069,140</b>

Ship Name	Owner(s)	Delivered Year	Size (1000 Scm)
Al Ghashamiya	Nakilat	2009	217,590
Al Sheehaniya	Nakilat	2009	210,170
Mesameer	Nakilat	2009	216,310
Onaiza	Nakilat	2009	210,150
Al Dafna	Nakilat	2009	266,370
Al Mafyar	Nakilat	2009	266,370
Mekaines	Nakilat	2009	266,480
Al Kharaitiyat	Nakilat	2009	216,300
Al Rekayyat	Nakilat	2009	216,290
Al Sadd	Nakilat	2009	210,200
Al Mayeda	Nakilat	2009	266,490
<b>Sub Totals</b>			<b>2,562,720</b>
<b>Total</b>			<b>13,738,490</b>

Ship Name	Owner(s)	Delivered Year	Size (1000 Scm)
Al Samriya	Nakilat	2009	263,300
Lijmiliya	Nakilat	2009	263,300
Al Bahiya	Nakilat	2009	210,180
Al Karaana	Nakilat	2009	210,190
Al Khattiya	Nakilat	2009	210,190
Al Nuaman	Nakilat	2009	210,180
Shagra	Nakilat	2009	266,400
Aamira	Nakilat	2010	266,240
Rasheeda	Nakilat	2010	266,280
Zarga	Nakilat	2010	266,430
<b>Sub Totals</b>			<b>2,432,690</b>
<b>Total</b>			<b>13,738,490</b>

### 3.6.9 Russia

Table 3.6.9.1 Existing Natural Gas Export Pipelines

Pipeline	Connection			Start Year	Major Owner	Type	Capacity (Bcm/Year)
	From	To	Via				
Urengoy-Pomary-Uzhgorod	Russia	Europe	Ukraine	1983	Gazprom	Export	32
Blue Stream	Russia	Turkey	-	2003	Gazprom	Export	16
Yamal Europe	Russia	Europe	Belarus	2006	Gazprom	Export	32.9
Nord Stream	Russia	Germany	-	2011	Gazprom	Export	55
Power of Siberia	Russia	China	-	2019	Gazprom	Export	38
TurkStream	Russia	Europe, Turkey	-	2020	Gazprom	Export	31.5
Nord Stream 2	Russia	Germany	-	NA	Gazprom	Export	55
<b>Total Capacity</b>							<b>260.4</b>

Table 3.6.9.2 Liquefaction Plants

Plant	Liquefaction (No. of Trains)	Status	Start Year	Major Owner	Capacity (MTPA)
Sakhalin II	2	Existing	2009	Gazprom	10.9
Yamal LNG	4	Existing	2017	Novatek	17.4
Vysotsk LNG	2	Existing	2019	Novatek	0.7
Portovaya LNG	1	Existing	2022	Gazprom	1.5
Arctic LNG 2	3	Under Construction	N/A	Novatek	19.8
Baltic LNG	2	Under Construction	N/A	Gazprom	13
<b>Total Capacity*</b>					<b>30.5</b>

\* excludes plants under construction

Table 3.6.9.3 Regasification Plants

Regasification Plant	Status	Start Year	Major Owner	Capacity (MTPA)
Kaliningrad FSRU	Existing	2019	Gazprom	2.7
<b>Total Capacity</b>				<b>2.7</b>

Table 3.6.9.4 LNG Carrier Fleet

Ship Name	Owner(s)	Delivered Year	Size (Cubic meters)
Lena River	Gazprom	2013	155,000
Yenisei River	Gazprom	2013	155,000
Velikiy Novgorod	Gazprom	2014	170,000
Pskov	Gazprom	2014	170,000
SCF Mitre	Sovcomflot	2015	170,000
SCF Melampus	Sovcomflot	2015	170,000
Christophe de Margerie	Sovcomflot	2016	173,000
Marshal Vasilevskiy	Gazpromflot	2017	174,000
<b>Total</b>			<b>1,337,000</b>

### 3.6.10 Trinidad and Tobago

Table 3.6.10.1 Liquefaction Plants

Plant	Liquefaction (No. of Trains)	Status	Start Year	Owner(s)	Operator(s)	Capacity (MTPA)
Atlantic LNG	3	Existing	2002 2003 2005	Atlantic LNG	Atlantic LNG	11.8
<b>Total Capacity</b>						<b>11.8</b>

### 3.6.11 United Arab Emirates

Table 3.6.11.1 Existing Natural Gas Export Pipelines

Pipeline	Connection			Start Year	Owner(s)	Operator(s)	Type	Capacity (Bcm/Year)
	From	To	Via					
Dolphin	Qatar	United Arab Emirates	-	2006	Dolpin Energy	Dolpin Energy	Import	33.1
<b>Total Capacity</b>								<b>33.1</b>

Table 3.6.11.2 Liquefaction Plants

Plant	Liquefaction (No. of Trains)	Status	Start Year	Owner(s)	Operator(s)	Capacity (MTPA)
Das Island - 1&2	2	Existing	1977	ADNOC, Mitsui, BP, Total	ADGAS	2.6
Das Island - 3	1	Existing	1994	ADNOC, Mitsui, BP, Total	ADGAS	2.8
Ruwais		Under Construction	N/A	ADNOC, Mitsui, BP, Total	ADGAS	9.6
<b>Total Capacity</b>						<b>5.4</b>

\* excludes plants under construction

Table 3.6.11.3 Regasification Plants

Plant	Status	Start Year	Owner(s)	Operator(s)	Capacity (MTPA)
Jebel Ali FLNG	Existing	2010	DUSUP	DUSUP	7.4
Ruwais	Existing	2016	ADNOC	ADNOC	3
<b>Total Capacity</b>					<b>10.4</b>

Table 3.6.11.4 LNG Carrier Fleet

Ship Name	Owner(s)	Delivered Year	Capacity (Cubic meters)
Al Khaznah	National Gas Shipping Co. (ADNOC)	1994	137,540
Shahamah	National Gas Shipping Co. (ADNOC)	1994	137,560
Ghasha	National Gas Shipping Co. (ADNOC)	1995	137,510
Ish	National Gas Shipping Co. (ADNOC)	1995	137,570
Mubaraz	National Gas Shipping Co. (ADNOC)	1996	136,980
Mraweh	National Gas Shipping Co. (ADNOC)	1996	137,040
Al Hamra	National Gas Shipping Co. (ADNOC)	1997	137,080
Umm Al Ashtan	National Gas Shipping Co. (ADNOC)	1997	137,110
<b>Total</b>			<b>1,098,390</b>

### 3.6.12 Venezuela

Table 3.6.12.1 Existing Natural Gas Export Pipelines

Pipeline	Connection		Start Year	Owner(s)	Operator(s)	Type	Capacity (Bcm/Year)
	From	To					
Antonio Ricaurte (Trans Caribbean)	Colombia	Venezuela	2007	PDVSA Gas	PDVSA Gas	Import/Export	5
<b>Total Capacity</b>							<b>5</b>

### 3.6.13 Angola

Table 3.6.13.1 Liquefaction Plants

Plant	Liquefaction (No. of Trains)	Status	Start Year	Owner(s)	Operator(s)	Capacity (MTPA)
Angola LNG	1	Existing	2013	Angola LNG	Angola LNG	5.2
<b>Total Capacity</b>						<b>5.2</b>

Table 3.6.13.2 LNG Carrier Fleet

Ship Name	Owner(s)	Delivered Year	Size (1000 Scm)
Sonangol Benguela	Sonangol	2007	160,500
Sonangol Etosha	Sonangol	2007	160,500
Sonangol Sambizanga	Sonangol	2007	160,500
Lobito	Mitsui & Co/NYK Line/ Teekay LNG Partners	2011	160,280
Malanje	Mitsui & Co/NYK Line/ Teekay LNG Partners	2011	160,280
Soyo		2011	160,280
Cubal	NYK Line / Mitsui & Co/Teekay LNG Partners	2012	160,280
<b>Total</b>			<b>1,122,620</b>

### 3.6.14 Azerbaijan

Table 3.6.14.1 Existing Natural Gas Export Pipelines

Pipeline	Connection			Status	Start Year	Owner(s)	Operator(s)	Type	Capacity (Bcm/Year)
	From	To	Via						
Jofa-Nakhchivan	Azerbaijan	Iran	-	Existing	2005	SOCAR, NIGC	SOCAR, NIGC	Swap	10
Hajigabul-Gazakh-Saguramo	Azerbaijan	Georgia		Existing	2006	SOCAR, Georgian Oil and Gas Corporation	SOCAR, Georgian Gas Transportation Company	-	8.7
South Caucasus Gas	Azerbaijan	Trans Anatolian Gas Pipeline	Georgia	Existing	2006	South Caucasus Pipeline Company Ltd	SOCAR Midstream Operations LLC	Export	24.04
<b>Total Capacity</b>									<b>42.74</b>

### 3.6.15 Iraq

Table 3.6.15.1 Existing Natural Gas Export Pipelines

Pipeline	Connection			Start Year	Owner(s)	Operator(s)	Type	Capacity (Bcm/Year)
	From	To	Via					
Asaluye - Baghdad	Iran	Iraq	-	2017	NIOC, INOC	NIOC, INOC	Import	12.8
IGAT 6 Gas	Iran	Iraq	-	2018	National Iranian Gas Company	National Iranian Gas Company	Import	39.9
<b>Total Capacity</b>								<b>52.7</b>

### 3.6.16 Malaysia

Table 3.6.16.1 Existing Natural Gas Export Pipelines

Pipeline	Connection			Start Year	Owner(s)	Operator(s)	Type	Capacity (Bcm/Year)
	From	To	Via					
Segamat	Malaysia	Singapore	-	1991	Petronas Gas	Petronas Gas	Export	5.7
West Natuna Transportation System	Indonesia	Malaysia	-	2001	PSCs	PSCs	Import	2.6
Yetagun	Malaysia	Thailand	-	2007	Petronas Carigali	Petronas Carigali	Export	5.2
<b>Total Capacity</b>								<b>13.5</b>

Table 3.6.16.2 Liquefaction Plants

Plant	Liquefaction (No. of Trains)	Status	Start Year	Owner(s)	Operator(s)	Total Capacity (MTPA)
MLNG Satu	3	Existing	1983		Petronas at Bintulu	9.6
MLNG Dua	3	Existing	1995		Petronas at Bintulu	8.4
MLNG Tiga	2	Existing	2003		Petronas at Bintulu	7.7
MLNG Train 9	1	Existing	2017		Petronas at Bintulu	3.6
PFLNG Satu	1	Existing	2017		Petronas at Bintulu	1.5
Petronas FLNG 2	1	Existing	2021		Petronas at Bintulu	1.2
PFLNG 3		Under Construction	N/A		Petronas at Bintulu	2
<b>Total Capacity*</b>						<b>32.0</b>

Table 3.6.16.3 Regasification Plants

Plant	Status	Start Year	Owner(s)	Operator(s)	Total Capacity (MTPA)
Melaka (FSRU)	Existing	2013			3.8
Pengerang (RGT 2)	Existing	2017			3.5
<b>Total Capacity</b>					<b>7.3</b>

Table 3.6.16.4 LNG Carrier Fleet

Ship Name	Owner(s)	Delivered Year	Size (1000 Scm)	Ship Name	Owner(s)	Delivered Year	Size (1000 Scm)
Puteri Intan	MISC	1994	130,000	Seri Anggun	MISC	2006	145000
Puteri Delima	MISC	1995	130,000	Seri Ayu	MISC	2007	145000
Puteri Nilam	MISC	1995	130,000	Seri Bakti	MISC	2007	152600
Puteri Zamrud	MISC	1996	130,000	Seri Begawan	MISC	2007	152300
Aman Sendai	MISC	1997	18,800	Seri Bijaksana	MISC	2008	152300
LNG Portovenere	MISC	1997	60,600	Seri Balhaf	MISC	2009	154500
Puteri Firus	MISC	1997	130,000	Seri Balqis	MISC	2009	154500
LNG Lerici	MISC	1998	60,600	Seri Camellia	MISC	2016	150000
Puteri Delima Satu	MISC	2002	137,100	Seri Cempaka	MISC	2017	150200
Puteri Intan Satu	MISC	2002	137,100	Seri Cenderawasih	MISC	2017	150000
Puteri Nilam Satu	MISC	2003	137,100	Seri Camar	MISC	2018	150200
Puteri Firus Satu	MISC	2004	137,100	Seri Cemara	MISC	2018	150200
Puteri Zamrud Satu	MISC	2004	137,100	Hull No.8030	MISC (JV)	2021	142000
Puteri Mutiara Satu	MISC	2005	137,100	Hull No.8031	MISC (JV)	2021	142000
Seri Alam	MISC	2005	145,000	Hull No.2364	MISC	2023	148100
Seri Amanah	MISC	2006	145,000	Hull No.2365	MISC	2023	148100
Seri Angkasa	MISC	2006	145,000				
<b>Sub Totals</b>			<b>2,047,600</b>	<b>Sub Totals</b>			<b>2,387,000</b>
<b>Total Capacity</b>							<b>4,434,600</b>

## 3.6.17 Mauritania

Table 3.6.17.1 Liquefaction Plants

Plant	Liquefaction (No. of Trains)	Status	Start Year	Owner(s)	Operator(s)	Total Capacity (MTPA)
Greater Tortue Ahmeyim FLNG Terminal	4	Under Construction	2024	BP, Kosmos Energy, Petrosen, Societe Mauritanienne des Hydrocarbures	BP	2.5
<b>Total Expected Capacity</b>						<b>2.5</b>

## 3.6.18 Mozambique

Table 3.6.18.1 Existing Natural Gas Export Pipelines

Pipeline	Connection			Start Year	Owner(s)	Operator(s)	Type	Capacity (Bcm/Year)
	From	To	Via					
Mozambique South Africa Gas Pipeline	Mozambique	South Africa	-	2004	Sasol Gas Holdings, South African Gas Development Limited Company; Companhia Mocambicana de Gasoduto	Sasol, iGas, CMG	Export	5.6
<b>Total Capacity</b>								<b>5.6</b>

Table 3.6.18.2 Liquefaction Plants

Plant	Liquefaction (No. of Trains)	Status	Start Year	Operator(s)	Total Capacity (MTPA)
Coral South FLNG Terminal	-	Existing	2022	ENI Offshore Mozambique	3.4
Mozambique LNG Terminal	-	Under Construction	2028		12.9
<b>Total Capacity*</b>					<b>3.4</b>

\* excludes plants under construction

## 3.6.19 Peru

Table 3.6.19.1 Liquefaction Plants

Plant	Liquefaction (No. of Trains)	Status	Start Year	Owner(s)	Operator(s)	Total Capacity (MTPA)
Peru LNG Terminal	1	Existing	2010	Hunt Oil, Shell, SK, Marubeni	Hunt LNG Operating Company S.A.C	4.45
<b>Total Capacity</b>						<b>4.45</b>

## 3.6.20 Senegal

Table 3.6.20.1 Liquefaction Plants

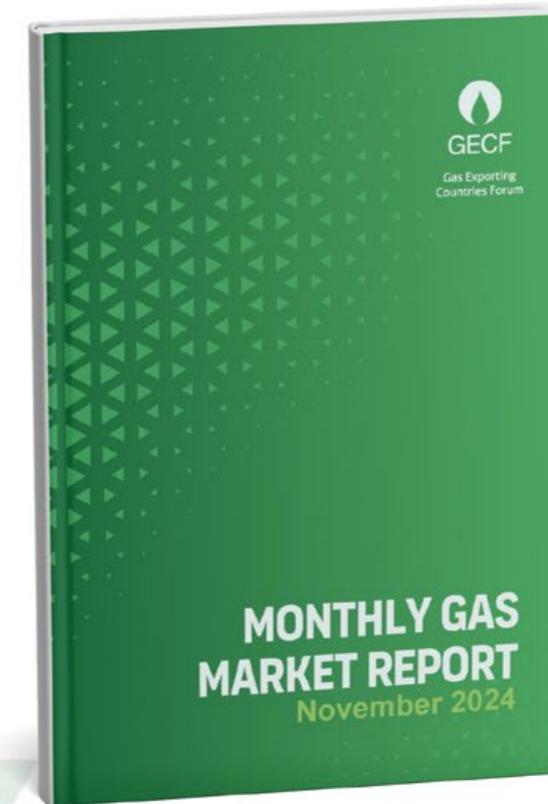
Plant	Liquefaction (No. of Trains)	Status	Start Year	Owner(s)	Operator(s)	Total Capacity (MTPA)
Greater Tortue Ahmeyim FLNG Terminal	4	Under Construction	2024	BP; Kosmos Energy, Petrosen, Societe Mauritanienne des Hydrocarbures	BP	2.5
<b>Total Expected Capacity</b>						<b>2.5</b>

Table 3.6.20.2 Regasification Plants

Plant	Status	Start Year	Owner(s)	Operator(s)	Total Capacity (MTPA)
Senegal FSRU	Under Construction	2024	KARMOL	KARMOL	2.5
<b>Total Expected Capacity</b>					<b>2.5</b>


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SECTION  
**04**

## GECF Member Countries



People's Democratic Republic of  
**ALGERIA**

- TIME ZONE**  
CENTRAL EUROPEAN (GMT+1)
- CAPITAL**  
ALGIERS
- CURRENCY**  
ALGERIAN DINAR
- CONTINENT**  
AFRICA
- POPULATION**  
46.55 M

## HIGHLIGHTS

**+4.1%**  
GDP Growth

Algeria's economic growth remained dynamic in 2023, with GDP recording a 4.1% increase, driven by robust performance in the nonhydrocarbon and hydrocarbon sectors.

**+31.0%**  
Gas Trade

Annual exports rose by more than 3 Bcm in 2023 due to a 31.0% increase in LNG exports.

**6**  
Discoveries | Upstream

Sonatrach announced 6 oil and gas discoveries in 2023, including 2 major finds in the Touggourt region with total well flow rates of up to 10,555 barrels of oil per day (b/d) and 426,373m<sup>3</sup>/d.

**32.4Mt/year**  
LNG Infrastructure

Algeria has 4 liquefaction units in operation, all operated by Sonatrach, with a total capacity of 32.4 Mt/year.

**+4.0%**  
Gas Production

Marketed Production reached 105.48 Bcm in 2023, an 4.0% increase compared to 2022.

**-15.0%**  
Flaring Decrease

Algeria achieved almost 0.4 Bcm reduction in flaring in 2023.

## 4.1.1 Macroeconomics

Table 4.1.1.1 Algeria: Macroeconomic Indicators

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Population (M Inhabitants)	39.10	40.07	40.84	41.70	42.63	43.42	44.23	44.62	45.83	46.55
Labor Force (M Inhabitants)	11.59	11.75	11.92	12.11	12.17	12.73	12.06	12.40	12.64	13.43
GDP (Current Billion US\$)	213.81	165.98	160.13	167.40	173.88	171.76	145.01	163.42	194.99	239.99
GDP Growth (annual %)	3.79	3.76	3.30	1.60	1.40	0.80	-4.90	3.40	3.60	4.10
GDP per capita (Current US\$)	5,468.29	4,141.96	3,920.78	4,014.47	4,079.01	3,955.41	3,278.74	3,662.80	4,254.20	5,155.20
Exports (Goods & Services) (Current Billion US\$)	64.66	38.58	33.40	37.94	44.56	39.01	25.11	38.64	65.53	60.37
Exports of Goods and Services (% of GDP)	30.24	23.24	20.86	22.66	25.62	22.71	17.32	23.64	33.61	25.16
Imports (Goods & Services) (Current Billion US\$)	68.31	60.81	56.09	55.60	56.24	49.97	40.60	43.02	43.06	50.44
Imports of Goods and Services (% of GDP)	31.95	36.64	35.03	33.20	32.30	29.10	28.00	26.33	22.10	21.01
Consumer price inflation (annual %)	3.90	4.40	5.80	5.90	3.50	2.40	2.10	7.23	8.86	9.37

Figure 4.1.1.1 Algeria: Population and Labor Force  
2014 - 2023 | Millions Inhabitants

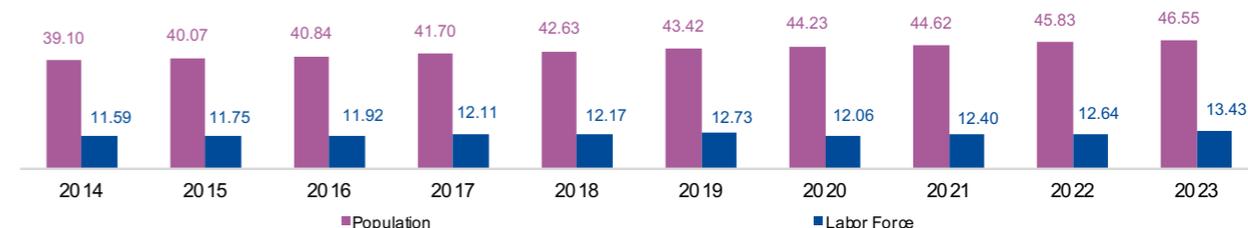


Figure 4.1.1.2 Algeria: GDP and GDP Growth  
2014 - 2023 | Current Billion US\$ and Annual %



### 4.1.2 Reserves and Production

**Table 4.1.2.1** Algeria: Proven Natural Gas Reserves (Bcm)

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Proven Gas Reserves	4,504	4,504	4,504	4,504	4,504	4,504	4,504	4,504	4,504	4,504

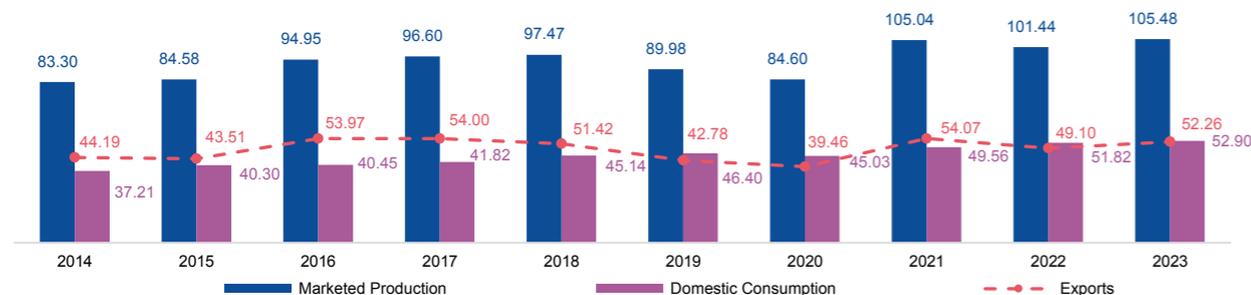
**Table 4.1.2.2** Algeria: Historical Natural Gas Production (Bcm)

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Gross Production	186.75	183.83	189.14	188.74	183.55	175.35	168.39	179.04	183.07	186.91
Marketed Production	83.30	84.58	94.95	96.60	97.47	89.98	84.60	105.04	101.44	105.48
Reinjection	81.21	77.05	70.12	66.94	61.10	60.33	59.98	47.05	52.98	51.06
Flaring	3.95	3.51	3.26	3.00	2.91	2.74	3.19	2.78	2.58	2.20
Shrinkage	18.30	18.68	20.81	22.21	22.07	22.30	20.64	24.17	26.07	28.17

**Table 4.1.2.3** Algeria: Detailed 2023 Natural Gas Production (Bcm)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Gross Production	15.86	14.38	15.94	15.46	15.66	15.13	15.79	15.86	15.39	15.64	15.52	16.28
Marketed Production	8.44	10.30	13.20	8.32	7.41	7.33	8.55	8.19	8.40	7.86	8.05	9.43

**Figure 4.1.2.1** Algeria: Historical Natural Gas Annual Production, Consumption and Exports  
2014 - 2023 | Bcm

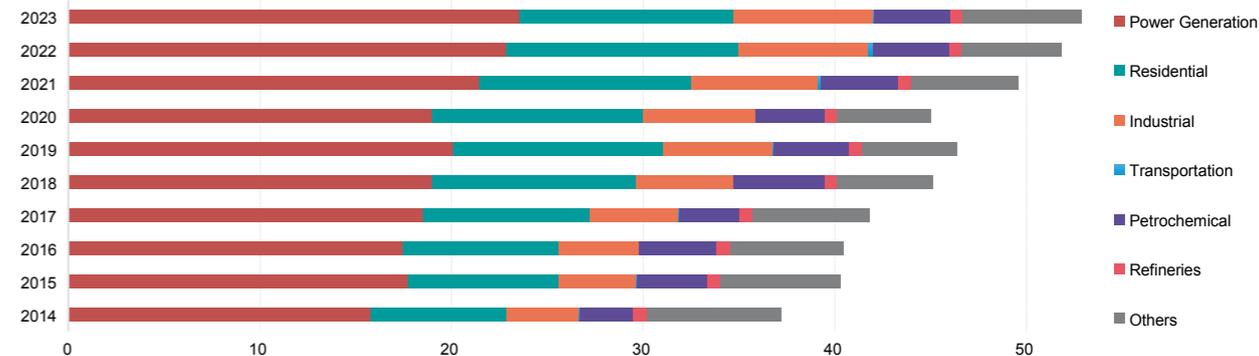


### 4.1.3 Domestic Consumption and Trade

**Table 4.3.1.1** Algeria: Historical Domestic Gas Consumption (Bcm)

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Residential	7.07	7.90	8.13	8.68	10.62	10.97	11.04	11.03	12.07	11.21
Industrial	3.83	4.04	4.21	4.63	5.10	5.74	5.86	6.66	6.81	7.28
Power Generation	15.75	17.72	17.45	18.53	18.99	20.08	18.97	21.47	22.89	23.51
Transportation	0.01	0.01	0.01	0.0	0.01	0.01	0.02	0.09	0.26	0.06
Petrochemical	2.83	3.66	4.00	3.18	4.75	3.94	3.60	4.09	3.96	3.95
Refineries	0.70	0.72	0.77	0.68	0.64	0.67	0.65	0.67	0.64	0.65
Others	7.02	6.25	5.88	6.10	5.03	4.98	4.89	5.56	5.19	6.22
<b>Domestic Consumption</b>	<b>37.21</b>	<b>40.30</b>	<b>40.45</b>	<b>41.82</b>	<b>45.14</b>	<b>46.40</b>	<b>45.03</b>	<b>49.56</b>	<b>51.82</b>	<b>52.90</b>

**Figure 4.3.1.1** Algeria: Historical Domestic Gas Consumption (Bcm)  
2014 - 2023 | Bcm

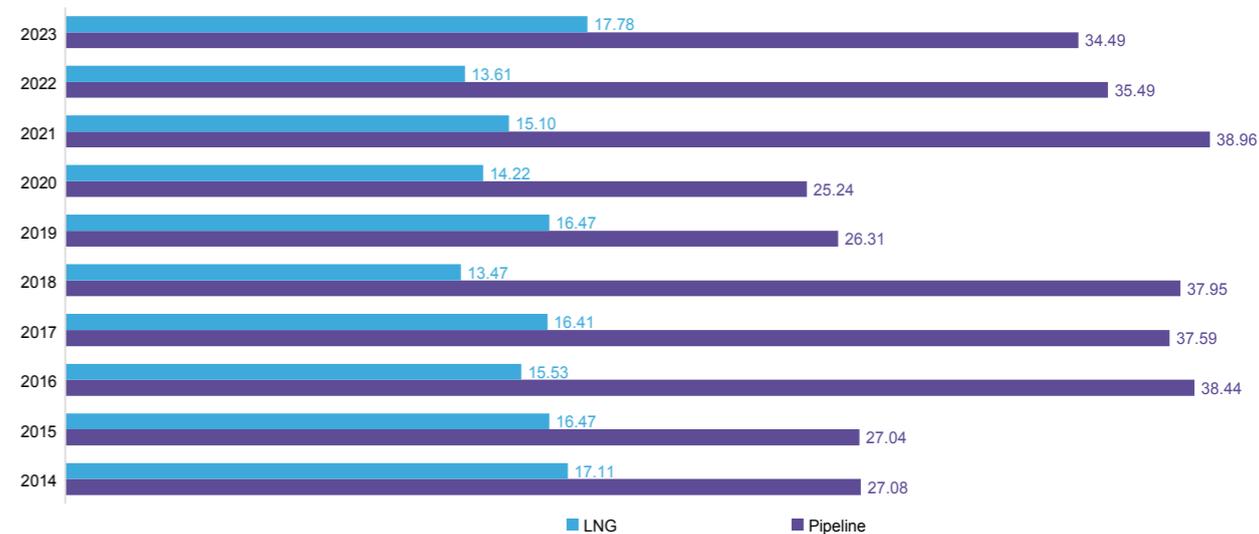


**Table 4.1.3.2** Algeria: Historical Trade: Natural Gas Exports

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Pipeline (Bcm)	27.08	27.04	38.44	37.59	37.95	26.31	25.24	38.96	35.49	34.49
LNG										
Bcm*	17.11	16.47	15.53	16.41	13.47	16.47	14.22	15.10	13.61	17.78
MMT	12.58	12.11	11.42	12.07	9.90	12.11	10.46	11.10	10.01	13.07
<b>Exports (Bcm)</b>	<b>44.19</b>	<b>43.51</b>	<b>53.97</b>	<b>54.00</b>	<b>51.42</b>	<b>42.78</b>	<b>39.46</b>	<b>54.07</b>	<b>49.10</b>	<b>52.26</b>

\*Gas Equivalent

**Figure 4.1.3.2** Algeria: Historical Trade: Natural Gas Exports  
2014 - 2023 | Bcm



**Table 4.1.3.3** Algeria: Detailed 2023 Trade: Natural Gas Exports

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Pipeline (Bcm)	2.39	2.49	2.80	3.29	2.69	2.69	3.24	3.14	3.27	2.98	2.69	2.83
LNG												
Bcm*	1.52	1.09	1.27	1.63	1.43	1.50	1.31	1.59	1.82	1.70	1.62	1.32
MMT	1.12	0.80	0.94	1.19	1.05	1.10	0.96	1.17	1.34	1.25	1.19	0.97
<b>Exports (Bcm)</b>	<b>3.91</b>	<b>3.58</b>	<b>4.08</b>	<b>4.91</b>	<b>4.11</b>	<b>4.19</b>	<b>4.55</b>	<b>4.73</b>	<b>5.08</b>	<b>4.68</b>	<b>4.30</b>	<b>4.14</b>

\*Gas Equivalent



Plurinational State of  
**BOLIVIA**



TIME ZONE  
**BOLIVIA (GMT-4)**



CAPITAL  
**SUCRE**



CURRENCY  
**BOLIVIAN BOLIVIANO**



CONTINENT  
**SOUTH AMERICA**



POPULATION  
**12.17 M**

## HIGHLIGHTS

**+3.1%**  
GDP Growth

Bolivia's economy grew in 2023, with GDP registering an increase of 3.1%, due to appropriate economic policy measures enabling economic reactivation within a framework of price stability.

**19.8 Bcm**  
Upstream

YPFB announced, in August 2023, the discovery of a new gas field in the Okinawa area. The Remanso-X1 (RMS-X1) well is undergoing condensate production tests and is expected to yield approximately 19.8 Bcm of gas and 52 mbl of liquids.

**8.1 Bcm**  
Gas Trade

Pipeline exports declined by 2.32 Bcm from 2022, standing at 8.08 Bcm in 2023.

**13.01 Bcm**  
Gas Production

Marketed production decreased by 13.1% compared to 2022, reaching 13.01 Bcm in 2023.

