



**GECF**

Gas Exporting  
Countries Forum

**GECF  
Annual  
Statistical  
Bulletin**

**2022**

6th edition





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**Annual**  
**Statistical**  
**Bulletin**  
**2022**  
6<sup>th</sup> edition

## Authors and Contributors

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**Secretary General**

*Eng. Mohamed Hamel.*

**Team Leader**

*Rixio Morales. Data & Information Department Head.*

**Statistics Team**

*Mona Shokripour. Energy Statistician.*

*Amira Remadna. Energy Data Analyst.*

*Hesham Marzouk. Databank Analyst.*

**IT Development Team**

*Hichem Kimouche. Senior ICT Analyst.*

*Diana Cueto. ICT Assitant.*

**Administrative Support**

*Asma Chenideur. Secretary.*

## Disclaimer

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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



[www.gecf.org](http://www.gecf.org)

## Foreword

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I am pleased to introduce the sixth edition of the GECF Annual Statistical Bulletin. It features data and statistics for the year 2021, covering its 19 member countries from four continents. This year's edition is marked by the new membership of Mozambique as Observer in the Forum.

The Bulletin contains primary official data from the GECF member countries. It is shared in a transparent manner, and in the context of the JODI-Gas partnership as well.

This edition is published at a time of great challenges and uncertainties. Yet, we believe that natural gas could contribute effectively to achieving the United Nations Sustainable Development Goals as well as the Paris Agreement long term objectives. To truly fulfill this potential, natural gas shall remain affordable. This is possible, given the large global natural gas resources. However, policy and financial support is a prerequisite to facilitate investment and convert these resources into supply. Investment is crucial for market stability.

Equally important is the development and deployment of cleaner natural gas technologies to reduce the environmental footprint of its operations from well-to-wheel. In this context, the GECF supports gas flaring and methane emissions reduction, the scaling up of carbon capture, utilisation and storage, as well as low-carbon ammonia and blue hydrogen.

The Bulletin is unveiled on the occasion of the 24<sup>th</sup> GECF Ministerial Meeting held in Cairo, the Arab Republic of Egypt. Egypt is also the host of the 27<sup>th</sup> edition of the United Nations Climate Change Conference. On this occasion, the GECF will hold a workshop on natural gas for sustainable development in Egypt's Pavilion in Sharm El Sheikh.

In closing, I would like to express my appreciation to the member countries' data teams as well as the GECF Secretariat team whose efforts and dedication have made this valuable publication a reality.

**Eng. Mohamed Hamel**  
Secretary General

## Acknowledgements

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Mr. Majid Badihi, Special Envoy of the Islamic Republic of Iran.

Ms. Naima Suwani, Special Envoy of the State of Libya.

Mr. Aliyu Alhaji Dikko, Special Envoy of the Federal Republic of Nigeria.

Ms. Sarah Hamad Khames Marqab Al-Kaabi, Special Envoy of the State of Qatar.

Ms. Irina Ananich, Ms. Anastasia Lebedeva and Ms. Alyona Zaitseva, Special Envoy and Representatives of the Russian Federation.

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To the Administration and Finance Department and Secretary General Office (SGO) of GECF for their valuable support.

## About The Gas Exporting Countries Forum



06<sup>th</sup> GECF Summit | 22<sup>nd</sup> February 2022  
Doha, Qatar

The Gas Exporting Countries Forum (GECF) is an international, governmental organisation providing the framework for exchanging experiences and information among its Member Countries.

In accordance with the Statute, the GECF 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 co-ordination in gas-related matters.

Following the GECF Long Term Strategy, our Vision is “to become a globally recognized credible Forum that will develop and reflect common views and unified positions, positively influencing direction of the global gas market by promoting natural gas as the fuel of choice in the global energy mix based on its availability, reliability, versatility, affordability and its inherent nature as an environmentally-friendly source of energy”. Our Mission is “to enhance the role of GECF in the global energy scene in order to support the sovereign rights of Member Countries over their natural gas resources, to maximize their value for the benefit of their people, and to promote their coordination on global energy developments with a view to contributing to global sustainable development and energy security”.

The GECF was established in 2001 in Tehran, Iran and later evolved into an international organisation with the signing of an agreement for the functioning of the Secretariat and its Statute at the 7<sup>th</sup> Ministerial Meeting in Moscow, Russia in December 2008, with its permanent secretariat based in Doha, Qatar.

The GECF Member Countries are: Algeria, Bolivia, Egypt, Equatorial Guinea, Iran, Libya, Nigeria, Qatar, Russia, Trinidad and Tobago and Venezuela. Angola, Azerbaijan, Iraq, Malaysia, Mozambique, Norway, Peru and United Arab Emirates have the status of Observer Members.

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## Definitions

Name	Definition	Source
<b>Domestic Consumption</b>	Volume of gas consumed domestically; excluding gas exports.	GECF.
<b>Energy Intensity Level of Primary Energy</b>	The ratio between energy supply and gross domestic product measured at purchasing power parity. Energy intensity is an indication of how much energy is used to produce one unit of economic output. Lower ratio indicates that less energy is used to produce one unit of output.	World Bank, Sustainable Energy for All (SE4ALL).
<b>Energy Use</b> (kg of Oil Equivalent per Capita)	Use of primary energy before transformation to other end-use fuels, which is equal to indigenous production plus imports and stock changes, minus exports and fuels supplied to ships and aircraft engaged in international transport.	World Bank, IEA Statistics © OECD/IEA 2014.
<b>Exports of Goods and Services</b> (% of GDP)	The Share of Exports of goods and services in the total GDP.	World Bank and OECD National Accounts data files.
<b>Exports of Goods and Services</b> (current US\$)	The value of all goods and other market services provided to the rest of the world. Data are in current U.S. dollars. They include the value of merchandise, freight, insurance, transport, travel, royalties, license fees, and other services, such as communication, construction, financial, information, business, personal, and government services.	World Bank and OECD National Accounts data files.
<b>Flaring</b>	Volume of gas flared or vented.	GECF.
<b>GDP</b> (Current US\$)	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. Data are in current U.S. dollars. Dollar figures for GDP are converted from domestic currencies using single year official exchange rates.	World Bank and OECD National Accounts data files.
<b>GDP Growth</b> (Annual %)	Annual percentage growth rate of GDP at market prices based on constant local currency. Aggregates are based on constant 2010 U.S. dollars.	World Bank and OECD National Accounts data files.
<b>GDP per capita</b> (Current US\$)	GDP per capita is gross domestic product divided by midyear population.	World Bank and OECD National Accounts data files.
<b>Gross Production</b>	Production of associated and Non-Associated Natural Gas wet or dry within the boundaries including off and on-shore fields. Associated Natural Gas is the Natural Gas produced in association with crude oil. Non-Associated Natural Gas is Natural Gas originating from fields producing hydrocarbons only in gaseous form.	GECF.
<b>Inflation, Consumer Prices</b> (Annual %)	The annual percentage change in the cost to the average consumer of acquiring a basket of goods and services that may be fixed or changed at specified intervals, such as yearly.	International Monetary Fund, International Financial Statistics and data files.
<b>Labor Force</b>	Comprises people ages 15 and older who supply labor for the production of goods and services during a specified period. It includes people who are currently employed and people who are unemployed but seeking work as well as first-time job-seekers. Not everyone who works is included, however. Unpaid workers, family workers, and students are often omitted, and some countries do not count members of the armed forces.	World Bank
<b>Liquefaction</b>	The process of converting Natural Gas into LNG.	GECF.
<b>Liquefied Natural Gas</b>	Also LNG, natural gas in liquid form; condensed into liquid by cooling it at -161°C / -260°F, at atmospheric pressure after pre-treatment to condense into liquid.	GECF.
<b>Marketed Production</b>	Gross Production minus Reinjection, Flaring, shrinkage and Other losses. This production is available to be marketed either on the local market or to be exported.	GECF.
<b>Natural Gas</b>	Mixture of hydrocarbons compounds and small quantities of various non-hydrocarbons existing in the gaseous phase or in solution with oil in natural underground reservoirs at reservoirs conditions.	GECF.
<b>Natural Gas Use</b> (Scm per Capita)	Use of natural gas before transformation to other end-use fuels, which is equal to gas consumed domestically, excluding gas exports.	GECF.
<b>Other Losses</b>	Refers to the amount of gas which is directly used by upstream facilities at the field perimeter level.	GECF.
<b>Petrochemicals</b> (Feedstock)	Volume of gas consumed as feedstock for petrochemical industry.	GECF.
<b>Population</b>	Counts all residents regardless of legal status or citizenship. The values shown are midyear estimates.	World Bank and OECD National Accounts data files.
<b>Power Generation</b>	Related to Domestic Consumption and Trade tables, it represents the volume of gas consumed to generate electricity.	GECF.
<b>Proven Natural Gas Reserves</b>	Estimated quantities that geological and engineering information indicates with reasonable certainty can be recovered in the future from known reservoirs under existing conditions.	BP.
<b>Refineries</b>	Volume of gas consumed as fuel in oil refineries.	GECF.
<b>Regasification</b>	The process of conversion of LNG into gas, its initial and gaseous state. It is a process by which LNG is warmed, usually through a heat exchanger, in order to become once more gaseous before emission into the Gas Grid.	GECF.
<b>Reinjection</b>	Volume of gas processed through non-associated gas processing plants and fields activities, returned to sub-surface formation to enhance recovery rate.	GECF.
<b>Shrinkage</b>	Volume reduction of wet Natural Gas due to the extraction of some of its constituents such as liquid hydrocarbon products and others.	GECF.
<b>Status</b>	Refers to last update of pipeline or plant status (Operational, Under construction or Planned).	GECF.
<b>Train</b>	An independent unit for gas liquefaction. An LNG plant may comprise one or more trains.	GECF.

## Abbreviation, Symbols and Units

Abbreviation	Explanation
%	Percentage.
-	No data applicable.
<b>1000MT</b>	One Thousand Metric Tones.
<b>Bcm</b>	Billion Standard Cubic Metres.
<b>FLNG</b>	Floating Liquefied Natural Gas Facility.
<b>FSRU</b>	Floating Storage Regasification Unit.
<b>GDP</b>	Gross Domestic Products.
<b>Kg</b>	Kilogram.
<b>Km</b>	Kilometre.
<b>LNG</b>	Liquefied Natural Gas.
<b>MCs</b>	Member Countries.
<b>MJ</b>	Mega Joules.
<b>MMcm</b>	Million Standard Cubic Metres
<b>MMT</b>	Million Metric Tons.
<b>MTPA</b>	Million Tons per Annum.
<b>NA</b>	No data available.
<b>OCs</b>	Observer Countries.
<b>PPP</b>	Purchasing Power Parity.
<b>Scm</b>	Standard Cubic Metres.
<b>US\$</b>	United States Dollar.

## Conversion Factors

### Conversion equivalents among LNG & Natural Gas units

From	To	Metric Tons of LNG	Cubic Metres of LNG	Scm
<b>Metric Tons of LNG</b>		1	2.2	1360
<b>Cubic Metres of LNG</b>		0.45	1	615
<b>Scm</b>		$7.35 \times 10^{-4}$	$1.626 \times 10^{-3}$	1

### Conversion equivalents among units of volumes

From	To	Cubic Feet	Litres	Cubic Metres
<b>Cubic Feet</b>		1	28.3	0.0283
<b>Litres</b>		0.0353	1	0.001
<b>Cubic Metres</b>		35.3147	1000	1

## Data Sources

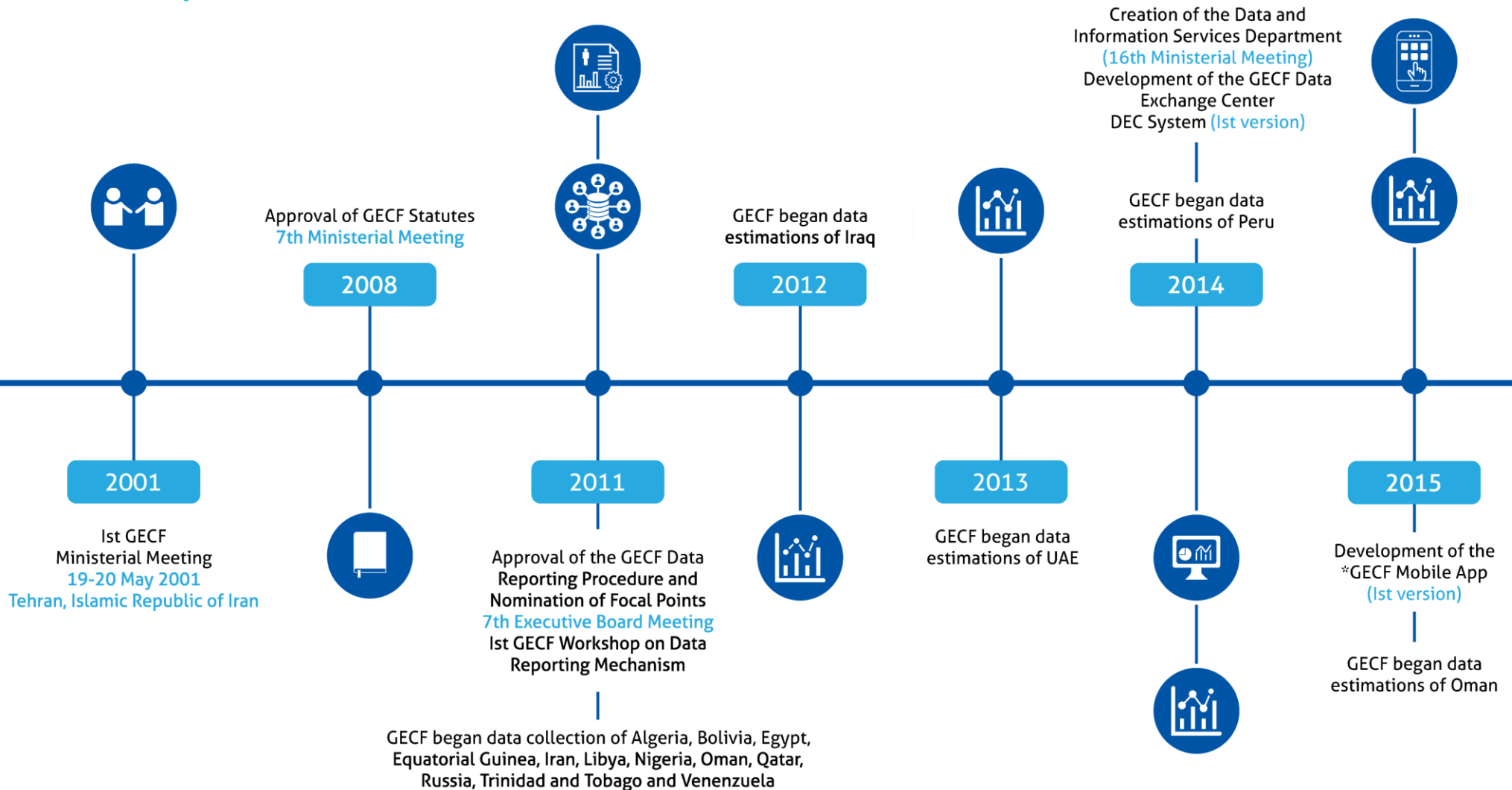
Section	Sources
<b>Macroeconomics</b>	<ul style="list-style-type: none"> <li>From Primary Sources whenever available.</li> <li>Otherwise, complemented with the World Bank data, available until September 23 2022.</li> </ul>
<b>Gas Chain figures (Proven Natural Gas Reserves, Gas Production, others)</b>	<ul style="list-style-type: none"> <li>From Primary Sources whenever available.</li> <li>Otherwise, complemented with GECF Secretariat estimations, from the following Secondary Sources: BP Statistical Review of World Energy, Cedigaz; Natural Gas in the World, EIA, Eurostat, ICIS, Organization of Arab Petroleum Exporting Countries(OAPEC), OECD/IEA, Organization of the Petroleum Exporting Countries(OPEC), United Nations Statistics, World Bank.</li> </ul>
<b>Conversion Factors</b>	<ul style="list-style-type: none"> <li>Joint Organization Data Initiative (JODI) Gas Manual.</li> </ul>
<b>Prices</b>	<ul style="list-style-type: none"> <li>GECF processed Secondary sources from Argus, Refinitiv Eikon.</li> </ul>
<b>images</b>	<ul style="list-style-type: none"> <li>Shutterstock, Pexels</li> </ul>

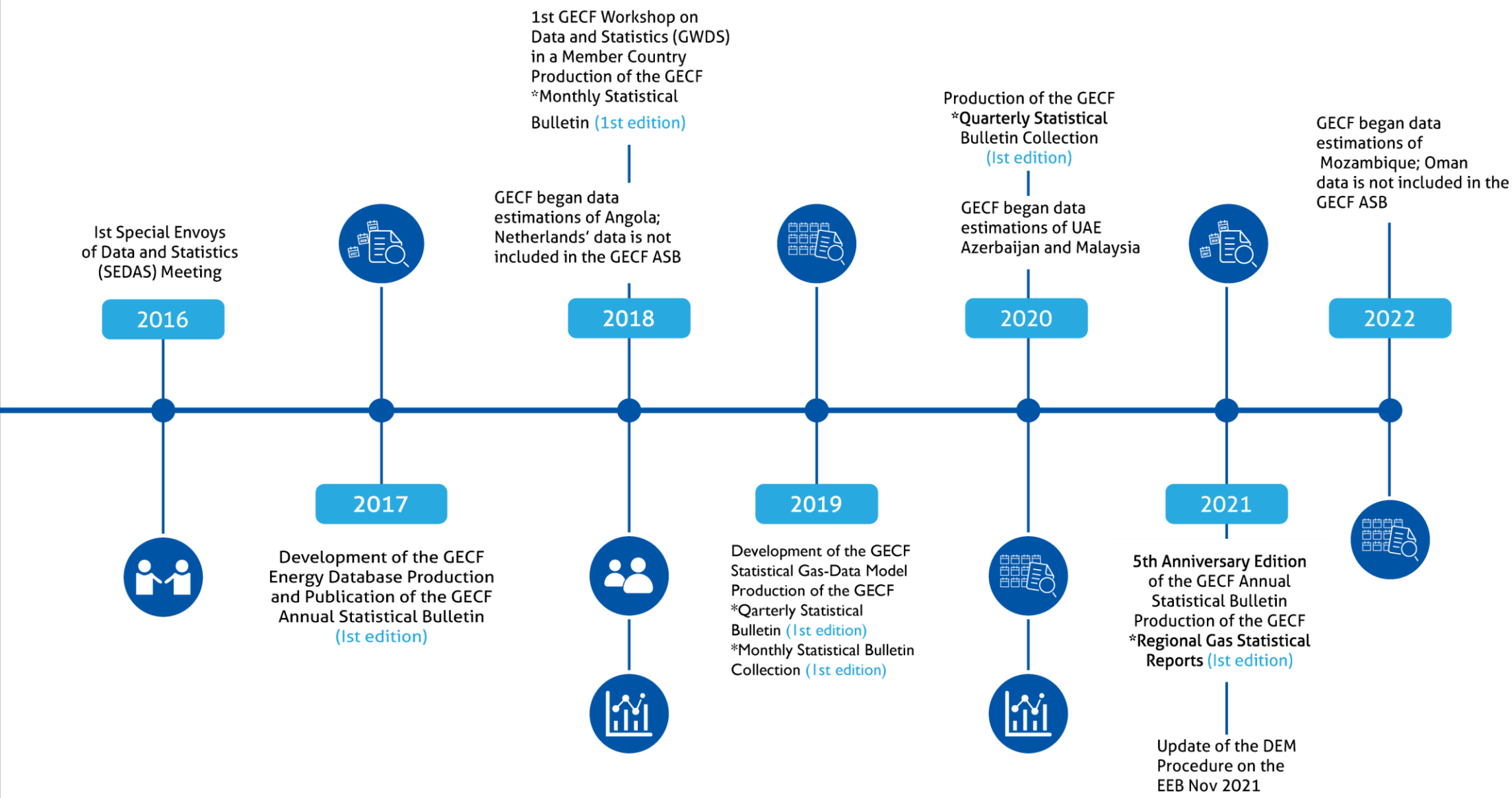
## General Notes

- Current (2022) **GECF Member Countries**: Algeria, Bolivia, Egypt, Equatorial Guinea, Iran, Libya, Nigeria, Qatar, Russia, Trinidad and Tobago and Venezuela.
- Current (2022) **GECF Observer Countries**: Angola, Azerbaijan, Iraq, Malaysia, Mozambique, Norway, Peru and United Arab Emirates.
- Totals**, in tables, may not add up due to independent rounding.
- When referring to **Standard Cubic Metres (Scm)** International Standard ISO 13443:1996 (Natural Gas – Standard reference conditions) is assumed (15°C, 760mm hg).
- Section 1 (Executive Summary) and Section 3 (GECF in the World), Tables 1.1.1, 3.1.1, 3.2.1, 3.2.3, 3.3.1, 3.3.3, 3.4.1:**
  - Figures calculated with the available data by the time of this publication.
  - GECF figures were calculated according to the official joining year of GECF Members and Observers Countries.

# GECF Data Exchange Mechanism (DEM)

Created in 2011, in order to fulfil the Article I and Article 3-B of GECF statute that highlight the exchange of information among MCs as one of the main objectives of establishment of GECF





1st Special Envoys of Data and Statistics (SEDAS) Meeting

2016



2017

Development of the GECF Energy Database Production and Publication of the GECF Annual Statistical Bulletin (1st edition)

GECF began data estimations of Angola; Netherlands' data is not included in the GECF ASB

2018



1st GECF Workshop on Data and Statistics (GWDS) in a Member Country Production of the GECF \*Monthly Statistical Bulletin (1st edition)



2019

Development of the GECF Statistical Gas-Data Model Production of the GECF \*Quarterly Statistical Bulletin (1st edition) \*Monthly Statistical Bulletin Collection (1st edition)

Production of the GECF \*Quarterly Statistical Bulletin Collection (1st edition)

2020

GECF began data estimations of UAE Azerbaijan and Malaysia



2021

5th Anniversary Edition of the GECF Annual Statistical Bulletin Production of the GECF \*Regional Gas Statistical Reports (1st edition)

Update of the DEM Procedure on the EEB Nov 2021

GECF began data estimations of Mozambique; Oman data is not included in the GECF ASB

2022





Section I

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# Executive Summary

## I.1 GECF Main Figures

Table I.1.1. GECF Gas Value Chain Figures (Bcm)

		2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	
GECF Figures*	Proven Natural Gas Reserves	131,167	140,726	141,544	141,370	142,679	142,273	141,181	142,071	144,641	144,147	
	Natural Gas Gross Production	1,812.86	1,980.62	1,972.29	1,989.05	2,012.19	2,091.35	2,065.82	2,017.40	2,094.49	2,147.19	
	Natural Gas Marketed Production	1,457.06	1,568.76	1,554.05	1,579.67	1,602.60	1,637.12	1,653.79	1,676.73	1,700.08	1,781.08	
	Natural Gas Domestic Consumption	864.05	921.43	935.70	959.31	977.55	1,012.14	1,011.22	1,007.82	1,031.08	1,071.45	
	Natural Gas Exports	Pipeline	426.69	444.56	407.61	417.76	444.00	468.42	430.64	405.96	403.37	433.09
		LNG	209.06	213.54	212.01	213.91	214.94	221.28	230.79	259.64	280.80	263.67
<b>Totals</b>		<b>635.75</b>	<b>658.10</b>	<b>619.62</b>	<b>631.67</b>	<b>658.94</b>	<b>689.69</b>	<b>661.43</b>	<b>665.60</b>	<b>684.17</b>	<b>696.76</b>	

\* GECF Figures consider Member Countries and Observer Members in each particular year

Graph I.1.1. GECF Natural Gas Gross and Marketed Production, Domestic Consumption and Exports (Total)  
2012 - 2021 | Bcm

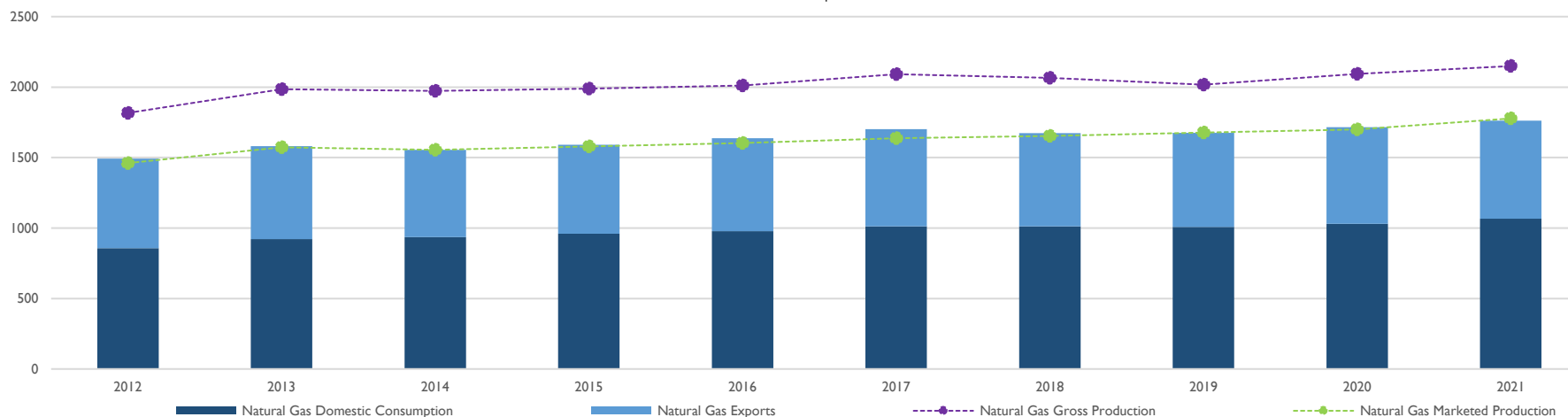
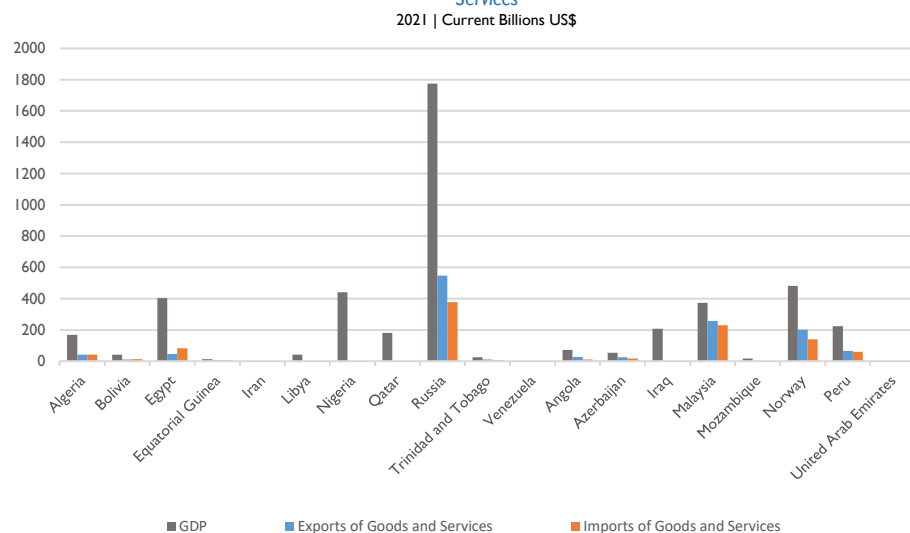




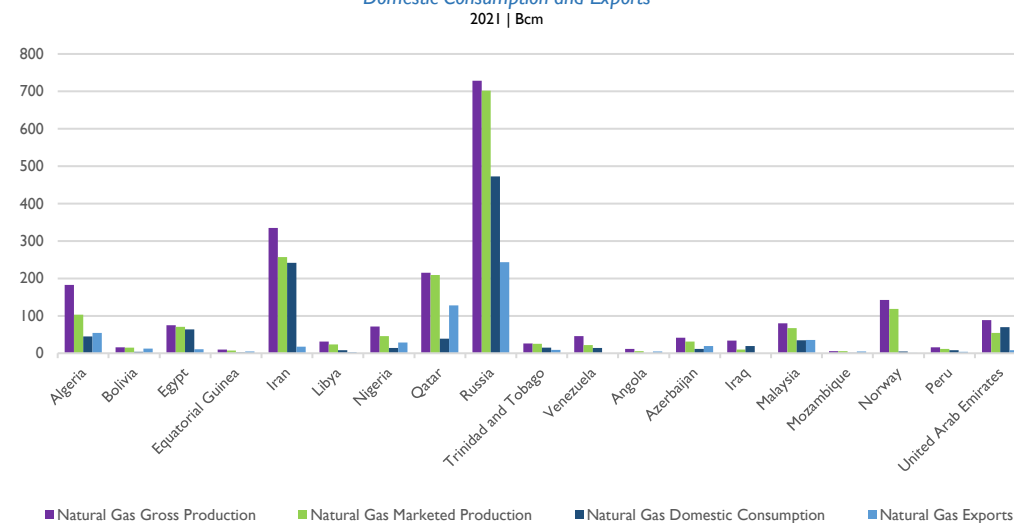
Table I.1.2. GECF Countries Main Figures in 2021

	Population (Million Inhabitants)	GDP (Current Billion US\$)	GDP Growth (Annual %)	Exports of Goods and Services (Current Billion US\$)	Imports of Goods and Services (Current Billion US\$)	Proven Natural Gas 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	44.62	163.05	3.50	43.34	43.02	4,504	179.04	105.04	38.97	15.99	49.57
Bolivia	11.83	40.41	6.11	11.24	12.61	253	16.94	16.44	11.98	-	4.09
Egypt	104.26	404.14	3.33	44.85	81.94	2,209	74.80	70.44	0.57	9.96	63.47
Equatorial Guinea	1.45	12.27	-0.95	6.81	5.72	39	9.97	7.04	-	4.69	2.26
Iran	85.03	NA	NA	NA	NA	33,988	334.53	256.88	17.60	-	241.25
Libya	6.96	41.88	31.37	NA	NA	1,505	31.17	23.68	3.09	0.00	8.96
Nigeria	211.40	440.78	3.65	NA	NA	5,848	71.47	45.68	0.84	27.72	13.86
Qatar	2.93	179.57	1.52	NA	NA	23,831	215.02	208.71	21.68	106.27	38.76
Russia	143.45	1,775.80	4.82	547.74	378.03	47,759	728.21	701.55	203.50	39.65	472.69
Trinidad and Tobago	1.37	24.38	15.76	11.08	6.37	NA	25.86	25.50	-	8.94	14.57
Venezuela	28.70	NA	NA	NA	NA	5,541	45.95	21.57	-	-	14.20
<b>Observers</b>											
Angola	33.93	72.55	0.70	27.48	10.92	301	11.45	5.95	-	4.74	0.83
Azerbaijan	10.15	54.62	5.60	25.49	16.34	1,917	41.77	30.87	19.38	-	11.21
Iraq	41.18	207.89	2.78	NA	NA	3,714	33.55	9.59	-	-	19.32
Malaysia	32.78	372.70	3.13	256.78	230.44	2,179	80.24	67.54	2.21	33.54	34.62
Mozambique	32.16	16.10	2.22	NA	NA	650	5.38	5.37	4.29	-	1.07
Norway	5.41	482.44	3.92	200.54	140.45	2,072	142.73	118.29	113.28	0.16	4.34
Peru	33.36	223.25	13.35	64.93	58.98	287	16.09	11.81	-	3.80	8.01
United Arab Emirates	9.99	NA	NA	NA	NA	8,200	88.40	54.48	-	8.22	69.45

Graph I.1.2. GECF Member, Observer Countries: GDP, Exports and Imports of Good and Services



Graph I.1.3. GECF Member, Observer Countries: Natural Gas Gross and Marketed Production, Domestic Consumption and Exports



## Section 2

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# GECF Macroeconomics

## 2.1 Population and Labor Force

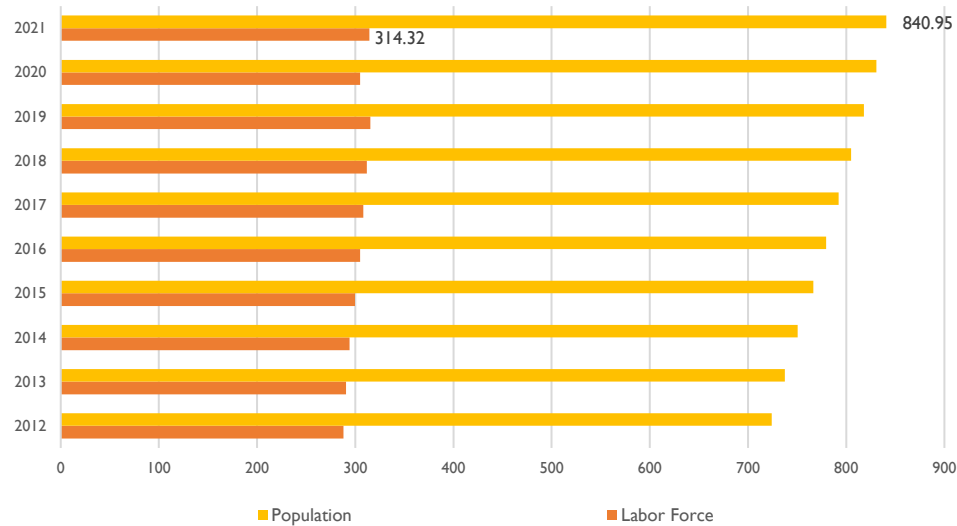
Table 2.1.1. GECF Countries Population (Million Inhabitants)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
<b>Members</b>										
Algeria	37.38	38.14	39.10	40.07	40.84	41.70	42.63	43.42	44.23	44.62
Bolivia	10.36	10.52	10.69	10.85	11.02	11.18	11.35	11.51	11.68	11.83
Egypt	86.42	88.40	90.42	92.44	94.45	96.44	98.42	100.39	102.33	104.26
Equatorial Guinea	1.03	1.08	1.12	1.17	1.22	1.26	1.31	1.36	1.40	1.45
Iran	75.54	76.48	77.47	78.49	79.56	80.67	81.80	82.91	83.99	85.03
Libya	6.29	6.32	6.36	6.42	6.49	6.58	6.68	6.78	6.87	6.96
Nigeria	167.23	171.77	176.40	181.14	185.96	190.87	195.87	200.96	206.14	211.40
Qatar	2.20	2.34	2.46	2.57	2.65	2.72	2.78	2.83	2.88	2.93
Russia	143.20	143.51	143.70	146.50	146.80	146.90	146.90	146.80	146.30	143.45
Trinidad and Tobago	1.34	1.34	1.35	1.35	1.35	1.36	1.36	1.36	1.37	1.37
Venezuela	29.36	29.78	30.04	30.08	29.85	29.40	28.89	28.52	28.44	28.70
<b>Observers</b>										
Angola	25.11	26.02	26.94	27.88	28.84	29.82	30.81	31.83	32.87	33.93
Azerbaijan	9.30	9.42	9.54	9.65	9.76	9.85	9.94	10.02	10.09	10.15
Iraq	31.89	33.16	34.41	35.57	36.61	37.55	38.43	39.31	40.22	41.18
Malaysia	29.07	29.47	29.87	30.27	30.68	31.10	31.53	31.95	32.37	32.78
Mozambique	24.86	25.56	26.29	27.04	27.83	28.65	29.50	30.37	31.26	32.16
Norway	5.02	5.08	5.14	5.19	5.23	5.28	5.31	5.35	5.38	5.41
Peru	29.51	29.77	30.09	30.47	30.93	31.44	31.99	32.51	32.97	33.36
United Arab Emirates	9.14	9.20	9.21	9.26	9.36	9.49	9.63	9.77	9.89	9.99

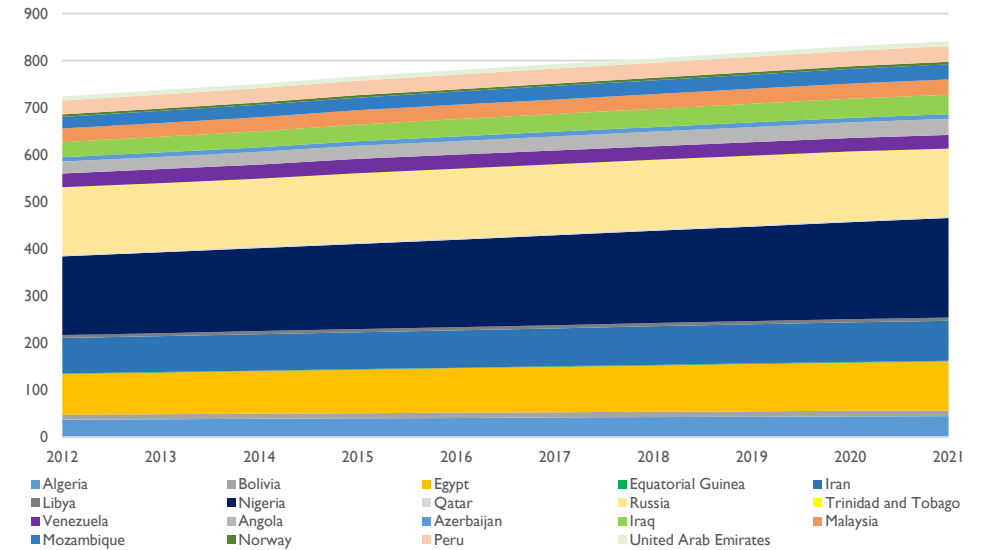
Table 2.1.2. GECF Countries Labor Force (Million Inhabitants)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
<b>Members</b>										
Algeria	11.54	12.00	11.59	11.75	11.92	12.11	12.17	12.73	12.06	12.40
Bolivia	5.03	5.14	5.25	5.37	5.48	5.60	5.72	5.83	5.95	6.31
Egypt	28.20	28.72	29.08	28.96	29.25	28.75	28.25	28.04	27.87	28.46
Equatorial Guinea	0.36	0.37	0.39	0.41	0.42	0.44	0.46	0.48	0.48	0.50
Iran	23.38	23.66	23.76	24.71	25.74	26.73	27.20	27.29	25.88	26.41
Libya	2.14	2.15	2.16	2.17	2.20	2.24	2.28	2.32	2.34	2.40
Nigeria	54.00	52.96	54.35	55.82	57.27	58.81	60.45	62.15	62.26	64.48
Qatar	1.67	1.77	1.87	1.96	2.02	2.08	2.12	2.16	2.17	2.21
Russia	75.68	75.53	75.43	76.59	76.64	76.11	76.01	75.88	70.60	71.77
Trinidad and Tobago	0.65	0.65	0.66	0.65	0.64	0.63	0.63	0.67	0.59	0.60
Venezuela	13.09	13.34	13.49	13.55	13.32	13.01	12.60	12.00	11.06	10.67
<b>Observers</b>										
Angola	10.25	10.62	11.00	11.40	11.80	12.22	12.66	13.12	13.42	13.97
Azerbaijan	4.63	4.70	4.79	4.88	4.97	5.03	5.09	5.10	4.85	4.96
Iraq	7.74	8.30	8.89	9.29	9.62	9.63	9.97	10.24	10.37	10.72
Malaysia	13.34	13.94	14.29	14.62	14.86	15.15	15.52	15.89	16.09	16.28
Mozambique	10.93	11.16	11.40	11.67	12.05	12.45	12.88	13.33	13.66	14.15
Norway	2.67	2.70	2.73	2.77	2.78	2.77	2.81	2.83	2.84	2.97
Peru	16.38	16.51	16.61	16.63	17.32	17.83	18.32	18.80	16.20	18.57
United Arab Emirates	6.28	6.33	6.35	6.38	6.46	6.55	6.51	6.60	6.38	6.50

Graph 2.1.1. GECF Member and Observer Countries Population and Labor Force  
Totals | 2012 - 2021 | Million Inhabitants



Graph 2.1.2. GECF Member and Observer Countries Population  
Per Country | 2012 - 2021 | Million Inhabitants



## 2.2 GDP

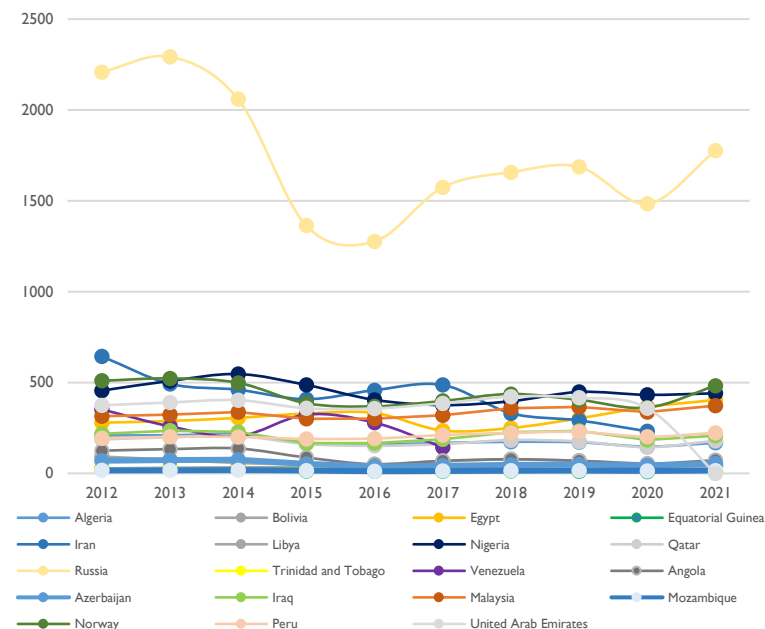
Table 2.2.1. GECF Countries GDP (Current Billion US\$)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
<b>Members</b>										
Algeria	209.06	209.76	213.81	165.98	160.13	167.40	173.88	171.76	145.01	163.05
Bolivia	27.28	30.88	33.24	33.24	34.19	37.78	40.58	41.19	36.84	40.41
Egypt	279.12	288.43	305.60	329.37	332.44	235.73	249.71	303.08	365.25	404.14
Equatorial Guinea	22.39	21.95	21.77	13.19	11.24	12.20	13.10	11.36	10.10	12.27
Iran	644.04	492.78	460.38	408.21	457.95	486.63	330.99	291.36	231.55	NA
Libya	92.54	75.35	57.37	48.72	49.91	67.16	76.68	69.25	52.32	41.88
Nigeria	455.50	508.69	546.68	486.80	404.65	375.75	397.19	448.12	432.29	440.78
Qatar	186.83	198.73	206.22	161.74	151.73	161.10	183.33	175.84	144.41	179.57
Russia	2,208.30	2,292.47	2,059.24	1,363.48	1,276.79	1,574.20	1,657.33	1,687.45	1,483.50	1,775.80
Trinidad and Tobago	24.38	24.93	24.72	25.16	23.57	22.94	22.78	22.74	21.06	24.38
Venezuela	352.19	258.99	203.82	323.60	279.25	143.84	98.44	63.96	47.26	NA
<b>Observers</b>										
Angola	125.00	133.40	137.24	87.22	49.84	68.97	77.79	69.31	53.62	72.55
Azerbaijan	69.68	74.16	75.24	53.07	37.87	40.87	47.11	48.17	42.69	54.62
Iraq	218.00	234.64	228.42	166.77	166.60	187.22	227.37	233.64	184.37	207.89
Malaysia	314.44	323.28	338.06	301.35	301.26	319.11	358.79	365.28	337.01	372.70
Mozambique	16.35	16.97	17.72	15.95	11.94	13.22	14.85	15.39	14.03	16.10
Norway	509.51	522.76	498.41	385.80	368.83	398.39	437.00	404.94	362.20	482.44
Peru	192.65	201.18	200.79	189.81	191.90	211.01	222.60	228.32	201.71	223.25
United Arab Emirates	374.59	390.11	403.14	358.13	357.05	385.61	422.22	417.22	358.87	NA

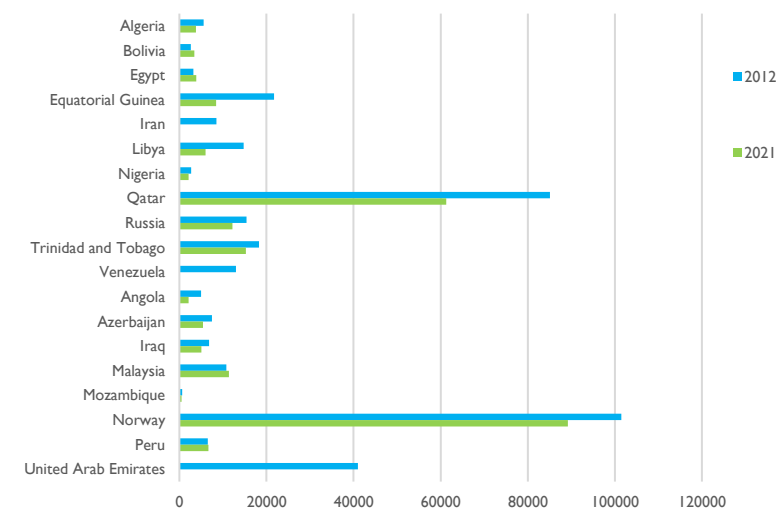
Table 2.2.2 GECF Countries GDP per Capita (Current US\$)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
<b>Members</b>										
Algeria	5,592.25	5,499.72	5,468.29	4,141.96	3,920.78	4,014.47	4,079.01	3,955.41	3,278.74	3,654.47
Bolivia	2,634.16	2,935.28	3,110.30	3,063.35	3,103.41	3,378.87	3,576.31	3,578.15	3,154.75	3,414.89
Egypt	3,229.69	3,262.66	3,379.56	3,562.93	3,519.87	2,444.29	2,537.13	3,019.09	3,569.21	3,876.36
Equatorial Guinea	21,711.15	20,390.74	19,394.08	11,283.40	9,250.32	9,667.86	10,005.62	8,380.74	7,198.34	8,462.29
Iran	8,525.77	6,443.03	5,943.05	5,200.68	5,755.80	6,032.07	4,046.34	3,514.04	2,756.75	NA
Libya	14,721.87	11,921.91	9,017.93	7,590.44	7,687.88	10,205.32	11,482.13	10,218.04	7,614.33	6,018.45
Nigeria	2,723.82	2,961.55	3,098.99	2,687.48	2,176.00	1,968.57	2,027.78	2,229.86	2,097.09	2,085.03
Qatar	85,075.99	85,050.68	83,858.34	63,039.11	57,162.97	59,124.87	65,907.95	62,087.97	50,124.39	61,276.00
Russia	15,420.87	15,974.64	14,095.65	9,313.01	8,704.90	10,720.33	11,287.36	11,497.65	10,126.72	12,172.79
Trinidad and Tobago	18,259.43	18,599.26	18,374.57	18,642.38	17,410.10	16,909.10	16,758.03	16,670.52	15,410.24	17,827.79
Venezuela	12,986.22	12,457.77	16,055.65	10,757.16	9,354.68	4,892.14	3,407.64	2,242.96	1,661.81	NA
<b>Observers</b>										
Angola	4,978.43	5,127.72	5,094.11	3,127.89	1,728.02	2,313.22	2,524.94	2,177.80	1,631.43	2,137.91
Azerbaijan	7,496.29	7,875.76	7,891.31	5,500.31	3,880.74	4,147.09	4,739.84	4,805.75	4,229.91	5,384.03
Iraq	6,836.07	7,076.55	6,637.68	4,688.32	4,550.66	4,985.45	5,915.85	5,943.46	4,583.75	5,048.39
Malaysia	10,817.43	10,970.10	11,319.06	9,955.24	9,817.79	10,259.30	11,380.08	11,432.83	10,412.35	11,371.10
Mozambique	657.65	664.08	673.97	589.86	428.93	461.41	503.30	506.82	448.84	500.44
Norway	101,524.14	102,913.45	97,019.18	74,355.52	70,460.56	75,496.75	82,267.81	75,719.75	67,329.68	89,202.75
Peru	6,528.97	6,756.75	6,672.88	6,229.10	6,205.00	6,710.51	6,958.50	7,023.08	6,117.49	6,692.25
United Arab Emirates	40,976.50	42,412.64	43,751.82	38,663.39	38,141.88	40,644.79	43,839.32	42,701.44	36,284.56	NA

Graph 2.2.1. GECF Member and Observer Countries GDP Per Country | 2012 - 2021 | Current Billion US\$



Graph 2.2.2. GECF Member and Observer Countries GDP per Capita 2012 vs 2021 | Current US\$



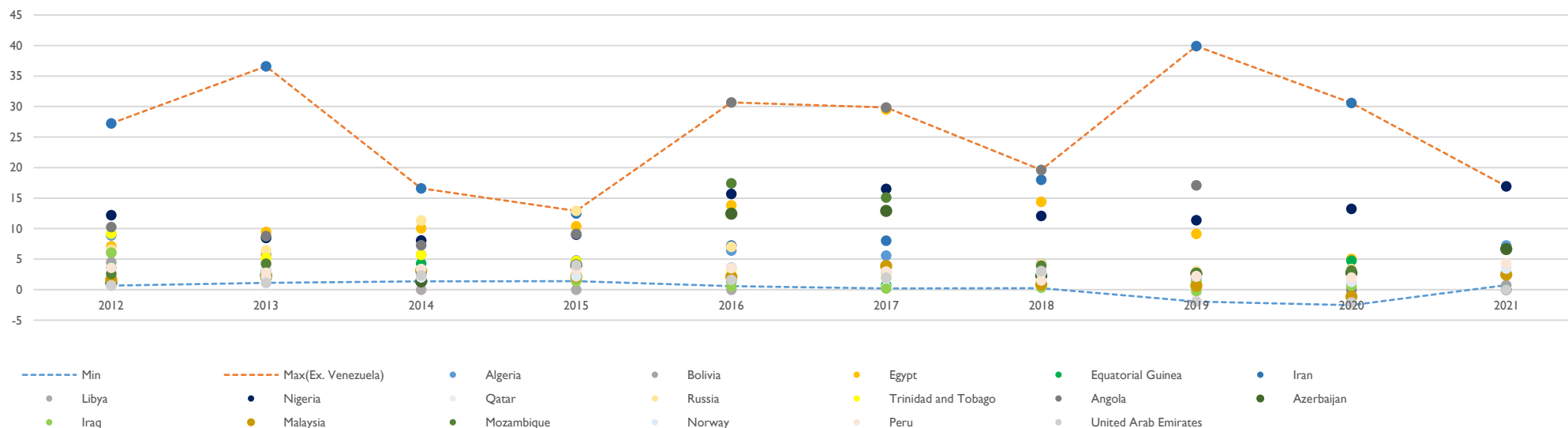


## 2.4 Inflation

Table 2.4.1. Inflation Consumer Prices (Annual %)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
<b>Members</b>										
Algeria	9.70	4.10	3.90	4.40	5.80	5.90	3.50	2.40	2.10	7.23
Bolivia	4.52	5.74	5.76	4.06	3.62	2.82	2.27	1.84	0.94	0.74
Egypt	7.11	9.47	10.07	10.37	13.81	29.51	14.40	9.15	5.04	5.55
Equatorial Guinea	3.66	2.95	4.31	1.68	1.41	0.75	1.35	1.24	4.77	2.10
Iran	27.26	36.60	16.61	12.48	7.25	8.04	18.01	39.91	30.59	NA
Libya	6.06	2.61	NA	NA	NA	NA	NA	NA	NA	NA
Nigeria	12.22	8.48	8.06	9.01	15.68	16.52	12.09	11.40	13.25	16.95
Qatar	2.32	3.22	3.35	1.81	2.68	0.39	0.26	-0.67	-2.54	2.30
Russia	6.57	6.47	11.35	12.91	7.04	2.51	4.26	3.04	3.38	6.69
Trinidad and Tobago	9.30	5.20	5.70	4.70	3.10	1.90	1.00	1.00	0.60	2.10
Venezuela	318.90	498.10	839.50	2,357.90	8,826.90	84,970.30	110,597,550.20	10,711,919,274.40	327,767,509,170.00	NA
<b>Observers</b>										
Angola	10.28	8.78	7.28	9.15	30.70	29.84	19.63	17.08	NA	NA
Azerbaijan	1.07	2.42	1.37	4.03	12.44	12.94	2.27	2.61	2.76	6.65
Iraq	6.09	1.88	2.24	1.39	0.56	0.18	0.37	-0.20	0.57	6.04
Malaysia	1.66	2.11	3.14	2.10	2.09	3.87	0.88	0.66	-1.14	2.48
Mozambique	2.60	4.26	2.56	3.55	17.42	15.11	3.91	2.78	3.14	NA
Norway	0.70	2.12	2.04	2.17	3.55	1.88	2.76	2.17	1.29	3.48
Peru	3.61	2.77	3.41	3.40	3.56	2.99	1.51	2.25	2.00	4.27
United Arab Emirates	0.66	1.10	2.35	4.07	1.62	1.97	3.07	-1.93	-2.08	NA

Graph 2.4.1 GECF Member and Observer Countries Inflation  
2012-2021 | Annual %



## 2.5 Energy Indicators

Table 2.5.1. Energy Intensity Level of Primary Energy (MJ/\$2011 PPP GDP)

	2012	2013	2014	2015	2016	2017	2018	2019
<b>Members</b>								
Algeria	4.72	4.76	5.00	5.05	4.85	4.93	5.19	5.32
Bolivia	4.13	4.11	4.17	4.08	4.13	4.09	3.99	3.82
Egypt	3.80	3.62	3.63	3.46	3.64	3.67	3.59	3.41
Equatorial Guinea	2.71	3.48	3.22	3.27	4.05	4.70	3.72	3.01
Iran	9.41	9.62	9.87	9.98	9.09	9.54	10.39	11.12
Libya	5.66	5.69	10.48	10.84	11.05	8.41	7.16	8.90
Nigeria	6.84	6.54	6.30	6.03	6.36	6.31	6.16	6.39
Qatar	6.97	7.05	6.60	6.32	5.88	6.80	6.46	6.79
Russia	8.17	7.80	7.76	7.77	7.99	7.99	8.25	8.10
Trinidad and Tobago	20.90	20.32	20.98	19.93	18.48	19.21	19.34	19.90
Venezuela	5.79	5.38	5.47	4.72	NA	NA	NA	NA
<b>Observers</b>								
Angola	2.71	2.60	3.28	2.86	2.61	2.51	2.95	2.94
Azerbaijan	4.47	4.28	4.30	4.26	4.35	4.37	4.32	4.61
Iraq	5.26	5.06	4.82	4.36	4.12	4.74	5.67	5.57
Malaysia	4.99	5.38	5.18	4.72	4.69	4.28	4.50	4.25
Mozambique	13.90	13.91	13.40	12.96	12.70	12.31	12.07	11.93
Norway	4.14	4.37	3.77	3.77	3.57	3.68	3.66	3.33
Peru	2.75	2.50	2.57	2.57	2.57	2.54	2.56	2.60
United Arab Emirates	5.11	5.13	5.40	5.56	5.96	4.54	4.11	3.36

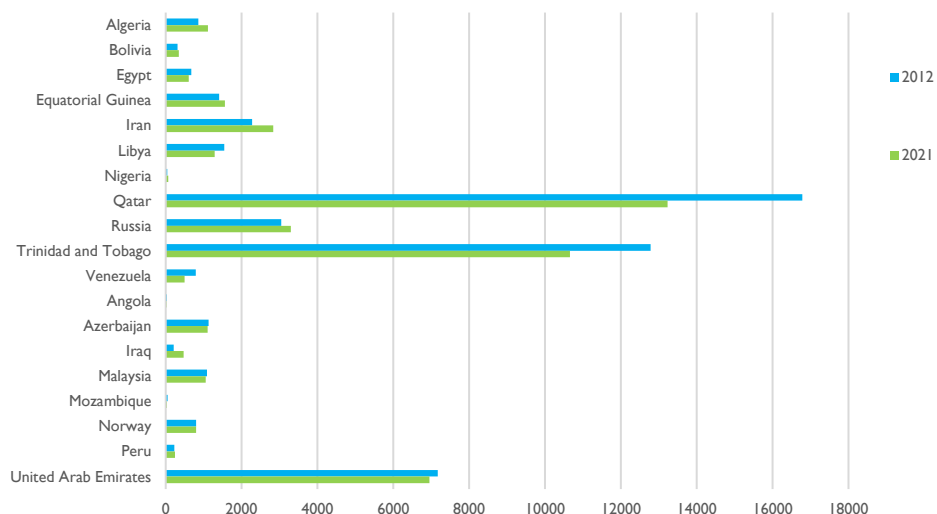
Table 2.5.2 Energy Use (kg of Oil Equivalent per Capita)

	2012	2013	2014
<b>Members</b>			
Algeria	1,229.55	1,247.50	1,333.90
Bolivia	663.11	668.44	714.37
Egypt	905.59	848.63	827.50
Equatorial Guinea	NA	NA	NA
Iran	2,869.33	2,889.11	3,060.39
Libya	2,744.01	3,071.82	2,808.65
Nigeria	798.63	780.14	763.63
Qatar	17,344.35	17,266.10	17,922.70
Russia	5,167.01	5,078.63	4,942.88
Trinidad and Tobago	14,312.42	14,478.85	14,363.57
Venezuela	2,488.41	2,308.94	NA
<b>Observers</b>			
Angola	552.36	533.76	544.61
Azerbaijan	1,472.90	1,474.00	1,502.08
Iraq	1,438.18	1,488.56	1,437.90
Malaysia	2,678.53	2,979.64	3,003.45
Mozambique	424.51	427.67	442.66
Norway	5,906.14	6,415.99	5,595.65
Peru	692.95	684.15	790.22
United Arab Emirates	7,481.19	7,604.84	7,648.39

