

GECF Annual Statistical Bulletin 2020



GECF

GAS EXPORTING COUNTRIES FORUM

GECF Annual Statistical Bulletin 2020

4th edition

Authors and Contributors

Namely in Alphabetical Order

Amira Remadna

Data Analysis and Research

Diana Cueto

ICT and Software Support

Hesham Marzouk

Data Engineering and Curation

Maria Arteaga

Graphic Design & Administrative Support

Nadezhda Lyubovskaya

International Affairs and Public Relations

Mona Shokripour, PhD

Data Integration and Modelling

Rixio Morales, PhD

ICT Solutions Architect and Maintenance

Roberto Arenas Lara, PhD

Team Leader

Disclaimer

The GECF Annual Statistical Bulletin (ASB) 2020 is the result of the data gathering collection and processing obtained directly from GECF Member and Observer Countries through the GECF Data Exchange Mechanism and in part using processed data from secondary sources examined and analysed by GECF Secretariat.

The data contained in the GECF ASB 2020 are for information purposes only and do not necessary reflect the views of GECF Member and Observer Countries. Neither GECF Secretariat nor any of GECF Member and Observer Countries nor any of their agents or their employees are liable for any errors in or omissions from such information and materials and does not assume any liability or responsibility for the accuracy completeness or reasonableness of data.

Unless copyrighted by a third party, the information presented in the GECF ASB 2020 may be used and/or reproduced for research educational and other non-commercial purposes without GECF Secretariat's prior written permission provided, fully acknowledging GECF as the copyright holder. Written permission from GECF Secretariat is required for any commercial use.

The GECF ASB 2020 contains references to materials from third parties. GECF Secretariat will not be responsible for any unauthorized use of third party materials.

Inquiries over the Data introduced on this publication: statistics@gecf.org

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



www.gecf.org

© 2020 Gas Exporting Countries Forum

Foreword



HE Dr. Yury P. Sentyurin | Secretary General, Gas Exporting Countries Forum (GECF)

While the spread of the novel coronavirus and the global mobilisation against it affected the general sense of time, for the Secretariat there was no time for pause in 2020.

Even before the arrival of COVID-19, there have been peculiar difficulties to putting out an annual publication on statistics in the accelerated age of hyper-connectivity. By the time the GECF Annual Statistical Bulletin (ASB) shapes up, some of the more dominating facts and stories are likely to have faded.

But the thing that makes the ASB a special exercise in content creation is that it entails processing and presenting something that is found in the core of our DNA: data.

The GECF ASB, as one of the flagship publications of the Secretariat, serves a major purpose in the area of energy data and statistics. Since 2017, it has played this niche role successfully by informing and educating our stakeholders and partners as an authoritative reference on the subject of data and statistics.

The pages of this latest edition pack a lot of punch. In addition to offering a comprehensive dataset, they contribute to energy data transparency for the sake of supply and demand stability as well as the security of natural gas markets. They also lend the readers a renewed understanding of the constantly shifting dynamics of the natural gas markets by presenting primary data from the 11 GECF Member Countries and redacted data on our Observer Members.

To make this fourth edition an engrossing experience for our readers, the Secretariat is presenting 10 years' worth of coverage of major natural gas indicators; including the monthly data from 2019. Separately, sections on short-term and long-term perspectives enhance the big-picture understanding.

This publication is a result of synergy between the Secretariat, the Special Envoys for Data and Statistics, and Member Countries' experts. To them and all their valuable contributions that realised the GECF ASB 2020, we extend our deepest and sincere gratitude and acknowledgments.

A digital version of this compendium is available for download on the GECF website. For our Member Countries, additionally, all the information in this publication (and more) is available through the GECF Mobile App and the GECF Data Exchange Mechanism.

The GECF Annual Statistics Bulletin 2020 represents not only a milestone for the Secretariat, but a keystone that supports the sovereign rights of the GECF Member Countries over their natural gas resources. In this context, it is with great pride that we unveil this publication to our esteemed readers and hope that they will find its contents valuable and enriching.

Gas Defines GECF, Data leads the way.

Yury P. Sentyurin, Ph.D.
Secretary General

Acknowledgements

To the Honourable Ministers of GECF Member Countries for their support and Guidance.

To the Special Envoys for Data and Statistics (SEDAS) of GECF Member Countries for their treasured efforts, hard work and valuable support (namely in alphabetic order):

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

Mr. Antimo Asumu Obama Asangono, Special Envoy of the Equatorial Guinea.

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

Mr. Jose Agustin Ruiz, Special Envoy of the Bolivarian Republic of Venezuela.

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

Dr. Miloud Medjelled, Special Envoy of the People's Democratic Republic of Algeria.

Ms. Nandita Maharaj, Special Envoy of the Republic of Trinidad and Tobago.

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

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

Ms. Silvia Cristina Claros Castro, Special Envoy of the Plurinational State of Bolivia.

Mr. Yasseen Mohamed, Mr. Karim El-Botaty and Mr. Hassan Sabry, Special Envoy and Representatives of the Arab Republic of Egypt.

To the Executive Board of GECF and Technical Economic Council Members for their appreciated orientations.

To the Gas Market Analysis Department (GMAD) and the Energy and Economic Forecasting Department (EEFD) of GECF for their esteemed feedback and comments.

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

About Gas Exporting Countries Forum



21th Ministerial Meeting of the Gas Exporting Countries Forum (GECF) | 3rd October 2019
Moscow, Russian Federation

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

In accordance with Our 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 7th 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, Kazakhstan, Malaysia, Norway, Oman, Peru and United Arab Emirates have the status of Observer Members.

The first Secretary General of GECF, HE Leonid Bokhanovskiy, was appointed at the 9th Ministerial Meeting which was held in Doha, Qatar on the 9th December 2009.

HE S.M. Hossein Adeli was appointed as second Secretary General of GECF at the 15th Ministerial Meeting convened in Tehran, the Islamic Republic of Iran, on the 3rd November 2013.

The third and incumbent Secretary General of GECF, HE Dr. Yury P. Sentyurin, was appointed at the 19th Ministerial Meeting held in Moscow, Russian Federation on 4th October 2017.

Content

Foreword	5	4.2. Bolivia	47
Acknowledgements	6	4.2.1 Macroeconomics	48
About Gas Exporting Countries Forum	7	4.2.2 Reserves and Production	49
Definitions	10	4.2.3 Domestic Consumption and Trade	49
Abbreviation, Symbols and Units	11	4.2.4 Transport and Plants	50
Data Sources	11	4.3. Egypt	51
General Notes	11	4.3.1 Macroeconomics	52
Conversion Factors	11	4.3.2 Reserves and Production	53
Conversion equivalents among LNG & Natural Gas units	11	4.3.3 Domestic Consumption and Trade	53
Conversion equivalents among units of volumes	11	4.3.4 Transport and Plants	54
Section 1. Executive Summary	13	4.4. Equatorial Guinea	55
Section 2. GECF Macroeconomics	17	4.4.1 Macroeconomics	56
2.1 Population and Labor Force	18	4.4.2 Reserves and Production	57
2.2 GDP	19	4.4.3 Domestic Consumption and Trade	57
2.3 Exports & Imports of Goods and Services	20	4.4.4 Transport and Plants	58
2.4 Inflation	21	4.5. Iran	59
2.5 Energy Indicators	22	4.5.1 Macroeconomics	60
Section 3. GECF in the World	25	4.5.2 Reserves and Production	61
3.1 Proven Natural Gas Reserves	26	4.5.3 Domestic Consumption and Trade	61
3.2 Natural Gas Production	27	4.5.4 Transport and Plants	62
3.3 Natural Gas Exports	29	4.6. Libya	63
3.4 Natural Gas Domestic Consumption	31	4.6.1 Macroeconomics	64
3.5 Liquefaction Plants	32	4.6.2 Reserves and Production	65
3.6 Natural Gas Pipelines	33	4.6.3 Domestic Consumption and Trade	65
3.7 LNG Carrier Fleet	34	4.6.4 Transport and Plants	66
Section 4. GECF Member Countries	41	4.7. Nigeria	67
4.1. Algeria	43	4.7.1 Macroeconomics	68
4.1.1 Macroeconomics	44	4.7.2 Reserves and Production	69
4.1.2 Reserves and Production	45	4.7.3 Domestic Consumption and Trade	69
4.1.3 Domestic Consumption and Trade	45	4.7.4 Transport and Plants	70
4.1.4 Transport and Plants	46	4.8. Qatar	71
		4.8.1 Macroeconomics	72
		4.8.2 Reserves and Production	73
		4.8.3 Domestic Consumption and Trade	73
		4.8.4 Transport and Plants	74

4.9. Russia.....	77	5.5 Malaysia.....	107
4.9.1 Macroeconomics.....	78	5.5.1 Macroeconomics.....	108
4.9.2 Reserves and Production.....	79	5.5.2 Reserves and Production.....	109
4.9.3 Domestic Consumption and Trade.....	79	5.5.3 Domestic Consumption and Trade.....	109
4.9.4 Transport and Plants.....	80	5.5.4 Transport and Plants.....	110
4.10. Trinidad and Tobago.....	81	5.6. Norway.....	111
4.10.1 Macroeconomics.....	82	5.6.1 Macroeconomics.....	112
4.10.2 Reserves and Production.....	83	5.6.2 Reserves and Production.....	113
4.10.3 Domestic Consumption and Trade.....	83	5.6.3 Domestic Consumption and Trade.....	113
4.10.4 Transport and Plants.....	84	5.6.4 Transport and Plants.....	114
4.11. Venezuela.....	85	5.7. Oman.....	115
4.11.1 Macroeconomics.....	86	5.7.1 Macroeconomics.....	116
4.11.2 Reserves and Production.....	87	5.7.2 Reserves and Production.....	117
4.11.3 Domestic Consumption and Trade.....	87	5.7.3 Domestic Consumption and Trade.....	117
4.11.4 Transport and Plants.....	88	5.7.4 Transport and Plants.....	118
Section 5. GECF Observer Countries.....	89	5.8. Peru.....	119
5.1. Angola.....	91	5.8.1 Macroeconomics.....	120
5.1.1 Macroeconomics.....	92	5.8.2 Reserves and Production.....	121
5.1.2 Reserves and Production.....	93	5.8.3 Domestic Consumption and Trade.....	121
5.1.3 Domestic Consumption and Trade.....	93	5.8.4 Transport and Plants.....	122
5.1.4 Transport and Plants.....	94	5.9. United Arab Emirates.....	123
5.2. Azerbaijan.....	95	5.9.1 Macroeconomics.....	124
5.2.1 Macroeconomics.....	96	5.9.2 Reserves and Production.....	125
5.2.2 Reserves and Production.....	97	5.9.3 Domestic Consumption and Trade.....	125
5.2.3 Domestic Consumption and Trade.....	97	5.9.4 Transport and Plants.....	126
5.2.4 Transport and Plants.....	98		
5.3. Iraq.....	99		
5.3.1 Macroeconomics.....	100		
5.3.2 Reserves and Production.....	101		
5.3.3 Domestic Consumption and Trade.....	101		
5.3.4 Transport and Plants.....	102		
5.4. Kazakhstan.....	103		
5.4.1 Macroeconomics.....	104		
5.4.2 Reserves and Production.....	105		
5.4.3 Domestic Consumption and Trade.....	105		
5.4.4 Transport and Plants.....	106		

Definitions

Name	Definition	Source
Domestic Consumption	Volume of gas consumed domestically; excluding gas exports.	GECF.
Energy Intensity Level of Primary Energy	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).
Energy Use (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.
Exports of Goods and Services (% of GDP)	The Share of Exports of goods and services in the total GDP.	World Bank and OECD National Accounts data files.
Exports of Goods and Services (current US\$)	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.
Flaring	Volume of gas flared or vented.	GECF.
GDP (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.
GDP Growth (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.
GDP per capita (Current US\$)	GDP per capita is gross domestic product divided by midyear population.	World Bank and OECD National Accounts data files.
Gross Production	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.
Inflation, Consumer Prices (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.
Labor Force	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
Liquefaction	The process of converting Natural Gas into LNG.	GECF.
Liquefied Natural Gas	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.
Marketed Production	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.
Natural Gas	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.
Natural Gas Use (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.
Other Losses	Refers to the amount of gas which is directly used by upstream facilities at the field perimeter level.	GECF.
Petrochemicals (Feedstock)	Volume of gas consumed as feedstock for petrochemical industry.	GECF.
Population	Counts all residents regardless of legal status or citizenship. The values shown are midyear estimates.	World Bank and OECD National Accounts data files.
Power Generation	Related to Domestic Consumption and Trade tables, it represents the volume of gas consumed to generate electricity.	GECF.
Proven Natural Gas Reserves	Estimated quantities that geological and engineering information indicates with reasonable certainty can be recovered in the future from known reservoirs under existing conditions.	BP.
Refineries	Volume of gas consumed as fuel in oil refineries.	GECF.
Regasification	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.
Reinjection	Volume of gas processed through non-associated gas processing plants and fields activities, returned to sub-surface formation to enhance recovery rate.	GECF.
Shrinkage	Volume reduction of wet Natural Gas due to the extraction of some of its constituents such as liquid hydrocarbon products and others.	GECF.
Status	Refers to last update of pipeline or plant status (Operational, Under construction or Planned).	GECF.
Train	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.
1000MT	One Thousand Metric Tones.
Bcm	Billion Standard Cubic Metres.
FLNG	Floating Liquefied Natural Gas Facility.
FSRU	Floating Storage Regasification Unit.
GDP	Gross Domestic Products.
Kg	Kilogram.
Km	Kilometres.
LNG	Liquefied Natural Gas.
MC	Member Countries.
MJ	Mega Joules.
MMcm	Million Standard Cubic Metres
MMT	Million Metric Tons.
MTPA	Million Tons per Annum.
NA	No data available.
OC	Observer Countries.
PPP	Purchasing Power Parity.
Scm	Standard Cubic Metres.
US\$	United States Dollar.

Conversion Factors

Conversion equivalents among LNG & Natural Gas units

From \ To	Metric Tons of LNG	Cubic Metres of LNG	Scm
Metric Tons of LNG	1	2.2	1360
Cubic Metres of LNG	0.45	1	615
Scm	7.35×10^{-4}	1.626×10^{-3}	1

Conversion equivalents among units of volumes

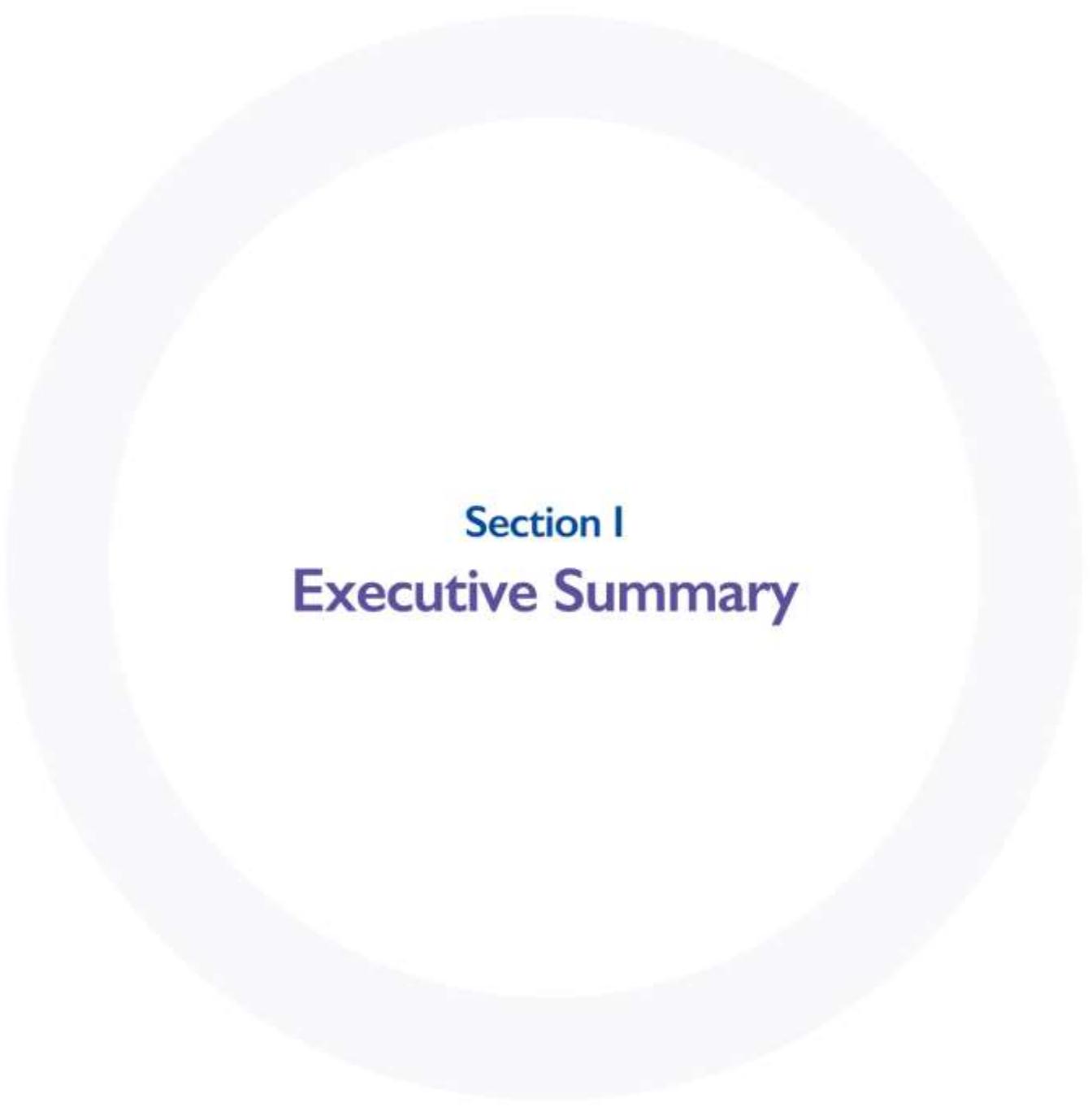
From \ To	Cubic Feet	Litres	Cubic Metres
Cubic Feet	1	28.3	0.0283
Litres	0.0353	1	0.001
Cubic Metres	35.3147	1000	1

Data Sources

Section	Sources
Macroeconomics	<ul style="list-style-type: none"> Otherwise, complemented with the World Bank data, available until September 23 2019. From Primary Sources whenever available.
Gas Chain figures (Proven Natural Gas Reserves, Gas Production, others)	<ul style="list-style-type: none"> From Primary Sources whenever available. Otherwise, complemented with GECF Secretariat estimations, or using data from the following Secondary Sources (namely alphabetically): Cedigaz, OPEC, the World Bank (EIA, EUROSTAT, OECD/IEA, United Nations Statistics).
Conversion Factors	<ul style="list-style-type: none"> Joint Organization Data Initiative (JODI) Gas Manual.

General Notes

- Current (2020) **GECF Member Countries**: Algeria, Bolivia, Egypt, Equatorial Guinea, Iran, Libya, Nigeria, Qatar, Russia, Trinidad and Tobago and Venezuela.
- Current (2020) **GECF Observer Countries**: Angola, Azerbaijan, Iraq, Kazakhstan, Malaysia, Norway, Oman, 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:** (1) Figures calculated with the available data by the time of this publication. (2) Algeria, Bolivia, Egypt, Equatorial Guinea, Iran, Libya, Nigeria, Qatar, Russia, Trinidad and Tobago and Venezuela have been GECF Members since 2009; Oman was GECF Member during 2011-2014 and become Observer Member in 2015; UAE joined as GECF Member in 2013 and become Observer Member in 2019; Kazakhstan and Norway joined GECF as Observers Members from 2009; Iraq joined GECF as an Observer Member in 2012; Netherlands was a GECF Observer Member during 2012-2017; Peru joined GECF as an Observer Member in 2014; Azerbaijan joined GECF as an Observer Member in 2015; Angola joined GECF as an Observer Member in 2018; Malaysia joined GECF as an Observer Member in 2020.



Section I
Executive Summary

I.1 GECF Main Figures

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

		2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	
GECF Figures*	Proven Natural Gas Reserves	129,095	132,298	136,404	142,543	143,371	144,711	146,005	145,021	144,220	144,316	
	Natural Gas Gross Production	1,701.70	1,750.54	1,882.78	1,987.24	1,993.42	2,026.32	2,035.93	2,114.39	2,134.46	2,148.38	
	Natural Gas Marketed Production	1,336.46	1,389.93	1,503.69	1,575.86	1,563.60	1,589.89	1,600.12	1,661.81	1,687.65	1,714.45	
	Natural Gas Domestic Consumption	804.62	833.95	899.87	977.90	998.10	1,023.05	1,029.47	1,065.93	1,073.49	1,091.60	
	Natural Gas Exports	Pipeline	355.39	350.31	440.41	456.13	417.76	437.82	463.75	492.14	454.05	426.87
		LNG	176.46	210.26	207.86	211.53	212.87	212.47	212.48	222.30	235.89	259.03
Totals		531.85	560.56	648.27	667.66	630.64	650.29	676.23	714.44	689.94	685.90	

* 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)
2010 - 2019 | Bcm

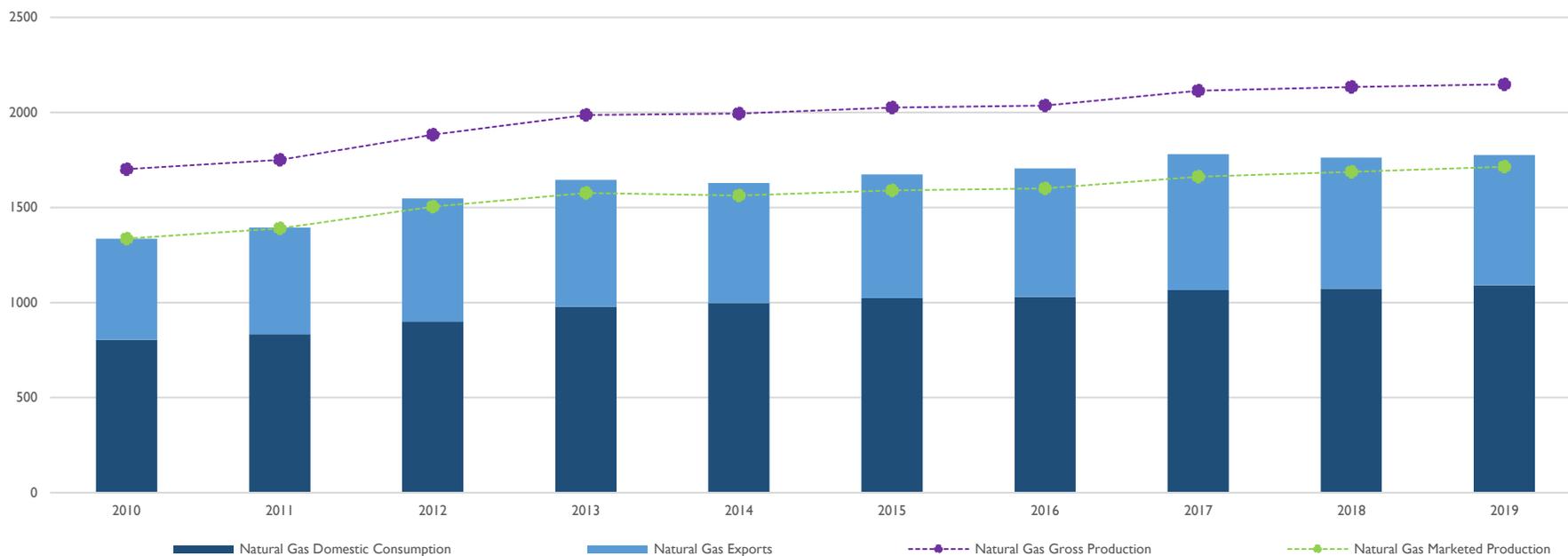
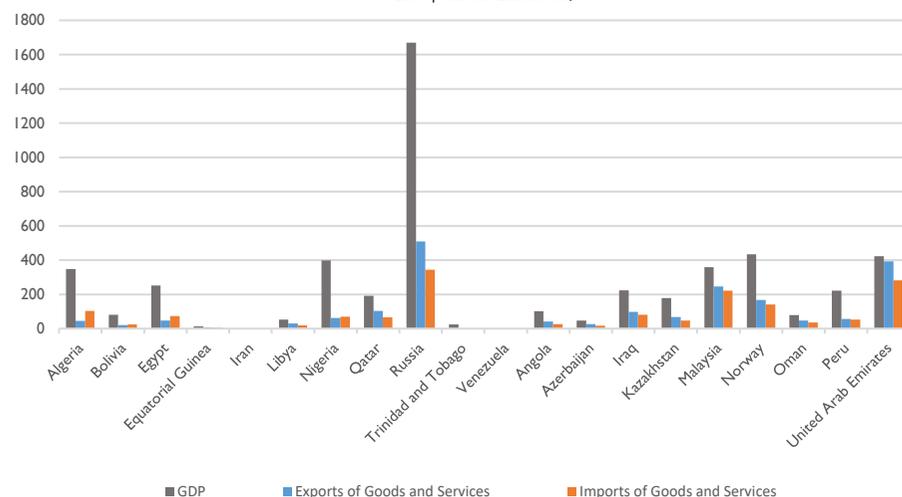


Table I.1.2. GECF Countries Main Figures in 2019

	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)
Members											
Algeria	43.42	169.94	0.80	38.06	54.22	4,504	175.35	89.58	26.31	14.65	46.83
Bolivia	11.51	40.90	2.22	10.21	12.85	303	17.08	16.57	12.56	-	4.61
Egypt	100.39	303.18	5.56	NA	NA	2,221	72.18	67.46	1.84	5.77	60.64
Equatorial Guinea	1.36	11.03	-5.58	6.08	5.76	39	12.20	6.74	-	4.45	1.49
Iran	82.91	NA	NA	NA	NA	33,988	322.50	240.81	12.35	-	231.22
Libya	6.78	52.08	2.54	33.76	27.85	1,505	18.52	10.31	5.65	0.00	4.84
Nigeria	208.96	448.12	2.21	NA	NA	5,761	81.05	47.70	0.79	32.02	12.10
Qatar	2.83	183.47	-0.18	92.02	66.77	23,831	181.31	176.30	22.45	106.89	41.53
Russia	146.80	1,699.88	1.34	481.29	352.91	49,154	738.10	718.48	208.40	39.90	501.00
Trinidad and Tobago	1.36	23.27	-1.25	7.20	6.33	302	35.98	35.00	-	16.90	15.59
Venezuela	28.52	NA	NA	NA	NA	5,674	56.21	20.27	-	-	17.55
Observers											
Angola	31.83	94.64	-0.87	NA	NA	343	12.90	6.80	-	5.80	0.82
Azerbaijan	10.02	48.05	2.22	23.63	17.71	1,917	33.16	22.84	11.84	-	11.78
Iraq	39.31	234.09	4.40	86.80	91.99	3,714	36.40	10.82	-	-	17.41
Kazakhstan	18.51	180.16	4.50	65.83	50.25	1,830	49.73	24.17	17.84	-	17.99
Malaysia	31.95	364.70	4.33	238.30	210.62	2,217	82.15	68.32	1.47	34.09	36.84
Norway	5.35	403.34	1.15	149.03	141.96	2,165	148.78	115.80	106.84	6.41	2.56
Oman	4.97	76.98	0.50	44.78	32.74	674	45.21	36.14	-	13.44	23.78
Peru	32.51	226.85	2.15	54.86	52.03	300	18.07	13.55	-	5.20	8.30
United Arab Emirates	9.77	421.14	1.68	389.37	288.40	6,091	93.66	55.11	-	7.61	71.57

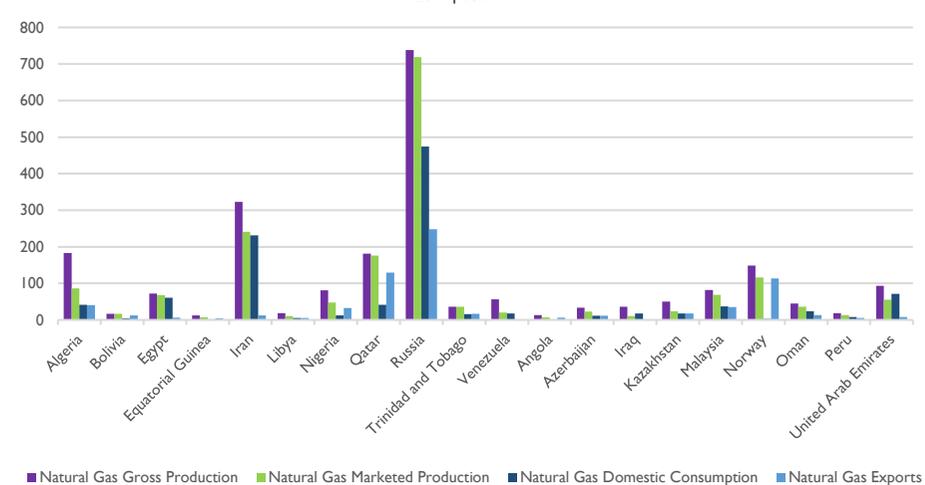
Graph I.1.2. GECF Member, Observer Countries: GDP, Exports and Imports of Good and Services

2019 | Current Billions US\$



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

2019 | Bcm





Section 2
GECF Macroeconomics

2.1 Population and Labor Force

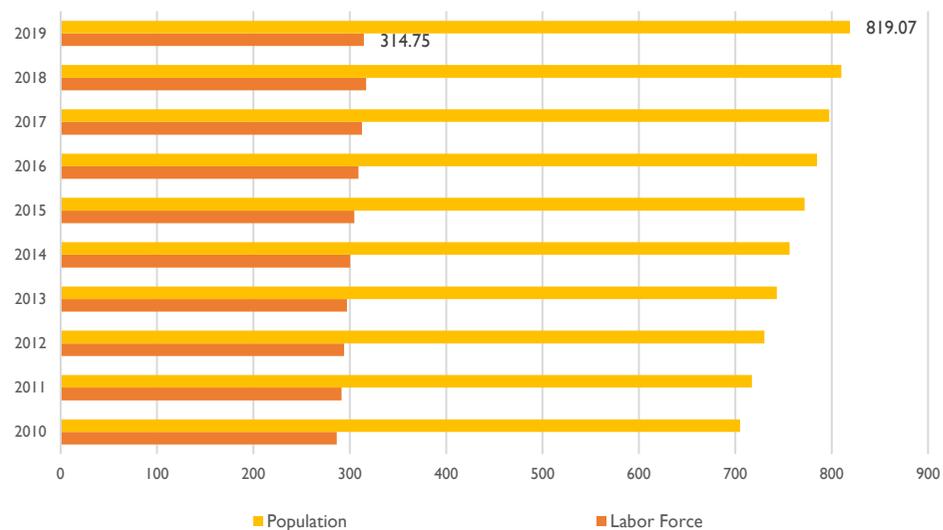
Table 2.1.1. GECF Countries Population (Million Inhabitants)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Members										
Algeria	35.98	36.66	37.38	38.14	39.10	40.07	40.84	41.70	42.63	43.42
Bolivia	20.08	20.40	20.73	21.05	21.37	21.69	22.02	22.34	22.66	11.51
Egypt	82.76	84.53	86.42	88.40	90.42	92.44	94.45	96.44	98.42	100.39
Equatorial Guinea	0.94	0.99	1.03	1.08	1.12	1.17	1.22	1.26	1.31	1.36
Iran	73.76	74.63	75.54	76.48	77.47	78.49	79.56	80.67	81.80	82.91
Libya	6.20	6.25	6.29	6.32	6.36	6.42	6.49	6.58	6.68	6.78
Nigeria	158.50	162.81	167.23	171.77	176.40	181.14	185.96	190.87	195.87	208.96
Qatar	1.86	2.04	2.20	2.34	2.46	2.57	2.65	2.72	2.78	2.83
Russia	142.85	142.96	143.20	143.51	143.70	146.50	146.80	146.90	146.90	146.80
Trinidad and Tobago	1.32	1.33	1.33	1.34	1.35	1.35	1.35	1.36	1.36	1.36
Venezuela	28.44	28.89	29.36	29.78	30.05	30.08	29.85	29.39	28.87	28.52
Observers										
Angola	23.36	24.22	25.11	26.02	26.94	27.88	28.84	29.82	30.81	31.83
Azerbaijan	9.05	9.17	9.30	9.42	9.54	9.65	9.76	9.85	9.94	10.02
Iraq	29.74	30.73	31.89	33.16	34.41	35.57	36.61	37.55	38.43	39.31
Kazakhstan	16.32	16.56	16.79	17.04	17.29	17.54	17.79	18.04	18.28	18.51
Malaysia	28.21	28.65	29.07	29.47	29.87	30.27	30.68	31.11	31.53	31.95
Norway	4.89	4.95	5.02	5.08	5.14	5.19	5.23	5.28	5.31	5.35
Oman	3.04	3.25	3.50	3.76	4.03	4.27	4.48	4.67	4.83	4.97
Peru	29.03	29.26	29.51	29.77	30.09	30.47	30.93	31.44	31.99	32.51
United Arab Emirates	8.55	8.95	9.14	9.20	9.21	9.26	9.36	9.49	9.63	9.77

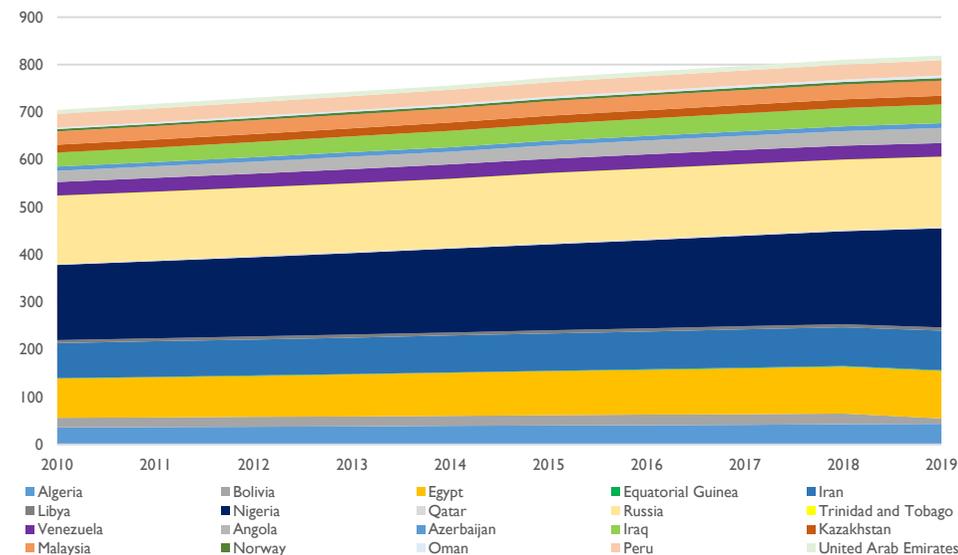
Table 2.1.2. GECF Countries Labor Force (Million Inhabitants)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Members										
Algeria	11.09	11.31	11.54	12.00	11.59	11.75	11.92	12.11	12.17	12.30
Bolivia	9.46	9.66	9.81	10.04	10.39	10.30	10.55	10.87	11.31	5.74
Egypt	27.41	27.82	28.59	29.41	29.97	29.54	29.89	29.63	30.18	30.83
Equatorial Guinea	0.36	0.38	0.39	0.41	0.43	0.46	0.47	0.49	0.51	0.53
Iran	24.03	24.16	24.27	24.36	24.42	25.36	26.56	27.42	27.77	27.90
Libya	2.14	2.17	2.20	2.22	2.24	2.26	2.30	2.34	2.38	2.42
Nigeria	53.14	54.54	53.68	52.79	53.69	54.56	55.29	56.83	58.40	59.87
Qatar	1.41	1.54	1.65	1.76	1.86	1.95	2.00	2.05	2.09	2.12
Russia	75.48	75.78	75.68	75.53	75.43	76.59	76.64	76.11	76.01	75.88
Trinidad and Tobago	0.62	0.64	0.65	0.65	0.66	0.65	0.64	0.63	0.63	NA
Venezuela	12.72	12.93	13.09	13.34	13.48	13.52	13.27	12.95	12.55	12.36
Observers										
Angola	9.56	9.91	10.27	10.65	11.03	11.44	11.85	12.27	12.71	13.16
Azerbaijan	4.45	4.54	4.63	4.70	4.79	4.88	4.97	5.03	5.09	5.10
Iraq	7.28	7.60	7.96	8.51	9.08	9.49	9.81	9.80	10.15	10.48
Kazakhstan	8.72	8.81	8.89	8.97	9.06	9.12	9.07	9.00	9.03	9.05
Malaysia	12.27	12.82	13.34	13.94	14.28	14.61	14.85	15.11	15.38	15.67
Norway	2.61	2.63	2.67	2.70	2.72	2.76	2.77	2.76	2.80	2.82
Oman	1.40	1.56	1.75	1.96	2.16	2.35	2.48	2.60	2.70	2.79
Peru	16.01	16.13	16.34	16.46	16.56	16.58	16.97	17.81	18.35	18.86
United Arab Emirates	6.22	6.47	6.58	6.58	6.57	6.60	6.61	6.68	6.75	6.84

Graph 2.1.1. GECF Member and Observer Countries Population and Labor Force
Totals | 2010 - 2019 | Million Inhabitants



Graph 2.1.2. GECF Member and Observer Countries Population
Per Country | 2010 - 2019 | Million Inhabitants



2.2 GDP

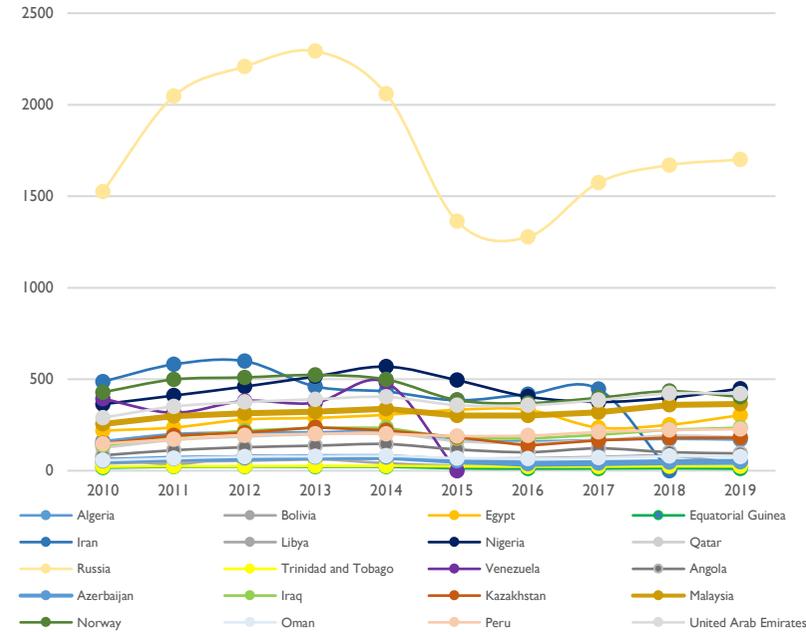
Table 2.2.1. GECF Countries GDP (Current Billion US\$)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Members										
Algeria	161.21	200.02	209.06	209.76	213.81	165.98	160.13	167.56	173.76	169.94
Bolivia	39.44	48.10	54.36	61.54	66.24	66.24	68.13	75.29	80.87	40.90
Egypt	218.89	236.00	279.37	288.59	305.53	332.70	332.93	235.37	250.89	303.18
Equatorial Guinea	16.31	21.36	22.39	21.95	21.77	13.19	11.24	12.20	13.28	11.03
Iran	486.81	580.76	598.87	460.29	432.69	384.95	417.98	445.35	NA	NA
Libya	74.77	34.70	81.87	65.50	41.14	27.84	26.20	37.88	52.61	52.08
Nigeria	363.36	410.33	459.38	514.97	568.50	494.58	404.65	375.75	398.16	448.12
Qatar	125.12	167.78	186.83	198.73	206.22	161.74	151.73	166.93	191.36	183.47
Russia	1,524.92	2,045.93	2,208.30	2,292.47	2,059.24	1,363.48	1,276.79	1,574.20	1,669.58	1,699.88
Trinidad and Tobago	21.31	24.53	24.59	26.07	26.27	23.63	22.16	22.52	23.80	23.27
Venezuela	393.19	316.48	381.29	371.01	482.36	NA	NA	NA	NA	NA
Observers										
Angola	83.80	111.79	128.05	136.71	145.71	116.19	101.12	122.12	101.35	94.64
Azerbaijan	52.90	65.95	69.68	74.16	75.24	53.07	37.87	40.87	47.11	48.05
Iraq	138.52	185.75	218.00	234.64	234.65	177.50	174.88	195.47	224.23	234.09
Kazakhstan	148.05	192.63	208.00	236.63	221.42	184.39	137.28	166.81	179.34	180.16
Malaysia	255.02	297.95	314.44	323.28	338.06	301.35	301.26	318.96	358.58	364.70
Norway	428.76	498.28	509.51	522.76	498.41	385.80	368.82	398.39	434.17	403.34
Oman	57.05	68.02	76.62	78.78	81.08	68.40	65.48	70.60	79.28	76.98
Peru	147.53	171.76	192.65	201.18	200.79	189.81	191.90	211.01	222.04	226.85
United Arab Emirates	289.79	350.67	374.59	390.11	403.14	358.14	357.05	385.61	422.22	421.14

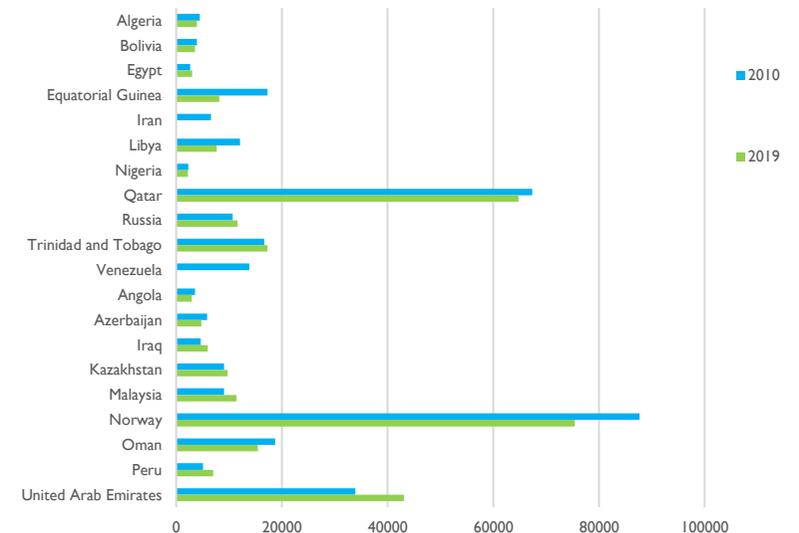
Table 2.2.2 GECF Countries GDP per Capita (Current US\$)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Members										
Algeria	4,480.79	5,455.84	5,592.22	5,499.59	5,471.00	4,154.00	3,894.00	4,003.00	4,087.00	3,913.54
Bolivia	3,928.16	4,714.84	5,245.48	5,847.20	6,198.08	6,106.67	6,188.96	6,740.92	7,137.49	3,552.07
Egypt	2,644.82	2,791.95	3,232.65	3,264.38	3,378.83	3,598.97	3,525.02	2,440.51	2,549.13	3,020.03
Equatorial Guinea	17,288.86	21,641.87	21,711.15	20,390.72	19,394.03	11,283.47	9,250.33	9,667.91	10,144.20	8,131.92
Iran	6,599.66	7,781.41	7,927.85	6,018.32	5,585.53	4,904.33	5,253.42	5,520.31	NA	NA
Libya	12,064.78	5,554.18	13,025.28	10,363.79	6,466.91	4,337.92	4,035.19	5,756.70	7,877.12	7,683.75
Nigeria	2,292.45	2,520.40	2,746.99	2,998.07	3,222.69	2,730.43	2,176.00	1,968.56	2,032.73	2,144.50
Qatar	67,403.16	82,409.58	85,076.15	85,050.91	83,858.53	63,039.02	57,163.06	61,264.40	68,793.78	64,781.73
Russia	10,675.00	14,311.08	15,420.87	15,974.64	14,330.15	9,307.04	8,697.46	10,716.13	11,365.44	11,579.54
Trinidad and Tobago	16,173.04	18,506.07	18,421.11	19,451.60	19,527.03	17,504.85	16,368.59	16,603.57	17,504.28	17,060.48
Venezuela	13,825.36	10,955.35	12,985.51	12,456.71	16,054.49	NA	NA	NA	NA	NA
Observers										
Angola	3,587.88	4,615.47	5,100.10	5,254.88	5,408.41	4,166.98	3,506.07	4,095.81	3,289.65	2,973.59
Azerbaijan	5,842.81	7,189.69	7,496.29	7,875.76	7,891.31	5,500.31	3,880.74	4,147.09	4,739.84	4,793.59
Iraq	4,657.28	6,045.50	6,836.03	7,076.55	6,818.80	4,989.80	4,776.73	5,205.29	5,834.17	5,955.11
Kazakhstan	9,070.49	11,634.00	12,386.70	13,890.63	12,807.26	10,510.77	7,714.84	9,247.58	9,812.60	9,731.15
Malaysia	9,040.57	10,399.37	10,817.44	10,970.12	11,319.08	9,955.24	9,817.74	10,254.23	11,373.23	11,414.84
Norway	87,693.79	100,600.56	101,524.14	102,913.45	97,019.18	74,355.52	70,459.18	75,496.75	81,734.47	75,419.63
Oman	18,756.98	20,921.15	21,902.58	20,926.55	20,131.92	16,028.75	14,618.88	15,130.94	16,414.89	15,474.03
Peru	5,082.35	5,869.32	6,528.97	6,756.75	6,672.88	6,229.10	6,205.00	6,710.51	6,941.24	6,977.70
United Arab Emirates	33,893.30	39,194.68	40,976.50	42,412.63	43,751.84	38,663.38	38,141.85	40,644.80	43,839.36	43,103.32