## 4.2.1 Macroeconomics

Table 4.2.1.1 Bolivia: Macroeconomic Indicators

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Population (M Inhabitants)	10.69	10.85	11.02	11.18	11.35	11.51	11.68	11.84	12.01	12.17
Labor Force (M Inhabitants)	5.25	5.37	5.48	5.60	5.72	5.83	5.95	6.06	6.18	6.26
GDP (Current Billion US\$)	33.24	33.24	34.19	37.78	40.58	41.19	36.90	40.70	44.33	45.46
GDP Growth (annual %)	5.46	4.86	4.26	4.20	4.22	2.22	-8.74	6.11	3.61	3.08
GDP per capita (Current US\$)	3,110.61	3,063.28	3,103.54	3,378.69	3,576.20	3,577.86	3,159.95	3,436.93	3,692.31	3,735.57
Exports (Goods & Services) (Current Billion US\$)	14.39	10.26	8.37	9.41	10.55	10.28	7.48	11.33	14.46	11.61
Exports (Goods & Services) (% of GDP)	43.29	30.87	24.49	24.90	25.99	24.97	20.27	27.83	32.61	25.53
Imports of Goods and Services (Current Billion US\$)	13.95	12.32	10.91	12.01	12.63	12.95	9.31	12.70	15.58	14.06
Imports of Goods and Services (% of GDP)	41.97	37.06	31.91	31.80	31.12	31.43	25.23	31.20	35.14	30.93
Consumer price inflation (annual %)	5.76	4.06	3.62	2.82	2.27	1.84	0.94	0.74	1.75	2.58

Figure 4.2.1.1 Bolivia: Population and Labor Force  
2014 - 2023 | Millions Inhabitants



Figure 4.2.1.2 Bolivia: GDP and GDP Growth  
2014 - 2023 | Current Billion US\$ and Annual %



## 4.2.2 Reserves and Production

**Table 4.2.2.1** Bolivia: Proven Natural Gas Reserves (Bcm)

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Proven Gas Reserves	296	296	296	255	253	253	253	253	253	253

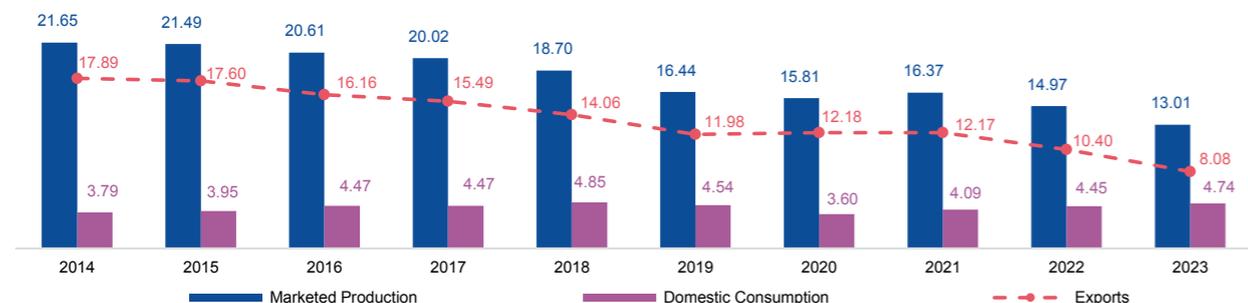
**Table 4.2.2.2** Bolivia: Historical Natural Gas Production (Bcm)

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Gross Production	22.39	22.17	21.33	20.70	19.34	17.05	16.38	16.97	15.52	13.47
Marketed Production	21.65	21.49	20.61	20.02	18.70	16.44	15.81	16.37	14.97	13.01
Reinjection	0.20	0.18	0.19	0.16	0.17	0.16	0.14	0.12	0.13	0.09
Flaring	0.20	0.19	0.17	0.17	0.15	0.13	0.13	0.13	0.11	0.10
Shrinkage	0.33	0.32	0.36	0.34	0.32	0.31	0.32	0.34	0.31	0.28

**Table 4.2.2.3** Bolivia: Detailed 2023 Natural Gas Production (Bcm)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Gross Production	1.24	1.10	1.22	1.16	1.08	1.11	1.14	1.10	1.09	1.10	1.05	1.09
Marketed Production	1.20	1.06	1.18	1.12	1.04	1.07	1.10	1.06	1.05	1.06	1.02	1.04

**Figure 4.2.2.1** Bolivia: Historical Natural Gas Annual Production, Consumption and Exports  
2014 - 2023 | Bcm

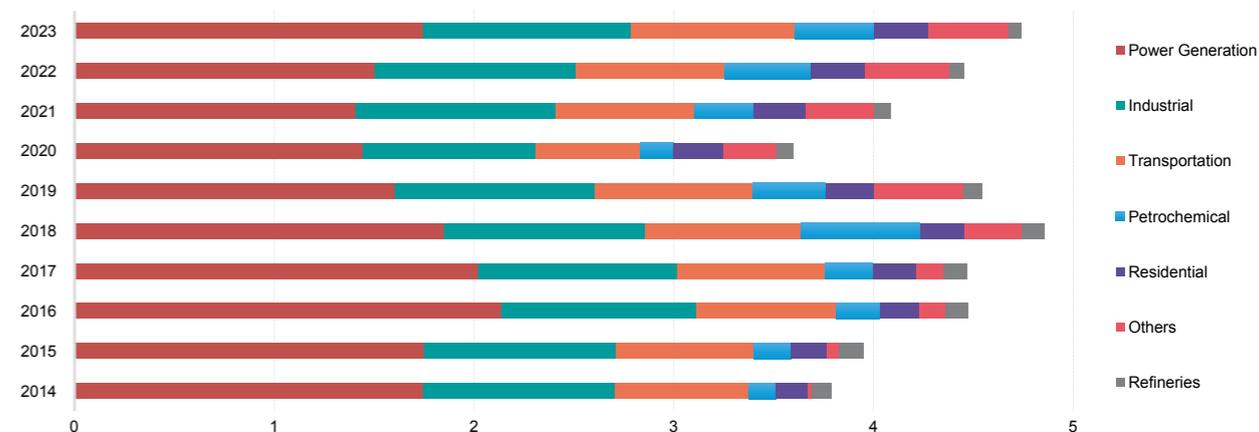


## 4.2.3 Domestic Consumption and Trade

**Table 4.2.3.1** Bolivia: Historical Domestic Gas Consumption (Bcm)

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Residential	0.16	0.18	0.20	0.22	0.22	0.24	0.25	0.26	0.27	0.27
Industrial	0.96	0.96	0.97	1.00	1.01	1.00	0.87	1.00	1.01	1.04
Power Generation	1.74	1.75	2.14	2.02	1.85	1.60	1.44	1.41	1.50	1.75
Transportation	0.67	0.69	0.70	0.74	0.78	0.79	0.52	0.70	0.74	0.82
Petrochemical	0.14	0.19	0.22	0.24	0.59	0.36	0.16	0.30	0.44	0.40
Refineries	0.10	0.13	0.12	0.12	0.11	0.09	0.08	0.08	0.08	0.06
Others	0.02	0.06	0.13	0.14	0.28	0.45	0.26	0.34	0.42	0.40
Domestic Consumption	3.79	3.95	4.47	4.47	4.85	4.54	3.60	4.09	4.45	4.74

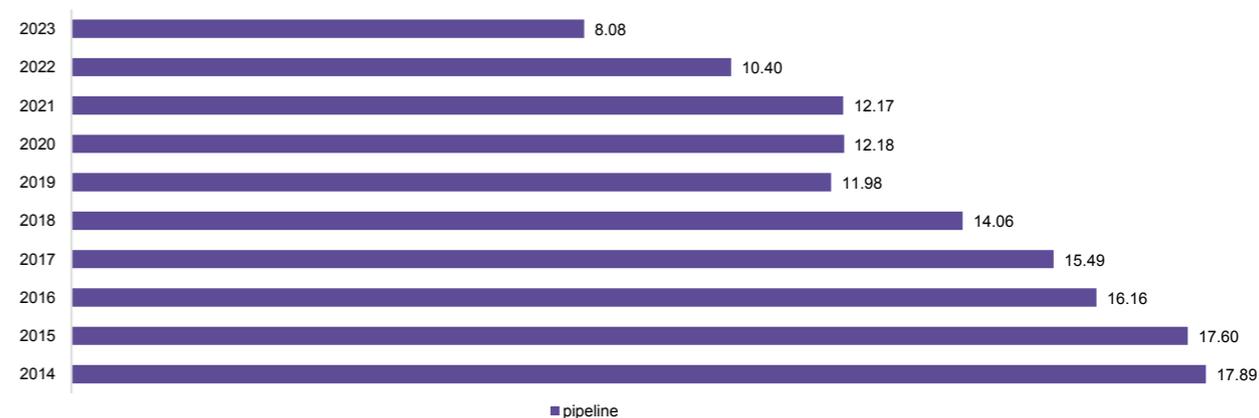
**Figure 4.2.3.1** Bolivia: Historical Domestic Gas Consumption (Bcm)  
2014 - 2023 | Bcm



**Table 4.2.3.2** Bolivia: Historical Trade: Natural Gas Exports  
2014 - 2023 | Bcm

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Pipeline (Bcm)	17.89	17.60	16.16	15.49	14.06	11.98	12.18	12.17	10.40	8.08
Exports (Bcm)	17.89	17.60	16.16	15.49	14.06	11.98	12.18	12.17	10.40	8.08

**Figure 4.2.3.2** Bolivia: Historical Trade: Natural Gas Exports  
2014 - 2023 | Bcm



**Table 4.2.3.3** Bolivia: Detailed 2023 Trade: Natural Gas Exports

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Pipeline (Bcm)	0.78	0.70	0.75	0.70	0.62	0.68	0.71	0.66	0.62	0.64	0.59	0.64
Exports (Bcm)	0.78	0.70	0.75	0.70	0.62	0.68	0.71	0.66	0.62	0.64	0.59	0.64



Arab Republic of  
**EGYPT**

 TIME ZONE EASTERN EUROPEAN (GMT+2)	 CAPITAL CAIRO	 CURRENCY EGYPTIAN POUND
 CONTINENT AFRICA	 POPULATION 112.72 M	

## HIGHLIGHTS

**+3.8%**  
GDP Growth

Egypt's economic growth remained dynamic in 2023, with GDP recording a 3.8% increase, driven by robust performance in the nonhydrocarbon and hydrocarbon sectors.

**61.0 Bcm**  
Domestic Consumption

Domestic consumption in 2023 stayed at the annual level of 61.0 Bcm.

**3.5 Tcf**  
Upstream

Chevron announced at the beginning of 2023 that it made a significant new gas discovery in an Egyptian offshore field. The Middle East Economic Survey reported that the size of the new discovery was 3.5 Tcf of gas.

**12.0 Mt/year**  
LNG Infrastructure

Egypt has 2 liquefaction units in operation totaling a capacity of 12 Mt/year and one operational regasification unit (FSRU) with a capacity of 3 Mt/year.

**-11.0%**  
Gas Production

Marketed production moved back by 11% in 2023 comparing to 2022 to reach 59.33 Bcm.

## 4.3.1 Macroeconomics

Table 4.3.1.1 Egypt: Macroeconomic Indicators

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Population (M Inhabitants)	90.42	92.44	94.45	96.44	98.42	100.39	102.33	104.26	110.99	112.72
Labor Force (M Inhabitants)	29.08	28.96	29.25	28.75	28.25	28.04	27.87	28.46	31.17	33.43
GDP (Current Billion US\$)	305.60	329.37	332.44	235.73	249.71	303.08	365.25	404.14	476.75	395.93
GDP Growth (annual %)	2.92	4.37	4.35	4.18	5.31	5.56	3.57	3.33	6.59	3.76
GDP per capita (Current US\$)	3,379.56	3,562.93	3,519.87	2,444.29	2,537.13	3,019.09	3,569.21	3,876.36	4,295.41	3,512.58
Exports (Goods & Services) (Current Billion US\$)	43.53	43.42	34.39	37.29	47.23	53.04	47.87	44.85	71.93	71.93
Exports of Goods and Services (% of GDP)	14.24	13.18	10.35	15.82	18.91	17.50	13.11	11.10	15.09	15.09
Imports (Goods & Services) (Current Billion US\$)	69.30	71.35	66.16	69.09	73.33	78.01	75.43	81.94	104.39	84.51
Imports of Goods and Services (% of GDP)	22.68	21.66	19.90	29.31	29.37	25.74	20.65	20.28	21.90	21.34
Consumer price inflation (annual %)	10.07	10.37	13.81	29.51	14.40	9.15	5.04	5.55	13.90	33.88

Figure 4.3.1.1 Egypt: GDP and GDP Growth

2014 - 2023 | Millions Inhabitants



Figure 4.3.1.2 Egypt: GDP and GDP Growth

2014 - 2023 | Current Billion US\$ and Annual %



### 4.3.2 Reserves and Production

**Table 4.3.2.1** Egypt: Historical Proven Natural Gas Reserves (Bcm)

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Proven Gas Reserves	2,186	2,086	2,221	2,221	2,221	2,221	2,209	2,209	2,209	1,784

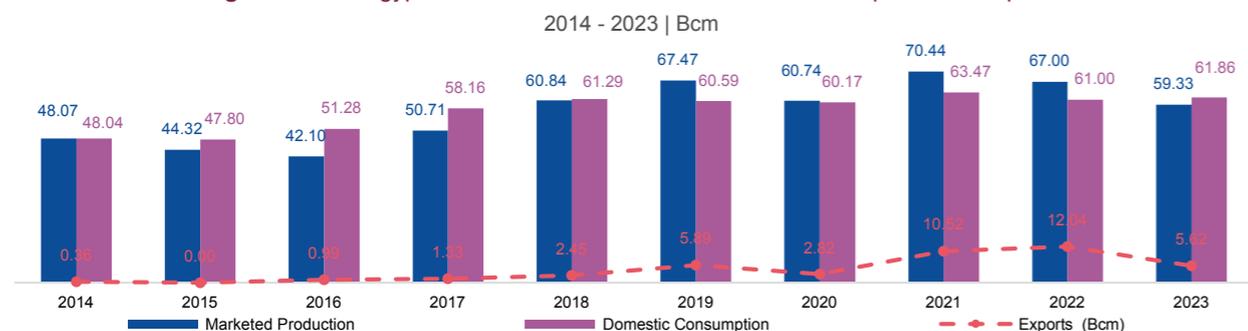
**Table 4.3.2.2** Egypt: Historical Natural Gas Production (Bcm)

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Gross Production	53.37	49.37	46.90	55.77	65.83	71.99	65.32	74.80	70.86	63.30
Marketed Production	48.07	44.32	42.10	50.71	60.84	67.47	60.74	70.44	67.00	59.33
Reinjection	1.76	1.76	1.73	1.55	1.50	1.38	1.38	1.32	1.16	1.20
Flaring	0.82	0.70	0.65	0.67	0.66	0.59	0.61	0.58	0.51	0.53
Shrinkage	0.49	0.46	0.40	0.68	0.69	0.58	0.62	0.60	0.54	0.55
Other losses	2.23	2.13	2.02	2.15	2.13	1.98	1.96	1.86	1.65	1.70

**Table 4.3.2.3** Egypt: Detailed 2023 Natural Gas Production (Bcm)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Gross Production	5.81	5.09	5.62	5.30	5.40	5.24	5.37	5.36	5.03	5.20	4.96	4.93
Marketed Production	5.47	4.79	5.29	4.98	5.06	4.91	5.03	5.00	4.70	4.87	4.64	4.60

**Figure 4.3.2.1** Egypt: Natural Gas Annual Production, Consumption and Exports

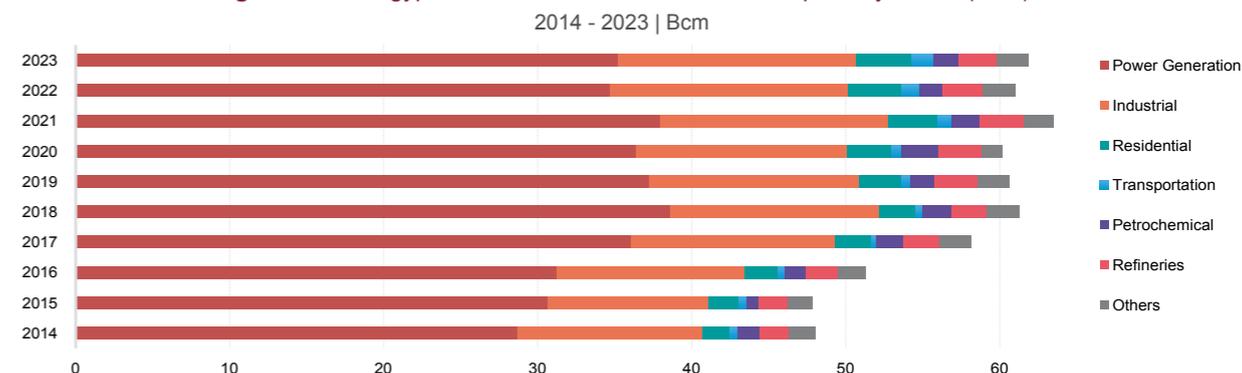


### 4.3.3 Domestic Consumption and Trade

**Table 4.3.3.1** Egypt: Historical Domestic Gas Consumption by sector (Bcm)

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Residential	1.79	1.96	2.16	2.36	2.38	2.79	2.92	3.19	3.52	3.61
Industrial	11.99	10.49	12.21	13.23	13.52	13.61	13.66	14.84	15.41	15.49
Power Generation	28.71	30.64	31.25	36.06	38.64	37.23	36.40	37.93	34.72	35.20
Transportation	0.49	0.45	0.39	0.38	0.42	0.55	0.64	0.87	1.16	1.35
Petrochemical	1.40	0.83	1.35	1.70	1.92	1.57	2.37	1.89	1.50	1.69
Refineries	1.90	1.85	2.15	2.40	2.28	2.80	2.84	2.84	2.58	2.46
Others	1.74	1.58	1.77	2.04	2.13	2.04	1.34	1.92	2.11	2.06
<b>Domestic Consumption</b>	<b>48.04</b>	<b>47.80</b>	<b>51.28</b>	<b>58.16</b>	<b>61.29</b>	<b>60.59</b>	<b>60.17</b>	<b>63.47</b>	<b>61.00</b>	<b>61.86</b>

**Figure 4.3.2.1** Egypt: Historical Domestic Gas Consumption by sector (Bcm)

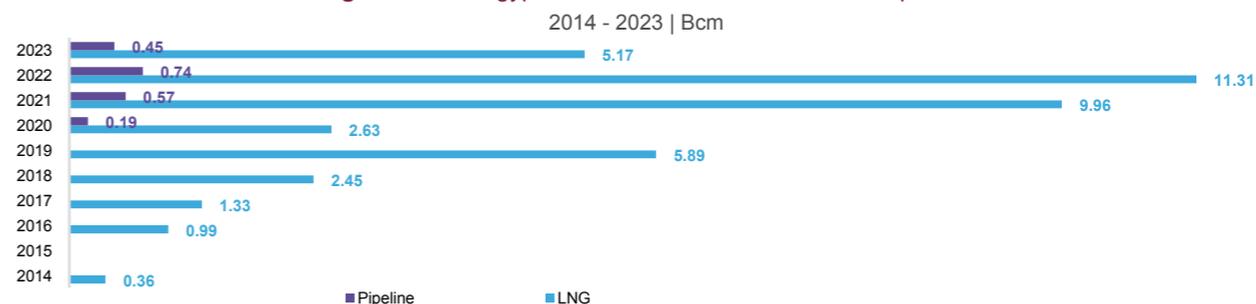


**Table 4.3.3.2** Egypt: Historical Trade: Natural Gas Exports

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	
Pipeline (Bcm)	0.00	0.00	0.00	0.00	0.00	0.00	0.19	0.57	0.74	0.45	
LNG	Bcm*	0.36	0.00	0.99	1.33	2.45	5.89	2.63	9.96	11.31	5.17
	MMT	0.27	0.00	0.73	0.98	1.80	4.33	1.93	7.32	8.31	3.80
<b>Exports (Bcm)</b>	<b>0.36</b>	<b>0.00</b>	<b>0.99</b>	<b>1.33</b>	<b>2.45</b>	<b>5.89</b>	<b>2.82</b>	<b>10.52</b>	<b>12.04</b>	<b>5.62</b>	

\*Gas Equivalent

**Figure 4.3.3.2** Egypt: Historical Trade: Natural Gas Exports



**Table 4.3.3.3** Egypt: Detailed 2023 Trade: Natural Gas Exports

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Pipeline (Bcm)	0.07	0.05	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.07
LNG	Bcm*	1.10	0.93	0.92	0.83	0.65	0.00	0.00	0.00	0.10	0.21	0.44
	MMT	0.81	0.68	0.68	0.61	0.48	0.00	0.00	0.00	0.07	0.15	0.32
<b>Exports (Bcm)</b>	<b>1.16</b>	<b>0.98</b>	<b>0.95</b>	<b>0.86</b>	<b>0.68</b>	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	<b>0.13</b>	<b>0.24</b>	<b>0.50</b>

\*Gas Equivalent

**Table 4.3.3.4** Egypt: Historical Trade: Natural Gas Imports

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Pipeline (Bcm)	0.00	0.00	0.00	0.00	0.00	0.00	1.72	4.22	6.27	8.57
LNG	Bcm*	0.00	3.49	10.15	8.91	1.97	0.00	0.00	0.00	0.00
	MMT	0.00	2.57	7.47	6.55	1.45	0.00	0.00	0.00	0.00
<b>Imports (Bcm)</b>	<b>0.00</b>	<b>3.49</b>	<b>10.15</b>	<b>8.91</b>	<b>1.97</b>	<b>0.00</b>	<b>1.72</b>	<b>4.22</b>	<b>6.27</b>	<b>8.57</b>

\*Gas Equivalent

**Table 4.3.3.5** Egypt: Detailed 2023 Trade: Natural Gas Imports

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Pipeline (Bcm)	0.74	0.66	0.81	0.79	0.82	0.78	0.72	0.65	0.74	0.36	0.60	0.89
Imports (Bcm)	0.74	0.66	0.81	0.79	0.82	0.78	0.72	0.65	0.74	0.36	0.60	0.89



Republic of  
**EQUATORIAL GUINEA**

**TIME ZONE**  
WEST AFRICA (GMT+1)

**CAPITAL**  
MALABO

**CURRENCY**  
CENTRAL AFRICAN  
CFA FRANC

**CONTINENT**  
AFRICA

**POPULATION**  
1.71 M

**HIGHLIGHTS**

**-5.7%**  
GDP Growth

Equatorial Guinea's economy faced challenges in 2023, with a 5.7% contraction in economic activity.

**3.7 Mt/year**  
LNG Infrastructure

The first liquefaction train of the EGLNG LNG plant, with a capacity of 3.7 Mt/year, was commissioned in 2007 on the island of Bioko close to Malabo.

**3**  
Blocks | Upstream

Offshore exploration blocks were granted to Panoro Energy, Africa Oil Corporation, and Antler Global to unlock additional reserves in 2023. Among the newly awarded blocks are Block EG-01, Block EG-08, and Block EG-31, situated next to existing producing and processing infrastructure.

**7.1 Bcm**  
Gas Production

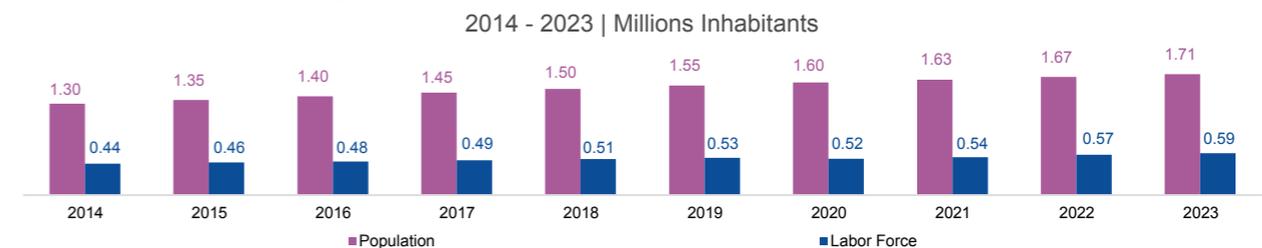
Marketed production decreased by 12% from the previous year's level and reached 7.10 Bcm in 2023.

**4.4.1 Macroeconomics**

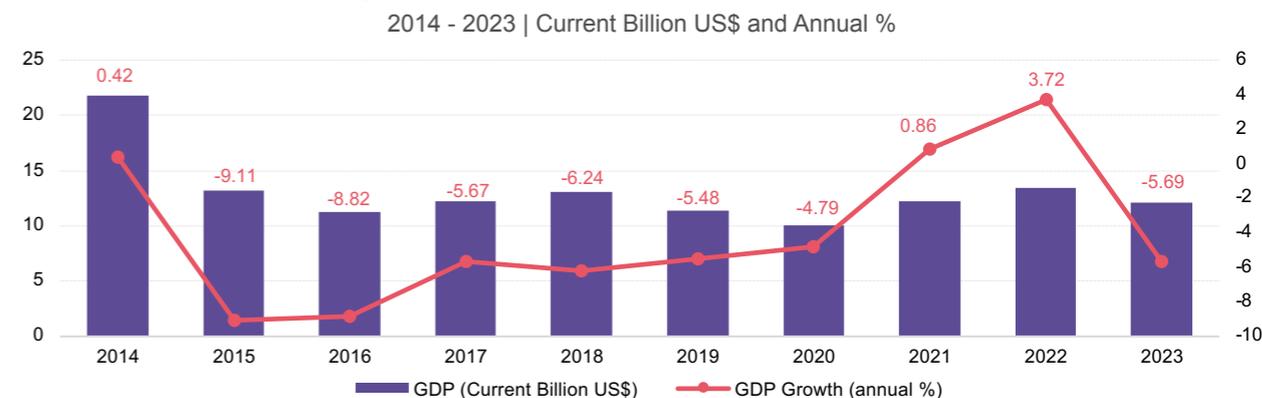
**Table 4.4.1.1** Equatorial Guinea: Equatorial Guinea Macroeconomic Indicators

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Population (M Inhabitants)	1.30	1.35	1.40	1.45	1.50	1.55	1.60	1.63	1.67	1.71
Labor Force (M Inhabitants)	0.44	0.46	0.48	0.49	0.51	0.53	0.52	0.54	0.57	0.59
GDP (Current Billion US\$)	21.77	13.19	11.24	12.20	13.10	11.36	10.10	12.22	13.49	12.12
GDP Growth (annual %)	0.42	-9.11	-8.82	-5.67	-6.24	-5.48	-4.79	0.86	3.72	-5.69
GDP per capita (Current US\$)	16,804.92	9,788.98	8,035.31	8,410.40	8,719.19	7,317.39	6,198.94	7,473.93	8,052.26	7,066.62
Exports (Goods & Services) (Current Billion US\$)	14.36	7.47	5.78	7.18	7.81	5.81	4.04	5.51	7.72	5.79
Exports (Goods & Services) (% of GDP)	65.96	56.66	51.41	58.86	59.61	51.13	40.85	45.13	57.24	47.81
Imports (Goods & Services) (Current Billion US\$)	8.36	5.57	4.63	5.32	5.77	4.97	3.67	3.89	5.43	4.76
Imports of Goods and Services (% of GDP)	38.42	42.22	41.19	43.57	44.03	43.75	37.08	31.84	34.56	39.32
Consumer price inflation (annual %)	4.31	1.68	1.41	0.75	1.06	1.53	4.77	-0.10	4.79	NA

**Figure 4.4.1.1** Equatorial Guinea: Population and Labor Force



**Figure 4.4.1.2** Equatorial Guinea: GDP and GDP Growth



### 4.4.2 Reserves and Production

**Table 4.4.2.1** Equatorial Guinea: Proven Natural Gas Reserves (Bcm)

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Proven Gas Reserves	60	54	47	42	42	39	39	39	39	39

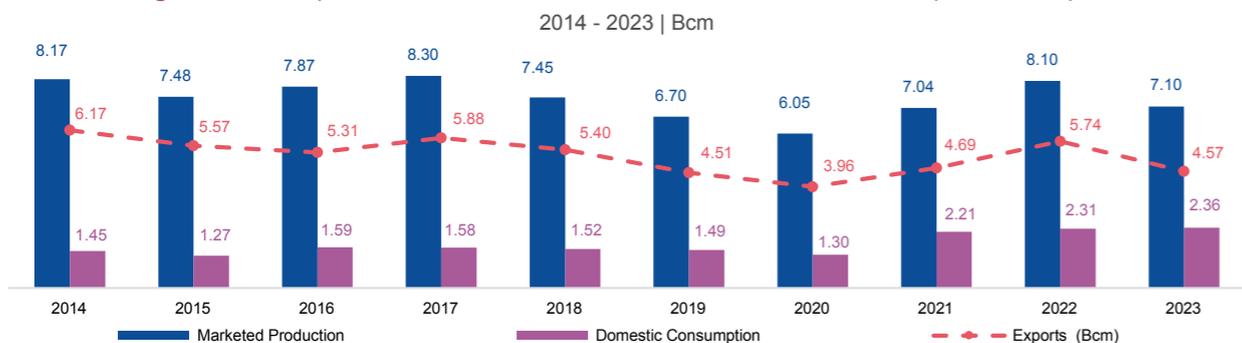
**Table 4.4.2.2** Equatorial Guinea: Historical Natural Gas Production (Bcm)

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Gross Production	13.89	15.45	14.76	13.80	12.66	12.16	11.15	9.97	10.82	9.47
Marketed Production	8.17	7.48	7.87	8.30	7.45	6.70	6.05	7.04	8.10	7.10
Reinjection	3.13	5.63	4.69	3.54	3.43	3.67	3.44	1.51	1.57	1.46
Flaring	1.33	1.27	0.96	0.76	0.76	0.60	0.66	0.48	0.49	0.31
Shrinkage	NA	NA	NA	NA	NA	0.17	0.15	0.13	0.13	0.15
Other losses	1.17	1.11	1.29	1.27	1.00	1.02	0.86	0.81	0.52	0.44

**Table 4.4.2.3** Equatorial Guinea: Detailed 2023 Natural Gas Production (Bcm)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Gross Production	0.88	0.79	0.75	0.47	0.83	0.79	0.82	0.83	0.74	0.84	0.86	0.86
Marketed Production	0.67	0.61	0.58	0.30	0.64	0.60	0.62	0.62	0.52	0.62	0.66	0.65

**Figure 4.4.2.1** Equatorial Guinea: Natural Gas Annual Production, Consumption and Exports

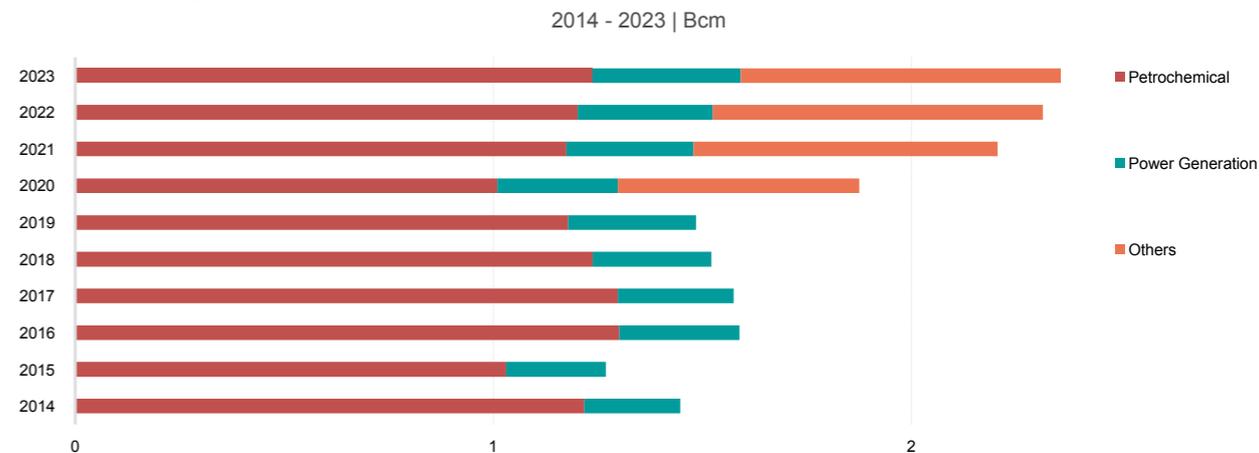


### 4.4.3 Domestic Consumption and Trade

**Table 4.4.3.1** Equatorial Guinea: Historical Domestic Gas Consumption by sector (Bcm)

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Power Generation	0.23	0.24	0.29	0.28	0.28	0.31	0.29	0.30	0.32	0.35
Petrochemical	1.22	1.03	1.30	1.30	1.24	1.18	1.01	1.17	1.20	1.24
Others	0.00	0.00	0.00	0.00	0.00	0.00	0.58	0.73	0.79	0.77
Domestic Consumption	1.45	1.27	1.59	1.58	1.52	1.49	1.30	2.21	2.31	2.36

**Figure 4.4.2.2** Equatorial Guinea: Historical Domestic Gas Consumption by sector (Bcm)



**Table 4.4.3.2** Equatorial Guinea: Historical Trade: Natural Gas Exports

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
LNG	6.17	5.57	5.31	5.88	5.40	4.51	3.96	4.69	5.74	4.57
MMT	4.54	4.10	3.90	4.32	3.97	3.31	2.91	3.45	4.22	3.05
Exports (Bcm)	6.17	5.57	5.31	5.88	5.40	4.51	3.96	4.69	5.74	4.57

\*Gas Equivalent

**Figure 4.4.2.3** Equatorial Guinea: Historical Trade: Natural Gas Exports



**Table 4.4.3.3** Equatorial Guinea: Detailed 2023 Trade: Natural Gas Exports

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
LNG	0.43	0.42	0.32	0.21	0.32	0.43	0.42	0.43	0.32	0.43	0.31	0.53
MMT	0.31	0.30	0.23	0.08	0.24	0.31	0.08	0.32	0.24	0.32	0.23	0.39
Exports (Bcm)	0.43	0.42	0.32	0.21	0.32	0.43	0.42	0.43	0.32	0.43	0.31	0.53

\*Gas Equivalent



Islamic Republic of  
**IRAN**



TIME ZONE  
IRAN STANDARD (GMT+3.5)



CAPITAL  
TEHRAN



CURRENCY  
IRANIAN RIYAL



CONTINENT  
MIDDLE EAST



POPULATION  
89.17 M

## HIGHLIGHTS

**+4.9%**  
GDP Growth

Iran's economy continued to grow moderately for the fourth consecutive year in 2023. Real GDP growth reached 4.9%, driven by expansions in services and manufacturing.

**\$900 Million**  
Upstream

Iran has signed a US\$900 million contract in 2023 with Iranian Offshore Engineering and Construction (IOEC) to develop the first phase of the Kish offshore gas field, which is located near the Gulf island of Kish and is estimated to hold 1,500 Bcm of gas in place.

**+2.0%**  
Gas Production

Marketed production increased by 2% compared to the previous year, reaching 266 Bcm in 2023.

**255.5 Bcm**  
Domestic Consumption

Domestic consumption in 2023 rose to 255.50 Bcm, 4% increase comparing to 2022.