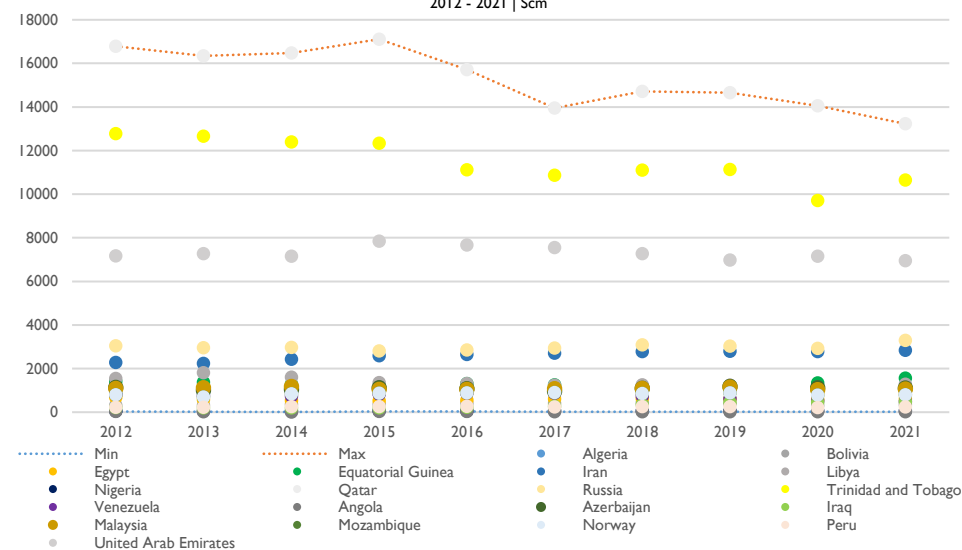
Table 2.5.3. Natural Gas Use (Scm per Capita)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
<b>Members</b>										
Algeria	861.57	852.80	951.59	1005.62	990.42	1002.78	1058.86	1068.44	1018.22	1110.91
Bolivia	308.26	320.25	354.37	363.74	405.84	399.54	427.83	392.80	307.92	345.31
Egypt	677.29	579.70	531.32	517.03	542.94	603.02	622.73	603.59	587.97	608.75
Equatorial Guinea	1410.99	1365.65	1282.22	1101.34	1310.92	1248.80	1162.31	1095.34	1336.93	1559.70
Iran	2281.31	2243.27	2427.14	2585.86	2653.84	2699.26	2785.14	2788.68	2774.01	2837.28
Libya	1,545.08	1,809.73	1,598.70	1,354.35	1,309.32	1,240.33	1,245.49	1,238.68	1,138.31	1,287.63
Nigeria	43.81	44.83	43.82	61.32	47.74	58.00	62.13	60.19	63.97	65.55
Qatar	16784.47	16,378.03	16,476.83	15,960.51	14,579.68	13,954.35	14,710.33	14662.95	14052.61	13226.66
Russia	3046.67	2960.16	2968.23	2801.95	2847.27	2940.68	3081.90	3033.42	2921.30	3295.25
Trinidad and Tobago	12781.69	12663.01	12390.23	12329.53	11121.73	10865.13	11098.99	11138.85	9707.85	10653.45
Venezuela	793.17	753.43	732.68	829.67	872.66	869.65	734.68	615.42	521.36	494.60
<b>Observers</b>										
Angola	30.27	15.79	11.14	27.61	27.74	26.46	25.64	25.61	25.16	24.49
Azerbaijan	1,134.01	1,005.44	1,040.16	1,127.54	1,075.92	954.81	1,088.56	1,176.14	1,124.53	1,104.95
Iraq	209.47	194.19	197.68	194.08	230.66	269.95	347.48	445.52	466.98	469.27
Malaysia	1,086.76	1,113.38	1,177.90	1,049.03	1,052.25	1,070.48	1,091.00	1,157.07	1,026.17	1,056.13
Mozambique	51.89	61.03	68.48	70.08	65.04	60.04	50.18	51.04	47.99	33.27
Norway	800.57	700.90	835.89	872.80	881.10	893.74	861.68	879.96	783.16	802.05
Peru	228.24	219.15	254.90	251.06	275.52	237.98	247.21	253.92	216.55	240.11
United Arab Emirates	7,175.99	7,273.39	7,152.02	7,851.76	7,668.00	7,547.01	7,272.38	6,982.91	7,154.84	6,951.20

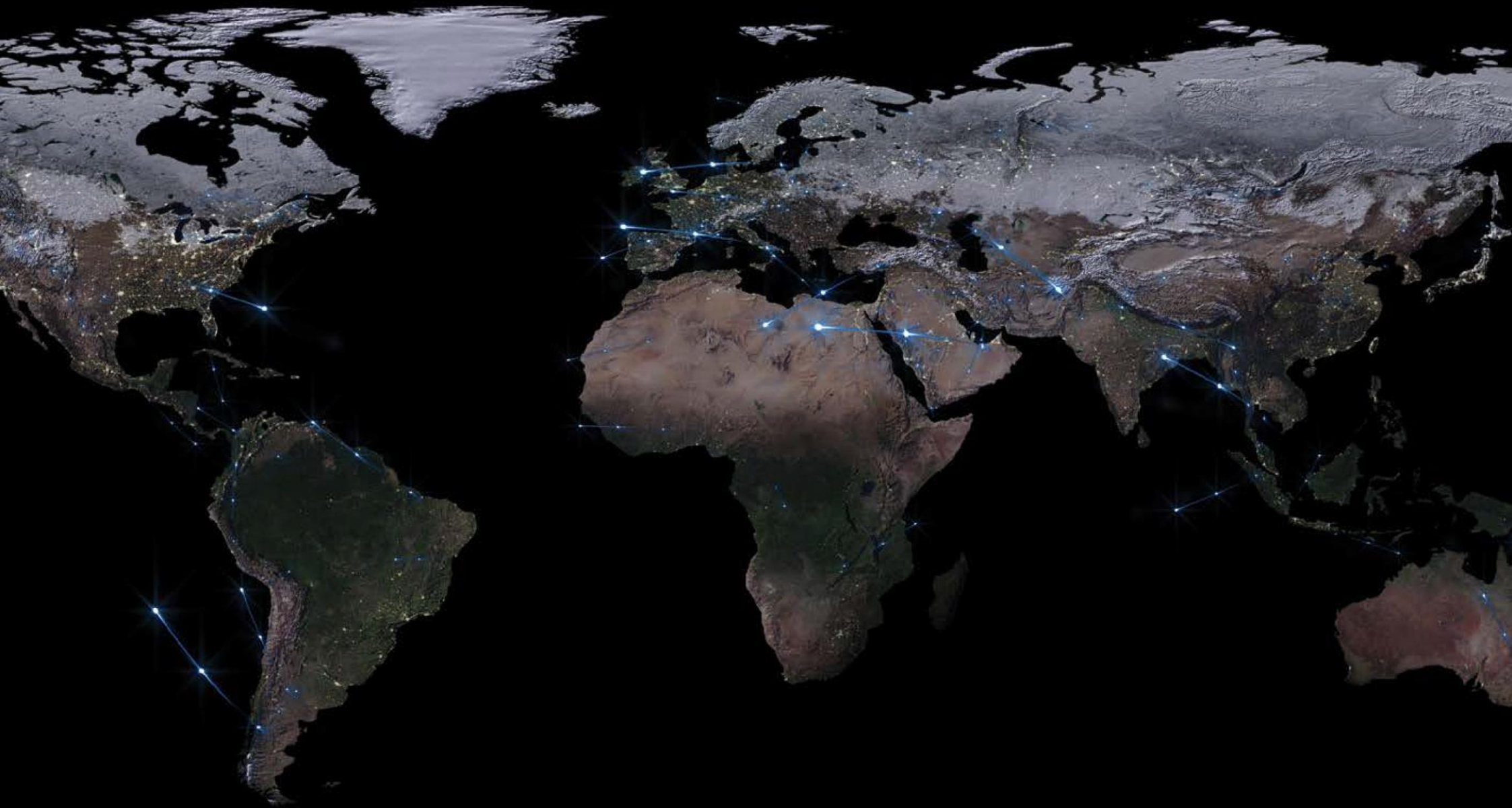
Graph 2.5.1. GECF Member and Observer Countries Natural Gas Use 2012 vs 2021 | Scm Per Capita



Graph 2.5.2 GECF Member and Observer Countries Natural Gas Use 2012 - 2021 | Scm







## Section 3



# GECF in the World

### 3.1 Proven Natural Gas Reserves

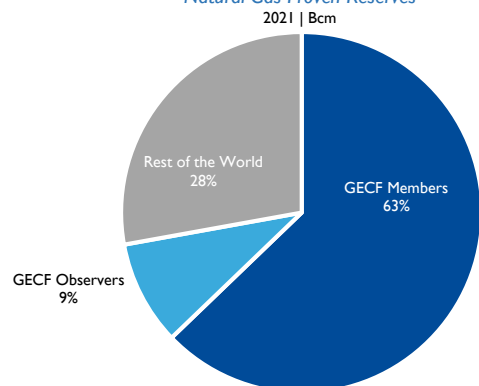
Table 3.1.1. Historical Proven Natural Gas Reserves of GECF Countries (Bcm)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
World	200,219	201,033	201,060	199,766	201,305	204,370	202,354	204,007	202,010	199,767
GEFC Totals	131,167	140,726	141,544	141,370	142,679	142,273	141,181	142,071	144,641	144,147
Members	127,525	134,017	135,040	133,822	134,570	134,429	133,589	134,888	125,718	125,477
Observers	3,642	6,709	6,504	7,548	8,109	7,843	7,592	7,183	18,923	18,670
GEFC Share	66%	70%	70%	71%	71%	70%	70%	70%	72%	72%

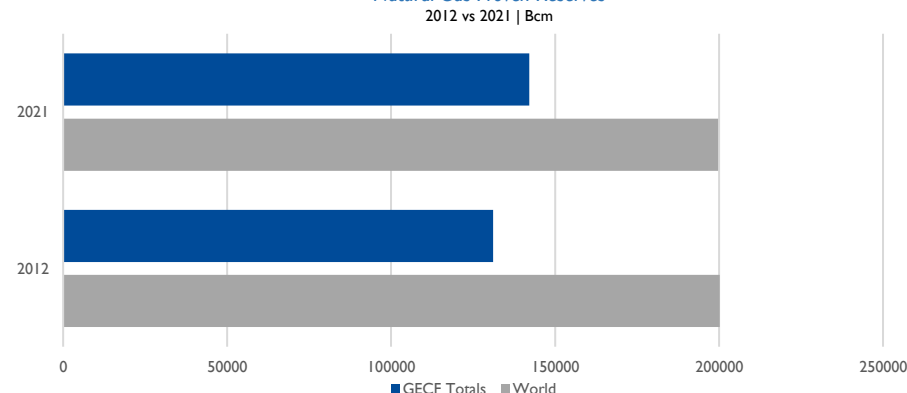
Table 3.1.2. Proven Natural Gas Reserves of Current GECF Countries (Bcm)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
<b>Members</b>										
Algeria	4,504	4,504	4,504	4,504	4,504	4,504	4,504	4,504	4,504	4,504
Bolivia	231	296	296	296	296	255	253	253	253	253
Egypt	1,957	1,777	2,186	2,086	2,221	2,221	2,221	2,221	2,209	2,209
Equatorial Guinea	71	66	60	54	47	42	42	39	39	39
Iran	33,780	34,020	34,020	33,500	33,721	33,810	33,899	33,988	33,988	33,988
Libya	1,549	1,506	1,505	1,505	1,505	1,505	1,505	1,505	1,505	1,505
Nigeria	5,115	5,108	5,303	5,280	5,475	5,627	5,685	5,761	5,750	5,848
Qatar	25,069	24,681	24,531	24,299	24,073	23,861	23,846	23,831	23,831	23,831
Russia	48,810	49,335	49,896	50,205	50,617	50,508	49,571	49,084	47,759	47,759
Trinidad and Tobago	371	347	326	300	281	298	298	302	290	NA
Venezuela	5,563	5,581	5,617	5,702	5,740	5,708	5,674	5,674	5,590	5,541
<b>Observers</b>										
Angola	275	275	308	308	440	422	384	343	301	301
Azerbaijan	508	675	665	665	665	1,074	1,435	1,917	1,917	1,917
Iraq	3,158	3,158	3,158	3,158	3,820	3,744	3,729	3,714	3,714	3,714
Malaysia	2,607	2,782	2,849	2,842	2,470	2,346	2,290	2,213	2,206	2,179
Mozambique	75	75	75	75	75	186	186	650	650	650
Norway	2,687	2,654	2,547	2,461	2,388	2,334	2,226	2,165	2,095	2,072
Peru	435	426	414	399	456	365	300	287	287	287
United Arab Emirates	6,091	6,091	6,091	6,091	6,091	6,091	6,091	7,726	7,730	8,200

Graph 3.1.1. GECF Countries and Rest of the World Natural Gas Proven Reserves



Graph 3.1.2. GECF Countries vs Rest of the World Natural Gas Proven Reserves



### 3.2 Natural Gas Production

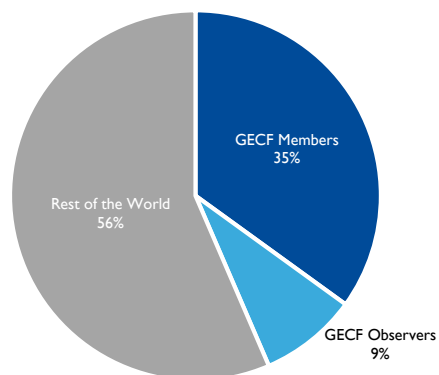
Table 3.2.1. Historical Natural Gas Gross Production of GEFC Countries (Bcm)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
World	4,173.69	4,278.79	4,349.63	4,406.34	4,437.97	4,577.82	4,697.26	4,815.45	4,736.69	4,883.11
GEFC Totals	1,812.86	1,980.62	1,972.29	1,989.05	2,012.19	2,091.35	2,065.82	2,017.40	2,094.49	2,147.19
<b>Members</b>	1,584.62	1,720.82	1,719.39	1,685.62	1,706.37	1,789.81	1,807.95	1,752.41	1,641.67	1,732.96
<b>Observers</b>	228.23	259.79	252.90	303.43	305.82	301.54	257.86	264.99	452.82	414.23
GEFC Share	43%	46%	45%	45%	45%	46%	44%	42%	44%	44%

Table 3.2.2. Natural Gas Gross Production of Current GEFC Countries (Bcm)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
<b>Members</b>										
<b>Algeria</b>	182.60	179.49	186.75	183.83	189.14	188.74	183.55	175.35	168.39	179.04
<b>Bolivia</b>	18.71	21.27	22.39	22.17	21.33	20.70	19.34	17.05	16.38	16.94
<b>Egypt</b>	62.01	57.82	53.37	49.37	46.90	55.77	65.83	71.99	65.32	74.80
<b>Equatorial Guinea</b>	11.94	13.99	13.66	15.45	14.76	13.80	12.96	12.20	11.15	9.97
<b>Iran</b>	229.14	229.83	245.68	256.98	277.39	301.45	311.49	322.50	329.86	334.53
<b>Libya</b>	23.44	22.88	20.94	22.56	24.59	27.55	30.32	32.66	25.54	31.17
<b>Nigeria</b>	84.85	79.63	86.33	85.22	76.78	79.49	80.27	81.05	77.23	71.47
<b>Qatar</b>	163.03	207.05	206.99	206.45	206.69	207.09	210.55	209.31	211.50	215.02
<b>Russia</b>	654.68	667.59	642.81	633.54	640.81	692.00	694.32	644.09	658.54	728.21
<b>Trinidad and Tobago</b>	42.57	42.82	42.03	39.59	34.42	34.70	36.46	36.36	30.87	25.86
<b>Venezuela</b>	75.97	76.44	76.72	80.20	82.16	76.89	67.44	56.21	46.88	45.95
<b>Observers</b>										
<b>Angola</b>	10.85	10.76	10.44	10.54	11.71	14.95	13.88	12.91	13.15	11.45
<b>Azerbaijan</b>	25.95	28.51	28.89	28.14	28.28	27.17	28.21	33.60	34.97	41.77
<b>Iraq</b>	26.54	27.65	28.88	30.15	34.32	35.15	36.33	37.12	29.45	33.55
<b>Malaysia</b>	76.05	80.06	80.66	77.94	79.52	86.60	80.43	82.29	76.47	80.24
<b>Mozambique</b>	4.89	5.28	5.60	5.71	5.81	5.81	5.61	5.51	5.41	5.38
<b>Norway</b>	147.89	145.80	152.89	162.79	162.03	164.66	160.01	152.02	147.73	142.73
<b>Peru</b>	15.81	16.22	18.46	17.29	19.62	18.42	17.11	17.99	16.40	16.09
<b>United Arab Emirates</b>	83.21	84.32	84.31	90.27	91.40	91.63	95.43	93.66	89.49	88.40

Graph 3.2.1. GEFC Countries and Rest of the World Natural Gas Gross Production 2021 | Bcm



Graph 3.2.2. GEFC Countries vs Rest of the World Natural Gas Gross Production 2012 vs 2021 | Bcm

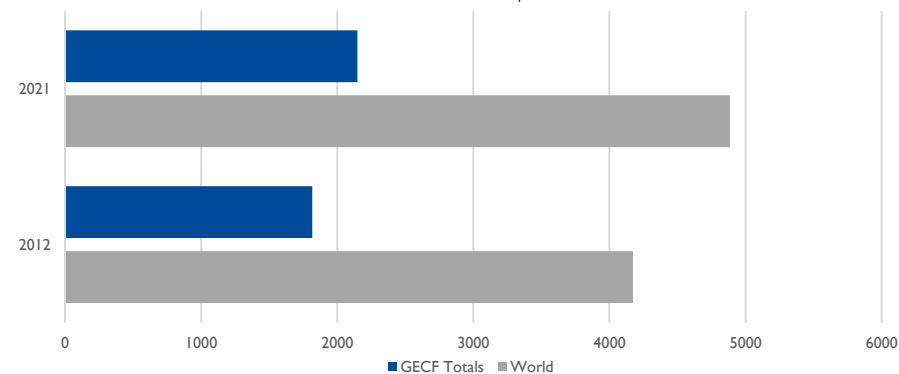


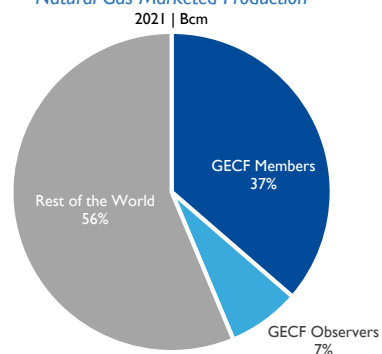
Table 3.2.3. Historical Natural Gas Marketed Production of GEFC Countries (Bcm)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
World	3,379.91	3,434.99	3,495.64	3,566.42	3,599.01	3,692.19	3,842.37	4,012.80	3,907.59	4,073.57
GEFC Totals	1,457.06	1,568.76	1,554.05	1,579.67	1,602.60	1,637.12	1,653.79	1,676.73	1,700.08	1,781.08
Members	1,263.66	1,365.89	1,363.61	1,354.05	1,376.37	1,412.24	1,467.89	1,489.98	1,378.11	1,482.54
Observers	193.41	202.87	190.44	225.61	226.23	224.88	185.90	186.75	321.97	298.54
GEFC Share	43%	46%	44%	44%	45%	44%	43%	42%	44%	44%

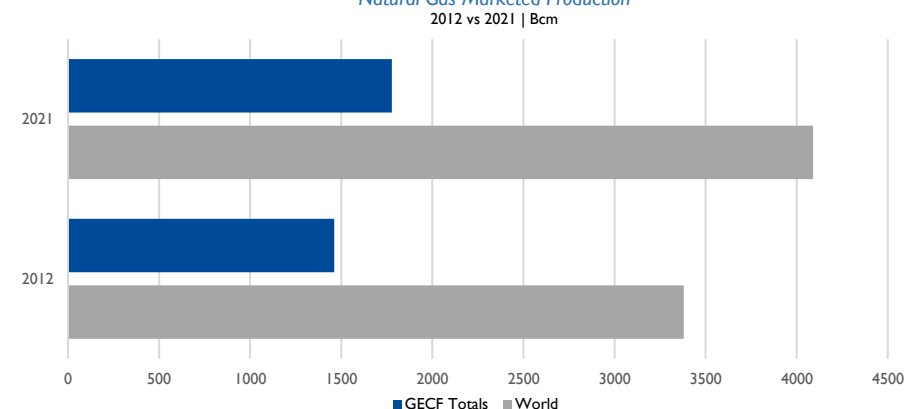
Table 3.2.4. Natural Gas Marketed Production of Current GEFC Countries (Bcm)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
<b>Members</b>										
Algeria	86.06	82.43	83.30	84.58	94.95	96.60	97.47	89.98	84.60	105.04
Bolivia	18.11	20.63	21.78	21.60	20.71	20.12	18.70	16.46	15.81	16.44
Egypt	56.82	52.49	48.07	44.32	42.10	50.71	60.84	67.47	60.74	70.44
Equatorial Guinea	8.22	8.41	8.23	7.44	7.88	8.24	7.75	6.74	6.02	7.04
Iran	172.31	171.57	188.02	202.97	211.14	217.80	233.06	241.73	249.63	256.88
Libya	16.07	16.99	16.59	15.15	18.72	20.69	23.22	26.83	20.93	23.68
Nigeria	42.57	38.41	43.84	45.15	41.99	45.79	46.97	47.70	47.94	45.68
Qatar	157.05	201.78	201.13	201.27	201.37	201.35	205.17	204.43	205.72	208.71
Russia	614.98	626.29	607.08	608.43	614.56	635.78	667.66	677.90	637.16	701.55
Trinidad and Tobago	39.02	39.53	38.99	36.95	32.18	32.78	34.92	35.37	30.16	25.50
Venezuela	22.73	21.82	21.88	26.00	28.90	28.29	24.50	20.27	19.40	21.57
<b>Observers</b>										
Angola	0.76	0.93	0.73	0.77	1.71	5.80	6.38	6.81	7.45	5.95
Azerbaijan	16.80	17.44	18.34	18.74	18.28	17.72	18.71	22.88	24.72	30.87
Iraq	6.68	7.44	7.93	7.69	10.42	10.65	11.13	11.54	7.37	9.59
Malaysia	62.09	64.91	65.41	63.14	64.42	71.35	66.73	68.46	63.42	67.54
Mozambique	4.89	5.28	5.60	5.70	5.80	5.80	5.60	5.50	5.40	5.37
Norway	114.21	109.98	111.38	120.74	120.42	127.73	126.38	119.05	116.20	118.29
Peru	11.85	12.22	12.97	12.59	14.02	12.97	12.75	13.47	12.08	11.81
United Arab Emirates	54.30	54.60	54.24	60.18	61.86	54.09	47.62	55.10	55.06	54.48

Graph 3.2.3. GEFC Countries and Rest of the World Natural Gas Marketed Production



Graph 3.2.4. GEFC Countries vs Rest of the World Natural Gas Marketed Production



### 3.3 Natural Gas Exports

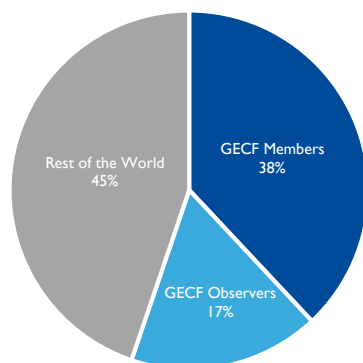
Table 3.3.1. Historical Natural Gas Pipeline Exports of GECF Countries (Bcm)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
World	690.10	715.29	683.30	706.96	753.71	811.36	767.87	823.08	745.74	784.38
GECF Totals	426.69	444.56	407.61	417.76	444.00	468.42	430.64	405.96	403.37	433.09
Members	266.52	281.94	254.35	266.03	287.58	306.06	316.36	298.05	280.33	298.23
Observers	160.17	162.62	153.26	151.74	156.42	162.36	114.28	107.91	123.04	134.86
GECF Share	62%	62%	60%	59%	59%	58%	56%	49%	54%	55%

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

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
<b>Members</b>										
Algeria	37.33	32.23	27.08	27.04	38.44	37.59	37.95	26.31	25.24	38.97
Bolivia	14.76	17.12	17.80	17.52	16.08	15.39	13.84	11.75	11.81	11.98
Egypt	0.58	0.60	0.00	0.00	0.00	0.00	0.00	0.00	0.19	0.57
Equatorial Guinea	-	-	-	-	-	-	-	-	-	-
Iran	9.18	9.54	9.76	8.60	8.65	12.89	13.24	18.35	15.52	17.60
Libya	6.35	5.55	6.42	7.03	5.60	5.04	5.63	7.11	4.87	3.09
Nigeria	0.40	0.60	0.60	0.60	0.12	0.39	0.72	0.79	0.89	0.84
Qatar	19.22	19.90	20.09	19.75	20.00	21.96	22.36	22.45	22.62	21.68
Russia	178.70	196.40	172.60	185.50	198.70	212.80	222.62	211.29	199.20	203.50
Trinidad and Tobago	-	-	-	-	-	-	-	-	-	-
Venezuela	-	-	-	-	-	-	-	-	-	-
<b>Observers</b>										
Angola	-	-	-	-	-	-	-	-	-	-
Azerbaijan	6.57	7.31	8.07	8.14	8.04	8.86	9.91	11.83	13.54	19.38
Iraq	-	-	-	-	-	-	-	-	-	-
Malaysia	1.64	2.30	1.84	1.56	1.70	1.50	1.10	1.47	1.70	2.21
Mozambique	3.60	3.69	3.78	3.79	3.96	4.08	4.12	3.95	3.89	4.29
Norway	105.66	103.08	102.23	108.38	107.87	116.68	114.28	107.91	107.81	113.28
Peru	-	-	-	-	-	-	-	-	-	-
United Arab Emirates	-	-	-	-	-	-	-	-	-	-

Graph 3.3.1. GECF Countries and Rest of the World Natural Gas Pipeline Exports 2021 | Bcm



Graph 3.3.2. GECF Countries vs Rest of the World Natural Gas Pipeline Exports 2012 vs 2021 | Bcm

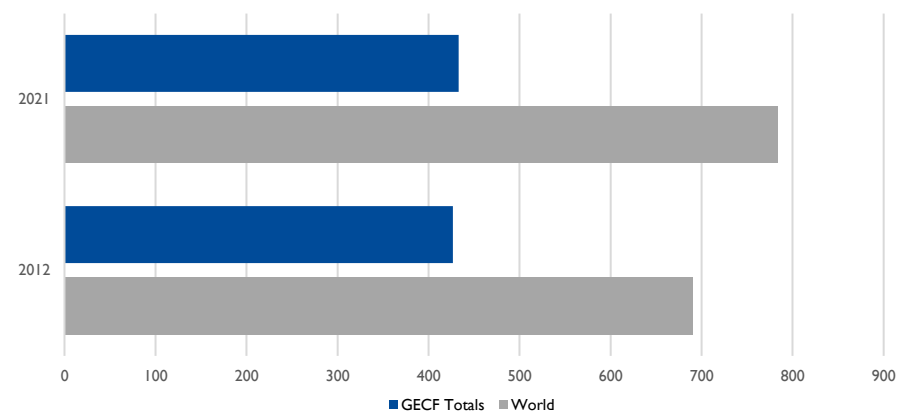


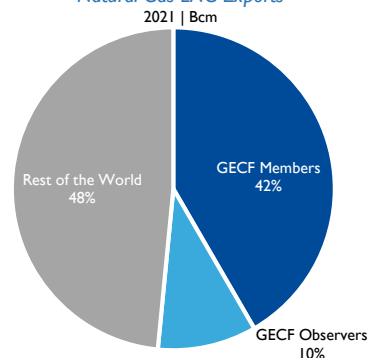
Table 3.3.3. Historical LNG Exports of GECF Countries (Bcm)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
World	321.31	326.55	328.67	332.03	355.75	395.61	429.57	480.51	488.49	509.66
GEFCF Totals	209.06	213.54	212.01	213.91	214.94	221.28	230.79	259.64	280.80	263.67
Members	204.52	209.99	206.63	192.41	191.98	198.59	205.77	228.96	210.93	213.22
Observers	4.54	3.55	5.38	21.50	22.95	22.69	25.02	30.68	69.86	50.45
GECF Share	65%	65%	65%	64%	60%	56%	54%	54%	57%	52%

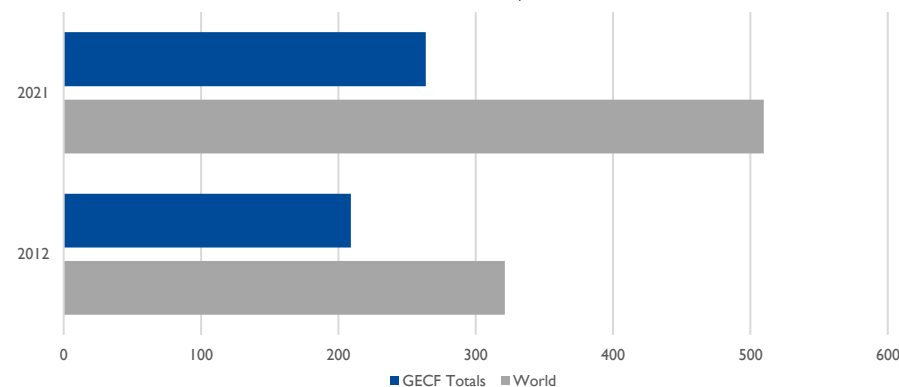
Table 3.3.4. LNG Exports of Current GECF Countries (Bcm)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
<b>Members</b>										
Algeria	15.00	15.16	17.11	16.47	15.53	16.41	13.47	16.47	14.22	15.99
Bolivia	-	-	-	-	-	-	-	-	-	-
Egypt	8.72	4.02	0.36	0.00	0.99	1.33	2.45	5.89	2.63	9.96
Equatorial Guinea	5.55	5.77	5.87	5.30	5.31	5.88	5.24	4.45	4.03	4.69
Iran	-	-	-	-	-	-	-	-	-	-
Libya	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nigeria	28.27	24.54	26.78	26.70	25.02	34.33	31.11	32.02	31.04	27.72
Qatar	103.98	104.87	104.83	104.53	106.52	104.23	102.41	104.89	104.84	106.27
Russia	13.18	16.20	12.63	13.18	14.91	15.03	25.48	39.09	40.25	39.65
Trinidad and Tobago	18.96	19.00	18.85	16.90	14.27	13.05	16.67	16.90	13.92	8.94
Venezuela	-	-	-	-	-	-	-	-	-	-
<b>Observers</b>										
Angola	0.00	0.52	0.43	0.00	0.91	4.96	5.31	5.72	6.27	4.74
Azerbaijan	-	-	-	-	-	-	-	-	-	-
Iraq	-	-	-	-	-	-	-	-	-	-
Malaysia	30.98	33.36	33.19	32.94	32.47	35.26	32.55	34.09	32.51	33.54
Mozambique	-	-	-	-	-	-	-	-	-	-
Norway	4.54	3.34	4.85	5.61	5.97	5.27	6.90	6.31	4.21	0.16
Peru	5.12	5.70	5.30	4.94	5.47	5.43	4.84	5.22	4.85	3.80
United Arab Emirates	9.26	9.14	9.93	9.33	9.44	8.34	8.94	9.26	8.74	8.22

Graph 3.3.3. GECF Countries and Rest of the World Natural Gas LNG Exports



Graph 3.3.4. GECF Countries vs Rest of the World Natural Gas LNG Exports 2012 vs 2021 | Bcm



### 3.4 Natural Gas Domestic Consumption

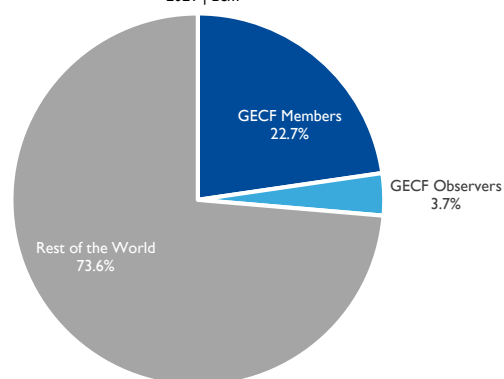
Table 3.4.1. Historical Natural Gas Domestic Consumption of GECF Countries (Bcm)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
World	3,399.48	3,432.70	3,437.39	3,505.59	3,588.83	3,690.68	3,831.10	3,938.18	3,881.30	4,044.37
GECF Totals	864.05	921.43	935.70	959.31	977.55	1,012.14	1,011.22	1,007.82	1,031.08	1,071.45
<b>Members</b>	819.34	870.18	888.90	882.13	896.15	925.25	961.13	952.77	860.64	923.67
<b>Observers</b>	44.72	51.26	46.80	77.18	81.40	86.89	50.09	55.05	170.44	147.78
GECF Share	25%	27%	27%	27%	27%	27%	26%	26%	27%	26%

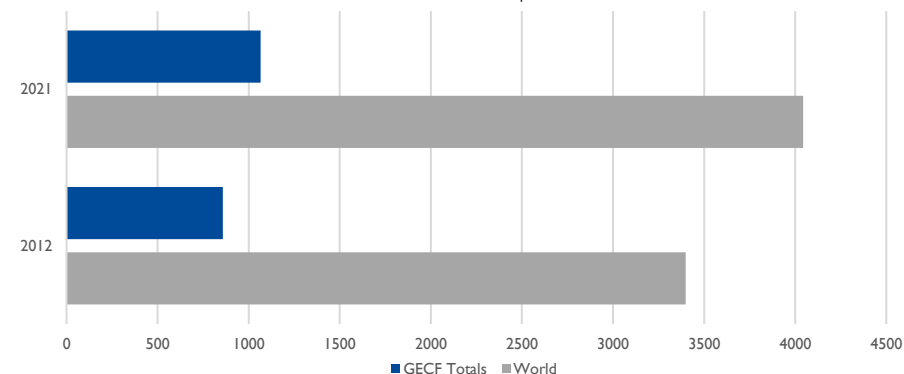
Table 3.4.2. Natural Gas Domestic Consumption of Current GECF Countries (Bcm)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
<b>Members</b>										
<b>Algeria</b>	32.21	32.53	37.21	40.30	40.45	41.82	45.14	46.40	45.03	49.57
<b>Bolivia</b>	3.39	3.61	4.14	4.22	4.73	4.79	4.87	4.52	3.60	4.09
<b>Egypt</b>	58.53	51.25	48.04	47.80	51.28	58.16	61.29	60.59	60.17	63.47
<b>Equatorial Guinea</b>	1.46	1.47	1.44	1.29	1.59	1.58	1.52	1.49	1.88	2.26
<b>Iran</b>	172.33	171.57	188.02	202.97	211.15	217.76	227.82	231.22	233.00	241.25
<b>Libya</b>	9.71	11.44	10.17	8.69	8.50	8.16	8.32	8.40	7.82	8.96
<b>Nigeria</b>	7.33	7.70	7.73	11.11	8.88	11.07	12.17	12.10	13.19	13.86
<b>Qatar</b>	36.86	38.27	40.52	40.95	38.70	38.02	40.92	41.53	40.49	38.76
<b>Russia</b>	436.29	424.80	426.53	410.49	417.98	431.99	452.73	445.31	427.39	472.69
<b>Trinidad and Tobago</b>	17.07	16.98	16.67	16.64	15.06	14.74	15.09	15.45	13.27	14.57
<b>Venezuela</b>	23.29	22.44	22.01	24.96	26.05	25.57	21.22	17.55	14.83	14.20
<b>Observers</b>										
<b>Angola</b>	0.76	0.41	0.30	0.77	0.80	0.79	0.79	0.82	0.83	0.83
<b>Azerbaijan</b>	10.54	9.47	9.92	10.88	10.50	9.41	10.82	11.79	11.35	11.21
<b>Iraq</b>	6.68	6.44	6.80	6.90	8.44	10.14	13.35	17.51	18.78	19.32
<b>Malaysia</b>	31.59	32.81	35.18	31.76	32.29	33.30	34.40	36.97	33.21	34.62
<b>Mozambique</b>	1.29	1.56	1.80	1.90	1.81	1.72	1.48	1.55	1.50	1.07
<b>Norway</b>	4.02	3.56	4.29	4.53	4.61	4.72	4.58	4.71	4.21	4.34
<b>Peru</b>	6.73	6.53	7.67	7.65	8.52	7.48	7.91	8.26	7.14	8.01
<b>United Arab Emirates</b>	65.60	66.90	65.90	72.73	71.78	71.60	70.04	68.23	70.76	69.45

Graph 3.4.1. GECF Countries and Rest of the World Natural Gas Domestic Consumption 2021 | Bcm



Graph 3.4.2. GECF Countries vs Rest of the World Natural Gas Domestic Consumption 2012 vs 2021 | Bcm





## 3.5 Liquefaction Plants

Table 3.5.1. Liquefaction Plants of GECF Countries

Country	Plant	Liquefaction (No. of Trains)	Total Capacity (MPTA)	Status	Start Year	Owner(s)	Operator(s)
<b>Members</b>							
Algeria	GL1Z	6	10.1	Operational	1978	Sonatrach	Sonatrach
	GL2Z	6	10.5	Operational	1981	Sonatrach	Sonatrach
	GL1K	1	6.0	Operational	2013	Sonatrach	Sonatrach
	GL3Z	1	5.8	Operational	2014	Sonatrach	Sonatrach
Bolivia	Rio Grande LNG	1	0.08	Operational	2016	YPFB	YPFB
Egypt	IDKU Egyptian LNG	2	7.2	Operational	2005	Shell, EGAS, EGBC, Petronas, ENGIE	OPCO
	Damietta	1	4.8	Operational	2005	EGAS, EGBC, Union Fenosa Gas	SEGAS
Equatorial Guinea	EG LNG	1	3.7	Operational	2007	Marathon, Sonagas, Mitsui, Marubeni	EG LNG
Iran	Iran FLNG	1	0.7	Cancelled	-	-	-
Libya	Marsa al Brega	1	3.2	Decommissioned	1960	Libya NOC	Sirte Oil Company
Nigeria	NLNG 1 & 2	2	7.0	Operational	1999	Nigeria LNG	Nigeria LNG
	NLNG 3	1	3.3	Operational	2002	Nigeria LNG	Nigeria LNG
	NLNG 4	1	4.1	Operational	2005	Nigeria LNG	Nigeria LNG
	NLNG 5	1	4.1	Operational	2006	Nigeria LNG	Nigeria LNG
	NLNG 6	1	4.1	Operational	2007	Nigeria LNG	Nigeria LNG
	NLNG 7	1	7.0	Under Construction	2026	Nigeria LNG	Nigeria LNG
	NLNG 8	1	-	Planned	-	Nigeria LNG	Nigeria LNG
	Yoho FLNG	1	1.2	Announced	2025	Yoho FLNG	Yoho FLNG
Qatar	Qatargas 1	3	9.9	Operational	1996/1997/1998	Qatar Petroleum, Exxon Mobil, Total, Mitsui, Marubeni	Qatargas
	Qatargas 2	2	15.6	Operational	2009	Qatar Petroleum, Exxon Mobil, Total	Qatargas
	Qatargas 3	1	7.8	Operational	2010	Qatar Petroleum, ConocoPhillips, Mitsui	Qatargas
	Qatargas 4	1	7.8	Operational	2011	Qatar Petroleum, Shell	Qatargas
	Raslaffan 1	2	6.6	Operational	1999	Qatar Petroleum, ExxonMobil, Korea LNG, Itochu, LNG Japan Corp	Qatargas
	Raslaffan 2	3	14.1	Operational	2004	Qatar Petroleum, ExxonMobil	Qatargas
	Raslaffan 3	2	15.6	Operational	2010	Qatar Petroleum, ExxonMobil	Qatargas
	North Field Expansion 1	4	33.0	Under Construction	2025	Qatar Petroleum	Construction Phase
	North Field Expansion 2	2	16	Project	2027	Qatar Petroleum	Project Phase
Russia	Sakhalin II	2	9.6	Operational	2009	Sakhalin Energy	Sakhalin Energy
	Yamal LNG	3	16.5	Operational	2017/2018	Novatek	Novatek
	Kriogas-Vysotsk LNG	2	0.7	Operational	2019	Novatek	Novatek
	Yamal LNG	1	0.9	Operational	2021	Novatek	Novatek
	Portovaya LNG	1	1.5	Operational	2022	Gazprom	Gazprom
	Arctic LNG	1	13.2	Suspended	-	-	-
	Baltic LNG	1	6.6	Under Construction	2023	Novatek	Novatek
	Baltic LNG	2	13.0	Announced	2024/2025	Gazprom	Gazprom
	Sakhalin II	1	5.4	Planned	2024	Sakhalin Energy	Sakhalin Energy
	Obskiy LNG	2	5.0	Announced	-	-	-
Trinidad and Tobago	Atlantic LNG	4	14.8	Operational	1999/2002/2003/2005	Atlantic LNG	Atlantic LNG
<b>Observers</b>							
Angola	Angola LNG	1	5.2	Operational	2013	Angola LNG	Angola LNG
Malaysia	Malaysia LNG	9	29.3	Operational	1983/1995/2003/2016	Malaysia LNG	Malaysia LNG
	PFLNG1	1	1.2	Operational	2016	Petronas	Petronas
	PFLNG2	1	1.5	Operational	2021	Petronas	Petronas
	PFLNG3	1	2.0	Planned	-	Petronas	Petronas
Mozambique	Coral South FLNG	1	3.4	Under Construction	End 2022	Coral South FLNG	ENI Offshore Mozambique
	Mozambique LNG	9	50.0	Announced	-	Mozambique LNG	Mozambique LNG
	Rovuma LNG	2	15.2	Announced	2025	Rovuma LNG	Rovuma LNG
Norway	Snohvit LNG	1	4.3	Operational	2007	Snohvit LNG Consortium	Snohvit LNG Consortium
	Stavanger	1	0.33	Operational	2010	Skangas	Skangas
Peru	Peru LNG Plant	1	4.5	Operational	2010	Peru LNG Consortium	Hunt Oil Company
United Arab Emirates	Das Island	3	5.6	Operational	1977/1977/1994	ADNOC, Mitsui, BP, Total	ADGAS

### 3.6 Natural Gas Pipelines

Table 3.6.1. Natural Gas (Import/Export) Pipelines of GEFC Member Countries (in Bold Text)

Pipeline	Connection			Owner(s)	Operator(s)	Status	Capacity (Bcm/Year)	Type	Start Year	Length (km)	Diameter (Inches)
	From	To	Via								
Enrico Mattei (TransMediterranean)	<b>Algeria</b>	Italy	Tunisia	Sonatrach, Sotugat, ENI	Sonatrach, TMPC, TTPC	Operational	34.0	Export	1982	2,475	47/20/42/48
Medgaz	<b>Algeria</b>	Spain	Med Sea	Sonatrach, Naturgy	Medgaz	Operational	10.5	Export	2011	210	48/24
Trans-Saharian Gas	<b>Algeria</b>	<b>Nigeria</b>	Niger	Sonatrach, NNPC	Sonatrach, NNPC	Proposed	30.0	Export	NA	4,128	48/56
GASBOL	<b>Bolivia</b>	Brazil	-	Gas TransBoliviano	Gas TransBoliviano	Operational	11.5	Export	1999	557	32
GIJA (Juana Azurduy)	<b>Bolivia</b>	Argentina	-	YPFB Transporte	YPFB Transporte	Operational	10.2	Export	2011	13	32
GOB	<b>Bolivia</b>	Brazil	-	GasOriente Boliviano	GasOriente Boliviano	Operational	1.5	Export	2002	362	18
Arab Gas Pipeline	<b>Egypt</b>	Jordan, Syria, Lebanon	-	EGAS, ENPPI, GASCOPEPETROJET SPC	Egyptian FAJR	Operational	10.0	Export	2003	1,200	36
EMG	Israel	<b>Egypt</b>	-	EMG	Israel Natural Gas Lines (INGL)	Operational	7.0-9.0	Import	2020	90	26
Tabriz-Ankara	<b>Iran</b>	Turkey	-	NIOC, Botas	NIOC, Botas	Operational	14.0	Export	2002	3,250	40
Jolfa-Nakhchivan	<b>Iran</b>	Azerbaijan	-	NIGC, SOCAR	NIGC, SOCAR	Operational	10.0	Swap	2005	627	40
Tabriz-Sardanian	<b>Iran</b>	Armenia	-	NIOC, Armenia Gazprom	NIOC, Armenia Gazprom	Operational	2.3	Export	2006	140	30
Asaluye-Baghdad	<b>Iran</b>	Iraq	-	NIOC, INOC	NIOC, INOC	Operational	12.8	Export	2017	230	NA
Dauletabad-Khangiran	Turkmenistan	<b>Iran</b>	-	Turkmengaz	Turkmengaz	Operational	12.0	Import	2007	182	48
Asaluye-Basrah	<b>Iran</b>	Iraq	-	NIOC, INOC	NIOC, INOC	Operational	NA	Export	NA	NA	NA
Asaluye-Nawabshah	<b>Iran</b>	Pakistan	-	NIOC, SNGPL, SSGC, Gazprom JSC	NIOC, SNGPL, SSGC, Gazprom JSC	Proposed	40.0	Export	NA	2,775	56
Asaluye-Sohar	<b>Iran</b>	Oman	-	NIOC, OGC	NIOC, OGC	Planned	9.9	Export	2020	NA	NA
Green Stream	<b>Libya</b>	Sicily	-	Green Stream	Green Stream	Operational	11.0	Export	2004	520	32
West African Gas Pipeline	<b>Nigeria</b>	Ghana	Benin-Togo	WAGP	Chevron	Operational	8.3	Export	2006	678	20
Dolphin	<b>Qatar</b>	<b>United Arab Emirates, Oman</b>	-	Dolphin Energy	Dolphin Energy	Operational	33.1	Export	2007	364	48
Urengoy-Pomary-Uzhgorod	<b>Russia</b>	Europe	Ukraine	Gazprom	Gazprom	Operational	32	Export	1983	4,451	56
Blue Stream	<b>Russia</b>	Turkey	-	Gazprom, Blue Stream Pipeline Company BV	Gazprom, Blue Stream Pipeline Company BV	Operational	16.0	Export	2003	1,213	55/47
Yamal Europe	<b>Russia</b>	Europe (Poland Germany)	Belarus	Gazprom, EuRoPol Gaz, WINGAS	Gazprom	Operational	32.9	Export	2006	2,000	56
Nord Stream	<b>Russia</b>	Germany	NA	Nord Stream AG JV	Nord Stream AG JV	Operational	55.0	Export	2011	1,224	48
Minsk-Vilnius-Kaunas-Kaliningrad	<b>Russia</b>	<b>Russia</b>	Belarus, Lithuania	Gazprom	Gazprom	Operational	2.5	Export	2011	155	20
Power of Siberia	<b>Russia</b>	China	-	Gazprom	Gazprom	Operational	38.0	Export	2019	3,000	56
TurkStream	<b>Russia</b>	Turkey	-	Gazprom	Gazprom	Operational	31.5	Export	2020	3000	32
Nord Stream 2	<b>Russia</b>	Germany	-	Nord Stream 2 AG	Nord Stream 2 AG	Completed	55.0	Export	-	1,200	48
Antonio Ricaurte (Trans Caribbean)	Colombia	<b>Venezuela</b>	-	PDVSA Gas	PDVSA Gas	Operational	2.7	Import Export	2007	225	26

Table 3.6.2. Natural Gas (Import/Export) Pipelines of GECF Observer Countries (in Bold Text)

Pipeline	Connection			Owner(s)	Operator(s)	Status	Capacity (Bcm/year)	Type	Start Year	Length (km)	Diameter (Inches)
	From	To	Via								
South Gas Corridor	<b>Azerbaijan</b>	Georgia, Turkey, Greece, Italy	-	BP, TPAO, SOCAR, Petronas, Lukoil, Naftiran, Intertrade	BP	Operational	16.0	Export	2006	692	42
Mozdok–Makhachkala–Kazi Magomed	Russia	<b>Azerbaijan</b>	-	SOCAR, GAZPROM	SOCAR, GAZPROM	Operational	13.0	-	2010	680	48
Trans-Caspian	Turkmenistan	<b>Azerbaijan</b>	-	NA	NA	Proposed	30.0	Export	NA	300	NA
Segamat	<b>Malaysia</b>	Singapore	-	Petronas Gas	Petronas Gas	Operational	5.7	Export	1991	230	36
Yetagun	<b>Malaysia</b>	Thailand	-	Petronas Carigali	Petronas Carigali	Operational	5.2	Export	2007	270	24
West Natuna Transportation System	Indonesia	<b>Malaysia</b>	-	PSCs	PSCs	Operational	2.6	Import	2001	96	18
Mozambique South Africa Gas Pipeline	<b>Mozambique</b>	South Africa	-	Sasol Gas Holding, South African Gas Development Limited Company Companhia, Mocambicana de Gasoduto	Sasol, iGas, CMG	Operational	5.6	Export	2004	865	-
African Renaissance Gas Pipeline	<b>Mozambique</b>	South Africa	-			Proposed	18.0	Export	2025/2026	2600	-
Norpipe	<b>Norway</b>	Germany	-	Gassco AS	Gassco AS	Operational	11.7	Export	1977	440	36
Vesterled	<b>Norway</b>	UK	-	Gassco AS	Gassco AS	Operational	14.2	Export	1978	360	32
Zeepipe I	<b>Norway</b>	Belgium	-	Gassco AS	Gassco AS	Operational	15.3	Export	1993	808	40
Europipe I	<b>Norway</b>	Germany	-	Gassco AS	Gassco AS	Operational	16.8	Export	1995	620	40
Franpipe	<b>Norway</b>	France	-	Gassco AS	Gassco AS	Operational	20.1	Export	1998	840	42
Europipe II	<b>Norway</b>	Germany	-	Gassco AS	Gassco AS	Operational	26.0	Export	1999	660	42
Langeled	<b>Norway</b>	UK	-	Gassco AS	Gassco AS	Operational	26.3	Export	2006	536	44
Baltic Pipeline	<b>Norway</b>	Poland	Denmark	Energinet, Gaz-System	Energinet, Gaz-System	Completed	10.0	Export	End 2022	613	42

### 3.7 LNG Carrier Fleet

Table 3.7.1. LNG Carrier Fleet of Member GECF Countries

Country	Ship Name	Owner(s)	Delivered Year	Size (1000 Scm)
<b>Algeria</b>	Lalla Ftama N'soumer	Sonatrach Group	2004	145.45
	Berge Arzew	Sonatrach Group	2004	138.00
	Global Energy	Sonatrach Group	2006	74.13
	Cheikh El-Mokrani	Sonatrach Group	2007	75.50
	Cheikh Bouamama	Sonatrach Group	2008	75.50
	Tessala	Sonatrach Group	2016	171.8
	Ourgata	Sonatrach Group	2017	171.8
<b>Nigeria</b>	LNG Edo	Bonny Gas Transport	1980	126.50
	LNG Rivers	Bonny Gas Transport	2002	137.20
	LNG Sokoto	Bonny Gas Transport	2002	137.20
	LNG Bayelsa	Bonny Gas Transport	2003	137.50
	LNG Akwa Ibom	Bonny Gas Transport	2004	141.00
	LNG River Orashi	BW Gas	2004	145.91
	LNG Adamawa	Bonny Gas Transport	2005	141.00
	LNG Cross River	Bonny Gas Transport	2005	141.00
	LNG Enugu	BW Gas	2005	145.00
	LNG Oyo	BW Gas	2005	140.50
	LNG River Niger	Bonny Gas Transport	2006	141.00
	LNG Benue	BW Gas	2006	145.70
	LNG Lokoja	BW Gas	2006	148.30
LNG Borno	NYK Line	2007	149.60	

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Table 3.7.1. LNG Carrier Fleet of GECEF Member Countries (Continuation)

Country	Ship Name	Owner(s)	Delivered Year	Size (1000 Scm)
Nigeria	LNG Ogun	NYK Line	2007	149.60
	LNG Kano	BW Gas	2007	148.30
	LNG Ondo	BW Gas	2007	148.30
	LNG Imo	BW Gas	2008	148.30
	LNG Bonny II	Bonny Gas Transport	2015	133.00
	LNG Finima II	Bonny Gas Transport	2015	133.00
	LNG Lagos II	Bonny Gas Transport	2015	122.00
	LNG Port-Harcourt II	Bonny Gas Transport	2015	122.00
	LNG Abuja II	Bonny Gas Transport	2016	126.50
Qatar	Al Ghashamiya	Nakilat	2009	217.59
	Sheehaniya	Nakilat	2009	210.20
	Mesaiimeer	Nakilat	2009	216.31
	Onaiza	Nakilat	2009	210.15
	Al Gattara	Nakilat	2007	216.20
	Al Gharrafa	Nakilat	2008	216.20
	Al Hamla	Nakilat	2008	216.20
	Tembek	Nakilat	2007	216.20
	Al Dafna	Nakilat	2009	266.37
	Al Ghuwairiya	Nakilat	2008	263.30
	Al Mafyar	Nakilat	2009	266.37
	Mekaines	Nakilat	2009	266.48
	Mozah	Nakilat	2008	266.25
	Umm Slal	Nakilat	2008	265.98
	Al Kharaitiyat	Nakilat	2009	216.30
	Al Rekayyat	Nakilat	2009	216.29
	Al Sadd	Nakilat	2009	210.20
	Al Mayeda	Nakilat	2009	266.00
	Al Samriya	Nakilat	2009	263.30
	Bu Samra	Nakilat	2008	266.00
	Lijmiliya	Nakilat	2009	263.30
	Al Bahiya	Nakilat	2009	210.10
	Al Karaana	Nakilat	2009	210.10
	Al Khattiya	Nakilat	2009	210.15
	Al Nuaman	Nakilat	2009	210.10
	Aamira	Nakilat	2010	266.00
	Rasheeda	Nakilat	2010	266.00
	Shagra	Nakilat	2009	266.28
	Zarga	Nakilat	2010	266.00
	Al Oraiq	Nakilat/"K" Line	2008	210.10
	Umm Al Amad	Nakilat/"K" Line	2008	210.10
	Al Jassasiya	Nakilat/Maran Gas	2007	145.70
	Maran Gas Achilles	Nakilat/Maran Gas	2016	174.00
Maran Gas Alexandria	Nakilat/Maran Gas	2015	161.87	
Maran Gas Apollonia	Nakilat/Maran Gas	2014	161.87	
Maran Gas Asciepius	Nakilat/Maran Gas	2008	145.82	
Maran Gas Coronis	Nakilat/Maran Gas	2012	145.70	
Maran Gas Delphi	Nakilat/Maran Gas	2014	159.80	
Maran Gas Efessos	Nakilat/Maran Gas	2014	159.80	
Maran Gas Lindos	Nakilat/Maran Gas	2015	161.87	

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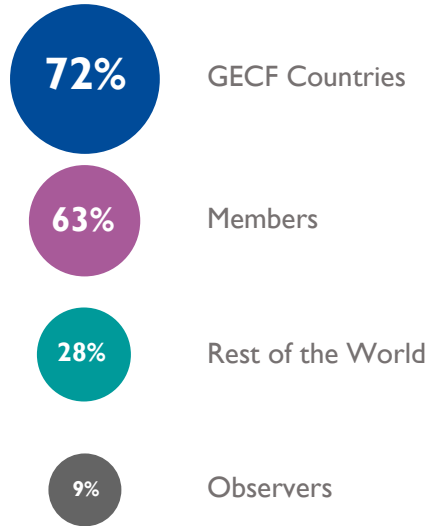
Table 3.7.1. LNG Carrier Fleet of GECF Member Countries (Continuation)

Country	Ship Name	Owner(s)	Delivered Year	Size (1000 Scm)
Qatar	Maran Gas Posidonia	Nakilat/Maran Gas	2014	161.87
	Maran Gas Sparta	Nakilat/Maran Gas	2015	159.80
	Simaisma	Nakilat/Maran Gas	2006	145.89
	Umm Bab	Nakilat/Maran Gas	2005	145.00
	Woodside Goode	Nakilat/Maran Gas	2013	159.80
	Woodside Rogers	Nakilat/Maran Gas	2013	159.80
	Al Aamriya	Nakilat/MOL	2008	210.17
	Fraiha	Nakilat/MOL	2008	210.10
	Murwab	Nakilat/MOL	2008	210.10
	Al Sahla	Nakilat/NYK	2008	216.20
	Al Thumama	Nakilat/NYK	2008	216.20
	Al Utouriya	Nakilat/NYK	2008	215.00
	Ejnan	Nakilat/NYK	2007	145.00
	Al Ghariya	Nakilat/Pronav	2008	210.15
	Al Ruwais	Nakilat/Pronav	2007	210.15
	Al Safliya	Nakilat/Pronav	2007	210.15
	Duhail	Nakilat/Pronav	2008	210.15
	Aseem	Nakilat/SCI	2009	155.00
	Al Marrouna	Nakilat/Teekay	2006	149.54
	Al Areesh	Nakilat/Teekay	2007	148.79
	Al Daayen	Nakilat/Teekay	2008	148.85
	Al Huwaila	Nakilat/Teekay	2008	217.00
	Al Kharsaah	Nakilat/Teekay	2008	217.00
	Al Khuwair	Nakilat/Teekay	2006	217.00
	Al Shamal	Nakilat/Teekay	2008	217.00
	Global Energy	Nakilat/Maran Gas	2020	173.40
	Global Star	Nakilat/Maran Gas	2021	173.40
	Hull no. 2502	Nakilat/Maran Gas	-	174.00
Hull no.2503	Nakilat/Maran Gas	-	174.00	
Russia	Lena River	Gazprom	2013	154.88
	Yenisei River	Gazprom	2013	154.88
	Velikiy Novgorod	Gazprom	2014	170.20
	Pskov	Gazprom	2014	170.20
	SCF Mitre	Sovcomflot	2015	170.00
	SCF Melampus	Sovcomflot	2015	170.20
	Christophe de Margerie	Sovcomflot	2016	172.60
	Marshal Vasilevskiy	Gazpromflot	2017	174.10