Graph 2.2.1. GECF Member and Observer Countries GDP Per Country | 2010 - 2019 | Current Billion US\$



Graph 2.2.2. GECF Member Countries and Observer Countries GDP per Capita 2010 vs 2019 | M/\$2011 PPP GDP



2.3 Exports & Imports of Goods and Services

Table 2.3.1. Exports of Goods & Services

	(Current Billion US\$)										(% of GDP)									
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Members																				
Algeria	61.98	77.58	77.12	69.66	64.66	38.58	33.40	37.93	44.52	38.06	38.45	38.79	36.89	33.21	30.24	23.24	20.86	22.64	25.62	22.40
Bolivia	16.18	19.81	25.01	26.06	28.29	20.12	16.55	18.45	20.81	10.21	82.07	82.37	92.03	84.70	85.41	60.74	48.59	49.02	51.47	24.97
Egypt	46.73	48.54	45.81	49.11	43.52	43.86	34.44	37.23	47.45	NA	21.35	20.57	16.40	17.02	14.24	13.18	10.35	15.82	18.91	NA
Equatorial Guinea	13.99	16.04	16.10	14.85	14.36	7.47	5.78	7.18	7.81	6.08	85.76	75.10	71.90	67.65	65.96	56.66	51.41	58.86	58.81	55.13
Iran	118.78	148.87	144.50	123.74	100.13	76.00	93.65	111.08	NA	NA	24.40	25.63	24.13	26.88	23.14	19.74	22.40	24.94	NA	NA
Libya	49.06	19.03	61.10	46.14	19.34	11.13	6.85	18.92	29.96	33.76	65.60	54.83	74.62	70.43	47.01	39.97	26.14	49.94	56.95	64.84
Nigeria	93.24	129.74	144.92	92.95	104.80	52.75	37.30	49.49	61.70	NA	25.66	31.62	31.55	18.05	18.44	10.67	9.22	13.17	15.50	NA
Qatar	77.98	121.84	142.88	144.51	140.23	92.29	72.40	85.20	102.56	92.02	62.32	72.62	76.47	72.72	68.00	57.06	47.71	51.04	53.60	50.15
Russia	445.51	573.99	594.19	592.50	558.28	391.37	330.11	410.72	509.50	481.29	29.22	28.06	26.91	25.85	27.11	28.70	25.85	26.09	30.52	28.31
Trinidad and Tobago	10.59	14.19	12.28	17.84	13.81	10.17	7.56	8.80	9.68	7.20	49.69	57.86	49.93	68.44	52.58	43.06	34.10	39.05	40.68	30.95
Venezuela	112.18	94.76	99.79	91.88	80.52	NA	NA	NA	NA	NA	28.53	29.94	26.17	24.76	16.69	NA	NA	NA	NA	NA
Observers																				
Angola	51.57	67.82	71.63	69.38	65.13	34.57	28.44	35.42	41.39	NA	61.54	60.67	55.94	50.75	44.70	29.75	28.12	29.00	40.84	NA
Azerbaijan	28.73	37.21	36.91	35.91	32.56	20.06	17.58	19.84	25.48	23.63	54.30	56.43	52.97	48.42	43.27	37.79	46.43	48.55	54.09	49.18
Iraq	54.60	82.51	96.90	93.10	97.00	62.73	56.14	74.20	98.61	86.80	39.42	44.42	44.45	39.68	41.34	35.34	32.10	37.96	43.98	37.08
Kazakhstan	65.50	89.50	91.75	91.38	87.11	52.58	43.71	54.04	67.48	65.83	44.24	46.46	44.11	38.62	39.34	28.52	31.84	32.40	37.63	36.54
Malaysia	221.69	254.02	249.35	244.49	249.47	209.29	201.16	223.42	246.55	238.30	86.93	85.26	79.30	75.63	73.79	69.45	66.78	70.05	68.76	65.34
Norway	170.47	205.66	207.28	204.91	194.36	145.84	130.78	144.75	166.90	149.03	39.76	41.27	40.68	39.20	39.00	37.80	35.46	36.33	38.44	36.95
Oman	38.50	49.53	54.82	59.39	56.95	39.08	31.05	36.96	46.18	44.78	67.49	72.83	71.56	75.38	70.25	57.14	47.42	52.36	58.26	58.16
Peru	41.05	52.39	52.88	49.91	45.39	40.40	43.37	52.16	56.35	54.86	27.83	30.50	27.45	24.81	22.61	21.29	22.60	24.72	25.38	24.19
United Arab Emirates	238.33	315.87	375.51	392.24	401.37	361.25	360.63	384.04	392.86	389.37	82.24	90.08	100.25	100.55	99.56	100.87	101.00	99.59	93.05	92.46

Table 2.3.2 Imports of Goods & Services

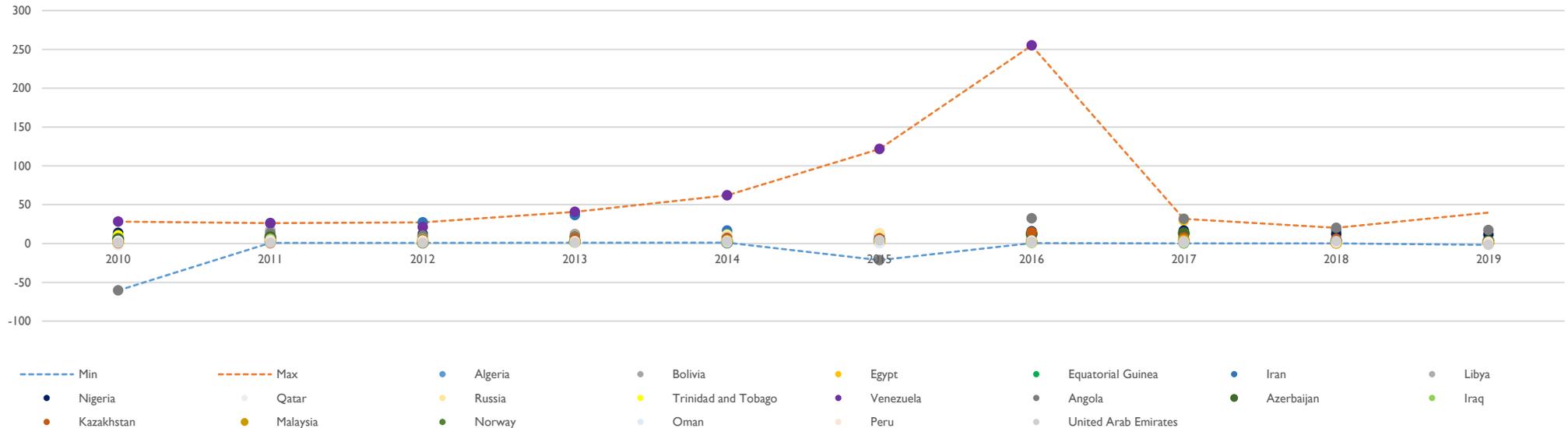
	(Current Billion US\$)										(% of GDP)									
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Members																				
Algeria	50.65	57.38	59.61	63.77	68.31	60.81	56.09	55.60	60.02	54.22	31.42	28.69	28.51	30.40	31.95	36.64	35.03	33.18	34.54	31.91
Bolivia	12.34	18.38	19.85	22.28	26.77	24.14	21.58	23.56	25.15	12.85	62.62	76.42	73.05	72.40	80.84	72.89	63.35	62.58	62.20	31.43
Egypt	58.20	58.26	67.93	67.40	69.28	72.07	66.26	68.98	73.68	NA	26.59	24.69	24.31	23.36	22.68	21.66	19.90	29.31	29.37	NA
Equatorial Guinea	9.61	8.39	10.02	8.61	8.36	5.57	4.63	5.32	6.07	5.76	58.91	39.28	44.77	39.24	38.42	42.22	41.19	43.57	45.70	52.25
Iran	94.30	101.97	139.20	107.94	92.87	74.20	86.98	106.16	NA	NA	19.37	17.56	23.24	23.45	21.46	19.27	20.81	23.84	NA	NA
Libya	31.48	15.54	32.54	42.46	37.80	20.68	11.55	15.07	18.85	27.85	42.10	44.79	39.75	64.83	91.88	74.28	44.08	39.79	35.82	53.49
Nigeria	64.17	88.88	59.65	66.94	70.78	52.75	46.55	49.51	69.72	NA	17.66	21.66	12.99	13.00	12.45	10.67	11.50	13.18	17.51	NA
Qatar	29.72	43.79	54.69	58.95	64.00	59.27	63.48	62.19	65.81	66.77	23.75	26.10	29.27	29.67	31.04	36.65	41.83	37.26	34.39	36.39
Russia	322.37	408.78	447.05	468.62	426.06	281.64	263.83	327.21	344.21	352.91	21.14	19.98	20.24	20.44	20.69	20.66	20.79	20.62	20.76	NA
Trinidad and Tobago	6.13	9.02	11.08	12.04	10.70	8.75	7.97	6.94	7.76	6.33	28.78	36.78	45.06	46.17	40.74	37.03	35.97	30.82	32.59	27.21
Venezuela	69.23	62.33	92.40	109.49	151.45	NA	NA	NA	NA	NA	17.61	19.70	24.23	29.51	31.40	NA	NA	NA	NA	NA
Observers																				
Angola	35.68	43.95	45.92	49.30	50.47	38.50	25.53	28.40	25.89	NA	42.58	39.31	35.86	36.06	34.64	33.13	25.25	23.25	25.54	NA
Azerbaijan	10.94	15.88	17.62	19.48	19.72	18.47	16.53	17.10	17.71	17.71	20.68	24.08	25.29	26.26	26.21	34.81	43.65	41.85	37.58	36.86
Iraq	47.21	51.55	63.44	84.50	86.70	73.52	69.81	69.66	80.61	91.99	34.08	27.75	29.10	36.01	36.95	41.42	39.92	35.64	35.95	39.30
Kazakhstan	44.26	51.34	61.60	63.40	56.75	45.24	39.08	40.75	46.45	50.25	29.89	26.65	29.61	26.79	25.63	24.53	28.47	24.43	25.90	27.89
Malaysia	181.10	207.62	215.53	216.89	218.11	186.60	181.13	201.50	221.41	210.62	71.01	69.68	68.54	67.09	64.52	61.92	60.12	63.17	61.75	57.75
Norway	122.15	141.51	140.29	148.20	147.86	123.68	123.48	130.80	141.68	141.96	28.49	28.40	27.53	28.35	29.67	32.06	33.48	32.83	32.63	35.20
Oman	24.17	29.24	34.40	41.83	37.86	36.78	31.21	34.96	35.30	32.74	42.36	42.98	44.90	53.10	46.69	53.77	47.66	49.52	44.53	42.52
Peru	35.18	43.77	48.49	50.25	48.68	45.32	43.73	48.10	52.26	52.03	23.85	25.49	25.17	24.98	24.25	23.88	22.79	22.79	23.54	22.94
United Arab Emirates	178.61	215.97	239.75	252.51	277.89	266.28	270.44	290.78	281.54	288.40	61.64	61.59	64.00	64.73	68.93	74.35	75.74	75.41	66.68	68.48

2.4 Inflation

Table 2.4.1. Inflation Consumer Prices (Annual %)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Members										
Algeria	3.91	4.52	8.89	3.25	2.90	4.80	6.40	5.60	4.30	1.95
Bolivia	9.68	16.78	9.06	12.22	10.96	7.01	7.62	5.53	3.78	1.84
Egypt	11.27	10.06	7.11	9.47	10.07	10.37	13.81	29.51	14.40	NA
Equatorial Guinea	7.79	4.81	3.66	2.95	4.31	1.68	1.41	0.75	1.35	1.24
Iran	10.09	26.29	27.26	36.60	16.61	12.48	7.25	8.04	18.01	39.91
Libya	2.80	15.52	6.06	2.61	NA	NA	NA	NA	NA	NA
Nigeria	13.72	10.84	12.22	8.48	8.06	9.01	15.68	16.52	12.09	11.40
Qatar	-2.43	1.14	2.32	3.22	3.35	1.81	2.68	0.39	0.26	-0.67
Russia	8.78	6.10	6.57	6.47	11.35	12.91	7.04	2.51	4.26	3.04
Trinidad and Tobago	10.60	5.10	9.20	5.20	5.70	4.70	3.10	1.90	0.90	1.00
Venezuela	28.19	26.09	21.07	40.64	62.17	121.74	254.95	NA	NA	NA
Observers										
Angola	-60.50	13.48	10.28	8.78	7.28	-21.53	32.38	31.69	20.19	17.15
Azerbaijan	5.73	7.85	1.07	2.42	1.39	4.01	12.45	12.94	2.26	2.61
Iraq	2.88	5.80	6.09	1.88	2.24	1.39	0.56	0.18	0.37	NA
Kazakhstan	Na	Na	5.10	5.85	6.71	6.67	14.55	7.44	6.02	5.25
Malaysia	1.62	3.17	1.66	2.11	3.14	2.10	2.09	3.87	0.88	0.66
Norway	2.42	1.28	0.70	2.12	2.04	2.17	3.55	1.88	2.76	2.17
Oman	3.26	4.04	2.95	1.05	1.02	0.07	1.11	1.60	0.88	0.13
Peru	1.53	3.37	3.66	2.81	3.24	3.55	3.59	2.80	1.32	2.14
United Arab Emirates	0.88	0.88	0.66	1.10	2.35	4.07	1.62	1.97	3.07	-1.93

Graph 2.4.1 GECF Member and Observer Countries Inflation
2010 - 2019 | Annual %



2.5 Energy Indicators

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

	2010	2011	2012	2013	2014	2015
Members						
Algeria	3.61	3.66	3.89	3.92	4.10	4.13
Bolivia	4.99	5.01	5.48	5.16	5.17	4.95
Egypt	3.66	3.78	3.80	3.57	3.71	3.51
Equatorial Guinea	2.53	2.61	2.61	2.52	2.63	2.21
Iran	6.58	6.46	7.20	7.48	7.70	7.79
Libya	4.76	8.27	5.09	6.63	4.44	4.21
Nigeria	6.15	6.20	6.26	5.96	5.63	5.68
Qatar	5.13	5.13	5.95	6.03	6.48	6.40
Russia	8.73	8.78	8.70	8.46	8.35	8.41
Trinidad and Tobago	21.15	20.81	20.01	20.03	19.14	19.09
Venezuela	6.31	5.62	5.79	5.38	5.47	4.72
Observers						
Angola	3.70	3.70	3.86	3.62	3.65	3.61
Azerbaijan	3.36	3.64	3.88	3.72	3.76	3.73
Iraq	4.01	4.08	4.01	4.04	4.03	3.72
Kazakhstan	8.47	8.84	8.07	8.42	7.87	7.92
Malaysia	5.18	5.13	4.95	5.33	5.13	4.68
Norway	4.61	3.77	3.89	4.23	3.58	3.75
Oman	5.68	6.76	6.79	6.74	6.38	6.30
Peru	2.69	2.58	2.62	2.46	2.78	2.79
United Arab Emirates	5.40	5.35	5.32	5.22	5.27	5.08

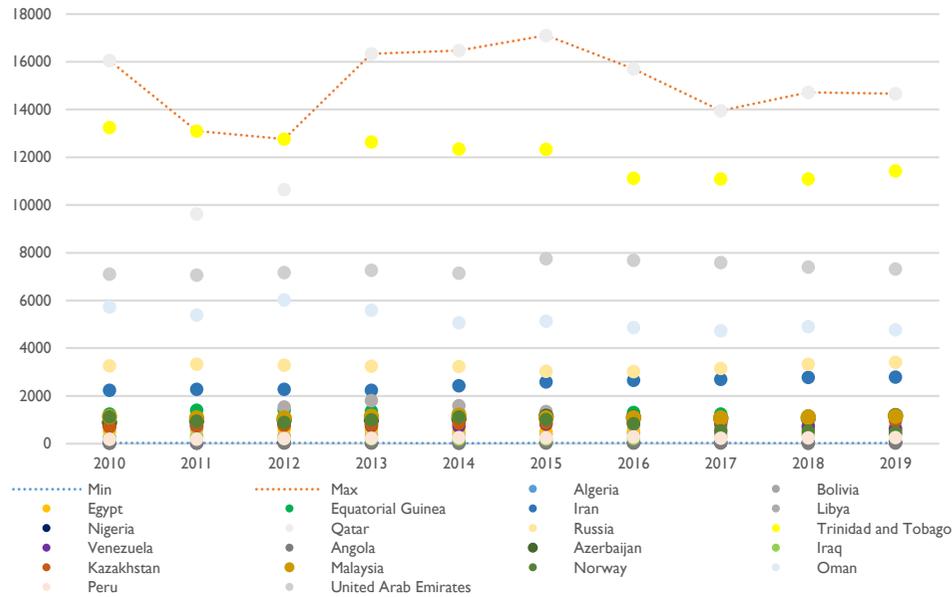
Table 2.5.2 Energy Use (kg of Oil Equivalent per Capita)

	2010	2011	2012	2013	2014
Members					
Algeria	1,114.22	1,140.64	1,229.55	1,247.50	1,333.90
Bolivia	636.14	660.99	747.87	740.17	778.17
Egypt	876.54	900.66	905.59	848.63	827.50
Equatorial Guinea	NA	NA	NA	NA	NA
Iran	2,769.46	2,791.11	2,869.33	2,889.11	3,060.39
Libya	3,353.53	2,190.81	2,744.01	3,071.82	2,808.65
Nigeria	756.35	778.84	798.63	780.14	763.63
Qatar	14,890.44	15,370.63	17,344.38	17,266.13	17,922.73
Russia	4,819.04	5,049.43	5,167.01	5,078.63	4,942.88
Trinidad and Tobago	1,114.22	1,140.64	1,229.55	1,247.50	NA
Observers					
Angola	520.96	521.78	552.36	533.76	544.61
Azerbaijan	1,279.55	1,369.35	1,472.90	1,474.00	1,502.08
Iraq	1,261.22	1,335.74	1,438.18	1,488.56	1,437.90
Kazakhstan	4,234.85	4,670.82	4,398.94	4,786.59	4,434.64
Malaysia	2,601.45	2,670.65	2,678.53	2,979.65	3,003.46
Norway	6,934.59	5,649.70	5,906.14	6,415.99	5,595.65
Oman	6,154.48	6,771.19	6,767.62	6,490.22	6,040.61
Peru	643.07	649.26	692.95	684.15	790.22
United Arab Emirates	7,215.22	7,190.97	7,481.19	7,604.84	7,648.40

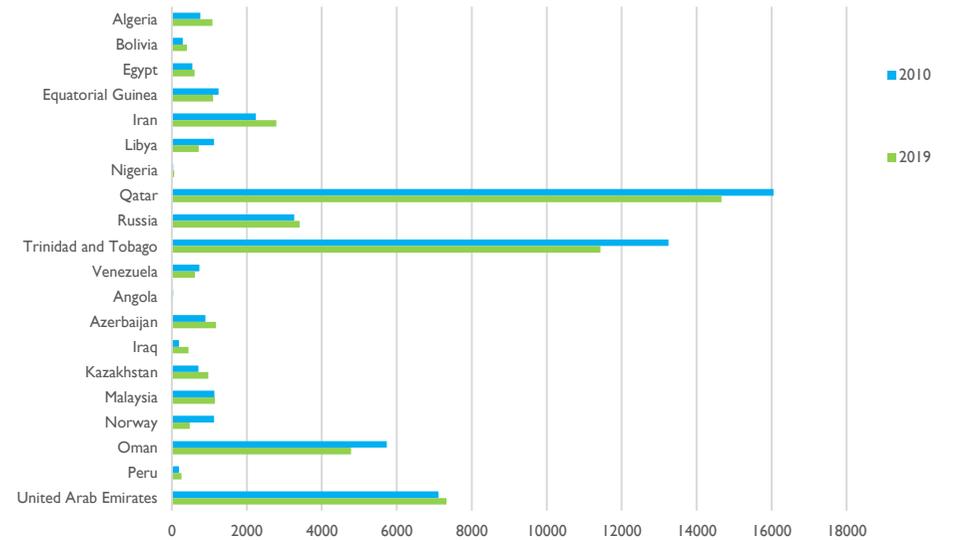
Table 2.5.3. Natural Gas Use (Scm per Capita)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Members										
Algeria	756.33	785.48	861.57	852.80	951.59	1,005.62	990.42	1,002.78	1,058.93	1,078.43
Bolivia	290.59	320.18	325.70	341.48	386.68	389.15	428.76	428.85	428.08	400.21
Egypt	545.55	587.02	608.52	581.64	531.05	517.08	543.06	603.02	622.73	604.04
Equatorial Guinea	1,248.36	1,410.54	1,410.99	1,365.65	1,282.22	1,101.35	1,310.92	1,248.81	1,162.30	1,095.34
Iran	2,237.04	2,288.34	2,281.31	2,243.27	2,427.14	2,585.86	2,653.84	2,699.26	2,785.14	2,788.68
Libya	1,127.79	688.54	1,545.09	1,809.18	1,598.16	1,353.82	780.00	730.94	714.43	714.32
Nigeria	31.52	37.84	43.81	44.83	43.82	61.32	47.74	58.00	62.13	57.89
Qatar	16,053.21	9,627.33	10,655.38	16,342.80	16,476.92	17,110.27	15,709.92	13,954.44	14,722.20	14,662.97
Russia	3,262.18	3,329.58	3,289.07	3,247.23	3,235.91	3,037.54	3,024.52	3,151.80	3,328.80	3,412.81
Trinidad and Tobago	13,247.76	13,098.63	12,763.86	12,646.19	12,351.38	12,329.65	11,123.26	11,093.83	11,096.72	11,431.35
Venezuela	734.64	757.12	793.12	753.37	732.63	829.67	872.81	870.01	735.11	615.42
Observers										
Angola	31.43	31.05	30.27	31.60	23.72	27.61	26.90	26.46	23.17	25.85
Azerbaijan	896.92	980.43	1,004.32	1,001.22	1,053.67	1,152.19	1,112.17	1,065.06	1,085.10	1,175.26
Iraq	191.84	235.07	217.28	204.81	197.98	195.35	219.79	284.63	355.25	443.00
Kazakhstan	706.82	758.97	771.20	793.05	867.89	886.29	888.50	927.72	1,039.25	971.64
Malaysia	1,136.54	1,086.83	1,085.40	1,147.06	1,195.90	1,081.56	1,076.74	1,079.39	1,118.23	1,152.96
Norway	1,121.02	943.73	887.64	1,002.83	1,118.20	1,016.93	840.51	540.32	529.81	479.45
Oman	5,737.43	5,395.08	6,034.83	5,591.26	5,067.96	5,136.68	4,869.15	4,730.03	4,911.71	4,778.91
Peru	189.13	195.12	224.02	235.78	254.57	251.72	288.99	238.20	241.50	255.30
United Arab Emirates	7,111.12	7,064.00	7,175.99	7,273.39	7,152.02	7,754.59	7,686.16	7,587.06	7,396.98	7,324.76

Graph 2.5.2 GECF Member and Observer Countries Natural Gas Use 2010 - 2019 | Annual %



Graph 2.5.1. GECF Member and Observer Countries Natural Gas Use 2010 vs 2019 | Scm Per Capita





Section 3
GECF in the World

3.1 Proven Natural Gas Reserves

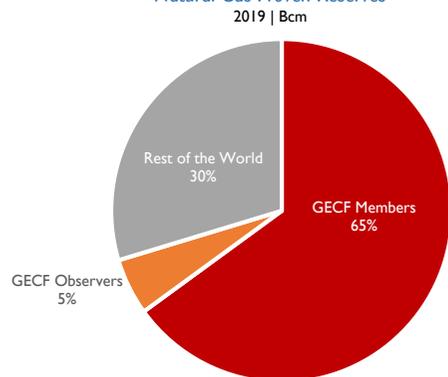
Table 3.1.1. Historical Proven Natural Gas Reserves of GECF Countries (Bcm)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
World	196,188	200,071	200,135	200,966	201,004	199,795	201,291	204,514	204,608	205,141
GECF Totals	129,095	132,298	136,404	142,543	143,371	144,711	146,005	145,021	144,220	144,316
Members	124,383	127,663	127,455	133,847	134,437	133,998	134,637	133,998	133,639	133,373
Observers	4,712	4,635	8,949	8,696	8,934	10,713	11,369	11,023	10,581	10,943
GECF Share	66%	66%	68%	71%	71%	72%	73%	71%	70%	70%

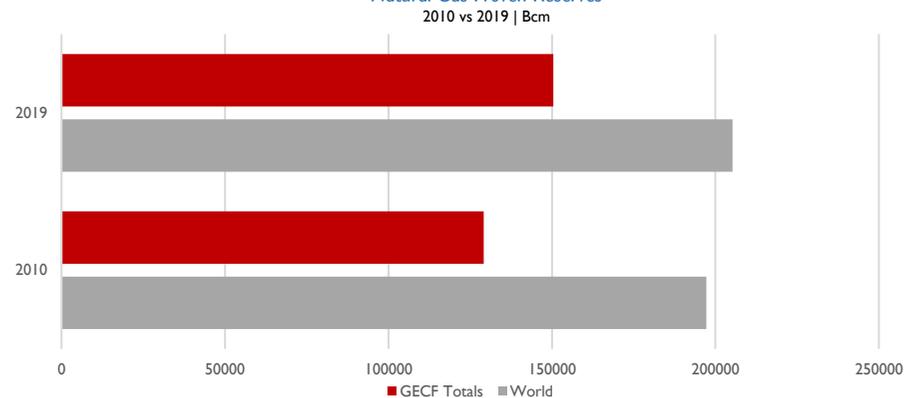
Table 3.1.2. Proven Natural Gas Reserves of Current GECF Countries (Bcm)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Members										
Algeria	4,504	4,504	4,504	4,504	4,504	4,504	4,504	4,504	4,504	4,504
Bolivia	266	250	231	296	274	252	264	303	303	303
Egypt	2,202	2,119	1,957	1,777	2,186	2,086	2,221	2,221	2,221	2,221
Equatorial Guinea	82	78	71	66	60	54	47	42	42	39
Iran	33,620	33,790	33,710	33,850	33,440	33,720	33,820	33,330	33,899	33,988
Libya	1,495	1,547	1,549	1,506	1,505	1,505	1,505	1,505	1,505	1,505
Nigeria	5,106	5,171	5,115	5,108	5,303	5,280	5,475	5,627	5,685	5,761
Qatar	25,201	25,110	25,069	24,681	24,531	24,299	24,073	23,861	23,846	23,831
Russia	46,000	48,676	48,810	49,335	49,896	50,205	50,617	50,508	49,571	49,154
Trinidad and Tobago	381	375	371	347	326	300	281	298	298	302
Venezuela	5,525	5,528	5,563	5,581	5,617	5,702	5,740	5,708	5,674	5,674
Observers										
Angola	275	275	275	275	308	308	440	422	384	343
Azerbaijan	1,317	1,317	1,308	1,300	1,292	1,284	1,277	1,270	1,435	1,917
Iraq	3,158	3,158	3,158	3,158	3,158	3,158	3,820	3,744	3,729	3,714
Kazakhstan	1,950	1,950	1,939	1,929	1,918	1,907	1,898	1,865	1,830	1,830
Malaysia	2,507	2,547	2,607	2,782	2,849	2,842	2,470	2,346	2,290	2,217
Norway	2,762	2,685	2,687	2,654	2,547	2,461	2,388	2,334	2,226	2,165
Oman	520	515	505	706	705	705	705	705	677	674
Peru	353	359	435	426	414	399	456	365	300	300
United Arab Emirates	6,091	6,091	6,091	6,091	6,091	6,091	6,091	6,091	6,091	6,091

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

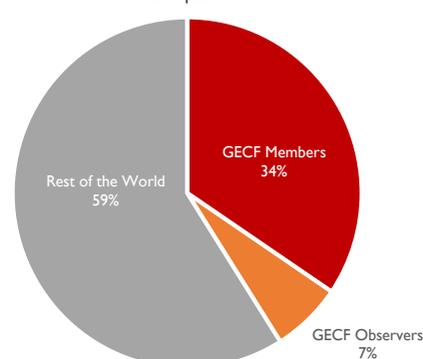
3.2.1. Historical Natural Gas Gross Production of GECF Countries (Bcm)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
World	4,072.36	4,141.69	4,204.12	4,268.20	4,334.20	4,373.58	4,455.06	4,609.66	4,820.70	5,253.95
GECF Totals	1,701.70	1,750.54	1,882.78	1,987.24	1,993.42	2,026.32	2,035.93	2,114.39	2,134.46	2,148.38
Members	1,521.46	1,577.48	1,590.16	1,688.20	1,682.40	1,654.87	1,661.26	1,741.78	1,790.41	1,804.14
Observers	180.24	173.06	292.61	299.04	311.02	371.45	374.67	372.61	344.05	344.24
GECF Share	42%	42%	45%	47%	46%	46%	46%	46%	44%	41%

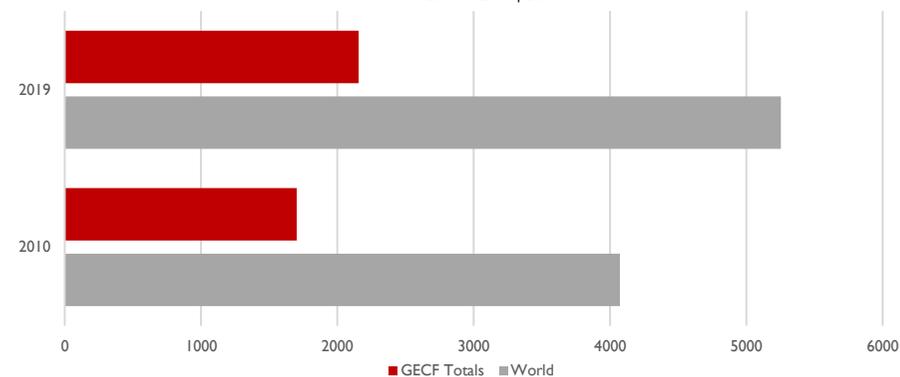
3.2.2. Natural Gas Gross Production of Current GECF Countries (Bcm)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Members										
Algeria	192.21	190.13	182.60	179.49	186.75	183.83	189.14	188.74	183.55	175.35
Bolivia	15.06	16.26	18.41	21.07	22.19	21.99	21.16	20.53	19.35	17.08
Egypt	66.33	66.46	66.02	61.36	54.10	49.34	46.71	55.77	65.83	72.18
Equatorial Guinea	10.87	11.03	11.94	13.99	13.66	15.45	14.76	13.80	12.96	12.20
Iran	222.64	227.48	229.14	229.83	245.68	256.98	277.39	301.45	311.49	322.50
Libya	30.26	9.86	23.44	22.88	20.94	22.56	14.78	14.73	14.60	18.52
Nigeria	79.85	84.01	84.85	79.63	86.33	85.22	76.78	79.49	80.27	81.05
Qatar	136.25	150.02	163.03	171.06	173.40	175.92	172.17	171.40	175.42	181.31
Russia	651.30	670.80	654.68	667.59	642.81	633.54	640.81	692.00	727.60	738.10
Trinidad and Tobago	45.61	44.77	44.40	42.85	38.10	39.59	34.00	35.36	36.46	35.98
Venezuela	71.08	73.27	75.97	76.44	76.72	80.20	82.16	76.89	67.44	56.21
Observers										
Angola	10.32	10.73	10.85	10.76	10.44	10.54	11.71	14.98	13.94	12.90
Azerbaijan	25.07	24.58	26.40	27.85	28.22	27.83	27.91	27.07	28.41	33.16
Iraq	22.73	24.13	26.22	27.30	28.50	29.78	33.82	34.65	35.80	36.40
Kazakhstan	37.88	38.08	38.06	40.60	42.02	43.70	44.51	46.81	48.80	49.73
Malaysia	76.77	76.42	76.98	80.86	81.53	78.99	80.19	82.95	80.23	82.15
Norway	142.37	134.98	148.00	144.81	150.71	159.74	158.90	161.58	156.30	148.78
Oman	33.10	33.39	35.69	37.69	37.42	38.58	39.65	39.66	43.69	45.21
Peru	13.90	14.66	15.96	16.43	18.65	17.19	19.68	18.44	17.11	18.07
United Arab Emirates	79.27	82.43	83.21	84.32	84.31	90.27	91.40	91.63	95.43	93.66

Graph 3.2.1. GECF Countries and Rest of the World
Natural Gas Gross Production
2019 | Bcm



Graph 3.2.2. GECF Countries vs Rest of the World
Natural Gas Gross Production
2010 vs 2019 | Bcm



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

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
World	3,262.40	3,348.08	3,410.34	3,465.96	3,517.35	3,576.97	3,595.37	3,718.77	3,855.87	3,960.43
GEFCF Totals	1,336.46	1,389.93	1,503.69	1,575.86	1,563.60	1,589.89	1,600.12	1,661.81	1,687.65	1,714.45
Members	1,209.10	1,268.36	1,283.87	1,353.62	1,340.90	1,326.82	1,336.21	1,398.46	1,456.68	1,484.33
Observers	127.36	121.57	219.81	222.24	222.70	263.07	263.91	263.34	230.97	230.12
GECF Share	41%	42%	44%	45%	44%	44%	45%	45%	44%	43%

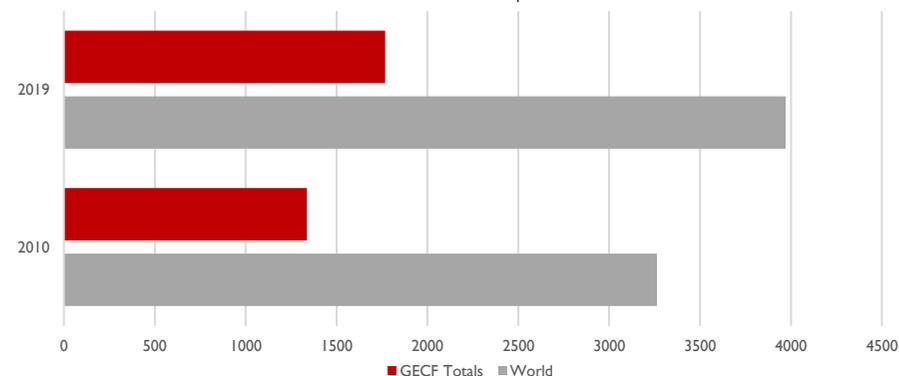
3.2.4. Natural Gas Marketed Production of Current GECF Countries (Bcm)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Members										
Algeria	85.46	83.37	86.06	82.43	83.30	84.58	94.95	96.60	97.47	89.58
Bolivia	14.47	15.71	17.85	20.48	21.66	21.50	20.61	20.03	18.70	16.57
Egypt	61.32	61.26	60.80	56.13	48.79	44.26	41.93	50.71	60.84	67.46
Equatorial Guinea	7.76	8.48	8.22	8.41	8.23	7.44	7.88	8.24	7.75	6.74
Iran	165.01	170.78	172.31	171.57	188.02	202.97	211.14	217.80	233.97	240.81
Libya	16.81	6.96	16.07	16.99	16.59	15.15	9.86	9.12	9.04	10.31
Nigeria	36.19	41.32	42.57	38.41	43.84	45.15	41.99	45.79	46.97	47.70
Qatar	131.17	145.27	157.05	164.96	167.43	170.05	166.10	165.37	170.04	176.30
Russia	628.93	647.60	631.15	645.91	619.75	612.74	619.81	668.94	704.51	718.48
Trinidad and Tobago	42.25	39.69	39.34	39.84	35.51	36.94	31.81	33.48	34.93	35.00
Venezuela	19.73	20.77	22.73	21.82	21.88	26.00	28.90	28.29	24.50	20.27
Observers										
Angola	0.74	0.75	0.76	0.93	0.73	0.77	1.71	5.83	6.14	6.80
Azerbaijan	16.25	15.95	16.81	17.45	18.38	18.78	18.28	17.76	19.05	22.84
Iraq	7.15	6.32	6.36	7.09	7.55	7.32	9.92	10.14	10.60	10.82
Kazakhstan	20.40	20.09	19.75	20.95	21.68	21.97	22.94	23.41	24.69	24.17
Malaysia	61.27	61.87	61.83	65.71	66.28	64.19	65.09	67.70	66.53	68.32
Norway	106.96	101.49	114.52	108.76	109.18	117.71	117.33	124.76	122.82	115.80
Oman	26.90	27.14	29.72	30.94	30.45	30.66	31.28	32.00	34.92	36.14
Peru	7.23	11.54	11.99	12.43	13.16	12.69	14.07	12.99	12.74	13.55
United Arab Emirates	51.37	52.98	55.61	55.73	55.45	60.04	61.23	54.09	47.96	55.11

Graph 3.2.3. GECF Countries and Rest of the World Natural Gas Marketed Production 2019 | Bcm



Graph 3.2.4. GECF Countries vs Rest of the World Natural Gas Marketed Production 2010 vs 2019 | Bcm



3.3 Natural Gas Exports

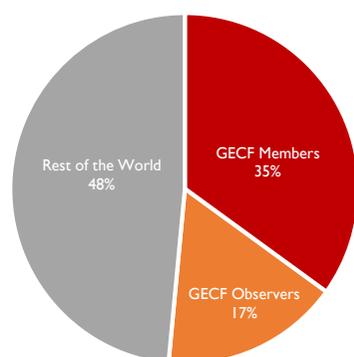
3.3.1. Historical Natural Gas Pipeline Exports of GECF Countries (Bcm)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
World	648.60	653.95	692.85	715.32	682.56	711.29	755.67	821.73	828.67	825.25
GECF Totals	355.39	350.31	440.41	456.13	417.76	437.82	463.75	492.14	454.05	426.87
Members	244.84	243.41	266.46	282.04	254.40	266.09	286.63	305.50	314.10	290.35
Observers	110.55	106.90	173.95	174.09	163.37	171.73	177.12	186.63	139.96	136.52
GECF Share	55%	54%	64%	64%	61%	62%	61%	60%	55%	52%

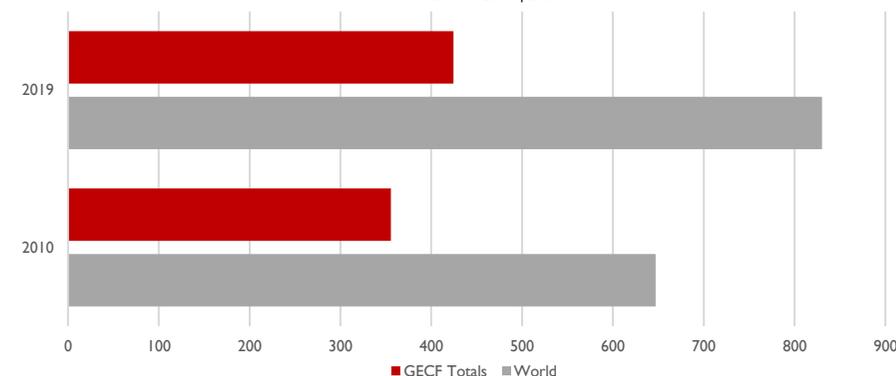
3.3.2. Natural Gas Pipeline Exports of Current GECF Countries (Bcm)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Members										
Algeria	37.85	35.72	37.33	32.23	27.08	27.04	38.44	37.59	37.95	26.31
Bolivia	11.54	12.48	14.61	16.94	17.62	17.34	15.92	15.25	13.84	12.56
Egypt	5.46	1.79	0.68	0.88	0.23	0.24	0.00	0.00	0.00	1.84
Equatorial Guinea	-	-	-	-	-	-	-	-	-	-
Iran	8.49	9.12	9.18	9.54	9.76	8.60	8.65	12.89	12.24	12.35
Libya	9.53	2.57	6.35	5.55	6.42	7.03	4.80	4.62	4.37	5.65
Nigeria	0.12	0.83	0.40	0.60	0.60	0.60	0.12	0.39	0.72	0.79
Qatar	19.15	19.20	19.22	19.90	20.09	19.75	20.00	21.96	22.36	22.45
Russia	152.70	161.70	178.70	196.40	172.60	185.50	198.70	212.80	222.62	208.40
Trinidad and Tobago	-	-	-	-	-	-	-	-	-	-
Venezuela	-	-	-	-	-	-	-	-	-	-
Observers										
Angola	-	-	-	-	-	-	-	-	-	-
Azerbaijan	5.45	6.29	6.09	7.68	7.77	7.32	7.62	8.86	9.19	11.84
Iraq	-	-	-	-	-	-	-	-	-	-
Kazakhstan	11.77	11.36	11.15	11.60	10.87	12.26	12.48	14.22	17.57	17.84
Malaysia	1.45	0.03	1.64	2.30	1.84	1.56	1.70	1.50	1.50	1.47
Norway	98.78	95.54	108.28	102.94	101.47	108.79	108.48	117.88	113.19	106.84
Oman	-	-	-	-	-	-	-	-	-	-
Peru	-	-	-	-	-	-	-	-	-	-
United Arab Emirates	-	-	-	-	-	-	-	-	-	-

Graph 3.3.1. GECF Countries and Rest of the World Natural Gas Pipeline Exports 2019 | Bcm



Graph 3.3.2. GECF Countries vs Rest of the World Natural Gas Pipeline Exports 2010 vs 2019 | Bcm



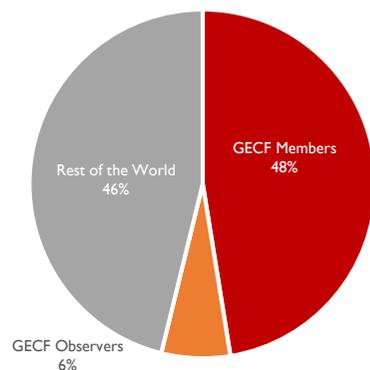
3.3.3. Historical LNG Exports of GECF Countries (Bcm)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
World	300.57	330.60	323.58	325.15	326.73	330.59	352.30	396.63	429.90	480.78
GECF Totals	176.46	210.26	207.86	211.53	212.87	212.47	212.48	222.30	235.89	259.03
Members	171.84	205.86	203.06	207.43	202.26	191.06	189.29	199.60	205.91	228.18
Observers	4.62	4.40	4.80	4.10	10.61	21.41	23.19	22.70	29.97	30.84
GECF Share	59%	64%	64%	65%	65%	64%	60%	56%	55%	54%