## 4.5.1 Macroeconomics

Table 4.5.1.1 Iran: Macroeconomic Indicators

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Population (M Inhabitants)	79.96	81.79	83.31	84.51	85.62	86.56	87.29	87.92	88.55	89.17
Labor Force (M Inhabitants)	24.78	25.88	27.04	28.10	28.61	28.70	27.17	27.18	28.64	29.16
GDP (Current Billion US\$)	460.38	408.21	457.95	486.63	329.69	283.65	239.74	359.10	413.39	401.50
GDP Growth (annual %)	4.98	-1.42	8.82	2.76	-1.84	-3.07	3.33	4.72	3.78	4.95
GDP per capita (Current US\$)	5,757.54	4,990.94	5,497.24	5,758.59	3,850.75	3,276.75	2,746.42	4,084.20	4,668.46	4,502.55
Exports (Goods & Services) (Current Billion US\$)	105.11	76.42	96.91	110.64	102.59	66.61	46.57	82.01	110.86	114.99
Exports (Goods & Services) (% of GDP)	22.83	18.72	21.16	22.74	31.12	23.48	19.42	22.84	26.82	28.64
Imports (Goods & Services) (Current Billion US\$)	103.68	84.51	88.05	107.10	90.50	77.35	58.46	77.33	10,245.00	108.03
Imports of Goods and Services (% of GDP)	22.52	20.70	19.23	22.01	27.45	27.27	24.39	21.53	24.78	26.91
Consumer price inflation (annual %)	16.61	12.48	7.25	8.04	18.01	39.91	30.59	43.39	43.49	44.58

Figure 4.5.1.1 Iran: Population and Labor Force  
2014 - 2023 | Millions Inhabitants

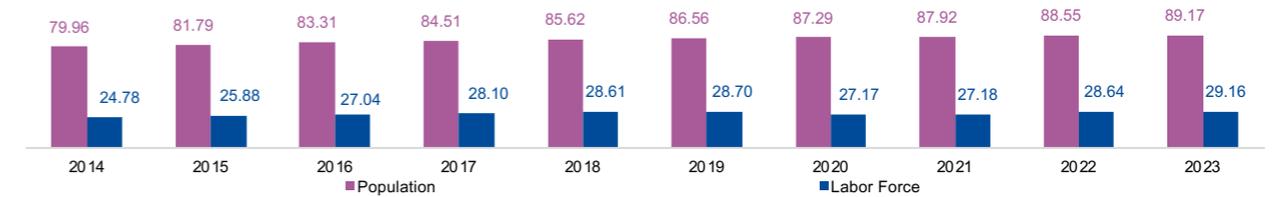
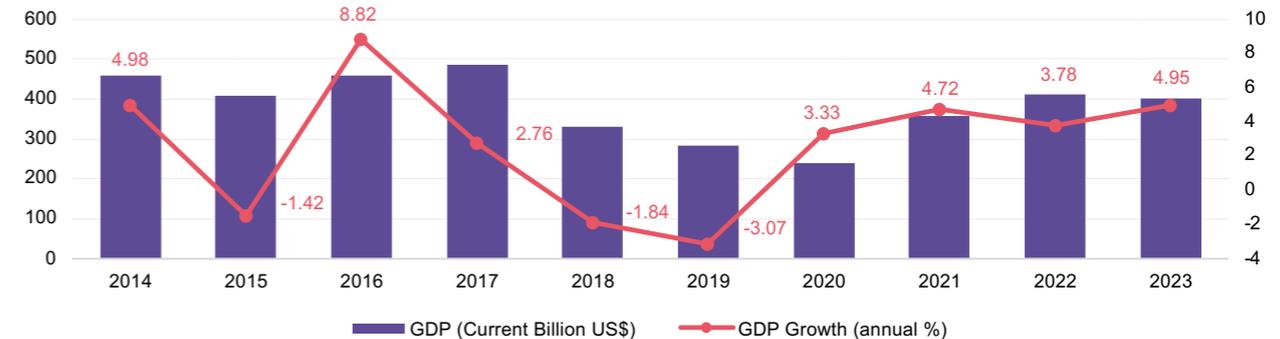


Figure 4.5.1.2 Iran: GDP and GDP Growth  
2014 - 2023 | Current Billion US\$ and Annual %



### 4.5.2 Reserves and Production

**Table 4.5.2.1 Iran: Proven Natural Gas Reserves (Bcm)**

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Proven Gas Reserves	34,020	33,500	33,721	33,810	33,899	33,988	33,988	33,988	33,988	33,988

**Table 4.5.2.2 Iran: Historical Natural Gas Production (Bcm)**

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Gross Production	245.68	256.98	277.39	301.45	310.58	321.42	324.73	336.49	340.30	343.83
Marketed Production	188.02	202.97	211.14	217.80	233.06	241.73	248.50	258.85	259.89	266.25
Reinjection	28.08	28.90	31.69	31.09	33.57	32.86	31.10	31.98	32.62	32.83
Shrinkage	9.45	10.68	11.82	12.94	12.64	11.97	10.43	11.10	11.64	11.44
Other losses	20.13	14.43	22.74	39.62	31.31	34.86	34.70	34.57	36.16	33.31

**Figure 4.5.2.1 Iran: Natural Gas Annual Production, Consumption**

2014 - 2023 | Bcm



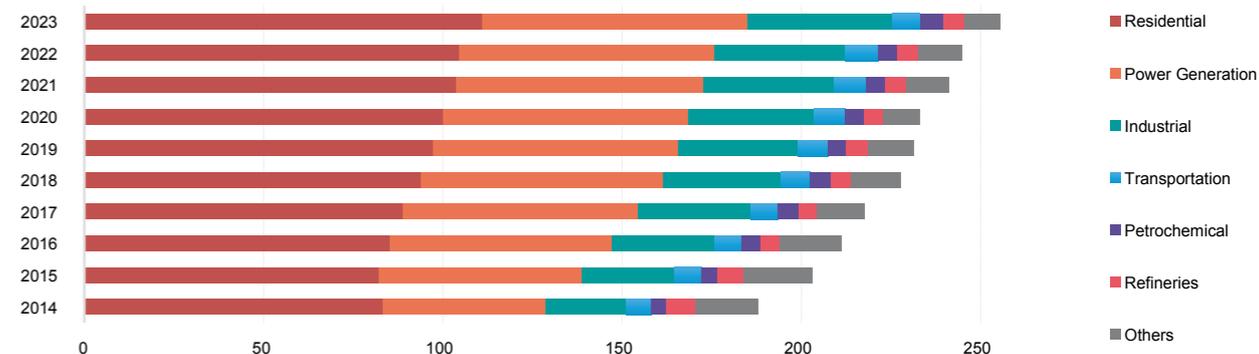
### 4.5.3 Domestic Consumption and Trade

**Table 4.5.3.1 Iran: Historical Domestic Gas Consumption by sector (Bcm)**

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Residential	83.35	81.98	85.17	88.85	93.98	97.32	99.95	103.74	104.48	110.99
Industrial	22.40	25.85	28.67	31.55	32.80	33.56	35.08	36.61	36.53	40.36
Power Generation	45.35	56.87	62.03	65.48	67.52	68.19	68.55	68.79	71.37	74.21
Transportation	7.05	7.37	7.56	7.59	8.12	8.37	8.65	8.95	9.01	7.57
Petrochemical	4.19	4.54	5.07	5.82	5.85	5.17	5.24	5.25	5.43	6.57
Refineries	8.13	7.13	5.54	5.13	5.65	5.95	5.32	5.88	5.96	5.76
Others	17.55	19.23	17.11	13.34	13.90	12.66	10.20	12.03	12.11	10.04
Domestic Consumption	188.02	202.97	211.15	217.76	227.82	231.22	233.00	241.25	244.89	255.50

**Figure 4.5.3.1 Iran: Historical Domestic Gas Consumption by sector (Bcm)**

2014 - 2023 | Bcm

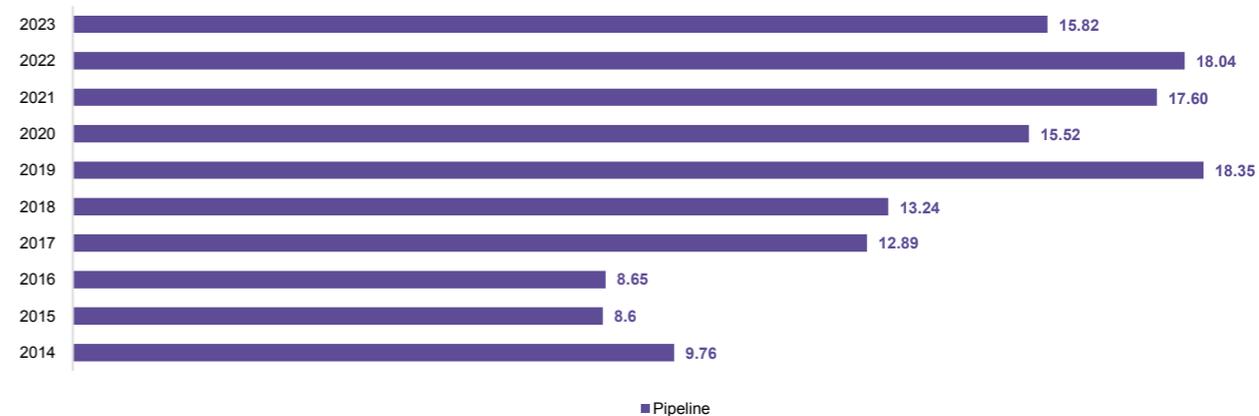


**Table 4.5.3.2 Iran: Historical Trade: Natural Gas Exports**

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Pipeline (Bcm)	9.76	8.60	8.65	12.89	13.24	18.35	15.52	17.60	18.04	15.82
Exports (Bcm)	9.76	8.60	8.65	12.89	13.24	18.35	15.52	17.60	18.04	15.82

**Figure 4.5.3.1 Iran: Historical Trade: Natural Gas Exports**

2014 - 2023 | Bcm



**Table 4.5.3.3 Historical Trade: Natural Gas Imports**

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Pipeline (Bcm)	6.33	9.50	7.33	4.72	5.91	1.27	0.02	0.00	3.05	5.07
Imports (Bcm)	6.33	9.50	7.33	4.72	5.91	1.27	0.02	0.00	3.05	5.07



State of **LIBYA**

- TIME ZONE EASTERN EUROPEAN (GMT+2)
- CAPITAL TRIPOLI
- CURRENCY LIBYAN DINAR
- CONTINENT AFRICA
- POPULATION 6.89 M

**HIGHLIGHTS**

**-1.7%**  
GDP Growth

Libya's economy contracted by 1.7% in 2023, largely due to the damages and financial losses incurred from the devastating floods.

**\$8 Billion**  
Upstream

Italy's Eni and partner the National Oil Corporation of Libya (NOC) have agreed to develop the Structures A&E giant gas project in 2023, with overall estimated investments of \$8 billion including a related carbon capture and storage facility.

**11.6 Bcm**  
Gas Production

Marketed production in 2023 experienced a 7% y-o-y decrease, reaching 11.66 Bcm.

**4.6.1 Macroeconomics**

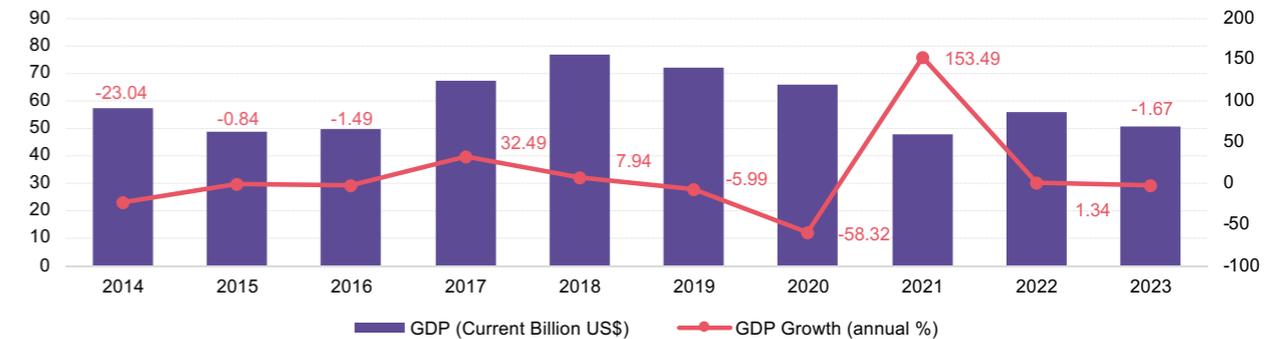
**Table 4.6.1.1** Libya: Macroeconomic Indicators

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Population (M Inhabitants)	6.10	6.19	6.28	6.38	6.48	6.57	6.65	6.74	6.81	6.89
Labor Force (M Inhabitants)	1.98	2.02	2.06	2.10	2.15	2.19	2.16	2.22	2.33	2.40
GDP (Current Billion US\$)	57.37	48.72	49.91	67.16	76.68	72.08	65.69	47.79	55.94	50.49
GDP Growth (annual %)	-23.04	-0.84	-1.49	32.49	7.94	-5.99	-58.32	153.49	1.34	-1.67
GDP per capita (Current US\$)	9,408.75	7,867.51	7,945.00	10,529.12	11,838.30	10,972.90	9,872.11	6,018.45	7,095.00	8,211.38
Exports (Goods & Services) (Current Billion US\$)	18.50	10.83	7.28	18.27	30.38	29.74	9.67	32.87	38.09	34.65
Exports (Goods & Services) (% of GDP)	32.24	22.23	14.58	27.20	39.61	41.26	14.73	68.79	68.09	68.63
Imports (Goods & Services) (Current Billion US\$)	25.41	16.89	13.24	13.67	18.53	24.95	14.10	25.01	24.38	20.85
Imports of Goods and Services (% of GDP)	44.29	34.68	26.53	20.35	24.17	34.62	21.47	52.35	43.58	41.30
Consumer price inflation (annual %)	2.43	10.40	25.85	25.80	13.17	-2.16	1.45	2.87	4.51	2.37

**Figure 4.6.1.1** Libya: Population and Labor Force 2014 - 2023 | Millions Inhabitants



**Figure 4.6.1.2** Libya: GDP and GDP Growth 2014 - 2023 | Current Billion US\$ and Annual %



### 4.6.2 Reserves and Production

**Table 4.6.2.1** Libya: Historical Proven Natural Gas Reserves (Bcm)

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Proven Gas Reserves	1,505	1,505	1,505	1,505	1,505	1,505	1,505	1,505	1,505	1,505

**Table 4.6.2.2** Libya: Historical Natural Gas Production (Bcm)

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Gross Production	20.94	22.56	24.59	27.55	30.32	32.66	25.54	26.35	25.29	27.17
Marketed Production	16.59	15.15	18.72	18.97	21.29	26.83	20.93	13.01	12.57	12.27
Reinjection	0.00	0.00	0.00	0.00	1.49	2.27	0.98	2.47	2.52	2.40
Flaring	2.12	2.70	2.21	3.09	3.61	3.67	1.98	5.58	2.86	6.20
Other losses	2.23	4.71	3.65	3.48	1.99	-0.10	1.65	5.29	7.34	6.30

**Figure 4.6.2.1** Libya: Natural Gas Annual Production, Consumption and Exports  
2014 - 2023 | Bcm

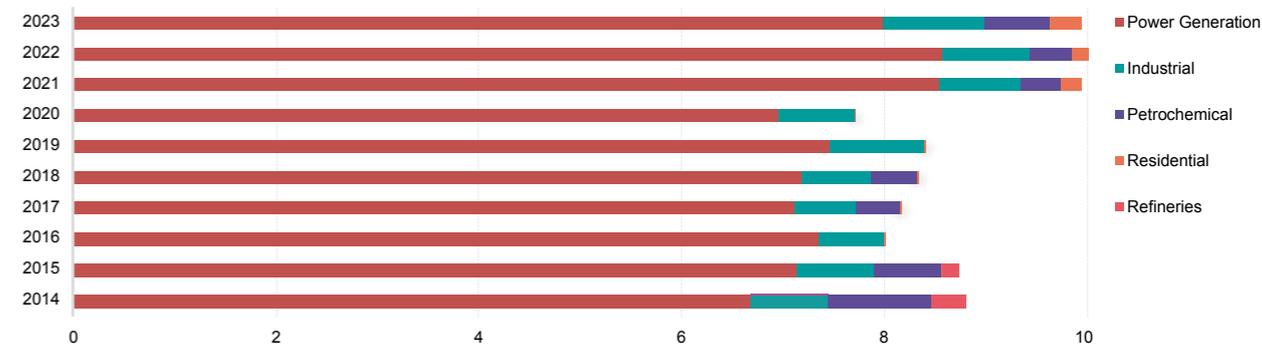


### 4.6.3 Domestic Consumption and Trade

**Table 4.6.3.1** Libya: Historical Domestic Gas Consumption by sector (Bcm)

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Residential	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.19	0.24	0.31
Industrial	0.76	0.76	0.63	0.59	0.67	0.92	0.74	0.79	0.84	1.00
Power Generation	6.69	7.14	7.36	7.13	7.20	7.47	6.95	8.55	8.58	8.00
Petrochemical	1.01	0.67	0.46	0.44	0.44	0.00	0.00	0.41	0.42	0.63
Refineries	0.36	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Domestic Consumption	8.82	8.73	7.99	8.16	8.32	8.40	7.70	9.94	10.09	9.94

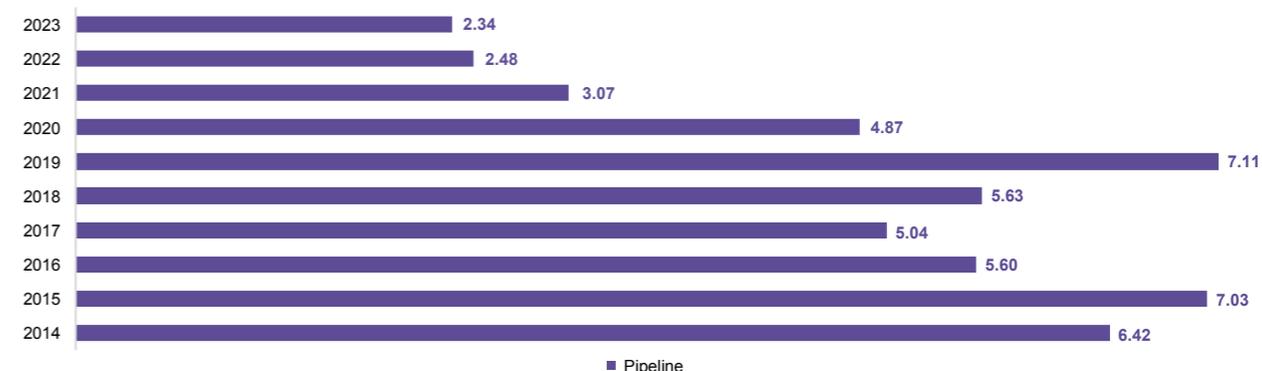
**Figure 4.6.2.2** Libya: Historical Domestic Gas Consumption by sector (Bcm)  
2014 - 2023 | Bcm



**Table 4.6.3.2** Libya: Historical Trade: Natural Gas Exports

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Pipeline (Bcm)	6.42	7.03	5.60	5.04	5.63	7.11	4.87	3.07	2.48	2.34
Exports (Bcm)	6.42	7.03	5.60	5.04	5.63	7.11	4.87	3.07	2.48	2.34

**Figure 4.6.2.3** Libya: Natural Gas Annual Exports  
2014 - 2023 | Bcm





Federal Republic of  
**NIGERIA**



TIME ZONE  
WEST AFRICA (GMT+1)



CAPITAL  
ABUJA



CURRENCY  
NIGERIAN NAIRA



CONTINENT  
AFRICA



POPULATION  
223.80 M

## HIGHLIGHTS

**+2.9%**  
GDP Growth

Nigeria's economy expanded by 2.86% in 2023, marking the third consecutive year of growth.

**14.7 Bcm**  
Domestic Consumption

Domestic natural gas consumption reached a level of 14.68 Bcm in 2023, marking a 13% y-o-y increase.

**\$18 Billion**  
Upstream

International companies are planning to invest over \$18 billion in Nigerian upstream projects. This surge in investment is driven by recent policy reforms and the potential for foreign direct investment in the upstream sector.

**23.34 Mt/year**  
LNG Infrastructure

Nigeria possessed 2 LNG Plants with the NLNG having six (6) operational liquefaction trains, while Greenville with three (3) operational trains totaling a capacity of 23.34 Mt/y.

**+16.8%**  
Gas Production

Nigeria's Marketed natural gas production increased by 16.8% in 2023 compared to the previous year, reaching 51.74 Bcm.

## 4.7.1 Macroeconomics

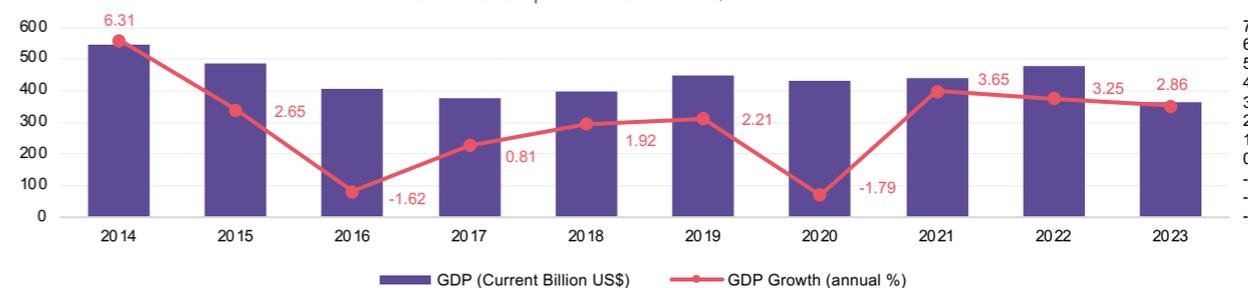
Table 4.7.1.1 Nigeria: Macroeconomic Indicators

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Population (M Inhabitants)	176.40	181.14	185.96	190.87	195.87	200.96	206.14	211.40	221.06	223.80
Labor Force (M Inhabitants)	54.35	55.82	57.27	58.81	60.45	62.15	62.26	64.48	73.27	75.72
GDP (Current Billion US\$)	546.68	486.80	404.65	375.75	397.19	448.12	432.29	440.78	477.39	362.81
GDP Growth (annual %)	6.31	2.65	-1.62	0.81	1.92	2.21	-1.79	3.65	3.25	2.86
GDP per capita (Current US\$)	3,098.99	2,687.48	2,176.00	1,968.57	2,027.78	2,229.86	2,097.09	2,085.03	2,184.42	1,621.12
Exports (Goods & Services) (Current Billion US\$)	100.78	51.92	37.30	49.49	61.55	63.73	35.08	47.34	68.12	82.86
Exports (Goods & Services) (% of GDP)	18.44	10.67	9.22	13.17	15.50	14.22	8.11	10.74	14.27	22.84
Imports (Goods & Services) (Current Billion US\$)	68.06	51.92	46.55	49.51	69.55	88.74	35.59	47.34	72.27	101.14
Imports of Goods and Services (% of GDP)	12.45	10.67	11.50	13.18	17.51	19.80	8.23	10.74	15.14	27.88
Consumer price inflation (annual %)	8.06	9.01	15.68	16.52	12.09	11.40	13.25	16.95	18.85	24.66

Figure 4.7.1.1 Nigeria: Population and Labor Force  
2014 - 2023 | Millions Inhabitants



Figure 4.7.1.2 Nigeria: GDP and GDP Growth  
2014 - 2023 | Current Billion US\$ and Annual %



### 4.7.2 Reserves and Production

**Table 4.7.2.1** Nigeria: Historical Proven Gas Reserves (Bcm)

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Proven Gas Reserves	5,303	5,280	5,475	5,627	5,685	5,761	5,750	5,848	5,913	5,943

**Table 4.7.2.2** Nigeria: Historical Natural Gas Production (Bcm)

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Gross Production	86.27	84.99	76.74	83.14	85.33	86.21	83.00	77.66	71.24	71.54
Marketed Production	45.42	47.14	42.55	47.44	49.35	50.24	50.78	48.66	44.28	51.74
Reinjection	25.35	23.42	21.75	21.80	22.35	22.86	20.25	17.59	17.47	14.96
Flaring	10.73	9.37	8.18	9.17	9.17	8.78	7.24	7.15	5.33	5.10
Other losses	4.77	5.06	4.28	4.73	4.46	4.34	4.73	4.27	4.15	4.17

**Table 4.7.2.3** Nigeria: Detailed 2023 Natural Gas Production (Bcm)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Gross Production	6.06	5.73	6.44	5.43	6.04	5.68	6.15	5.88	6.32	6.39	5.70	5.71
Marketed Production	3.45	3.36	3.81	3.50	3.63	3.31	5.08	4.16	5.44	5.69	6.31	3.98

**Figure 4.7.2.1** Nigeria: Natural Gas Annual Production, Consumption and Exports  
2014 - 2023 | Bcm

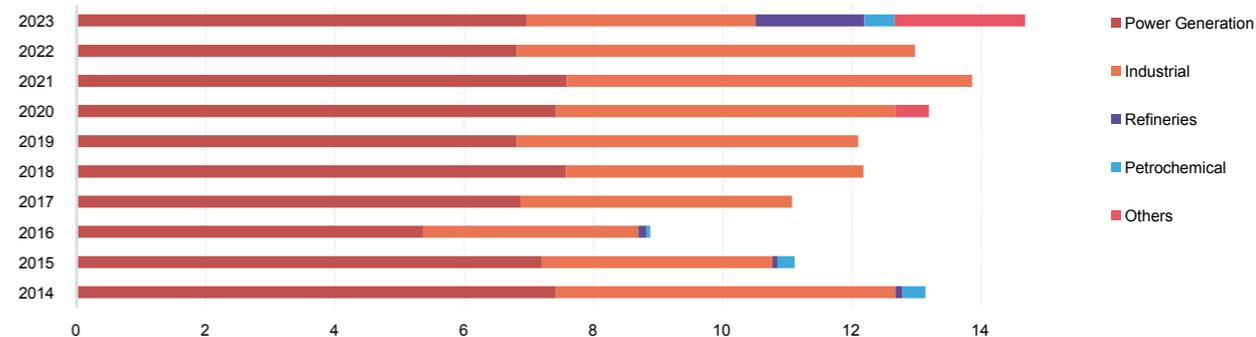


### 4.7.3 Domestic Consumption and Trade

**Table 4.7.3.1** Nigeria: Historical Domestic Gas Consumption by sector (Bcm)

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Industrial	5.25	3.57	3.33	4.21	4.60	5.29	5.25	6.27	6.16	3.54
Power Generation	7.42	7.20	5.36	6.86	7.57	6.81	7.42	7.59	6.82	6.97
Petrochemical	0.35	0.27	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.47
Refineries	0.11	0.08	0.13	0.00	0.00	0.00	0.00	0.00	0.00	1.68
Others	0.00	0.00	0.00	0.00	0.00	0.00	0.52	0.00	0.00	2.02
Domestic Consumption	13.13	11.11	8.88	11.07	12.18	12.10	13.19	13.86	12.97	14.68

**Figure 4.7.3.1** Nigeria: Historical Domestic Gas Consumption by sector (Bcm)  
2014-2023 | Bcm

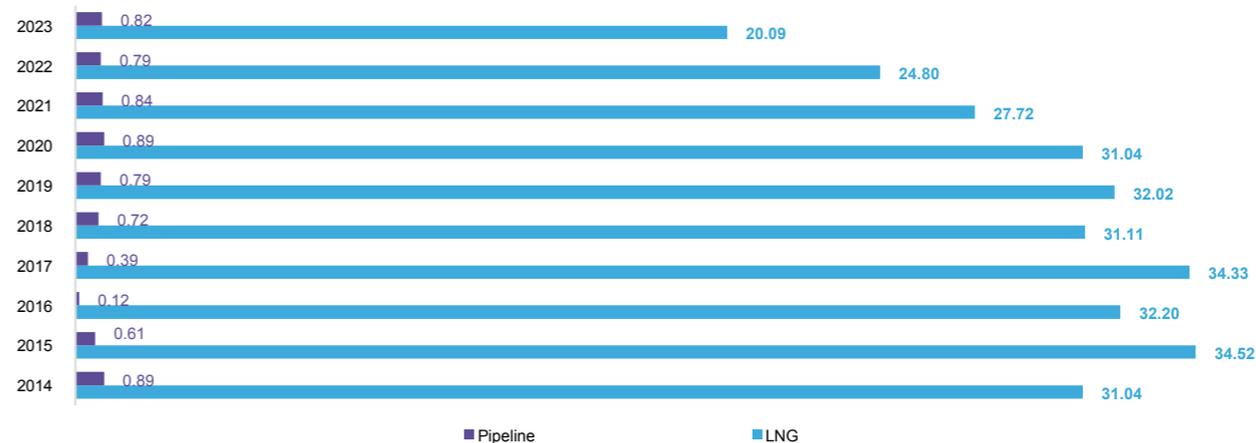


**Table 4.7.3.2** Nigeria: Historical Trade: Natural Gas Exports

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	
Pipeline (Bcm)	0.89	0.61	0.12	0.39	0.72	0.79	0.89	0.84	0.79	0.82	
LNG	Bcm*	31.04	34.52	32.20	34.33	31.11	32.02	31.04	27.72	24.80	20.09
	MMT	22.82	25.38	23.68	25.24	22.88	23.54	22.82	20.38	18.24	14.77
Exports (Bcm)	31.93	35.14	32.31	34.72	31.83	32.81	31.93	28.56	25.59	20.91	

\*Gas Equivalent

**Figure 4.7.3.2** Nigeria: Historical Trade: Natural Gas Exports  
2014 - 2023 | Bcm



**Table 4.7.3.3** Nigeria: Detailed 2023 Trade: Natural Gas Exports

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Pipeline (Bcm)	0.07	0.07	0.08	0.06	0.07	0.09	0.07	0.06	0.07	0.04	0.06	0.07	
LNG	Bcm*	1.71	1.71	2.04	1.91	1.98	1.86	1.55	1.25	1.61	1.66	1.37	1.45
	MMT	1.26	1.26	1.50	1.40	1.45	1.37	1.14	0.92	1.18	1.22	1.01	1.06
Exports (Bcm)	1.78	1.78	2.12	1.97	2.05	1.95	1.62	1.31	1.68	1.71	1.43	1.52	

\*Gas Equivalent



- TIME ZONE**  
ARABIA (GMT+3)
- CAPITAL**  
DOHA
- CURRENCY**  
QATARI RIYAL
- CONTINENT**  
MIDDLE EAST
- POPULATION**  
2.72 M

## HIGHLIGHTS

**170.9 Bcm**  
Gas Production

Qatar's marketed natural gas production saw a slight increase in 2023, reaching 170.9 Bcm.

**77.0 Mt/year**  
LNG Infrastructure

Qatar has 7 LNG plants with 14 liquefaction trains and a total capacity of 106 bcm/year (77 Mt/year), all operated by Qatargas.

**\$560 Million**  
Upstream

QatarEnergy has awarded a \$560 million contract to Spanish contractor Tecnicas Reunidas for additional onshore surface facilities required for its North Field South (NFS) expansion program.

**43.2 Bcm**  
Domestic Consumption

Domestic gas consumption in Qatar remained steady at 43.2 Bcm in 2023.

## 4.8.1 Macroeconomics

Table 4.8.1.1 Qatar: Macroeconomic Indicators

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Population (M Inhabitants)	2.21	2.41	2.60	2.71	2.77	2.81	2.76	2.69	2.70	2.72
Labor Force (M Inhabitants)	1.65	1.82	1.96	2.05	2.08	2.10	2.05	1.98	2.01	2.04
GDP (Current Billion US\$)	206.22	161.74	151.73	161.10	183.33	176.37	144.41	179.73	235.77	213.00
GDP Growth (annual %)	5.33	4.75	3.06	-1.50	1.23	0.69	-3.56	1.63	4.21	1.20
GDP per capita (Current US\$)	93,126.15	66,984.91	58,467.24	59,407.70	66,264.08	62,827.40	52,315.66	66,858.74	87,480.42	69,540.00
Exports (Goods & Services) (Current Billion US\$)	140.23	92.29	72.40	85.20	102.56	92.05	70.93	105.86	161.69	NA
Exports of Goods and Services (% of GDP)	68.00	57.06	47.71	52.89	55.94	52.19	49.12	58.73	68.58	NA
Imports (Goods & Services) (Current Billion US\$)	64.00	59.27	63.48	62.19	65.81	66.77	59.06	61.33	74.52	NA
Imports of Goods and Services (% of GDP)	31.04	36.65	41.83	38.61	35.90	37.97	40.90	34.13	31.61	NA
Consumer price inflation (annual %)	3.35	1.81	2.68	0.39	0.26	-0.67	-2.54	2.30	5.00	3.03

Figure 4.8.1.1 Qatar: Population and Labor Force  
2014 - 2023 | Millions Inhabitants



Figure 4.8.1.2 Qatar: GDP and GDP Growth  
2014 - 2023 | Current Billion US\$ and Annual %



### 4.8.2 Reserves and Production

**Table 4.8.2.1** Qatar: Historical Proven Natural Gas Reserves (Bcm)

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Proven Gas Reserves	24,531	24,299	24,073	23,861	23,846	23,831	23,831	23,831	23,831	23,831

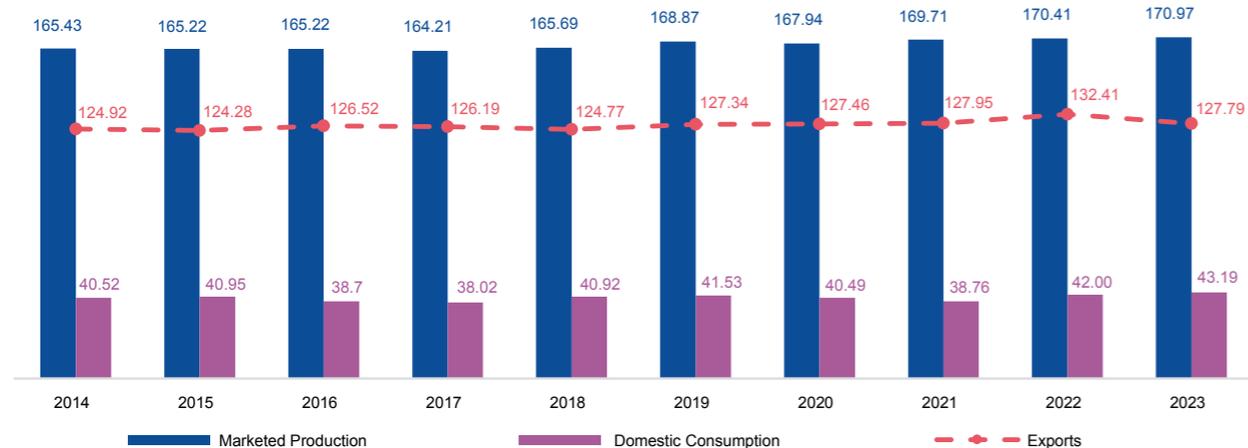
**Table 4.8.2.2** Qatar: Historical Natural Gas Production (Bcm)

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Gross Production	206.99	206.45	206.69	207.09	210.55	209.31	211.50	215.02	215.98	215.40
Marketed Production	165.43	165.23	165.22	164.21	165.69	168.87	167.94	169.71	170.41	170.97
Reinjection	2.65	2.53	2.74	2.66	2.25	2.28	2.20	2.20	3.72	3.91
Flaring	0.71	0.72	0.72	0.69	0.60	0.70	1.10	1.10	1.21	1.28
Other losses	2.50	1.92	1.86	2.39	2.53	1.90	2.48	2.98	0.56	0.85

**Table 4.8.2.3** Qatar: Detailed 2023 Natural Gas Production (Bcm)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Gross Production	18.42	15.82	18.11	18.46	17.65	18.43	19.17	18.90	18.35	16.71	16.76	18.62
Marketed Production	14.43	13.71	14.20	14.54	13.89	14.49	15.09	14.92	14.61	13.21	13.21	14.67

**Figure 4.8.2.1** Qatar: Natural Gas Annual Production, Consumption and Exports  
2014 - 2023 | Bcm



### 4.8.3 Domestic Consumption and Trade

**Table 4.8.3.1** Qatar: Historical Domestic Gas Consumption (Bcm)

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Domestic Consumption	40.52	40.95	38.70	38.02	40.92	41.53	40.49	38.76	42.00	43.19

**Table 4.8.3.2** Qatar: Historical Trade: Natural Gas Exports

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	
Pipeline (Bcm)	20.09	19.75	20.00	21.96	22.36	22.45	22.62	21.68	24.04	20.67	
LNG	Bcm*	104.83	104.53	106.52	104.23	102.41	104.89	104.84	106.27	108.37	107.12
	MMT	77.08	76.86	78.32	76.64	75.30	77.13	77.09	78.14	79.68	78.76
Exports (Bcm)	124.92	124.28	126.52	126.19	124.77	127.34	127.46	127.95	132.41	127.79	

\*Gas Equivalent

**Figure 4.8.2.2** Qatar: Natural Gas Annual Exports  
2014 - 2023 | Bcm



**Table 4.8.3.3** Qatar: Detailed 2023 Trade: Natural Gas Exports

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Pipeline (Bcm)	1.50	0.89	1.87	1.79	1.95	1.87	1.81	1.92	1.87	1.94	1.63	1.63	
LNG	Bcm*	9.47	9.38	8.99	9.43	8.35	8.99	9.30	9.04	8.94	7.71	8.42	9.09
	MMT	6.97	6.89	6.61	6.94	6.14	6.61	6.84	6.65	6.57	5.67	6.19	6.68
Exports (Bcm)	10.98	10.26	10.86	11.23	10.30	10.86	11.11	10.97	10.81	9.65	10.04	10.72	

\*Gas Equivalent



Russian Federation  
**RUSSIA**

**TIME ZONE**  
GMT+3 (MOSCOW)

**CAPITAL**  
MOSCOW

**CURRENCY**  
RUSSIAN RUBLE

**CONTINENT**  
EURASIA

**POPULATION**  
143.83 M

**HIGHLIGHTS**

**+3.6%**  
GDP Growth

Russia's economy rebounded in 2023, growing by 3.6%, driven by increased activity in manufacturing, trade-related services, and construction.