Table 3.7.2. LNG Carrier Fleet of GECF Observer Countries

Country	Ship Name	Owner(s)	Delivered Year	Size (1000 Scm)
Angola	Cubal	NYK Line/Mitsui & Co/Teekay LNG Partners	2012	160.28
	Lobito	Mitsui & Co/NYK Line/Teekay LNG Partners	2011	160.28
	Malanje	Mitsui & Co/NYK Line/Teekay LNG Partners	2011	160.28
	Sonangol Benguela	Sonangol	2007	160.50
	Sonangol Etosha	Sonangol	2007	160.50
	Sonangol Sambizanga	Sonangol	2007	160.50
	Soyo	Mitsui & Co/NYK Line/Teekay LNG Partners	2011	160.28
	Aman Sendai	MISC	1997	18.80
	LNG Portovenere	MISC	1997	60.60
	LNG Lerici	MISC	1998	60.60
	Puteri Intan	MISC	1994	130.00
	Puteri Delima	MISC	1995	130.00
	Puteri Nilam	MISC	1995	130.00
	Puteri Zamrud	MISC	1996	130.00
	Puteri Firus	MISC	1997	130.00
	Puteri Delima Satu	MISC	2002	137.10
	Puteri Intan Satu	MISC	2002	137.10
	Puteri Nilam Satu	MISC	2003	137.10
	Puteri Firus Satu	MISC	2004	137.10
	Malaysia	Puteri Zamrud Satu	MISC	2004
Puteri Mutiara Satu		MISC	2005	137.10
Seri Alam		MISC	2005	145.00
Seri Amanah		MISC	2006	145.00
Seri Angkasa		MISC	2006	145.00
Seri Anggun		MISC	2006	145.00
Seri Ayu		MISC	2007	145.00
Seri Bakti		MISC	2007	152.60
Seri Begawan		MISC	2007	152.30
Seri Bijaksana		MISC	2008	152.30
Seri Balhaf		MISC	2009	154.50
Seri Balqis		MISC	2009	154.50
Seri Camellia		MISC	2016	150.00
Seri Cempaka		MISC	2017	150.20
Seri Cenderawasih		MISC	2017	150.00
Seri Camar		MISC	2018	150.20
Seri Cemara		MISC	2018	150.20
Hull No.8030		MISC (JV)	2021	142.00
Hull No.8031		MISC (JV)	2021	142.00
United Arab Emirates		Hull No.2364	MISC	2023
	Hull No.2365	MISC	2023	148.10
	AL Khaznah	National Gas Shipping Co. (ADNOC)	1994	137.54
	Shahamah	National Gas Shipping Co. (ADNOC)	1994	137.56
	Ghasha	National Gas Shipping Co. (ADNOC)	1995	137.51
	Ish	National Gas Shipping Co. (ADNOC)	1995	137.57
	Mubaraz	National Gas Shipping Co. (ADNOC)	1996	136.98
	Mraweh	National Gas Shipping Co. (ADNOC)	1996	137.04
	AL Hamra	National Gas Shipping Co. (ADNOC)	1997	137.08
	Umm AL Ashtan	National Gas Shipping Co. (ADNOC)	1997	137.11

Proven Natural Gas Reserves



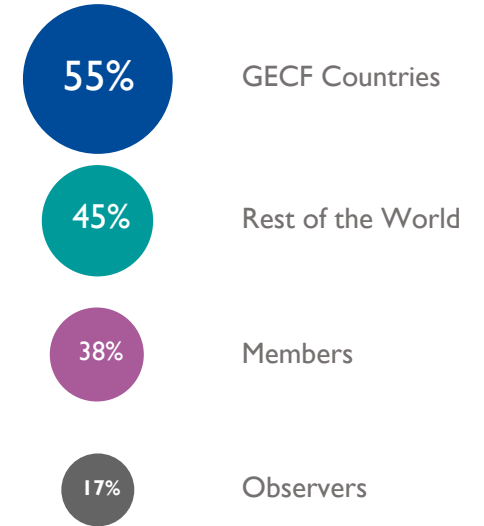
Natural Gas Gross Production



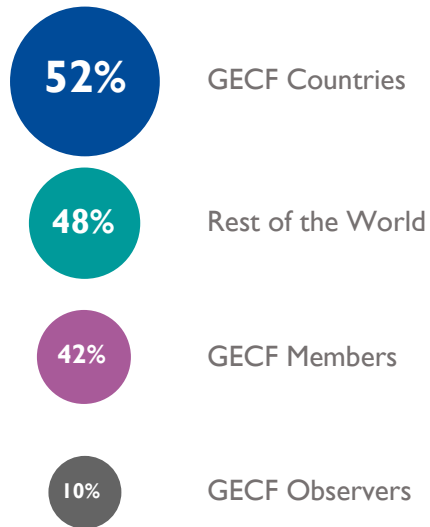
Natural Gas Marketed Production



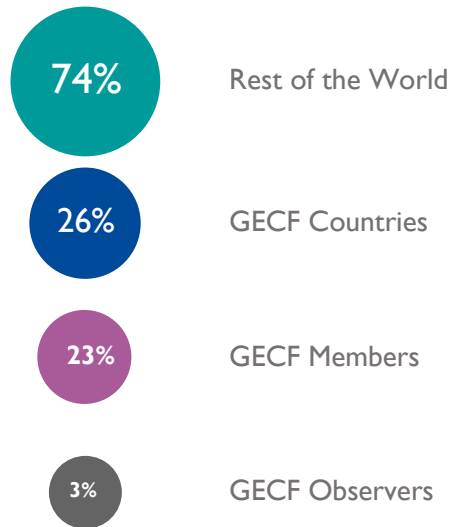
Natural Gas Pipeline Exports



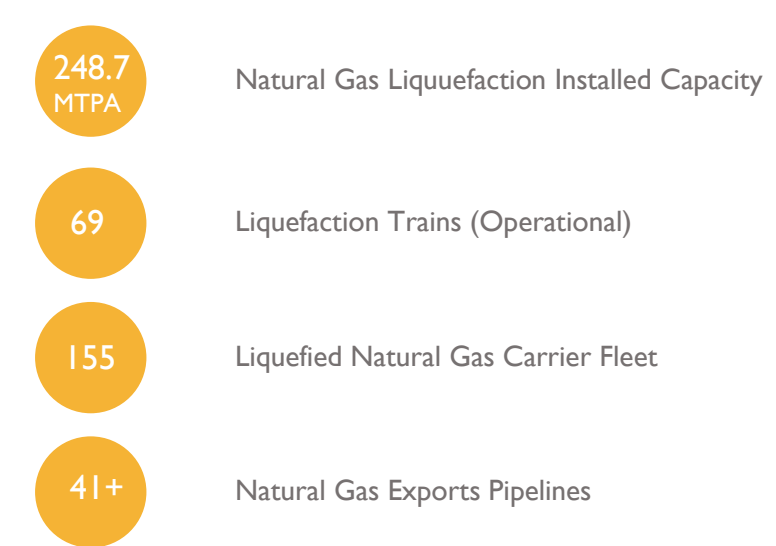
LNG Exports



Domestic Consumption



GECF Countries Plants and Transport





## 2022 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 | Bolivarian Republic of Venezuela |
| 6 | State of Libya                          |    |                                  |

## 2022 GECF Observers

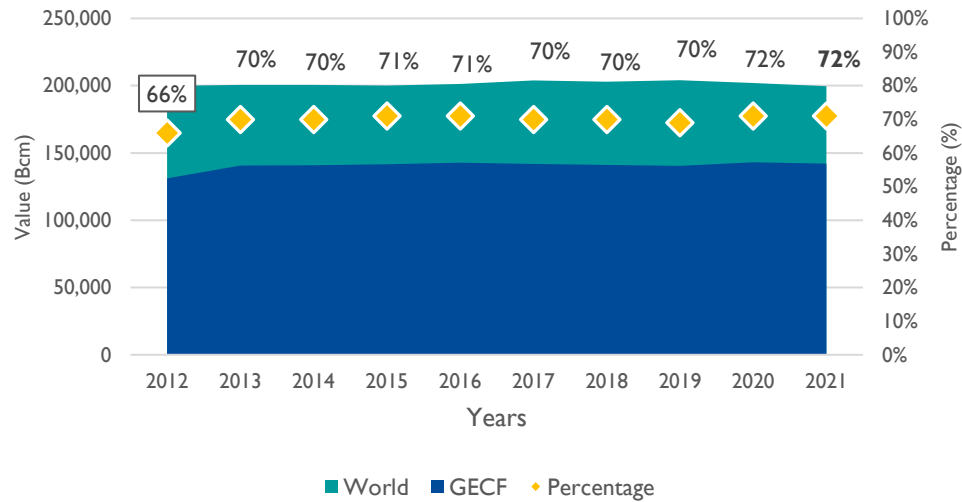
- |    |                        |    |                      |
|----|------------------------|----|----------------------|
| 12 | Republic of Angola     | 18 | Republic of Peru     |
| 13 | Republic of Azerbaijan | 19 | United Arab Emirates |
| 14 | Republic of Iraq       |    |                      |
| 15 | Malaysia               |    |                      |
| 16 | Republic of Mozambique |    |                      |
| 17 | Kingdom of Norway      |    |                      |



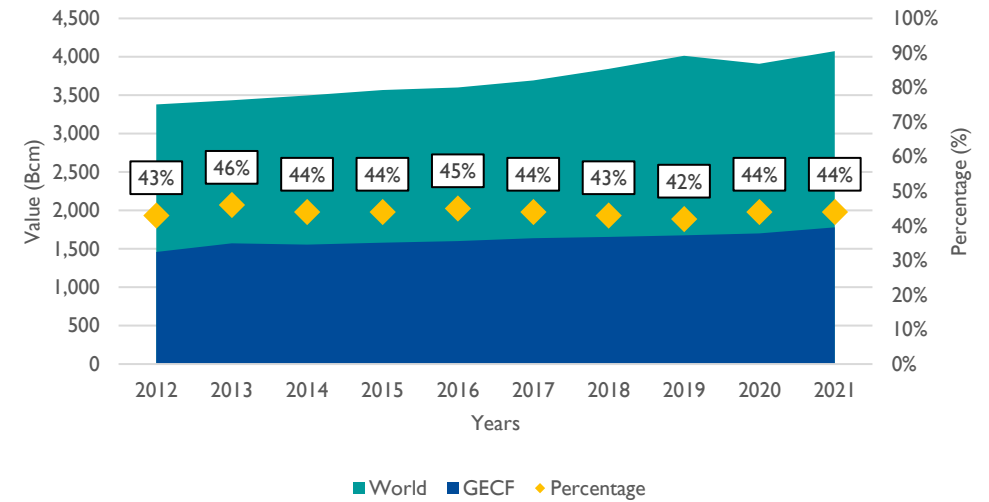


### 3.8 Historical GECF Share in the World

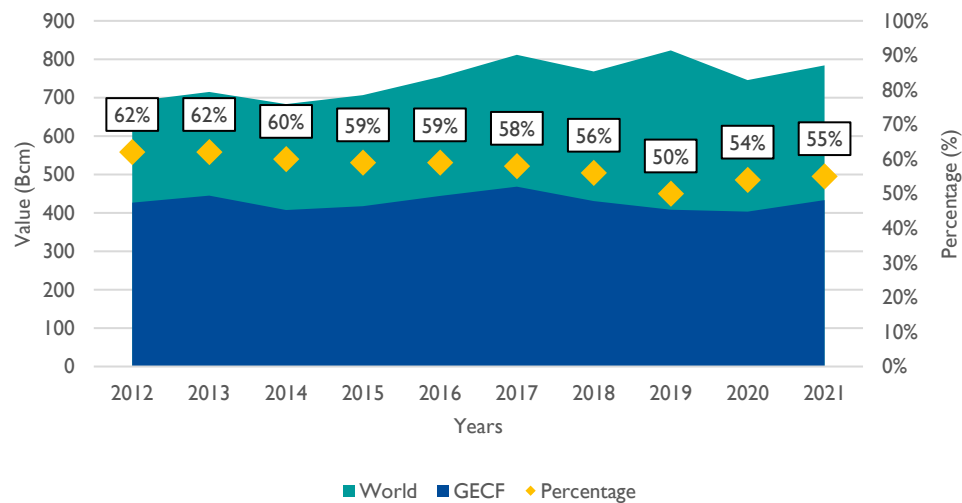
Graph 3.8.1 GECF Natural Gas Proven Reserves (Total)  
2011 - 2021 | Bcm



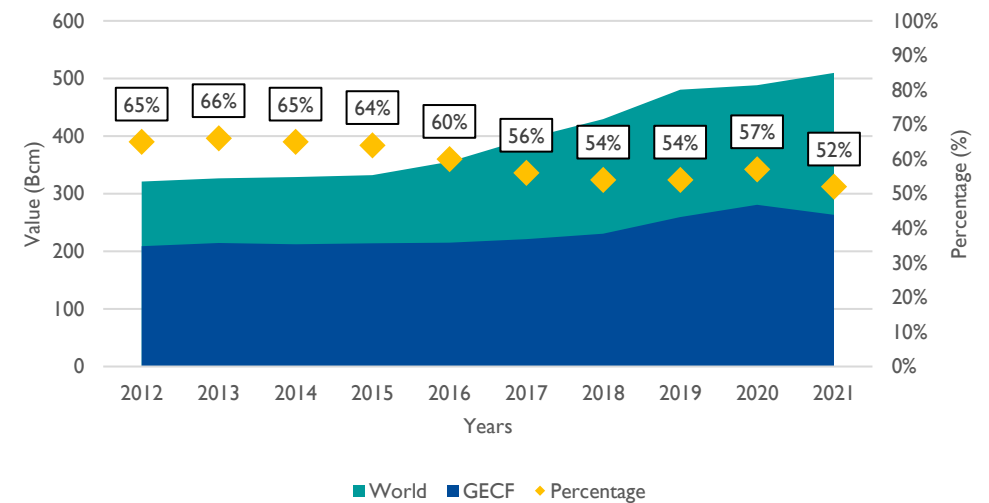
Graph 3.8.2 GECF Natural Gas Marketed Production (Total)  
2011 - 2021 | Bcm



Graph 3.8.3 GECF Natural Gas Pipeline Exports (Total)  
2012 - 2021 | Bcm



Graph 3.8.4 GECF LNG Exports (Total)  
2012 - 2021 | Bcm



## Section 4

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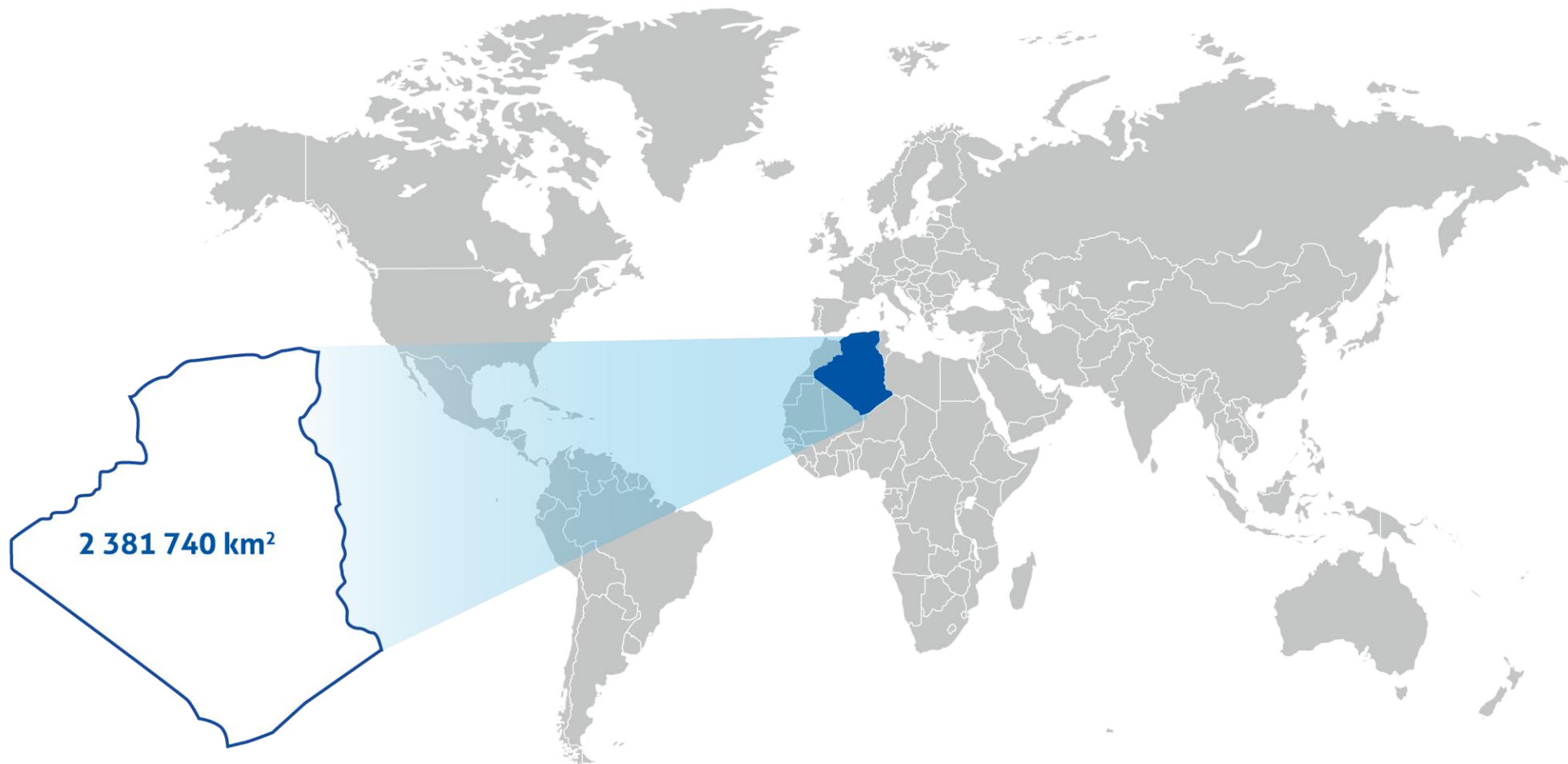
# GECF Member Countries



GECF



PEOPLE'S DEMOCRATIC REPUBLIC OF  
**ALGERIA**



POPULATION

44 616 626



CAPITAL

ALGIERS



CONTINENT

AFRICA



CURRENCY

ALGERIAN DINAR



TIME ZONE

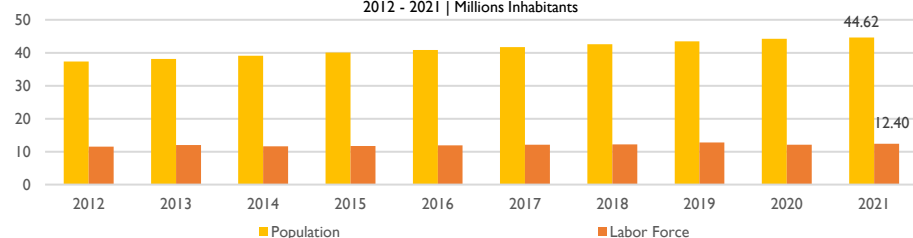
CENTRAL EUROPEAN (GMT+1)

## 4.1.1 Macroeconomics

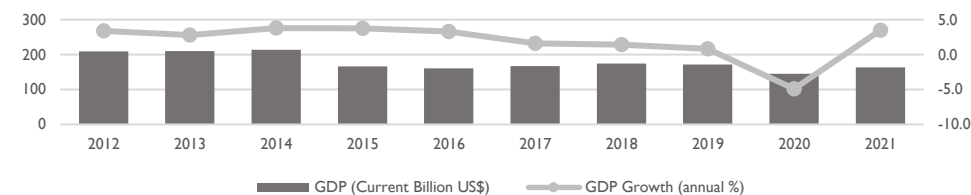
Table 4.1.1.1 Algeria Macroeconomic Indicators

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
<b>Population</b> (Inhabitants)	37,383,887	38,140,132	39,100,000	40,072,802	40,841,404	41,699,198	42,628,000	43,424,118	44,227,000	44,616,626
<b>Labor Force</b> (Inhabitants)	11,541,577	12,002,108	11,586,092	11,752,300	11,921,392	12,108,635	12,173,459	12,730,000	12,055,000	12,398,078
<b>GDP</b> (Current Billion US\$)	209.06	209.76	213.81	165.98	160.13	167.40	173.88	171.76	145.01	163.05
<b>GDP Growth</b> (annual %)	3.37	2.77	3.79	3.76	3.30	1.60	1.40	0.80	-4.90	3.50
<b>GDP per capita</b> (Current US\$)	5,592.25	5,499.72	5,468.29	4,141.96	3,920.78	4,014.47	4,079.01	3,955.41	3,278.74	3,654.47
<b>Exports of Goods and Services</b> (Current Billion US\$)	77.12	69.66	64.66	38.58	33.40	37.94	44.56	39.01	25.11	43.34
<b>Exports of Goods and Services</b> (% of GDP)	36.90	33.21	30.24	23.24	20.86	22.66	25.62	22.71	17.32	26.60
<b>Imports of Goods and Services</b> (Current Billion US\$)	59.61	63.77	68.31	60.81	56.09	55.60	56.24	49.97	40.60	43.02
<b>Imports of Goods and Services</b> (% of GDP)	28.51	30.40	31.95	36.64	35.03	33.20	32.30	29.10	28.00	26.39
<b>Inflation consumer prices</b> (annual %)	9.70	4.10	3.90	4.40	5.80	5.90	3.50	2.40	2.10	7.23
<b>Energy use</b> (kg of oil equivalent per capita)	1,229.55	1,247.50	1,333.90	1,368.70	1,347.70	1,339.90	1,430.90	1,433.30	1,325.02	1,416.77
<b>Natural Gas use</b> (Scm per capita)	861.57	852.80	951.59	1,005.62	990.42	1,002.78	1,058.86	1,068.44	1,018.22	1,110.91

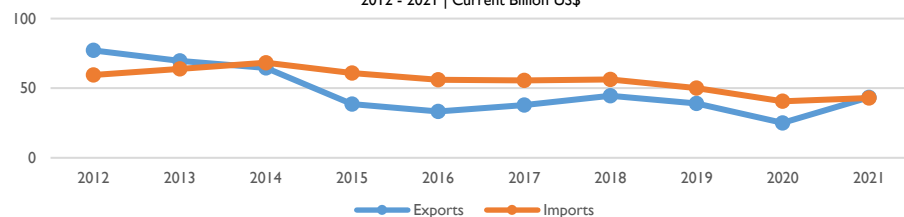
Graph 4.1.1.1. Algeria: Population and Labor Force  
2012 - 2021 | Millions Inhabitants



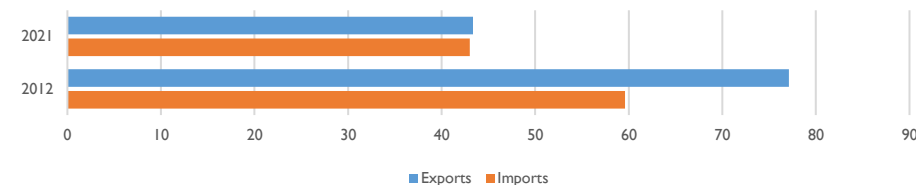
Graph 4.1.1.2. Algeria: GDP and GDP Growth  
2012 - 2021 | Current Billion US\$ and Annual %



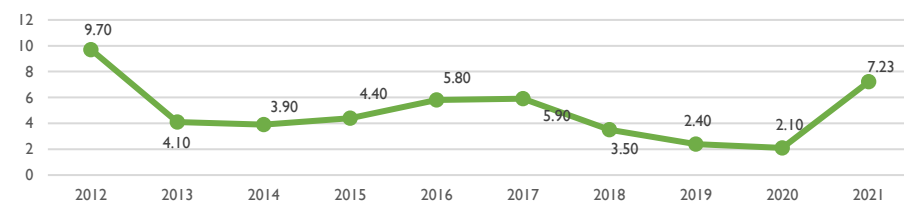
Graph 4.1.1.3. Algeria: Exports and Imports (Goods and Services)  
2012 - 2021 | Current Billion US\$



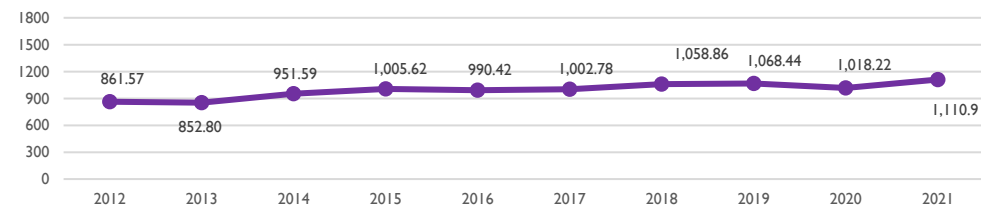
Graph 4.1.1.4. Algeria: Exports and Imports (Goods and Services)  
2012 vs 2021 | Current Billion US\$



Graph 4.1.1.5. Algeria: Inflation (Consumer Prices)  
2012 - 2021 | Annual %



Graph 4.1.1.6. Algeria: Natural Gas Use  
2012 - 2021 | Scm per Capita



## 4.1.2 Reserves and Production

Table 4.1.2.1 Proven Natural Gas Reserves (Bcm)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
<b>Proven Gas Reserves</b>	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 Historical Natural Gas Production (Bcm)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
<b>Gross Production</b>	182.60	179.49	186.75	183.83	189.14	188.74	183.55	175.35	168.39	179.04
<b>Marketed Production</b>	86.06	82.43	83.30	84.58	94.95	96.60	97.47	89.98	84.60	105.04
<b>Reinjection</b>	77.40	76.20	81.21	77.05	70.12	66.94	61.10	60.33	59.98	47.05
<b>Flaring</b>	3.50	3.70	3.95	3.51	3.26	3.00	2.91	2.74	3.19	2.78
<b>Shrinkage</b>	15.65	17.16	18.30	18.68	20.81	22.21	22.07	22.30	20.64	24.17

Table 4.1.2.3 Detailed 2021 Natural Gas Production (MMcm)

	2021											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
<b>Gross Production</b>	15023.77	14091.90	15328.37	14713.18	15252.08	14098.84	15064.83	14112.04	14425.96	15858.29	15369.21	15705.35
<b>Marketed Production</b>	9970.50	9244.20	10057.63	8822.13	8567.10	7707.86	8165.83	7725.61	7794.65	8533.59	8819.00	9628.90

## 4.1.3 Domestic Consumption and Trade

Table 4.1.3.1 Domestic Gas Consumption (Bcm)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
<b>Residential</b>	5.96	6.62	7.07	7.90	8.13	8.68	10.62	10.97	10.89	11.03
<b>Industrial</b>	3.52	3.68	3.83	4.04	4.21	4.63	5.10	5.74	5.80	6.66
<b>Power Generation</b>	14.11	14.45	15.75	17.72	17.45	18.53	18.99	20.08	18.97	21.47
<b>Transportation</b>	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.09
<b>Petrochemical (feedstock)</b>	2.06	1.82	2.83	3.66	4.00	3.18	4.75	3.94	3.60	4.09
<b>Refineries</b>	0.61	0.73	0.70	0.72	0.77	0.68	0.64	0.67	0.65	0.67
<b>Others</b>	5.94	5.22	7.02	6.25	5.88	6.10	5.03	4.98	5.11	5.56
<b>Totals</b>	32.21	32.53	37.21	40.30	40.45	41.82	45.14	46.40	45.03	49.57

Table 4.1.3.2 Historical Trade: Natural Gas Exports

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
<b>Pipeline (Bcm)</b>	37.33	32.23	27.08	27.04	38.44	37.59	37.95	26.31	25.24	38.97
<b>LNG</b>										
Bcm*	15.00	15.16	17.11	16.47	15.53	16.41	13.47	16.47	14.22	15.99
MMT	10.88	10.99	12.41	11.94	11.26	11.90	9.77	11.94	10.31	11.60
<b>Totals (Bcm)</b>	52.33	47.39	44.19	43.51	53.97	54.00	51.42	42.78	39.46	54.97

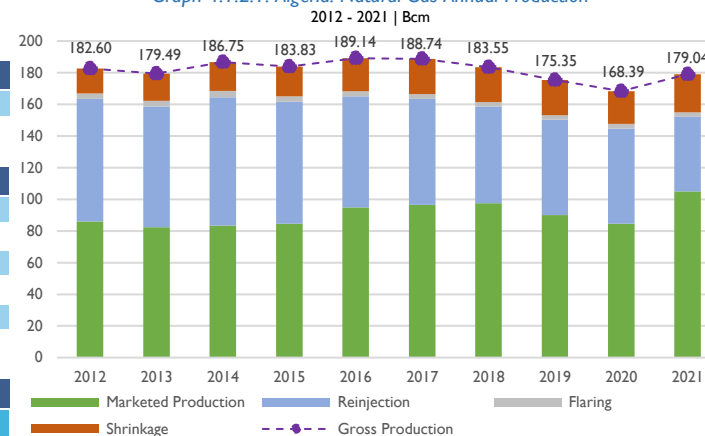
\* Gas equivalent

Table 4.1.3.3 Detailed 2021 Trade: Natural Gas Exports

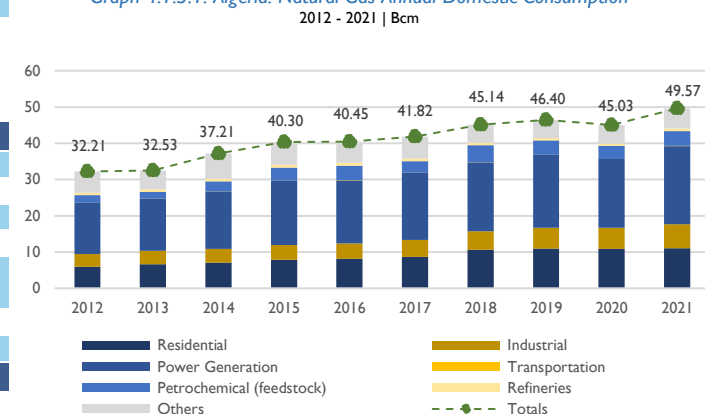
	2021											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
<b>Pipeline (MMcm)</b>	3294.86	3408.36	3767.70	3344.80	3531.34	3341.33	3326.18	2942.97	2849.48	3350.95	2859.86	2955.57
<b>LNG</b>												
MMcm*	1241.10	1546.39	1641.10	1477.48	1784.77	969.33	1188.73	816.14	1257.31	1568.70	1205.10	1297.50
1000MT	900.00	1121.39	1190.06	1071.41	1294.25	702.92	862.02	591.83	911.75	1137.54	873.90	940.90
<b>Totals (MMcm)</b>	4535.96	4954.75	5408.80	4822.28	5316.11	4310.66	4514.91	3759.11	4106.79	4919.65	4064.96	4253.07

\* Gas equivalent

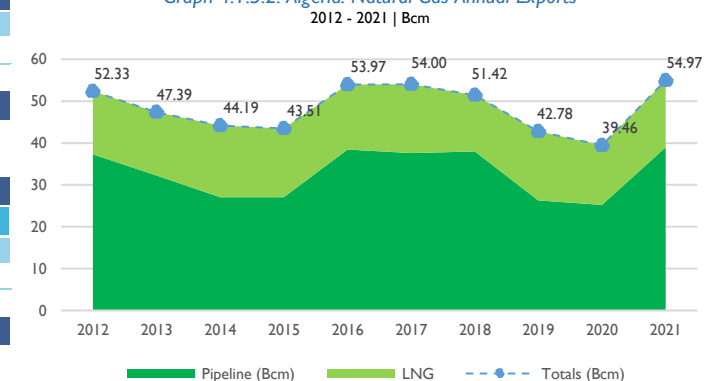
Graph 4.1.2.1. Algeria: Natural Gas Annual Production



Graph 4.1.3.1. Algeria: Natural Gas Annual Domestic Consumption



Graph 4.1.3.2. Algeria: Natural Gas Annual Exports



## 4.1.4 Transport and Plants

Table 4.1.4.1 Natural Gas Export Pipelines

Pipeline	Connection			Owner(s)	Operator(s)	Status	Capacity (Bcm/Year)	Type	Start Year	Length (km)	Diameter (Inches)	
	From	To	Via									
Enrico Mattei (TransMediterranean)	Algeria	Italy	Tunisia	Sonatrach, Sotugat, ENI	Sonatrach, TMPC, TTPC	Operational	34.0	Export	1982	2,475	47/20/42/48	
Medgaz	Algeria	Spain	Med Sea	Sonatrach, Naturgy	Medgaz	Operational	10.5	Export	2011	210	48/24	
Trans-Saharan Gas	Algeria	Nigeria	Niger	Sonatrach, NNPC	Sonatrach, NNPC	Proposed	30.0	Export	NA	4,128	48/56	
<b>Total Expected Capacity</b>							<b>74.5</b>					

Table 4.1.4.2 LNG Carrier Fleet

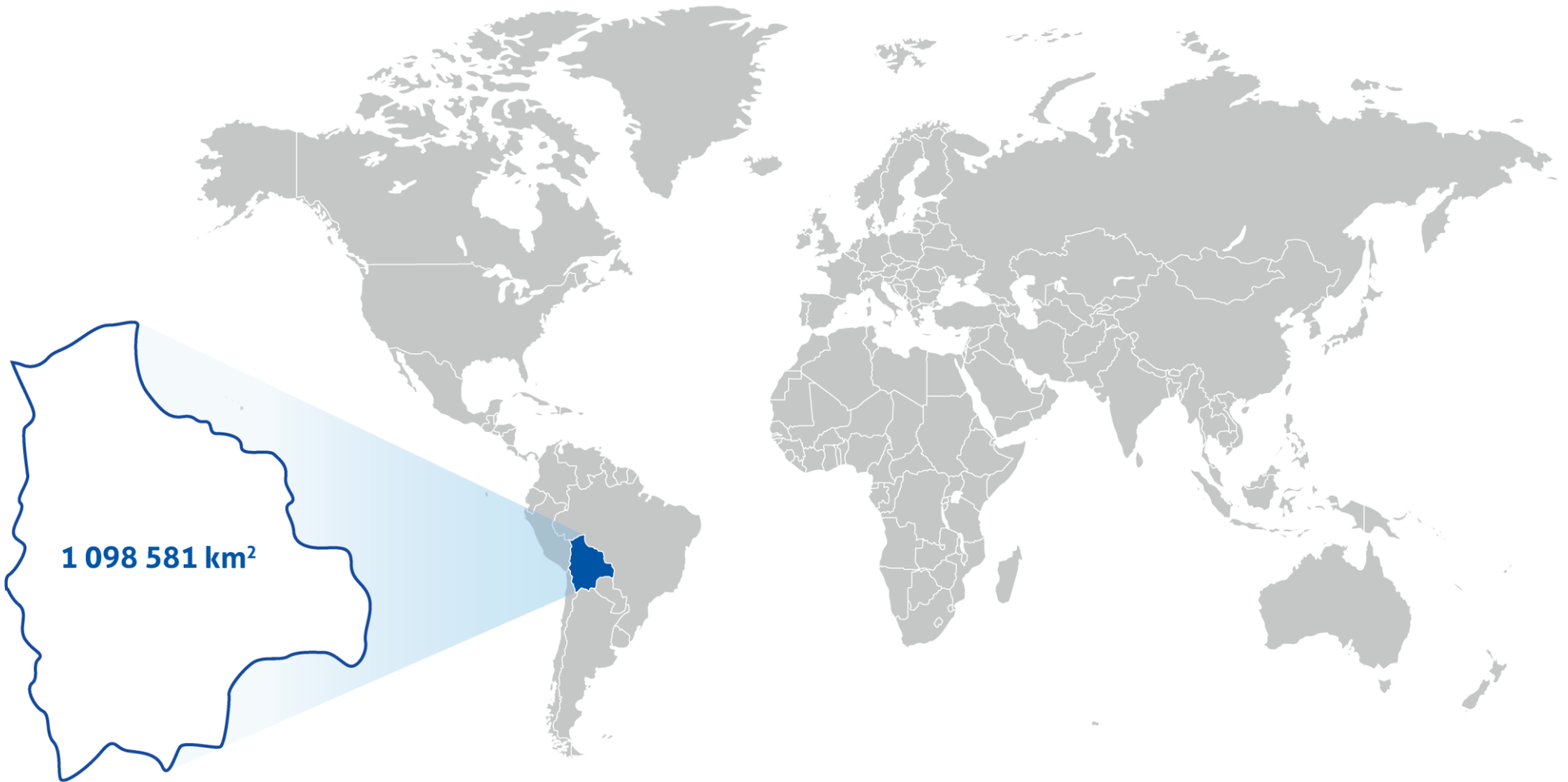
Ship Name	Owner(s)	Delivered Year	Size (1000 Scm)
Global Energy	Sonatrach Group	2006	74.13
Lalla Ftama N'soumer	Sonatrach Group	2004	145.45
Berge Arzew	Sonatrach Group	2004	138.00
Cheikh El-Mokrani	Sonatrach Group	2007	75.50
Cheikh Bouamama	Sonatrach Group	2008	75.50
Tessala	Sonatrach Group	2016	171.80
Ourgata	Sonatrach Group	2017	171.80
<b>Total</b>			<b>852.18</b>

Table 4.1.4.3 Liquefaction Plants

Plant	Liquefaction (No. of Trains)	Total Capacity (MTPA)	Status	Start Year	Owner(s)	Operator(s)
GLIZ	6	10.1	Operational	1978	Sonatrach	Sonatrach
GL2Z	6	10.5	Operational	1981	Sonatrach	Sonatrach
GLIK	1	6.0	Operational	2013	Sonatrach	Sonatrach
GL3Z	1	5.8	Operational	2014	Sonatrach	Sonatrach
<b>Total Existing Capacity</b>		<b>32.4</b>				



PLURINATIONAL STATE OF  
**BOLIVIA**



POPULATION

**11 832 936**



CAPITAL

**SUCRE**



CONTINENT

**SOUTH AMERICA**



CURRENCY

**BOLIVIAN BOLIVIANO**



TIME ZONE

**BOLIVIA (GMT-4)**



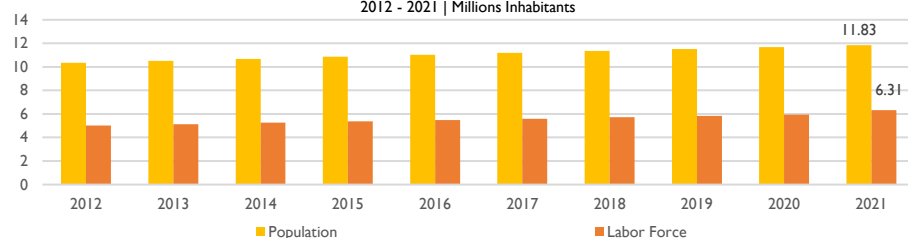
## 4.2.1 Macroeconomics

Table 4.2.1.1 Bolivia Macroeconomic Indicators

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
<b>Population</b> (Inhabitants)	10,356,978	10,521,247	10,685,994	10,851,103	11,016,438	11,181,861	11,347,241	11,512,468	11,677,406	11,832,936
<b>Labor Force</b> (Inhabitants)	5,030,046	5,140,002	5,252,954	5,367,472	5,482,890	5,599,033	5,715,242	5,831,367	5,947,030	6,312,009
<b>GDP</b> (Current Billion US\$)	27.28	30.88	33.24	33.24	34.19	37.78	40.58	41.19	36.84	40.41
<b>GDP Growth</b> (annual %)	5.12	6.80	5.46	4.86	4.26	4.20	4.22	2.22	-8.83	6.11
<b>GDP per capita</b> (Current US\$)	2,634.16	2,935.28	3,110.30	3,063.35	3,103.41	3,378.87	3,576.31	3,578.15	3,154.75	3,414.89
<b>Exports of Goods and Services</b> (Current Billion US\$)	12.87	13.62	14.39	10.26	8.37	9.41	10.55	10.28	7.50	11.24
<b>Exports of Goods and Services</b> (% of GDP)	47.17	44.09	43.29	30.87	24.49	24.90	25.99	24.97	20.37	27.82
<b>Imports of Goods and Services</b> (Current Billion US\$)	10.31	11.47	13.95	12.32	10.91	12.01	12.63	12.95	9.32	12.61
<b>Imports of Goods and Services</b> (% of GDP)	37.78	37.14	41.97	37.06	31.91	31.80	31.12	31.43	25.30	31.19
<b>Inflation consumer prices</b> (annual %)	4.52	5.74	5.76	4.06	3.62	2.82	2.27	1.84	0.94	0.74
<b>Energy use</b> (kg of oil equivalent per capita)	663.11	668.44	714.37	731.92	747.72	736.06	718.88	671.97	586.62	NA
<b>Natural Gas use</b> (Scm per capita)	308.26	320.25	354.37	363.74	405.84	399.54	427.83	392.80	307.92	345.31

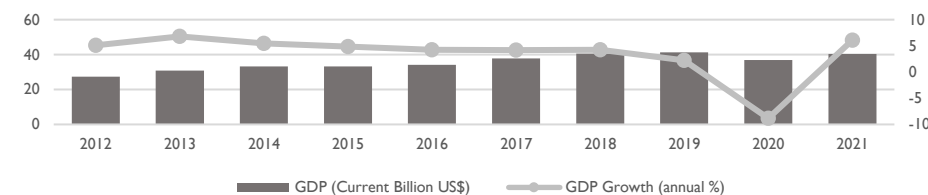
Graph 4.2.1.1. Bolivia: Population and Labor Force

2012 - 2021 | Millions Inhabitants



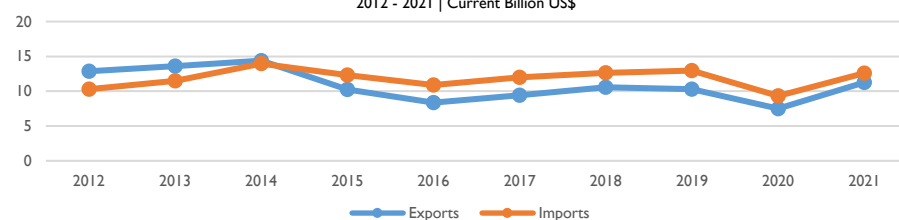
Graph 4.2.1.2. Bolivia: GDP and GDP Growth

2012 - 2021 | Current Billion US\$ and Annual %



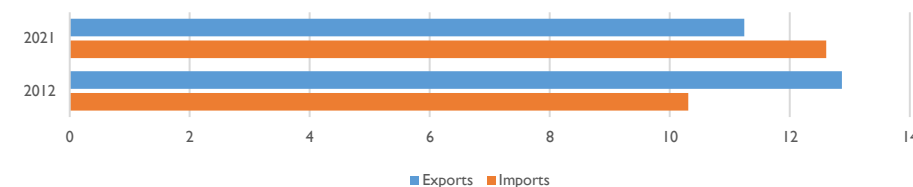
Graph 4.2.1.3. Bolivia: Exports and Imports (Goods and Services)

2012 - 2021 | Current Billion US\$



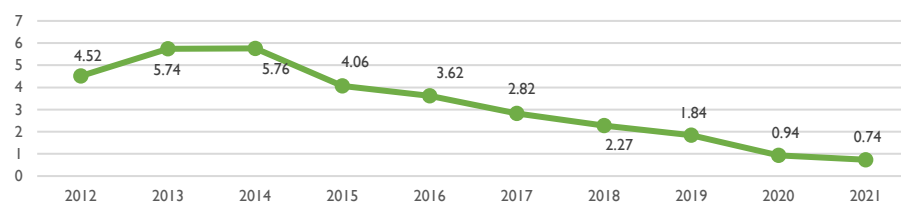
Graph 4.2.1.4. Bolivia: Exports and Imports (Goods and Services)

2012 vs 2021 | Current Billion US\$



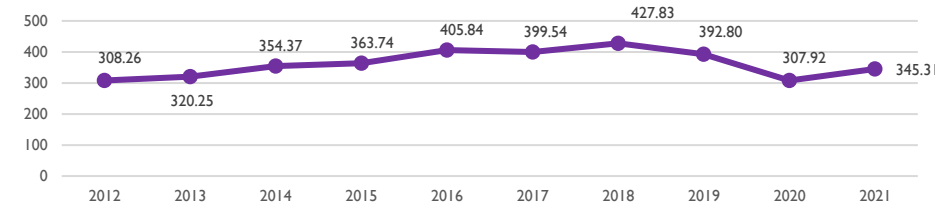
Graph 4.2.1.5. Bolivia: Inflation (Consumer Prices)

2012 - 2021 | Annual %



Graph 4.2.1.6. Bolivia: Natural Gas Use

2012 - 2021 | Scm per Capita



## 4.2.2 Reserves and Production

Table 4.2.2.1 Proven Natural Gas Reserves (Bcm)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
<b>Proven Gas Reserves</b>	231	296	296	296	296	255	253	253	253	253

Table 4.2.2.2 Historical Natural Gas Production (Bcm)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
<b>Gross Production</b>	18.71	21.27	22.39	22.17	21.34	20.70	19.34	17.05	16.38	16.94
<b>Marketed Production</b>	17.95	20.49	21.65	21.49	20.61	20.03	18.70	16.46	15.81	16.44
<b>Flaring</b>	0.23	0.24	0.20	0.18	0.19	0.16	0.08	0.08	0.07	0.06
<b>Shrinkage</b>	0.20	0.21	0.20	0.19	0.18	0.17	0.16	0.13	0.13	0.08
<b>Other losses</b>	0.33	0.34	0.33	0.32	0.36	0.34	0.41	0.37	0.38	0.36

Table 4.2.2.3 Detailed 2021 Natural Gas Production (MMcm)

	2021											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
<b>Gross Production</b>	1494.89	1305.14	1558.98	1398.19	1490.85	1444.79	1477.00	1423.52	1339.71	1336.17	1326.91	1342.64
<b>Marketed Production</b>	1443.45	1259.73	1518.16	1350.19	1451.67	1407.02	1438.05	1385.20	1302.59	1299.16	1282.44	1303.20

## 4.2.3 Domestic Consumption and Trade

Table 4.2.3.1 Domestic Gas Consumption (Bcm)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
<b>Residential</b>	0.08	0.09	0.16	0.18	0.20	0.22	0.22	0.24	0.46	0.26
<b>Industrial</b>	0.81	0.89	0.96	0.96	0.97	0.99	1.01	0.98	0.87	1.00
<b>Power Generation</b>	1.53	1.50	1.74	1.75	2.14	2.02	1.85	1.60	1.44	1.41
<b>Transportation</b>	0.57	0.64	0.67	0.69	0.70	0.74	0.78	0.79	0.32	0.70
<b>Petrochemical (feedstock)</b>	0.11	0.14	0.14	0.19	0.22	0.24	0.59	0.36	0.16	0.30
<b>Refineries</b>	0.09	0.09	0.10	0.13	0.12	0.12	0.11	0.09	0.08	0.08
<b>Others</b>	0.00	0.01	0.02	0.06	0.13	0.14	0.28	0.28	0.14	0.22
<b>Totals</b>	3.19	3.37	3.79	3.95	4.47	4.47	4.85	4.52	3.60	4.09

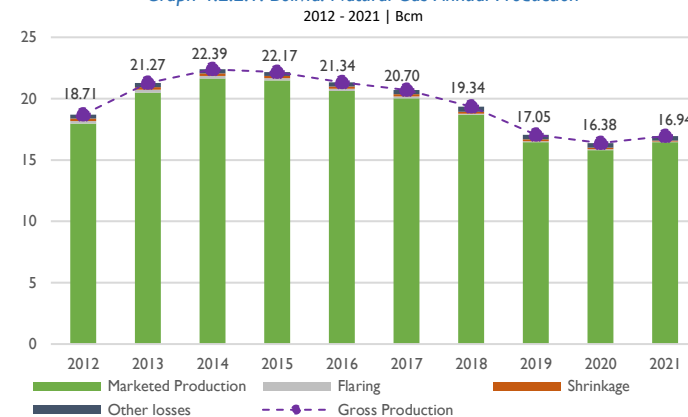
Table 4.2.3.2 Historical Trade: Natural Gas Exports (Bcm)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
<b>Pipeline (Bcm)</b>	14.76	17.12	17.80	17.52	16.08	15.39	13.84	11.75	11.81	11.98
<b>Totals (Bcm)</b>	14.76	17.12	17.80	17.52	16.08	15.39	13.84	11.75	11.81	11.98

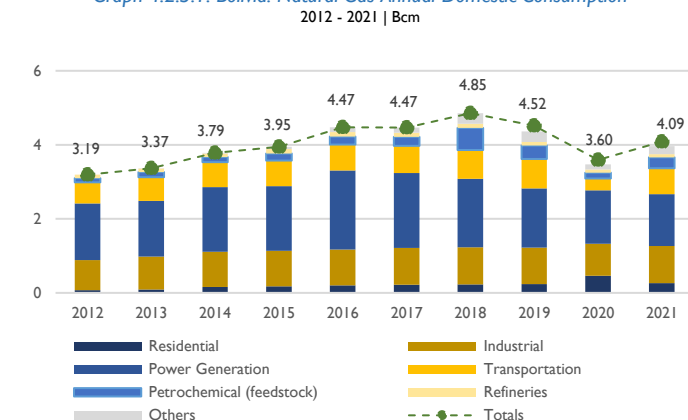
Table 4.2.3.3 Detailed 2021 Trade: Natural Gas Exports (MMcm)

	2021											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
<b>Pipeline (MMcm)</b>	1128.41	950.42	1153.77	1007.67	1071.78	1049.48	1048.68	1007.22	897.02	899.08	871.47	895.93
<b>Totals (MMcm)</b>	1128.41	950.42	1153.77	1007.67	1071.78	1049.48	1048.68	1007.22	897.02	899.08	871.47	895.93

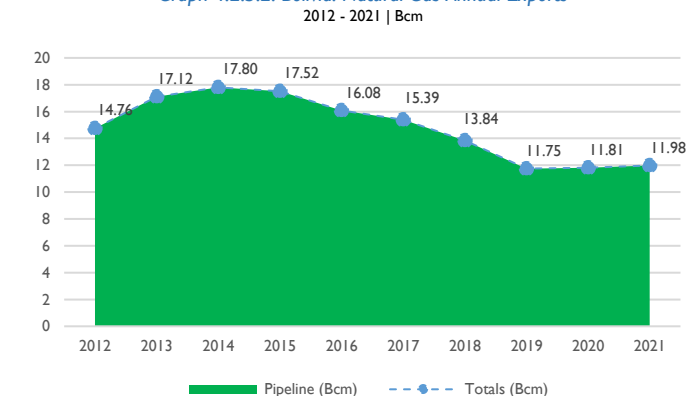
Graph 4.2.2.1. Bolivia: Natural Gas Annual Production



Graph 4.2.3.1. Bolivia: Natural Gas Annual Domestic Consumption



Graph 4.2.3.2. Bolivia: Natural Gas Annual Exports



## 4.2.4 Transport and Plants

Table 4.2.4.1 Natural Gas Export Pipelines

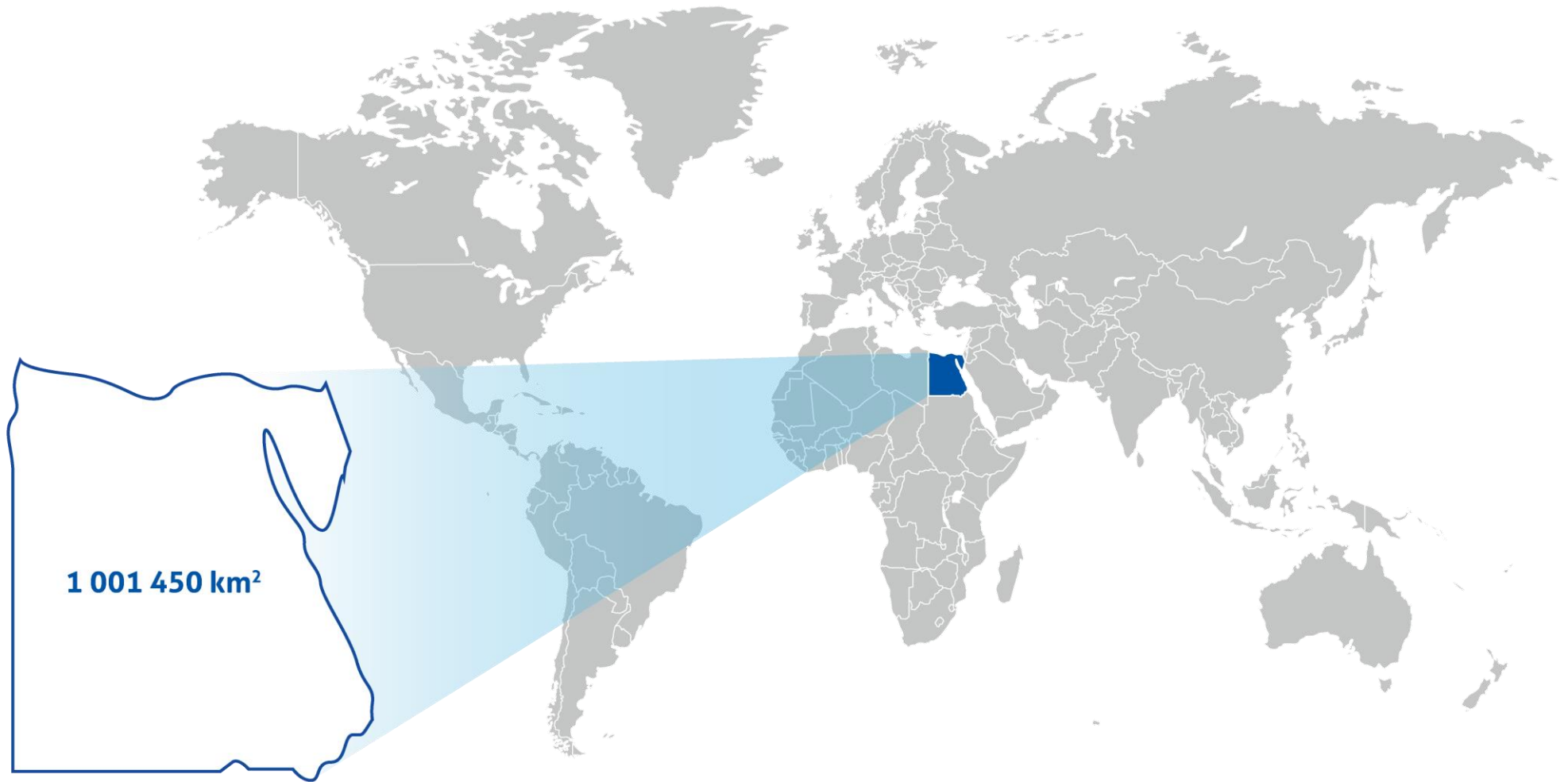
Pipeline	Connection			Owner(s)	Operator(s)	Status	Capacity (Bcm/Year)	Type	Start Year	Length (km)	Diameter (Inches)	
	From	To	Via									
GASBOL	Bolivia	Brazil	-	Gas TransBoliviano	Gas TransBoliviano	Operational	11.5	Export	1999	557	32	
GIJA (Juana Azurduy)	Bolivia	Argentina	-	YPFB Transporte	YPFB Transporte	Operational	10.2	Export	2011	13	32	
GOB	Bolivia	Brazil	-	GasOriente Boliviano	GasOriente Boliviano	Operational	1.5	Export	2002	362	18	
<b>Total Existing Capacity</b>							<b>23.2</b>					

Table 4.2.4.2 Domestic Gas Plants

Plant	Liquefaction (No. of Trains)	Total Capacity (MTPA)	Status	Start Year	Owner(s)	Operator(s)
Rio Grande LNG	1	0.08	Operational	2016	YPFB	YPFB



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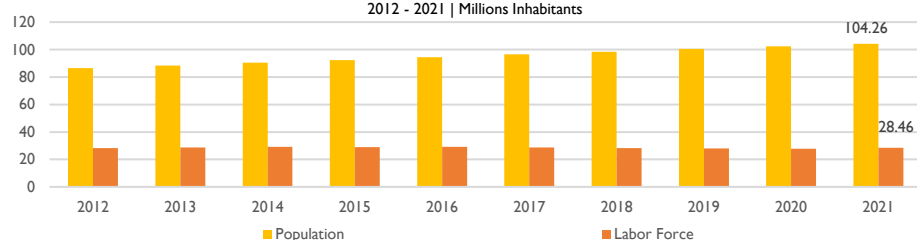
**EASTERN EUROPEAN (GMT+2)**

### 4.3.1 Macroeconomics

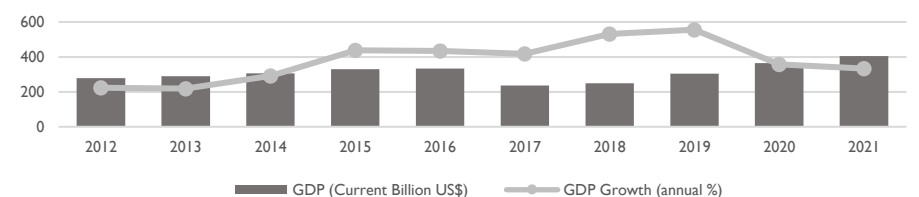
Table 4.3.1.1 Egypt Macroeconomic Indicators

