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Foreword



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

It is a privilege to introduce the 2nd edition of the GECF Annual Statistical Bulletin (ASB), the Data and Statistics Flagship of GECF and one of its most important publications.

In its second year, the GECF ASB 2018 provides high quality and reliable data, becoming a relevant source of trustworthy information for the benefit of all stakeholders in the Gas Industry, aiming to be a reference tool for analysts, researchers, academics in general, and definitely to policy makers, highlighting the importance of Data Transparency for the healthy evolution of Natural Gas Markets.

The GECF ASB 2018 achieved a comprehensive primary source data set from all 12 GECF Member Countries (Algeria, Bolivia, Equatorial Guinea, Egypt, Iran, Libya, Nigeria, Qatar, Russia, United Arab Emirates, Trinidad and Tobago and Venezuela), a leap forward in terms of confidence for our readers about the presented data, including GECF Observer Members figures as well.

Additionally, it provides the perspective of GECF in the World, within the context of Gas Proven Reserves, Natural Gas Production, Natural Gas Exports, and Domestic Gas Consumption.

The GECF ASB 2018 is the result of a sustained effort over several months among the Special Envoys for Data and Statistics (SEDAS) from GECF Member Countries and the Secretariat, a truly teamwork endeavour. Their dedication and attention to details flourish with this publication through the firm conviction that Gas Defines GECF, Data leads the way.

I would like to specially thank to the colleagues of GECF Secretariat, representatives of GECF Member Countries, and to all who, in one way or another contribute in this breakthrough.

For the general public, this information is available by two distribution channels: printed book, and by a downloadable PDF file from GECF Website.

For representatives of GECF Member Countries, two additional channels are provided: the GECF Mobile Application (available on iOS and Android), and the GECF Data Exchange Centre System. These alternatives allow them to get even more advantages in terms of tools for analysis and expanded data sets.

Yury P. Sentyurin, PhD
Secretary General

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

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Mr. Ali Aliabadi, Special Envoy of the Islamic Republic of Iran.

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

Mr. Carlos Quispe and Yumar Rojas Kooock, Special Envoy and Representative of the Plurinational State of Bolivia.

Ms. Dina Ibrahim Almannae and Ms Hayat Omar Amboul, Special Envoy and Representatives of the United Arab Emirates.

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

Ms. Iryna Ananich, Ms Anastasia Lebedeva and Ms Irina Grechukhina, Special Envoy and Representatives of the Russian Federation.

Mr. 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. Valeria Matamoros, Special Envoy of the Bolivarian Republic of Venezuela.

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 support.

About Gas Exporting Countries Forum



19th Ministerial Meeting of the Gas Exporting Countries Forum (GECF) | 4 October 2017
Moscow, Russian Federation

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

In accordance with the GECF Statute, the organisation aims to support the sovereign rights of its Member Countries over their natural gas resources and their abilities to develop, preserve and use such resources for the benefit of their peoples, through the exchange of experience, views, information and co-ordination in gas-related matters. The Member countries of the Forum are: Algeria, Bolivia, Egypt, Equatorial Guinea, Iran, Libya, Nigeria, Qatar, Russia, Trinidad and Tobago, United Arab Emirates and Venezuela. Azerbaijan, Iraq, Kazakhstan, Norway, Oman and Peru have the status of Observer Members.

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 GECF and its Statute at the 7th Ministerial Meeting in Moscow, Russia in December 2008, with its permanent secretariat based in Doha, Qatar.

Following the GECF Long Term Strategy, the Vision of the GECF 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”. Its 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 first Secretary GECF, HE Leonid Bokhanovskiy, was appointed at the 9th Ministerial Meeting which was held in Doha, Qatar on December 9, 2009.

The second Secretary General, HE S.M. Hossein Adeli, was appointed for his first term at the 15th Ministerial Meeting convened in Tehran, the Islamic Republic of Iran, and was appointed for his second term at the 17th Ministerial Meeting, November 21st 2015 in Tehran, Iran.

At the 19th Ministerial Meeting, HE Yury P. Sentyurin was appointed as the third Secretary General of the Gas Exporting Countries Forum.

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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.
Liquefaction	The process of converting Natural Gas into LNG.	GECF.
Liquefied Natural Gas	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 and shrinkage. 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.
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 available.
Bcm	Billion 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.
MMT	Million Metric Tons.
MTPA	Million Tons per Annum.
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"> From Primary Sources whenever available. Otherwise, complemented with the World Bank data, available until September 23 2018.
Gas Chain figures (Proven 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

- Totals in tables may not add up due to independent rounding.
- Member Countries: Algeria, Bolivia, Egypt, Equatorial Guinea, Iran, Libya, Nigeria, Qatar, Russia, Trinidad and Tobago, United Arab Emirates and Venezuela.
- Observer Countries: Azerbaijan, Iraq, Kazakhstan, Norway, Oman and Peru.