**620.2 Bcm**  
Gas Production

Russia's Marketed natural gas production declined by 4% , totaling 620.2 Bcm in 2023.

**495.6 Bcm**  
Domestic Consumption

Domestic consumption reached 495.6 Bcm in 2023, representing a 2% y-o-y increase.

**-23.0%**  
Flaring Decrease

Russia reduced gas flaring to 13.97 Bcm in 2023, highlighting a significant step towards reducing environmental impacts and improving gas utilization.

**29.2 Mt/year**  
LNG Infrastructure

Russia has 4 operational LNG plants with 9 liquefaction trains totaling a capacity of 29.2 Mt/year.

**4.9.1 Macroeconomics**

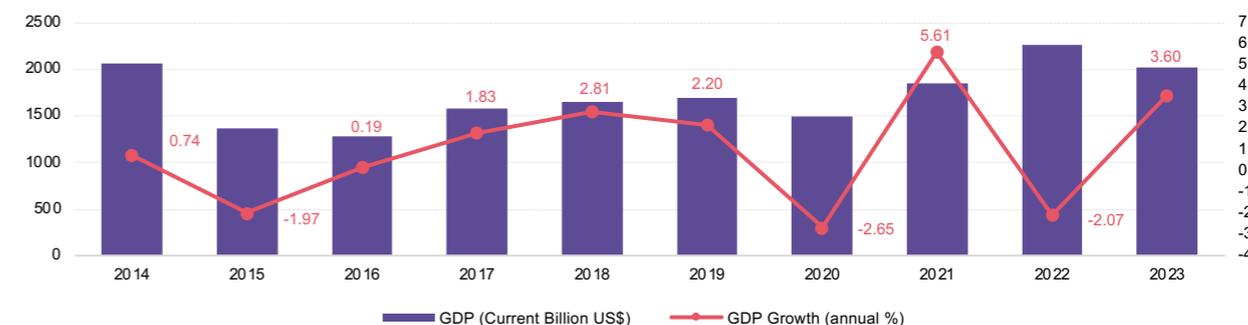
**Table 4.9.1.1** Russia: Macroeconomic Indicators

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
<b>Population</b> (M Inhabitants)	144.24	144.64	145.02	145.29	145.40	145.45	145.25	144.75	144.24	143.83
<b>Labor Force</b> (M Inhabitants)	75.65	75.41	75.53	75.02	74.98	74.13	73.66	74.03	73.80	72.41
<b>GDP</b> (Current Billion US\$)	2,059.24	1,363.48	1,276.79	1,574.20	1,657.33	1,693.12	1,493.08	1,843.39	2,266.03	2,021.42
<b>GDP Growth</b> (annual %)	0.74	-1.97	0.19	1.83	2.81	2.20	-2.65	5.61	-2.07	3.60
<b>GDP per capita</b> (Current US\$)	14,055.47	9,277.71	8,663.16	10,658.91	11,211.89	11,447.70	10,108.33	12,521.52	15,445.24	13,817.05
<b>Exports (Goods &amp; Services)</b> (Current Billion US\$)	558.28	391.37	330.11	410.72	510.35	481.54	381.07	548.80	635.07	466.60
<b>Exports of Goods and Services</b> (% of GDP)	27.11	28.70	25.85	26.09	30.79	28.43	25.52	29.77	28.03	23.08
<b>Imports (Goods &amp; Services)</b> (Current Billion US\$)	426.06	281.64	263.83	327.21	344.52	352.81	305.01	376.52	345.18	378.93
<b>Imports of Goods and Services</b> (% of GDP)	20.69	20.66	20.66	20.79	20.79	20.80	20.44	20.43	15.23	18.75
<b>Consumer price inflation</b> (annual %)	7.82	15.53	7.04	3.68	2.88	4.47	3.38	6.69	NA	NA

**Figure 4.9.1.1** Russia: Population and Labor Force  
2014 - 2023 | Millions Inhabitants



**Figure 4.9.1.2** Russia: GDP and GDP Growth  
2014 - 2023 | Current Billion US\$ and Annual %



### 4.9.2 Reserves and Production

**Table 4.9.2.1** Russia: Historical Proven Natural Gas Reserves (Bcm)

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Proven Gas Reserves	49,896	50,205	50,617	50,508	49,571	49,154	47,759	47,759	47,759	47,152

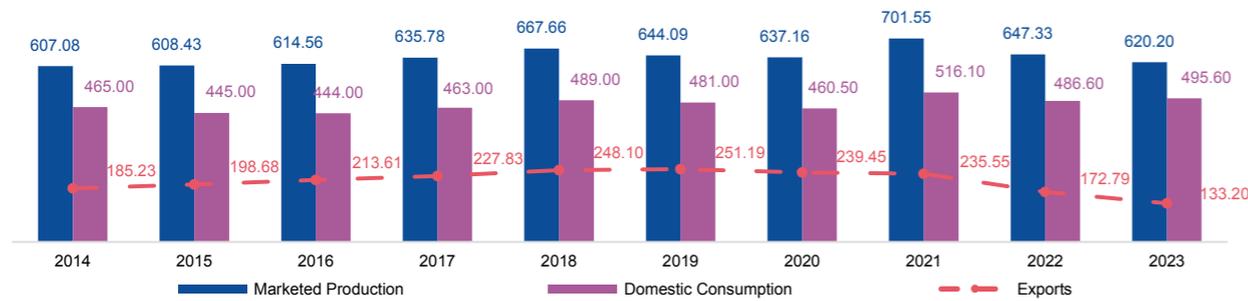
**Table 4.9.2.2** Russia: Historical Natural Gas Production (Bcm)

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Gross Production	642.81	633.54	640.81	692.00	694.32	677.90	658.54	728.21	672.40	639.40
Marketed Production	607.08	608.43	614.56	635.78	667.66	644.09	637.16	701.55	647.33	620.20
Flaring	15.67	14.51	14.60	15.12	15.85	16.45	14.80	19.70	18.04	13.97
Other losses	6.59	6.76	6.59	7.04	7.24	7.17	6.58	6.96	7.03	5.23

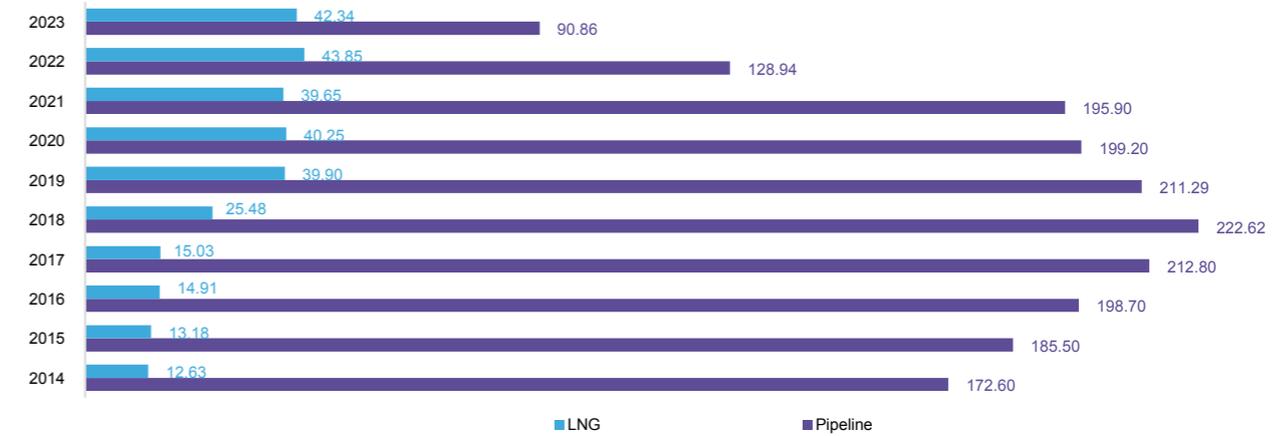
**Table 4.9.2.3** Russia: Detailed 2023 Natural Gas Production (Bcm)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Gross Production	61.30	55.20	58.90	53.30	48.50	43.10	43.10	48.00	48.30	58.50	58.30	62.90
Marketed Production	61.04	56.58	56.77	46.87	46.58	41.83	41.83	47.07	51.72	57.16	53.57	59.20

**Graph 4.9.2.1** Russia: Natural Gas Annual Production, Consumption and Exports  
2014 - 2023 | Bcm



**Figure 4.9.3.1** Russia: Natural Gas Annual Exports  
2014 - 2023 | Bcm



**Table 4.9.3.3** Russia: Historical Trade: Natural Gas Imports

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Pipeline (Bcm)	8.58	8.84	8.93	8.94	15.97	18.83	10.25	14.58	9.18	8.60
Imports (Bcm)	8.58	8.84	8.93	8.94	15.97	18.83	10.25	14.58	9.18	8.60

### 4.9.3 Domestic Consumption and Trade

**Table 4.9.3.1** Russia: Historical Domestic Gas Consumption (Bcm)

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Domestic Consumption	465.00	445.00	444.00	463.00	489.00	481.00	460.50	516.10	486.60	495.60

**Table 4.9.3.2** Russia: Historical Trade: Natural Gas Exports

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Pipeline (Bcm)	172.60	185.50	198.70	212.80	222.62	211.29	199.20	195.90	128.94	90.86
LNG										
Bcm*	12.63	13.18	14.91	15.03	25.48	39.90	40.25	39.65	43.85	42.34
MMT	9.29	9.69	10.96	11.05	18.74	29.34	29.60	29.15	32.24	31.12
Exports (Bcm)	185.23	198.68	213.61	227.83	248.10	251.19	239.45	235.55	172.79	133.20

\*Gas Equivalent



Republic of  
**TRINIDAD AND TOBAGO**

- TIME ZONE**  
ATLANTIC (GMT-4)
- CAPITAL**  
PORT OF SPAIN
- CURRENCY**  
TRINIDAD AND TOBAGO DOLLAR
- CONTINENT**  
SOUTH AMERICAN CARIBBEAN SEA
- POPULATION**  
1.37 M

**HIGHLIGHTS**

**+2.1%**  
GDP Growth

Trinidad and Tobago's economy grew by 2.1% in 2023, demonstrating resilience amid monetary policy tightening and interest rate cuts.

**20 Blocks**  
Upstream

The country initiated an auction process for up to 20 offshore natural gas exploration blocks during the first quarter of 2023, offering revised fiscal terms to attract a wider range of bidders.

**25.7 Bcm**  
Gas Production

Trinidad and Tobago's Marketed natural gas production reached 25.7 Bcm in 2023, a 6% decrease from the previous year.

**11.8 Mt/year**  
LNG Infrastructure

Trinidad and Tobago has 3 liquefaction trains operated by Atlantic LNG, with a combined annual capacity of 11.8 million Metric Tons.

**13.6 Bcm**  
Domestic Consumption

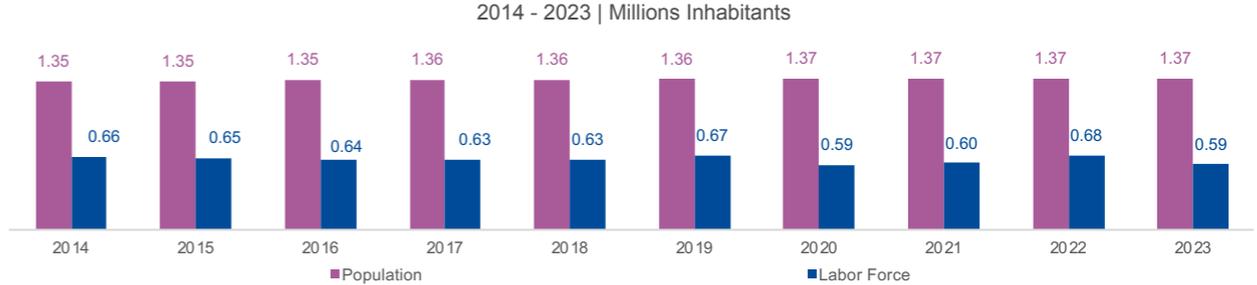
Domestic consumption in Trinidad and Tobago totaled 13.6 Bcm in 2023.

**4.10.1 Macroeconomics**

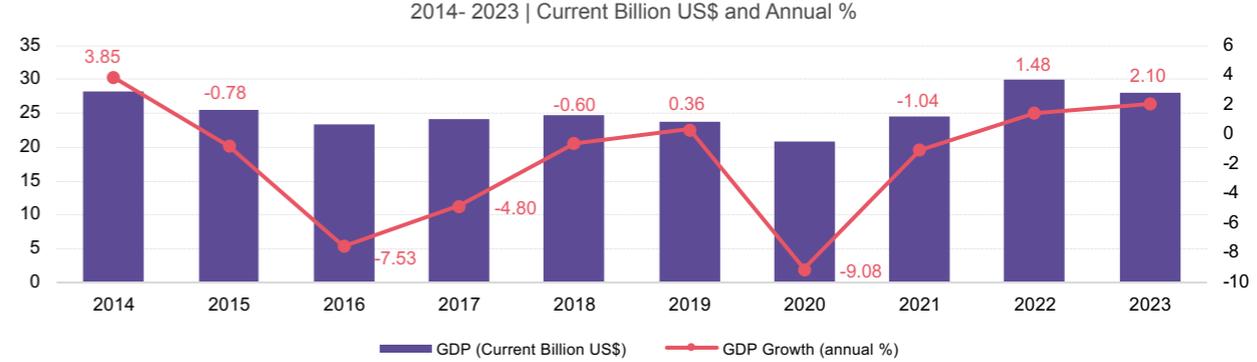
**Table 4.10.1.1** Trinidad and Tobago: Macroeconomic Indicators

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
<b>Population (M Inhabitants)</b>	1.35	1.35	1.35	1.36	1.36	1.36	1.37	1.37	1.37	1.37
<b>Labor Force (M Inhabitants)</b>	0.66	0.65	0.64	0.63	0.63	0.67	0.59	0.60	0.68	0.59
<b>GDP (Current Billion US\$)</b>	28.20	25.54	23.44	24.15	24.64	23.79	20.81	24.53	30.07	NA
<b>GDP Growth (annual %)</b>	3.85	-0.78	-7.53	-4.80	-0.60	0.36	-9.08	-1.04	1.48	NA
<b>GDP per capita (Current US\$)</b>	20,925.97	18,889.96	17,293.97	17,781.24	18,100.04	17,424.71	15,222.25	17,946.65	22,031.78	18,332.96
<b>Exports (Goods &amp; Services) (Current Billion US\$)</b>	13.83	10.18	7.25	8.80	9.68	7.22	5.54	8.66	13.33	7.78
<b>Exports (Goods &amp; Services) (% of GDP)</b>	49.04	39.86	30.93	36.44	39.29	30.35	26.62	35.30	44.33	27.65
<b>Imports (Goods &amp; Services) (Current Billion US\$)</b>	10.71	8.76	7.98	6.95	7.76	6.36	4.89	5.79	6.25	8.95
<b>Imports of Goods and Services (% of GDP)</b>	37.98	34.30	34.04	28.78	31.49	26.73	23.50	23.60	20.78	31.81
<b>Consumer price inflation (annual %)</b>	5.70	4.70	3.10	1.90	1.00	1.00	0.60	2.10	5.83	4.63

**Figure 4.10.1.1** Trinidad and Tobago: Population and Labor Force



**Figure 4.10.1.2** Trinidad and Tobago: GDP and GDP Growth



### 4.10.2 Reserves and Production

**Table 4.10.2.1** Trinidad and Tobago: Proven Natural Gas Reserves (Bcm)

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Proven Gas Reserves	326	300	281	298	298	298	290	307	326	NA

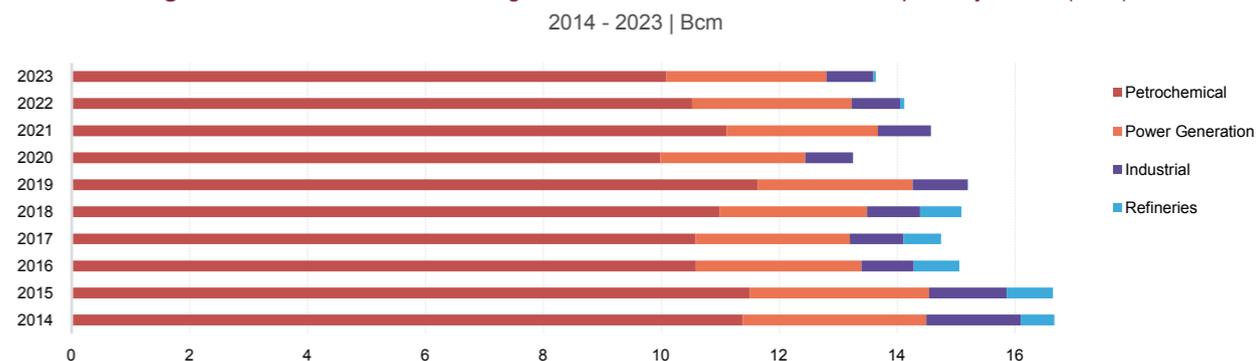
**Table 4.10.2.2** Trinidad and Tobago: Historical Natural Gas Production (Bcm)

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Gross Production	42.03	39.59	34.42	34.70	36.46	36.36	30.87	25.86	27.71	26.03
Marketed Production	38.99	36.94	32.18	32.78	34.92	35.37	30.16	25.82	27.52	25.74
Reinjection	1.61	1.47	1.36	0.74	1.06	0.90	0.64	0.27	0.09	0.01
Flaring	1.13	0.92	0.72	1.05	0.29	0.08	0.07	0.09	0.09	0.06
Other losses	0.30	0.26	0.16	0.13	0.19	0.00	0.00	0.00	0.00	0.23

**Table 4.10.2.3** Trinidad and Tobago: Detailed 2023 Natural Gas Production (Bcm)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Gross Production	2.33	2.10	2.28	2.11	2.25	2.14	2.17	2.05	2.22	2.06	2.15	2.18
Marketed Production	2.28	2.07	2.24	2.07	2.22	2.10	2.14	2.03	2.20	2.06	2.15	2.18

**Figure 4.10.3.1** Trinidad and Tobago: Historical Domestic Gas Consumption by sector (Bcm)

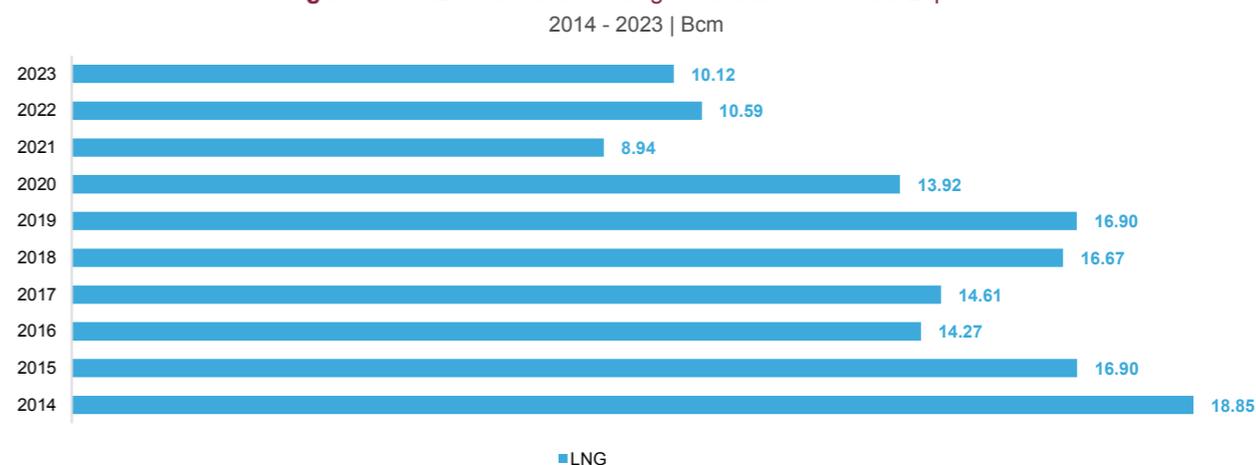


**Table 4.10.3.2** Trinidad and Tobago: Historical Trade: Natural Gas Exports

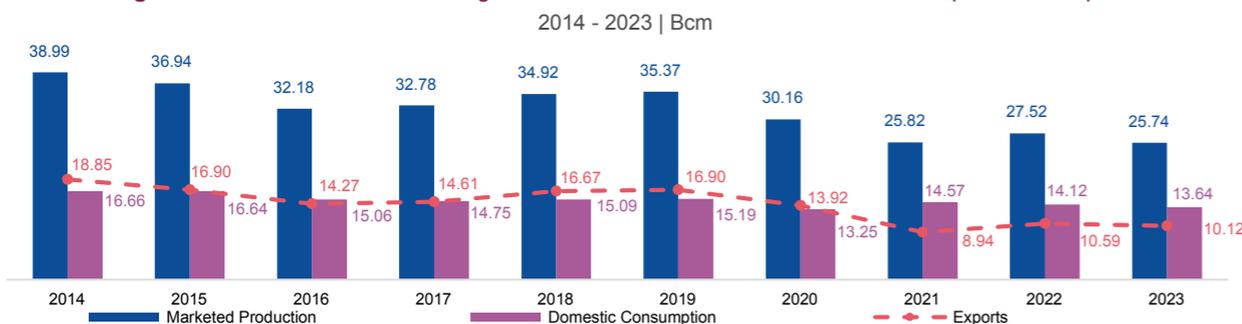
	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	
LNG	Bcm*	18.85	16.90	14.27	14.61	16.67	16.90	13.92	8.94	10.59	10.12
	MMT	13.86	12.43	10.49	9.59	12.25	12.42	10.24	6.58	7.79	7.44
Exports (Bcm)		18.85	16.90	14.27	14.61	16.67	16.90	13.92	8.94	10.59	10.12

\*Gas Equivalent

**Figure 4.10.3.2** Trinidad and Tobago: Natural Gas Annual Exports



**Figure 4.10.2.1** Trinidad and Tobago: Natural Gas Annual Production, Consumption and Exports



### 4.10.3 Domestic Consumption and Trade

**Table 4.10.3.1** Trinidad and Tobago: Historical Domestic Gas Consumption by sector (Bcm)

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Industrial	1.60	1.31	0.89	0.91	0.90	0.93	0.81	0.90	0.82	0.80
Power Generation	3.12	3.04	2.81	2.61	2.51	2.63	2.45	2.56	2.71	2.71
Petrochemical	11.38	11.50	10.58	10.58	10.98	11.63	9.99	11.11	10.52	10.09
Refineries	0.57	0.78	0.78	0.64	0.70	0.00	0.00	0.00	0.07	0.04
Domestic Consumption	16.66	16.64	15.06	14.75	15.09	15.19	13.25	14.57	14.12	13.64

**Table 4.10.3.3** Trinidad and Tobago: Detailed 2023 Trade: Natural Gas Exports

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
LNG	Bcm*	0.92	0.83	0.92	0.83	0.91	0.89	0.72	0.85	0.84	0.82	0.77	0.82
	MMT	0.68	0.61	0.67	0.61	0.67	0.66	0.53	0.62	0.62	0.61	0.56	0.60
Exports (Bcm)		0.92	0.83	0.92	0.83	0.91	0.89	0.72	0.85	0.84	0.82	0.77	0.82

\*Gas Equivalent



# UNITED ARAB EMIRATES

- TIME ZONE**  
GULF (GMT+4)
- CAPITAL**  
ABU DHABI
- CURRENCY**  
UNITED ARAB EMIRATES DIRHAM
- CONTINENT**  
MIDDLE EAST
- POPULATION**  
9.52 M

## HIGHLIGHTS

**+3.4%**  
GDP Growth

The UAE economy grew by 3.4% in 2023, a slowdown of 4 points from the strong growth of 7.4% recorded the previous year.

**+5.4%**  
Gas Production

The UAE's Marketed natural gas production increased by 5.4% in 2023, reaching a total of 58.6 Bcm.

**73.3Bcm**  
Domestic Consumption

Domestic natural gas consumption in the UAE increased by 5% y-o-y to reach 73.26 Bcm in 2023.

**5.4Mt/year**  
LNG Infrastructure

The UAE has 3 liquefaction trains at the Das Island plant totaling a capacity of 5.4 Mt/year, in addition of an operational regasification plant (FSRU) with a capacity of 10.3 Mt/y.

## 4.11.1 Macroeconomics

Table 4.11.1 UAE: Macroeconomic Indicators

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Population (M Inhabitants)	8.84	8.92	8.99	9.07	9.14	9.21	9.29	9.37	9.44	9.52
Labor Force (M Inhabitants)	6.07	6.16	6.24	6.33	6.40	6.48	6.49	6.46	6.59	6.67
GDP (Current Billion US\$)	414.11	370.28	369.26	390.52	427.05	417.99	349.47	415.18	507.53	504.17
GDP Growth (annual %)	4.17	6.79	5.56	0.74	1.31	1.11	-4.96	4.35	7.85	3.40
GDP per capita (Current US\$)	46,865.96	41,525.14	41,054.54	43,063.97	46,722.27	45,376.17	37,629.17	44,332.34	53,707.98	52,976.81
Exports (Goods & Services) (Current Billion US\$)	401.37	361.25	360.63	384.04	392.86	404.05	335.24	425.15	532.80	570.17
Exports of Goods and Services (% of GDP)	96.92	97.56	97.66	98.34	91.99	96.66	95.93	NA	NA	NA
Exports (Goods & Services) (Current Billion US\$)	277.89	266.28	270.44	290.78	281.54	295.60	246.89	347.53	417.03	470.50
Imports of Goods and Services (% of GDP)	67.11	71.91	73.24	74.46	65.93	70.72	70.65	NA	NA	NA
Consumer price inflation (annual %)	2.35	4.07	1.62	1.97	3.07	-1.93	-2.08	-0.01	4.83	NA

Figure 4.11.1.1 UAE: Population and Labor Force

2014 - 2023 | Millions Inhabitants

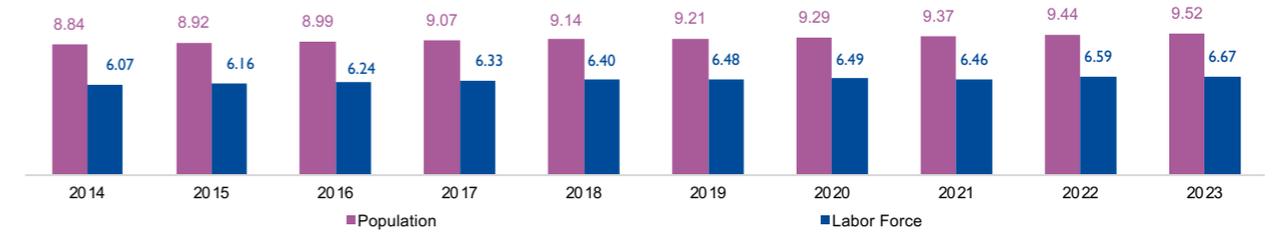
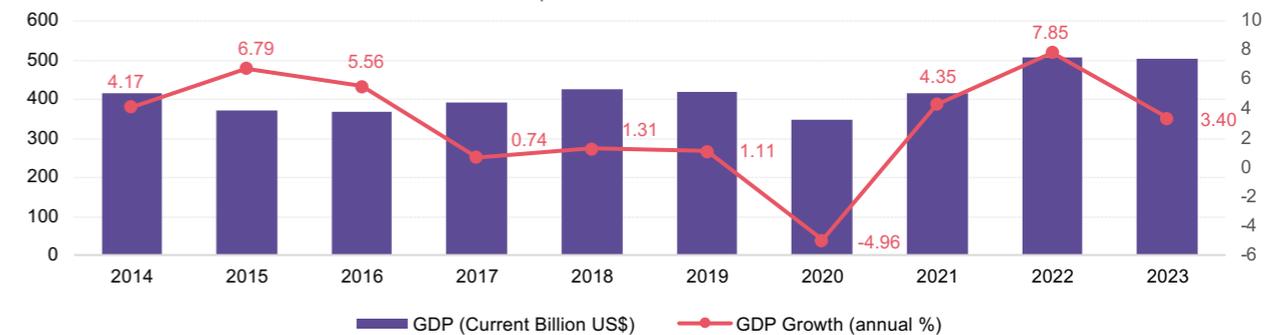


Figure 4.11.1.2 UAE: GDP and GDP Growth

2014 - 2023 | Current Billion US\$ and Annual %



### 4.11.2 Reserves and Production

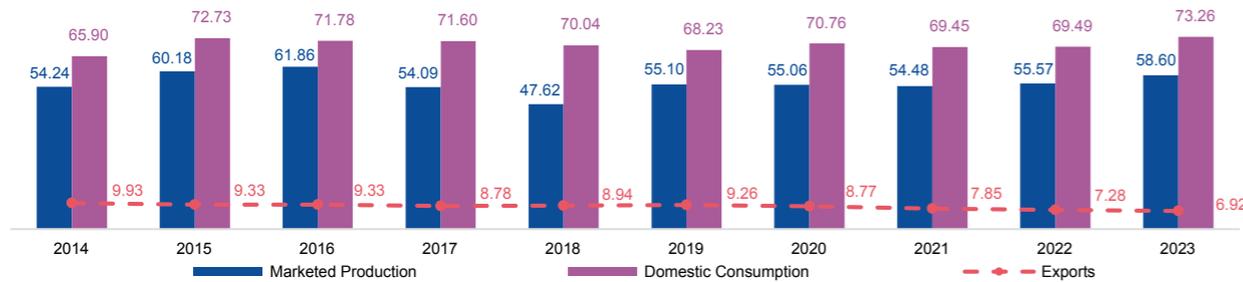
**Table 4.11.2.1 UAE: Proven Natural Gas Reserves (Bcm)**

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Proven Gas Reserves	6,091	6,091	6,091	6,091	6,091	7,726	7,730	8,200	8,210	8,210

**Table 4.11.2.2 UAE: Historical Natural Gas Production (Bcm)**

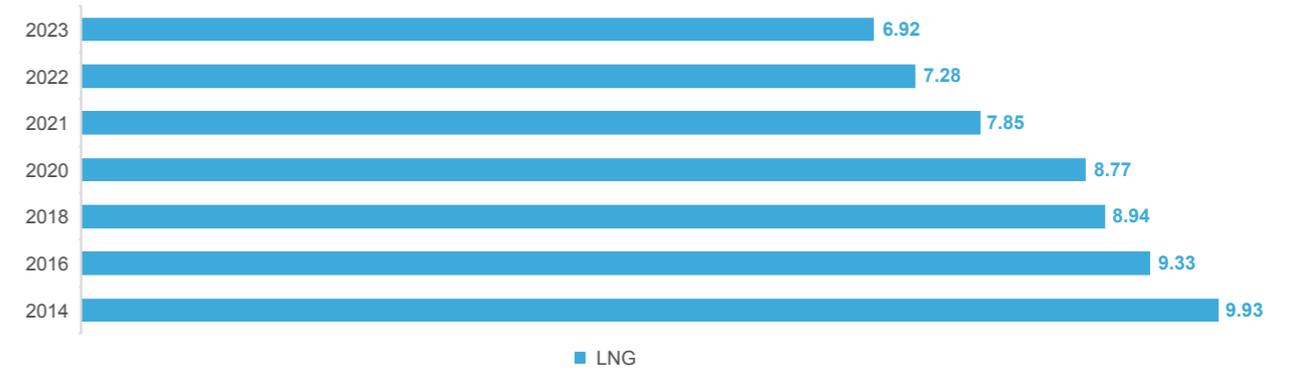
	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Gross Production	84.31	90.27	91.40	91.63	95.43	93.66	89.49	88.40	89.20	91.05
Marketed Production	54.24	60.18	61.86	54.09	47.62	55.10	55.06	54.48	55.57	58.60
Reinjection	23.40	23.69	23.75	23.78	22.99	23.95	23.45	23.25	23.46	23.88
Flaring	1.02	1.04	1.02	1.14	0.23	0.98	1.30	1.10	1.11	1.19
Shrinkage	0.00	0.40	0.30	7.53	19.01	8.22	4.59	4.48	3.93	3.10
Other losses	4.44	5.10	5.10	5.10	5.24	5.40	5.09	5.09	5.12	4.29

**Figure 4.11.2.1 UAE: Natural Gas Annual Production, Consumption and Exports**  
2014 - 2023 | Bcm



**Figure 4.11.3.1 UAE: Natural Gas Exports**

2014 - 2023 | Bcm



**Table 4.11.3.3 UAE: Historical Trade: Natural Gas Imports**

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Pipeline (Bcm)	22.25	23.14	20.00	22.11	24.65	20.88	21.13	19.84	20.89	20.67
LNG	Bcm*	3.55	3.96	4.48	3.92	1.40	1.63	1.53	1.71	0.88
	MMT	2.61	2.91	3.29	2.88	1.03	1.20	1.12	1.26	0.65
Imports (Bcm)	25.80	27.10	24.48	26.03	26.05	22.50	22.65	21.55	21.77	21.58

\*Gas Equivalent

### 4.11.3 Domestic Consumption and Trade

**Table 4.11.3.1 UAE: Historical Domestic Gas Consumption by sector (Bcm)**

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Domestic Consumption	65.90	72.73	71.78	71.60	70.04	68.23	70.76	69.45	69.49	73.26

**Table 4.11.3.2 UAE: Historical Trade: Natural Gas Exports**

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
LNG	Bcm*	9.93	9.33	9.33	8.78	8.94	9.26	8.77	7.85	7.28
	MMT	7.25	6.81	6.81	6.41	6.52	6.76	6.40	5.73	5.31
Exports (Bcm)	9.93	9.33	9.33	8.78	8.94	9.26	8.77	7.85	7.28	6.92

\*Gas Equivalent



Bolivarian Republic of  
**VENEZUELA**



TIME ZONE  
**VENEZUELA (GMT-4)**



CAPITAL  
**CARACAS**



CURRENCY  
**VENEZUELAN BOLIVAR**



CONTINENT  
**SOUTH AMERICA**



POPULATION  
**28.84 M**

## HIGHLIGHTS

**5,476 Bcm**  
Gas reserves

Venezuela holds substantial proven natural gas reserves, estimated at over 5,476 Bcm as of the end of 2023.