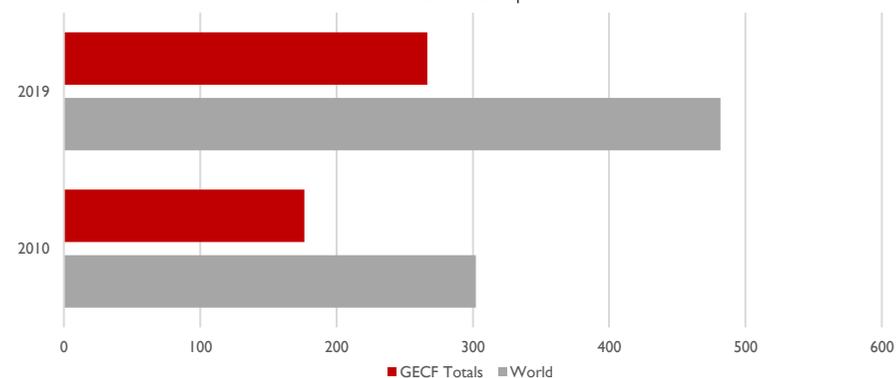
3.3.4. LNG Exports of Current GECF Countries (Bcm)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Members										
Algeria	19.51	17.13	15.00	15.16	17.11	16.47	15.53	16.41	13.47	14.65
Bolivia	-	-	-	-	-	-	-	-	-	-
Egypt	11.94	11.19	8.26	4.87	0.44	0.00	0.99	1.33	2.45	5.77
Equatorial Guinea	5.87	5.61	5.55	5.77	5.87	5.30	5.31	5.88	5.24	4.45
Iran	-	-	-	-	-	-	-	-	-	-
Libya	0.29	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nigeria	23.66	25.94	28.27	24.54	26.78	26.70	25.02	34.33	31.11	32.02
Qatar	75.75	102.60	102.98	103.41	102.32	104.53	105.20	104.23	104.41	106.89
Russia	14.79	14.05	13.18	16.20	12.63	13.18	14.91	15.03	25.48	39.90
Trinidad and Tobago	20.03	18.32	18.96	19.00	18.94	16.90	14.27	14.61	16.67	16.90
Venezuela	-	-	-	-	-	-	-	-	-	-
Observers										
Angola	0.00	0.00	0.00	0.47	0.44	0.00	0.93	4.98	5.25	5.80
Azerbaijan	-	-	-	-	-	-	-	-	-	-
Iraq	-	-	-	-	-	-	-	-	-	-
Kazakhstan	-	-	-	-	-	-	-	-	-	-
Malaysia	30.29	31.28	30.98	33.36	33.19	32.94	32.47	35.26	32.15	34.09
Norway	4.62	4.40	4.80	3.89	4.84	5.63	5.95	5.22	6.75	6.41
Oman	11.43	10.93	10.86	11.28	10.27	10.00	10.64	11.15	13.28	13.44
Peru	1.74	5.64	5.32	5.18	5.24	4.83	5.72	5.50	4.70	5.20
United Arab Emirates	7.82	7.57	7.37	7.19	7.91	7.98	8.06	7.78	7.08	7.61

Graph 3.3.3. GECF Countries and Rest of the World
Natural Gas LNG Exports
2019 | Bcm



Graph 3.3.4. GECF Countries vs Rest of the World
Natural Gas LNG Exports
2010 vs 2019 | Bcm



3.4 Natural Gas Domestic Consumption

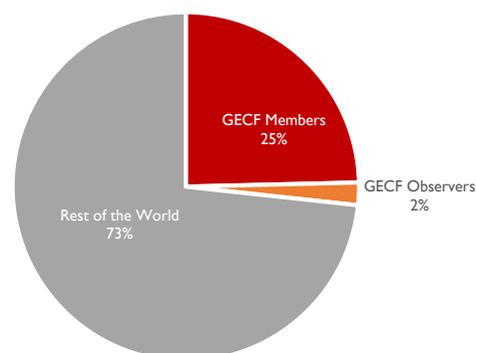
3.4.1. Historical Natural Gas Domestic Consumption of GECF Countries (Bcm)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
World	3,311.04	3,410.72	3,466.07	3,503.90	3,558.89	3,631.22	3,666.04	3,778.58	3,892.21	3,993.63
GECF Totals	804.62	833.95	899.87	977.90	998.10	1,023.05	1,029.47	1,065.93	1,073.49	1,091.60
Members	787.61	816.71	834.83	911.25	927.18	918.71	921.91	953.61	995.08	1,008.95
Observers	17.02	17.24	65.03	66.65	70.92	104.34	107.56	112.31	78.41	82.64
GECF Share	24%	24%	26%	28%	28%	28%	28%	28%	28%	27%

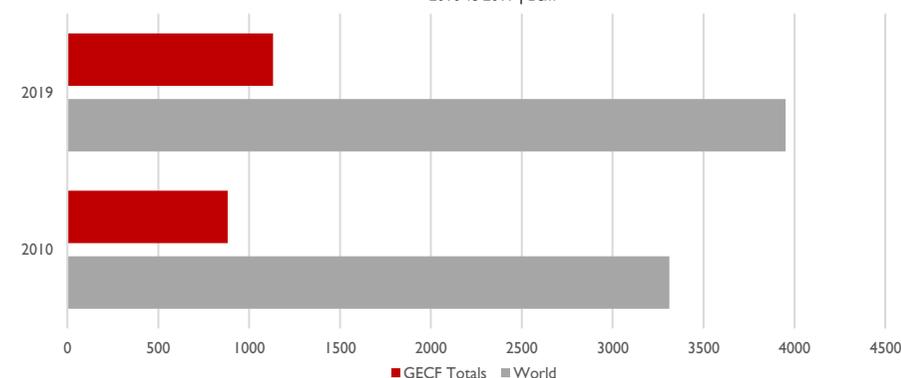
3.4.2. Natural Gas Domestic Consumption of Current GECF Countries (Bcm)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Members										
Algeria	27.21	28.80	32.21	32.53	37.21	40.30	40.45	41.82	45.14	46.83
Bolivia	2.92	3.27	3.38	3.60	4.14	4.23	4.73	4.80	4.86	4.61
Egypt	45.15	49.62	52.59	51.42	48.02	47.80	51.29	58.16	61.29	60.64
Equatorial Guinea	1.18	1.39	1.46	1.47	1.44	1.29	1.59	1.58	1.52	1.49
Iran	165.01	170.79	172.33	171.57	188.02	202.97	211.15	217.76	227.82	231.22
Libya	6.99	4.30	9.71	11.43	10.17	8.69	5.06	4.81	4.77	4.84
Nigeria	5.00	6.16	7.33	7.70	7.73	11.11	8.88	11.07	12.17	12.10
Qatar	29.80	19.60	23.40	38.19	40.52	43.90	41.70	38.02	40.95	41.53
Russia	466.00	476.00	471.00	466.00	465.00	445.00	444.00	463.00	489.00	501.00
Trinidad and Tobago	17.46	17.36	17.04	16.95	16.62	16.64	15.06	15.05	15.09	15.59
Venezuela	20.89	21.87	23.29	22.44	22.01	24.96	26.05	25.57	21.22	17.55
Observers										
Angola	0.73	0.75	0.76	0.82	0.64	0.77	0.78	0.79	0.71	0.82
Azerbaijan	8.12	8.99	9.34	9.43	10.05	11.12	10.85	10.50	10.79	11.78
Iraq	5.71	7.22	6.93	6.79	6.81	6.95	8.05	10.69	13.65	17.41
Kazakhstan	11.54	12.57	12.95	13.51	15.00	15.55	15.81	16.73	18.99	17.99
Malaysia	32.06	31.14	31.55	33.80	35.72	32.74	33.04	33.57	35.26	36.84
Norway	5.48	4.67	4.45	5.09	5.74	5.28	4.40	2.85	2.81	2.56
Oman	17.45	17.54	21.11	21.05	20.41	21.92	21.81	22.07	23.72	23.78
Peru	5.49	5.71	6.61	7.02	7.66	7.67	8.94	7.49	7.73	8.30
United Arab Emirates	60.80	63.20	65.60	66.90	65.90	71.83	71.95	71.98	71.24	71.57

Graph 3.4.1. GECF Countries and Rest of the World Natural Gas Domestic Consumption 2019 | Bcm



Graph 3.4.2. GECF Countries vs Rest of the World Natural Gas Domestic Consumption 2010 vs 2019 | Bcm



3.5 Liquefaction Plants

3.5.1. Liquefaction Plants of GEFC Countries

Country	Plant	Liquefaction (No. of Trains)	Total Capacity (MPTA)	Status	Start Year	Owner(s)	Operator(s)
Members							
Algeria	GL1Z	6	10.1	Operational	1978	Sonatrach	Sonatrach
	GL2Z	6	10.5	Operational	1981	Sonatrach	Sonatrach
	GL1K	1 Mega	6.0	Operational	2013	Sonatrach	Sonatrach
	GL3Z	1 Mega	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	Offline	2005	EGAS, EGBC, Union Fenosa Gas	SEGAS
Equatorial Guinea	EG LNG	1	3.7	Operational	2007	Marathon, Sonagas, Mitsui, Marubeni	EG LNG
Iran	Iran LNG	2	6.7	Under Construction	NA	NIOC	Iran LNG
	Iran FLNG	1	0.7	Planned	NA	NIOC	-
Libya	Marsa al Brega	1	3.2	Offline	1960	Libya NOC	Sirte Oil Company
	NLNG 1 & 2	2	7.0	Operational	1999	Nigeria LNG	Nigeria LNG
Nigeria	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	-	Planned	-	Nigeria LNG	Nigeria LNG
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	Project	2024/2025	Qatar Petroleum	Project 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	Novatek	Novatek
	Kriogas-Vysotsk LNG	2	0.7	Operational	2019	Novatek	Novatek
	Yamal LNG	1	0.9	Under Construction	2020	Novatek	Novatek
	Gorskaya LNG	3	1.3	Under Construction	2020/2021	Gazprom	Gazprom
	Portovaya LNG	1	1.5	Under Construction	2020	Gazprom	Gazprom
	Arctic LNG	3	19.8	Under Construction	2023/2025	Novatek	Novatek
	Baltic LNG	2	13.0	Planned	2023/2024	Gazprom	Gazprom
	Sakhalin II	1	5.4	Planned	2024	Sakhalin Energy	Sakhalin Energy
	Obskiy LNG	2	5.0	Planned	2024/2025	Novatek	Novatek
Trinidad and Tobago	Atlantic LNG	4	14.8	Operational	1999/2002/2003/2005	Atlantic LNG	Atlantic LNG
Observers							
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	Under Construction	2021	Petronas	Petronas
Norway	Snohvit LNG	1	4.3	Operational	2007	Snohvit LNG Consortium	Snohvit LNG Consortium
Oman	Qalhat	3	10.8	Operational	2000	Oman LNG	Oman LNG
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

3.6.1. Natural Gas (Import/Export) Pipelines of GECF 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)	Algeria	Italy	Tunisia	Sonatrach, Sotugat, ENI	Sonatrach, TMPC, TTPC	Operational	34.0	Export	1982	2,475	47/20/42/48
Pedro Duran Farell	Algeria	Spain-Portugal	Morocco	Sonatrach, Enagas, Naturgy, Galp	Sonatrach, Metragaz, Enagas, Naturgy	Operational	12.0	Export	1996	1,620	47/28/32/22
Medgaz	Algeria	Spain	Med Sea	Sonatrach, Naturgy	Medgaz	Operational	8.0	Export	2011	210	48/24
Trans-Saharan Gas	Algeria	Nigeria	Niger	Sonatrach, NNPC	NA	Planned	20.0 – 30.0	Export	NA	4,128	48/56
GASBOL	Bolivia	Brazil	-	Gas TransBoliviano	Gas TransBoliviano	Operational	11.5	Export	1999	557	32
GIIA (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
Arab Gas Pipeline	Egypt	Jordan, Syria, Lebanon	-	EGAS, ENPPI, GASCOPETROJET SPC	Egyptian FAJR	Offline	10.0	Export	2003	1,200	36
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	-
Dauletabad-Khangiran	Turkmenistan	Iran	-	Turkmgaz	Turkmgaz	Operational	12.0	Import	2007	182	48
Asaluye-Basrah	Iran	Iraq	-	NIOC, INOC	NIOC, INOC	Under Construction	NA	Export	NA	NA	NA
Asaluye-Nawabshah	Iran	Pakistan	-	NIOC, SNGPL, SSGC, Gazprom JSC	NIOC, SNGPL, SSGC, Gazprom JSC	Under Construction	40.0	Export	NA	2,775	56
Asaluye-Sohar	Iran	Oman	-	NIOC, OGC	NIOC, OGC	Planned	9.9	Export	2020	-	-
Green Stream	Libya	Sicily	-	Green Stream	Green Stream	Operational	11.0	Export	2004	520	32
West African Gas Pipeline	Nigeria	Ghana	Benin-Togo	WAGP	Chevron	Operational	8.3	Export	2006	678	20
Dolphin	Qatar	United Arab Emirates, Oman	-	Dolphin Energy	Dolphin Energy	Operational	33.1	Export	2007	364	48
Urengoy-Pomary-Uzhgorod	Russia	Europe	Ukraine	Gazprom	Gazprom	Operational	32	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	NA	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
Power of Siberia	Russia	China	-	Gazprom	Gazprom	Operational	38.0	Export	2019	3,000	56
TurkStream	Russia	Turkey	-	Gazprom	Gazprom	Operational	31.5	Export	2020	3000	32
Nord Stream 2	Russia	Germany	-	Nord Stream 2 AG	Nord Stream 2 AG	Under Construction	55.0	Export	2021	1,200	48
Antonio Ricaurte (Trans Caribbean)	Colombia	Venezuela	-	PDVSA Gas	PDVSA Gas	Operational	2.7	Import Export	2007	225	26

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 Caucasus (Baku-Tbilissi-Erzurum)	Azerbaijan	Georgia,Turkey	-	BP, TPAO, SOCAR, Petronas, Lukoil, Naftiran, Intertrade	BP	Operational	25.0	Export	2006	692	42
Mozdok–Makhachkala–Kazi Magomed	Russia	Azerbaijan	-	SOCAR, GAZPROM	SOCAR, GAZPROM	Operational	13.0	-	2010	680	48
Trans-Anatolian	Azerbaijan	Turkey	-	TANAP Consortium	SOCAR	Operational	31.0	Export	2018	1,850	56/42
Trans-Caspian	Turkmenistan	Azerbaijan	-	NA	NA	Planned	30.0	Export	NA	300	-
Bukhara–Tashkent–Bishkek–Almaty	Uzbekistan	Kazakhstan	-	Uzbekneftegas, KyrKazGas, KazTransGas	Uzbekneftegas, KyrKazGas, KazTransGas	Operational	22.0	Import	1971	684	40
Central Asia Center (CAC)	Turkmenistan	Kazakhstan	-	Gazprom	Gazprom	Operational	44.0	Import	1969/1988	2,000	30/50
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
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

3.7 LNG Carrier Fleet

3.7.1. LNG Carrier Fleet of Member GECF Countries

Country	Ship Name	Owner(s)	Delivered Year	Size (1000 Scm)
Algeria	Abane Ramdane	Sonatrach Group	1981	126.13
	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	171.8
	Ourgata	Sonatrach Group	2017	171.8
Nigeria	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	

3.7.1. LNG Carrier Fleet of GECF 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	Umm Bab	Nakilat / Maran Gas	2005	217.59
	Simaisma	Nakilat / Maran Gas	2006	210.20
	Al Marrouna	Nakilat / Teekay	2006	216.31
	Al Khuwair	Nakilat / Teekay	2006	210.15
	Al Jassasiya	Nakilat / Maran Gas	2007	266.37
	Ejnan	Nakilat / NYK	2007	263.30
	Al Gattara	Nakilat / International Seaways	2007	266.37
	Tembek	Nakilat / International Seaways	2007	266.48
	Al Ruwais	Nakilat / Pronav	2007	266.25
	Al Saffiya	Nakilat / Pronav	2007	265.98
	Al Areesh	Nakilat / Teekay	2007	210.10
	Al Ghuwairiya	Nakilat	2008	210.10
	Mozah	Nakilat	2008	216.30
	Umm Slal	Nakilat	2008	210.15
	Bu Samra	Nakilat	2008	210.10
	Al Oraiq	Nakilat / "K" Line	2008	216.29
	Umm Al Amad	Nakilat / "K" Line	2008	210.20
	Maran Gas Asclepius	Nakilat / Maran Gas	2008	266.00
	Al Aamriya	Nakilat / MOL	2008	266.00
	Fraiha	Nakilat / MOL	2008	263.30
	Murwab	Nakilat / MOL	2008	266.00
	Al Sahla	Nakilat / NYK	2008	263.30
	Al Thumama	Nakilat / NYK	2008	266.28
	Al Utouriya	Nakilat / NYK	2008	266.00
	Al Gharrafa	Nakilat / International Seaways	2008	266.00
	Al Hamla	Nakilat / International Seaways	2008	210.10
	Al Ghariya	Nakilat / Pronav	2008	210.10
	Duhail	Nakilat / Pronav	2008	145.70
	Al Daayen	Nakilat / Teekay	2008	174.00
	Al Huwaila	Nakilat / Teekay	2008	161.87
	Al Kharsaah	Nakilat / Teekay	2008	161.87
	Al Shamal	Nakilat / Teekay	2008	145.82
	Al Ghashamiya	Nakilat	2009	145.70
Sheehaniya	Nakilat	2009	159.80	
Mesaimmer	Nakilat	2009	159.80	
Onaiza	Nakilat	2009	161.87	
Al Dafna	Nakilat	2009	161.87	
Al Mafyar	Nakilat	2009	159.80	
Mekaines	Nakilat	2009	145.89	
Al Bahiya	Nakilat	2009	145.00	
Al Karaana	Nakilat	2009	159.80	

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

Country	Ship Name	Owner(s)	Delivered Year	Size (1000 Scm)
Qatar	Al Kharaitiyat	Nakilat	2009	159.80
	Al Khattiya	Nakilat	2009	210.17
	Al Nuaman	Nakilat	2009	210.10
	Al Rekayyat	Nakilat	2009	210.10
	Al Sadd	Nakilat	2009	216.20
	Al Mayeda	Nakilat	2009	216.20
	Al Samriya	Nakilat	2009	215.00
	Lijmiliya	Nakilat	2009	145.00
	Shagra	Nakilat	2009	216.20
	Aseem	Nakilat / SCI	2009	216.20
	Aamira	Nakilat	2010	216.20
	Rasheeda	Nakilat	2010	216.20
	Zarga	Nakilat	2010	210.15
	Maran Gas Coronis	Nakilat / Maran Gas	2012	210.15
	Woodside Goode	Nakilat / Maran Gas	2013	210.15
	Woodside Rogers	Nakilat / Maran Gas	2013	210.15
	Maran Gas Apollonia	Nakilat / Maran Gas	2014	155.00
	Maran Gas Delphi	Nakilat / Maran Gas	2014	149.54
	Maran Gas Efessos	Nakilat / Maran Gas	2014	148.79
	Maran Gas Posidonia	Nakilat / Maran Gas	2014	148.85
Maran Gas Alexandria	Nakilat / Maran Gas	2015	217.00	
Maran Gas Lindos	Nakilat / Maran Gas	2015	217.00	
Maran Gas Sparta	Nakilat / Maran Gas	2015	217.00	
Maran Gas Achilles	Nakilat / Maran Gas	2016	217.00	
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

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
Malaysia	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

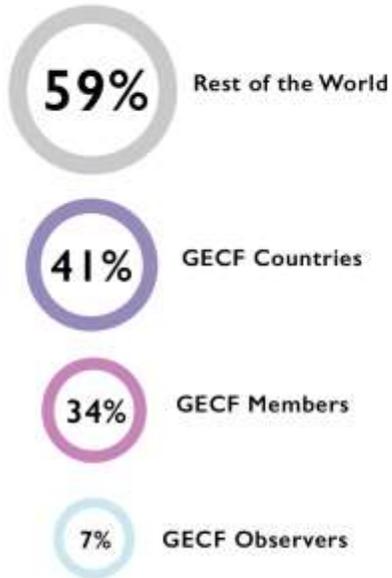
3.7.2. LNG Carrier Fleet of GECF Observer Countries (Continuation)

Country	Ship Name	Owner(s)	Delivered Year	Size (1000 Scm)
Malaysia	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
	Puteri Zamrud Satu	MISC	2004	137.10
	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	
Hull No.2364	MISC	2023	148.10	
Hull No.2365	MISC	2023	148.10	
United Arab Emirates	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



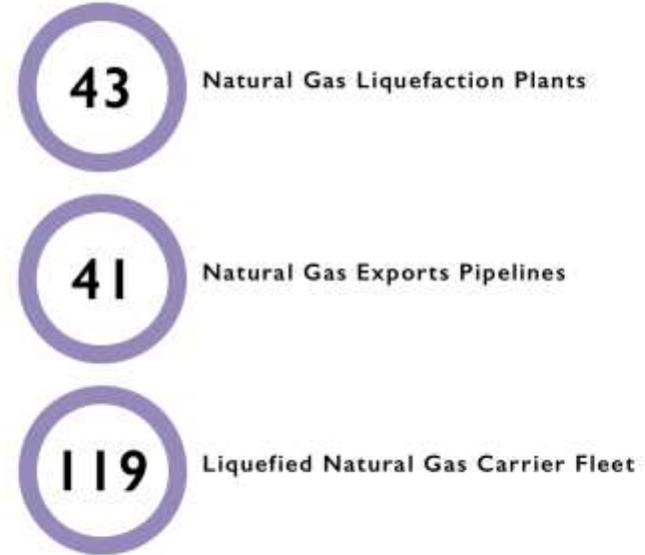
Natural Gas LNG Exports



Natural Gas Domestic Consumption



GECF Countries





GECF Members

- 1. People's Democratic Republic of Algeria
- 2. Plurinational State of Bolivia
- 3. Arab Republic of Egypt
- 4. Republic of Equatorial Guinea
- 5. Islamic Republic of Iran
- 6. State of Libya

- 7. Federal Republic of Nigeria
- 8. State of Qatar
- 9. Russian Federation
- 10. Republic of Trinidad and Tobago
- 11. Bolivarian Republic of Venezuela

GECF Observers

- 12. Republic of Angola
- 13. Republic of Azerbaijan
- 14. Republic of Iraq
- 15. Republic of Kazakhstan
- 16. Malaysia
- 17. Kingdom of Norway
- 18. Sultanate of Oman
- 19. Republic of Peru
- 20. United Arab Emirates



Section 4
GECF Member Countries



People's Democratic Republic of

ALGERIA



Population:
43 424 118



Capital:
Algiers



Continent:
Africa



Currency:
Algerian Dinar



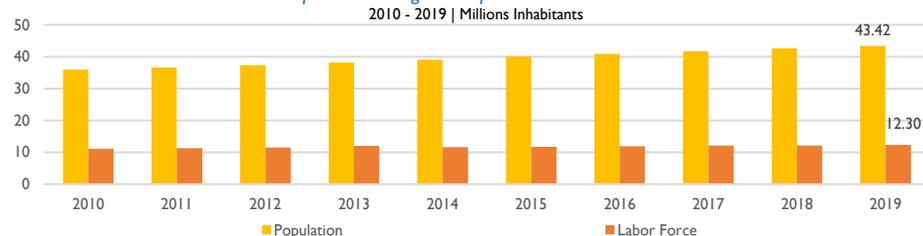
Time Zone:
Central European
GMT+1

4.1.1 Macroeconomics

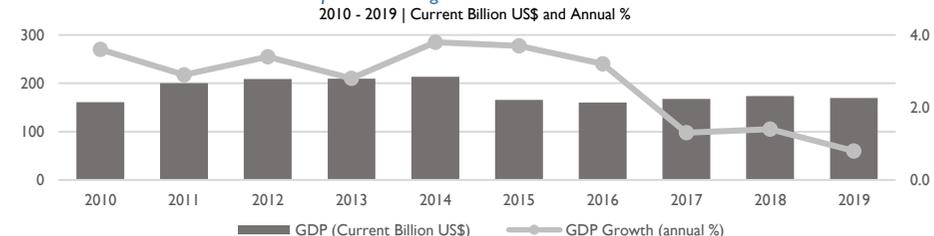
4.1.1.1 Algeria Macroeconomic Indicators

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Population (Inhabitants)	35,977,455	36,661,444	37,383,887	38,140,132	39,100,000	40,072,802	40,841,404	41,699,198	42,628,000	43,424,118
Labor Force (Inhabitants)	11,093,688	11,310,068	11,541,577	12,002,108	11,586,092	11,752,300	11,921,392	12,108,635	12,173,459	12,302,396
GDP (Current Billion US\$)	161.21	200.02	209.06	209.76	213.81	165.98	160.13	167.56	173.76	169.94
GDP Growth (Annual %)	3.63	2.89	3.37	2.77	3.79	3.76	3.30	1.60	1.40	0.80
GDP per Capita (Current US\$)	4,480.79	5,455.84	5,592.22	5,499.59	5,471.00	4,154.00	3,894.00	4,003.00	4,087.00	3,913.54
Exports of Goods and Services (Current Billion US\$)	61.98	77.58	77.12	69.66	64.66	38.58	33.40	37.93	44.52	38.06
Exports of Goods and Services (% of GDP)	38.45	38.79	36.89	33.21	30.24	23.24	20.86	22.64	25.62	22.40
Imports of Goods and Services (Current Billion US\$)	50.65	57.38	59.61	63.77	68.31	60.81	56.09	55.60	60.02	54.22
Imports of Goods and Services (% of GDP)	31.42	28.69	28.51	30.40	31.95	36.64	35.03	33.18	34.54	31.91
Inflation Consumer Prices (Annual %)	3.91	4.52	8.89	3.25	2.90	4.80	6.40	5.60	4.30	1.95
Energy Use (kg of Oil Equivalent per Capita)	1,114.22	1,140.64	1,229.55	1,247.50	1,333.90	1,368.70	1,347.70	1,339.90	1,430.90	1,541.47
Natural Gas Use (Scm per Capita)	756.33	785.48	861.57	852.80	951.59	1,005.62	990.42	1,002.78	1,058.93	1,078.43

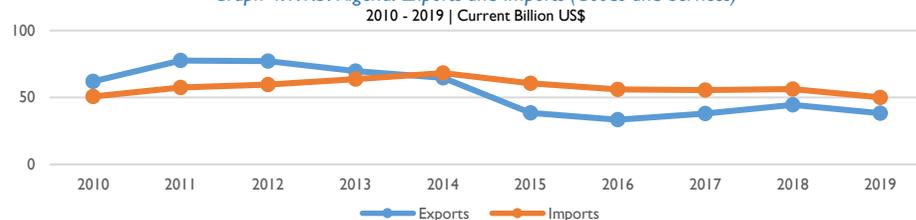
Graph 4.1.1.1. Algeria: Population and Labor Force



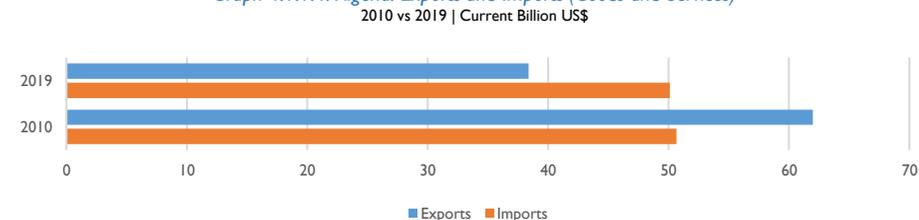
Graph 4.1.1.2. Algeria: GDP and GDP Growth



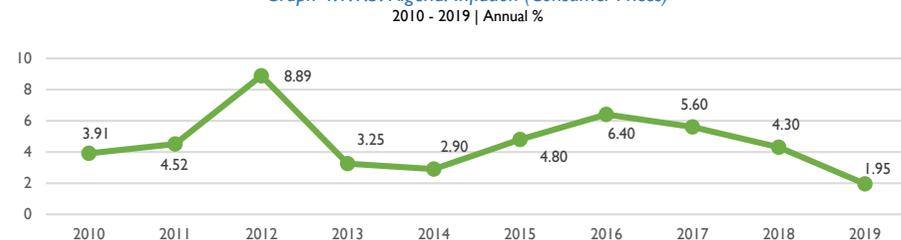
Graph 4.1.1.3. Algeria: Exports and Imports (Goods and Services)



Graph 4.1.1.4. Algeria: Exports and Imports (Goods and Services)



Graph 4.1.1.5. Algeria: Inflation (Consumer Prices)



Graph 4.1.1.6. Algeria: Natural Gas Use



4.1.2 Reserves and Production

Table 4.1.2.1 Proven Natural Gas Reserves (Bcm)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Proven Natural Gas Reserves	4,504	4,504	4,504	4,504	4,504	4,504	4,504	4,504	4,504	4,504

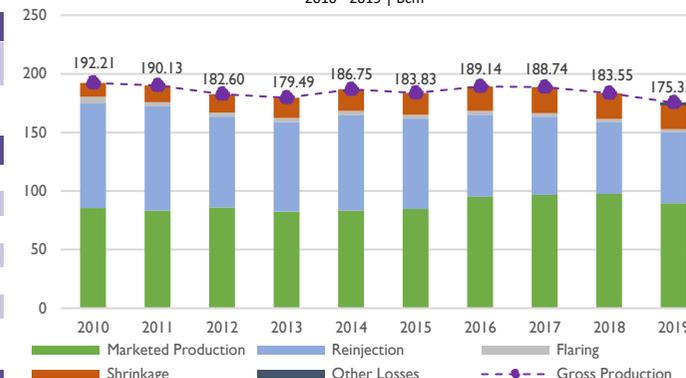
Table 4.1.2.2 Historical Natural Gas Production (Bcm)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Gross Production	192.21	190.13	182.60	179.49	186.75	183.83	189.14	188.74	183.55	175.35
Marketed Production	85.46	83.37	86.06	82.43	83.30	84.58	94.95	96.60	97.47	89.58
Reinjection	89.10	88.75	77.40	76.20	81.21	77.05	70.12	66.94	61.10	60.33
Flaring	5.80	3.60	3.50	3.70	3.95	3.51	3.26	3.00	2.91	2.74
Shrinkage	11.85	14.41	15.65	17.16	18.30	18.68	20.81	22.21	22.07	20.36
Other Losses	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.35

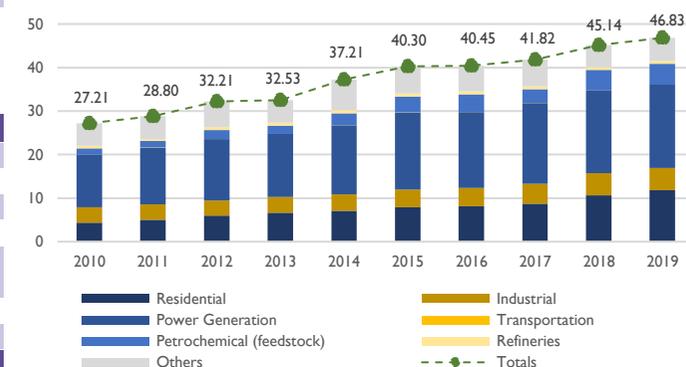
Table 4.1.2.3 Detailed 2019 Natural Gas Production (MMcm)

	2019											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Gross Production	16256.35	14484.11	15301.33	14357.80	15115.69	13175.03	14946.31	14647.75	13253.50	13978.85	14467.84	15365.45
Marketed Production	9726.18	8490.58	7598.94	7014.46	6569.76	6347.92	6340.64	7033.99	6280.07	6989.88	8077.64	9109.93

Graph 4.1.2.1. Algeria: Natural Gas Annual Production
2010 - 2019 | Bcm



Graph 4.1.3.1. Algeria: Natural Gas Annual Domestic Consumption
2010 - 2019 | Bcm



4.1.3 Domestic Consumption and Trade

Table 4.1.3.1 Domestic Gas Consumption (Bcm)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Residential	4.35	5.02	5.96	6.62	7.07	7.90	8.13	8.68	10.62	11.84
Industrial	3.54	3.55	3.52	3.68	3.83	4.04	4.21	4.63	5.10	5.11
Power Generation	12.07	13.04	14.11	14.45	15.75	17.72	17.45	18.53	18.99	19.10
Transportation	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Petrochemical (feedstock)	1.50	1.48	2.06	1.82	2.83	3.66	4.00	3.18	4.75	4.83
Refineries	0.55	0.49	0.61	0.73	0.70	0.72	0.77	0.68	0.64	0.62
Others	5.20	5.22	5.94	5.22	7.02	6.25	5.88	6.10	5.03	5.33
Totals	27.21	28.80	32.21	32.53	37.21	40.30	40.45	41.82	45.14	46.83

Table 4.1.3.2 Historical Trade: Natural Gas Exports

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Pipeline (Bcm)	37.85	35.72	37.33	32.23	27.08	27.04	38.44	37.59	37.95	26.31
LNG	Bcm*	19.51	17.13	15.00	15.16	17.11	16.47	15.53	16.41	14.65
	MMT	14.35	12.60	11.03	11.15	12.58	12.11	11.42	12.07	10.77
Totals (Bcm)	57.36	52.85	52.33	47.39	44.19	43.51	53.97	54.00	51.42	40.96

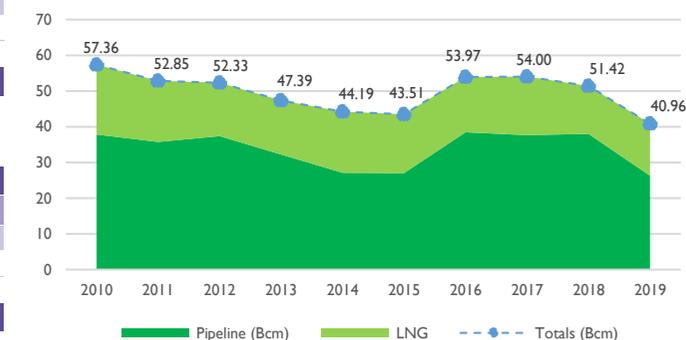
* Gas equivalent

Table 4.1.3.3 Detailed 2019 Trade: Natural Gas Exports

	2019											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Pipeline (MMcm)	3552.21	2443.80	1463.70	1845.69	1996.70	1842.70	2043.10	1864.40	1776.60	2167.45	2359.92	2950.10
LNG	MMcm*	910.01	1387.72	1654.20	1607.80	1066.95	1071.90	867.60	1276.20	1069.90	1376.87	1003.80
	1000MT	669.13	1020.38	1216.32	1182.21	784.52	788.16	637.94	938.38	786.69	997.13	738.09
Totals (MMcm)	4462.23	3831.52	3117.90	3453.49	3063.65	2914.60	2910.70	3140.60	2846.50	3523.55	3736.79	3953.90

* Gas equivalent

Graph 4.1.3.2. Algeria: Natural Gas Annual Exports
2010 - 2019 | Bcm



4.1.4 Transport and Plants

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
Pedro Duran Farell	Algeria	Spain-Portugal	Morocco	Sonatrach, Enagas, Naturgy, Galp	Sonatrach, Metragaz, Enagas, Naturgy	Operational	12.0	Export	1996	1,620	47/28/32/22
Medgaz	Algeria	Spain	Med Sea	Sonatrach, Naturgy	Medgaz	Operational	8.0	Export	2011	210	48/24
Trans-Saharan Gas	Algeria	Nigeria	Niger	Sonatrach, NNPC	NA	Planned	20.0 – 30.0	Export	NA	4,128	48/56

4.1.4.2 LNG Carrier Fleet

Ship Name	Owner(s)	Delivered Year	Size (1000 Scm)
Abane Ramdane	Sonatrach Group	1981	126.13
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
Total			904.18

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
GLZZ	6	10.5	Operational	1981	Sonatrach	Sonatrach
GLIK	1 Mega	6.0	Operational	2013	Sonatrach	Sonatrach
GL3Z	1 Mega	5.8	Operational	2014	Sonatrach	Sonatrach



Plurinational State of
BOLIVIA



Population:
11 513 100



Capital:
Sucre



Continent:
South America



Currency:
Bolivian Boliviano



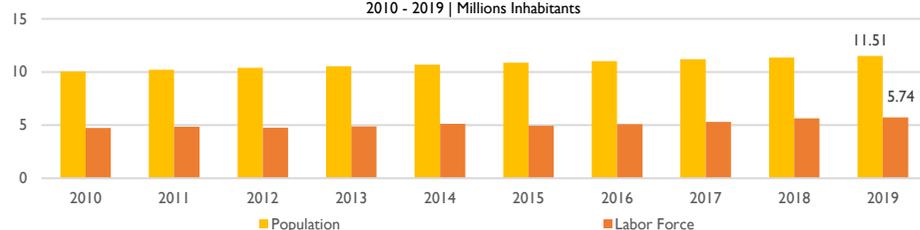
Time Zone:
Bolivia
GMT-4

4.2.1 Macroeconomics

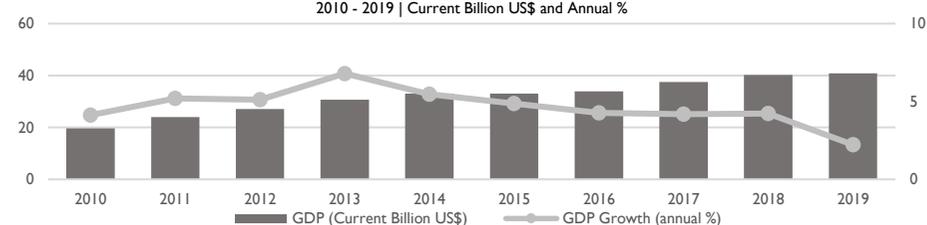
4.2.1.1 Bolivia Macroeconomic Indicators

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Population (Inhabitants)	10,048,590	10,212,954	10,377,676	10,542,376	10,706,517	10,869,730	11,031,813	11,192,854	11,353,142	11,513,100
Labor Force (Inhabitants)	4,740,398	4,836,945	4,744,597	4,875,374	5,124,437	4,925,990	5,080,592	5,293,299	5,631,725	5,735,836
GDP (Current Billion US\$)	19.65	23.96	27.08	30.66	33.00	33.00	33.94	37.51	40.29	40.90
GDP Growth (Annual %)	4.13	5.20	5.12	6.80	5.46	4.86	4.26	4.20	4.22	2.22
GDP per Capita (Current US\$)	1,955.46	2,346.34	2,609.88	2,908.20	3,081.88	3,035.97	3,076.66	3,351.12	3,548.59	3,552.07
Exports of Goods and Services (Current Billion US\$)	8.09	10.57	12.77	13.52	14.29	10.19	8.31	9.34	10.47	10.21
Exports of Goods and Services (% of GDP)	41.19	44.09	47.17	44.09	43.29	30.87	24.49	24.90	25.99	24.97
Imports of Goods and Services (Current Billion US\$)	6.74	9.20	10.23	11.39	13.85	12.23	10.83	11.93	12.54	12.85
Imports of Goods and Services (% of GDP)	34.32	38.39	37.78	37.14	41.97	37.06	31.91	31.80	31.12	31.43
Inflation Consumer Prices (Annual %)	2.50	9.88	4.52	5.74	5.77	4.06	3.62	2.82	2.27	1.84
Energy Use (kg of Oil Equivalent per Capita)	636.14	660.99	747.87	740.17	778.17	NA	NA	NA	NA	NA
Natural Gas Use (Scm per Capita)	290.59	320.18	325.70	341.48	386.68	389.15	428.76	428.85	428.08	400.21

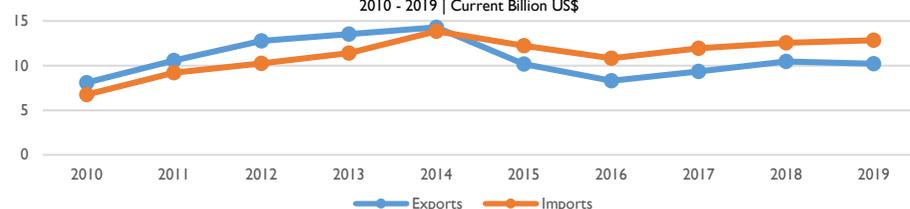
Graph 4.2.1.1. Bolivia: Population and Labor Force
2010 - 2019 | Millions Inhabitants



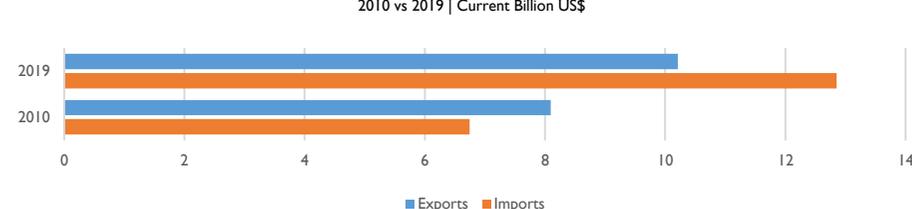
Graph 4.2.1.2. Bolivia: GDP and GDP Growth
2010 - 2019 | Current Billion US\$ and Annual %



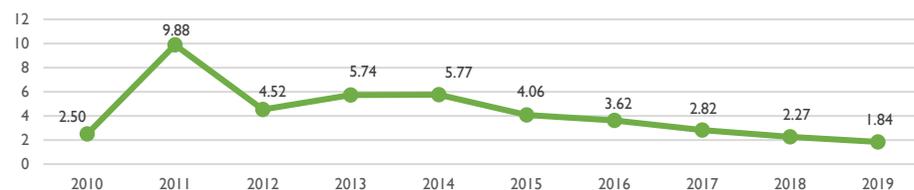
Graph 4.2.1.3. Bolivia: Exports and Imports (Goods and Services)
2010 - 2019 | Current Billion US\$



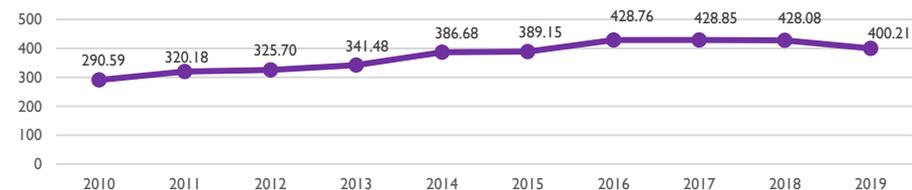
Graph 4.2.1.4. Bolivia: Exports and Imports (Goods and Services)
2010 vs 2019 | Current Billion US\$



Graph 4.2.1.5. Bolivia: Inflation (Consumer Prices)
2010 - 2019 | Annual %



Graph 4.2.1.6. Bolivia: Natural Gas Use
2010 - 2019 | Scm per Capita



4.2.2 Reserves and Production

Table 4.2.2.1 Proven Natural Gas Reserves (Bcm)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Proven Natural Gas Reserves	266	250	231	296	274	252	264	303	303	303

Table 4.2.2.2 Historical Natural Gas Production (Bcm)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Gross Production	15.06	16.26	18.41	21.07	22.19	21.99	21.16	20.53	19.35	17.08
Marketed Production	14.47	15.71	17.85	20.48	21.66	21.50	20.61	20.03	18.70	16.57
Reinjection	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Flaring	0.09	0.12	0.07	0.10	0.07	0.07	0.09	0.07	0.08	0.07
Other losses	0.39	0.43	0.49	0.49	0.46	0.42	0.46	0.43	0.57	0.44

Table 4.2.2.3 Detailed 2019 Natural Gas Production (MMcm)

	2019											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Gross Production	1323.47	1503.23	1147.31	1145.48	1345.16	-	-	-	-	-	-	-
Marketed Production	1273.53	1454.71	1100.45	1092.16	1300.46	-	-	-	-	-	-	-