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
<b>Population</b> (Inhabitants)	86,422,240	88,404,652	90,424,668	92,442,549	94,447,071	96,442,590	98,423,602	100,388,076	102,334,403	104,258,327
<b>Labor Force</b> (Inhabitants)	28,199,906	28,717,575	29,084,186	28,961,629	29,254,321	28,747,249	28,245,855	28,036,701	27,870,211	28,462,356
<b>GDP</b> (Current Billion US\$)	279.12	288.43	305.60	329.37	332.44	235.73	249.71	303.08	365.25	404.14
<b>GDP Growth</b> (annual %)	2.23	2.19	2.92	4.37	4.35	4.18	5.31	5.56	3.57	3.33
<b>GDP per capita</b> (Current US\$)	3,229.69	3,262.66	3,379.56	3,562.93	3,519.87	2,444.29	2,537.13	3,019.09	3,569.21	3,876.36
<b>Exports of Goods and Services</b> (Current Billion US\$)	45.77	49.09	43.53	43.42	34.39	37.29	47.23	53.04	47.87	44.85
<b>Exports of Goods and Services</b> (% of GDP)	16.40	17.02	14.24	13.18	10.35	15.82	18.91	17.50	13.11	11.10
<b>Imports of Goods and Services</b> (Current Billion US\$)	67.87	67.36	69.30	71.35	66.16	69.09	73.33	78.01	75.43	81.94
<b>Imports of Goods and Services</b> (% of GDP)	24.31	23.36	22.68	21.66	19.90	29.31	29.37	25.74	20.65	20.28
<b>Inflation consumer prices</b> (annual %)	7.11	9.47	10.07	10.37	13.81	29.51	14.40	9.15	5.04	5.55
<b>Energy use</b> (kg of oil equivalent per capita)	905.59	848.63	827.50	NA	NA	NA	NA	NA	NA	NA
<b>Natural Gas use</b> (Scm per capita)	677.29	579.70	531.32	517.03	542.94	603.02	622.73	603.59	587.97	608.75

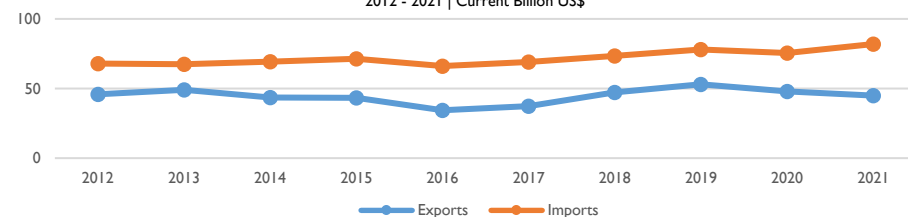
Graph 4.3.1.1. Egypt: Population and Labor Force  
2012 - 2021 | Millions Inhabitants



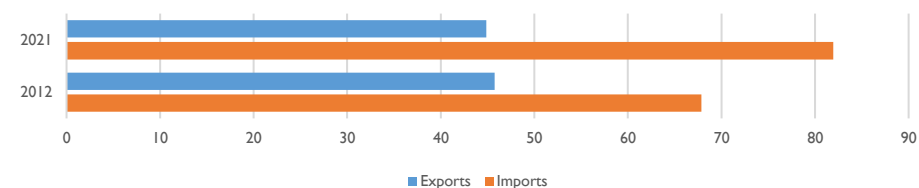
Graph 4.3.1.2. Egypt: GDP and GDP Growth  
2012 - 2021 | Current Billion US\$ and Annual %



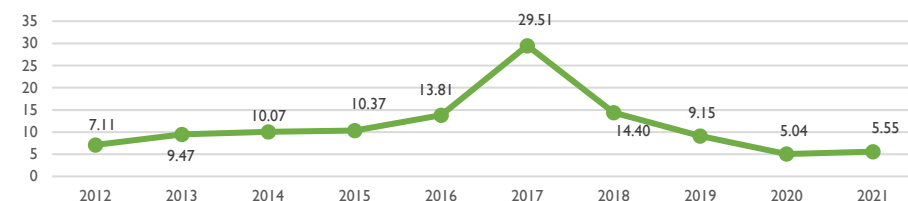
Graph 4.3.1.3. Egypt: Exports and Imports (Goods and Services)  
2012 - 2021 | Current Billion US\$



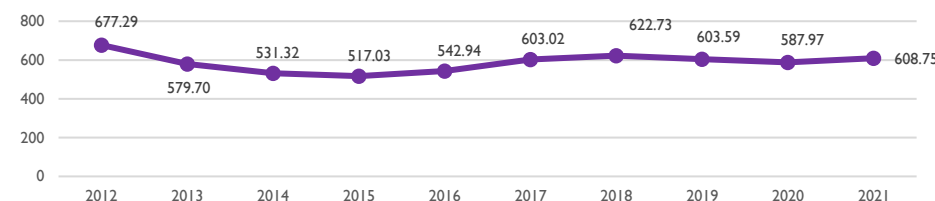
Graph 4.3.1.4. Egypt: Exports and Imports (Goods and Services)  
2021 vs 2021 | Current Billion US\$



Graph 4.3.1.5. Egypt: Inflation (Consumer Prices)  
2012 - 2021 | Annual %



Graph 4.3.1.6. Egypt: Natural Gas Use  
2012 - 2021 | Scm per Capita



### 4.3.2 Reserves and Production

Table 4.3.2.1 Proven Natural Gas Reserves (Bcm)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
<b>Proven Gas Reserves</b>	1,957	1,777	2,186	2,086	2,221	2,221	2,221	2,221	2,209	2,209

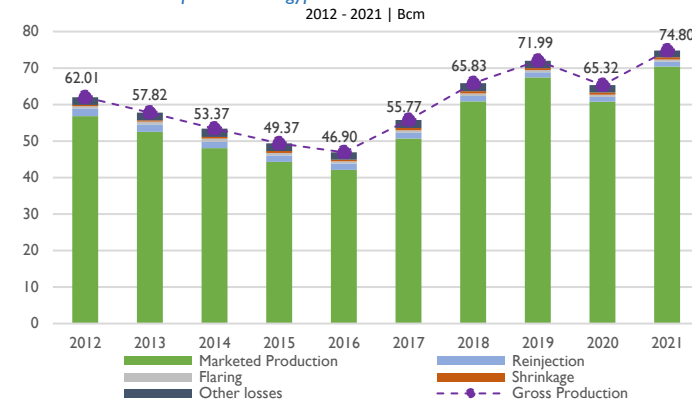
Table 4.3.2.2 Historical Natural Gas Production (Bcm)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
<b>Gross Production</b>	62.01	57.82	53.37	49.37	46.90	55.77	65.83	71.99	65.32	74.80
<b>Marketed Production</b>	56.82	52.49	48.07	44.32	42.10	50.71	60.84	67.47	60.74	70.44
<b>Reinjection</b>	2.08	2.07	1.76	1.76	1.73	1.55	1.50	1.38	1.38	1.32
<b>Flaring</b>	0.68	0.78	0.82	0.70	0.65	0.67	0.66	0.59	0.61	0.58
<b>Shrinkage</b>	0.31	0.34	0.49	0.46	0.40	0.68	0.69	0.58	0.62	0.60
<b>Other losses</b>	2.12	2.15	2.23	2.13	2.02	2.15	2.13	1.98	1.96	1.86

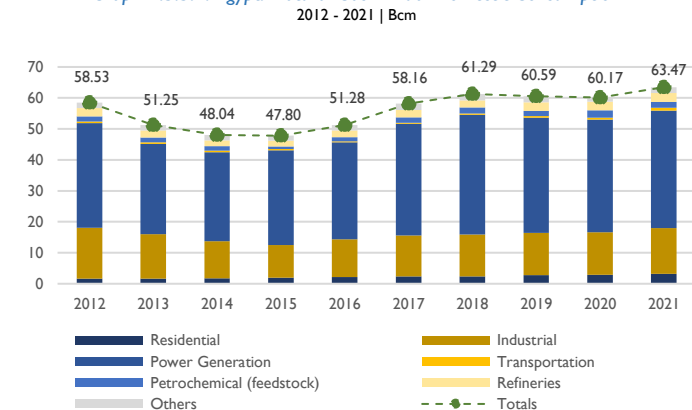
Table 4.3.2.3 Detailed 2021 Natural Gas Production (MMcm)

	2021											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
<b>Gross Production</b>	6183.31	5772.52	6458.89	6152.16	6251.39	6169.87	6380.89	6466.67	6361.99	6293.83	6077.43	6234.79
<b>Marketed Production</b>	5790.18	5479.46	6133.33	5808.40	5840.34	5730.77	6024.46	6081.03	6001.39	5927.30	5746.53	5877.78

Graph 4.3.2.1. Egypt: Natural Gas Annual Production



Graph 4.3.3.1. Egypt: Natural Gas Annual Domestic Consumption



### 4.3.3 Domestic Consumption and Trade

Table 4.3.3.1 Domestic Gas Consumption (Bcm)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
<b>Residential</b>	1.63	1.64	1.79	1.96	2.16	2.36	2.38	2.79	2.92	3.19
<b>Industrial</b>	16.44	14.39	11.99	10.49	12.21	13.23	13.52	13.61	13.66	14.84
<b>Power Generation</b>	33.76	29.07	28.71	30.64	31.25	36.06	38.64	37.23	36.40	37.93
<b>Transportation</b>	0.56	0.53	0.49	0.45	0.39	0.38	0.42	0.55	0.64	0.87
<b>Petrochemical (feedstock)</b>	1.65	1.59	1.40	0.83	1.35	1.70	1.92	1.57	2.37	1.89
<b>Refineries</b>	2.73	2.28	1.90	1.85	2.15	2.40	2.28	2.80	2.84	2.84
<b>Others</b>	1.76	1.73	1.74	1.58	1.77	2.04	2.13	2.04	1.34	1.92
<b>Totals</b>	<b>58.53</b>	<b>51.25</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>

Table 4.3.3.2 Historical Trade: Natural Gas Exports

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
<b>Pipeline (Bcm)</b>	0.58	0.60	0.00	0.00	0.00	0.00	0.00	0.00	0.19	0.57
<b>LNG</b>										
Bcm*	8.72	4.02	0.36	0.00	0.99	1.33	2.45	5.89	2.63	9.96
MMT	6.41	2.96	0.27	0.00	0.73	0.98	1.80	4.33	1.93	7.32
<b>Totals (Bcm)</b>	<b>9.30</b>	<b>4.62</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>

\* Gas equivalent

Table 4.3.3.3 Detailed 2021 Trade: Natural Gas Exports

	2021											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
<b>Pipeline (MMcm)</b>	82.00	95.00	30.72	49.00	31.00	29.70	30.72	54.00	50.00	31.00	51.07	31.00
<b>LNG</b>												
MMcm*	885.00	1.05	1282.08	1059.00	645.00	743.24	547.78	341.00	665.00	1156.00	1315.34	1317.00
1000MT	650.74	0.77	942.71	778.68	474.26	546.50	402.78	250.74	488.97	850.00	967.16	968.38
<b>Totals (MMcm)</b>	<b>967.00</b>	<b>96.05</b>	<b>1312.80</b>	<b>1108.00</b>	<b>676.00</b>	<b>772.94</b>	<b>578.50</b>	<b>395.00</b>	<b>715.00</b>	<b>1187.00</b>	<b>1366.41</b>	<b>1348.00</b>

\* Gas equivalent

Graph 4.3.3.2. Egypt: Natural Gas Exports and Imports

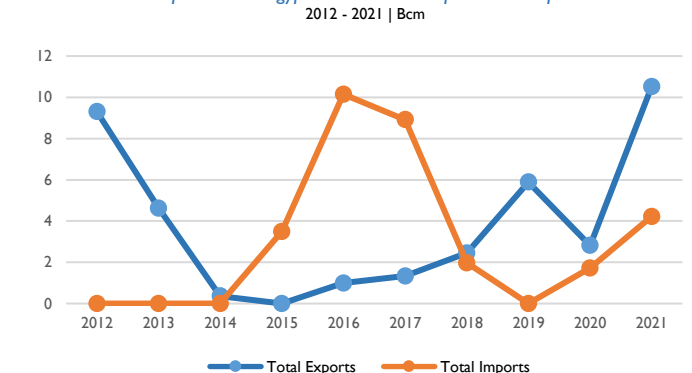


Table 4.3.3.4 Historical Trade: Natural Gas Imports

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
<b>Pipeline (Bcm)</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.72	4.22
Bcm*	0.00	0.00	0.00	3.49	10.15	8.91	1.97	0.00	0.00	0.00
<b>LNG</b>										
MMT	0.00	0.00	0.00	2.57	7.47	6.55	1.45	0.00	0.00	0.00
<b>Totals (Bcm)</b>	<b>0.00</b>	<b>0.00</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>

\* Gas equivalent

Table 4.3.3.5 Detailed 2021 Trade: Natural Gas Imports

	2021											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
<b>Pipeline (MMcm)</b>	354.00	279.62	349.66	358.83	273.37	374.71	332.30	331.84	381.53	417.00	335.52	428.86
MMcm*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>LNG</b>												
1000MT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Totals (MMcm)</b>	<b>354.00</b>	<b>279.62</b>	<b>349.66</b>	<b>358.83</b>	<b>273.37</b>	<b>374.71</b>	<b>332.30</b>	<b>331.84</b>	<b>381.53</b>	<b>417.00</b>	<b>335.52</b>	<b>428.86</b>

\* Gas equivalent

## 4.3.4 Transport and Plants

Table 4.3.4.1 Natural Gas Export Pipelines

Pipeline	Connection			Owner(s)	Operator(s)	Status	Capacity (Bcm/Year)	Type	Start Year	Length (km)	Diameter (Inches)	
	From	To	Via									
Arab Gas Pipeline	Egypt	Jordan, Syria, Lebanon	-	EGAS, ENPPI, GASCOPEPETROJET SPC	Egyptian FAJR	Operational	10.0	Export	2003	1,200	36	
EMG	Israel	Egypt	-	EMG	Israel Natural Gas Lines (INGL)	Operational	7.0-9.0	Import	2020	90	26	
<b>Total Existing Capacity</b>							<b>17.0-19.0</b>					

Table 4.3.4.2 Liquefaction Plants

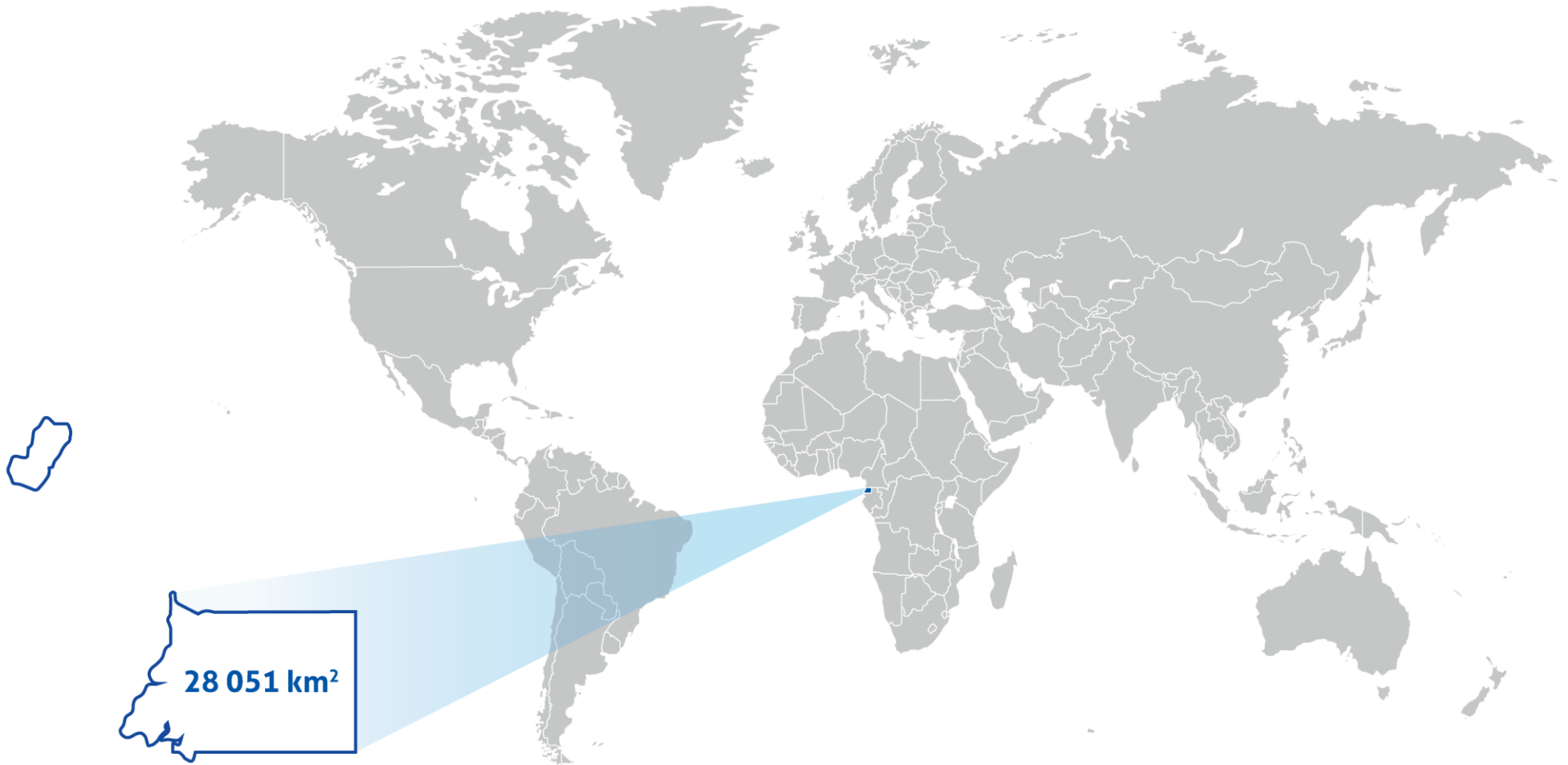
Plant	Liquefaction (No. of Trains)	Total Capacity (MTPA)	Status	Start Year	Owner(s)	Operator(s)
IDKU Egyptian LNG	2	7.2	Operational	2005	Shell, EGAS, EGBC, Petronas, ENGIE	OPCO
Damietta	1	4.8	Operational	2005	EGAS, EGBC, Union Fenosa Gas	SEGAS
<b>Total Existing Capacity</b>		<b>12.0</b>				

Table 4.3.4.3 Regasification Plants

Plant	Total Capacity (MTPA)	Status	Start Year	Owner(s)	Operator(s)
Ain Sokhna FSRU 1	3.0	Operational	2015	Norwegian Hoegh	Norwegian Hoegh
Ain Sokhna FSRU 2	4.5	Offline	2015	Norwegian BW Gas	Norwegian BW Gas
<b>Total Existing Capacity</b>	<b>7.5</b>				



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CONTINENT

**AFRICA**



CURRENCY

**CENTRAL AFRICAN CFA FRANC**



TIME ZONE

**WEST AFRICA (GMT+1)**

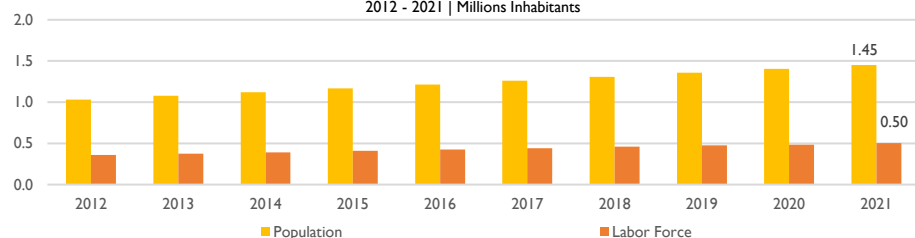


### 4.4.I Macroeconomics

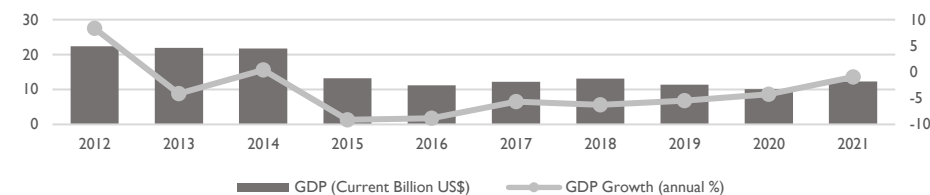
Table 4.4.1.I Equatorial Guinea Macroeconomic Indicators

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
<b>Population</b> (Inhabitants)	1,031,191	1,076,412	1,122,273	1,168,575	1,215,181	1,262,008	1,308,966	1,355,982	1,402,985	1,449,891
<b>Labor Force</b> (Inhabitants)	357,849	374,439	391,238	408,279	424,929	442,090	459,385	476,710	483,616	503,147
<b>GDP</b> (Current Billion US\$)	22.39	21.95	21.77	13.19	11.24	12.20	13.10	11.36	10.10	12.27
<b>GDP Growth</b> (annual %)	8.31	-4.13	0.42	-9.11	-8.82	-5.67	-6.24	-5.48	-4.24	-0.95
<b>GDP per capita</b> (Current US\$)	21,711.15	20,390.74	19,394.08	11,283.40	9,250.32	9,667.86	10,005.62	8,380.74	7,198.34	8,462.29
<b>Exports of Goods and Services</b> (Current Billion US\$)	16.10	14.85	14.36	7.47	5.78	7.18	7.81	5.81	4.39	6.81
<b>Exports of Goods and Services</b> (% of GDP)	71.90	67.65	65.96	56.66	51.41	58.86	59.61	51.13	43.49	55.47
<b>Imports of Goods and Services</b> (Current Billion US\$)	10.02	8.61	8.36	5.57	4.63	5.32	5.77	4.97	4.64	5.72
<b>Imports of Goods and Services</b> (% of GDP)	44.77	39.24	38.42	42.22	41.19	43.57	44.03	43.75	45.94	46.59
<b>Inflation consumer prices</b> (annual %)	3.66	2.95	4.31	1.68	1.41	0.75	1.35	1.24	4.77	2.10
<b>Energy use</b> (kg of oil equivalent per capita)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
<b>Natural Gas use</b> (Scm per capita)	1,410.99	1,365.65	1,282.22	1,101.34	1,310.92	1,248.80	1,162.31	1,095.34	1,336.93	1,559.70

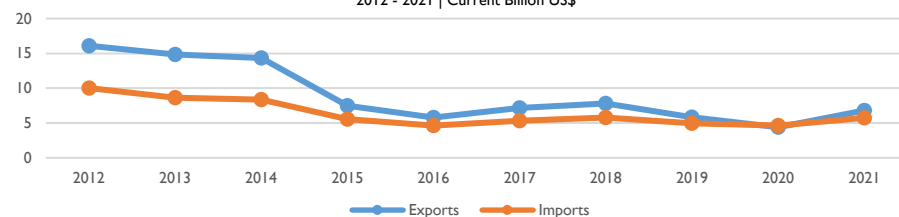
Graph 4.4.1.1. Equatorial Guinea: Population and Labor Force  
2012 - 2021 | Millions Inhabitants



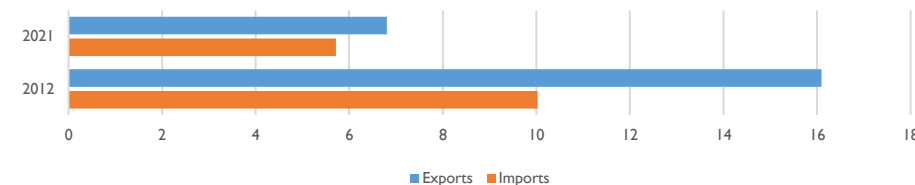
Graph 4.4.1.2. Equatorial Guinea: GDP and GDP Growth  
2012 - 2021 | Current Billion US\$ and Annual %



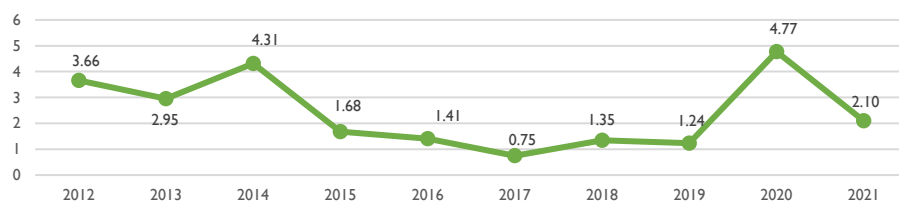
Graph 4.4.1.3. Equatorial Guinea: Exports and Imports (Goods and Services)  
2012 - 2021 | Current Billion US\$



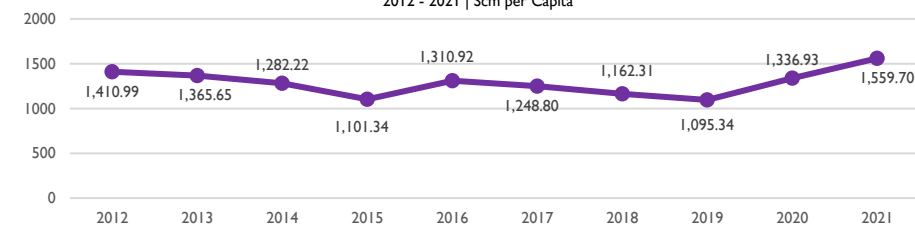
Graph 4.4.1.4. Equatorial Guinea: Exports and Imports (Goods and Services)  
2012 vs 2021 | Current Billion US\$



Graph 4.4.1.5. Equatorial Guinea: Inflation (Consumer Prices)  
2012 - 2021 | Annual %



Graph 4.4.1.6. Equatorial Guinea: Natural Gas Use  
2012 - 2021 | Scm per Capita



## 4.4.2 Reserves and Production

Table 4.4.2.1 Proven Natural Gas Reserves (Bcm)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
<b>Proven Gas Reserves</b>	71	66	60	54	47	42	42	39	39	39

Table 4.4.2.2 Historical Natural Gas Production (Bcm)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
<b>Gross Production</b>	11.94	13.99	13.66	15.45	14.76	13.80	12.96	12.20	11.15	9.97
<b>Marketed Production</b>	8.22	8.41	8.23	7.44	7.88	8.24	7.75	6.74	6.02	7.04
<b>Reinjection</b>	1.33	3.04	3.03	5.62	4.62	3.53	3.43	3.71	3.44	1.51
<b>Flaring</b>	1.42	1.33	1.22	1.27	0.97	0.76	0.78	0.60	0.66	0.48
<b>Shrinkage</b>	NA	NA	NA	NA	NA	NA	NA	NA	0.13	0.13
<b>Other losses</b>	0.98	1.20	1.17	1.11	1.29	1.27	1.00	1.14	0.90	0.81

Table 4.4.2.3 Detailed 2021 Natural Gas Production (MMcm)

	2021											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
<b>Gross Production</b>	698.84	710.20	899.60	885.10	908.98	887.09	934.94	936.01	785.22	586.79	844.48	895.85
<b>Marketed Production</b>	465.12	503.10	671.32	666.16	681.14	677.23	713.02	718.97	544.10	113.15	619.40	673.95

## 4.4.3 Domestic Consumption and Trade

Table 4.4.3.1 Domestic Gas Consumption (Bcm)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
<b>Power Generation</b>	0.23	0.22	0.22	0.26	0.29	0.28	0.28	0.31	0.29	0.30
<b>Petrochemical (feedstock)</b>	1.23	1.25	1.22	1.03	1.30	1.30	1.24	1.18	1.01	1.17
<b>Others</b>	NA	NA	NA	NA	NA	NA	NA	NA	0.58	0.78
<b>Totals</b>	1.46	1.47	1.44	1.29	1.59	1.58	1.52	1.49	1.88	2.26

Table 4.4.3.2 Historical Trade: Natural Gas Exports

LNG		2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
		Bcm*	5.55	5.77	5.87	5.30	5.31	5.88	5.24	4.45	4.03
	MMT	4.08	4.25	4.31	3.89	3.90	4.32	3.85	3.27	2.96	3.45
<b>Totals (Bcm)</b>		5.55	5.77	5.87	5.30	5.31	5.88	5.24	4.45	4.03	4.69

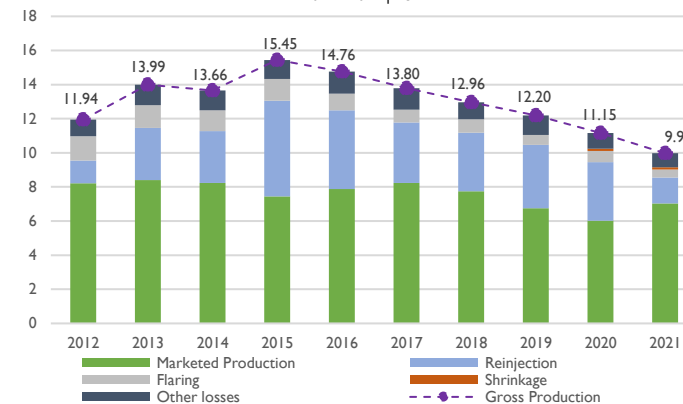
\* Gas equivalent

Table 4.4.3.3 Detailed 2021 Trade: Natural Gas Exports

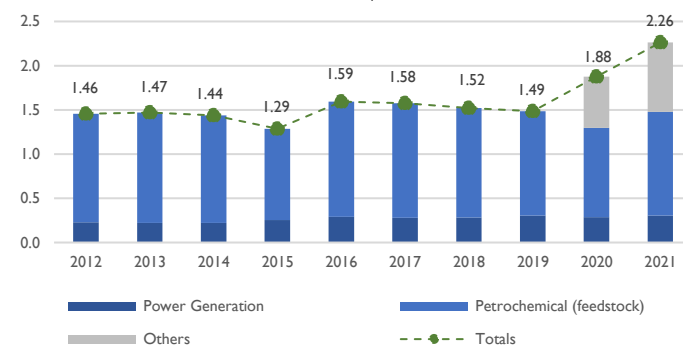
LNG		2021											
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
	MMcm*	220.83	344.06	440.65	525.57	419.62	531.38	438.39	525.72	411.84	0.00	414.48	421.07
	1000MT	162.37	252.98	324.01	386.45	308.55	390.72	322.34	386.56	302.82	0.00	304.77	309.61
<b>Totals (MMcm)</b>		220.83	344.06	440.65	525.57	419.62	531.38	438.39	525.72	411.84	0.00	414.48	421.07

\* Gas equivalent

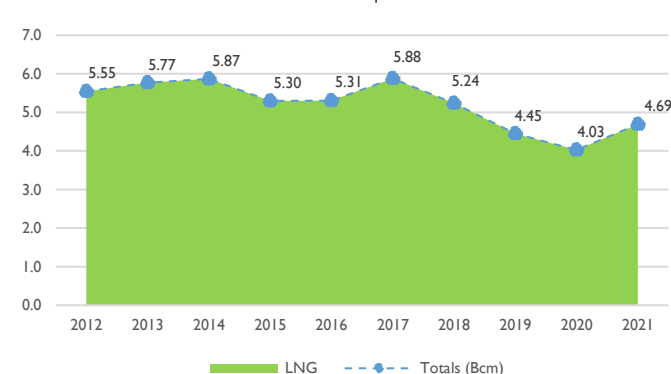
Graph 4.4.2.1. Equatorial Guinea: Natural Gas Annual Production 2012 - 2021 | Bcm



Graph 4.4.3.1. Equatorial Guinea: Natural Gas Annual Domestic Consumption 2012 - 2021 | Bcm



Graph 4.4.3.2. Equatorial Guinea: Natural Gas Annual Exports 2012 - 2021 | Bcm



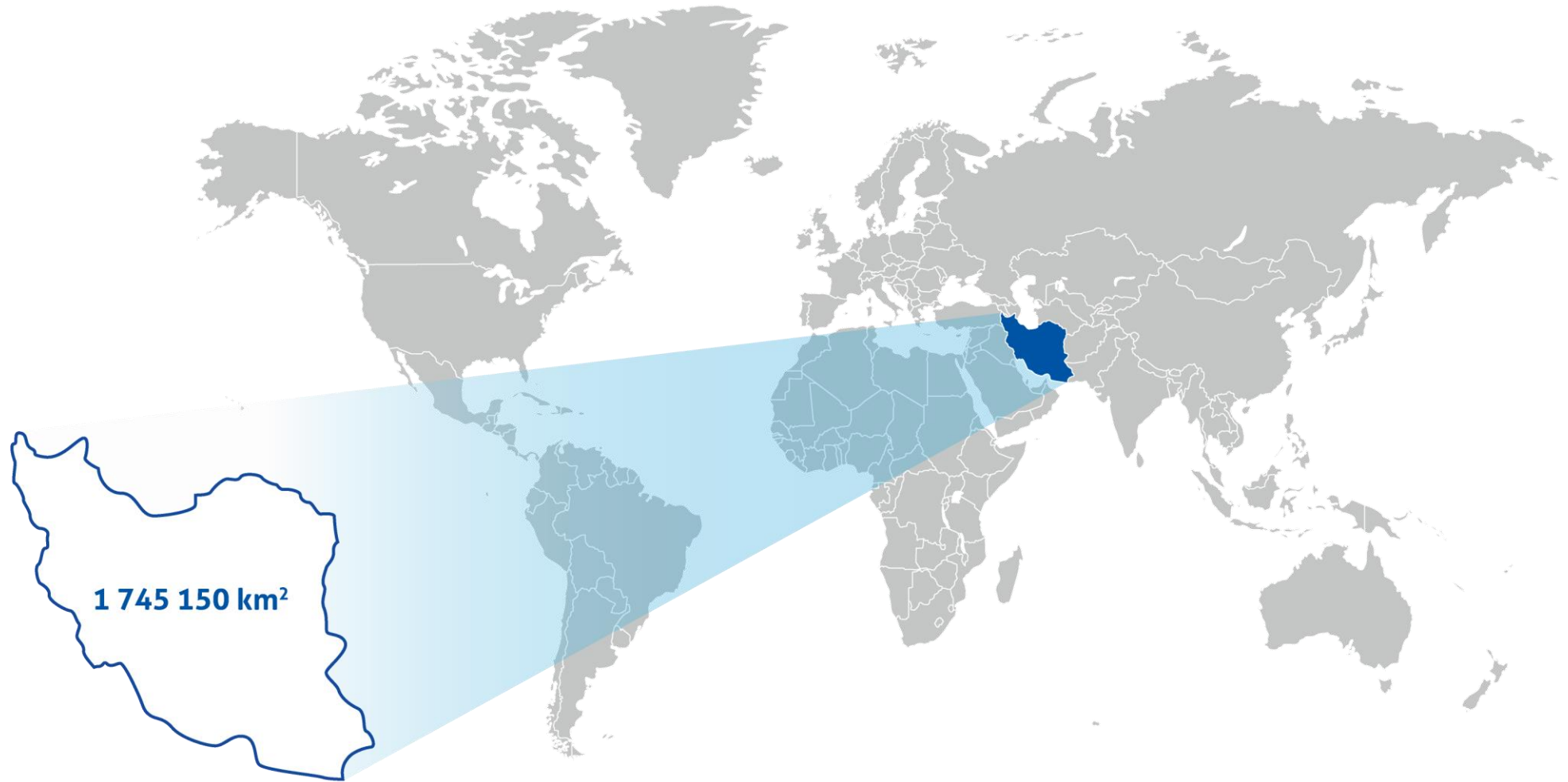
## 4.4.4 Transport and Plants

Table 4.4.4.1 Liquefaction Plants

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



ISLAMIC REPUBLIC OF  
**IRAN**



POPULATION

85 028 760



CAPITAL

TEHRAN



CONTINENT

MIDDLE EAST



CURRENCY

IRANIAN RIYAL



TIME ZONE

IRAN STANDARD (GMT+3.5)

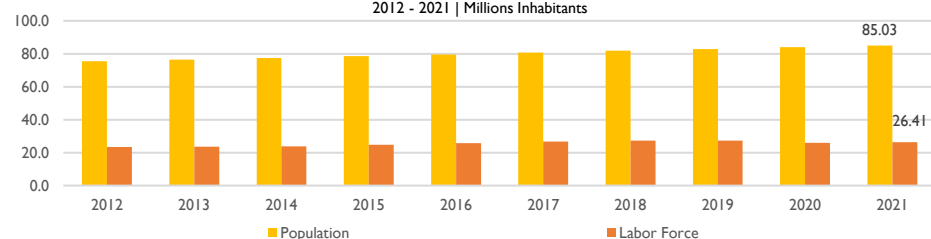
## 4.5.1 Macroeconomics

Table 4.5.1.1 Iran Macroeconomic Indicators

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
<b>Population</b> (Inhabitants)	75,539,881	76,481,963	77,465,769	78,492,208	79,563,991	80,673,888	81,800,204	82,913,893	83,992,953	85,028,760
<b>Labor Force</b> (Inhabitants)	23,379,009	23,663,015	23,762,811	24,705,761	25,742,459	26,730,481	27,200,998	27,293,909	25,884,148	26,410,385
<b>GDP</b> (Current Billion US\$)	644.04	492.78	460.38	408.21	457.95	486.63	330.99	291.36	231.55	NA
<b>GDP Growth</b> (annual %)	-3.75	-1.52	4.98	-1.42	8.82	2.76	-2.25	-1.34	1.76	NA
<b>GDP per capita</b> (Current US\$)	8,525.77	6,443.03	5,943.05	5,200.68	5,755.80	6,032.07	4,046.34	3,514.04	2,756.75	NA
<b>Exports of Goods and Services</b> (Current Billion US\$)	144.75	124.10	105.11	76.42	96.91	110.64	100.02	66.17	48.05	NA
<b>Exports of Goods and Services</b> (% of GDP)	22.48	25.18	22.83	18.72	21.16	22.74	30.22	22.71	20.75	NA
<b>Imports of Goods and Services</b> (Current Billion US\$)	139.20	107.94	103.68	84.51	88.05	107.10	93.23	79.66	59.11	NA
<b>Imports of Goods and Services</b> (% of GDP)	21.61	21.90	22.52	20.70	19.23	22.01	28.17	27.34	25.53	NA
<b>Inflation consumer prices</b> (annual %)	27.26	36.60	16.61	12.48	7.25	8.04	18.01	39.91	30.59	NA
<b>Energy use</b> (kg of oil equivalent per capita)	2,869.33	2,889.11	3,060.39	NA	NA	NA	NA	NA	NA	NA
<b>Natural Gas use</b> (Scm per capita)	2,281.31	2,243.27	2,427.14	2,585.86	2,653.84	2,699.26	2,785.14	2,788.68	2,774.01	2,837.28

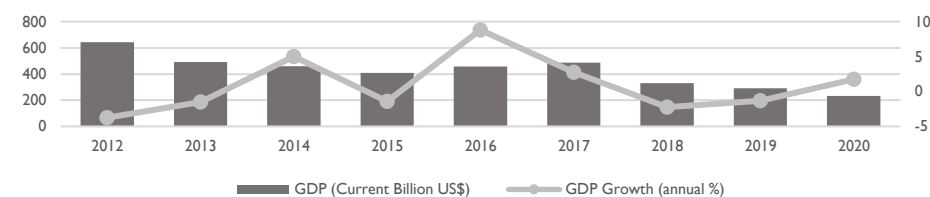
Graph 4.5.1.1. Iran: Population and Labor Force

2012 - 2021 | Millions Inhabitants



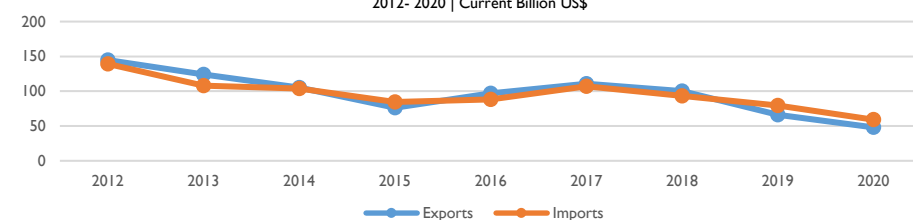
Graph 4.5.1.2. Iran: GDP and GDP Growth

2012 - 2020 | Current Billion US\$ and Annual %



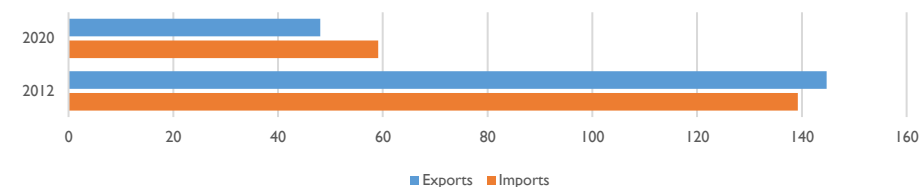
Graph 4.5.1.3. Iran: Exports and Imports (Goods and Services)

2012 - 2020 | Current Billion US\$



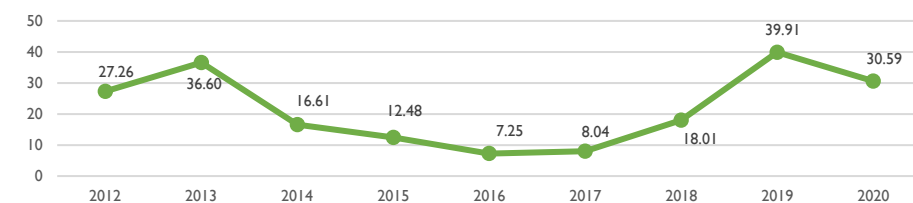
Graph 4.5.1.4. Iran: Exports and Imports (Goods and Services)

2012 vs 2020 | Current Billion US\$



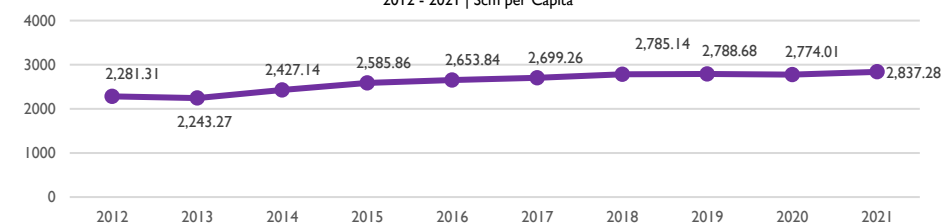
Graph 4.5.1.5. Iran: Inflation (Consumer Prices)

2012 - 2020 | Annual %



Graph 4.5.1.6. Iran: Natural Gas Use

2012 - 2021 | Scm per Capita



## 4.5.2 Reserves and Production

Table 4.5.2.1 Proven Natural Gas Reserves (Bcm)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
<b>Proven Gas Reserves</b>	33,780	34,020	34,020	33,500	33,721	33,810	33,899	33,988	33,988	33,988

Table 4.5.2.2 Historical Natural Gas Production (Bcm)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
<b>Gross Production</b>	229.14	229.83	245.68	256.98	277.39	301.45	311.49	322.50	329.86	334.53
<b>Marketed Production</b>	172.31	171.57	188.02	202.97	211.14	217.80	233.06	241.73	249.63	256.88
<b>Reinjection</b>	28.72	29.61	28.08	28.90	31.69	31.09	33.57	32.86	31.10	31.98
<b>Shrinkage</b>	8.80	7.99	9.45	10.68	11.82	12.94	12.64	11.97	10.43	11.10
<b>Other losses</b>	19.31	20.66	20.13	14.43	22.74	39.62	31.31	34.86	34.70	34.57

## 4.5.3 Domestic Consumption and Trade

Table 4.5.3.1 Domestic Gas Consumption (Bcm)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
<b>Residential</b>	78.03	78.45	83.35	81.98	85.17	88.85	93.98	97.32	99.95	103.74
<b>Industrial</b>	23.10	23.28	22.40	25.85	28.67	31.55	32.80	33.56	35.08	36.61
<b>Power Generation</b>	38.12	36.70	45.35	56.87	62.03	65.48	67.52	68.19	68.55	68.79
<b>Transportation</b>	6.65	6.65	7.05	7.37	7.56	7.59	8.12	8.37	8.65	8.95
<b>Petrochemical (feedstock)</b>	4.55	3.70	4.19	4.54	5.07	5.82	5.85	5.17	5.24	5.25
<b>Refineries</b>	7.14	7.71	8.13	7.13	5.54	5.13	5.65	5.95	5.32	5.88
<b>Others</b>	14.74	15.08	17.55	19.23	17.11	13.34	13.90	12.66	10.20	12.03
<b>Totals</b>	172.33	171.57	188.02	202.97	211.15	217.76	227.82	231.22	233.00	241.25

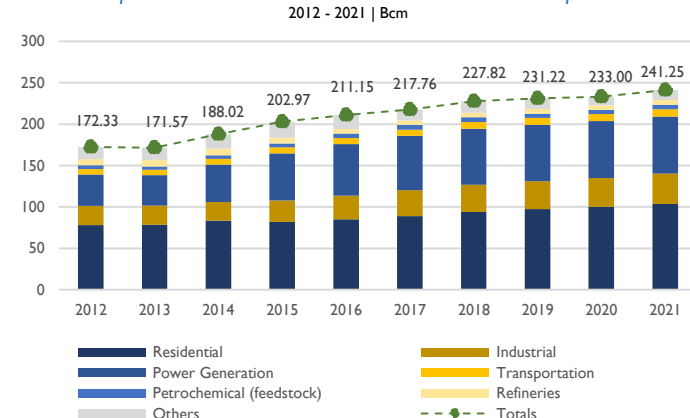
Table 4.5.3.2 Historical Trade: Natural Gas Exports (Bcm)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
<b>Pipeline (Bcm)</b>	9.18	9.54	9.76	8.60	8.65	12.89	13.24	18.35	15.52	17.60
<b>Totals (Bcm)</b>	9.18	9.54	9.76	8.60	8.65	12.89	13.24	18.35	15.52	17.60

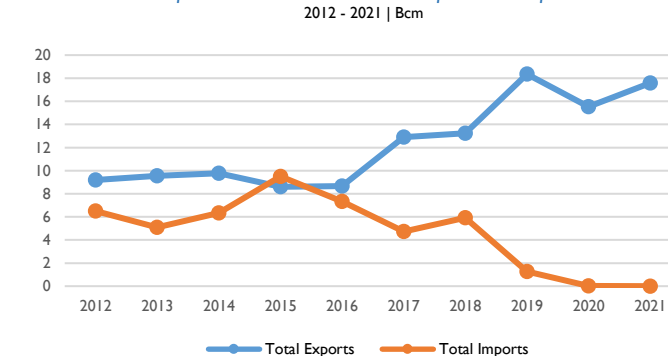
Graph 4.5.2.1. Iran: Natural Gas Annual Production 2012 - 2021 | Bcm



Graph 4.5.3.1. Iran: Natural Gas Annual Domestic Consumption 2012 - 2021 | Bcm



Graph 4.5.3.2. Iran: Natural Gas Exports and Imports 2012 - 2021 | Bcm



## 4.5.4 Transport and Plants

Table 4.5.4.1 Natural Gas Export Pipelines

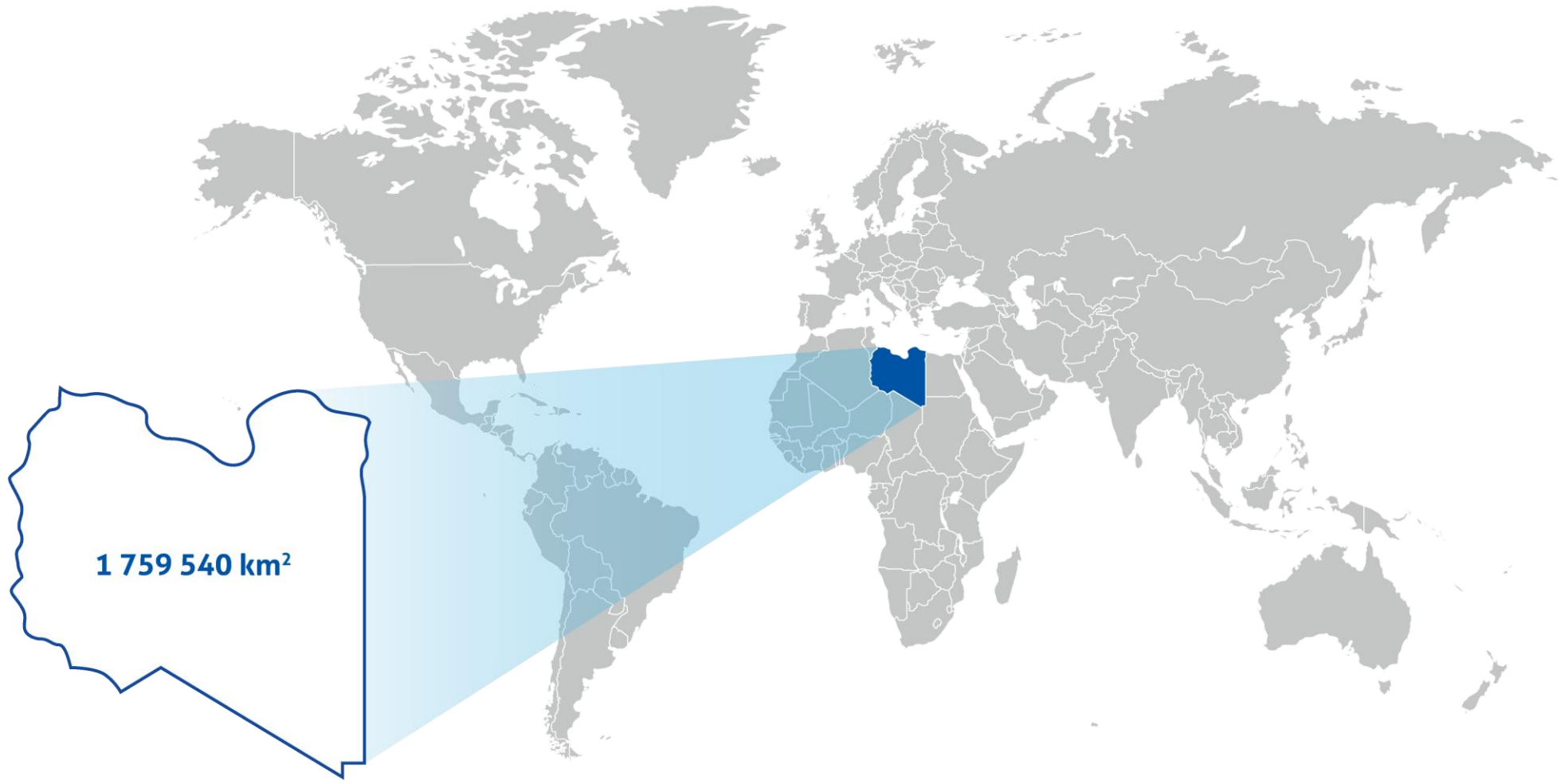
Pipeline	Connection			Owner(s)	Operator(s)	Status	Capacity (Bcm/Year)	Type	Start Year	Length (km)	Diameter (Inches)	
	From	To	Via									
Tabriz-Ankara	Iran	Turkey	-	NIOC, Botas	NIOC, Botas	Operational	14.0	Export	2002	3,250	40	
Jolfa-Nakhchivan	Iran	Azerbaijan	-	NIGC, SOCAR	NIGC, SOCAR	Operational	10.0	Swap	2005	627	40	
Tabriz-Sardanian	Iran	Armenia	-	NIOC, Armenia Gazprom	NIOC, Armenia Gazprom	Operational	2.3	Export	2006	140	30	
Asaluye-Baghdad	Iran	Iraq	-	NIOC, INOC	NIOC, INOC	Operational	12.8	Export	2017	230	NA	
Dauletabad-Khangiran	Turkmenistan	Iran	-	Turkmengaz	Turkmengaz	Operational	12.0	Import	2007	182	48	
Asaluye-Basrah	Iran	Iraq	-	NIOC, INOC	NIOC, INOC	Operational	NA	Export	NA	NA	NA	
Asaluye-Nawabshah	Iran	Pakistan	-	NIOC, SNGPL, SSGC, Gazprom JSC	NIOC, SNGPL, SSGC, Gazprom JSC	Proposed	40.0	Export	NA	2,775	56	
Asaluye-Sohar	Iran	Oman	-	NIOC, OGC	NIOC, OGC	Planned	9.9	Export	2020	NA	NA	
<b>Total Expected Capacity</b>							<b>+101.0</b>					

Table 4.5.4.2 Liquefaction Plants

Plant	Liquefaction (No. of Trains)	Total Capacity (MTPA)	Status	Start Year	Owner(s)	Operator(s)
Iran FLNG	1	0.7	Cancelled	-	-	-



STATE OF  
**LIBYA**



POPULATION

**6 958 538**



CAPITAL

**TRIPOLI**



CONTINENT

**AFRICA**



CURRENCY

**LIBYAN DINAR**



TIME ZONE

**EASTERN EUROPEAN (GMT+2)**

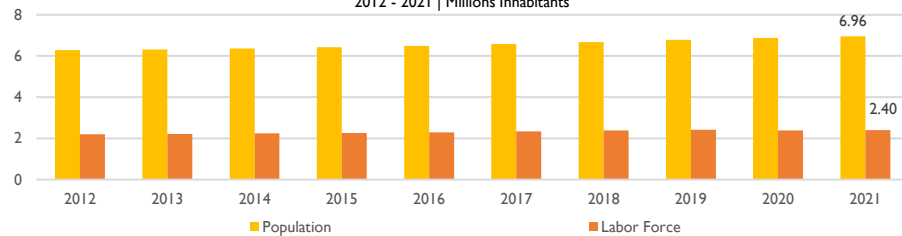


### 4.6.I Macroeconomics

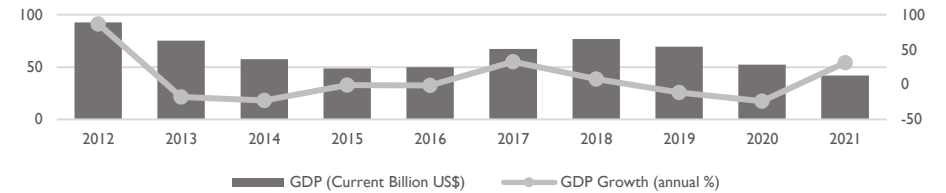
Table 4.6.1.1 Libya Macroeconomic Indicators

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
<b>Population</b> (Inhabitants)	6,285,751	6,320,350	6,362,039	6,418,315	6,492,160	6,580,723	6,678,565	6,777,453	6,871,287	6,958,538
<b>Labor Force</b> (Inhabitants)	2,137,675	2,146,672	2,157,704	2,173,488	2,201,903	2,236,944	2,276,671	2,318,129	2,337,057	2,403,613
<b>GDP</b> (Current Billion US\$)	92.54	75.35	57.37	48.72	49.91	67.16	76.68	69.25	52.32	41.88
<b>GDP Growth</b> (annual %)	86.83	-18.00	-23.04	-0.84	-1.49	32.49	7.94	-11.20	-23.93	31.37
<b>GDP per capita</b> (Current US\$)	14,721.87	11,921.91	9,017.93	7,590.44	7,687.88	10,205.32	11,482.13	10,218.04	7,614.33	6,018.45
<b>Exports of Goods and Services</b> (Current Billion US\$)	61.88	45.13	18.50	10.83	7.28	18.27	30.38	29.66	8.61	NA
<b>Exports of Goods and Services</b> (% of GDP)	66.87	59.89	32.24	22.23	14.58	27.20	39.61	42.84	33.89	NA
<b>Imports of Goods and Services</b> (Current Billion US\$)	29.02	35.00	25.41	16.89	13.24	13.67	18.53	24.50	20.38	NA
<b>Imports of Goods and Services</b> (% of GDP)	31.36	46.45	44.29	34.68	26.53	20.35	24.17	35.37	38.95	NA
<b>Inflation consumer prices</b> (annual %)	6.06	2.61	NA	NA	NA	NA	NA	NA	NA	NA
<b>Energy use</b> (kg of oil equivalent per capita)	2,744.01	3,071.82	2,808.65	NA	NA	NA	NA	NA	NA	NA
<b>Natural Gas use</b> (Scm per capita)	1,545.08	1,809.73	1,598.70	1,354.35	1,309.32	1,240.33	1,245.49	1,238.68	1,138.31	1,287.63

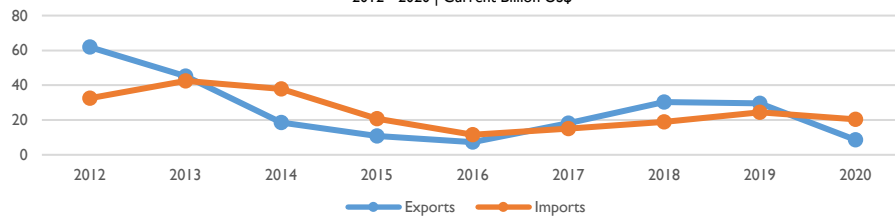
Graph 4.6.1.1. Libya: Population and Labor Force  
2012 - 2021 | Millions Inhabitants



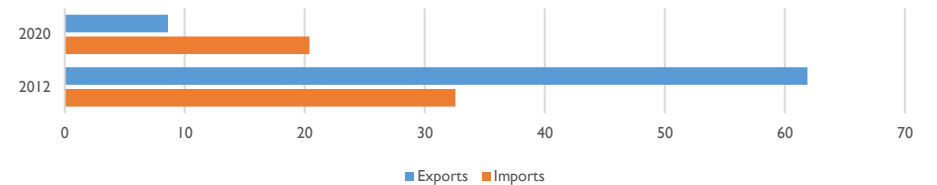
Graph 4.6.1.2. Libya: GDP and GDP Growth  
2012 - 2021 | Current Billion US\$ and Annual %



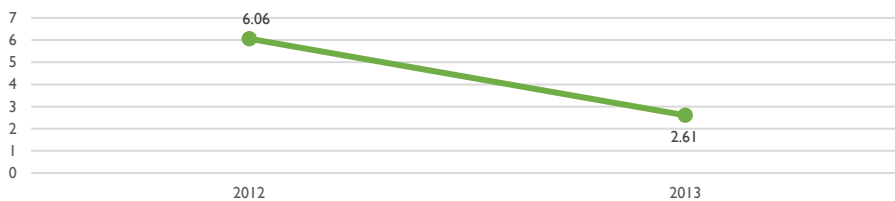
Graph 4.6.1.3. Libya: Exports and Imports (Goods and Services)  
2012 - 2020 | Current Billion US\$



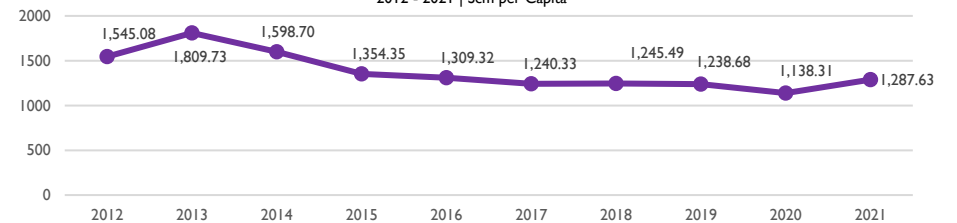
Graph 4.6.1.4. Libya: Exports and Imports (Goods and Services)  
2012 vs 2020 | Current Billion US\$