**+1.6%**  
Gas Production

Marketed natural gas production in Venezuela rose by 1.6% in 2023, reaching 22.68 Bcm.

**16.6 Bcm**  
Domestic Consumption

Venezuela consumed over 16.6 Bcm of natural gas domestically in 2023, marking a 20% y-o-y increase.

**14.31 Bcm**  
Flaring Decrease

Venezuela reduced gas flaring to 14.31 Bcm in 2023, highlighting a significant step towards reducing environmental impacts and improving gas utilization.

## 4.12.1 Macroeconomics

Table 4.12.1.1 Venezuela: Macroeconomic Indicators

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Population (M Inhabitants)	30.19	30.53	30.74	30.56	29.83	28.97	28.49	28.20	28.30	28.84
Labor Force (M Inhabitants)	13.37	13.47	13.50	13.28	12.66	11.52	10.40	10.40	10.97	11.55
GDP (Current Billion US\$)	203.82	323.60	279.25	143.84	98.44	63.96	47.26	57.67	92.10	97.12
GDP Growth (annual %)	-3.89	58.77	-13.70	-48.49	-31.57	-35.02	-26.12	NA	NA	NA
GDP per capita (Current US\$)	6,784.28	10,757.16	9,354.68	4,892.14	3,407.64	2,242.96	1,661.81	22,045.05	3,254.22	3,367.27
Exports (Goods & Services) (Current Billion US\$)	80.52	37.25	27.61	33.89	33.60	20.68	8.24	10.10	17.70	16.91
Exports (Goods & Services) (% of GDP)	39.51	11.51	9.89	23.56	34.14	32.33	17.43	NA	NA	NA
Imports (Goods & Services) (Current Billion US\$)	151.45	36.50	17.98	13.36	13.51	7.19	8.41	12.00	18.00	18.03
Imports of Goods and Services (% of GDP)	74.30	11.28	6.44	9.29	13.72	11.24	17.79	NA	NA	NA
Consumer price inflation (annual %)	839.50	2,357.90	8,826.90	84,970	110,597,550	10,711,919,274	327,767,509,170	2,577,508,248,886	8,610,897,384,090	NA

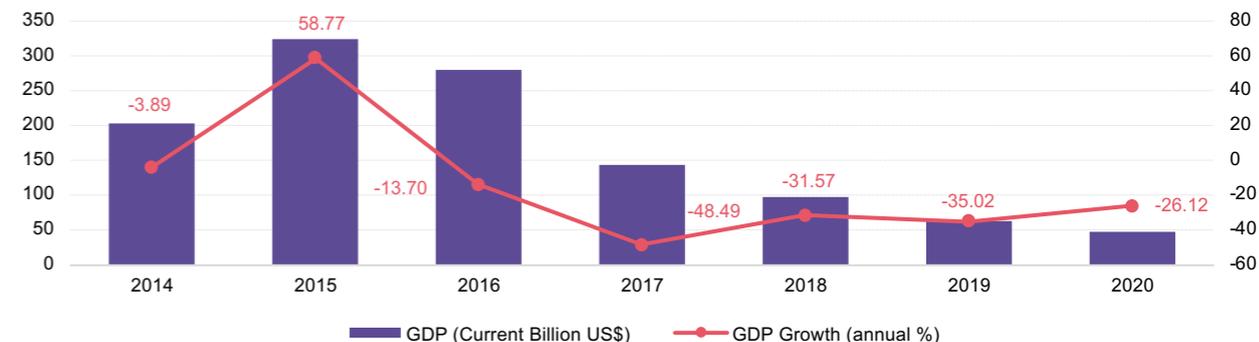
Figure 4.12.1.1 Venezuela: Population and Labor Force

2014 - 2023 | Millions Inhabitants



Figure 4.12.1.2 Venezuela: GDP and GDP Growth

2014 - 2023 | Current Billion US\$ and Annual %



### 4.12.2 Reserves and Production

**Table 4.12.2.1** Venezuela: Proven Natural Gas Reserves (Bcm)

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Proven Gas Reserves	5,617	5,702	5,740	5,708	5,674	5,674	5,590	5,541	5,624	5,476

**Table 4.12.2.2** Venezuela: Historical Natural Gas Production (Bcm)

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Gross Production	76.00	80.20	82.16	76.89	67.44	56.21	46.88	45.95	45.00	41.47
Marketed Production	21.62	25.95	28.84	28.29	24.50	20.27	19.40	21.57	22.31	22.68
Reinjection	27.03	25.44	23.42	21.90	15.15	4.45	0.08	0.00	1.04	0.35
Flaring	15.02	16.54	18.82	17.24	20.73	26.18	24.11	19.50	17.55	14.31
Shrinkage	1.46	1.83	1.67	1.51	1.22	0.93	0.47	0.54	1.04	0.97
Other losses	10.88	10.44	9.41	7.96	5.84	4.38	2.81	4.33	3.06	3.17

**Table 4.12.2.3** Venezuela: Detailed 2023 Natural Gas Production (Bcm)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Gross Production	3.47	3.16	3.59	3.43	3.51	3.25	3.38	3.51	3.45	3.69	3.47	3.57
Marketed Production	1.89	1.67	1.97	1.89	1.97	1.76	1.94	2.05	1.86	2.00	1.82	1.86

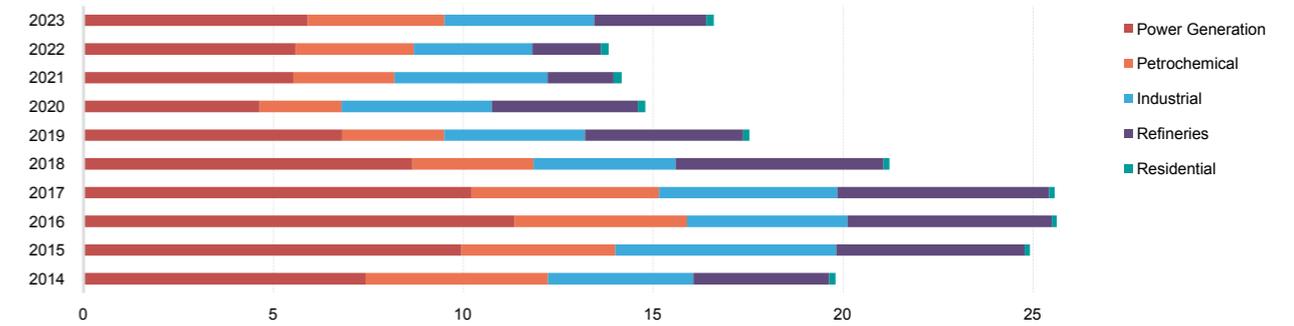
**Figure 4.12.2.1** Venezuela: Natural Gas Annual Production and Consumption

2014 - 2023 | Bcm



**Figure 4.12.3.1** Venezuela: Historical Domestic Gas Consumption by sector (Bcm)

2014 - 2023 | Bcm



**Table 4.12.3.2** Venezuela: Historical Trade: Natural Gas Imports

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Pipeline (Bcm)	0.96	0.37	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Imports (Bcm)	0.96	0.37	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

### 4.12.3 Domestic Consumption and Trade

**Table 4.12.3.1** Venezuela: Historical Domestic Gas Consumption by sector (Bcm)

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Residential	0.17	0.14	0.12	0.15	0.16	0.17	0.20	0.21	0.20	0.20
Industrial	3.83	5.81	4.22	4.69	3.75	3.71	3.96	4.03	3.12	3.94
Power Generation	7.42	9.95	11.34	10.20	8.66	6.82	4.64	5.52	5.58	5.90
Transportation	0.00	0.00	0.00	0.00	0.02	0.02	0.03	0.03	0.03	0.03
Petrochemical	4.80	4.06	4.55	4.96	3.18	2.68	2.15	2.66	3.12	3.61
Refineries	3.57	4.96	5.38	5.57	5.47	4.16	3.85	1.74	1.80	2.95
Domestic Consumption	19.80	24.91	25.62	25.57	21.24	17.55	14.83	14.20	13.86	16.62



SECTION  
**05**

**GECF Observer  
Countries**



Republic of  
**ANGOLA**

**TIME ZONE**  
WEST AFRICA (GMT+1)

**CAPITAL**  
LUANDA

**CURRENCY**  
ANGOLAN KWANZA

**CONTINENT**  
AFRICA

**POPULATION**  
36.68 M

**HIGHLIGHTS**

**+0.9%**  
**GDP Growth**  
+0.9% GDP growth in 2023, indicating modest economic stability despite fluctuations.

**6 Bcm**  
**Marketed Production**  
6 Bcm of marketed natural gas production in 2023, reflecting Angola's commitment to sustaining its production levels.

**1.2 Bcm**  
**Domestic Consumption**  
1.2 Bcm of natural gas consumed domestically in 2023, highlighting increased local reliance on gas.

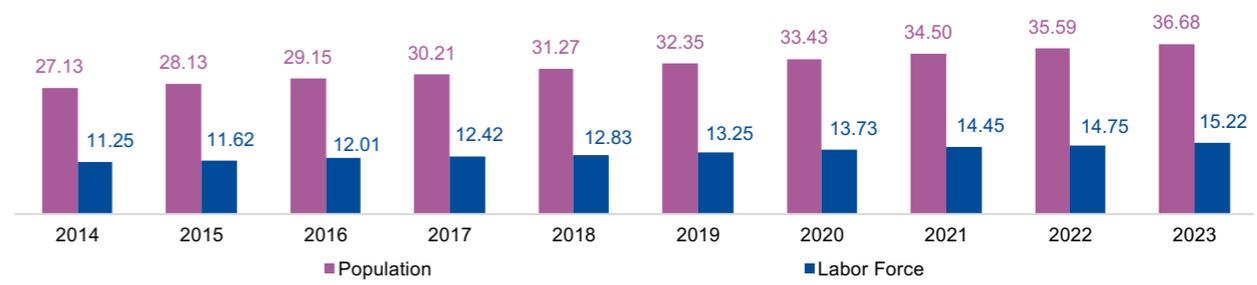
**4.8 Bcm**  
**LNG Exports**  
4.8 Bcm of LNG exported in 2023, demonstrating Angola's growing role in the global LNG market.

**5.1.1 Macroeconomics**

**Table 5.1.1.1** Angola: Macroeconomic Indicators

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
<b>Population</b> (M Inhabitants)	27.13	28.13	29.15	30.21	31.27	32.35	33.43	34.50	35.59	36.68
<b>Labor Force</b> (M Inhabitants)	11.25	11.62	12.01	12.42	12.83	13.25	13.73	14.45	14.75	15.22
<b>GDP</b> (Current Billion US\$)	135.97	90.50	52.76	73.69	79.45	70.90	48.50	66.51	104.40	84.72
<b>GDP Growth</b> (annual %)	4.82	0.94	-2.58	-0.15	-1.32	-0.70	-5.64	1.20	3.05	0.86
<b>GDP per capita</b> (Current US\$)	5,011.98	3,217.34	1,809.71	2,439.37	2,540.51	2,191.35	1,450.91	1,927.47	2,933.48	2,309.52
<b>Exports (Goods &amp; Services)</b> (Current Billion US\$)	60.77	26.93	14.84	21.37	32.44	28.92	18.58	31.75	46.35	33.78
<b>Exports (Goods &amp; Services)</b> (% of GDP)	44.70	29.75	28.12	29.00	40.84	40.79	38.31	47.75	44.40	39.87
<b>Imports (Goods &amp; Services)</b> (Current Billion US\$)	47.10	29.99	13.32	17.13	20.29	12.08	13.40	17.77	26.41	22.59
<b>Imports (Goods &amp; Services)</b> (% of GDP)	34.64	33.13	25.25	23.25	25.54	17.04	27.63	26.72	25.30	26.66
<b>Consumer price inflation</b> (annual %)	7.28	9.36	30.69	29.84	19.63	17.08	22.27	25.75	21.36	13.64

**Figure 5.1.1.1** Angola: Population and Labor Force  
2014 - 2023 | Millions Inhabitants



**Figure 5.1.1.2** Angola: GDP and GDP Growth  
2014 - 2023 | Current Billion US\$ and Annual %



### 5.1.2 Reserves and Production

**Table 5.1.2.1** Angola: Proven Natural Gas Reserves (Bcm)

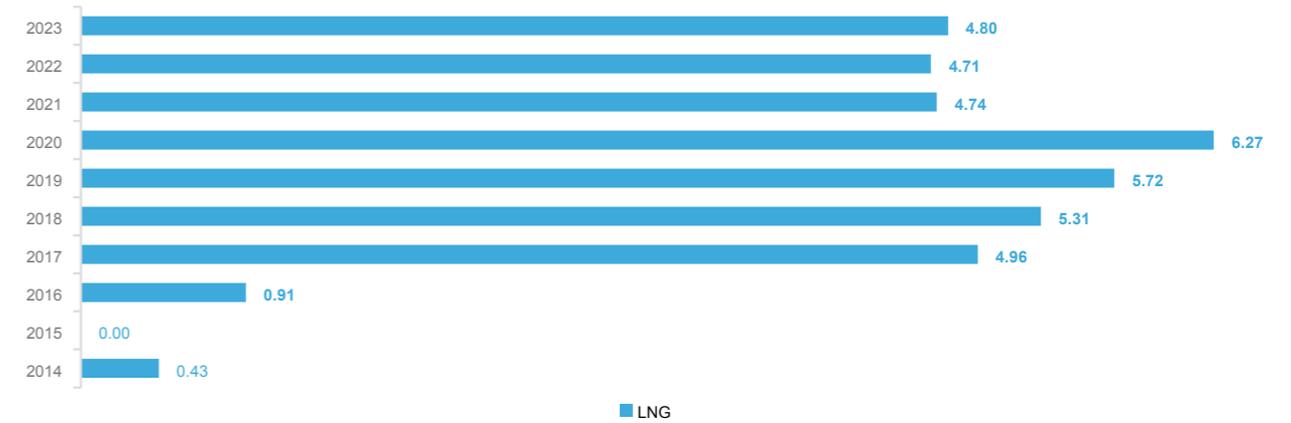
	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Proven Gas Reserves	308	308	440	422	384	343	301	301	129	129

**Table 5.1.2.2** Angola: Historical Natural Gas Production (Bcm)

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Gross Production	10.44	10.54	11.71	14.95	13.88	12.91	13.15	11.45	10.59	10.74
Marketed Production	0.73	0.77	1.71	5.75	6.47	7.02	7.50	5.93	5.92	6.00
Reinjection	2.53	2.55	2.50	2.60	2.50	2.40	2.40	2.50	2.30	2.33
Flaring	6.99	7.00	7.20	6.10	4.20	2.80	2.30	2.10	2.00	2.03
Other losses	0.19	0.22	0.30	0.50	0.71	0.69	0.95	0.92	0.38	0.38

**Figure 5.1.2.2** Angola: Natural Gas Exports

2014 -2023 | Bcm



### 5.1.3 Domestic Consumption and Trade

**Table 5.1.3.1** Angola: Historical Domestic Gas Consumption (Bcm)

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Domestic Consumption	0.30	0.77	0.80	0.79	1.16	1.30	1.23	1.19	1.21	1.20

**Table 5.1.3.2** Angola: Historical Trade: Natural Gas Exports

		2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
LNG	Bcm*	0.43	0.00	0.91	4.96	5.31	5.72	6.27	4.74	4.71	4.80
	MMT	0.32	0.00	0.67	3.65	3.91	4.21	4.61	3.48	3.46	3.53
Exports (Bcm)		0.43	0.00	0.91	4.96	5.31	5.72	6.27	4.74	4.71	4.80

\*Gas Equivalent

**Table 5.1.2.1** Angola: Natural Gas Annual Production, Consumption and Exports

2014 - 2023 | Bcm





Republic of  
**AZERBAIJAN**

- TIME ZONE: AZERBAIJAN (GMT+4)
- CAPITAL: BAKU
- CURRENCY: AZERBAIJANI MANAT
- CONTINENT: EUROASIA
- POPULATION: 10.11 M

**HIGHLIGHTS**

**+1.1%**  
GDP Growth

+1.1% GDP growth in 2023, reflecting gradual economic progress.

**23.9 Bcm**  
Pipeline Exports

23.9 Bcm of natural gas exported via pipelines in 2023, emphasizing Azerbaijan's strategic export capacity.

**36.7 Bcm**  
Marketed Production

36.7 Bcm of marketed production in 2023, positioning Azerbaijan as a key regional natural gas producer.

**+10.0%**  
Per Capita Gas Consumption Growth

Azerbaijan's per capita natural gas consumption reached 1,512 Scm in 2023, reflecting a 3% CAGR over the past decade and underscoring the country's increasing energy demand.

**15.3 Bcm**  
Domestic Consumption

15.3 Bcm of natural gas consumed domestically, underlining significant internal energy demand.

**5.2.1 Macroeconomics**

Table 5.2.1.1 Azerbaijan: Macroeconomic Indicators

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Population (M Inhabitants)	9.54	9.65	9.76	9.85	9.94	10.02	10.09	10.14	10.14	10.11
Labor Force (M Inhabitants)	4.53	4.63	4.76	4.84	4.93	5.19	5.17	5.26	5.43	5.47
GDP (Current Billion US\$)	75.24	53.08	37.87	40.87	47.11	48.17	42.69	54.83	78.81	72.36
GDP Growth (annual %)	2.75	1.09	-3.10	0.20	1.50	2.50	-4.30	5.62	4.71	1.12
GDP per capita (Current US\$)	7,890.84	5,500.50	3,880.69	4,147.20	4,739.79	4,805.75	4,229.91	5,408.05	7,770.59	7,155.08
Exports (Goods & Services) (Current Billion US\$)	32.56	20.06	17.58	19.84	25.48	23.63	15.21	25.49	47.27	35.49
Exports (Goods & Services) (% of GDP)	43.27	37.79	46.43	48.55	54.09	49.05	35.62	46.49	59.99	49.05
Imports (Goods & Services) (Current Billion US\$)	19.72	18.47	16.53	17.10	17.70	17.71	15.54	16.34	21.27	25.02
Imports (Goods & Services) (% of GDP)	26.21	34.81	43.65	41.85	37.58	36.77	36.39	29.80	27.00	34.57
Consumer price inflation (annual %)	1.37	4.03	12.44	12.94	2.27	2.61	2.76	6.65	13.85	8.79

Figure 5.2.1.1 Azerbaijan: Population and Labor Force  
2014 - 2023 | Millions Inhabitants



Figure 5.2.1.2 Azerbaijan: GDP and GDP Growth  
2014 - 2023 | Current Billion US\$ and Annual %



## 5.2.2 Reserves and Production

**Table 5.2.2.1** Azerbaijan: Proven Natural Gas Reserves (Bcm)

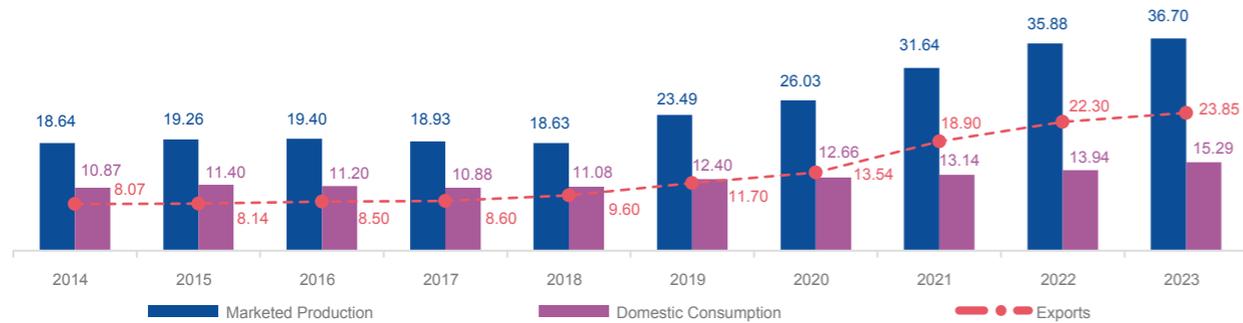
	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Proven Gas Reserves	665	665	665	1,074	1,435	1,917	1,917	1,917	1,917	1,900

**Table 5.2.2.2** Azerbaijan: Historical Natural Gas Production (Bcm)

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Gross Production	29.60	29.00	29.40	28.60	30.50	35.60	37.10	43.90	46.70	48.30
Marketed Production	18.64	19.26	19.40	18.93	18.63	23.49	26.03	31.64	35.88	36.70
Reinjection	7.80	7.00	7.70	7.40	7.82	7.99	7.60	7.99	7.41	7.91
Flaring	0.50	0.30	0.30	0.25	0.24	0.30	0.25	0.30	0.26	0.28
Other losses	2.66	2.44	2.00	2.02	3.81	3.82	3.22	3.97	3.14	3.90

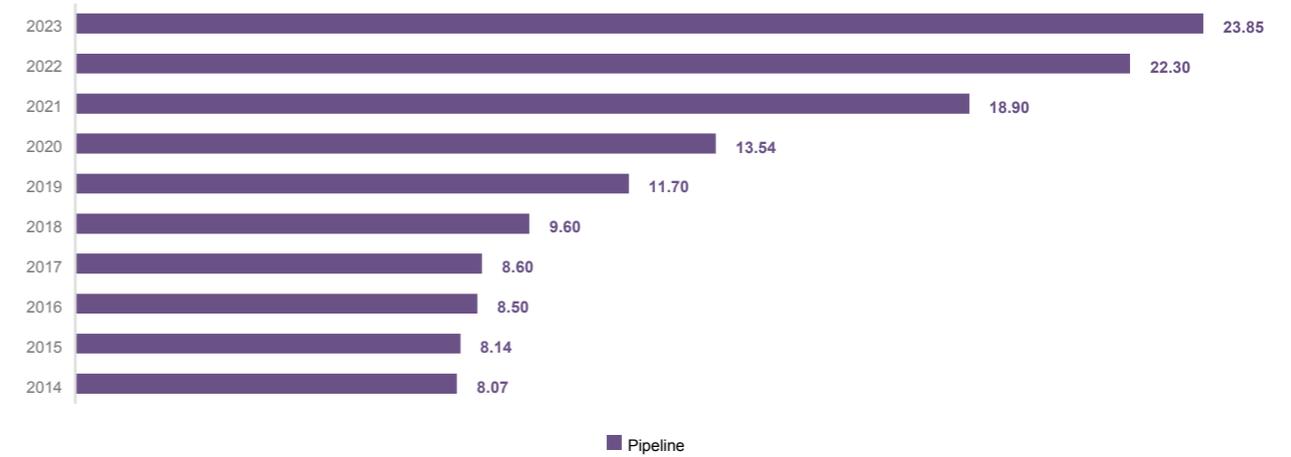
**Table 5.2.2.1** Azerbaijan: Natural Gas Annual Production, Consumption and Exports

2014 - 2023 | Bcm



**Figure 5.2.3.1** Azerbaijan: Natural Gas Exports

2014 - 2023 | Bcm



**Table 5.2.3.3** Azerbaijan: Historical Trade: Natural Gas Imports (Bcm)

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Pipeline	0.30	0.28	0.30	0.55	2.06	1.01	0.17	0.50	0.36	2.44
Imports	0.30	0.28	0.30	0.55	2.06	1.01	0.17	0.50	0.36	2.44

## 5.2.3 Domestic Consumption and Trade

**Table 5.2.3.1** Azerbaijan: Historical Domestic Gas Consumption (Bcm)

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Domestic Consumption	10.87	11.40	11.20	10.88	11.08	12.40	12.66	13.14	13.94	15.29

**Table 5.2.3.2** Azerbaijan: Historical Trade: Natural Gas Exports (Bcm)

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Pipeline	8.07	8.14	8.50	8.60	9.60	11.70	13.54	18.90	22.30	23.85
Exports	8.07	8.14	8.50	8.60	9.60	11.70	13.54	18.90	22.30	23.85





**Republic of IRAQ**  
 الله أكبر

- TIME ZONE**  
ARABIA (GMT+3)
- CAPITAL**  
BAGHDAD
- CURRENCY**  
IRAQI DINAR
- CONTINENT**  
MIDDLE EAST
- POPULATION**  
45.50 M

## HIGHLIGHTS

**-2.9%**  
GDP Growth

-2.9% GDP growth in 2023, reflecting economic and regional challenges.

**-2.0%**  
Flaring Decrease

Iraq reduced gas flaring to 15.85 Bcm in 2023, showcasing a small but important step toward reducing environmental impacts.

**10.2Bcm**  
Marketed Production

10.2 Bcm of marketed production in 2023, indicating a modest level of natural gas production.

**+4.0%**  
Per Capita Gas Consumption Growth

Iraq's per capita natural gas consumption reached 453 Scm in 2023 marking a 10% CAGR over the past decade and highlighting rising energy demand.

**20.6Bcm**  
Domestic Consumption

20.6 Bcm of natural gas consumed domestically in 2023, showing substantial internal use, particularly for power and industrial sectors.

**+26.0%**  
Labor Force Participation

In 2023, 26.0% of Iraq's population participated in the labor force, reflecting a steady 2% CAGR over the past decade.

## 5.3.1 Macroeconomics

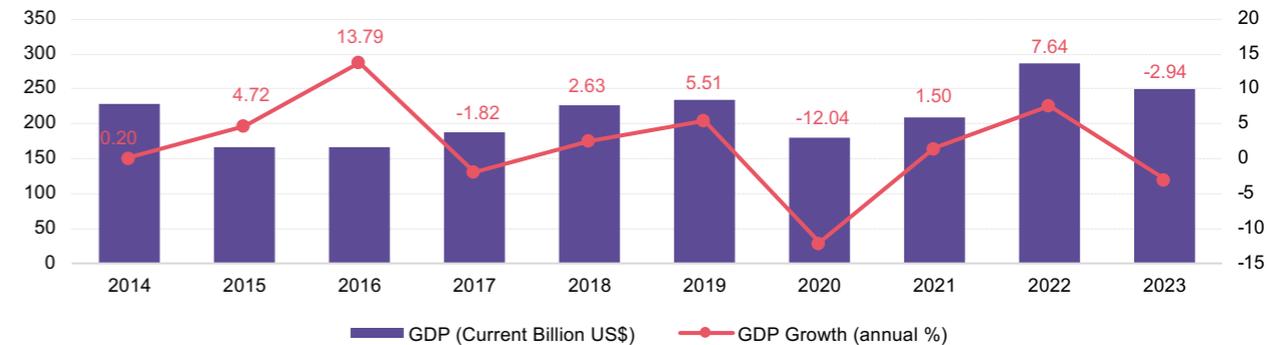
Table 5.3.1.1 Iraq: Macroeconomic Indicators

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Population (M Inhabitants)	36.75	37.76	38.70	39.62	40.59	41.56	42.56	43.53	44.50	45.50
Labor Force (M Inhabitants)	9.39	9.71	10.03	10.02	10.32	10.54	10.31	10.68	11.36	11.81
GDP (Current Billion US\$)	228.42	166.77	166.74	187.22	227.37	233.64	180.90	209.69	286.64	250.84
GDP Growth (annual %)	0.20	4.72	13.79	-1.82	2.63	5.51	-12.04	1.50	7.64	-2.94
GDP per capita (Current US\$)	6,215.99	4,416.94	4,308.85	4,725.19	5,601.47	5,621.18	4,250.74	4,816.78	6,441.92	5,512.48
Exports (Goods & Services) (Current Billion US\$)	88.95	57.56	46.87	63.50	92.77	88.90	50.20	78.26	127.08	109.71
Exports (Goods & Services) (% of GDP)	38.94	34.51	28.11	33.92	40.80	38.05	27.75	37.32	NA	NA
Imports (Goods & Services) (Current Billion US\$)	68.62	58.50	44.15	48.42	56.84	72.28	54.26	50.71	69.16	86.75
Imports (Goods & Services) (% of GDP)	30.04	35.08	26.48	25.86	25.00	30.94	29.99	24.18	NA	NA
Consumer price inflation (annual %)	2.24	1.39	0.56	0.18	0.37	-0.20	0.57	6.04	4.99	

Figure 5.3.1.1 Iraq: Population and Labor Force 2014 - 2023 | Millions Inhabitants



Figure 5.3.1.2 Iraq: GDP and GDP Growth 2014 2023 | Current Billion US\$ and Annual %



### 5.3.2 Reserves and Production

**Table 5.3.2.1** Iraq: Proven Natural Gas Reserves (Bcm)

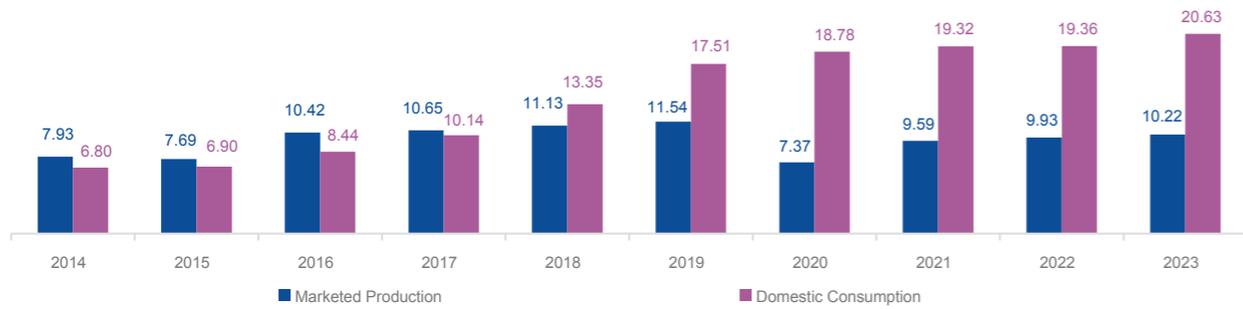
	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Proven Gas Reserves	3,158	3,158	3,820	3,744	3,729	3,714	3,714	3,714	3,714	3,714

**Table 5.3.2.2** Iraq: Historical Natural Gas Production (Bcm)

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Gross Production	28.88	30.15	34.32	35.15	36.33	37.12	29.45	33.55	33.96	35.26
Marketed Production	7.93	7.69	10.42	10.65	11.13	11.54	7.37	9.59	9.93	10.22
Reinjection	0.15	0.16	0.15	0.20	0.20	0.20	0.20	0.20	0.20	0.35
Flaring	12.87	14.61	16.00	16.50	16.50	16.70	14.20	16.00	16.13	15.85
Other losses	7.93	7.69	7.75	7.80	8.50	8.68	7.68	7.76	7.70	8.83

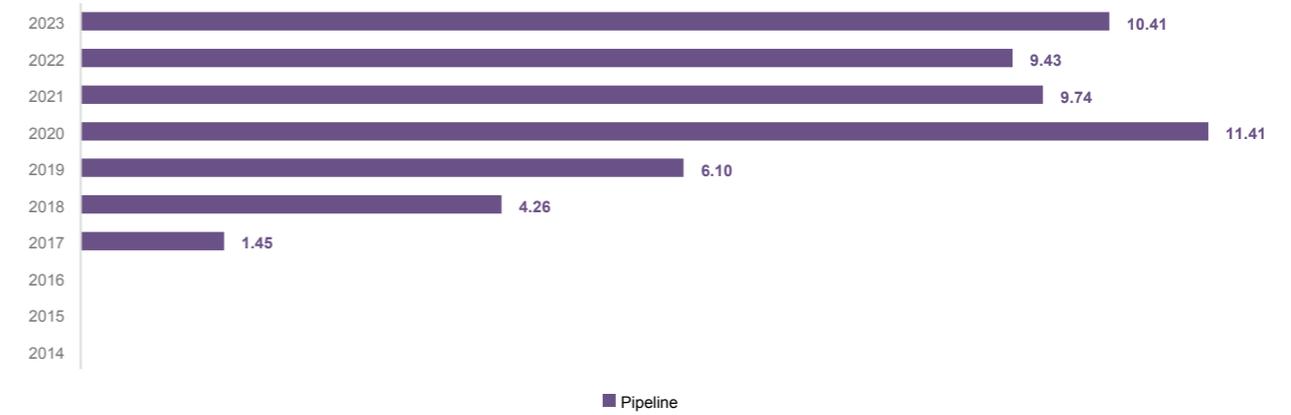
**Figure 5.3.2.1** Iraq: Natural Gas Annual Production and Consumption

2014 - 2023 | Bcm



**Figure 5.3.2.2** Iraq: Natural Gas Imports

2017 - 2023 | Bcm



**Table 5.3.3.3** Iraq: Historical Trade: Natural Gas Imports (Bcm)

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Pipeline	0.00	0.00	0.00	1.45	4.26	6.10	11.41	9.74	9.43	10.41
Imports	0.00	0.00	0.00	1.45	4.26	6.10	11.41	9.74	9.43	10.41

### 5.3.3 Domestic Consumption and Trade

**Table 5.3.3.1** Iraq: Historical Domestic Gas Consumption (Bcm)

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Domestic Consumption	6.80	6.90	8.44	10.14	13.35	17.51	18.78	19.32	19.36	20.63



# MALAYSIA

- TIME ZONE**  
MALAYSIA (GMT+8)
- CAPITAL**  
KUALA LUMPUR
- CURRENCY**  
RINGGIT MALAYSIA RM
- CONTINENT**  
ASIA
- POPULATION**  
34.31 M

## HIGHLIGHTS

**+3.9%**  
GDP Growth

+3.9% GDP growth in 2023, demonstrating strong economic recovery.