4.2.3 Domestic Consumption and Trade

Table 4.2.3.1 Domestic Gas Consumption (Bcm)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Residential	0.08	0.10	0.12	0.14	0.16	0.18	0.20	0.22	0.22	0.22
Industrial	0.67	0.75	0.81	0.89	0.96	0.96	0.97	1.00	1.01	1.03
Power Generation	1.39	1.54	1.53	1.50	1.74	1.75	2.14	2.02	1.85	1.92
Transportation	0.45	0.52	0.57	0.64	0.67	0.69	0.70	0.74	0.78	0.80
Refineries	0.10	0.10	0.09	0.09	0.10	0.13	0.12	0.12	0.11	0.11
Others	0.23	0.26	0.26	0.34	0.51	0.52	0.60	0.70	0.89	0.52
Totals	2.92	3.27	3.38	3.60	4.14	4.23	4.73	4.80	4.86	4.61

Table 4.2.3.2 Historical Trade: Natural Gas Exports (Bcm)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Pipeline	11.54	12.48	14.61	16.94	17.62	17.34	15.92	15.25	13.84	12.56
Totals	11.54	12.48	14.61	16.94	17.62	17.34	15.92	15.25	13.84	12.56

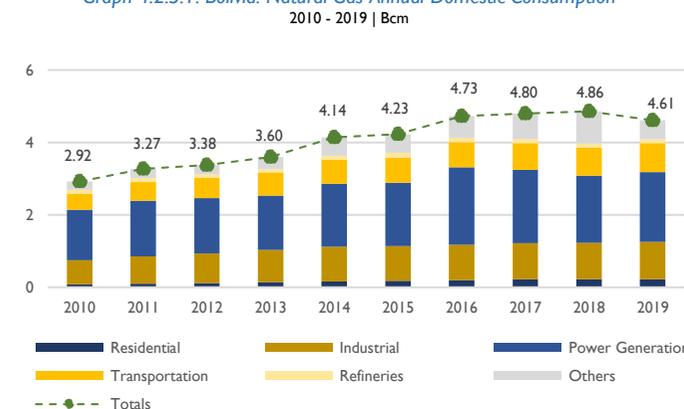
Table 4.2.3.3 Detailed 2019 Trade: Natural Gas Exports (MMcm)

	2019											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Pipeline	889.93	1084.04	711.96	692.41	884.93	-	-	-	-	-	-	-
Totals	889.93	1084.04	711.96	692.41	884.93	-	-	-	-	-	-	-

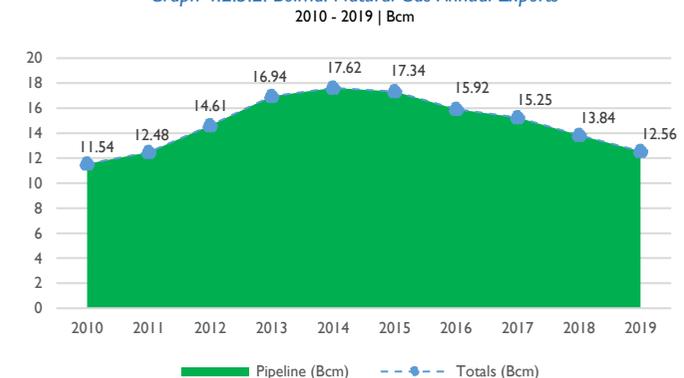
Graph 4.2.2.1. Bolivia: Natural Gas Annual Production



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

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
GJA (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

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



Arab Republic of
EGYPT



Population:
100 388 073



Capital:
Cairo



Continent:
Africa



Currency:
Egyptian Pound



Time Zone:
Eastern European
GMT+2

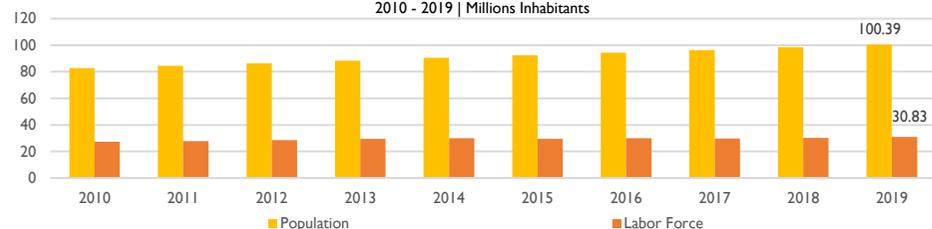
4.3.1 Macroeconomics

4.3.1.1 Egypt Macroeconomic Indicators

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Population (Inhabitants)	82,761,235	84,529,250	86,422,240	88,404,640	90,424,654	92,442,547	94,447,072	96,442,593	98,423,595	100,388,073
Labor Force (Inhabitants)	27,413,574	27,823,661	28,585,480	29,412,982	29,974,476	29,541,725	29,891,673	29,629,276	30,177,778	30,828,413
GDP (Current Billion US\$)	218.89	236.00	279.37	288.59	305.53	332.70	332.93	235.37	250.89	303.18
GDP Growth (Annual %)	5.15	1.76	2.23	2.19	2.92	4.37	4.35	4.18	5.31	5.56
GDP per Capita (Current US\$)	2,644.82	2,791.95	3,232.65	3,264.38	3,378.83	3,598.97	3,525.02	2,440.51	2,549.13	3,020.03
Exports of Goods and Services (Current Billion US\$)	46.73	48.54	45.81	49.11	43.52	43.86	34.44	37.23	47.45	NA
Exports of Goods and Services (% of GDP)	21.35	20.57	16.40	17.02	14.24	13.18	10.35	15.82	18.91	NA
Imports of Goods and Services (Current Billion US\$)	58.20	58.26	67.93	67.40	69.28	72.07	66.26	68.98	73.68	NA
Imports of Goods and Services (% of GDP)	26.59	24.69	24.31	23.36	22.68	21.66	19.90	29.31	29.37	NA
Inflation Consumer Prices (Annual %)	11.27	10.06	7.11	9.47	10.07	10.37	13.81	29.51	14.40	NA
Energy Use (kg of Oil Equivalent per Capita)	876.54	900.66	905.59	848.63	827.50	NA	NA	NA	NA	NA
Natural Gas Use (Scm per Capita)	545.55	587.02	608.52	581.64	531.05	517.08	543.06	603.02	622.73	604.04

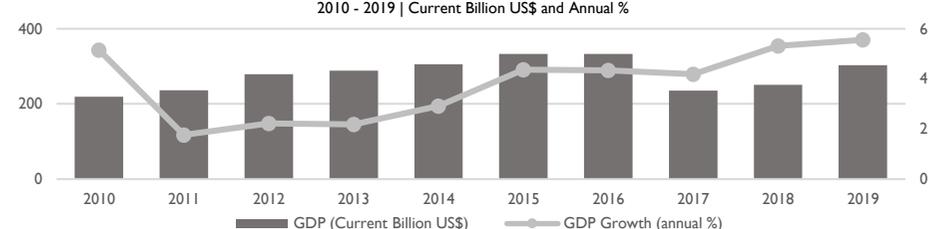
Graph 4.3.1.1. Egypt: Population and Labor Force

2010 - 2019 | Millions Inhabitants



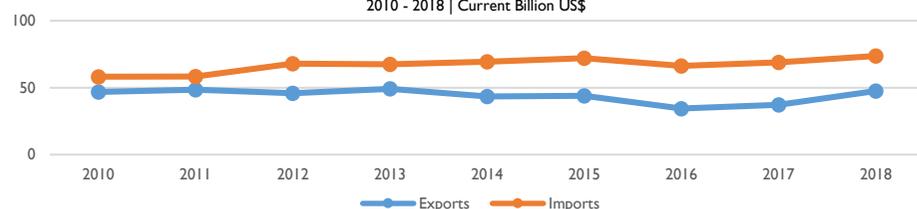
Graph 4.3.1.2. Egypt: GDP and GDP Growth

2010 - 2019 | Current Billion US\$ and Annual %



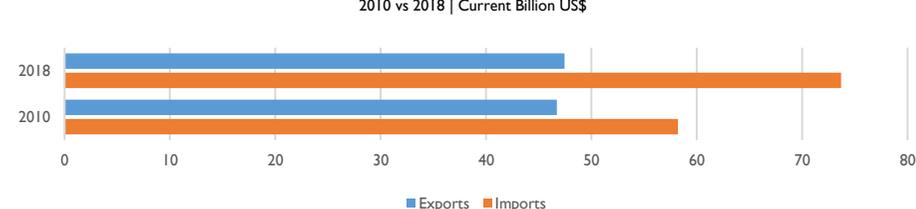
Graph 4.3.1.3. Egypt: Exports and Imports (Goods and Services)

2010 - 2018 | Current Billion US\$



Graph 4.3.1.4. Egypt: Exports and Imports (Goods and Services)

2010 vs 2018 | Current Billion US\$



Graph 4.3.1.5. Egypt: Inflation (Consumer Prices)

2010 - 2018 | Annual %



Graph 4.3.1.6. Egypt: Natural Gas Use

2010 - 2019 | Scm per Capita



4.3.2 Reserves and Production

Table 4.3.2.1 Proven Natural Gas Reserves (Bcm)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Proven Natural Gas Reserves	2,202	2,119	1,957	1,777	2,186	2,086	2,221	2,221	2,221	2,221

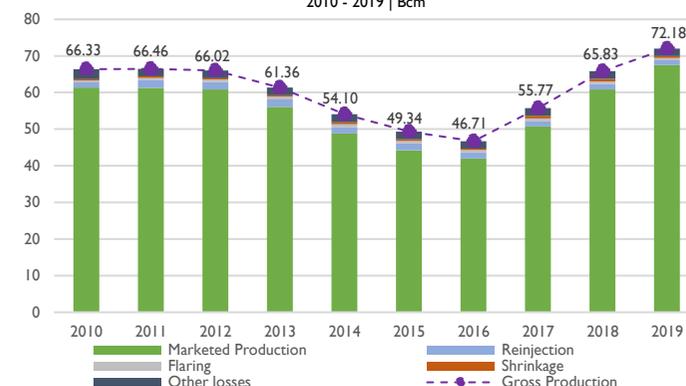
Table 4.3.2.2 Historical Natural Gas Production (Bcm)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Gross Production	66.33	66.46	66.02	61.36	54.10	49.34	46.71	55.77	65.83	72.18
Marketed Production	61.32	61.26	60.80	56.13	48.79	44.26	41.93	50.71	60.84	67.46
Reinjection	1.46	2.21	2.09	2.02	1.77	1.78	1.72	1.55	1.50	1.38
Flaring	0.49	0.50	0.68	0.77	0.82	0.70	0.65	0.67	0.66	0.59
Shrinkage	0.35	0.50	0.31	0.33	0.49	0.45	0.40	0.68	0.69	0.58
Other losses	2.71	1.99	2.14	2.11	2.23	2.15	2.01	2.15	2.13	2.18

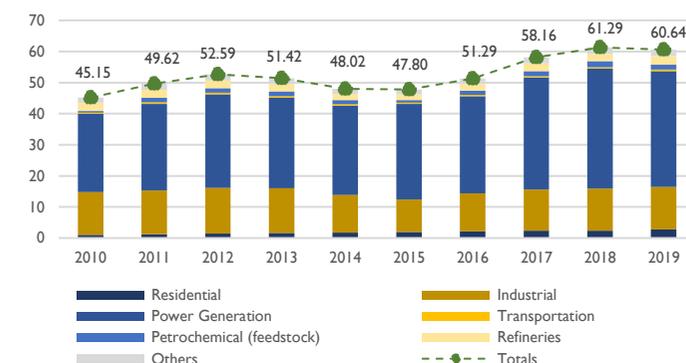
Table 4.3.2.3 Detailed 2019 Natural Gas Production (MMcm)

	2019											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Gross Production	6043.90	5490.11	6218.50	5856.24	6162.76	6024.80	6181.92	6297.63	5608.66	5919.90	6051.78	6326.02
Marketed Production	5615.26	5133.50	5861.79	5456.85	5783.31	5628.90	5774.35	5894.21	5232.91	5508.98	5657.75	5919.14

Graph 4.3.2.1. Egypt: Natural Gas Annual Production 2010 - 2019 | Bcm



Graph 4.3.3.1. Egypt: Natural Gas Annual Domestic Consumption 2010 - 2019 | Bcm



4.3.3 Domestic Consumption and Trade

Table 4.3.3.1 Domestic Gas Consumption (Bcm)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Residential	1.02	1.21	1.43	1.64	1.75	1.96	2.16	2.36	2.38	2.79
Industrial	13.75	14.10	14.73	14.40	12.12	10.49	12.21	13.23	13.52	13.61
Power Generation	25.14	27.83	30.08	29.04	28.63	30.64	31.25	36.06	38.64	37.23
Transportation	0.46	0.48	0.50	0.52	0.49	0.45	0.40	0.38	0.42	0.55
Petrochemical (feedstock)	0.48	1.48	1.46	1.60	1.41	0.83	1.35	1.70	1.92	1.57
Refineries	2.72	2.62	2.44	2.28	1.91	1.86	2.15	2.40	2.28	2.80
Others	1.59	1.90	1.95	1.94	1.71	1.57	1.77	2.04	2.13	2.09
Totals	45.15	49.62	52.59	51.42	48.02	47.80	51.29	58.16	61.29	60.64

Table 4.3.3.2 Historical Trade: Natural Gas Exports

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Pipeline (Bcm)	5.46	1.79	0.68	0.88	0.23	0.24	0.00	0.00	0.00	1.84
LNG	11.94	11.19	8.26	4.87	0.44	0.00	0.99	1.33	2.45	5.77
MMcm*	8.78	8.23	6.07	3.58	0.32	0.00	0.73	0.98	1.80	4.24
Totals (Bcm)	17.40	12.98	8.94	5.75	0.67	0.24	0.99	1.33	2.45	7.61

* Gas equivalent

Table 4.3.3.3 Detailed 2019 Trade: Natural Gas Exports

	2019											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Pipeline (MMcm)	305.82	271.84	243.52	189.72	31.15	48.14	5.66	2.83	5.66	161.40	257.68	317.15
LNG	369.62	499.65	562.89	468.95	565.19	526.75	439.18	426.34	86.36	325.49	760.49	737.40
1000MT	271.78	367.39	413.89	344.82	415.58	387.32	322.93	313.49	63.50	239.33	559.18	542.21
Totals (MMcm)	675.44	771.49	806.41	658.67	596.34	574.89	444.84	429.17	92.02	486.89	1018.17	1054.55

* Gas equivalent

Graph 4.3.3.2. Egypt: Natural Gas Annual Exports 2010 - 2019 | Bcm

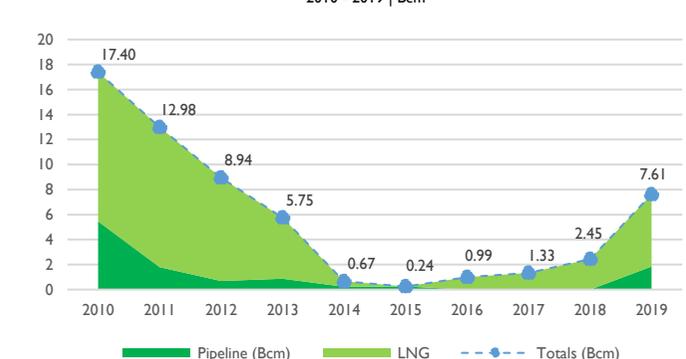


Table 4.3.3.4 Historical Trade: Natural Gas Imports

		2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
LNG	Bcm*	0.00	0.00	0.00	0.00	0.00	4.11	10.33	8.91	3.22	0.00
	MMT	0.00	0.00	0.00	0.00	0.00	3.02	7.60	6.55	2.37	0.00
Totals (Bcm)		0.00	0.00	0.00	0.00	0.00	4.11	10.33	8.91	3.22	0.00

* Gas equivalent

4.3.4 Transport and Plants

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, GASCOPETROJET SPC	Egyptian FAJR	Offline	10.0	Export	2003	1,200	36

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	Offline	2005	EGAS, EGBC, Union Fenosa Gas	SEGAS

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



Republic of
EQUATORIAL GUINEA



Population:
1 355 986



Capital:
Malabo



Continent:
Africa



Currency:
Central African
CFA franc



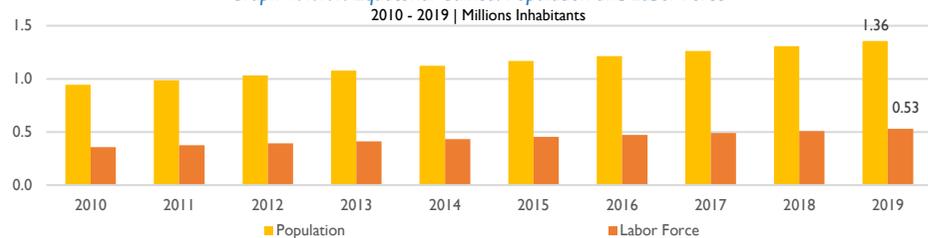
Time Zone:
West Africa
GMT+1

4.4.1 Macroeconomics

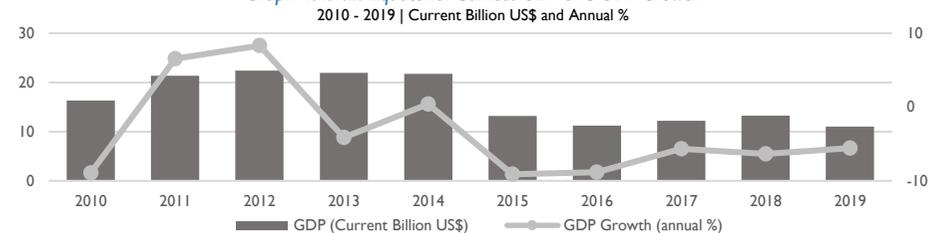
4.4.1.1 Equatorial Guinea Macroeconomic Indicators

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Population (Inhabitants)	943,639	986,853	1,031,191	1,076,413	1,122,276	1,168,568	1,215,179	1,262,001	1,308,974	1,355,986
Labor Force (Inhabitants)	358,501	375,049	393,029	412,573	433,541	455,553	471,561	489,077	508,396	529,729
GDP (Current Billion US\$)	16.31	21.36	22.39	21.95	21.77	13.19	11.24	12.20	13.28	11.03
GDP Growth (Annual %)	-8.92	6.52	8.31	-4.13	0.42	-9.11	-8.82	-5.67	-6.36	-5.58
GDP per Capita (Current US\$)	17,288.86	21,641.87	21,711.15	20,390.72	19,394.03	11,283.47	9,250.33	9,667.91	10,144.20	8,131.92
Exports of Goods and Services (Current Billion US\$)	13.99	16.04	16.10	14.85	14.36	7.47	5.78	7.18	7.81	6.08
Exports of Goods and Services (% of GDP)	85.76	75.10	71.90	67.65	65.96	56.66	51.41	58.86	58.81	55.13
Imports of Goods and Services (Current Billion US\$)	9.61	8.39	10.02	8.61	8.36	5.57	4.63	5.32	6.07	5.76
Imports of Goods and Services (% of GDP)	58.91	39.28	44.77	39.24	38.42	42.22	41.19	43.57	45.70	52.25
Inflation Consumer Prices (Annual %)	7.79	4.81	3.66	2.95	4.31	1.68	1.41	0.75	1.35	1.24
Energy Use (kg of Oil Equivalent per Capita)	-	-	-	-	-	-	-	-	-	-
Natural Gas Use (Scm per Capita)	1,248.36	1,410.54	1,410.99	1,365.65	1,282.22	1,101.35	1,310.92	1,248.81	1,162.30	1,095.34

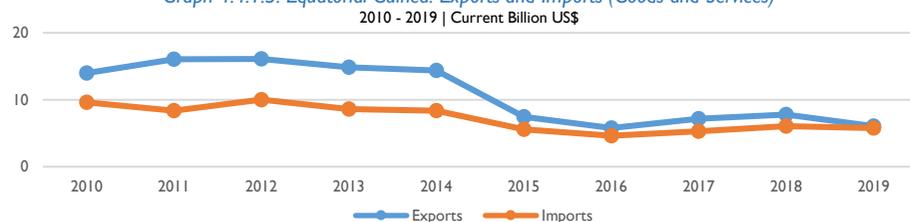
Graph 4.4.1.1. Equatorial Guinea: Population and Labor Force



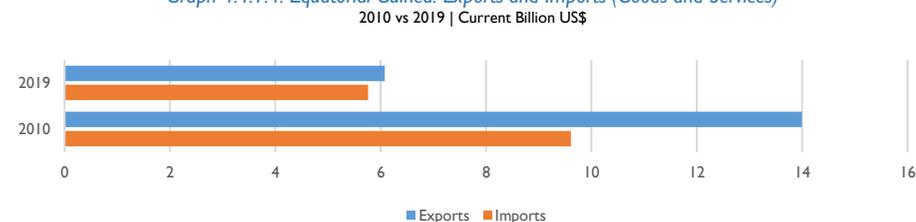
Graph 4.4.1.2. Equatorial Guinea: GDP and GDP Growth



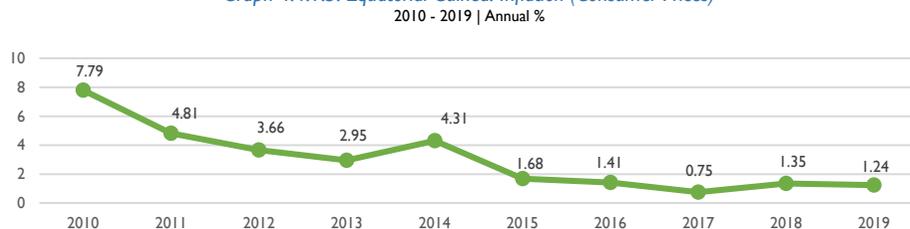
Graph 4.4.1.3. Equatorial Guinea: Exports and Imports (Goods and Services)



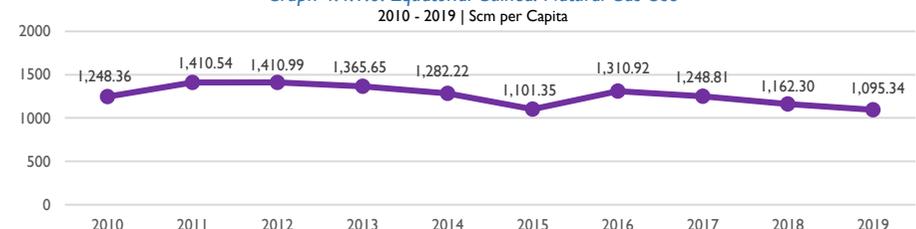
Graph 4.4.1.4. Equatorial Guinea: Exports and Imports (Goods and Services)



Graph 4.4.1.5. Equatorial Guinea: Inflation (Consumer Prices)



Graph 4.4.1.6. Equatorial Guinea: Natural Gas Use



4.4.2 Reserves and Production

Table 4.4.2.1 Proven Natural Gas Reserves (Bcm)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Proven Natural Gas Reserves	82	78	71	66	60	54	47	42	42	39

Table 4.4.2.2 Historical Natural Gas Production (Bcm)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Gross Production	10.87	11.03	11.94	13.99	13.66	15.45	14.76	13.80	12.96	12.20
Marketed Production	7.76	8.48	8.22	8.41	8.23	7.44	7.88	8.24	7.75	6.74
Reinjection	0.56	0.26	1.33	3.04	3.03	5.62	4.62	3.53	3.43	3.71
Flaring	1.30	1.51	1.42	1.33	1.22	1.27	0.97	0.76	0.78	0.60
Other losses	1.25	0.78	0.98	1.20	1.17	1.11	1.29	1.27	1.00	1.14

Table 4.4.2.3 Detailed 2019 Natural Gas Production (MMcm)

	2019											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Gross Production	1073.26	945.46	757.87	1035.59	1069.16	1055.46	1056.97	1073.69	1049.62	1058.47	993.86	1029.48
Marketed Production	634.80	533.66	322.66	608.78	610.45	594.84	590.27	585.01	572.73	580.54	549.57	560.93

4.4.3 Domestic Consumption and Trade

Table 4.4.3.1 Domestic Gas Consumption (Bcm)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Power Generation	0.08	0.13	0.23	0.22	0.22	0.26	0.29	0.28	0.28	0.31
Petrochemical (feedstock)	1.10	1.26	1.23	1.25	1.22	1.03	1.30	1.30	1.24	1.18
Totals	1.18	1.39	1.46	1.47	1.44	1.29	1.59	1.58	1.52	1.49

Table 4.4.3.2 Historical Trade: Natural Gas Exports

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	
LNG	Bcm*	5.87	5.61	5.55	5.77	5.87	5.30	5.31	5.88	5.24	4.45
	MMT	4.32	4.13	4.08	4.25	4.31	3.89	3.90	4.32	3.85	3.27
Totals (Bcm)	5.87	5.61	5.55	5.77	5.87	5.30	5.31	5.88	5.24	4.45	

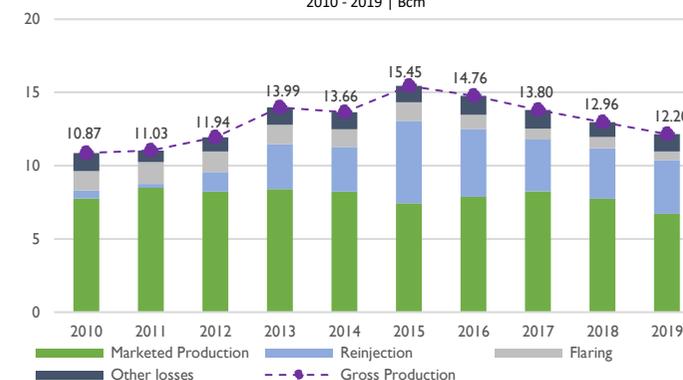
* Gas equivalent

Table 4.4.3.3 Detailed 2019 Trade: Natural Gas Exports

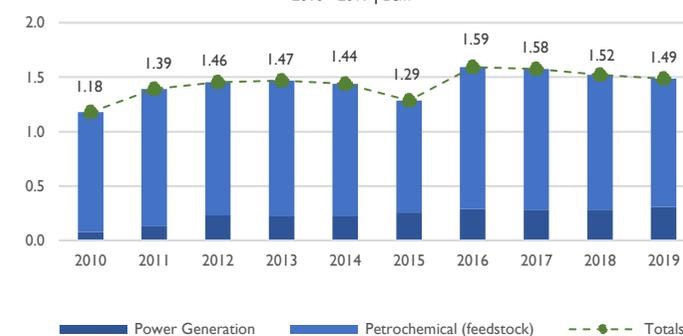
	2019												
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
LNG	MMcm*	418.70	426.89	185.51	373.15	427.27	395.79	309.08	412.93	321.13	462.79	307.73	406.66
	1000MT	307.87	313.89	136.40	274.37	314.17	291.02	227.27	303.62	236.13	340.29	226.27	299.02
Totals (MMcm)	418.70	426.89	185.51	373.15	427.27	395.79	309.08	412.93	321.13	462.79	307.73	406.66	

* Gas equivalent

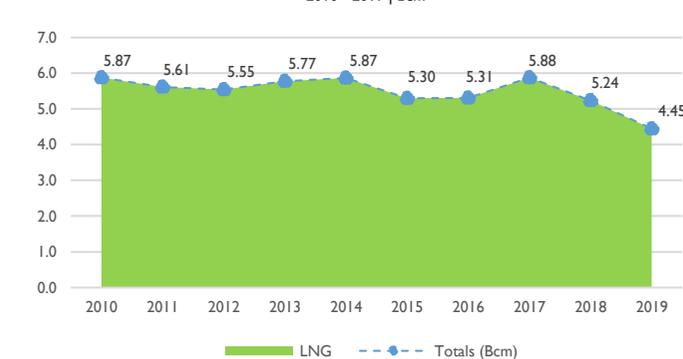
Graph 4.4.2.1. Equatorial Guinea: Natural Gas Annual Production
2010 - 2019 | Bcm



Graph 4.4.3.1. Equatorial Guinea: Natural Gas Annual Domestic Consumption
2010 - 2019 | Bcm



Graph 4.4.3.2. Equatorial Guinea: Natural Gas Annual Exports
2010 - 2019 | Bcm



4.4.4 Transport and Plants

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:
82 913 906



Capital:
Tehran



Continent:
Middle East



Currency:
Iranian Rial



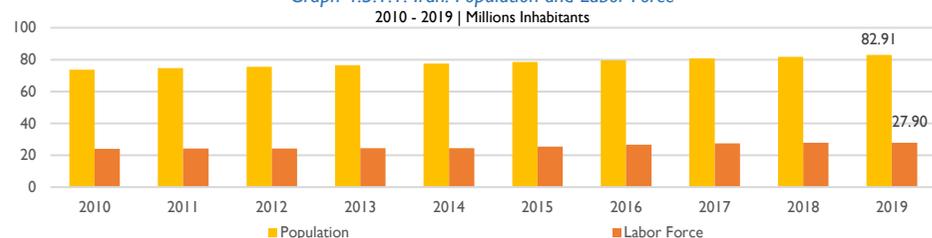
Time Zone:
Iran Standard
GMT+3.5

4.5.1 Macroeconomics

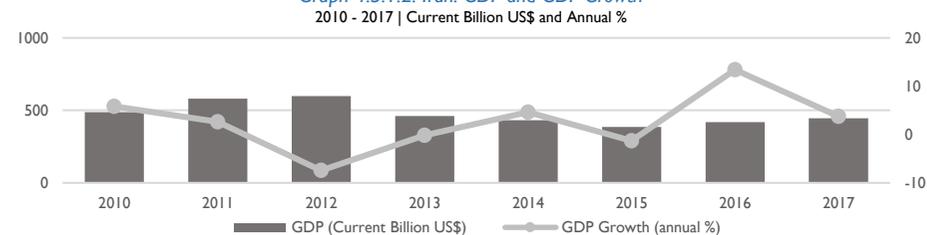
4.5.1.1 Iran Macroeconomic Indicators

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Population (Inhabitants)	73,762,519	74,634,956	75,539,862	76,481,943	77,465,753	78,492,215	79,564,016	80,673,951	81,800,269	82,913,906
Labor Force (Inhabitants)	24,034,962	24,157,199	24,267,244	24,357,605	24,417,864	25,359,406	26,559,651	27,419,237	27,770,616	27,903,015
GDP (Current Billion US\$)	486.81	580.76	598.87	460.29	432.69	384.95	417.98	445.35	NA	NA
GDP Growth (Annual %)	5.80	2.65	-7.44	-0.19	4.60	-1.32	13.40	3.76	NA	NA
GDP per Capita (Current US\$)	6,599.66	7,781.41	7,927.85	6,018.32	5,585.53	4,904.33	5,253.42	5,520.31	NA	NA
Exports of Goods and Services (Current Billion US\$)	118.78	148.87	144.50	123.74	100.13	76.00	93.65	111.08	NA	NA
Exports of Goods and Services (% of GDP)	24.40	25.63	24.13	26.88	23.14	19.74	22.40	24.94	NA	NA
Imports of Goods and Services (Current Billion US\$)	94.30	101.97	139.20	107.94	92.87	74.20	86.98	106.16	NA	NA
Imports of Goods and Services (% of GDP)	19.37	17.56	23.24	23.45	21.46	19.27	20.81	23.84	NA	NA
Inflation Consumer Prices (Annual %)	10.09	26.29	27.26	36.60	16.61	12.48	7.25	8.04	18.01	39.91
Energy Use (kg of Oil Equivalent per Capita)	2,769.46	2,791.11	2,869.33	2,889.11	3,060.39	NA	NA	NA	NA	NA
Natural Gas Use (Scm per Capita)	2,237.04	2,288.34	2,281.31	2,243.27	2,427.14	2,585.86	2,653.84	2,699.26	2,785.14	2,788.68

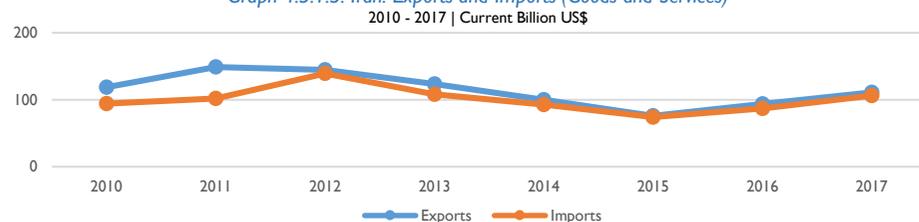
Graph 4.5.1.1. Iran: Population and Labor Force



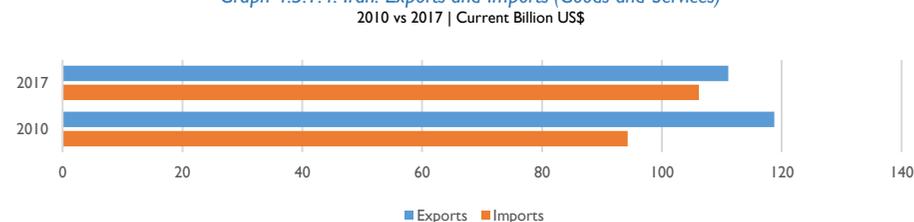
Graph 4.5.1.2. Iran: GDP and GDP Growth



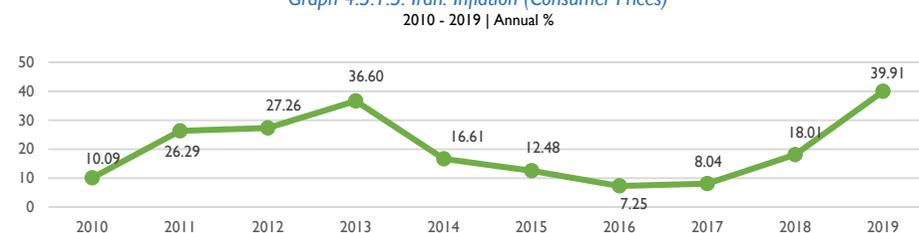
Graph 4.5.1.3. Iran: Exports and Imports (Goods and Services)



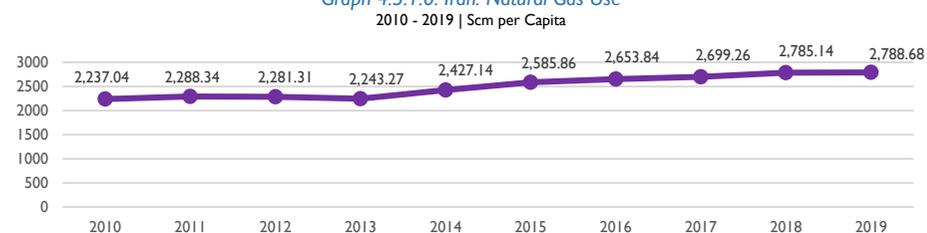
Graph 4.5.1.4. Iran: Exports and Imports (Goods and Services)



Graph 4.5.1.5. Iran: Inflation (Consumer Prices)



Graph 4.5.1.6. Iran: Natural Gas Use



4.5.2 Reserves and Production

Table 4.5.2.1 Proven Natural Gas Reserves (Bcm)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Proven Gas Reserves	33,620	33,790	33,710	33,850	33,440	33,720	33,820	33,330	33,899	33,988

Table 4.5.2.2 Historical Natural Gas Production (Bcm)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Gross Production	222.64	227.48	229.14	229.83	245.68	256.98	277.39	301.45	311.49	322.50
Marketed Production	165.01	170.78	172.31	171.57	188.02	202.97	211.14	217.80	233.97	240.81
Reinjection	29.20	31.44	28.72	29.61	28.08	28.90	31.69	31.09	33.57	32.86
Shrinkage	8.67	8.62	8.80	7.99	9.45	10.68	11.82	12.94	12.64	13.97
Other losses	19.76	16.64	19.31	20.66	20.13	14.43	22.74	39.62	31.31	34.86

4.5.3 Domestic Consumption and Trade

Table 4.5.3.1 Domestic Gas Consumption (Bcm)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Residential	70.28	77.30	78.03	78.45	83.35	81.98	85.17	88.85	93.98	97.32
Industrial	17.73	20.35	23.10	23.28	22.40	25.85	28.67	31.55	32.80	33.56
Power Generation	46.28	39.32	38.12	36.70	45.35	56.87	62.03	65.48	67.52	68.19
Transportation	4.99	6.03	6.65	6.65	7.05	7.37	7.56	7.59	8.12	8.37
Petrochemical (feedstock)	4.25	4.62	4.55	3.70	4.19	4.54	5.07	5.82	5.85	5.17
Refineries	8.28	8.60	7.14	7.71	8.13	7.13	5.54	5.13	5.65	5.95
Others	13.20	14.57	14.74	15.08	17.55	19.23	17.11	13.34	13.90	12.66
Totals	165.01	170.79	172.33	171.57	188.02	202.97	211.15	217.76	227.82	231.22

Table 4.5.3.2 Historical Trade: Natural Gas Exports (Bcm)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Pipeline	8.49	9.12	9.18	9.54	9.76	8.60	8.65	12.89	12.24	12.35
Totals	8.49	9.12	9.18	9.54	9.76	8.60	8.65	12.89	12.24	12.35

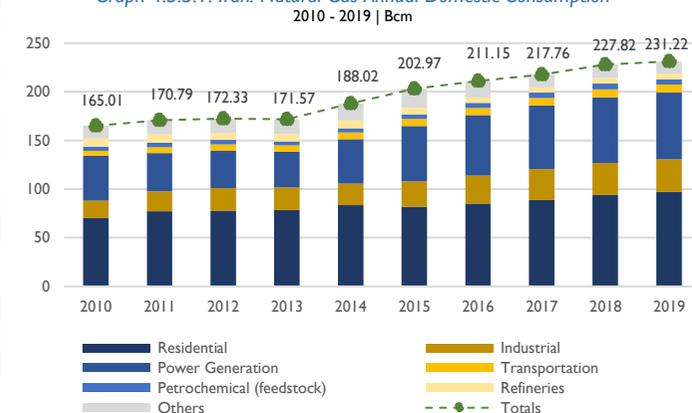
Table 4.5.3.4 Historical Trade: Natural Gas Imports (Bcm)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Pipeline	7.52	11.65	6.51	5.09	6.33	9.50	7.33	4.72	5.91	1.27
Totals	7.52	11.65	6.51	5.09	6.33	9.50	7.33	4.72	5.91	1.27

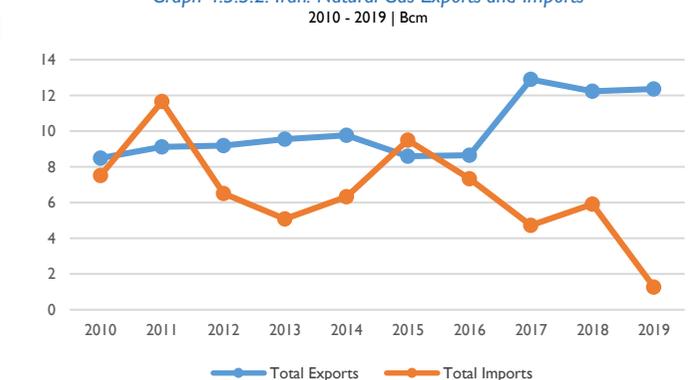
Graph 4.5.2.1. Iran: Natural Gas Annual Production



Graph 4.5.3.1. Iran: Natural Gas Annual Domestic Consumption



Graph 4.5.3.2. Iran: Natural Gas Exports and Imports



4.5.4 Transport and Plants

4.5.4.1 Natural Gas Export Pipelines

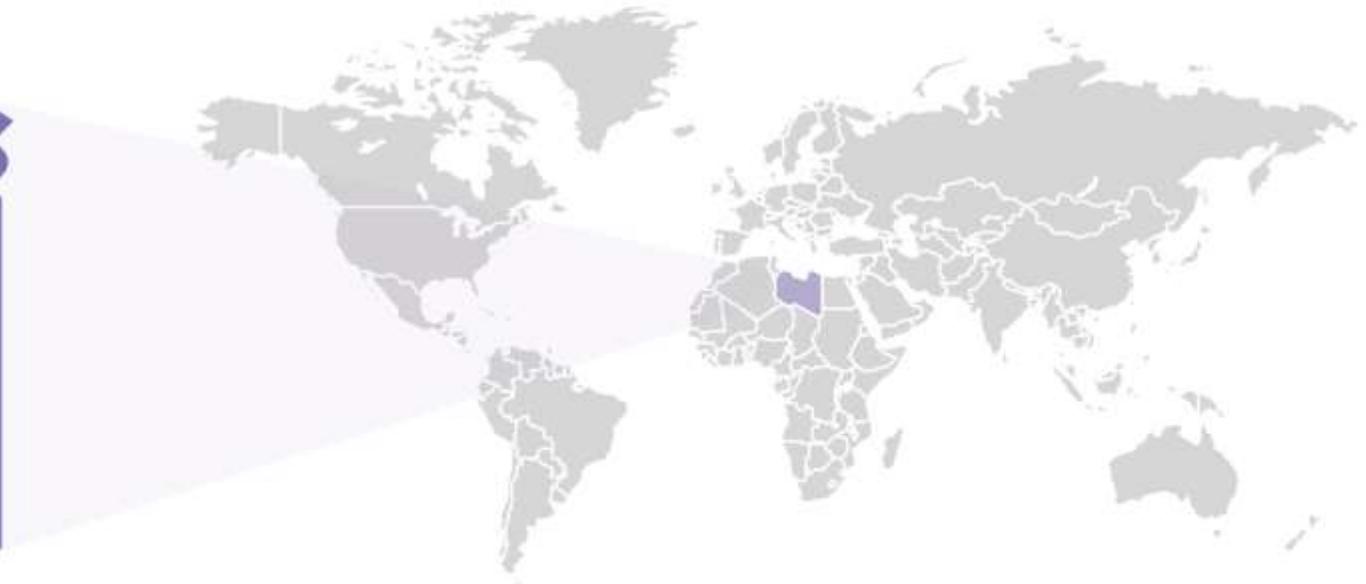
Pipeline	Connection			Owner(s)	Operator(s)	Status	Capacity (Bcm/Year)	Type	Start Year	Length (km)	Diameter (Inches)
	From	To	Via								
Tabriz-Ankara	Iran	Turkey	-	NIOC, Botas	NIOC, Botas	Operational	14.0	Export	2002	3,250	40
Jolfa-Nakhchivan	Iran	Azerbaijan	-	NIGC, SOCAR	NIGC, SOCAR	Operational	10.0	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	Under Construction	NA	Export	NA	NA	NA
Asaluye-Nawabshah	Iran	Pakistan	-	NIOC, SNGPL, SSGC, Gazprom JSC	NIOC, SNGPL, SSGC, Gazprom JSC	Under Construction	40.0	Export	NA	2,775	56
Asaluye-Sohar	Iran	Oman	-	NIOC, OGC	NIOC, OGC	Planned	9.9	Export	2020	NA	NA

4.5.4.2 Liquefaction Plants

Plant	Liquefaction (No. of Trains)	Total Capacity (MTPA)	Status	Start Year	Owner(s)	Operator(s)
Iran LNG	2	6.7	Under Construction	NA	NIOC	Iran LNG
Iran FLNG	1	0.7	Planned	NA	NIOC	NA