Graph 4.6.1.5. Libya: Inflation (Consumer Prices)  
2012 - 2013 | Annual %



Graph 4.6.1.6. Libya: Natural Gas Use  
2012 - 2021 | Scm per Capita



## 4.6.2 Reserves and Production

Table 4.6.2.1 Proven Natural Gas Reserves (Bcm)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
<b>Proven Gas Reserves</b>	1,549	1,506	1,505	1,505	1,505	1,505	1,505	1,505	1,505	1,505

Table 4.6.2.2 Historical Natural Gas Production (Bcm)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
<b>Gross Production</b>	23.44	22.88	20.94	22.56	24.59	27.55	30.32	32.66	25.54	31.17
<b>Marketed Production</b>	16.07	16.99	16.59	15.15	18.72	20.69	23.22	26.73	20.93	23.68
<b>Reinjection</b>	1.40	1.15	0.00	0.00	0.00	0.00	1.49	2.27	0.98	2.53
<b>Flaring</b>	3.92	3.25	2.12	2.70	2.21	3.38	3.61	3.67	1.98	3.46
<b>Other losses</b>	2.05	1.49	2.23	4.71	3.65	3.48	1.99	0.00	1.65	0.00

Table 4.6.2.3 Detailed 2021 Natural Gas Production (MMcm)

	2021											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
<b>Gross Production</b>	2667.20	2657.90	2622.60	2287.30	2580.90	2533.80	2123.10	2489.30	2609.60	NA	NA	NA
<b>Marketed Production</b>	2115.50	2084.60	2572.00	1774.90	2006.00	1966.60	1592.50	1904.10	2056.00	NA	NA	NA

## 4.6.3 Domestic Consumption and Trade

Table 4.6.3.1 Domestic Gas Consumption (Bcm)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
<b>Residential</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Industrial</b>	0.66	1.28	1.32	0.76	0.67	0.59	0.67	0.92	0.74	1.22
<b>Power Generation</b>	7.93	8.87	7.77	6.69	7.36	7.13	7.20	7.47	6.95	7.34
<b>Petrochemical (feedstock)</b>	0.91	0.93	0.72	1.08	0.46	0.44	0.44	0.00	0.13	0.41
<b>Refineries</b>	0.22	0.36	0.36	0.17	0.00	0.00	0.00	0.00	0.00	0.00
<b>Totals</b>	9.71	11.44	10.17	8.69	8.50	8.16	8.32	8.40	7.82	8.96

Table 4.6.3.2 Historical Trade: Natural Gas Exports

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
<b>Pipeline (Bcm)</b>	6.35	5.55	6.42	7.03	5.60	5.04	5.63	7.11	4.87	3.09
<b>Totals (Bcm)</b>	6.35	5.55	6.42	7.03	5.60	5.04	5.63	7.11	4.87	3.09

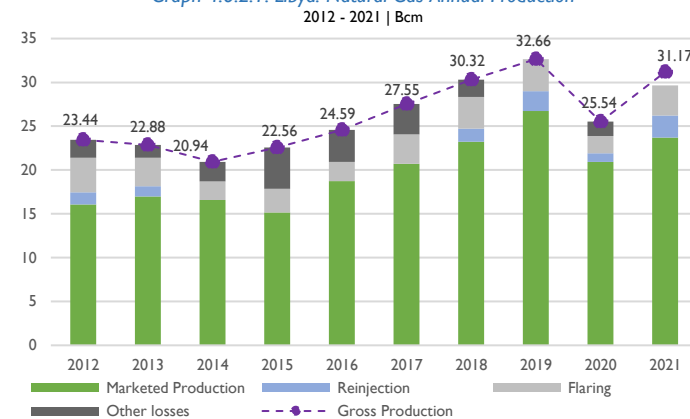
\* Gas equivalent

Table 4.6.3.3 Detailed 2021 Trade: Natural Gas Exports

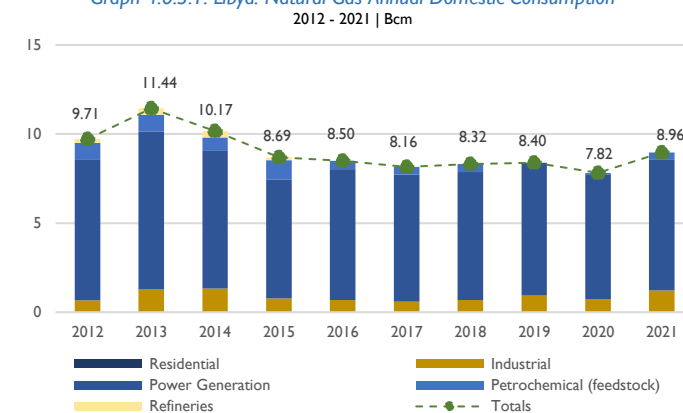
	2021											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
<b>Pipeline (MMcm)</b>	276.90	345.10	351.00	147.10	315.10	312.40	76.60	320.40	NA	NA	NA	NA
<b>Totals (MMcm)</b>	276.90	345.10	351.00	147.10	315.10	312.40	76.60	320.40	NA	NA	NA	NA

\* Gas equivalent

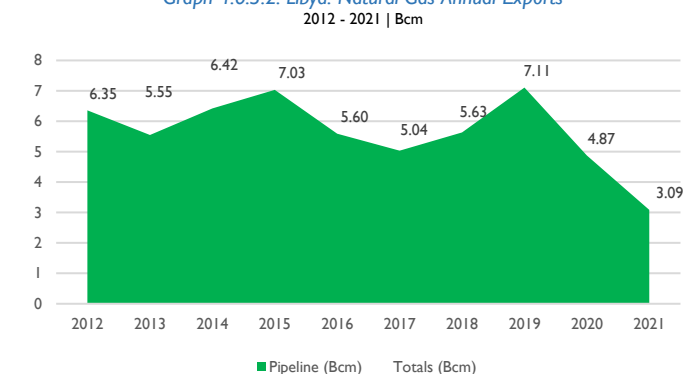
Graph 4.6.2.1. Libya: Natural Gas Annual Production



Graph 4.6.3.1. Libya: Natural Gas Annual Domestic Consumption



Graph 4.6.3.2. Libya: Natural Gas Annual Exports



## 4.6.4 Transport and Plants

Table 4.6.4.1 Natural Gas Export Pipelines

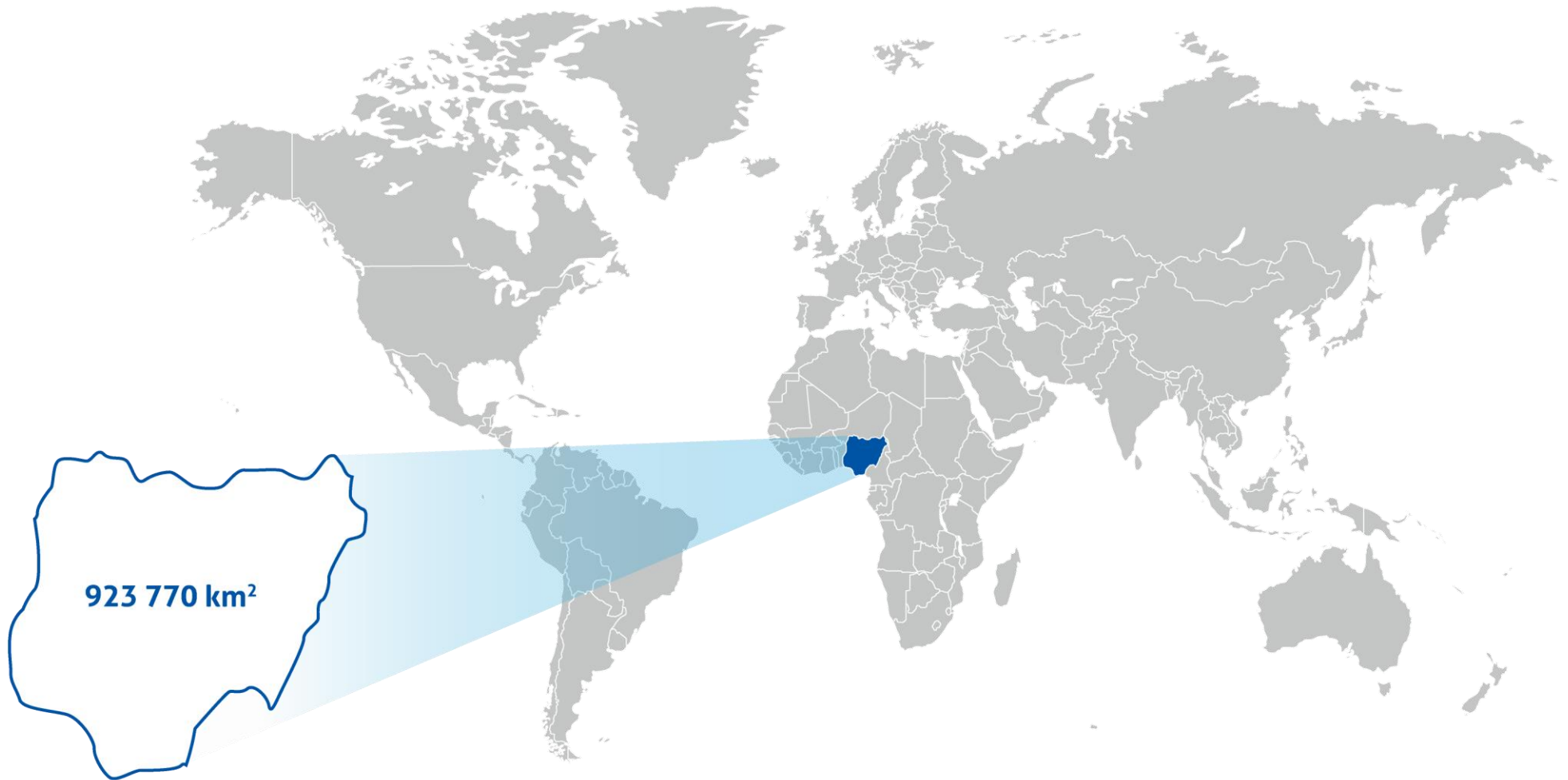
Pipeline	Connection			Owner(s)	Operator(s)	Status	Capacity (Bcm/Year)	Type	Start Year	Length (km)	Diameter (Inches)
	From	To	Via								
Green Stream	Libya	Sicily	-	Green Stream	Green Stream	Operational	11.0	Export	2004	520	32

Table 4.6.4.2 Liquefaction Plants

Plant	Liquefaction (No. of Trains)	Total Capacity (MTPA)	Status	Start Year	Owner(s)	Operator(s)
Marsa al Brega	1	3.2	Decommissioned	1960	Libya NOC	Sirte Oil Company



FEDERAL REPUBLIC OF  
**NIGERIA**



POPULATION

**211 400 704**



CAPITAL

**ABUJA**



CONTINENT

**AFRICA**



CURRENCY

**NIGERIAN NAIRA**



TIME ZONE

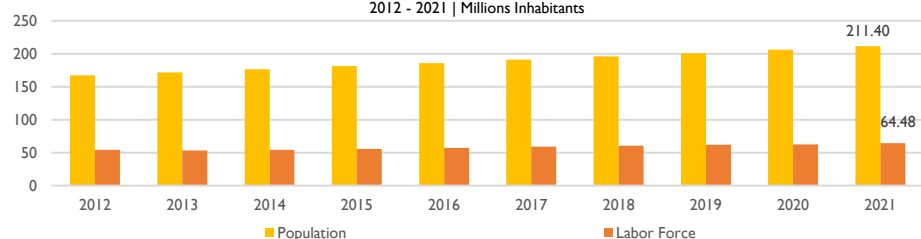
**WEST AFRICA (GMT+1)**

## 4.7.1 Macroeconomics

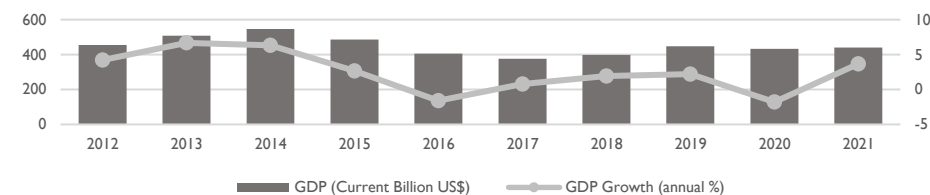
Table 4.7.1.1 Nigeria Macroeconomic Indicators

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
<b>Population</b> (Inhabitants)	167,228,803	171,765,819	176,404,931	181,137,454	185,960,244	190,873,247	195,874,685	200,963,603	206,139,587	211,400,704
<b>Labor Force</b> (Inhabitants)	54,004,475	52,957,798	54,348,205	55,815,157	57,266,041	58,814,727	60,448,885	62,151,626	62,259,271	64,479,317
<b>GDP</b> (Current Billion US\$)	455.50	508.69	546.68	486.80	404.65	375.75	397.19	448.12	432.29	440.78
<b>GDP Growth</b> (annual %)	4.23	6.67	6.31	2.65	-1.62	0.81	1.92	2.21	-1.79	3.65
<b>GDP per capita</b> (Current US\$)	2,723.82	2,961.55	3,098.99	2,687.48	2,176.00	1,968.57	2,027.78	2,229.86	2,097.09	2,085.03
<b>Exports of Goods and Services</b> (Current Billion US\$)	143.70	91.82	100.78	51.92	37.30	49.49	61.55	63.73	NA	NA
<b>Exports of Goods and Services</b> (% of GDP)	31.55	18.05	18.44	10.67	9.22	13.17	15.50	14.22	NA	NA
<b>Imports of Goods and Services</b> (Current Billion US\$)	59.15	66.12	68.06	51.92	46.55	49.51	69.55	88.74	NA	NA
<b>Imports of Goods and Services</b> (% of GDP)	12.99	13.00	12.45	10.67	11.50	13.18	17.51	19.80	NA	NA
<b>Inflation consumer prices</b> (annual %)	12.22	8.48	8.06	9.01	15.68	16.52	12.09	11.40	13.25	16.95
<b>Energy use</b> (kg of oil equivalent per capita)	798.63	780.14	763.63	NA	NA	NA	NA	NA	NA	NA
<b>Natural Gas use</b> (Scm per capita)	43.81	44.83	43.82	61.32	47.74	58.00	62.13	60.19	63.97	65.55

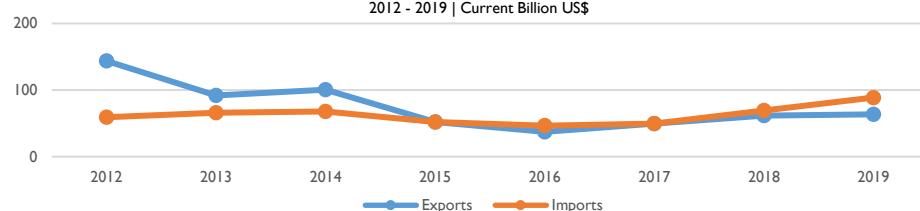
Graph 4.7.1.1. Nigeria: Population and Labor Force  
2012 - 2021 | Millions Inhabitants



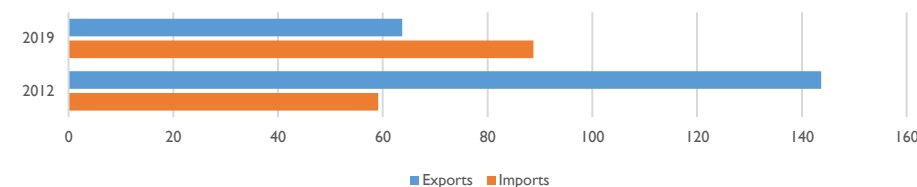
Graph 4.7.1.2. Nigeria: GDP and GDP Growth  
2012 - 2021 | Current Billion US\$ and Annual %



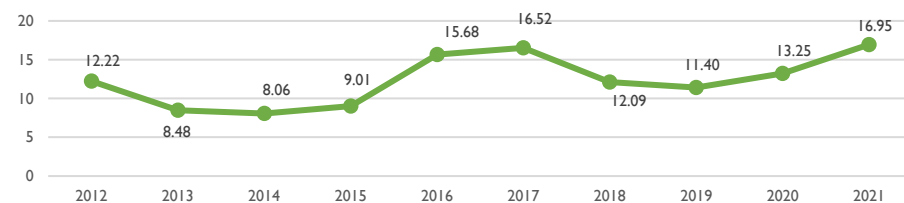
Graph 4.7.1.3. Nigeria: Exports and Imports (Goods and Services)  
2012 - 2019 | Current Billion US\$



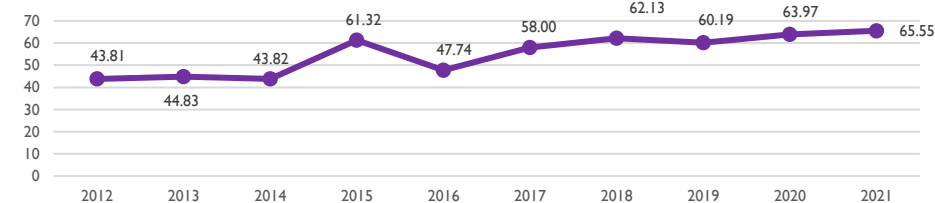
Graph 4.7.1.4. Nigeria: Exports and Imports (Goods and Services)  
2012 vs 2019 | Current Billion US\$



Graph 4.7.1.5. Nigeria: Inflation (Consumer Prices)  
2012 - 2021 | Annual %



Graph 4.7.1.6. Nigeria: Natural Gas Use  
2012 - 2021 | Scm per Capita



## 4.7.2 Reserves and Production

Table 4.7.2.1 Proven Natural Gas Reserves (Bcm)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
<b>Proven Gas Reserves</b>	5,115	5,108	5,303	5,280	5,475	5,627	5,685	5,761	5,750	5,848

Table 4.7.2.2 Historical Natural Gas Production (Bcm)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
<b>Gross Production</b>	84.85	79.63	86.33	85.22	76.78	79.49	80.27	81.05	77.23	71.47
<b>Marketed Production</b>	42.57	38.41	43.84	45.15	41.99	45.79	46.97	47.70	47.94	45.68
<b>Reinjection</b>	20.52	21.47	22.89	21.04	19.90	21.68	21.51	22.32	19.76	16.67
<b>Flaring</b>	13.18	12.11	10.74	9.69	8.18	8.14	7.98	6.86	5.47	5.73
<b>Other losses</b>	8.57	7.64	8.85	9.35	6.70	3.88	3.81	4.16	4.06	3.40

Table 4.7.2.3 Detailed 2021 Natural Gas Production (MMcm)

	2021											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
<b>Gross Production</b>	6289.39	5840.27	5958.85	5841.12	6121.01	6206.19	6410.23	5887.53	5793.86	5478.03	5628.87	6010.92
<b>Marketed Production</b>	4223.78	3765.60	3916.44	3589.29	3779.75	4025.39	4093.03	3700.23	3671.64	3425.72	3551.08	3939.64

## 4.7.3 Domestic Consumption and Trade

Table 4.7.3.1 Domestic Gas Consumption (Bcm)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
<b>Industrial</b>	1.90	2.23	2.31	3.56	3.33	4.21	4.60	5.29	5.25	6.27
<b>Power Generation</b>	4.63	4.88	4.96	7.20	5.36	6.86	7.57	6.81	7.42	7.59
<b>Petrochemical (feedstock)</b>	0.69	0.47	0.35	0.27	0.06	0.00	0.00	0.00	0.00	0.00
<b>Refineries</b>	0.11	0.11	0.11	0.08	0.13	0.00	0.00	0.00	0.00	0.00
<b>Others</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.52	0.00
<b>Totals</b>	7.33	7.70	7.73	11.11	8.88	11.07	12.17	12.10	13.19	13.86

Table 4.7.3.2 Historical Trade: Natural Gas Exports

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
<b>Pipeline (Bcm)</b>	0.40	0.60	0.60	0.60	0.12	0.39	0.72	0.79	0.89	0.84
<b>LNG</b>	Bcm*	28.27	24.54	26.78	26.70	34.33	31.11	32.02	31.04	27.72
	MMT	20.79	18.04	19.69	19.63	25.24	22.88	23.54	22.82	20.38
<b>Totals (Bcm)</b>		28.67	25.14	27.38	27.30	34.72	31.83	32.81	31.93	28.56

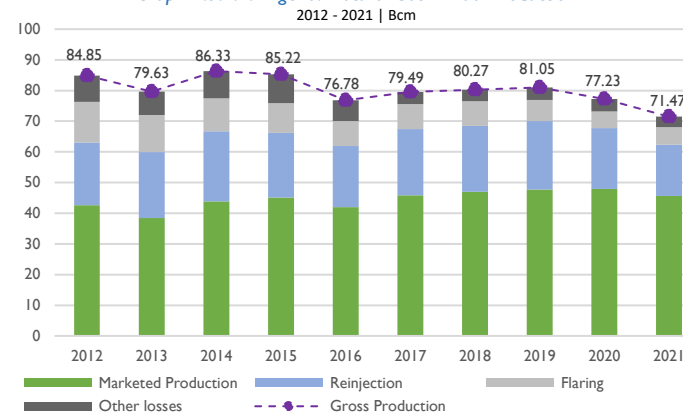
\* Gas equivalent

Table 4.7.3.3 Detailed 2021 Trade: Natural Gas Exports

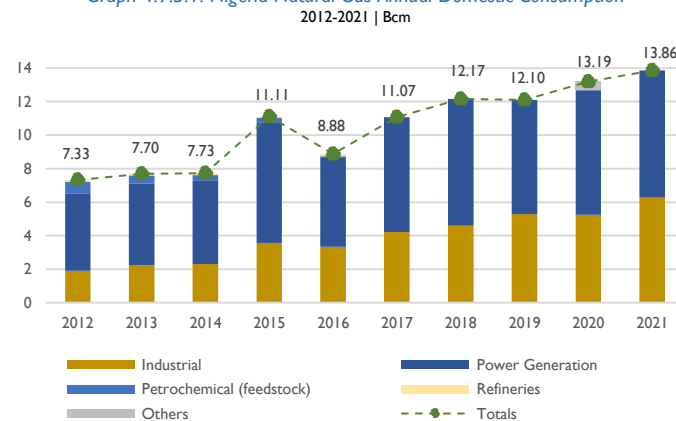
	2021											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
<b>Pipeline (MMcm)</b>	76.98	66.79	79.52	83.20	79.81	75.28	70.18	70.18	58.02	63.39	60.00	58.86
<b>LNG</b>	MMcm*	2573.32	2269.09	2312.96	2089.96	2090.52	2327.39	2364.75	2204.00	2389.09	2130.71	2345.50
	1000MT	1892.15	1668.45	1700.71	1536.73	1537.15	1711.32	1738.79	1620.59	1756.68	1566.70	1926.90
<b>Totals (MMcm)</b>		2650.30	2335.88	2392.48	2173.16	2170.33	2402.67	2434.93	2274.19	2447.10	2194.10	2405.50

\* Gas equivalent

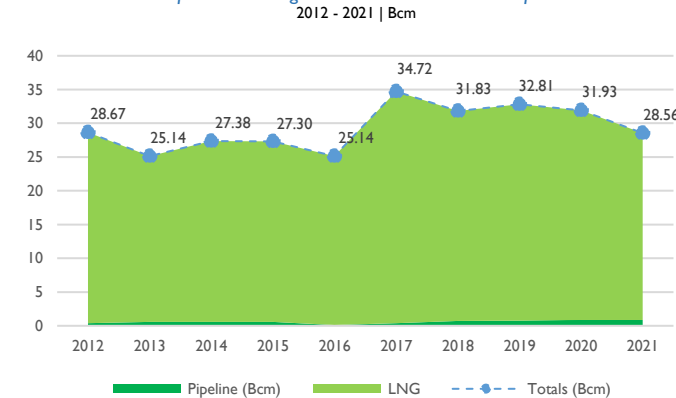
Graph 4.7.2.1. Nigeria: Natural Gas Annual Production



Graph 4.7.3.1. Nigeria Natural Gas Annual Domestic Consumption



Graph 4.7.3.2. Nigeria: Natural Gas Annual Exports



## 4.7.4 Transport and Plants

Table 4.7.4.1 Natural Gas Export Pipelines

Pipeline	Connection			Owner(s)	Operator(s)	Status	Capacity (Bcm/Year)	Type	Start Year	Length (km)	Diameter (Inches)
	From	To	Via								
West African Gas Pipeline	Nigeria	Ghana	Benin-Togo	WAGP	Chevron	Operational	8.3	Export	2006	678	20

Table 4.7.4.2 LNG Carrier Fleet

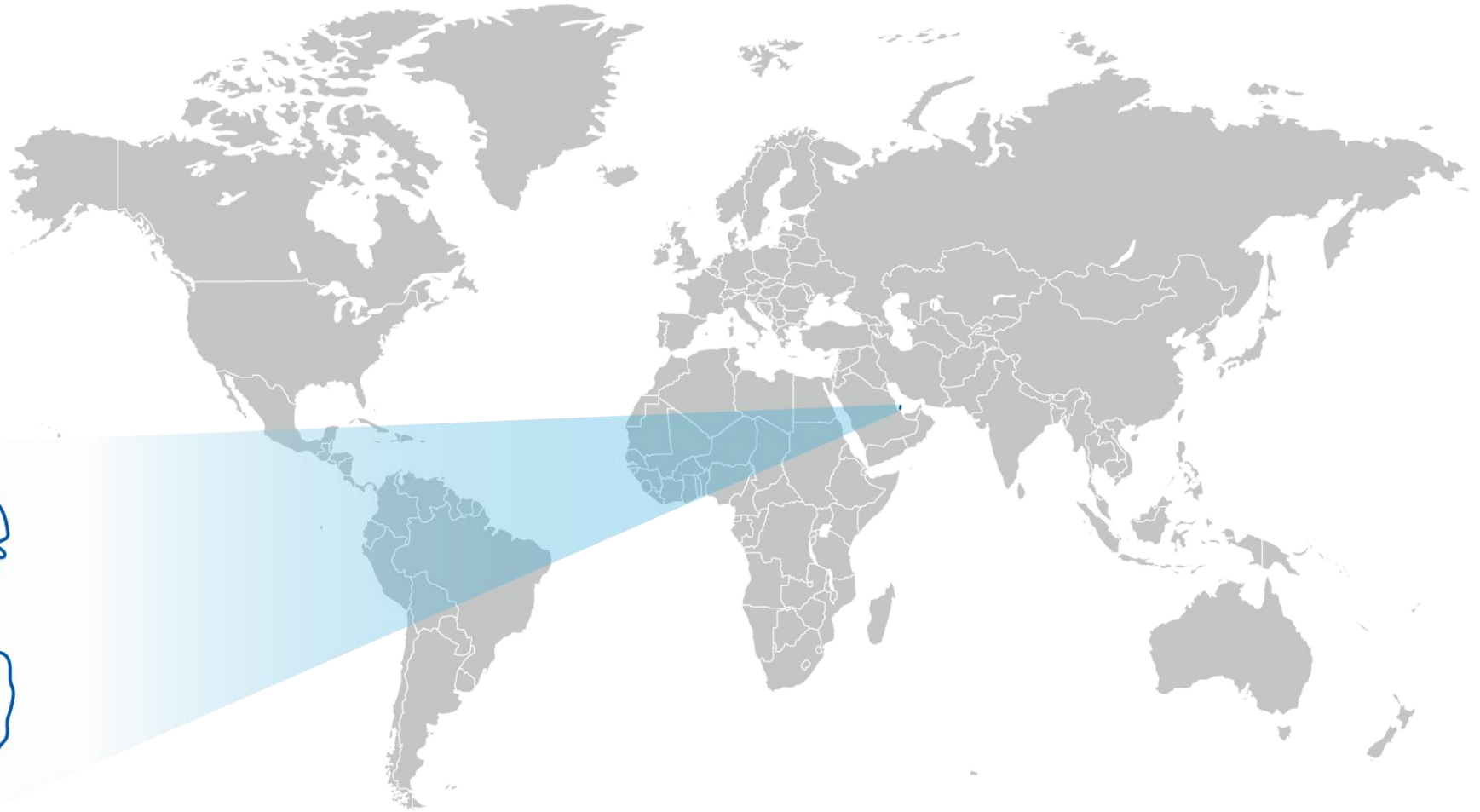
Ship Name	Owner(s)	Delivered Year	Size (1000 Scm)
LNG Edo	Bonny Gas Transport	1980	126.50
LNG Rivers	Bonny Gas Transport	2002	137.20
LNG Sokoto	Bonny Gas Transport	2002	137.20
LNG Bayelsa	Bonny Gas Transport	2003	137.50
LNG Akwa Ibom	Bonny Gas Transport	2004	141.00
LNG River Orashi	BW Gas	2004	145.91
LNG Adamawa	Bonny Gas Transport	2005	141.00
LNG Cross River	Bonny Gas Transport	2005	141.00
LNG Enugu	BW Gas	2005	145.00
LNG Oyo	BW Gas	2005	140.50
LNG River Niger	Bonny Gas Transport	2006	141.00
LNG Benue	BW Gas	2006	145.70
LNG Lokoja	BW Gas	2006	148.30
LNG Borno	NYK Line	2007	149.60
LNG Ogun	NYK Line	2007	149.60
LNG Kano	BW Gas	2007	148.30
LNG Ondo	BW Gas	2007	148.30
LNG Imo	BW Gas	2008	148.30
LNG Bonny II	Bonny Gas Transport	2015	133.00
LNG Finima II	Bonny Gas Transport	2015	133.00
LNG Lagos II	Bonny Gas Transport	2015	122.00
LNG Port-Harcourt II	Bonny Gas Transport	2015	122.00
LNG Abuja II	Bonny Gas Transport	2016	126.50
<b>Total</b>			<b>3,208.41</b>

Table 4.7.4.3 Liquefaction Plants

Plant	Liquefaction (No. of Trains)	Total Capacity (MTPA)	Status	Start Year	Owner(s)	Operator(s)
NLNG 1 & 2	2	7.0	Operational	1999	Nigeria LNG	Nigeria LNG
NLNG 3	1	3.3	Operational	2002	Nigeria LNG	Nigeria LNG
NLNG 4	1	4.1	Operational	2005	Nigeria LNG	Nigeria LNG
NLNG 5	1	4.1	Operational	2006	Nigeria LNG	Nigeria LNG
NLNG 6	1	4.1	Operational	2007	Nigeria LNG	Nigeria LNG
NLNG 7	1	7.0	Under Construction	2024	Nigeria LNG	Nigeria LNG
NLNG 8	1	NA	Planned	NA	Nigeria LNG	Nigeria LNG
Yoho FLNG	1	1.2	Announced	2025	Yoho FLNG	Yoho FLNG
<b>Total Expected Capacity</b>		<b>30.8</b>				



STATE OF  
**QATAR**



**11 610 km<sup>2</sup>**



POPULATION

**2 930 524**



CAPITAL

**DOHA**



CONTINENT

**MIDDLE EAST**



CURRENCY

**QATARI RIYAL**



TIME ZONE

**ARABIA (GMT+3)**

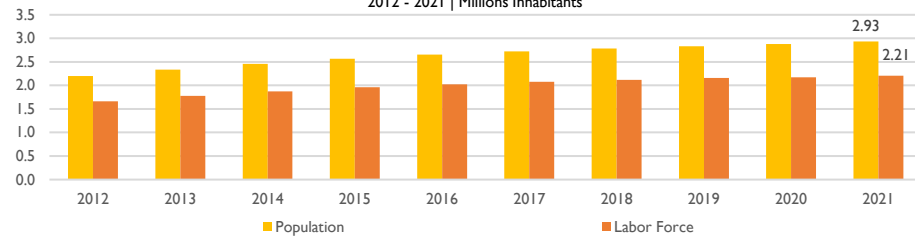


## 4.8.I Macroeconomics

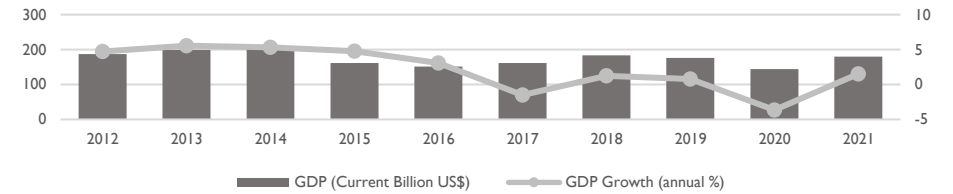
Table 4.8.I.1 Qatar Macroeconomic Indicators

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
<b>Population</b> (Inhabitants)	2,196,078	2,336,579	2,459,202	2,565,708	2,654,379	2,724,727	2,781,682	2,832,071	2,881,060	2,930,524
<b>Labor Force</b> (Inhabitants)	1,665,040	1,774,951	1,872,348	1,960,129	2,024,649	2,077,316	2,120,699	2,160,943	2,174,828	2,208,868
<b>GDP</b> (Current Billion US\$)	186.83	198.73	206.22	161.74	151.73	161.10	183.33	175.84	144.41	179.57
<b>GDP Growth</b> (annual %)	4.73	5.56	5.33	4.75	3.06	-1.50	1.23	0.77	-3.64	1.52
<b>GDP per capita</b> (Current US\$)	85,075.99	85,050.68	83,858.34	63,039.11	57,162.97	59,124.87	65,907.95	62,087.97	50,124.39	61,276.00
<b>Exports of Goods and Services</b> (Current Billion US\$)	142.88	144.51	140.23	92.29	72.40	85.20	102.56	92.05	70.93	NA
<b>Exports of Goods and Services</b> (% of GDP)	76.47	72.72	68.00	57.06	47.71	52.89	55.94	52.35	49.12	NA
<b>Imports of Goods and Services</b> (Current Billion US\$)	54.69	58.95	64.00	59.27	63.48	62.19	65.81	66.77	59.06	NA
<b>Imports of Goods and Services</b> (% of GDP)	29.27	29.67	31.04	36.65	41.83	38.61	35.90	37.97	40.90	NA
<b>Inflation consumer prices</b> (annual %)	2.32	3.22	3.35	1.81	2.68	0.39	0.26	-0.67	-2.54	2.30
<b>Energy use</b> (kg of oil equivalent per capita)	17,344.35	17,266.10	17,922.70	NA	NA	NA	NA	NA	NA	NA
<b>Natural Gas use</b> (Scm per capita)	10,655.36	16,342.77	16,476.89	17,110.29	15,709.89	13,954.43	14,722.17	14,662.95	14,052.61	13,226.66

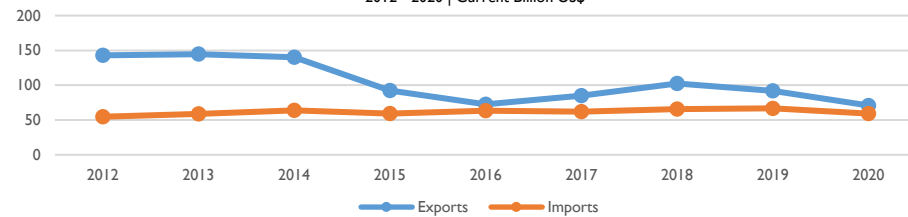
Graph 4.8.I.1. Qatar: Population and Labor Force  
2012 - 2021 | Millions Inhabitants



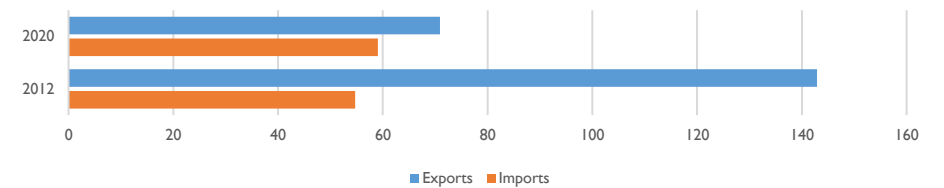
Graph 4.8.I.2. Qatar: GDP and GDP Growth  
2012 - 2021 | Current Billion US\$ and Annual %



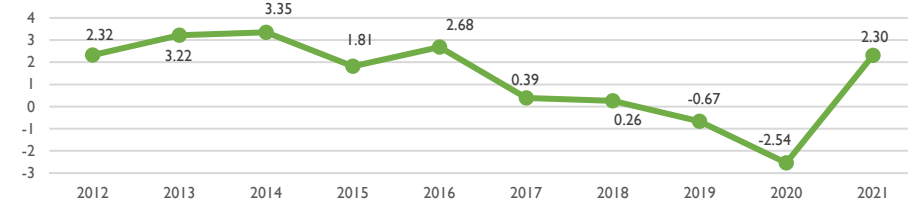
Graph 4.8.I.3. Qatar: Exports and Imports (Goods and Services)  
2012 - 2020 | Current Billion US\$



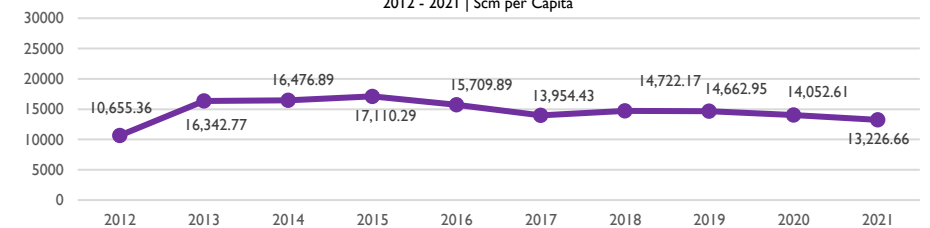
Graph 4.8.I.4. Qatar: Exports and Imports (Goods and Services)  
2012 vs 2020 | Current Billion US\$



Graph 4.8.I.5. Qatar: Inflation (Consumer Prices)  
2012 - 2021 | Annual %



Graph 4.8.I.6. Qatar: Natural Gas Use  
2012 - 2021 | Scm per Capita



## 4.8.2 Reserves and Production

Table 4.8.2.1 Proven Natural Gas Reserves (Bcm)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
<b>Proven Gas Reserves</b>	25,069	24,681	24,531	24,299	24,073	23,861	23,846	23,831	23,831	23,831

Table 4.8.2.2 Historical Natural Gas Production (Bcm)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
<b>Gross Production</b>	163.03	207.05	206.99	206.45	206.69	207.09	210.55	209.31	211.50	215.02
<b>Marketed Production</b>	157.05	201.78	201.13	201.27	201.37	201.35	205.17	204.43	205.72	208.71
<b>Reinjection</b>	2.66	2.71	2.65	2.53	2.74	2.66	2.25	2.28	2.20	2.52
<b>Flaring</b>	0.70	0.74	0.71	0.72	0.72	0.69	0.60	0.70	0.72	0.71
<b>Other losses</b>	2.62	1.82	2.50	1.92	1.86	2.39	2.53	1.90	2.86	3.08

Table 4.8.2.3 Detailed 2021 Natural Gas Production (MMcm)

	2021											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
<b>Gross Production</b>	18650.21	16657.44	17169.33	17510.88	18803.83	17992.53	18206.04	18565.94	18401.14	18183.21	16581.50	18294.70
<b>Marketed Production</b>	18080.51	16165.86	16877.01	17056.37	18321.03	17445.44	17624.92	17996.24	17823.47	17582.78	16017.43	17718.84

## 4.8.3 Domestic Consumption and Trade

Table 4.8.3.1 Domestic Gas Consumption (Bcm)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
<b>Totals</b>	36.86	38.27	40.52	40.95	38.70	38.02	40.92	41.53	40.49	38.76

Table 4.8.3.2 Historical Trade: Natural Gas Exports

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
<b>Pipeline (Bcm)</b>	19.22	19.90	20.09	19.75	20.00	21.96	22.36	22.45	22.62	21.68
<b>LNG</b>	Bcm*	103.98	104.87	104.83	104.53	106.52	104.23	102.41	104.89	104.84
	MMT	76.46	77.11	77.08	76.86	78.32	76.64	75.30	77.13	77.09
<b>Totals (Bcm)</b>	123.20	124.77	124.92	124.28	126.52	126.19	124.77	127.34	127.46	127.95

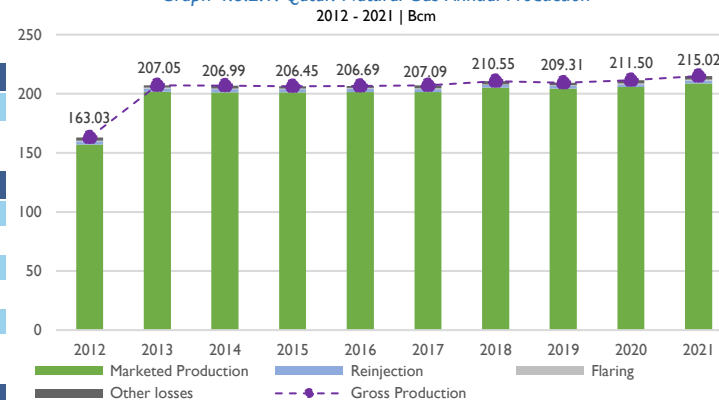
\* Gas equivalent

Table 4.8.3.3 Detailed 2021 Trade: Natural Gas Exports

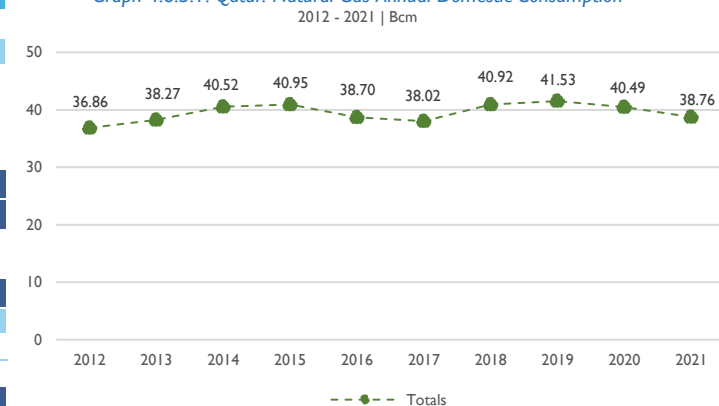
	2021											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
<b>Gross Production</b>	1542.33	1227.37	1698.59	2025.22	2124.33	2064.30	1929.45	1935.60	1867.21	1832.89	1718.55	1718.78
<b>LNG</b>	MMcm*	9787.77	8850.59	8764.89	8570.74	9197.62	8504.30	8594.99	8783.61	8861.33	8932.02	8148.61
	1000MT	7196.89	6507.79	6444.77	6302.01	6762.96	6253.16	6319.84	6458.54	6515.68	6567.66	5991.62
<b>Totals (MMcm)</b>	11330.11	10077.96	10463.48	10595.96	11321.95	10568.60	10524.44	10719.21	10728.54	10764.91	9867.16	10988.52

\* Gas equivalent

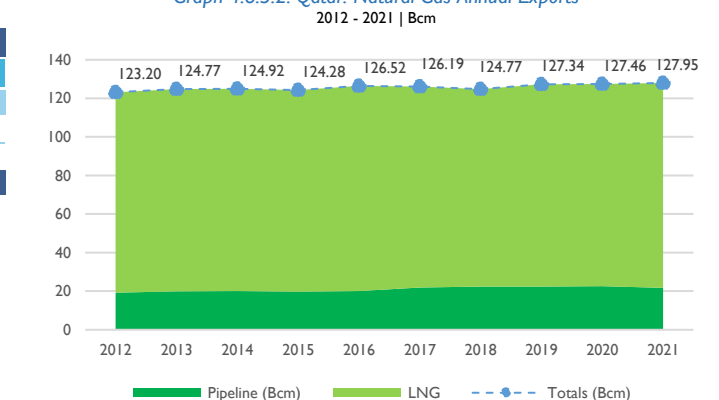
Graph 4.8.2.1. Qatar: Natural Gas Annual Production



Graph 4.8.3.1. Qatar: Natural Gas Annual Domestic Consumption



Graph 4.8.3.2. Qatar: Natural Gas Annual Exports



## 4.8.4 Transport and Plants

Table 4.8.4.1 Natural Gas Export Pipelines

Pipeline	Connection			Owner(s)	Operator(s)	Status	Capacity (Bcm/Year)	Type	Start Year	Length (km)	Diameter (Inches)
	From	To	Via								
Dolphin	Qatar	United Arab Emirates, Oman	-	Dolphin Energy	Dolphin Energy	Operational	33.1	Export	2007	364	48

Table 4.8.4.2 LNG Carrier Fleet

Ship Name	Owner(s)	Delivered Year	Size (1000 Scm)
Al Ghashamiya	Nakilat	2009	217.59
Sheehaniya	Nakilat	2009	210.20
Mesaimmeer	Nakilat	2009	216.31
Onaiza	Nakilat	2009	210.15
Al Gattara	Nakilat	2007	216.20
Al Gharrafa	Nakilat	2008	216.20
Al Hamla	Nakilat	2008	216.20
Tembek	Nakilat	2007	216.20
Al Dafna	Nakilat	2009	266.37
Al Ghuwairiya	Nakilat	2008	263.30
Al Mafyar	Nakilat	2009	266.37
Mekaines	Nakilat	2009	266.48
Mozah	Nakilat	2008	266.25
Umm Slal	Nakilat	2008	265.98
Al Kharaitiyat	Nakilat	2009	216.30
Al Rekayyat	Nakilat	2009	216.29
Al Sadd	Nakilat	2009	210.20
Al Mayeda	Nakilat	2009	266.00
Al Samriya	Nakilat	2009	263.30
Bu Samra	Nakilat	2008	266.00
Lijmiliya	Nakilat	2009	263.30
Al Bahiya	Nakilat	2009	210.10
Al Karaana	Nakilat	2009	210.10
Al Khattiya	Nakilat	2009	210.15
Al Nuaman	Nakilat	2009	210.10
Aamira	Nakilat	2010	266.00
Rasheeda	Nakilat	2010	266.00
Shagra	Nakilat	2009	266.28
Zarga	Nakilat	2010	266.00
Al Oraiq	Nakilat/"K" Line	2008	210.10
Umm Al Amad	Nakilat/"K" Line	2008	210.10
Al Jassasiya	Nakilat/Maran Gas	2007	145.70
Maran Gas Achilles	Nakilat/Maran Gas	2016	174.00
Al Ghariya	Nakilat/Pronav	2008	210.15
Al Ruwais	Nakilat/Pronav	2007	210.15
Al Safliya	Nakilat/Pronav	2007	210.15
Duhail	Nakilat/Pronav	2008	210.15
Aseem	Nakilat/SCI	2009	155.00
Al Marrouna	Nakilat/Teekay	2006	149.54
Al Areesh	Nakilat/Teekay	2007	148.79
<b>Sub Totals</b>			<b>8,953.75</b>
<b>Total</b>			<b>16,150.32</b>

Ship Name	Owner(s)	Delivered Year	Size (1000 Scm)
Maran Gas Alexandria	Nakilat/Maran Gas	2015	161.87
Maran Gas Apollonia	Nakilat/Maran Gas	2014	161.87
Maran Gas Asciepius	Nakilat/Maran Gas	2008	145.82
Maran Gas Coronis	Nakilat/Maran Gas	2012	145.70
Maran Gas Delphi	Nakilat/Maran Gas	2014	159.80
Maran Gas Efessos	Nakilat/Maran Gas	2014	159.80
Maran Gas Lindos	Nakilat/Maran Gas	2015	161.87
Maran Gas Posidonia	Nakilat/Maran Gas	2014	161.87
Maran Gas Sparta	Nakilat/Maran Gas	2015	159.80
Simaisma	Nakilat/Maran Gas	2006	145.89
Umm Bab	Nakilat/Maran Gas	2005	145.00
Woodside Goode	Nakilat/Maran Gas	2013	159.80
Woodside Rogers	Nakilat/Maran Gas	2013	159.80
Al Aamriya	Nakilat/MOL	2008	210.17
Fraiha	Nakilat/MOL	2008	210.10
Murwab	Nakilat/MOL	2008	210.10
Al Sahla	Nakilat/NYK	2008	216.20
Al Thumama	Nakilat/NYK	2008	216.20
Al Utouriya	Nakilat/NYK	2008	215.00
Ejnan	Nakilat/NYK	2007	145.00
Simaisma	Nakilat/Maran Gas	2006	145.89
Umm Bab	Nakilat/Maran Gas	2005	145.00
Woodside Goode	Nakilat/Maran Gas	2013	159.80
Woodside Rogers	Nakilat/Maran Gas	2013	159.80
Al Aamriya	Nakilat/MOL	2008	210.17
Fraiha	Nakilat/MOL	2008	210.10
Murwab	Nakilat/MOL	2008	210.10
Al Sahla	Nakilat/NYK	2008	216.20
Al Thumama	Nakilat/NYK	2008	216.20
Al Utouriya	Nakilat/NYK	2008	215.00
Ejnan	Nakilat/NYK	2007	145.00
Al Daayen	Nakilat/Teekay	2008	148.85
Al Huwaila	Nakilat/Teekay	2008	217.00
Al Kharsaah	Nakilat/Teekay	2008	217.00
Al Khuwair	Nakilat/Teekay	2006	217.00
Al Shamal	Nakilat/Teekay	2008	217.00
Global Energy	Nakilat/Maran Gas	2020	173.40
Global Star	Nakilat/Maran Gas	2021	173.40
Hull no. 2502	Nakilat/Maran Gas	-	174.00
Hull no. 2503	Nakilat/Maran Gas	-	174.00
<b>Sub Totals</b>			<b>7,196.57</b>
<b>Total</b>			<b>16,150.32</b>

Table 4.8.4.3 Liquefaction Plants

Plant	Liquefaction (No. of Trains)	Total Capacity (MTPA)	Status	Start Year	Owner(s)	Operator(s)
Qatargas 1	3	9.9	Operational	1996 1997 1998	Qatar Petroleum, ExxonMobil, Total, Mitsui, Marubeni	Qatargas
Qatargas 2	2	15.6	Operational	2009	Qatar Petroleum, ExxonMobil, Total	Qatargas
Qatargas 3	1	7.8	Operational	2010	Qatar Petroleum, ConocoPhillips, Mitsui	Qatargas
Qatargas 4	1	7.8	Operational	2011	Qatar Petroleum, Shell	Qatargas
Raslaffan	2	6.6	Operational	1999	Qatar Petroleum, ExxonMobil, Korea LNG Ltd, Itochu, LNG Japan Corp	Qatargas
Raslaffan (II)	3	14.1	Operational	2004	Qatar Petroleum, ExxonMobil	Qatargas
Raslaffan 3	2	15.6	Operational	2010	Qatar Petroleum, ExxonMobil	Qatargas
North Field Expansion 1	4	33.0	Under Construction	2025	Qatar Petroleum	Construction Phase
North Field Expansion 2	2	16.0	Project	2027	Qatar Petroleum	Project Phase
<b>Total Expected Capacity</b>		<b>126.4</b>				

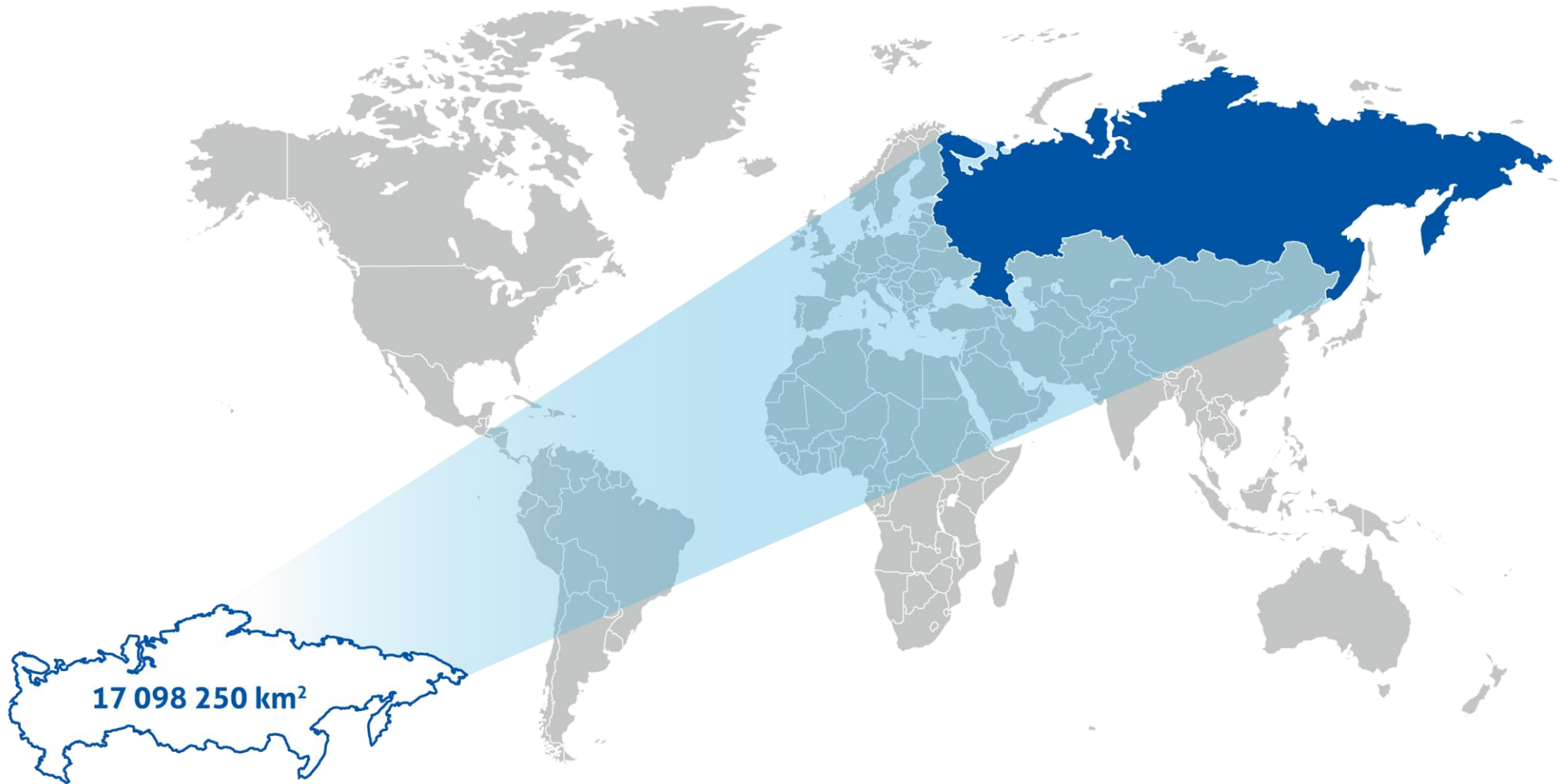


Qatar | Russia  
Nigeria | Trinidad & Tobago  
Venezuela





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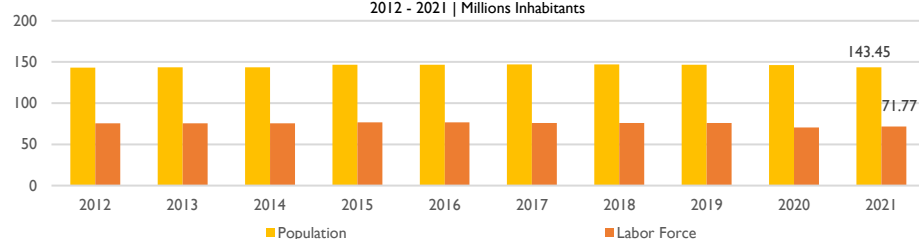
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## 4.9.I Macroeconomics

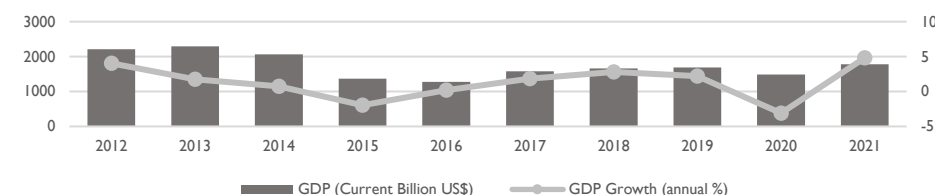
Table 4.9.I.1 Russia Macroeconomic Indicators

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
<b>Population</b> (Inhabitants)	143,201,721	143,506,995	143,700,000	146,500,000	146,800,000	146,900,000	146,900,000	146,800,000	146,300,000	143,446,060
<b>Labor Force</b> (Inhabitants)	75,676,000	75,529,000	75,428,000	76,588,000	76,636,000	76,109,000	76,011,000	75,878,000	70,600,000	71,766,617
<b>GDP</b> (Current Billion US\$)	2,208.30	2,292.47	2,059.24	1,363.48	1,276.79	1,574.20	1,657.33	1,687.45	1,483.50	1,775.80
<b>GDP Growth</b> (annual %)	4.02	1.76	0.74	-1.97	0.19	1.83	2.81	2.20	-3.10	4.82
<b>GDP per capita</b> (Current US\$)	15,420.87	15,974.64	14,095.65	9,313.01	8,704.90	10,720.33	11,287.36	11,497.65	10,126.72	12,172.79
<b>Exports of Goods and Services</b> (Current Billion US\$)	594.19	592.50	558.28	391.37	330.11	410.72	510.35	481.54	378.64	547.74
<b>Exports of Goods and Services</b> (% of GDP)	26.91	25.85	27.11	28.70	25.85	26.09	30.79	28.54	25.52	30.84
<b>Imports of Goods and Services</b> (Current Billion US\$)	447.05	468.62	426.06	281.64	263.83	327.21	344.52	352.81	305.01	378.03
<b>Imports of Goods and Services</b> (% of GDP)	20.24	20.44	20.69	20.66	20.66	20.79	20.79	20.91	20.56	21.29
<b>Inflation consumer prices</b> (annual %)	6.57	6.47	11.35	12.91	7.04	2.51	4.26	3.04	3.38	6.69
<b>Energy use</b> (kg of oil equivalent per capita)	5,167.01	5,078.63	4,942.88	NA	NA	NA	NA	NA	NA	NA
<b>Natural Gas use</b> (Scm per capita)	3,046.67	2,960.16	2,968.23	2,801.95	2,847.27	2,940.68	3,081.90	3,033.42	2,921.30	3,295.25