**36.2 Bcm**  
LNG Exports

36.2 Bcm of LNG exports in 2023, reinforcing Malaysia's significant status as a major LNG supplier in the Asia-Pacific region.

**71.4 Bcm**  
Marketed Production

71.4 Bcm of marketed natural gas production in 2023, confirming Malaysia's role as a major natural gas producer.

**-12.0%**  
Flaring Decrease

Malaysia reduced gas flaring to 0.90 Bcm in 2023, reflecting notable progress in environmental sustainability.

**36 Bcm**  
Domestic Consumption

36 Bcm of domestic consumption in 2023, largely used for industrial and power generation.

**+50.0%**  
Labor Force Participation

Half of Malaysia's population is part of the labor force, with a stable 1% CAGR over the past decade highlighting consistent workforce growth.

## 5.4.1 Macroeconomics

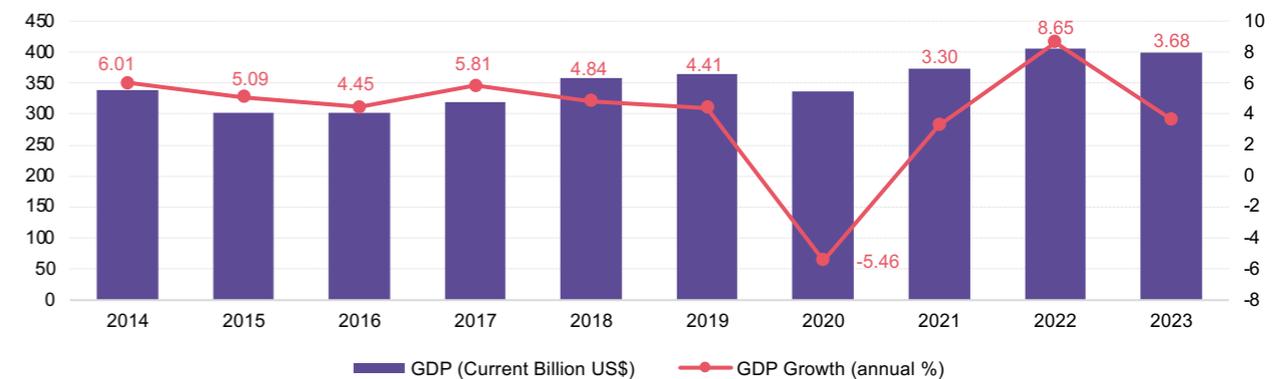
Table 5.4.1.1 Malaysia: Macroeconomic Indicators

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Population (M Inhabitants)	30.61	31.07	31.53	31.98	32.40	32.80	33.20	33.57	33.94	34.31
Labor Force (M Inhabitants)	14.68	15.05	15.33	15.66	16.04	16.44	16.63	17.00	17.13	17.31
GDP (Current Billion US\$)	338.06	301.35	301.26	319.11	358.79	365.28	337.01	372.70	406.31	399.65
GDP Growth (annual %)	6.01	5.09	4.45	5.81	4.84	4.41	-5.46	3.30	8.65	3.68
GDP per capita (Current US\$)	11,045.58	9,699.60	9,555.67	9,979.70	11,073.98	11,132.10	10,164.34	11,134.62	11,993.19	11,648.67
Exports (Goods & Services) (Current Billion US\$)	249.47	209.29	201.17	223.41	245.97	238.38	207.80	264.02	313.21	273.43
Exports (Goods & Services) (% of GDP)	73.79	69.45	66.78	70.01	68.55	65.28	61.58	70.62	76.95	68.42
Imports (Goods & Services) (Current Billion US\$)	218.12	186.60	181.13	201.50	221.90	210.89	186.31	236.99	283.75	253.48
Imports (Goods & Services) (% of GDP)	64.52	61.92	60.12	63.14	61.85	57.75	55.21	63.39	69.71	63.43
Consumer price inflation (annual %)	3.14	2.10	2.09	3.87	0.88	0.66	-1.14	2.48	3.38	2.49

Figure 5.4.1.1 Malaysia: Population and Labor Force  
2014 - 2023 | Millions Inhabitants



Figure 5.4.1.2 Malaysia: GDP and GDP Growth  
2014 - 2023 | Current Billion US\$ and Annual %



### 5.4.2 Reserves and Production

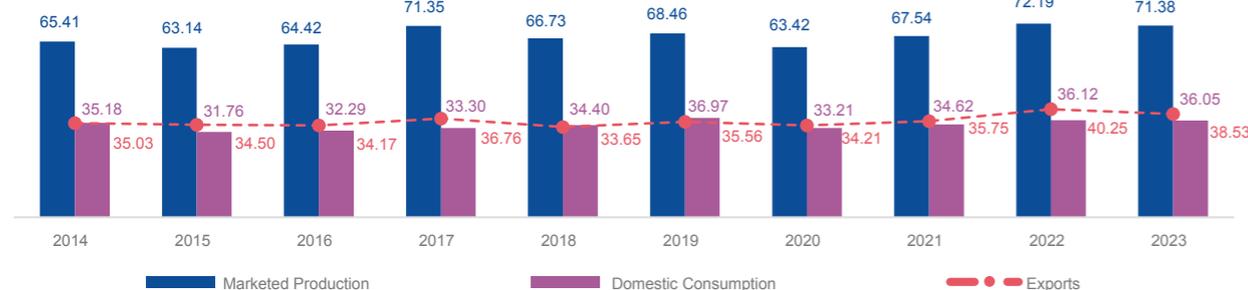
**Table 5.4.2.1** Malaysia: Historical Proven Natural Gas Reserves (Bcm)

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Proven Gas Reserves	2,849	2,842	2,470	2,346	2,290	2,240	2,130	2,095	2,152	2,112

**Table 5.4.2.2** Malaysia: Historical Natural Gas Production (Bcm)

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Gross Production	80.66	77.94	79.52	86.60	80.43	82.29	76.47	80.24	85.19	84.13
Marketed Production	65.41	63.14	64.42	71.35	66.73	68.46	63.42	67.54	72.19	71.38
Reinjection	8.60	8.40	8.50	8.35	7.30	7.20	7.00	6.40	6.60	6.30
Flaring	1.50	1.50	1.50	1.40	1.10	1.20	1.00	0.90	1.02	0.90
Other losses	5.15	4.90	5.10	5.50	5.30	5.43	5.05	5.40	5.80	5.55

**Table 5.4.2.1** Malaysia: Natural Gas Annual Production, Consumption and Exports  
2014 - 2023 | Bcm



### 5.4.3 Domestic Consumption and Trade

**Table 5.4.3.1** Malaysia: Historical Domestic Gas Consumption (Bcm)

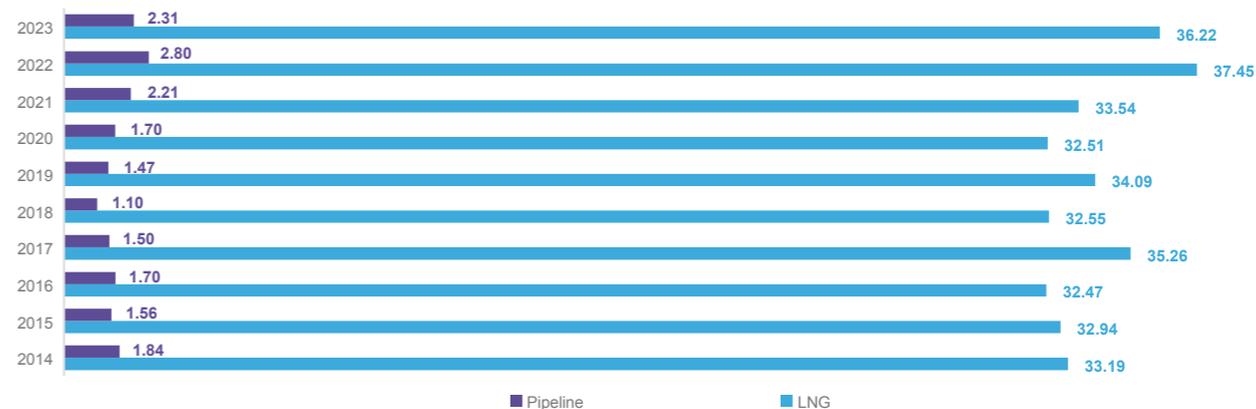
	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Domestic Consumption	35.18	31.76	32.29	33.30	34.40	36.97	33.21	34.62	36.12	36.05

**Table 5.4.3.2** Malaysia: Historical Trade: Natural Gas Exports

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Pipeline (Bcm)	1.84	1.56	1.70	1.50	1.10	1.47	1.70	2.21	2.80	2.31
LNG	Bcm*	33.19	32.94	32.47	35.26	32.55	34.09	32.51	33.54	37.45
	MMT	24.40	24.22	23.87	25.93	23.94	25.06	23.91	24.66	27.54
Exports (Bcm)	35.03	34.50	34.17	36.76	33.65	35.56	34.21	35.75	40.25	38.53

\*Gas Equivalent

**Figure 5.4.2.2** Malaysia: Natural Gas Exports  
2014 - 2023 | Bcm



**Table 5.4.3.3** Malaysia: Historical Trade: Natural Gas Imports

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Pipeline (Bcm)	2.10	1.33	0.55	0.72	0.60	0.62	0.42	0.37	0.22	0.00
LNG	Bcm*	2.15	2.14	1.53	1.99	1.81	3.45	3.59	2.45	3.96
	MMT	1.58	1.57	1.13	1.46	1.33	2.54	2.64	1.80	2.35
Imports (Bcm)	4.25	3.47	2.08	2.71	2.41	4.07	4.01	2.82	4.18	3.20

\*Gas Equivalent



Islamic Republic of  
**MAURITANIA**

- TIME ZONE UTC (GMT)
- CAPITAL NOUAKCHOTT
- CURRENCY MAURITANIAN OUGUIYA
- CONTINENT AFRICA
- POPULATION 4.86 M

## HIGHLIGHTS

**+3.4%**  
GDP Growth

\$10.45 billion GDP in 2023, with a growth rate of +3.4%, indicating steady economic expansion.

**1<sup>st</sup>**  
LNG Milestone

Mauritania is set to produce its first LNG from the Greater Tortue Ahmeyim liquefaction terminal, shared with Senegal by the end of 2024, marking a significant step in its natural gas industry.

## 5.5.1 Macroeconomics

Table 5.5.1.1 Mauritania: Macroeconomic Indicators

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Population (M Inhabitants)	3.84	3.95	4.05	4.16	4.27	4.38	4.50	4.61	4.74	4.86
Labor Force (M Inhabitants)	0.92	0.93	0.95	0.97	1.00	1.03	1.05	1.08	1.13	1.18
GDP (Current Billion US\$)	6.59	6.17	6.40	6.80	7.47	7.89	8.26	9.22	9.74	10.45
GDP Growth (annual %)	4.27	5.38	1.26	6.27	4.77	3.14	-0.36	0.74	6.39	3.38
GDP per capita (Current US\$)	1,715.39	1,562.73	1,579.20	1,634.64	1,749.95	1,800.88	1,836.29	1,998.39	2,057.38	2,149.41
Exports (Goods & Services) (Current Billion US\$)	2.46	1.86	2.17	2.35	2.73	3.35	3.42	3.68	4.81	4.62
Exports (Goods & Services) (% of GDP)	37.39	30.20	33.93	34.51	36.59	42.40	41.41	39.86	49.33	44.18
Imports (Goods & Services) (Current Billion US\$)	3.57	2.91	2.51	3.01	3.93	4.03	3.75	4.47	5.36	5.45
Imports (Goods & Services) (% of GDP)	54.22	47.15	39.23	44.31	52.56	51.09	45.37	48.45	55.01	52.17
Consumer price inflation (annual %)	3.53	3.25	1.47	2.25	3.07	2.30	2.39	3.57	9.53	4.95

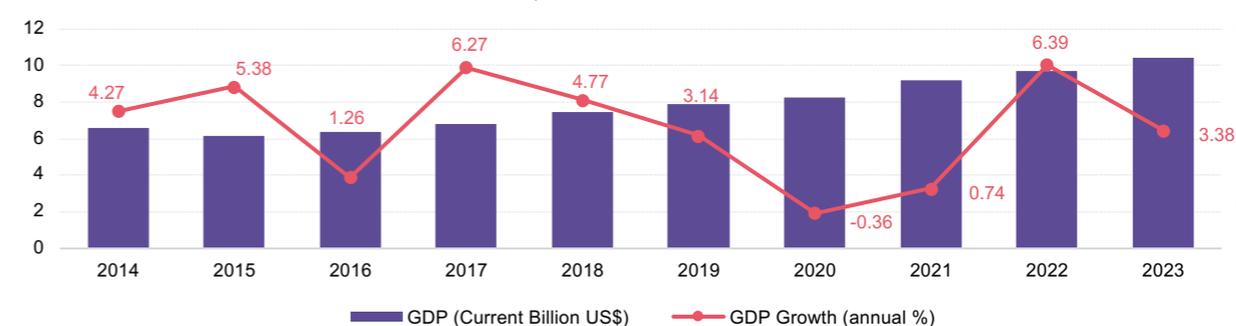
Figure 5.5.1.1 Mauritania: Population and Labor Force

2014 - 2023 | Millions Inhabitants



Figure 5.5.1.2 Mauritania: GDP and GDP Growth

2014 - 2023 | Current Billion US\$ and Annual %



## 5.5.2 Reserves

Table 5.5.2 Proven Natural Gas Reserves (Bcm)

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Proven Gas Reserves	28	28	28	28	50	50	212	1,061	1,061	1,061



Republic of  
**MOZAMBIQUE**



TIME ZONE  
(GMT+2)



CAPITAL  
MAPUTO



CURRENCY  
MOZAMBICAN  
METICAL (MZN)



CONTINENT  
AFRICA



POPULATION  
33.90 M

**HIGHLIGHTS**

**+5.0%**

**GDP Growth**

+5.0% GDP growth in 2023, supported by expanding natural gas production and exports.

**8.9Bcm**

**Marketed Production**

8.9 Bcm of marketed production in 2023, marking Mozambique's growing production capacity.

**1.2Bcm**

**Domestic Consumption**

1.2 Bcm of domestic natural gas consumption in 2023, showing a growing internal market.

**3.6Bcm**

**LNG Exports**

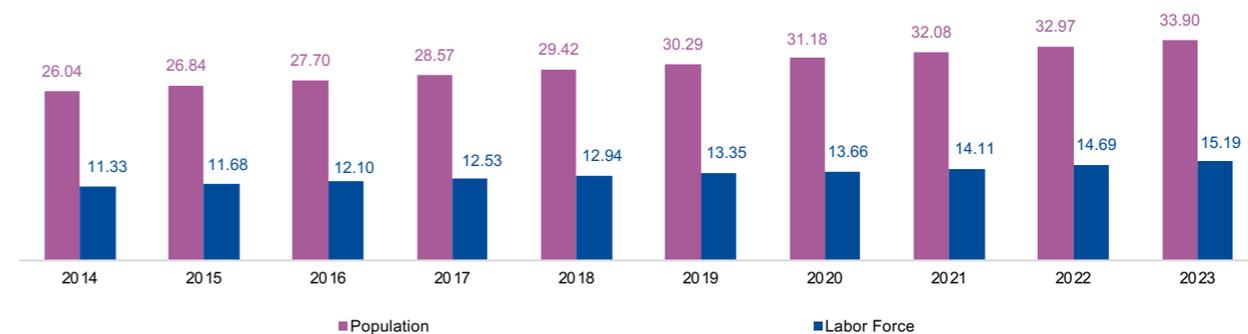
3.6 Bcm of LNG exported in 2023, establishing Mozambique as an emerging LNG exporter.

**5.6.1 Macroeconomics**

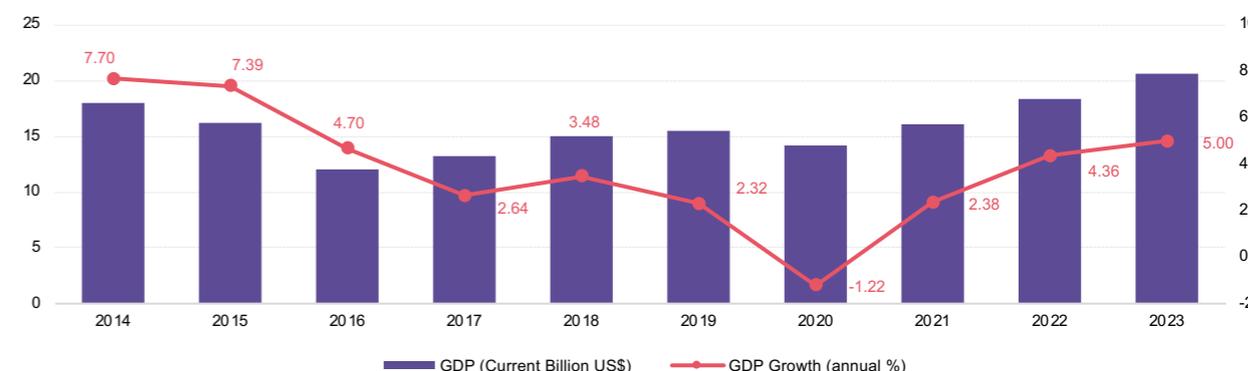
**Table 5.6.1 Mozambique: Macroeconomic Indicators**

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Population (M Inhabitants)	26.04	26.84	27.70	28.57	29.42	30.29	31.18	32.08	32.97	33.90
Labor Force (M Inhabitants)	11.33	11.68	12.10	12.53	12.94	13.35	13.66	14.11	14.69	15.19
GDP (Current Billion US\$)	17.98	16.21	12.07	13.26	15.02	15.51	14.24	16.17	18.41	20.60
GDP Growth (annual %)	7.70	7.39	4.70	2.64	3.48	2.32	-1.22	2.38	4.36	5.00
GDP per capita (Current US\$)	690.44	603.84	435.76	464.29	510.38	512.22	456.58	504.04	558.30	608.44
Exports (Goods & Services) (Current Billion US\$)	5.89	5.28	4.27	5.44	6.84	5.76	4.67	6.52	9.67	NA
Exports (Goods & Services) (% of GDP)	32.79	32.57	35.38	41.04	45.53	37.14	32.79	40.35	52.54	NA
Imports (Goods & Services) (Current Billion US\$)	15.02	10.73	9.05	8.58	11.88	10.62	9.55	11.60	15.28	NA
Imports (Goods & Services) (% of GDP)	83.57	66.19	75.01	64.70	79.08	68.45	67.12	71.73	83.02	NA
Consumer price inflation (annual %)	2.56	3.55	17.42	15.11	3.91	2.80	3.48	6.41	10.28	7.13

**Figure 5.6.1.1 Mozambique: Population and Labor Force**  
2014 - 2023 | Millions Inhabitants



**Figure 5.6.1.2 Mozambique: GDP and GDP Growth**  
2014 - 2023 | Current Billion US\$ and Annual %



### 5.6.2 Reserves and Production

**Table 5.6.2.1 Mozambique: Proven Natural Gas Reserves (Bcm)**

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Proven Gas Reserves	75	75	75	186	186	650	650	650	650	650

**Table 5.5.2.2 Mozambique: Historical Natural Gas Production (Bcm)**

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Gross Production	5.58	5.69	5.77	5.87	5.47	5.44	5.31	5.54	5.71	8.92
Marketed Production	5.58	5.68	5.76	5.86	5.46	5.43	5.30	5.53	5.70	8.91
Flaring	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01

**Table 5.6.2.1 Mozambique: Natural Gas Annual Production, Consumption and Exports**

2014 - 2023 | Bcm



### 5.6.3 Domestic Consumption and Trade

**Table 5.6.3.1 Mozambique: Historical Domestic Gas Consumption (Bcm)**

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Domestic Consumption	1.80	1.90	1.81	1.78	1.34	1.47	1.41	1.24	1.25	1.15

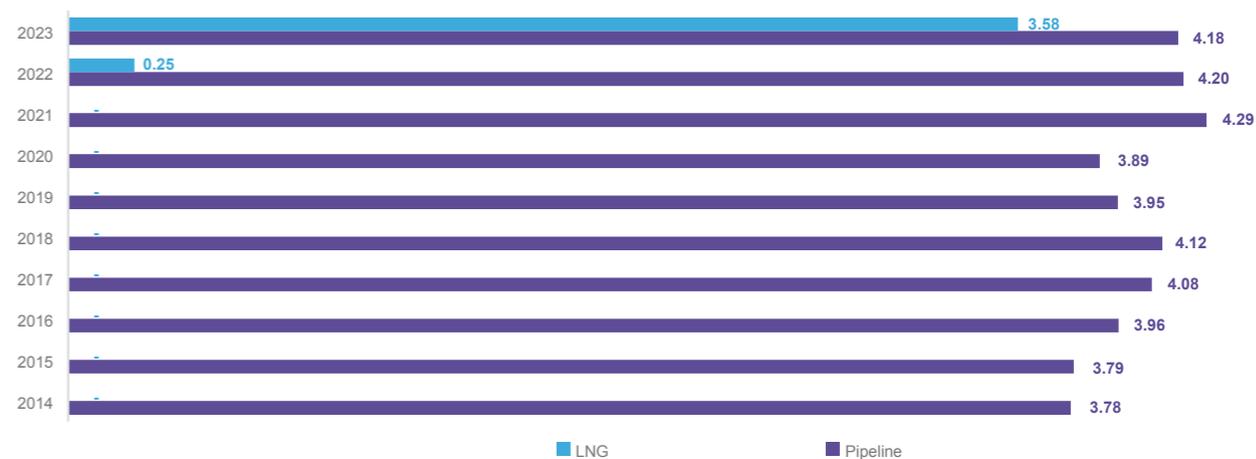
**Table 5.6.3.2 Mozambique: Historical Trade: Natural Gas Exports**

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Pipeline (Bcm)	3.78	3.79	3.96	4.08	4.12	3.95	3.89	4.29	4.20	4.18
LNG	-	-	-	-	-	-	-	-	0.25	3.58
MMT	-	-	-	-	-	-	-	-	0.18	2.65
Exports (Bcm)	3.78	3.79	3.96	4.08	4.12	3.95	3.89	4.29	4.45	7.76

\*Gas Equivalent

**Figure 5.6.3.1 Mozambique: Natural Gas Exports**

2014 - 2023 | Bcm





Republic of  
**PERU**

- TIME ZONE**  
PERU (GMT-5)
- CAPITAL**  
LIMA
- CURRENCY**  
PERUVIAN SOL
- CONTINENT**  
SOUTH AMERICA
- POPULATION**  
34.35 M

### HIGHLIGHTS

**-0.6%**  
**GDP Growth**  
-0.6% GDP growth in 2023, indicating some economic challenges faced during the year.

**5 Bcm**  
**LNG Exports**  
5 Bcm of LNG exports in 2023, confirming its steady role in the international LNG market.

**14.7 Bcm**  
**Marketed Production**  
14.7 Bcm of marketed production in 2023, maintaining Peru's stability as a natural gas producer.

**+7.0%**  
**Marketed Production Increase**  
Peru's total marketed natural gas production reached 14.65 Bcm in 2023, showcasing stability and consistent growth as a natural gas producer.

**9.6 Bcm**  
**Domestic Consumption**  
9.6 Bcm of domestic gas consumption in 2023, reflecting consistent demand for natural gas.

**-8.0%**  
**Flaring Decrease**  
Peru reduced gas flaring to 0.11 Bcm in 2023, continuing its efforts toward environmental sustainability.

### 5.7.1 Macroeconomics

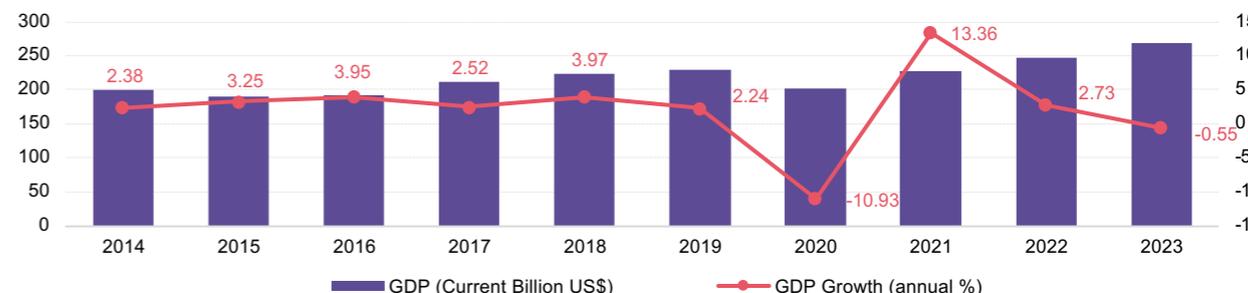
Table 5.7.1.1 Peru: Macroeconomic Indicators

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Population (M Inhabitants)	30.35	30.71	31.13	31.61	32.20	32.82	33.30	33.72	34.05	34.35
Labor Force (M Inhabitants)	16.68	16.69	16.86	17.56	18.03	18.53	16.83	17.87	18.27	18.53
GDP (Current Billion US\$)	200.79	189.80	191.90	211.01	222.60	228.35	201.41	226.35	246.49	267.60
GDP Growth (annual %)	2.38	3.25	3.95	2.52	3.97	2.24	-10.93	13.36	2.73	-0.55
GDP per capita (Current US\$)	6,614.83	6,180.12	6,163.86	6,676.31	6,912.10	6,956.50	6,047.48	6,713.66	7,239.11	7,789.87
Exports (Goods & Services) (Current Billion US\$)	45.39	40.40	43.37	52.16	56.08	54.89	46.35	65.97	71.25	72.49
Exports (Goods & Services) (% of GDP)	22.61	21.29	22.60	24.72	25.19	24.04	23.01	29.15	28.90	27.09
Imports (Goods & Services) (Current Billion US\$)	48.68	45.32	43.73	48.10	52.18	52.30	42.77	59.14	69.87	63.75
Imports (Goods & Services) (% of GDP)	24.25	23.88	22.79	22.79	23.44	22.90	21.23	26.13	28.35	23.82
Consumer price inflation (annual %)	3.41	3.40	3.56	2.99	1.51	2.25	2.00	4.27	8.33	6.46

Figure 5.7.1.1 Peru: Population and Labor Force  
2014 - 2023 | Millions Inhabitants



Figure 5.7.1.2 Peru: GDP and GDP Growth  
2014 - 2023 | Current Billion US\$ and Annual %



### 5.7.2 Reserves and Production

**Table 5.7.2.1** Peru: Proven Natural Gas Reserves (Bcm)

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Proven Gas Reserves	414	399	456	365	300	287	274	262	237	237

**Table 5.7.2.2** Peru: Historical Natural Gas Production (Bcm)

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Gross Production	18.46	17.29	19.62	18.42	17.11	17.99	16.40	16.09	18.18	19.16
Marketed Production	12.97	12.59	14.02	12.97	12.75	13.47	12.08	11.81	13.66	14.65
Reinjection	5.14	4.20	5.20	5.10	4.10	4.20	4.00	4.00	4.20	4.15
Flaring	0.21	0.10	0.20	0.14	0.11	0.11	0.11	0.08	0.12	0.11
Other losses	0.14	0.40	0.20	0.21	0.15	0.21	0.21	0.20	0.20	0.25

**Figure 5.7.2.1** Peru: Natural Gas Annual Production, Consumption and Exports  
2013 - 2022 | Bcm



### 5.7.3 Domestic Consumption and Trade

**Table 5.7.3.1** Peru: Historical Domestic Gas Consumption (Bcm)

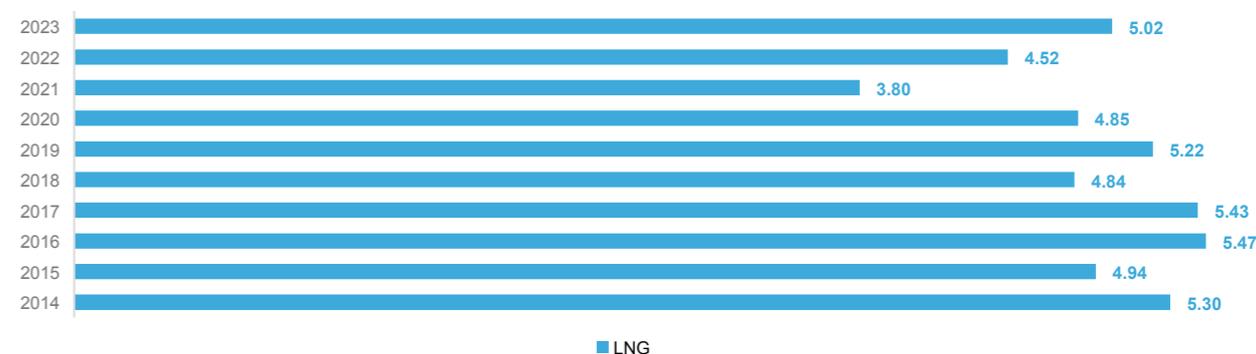
	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Domestic Consumption	7.67	7.65	8.52	7.48	7.91	8.26	7.14	8.01	9.41	9.63

**Table 5.6.3.2** Peru: Historical Trade: Natural Gas Exports

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	
LNG	Bcm*	5.30	4.94	5.47	5.43	4.84	5.22	4.85	3.80	4.52	5.02
	MMT	3.90	3.63	4.02	3.99	3.56	3.84	3.57	2.79	3.32	3.69
Exports (Bcm)	5.30	4.94	5.47	5.43	4.84	5.22	4.85	3.80	4.52	5.02	

\*Gas Equivalent

**Figure 5.7.3.1** Peru: Natural Gas Exports  
2013 - 2022 | Bcm





Republic of  
**SENEGAL**



TIME ZONE  
UTC (GMT)



CAPITAL  
DAKAR



CURRENCY  
WEST AFRICAN  
CFA FRANC



CONTINENT  
AFRICA



POPULATION  
17.76 M

## HIGHLIGHTS

**+3.7%**  
GDP Growth

+3.7% GDP growth in 2023, supported by ongoing infrastructure development.

**2.3Mt/year**  
LNG Capacity

Senegal, in partnership with Mauritania, is set to produce its first LNG from the Greater Tortue Ahmeyim terminal by the end of 2024, marking a significant milestone in its energy sector.

**+86.5%**  
CAGR Growth

Senegal holds 243 bcm of proven natural gas reserves, showcasing exceptional growth over the past decade.

## 5.8.1 Macroeconomics

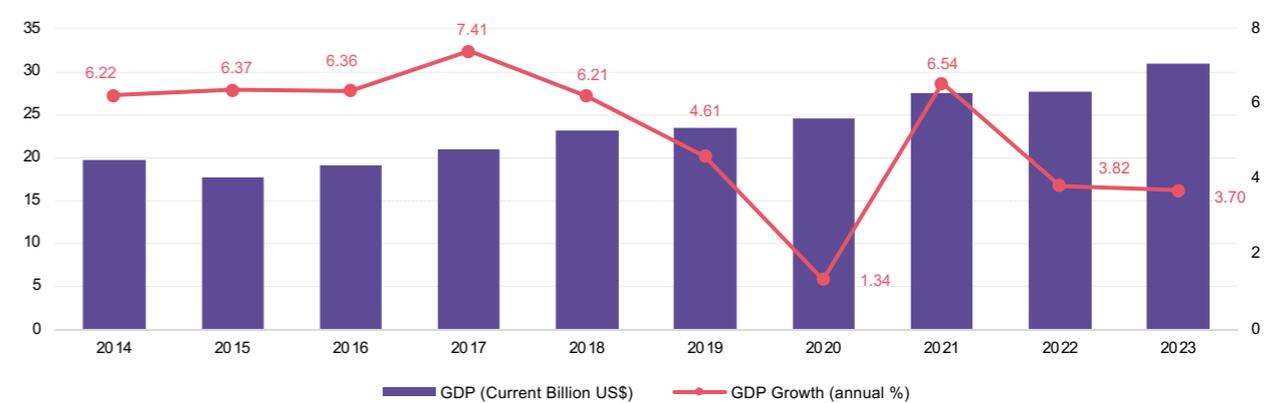
Table 5.8.1.1 Senegal: Macroeconomic Indicators

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Population (M Inhabitants)	13.97	14.36	14.75	15.16	15.57	16.00	16.44	16.88	17.32	17.76
Labor Force (M Inhabitants)	3.65	3.71	4.22	3.99	4.41	4.68	4.78	4.99	5.12	5.26
GDP (Current Billion US\$)	19.78	17.77	19.04	20.99	23.12	23.40	24.53	27.52	27.62	31.01
GDP Growth (annual %)	6.22	6.37	6.36	7.41	6.21	4.61	1.34	6.54	3.82	3.70
GDP per capita (Current US\$)	1,417.09	1,238.13	1,290.75	1,385.20	1,484.23	1,462.68	1,492.48	1,630.70	1,594.99	1,745.97
Exports (Goods & Services) (Current Billion US\$)	4.31	4.03	4.11	4.60	5.31	5.85	5.08	6.78	7.42	7.93
Exports (Goods & Services) (% of GDP)	21.78	22.68	21.56	21.93	22.95	24.98	20.70	24.64	26.86	25.56
Imports (Goods & Services) (Current Billion US\$)	7.26	6.29	6.19	7.51	8.98	9.19	9.65	12.31	14.69	13.61
Imports (Goods & Services) (% of GDP)	36.66	35.43	32.55	35.78	38.84	39.25	39.35	44.74	53.18	43.88
Consumer price inflation (annual %)	-1.09	0.14	0.84	1.32	0.46	1.76	2.54	2.18	9.70	NA

Figure 5.8.1.1 Senegal: Population and Labor Force  
2014 - 2023 | Millions Inhabitants



Figure 5.8.1.2 Senegal: GDP and GDP Growth  
2014 - 2023 | Current Billion US\$ and Annual %



## 5.8.2 Reserves and Production

**Table 5.8.2.1** Senegal: Proven Natural Gas Reserves (Bcm)

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Proven Gas Reserves	1	1	1	1	179	179	243	243	243	243

**Table 5.8.2.2** Senegal: Historical Natural Gas Production (Bcm)

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Gross Production	0.04	0.02	0.02	0.02	0.01	0.02	0.02	0.01	0.01	0.00
Marketed Production	0.04	0.02	0.02	0.02	0.01	0.02	0.02	0.01	0.01	0.00

## 5.8.3 Domestic Consumption and Trade

**Table 5.8.3.1** Senegal: Historical Domestic Gas Consumption (Bcm)

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Domestic Consumption	0.04	0.02	0.02	0.02	0.01	0.02	0.02	0.01	0.01	0.00



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SECTION  
**06**

**Referential  
Gas Market Prices**

## 6.1 Key Benchmark Prices

### Recent Dynamics 2022-2023

**Title Transfer Facility (TTF) spot prices:** TTF spot prices showed significant decreases throughout 2023 compared to 2022. The most substantial decline was observed in August, with an 85% y-o-y decrease. The smallest reduction occurred in January, at 29% y-o-y. Overall, spot prices consistently dropped by more than 50% for most months, indicating a considerable cooling of the market compared to the previous year's highs. On an annual basis, 2023 prices averaged 66% lower than 2022, with the annual average falling from 37.86 to 12.88 \$/MMBtu.