State of
LIBYA



Population:
6 777 452



Capital:
Tripoli



Continent:
Africa



Currency:
Libyan Dinar



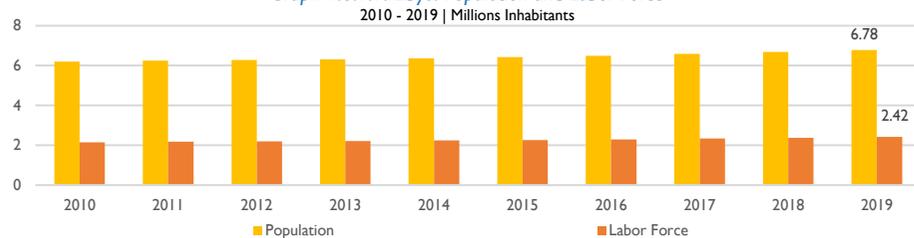
Time Zone:
Eastern European
GMT+2

4.6.1 Macroeconomics

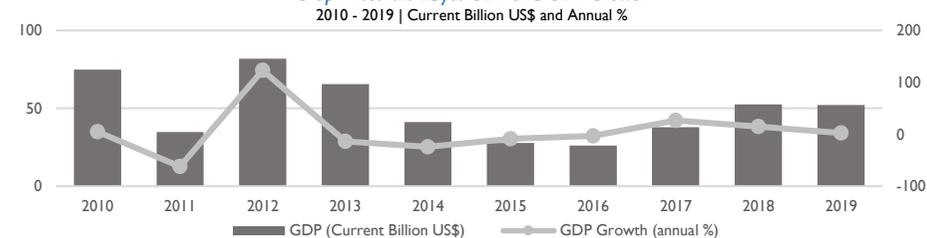
4.6.1.1 Libya Macroeconomic Indicators

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Population (Inhabitants)	6,197,663	6,247,439	6,285,750	6,320,359	6,362,037	6,418,315	6,492,164	6,580,724	6,678,567	6,777,452
Labor Force (Inhabitants)	2,144,062	2,174,305	2,198,693	2,219,306	2,239,204	2,260,872	2,296,579	2,337,299	2,380,602	2,422,261
GDP (Current Billion US\$)	74.77	34.70	81.87	65.50	41.14	27.84	26.20	37.88	52.61	52.08
GDP Growth (Annual %)	5.02	-62.08	123.14	-13.60	-24.00	-8.86	-2.80	26.68	15.13	2.54
GDP per Capita (Current US\$)	12,064.78	5,554.18	13,025.28	10,363.79	6,466.91	4,337.92	4,035.19	5,756.70	7,877.12	7,683.75
Exports of Goods and Services (Current Billion US\$)	49.06	19.03	61.10	46.14	19.34	11.13	6.85	18.92	29.96	33.76
Exports of Goods and Services (% of GDP)	65.60	54.83	74.62	70.43	47.01	39.97	26.14	49.94	56.95	64.84
Imports of Goods and Services (Current Billion US\$)	31.48	15.54	32.54	42.46	37.80	20.68	11.55	15.07	18.85	27.85
Imports of Goods and Services (% of GDP)	42.10	44.79	39.75	64.83	91.88	74.28	44.08	39.79	35.82	53.49
Inflation Consumer Prices (Annual %)	2.80	15.52	6.06	2.61	NA	NA	NA	NA	NA	NA
Energy Use (kg of Oil Equivalent per Capita)	3,353.53	2,190.81	2,744.01	3,071.82	2,808.65	NA	NA	NA	NA	NA
Natural Gas Use (Scm per Capita)	1,127.79	688.54	1,545.09	1,809.18	1,598.16	1,353.82	780.00	730.94	714.43	714.32

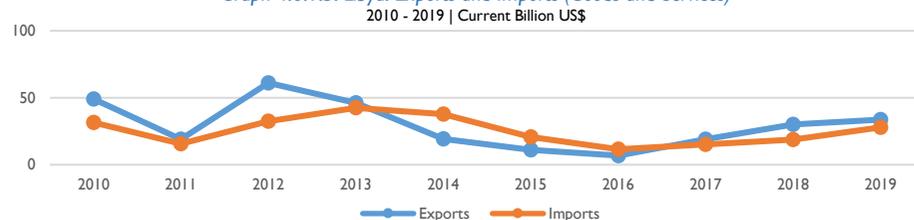
Graph 4.6.1.1. Libya: Population and Labor Force



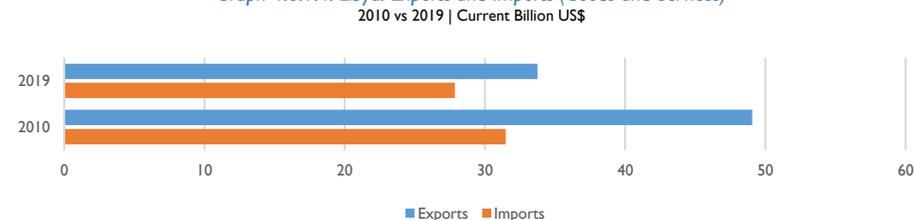
Graph 4.6.1.2. Libya: GDP and GDP Growth



Graph 4.6.1.3. Libya: Exports and Imports (Goods and Services)



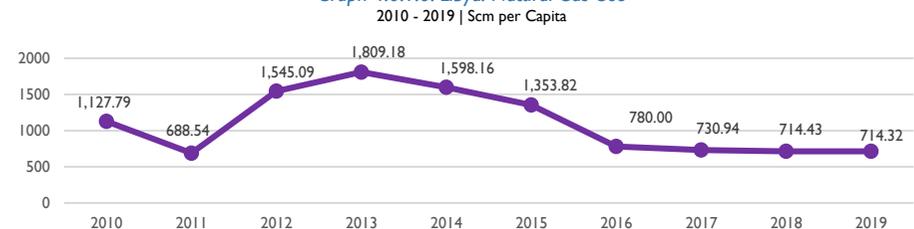
Graph 4.6.1.4. Libya: Exports and Imports (Goods and Services)



Graph 4.6.1.5. Libya: Inflation (Consumer Prices)



Graph 4.6.1.6. Libya: Natural Gas Use



4.6.2 Reserves and Production

Table 4.6.2.1 Proven Natural Gas Reserves (Bcm)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Proven Natural Gas Reserves	1,495	1,547	1,549	1,506	1,505	1,505	1,505	1,505	1,505	1,505

Table 4.6.2.2 Historical Natural Gas Production (Bcm)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Gross Production	30.26	9.86	23.44	22.88	20.94	22.56	14.78	14.73	14.60	18.52
Marketed Production	16.81	6.96	16.07	16.99	16.59	15.15	9.86	9.12	9.04	10.31
Reinjection	3.40	0.70	1.40	1.15	0.00	0.00	0.60	0.50	0.45	0.60
Flaring	3.48	1.30	3.92	3.25	2.12	2.70	3.20	3.89	3.91	6.49
Other losses	6.57	0.90	2.05	1.49	2.23	4.71	1.12	1.21	1.20	1.12

4.6.3 Domestic Consumption and Trade

Table 4.6.3.1 Domestic Gas Consumption (Bcm)

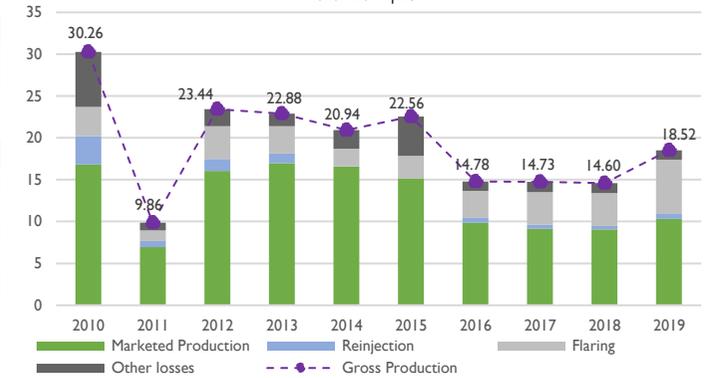
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Industrial	0.92	0.97	0.66	1.28	1.32	0.76	0.74	0.67	0.63	0.67
Power Generation	4.84	2.56	7.93	8.87	7.77	6.69	3.09	2.94	2.94	2.96
Petrochemical (feedstock)	0.96	0.61	0.91	0.93	0.72	1.08	1.05	1.01	1.01	1.02
Refineries	0.27	0.16	0.22	0.36	0.36	0.17	0.18	0.19	0.19	0.19
Totals	6.99	4.30	9.71	11.43	10.17	8.69	5.06	4.81	4.77	4.84

Table 4.6.3.2 Historical Trade: Natural Gas Exports

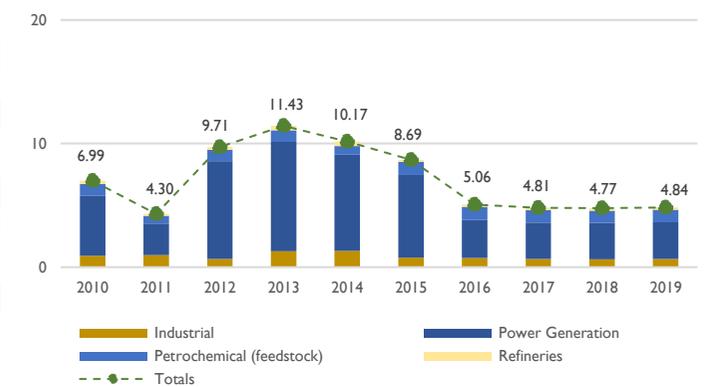
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Pipeline (Bcm)	9.53	2.57	6.35	5.55	6.42	7.03	4.80	4.62	4.37	5.65
LNG	Bcm*	0.29	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	MMT	0.21	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Totals (Bcm)	9.82	2.66	6.35	5.55	6.42	7.03	4.80	4.62	4.37	5.65

* Gas equivalent

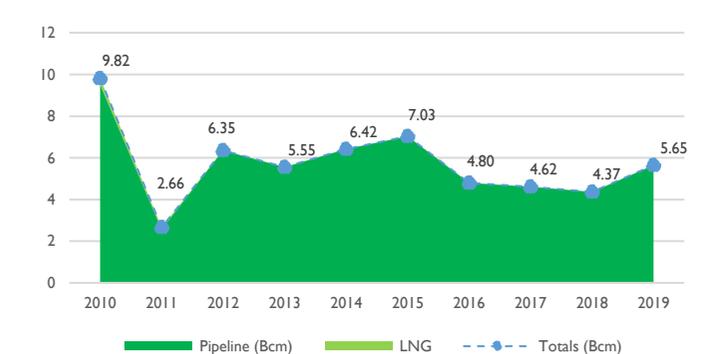
Graph 4.6.2.1. Libya: Natural Gas Annual Production 2010 - 2019 | Bcm



Graph 4.6.3.1. Libya: Natural Gas Annual Domestic Consumption 2010 - 2019 | Bcm



Graph 4.6.3.2. Libya: Natural Gas Annual Exports 2010 - 2019 | Bcm



4.6.4 Transport and Plants

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

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	Offline	1960	Libya NOC	Sirte Oil Company



Federal Republic of

NIGERIA



Population:
208 963 120



Capital:
Abuja



Continent:
Africa



Currency:
Nigerian Naira



Time Zone:
West Africa
GMT+1

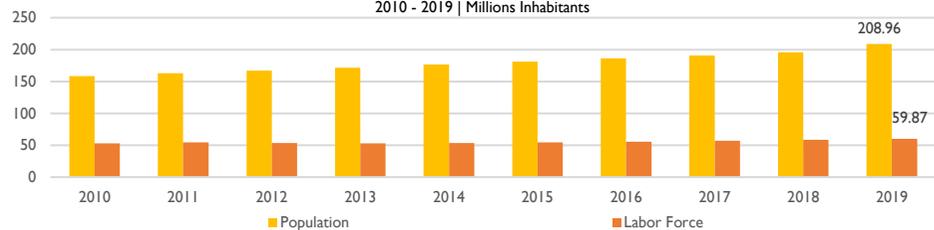
4.7.1 Macroeconomics

4.7.1.1 Nigeria Macroeconomic Indicators

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Population (Inhabitants)	158,503,197	162,805,071	167,228,767	171,765,769	176,404,902	181,137,448	185,960,289	190,873,311	195,874,740	208,963,120
Labor Force (Inhabitants)	53,136,654	54,538,708	53,684,327	52,793,935	53,691,627	54,559,255	55,288,066	56,831,352	58,403,811	59,873,566
GDP (Current Billion US\$)	363.36	410.33	459.38	514.97	568.50	494.58	404.65	375.75	398.16	448.12
GDP Growth (Annual %)	8.01	5.31	4.23	6.67	6.31	2.65	-1.62	0.81	1.92	2.21
GDP per Capita (Current US\$)	2,292.45	2,520.40	2,746.99	2,998.07	3,222.69	2,730.43	2,176.00	1,968.56	2,032.73	2,144.50
Exports of Goods and Services (Current Billion US\$)	93.24	129.74	144.92	92.95	104.80	52.75	37.30	49.49	61.70	NA
Exports of Goods and Services (% of GDP)	25.66	31.62	31.55	18.05	18.44	10.67	9.22	13.17	15.50	NA
Imports of Goods and Services (Current Billion US\$)	64.17	88.88	59.65	66.94	70.78	52.75	46.55	49.51	69.72	NA
Imports of Goods and Services (% of GDP)	17.66	21.66	12.99	13.00	12.45	10.67	11.50	13.18	17.51	NA
Inflation Consumer Prices (Annual %)	13.72	10.84	12.22	8.48	8.06	9.01	15.68	16.52	12.09	11.40
Energy Use (kg of Oil Equivalent per Capita)	756.35	778.84	798.63	780.14	763.63	NA	NA	NA	NA	NA
Natural Gas Use (Scm per Capita)	31.52	37.84	43.81	44.83	43.82	61.32	47.74	58.00	62.13	57.89

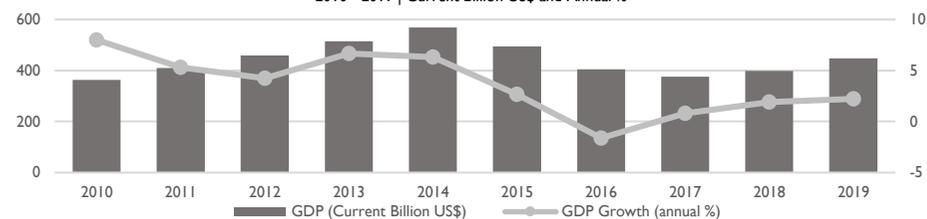
Graph 4.7.1.1. Nigeria: Population and Labor Force

2010 - 2019 | Millions Inhabitants



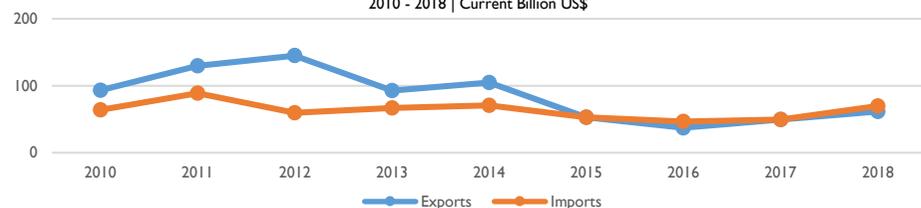
Graph 4.7.1.2. Nigeria: GDP and GDP Growth

2010 - 2019 | Current Billion US\$ and Annual %



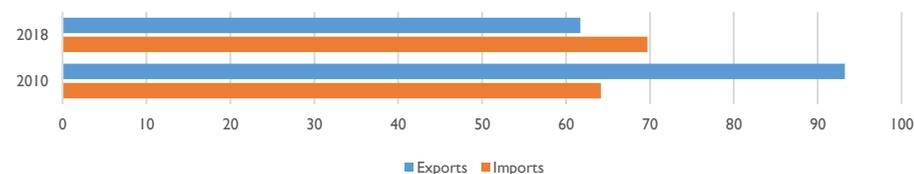
Graph 4.7.1.3. Nigeria: Exports and Imports (Goods and Services)

2010 - 2018 | Current Billion US\$



Graph 4.7.1.4. Nigeria: Exports and Imports (Goods and Services)

2010 vs 2018 | Current Billion US\$



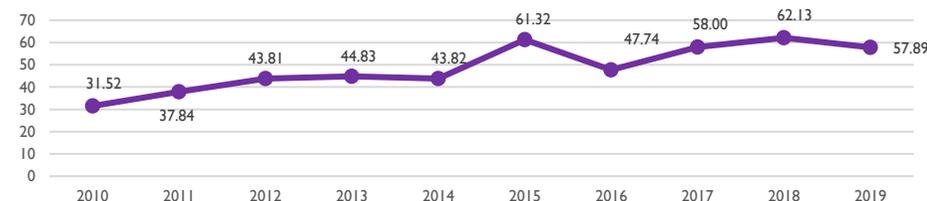
Graph 4.7.1.5. Nigeria: Inflation (Consumer Prices)

2010 - 2019 | Annual %



Graph 4.7.1.6. Nigeria: Natural Gas Use

2010 - 2019 | Scm per Capita



4.7.2 Reserves and Production

Table 4.7.2.1 Proven Natural Gas Reserves (Bcm)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Proven Natural Gas Reserves	5,106	5,171	5,115	5,108	5,303	5,280	5,475	5,627	5,685	5,761

Table 4.7.2.2 Historical Natural Gas Production (Bcm)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Gross Production	79.85	84.01	84.85	79.63	86.33	85.22	76.78	79.49	80.27	81.05
Marketed Production	36.19	41.32	42.57	38.41	43.84	45.15	41.99	45.79	46.97	47.70
Reinjection	21.29	22.52	20.52	21.47	22.89	21.04	19.90	21.68	21.51	22.32
Flaring	15.29	14.27	13.18	12.11	10.74	9.69	8.18	8.14	7.98	6.86
Other losses	7.08	5.89	8.57	7.64	8.85	9.35	6.70	3.88	3.81	4.16

Table 4.7.2.3 Detailed 2019 Natural Gas Production (MMcm)

	2019											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Gross Production	6,923.60	6,309.77	7,459.60	7,125.66	6,259.96	6,283.73	7,057.74	7,102.45	6,653.90	6,650.50	6,472.78	6,745.87
Marketed Production	4,287.73	3,660.61	4,386.78	4,127.56	3,517.41	3,605.99	4,129.54	4,279.53	3,838.33	3,796.16	3,877.95	4,197.17

4.7.3 Domestic Consumption and Trade

Table 4.7.3.1 Domestic Gas Consumption (Bcm)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Industrial	1.08	1.30	1.90	2.23	2.31	3.56	3.33	4.21	4.60	5.29
Power Generation	3.30	4.19	4.63	4.88	4.96	7.20	5.36	6.86	7.57	6.81
Petrochemical (feedstock)	0.51	0.55	0.69	0.47	0.35	0.27	0.06	0.00	0.00	0.00
Refineries	0.11	0.13	0.11	0.11	0.11	0.08	0.13	0.00	0.00	0.00
Totals	5.00	6.16	7.33	7.70	7.73	11.11	8.88	11.07	12.17	12.10

Table 4.7.3.2 Historical Trade: Natural Gas Exports

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	
Pipeline (Bcm)	0.12	0.83	0.40	0.60	0.60	0.60	0.12	0.39	0.72	0.79	
LNG	Bcm*	23.66	25.94	28.27	24.54	26.78	26.70	25.02	34.33	31.11	32.02
	MMT	17.40	19.07	20.79	18.04	19.69	18.40	25.24	22.88	23.54	
Totals (Bcm)		23.78	26.77	28.67	25.14	27.38	27.30	25.14	34.72	31.83	32.81

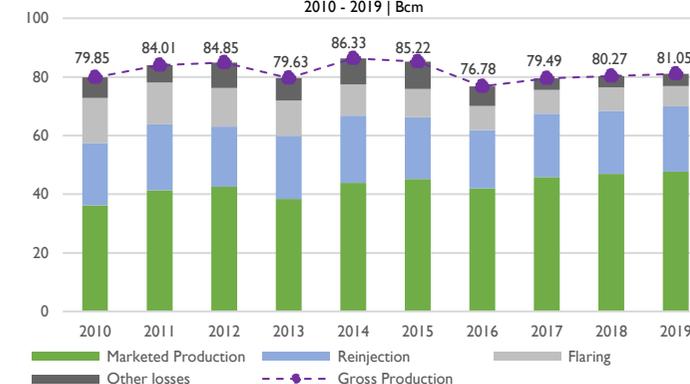
* Gas equivalent

Table 4.7.3.3 Detailed 2019 Trade: Natural Gas Exports

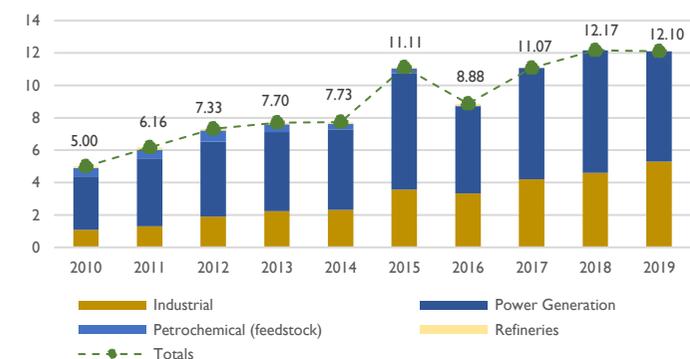
	2019											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Pipeline (MMcm)	56.03	44.15	52.07	53.77	59.71	68.77	76.41	98.20	68.77	72.73	56.03	81.22
LNG	MMcm*	2840.19	2222.40	2844.72	2773.12	2124.76	2819.81	2994.42	2775.38	2775.38	2714.82	2921.69
	1000MT	2088.37	1634.12	2091.70	2039.06	1562.33	1626.63	2073.39	2201.78	2040.72	1996.19	2148.30
Totals (MMcm)		2896.22	2266.55	2896.79	2826.89	2184.48	2886.22	3092.62	2844.15	2848.11	2770.85	3002.91

* Gas equivalent

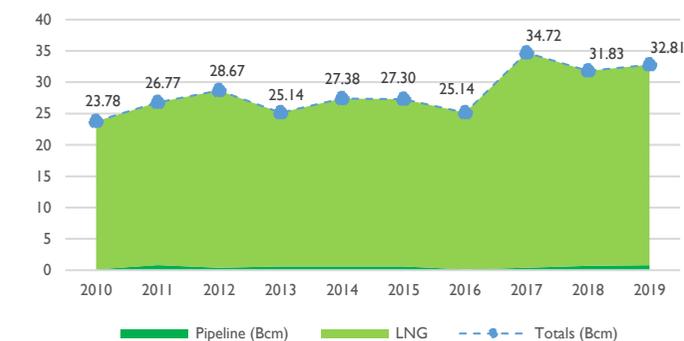
Graph 4.7.2.1. Nigeria: Natural Gas Annual Production 2010 - 2019 | Bcm



Graph 4.7.3.1. Nigeria Natural Gas Annual Domestic Consumption 2010-2019 | Bcm



Graph 4.7.3.2. Nigeria: Natural Gas Annual Exports 2010 - 2019 | Bcm



4.7.4 Transport and Plants

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

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
Total			3,208.41

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



State of
QATAR



Population:
2 832 067



Capital:
Doha



Continent:
Middle East



Currency:
Qatari Riyal



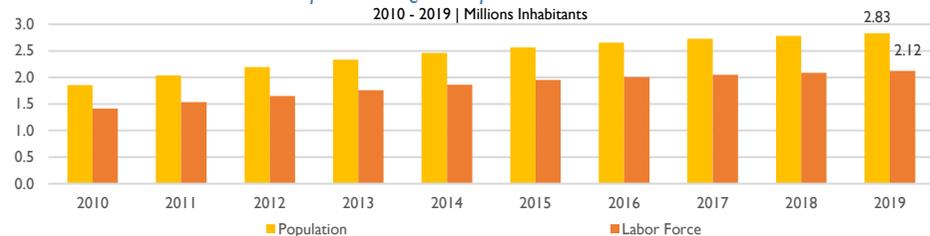
Time Zone:
Arabia
GMT+3

4.8.1 Macroeconomics

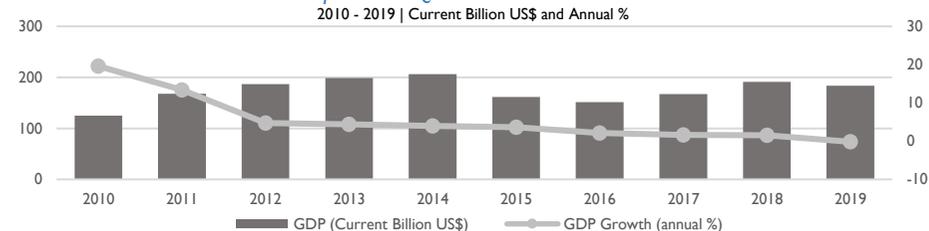
4.8.1.1 Qatar Macroeconomic Indicators

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Population (Inhabitants)	1,856,327	2,035,871	2,196,074	2,336,574	2,459,198	2,565,710	2,654,374	2,724,724	2,781,677	2,832,067
Labor Force (Inhabitants)	1,413,296	1,536,175	1,651,717	1,758,797	1,858,956	1,952,246	2,004,463	2,046,136	2,085,366	2,124,504
GDP (Current Billion US\$)	125.12	167.78	186.83	198.73	206.22	161.74	151.73	166.93	191.36	183.47
GDP Growth (Annual %)	19.59	13.38	4.69	4.41	3.98	3.66	2.13	1.58	1.49	-0.18
GDP per Capita (Current US\$)	67,403.16	82,409.58	85,076.15	85,050.91	83,858.53	63,039.02	57,163.06	61,264.40	68,793.78	64,781.73
Exports of Goods and Services (Current Billion US\$)	77.98	121.84	142.88	144.51	140.23	92.29	72.40	85.20	102.56	92.02
Exports of Goods and Services (% of GDP)	62.32	72.62	76.47	72.72	68.00	57.06	47.71	51.04	53.60	50.15
Imports of Goods and Services (Current Billion US\$)	29.72	43.79	54.69	58.95	64.00	59.27	63.48	62.19	65.81	66.77
Imports of Goods and Services (% of GDP)	23.75	26.10	29.27	29.67	31.04	36.65	41.83	37.26	34.39	36.39
Inflation Consumer Prices (Annual %)	-2.43	1.14	2.32	3.22	3.35	1.81	2.68	0.39	0.26	-0.67
Energy Use (kg of Oil Equivalent per Capita)	14,890.44	15,370.63	17,344.38	17,266.13	17,922.73	NA	NA	NA	NA	NA
Natural Gas Use (Scm per Capita)	16,053.21	9,627.33	10,655.38	16,342.80	16,476.92	17,110.27	15,709.92	13,954.44	14,722.20	14,662.97

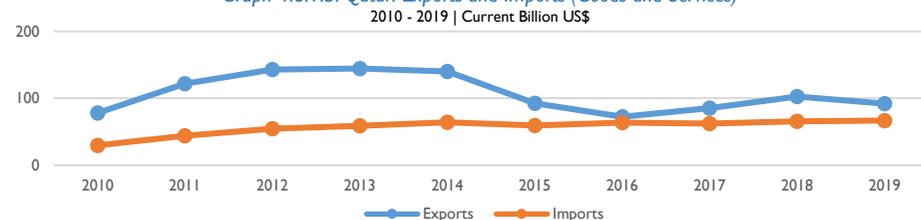
Graph 4.8.1.1. Qatar: Population and Labor Force



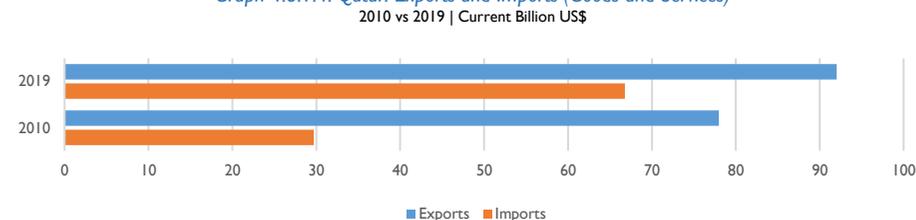
Graph 4.8.1.2. Qatar: GDP and GDP Growth



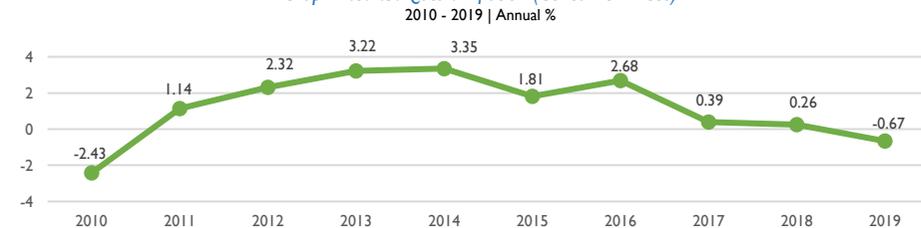
Graph 4.8.1.3. Qatar: Exports and Imports (Goods and Services)



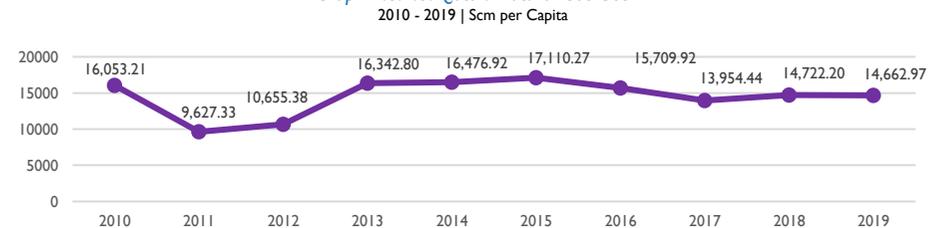
Graph 4.8.1.4. Qatar: Exports and Imports (Goods and Services)



Graph 4.8.1.5. Qatar: Inflation (Consumer Prices)



Graph 4.8.1.6. Qatar: Natural Gas Use



4.8.2 Reserves and Production

Table 4.8.2.1 Proven Natural Gas Reserves (Bcm)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Proven Natural Gas Reserves	25,201	25,110	25,069	24,681	24,531	24,299	24,073	23,861	23,846	23,831

Table 4.8.2.2 Historical Natural Gas Production (Bcm)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Gross Production	136.25	150.02	163.03	171.06	173.40	175.92	172.17	171.40	175.42	181.31
Marketed Production	131.17	145.27	157.05	164.96	167.43	170.05	166.10	165.37	170.04	176.30
Reinjection	2.07	2.11	2.66	2.71	2.65	2.53	2.74	2.66	2.25	2.48
Flaring	1.02	0.56	0.70	0.74	0.71	0.72	0.72	0.69	0.60	0.70
Other losses	1.99	2.08	2.62	2.65	2.61	2.62	2.58	2.62	2.53	1.83

Table 4.8.2.3 Detailed 2019 Natural Gas Production (MMcm)

	2019											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Gross Production	16099.04	13861.13	13998.83	13392.73	15571.33	15513.49	16125.65	15952.28	15590.75	15125.74	14740.83	15337.13
Marketed Production	15626.92	13457.75	13530.21	13032.71	15230.23	15218.44	15823.75	15648.96	15299.33	14833.53	14386.66	14894.33

4.8.3 Domestic Consumption and Trade

Table 4.8.3.1 Domestic Gas Consumption (Bcm)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Totals	29.80	19.60	23.40	38.19	40.52	43.90	41.70	38.02	40.95	41.53

Table 4.8.3.2 Historical Trade: Natural Gas Exports

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Pipeline (Bcm)	19.15	19.20	19.22	19.90	20.09	19.75	20.00	21.96	22.36	22.45
LNG	Bcm*	75.75	102.60	102.98	103.41	102.32	104.53	105.20	104.23	104.41
	MMT	55.70	75.44	75.72	76.04	75.24	76.86	77.35	76.64	76.77
Totals (Bcm)	94.90	121.80	122.20	123.31	122.41	124.28	125.20	126.19	126.77	129.34

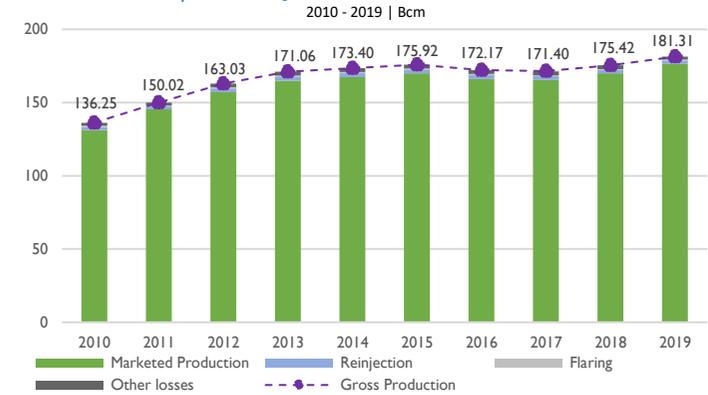
* Gas equivalent

Table 4.8.3.3 Detailed 2019 Trade: Natural Gas Exports

	2019											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Pipeline (MMcm)	1640.65	1171.07	1764.42	1726.20	1977.73	2003.13	2109.41	2106.77	2061.75	2042.69	1952.16	1896.97
LNG	MMcm*	9822.20	8876.67	8652.53	8013.28	9205.89	8965.16	9356.69	9140.18	8977.21	8489.98	8905.00
	1000MT	7222.21	6526.96	6362.16	5892.12	6769.04	6592.03	6879.92	6720.72	6600.89	6242.63	6239.12
Totals (MMcm)	11462.85	10047.74	10416.95	9739.48	11183.63	10968.29	11466.09	11246.96	11038.96	10532.67	10437.37	10801.98

* Gas equivalent

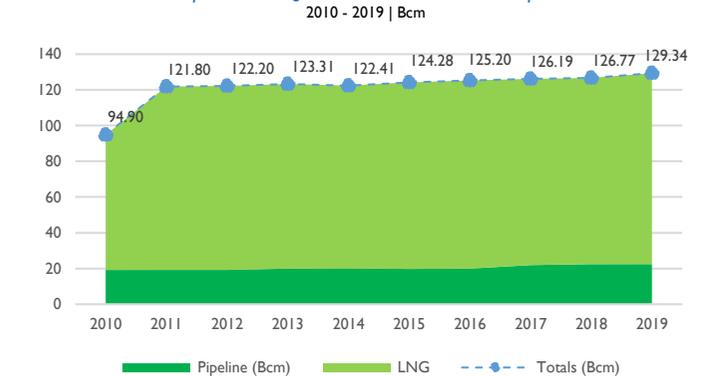
Graph 4.8.2.1. Qatar: Natural Gas Annual Production



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

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

4.8.4.2 LNG Carrier Fleet

Ship Name	Owner(s)	Delivered Year	Size (1000 Scm)
Umm Bab	Nakilat / Maran Gas	2005	217.59
Simaisma	Nakilat / Maran Gas	2006	210.20
Al Marrouna	Nakilat / Teekay	2006	216.31
Al Khuwair	Nakilat / Teekay	2006	210.15
Al Jassasiya	Nakilat / Maran Gas	2007	266.37
Ejnan	Nakilat / NYK	2007	263.30
Al Gattara	Nakilat / International Seaways	2007	266.37
Tembek	Nakilat / International Seaways	2007	266.48
Al Ruwais	Nakilat / Pronav	2007	266.25
Al Safliya	Nakilat / Pronav	2007	265.98
Al Areesh	Nakilat / Teekay	2007	210.10
Al Ghuwairiya	Nakilat	2008	210.10
Mozah	Nakilat	2008	216.30
Umm Slal	Nakilat	2008	210.15
Bu Samra	Nakilat	2008	210.10
Al Oraiq	Nakilat / "K" Line	2008	216.29
Umm Al Amad	Nakilat / "K" Line	2008	210.20
Maran Gas Asclepius	Nakilat / Maran Gas	2008	266.00
Al Aamriya	Nakilat / MOL	2008	266.00
Fraiha	Nakilat / MOL	2008	263.30
Murwab	Nakilat / MOL	2008	266.00
Al Sahla	Nakilat / NYK	2008	263.30
Al Thumama	Nakilat / NYK	2008	266.28
Al Utouriya	Nakilat / NYK	2008	266.00
Al Gharrafa	Nakilat / International Seaways	2008	266.00
Al Hamla	Nakilat / International Seaways	2008	210.10
Al Ghariya	Nakilat / Pronav	2008	210.10
Duhail	Nakilat / Pronav	2008	145.70
Al Daayen	Nakilat / Teekay	2008	174.00
Al Huwaila	Nakilat / Teekay	2008	161.87
Al Kharsaah	Nakilat / Teekay	2008	161.87
Al Shamal	Nakilat / Teekay	2008	145.82
Al Ghashamiya	Nakilat	2009	145.70
Sub Totals			7,410.28
Total			13,422.26

Ship Name	Owner(s)	Delivered Year	Size (1000 Scm)
Sheehaniya	Nakilat	2009	159.80
Mesaimmeer	Nakilat	2009	159.80
Onaiza	Nakilat	2009	161.87
Al Dafna	Nakilat	2009	161.87
Al Mafyar	Nakilat	2009	159.80
Mekaines	Nakilat	2009	145.89
Al Bahiya	Nakilat	2009	145.00
Al Karaana	Nakilat	2009	159.80
Al Kharaitiyat	Nakilat	2009	159.80
Al Khattiya	Nakilat	2009	210.17
Al Nuaman	Nakilat	2009	210.10
Al Rekayyat	Nakilat	2009	210.10
Al Sadd	Nakilat	2009	216.20
Al Mayeda	Nakilat	2009	216.20
Al Samriya	Nakilat	2009	215.00
Lijmiliya	Nakilat	2009	145.00
Shagra	Nakilat	2009	216.20
Aseem	Nakilat / SCI	2009	216.20
Aamira	Nakilat	2010	216.20
Rasheeda	Nakilat	2010	216.20
Zarga	Nakilat	2010	210.15
Maran Gas Coronis	Nakilat / Maran Gas	2012	210.15
Woodside Goode	Nakilat / Maran Gas	2013	210.15
Woodside Rogers	Nakilat / Maran Gas	2013	210.15
Maran Gas Apollonia	Nakilat / Maran Gas	2014	155.00
Maran Gas Delphi	Nakilat / Maran Gas	2014	149.54
Maran Gas Efessos	Nakilat / Maran Gas	2014	148.79
Maran Gas Posidonia	Nakilat / Maran Gas	2014	148.85
Maran Gas Alexandria	Nakilat / Maran Gas	2015	217.00
Maran Gas Lindos	Nakilat / Maran Gas	2015	217.00
Maran Gas Sparta	Nakilat / Maran Gas	2015	217.00
Maran Gas Achilles	Nakilat / Maran Gas	2016	217.00
Sub Totals			6,011.98
Total			13,422.26

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	Project	2024 2025	Qatar Petroleum	Project Phase
North Field Expansion 2	2	16.0	Project	2027	Qatar Petroleum	Project Phase



Russian Federation

RUSSIA



Population:
146 800 000



Capital:
Moscow



Continent:
Euroasia



Currency:
Russian Ruble



Time Zone:
GMT+3
(Moscow)

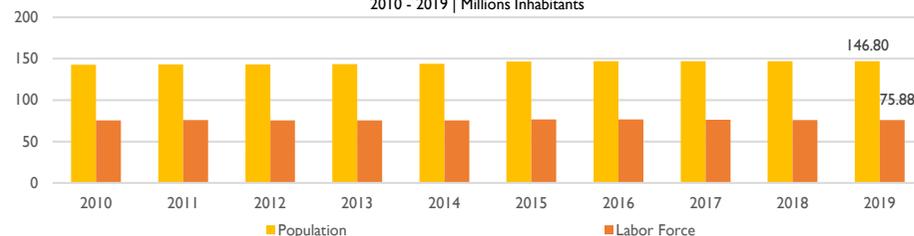
4.9.I Macroeconomics

4.9.I.1 Russia Macroeconomic Indicators

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Population (Inhabitants)	142,849,468	142,960,908	143,201,721	143,506,995	143,700,000	146,500,000	146,800,000	146,900,000	146,900,000	146,800,000
Labor Force (Inhabitants)	75,478,000	75,779,000	75,676,000	75,529,000	75,428,000	76,588,000	76,636,000	76,109,000	76,011,000	75,878,000
GDP (Current Billion US\$)	1,524.92	2,045.93	2,208.30	2,292.47	2,059.24	1,363.48	1,276.79	1,574.20	1,669.58	1,699.88
GDP Growth (Annual %)	4.50	4.30	4.02	1.76	0.74	-1.97	0.19	1.83	2.54	1.34
GDP per Capita (Current US\$)	10,675.00	14,311.08	15,420.87	15,974.64	14,330.15	9,307.04	8,697.46	10,716.13	11,365.44	11,579.54
Exports of Goods and Services (Current Billion US\$)	445.51	573.99	594.19	592.50	558.28	391.37	330.11	410.72	509.50	481.29
Exports of Goods and Services (% of GDP)	29.22	28.06	26.91	25.85	27.11	28.70	25.85	26.09	30.52	28.31
Imports of Goods and Services (Current Billion US\$)	322.37	408.78	447.05	468.62	426.06	281.64	263.83	327.21	344.21	352.91
Imports of Goods and Services (% of GDP)	21.14	19.98	20.24	20.44	20.69	20.66	20.66	20.79	20.62	20.76
Inflation Consumer Prices (Annual %)	8.78	6.10	6.57	6.47	11.35	12.91	7.04	2.51	4.26	3.04
Energy Use (kg of Oil Equivalent per Capita)	4,819.04	5,049.43	5,167.01	5,078.63	4,942.88	NA	NA	NA	NA	NA
Natural Gas Use (Scm per Capita)	3,262.18	3,329.58	3,289.07	3,247.23	3,235.91	3,037.54	3,024.52	3,151.80	3,328.80	3,412.81

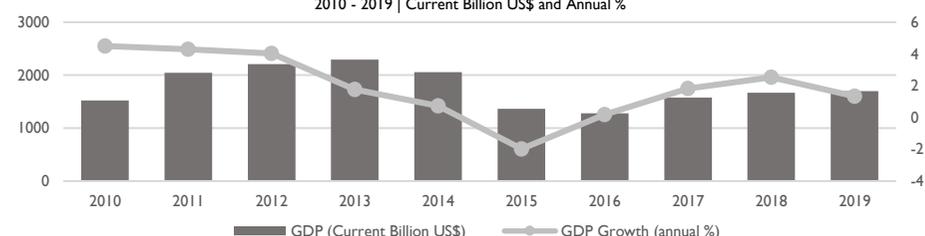
Graph 4.9.1.1. Russia: Population and Labor Force

2010 - 2019 | Millions Inhabitants



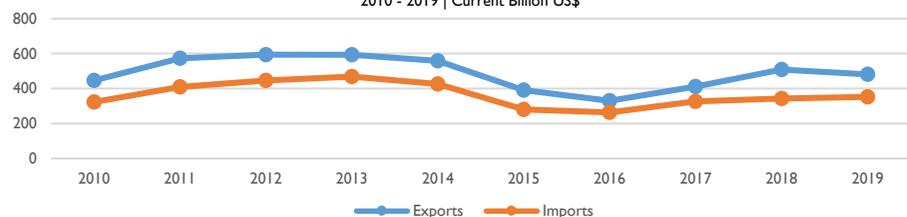
Graph 4.9.1.2. Russia: GDP and GDP Growth

2010 - 2019 | Current Billion US\$ and Annual %



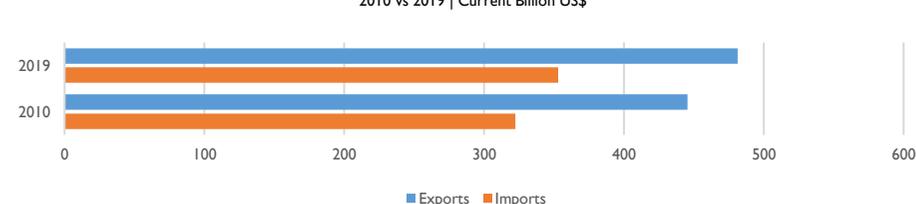
Graph 4.9.1.3. Russia: Exports and Imports (Goods and Services)

2010 - 2019 | Current Billion US\$



Graph 4.9.1.4. Russia: Exports and Imports (Goods and Services)

2010 vs 2019 | Current Billion US\$



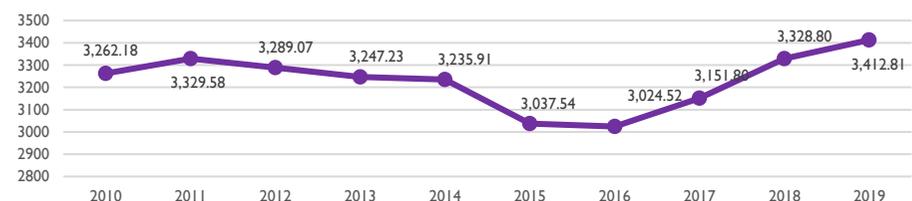
Graph 4.9.1.5. Russia: Inflation (Consumer Prices)