Section I
Executive Summary

I.1 GECF Main Figures

Table I.1.1. GECF Gas Value Chain Figures

		2010	2011	2012	2013	2014	2015	2016	2017	
GECF Figures	Gas Proven Reserves* (Bcm)	139,597	141,208	140,965	140,865	141,183	137,088	137,177	137,475	
	Natural Gas Gross Production (Bcm)	1,873.15	1,900.80	1,933.25	1,942.39	1,946.36	1,966.88	1,976.42	2,075.73	
	Natural Gas Marketed Production (Bcm)	1,441.86	1,474.41	1,510.16	1,517.62	1,508.08	1,535.01	1,546.75	1,632.73	
	Natural Gas Domestic Consumption (Bcm)	910.76	929.46	948.88	955.84	976.49	992.49	996.20	1,013.19	
	Natural Gas Exports (Bcm)	Pipeline	380.22	379.35	390.37	402.27	374.45	393.36	415.65	405.43
		LNG	196.36	223.53	222.24	215.30	215.14	214.84	211.34	222.70
Totals		576.58	602.88	612.62	617.57	589.59	608.20	626.99	628.14	

*The figures of 2015, 2016 and 2017 were calculated with the available data by the time of this publication.

Graph I.1.1. GECF Natural Gas Gross and Marketed Production,
Domestic Consumption and Exports (Total)
2010 - 2017 | Bcm

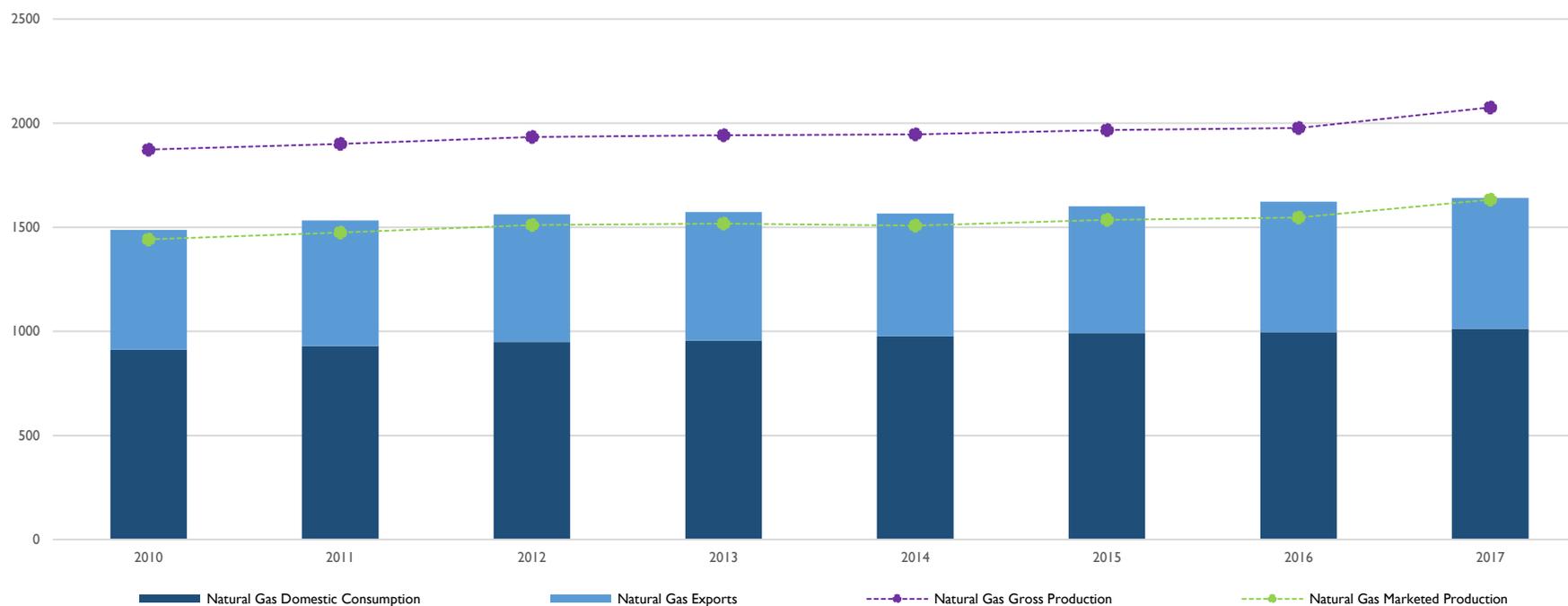
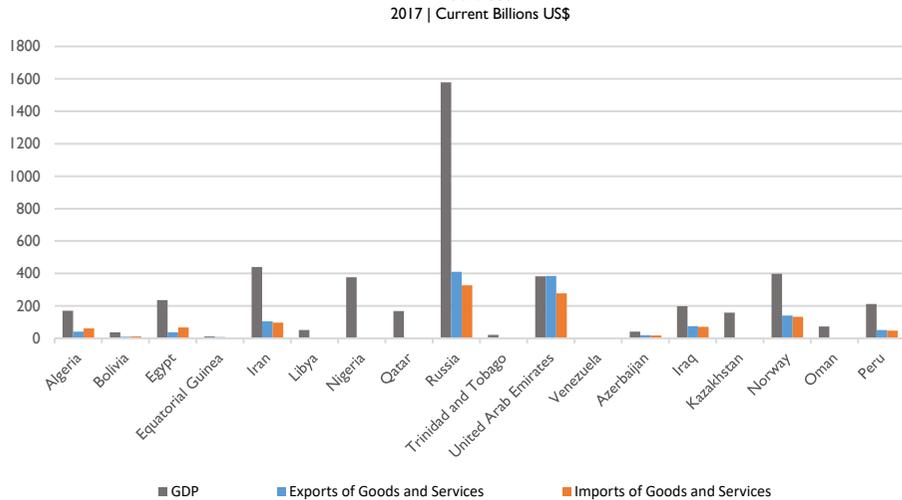