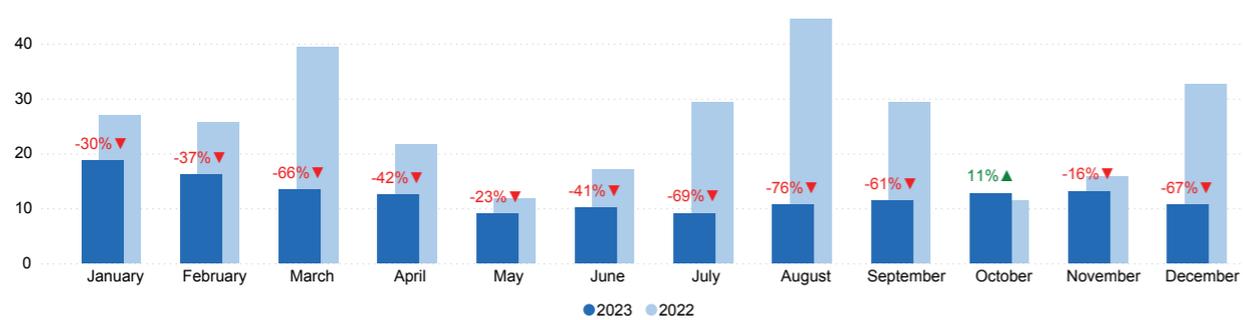
Figure 6.1.1 TTF spot (\$/MMBtu): y-o-y comparison by Month (2023 vs 2022)



Source: GECF Secretariat based on data from LSEG

**National Balancing Point (NBP) spot prices:** NBP spot prices significantly decreased in 2023 compared to 2022, with variations across months. The largest decline was in August at 76% y-o-y, while October saw an 11% y-o-y increase. The reductions were less pronounced than TTF, with some months showing smaller decreases, suggesting slightly different market dynamics. The annual average price in 2023 was 52% below 2022 levels, decreasing from 25.64 to 12.30 \$/MMBtu.

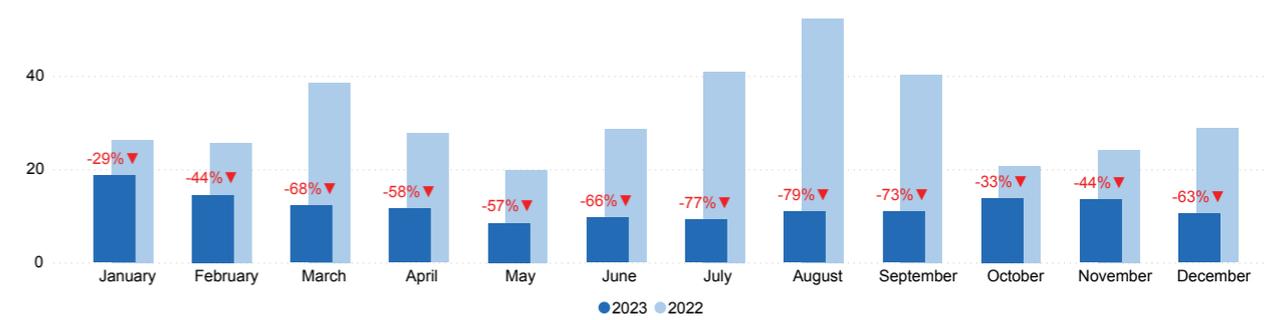
Figure 6.1.2 NBP spot (\$/MMBtu): y-o-y comparison by Month (2023 vs 2022)



Source: GECF Secretariat based on data from LSEG

**South West Europe (SWE) spot LNG prices:** SWE spot LNG prices experienced consistent decreases throughout 2023 compared to 2022. The most significant drop was in August at 79% y-o-y, while the smallest was in January at 29% y-o-y. The pattern of decline closely mirrored that of TTF, indicating similar market forces affecting both pricing points. The annual average recorded a 62% decrease from 2022 to 2023, falling from 31.33 to 12.00 \$/MMBtu.

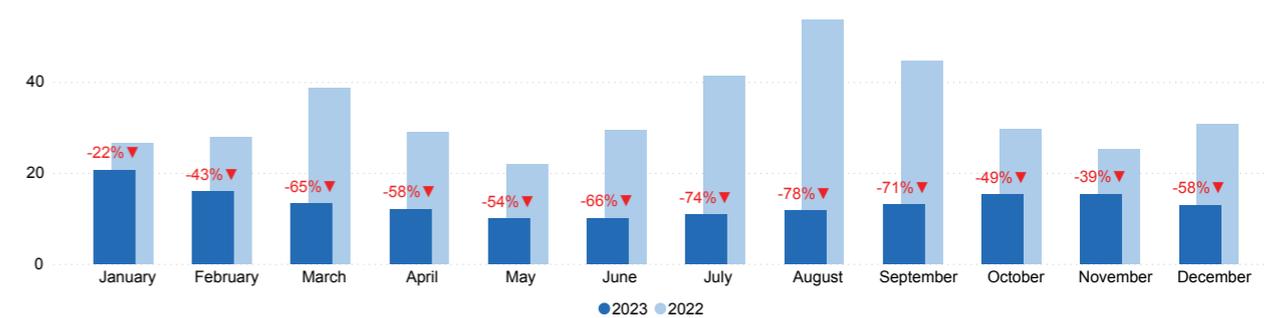
Figure 6.1.3 SWE spot LNG (\$/MMBtu): y-o-y comparison by Month (2023 vs 2022)



Source: GECF Secretariat based on data from Argus

**North East Asia (NEA) spot LNG prices:** NEA spot LNG prices showed substantial decreases in 2023 compared to 2022. The largest decline was in August at 78% y-o-y, with the smallest in January at 22% y-o-y. The consistent pattern of decrease across all months suggests a region-wide shift in market conditions from the previous year. The annual average price dropped by 60% from 2022 to 2023, decreasing from 33.41 to 13.46 \$/MMBtu.

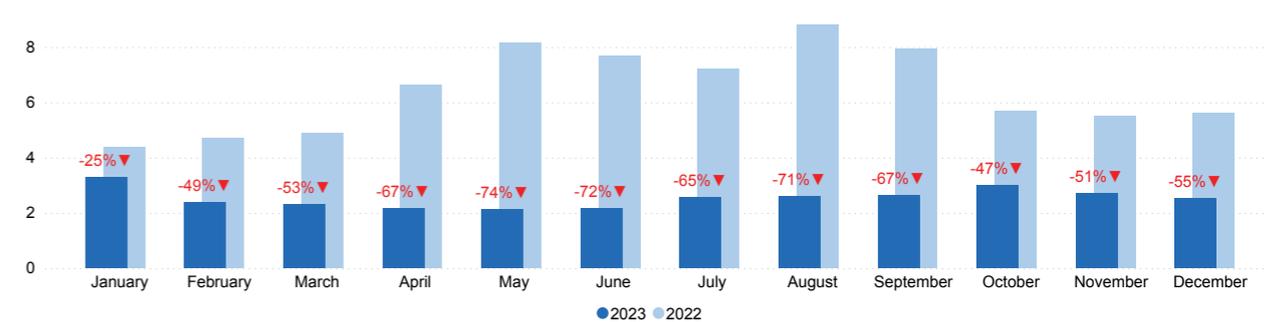
Figure 6.1.4 NEA spot LNG (\$/MMBtu): y-o-y comparison by Month (2023 vs 2022)



Source: GECF Secretariat based on data from Argus

**Henry Hub (HH) spot prices:** HH spot prices demonstrated consistent decreases throughout 2023 compared to 2022. The most significant reduction was in May at 74% y-o-y, while the smallest was in January at 25% y-o-y. The persistent downward trend indicates a notable shift in the US natural gas market. The annual average price fell by 61% from 2022 to 2023, declining from 6.45 to 2.54 \$/MMBtu.

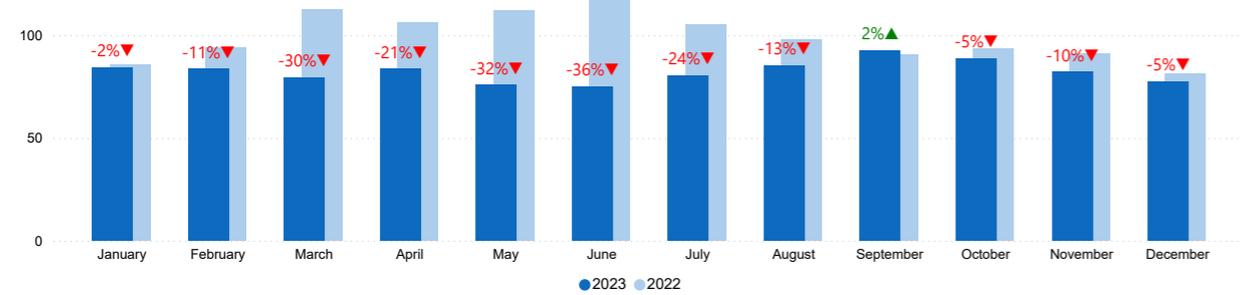
Figure 6.1.5 HH spot (\$/MMBtu): y-o-y comparison by Month (2023 vs 2022)



Source: GECF Secretariat based on data from LSEG

**Brent spot prices:** Brent spot prices showed more moderate changes compared to natural gas markets. Decreases were observed in most months, with the largest in June at 36% y-o-y. However, September saw a 2% y-o-y increase. The overall trend suggests a slight softening of oil spot prices compared to 2022, but with less volatility than gas markets. The annual average price decreased by 17% from 2022 to 2023, moving from 99.05 to 82.19 \$/bbl.

Figure 6.1.6 Brent (\$/bbl): y-o-y comparison by Month (2023 vs 2022)



Source: GECF Secretariat based on data from LSEG

### 6.1.1 Title Transfer Facility (TTF) spot prices

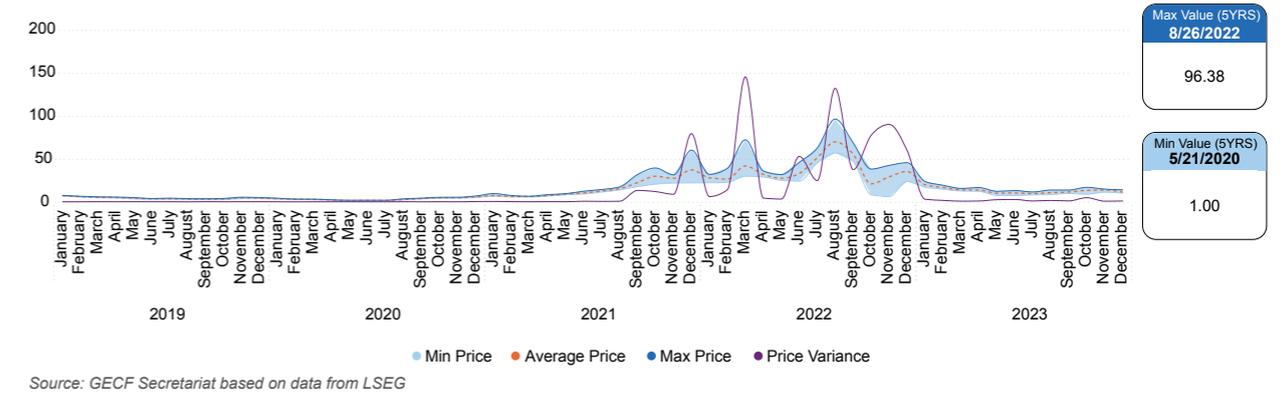
The Title Transfer Facility (TTF) spot prices showed significant volatility and an overall upward trend over the past five years. The lowest price point in the five-year period was observed in May 2020 at 1.00 \$/MMBtu, highlighting the extreme range of spot price fluctuations in the market. The data reveals a dramatic price surge in 2022, with the maximum price reaching 96.38 \$/MMBtu in August of that year. This peak was followed by a gradual decline in 2023, though spot prices remained elevated compared to pre-2022 levels. The monthly data reveals clear seasonal patterns, with spot prices typically peaking in winter months. The chart illustrates the extreme price volatility in 2022, with the price curve for that year significantly higher than other years. Annual average prices over the five-year period show significant variation: starting at 4.45 \$/MMBtu in 2019, dropping to 3.18 \$/MMBtu in 2020, rising sharply to 16.07 \$/MMBtu in 2021, peaking at 37.86 \$/MMBtu in 2022, and then declining to 12.88 \$/MMBtu in 2023. This pattern demonstrates the market's extreme volatility, with a more than tenfold increase from 2020 to 2022, followed by a significant correction in 2023.

Table 6.1.1.1 TTF spot (\$/MMBtu): 5 years historical data

Year	2019			2020			2021			2022			2023		
	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max
January	6.69	7.17	7.58	3.18	3.62	4.18	6.38	7.32	9.59	22.16	27.95	31.99	17.05	19.90	23.71
February	5.60	5.99	6.50	2.85	3.00	3.18	5.65	6.17	7.34	22.62	26.60	39.05	14.71	16.73	19.33
March	4.69	5.20	5.84	2.33	2.80	3.13	5.67	6.21	6.53	29.84	41.71	72.23	12.60	13.87	15.63
April	4.52	4.96	5.55	1.77	2.09	2.32	6.60	7.28	8.39	28.92	32.07	36.00	12.25	13.69	16.58
May	3.38	4.36	4.88	1.00	1.46	1.87	8.19	8.99	9.53	25.02	27.51	31.76	7.34	10.03	12.25
June	3.04	3.48	3.84	1.17	1.65	1.89	9.15	10.33	12.36	24.14	33.05	46.02	7.31	10.34	13.09
July	3.10	3.60	4.29	1.39	1.64	1.84	11.39	12.55	14.33	45.13	51.31	62.67	8.10	9.53	11.50
August	2.92	3.27	3.67	2.15	2.61	3.53	13.86	15.33	17.32	56.88	69.78	96.38	8.42	10.74	13.74
September	2.31	3.09	3.63	3.56	3.87	4.29	17.66	22.36	31.78	46.98	55.49	68.66	9.69	11.42	13.77
October	2.62	3.34	4.01	4.05	4.82	5.29	20.60	29.81	39.41	8.24	20.91	38.14	8.80	13.40	16.87
November	3.74	4.78	5.36	4.37	4.79	5.33	21.82	27.40	31.41	6.08	29.10	42.41	11.25	13.73	14.82
December	3.69	4.30	4.98	4.92	5.80	6.82	22.07	37.19	60.20	23.71	35.34	45.58	10.09	11.30	14.02
All Year	2.31	4.45	7.58	1.00	3.18	6.82	5.65	16.07	60.20	6.08	37.86	96.38	7.31	12.88	23.71

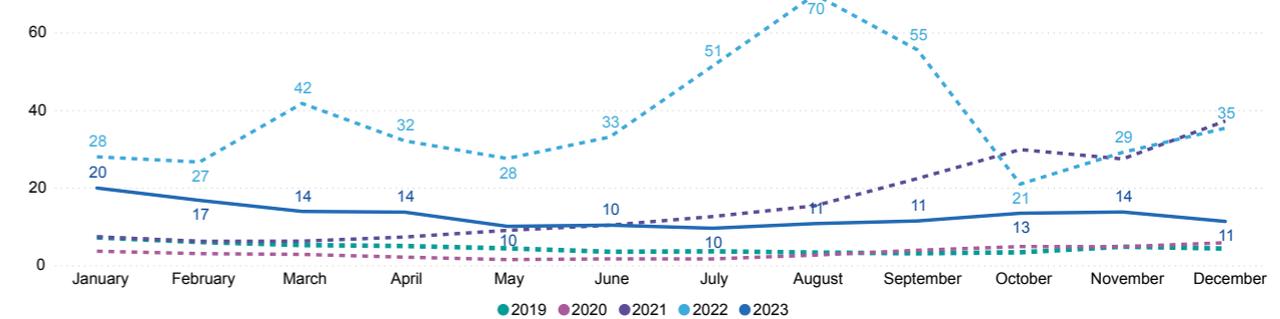
Source: GECF Secretariat based on data from LSEG

Figure 6.1.1.1 TTF spot (\$/MMBtu): 5 years historical monthly data



Source: GECF Secretariat based on data from LSEG

Figure 6.1.1.2 TTF spot (\$/MMBtu): Average Monthly Price; 5 years comparison



Source: GECF Secretariat based on data from LSEG

### 6.1.2 National Balancing Point (NBP) spot prices

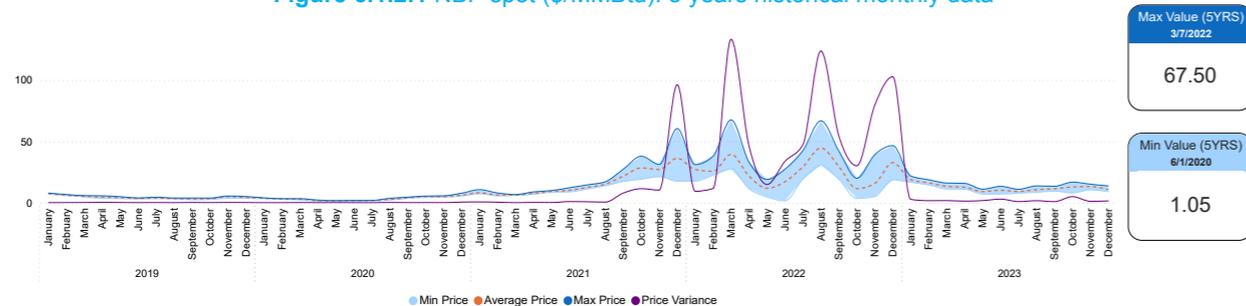
The National Balancing Point (NBP) spot prices demonstrated patterns similar to the TTF market over the five-year period. The lowest spot price in the dataset was recorded at 1.05 \$/MMBtu in May & June 2020, illustrating the wide range of price movements. The data shows a significant price spike in 2022, peaking at 67.50 \$/MMBtu in March. This was followed by a general downward trend in 2023, despite spot prices remaining higher than pre-2022 levels. The chart demonstrates similar seasonal patterns to TTF, with winter peaks. The spot price curves for different years show increasing divergence over time, particularly in 2022, indicating growing market volatility. The table reveals that spot price spreads (difference between minimum and maximum spot prices) have generally widened over the years. The five-year annual averages reflect substantial market changes: from 4.45 \$/MMBtu in 2019, declining to 3.23 \$/MMBtu in 2020, increasing to 15.87 \$/MMBtu in 2021, surging to 25.64 \$/MMBtu in 2022, before decreasing to 12.30 \$/MMBtu in 2023. This trajectory closely follows the TTF pattern, though with slightly lower absolute values.

Table 6.1.2.1 NBP spot (\$/MMBtu): 5 years historical data

Year	2019			2020			2021			2022			2023		
	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max
January	6.97	7.46	7.87	3.22	3.66	3.99	7.20	8.08	10.65	17.54	27.01	31.06	16.64	18.79	21.78
February	5.72	6.13	6.71	2.75	3.05	3.30	5.52	6.37	7.96	22.35	25.63	38.00	14.48	16.13	18.69
March	4.65	5.19	5.82	2.20	2.85	3.31	5.91	6.26	6.65	27.53	39.40	67.50	11.18	13.37	16.05
April	3.47	4.62	5.64	1.22	1.73	2.17	6.90	7.66	8.86	11.32	21.62	33.05	11.03	12.56	15.77
May	3.33	4.06	4.94	1.05	1.44	1.78	8.48	9.21	9.91	4.68	11.74	18.98	7.05	9.06	11.03
June	3.04	3.53	3.91	1.05	1.65	1.90	8.81	10.13	12.23	1.50	17.15	27.41	7.02	10.09	13.36
July	3.31	3.70	4.50	1.48	1.68	1.89	11.21	12.49	14.58	19.25	29.26	42.61	7.79	9.13	10.94
August	3.04	3.38	3.84	2.05	2.70	3.59	13.78	15.16	17.10	30.57	44.57	66.76	8.50	10.61	13.73
September	2.34	3.10	3.84	3.54	3.92	4.57	17.28	21.67	27.37	18.92	29.35	42.12	9.41	11.40	13.43
October	2.66	3.29	3.81	4.30	4.98	5.44	19.14	28.33	37.90	3.44	11.49	19.96	7.93	12.77	16.76
November	3.69	4.92	5.48	4.53	4.96	5.66	21.20	27.06	31.24	5.05	15.74	39.19	10.52	13.16	15.12
December	3.56	4.23	5.06	5.39	6.18	7.79	17.54	36.20	60.46	18.64	32.65	46.55	9.01	10.65	13.72
All Year	2.34	4.45	7.87	1.05	3.23	7.79	5.52	15.87	60.46	1.50	25.64	67.50	7.02	12.30	21.78

Source: GECF Secretariat based on data from LSEG

Figure 6.1.2.1 NBP spot (\$/MMBtu): 5 years historical monthly data



Source: GECF Secretariat based on data from LSEG

Figure 6.1.2.2 NBP spot (\$/MMBtu): Average Monthly Price; 5 years comparison



Source: GECF Secretariat based on data from LSEG

### 6.1.3 South West Europe (SWE) spot LNG prices

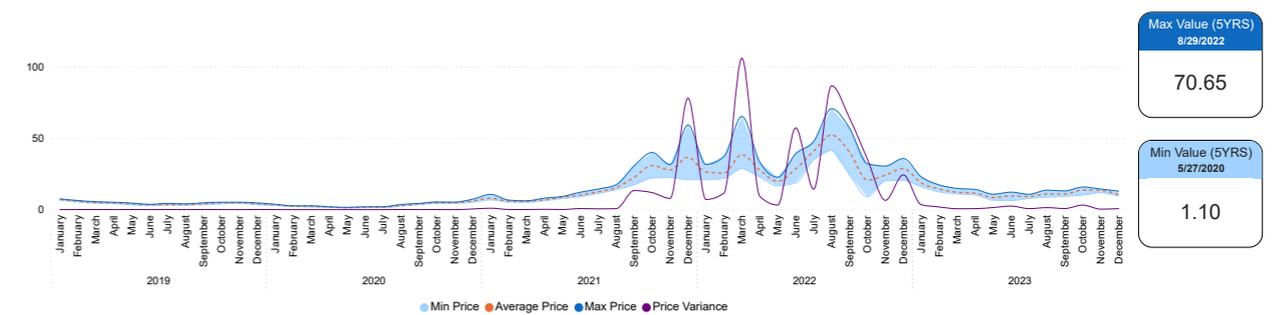
The South West Europe (SWE) spot LNG prices exhibited considerable volatility over the five-year period. The lowest price point in the five-year span was 1.10 \$/MMBtu in May 2020, underscoring the extensive range of price fluctuations. The data shows a dramatic price increase in 2022, reaching a maximum of 70.65 \$/MMBtu in August. This peak was followed by a general decline in 2023, though spot prices remained elevated compared to pre-2022 levels. The chart shows that SWE spot LNG prices follow similar trends to TTF and NBP, but often with slightly higher peaks. The table indicates that annual average spot prices have been consistently higher than TTF and NBP. Annual averages over the five-year period show dramatic changes: beginning at 4.61 \$/MMBtu in 2019, falling to 3.17 \$/MMBtu in 2020, rising to 16.14 \$/MMBtu in 2021, peaking at 31.33 \$/MMBtu in 2022, and declining to 12.00 \$/MMBtu in 2023. The pattern indicates a strong correlation with European gas hub prices while maintaining a slight premium during peak periods.

Table 6.1.3.1 SWE spot LNG (\$/MMBtu): 5 years historical data

Year	2019			2020			2021			2022			2023		
	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max
January	6.63	7.22	7.60	2.85	3.38	3.85	6.90	8.06	10.75	20.95	26.36	31.65	16.10	18.70	22.95
February	5.40	5.85	6.45	2.30	2.49	2.70	5.30	5.91	6.75	21.85	25.65	37.20	12.45	14.49	17.38
March	4.46	5.01	5.62	1.90	2.41	2.75	5.10	5.83	6.25	28.90	38.54	65.25	11.00	12.23	14.90
April	4.25	4.69	5.27	1.65	1.85	2.05	6.25	6.91	8.10	22.73	27.67	33.30	10.35	11.55	14.20
May	3.30	4.20	4.63	1.10	1.41	1.65	7.80	8.71	9.30	16.60	19.87	22.73	6.60	8.50	10.85
June	2.93	3.46	3.78	1.40	1.85	2.05	9.05	10.29	12.25	18.85	28.55	39.15	6.40	9.65	12.30
July	3.20	3.55	4.40	1.55	1.80	2.10	11.35	12.56	14.45	34.85	40.91	47.70	7.88	9.20	10.80
August	3.05	3.61	4.10	2.40	2.93	3.65	13.95	15.50	17.55	41.65	52.26	70.65	8.70	10.95	13.70
September	3.50	4.07	4.85	3.55	3.95	4.40	17.40	22.65	30.70	24.28	40.28	57.05	9.35	10.96	13.15
October	4.05	4.76	5.25	4.40	4.90	5.45	22.15	30.93	40.05	9.00	20.70	32.15	10.25	13.78	15.90
November	4.55	4.79	5.25	4.50	4.88	5.30	22.50	27.83	31.55	20.28	24.18	30.55	11.90	13.50	14.50
December	3.40	4.16	4.75	5.15	6.18	7.40	20.95	36.74	59.20	20.55	28.78	35.85	9.40	10.51	13.00
All Year	2.93	4.61	7.60	1.10	3.17	7.40	5.10	16.14	59.20	9.00	31.33	70.65	6.40	12.00	22.95

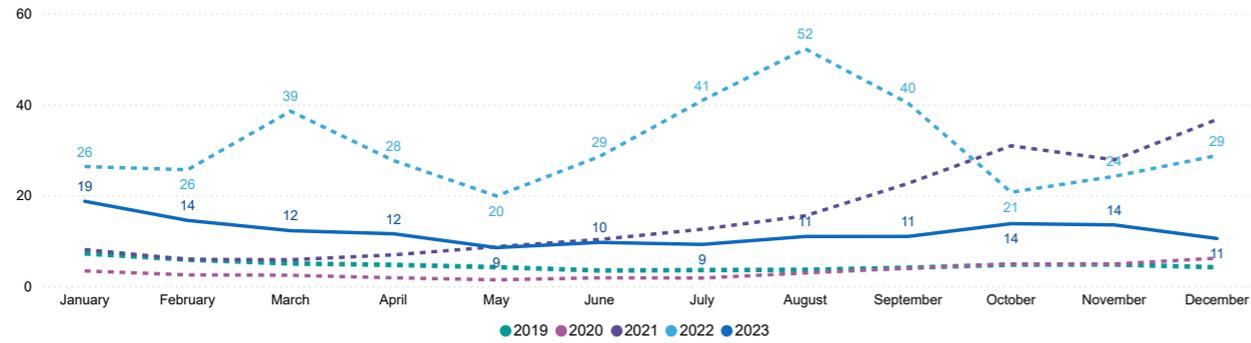
Source: GECF Secretariat based on data from Argus

Figure 6.1.3.1 SWE spot LNG (\$/MMBtu): 5 years historical monthly data



Source: GECF Secretariat based on data from Argus

Figure 6.1.3.2 SWE spot LNG (\$/MMBtu): Average Monthly Price; 5 years comparison



Source: GECF Secretariat based on data from Argus

### 6.1.4 North East Asia (NEA) spot LNG prices

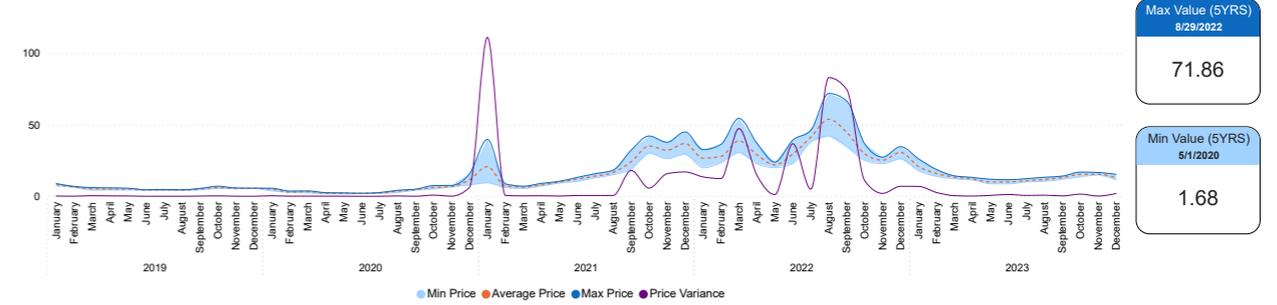
The North East Asia (NEA) spot LNG prices showed significant volatility and an overall upward trend over the five-year period. The lowest price in the dataset was recorded at 1.68 \$/MMBtu in April and May 2020, highlighting the wide range of price movements. The data reveals a substantial price surge in 2022, peaking at 71.86 \$/MMBtu in August. This was followed by a general decline in 2023, although spot prices remained higher than pre-2022 levels. The chart illustrates that NEA spot LNG prices often experience more pronounced winter peaks compared to European markets. The table shows that NEA spot prices have consistently higher annual averages than other regions, particularly in recent years. The five-year annual averages demonstrate significant market evolution: starting at 5.44 \$/MMBtu in 2019, dropping to 4.36 \$/MMBtu in 2020, increasing sharply to 18.67 \$/MMBtu in 2021, peaking at 33.41 \$/MMBtu in 2022, before declining to 13.46 \$/MMBtu in 2023. NEA prices consistently maintained a premium over other regional markets throughout the period.

Table 6.1.4.1 NEA spot LNG (\$/MMBtu): 5 years historical data

Year	2019			2020			2021			2022			2023		
	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max
January	7.24	8.26	8.94	3.80	4.88	5.61	9.42	20.69	39.72	19.89	26.63	32.55	17.86	20.73	26.13
February	6.14	6.50	6.89	2.68	2.92	3.65	6.05	7.17	8.69	23.43	27.82	36.28	13.88	15.96	18.70
March	4.28	5.24	6.08	2.35	3.28	3.76	5.44	6.44	7.06	30.63	38.65	54.44	12.21	13.35	14.28
April	4.35	5.01	5.87	1.68	2.13	2.54	7.19	7.92	9.01	22.79	29.01	37.09	11.43	12.10	13.19
May	4.37	5.04	5.65	1.68	2.03	2.38	9.20	9.98	10.46	19.99	21.94	23.85	8.74	9.99	11.90
June	4.24	4.39	4.52	1.93	2.05	2.13	10.42	12.02	13.19	22.88	29.52	39.23	8.67	10.09	11.60
July	4.11	4.42	4.78	2.07	2.29	2.61	12.82	14.10	15.79	37.90	41.26	46.10	10.02	10.90	12.30
August	4.07	4.28	4.55	2.64	3.63	4.19	15.09	16.68	18.26	42.08	53.80	71.86	10.42	11.71	13.30
September	4.52	5.05	5.47	4.30	4.61	4.98	18.89	24.06	32.20	34.58	44.68	66.52	11.84	13.09	14.09
October	5.41	6.02	7.04	5.08	6.12	7.48	30.08	35.07	42.10	25.00	29.70	36.64	13.63	15.29	16.90
November	5.25	5.46	5.83	6.52	6.82	7.61	26.25	32.18	37.73	22.76	25.22	27.36	14.84	15.41	16.64
December	5.42	5.56	5.69	7.94	11.55	15.68	29.33	36.90	44.98	26.13	30.67	34.67	11.50	13.00	15.35
All Year	4.07	5.44	8.94	1.68	4.36	15.68	5.44	18.67	44.98	19.89	33.41	71.86	8.67	13.46	26.13

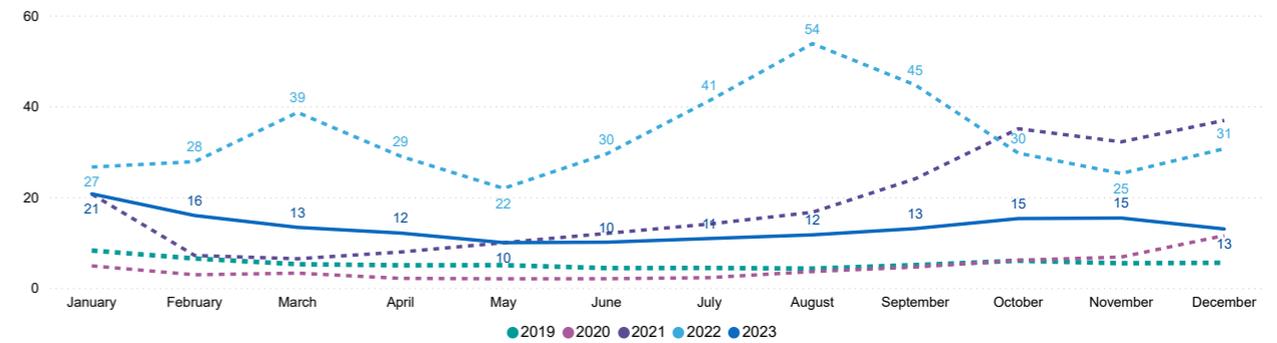
Source: GECF Secretariat based on data from Argus

Figure 6.1.4.1 NEA spot LNG (\$/MMBtu): 5 years historical monthly data



Source: GECF Secretariat based on data from Argus

Figure 6.1.4.2 NEA spot LNG (\$/MMBtu): Average Monthly Price; 5 years comparison



Source: GECF Secretariat based on data from Argus

### 6.1.5 Henry Hub (HH) spot prices

The Henry Hub (HH) spot prices demonstrated less volatility compared to the other markets over the five-year period. The lowest price point in the five-year span was 1.33 \$/MMBtu in September 2020. It's worth noting an unusual spike to 23.86 \$/MMBtu in February 2021 during the Texas winter storm, which stands out as an anomaly in the dataset. The data shows a notable spot price increase in 2022, reaching a maximum of 9.85 \$/MMBtu in August. This peak was followed by a decline in 2023, with spot prices returning to levels more consistent with previous years (2019, 2020). The chart shows that HH spot prices have been significantly less volatile than global spot LNG prices. Unlike other markets, HH doesn't show consistent seasonal patterns. Even during the 2022 global price surge, HH spot prices remained relatively stable compared to international markets. Annual averages over the five years show relatively moderate changes compared to global markets: from 2.56 \$/MMBtu in 2019, declining to 2.03 \$/MMBtu in 2020, rising to 3.90 \$/MMBtu in 2021, reaching 6.45 \$/MMBtu in 2022, and returning to 2.54 \$/MMBtu in 2023. This pattern demonstrates HH's relative stability compared to international gas prices.