2010 - 2019 | Annual %



Graph 4.9.1.6. Russia: Natural Gas Use

2010 - 2019 | Scm per Capita



4.9.2 Reserves and Production

Table 4.9.2.1 Proven Natural Gas Reserves (Bcm)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Proven Natural Gas Reserves	46,000	48,676	48,810	49,335	49,896	50,205	50,617	50,508	49,571	49,154

Table 4.9.2.2 Historical Natural Gas Production (Bcm)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Gross Production	651.30	670.80	654.68	667.59	642.81	633.54	640.81	692.00	727.60	738.10
Marketed Production	628.93	647.60	631.15	645.91	619.75	612.74	619.81	668.94	704.51	718.48
Flaring	15.49	16.73	17.09	15.33	15.67	14.51	14.60	15.12	15.85	16.45
Other losses	6.59	6.67	6.76	6.76	6.59	6.76	6.59	7.04	7.24	3.17

Table 4.9.2.3 Detailed 2019 Natural Gas Production (MMcm)

	2019											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Gross Production	67100.00	67100.00	62500.00	64400.00	61700.00	54700.00	54800.00	55600.00	56400.00	62100.00	64200.00	67500.00
Marketed Production	NA											

4.9.3 Domestic Consumption and Trade

Table 4.9.3.1 Domestic Gas Consumption (Bcm)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Totals	466.00	476.00	471.00	466.00	465.00	445.00	444.00	463.00	489.00	501.00

Table 4.9.3.2 Historical Trade: Natural Gas Exports

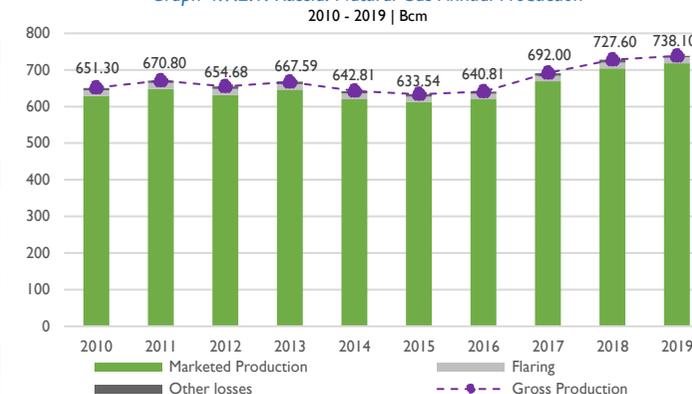
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Pipeline (Bcm)	152.70	161.70	178.70	196.40	172.60	185.50	198.70	212.80	222.62	208.40
LNG	Bcm*	14.79	14.05	13.18	16.20	12.63	13.18	14.91	25.48	39.90
	MMT	10.87	10.33	9.69	11.91	9.29	9.69	10.96	11.05	29.34
Totals (Bcm)	167.49	175.75	191.88	212.60	185.23	198.68	213.61	227.83	248.10	248.30

* Gas equivalent

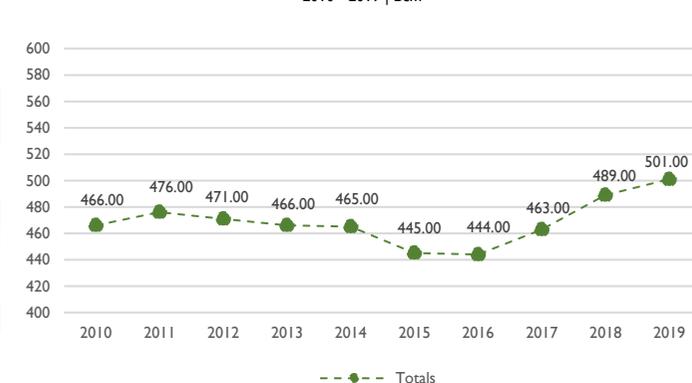
Table 4.9.3.3 Historical Trade: Natural Gas Imports (Bcm)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Pipeline	4.25	7.97	8.06	8.23	8.58	8.84	8.93	8.94	9.37	9.11
Totals	4.25	7.97	8.06	8.23	8.58	8.84	8.93	8.94	9.37	9.11

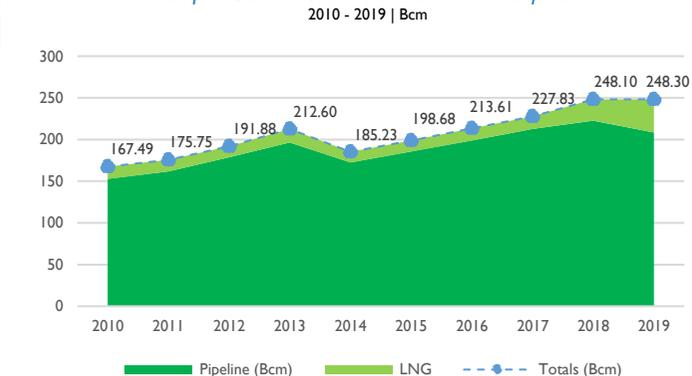
Graph 4.9.2.1. Russia: Natural Gas Annual Production



Graph 4.9.3.1. Russia: Natural Gas Annual Domestic Consumption



Graph 4.9.3.2. Russia: Natural Gas Annual Exports



4.9.4 Transport and Plants

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	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	Under Construction	55.0	Export	2021	1,200	48
TurkStream	Russia	Turkey	-	Gazprom	Gazprom	Operational	31.5	Export	2020	3,000	32
Power of Siberia	Russia	China	-	Gazprom	Gazprom	Operational	38.0	Export	2019	3,000	56

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
Total			1337.06

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	Under Construction	2020	Novatek	Novatek
Arctic LNG	3	19.8	Under Construction	2023/2025	Novatek	Novatek
Gorskaya LNG	3	1.3	Under Construction	2020/2021	Gazprom	Gazprom
Portovaya LNG	1	1.5	Under Construction	2020	Gazprom	Gazprom
Baltic LNG	2	13.0	Planned	2023/2024	Gazprom	Gazprom
Obskiy LNG	2	5.0	Planned	2024/2025	Novatek	Novatek
Sakhalin II	1	5.4	Planned	2024	Sakhalin Energy	Sakhalin Energy

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



Republic of

TRINIDAD AND TOBAGO



Population:
1 363 728



Capital:
Port of Spain



Continent:
South America
Caribbean Sea



Currency:
Trinidad and
Tobago Dollar



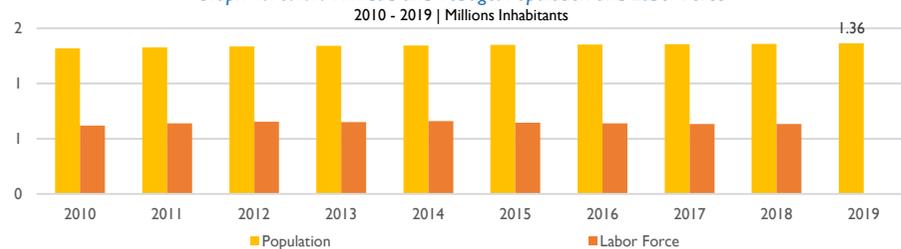
Time Zone:
Atlantic
GMT-4

4.10.1 Macroeconomics

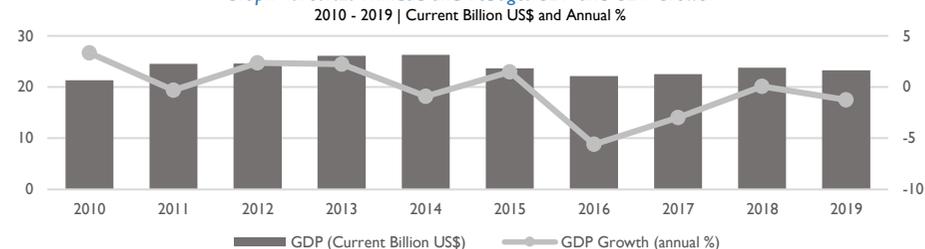
4.10.1.1 Trinidad and Tobago Macroeconomic Indicators

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Population (Inhabitants)	1,317,721	1,325,660	1,334,637	1,340,483	1,345,284	1,349,654	1,353,708	1,356,610	1,359,471	1,363,728
Labor Force (Inhabitants)	618,800	639,200	652,800	650,200	658,600	645,300	638,500	634,000	633,900	NA
GDP (Current Billion US\$)	21.31	24.53	24.59	26.07	26.27	23.63	22.16	22.52	23.80	23.27
GDP Growth (Annual %)	3.33	-0.30	2.37	2.23	-0.91	1.48	-5.60	-2.99	0.07	-1.25
GDP per Capita (Current US\$)	16,173.04	18,506.07	18,421.11	19,451.60	19,527.03	17,504.85	16,368.59	16,603.57	17,504.28	17,060.48
Exports of Goods and Services (Current Billion US\$)	10.59	14.19	12.28	17.84	13.81	10.17	7.56	8.80	9.68	7.20
Exports of Goods and Services (% of GDP)	49.69	57.86	49.93	68.44	52.58	43.06	34.10	39.05	40.68	30.95
Imports of Goods and Services (Current Billion US\$)	6.13	9.02	11.08	12.04	10.70	8.75	7.97	6.94	7.76	6.33
Imports of Goods and Services (% of GDP)	28.78	36.78	45.06	46.17	40.74	37.03	35.97	30.82	32.59	27.21
Inflation Consumer Prices (Annual %)	10.60	5.10	9.20	5.20	5.70	4.70	3.10	1.90	0.90	1.00
Energy Use (kg of Oil Equivalent per Capita)	1,114.22	1,140.64	1,229.55	1,247.50	NA	NA	NA	NA	NA	NA
Natural Gas Use (Scm per Capita)	13,247.76	13,098.63	12,763.86	12,646.19	12,351.38	12,329.65	11,123.26	11,093.83	11,096.72	11,431.35

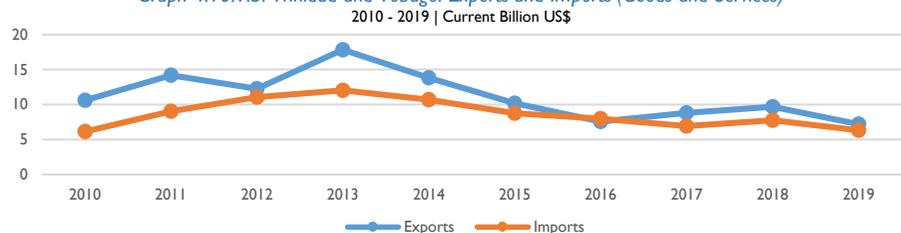
Graph 4.10.1.1. Trinidad and Tobago: Population and Labor Force



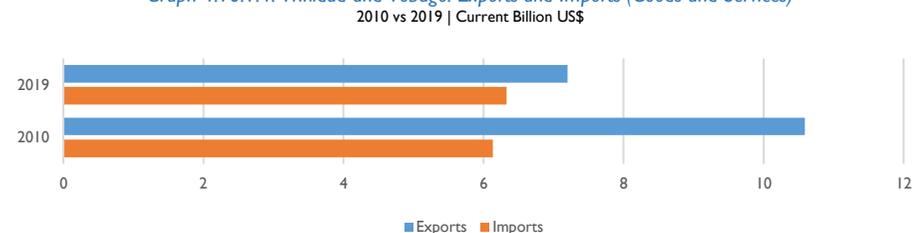
Graph 4.10.1.2. Trinidad and Tobago: GDP and GDP Growth



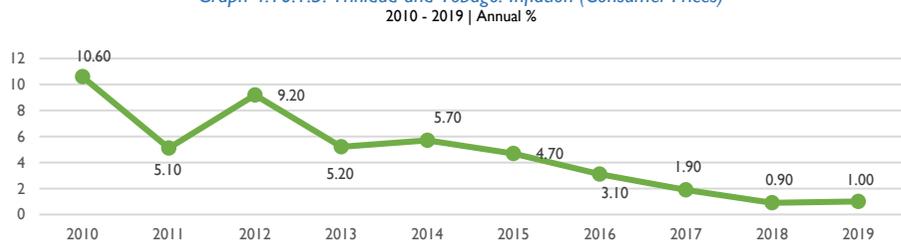
Graph 4.10.1.3. Trinidad and Tobago: Exports and Imports (Goods and Services)



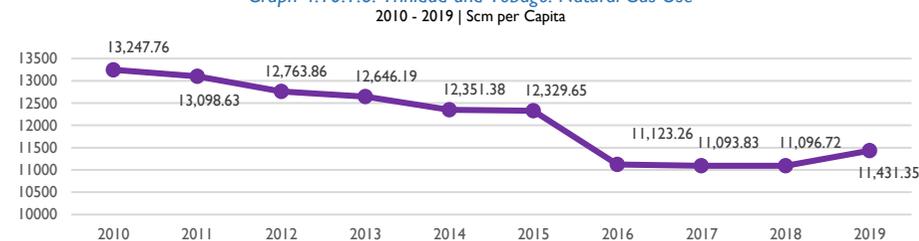
Graph 4.10.1.4. Trinidad and Tobago: Exports and Imports (Goods and Services)



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)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Proven Natural Gas Reserves	381	375	371	347	326	300	281	298	298	302

Table 4.10.2.2 Historical Natural Gas Production (Bcm)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Gross Production	45.61	44.77	44.40	42.85	38.10	39.59	34.00	35.36	36.46	35.98
Marketed Production	42.25	39.69	39.34	39.84	35.51	36.94	31.81	33.48	34.93	35.00
Reinjection	1.74	1.74	1.99	1.82	1.47	1.47	1.36	0.74	1.06	0.90
Flaring	1.61	1.17	1.12	1.19	1.12	0.92	0.72	1.05	0.29	0.08
Shrinkage	0.00	1.80	1.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other losses	0.01	0.36	0.70	0.00	0.00	0.26	0.11	0.08	0.19	0.00

Table 4.10.2.3 Detailed 2019 Natural Gas Production (MMcm)

	2019											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Gross Production	3091.49	3032.25	3260.92	2690.68	3128.60	2852.62	3138.14	3115.16	2838.80	3115.81	2839.53	2873.99
Marketed Production	2997.68	2942.63	3160.36	2615.03	3030.58	2735.70	3050.50	3095.84	2760.32	2991.87	2807.77	2806.90

4.10.3 Domestic Consumption and Trade

Table 4.10.3.1 Domestic Gas Consumption (Bcm)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Industrial	1.71	1.65	1.62	1.62	1.59	1.31	0.89	0.88	0.90	0.93
Power Generation	3.03	3.14	3.14	3.15	3.11	3.04	2.81	2.81	2.51	2.63
Petrochemical (feedstock)	12.30	12.03	11.51	11.48	11.34	11.50	10.58	10.58	10.98	11.63
Refineries	0.42	0.54	0.76	0.71	0.57	0.78	0.78	0.78	0.70	0.40
Totals	17.46	17.36	17.04	16.95	16.62	16.64	15.06	15.05	15.09	15.59

Table 4.10.3.2 Historical Trade: Natural Gas Exports

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
LNG	Bcm*	20.03	18.32	18.96	19.00	18.94	16.90	14.27	14.61	16.67
	MMT	14.72	13.47	13.94	13.97	13.93	12.43	10.49	10.74	12.26
Totals (Bcm)	20.03	18.32	18.96	19.00	18.94	16.90	14.27	14.61	16.67	16.90

* Gas equivalent

Table 4.10.3.3 Detailed 2019 Trade: Natural Gas Exports

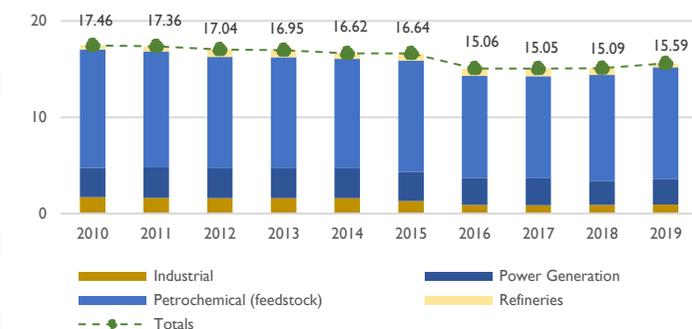
		2019											
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
LNG	MMcm*	1465.14	1371.93	1520.10	1332.18	1423.61	1357.41	1332.09	1654.37	1260.48	1404.62	1310.66	1462.64
	1000MT	1077.31	1008.77	1117.72	979.54	1046.77	998.09	979.48	1216.45	926.82	1032.81	963.72	1075.47
Total (MMcm)		1465.14	1371.93	1520.10	1332.18	1423.61	1357.41	1332.09	1654.37	1260.48	1404.62	1310.66	1462.64

* Gas equivalent

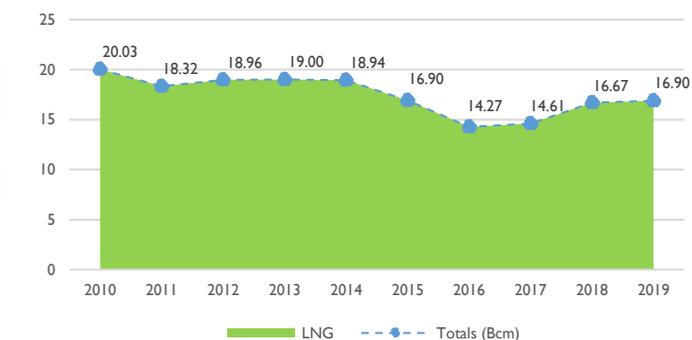
Graph 4.10.2.1. Trinidad and Tobago: Natural Gas Annual Production 2010 - 2019 | Bcm



Graph 4.10.3.1. Trinidad and Tobago: Natural Gas Annual Domestic Consumption 2010 - 2019 | Bcm



Graph 4.10.3.2. Trinidad and Tobago: Natural Gas Annual Exports 2010 - 2019 | Bcm



4.10.4 Transport and Plants

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:
28 515 829



Capital:
Caracas



Continent:
South
America



Currency:
Venezuelan
Bolivar



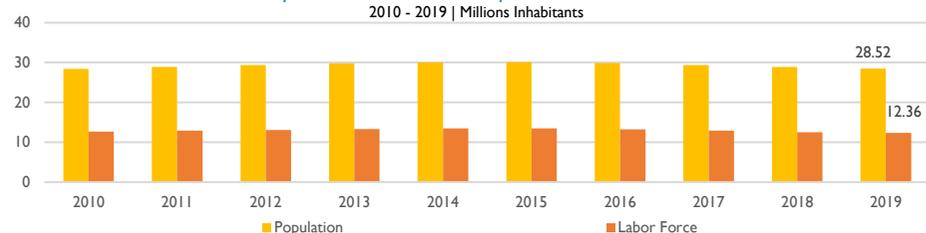
Time Zone:
Venezuela
GMT-4

4.1.1 Macroeconomics

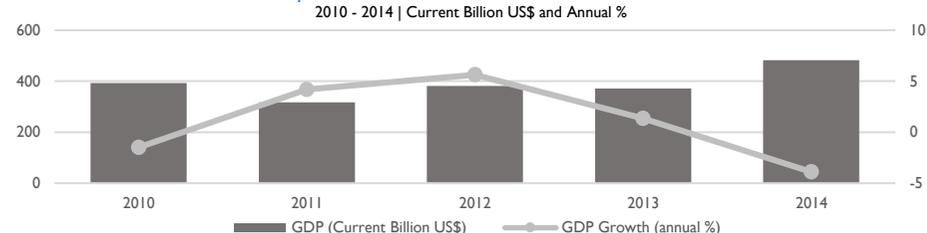
4.1.1.1 Venezuela Macroeconomic Indicators

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Population (Inhabitants)	28,439,940	28,888,369	29,362,449	29,783,571	30,045,134	30,081,829	29,846,179	29,390,409	28,870,195	28,515,829
Labor Force (Inhabitants)	12,716,270	12,931,945	13,092,390	13,340,802	13,481,826	13,520,458	13,271,796	12,945,078	12,554,309	12,364,879
GDP (Current Billion US\$)	393.19	316.48	381.29	371.01	482.36	NA	NA	NA	NA	NA
GDP Growth (Annual %)	-1.49	4.18	5.63	1.34	-3.89	NA	NA	NA	NA	NA
GDP per Capita (Current US\$)	13,825.36	10,955.35	12,985.51	12,456.71	16,054.49	NA	NA	NA	NA	NA
Exports of Goods and Services (Current Billion US\$)	112.18	94.76	99.79	91.88	80.52	NA	NA	NA	NA	NA
Exports of Goods and Services (% of GDP)	28.53	29.94	26.17	24.76	16.69	NA	NA	NA	NA	NA
Imports of Goods and Services (Current Billion US\$)	69.23	62.33	92.40	109.49	151.45	NA	NA	NA	NA	NA
Imports of Goods and Services (% of GDP)	17.61	19.70	24.23	29.51	31.40	NA	NA	NA	NA	NA
Inflation Consumer Prices (Annual %)	28.19	26.09	21.07	40.64	62.17	121.74	254.95	NA	NA	NA
Energy Use (kg of Oil Equivalent per Capita)	2,545.03	2,326.12	2,488.27	2,308.74	NA	NA	NA	NA	NA	NA
Natural Gas Use (Scm per Capita)	734.64	757.12	793.12	753.37	732.63	829.67	872.81	870.01	735.11	615.42

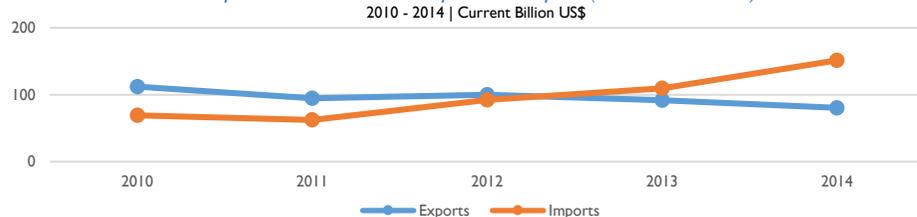
Graph 4.1.1.1. Venezuela: Population and Labor Force



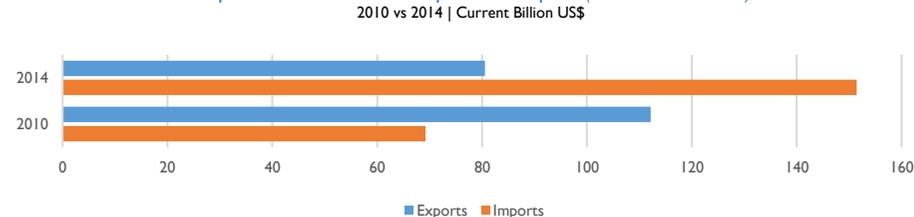
Graph 4.1.1.2. Venezuela: GDP and GDP Growth



Graph 4.1.1.3. Venezuela: Exports and Imports (Goods and Services)



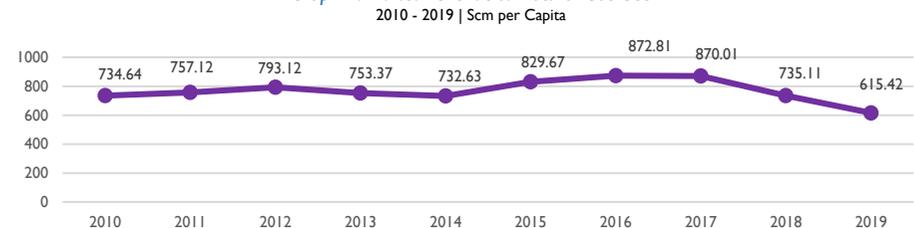
Graph 4.1.1.4. Venezuela: Exports and Imports (Goods and Services)



Graph 4.1.1.5. Venezuela: Inflation (Consumer Prices)



Graph 4.1.1.6. Venezuela: Natural Gas Use



4.11.2 Reserves and Production

Table 4.11.2.1 Proven Natural Gas Reserves (Bcm)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Proven Natural Gas Reserves	5,525	5,528	5,563	5,581	5,617	5,702	5,740	5,708	5,674	5,674

Table 4.11.2.2 Historical Natural Gas Production (Bcm)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Gross Production	71.08	73.27	75.97	76.44	76.72	80.20	82.16	76.89	67.44	56.21
Marketed Production	19.73	20.77	22.73	21.82	21.88	26.00	28.90	28.29	24.50	20.27
Reinjection	30.39	29.83	29.76	28.77	27.03	25.44	23.42	21.90	15.15	4.45
Flaring	6.68	9.28	11.35	13.73	15.32	16.54	18.82	17.24	20.73	26.18
Shrinkage	14.28	13.39	12.14	12.13	12.49	12.21	11.02	1.51	1.22	0.93
Other losses	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.96	5.84	4.38

Table 4.11.2.3 Detailed 2019 Natural Gas Production (MMcm)

	2019											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Gross Production	5559.00	5011.21	4701.90	4440.00	4845.00	4788.00	4624.00	4458.00	4482.26	4630.41	4322.46	4348.49
Marketed Production	2238.00	1929.21	1738.90	1942.00	1639.00	1570.00	1427.00	1199.00	1764.48	1559.24	1572.74	1692.98

4.11.3 Domestic Consumption and Trade

Table 4.11.3.1 Domestic Gas Consumption (Bcm)

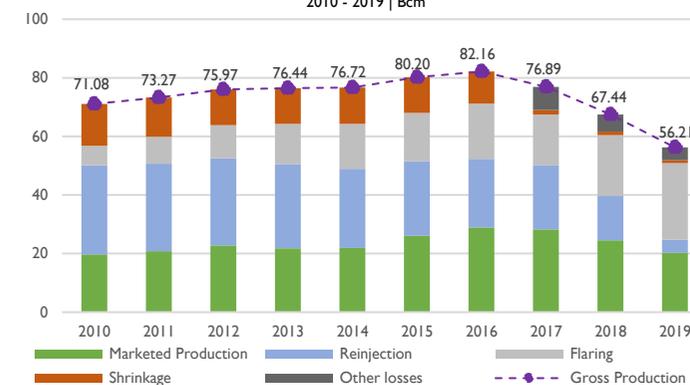
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Residential	0.14	0.16	0.17	0.18	0.17	0.15	0.14	0.15	0.16	0.17
Industrial	5.88	6.81	7.03	6.06	4.95	5.75	4.60	4.69	3.75	3.71
Power Generation	5.90	5.43	6.90	7.15	7.21	9.69	11.31	10.20	8.66	6.82
Petrochemical (feedstock)	4.45	4.73	4.43	4.34	4.70	4.41	4.55	4.96	3.18	2.68
Refineries	4.53	4.75	4.77	4.70	4.98	4.96	5.45	5.57	5.47	4.16
Totals	20.89	21.87	23.29	22.44	22.01	24.96	26.05	25.57	21.22	17.55

Table 4.11.3.2 Historical Trade: Natural Gas Imports (Bcm)

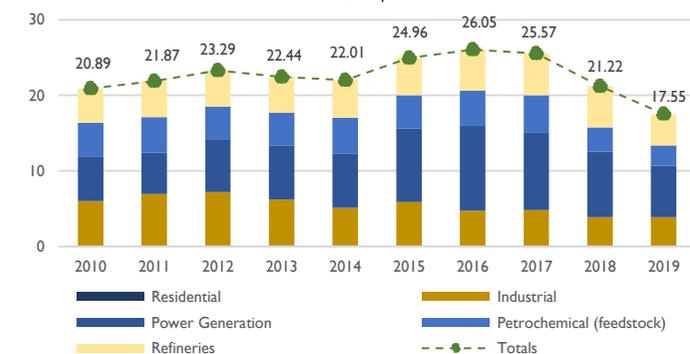
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Pipeline	1.40	1.79	1.89	1.82	1.83	0.95	0.00	0.00	0.00	0.00
Totals	1.40	1.79	1.89	1.82	1.83	0.95	0.00	0.00	0.00	0.00

* Gas equivalent

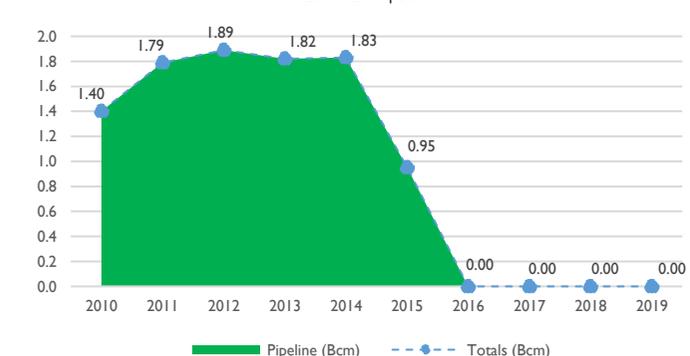
Graph 4.11.2.1. Venezuela: Natural Gas Annual Production
2010 - 2019 | Bcm



Graph 4.11.3.1. Venezuela: Natural Gas Annual Domestic Consumption
2010 - 2019 | Bcm



Graph 4.11.3.2. Venezuela: Natural Gas Annual Imports
2010 - 2019 | Bcm



4.11.4 Transport and Plants*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
GECF Observer Countries



Republic of
ANGOLA



Population:
31 825 295



Capital:
Luanda



Continent:
Africa



Currency:
Angolan kwanza



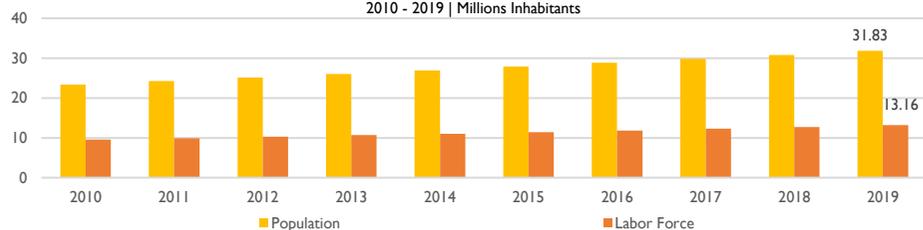
Time Zone:
West Africa
GMT+1

5.1.1 Macroeconomics

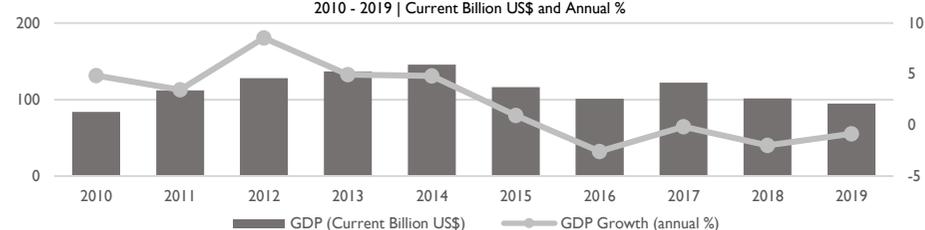
5.1.1.1 Angola Macroeconomic Indicators

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Population (Inhabitants)	23,356,246	24,220,661	25,107,931	26,015,780	26,941,779	27,884,381	28,842,484	29,816,748	30,809,762	31,825,295
Labor Force (Inhabitants)	9,560,441	9,910,112	10,270,167	10,646,623	11,034,611	11,437,925	11,848,410	12,268,842	12,705,486	13,164,276
GDP (Current Billion US\$)	83.80	111.79	128.05	136.71	145.71	116.19	101.12	122.12	101.35	94.64
GDP Growth (Annual %)	4.86	3.47	8.54	4.95	4.82	0.94	-2.58	-0.15	-2.00	-0.87
GDP per Capita (Current US\$)	3,587.88	4,615.47	5,100.10	5,254.88	5,408.41	4,166.98	3,506.07	4,095.81	3,289.65	2,973.59
Exports of Goods and Services (Current Billion US\$)	51.57	67.82	71.63	69.38	65.13	34.57	28.44	35.42	41.39	NA
Exports of Goods and Services (% of GDP)	61.54	60.67	55.94	50.75	44.70	29.75	28.12	29.00	40.84	NA
Imports of Goods and Services (Current Billion US\$)	35.68	43.95	45.92	49.30	50.47	38.50	25.53	28.40	25.89	NA
Imports of Goods and Services (% of GDP)	42.58	39.31	35.86	36.06	34.64	33.13	25.25	23.25	25.54	NA
Inflation Consumer Prices (Annual %)	-60.50	13.48	10.28	8.78	7.28	-21.53	32.38	31.69	20.19	17.15
Energy Use (kg of Oil Equivalent per Capita)	520.96	521.78	552.36	533.76	544.61	NA	NA	NA	NA	NA
Natural Gas Use (Scm per Capita)	31.43	31.05	30.27	31.60	23.72	27.61	26.90	26.46	23.17	25.85

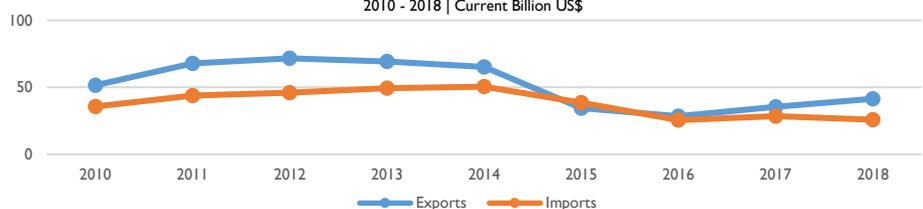
Graph 5.1.1.1. Angola: Population and Labor Force
2010 - 2019 | Millions Inhabitants



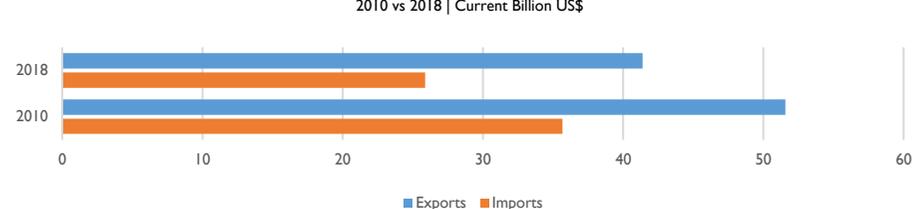
Graph 5.1.1.2. Angola: GDP and GDP Growth
2010 - 2019 | Current Billion US\$ and Annual %



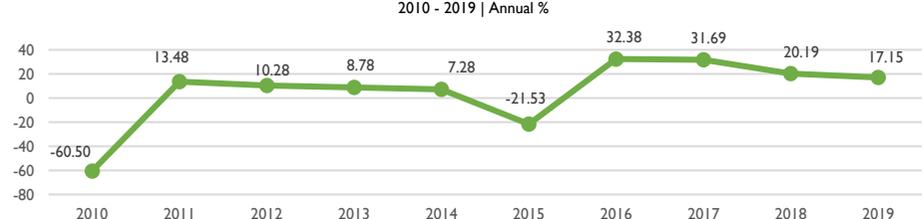
Graph 5.1.1.3. Angola: Exports and Imports (Goods and Services)
2010 - 2018 | Current Billion US\$



Graph 5.1.1.4. Angola: Exports and Imports (Goods and Services)
2010 vs 2018 | Current Billion US\$



Graph 5.1.1.5. Angola: Inflation (Consumer Prices)
2010 - 2019 | Annual %



Graph 5.1.1.6. Angola: Natural Gas Use
2010 - 2019 | Scm per Capita



5.1.2 Reserves and Production

Table 5.1.2.1 Proven Natural Gas Reserves (Bcm)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Proven Natural Gas Reserves	275	275	275	275	308	308	440	422	384	343

Table 5.1.2.2 Natural Gas Production (Bcm)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Gross Production	10.32	10.73	10.85	10.76	10.44	10.54	11.71	14.98	13.94	12.90
Marketed Production	0.74	0.75	0.76	0.93	0.73	0.77	1.71	5.83	6.14	6.80
Reinjection	2.36	2.60	2.63	2.58	2.53	2.55	2.50	2.60	2.80	2.40
Flaring	7.04	7.18	7.26	7.00	6.99	7.00	7.20	6.10	4.20	2.80
Other Losses	0.18	0.20	0.20	0.25	0.19	0.22	0.30	0.45	0.80	0.90

5.1.3 Domestic Consumption and Trade

Table 5.1.3.1 Domestic Gas Consumption (Bcm)

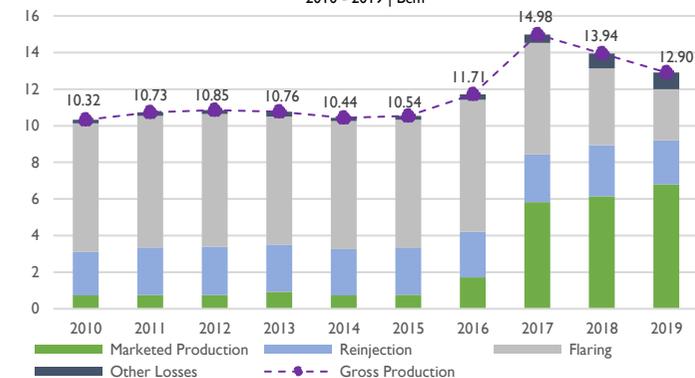
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Totals	0.73	0.75	0.76	0.82	0.64	0.77	0.78	0.79	0.71	0.82

Table 5.1.3.2 Historical Trade: Natural Gas Exports

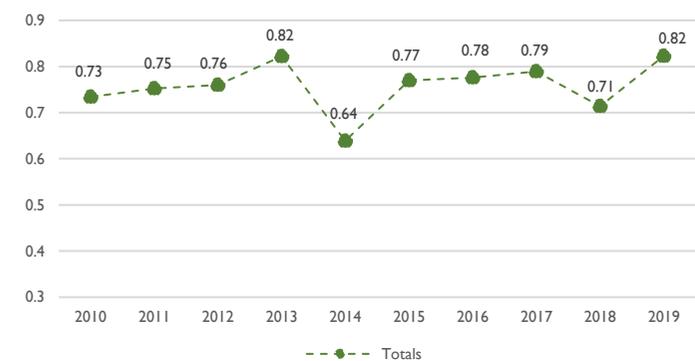
		2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
LNG	Bcm*	0.00	0.00	0.00	0.52	0.44	0.00	0.93	4.98	5.35	5.80
	MMT	0.00	0.00	0.00	0.34	0.32	0.00	0.68	3.66	3.86	4.26
Totals (Bcm)		0.00	0.00	0.00	0.47	0.44	0.00	0.93	4.98	5.25	5.80

* Gas equivalent

Graph 5.1.2.1. Angola: Natural Gas Annual Production
2010 - 2019 | Bcm



Graph 5.1.3.1. Angola: Natural Gas Annual Domestic Consumption
2010 - 2019 | Bcm



Graph 5.1.3.2. Angola: Natural Gas Trade and Marketed Production
2010 - 2019 | Bcm



5.1.4 Transport and Plants

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
Total			1122.60

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



Republic of

AZERBAIJAN



Population:
10 023 318



Capital:
Baku



Continent:
Euroasia



Currency:
Azerbaijani
Manat



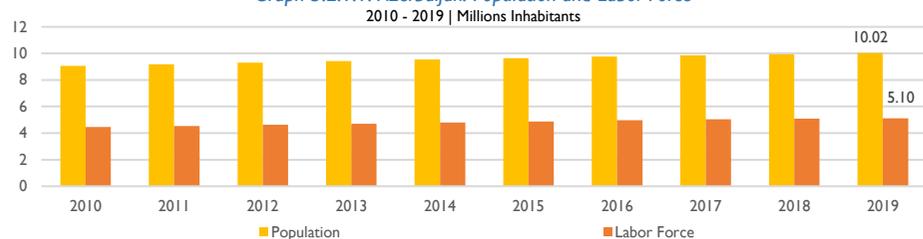
Time Zone:
Azerbaijan
GMT+4

5.2.1 Macroeconomics

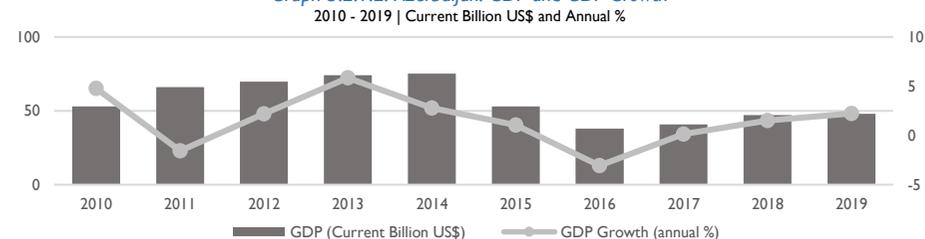
5.2.1.1 Azerbaijan Macroeconomic Indicators

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Population (Inhabitants)	9,054,332	9,173,082	9,295,784	9,416,801	9,535,079	9,649,341	9,757,812	9,854,033	9,939,771	10,023,318
Labor Force (Inhabitants)	4,454,609	4,543,044	4,627,397	4,702,693	4,791,071	4,875,807	4,969,726	5,033,862	5,091,052	5,103,137
GDP (Current Billion US\$)	52.90	65.95	69.68	74.16	75.24	53.07	37.87	40.87	47.11	48.05
GDP Growth (Annual %)	4.79	-1.57	2.20	5.84	2.80	1.05	-3.06	0.15	1.50	2.22
GDP per Capita (Current US\$)	5,842.81	7,189.69	7,496.29	7,875.76	7,891.31	5,500.31	3,880.74	4,147.09	4,739.84	4,793.59
Exports of Goods and Services (Current Billion US\$)	28.73	37.21	36.91	35.91	32.56	20.06	17.58	19.84	25.48	23.63
Exports of Goods and Services (% of GDP)	54.30	56.43	52.97	48.42	43.27	37.79	46.43	48.55	54.09	49.18
Imports of Goods and Services (Current Billion US\$)	10.94	15.88	17.62	19.48	19.72	18.47	16.53	17.10	17.71	17.71
Imports of Goods and Services (% of GDP)	20.68	24.08	25.29	26.26	26.21	34.81	43.65	41.85	37.58	36.86
Inflation Consumer Prices (Annual %)	5.73	7.85	1.07	2.42	1.39	4.01	12.45	12.94	2.26	2.61
Energy Use (kg of Oil Equivalent per Capita)	1,279.55	1,369.35	1,472.90	1,474.00	1,502.08	NA	NA	NA	NA	NA
Natural Gas Use (Scm per Capita)	896.92	980.43	1,004.32	1,001.22	1,053.67	1,152.19	1,112.17	1,065.06	1,085.10	1,175.26

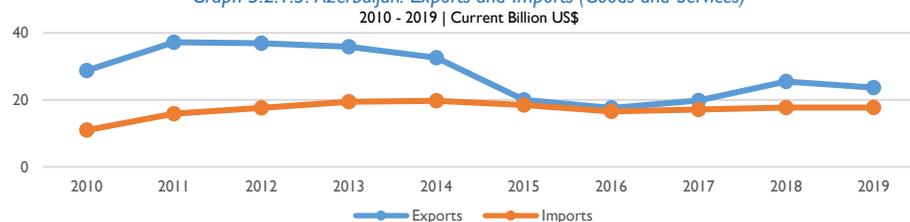
Graph 5.2.1.1. Azerbaijan: Population and Labor Force



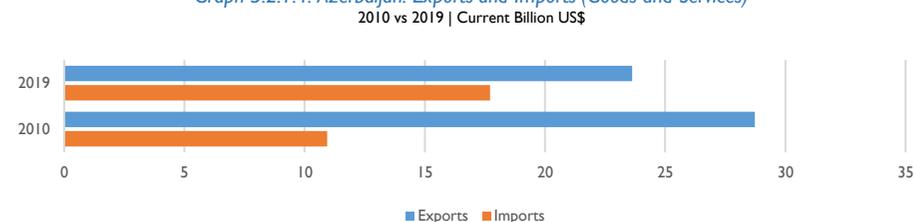
Graph 5.2.1.2. Azerbaijan: GDP and GDP Growth



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



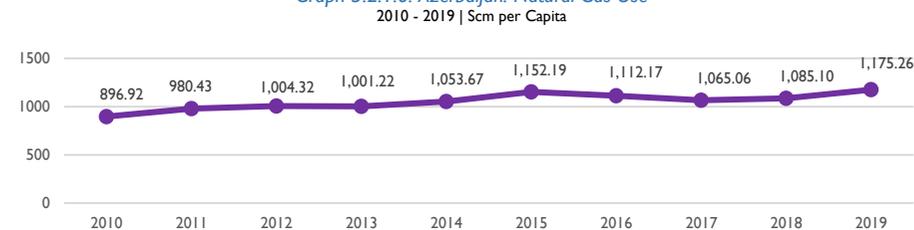
Graph 5.2.1.4. Azerbaijan: Exports and Imports (Goods and Services)