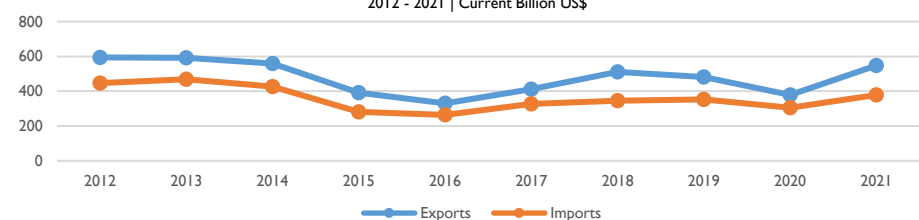
Graph 4.9.I.1. Russia: Population and Labor Force  
2012 - 2021 | Millions Inhabitants



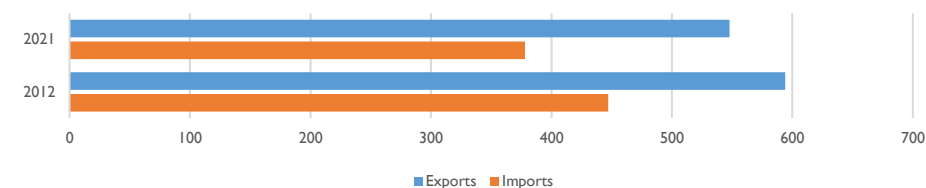
Graph 4.9.I.2. Russia: GDP and GDP Growth  
2012 - 2021 | Current Billion US\$ and Annual %



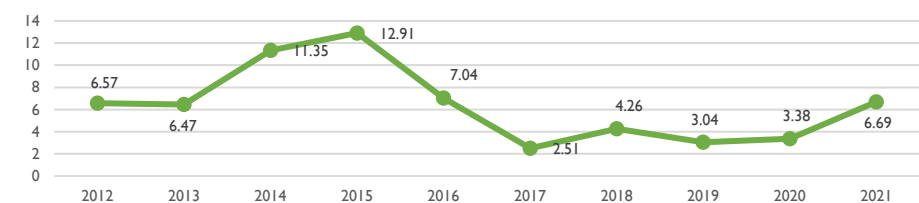
Graph 4.9.I.3. Russia: Exports and Imports (Goods and Services)  
2012 - 2021 | Current Billion US\$



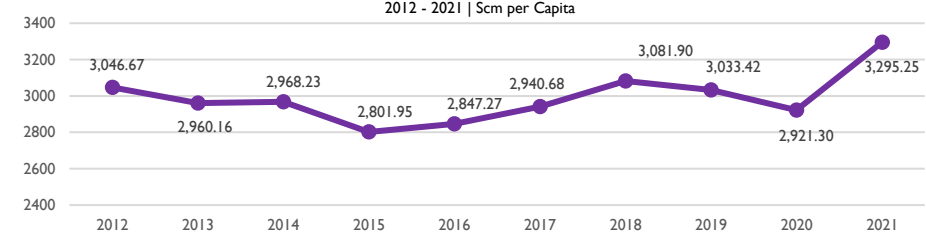
Graph 4.9.I.4. Russia: Exports and Imports (Goods and Services)  
2012 vs 2021 | Current Billion US\$



Graph 4.9.I.5. Russia: Inflation (Consumer Prices)  
2012 - 2021 | Annual %



Graph 4.9.I.6. Russia: Natural Gas Use  
2012 - 2021 | Scm per Capita



## 4.9.2 Reserves and Production

Table 4.9.2.1 Proven Natural Gas Reserves (Bcm)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
<b>Proven Gas Reserves</b>	48,810	49,335	49,896	50,205	50,617	50,508	49,571	49,084	47,759	47,759

Table 4.9.2.2 Historical Natural Gas Production (Bcm)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
<b>Gross Production</b>	654.68	667.59	642.81	633.54	640.81	692.00	694.32	644.09	658.54	728.21
<b>Marketed Production</b>	614.98	626.29	607.08	608.43	614.56	635.78	667.66	677.90	637.16	701.55
<b>Flaring</b>	17.09	15.33	15.67	14.51	14.60	15.12	15.85	16.45	14.80	19.70
<b>Other losses</b>	6.76	6.76	6.59	6.76	6.59	7.04	7.24	7.17	6.58	6.96

Table 4.9.2.3 Detailed 2021 Natural Gas Production (MMcm)

	2021											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
<b>Gross Production</b>	65329.05	59536.79	63809.77	61530.85	60296.43	56118.41	54219.31	55168.86	59346.88	63524.90	63524.90	65803.82
<b>Marketed Production</b>	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

## 4.9.3 Domestic Consumption and Trade

Table 4.9.3.1 Domestic Gas Consumption (Bcm)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
<b>Totals</b>	436.29	424.80	426.53	410.49	417.98	431.99	452.73	445.31	427.39	472.69

Table 4.9.3.2 Historical Trade: Natural Gas Exports

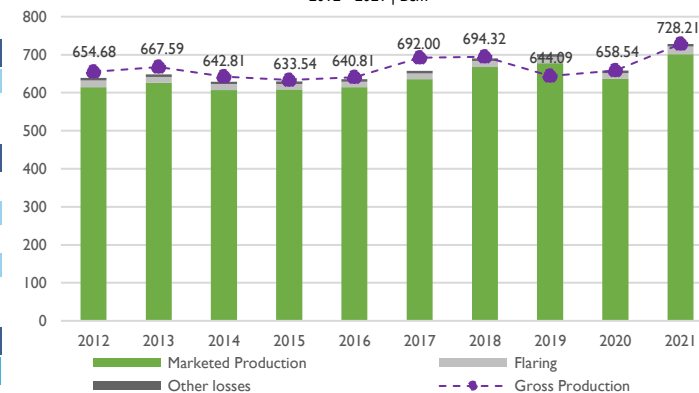
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	
<b>Pipeline (Bcm)</b>	178.70	196.40	172.60	185.50	198.70	212.80	222.62	211.29	199.20	203.50	
<b>LNG</b>	Bcm*	13.18	16.20	12.63	13.18	14.91	15.03	25.48	39.09	40.25	39.65
	MMT	9.69	11.91	9.29	9.69	10.96	11.05	18.74	28.74	29.60	29.15
<b>Totals (Bcm)</b>	191.88	212.60	185.23	198.68	213.61	227.83	248.10	250.38	239.45	243.15	

\* Gas equivalent

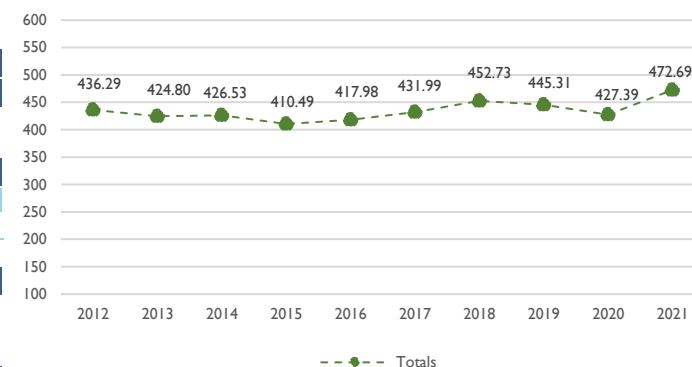
Table 4.9.3.3 Historical Trade: Natural Gas Imports (Bcm)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
<b>Pipeline (Bcm)</b>	8.06	8.23	8.58	8.84	8.93	8.94	15.97	18.83	10.25	14.58
<b>Totals (Bcm)</b>	8.06	8.23	8.58	8.84	8.93	8.94	15.97	18.83	10.25	14.58

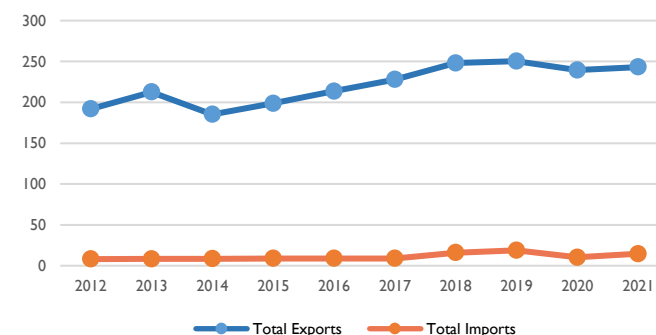
Graph 4.9.2.1. Russia: Natural Gas Annual Production  
2012 - 2021 | Bcm



Graph 4.9.3.1. Russia: Natural Gas Annual Domestic Consumption  
2012 - 2021 | Bcm



Graph 4.9.3.2. Russia: Natural Gas Exports and Imports  
2012 - 2020 | Bcm





## 4.9.4 Transport and Plants

Table 4.9.4.1 Natural Gas Export Pipelines

Pipeline	Connection			Owner(s)	Operator(s)	Status	Capacity (Bcm/Year)	Type	Start Year	Length (km)	Diameter (Inches)
	From	To	Via								
Urengoy-Pomary-Uzhgorod	Russia	Europe	Ukraine	Gazprom	Gazprom	Operational	32.0	Export	1983	4,451	56
Blue Stream	Russia	Turkey	-	Gazprom, Blue Stream Pipeline Company BV	Gazprom, Blue Stream Pipeline Company BV	Operational	16.0	Export	2003	1,213	55/47
Yamal Europe	Russia	Europe (Poland Germany)	Belarus	Gazprom, EuRoPol Gaz, WINGAS	Gazprom	Operational	32.9	Export	2006	2,000	56
Nord Stream	Russia	Germany	-	Nord Stream AG JV	Nord Stream AG JV	Operational	55.0	Export	2011	1,224	48
Minsk-Vilnius-Kaunas-Kaliningrad	Russia	Russia	Belarus, Lithuania	Gazprom	Gazprom	Operational	2.5	Export	2011	155	20
Nord Stream 2	Russia	Germany	-	Nord Stream 2 AG	Nord Stream 2 AG	Completed	55.0	Export	NA	1,200	48
TurkStream	Russia	Turkey	-	Gazprom	Gazprom	Operational	31.5	Export	2020	3000	32
Power of Siberia	Russia	China	-	Gazprom	Gazprom	Operational	38.0	Export	2019	3,000	56
<b>Total Existing Capacity</b>							<b>262.9</b>				

Table 4.9.4.2 LNG Carrier Fleet

Ship Name	Owner(s)	Delivered Year	Size (1000 Scm)
Lena River	Gazprom	2013	154.88
Yenisei River	Gazprom	2013	154.88
Velikiy Novgorod	Gazprom	2014	170.20
Pskov	Gazprom	2014	170.20
SCF Mitre	Sovcomflot	2015	170.00
SCF Melampus	Sovcomflot	2015	170.20
Christophe de Margerie	Sovcomflot	2016	172.60
Marshal Vasilevskiy	Gazpromflot	2017	174.10
<b>Total</b>			<b>1337.06</b>

Table 4.9.4.3 Liquefaction Plants

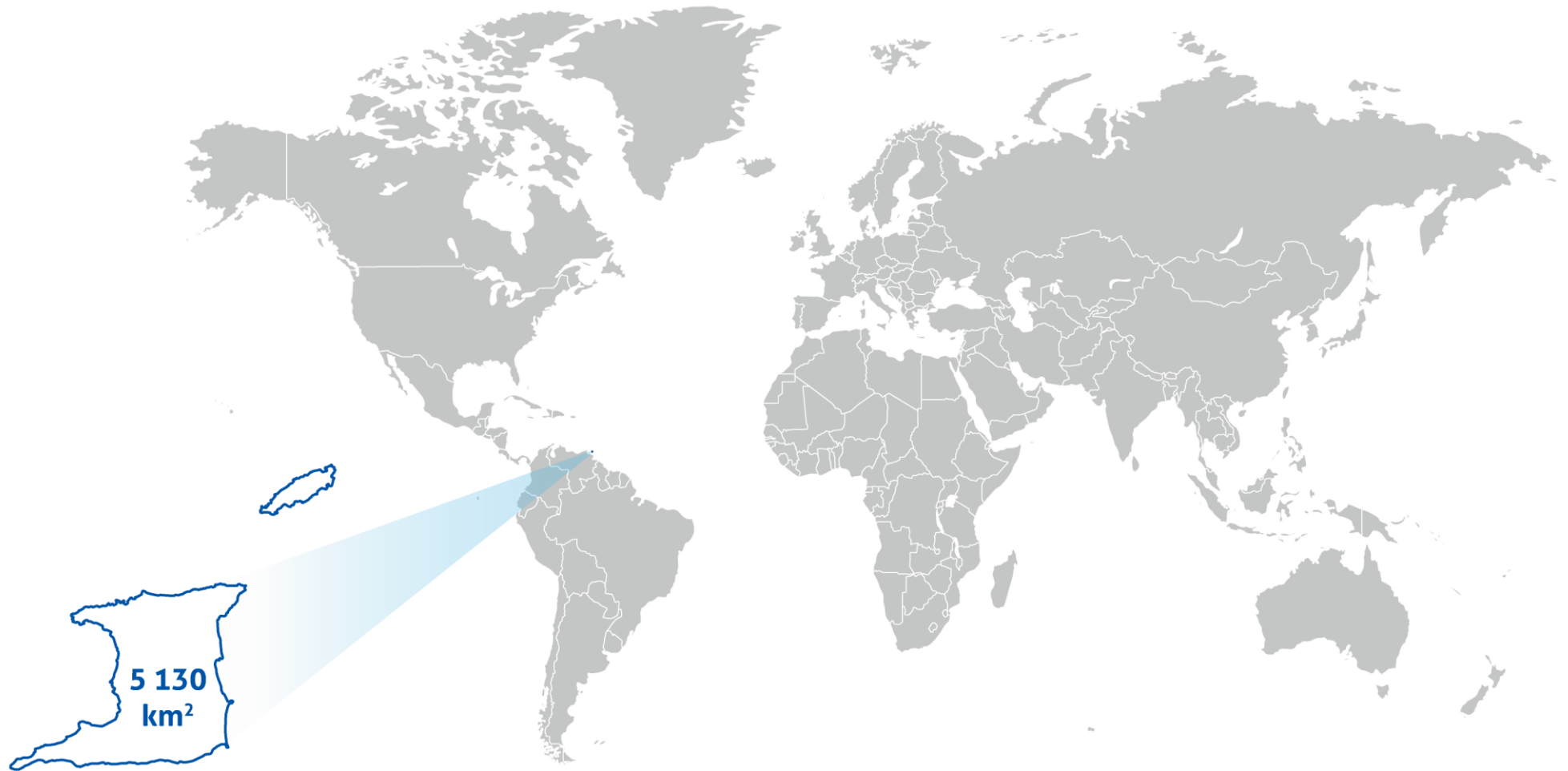
Plant	Liquefaction (No. of Trains)	Total Capacity (MTPA)	Status	Start Year	Owner(s)	Operator(s)
Sakhalin II	2	9.6	Operational	2009	Sakhalin Energy	Sakhalin Energy
Yamal LNG	3	16.5	Operational	2017	Novatek	Novatek
Krio-Vysotsk LNG	2	0.7	Operational	2019	Novatek	Novatek
Yamal LNG	1	0.9	Operational	2021	Novatek	Novatek
Arctic LNG	3	19.8	Under Construction	2023/2025	Novatek	Novatek
Portovaya LNG	1	1.5	Operational	2022	Gazprom	Gazprom
Baltic LNG	2	13.0	Under Construction	2023/2024	Gazprom	Gazprom
Sakhalin II	1	5.4	Planned	2024	Sakhalin Energy	Sakhalin Energy
Obskiy LNG	2	5.0	Cancelled	-	-	-
<b>Total Expected Capacity</b>		<b>72.4</b>				

Table 4.9.4.4 Regasification Plants

Regasification Plant	Total Capacity (MTPA)	Status	Start Year	Owner(s)	Operator(s)
Kaliningrad LNG	2.7	Operational	2019	Gazprom	Gazprom



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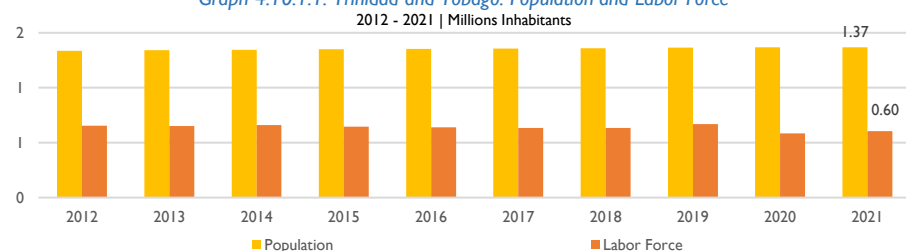
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## 4.10.1 Macroeconomics

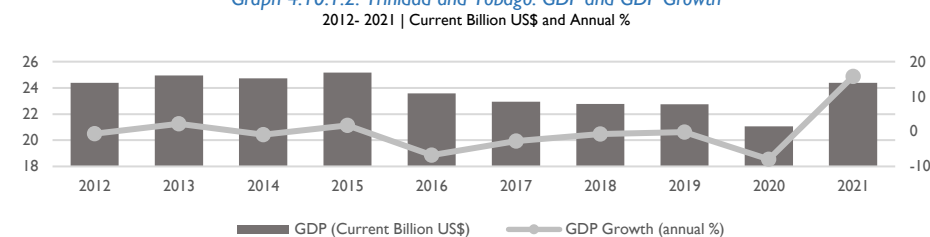
Table 4.10.1.1 Trinidad and Tobago Macroeconomic Indicators

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
<b>Population</b> (Inhabitants)	1,335,194	1,340,557	1,345,343	1,349,667	1,353,895	1,356,633	1,359,193	1,363,985	1,366,725	1,367,558
<b>Labor Force</b> (Inhabitants)	652,800	650,200	658,600	645,300	638,500	634,000	633,900	668,956	585,000	604,900
<b>GDP</b> (Current Billion US\$)	24.38	24.93	24.72	25.16	23.57	22.94	22.78	22.74	21.06	24.38
<b>GDP Growth</b> (annual %)	-0.62	2.22	-0.86	1.75	-6.74	-2.76	-0.71	-0.17	-7.96	15.76
<b>GDP per capita</b> (Current US\$)	18,259.43	18,599.26	18,374.57	18,642.38	17,410.10	16,909.10	16,758.03	16,670.52	15,410.24	17,827.79
<b>Exports of Goods and Services</b> (Current Billion US\$)	16.73	17.91	15.30	11.73	8.50	9.64	10.76	8.76	6.00	11.08
<b>Exports of Goods and Services</b> (% of GDP)	68.63	71.84	61.89	46.61	36.08	42.04	47.22	38.54	28.50	45.45
<b>Imports of Goods and Services</b> (Current Billion US\$)	9.23	9.28	7.92	7.53	7.09	6.45	6.62	6.03	5.02	6.37
<b>Imports of Goods and Services</b> (% of GDP)	37.87	37.20	32.04	29.93	30.07	28.12	29.05	26.53	23.83	26.13
<b>Inflation consumer prices</b> (annual %)	9.30	5.20	5.70	4.70	3.10	1.90	1.00	1.00	0.60	2.10
<b>Energy use</b> (kg of oil equivalent per capita)	14,312.42	14,478.85	14,363.57	NA	NA	NA	NA	NA	NA	NA
<b>Natural Gas use</b> (Scm per capita)	12,781.69	12,663.01	12,390.23	12,329.53	11,121.73	10,865.13	11,098.99	11,138.85	9,707.85	10,653.45

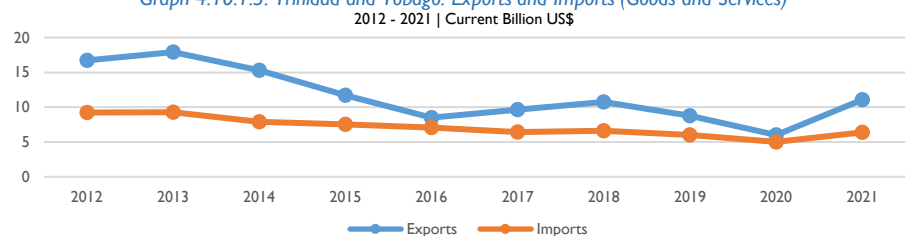
Graph 4.10.1.1. Trinidad and Tobago: Population and Labor Force



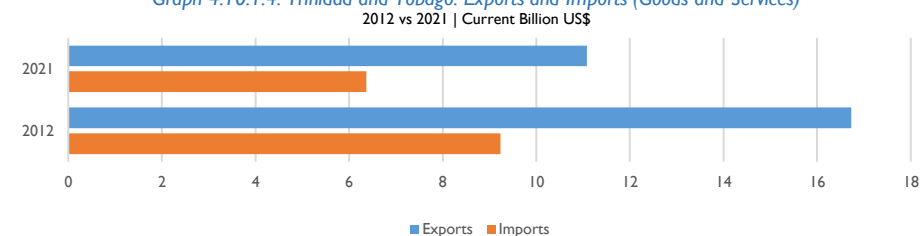
Graph 4.10.1.2. Trinidad and Tobago: GDP and GDP Growth



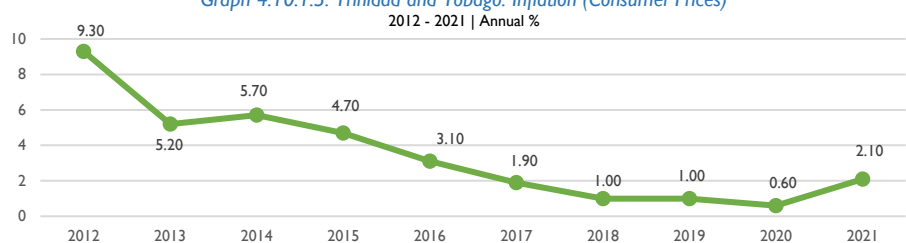
Graph 4.10.1.3. Trinidad and Tobago: Exports and Imports (Goods and Services)



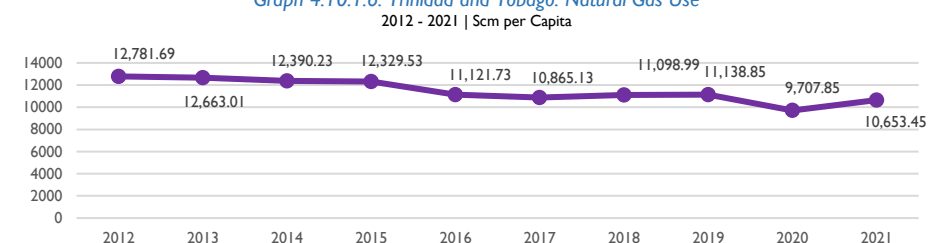
Graph 4.10.1.4. Trinidad and Tobago: Exports and Imports (Goods and Services)



Graph 4.10.1.5. Trinidad and Tobago: Inflation (Consumer Prices)



Graph 4.10.1.6. Trinidad and Tobago: Natural Gas Use



## 4.10.2 Reserves and Production

Table 4.10.2.1 Proven Natural Gas Reserves (Bcm)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
<b>Proven Gas Reserves</b>	371	347	326	300	281	298	298	302	290	NA

Table 4.10.2.2 Historical Natural Gas Production (Bcm)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
<b>Gross Production</b>	42.57	42.82	42.03	39.59	34.42	34.70	36.46	36.36	30.87	25.86
<b>Marketed Production</b>	39.02	39.53	38.99	36.95	32.18	32.78	34.92	35.37	30.16	25.50
<b>Reinjection</b>	2.00	1.81	1.61	1.47	1.36	0.74	1.06	0.90	0.64	0.27
<b>Flaring</b>	1.13	1.19	1.13	0.92	0.72	1.05	0.29	0.08	0.07	0.09
<b>Other losses</b>	0.43	0.30	0.30	0.26	0.16	0.13	0.19	0.00	0.00	0.00

Table 4.10.2.3 Detailed 2021 Natural Gas Production (MMcm)

	2021											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
<b>Gross Production</b>	2566.10	2196.53	2364.32	2096.18	2098.50	2054.58	2020.42	1978.31	1967.13	2259.05	2001.94	2252.03
<b>Marketed Production</b>	2518.46	2141.48	2295.99	2055.74	2082.61	2047.95	2011.45	1968.48	1936.12	2229.79	1972.54	2241.35

## 4.10.3 Domestic Consumption and Trade

Table 4.10.3.1 Domestic Gas Consumption (Bcm)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
<b>Industrial</b>	1.62	1.62	1.60	1.31	0.89	0.91	0.90	0.93	0.81	0.90
<b>Power Generation</b>	3.15	3.15	3.12	3.04	2.81	2.61	2.51	2.63	2.45	2.56
<b>Petrochemical (feedstock)</b>	11.54	11.50	11.38	11.50	10.58	10.58	10.98	11.63	10.00	11.11
<b>Refineries</b>	0.76	0.71	0.57	0.78	0.78	0.64	0.70	0.00	0.00	0.00
<b>Totals</b>	17.07	16.98	16.67	16.64	15.06	14.74	15.09	15.19	13.27	14.57

Table 4.10.3.2 Historical Trade: Natural Gas Exports

LNG	Bcm*	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
		MMT	13.94	13.97	13.86	12.43	10.49	9.59	12.26	12.42	10.24
<b>Totals (Bcm)</b>		18.96	19.00	18.85	16.90	14.27	13.05	16.67	16.90	13.92	8.94

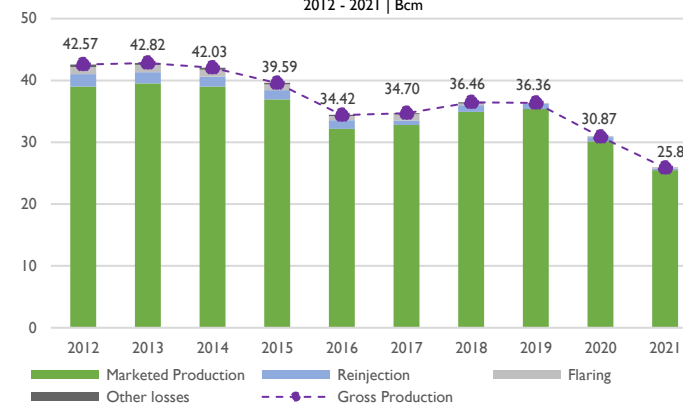
\* Gas equivalent

Table 4.10.3.3 Detailed 2021 Trade: Natural Gas Exports

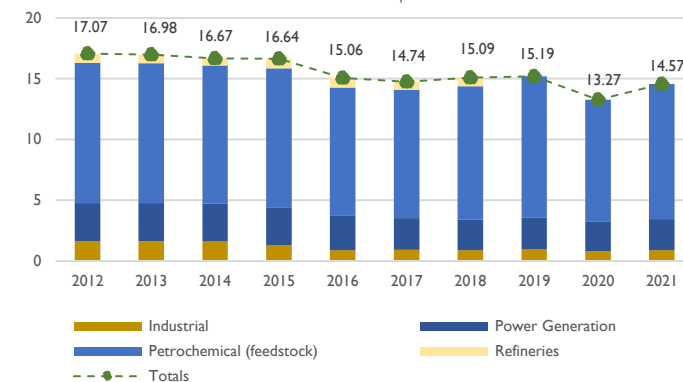
LNG	MMcm*	2021											
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
	1000MT	735.60	602.09	640.12	596.31	533.45	471.89	445.05	489.88	376.73	561.76	523.99	599.96
<b>Total (MMcm)</b>		1000.42	818.84	870.56	810.98	725.49	641.77	605.27	666.23	512.35	764.00	712.62	815.95

\* Gas Equivalent

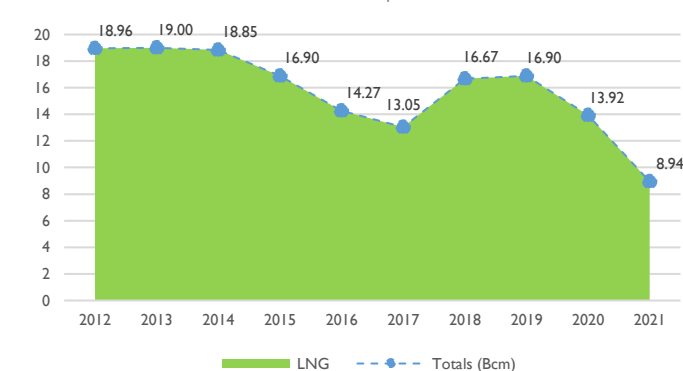
Graph 4.10.2.1. Trinidad and Tobago: Natural Gas Annual Production 2012 - 2021 | Bcm



Graph 4.10.3.1. Trinidad and Tobago: Natural Gas Annual Domestic Consumption 2012 - 2021 | Bcm



Graph 4.10.3.2. Trinidad and Tobago: Natural Gas Annual Exports 2012 - 2021 | Bcm



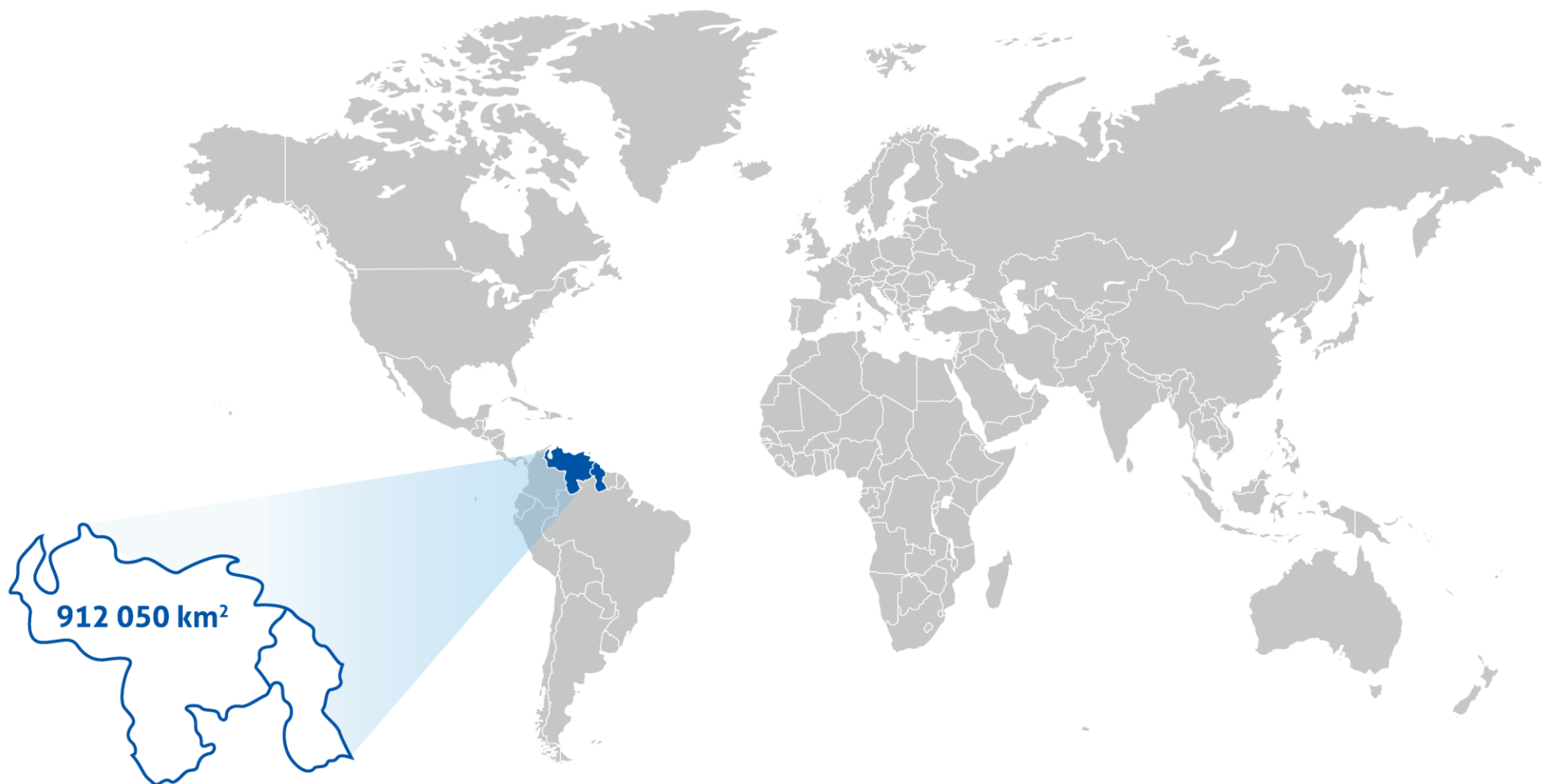
### 4.10.4 Transport and Plants

Table 4.10.4.1 Liquefaction Plants

Plant	Liquefaction (No. of Trains)	Total Capacity (MTPA)	Status	Start Year	Owner(s)	Operator(s)
Atlantic LNG	4	14.8	Operational	1999 2002 2003 2005	Atlantic LNG	Atlantic LNG



BOLIVARIAN REPUBLIC OF  
**VENEZUELA**



POPULATION

**28 704 947**



CAPITAL

**CARACAS**



CONTINENT

**SOUTH AMERICA**



CURRENCY

**VENEZUELAN BOLIVAR**



TIME ZONE

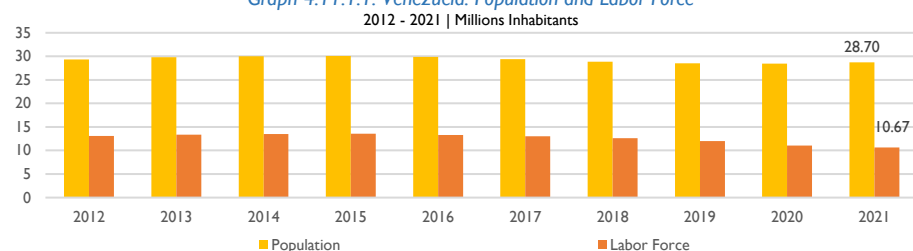
**VENEZUELA (GMT-4)**

## 4.1.1.1 Macroeconomics

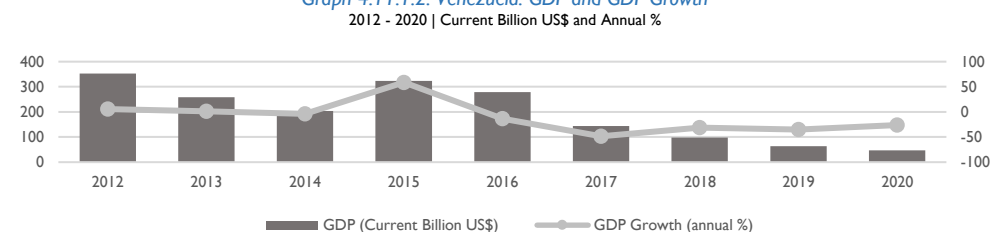
Table 4.1.1.1 Venezuela Macroeconomic Indicators

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
<b>Population</b> (Inhabitants)	29,360,827	29,781,046	30,042,973	30,081,827	29,851,249	29,402,480	28,887,117	28,515,829	28,435,943	28,704,947
<b>Labor Force</b> (Inhabitants)	13,091,253	13,341,572	13,492,626	13,545,018	13,321,835	13,005,670	12,595,517	11,996,396	11,063,628	10,665,579
<b>GDP</b> (Current Billion US\$)	352.19	258.99	203.82	323.60	279.25	143.84	98.44	63.96	47.26	NA
<b>GDP Growth</b> (annual %)	5.63	1.34	-3.89	58.77	-13.70	-48.49	-31.57	-35.02	-26.12	NA
<b>GDP per capita</b> (Current US\$)	12,986.22	12,457.77	16,055.65	10,757.16	9,354.68	4,892.14	3,407.64	2,242.96	1,661.81	NA
<b>Exports of Goods and Services</b> (Current Billion US\$)	99.79	91.88	80.52	37.25	27.61	33.89	33.60	20.68	8.24	NA
<b>Exports of Goods and Services</b> (% of GDP)	28.33	35.48	39.51	11.51	9.89	23.56	34.14	32.33	17.43	NA
<b>Imports of Goods and Services</b> (Current Billion US\$)	92.40	109.49	151.45	36.50	17.98	13.36	13.51	7.19	8.41	NA
<b>Imports of Goods and Services</b> (% of GDP)	26.23	42.28	74.30	11.28	6.44	9.29	13.72	11.24	17.79	NA
<b>Inflation consumer prices</b> (annual %)	318.90	498.10	839.50	2,357.90	8,826.90	84,970.30	110,597,550.20	10,711,919,274.40	327,767,509,170.00	NA
<b>Energy use</b> (kg of oil equivalent per capita)	2,488.41	2,308.94	NA	NA	NA	NA	NA	NA	NA	NA
<b>Natural Gas use</b> (Scm per capita)	793.17	753.43	732.68	829.67	872.66	869.65	734.68	615.42	521.36	494.60

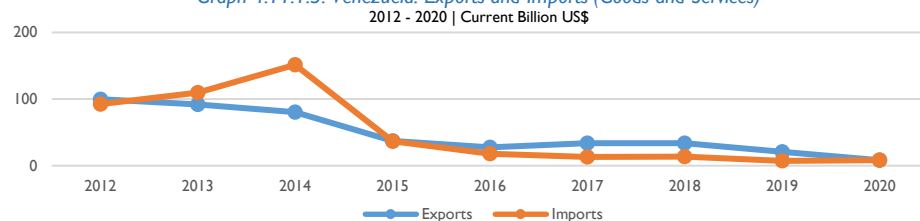
Graph 4.1.1.1.1. Venezuela: Population and Labor Force



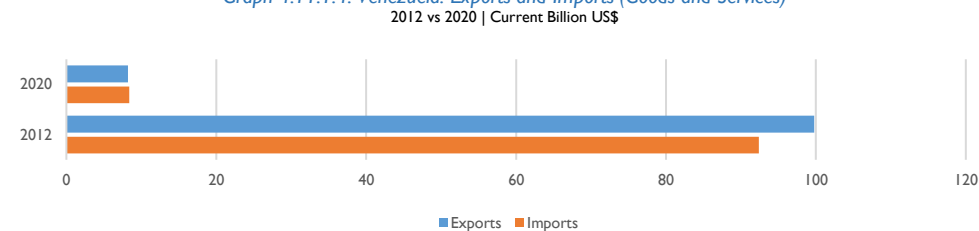
Graph 4.1.1.1.2. Venezuela: GDP and GDP Growth



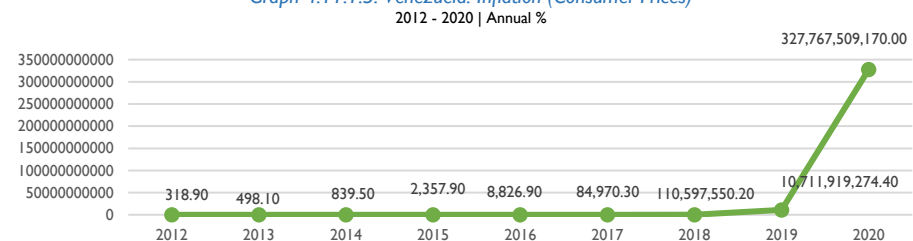
Graph 4.1.1.1.3. Venezuela: Exports and Imports (Goods and Services)



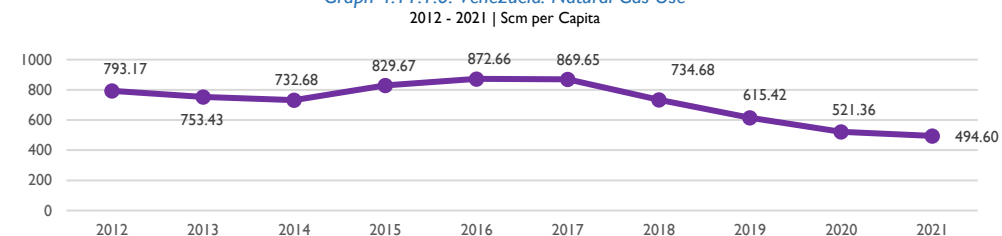
Graph 4.1.1.1.4. Venezuela: Exports and Imports (Goods and Services)



Graph 4.1.1.1.5. Venezuela: Inflation (Consumer Prices)



Graph 4.1.1.1.6. Venezuela: Natural Gas Use



## 4.1.1.2 Reserves and Production

Table 4.1.1.2.1 Proven Natural Gas Reserves (Bcm)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
<b>Proven Gas Reserves</b>	5,563	5,581	5,617	5,702	5,740	5,708	5,674	5,674	5,590	5,541

Table 4.1.1.2.2 Historical Natural Gas Production (Bcm)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
<b>Gross Production</b>	75.97	76.44	76.72	80.20	82.16	76.89	67.44	56.21	46.88	45.95
<b>Marketed Production</b>	22.73	21.82	21.88	26.00	28.90	28.29	24.50	20.27	19.40	21.57
<b>Reinjection</b>	29.76	28.77	27.03	25.44	23.42	21.90	15.15	4.45	0.08	0.00
<b>Flaring</b>	11.35	13.73	15.32	16.54	18.82	17.24	20.73	26.18	24.11	0.54
<b>Shrinkage</b>	12.14	12.13	12.49	12.21	11.02	1.51	1.22	0.93	0.47	19.50
<b>Other losses</b>	0.00	0.00	0.00	0.00	0.00	7.96	5.84	4.38	2.81	4.33

Table 4.1.1.2.3 Detailed 2021 Natural Gas Production (MMcm)

	2021											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
<b>Gross Production</b>	3385.46	3283.44	3693.77	3757.76	3656.68	3733.97	4156.92	4183.04	3855.33	4195.83	3967.43	4082.55
<b>Marketed Production</b>	1590.25	1530.33	1690.76	1828.06	1624.42	1635.85	1890.12	1890.48	1794.41	2243.47	1824.57	2027.84

## 4.1.1.3 Domestic Consumption and Trade

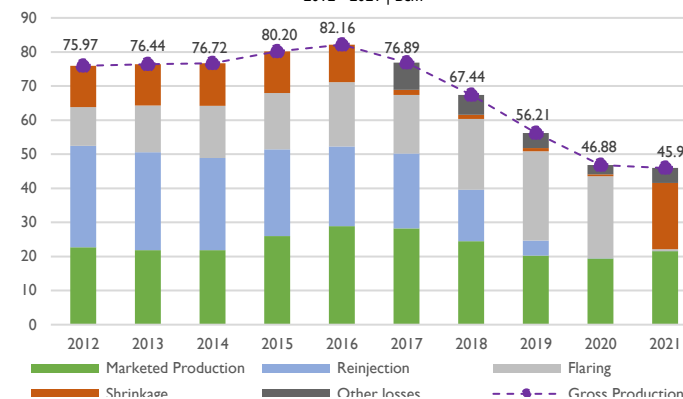
Table 4.1.1.3.1 Domestic Gas Consumption (Bcm)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
<b>Residential</b>	0.17	0.18	0.17	0.15	0.14	0.15	0.16	0.17	0.20	0.21
<b>Industrial</b>	7.03	6.06	4.95	5.75	4.60	4.69	3.75	3.71	3.96	4.03
<b>Power Generation</b>	6.90	7.15	7.21	9.69	11.31	10.20	8.66	6.82	4.64	5.52
<b>Transportation</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.03	0.03
<b>Petrochemical (feedstock)</b>	4.43	4.34	4.70	4.41	4.55	4.96	3.18	2.68	2.15	2.66
<b>Refineries</b>	4.77	4.70	4.98	4.96	5.45	5.57	5.47	4.16	3.85	1.74
<b>Totals</b>	23.29	22.44	22.01	24.96	26.05	25.57	21.22	17.55	14.83	14.20

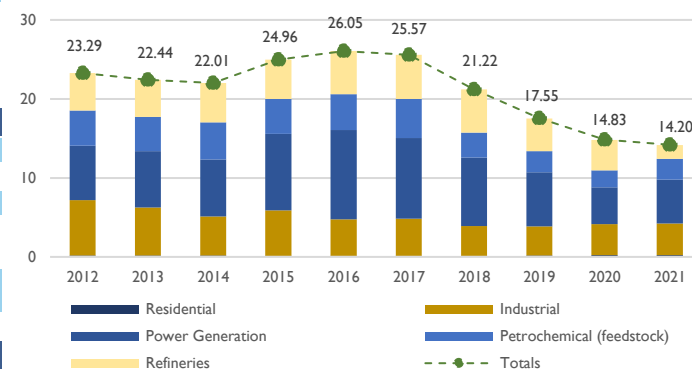
Table 4.1.1.3.2 Historical Trade: Natural Gas Imports (Bcm)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
<b>Pipeline</b>	1.89	1.82	1.83	0.95	0.00	0.00	0.00	0.00	0.00	0.00
<b>Totals</b>	1.89	1.82	1.83	0.95	0.00	0.00	0.00	0.00	0.00	0.00

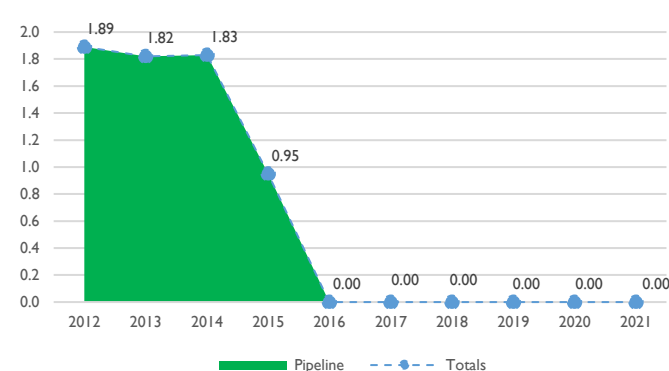
Graph 4.1.1.2.1. Venezuela: Natural Gas Annual Production  
2012 - 2021 | Bcm



Graph 4.1.1.3.1. Venezuela: Natural Gas Annual Domestic Consumption  
2012 - 2021 | Bcm



Graph 4.1.1.3.2. Venezuela: Natural Gas Annual Imports  
2012 - 2021 | Bcm





#### 4.11.4 Transport and Plants

Table 4.11.4.1 Natural Gas Export Pipelines

Pipeline	Connection		Owner(s)	Operator(s)	Status	Capacity (Bcm/Year)	Type	Start Year	Length (km)	Diameter (Inches)
	From	To								
Antonio Ricaurte (Trans Caribbean)	Colombia	Venezuela	PDVSA Gas	PDVSA Gas	Operational	2.7	Import/Export	2007	225	26

## Section 5

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# GECF Observer Countries



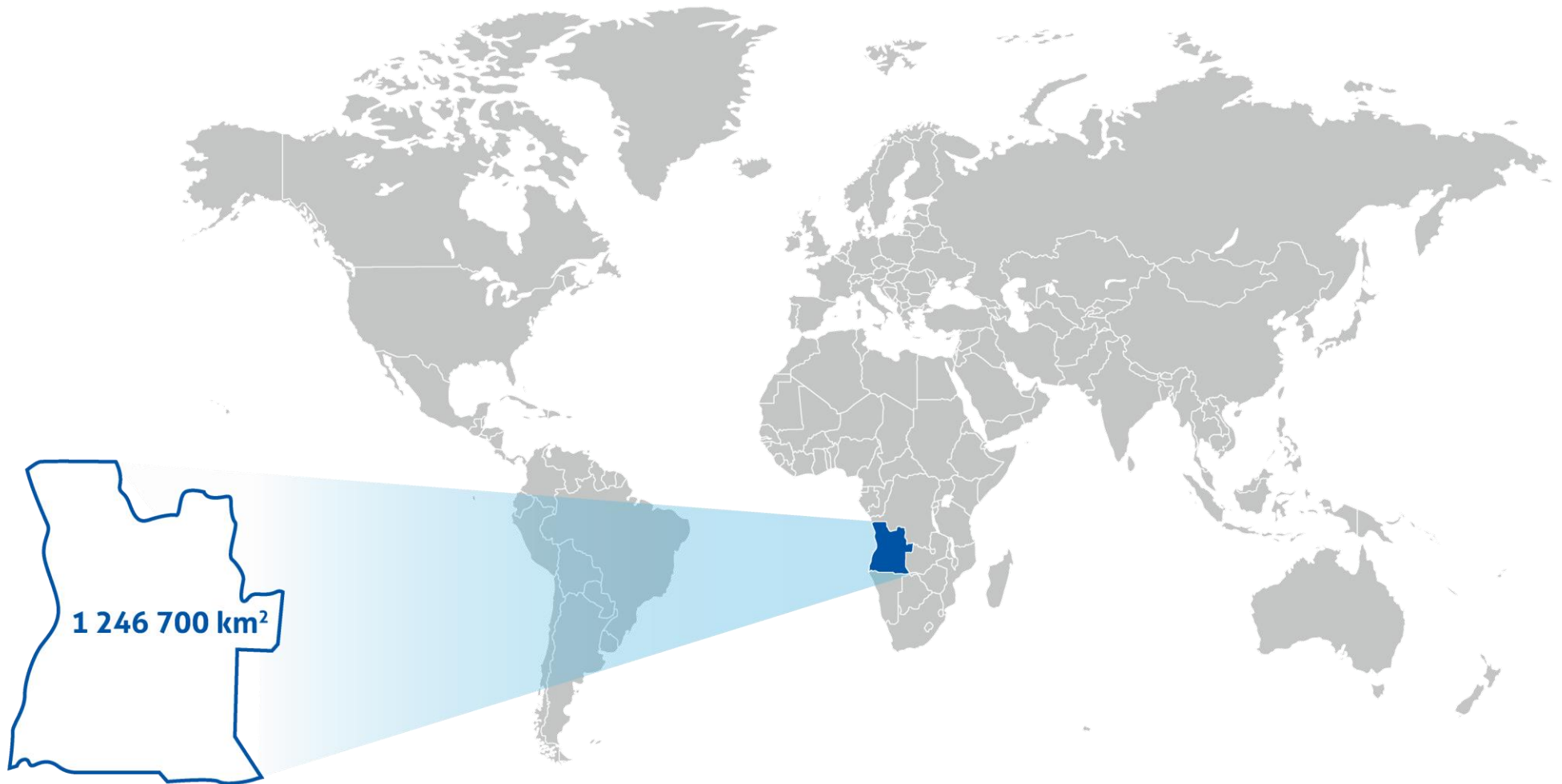
Angola | Azerbaijan | Iraq  
Malaysia | Mozambique | UAE  
Peru | Norway



GECF



REPUBLIC OF  
**ANGOLA**



POPULATION

**33 933 611**



CAPITAL

**LUANDA**



CONTINENT

**AFRICA**



CURRENCY

**ANGOLAN KWANZA**



TIME ZONE

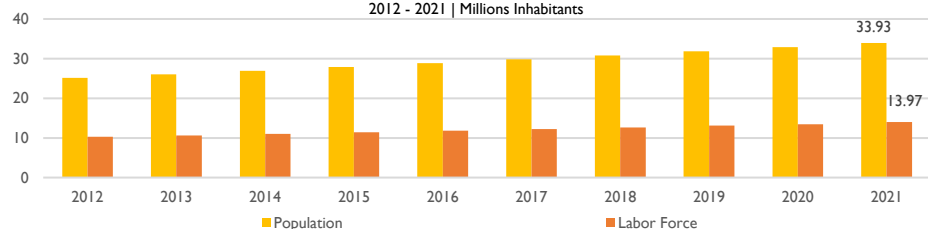
**WEST AFRICA (GMT+1)**

## 5.1.1 Macroeconomics

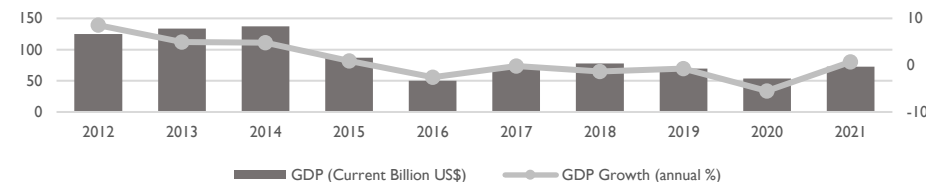
Table 5.1.1.1 Angola Macroeconomic Indicators

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
<b>Population</b> (Inhabitants)	25,107,925	26,015,786	26,941,773	27,884,380	28,842,482	29,816,769	30,809,787	31,825,299	32,866,268	33,933,611
<b>Labor Force</b> (Inhabitants)	10,252,532	10,621,492	11,004,723	11,402,381	11,804,734	12,223,456	12,659,938	13,116,712	13,415,460	13,971,332
<b>GDP</b> (Current Billion US\$)	125.00	133.40	137.24	87.22	49.84	68.97	77.79	69.31	53.62	72.55
<b>GDP Growth</b> (annual %)	8.54	4.95	4.82	0.94	-2.58	-0.15	-1.32	-0.70	-5.50	0.70
<b>GDP per capita</b> (Current US\$)	4,978.43	5,127.72	5,094.11	3,127.89	1,728.02	2,313.22	2,524.94	2,177.80	1,631.43	2,137.91
<b>Exports of Goods and Services</b> (Current Billion US\$)	69.92	67.70	61.34	25.95	14.02	20.00	31.77	28.27	20.33	27.48
<b>Exports of Goods and Services</b> (% of GDP)	55.94	50.75	44.70	29.75	28.12	29.00	40.84	40.79	37.91	37.87
<b>Imports of Goods and Services</b> (Current Billion US\$)	44.82	48.11	47.54	28.90	12.58	16.04	19.87	11.81	10.16	10.92
<b>Imports of Goods and Services</b> (% of GDP)	35.86	36.06	34.64	33.13	25.25	23.25	25.54	17.04	18.95	15.05
<b>Inflation consumer prices</b> (annual %)	10.28	8.78	7.28	9.15	30.70	29.84	19.63	17.08	NA	NA
<b>Energy use</b> (kg of oil equivalent per capita)	552.36	533.76	544.61	NA	NA	NA	NA	NA	NA	NA
<b>Natural Gas use</b> (Scm per capita)	30.27	15.79	11.14	27.61	27.74	26.46	25.64	25.61	25.16	24.49

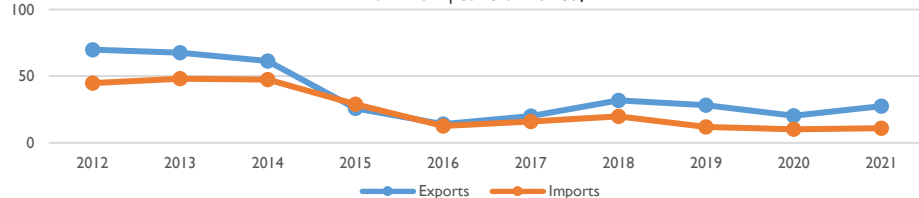
Graph 5.1.1.1. Angola: Population and Labor Force  
2012 - 2021 | Millions Inhabitants



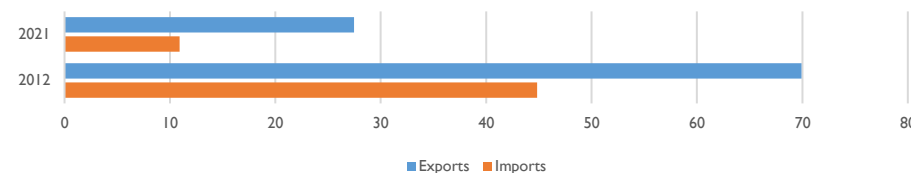
Graph 5.1.1.2. Angola: GDP and GDP Growth  
2012 - 2021 | Current Billion US\$ and Annual %



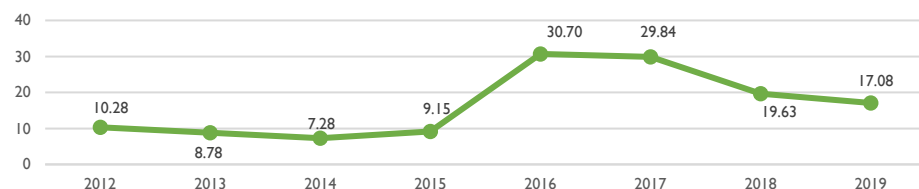
Graph 5.1.1.3. Angola: Exports and Imports (Goods and Services)  
2012 - 2021 | Current Billion US\$



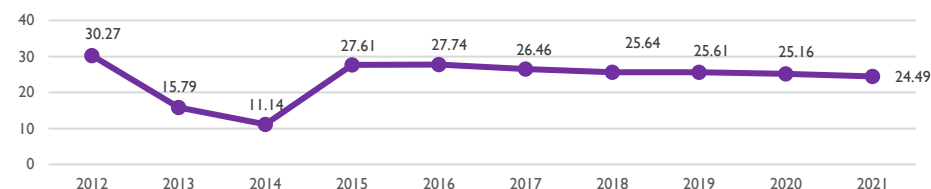
Graph 5.1.1.4. Angola: Exports and Imports (Goods and Services)  
2012 vs 2021 | Current Billion US\$



Graph 5.1.1.5. Angola: Inflation (Consumer Prices)  
2012 - 2019 | Annual %



Graph 5.1.1.6. Angola: Natural Gas Use  
2012 - 2021 | Scm per capita



## 5.1.2 Reserves and Production

Table 5.1.2.1 Proven Natural Gas Reserves (Bcm)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
<b>Proven Gas Reserves</b>	275	275	308	308	440	422	384	343	301	301

Table 5.1.2.2 Natural Gas Production (Bcm)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
<b>Gross Production</b>	10.85	10.76	10.44	10.54	11.71	14.95	13.88	12.91	13.15	11.45
<b>Marketed Production</b>	0.76	0.93	0.73	0.77	1.71	5.80	6.38	6.81	7.45	5.95
<b>Reinjection</b>	2.63	2.58	2.53	2.55	2.50	2.60	2.50	2.40	2.40	2.50
<b>Flaring</b>	7.26	7.00	6.99	7.00	7.20	6.10	4.20	2.80	2.30	2.10
<b>Other Losses</b>	0.20	0.25	0.19	0.22	0.30	0.45	0.80	0.90	1.00	0.90