Table 6.1.5.1 HH spot (\$/MMBtu): 5 years historical data

Year	2019			2020			2021			2022			2023		
	Month	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg
January	2.72	3.09	3.58	1.89	2.02	2.17	2.25	2.71	2.89	3.73	4.38	5.69	2.65	3.29	3.78
February	2.54	2.69	2.97	1.78	1.91	2.04	2.66	5.39	23.86	4.03	4.69	6.70	2.07	2.38	2.67
March	2.67	2.93	4.25	1.65	1.79	1.96	2.45	2.62	2.87	4.36	4.90	5.52	1.93	2.31	2.67
April	2.53	2.65	2.76	1.50	1.74	1.92	2.43	2.66	2.98	5.43	6.61	7.48	1.87	2.16	2.27
May	2.54	2.64	2.73	1.56	1.75	1.93	2.78	2.91	3.00	6.78	8.15	9.44	1.85	2.13	2.37
June	2.27	2.39	2.50	1.42	1.63	1.84	2.98	3.26	3.79	5.80	7.69	9.43	1.74	2.17	2.71
July	2.22	2.36	2.54	1.58	1.75	1.88	3.56	3.83	4.15	5.65	7.21	9.46	2.46	2.55	2.68
August	2.02	2.22	2.36	1.95	2.30	2.57	3.83	4.07	4.35	7.76	8.80	9.85	2.42	2.58	2.92
September	2.33	2.56	2.75	1.33	1.92	2.35	4.45	5.14	5.94	6.40	7.94	9.38	2.45	2.64	2.81
October	2.08	2.33	2.73	1.41	2.39	3.14	4.81	5.52	6.37	4.45	5.69	6.91	2.60	2.99	3.34
November	2.39	2.64	2.87	2.19	2.58	3.03	4.52	5.04	5.73	3.46	5.50	7.00	2.00	2.71	3.19
December	1.75	2.23	2.43	2.36	2.57	2.89	3.32	3.78	4.31	3.52	5.61	7.20	2.33	2.52	2.76
All Year	1.75	2.56	4.25	1.33	2.03	3.14	2.25	3.90	23.86	3.46	6.45	9.85	1.74	2.54	3.78

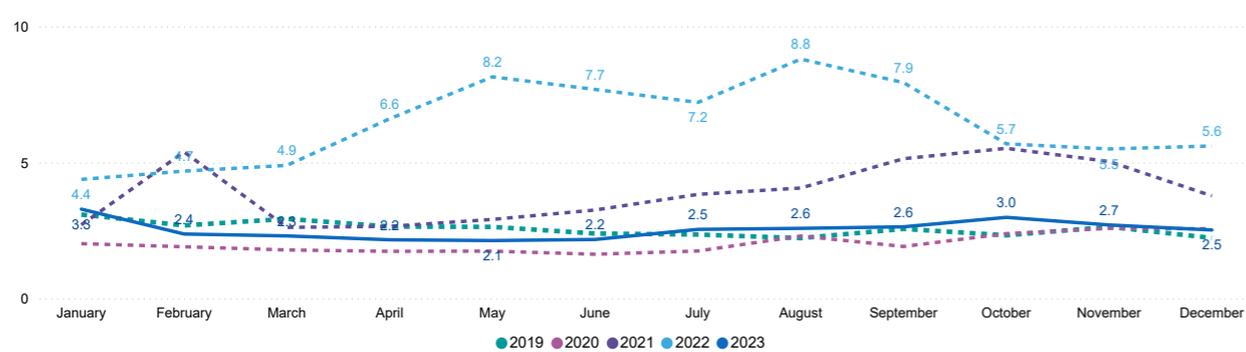
Source: GECF Secretariat based on data from LSEG

Figure 6.1.5.1 HH spot (\$/MMBtu): 5 years historical monthly data



Source: GECF Secretariat based on data from LSEG

Figure 6.1.5.2 HH spot (\$/MMBtu): Average Monthly Price; 5 years comparison



Source: GECF Secretariat based on data from LSEG

## 6.1.6 Brent spot prices

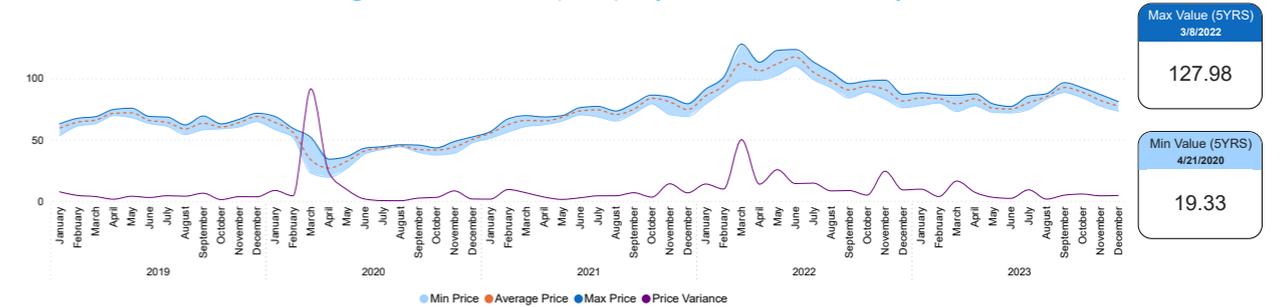
The Brent spot prices exhibited significant fluctuations over the five-year period. The data shows a dramatic spot price drop in 2020, reaching a low of 19.33 \$/bbl in April, due to the global pandemic's impact. This was followed by a strong recovery and surge in 2022, peaking at 127.98 \$/bbl in March. Spot prices moderated in 2023 but remained elevated compared to pre-2022 levels. The chart illustrates the dramatic V-shaped recovery of oil spot prices from the 2020 low. Unlike natural gas spot prices, Brent spot prices in 2023 have remained closer to 2022 levels. Monthly spot price volatility (difference between monthly min and max) has generally increased in recent years. The five-year annual averages reflect significant market changes: starting at 64.78 \$/bbl in 2019, dropping sharply to 43.22 \$/bbl in 2020, recovering to 70.90 \$/bbl in 2021, peaking at 99.05 \$/bbl in 2022, and moderating to 82.19 \$/bbl in 2023. This trajectory shows a clear V-shaped recovery from the 2020 pandemic-induced low. Brent crude price has an impact on gas prices, since many long-term LNG contracts are oil indexed.

Table 6.1.6.1 Brent (\$/bbl): 5 years historical data

Year	2019			2020			2021			2022			2023		
	Month	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg
January	53.13	59.42	62.91	58.29	64.03	68.91	51.09	55.32	56.58	78.98	85.69	91.21	77.84	84.06	88.30
February	61.11	64.28	67.46	52.18	55.86	59.31	56.35	62.28	67.04	89.16	94.10	100.99	79.92	83.48	86.61
March	63.08	66.00	68.80	22.74	33.62	51.86	60.79	65.70	69.63	98.02	112.46	127.98	72.97	79.21	86.18
April	69.68	71.47	74.64	19.33	26.85	34.11	62.15	65.31	68.56	98.48	106.19	113.16	77.69	83.46	87.33
May	68.03	71.92	75.70	26.44	32.41	36.17	65.11	68.31	69.63	102.46	111.96	122.84	72.33	75.65	79.31
June	63.11	65.66	68.97	38.32	40.77	43.08	70.25	73.41	76.18	110.05	117.50	123.58	71.84	74.98	77.12
July	60.85	64.07	68.44	42.03	43.22	44.32	68.62	74.29	77.16	99.10	105.12	113.50	74.65	80.20	85.56
August	54.18	58.78	62.05	44.15	45.02	45.86	65.18	70.51	73.41	92.34	97.74	105.09	83.20	85.10	87.55
September	58.08	63.42	69.32	39.61	41.87	45.58	71.45	74.88	79.53	84.06	90.60	95.74	88.55	92.59	96.55
October	58.82	60.33	62.91	37.46	41.52	43.34	79.28	83.75	86.40	88.86	93.59	97.92	84.07	88.70	92.38
November	60.37	63.93	66.65	38.97	43.98	48.61	70.57	80.85	84.78	83.03	90.85	98.57	77.42	82.03	86.85
December	64.80	68.90	71.55	47.42	50.21	52.26	68.87	74.54	79.32	76.10	81.46	86.88	73.24	77.41	81.07
All Year	53.13	64.78	75.70	43.22	68.91	51.09	70.90	86.40	76.10	99.05	127.98	71.84	82.19	96.55	

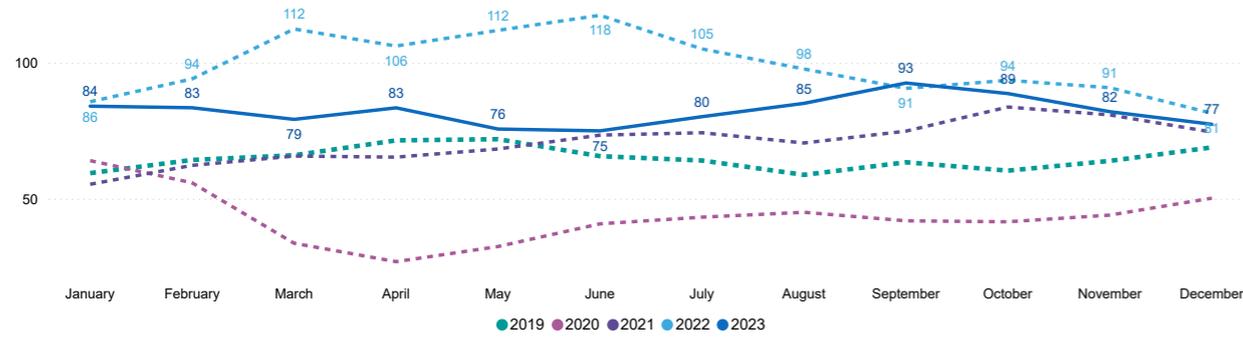
Source: GECF Secretariat based on data from LSEG

Figure 6.1.6.1 Brent (\$/bbl): 5 years historical monthly data



Source: GECF Secretariat based on data from LSEG

Figure 6.1.6.2 Brent (\$/bbl): Average Monthly Price; 5 years comparison



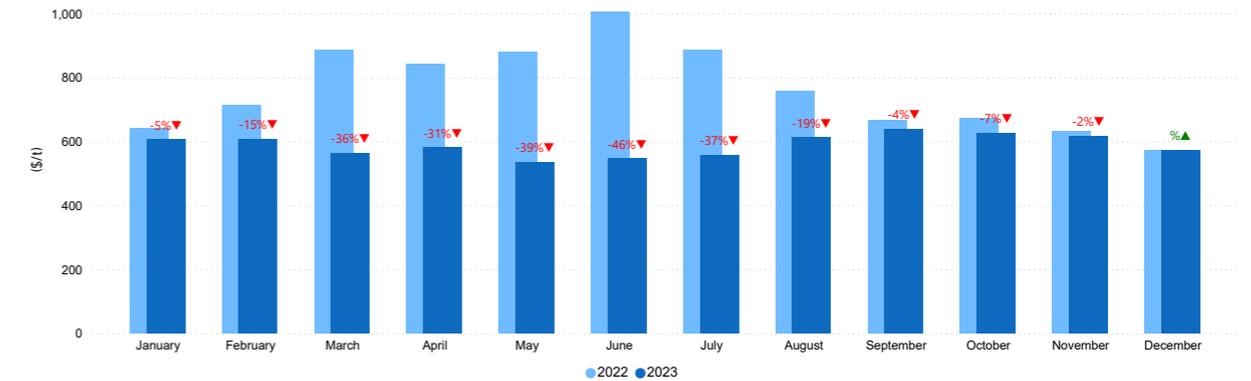
Source: GECF Secretariat based on data from LSEG

## 6.2 LNG Shipping

### Recent Dynamics 2022-2023

**Shipping fuel average prices:** Fuel oil prices for shipping consistently decreased in 2023 compared to 2022. The largest decline was in June at 46% y-o-y, while December saw a slight increase with only 0.3% y-o-y. The trend indicates a general easing of bunkering fuel prices. The annual average price decreased by 24% from 2022 to 2023, falling from 762.99 to 589.26\$/t.

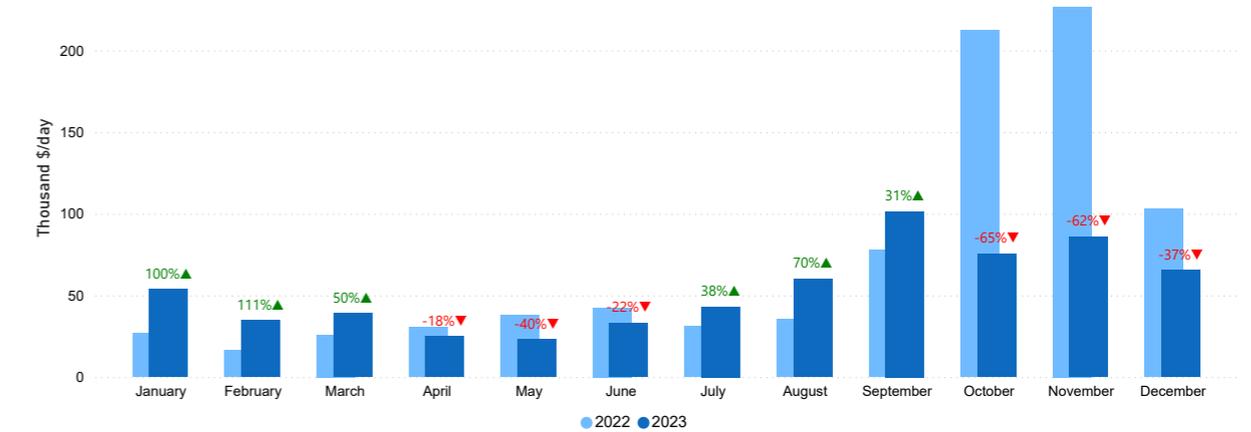
Figure 6.2.1 Average Fuel Oil Price y-o-y comparison by Month (2023 vs 2022) (\$/t)



Source: Average shipping fuel price is GECF Secretariat data based on data from Argus for the main bunkering hubs: Fujairah, Houston, Rotterdam/Antwerp, and Singapore

**Steam Turbine LNG Carrier Spot Charter Rates:** Spot charter rates for steam turbine LNG carriers showed mixed trends in 2023 compared to 2022. Significant increases were observed in the first quarter, with February seeing a 111% y-o-y rise. However, the last quarter of the year experienced substantial decreases, particularly in October with a 65% y-o-y drop. This volatility suggests complex and changing dynamics in the LNG shipping market throughout the year. The annual average rate decreased by 26% from 2022 to 2023, declining from 72.23 to 53.23 thousand \$/day.

Figure 6.2.2 Average spot charter rates; y-o-y comparison by Month (2023 vs 2022)



Source: GECF Secretariat based on data from Argus

### 6.2.1 Shipping fuel average prices

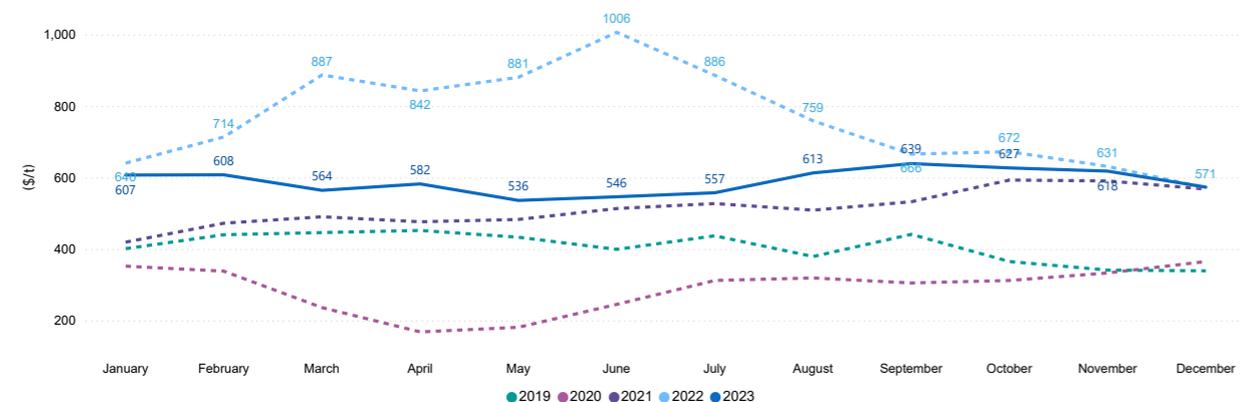
The average monthly fuel oil prices for shipping showed significant volatility over the five-year period. Prices reached a low in April 2020 at 168 \$/t, due to pandemic-related demand reduction, before surging to a peak of 1,006.40 \$/t in June 2022. The chart illustrates a sharp price increase throughout 2021 and first half of 2022 till August, followed by a moderation in late 2022 and 2023. However, 2023 prices remain elevated compared to pre-2022 levels. The data also reveals some seasonality, with prices often rising in the latter half of the year. Annual averages over the five-year period show substantial fluctuation: from 406.08 \$/t in 2019, declining to 288.83 \$/t in 2020, rising to 514.46 \$/t in 2021, peaking at 762.99 \$/t in 2022, and decreasing to 589.26 \$/t in 2023. This pattern reflects the broader energy market dynamics while maintaining correlation with oil prices.

Table 6.2.1.1 Average Monthly Fuel Oil Price: 5 years (\$/t)

Year	January	February	March	April	May	June	July	August	September	October	November	December	Average
2019	401.00	440.00	446.00	452.00	433.00	399.00	437.00	379.00	441.00	365.00	341.00	339.00	406.08
2020	352.00	338.00	236.00	168.00	181.00	245.00	312.00	319.00	305.00	312.00	333.00	365.00	288.83
2021	419.25	472.25	490.25	476.25	482.75	513.25	527.25	508.75	532.25	593.00	590.50	567.75	514.46
2022	640.36	713.61	887.07	842.43	880.58	1,006.40	886.11	758.75	665.63	672.36	631.25	571.28	762.99
2023	607.05	607.68	564.23	582.22	536.02	546.24	557.46	613.00	639.04	626.95	618.02	573.22	589.26

Source: Average shipping fuel price is GECF Secretariat data based on data from Argus for the main bunkering hubs: Fujairah, Houston, Rotterdam/Antwerp, and Singapore

Figure 6.2.1.1 Average Monthly Fuel Oil Price: 5 years comparison



Source: Average shipping fuel price is GECF Secretariat data based on data from Argus for the main bunkering hubs: Fujairah, Houston, Rotterdam/Antwerp, and Singapore

### 6.2.2 Charter rates for steam turbine LNG carriers

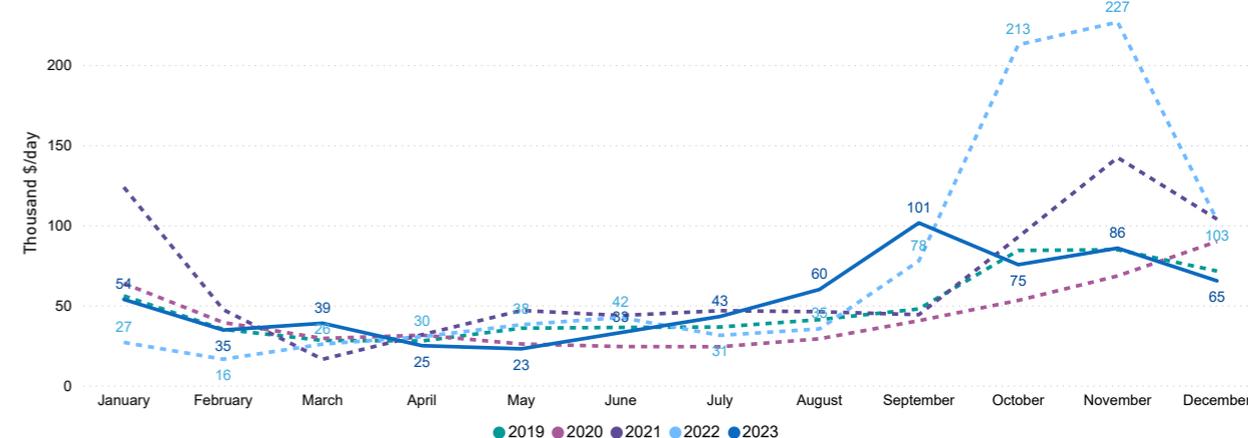
The average spot charter rates for steam turbine LNG carriers demonstrated extreme volatility over the five-year period. Spot charter rates peaked dramatically in November 2022 at 226,730 \$/day, a significant increase from the low of 16,350 \$/day in March 2021. The chart shows recurring seasonal patterns with spot charter rates typically spiking in the fourth quarter of each year. However, the magnitude of these spikes varies greatly year to year. The year 2022 stands out with an exceptionally high peak. In 2023, there was a return to more moderate levels, though these levels were still elevated compared to 2019 in most months. However, by the end of the year, 2023 finished with figures lower than all the previous five years. The five-year annual averages demonstrate high volatility: beginning at 48.72 thousand \$/day in 2019, decreasing to 43.25 thousand \$/day in 2020, increasing to 65.43 thousand \$/day in 2021, peaking at 72.23 thousand \$/day in 2022, and declining to 53.23 thousand \$/day in 2023. This pattern reflects the changing dynamics of LNG trade and market conditions throughout the period.

Table 6.2.2.1 Average spot charter rates: 5 years (Thousand \$/day)

Year	January	February	March	April	May	June	July	August	September	October	November	December	Average
2019	55.95	35.04	28.11	27.78	35.76	36.24	36.50	41.10	47.77	84.27	84.71	71.41	48.72
2020	63.68	39.31	29.37	31.42	25.92	24.30	24.19	29.16	40.43	53.08	68.37	89.82	43.25
2021	123.73	47.34	16.35	31.68	46.83	43.65	46.68	46.04	44.18	92.68	142.20	103.78	65.43
2022	26.89	16.39	25.83	30.43	37.94	42.45	31.27	35.32	77.74	212.58	226.73	103.21	72.23
2023	53.71	34.61	38.85	24.86	22.89	33.02	43.06	59.92	101.45	75.39	85.70	65.29	53.23

Source: GECF Secretariat based on data from Argus

Figure 6.2.2.1 Average spot charter rates: 5 years (Thousand \$/day)



Source: GECF Secretariat based on data from Argus

# Definitions

Name	Definition	Source
Domestic (natural gas) consumption	Domestic natural gas consumption refers to the total quantity of natural gas that consumers need across power generation, industry, residential and commercial use, transportation, and petrochemicals in one year.	GECF
Exports of goods and services (% of GDP)	The share of exports of goods and services in the total GDP	World Bank and OECD National Accounts data files
Exports of Goods and Services (Current US\$)	Exports of goods and services is the value of all goods and other market services provided to the rest of the world. These include merchandise, freight, insurance, travel, and other services such as communication, construction, financial, information, business, personal, and government services. Exports also cover the value of goods shipped between countries, regardless of the method of transportation, and services that are sold internationally.	World Bank and OECD National Accounts data files
Flaring	Flaring is the controlled burning of natural gas that is released during oil and gas production or processing. This gas is often burned off when it cannot be captured or used for economic, technical, or safety reasons. Flaring typically occurs at oil wells, refineries, or processing plants and is used to manage excess or waste gas, especially when it is not feasible to transport or utilize it.	GECF
GDP (Current US\$)	Gross Domestic Product (GDP) is the total monetary value of all finished goods and services produced within a country's borders during a year. It includes the value of consumer spending, government spending, business investment, and net exports (exports minus imports). GDP serves as a comprehensive measure of a country's economic activity and health. Nominal GDP is expressed in current U.S. dollars, with domestic currencies converted using the official exchange rates for a given year.	World Bank and OECD National Accounts data files
GDP Growth (Annual %)	Annual percentage growth rate of GDP at market prices based on constant local currency. Aggregates are based on constant 2015 prices, expressed in U.S. dollars.	World Bank and OECD National Accounts data files
GDP per capita (Current US\$)	GDP per capita is gross domestic product divided by midyear population. GDP is the sum of gross value added by all resident producers in the economy plus any product taxes and minus any subsidies not included in the value of the products. It is calculated without making deductions for depreciation of fabricated assets or for depletion and degradation of natural resources. Data are in current U.S. dollars.	World Bank and OECD National Accounts data files
Gross (natural gas) production	Gross natural gas production refers to the total quantity of natural gas extracted from underground reservoirs during a year. This includes all gas produced from gas wells, oil wells (associated gas), and condensate fields, before any processing or removal of impurities like water, carbon dioxide, or sulfur. Gross production also encompasses both marketable gas (which can be sold or used) and non-marketable gas, such as gas that is flared, vented, or re-injected into the reservoir for pressure maintenance. It represents the raw volume of natural gas extracted before any adjustments or losses due to processing or transportation.	GECF
Labor force	The World Bank defines the labor force as the total number of people aged 15 and above who are either employed or actively seeking employment. This includes both individuals who are working (the employed) and those who are not working but are available and actively looking for work (the unemployed). The labor force does not include individuals who are not actively seeking work, such as full-time students, homemakers, or retirees. It is a key indicator used to measure the available labor supply within an economy and is often expressed as a percentage of the working-age population.	World Bank

Name	Definition	Source
(Natural gas) liquefaction	The liquefaction of LNG refers to the process of cooling natural gas to extremely low temperatures, typically around -162°C (-260°F), to convert it from a gaseous state into a liquid form, known as liquefied natural gas (LNG). This process reduces the volume of the gas by about 600 times, making it much easier and more efficient to store and transport, especially over long distances where pipelines are not feasible.	GECF
Liquefied Natural Gas	Liquefied Natural Gas (LNG) is natural gas that has been cooled to a liquid state at around -162°C (-260°F). This process reduces the gas's volume by approximately 600 times, making it easier and more cost-effective to store and transport, especially over long distances where pipelines are not feasible. LNG is primarily composed of methane, with small amounts of other gases.	GECF
Marketed (natural gas) production	Marketed natural gas refers to the volume of natural gas that is available for sale after it has been processed and treated to remove impurities such as water, sulfur, and other non-hydrocarbon gases. This gas is suitable for use by consumers and industries and excludes any gas that is flared, vented, or re-injected back into the reservoir for pressure maintenance. Marketed natural gas is the portion of gross natural gas production that can be sold to domestic or international markets and transported via pipelines or as liquefied natural gas (LNG).	GECF
Natural gas	Natural gas is a hydrocarbon composed primarily of methane (CH <sub>4</sub> ), along with smaller amounts of other hydrocarbons such as ethane, propane, butane, and impurities like carbon dioxide, nitrogen, and sulfur compounds.	GECF
Natural gas consumption per capita	Natural gas consumption per capita refers to the average amount of natural gas consumed by each person in a specific country or region annually. It is determined by dividing the total natural gas consumption of a country or region by its population.	GECF
Other Losses	Other losses in natural gas production refer to the amount of gas lost throughout the supply chain, from extraction to delivery to consumers. These losses occur during processing, transportation, storage, and distribution due to leaks, venting, flaring, or inefficiencies.	GECF
(Natural gas consumption in) petrochemicals (sector)	Natural gas consumption in the petrochemical sector refers to the use of natural gas as both a raw material (feedstock) and an energy source in the production of chemicals like ammonia, methanol, and ethylene, which are essential for making fertilizers, plastics, and other industrial products.	GECF
Population	Total population is based on the de facto definition of population, which counts all residents regardless of legal status or citizenship. The values shown are midyear estimates.	World Bank and OECD National Accounts data files
(Natural gas consumption in) power generation	Natural gas consumption in the power sector refers to the amount of natural gas used as a fuel to generate electricity in power plants. In this sector, natural gas is burned in turbines or combined-cycle power plants to produce electricity, which is then distributed to homes, businesses, and industries.	GECF
Proven natural gas reserves	Proven natural gas reserves are the estimated quantities of natural gas that can be economically and technically recovered from known reservoirs using current technology. They are divided into developed reserves (ready for extraction) and undeveloped reserves (requiring further investment). Proven reserves indicate a region's future natural gas supply potential.	GECF
(Natural gas consumption in) refineries	Natural gas consumption in refineries refers to the use of natural gas as a fuel for powering refinery operations.	GECF
Regasification (of natural gas)	Regasification is the process of converting liquefied natural gas (LNG) back into its gaseous state after it has been transported in liquid form. This process typically occurs at a regasification terminal, where the LNG is warmed up, returning it to a gas that can then be distributed through pipelines for use in power generation, industry, and residential applications.	GECF

Name	Definition	Source
Reinjection	Natural gas reinjection is the process of injecting natural gas back into underground reservoirs to maintain pressure and enhance oil recovery. It is often used in oil fields when transporting or selling the gas is not economically viable.	GECF
Shrinkage	Natural gas shrinkage is the reduction in gas volume during production, processing, and transportation due to the removal of impurities and losses from flaring, venting, or leaks. It results in a smaller final volume of usable gas.	GECF
Status	Refers to the current status of a pipeline or plant, which may be classified as operational, non-operational, planned, proposed, or under construction.	GECF
Train	An LNG train refers to a liquefied natural gas (LNG) production unit within an LNG facility. Each LNG train includes systems for gas purification, refrigeration, and liquefaction. Large LNG plants often have multiple trains to increase production capacity, with each train operating independently to produce LNG from natural gas.	GECF
Brent	The ICE Brent one-month ahead price is sourced from Refinitiv Eikon (LSEG).	GECF
HH	The Henry Hub (HH) is a physical trading point for natural gas in the US. The spot day-ahead price is sourced from Refinitiv Eikon (LSEG).	GECF
TTF	The Title Transfer Facility (TTF) is a virtual trading point for natural gas in the Netherlands. The spot day-ahead price is sourced from Refinitiv Eikon (LSEG).	GECF
NBP	The National Balancing Point (NBP) is a virtual trading point for natural gas in the UK. The spot day-ahead price is sourced from Refinitiv Eikon (LSEG).	GECF
SWE spot LNG	The southwest Europe (SWE) spot LNG price is the Argus assessment based on deliveries to Spain and Portugal. The spot one month-ahead price is used.	GECF
NEA spot LNG	The northeast Asia (NEA) spot LNG price is the Argus assessment based on deliveries to Japan, South Korea, Taiwan and China. The spot one month-ahead price is used.	GECF
Primary Energy	Primary Energy refers to the the total energy contained in natural resources such as coal, oil, natural gas, nuclear, renewables, before undergoing any conversion or transformation processes.	GECF
Primary Energy Consumption	Primary Energy Consumption refers to the total primary energy consumed by a country or region. It includes consumption across all sectors.	GECF
Primary Energy Consumption per Capita	Primary Energy Consumption per Capita refers to the amount of primary energy consumed by each person in a specific country or region annually. It is determined by dividing the primary energy consumption of a country by its population.	GECF
Primary Energy Intensity	Primary Energy Intensity refers to the amount of primary energy consumed per unit of GDP in a specific country or region annually. It is determined by dividing the primary energy consumption of a country by its current GDP.	GECF
Electricity Consumption	The total amount of electrical energy used by all sectors within a country, encompassing residential, commercial, industrial, and other sectors.	GECF
Electricity Consumption per Capita	Electricity Consumption per Capita refers to the amount of electricity consumed by each person in a specific country or region annually. It is determined by dividing the electricity consumption of a country by its population.	GECF
Electricity Consumption per GDP	Electricity Consumption per GDP refers to the amount of electricity consumed per unit of GDP in a specific country or region annually. It is determined by dividing the electricity consumption of a country by its current GDP.	GECF

## Data Sources

Section	Sources
<b>Macroeconomics</b>	Primary sources, supplemented by World Bank data updated as of July 2024, where available.
<b>Natural gas supply chain figures (Proven natural gas reserves, gas production, domestic consumption, and trade)</b>	Primary sources, supplemented by GECF Secretariat estimations, and secondary sources including Cedigaz (Natural Gas in the World), EIA, Enerdata, ICIS, JODI, OECD/IEA, OPEC, and Statistical Review of World Energy.
<b>Conversion factors</b>	Joint Organization Data Initiative (JODI) Gas Manual.
<b>Prices</b>	GECF processed secondary sources from Argus, Refinitiv Eikon.

## Abbreviations, Symbols and Units

Abbreviation	Explanation
%	Percentage
-	No data applicable
1000MT	One Thousand Metric Tons
Bcm	Billion Standard Cubic Metres
CAGR	Compound Annual Growth Rate
FLNG	Floating Liquefied Natural Gas Facility
FSRU	Floating Storage Regasification Unit
GDP	Gross Domestic Products
K	Kilo, equal one thousand
Km	Kilometre
LNG	Liquefied Natural Gas
M	Million
MCs	Member Countries
MMcm	Million Standard Cubic Metres
MMT	Million Metric Tons
MTPA	Million Tons per Annum
NA	No data available
Scm	Standard Cubic Metres
US\$	United States Dollar
GJ	Gigajoules
EJ	Exajoules
MJ	Mega Joules
TWh	Terawatt hours
KWh	Kilowatt-hour
MWh	Megawatt-hour