Graph 5.2.1.5. Azerbaijan: Inflation (Consumer Prices)



Graph 5.2.1.6. Azerbaijan: Natural Gas Use



5.2.2 Reserves and Production

Table 5.2.2.1 Proven Natural Gas Reserves (Bcm)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Proven Natural Gas Reserves	1,317	1,317	1,308	1,300	1,292	1,284	1,277	1,270	1,435	1,917

Table 5.2.2.2 Natural Gas Production (Bcm)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Gross Production	25.07	24.58	26.40	27.85	28.22	27.83	27.91	27.07	28.41	33.16
Marketed Production	16.25	15.95	16.81	17.45	18.38	18.78	18.28	17.76	19.05	22.84
Reinjection	5.50	5.40	6.15	7.75	7.80	7.00	7.70	7.40	7.40	7.99
Flaring	1.30	1.10	0.65	0.65	0.50	0.30	0.30	0.25	0.20	0.30
Other Losses	2.02	2.13	2.79	2.00	1.54	1.75	1.63	1.66	1.76	2.03

5.2.3 Domestic Consumption and Trade

Table 5.2.3.1 Domestic Gas Consumption (Bcm)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Totals	8.12	8.99	9.34	9.43	10.05	11.12	10.85	10.50	10.79	11.78

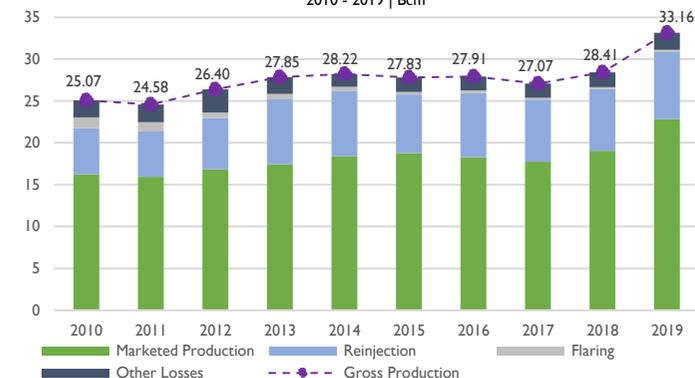
Table 5.2.3.2 Historical Trade: Natural Gas Exports (Bcm)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Pipeline	5.45	6.29	6.09	7.68	7.77	7.32	7.62	8.86	9.19	11.84
Totals	5.45	6.29	6.09	7.68	7.77	7.32	7.62	8.86	9.19	11.84

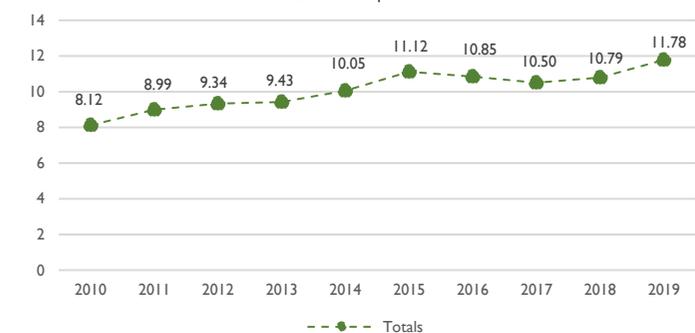
Table 5.2.3.3 Historical Trade: Natural Gas Imports (Bcm)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Pipeline	0.25	0.25	0.55	0.45	0.31	0.21	0.30	1.63	1.84	1.40
Totals	0.25	0.25	0.55	0.45	0.31	0.21	0.30	1.63	1.84	1.40

Graph 5.2.2.1. Azerbaijan: Natural Gas Annual Production
2010 - 2019 | Bcm



Graph 5.2.3.1. Azerbaijan: Natural Gas Annual Domestic Consumption
2010 - 2019 | Bcm



Graph 5.2.3.2. Azerbaijan: Natural Gas Trade and Marketed Production
2010 - 2019 | Bcm



5.2.4 Transport and Plants

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								
South Caucasus (Baku-Tbilissi-Erzurum)	Azerbaijan	Georgia, Turkey	-	BP, TPAO, SOCAR, Petronas, Lukoil, Naftiran, Intertrade	BP	Operational	25.0	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-Anatolian	Azerbaijan	Turkey	-	TANAP Consortium	SOCAR	Operational	31.0	Export	2018	1,850	56/42
Trans-Caspian	Azerbaijan	Turkmenistan	-	NA	NA	Planned	30.0	Export	NA	300	NA



Republic of
IRAQ



Population:
39 309 783



Capital:
Baghdad



Continent:
Middle East



Currency:
Iraqi Dinar



Time Zone:
Arabia
GMT+3

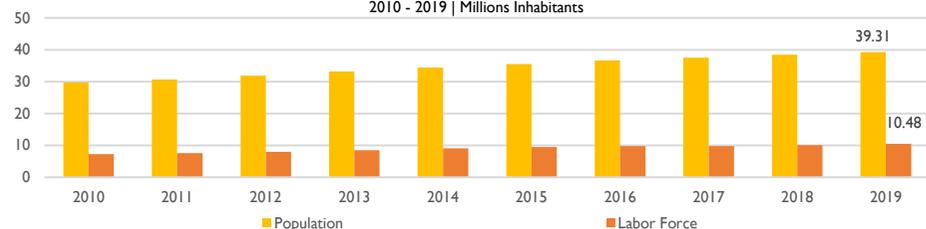
5.3.1 Macroeconomics

5.3.1.1 Iraq Macroeconomic Indicators

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Population (Inhabitants)	29,741,976	30,725,300	31,890,011	33,157,050	34,411,951	35,572,261	36,610,632	37,552,781	38,433,600	39,309,783
Labor Force (Inhabitants)	7,283,181	7,599,634	7,962,730	8,510,817	9,082,831	9,491,635	9,813,997	9,800,982	10,146,991	10,475,720
GDP (Current Billion US\$)	138.52	185.75	218.00	234.64	234.65	177.50	174.88	195.47	224.23	234.09
GDP Growth (Annual %)	6.40	7.55	13.94	7.60	0.70	2.48	15.21	-2.49	-0.56	4.40
GDP per Capita (Current US\$)	4,657.28	6,045.50	6,836.03	7,076.55	6,818.80	4,989.80	4,776.73	5,205.29	5,834.17	5,955.11
Exports of Goods and Services (Current Billion US\$)	54.60	82.51	96.90	93.10	97.00	62.73	56.14	74.20	98.61	86.80
Exports of Goods and Services (% of GDP)	39.42	44.42	44.45	39.68	41.34	35.34	32.10	37.96	43.98	37.08
Imports of Goods and Services (Current Billion US\$)	47.21	51.55	63.44	84.50	86.70	73.52	69.81	69.66	80.61	91.99
Imports of Goods and Services (% of GDP)	34.08	27.75	29.10	36.01	36.95	41.42	39.92	35.64	35.95	39.30
Inflation Consumer Prices (Annual %)	2.88	5.80	6.09	1.88	2.24	1.39	0.56	0.18	0.37	NA
Energy Use (kg of Oil Equivalent per Capita)	1,261.22	1,335.74	1,438.18	1,488.56	1,437.90	NA	NA	NA	NA	NA
Natural Gas Use (Scm per Capita)	191.84	235.07	217.28	204.81	197.98	195.35	219.79	284.63	355.25	443.00

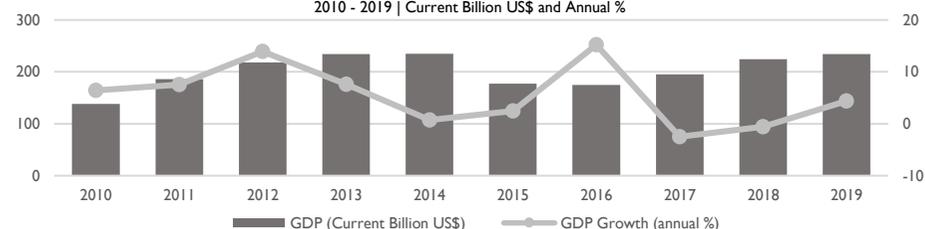
Graph 5.3.1.1. Iraq: Population and Labor Force

2010 - 2019 | Millions Inhabitants



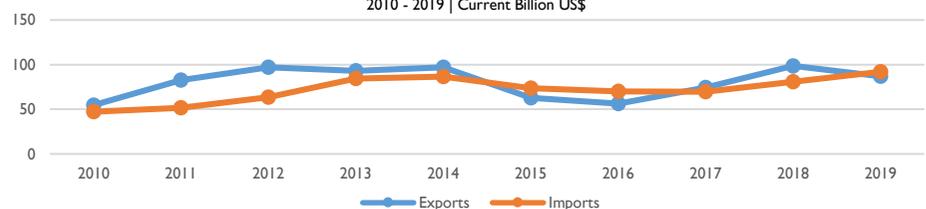
Graph 5.3.1.2. Iraq: GDP and GDP Growth

2010 - 2019 | Current Billion US\$ and Annual %



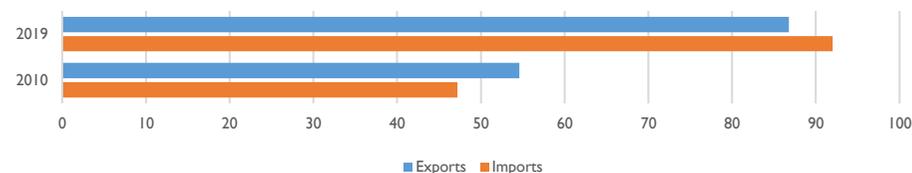
Graph 5.3.1.3. Iraq: Exports and Imports (Goods and Services)

2010 - 2019 | Current Billion US\$



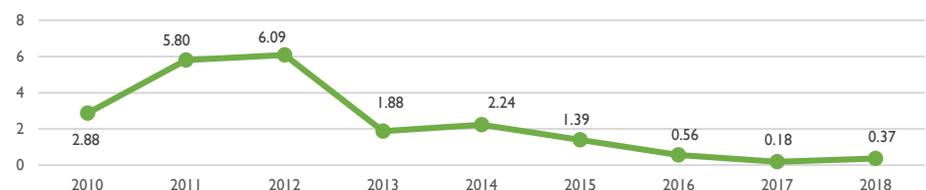
Graph 5.3.1.4. Iraq: Exports and Imports (Goods and Services)

2010 vs 2019 | Current Billion US\$



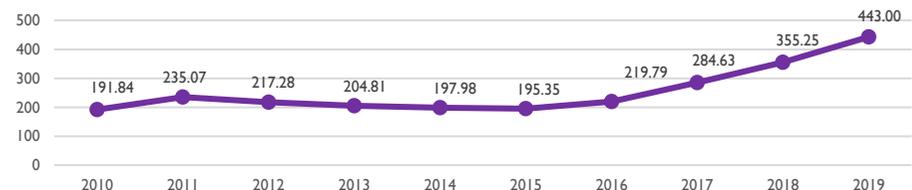
Graph 5.3.1.5. Iraq: Inflation (Consumer Prices)

2010 - 2018 | Annual %



Graph 5.3.1.6. Iraq: Natural Gas Use

2010 - 2019 | Scm per Capita



5.3.2 Reserves and Production

Table 5.3.2.1 Proven Natural Gas Reserves (Bcm)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Proven Natural Gas Reserves	3,158	3,158	3,158	3,158	3,158	3,158	3,820	3,744	3,729	3,714

Table 5.3.2.2 Natural Gas Production (Bcm)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Gross Production	22.73	24.13	26.22	27.30	28.50	29.78	33.82	34.65	35.80	36.40
Marketed Production	7.15	6.32	6.36	7.09	7.55	7.32	9.92	10.14	10.60	10.82
Reinjection	0.81	0.97	0.88	0.34	0.15	0.16	0.15	0.20	0.20	0.20
Flaring	7.57	9.61	11.98	12.43	12.87	14.61	16.00	16.50	16.50	16.70
Other Losses	7.20	7.23	7.00	7.44	7.93	7.69	7.75	7.80	8.50	8.68

5.3.3 Domestic Consumption and Trade

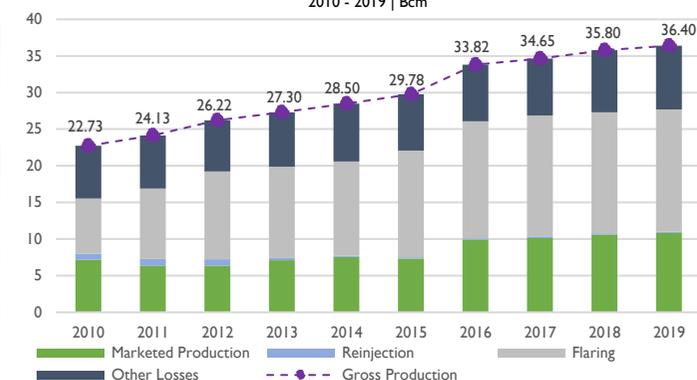
Table 5.3.3.1 Domestic Gas Consumption (Bcm)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Totals	5.71	7.22	6.93	6.79	6.81	6.95	8.05	10.69	13.65	17.41

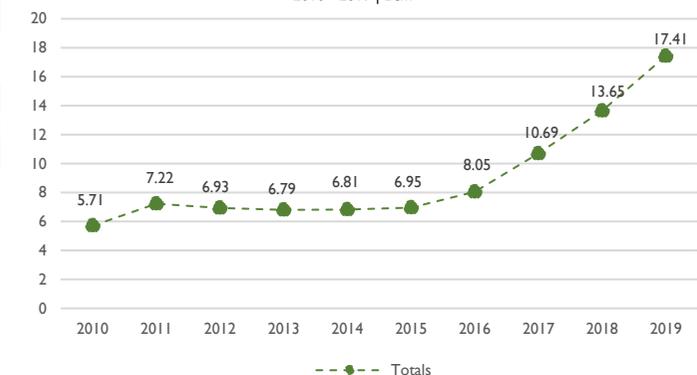
Table 5.3.3.2 Historical Trade: Natural Gas Imports (Bcm)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Pipeline	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.45	4.19	6.11
Totals	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.45	4.19	6.11

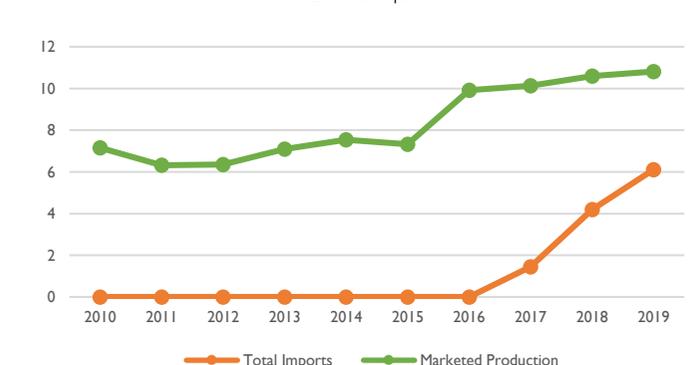
Graph 5.3.2.1. Iraq: Natural Gas Annual Production
2010 - 2019 | Bcm



Graph 5.3.3.1. Iraq: Natural Gas Annual Domestic Consumption
2010 - 2019 | Bcm



Graph 5.3.3.2. Iraq: Natural Gas Trade and Marketed Production
2010 - 2019 | Bcm



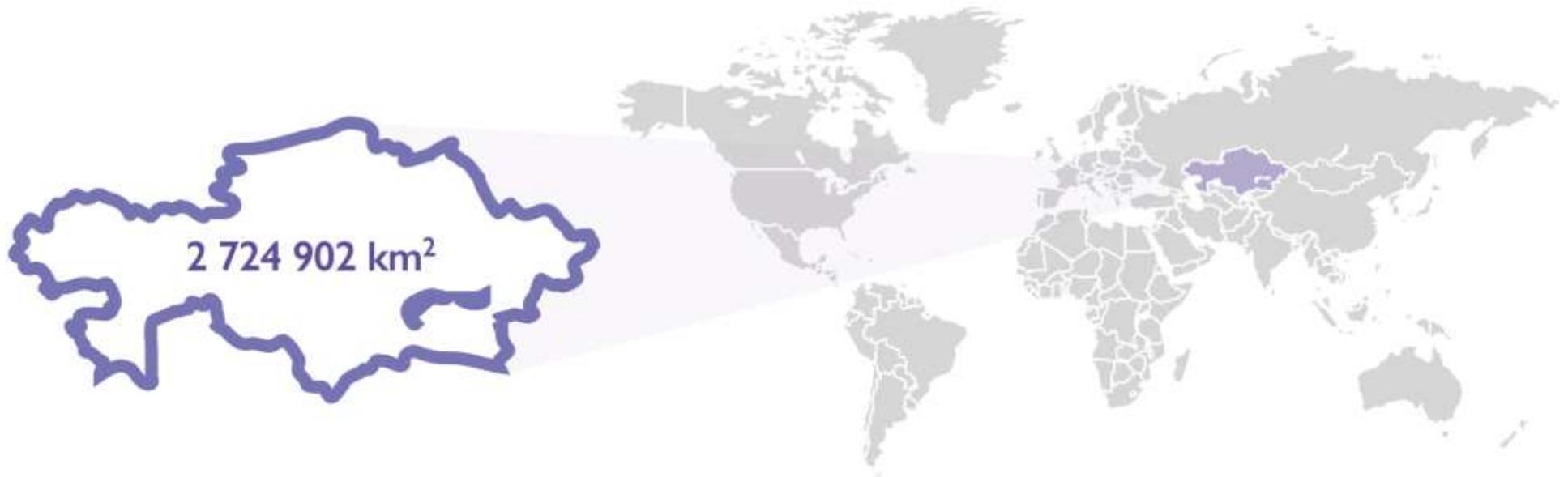
5.3.4 Transport and Plants

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	Under Construction	NA	Import	NA	NA	NA



Republic of
KAZAKHSTAN



Population:
18 513 930



Capital:
Astana



Continent:
Asia



Currency:
Kazakhstani
Tenge



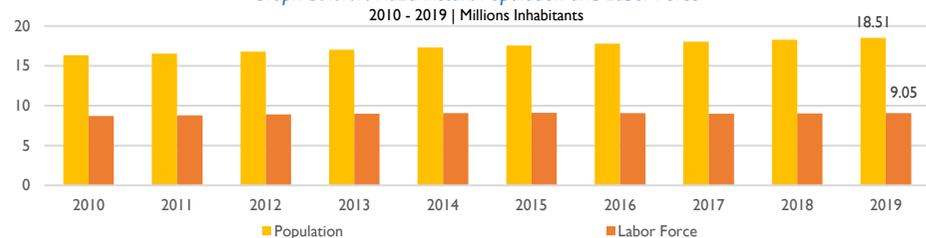
Time Zone:
Oral,Alma-Ata
GMT+6 (Astana)

5.4.I Macroeconomics

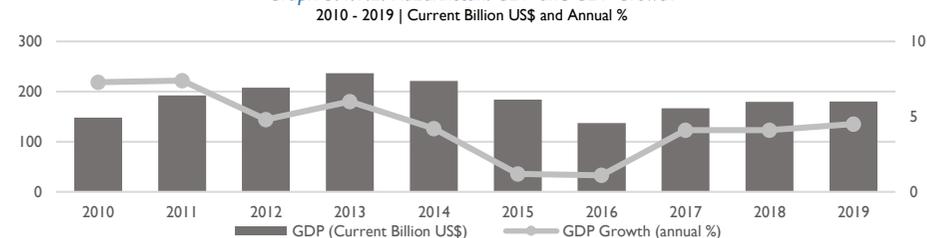
5.4.I.1 Kazakhstan Macroeconomic Indicators

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Population (Inhabitants)	16,321,872	16,557,201	16,792,089	17,035,550	17,288,285	17,542,806	17,794,055	18,037,776	18,276,499	18,513,930
Labor Force (Inhabitants)	8,721,454	8,808,695	8,893,173	8,972,345	9,061,748	9,116,395	9,070,629	9,003,750	9,030,838	9,053,149
GDP (Current Billion US\$)	148.05	192.63	208.00	236.63	221.42	184.39	137.28	166.81	179.34	180.16
GDP Growth (Annual %)	7.30	7.40	4.80	6.00	4.20	1.20	1.10	4.10	4.10	4.50
GDP per Capita (Current US\$)	9,070.49	11,634.00	12,386.70	13,890.63	12,807.26	10,510.77	7,714.84	9,247.58	9,812.60	9,731.15
Exports of Goods and Services (Current Billion US\$)	65.50	89.50	91.75	91.38	87.11	52.58	43.71	54.04	67.48	65.83
Exports of Goods and Services (% of GDP)	44.24	46.46	44.11	38.62	39.34	28.52	31.84	32.40	37.63	36.54
Imports of Goods and Services (Current Billion US\$)	44.26	51.34	61.60	63.40	56.75	45.24	39.08	40.75	46.45	50.25
Imports of Goods and Services (% of GDP)	29.89	26.65	29.61	26.79	25.63	24.53	28.47	24.43	25.90	27.89
Inflation Consumer Prices (Annual %)	0.00	0.00	5.10	5.85	6.71	6.67	14.55	7.44	6.02	5.25
Energy Use (kg of Oil Equivalent per Capita)	4,234.85	4,670.82	4,398.94	4,786.59	4,434.64	NA	NA	NA	NA	NA
Natural Gas Use (Scm per Capita)	706.82	758.97	771.20	793.05	867.89	886.29	888.50	927.72	1,039.25	971.64

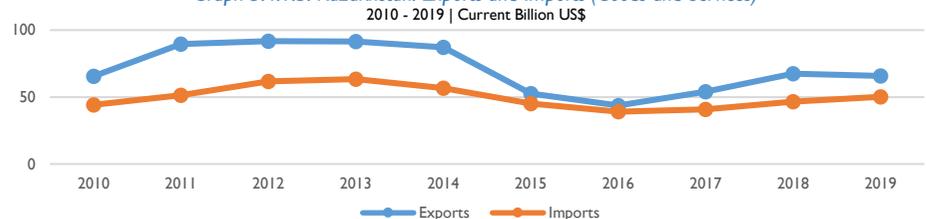
Graph 5.4.I.1.1. Kazakhstan: Population and Labor Force



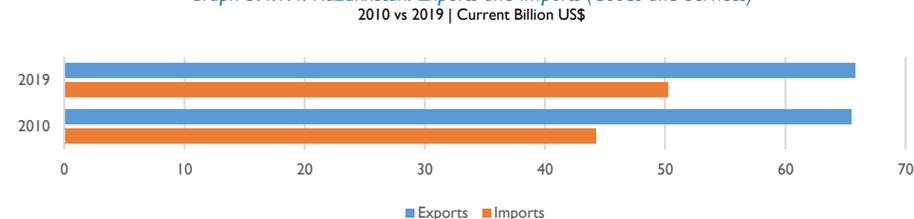
Graph 5.4.I.1.2. Kazakhstan: GDP and GDP Growth



Graph 5.4.I.1.3. Kazakhstan: Exports and Imports (Goods and Services)



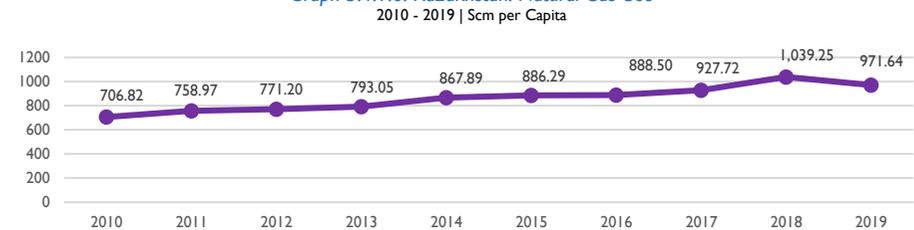
Graph 5.4.I.1.4. Kazakhstan: Exports and Imports (Goods and Services)



Graph 5.4.I.1.5. Kazakhstan: Inflation (Consumer Prices)



Graph 5.4.I.1.6. Kazakhstan: Natural Gas Use



5.4.2 Reserves and Production

Table 5.4.2.1 Proven Natural Gas Reserves (Bcm)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Proven Natural Gas Reserves	1,950	1,950	1,939	1,929	1,918	1,907	1,898	1,865	1,830	1,830

Table 5.4.2.2 Natural Gas Production (Bcm)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Gross Production	37.88	38.08	38.06	40.60	42.02	43.70	44.51	46.81	48.80	49.73
Marketed Production	20.40	20.09	19.75	20.95	21.68	21.97	22.94	23.41	24.69	24.17
Reinjection	11.80	11.50	11.80	12.25	12.75	13.50	13.65	14.70	15.51	17.21
Flaring	1.90	2.50	2.56	2.15	2.15	2.30	1.90	1.80	1.60	1.50
Other Losses	3.78	3.99	3.95	5.25	5.44	5.93	6.02	6.90	7.00	6.85

5.4.3 Domestic Consumption and Trade

Table 5.4.3.1 Domestic Gas Consumption (Bcm)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Totals	11.54	12.57	12.95	13.51	15.00	15.55	15.81	16.73	18.99	17.99

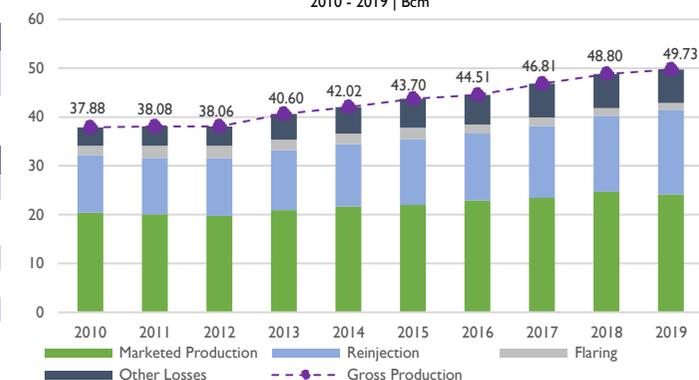
Table 5.4.3.2 Historical Trade: Natural Gas Exports (Bcm)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Pipeline	11.77	11.36	11.15	11.60	10.87	12.26	12.48	14.22	17.57	17.84
Totals	11.77	11.36	11.15	11.60	10.87	12.26	12.48	14.22	17.57	17.84

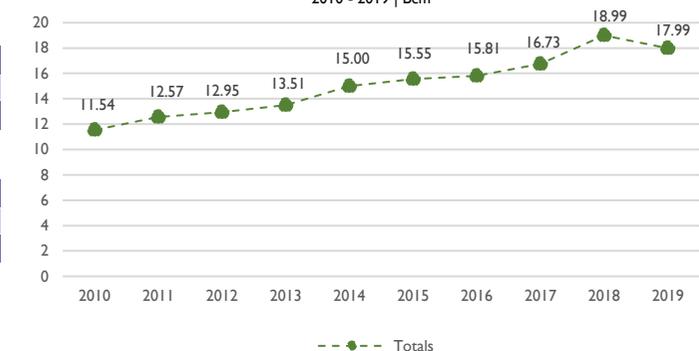
Table 5.4.3.3 Historical Trade: Natural Gas Imports (Bcm)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Pipeline	5.69	5.20	3.93	5.28	4.84	4.70	5.73	5.70	7.24	7.36
Totals	5.69	5.20	3.93	5.28	4.84	4.70	5.73	5.70	7.24	7.36

Graph 5.4.2.1. Kazakhstan: Natural Gas Annual Production
2010 - 2019 | Bcm



Graph 5.4.3.1. Kazakhstan: Natural Gas Annual Domestic Consumption
2010 - 2019 | Bcm



Graph 5.4.3.2. Kazakhstan: Natural Gas Trade and Marketed Production
2010 - 2019 | Bcm



5.4.4 Transport and Plants

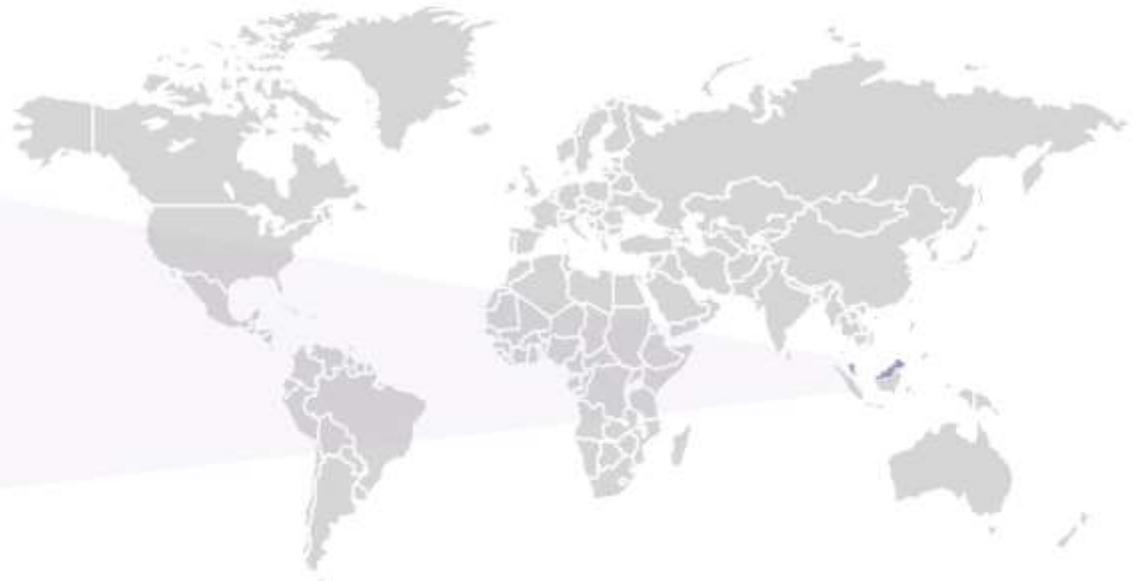
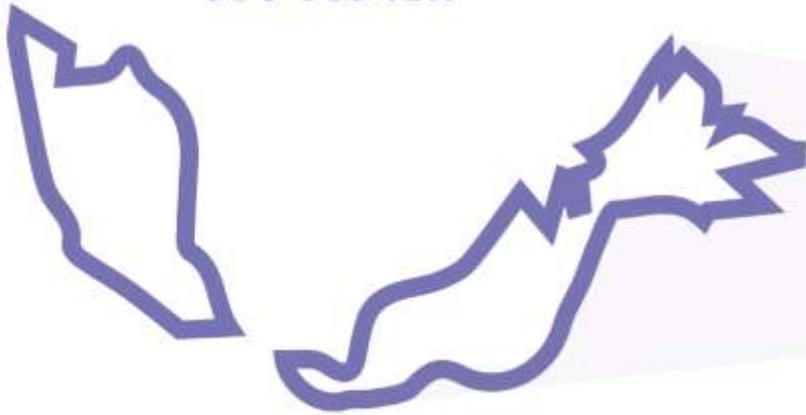
5.4.4.1 Natural Gas Export Pipelines

Pipeline	Connection			Owner(s)	Operator(s)	Status	Capacity (Bcm/year)	Type	Start Year	Length (km)	Diameter (Inches)
	From	To	Via								
Bukhara–Tashkent– Bishkek–Almaty	Uzbekistan	Kazakhstan	-	Uzbekneftegas, KyrKazGas, KazTransGas	Uzbekneftegas, KyrKazGas, KazTransGas	Operational	22.0	Import	1971	684	40
Central Asia Center (CAC)	Turkmenistan	Kazakhstan	-	Gazprom	Gazprom	Operational	44.0	Import	1969/ 1988	2,000	30/50



MALAYSIA

330 803 km²



Population:
31 949 777



Capital:
Kuala Lumpur



Continent:
Asia



Currency:
Ringgit Malaysia
RM



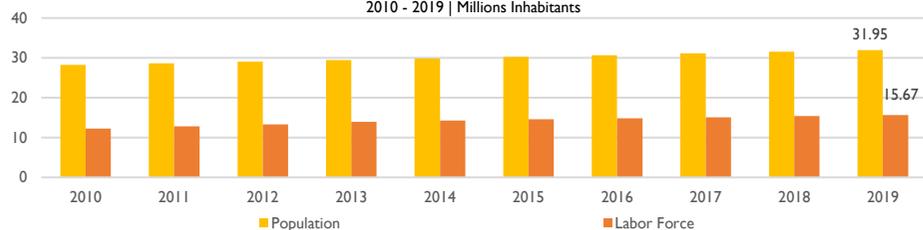
Time Zone:
Malaysia
GMT+8

5.5.1 Macroeconomics

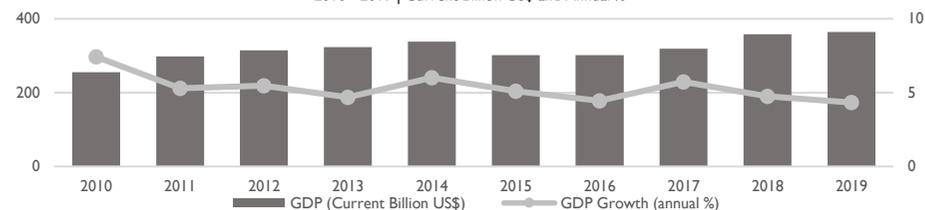
5.5.1.1 Malaysia Macroeconomic Indicators

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Population (Inhabitants)	28,208,035	28,650,955	29,068,159	29,468,872	29,866,559	30,270,962	30,684,804	31,105,028	31,528,585	31,949,777
Labor Force (Inhabitants)	12,266,013	12,823,341	13,336,103	13,939,869	14,282,710	14,612,026	14,851,647	15,114,465	15,381,536	15,673,198
GDP (Current Billion US\$)	255.02	297.95	314.44	323.28	338.06	301.35	301.26	318.96	358.58	364.70
GDP Growth (Annual %)	7.42	5.29	5.47	4.69	6.01	5.09	4.45	5.74	4.74	4.33
GDP per Capita (Current US\$)	9,040.57	10,399.37	10,817.44	10,970.12	11,319.08	9,955.24	9,817.74	10,254.23	11,373.23	11,414.84
Exports of Goods and Services (Current Billion US\$)	221.69	254.02	249.35	244.49	249.47	209.29	201.16	223.42	246.55	238.30
Exports of Goods and Services (% of GDP)	86.93	85.26	79.30	75.63	73.79	69.45	66.78	70.05	68.76	65.34
Imports of Goods and Services (Current Billion US\$)	181.10	207.62	215.53	216.89	218.11	186.60	181.13	201.50	221.41	210.62
Imports of Goods and Services (% of GDP)	71.01	69.68	68.54	67.09	64.52	61.92	60.12	63.17	61.75	57.75
Inflation Consumer Prices (Annual %)	1.62	3.17	1.66	2.11	3.14	2.10	2.09	3.87	0.88	0.66
Energy Use (kg of Oil Equivalent per Capita)	2,601.45	2,670.65	2,678.53	2,979.65	3,003.46	NA	NA	NA	NA	NA
Natural Gas Use (Scm per Capita)	1,136.54	1,086.83	1,085.40	1,147.06	1,195.90	1,081.56	1,076.74	1,079.39	1,118.23	1,152.96

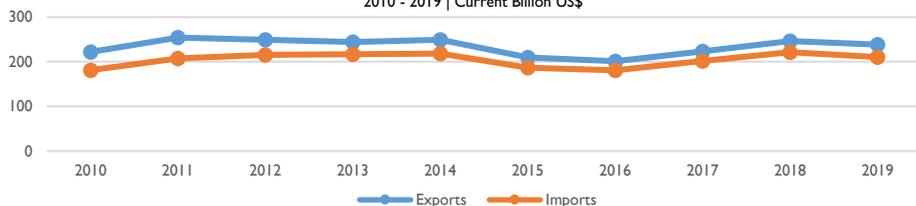
Graph 5.5.1.1. Malaysia: Population and Labor Force
2010 - 2019 | Millions Inhabitants



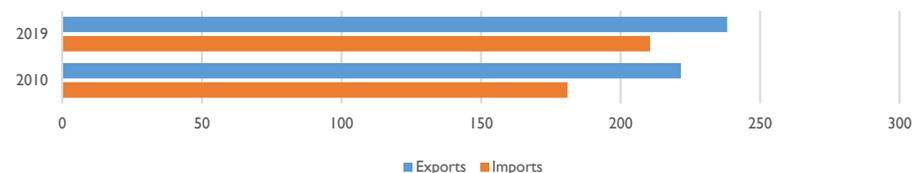
Graph 5.5.1.2. Malaysia: GDP and GDP Growth
2010 - 2019 | Current Billion US\$ and Annual %



Graph 5.5.1.3. Malaysia: Exports and Imports (Goods and Services)
2010 - 2019 | Current Billion US\$



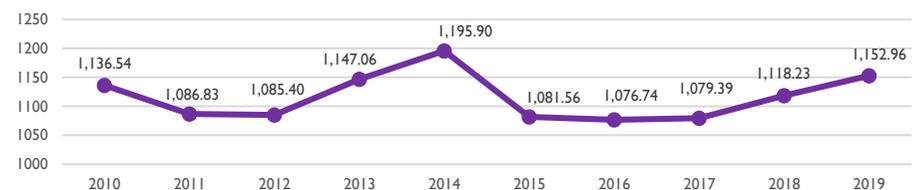
Graph 5.5.1.4. Malaysia: Exports and Imports (Goods and Services)
2010 vs 2019 | Current Billion US\$



Graph 5.5.1.5. Malaysia: Inflation (Consumer Prices)
2010 - 2019 | Annual %



Graph 5.5.1.6. Malaysia: Natural Gas Use
2010 - 2019 | Scm per Capita



5.5.2 Reserves and Production

Table 5.5.2.1 Proven Natural Gas Reserves (Bcm)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Proven Natural Gas Reserves	2,507	2,547	2,607	2,782	2,849	2,842	2,470	2,346	2,290	2,217

Table 5.5.2.2 Natural Gas Production (Bcm)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Gross Production	76.77	76.42	76.98	80.86	81.53	78.99	80.19	82.95	80.23	82.15
Marketed Production	61.27	61.87	61.83	65.71	66.28	64.19	65.09	67.70	66.53	68.32
Reinjection	9.30	8.15	8.65	8.70	8.60	8.40	8.50	8.35	7.30	7.20
Flaring	1.20	1.30	1.30	1.25	1.50	1.50	1.50	1.40	1.10	1.20
Other Losses	5.00	5.10	5.20	5.20	5.15	4.90	5.10	5.50	5.30	5.43

5.5.3 Domestic Consumption and Trade

Table 5.5.3.1 Domestic Gas Consumption (Bcm)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Totals	32.06	31.14	31.55	33.80	35.72	32.74	33.04	33.57	35.26	36.84

Table 5.5.3.2 Historical Trade: Natural Gas Exports

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	
Pipeline	1.45	0.03	1.64	2.30	1.84	1.56	1.70	1.50	1.50	1.47	
LNG	Bcm*	30.29	31.28	30.98	33.36	33.19	32.94	32.47	35.26	32.15	34.09
	MMT	22.27	23.00	22.78	24.53	24.40	24.22	23.87	25.93	23.64	25.06
Totals (Bcm)	31.74	31.31	32.62	35.66	35.03	34.50	34.17	36.76	33.65	35.56	

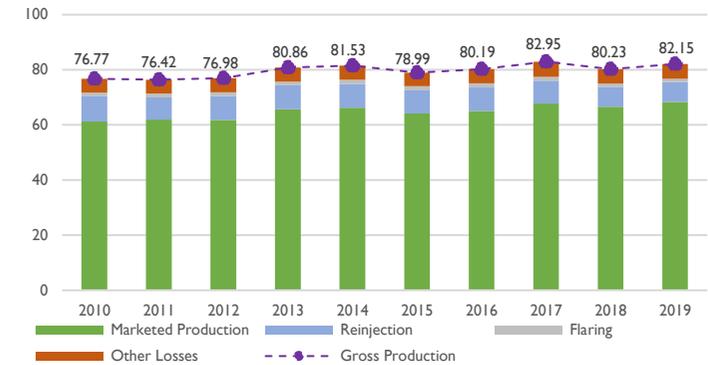
* Gas equivalent

Table 5.5.3.3 Historical Trade: Natural Gas Imports

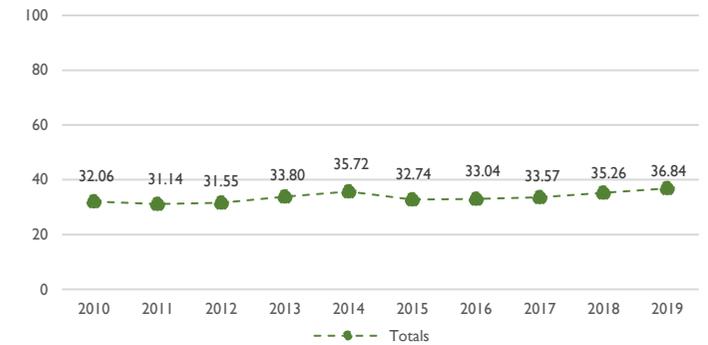
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Pipeline	2.94	1.99	2.34	1.75	2.30	1.10	0.57	0.71	0.61	0.62
LNG	Bcm*	0.00	0.00	0.00	2.00	2.16	1.94	1.55	1.77	3.45
	MMT	0.00	0.00	0.00	1.47	1.59	1.43	1.42	1.30	2.54
Totals (Bcm)	2.94	1.99	2.34	3.75	4.46	3.04	2.12	2.64	2.38	4.07

* Gas equivalent

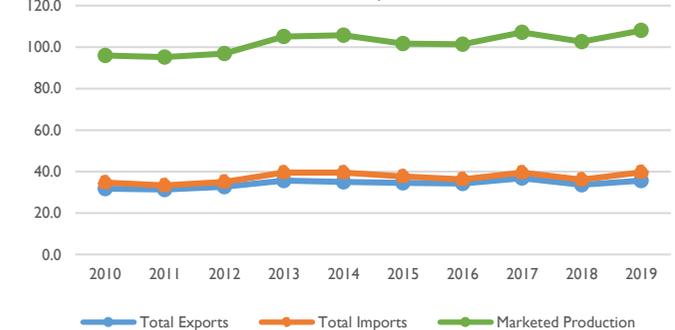
Graph 5.5.2.1. Malaysia: Natural Gas Annual Production 2010 - 2019 | Bcm



Graph 5.5.3.1. Malaysia: Natural Gas Annual Domestic Consumption 2010 - 2019 | Bcm



Graph 5.5.3.2. Malaysia: Natural Gas Trade and Marketed Production 2010 - 2019 | Bcm



5.5.4 Transport and Plants

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								
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

5.5.4.2 LNG Carrier Fleet

Ship Name	Owner(s)	Delivered Year	Size (1000 Scm)
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
Puteri Zamrud Satu	MISC	2004	137.10
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
Sub Totals			2047.60
Total			4434.6

Ship Name	Owner(s)	Delivered Year	Size (1000 Scm)
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
Hull No.2364	MISC	2023	148.10
Hull No.2365	MISC	2023	148.10
Sub Totals			2387.00
Total			4434.6

5.5.4.3 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	Under Construction	2021	Petronas	Petronas