## 5.1.3 Domestic Consumption and Trade

Table 5.1.3.1 Domestic Gas Consumption (Bcm)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
<b>Totals</b>	0.76	0.41	0.30	0.77	0.80	0.79	0.79	0.82	0.83	0.83

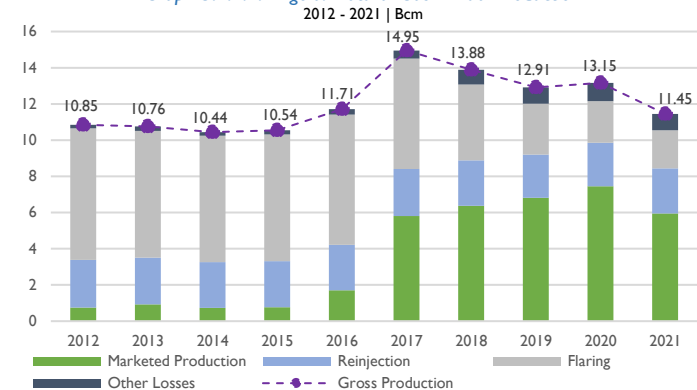
\* Gas equivalent

Table 5.1.3.2 Historical Trade: Natural Gas Exports

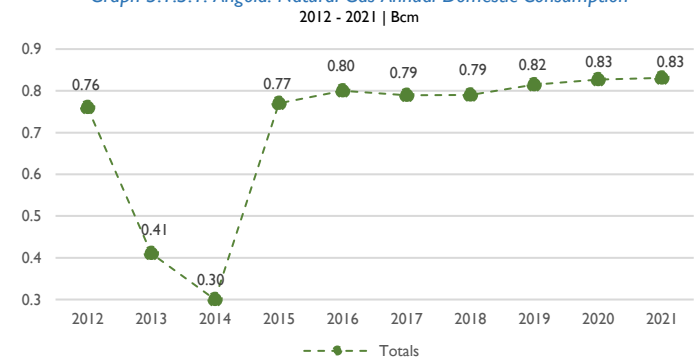
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	
<b>LNG</b>	Bcm*	0.00	0.52	0.43	0.00	0.91	4.96	5.31	5.72	6.27	4.74
	MMT	0.00	0.38	0.32	0.00	0.67	3.65	3.91	4.21	4.61	3.48
<b>Totals (Bcm)</b>	0.00	0.52	0.43	0.00	0.91	4.96	5.31	5.72	6.27	4.74	

\* Gas equivalent

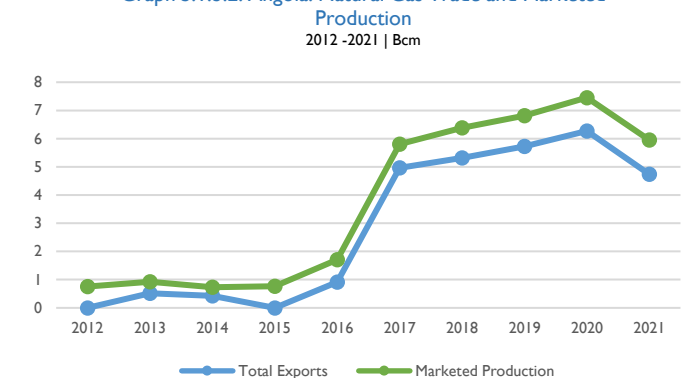
Graph 5.1.2.1. Angola: Natural Gas Annual Production



Graph 5.1.3.1. Angola: Natural Gas Annual Domestic Consumption



Graph 5.1.3.2. Angola: Natural Gas Trade and Marketed Production



## 5.1.4 Transport and Plants

Table 5.1.4.1 LNG Carrier Fleet

Ship Name	Owner(s)	Delivered Year	Size (1000 Scm)
Cubal	NYK Line/Mitsui & Co/Teekay LNG Partners	2012	160.28
Lobito	Mitsui & Co/NYK Line/Teekay LNG Partners	2011	160.28
Malanje	Mitsui & Co/NYK Line/Teekay LNG Partners	2011	160.28
Sonangol Benguela	Sonangol	2007	160.50
Sonangol Etosha	Sonangol	2007	160.50
Sonangol Sambizanga	Sonangol	2007	160.50
Soyo	Mitsui & Co/NYK Line/Teekay LNG Partners	2011	160.28
<b>Total</b>			<b>1122.60</b>

Table 5.1.4.2 Liquefaction Plants

Plant	Liquefaction (No. of Trains)	Total Capacity (MTPA)	Status	Start Year	Owner(s)	Operator(s)
Angola LNG	1	5.2	Operational	2013	Angola LNG	Angola LNG



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POPULATION

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CAPITAL

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**EUROASIA**



CURRENCY

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TIME ZONE

**AZERBAIJAN (GMT+4)**



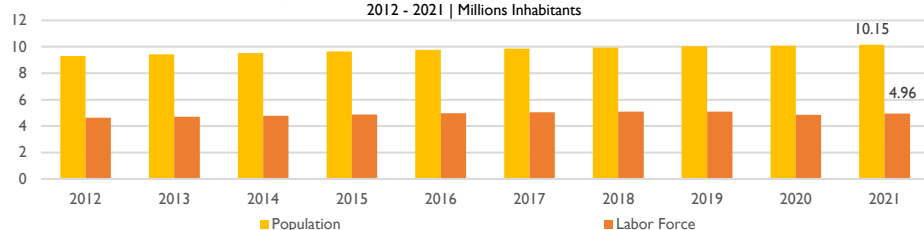
## 5.2.1 Macroeconomics

Table 5.2.1.1 Azerbaijan Macroeconomic Indicators

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
<b>Population</b> (Inhabitants)	9,295,784	9,416,801	9,535,079	9,649,341	9,757,812	9,854,033	9,939,771	10,024,283	10,093,121	10,145,212
<b>Labor Force</b> (Inhabitants)	4,627,324	4,702,401	4,791,071	4,876,104	4,969,576	5,033,710	5,091,128	5,103,475	4,846,887	4,955,924
<b>GDP</b> (Current Billion US\$)	69.68	74.16	75.24	53.07	37.87	40.87	47.11	48.17	42.69	54.62
<b>GDP Growth</b> (annual %)	2.17	5.81	2.75	1.09	-3.10	0.20	1.50	2.50	-4.30	5.60
<b>GDP per capita</b> (Current US\$)	7,496.29	7,875.76	7,891.31	5,500.31	3,880.74	4,147.09	4,739.84	4,805.75	4,229.91	5,384.03
<b>Exports of Goods and Services</b> (Current Billion US\$)	36.91	35.91	32.56	20.06	17.58	19.84	25.48	23.63	15.21	25.49
<b>Exports of Goods and Services</b> (% of GDP)	52.97	48.42	43.27	37.79	46.43	48.55	54.09	49.05	35.62	46.66
<b>Imports of Goods and Services</b> (Current Billion US\$)	17.62	19.48	19.72	18.47	16.53	17.10	17.71	17.71	15.54	16.34
<b>Imports of Goods and Services</b> (% of GDP)	25.29	26.26	26.21	34.81	43.65	41.85	37.58	36.77	36.39	29.91
<b>Inflation consumer prices</b> (annual %)	1.07	2.42	1.37	4.03	12.44	12.94	2.27	2.61	2.76	6.65
<b>Energy use</b> (kg of oil equivalent per capita)	1,472.90	1,474.00	1,502.08	NA	NA	NA	NA	NA	NA	NA
<b>Natural Gas use</b> (Scm per capita)	1,134.01	1,005.44	1,040.16	1,127.54	1,075.92	954.81	1,088.56	1,176.14	1,124.53	1,104.95

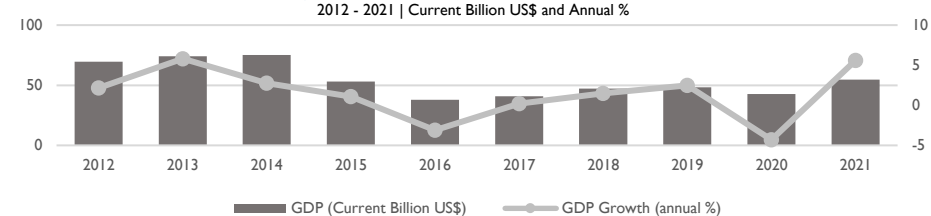
Graph 5.2.1.1. Azerbaijan: Population and Labor Force

2012 - 2021 | Millions Inhabitants



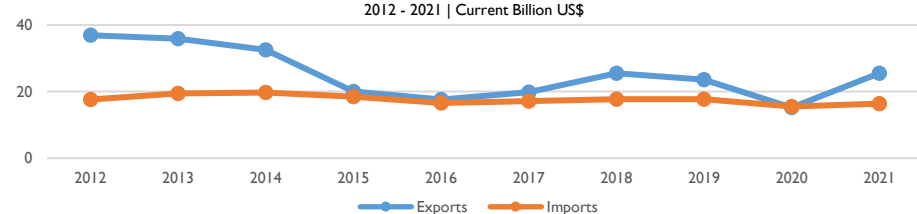
Graph 5.2.1.2. Azerbaijan: GDP and GDP Growth

2012 - 2021 | Current Billion US\$ and Annual %



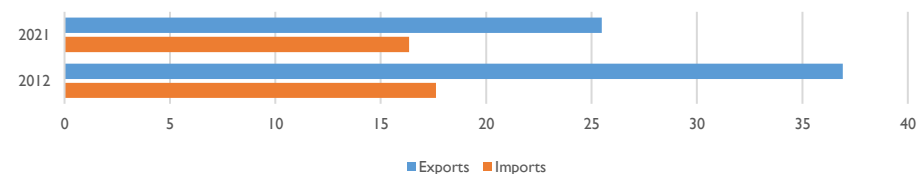
Graph 5.2.1.3. Azerbaijan: Exports and Imports (Goods and Services)

2012 - 2021 | Current Billion US\$



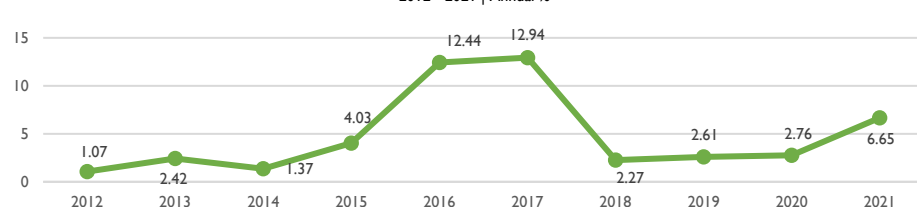
Graph 5.2.1.4. Azerbaijan: Exports and Imports (Goods and Services)

2012 vs 2021 | Current Billion US\$



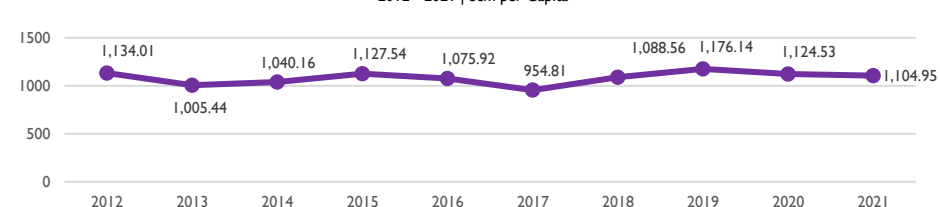
Graph 5.2.1.5. Azerbaijan: Inflation (Consumer Prices)

2012 - 2021 | Annual %



Graph 5.2.1.6. Azerbaijan: Natural Gas Use

2012 - 2021 | Scm per Capita



## 5.2.2 Reserves and Production

Table 5.2.2.1 Proven Natural Gas Reserves (Bcm)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
<b>Proven Gas Reserves</b>	508	675	665	665	665	1,074	1,435	1,917	1,917	1,917

Table 5.2.2.2 Natural Gas Production (Bcm)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
<b>Gross Production</b>	25.95	28.51	28.89	28.14	28.28	27.17	28.21	33.60	34.97	41.77
<b>Marketed Production</b>	16.80	17.44	18.34	18.74	18.28	17.72	18.71	22.88	24.72	30.87
<b>Reinjection</b>	6.15	7.75	7.80	7.00	7.70	7.40	7.40	7.99	7.60	7.60
<b>Flaring</b>	0.65	0.65	0.50	0.30	0.30	0.25	0.20	0.30	0.15	0.20
<b>Other Losses</b>	2.35	2.67	2.25	2.10	2.00	1.80	1.90	2.43	2.50	3.10

## 5.2.3 Domestic Consumption and Trade

Table 5.2.3.1 Domestic Gas Consumption (Bcm)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
<b>Totals</b>	10.54	9.47	9.92	10.88	10.50	9.41	10.82	11.79	11.35	11.21

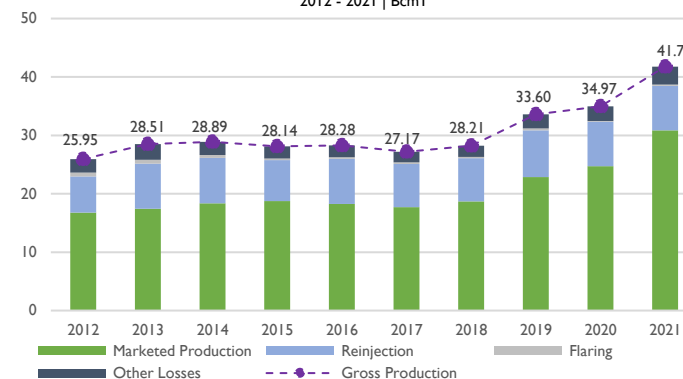
Table 5.2.3.2 Historical Trade: Natural Gas Exports (Bcm)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
<b>Pipeline</b>	6.57	7.31	8.07	8.14	8.04	8.86	9.91	11.83	13.54	19.38
<b>Totals</b>	6.57	7.31	8.07	8.14	8.04	8.86	9.91	11.83	13.54	19.38

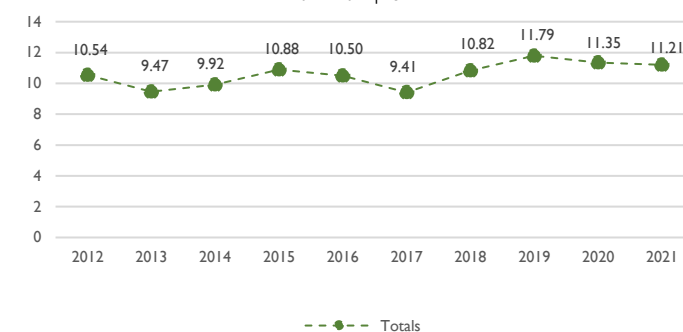
Table 5.2.3.3 Historical Trade: Natural Gas Imports (Bcm)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
<b>Pipeline</b>	0.55	0.45	0.30	0.28	0.30	0.55	2.06	1.01	0.17	0.50
<b>Totals</b>	0.55	0.45	0.30	0.28	0.30	0.55	2.06	1.01	0.17	0.50

Graph 5.2.2.1. Azerbaijan: Natural Gas Annual Production  
2012 - 2021 | Bcm



Graph 5.2.3.1. Azerbaijan: Natural Gas Annual Domestic Consumption  
2012 - 2021 | Bcm



Graph 5.2.3.2. Azerbaijan: Natural Gas Trade and Marketed Production  
2012 - 2021 | Bcm



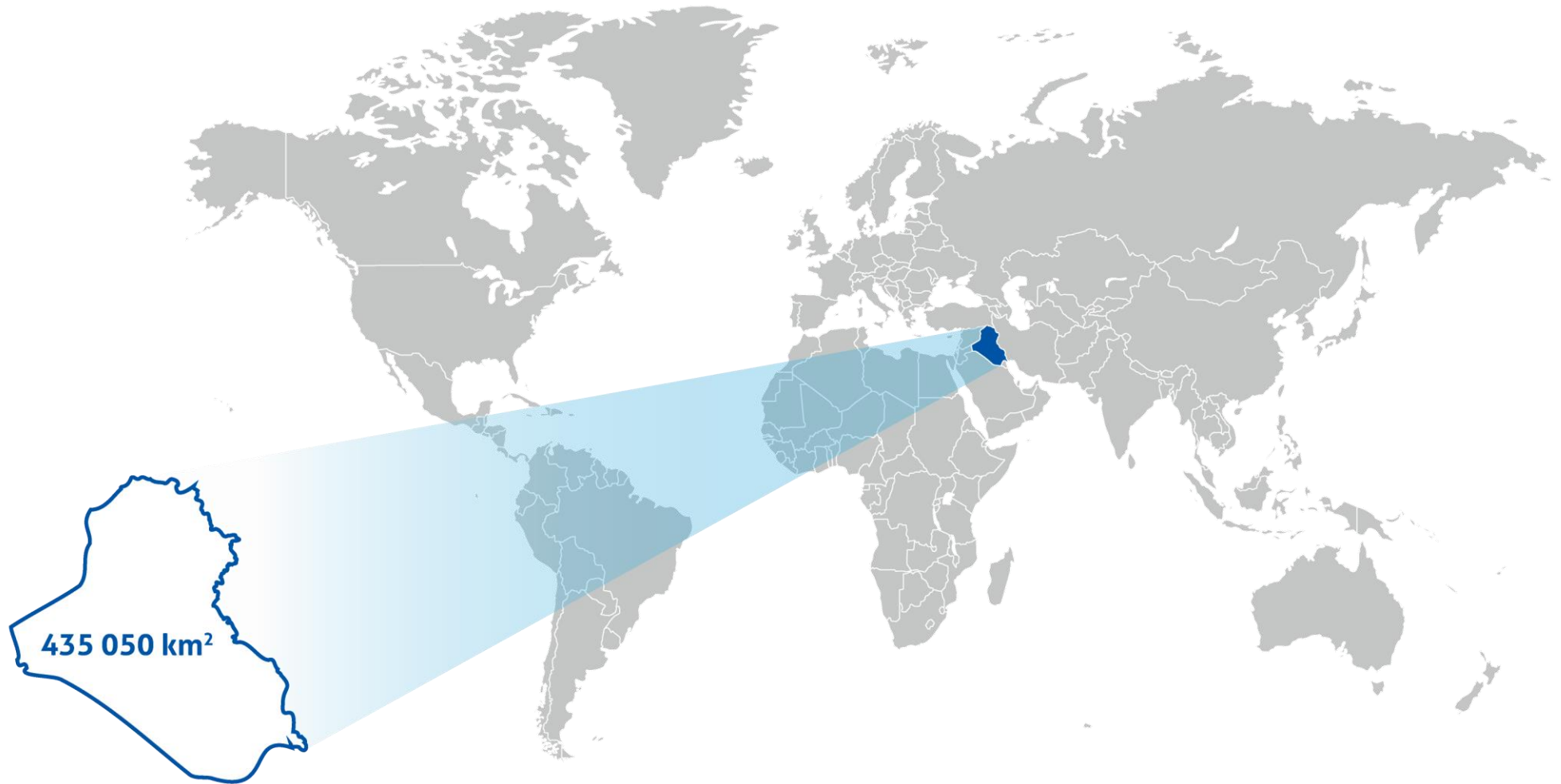
## 5.2.4 Transport and Plants

Table 5.2.4.1 Natural Gas Export Pipelines

Pipeline	Connection			Owner(s)	Operator(s)	Status	Capacity (Bcm/Year)	Type	Start Year	Length (km)	Diameter (Inches)	
	From	To	Via									
Southern Gas Corridor	Azerbaijan	Georgia, Turke, Greece, Italy	-	BP, TPAO, SOCAR, Petronas, Lukoil, Naftiran, Intertrade	BP	Operational	16.0	Export	2006	692	42	
Jolfa-Nakhchivan	Azerbaijan	Iran	-	SOCAR, NIGC	SOCAR, NIGC	Operational	10.0	Swap	2005	627	40	
Mozdok–Makhachkala– Kazi Magomed	Russia	Azerbaijan	-	SOCAR, GAZPROM	SOCAR, GAZPROM	Operational	13.0	-	2010	680	48	
Trans-Caspian	Azerbaijan	Turkmenistan	-	NA	NA	Proposed	30.0	Export	NA	300	NA	
<b>Total Expected Capacity</b>							<b>69.0</b>					



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POPULATION

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CAPITAL

**BAGHDAD**



CONTINENT

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TIME ZONE

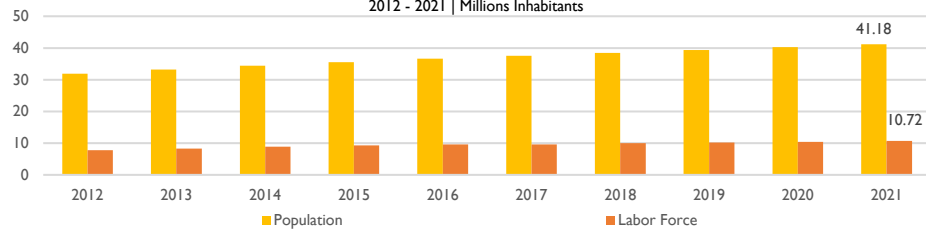
**ARABIA (GMT+3)**

### 5.3.1 Macroeconomics

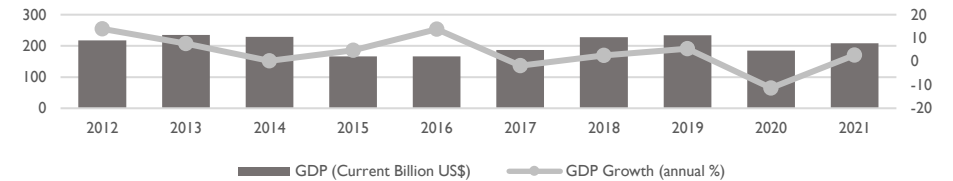
Table 5.3.1.1 Iraq Macroeconomic Indicators

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
<b>Population</b> (Inhabitants)	31,890,012	33,157,061	34,411,949	35,572,269	36,610,632	37,552,789	38,433,604	39,309,789	40,222,503	41,179,351
<b>Labor Force</b> (Inhabitants)	7,742,672	8,304,576	8,889,023	9,291,728	9,620,473	9,631,305	9,968,680	10,242,316	10,368,723	10,718,823
<b>GDP</b> (Current Billion US\$)	218.00	234.64	228.42	166.77	166.60	187.22	227.37	233.64	184.37	207.89
<b>GDP Growth</b> (annual %)	13.94	7.63	0.20	4.72	13.79	-1.82	2.63	5.51	-11.32	2.78
<b>GDP per capita</b> (Current US\$)	6,836.07	7,076.55	6,637.68	4,688.32	4,550.66	4,985.45	5,915.85	5,943.46	4,583.75	5,048.39
<b>Exports of Goods and Services</b> (Current Billion US\$)	97.03	93.07	88.95	57.56	46.83	63.50	92.77	88.90	50.19	NA
<b>Exports of Goods and Services</b> (% of GDP)	44.51	39.66	38.94	34.51	28.11	33.92	40.80	38.05	27.22	NA
<b>Imports of Goods and Services</b> (Current Billion US\$)	63.44	65.10	68.62	58.50	44.12	48.42	56.84	72.28	54.27	NA
<b>Imports of Goods and Services</b> (% of GDP)	29.10	27.75	30.04	35.08	26.48	25.86	25.00	30.94	29.43	NA
<b>Inflation consumer prices</b> (annual %)	6.09	1.88	2.24	1.39	0.56	0.18	0.37	-0.20	0.57	6.04
<b>Energy use</b> (kg of oil equivalent per capita)	1,438.18	1,488.56	1,437.90	NA	NA	NA	NA	NA	NA	NA
<b>Natural Gas use</b> (Scm per capita)	209.47	194.19	197.68	194.08	230.66	269.95	347.48	445.52	466.98	469.27

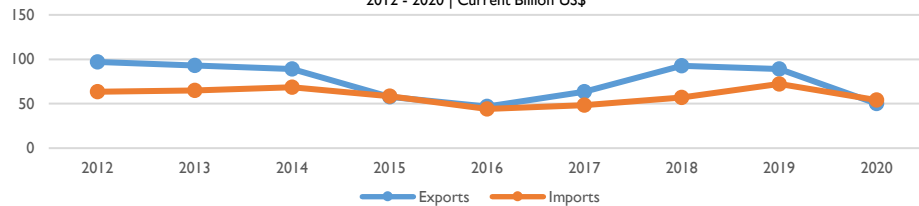
Graph 5.3.1.1. Iraq: Population and Labor Force  
2012 - 2021 | Millions Inhabitants



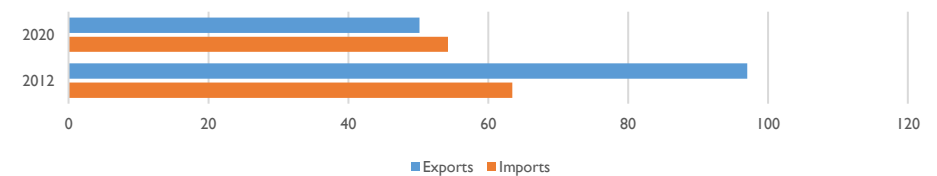
Graph 5.3.1.2. Iraq: GDP and GDP Growth  
2012 - 2021 | Current Billion US\$ and Annual %



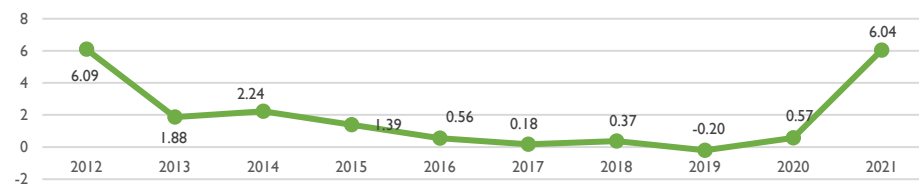
Graph 5.3.1.3. Iraq: Exports and Imports (Goods and Services)  
2012 - 2020 | Current Billion US\$



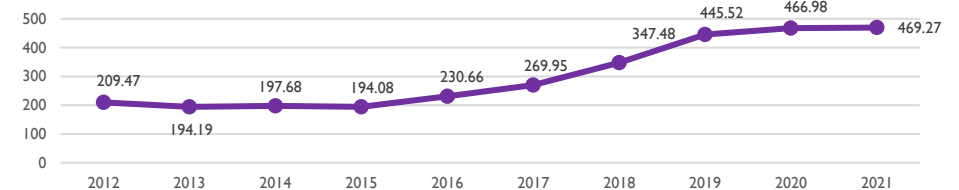
Graph 5.3.1.4. Iraq: Exports and Imports (Goods and Services)  
2012 vs 2020 | Current Billion US\$



Graph 5.3.1.5. Iraq: Inflation (Consumer Prices)  
2012 - 2021 | Annual %



Graph 5.3.1.6. Iraq: Natural Gas Use  
2012 - 2021 | Scm per Capita



### 5.3.2 Reserves and Production

Table 5.3.2.1 Proven Natural Gas Reserves (Bcm)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
<b>Proven Gas Reserves</b>	3,158	3,158	3,158	3,158	3,820	3,744	3,729	3,714	3,714	3,714

Table 5.3.2.2 Natural Gas Production (Bcm)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
<b>Gross Production</b>	26.54	27.65	28.88	30.15	34.32	35.15	36.33	37.12	29.45	33.55
<b>Marketed Production</b>	6.68	7.44	7.93	7.69	10.42	10.65	11.13	11.54	7.37	9.59
<b>Reinjection</b>	0.88	0.34	0.15	0.16	0.15	0.20	0.20	0.20	0.20	0.20
<b>Flaring</b>	11.98	12.43	12.87	14.61	16.00	16.50	16.50	16.70	14.20	16.00
<b>Other Losses</b>	7.00	7.44	7.93	7.69	7.75	7.80	8.50	8.68	7.68	7.76

### 5.3.3 Domestic Consumption and Trade

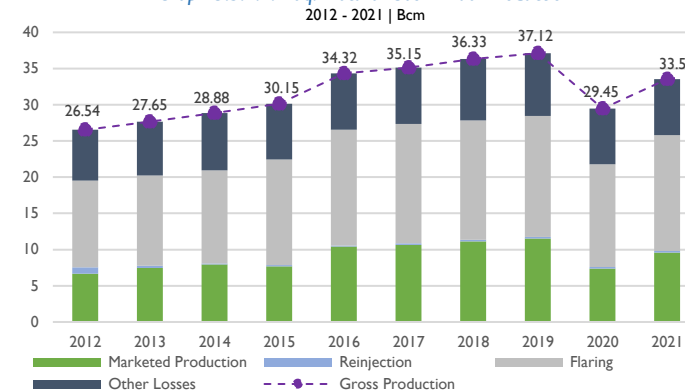
Table 5.3.3.1 Domestic Gas Consumption (Bcm)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
<b>Totals</b>	6.68	6.44	6.80	6.90	8.44	10.14	13.35	17.51	18.78	19.32

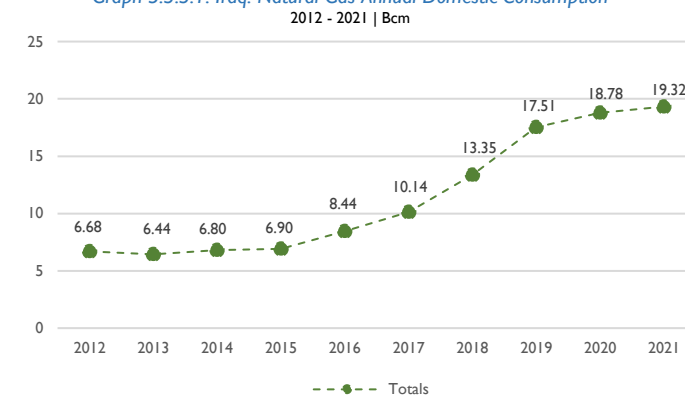
Table 5.3.3.2 Historical Trade: Natural Gas Imports (Bcm)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
<b>Pipeline</b>	0.00	0.00	0.00	0.00	0.00	1.45	4.26	6.10	11.41	9.74
<b>Totals</b>	0.00	0.00	0.00	0.00	0.00	1.45	4.26	6.10	11.41	9.74

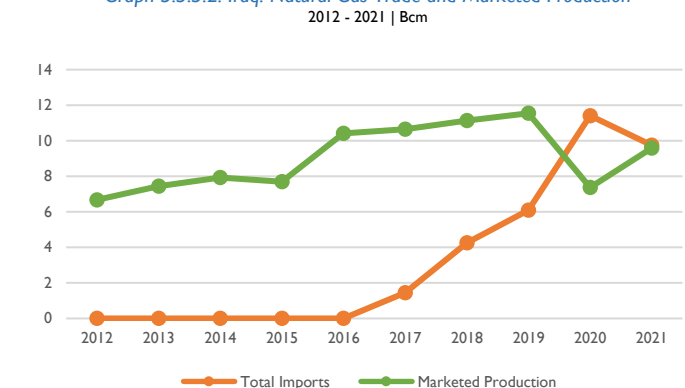
Graph 5.3.2.1. Iraq: Natural Gas Annual Production



Graph 5.3.3.1. Iraq: Natural Gas Annual Domestic Consumption



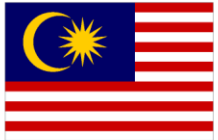
Graph 5.3.3.2. Iraq: Natural Gas Trade and Marketed Production



### 5.3.4 Transport and Plants

Table 5.3.4.1 Natural Gas Export Pipelines

Pipeline	Connection			Owner(s)	Operator(s)	Status	Capacity (Bcm/year)	Type	Start Year	Length (km)	Diameter (Inches)
	From	To	Via								
Asaluye-Baghdad	Iran	Iraq	-	NIOC, INOC	NIOC, INOC	Operational	12.8	Import	2017	230	NA
Asaluye-Basrah	Iran	Iraq	-	NIOC, INOC	NIOC, INOC	Operational	NA	Import	NA	NA	NA
<b>Total Existing Capacity</b>							<b>+12.8</b>				



# MALAYSIA



POPULATION

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CAPITAL

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CONTINENT

ASIA



CURRENCY

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TIME ZONE

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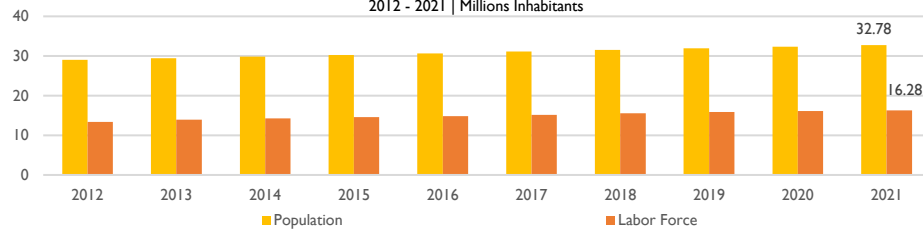
### 5.4.I Macroeconomics

Table 5.4.1.I Malaysia Macroeconomic Indicators

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
<b>Population</b> (Inhabitants)	29,068,189	29,468,923	29,866,606	30,270,965	30,684,652	31,104,655	31,528,033	31,949,789	32,365,998	32,776,195
<b>Labor Force</b> (Inhabitants)	13,338,673	13,944,247	14,286,287	14,617,015	14,858,273	15,154,997	15,523,126	15,885,303	16,085,580	16,277,252
<b>GDP</b> (Current Billion US\$)	314.44	323.28	338.06	301.35	301.26	319.11	358.79	365.28	337.01	372.70
<b>GDP Growth</b> (annual %)	5.47	4.69	6.01	5.09	4.45	5.81	4.84	4.44	-5.65	3.13
<b>GDP per capita</b> (Current US\$)	10,817.43	10,970.10	11,319.06	9,955.24	9,817.79	10,259.30	11,380.08	11,432.83	10,412.35	11,371.10
<b>Exports of Goods and Services</b> (Current Billion US\$)	249.35	244.49	249.47	209.29	201.16	223.42	245.97	238.38	207.04	256.78
<b>Exports of Goods and Services</b> (% of GDP)	79.30	75.63	73.79	69.45	66.78	70.01	68.55	65.26	61.43	68.90
<b>Imports of Goods and Services</b> (Current Billion US\$)	215.53	216.89	218.11	186.60	181.13	201.50	221.90	210.89	185.32	230.44
<b>Imports of Goods and Services</b> (% of GDP)	68.54	67.09	64.52	61.92	60.12	63.14	61.85	57.73	54.99	61.83
<b>Inflation consumer prices</b> (annual %)	1.66	2.11	3.14	2.10	2.09	3.87	0.88	0.66	-1.14	2.48
<b>Energy use</b> (kg of oil equivalent per capita)	2,678.53	2,979.64	3,003.45	NA	NA	NA	NA	NA	NA	NA
<b>Natural Gas use</b> (Scm per capita)	1,086.76	1,113.38	1,177.90	1,049.03	1,052.25	1,070.48	1,091.00	1,157.07	1,026.17	1,056.13

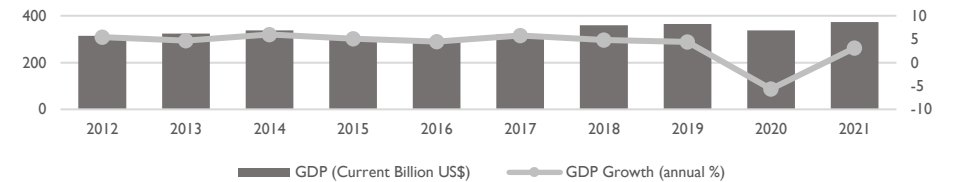
Graph 5.4.1.1. Malaysia: Population and Labor Force

2012 - 2021 | Millions Inhabitants



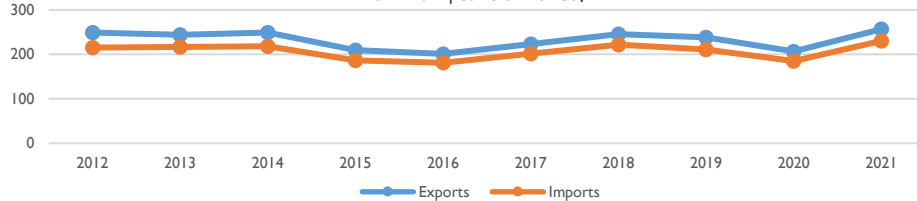
Graph 5.4.1.2. Malaysia: GDP and GDP Growth

2012 - 2021 | Current Billion US\$ and Annual %



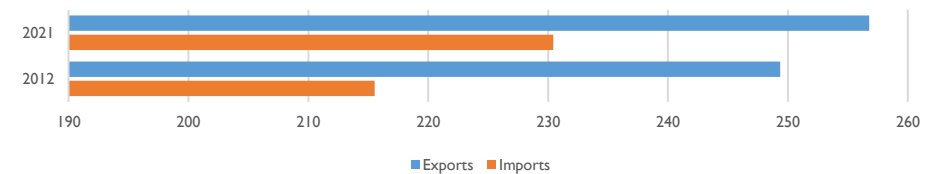
Graph 5.4.1.3. Malaysia: Exports and Imports (Goods and Services)

2012 - 2021 | Current Billion US\$



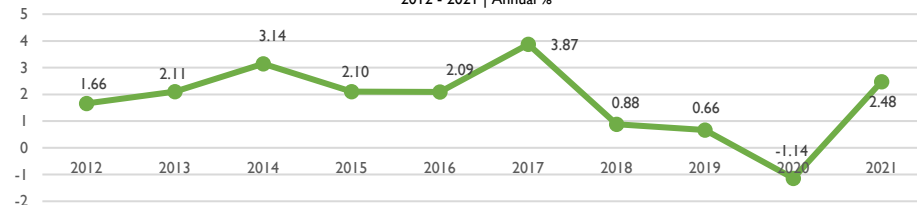
Graph 5.4.1.4. Malaysia: Exports and Imports (Goods and Services)

2012 vs 2021 | Current Billion US\$



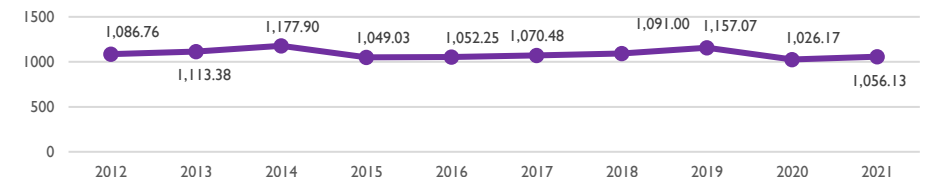
Graph 5.4.1.5. Malaysia: Inflation (Consumer Prices)

2012 - 2021 | Annual %



Graph 5.4.1.6. Malaysia: Natural Gas Use

2012 - 2021 | Scm per capita



### 5.4.2 Reserves and Production

Table 5.4.2.1 Proven Natural Gas Reserves (Bcm)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
<b>Proven Gas Reserves</b>	2,607	2,782	2,849	2,842	2,470	2,346	2,290	2,213	2,206	2,179

Table 5.4.2.2 Natural Gas Production (Bcm)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
<b>Gross Production</b>	76.05	80.06	80.66	77.94	79.52	86.60	80.43	82.29	76.47	80.24
<b>Marketed Production</b>	62.09	64.91	65.41	63.14	64.42	71.35	66.73	68.46	63.42	67.54
<b>Reinjection</b>	8.65	8.70	8.60	8.40	8.50	8.35	7.30	7.20	7.00	6.40
<b>Flaring</b>	1.30	1.25	1.50	1.50	1.50	1.40	1.10	1.20	1.00	0.90
<b>Other Losses</b>	5.20	5.20	5.15	4.90	5.10	5.50	5.30	5.43	5.05	5.40

### 5.4.3 Domestic Consumption and Trade

Table 5.4.3.1 Domestic Gas Consumption (Bcm)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
<b>Totals</b>	31.59	32.81	35.18	31.76	32.29	33.30	34.40	36.97	33.21	34.62

Table 5.4.3.2 Historical Trade: Natural Gas Exports

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	
<b>Pipeline</b>	1.64	2.30	1.84	1.56	1.70	1.50	1.10	1.47	1.70	2.21	
<b>LNG</b>	Bcm*	30.98	33.36	33.19	32.94	32.47	35.26	32.55	34.09	32.51	33.54
	MMT	22.78	24.53	24.40	24.22	23.87	25.93	23.94	25.06	23.91	24.66
<b>Totals (Bcm)</b>	32.62	35.66	35.03	34.50	34.17	36.76	33.65	35.56	34.21	35.75	

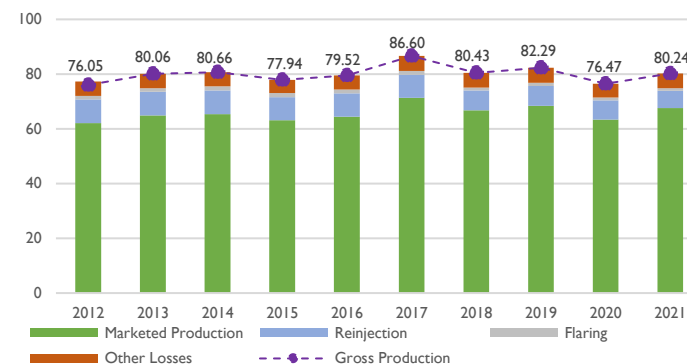
\* Gas equivalent

Table 5.4.3.3 Historical Trade: Natural Gas Imports

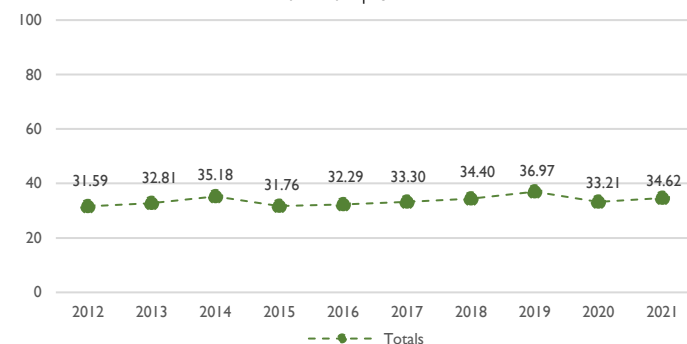
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
<b>Pipeline</b>	2.22	2.25	2.10	1.33	0.55	0.72	0.60	0.62	0.42	0.37
<b>LNG</b>	Bcm*	0.00	2.01	2.15	2.14	1.53	1.99	1.81	3.45	2.45
	MMT	0.00	1.48	1.58	1.57	1.13	1.46	1.33	2.54	2.64
<b>Totals (Bcm)</b>	2.22	4.26	4.25	3.47	2.08	2.71	2.41	4.07	4.01	2.82

\* Gas equivalent

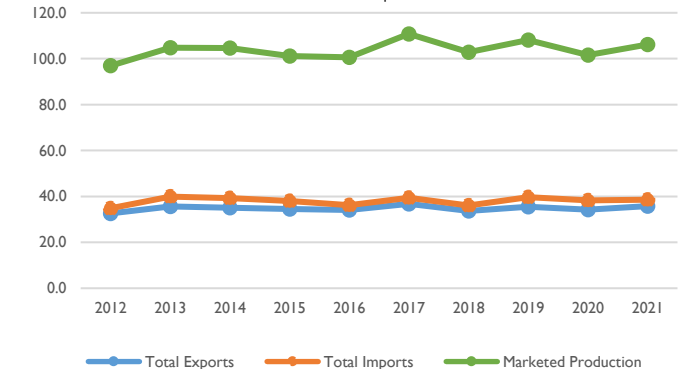
Graph 5.4.2.1. Malaysia: Natural Gas Annual Production  
2012 - 2021 | Bcm



Graph 5.4.3.1. Malaysia: Natural Gas Annual Domestic Consumption  
2012 - 2021 | Bcm



Graph 5.4.3.2. Malaysia: Natural Gas Trade and Marketed Production  
2012 - 2021 | Bcm



## 5.4.4 Transport and Plants

Table 5.4.4.1 Natural Gas Export Pipelines

Pipeline	Connection			Owner(s)	Operator(s)	Status	Capacity (Bcm/year)	Type	Start Year	Length (km)	Diameter (Inches)	
	From	To	Via									
Segamat	Malaysia	Singapore	-	Petronas Gas	Petronas Gas	Operational	5.7	Export	1991	230	36	
Yetagun	Malaysia	Thailand	-	Petronas Carigali	Petronas Carigali	Operational	5.2	Export	2007	270	24	
West Natuna Transportation System	Indonesia	Malaysia	-	PSCs	PSCs	Operational	2.6	Import	2001	96	18	
<b>Total Existing Capacity</b>							<b>13.5</b>					

Table 5.4.4.2 LNG Carrier Fleet

Ship Name	Owner(s)	Delivered Year	Size (1000 Scm)	Ship Name	Owner(s)	Delivered Year	Size (1000 Scm)
Aman Sendai	MISC	1997	18.80	Seri Anggun	MISC	2006	145.00
LNG Portovenere	MISC	1997	60.60	Seri Ayu	MISC	2007	145.00
LNG Lerici	MISC	1998	60.60	Seri Bakti	MISC	2007	152.60
Puteri Intan	MISC	1994	130.00	Seri Begawan	MISC	2007	152.30
Puteri Delima	MISC	1995	130.00	Seri Bijaksana	MISC	2008	152.30
Puteri Nilam	MISC	1995	130.00	Seri Balhaf	MISC	2009	154.50
Puteri Zamrud	MISC	1996	130.00	Seri Balqis	MISC	2009	154.50
Puteri Firus	MISC	1997	130.00	Seri Camellia	MISC	2016	150.00
Puteri Delima Satu	MISC	2002	137.10	Seri Cempaka	MISC	2017	150.20
Puteri Intan Satu	MISC	2002	137.10	Seri Cenderawasih	MISC	2017	150.00
Puteri Nilam Satu	MISC	2003	137.10	Seri Camar	MISC	2018	150.20
Puteri Firus Satu	MISC	2004	137.10	Seri Cemara	MISC	2018	150.20
Puteri Zamrud Satu	MISC	2004	137.10	Hull No.8030	MISC (JV)	2021	142.00
Puteri Mutiara Satu	MISC	2005	137.10	Hull No.8031	MISC (JV)	2021	142.00
Seri Alam	MISC	2005	145.00	Hull No.2364	MISC	2023	148.10
Seri Amanah	MISC	2006	145.00	Hull No.2365	MISC	2023	148.10
Seri Angkasa	MISC	2006	145.00				
<b>Sub Totals</b>			<b>2047.60</b>				<b>2387.00</b>
<b>Total</b>							<b>4434.6</b>

Table 5.4.4.3 Liquefaction Plants

Plant	Liquefaction (No. of Trains)	Total Capacity (MTPA)	Status	Start Year	Owner(s)	Operator(s)
Malaysia LNG	9	29.3	Operational	1983/1995/2003/2016	Malaysia LNG	Malaysia LNG
PFLNG1	1	1.2	Operational	2016	Petronas	Petronas
PFLNG2	1	1.5	Operational	2021	Petronas	Petronas
PFLNG3	1	2.0	Planned	-	Petronas	Petronas
<b>Total Expected Capacity</b>		<b>34.0</b>				

Table 5.4.4.4 Regasification Plants

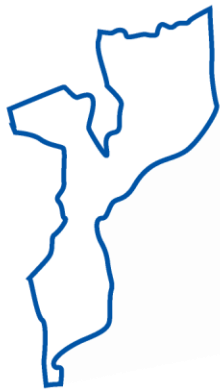
Plant	Total Capacity (MTPA)	Status	Start Year	Owner(s)	Operator(s)
Melaka (FSRU)	3.8	Operational	2013	-	-
Pengerang (RGT 2)	3.5	Operational	2017	-	-
<b>Total Existing Capacity</b>	<b>7.3</b>				



REPUBLIC OF  
**MOZAMBIQUE**



786,380 km<sup>2</sup>



POPULATION

32 163 045



CAPITAL

MAPUTO



CONTINENT

AFRICA



CURRENCY

MOZAMBICAN METICAL (MZN)



TIME ZONE

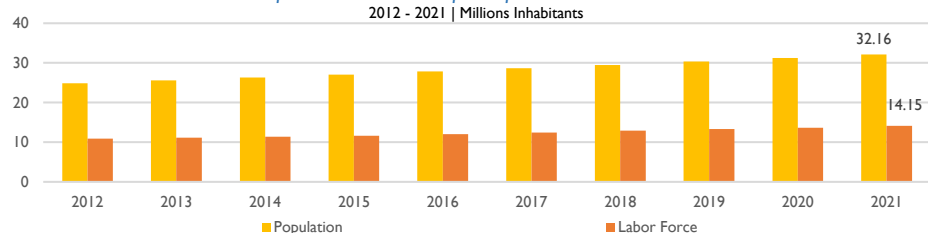
(GMT+2)

## 5.5.1 Macroeconomics

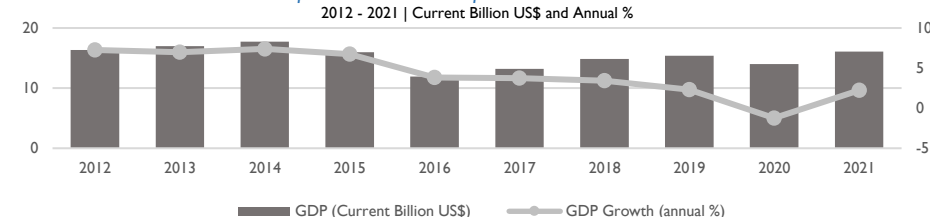
Table 5.5.1.1 Mozambique Macroeconomic Indicators

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
<b>Population</b> (Inhabitants)	24,862,673	25,560,752	26,286,192	27,042,001	27,829,930	28,649,007	29,496,009	30,366,043	31,255,435	32,163,045
<b>Labor Force</b> (Inhabitants)	10,930,022	11,158,852	11,403,911	11,667,371	12,047,984	12,454,016	12,882,281	13,327,075	13,661,543	14,146,886
<b>GDP</b> (Current Billion US\$)	16.35	16.97	17.72	15.95	11.94	13.22	14.85	15.39	14.03	16.10
<b>GDP Growth</b> (annual %)	7.26	6.96	7.40	6.72	3.82	3.74	3.44	2.31	-1.23	2.22
<b>GDP per capita</b> (Current US\$)	657.65	664.08	673.97	589.86	428.93	461.41	503.30	506.82	448.84	500.44
<b>Exports of Goods and Services</b> (Current Billion US\$)	4.72	4.54	5.54	4.96	4.00	5.10	6.66	4.97	4.19	NA
<b>Exports of Goods and Services</b> (% of GDP)	28.88	26.74	31.28	31.08	33.55	38.58	44.87	32.27	29.87	NA
<b>Imports of Goods and Services</b> (Current Billion US\$)	11.93	12.97	14.20	10.02	8.61	8.08	12.22	12.27	10.30	NA
<b>Imports of Goods and Services</b> (% of GDP)	72.99	76.41	80.18	62.83	72.09	61.14	82.33	79.73	73.42	NA
<b>Inflation consumer prices</b> (annual %)	2.60	4.26	2.56	3.55	17.42	15.11	3.91	2.78	3.14	NA
<b>Energy use</b> (kg of oil equivalent per capita)	424.51	427.67	442.66	NA	NA	NA	NA	NA	NA	NA
<b>Natural Gas use</b> (Scm per capita)	1,252.43	1,234.33	1,285.94	1,320.82	1,176.42	1,153.25	1,138.27	1,161.04	1,178.57	982.18

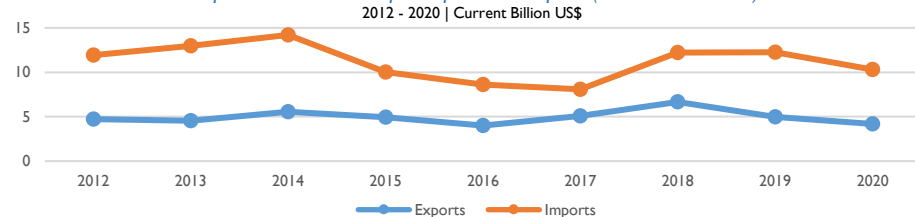
Graph 5.5.1.1. Mozambique: Population and Labor Force  
2012 - 2021 | Millions Inhabitants



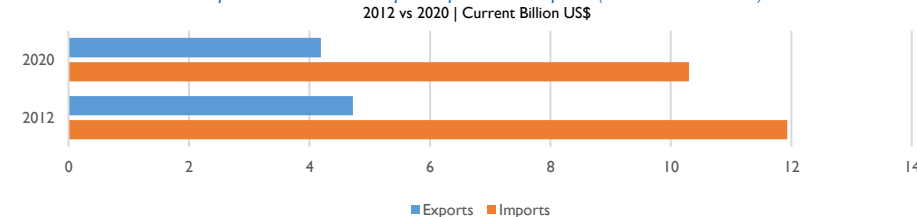
Graph 5.5.1.2. Mozambique: GDP and GDP Growth  
2012 - 2021 | Current Billion US\$ and Annual %



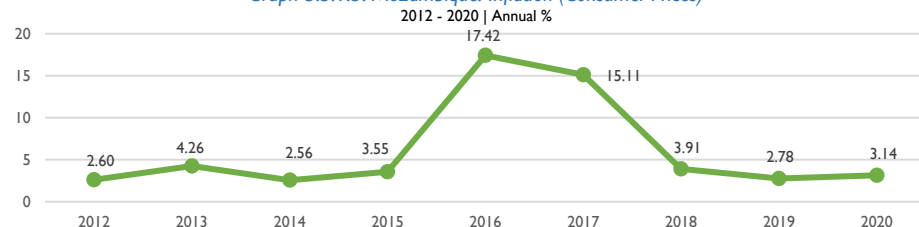
Graph 5.5.1.3. Mozambique: Exports and Imports (Goods and Services)  
2012 - 2020 | Current Billion US\$



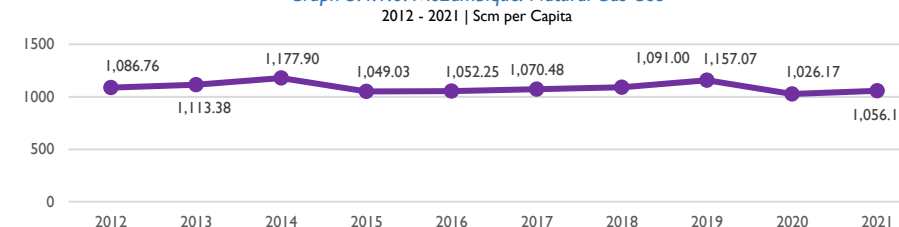
Graph 5.5.1.4. Mozambique: Exports and Imports (Goods and Services)  
2012 vs 2020 | Current Billion US\$



Graph 5.5.1.5. Mozambique: Inflation (Consumer Prices)  
2012 - 2020 | Annual %



Graph 5.4.1.6. Mozambique: Natural Gas Use  
2012 - 2021 | Scm per Capita



## 5.5.2 Reserves and Production

Table 5.5.2.1 Proven Natural Gas Reserves (Bcm)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
<b>Proven Gas Reserves</b>	75	75	75	75	75	186	186	650	650	650

Table 5.5.2.2 Natural Gas Production (Bcm)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
<b>Gross Production</b>	4.89	5.28	5.60	5.71	5.81	5.81	5.61	5.51	5.41	5.38
<b>Marketed Production</b>	4.89	5.28	5.60	5.70	5.80	5.80	5.60	5.50	5.40	5.37
<b>Reinjection</b>	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
<b>Flaring</b>	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01

## 5.5.3 Domestic Consumption and Trade

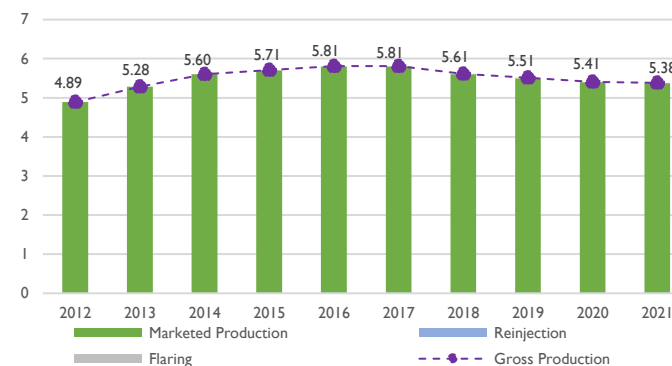
Table 5.5.3.1 Domestic Gas Consumption (Bcm)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
<b>Totals</b>	1.29	1.56	1.80	1.90	1.81	1.72	1.48	1.55	1.50	1.07

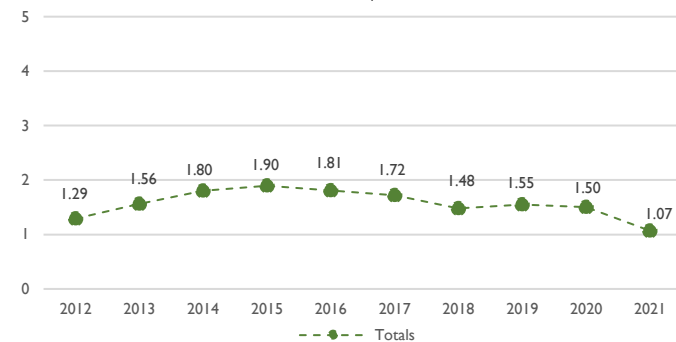
Table 5.5.3.3 Historical Trade: Natural Gas Exports (Bcm)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
<b>Pipeline</b>	3.60	3.69	3.78	3.79	3.96	4.08	4.12	3.95	3.89	4.29
<b>Totals</b>	3.60	3.69	3.78	3.79	3.96	4.08	4.12	3.95	3.89	4.29