Kingdom of
NORWAY

385 178 km²



Population:
5 347 896



Capital:
Oslo



Continent:
Europe



Currency:
Norwegian
Krone



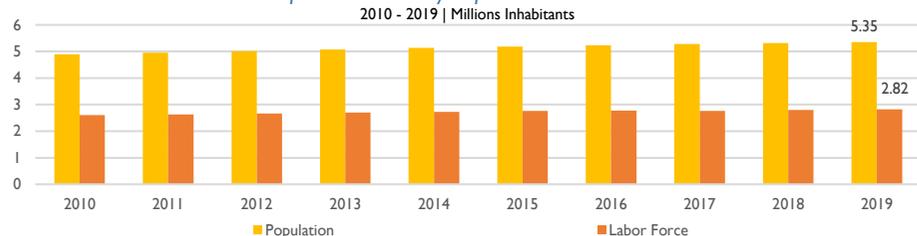
Time Zone:
Central European
GMT+2

5.6.1 Macroeconomics

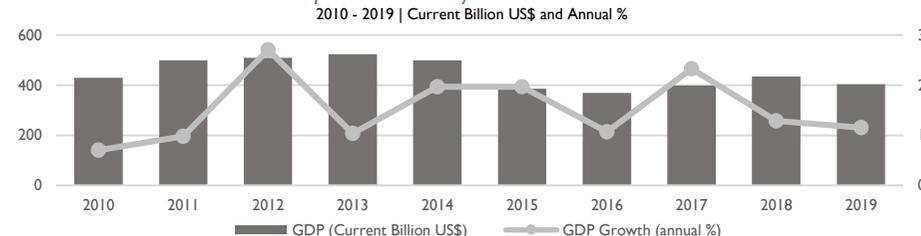
5.6.1.1 Norway Macroeconomic Indicators

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Population (Inhabitants)	4,889,252	4,953,088	5,018,573	5,079,623	5,137,232	5,188,607	5,234,519	5,276,968	5,311,916	5,347,896
Labor Force (Inhabitants)	2,607,331	2,625,969	2,670,882	2,697,657	2,722,748	2,762,074	2,769,807	2,762,942	2,799,958	2,818,011
GDP (Current Billion US\$)	428.76	498.28	509.51	522.76	498.41	385.80	368.82	398.39	434.17	403.34
GDP Growth (Annual %)	0.70	0.98	2.70	1.03	1.97	1.97	1.07	2.32	1.29	1.15
GDP per Capita (Current US\$)	87,693.79	100,600.56	101,524.14	102,913.45	97,019.18	74,355.52	70,459.18	75,496.75	81,734.47	75,419.63
Exports of Goods and Services (Current Billion US\$)	170.47	205.66	207.28	204.91	194.36	145.84	130.78	144.75	166.90	149.03
Exports of Goods and Services (% of GDP)	39.76	41.27	40.68	39.20	39.00	37.80	35.46	36.33	38.44	36.95
Imports of Goods and Services (Current Billion US\$)	122.15	141.51	140.29	148.20	147.86	123.68	123.48	130.80	141.68	141.96
Imports of Goods and Services (% of GDP)	28.49	28.40	27.53	28.35	29.67	32.06	33.48	32.83	32.63	35.20
Inflation Consumer Prices (Annual %)	2.42	1.28	0.70	2.12	2.04	2.17	3.55	1.88	2.76	2.17
Energy Use (kg of Oil Equivalent per Capita)	6,934.59	5,649.70	5,906.14	6,415.99	5,595.65	5,817.64	NA	NA	NA	NA
Natural Gas Use (Scm per Capita)	1,121.02	943.73	887.64	1,002.83	1,118.20	1,016.93	840.51	540.32	529.81	479.45

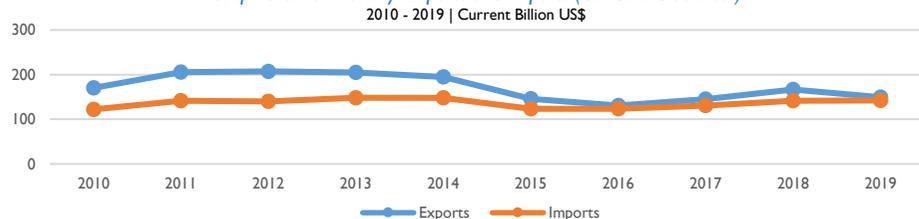
Graph 5.6.1.1. Norway: Population and Labor Force



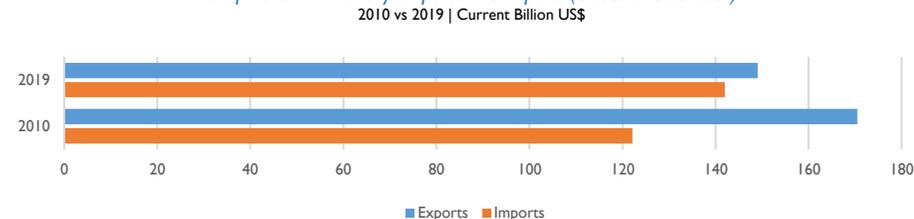
Graph 5.6.1.2. Norway: GDP and GDP Growth



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



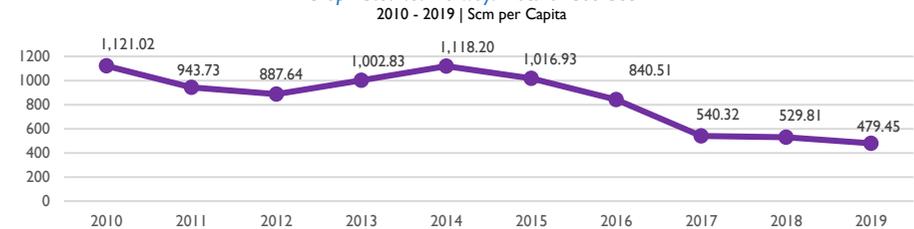
Graph 5.6.1.4. Norway: Exports and Imports (Goods and Services)



Graph 5.6.1.5. Norway: Inflation (Consumer Prices)



Graph 5.6.1.6. Norway: Natural Gas Use



5.6.2 Reserves and Production

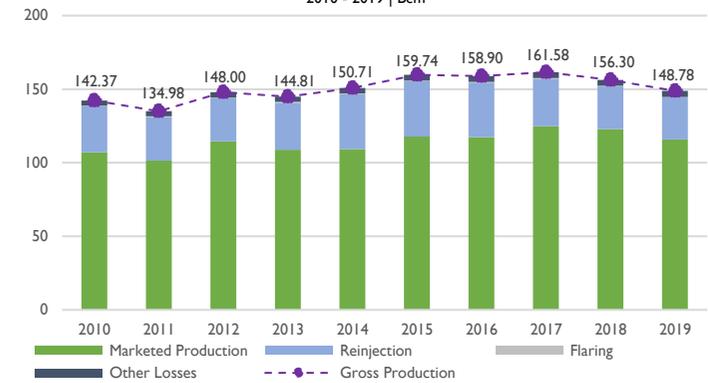
Table 5.6.2.1 Proven Natural Gas Reserves (Bcm)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Proven Natural Gas Reserves	2,762	2,685	2,687	2,654	2,547	2,461	2,388	2,334	2,226	2,165

Table 5.6.2.2 Natural Gas Production (Bcm)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Gross Production	142.37	134.98	148.00	144.81	150.71	159.74	158.90	161.58	156.30	148.78
Marketed Production	106.96	101.49	114.52	108.76	109.18	117.71	117.33	124.76	122.82	115.80
Reinjection	31.30	29.50	29.30	32.00	37.50	37.60	37.20	32.30	29.10	28.60
Flaring	0.51	0.50	0.49	0.53	0.46	0.45	0.48	0.40	0.34	0.32
Other Losses	3.60	3.50	3.69	3.52	3.57	3.98	3.88	4.11	4.03	4.05

Graph 5.6.2.1. Norway: Natural Gas Annual Production 2010 - 2019 | Bcm



5.6.3 Domestic Consumption and Trade

Table 5.6.3.1 Domestic Gas Consumption (Bcm)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Totals	5.48	4.67	4.45	5.09	5.74	5.28	4.40	2.85	2.81	2.56

Table 5.6.3.2 Historical Trade: Natural Gas Exports

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Pipeline	98.78	95.54	108.28	102.94	101.47	108.79	108.48	117.88	113.19	106.84
LNG	Bcm*	4.62	4.40	4.80	3.89	4.84	5.95	5.22	6.75	6.41
	MMT	3.40	3.24	3.53	2.86	3.56	4.14	4.38	3.84	4.71
Totals (Bcm)	103.40	99.94	113.08	106.83	106.31	114.42	114.43	123.09	119.95	113.25

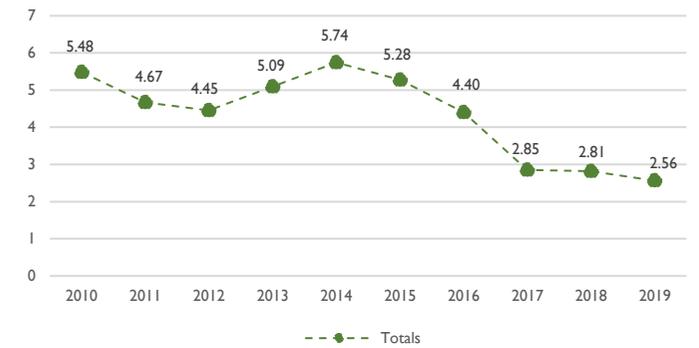
* Gas equivalent

Table 5.6.3.3 Historical Trade: Natural Gas Imports

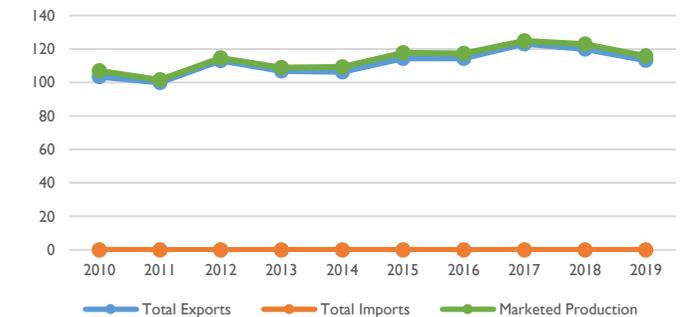
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
LNG	Bcm*	0.006	0.001	0.001	0.000	0.000	0.006	0.004	0.000	0.000
	MMT	0.004	0.001	0.001	0.000	0.000	0.004	0.003	0.000	0.000
Totals (Bcm)	0.006	0.001	0.001	0.000	0.000	0.006	0.004	0.000	0.000	0.000

* Gas equivalent

Graph 5.6.3.1. Norway: Natural Gas Annual Domestic Consumption 2010 - 2019 | Bcm



Graph 5.6.3.2. Norway: Natural Gas Trade and Marketed Production 2010 - 2019 | Bcm



5.6.4 Transport and Plants

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	NA	Gassco AS	Gassco AS	Operational	11.7	Export	1977	440	36
Vesterled	Norway	UK	NA	Gassco AS	Gassco AS	Operational	14.2	Export	1978	360	32
Zeepipe I	Norway	Belgium	NA	Gassco AS	Gassco AS	Operational	15.3	Export	1993	808	40
Europipe I	Norway	Germany	NA	Gassco AS	Gassco AS	Operational	16.8	Export	1995	620	40
Franpipe	Norway	France	NA	Gassco AS	Gassco AS	Operational	20.1	Export	1998	840	42
Europipe II	Norway	Germany	NA	Gassco AS	Gassco AS	Operational	26.0	Export	1999	660	42
Langeled	Norway	UK	NA	Gassco AS	Gassco AS	Operational	26.3	Export	2006	536	44

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



Sultanate of
OMAN

309 500 km²



Population:
4 974 986



Capital:
Muscat



Continent:
Middle East



Currency:
Omani Rial



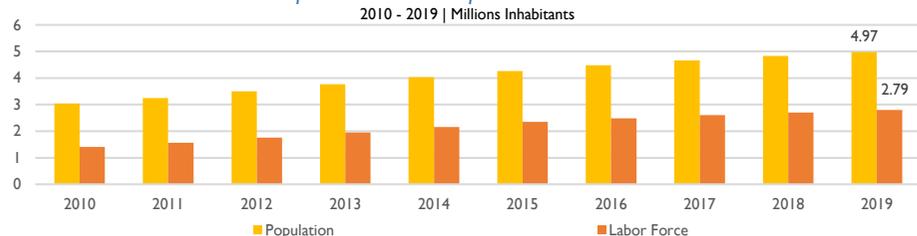
Time Zone:
Gulf
GMT+4

5.7.1 Macroeconomics

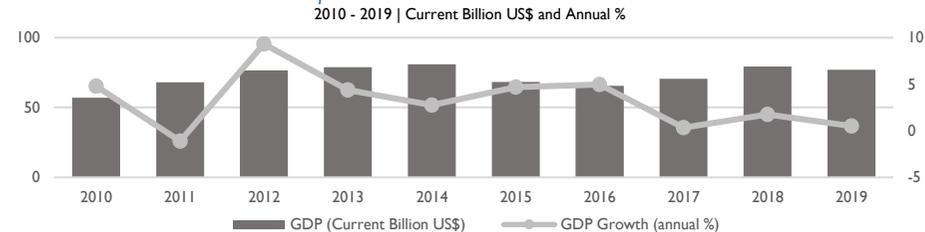
5.7.1.1 Oman Macroeconomic Indicators

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Population (Inhabitants)	3,041,434	3,251,108	3,498,029	3,764,805	4,027,260	4,267,348	4,479,219	4,665,935	4,829,483	4,974,986
Labor Force (Inhabitants)	1,402,133	1,562,303	1,751,335	1,956,038	2,159,684	2,349,315	2,482,965	2,601,786	2,701,563	2,793,208
GDP (Current Billion US\$)	57.05	68.02	76.62	78.78	81.08	68.40	65.48	70.60	79.28	76.98
GDP Growth (Annual %)	4.80	-1.11	9.33	4.37	2.75	4.68	4.96	0.35	1.76	0.50
GDP per Capita (Current US\$)	18,756.98	20,921.15	21,902.58	20,926.55	20,131.92	16,028.75	14,618.88	15,130.94	16,414.89	15,474.03
Exports of Goods and Services (Current Billion US\$)	38.50	49.53	54.82	59.39	56.95	39.08	31.05	36.96	46.18	44.78
Exports of Goods and Services (% of GDP)	67.49	72.83	71.56	75.38	70.25	57.14	47.42	52.36	58.26	58.16
Imports of Goods and Services (Current Billion US\$)	24.17	29.24	34.40	41.83	37.86	36.78	31.21	34.96	35.30	32.74
Imports of Goods and Services (% of GDP)	42.36	42.98	44.90	53.10	46.69	53.77	47.66	49.52	44.53	42.52
Inflation Consumer Prices (Annual %)	3.26	4.04	2.95	1.05	1.02	0.07	1.11	1.60	0.88	0.13
Energy Use (kg of Oil Equivalent per Capita)	6,154.48	6,771.19	6,767.62	6,490.22	6,040.61	NA	NA	NA	NA	NA
Natural Gas Use (Scm per Capita)	5,737.43	5,395.08	6,034.83	5,591.26	5,067.96	5,136.68	4,869.15	4,730.03	4,911.71	4,778.91

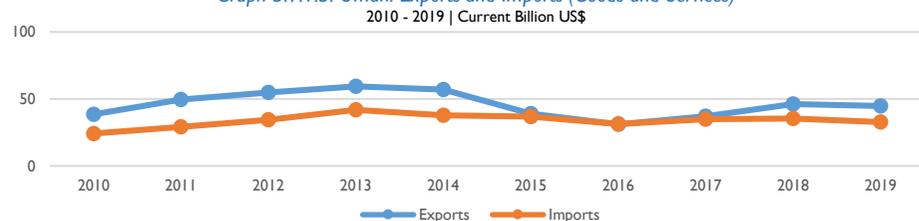
Graph 5.7.1.1. Oman: Population and Labor Force



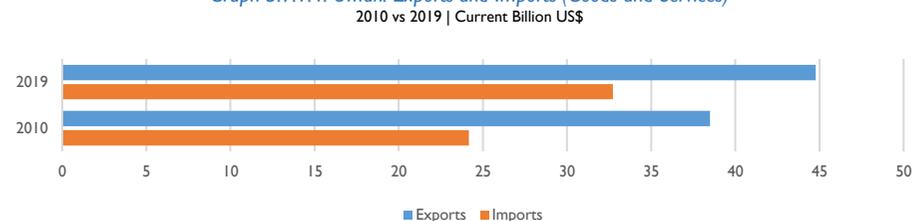
Graph 5.7.1.2. Oman: GDP and GDP Growth



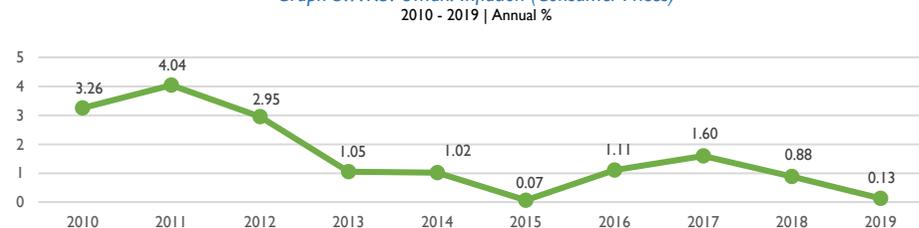
Graph 5.7.1.3. Oman: Exports and Imports (Goods and Services)



Graph 5.7.1.4. Oman: Exports and Imports (Goods and Services)



Graph 5.7.1.5. Oman: Inflation (Consumer Prices)



Graph 5.7.1.6. Oman: Natural Gas Use



5.7.2 Reserves and Production

Table 5.7.2.1 Proven Natural Gas Reserves (Bcm)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Proven Natural Gas Reserves	520	515	505	706	705	705	705	705	677	674

Table 5.7.2.2 Natural Gas Production (Bcm)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Gross Production	33.10	33.39	35.69	37.69	37.42	38.58	39.65	39.66	43.69	45.21
Marketed Production	26.90	27.14	29.72	30.94	30.45	30.66	31.28	32.00	34.92	36.14
Reinjection	2.69	2.96	2.53	2.86	2.85	3.71	3.80	2.90	3.85	3.94
Flaring	1.29	0.92	1.30	1.53	1.57	1.43	1.70	1.70	1.60	1.65
Other Losses	2.22	2.38	2.14	2.36	2.54	2.78	2.87	3.06	3.32	3.48

5.7.3 Domestic Consumption and Trade

Table 5.7.3.1 Domestic Gas Consumption (Bcm)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Totals	17.45	17.54	21.11	21.05	20.41	21.92	21.81	22.07	23.72	23.78

Table 5.7.3.2 Historical Trade: Natural Gas Exports (Bcm)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
LNG	Bcm*	11.43	10.93	10.86	11.28	10.27	10.64	11.15	13.28	13.44
	MMT	8.40	8.04	7.99	8.29	7.55	7.82	8.20	9.76	9.88
Totals (Bcm)	11.43	10.93	10.86	11.28	10.27	10.64	11.15	13.28	13.44	

* Gas equivalent

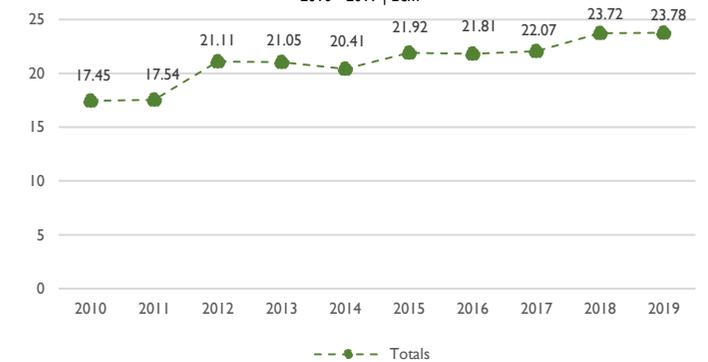
Table 5.7.3.3 Historical Trade: Natural Gas Imports (Bcm)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Pipeline	1.90	1.95	1.95	1.95	1.97	1.99	1.97	1.97	1.97	2.00
Totals	1.90	1.95	1.95	1.95	1.97	1.99	1.97	1.97	1.97	2.00

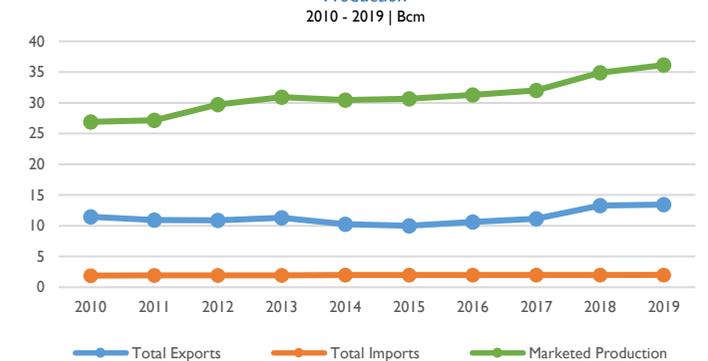
Graph 5.7.2.1. Oman: Natural Gas Annual Production 2010 - 2019 | Bcm



Graph 5.7.3.1. Oman: Natural Gas Annual Domestic Consumption 2010 - 2019 | Bcm



Graph 5.7.3.2. Oman: Natural Gas Trade and Marketed Production 2010 - 2019 | Bcm



5.7.4 Transport and Plants

5.7.4.1 Natural Gas Export Pipelines

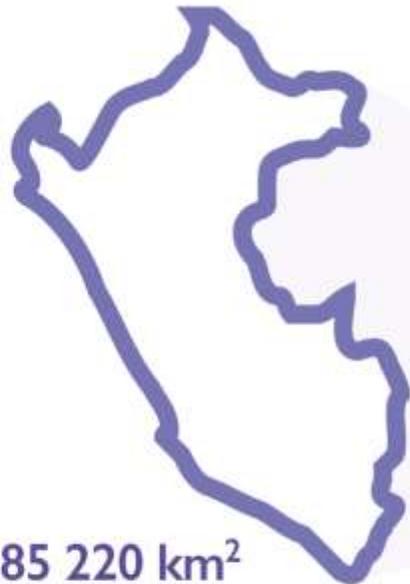
Pipeline	Connection			Owner(s)	Operator(s)	Status	Capacity (Bcm/year)	Type	Start Year	Length (km)	Diameter (Inches)
	From	To	Via								
Dolphin	Qatar	Oman	United Arab Emirates	Dolphin Energy	Dolphin Energy	Operational	33.1	Import	2007	364	48
Asaluye-Sohar	Iran	Oman	NA	NIOC, OGC	NIOC, OGC	Planned	9.9	Import	2020	NA	NA

5.7.4.2 Liquefaction Plants

Plant	Liquefaction (No. of Trains)	Total Capacity (MTPA)	Status	Start Year	Owner(s)	Operator(s)
Qalhat	3	10.8	Operational	2000	Oman LNG	Oman LNG



Republic of
PERU



1 285 220 km²



Population:
32 510 453



Capital:
Lima



Continent:
South
America



Currency:
Peruvian Sol



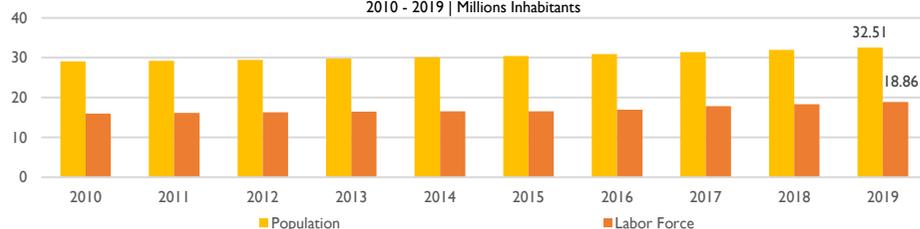
Time Zone:
Peru
GMT-5

5.8.1 Macroeconomics

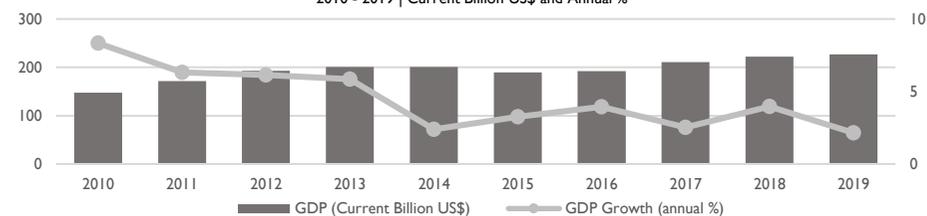
5.8.1.1 Peru Macroeconomic Indicators

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Population (Inhabitants)	29,027,674	29,264,318	29,506,788	29,773,987	30,090,359	30,470,734	30,926,032	31,444,297	31,989,256	32,510,453
Labor Force (Inhabitants)	16,008,776	16,126,917	16,335,923	16,464,314	16,558,647	16,583,446	16,965,614	17,810,899	18,346,713	18,864,899
GDP (Current Billion US\$)	147.53	171.76	192.65	201.18	200.79	189.81	191.90	211.01	222.04	226.85
GDP Growth (Annual %)	8.33	6.33	6.14	5.85	2.38	3.25	3.95	2.52	3.98	2.15
GDP per Capita (Current US\$)	5,082.35	5,869.32	6,528.97	6,756.75	6,672.88	6,229.10	6,205.00	6,710.51	6,941.24	6,977.70
Exports of Goods and Services (Current Billion US\$)	41.05	52.39	52.88	49.91	45.39	40.40	43.37	52.16	56.35	54.86
Exports of Goods and Services (% of GDP)	27.83	30.50	27.45	24.81	22.61	21.29	22.60	24.72	25.38	24.19
Imports of Goods and Services (Current Billion US\$)	35.18	43.77	48.49	50.25	48.68	45.32	43.73	48.10	52.26	52.03
Imports of Goods and Services (% of GDP)	23.85	25.49	25.17	24.98	24.25	23.88	22.79	22.79	23.54	22.94
Inflation Consumer Prices (Annual %)	1.53	3.37	3.66	2.81	3.24	3.55	3.59	2.80	1.32	2.14
Energy Use (kg of Oil Equivalent per Capita)	643.07	649.26	692.95	684.15	790.22	NA	NA	NA	NA	NA
Natural Gas Use (Scm per Capita)	189.13	195.12	224.02	235.78	254.57	251.72	288.99	238.20	241.50	255.30

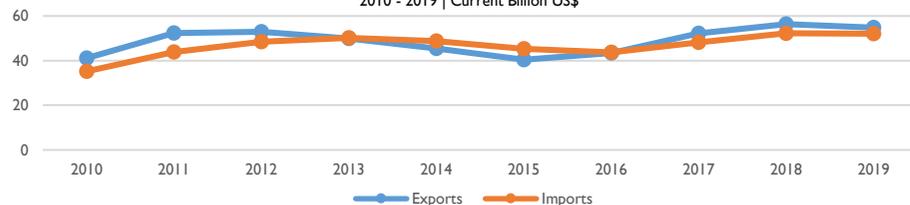
Graph 5.8.1.1. Peru: Population and Labor Force
2010 - 2019 | Millions Inhabitants



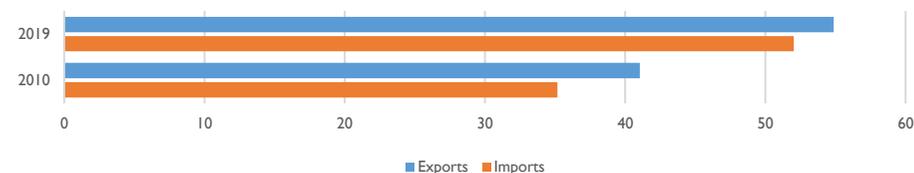
Graph 5.8.1.2. Peru: GDP and GDP Growth
2010 - 2019 | Current Billion US\$ and Annual %



Graph 5.8.1.3. Peru: Exports and Imports (Goods and Services)
2010 - 2019 | Current Billion US\$



Graph 5.8.1.4. Peru: Exports and Imports (Goods and Services)
2010 vs 2019 | Current Billion US\$



Graph 5.8.1.5. Peru: Inflation (Consumer Prices)
2010 - 2019 | Annual %



Graph 5.8.1.6. Peru: Natural Gas Use
2010 - 2019 | Scm per Capita



5.8.2 Reserves and Production

Table 5.8.2.1 Proven Natural Gas Reserves (Bcm)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Proven Natural Gas Reserves	353	359	435	426	414	399	456	365	300	300

Table 5.8.2.2 Natural Gas Production (Bcm)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Gross Production	13.90	14.66	15.96	16.43	18.65	17.19	19.68	18.44	17.11	18.07
Marketed Production	7.23	11.54	11.99	12.43	13.16	12.69	14.07	12.99	12.74	13.55
Reinjection	5.32	2.32	2.87	3.00	5.14	4.20	5.20	5.10	4.10	4.20
Flaring	0.33	0.16	0.15	0.10	0.21	0.10	0.20	0.14	0.11	0.11
Other Losses	1.02	0.64	0.94	0.90	0.14	0.20	0.21	0.21	0.15	0.21

5.8.3 Domestic Consumption and Trade

Table 5.8.3.1 Domestic Gas Consumption (Bcm)

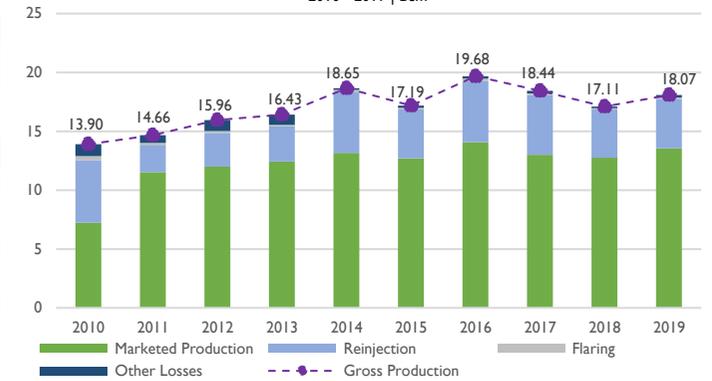
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Totals	5.49	5.71	6.61	7.02	7.66	7.67	8.94	7.49	7.73	8.30

Table 5.8.3.2 Historical Trade: Natural Gas Exports

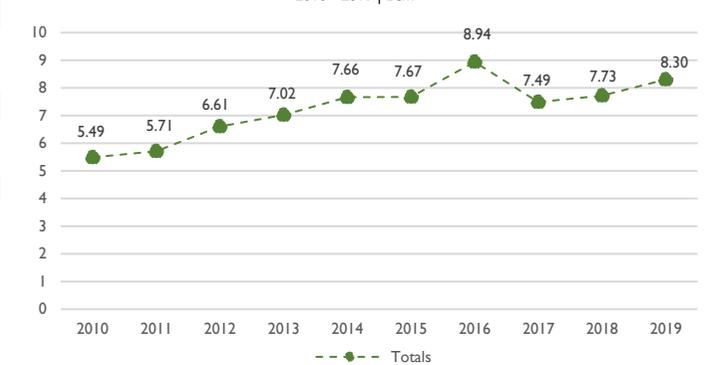
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
LNG	Bcm*	1.74	5.64	5.32	5.18	5.24	4.83	5.72	4.70	5.20
	MMT	1.28	4.15	3.91	3.81	3.85	3.55	4.21	4.04	3.46
Totals (Bcm)	1.74	5.64	5.32	5.18	5.24	4.83	5.72	5.50	4.70	5.20

* Gas equivalent

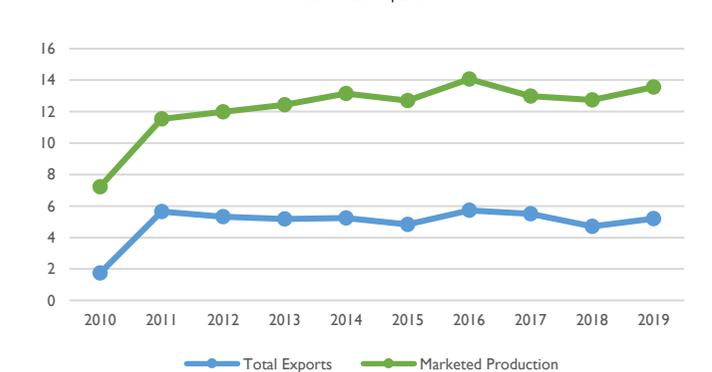
Graph 5.8.2.1. Peru: Natural Gas Annual Production 2010 - 2019 | Bcm



Graph 5.8.3.1. Peru: Natural Gas Annual Domestic Consumption 2010 - 2019 | Bcm



Graph 5.8.3.2. Peru: Natural Gas Trade and Marketed Production 2010 - 2019 | Bcm



5.8.4 Transport and Plants

5.8.4.1 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:
9 770 529



Capital:
Abu Dhabi



Continent:
Middle East



Currency:
United Arab
Emirates Dirham



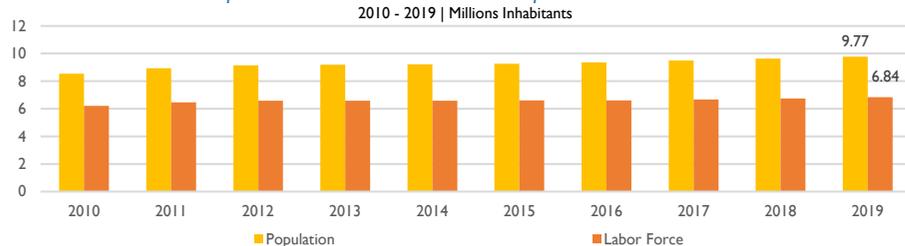
Time Zone:
Gulf
GMT+4

5.9.1 Macroeconomics

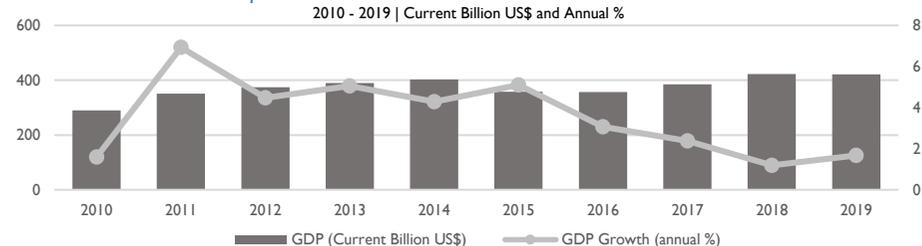
5.9.1.1 United Arab Emirates Macroeconomic Indicators

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Population (Inhabitants)	8,549,988	8,946,777	9,141,596	9,197,910	9,214,175	9,262,900	9,360,980	9,487,203	9,630,959	9,770,529
Labor Force (Inhabitants)	6,220,548	6,473,048	6,576,816	6,583,303	6,572,188	6,600,371	6,612,725	6,676,278	6,752,973	6,840,917
GDP (Current Billion US\$)	289.79	350.67	374.59	390.11	403.14	358.14	357.05	385.61	422.22	421.14
GDP Growth (Annual %)	1.60	6.93	4.48	5.05	4.28	5.11	3.06	2.37	1.19	1.68
GDP per Capita (Current US\$)	33,893.30	39,194.68	40,976.50	42,412.63	43,751.84	38,663.38	38,141.85	40,644.80	43,839.36	43,103.32
Exports of Goods and Services (Current Billion US\$)	238.33	315.87	375.51	392.24	401.37	361.25	360.63	384.04	392.86	389.37
Exports of Goods and Services (% of GDP)	82.24	90.08	100.25	100.55	99.56	100.87	101.00	99.59	93.05	92.46
Imports of Goods and Services (Current Billion US\$)	178.61	215.97	239.75	252.51	277.89	266.28	270.44	290.78	281.54	288.40
Imports of Goods and Services (% of GDP)	61.64	61.59	64.00	64.73	68.93	74.35	75.74	75.41	66.68	68.48
Inflation Consumer Prices (Annual %)	0.88	0.88	0.66	1.10	2.35	4.07	1.62	1.97	3.07	-1.93
Energy Use (kg of Oil Equivalent per Capita)	7,215.22	7,190.97	7,481.19	7,604.84	7,648.40	NA	NA	NA	NA	NA
Natural Gas Use (Scm per Capita)	7,111.12	7,064.00	7,175.99	7,273.39	7,152.02	7,754.59	7,686.16	7,587.06	7,396.98	7,324.76

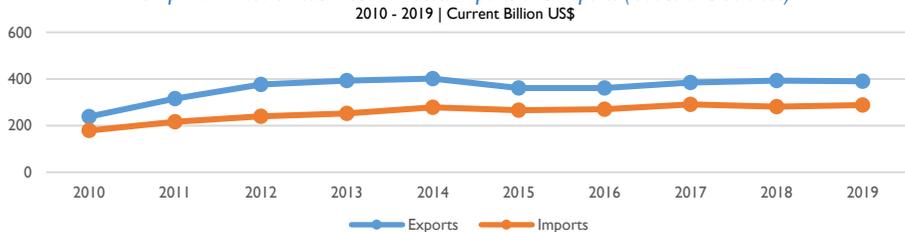
Graph 4.11.1.1. United Arab Emirates: Population and Labor Force



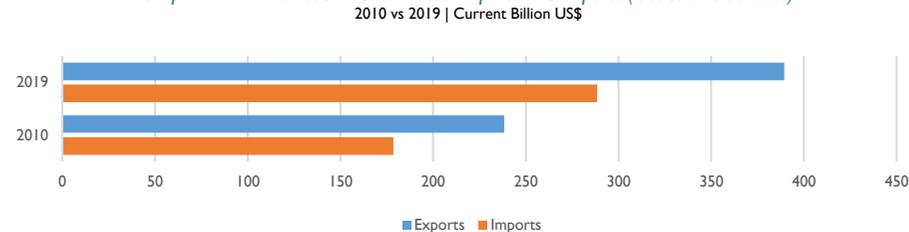
Graph 4.11.1.2. United Arab Emirates: GDP and GDP Growth



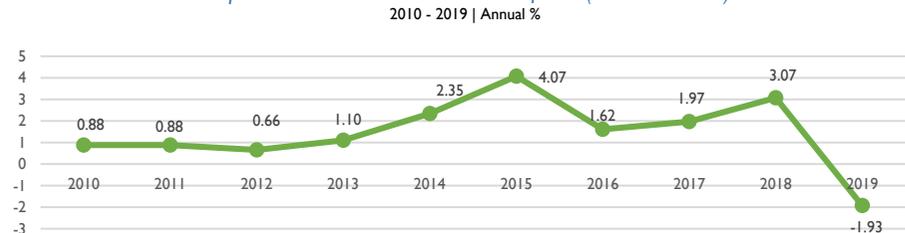
Graph 4.11.1.3. United Arab Emirates: Exports and Imports (Goods and Services)



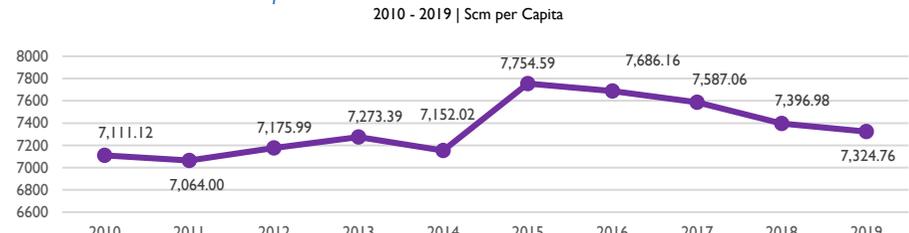
Graph 4.11.1.4. United Arab Emirates: Exports and Imports (Goods and Services)



Graph 4.11.1.5. United Arab Emirates: Inflation (Consumer Prices)



Graph 4.11.1.6. United Arab Emirates: Natural Gas Use



5.9.2 Reserves and Production

Table 5.9.2.1 Proven Natural Gas Reserves (Bcm)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Proven Natural Gas Reserves	6,091	6,091	6,091	6,091	6,091	6,091	6,091	6,091	6,091	6,091

Table 5.9.2.2 Historical Natural Gas Production (Bcm)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Gross Production	79.27	82.43	83.21	84.32	84.31	90.27	91.40	91.63	95.43	93.66
Marketed Production	51.37	52.98	55.61	55.73	55.45	60.04	61.23	54.09	47.96	55.11
Reinjection	22.41	23.97	22.39	23.18	23.40	23.69	23.75	23.78	22.99	23.95
Flaring	0.97	0.98	1.02	1.02	1.02	1.04	1.02	1.14	0.23	0.98
Shrinkage	0.00	0.00	0.00	0.00	0.00	0.40	0.30	7.53	19.01	8.22
Other Losses	4.52	4.50	4.19	4.39	4.44	5.10	5.10	5.10	5.24	5.40

5.9.3 Domestic Consumption and Trade

Table 5.9.3.1 Domestic Gas Consumption (Bcm)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Totals	60.80	63.20	65.60	66.90	65.90	71.83	71.95	71.98	71.24	71.57

Table 5.9.3.2 Historical Trade: Natural Gas Exports

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	
LNG	Bcm*	7.82	7.57	7.37	7.19	7.91	7.98	8.06	7.78	7.08	7.61
	MMT	5.75	5.57	5.42	5.29	5.82	5.87	5.93	5.72	5.21	5.60
Totals (Bcm)	7.82	7.57	7.37	7.19	7.91	7.98	8.06	7.78	7.08	7.61	

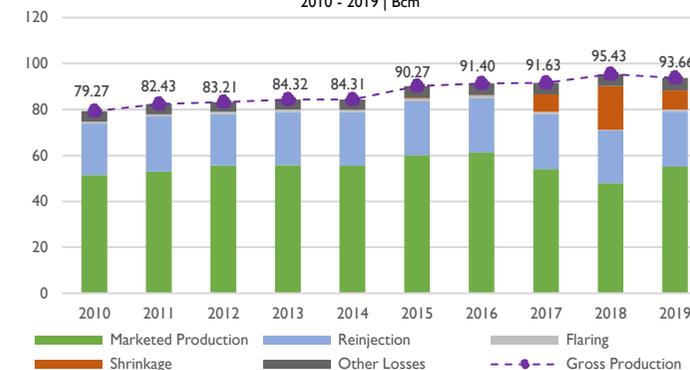
* Gas equivalent

Table 5.9.3.3 Historical Trade: Natural Gas Imports

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	
Pipeline (Bcm)	19.15	19.20	19.22	19.90	20.09	19.75	20.00	21.96	22.34	22.45	
LNG	Bcm*	0.00	0.54	0.08	0.41	0.26	1.04	0.03	1.50	0.05	1.62
	MMT	0.00	0.40	0.06	0.30	0.19	0.76	0.02	1.10	0.04	1.19
Totals (Bcm)	19.15	19.74	19.30	20.31	20.35	20.79	20.03	23.46	22.39	24.07	

* Gas equivalent

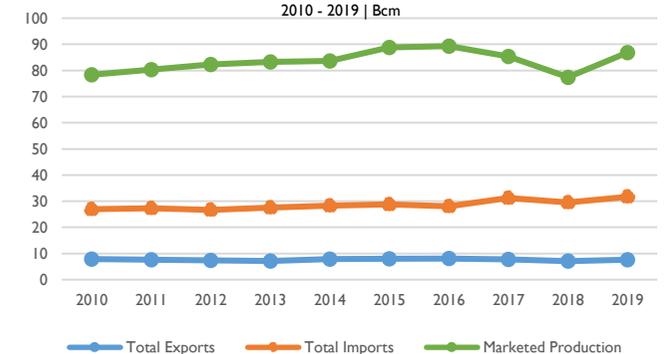
Graph 5.9.2.1. United Arab Emirates: Natural Gas Annual Production 2010 - 2019 | Bcm



Graph 5.9.3.1. United Arab Emirates: Natural Gas Annual Domestic Consumption 2010 - 2019 | Bcm



Graph 5.9.3.2. United Arab Emirates: Natural Gas Trade and Marketed Production 2010 - 2019 | Bcm



5.9.4 Transport and Plants

5.9.4.1 Natural Gas Export Pipelines

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

5.9.4.2 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
Total			1098.39

5.9.4.3 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

5.9.4.4 Regasification Plants

Plant	Total Capacity (MTPA)	Status	Start Year	Owner(s)	Operator(s)
Ruwais (FSRU)	6.9	Operational	2016	NA	GASCO
Jebel Ali (FSRU)	10.3	Operational	2010	NA	DUSUP

GECF Main Deliverables

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

The Bulletin provides 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.

GECF Quarterly Statistical Bulletin (QSB) | Exclusive for GECF Member Countries

The GECF Quarterly Statistical Bulletins (QSB) provides aggregated primary data, gathered by the Secretariat through the GECF Data Exchange Mechanism and complemented with JODI-Gas data for Non-GEFC Countries, portraying the status of Gas Markets and its changes.

GECF Statistical Reports (GSB) | 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 and the participation of GECF in each one, using JODI-Gas data of Non-GEFC Countries.

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 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 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 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.

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



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



www.gecf.org

© 2020 Gas Exporting Countries Forum