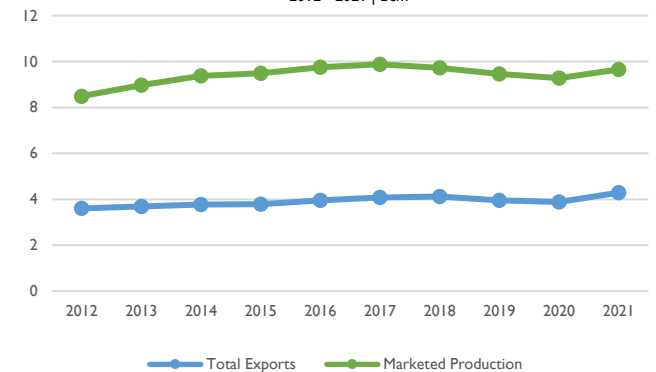
Graph 5.5.2.1. Mozambique: Natural Gas Annual Production  
2012 - 2021 | Bcm



Graph 5.5.3.1. Mozambique: Natural Gas Annual Domestic Consumption  
2012 - 2021 | Bcm



Graph 5.5.3.2. Mozambique: Natural Gas Trade and Marketed Production  
2012 - 2021 | Bcm



## 5.5.4 Transport and Plants

Table 5.5.4.1 Natural Gas Export Pipelines

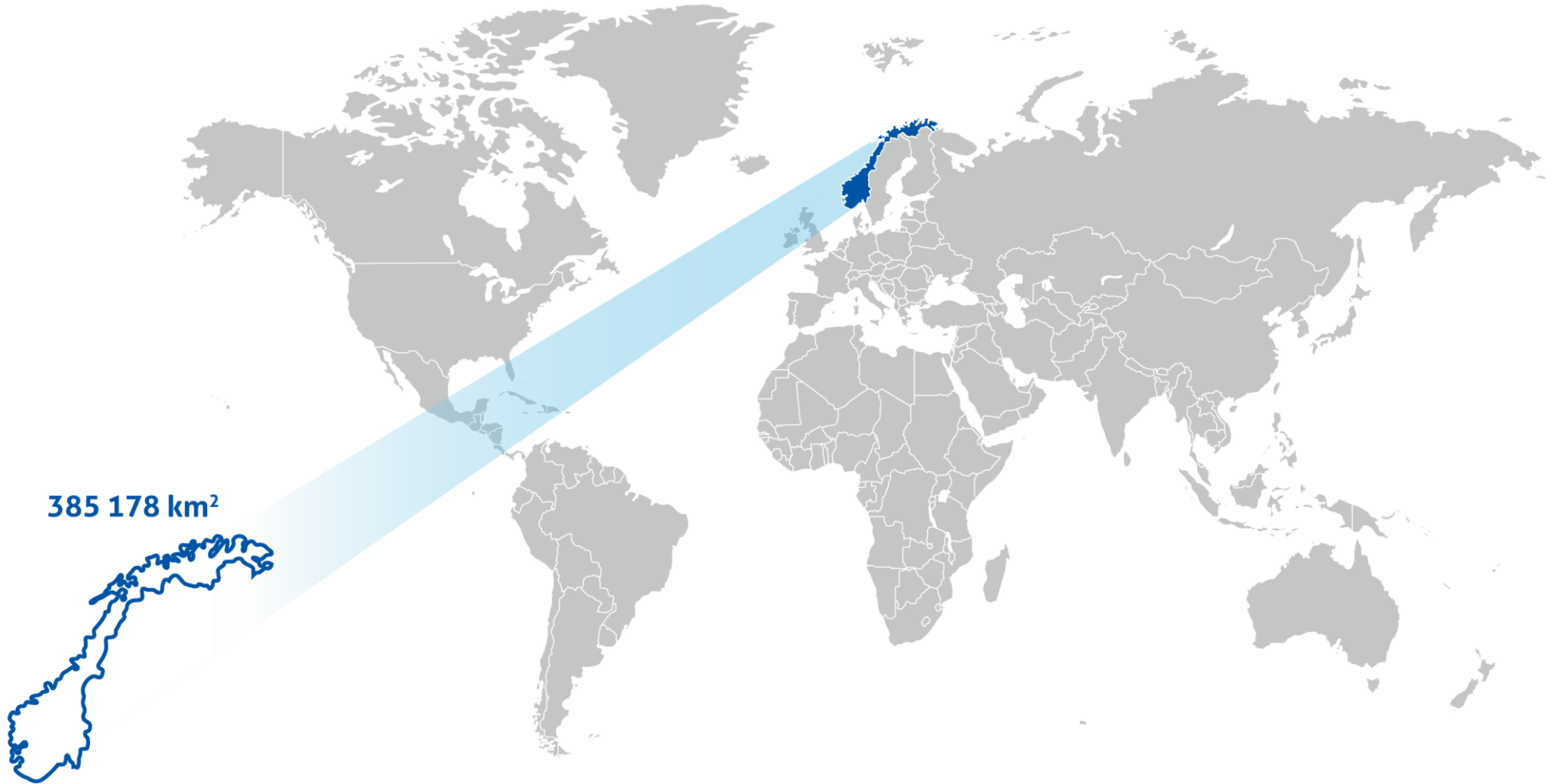
Pipeline	Connection			Owner(s)	Operator(s)	Status	Capacity (Bcm/year)	Type	Start Year	Length (km)	Diameter (Inches)	
	From	To	Via									
Mozambique South Africa Gas Pipeline	<b>Mozambique</b>	South Africa	-	Sasol Gas Holding, South African Gas Development Limited Company Companhia, Mocambicana de Gasoduto	Sasol, iGas, CMG	Operational	5.6	Export	2004	865	-	
African Renaissance Gas Pipeline	<b>Mozambique</b>	South Africa	-	-	-	Proposed	18.0	Export	2025/2026	2600	-	
<b>Total Expected Capacity</b>							<b>23.6</b>					

Table 5.5.4.2 Liquefaction Plants

Plant	Liquefaction (No. of Trains)	Total Capacity (MTPA)	Status	Start Year	Owner(s)	Operator(s)
Coral South FLNG	1	3.4	Under Construction	End 2022	Coral South FLNG	ENI Offshore Mozambique
Mozambique LNG	9	50.0	Announced	-	Mozambique LNG	Mozambique LNG
Rovuma LNG	2	15.2	Announced	2025	Rovuma LNG	Rovuma LNG
<b>Total Expected Capacity</b>		<b>68.6</b>				



KINGDOM OF  
**NORWAY**



POPULATION

**5 408 320**



CAPITAL

**OSLO**



CONTINENT

**EUROPE**



CURRENCY

**NORWEGIAN KRONE**



TIME ZONE

**CENTRAL EUROPEAN (GMT+2)**

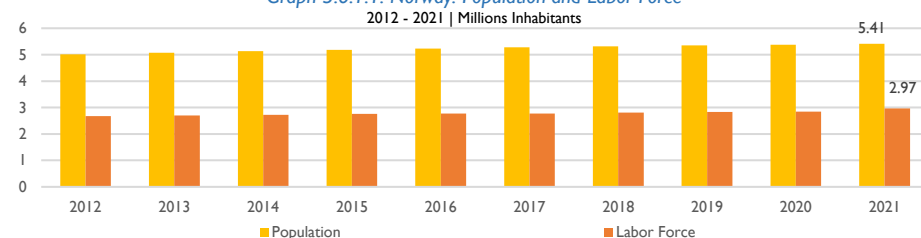


## 5.6.1 Macroeconomics

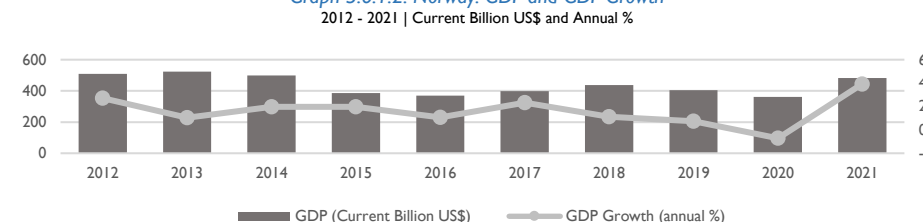
Table 5.6.1.1 Norway Macroeconomic Indicators

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
<b>Population</b> (Inhabitants)	5,018,573	5,079,623	5,137,232	5,188,607	5,234,519	5,276,968	5,311,916	5,347,896	5,379,475	5,408,320
<b>Labor Force</b> (Inhabitants)	2,671,168	2,697,989	2,728,680	2,765,947	2,776,089	2,768,764	2,808,280	2,834,618	2,841,159	2,965,737
<b>GDP</b> (Current Billion US\$)	509.51	522.76	498.41	385.80	368.83	398.39	437.00	404.94	362.20	482.44
<b>GDP Growth</b> (annual %)	2.70	1.03	1.97	1.97	1.07	2.32	1.12	0.75	-0.72	3.92
<b>GDP per capita</b> (Current US\$)	101,524.14	102,913.45	97,019.18	74,355.52	70,460.56	75,496.75	82,267.81	75,719.75	67,329.68	89,202.75
<b>Exports of Goods and Services</b> (Current Billion US\$)	207.28	204.91	194.36	145.84	130.79	144.75	165.94	146.84	116.79	200.54
<b>Exports of Goods and Services</b> (% of GDP)	40.68	39.20	39.00	37.80	35.46	36.33	37.97	36.26	32.25	41.57
<b>Imports of Goods and Services</b> (Current Billion US\$)	140.29	148.20	147.86	123.68	123.48	130.80	140.88	140.84	119.83	140.45
<b>Imports of Goods and Services</b> (% of GDP)	27.53	28.35	29.67	32.06	33.48	32.83	32.24	34.78	33.09	29.11
<b>Inflation consumer prices</b> (annual %)	0.70	2.12	2.04	2.17	3.55	1.88	2.76	2.17	1.29	3.48
<b>Energy use</b> (kg of oil equivalent per capita)	5,906.14	6,415.99	5,595.65	5,817.64	NA	NA	NA	NA	NA	NA
<b>Natural Gas use</b> (Scm per capita)	800.57	700.90	835.89	872.80	881.10	893.74	861.68	879.96	783.16	802.05

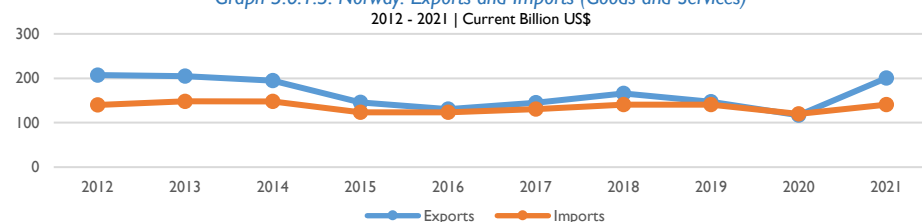
Graph 5.6.1.1. Norway: Population and Labor Force



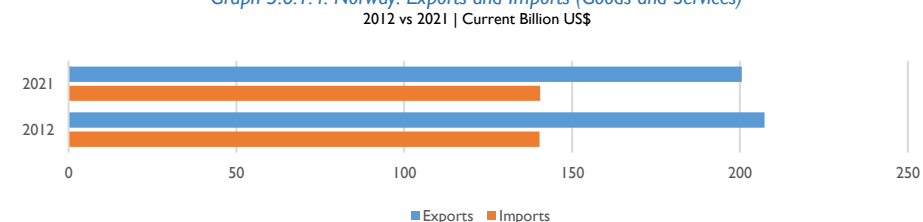
Graph 5.6.1.2. Norway: GDP and GDP Growth



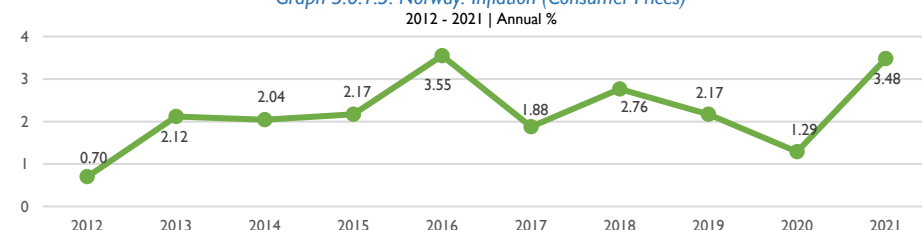
Graph 5.6.1.3. Norway: Exports and Imports (Goods and Services)



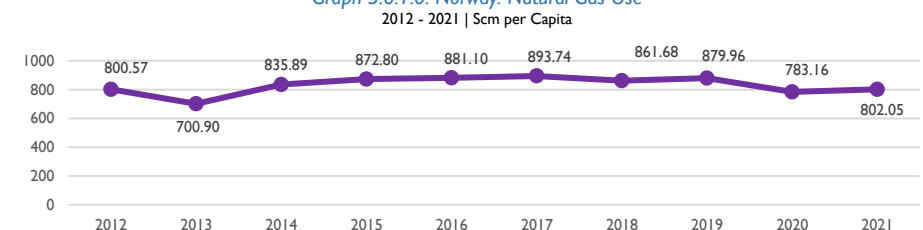
Graph 5.6.1.4. Norway: Exports and Imports (Goods and Services)



Graph 5.6.1.5. Norway: Inflation (Consumer Prices)



Graph 5.6.1.6. Norway: Natural Gas Use



## 5.6.2 Reserves and Production

Table 5.6.2.1 Proven Natural Gas Reserves (Bcm)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
<b>Proven Gas Reserves</b>	2,687	2,654	2,547	2,461	2,388	2,334	2,226	2,165	2,095	2,072

Table 5.6.2.2 Natural Gas Production (Bcm)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
<b>Gross Production</b>	147.89	145.80	152.89	162.79	162.03	164.66	160.01	152.02	147.73	142.73
<b>Marketed Production</b>	114.21	109.98	111.38	120.74	120.42	127.73	126.38	119.05	116.20	118.29
<b>Reinjection</b>	29.30	32.00	37.50	37.60	37.20	32.30	29.10	28.60	27.30	20.30
<b>Flaring</b>	0.68	0.30	0.34	0.44	0.43	0.43	0.38	0.32	0.25	0.27
<b>Other Losses</b>	3.69	3.52	3.67	4.01	3.98	4.19	4.15	4.05	3.98	3.87

## 5.6.3 Domestic Consumption and Trade

Table 5.6.3.1 Domestic Gas Consumption (Bcm)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
<b>Totals</b>	4.02	3.56	4.29	4.53	4.61	4.72	4.58	4.71	4.21	4.34

Table 5.6.3.2 Historical Trade: Natural Gas Exports

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
<b>Pipeline</b>	105.66	103.08	102.23	108.38	107.87	116.68	114.28	107.91	107.81	113.28
<b>LNG</b>	Bcm*	4.54	3.34	4.85	5.61	5.97	6.90	6.31	4.21	0.16
	MMT	3.34	2.46	3.57	4.12	4.39	3.87	5.08	3.10	0.12
<b>Totals (Bcm)</b>	110.20	106.42	107.08	113.98	113.83	121.95	121.18	114.22	112.02	113.44

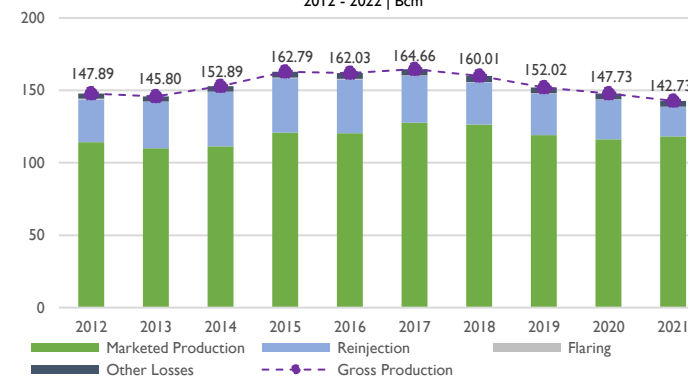
\* Gas equivalent

Table 5.6.3.3 Historical Trade: Natural Gas Imports

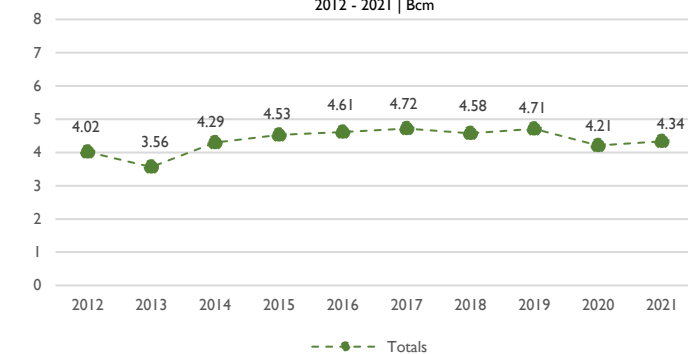
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
<b>LNG</b>	Bcm*	0.001	0.001	0.000	0.015	0.043	0.030	0.010	0.027	0.037
	MMT	0.001	0.001	0.000	0.011	0.032	0.022	0.007	0.020	0.027
<b>Totals (Bcm)</b>	0.001	0.001	0.000	0.015	0.043	0.030	0.010	0.027	0.032	0.037

\* Gas equivalent

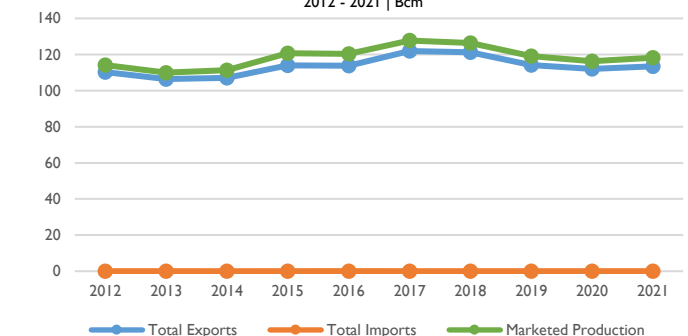
Graph 5.6.2.1. Norway: Natural Gas Annual Production  
2012 - 2021 | Bcm



Graph 5.6.3.1. Norway: Natural Gas Annual Domestic Consumption  
2012 - 2021 | Bcm



Graph 5.6.3.2. Norway: Natural Gas Trade and Marketed Production  
2012 - 2021 | Bcm



## 5.6.4 Transport and Plants

Table 5.6.4.1 Natural Gas Export Pipelines

Pipeline	Connection			Owner(s)	Operator(s)	Status	Capacity (Bcm/year)	Type	Start Year	Length (km)	Diameter (Inches)	
	From	To	Via									
Norpipe	Norway	Germany	-	Gassco AS	Gassco AS	Operational	11.7	Export	1977	440	36	
Vesterled	Norway	UK	-	Gassco AS	Gassco AS	Operational	14.2	Export	1978	360	32	
Zeepipe I	Norway	Belgium	-	Gassco AS	Gassco AS	Operational	15.3	Export	1993	808	40	
Europipe I	Norway	Germany	-	Gassco AS	Gassco AS	Operational	16.8	Export	1995	620	40	
Franpipe	Norway	France	-	Gassco AS	Gassco AS	Operational	20.1	Export	1998	840	42	
Europipe II	Norway	Germany	-	Gassco AS	Gassco AS	Operational	26.0	Export	1999	660	42	
Langeled	Norway	UK	-	Gassco AS	Gassco AS	Operational	26.3	Export	2006	536	44	
Baltic Pipeline	Norway	Poland	Denmark	Energinet, Gaz-System	Energinet, Gaz-System	Completed	10.0	Export	End2022	613	42	
<b>Total Expected Capacity</b>							<b>140.4</b>					

Table 5.6.4.2 Liquefaction Plants

Plant	Liquefaction (No. of Trains)	Total Capacity (MTPA)	Status	Start Year	Owner(s)	Operator(s)
Snohvit LNG	1	4.3	Operational	2007	Snohvit LNG Consortium	Snohvit LNG Consortium
Stavanger	1	0.33	Operational	2010	Skangas	Skangas
<b>Total Existing Capacity</b>		<b>4.63</b>				



REPUBLIC OF  
**PERU**



1 285 220 km<sup>2</sup>



POPULATION

33 359 416



CAPITAL

LIMA



CONTINENT

SOUTH AMERICA



CURRENCY

PERIVIAN SOL



TIME ZONE

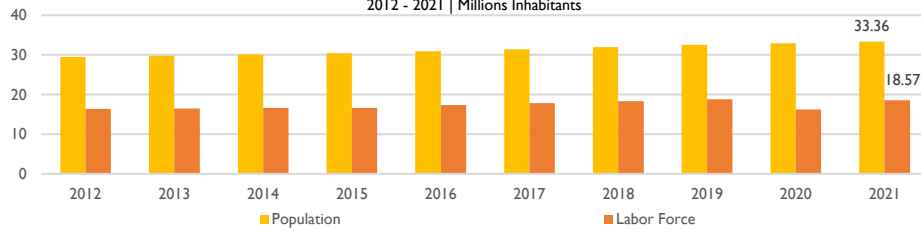
PERU (GMT-5)

## 5.7.1 Macroeconomics

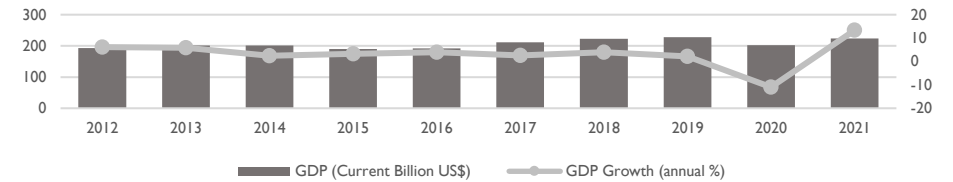
Table 5.7.1.1 Peru Macroeconomic Indicators

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
<b>Population</b> (Inhabitants)	29,506,790	29,773,986	30,090,372	30,470,739	30,926,036	31,444,299	31,989,265	32,510,462	32,971,846	33,359,416
<b>Labor Force</b> (Inhabitants)	16,382,486	16,511,392	16,606,063	16,632,754	17,321,378	17,829,194	18,321,791	18,798,564	16,201,831	18,566,550
<b>GDP</b> (Current Billion US\$)	192.65	201.18	200.79	189.81	191.90	211.01	222.60	228.32	201.71	223.25
<b>GDP Growth</b> (annual %)	6.14	5.85	2.38	3.25	3.95	2.52	3.97	2.24	-10.95	13.35
<b>GDP per capita</b> (Current US\$)	6,528.97	6,756.75	6,672.88	6,229.10	6,205.00	6,710.51	6,958.50	7,023.08	6,117.49	6,692.25
<b>Exports of Goods and Services</b> (Current Billion US\$)	52.88	49.91	45.39	40.40	43.37	52.16	56.08	54.89	45.14	64.93
<b>Exports of Goods and Services</b> (% of GDP)	27.45	24.81	22.61	21.29	22.60	24.72	25.19	24.04	22.38	29.09
<b>Imports of Goods and Services</b> (Current Billion US\$)	48.49	50.25	48.68	45.32	43.73	48.10	52.18	52.30	42.66	58.98
<b>Imports of Goods and Services</b> (% of GDP)	25.17	24.98	24.25	23.88	22.79	22.79	23.44	22.90	21.15	26.42
<b>Inflation consumer prices</b> (annual %)	3.61	2.77	3.41	3.40	3.56	2.99	1.51	2.25	2.00	4.27
<b>Energy use</b> (kg of oil equivalent per capita)	692.95	684.15	790.22	NA	NA	NA	NA	NA	NA	NA
<b>Natural Gas use</b> (Scm per capita)	228.24	219.15	254.90	251.06	275.52	237.98	247.21	253.92	216.55	240.11

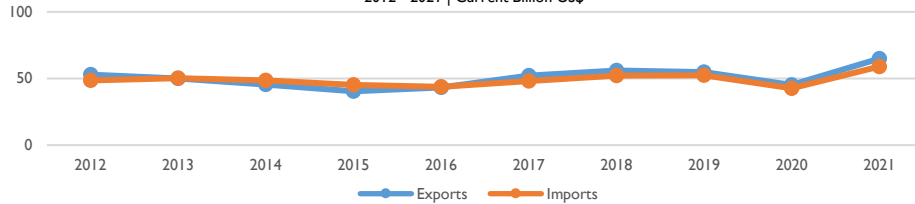
Graph 5.7.1.1. Peru: Population and Labor Force  
2012 - 2021 | Millions Inhabitants



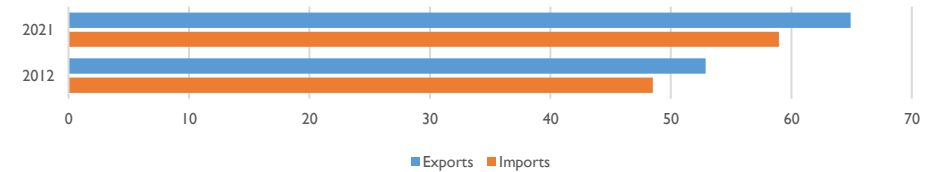
Graph 5.7.1.2. Peru: GDP and GDP Growth  
2012 - 2021 | Current Billion US\$ and Annual %



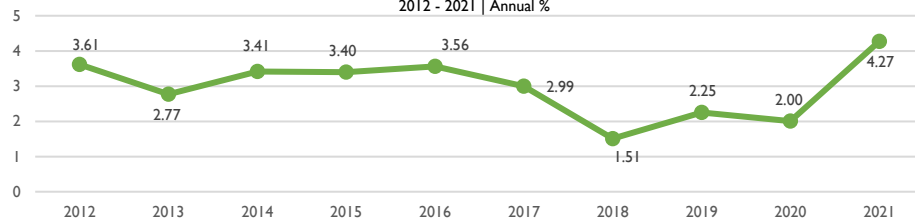
Graph 5.7.1.3. Peru: Exports and Imports (Goods and Services)  
2012 - 2021 | Current Billion US\$



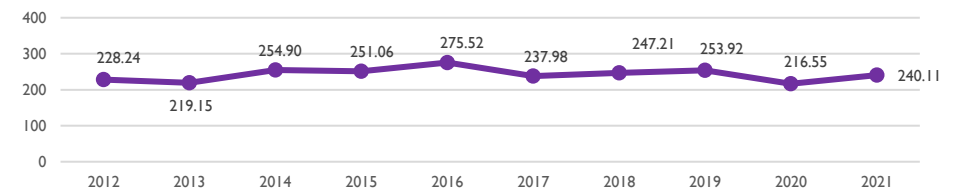
Graph 5.7.1.4. Peru: Exports and Imports (Goods and Services)  
2012 vs 2021 | Current Billion US\$



Graph 5.7.1.5. Peru: Inflation (Consumer Prices)  
2012 - 2021 | Annual %



Graph 5.7.1.6. Peru: Natural Gas Use  
2012 - 2021 | Scm per Capita



## 5.7.2 Reserves and Production

Table 5.7.2.1 Proven Natural Gas Reserves (Bcm)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
<b>Proven Gas Reserves</b>	435	426	414	399	456	365	300	287	287	287

Table 5.7.2.2 Natural Gas Production (Bcm)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
<b>Gross Production</b>	15.81	16.22	18.46	17.29	19.62	18.42	17.11	17.99	16.40	16.09
<b>Marketed Production</b>	11.85	12.22	12.97	12.59	14.02	12.97	12.75	13.47	12.08	11.81
<b>Reinjection</b>	2.87	3.00	5.14	4.20	5.20	5.10	4.10	4.20	4.00	4.00
<b>Flaring</b>	0.15	0.10	0.21	0.10	0.20	0.14	0.11	0.11	0.11	0.08
<b>Other Losses</b>	0.94	0.90	0.14	0.40	0.20	0.21	0.15	0.21	0.21	0.20

## 5.7.3 Domestic Consumption and Trade

Table 5.7.3.1 Domestic Gas Consumption (Bcm)

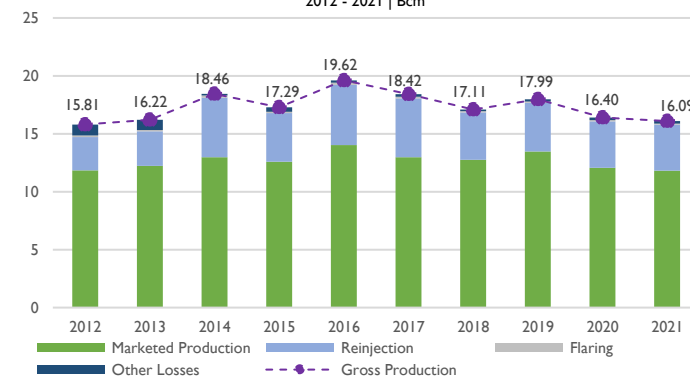
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
<b>Totals</b>	6.73	6.53	7.67	7.65	8.52	7.48	7.91	8.26	7.14	8.01

Table 5.7.3.2 Historical Trade: Natural Gas Exports

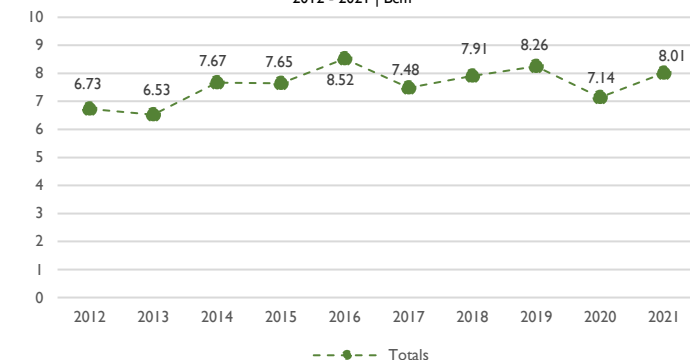
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	
<b>LNG</b>	Bcm*	5.12	5.70	5.30	4.94	5.47	5.43	4.84	5.22	4.85	3.80
	MMT	3.76	4.19	3.90	3.63	4.02	3.99	3.56	3.84	3.57	2.79
<b>Totals (Bcm)</b>	5.12	5.70	5.30	4.94	5.47	5.43	4.84	5.22	4.85	3.80	

\* Gas equivalent

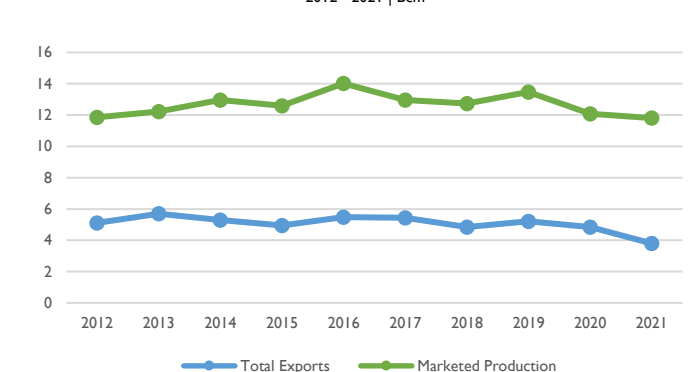
Graph 5.7.2.1. Peru: Natural Gas Annual Production  
2012 - 2021 | Bcm



Graph 5.7.3.1. Peru: Natural Gas Annual Domestic Consumption  
2012 - 2021 | Bcm



Graph 5.7.3.2. Peru: Natural Gas Trade and Marketed Production  
2012 - 2021 | Bcm



## 5.7.4 Transport and Plants

Table 5.7.4.1 Liquefaction Plants

Plant	Liquefaction (No. of Trains)	Total Capacity (MTPA)	Status	Start Year	Owner(s)	Operator(s)
Peru LNG Plant	1	4.5	Operational	2010	Peru LNG Consortium	Hunt Oil Company



# UNITED ARAB EMIRATES



POPULATION

9 991 083



CAPITAL

ABU DHABI



CONTINENT

MIDDLE EAST



CURRENCY

UNITED ARAB EMIRATES DIRHAM



TIME ZONE

GULF (GMT+4)

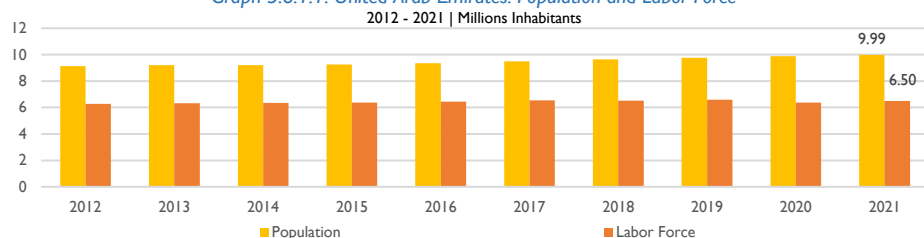


## 5.8.1 Macroeconomics

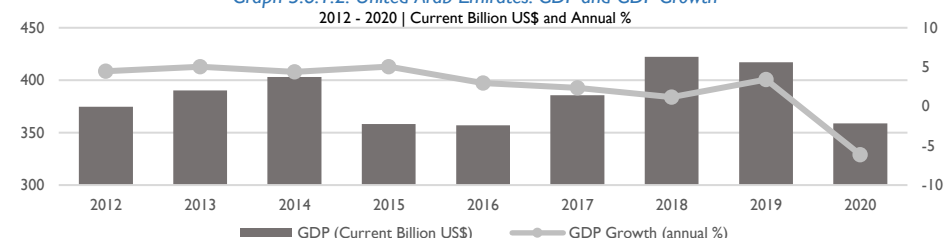
Table 5.8.1.1 United Arab Emirates Macroeconomic Indicators

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
<b>Population</b> (Inhabitants)	9,141,598	9,197,908	9,214,182	9,262,896	9,360,975	9,487,206	9,630,966	9,770,526	9,890,400	9,991,083
<b>Labor Force</b> (Inhabitants)	6,279,857	6,329,460	6,347,513	6,384,978	6,457,163	6,551,369	6,513,809	6,598,173	6,376,718	6,498,745
<b>GDP</b> (Current Billion US\$)	374.59	390.11	403.14	358.13	357.05	385.61	422.22	417.22	358.87	NA
<b>GDP Growth</b> (annual %)	4.48	5.05	4.41	5.06	2.98	2.37	1.19	3.41	-6.13	NA
<b>GDP per capita</b> (Current US\$)	40,976.50	42,412.64	43,751.82	38,663.39	38,141.88	40,644.79	43,839.32	42,701.44	36,284.56	NA
<b>Exports of Goods and Services</b> (Current Billion US\$)	375.51	392.24	401.37	361.25	360.63	384.04	392.86	404.05	335.24	NA
<b>Exports of Goods and Services</b> (% of GDP)	100.25	100.55	99.56	100.87	101.00	99.59	93.05	96.84	93.42	NA
<b>Imports of Goods and Services</b> (Current Billion US\$)	239.75	252.51	277.89	266.28	270.44	290.78	281.54	295.60	246.89	NA
<b>Imports of Goods and Services</b> (% of GDP)	64.00	64.73	68.93	74.35	75.74	75.41	66.68	70.85	68.80	NA
<b>Inflation consumer prices</b> (annual %)	0.66	1.10	2.35	4.07	1.62	1.97	3.07	-1.93	-2.08	NA
<b>Energy use</b> (kg of oil equivalent per capita)	7,481.19	7,604.84	7,648.39	NA	NA	NA	NA	NA	NA	NA
<b>Natural Gas use</b> (Scm per capita)	7,175.99	7,273.39	7,152.02	7,754.59	7,686.17	7,587.06	7,396.97	7,324.77	7,123.69	7,051.91

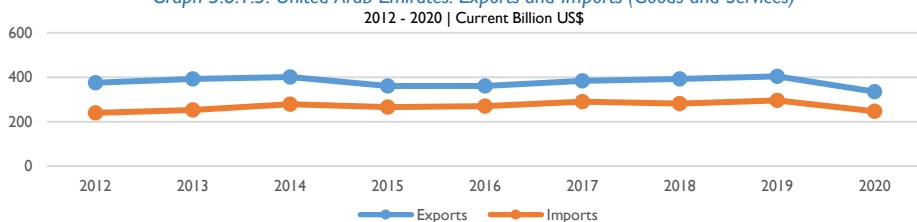
Graph 5.8.1.1. United Arab Emirates: Population and Labor Force



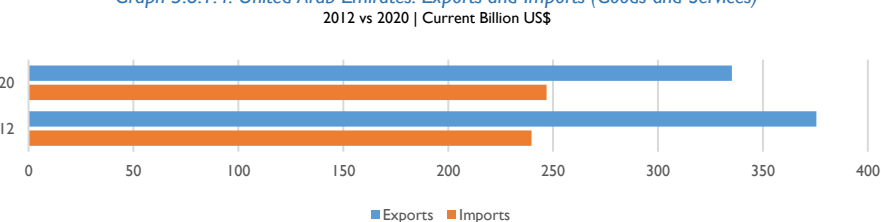
Graph 5.8.1.2. United Arab Emirates: GDP and GDP Growth



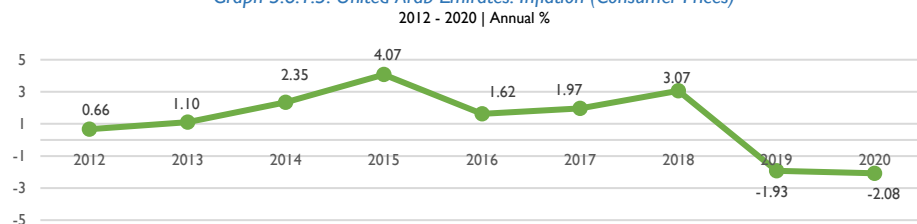
Graph 5.8.1.3. United Arab Emirates: Exports and Imports (Goods and Services)



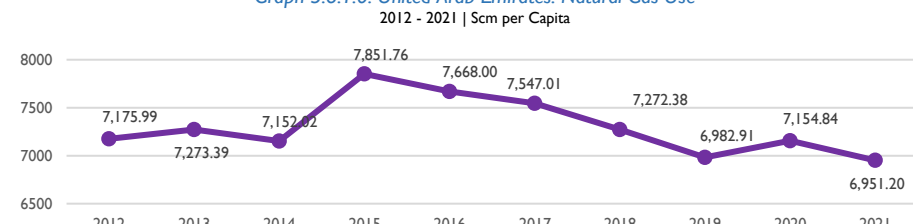
Graph 5.8.1.4. United Arab Emirates: Exports and Imports (Goods and Services)



Graph 5.8.1.5. United Arab Emirates: Inflation (Consumer Prices)



Graph 5.8.1.6. United Arab Emirates: Natural Gas Use



## 5.8.2 Reserves and Production

Table 5.8.2.1 Proven Natural Gas Reserves (Bcm)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
<b>Proven Gas Reserves</b>	6,091	6,091	6,091	6,091	6,091	6,091	6,091	7,726	7,730	8,200

Table 5.8.2.2 Historical Natural Gas Production (Bcm)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
<b>Gross Production</b>	83.21	84.32	84.31	90.27	91.40	91.63	95.43	93.66	89.49	88.40
<b>Marketed Production</b>	54.30	54.60	54.24	60.18	61.86	54.09	47.62	55.10	55.06	54.48
<b>Reinjection</b>	22.39	23.18	23.40	23.69	23.75	23.78	22.99	23.95	23.45	23.25
<b>Flaring</b>	1.02	1.02	1.02	1.04	1.02	1.14	0.23	0.98	1.30	1.10
<b>Shrinkage</b>	0.00	0.00	0.00	0.40	0.30	7.53	19.01	8.22	4.59	4.48
<b>Other Losses</b>	4.19	4.39	4.44	5.10	5.10	5.10	5.24	5.40	5.09	5.09

## 5.8.3 Domestic Consumption and Trade

Table 5.8.3.1 Domestic Gas Consumption (Bcm)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
<b>Totals</b>	65.60	66.90	65.90	72.73	71.78	71.60	70.04	68.23	70.76	69.45

Table 5.8.3.2 Historical Trade: Natural Gas Exports

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	
<b>LNG</b>	Bcm*	9.26	9.14	9.93	9.33	9.44	8.34	8.94	9.26	8.74	8.22
	MMT	5.42	5.29	5.82	5.87	5.93	5.72	5.21	5.60	5.48	6.04
<b>Totals (Bcm)</b>	9.26	9.14	9.93	9.33	9.44	8.34	8.94	9.26	8.74	8.22	

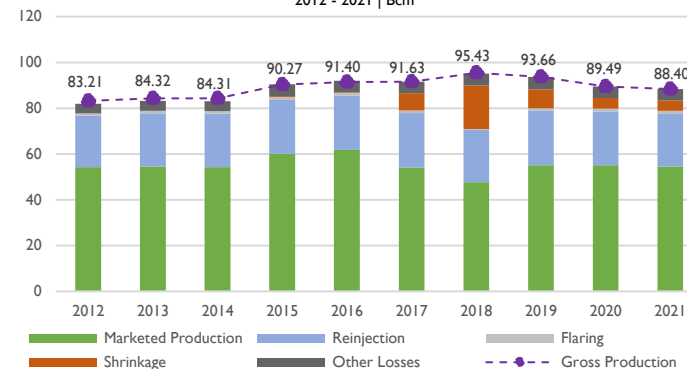
\* Gas equivalent

Table 5.8.3.3 Historical Trade: Natural Gas Imports

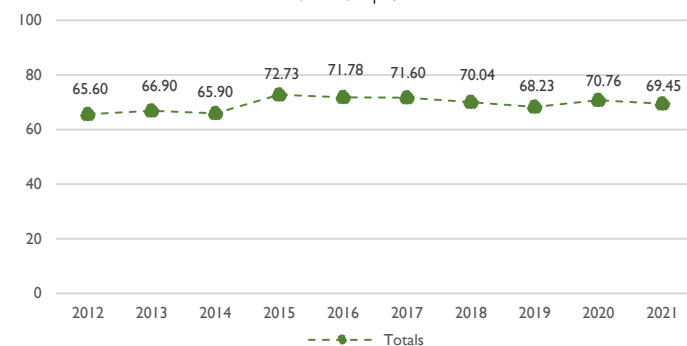
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
<b>Pipeline (Bcm)</b>	19.22	19.90	20.09	19.75	20.00	21.96	22.36	22.45	22.62	21.68
<b>LNG</b>	Bcm*	1.35	1.54	1.55	2.96	2.92	1.40	1.63	1.53	1.71
	MMT	0.99	1.13	1.14	2.18	3.13	2.15	1.03	1.20	1.12
<b>Totals (Bcm)</b>	20.56	21.44	21.64	22.71	24.26	24.88	23.76	24.08	24.14	23.39

\* Gas equivalent

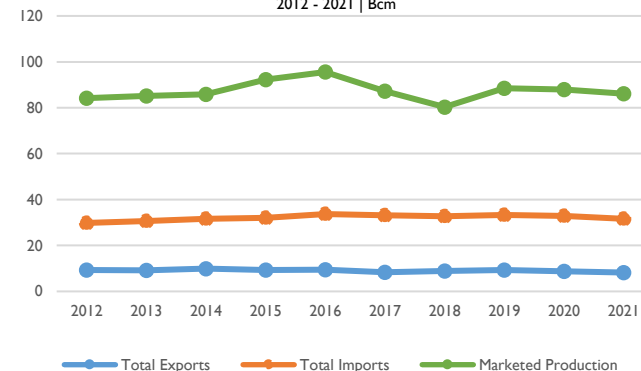
Graph 5.8.2.1. United Arab Emirates: Natural Gas Annual Production  
2012 - 2021 | Bcm



Graph 5.8.3.1. United Arab Emirates: Natural Gas Annual Domestic Consumption  
2012 - 2021 | Bcm



Graph 5.8.3.2. United Arab Emirates: Natural Gas Trade and Marketed Production  
2012 - 2021 | Bcm



## 5.8.4 Transport and Plants

Table 5.8.4.1 Natural Gas Export Pipelines

Pipeline	Connection			Owner(s)	Operator(s)	Status	Capacity (Bcm/Year)	Type	Start Year	Length (km)	Diameter (Inches)
	From	To	Via								
Dolphin	Qatar	United Arab Emirates	-	Dolphin Energy	Dolphin Energy	Operational	33.1	Import	2007	364	48

Table 5.8.4.2 LNG Carrier Fleet

Ship Name	Owner(s)	Delivered Year	Size (1000 Scm)
AL Khaznah	National Gas Shipping Co. (ADNOC)	1994	137.54
Shahamah	National Gas Shipping Co. (ADNOC)	1994	137.56
Ghasha	National Gas Shipping Co. (ADNOC)	1995	137.51
Ish	National Gas Shipping Co. (ADNOC)	1995	137.57
Mubaraz	National Gas Shipping Co. (ADNOC)	1996	136.98
Mraweh	National Gas Shipping Co. (ADNOC)	1996	137.04
AL Hamra	National Gas Shipping Co. (ADNOC)	1997	137.08
Umm AL Ashtan	National Gas Shipping Co. (ADNOC)	1997	137.11
<b>Total</b>			<b>1098.39</b>

Table 5.8.4.3 Liquefaction Plants

Plant	Liquefaction (No. of Trains)	Total Capacity (MTPA)	Status	Start Year	Owner(s)	Operator(s)
Das Island	3	5.6	Operational	1977 1977 1994	ADNOC, Mitsui, BP, Total	ADGAS

Table 5.8.4.4 Regasification Plants

Plant	Total Capacity (MTPA)	Status	Start Year	Owner(s)	Operator(s)
Ruwais (FSRU)	6.9	Offline	2016	NA	GASCO
Jebel Ali (FSRU)	10.3	Operational	2010	NA	DUSUP
<b>Total Existing Capacity</b>	<b>17.2</b>				

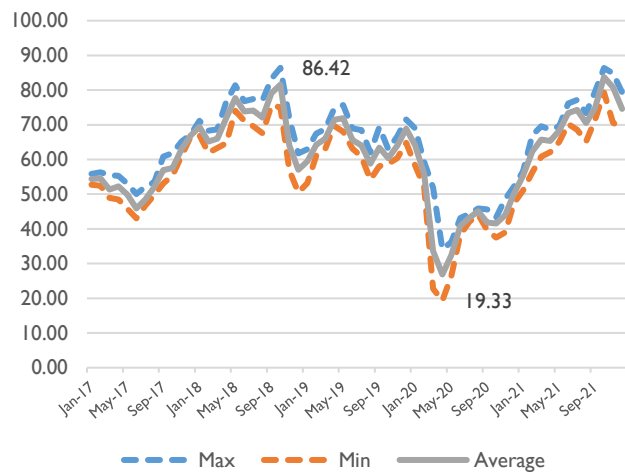
## Section 6

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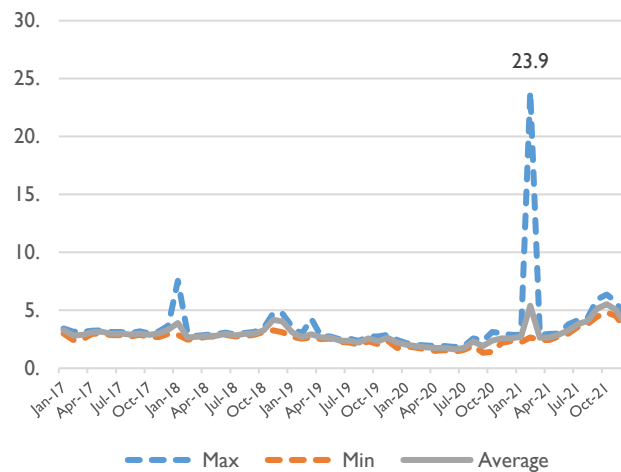
# Referential Gas Market Prices

## 6.1. Prices (Brent, HH, TTF, NBP, NEA, SWE)

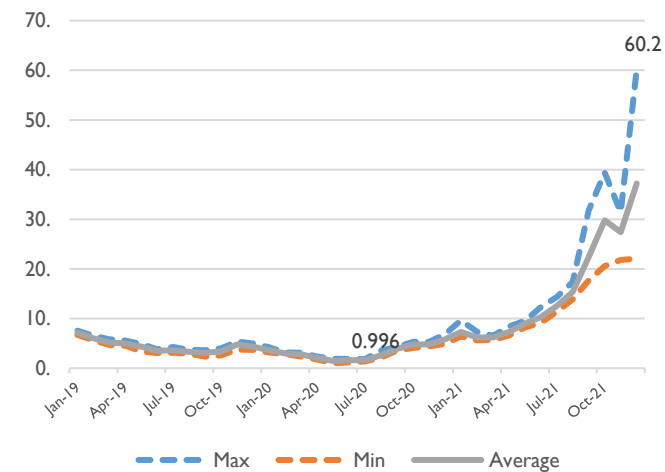
Graph 6.1.1. Brent Crude Price  
2017 - 2021 | \$/bbl



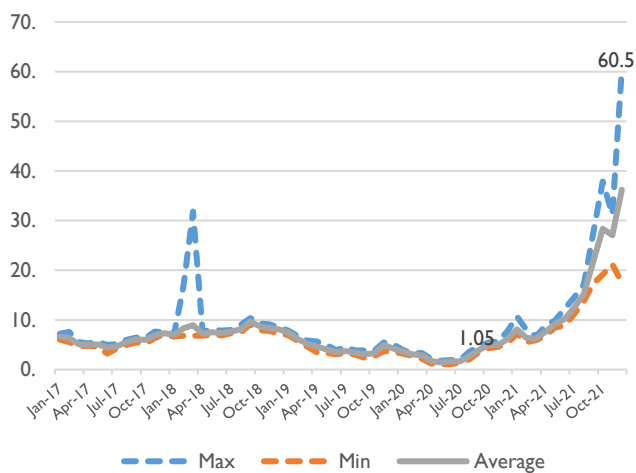
Graph 6.1.2. HH Spot Price  
2017 - 2021 | \$/MMBtu



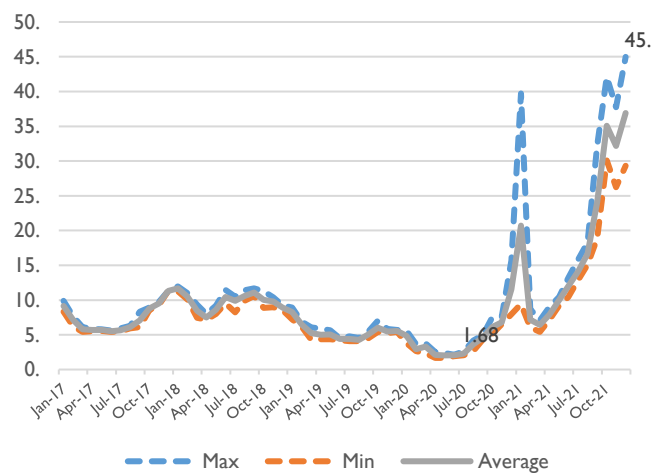
Graph 6.1.3. TTF Spot LNG Price  
2019 - 2021 | \$/MMBtu



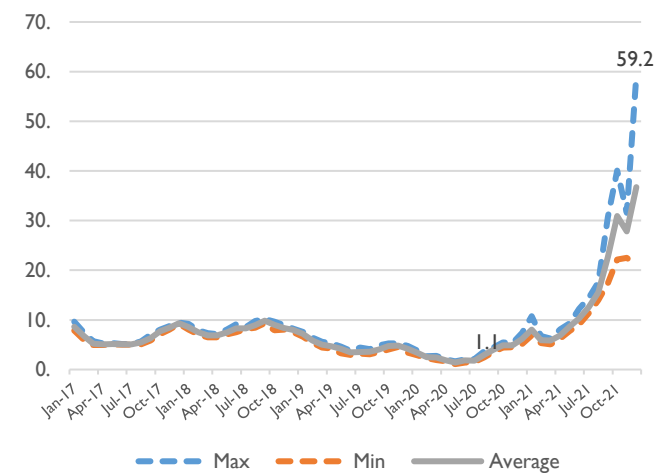
Graph 6.1.4. NBP Day Ahead Price  
2017 - 2021 | \$/MMBtu



Graph 6.1.5. NEA Spot LNG Price  
2017 - 2021 | \$/MMBtu



Graph 6.1.6. SWE Spot LNG Price  
2017 - 2021 | \$/MMBtu



In nominal Dollars from Jan 2017 – Dic 2021 (Brent, Henry Hub, TTF Spot, NBP Day Ahead, NEA Spot LNG, SWE Sport LNG)

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



## GECF Main Deliverables

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### GECF Daily Brief | Exclusive for GECF Member Countries

The GECF Gas Daily Brief is an initiative created by the GECF Secretariat on 2014, issued on daily basis, only available to GECF Member Countries through the GECF Mobile Application, the GECF Data Exchange Centre System and via email, covering daily price behaviour and price news, supply and demand, trade, technology, transportation & storage, assets and investments, economic & geopolitics, policy & regulations.

### GECF Weekly Alerts | Exclusive for GECF Member Countries

The GECF Weekly Alerts aim to keep GECF Member Countries updated over the latest developments, in the response of the global gas market to COVID-19, as well as to capturing the critical issues affecting natural gas market and indicators of GECF Gas & LNG exports under the market situation.

### GECF Monthly Short Term Gas Market Report | Exclusive for GECF Member Countries

The Monthly Gas Market Report (MGMR), initiated in January 2016, aims to provide a monthly overview of the developments in gas markets to GECF Members Countries. The reports covers the latest developments trends and assessment in the gas market worldwide and along the Gas Value Chain (Gas Production & Supply, Demand, LNG Trade, Shipping, Prices as well as the latest forecasts of the world economy).

### GECF Monthly/Quarterly Statistical Bulletin (MSB) | Exclusive for GECF Member Countries

The Bulletin provides primary data gathered from GECF Countries through the GECF Data Exchange Mechanism, curated in the GECF Databank. GECF Secretariat, in close cooperation with the Special Envoys for Data & Statistics (SEDAS) from GECF Member Countries, produce its content with focus on gas value chain data, portraying the status of Gas Markets and its changes.

### GECF MSB/QSB Collections | Exclusive for GECF Member Countries

The Collections provides, in onw view, the data presented in the regular publications of the Secretariat, with data from GECF Countries gathered through the GECF Data Exchange Mechanism, curated in the GECF Databank, and complemented with JODI-Gas data for Non-GECF Countries, portraying the status of Gas Markets and its changes.

### GECF Annual Statistical Bulletin (ASB) | General audience

With the aim to be a reference tool for policy-makers, analysts, academics, researchers, scientists and others users of energy data, GECF developed the first GECF ASB in 2017 for general audience, recognizing that Data is essential to the global gas industry, encouraging the data transparency by producing this valuable report, considered a positive element for market stability and Sustainable Gas Development for GECF Countries.

### GECF Regional Gas Statistical Reports | Exclusive for GECF Member Countries

Released yearly, the Statistical Reports complement the series of Statistical Publications of the Secretariat, introducing figures from the perspective of UN Geographical Regions (Africa, Americas, Asia, Europe and Oceania) and the participation of GECF in each one, using with JODI-Gas data of Non-GECF Countries.

### GECF Annual Short-Term Gas Market Report (ASTGMR) | General audience

The GECF Annual Short-Term Gas Market Report (ASTGMR) is an annual report providing a comprehensive short-term analysis on natural gas and LNG industry worldwide. It sheds light on different aspects of the gas industry (macroeconomics, natural gas supply, rig counts, natural gas demand, shipping activities, storage, natural gas and LNG trade as well as prices), highlighting the main risks and challenges that the gas industry is facing today and the developments in the gas and LNG industry over the current and the past two years, underscoring potential opportunities and challenges of gas producers.

For more detailed information, please consult GECF Website: <http://www.gecf.org>

### GECF Global Gas Outlook 2050 (synopsis) | General audience

The GECF Global Gas Outlook (GGO) provides modelled long-term energy projections, based on assumptions concerning macroeconomic conditions, energy prices, and energy policies. As one of the Forum's annual flagship publications, it is unique, since is the only energy outlook worldwide to focus solely on natural gas. The GGO aims to be a global reference for insights into gas markets, offering an impartial view of gas market evolution by highlighting the potential developments and scenarios over the 2040 forecast horizon.

### GECF Short Term Gas Market Outlook | Exclusive for GECF Member and Observer Countries

Prepared on annual basis by the Secretariat, the Short Term Gas Market Outlook (STGMO) is a unique, concise and well documented report that describes the views of GECF on the Gas Markets, introduced exclusively in the annual GECF Ministerial Meeting.

### GECF Gas Lectures | General audience

The Gas Lecture Series is a GECF initiative designed to encourage discussions and debates on natural gas related topics in the energy sector, involving producers, consumer businesses, university staff, international governmental and non-governmental organisations, and the media. Since 2014, the lectures have featured prominent scholars, experts and leaders in the energy sector.

### GECF Workshops | Exclusive for GECF Member Countries

The Secretariat of the GECF regularly organizes workshops on a number of topics of interest, relevant to the Gas Industry, to contribute to the development of the global gas discourse.

### Working Papers, Studies and Articles | Exclusive for GECF Member Countries

The GECF Secretariat actively develops papers, studies and articles, upon request of GECF Member Countries, as part of its extensive research activities; aiming to provide an independent assessment on key features that are judged to have an important impact on the GECF Member Countries and the world.

### GECF Website | General audience

As the information portal of forum, the GECF Website is a rich source of information where the latest actions accomplished by the Secretariat can be reviewed, as well as its newest publications, general reference material about natural gas and detailed information about GECF Countries.

### GECF Data Exchange Centre System | Exclusive for GECF Member Countries

Using state-of-the-art technologies available to support the effort made with the establishment of the GECF Data Exchange Mechanism, the Secretariat designed the GECF Databank, a database for Primary Source Data collected from GECF Member Countries. This highly valuable repository is managed through the GECF Data Exchange Centre (DEC) System, an in-house developed system that provides to GECF Member Countries a unique tool to get, review and analyse their data.

### GECF Members' Corner | Exclusive for GECF Member Countries

The private area of GECF Member Countries was developed in 2017, to enhance the data distribution of all Secretariat's products, creating a space for collaboration and aiming to implement in the short term more facilities that will contribute with the development of the Long Term Strategy and GECF 5 Year Plan.

### GECF Mobile Application | Exclusive for GECF Member Countries

Available for iOS and Android, the exclusive GECF Mobile Application is the window that allows GECF Member Countries to review the GECF News Archive, Energy Prices and data of the GECF Annual Statistical Bulletin.



**GECF**

Gas Exporting  
Countries Forum

**Gas Exporting Countries Forum**

Tornado Tower 47th & 48th Floors,  
West Bay, Doha-Qatar.

T: +974 4404 8400 | F: +974 4404 8415



[www.gecf.org](http://www.gecf.org)

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