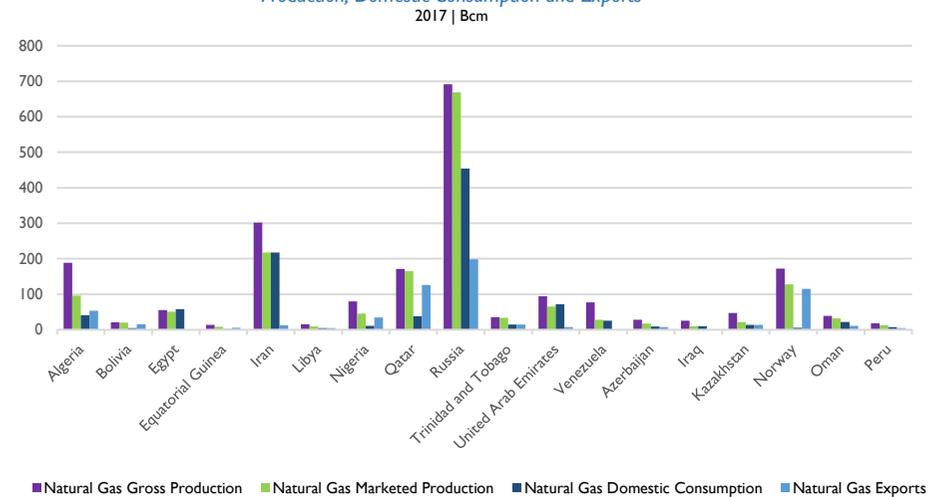
Table 1.1.2. GECF Countries Main Figures in 2017

	Population (inhabitants)	GDP (current billions US\$)	GDP Growth (annual %)	Exports of Goods and Services (current billions US\$)	Imports of Goods and Services (current billions US\$)	Gas Proven Reserves (Bcm)	Natural Gas Gross Production (Bcm)	Natural Gas Marketed Production (Bcm)	Natural Gas Exports (Pipeline, Bcm)	Natural Gas Exports (LNG, Bcm)	Natural Gas Domestic Consumption (Bcm)	
Members												
Algeria	41,318,142	170.37	1.70	40.94	61.91	-	188.74	96.60	37.59	16.41	40.99	
Bolivia	11,051,600	37.51	4.20	9.34	11.93	303	20.91	20.23	15.25	-	4.79	
Egypt	97,553,151	235.37	4.18	38.36	67.05	2,221	55.77	50.71	0.00	1.33	58.16	
Equatorial Guinea	1,267,689	12.49	-3.22	7.06	4.73	47	13.80	8.24	-	5.88	1.58	
Iran	81,162,788	439.51	4.30	104.55	97.95	33,330	301.45	217.80	12.89	-	217.76	
Libya	6,374,616	50.98	26.68	-	-	1,500	15.15	9.40	4.32	0.00	5.08	
Nigeria	190,886,311	375.77	0.81	-	-	5,627	79.49	45.79	0.39	34.33	11.07	
Qatar	2,639,211	167.61	1.60	-	-	24,500	171.40	165.37	21.96	104.23	38.02	
Russia	144,495,044	1,577.52	1.55	410.78	326.37	47,805	691.10	668.94	182.15	15.99	454.05	
Trinidad and Tobago	1,369,125	22.10	-2.34	-	-	-	35.36	33.48	-	14.61	15.02	
United Arab Emirates	9,400,145	382.58	0.79	384.04	277.09	6,091	94.63	65.52	-	7.78	71.98	
Venezuela	31,977,065	-	-	-	-	5,708	76.89	28.29	-	-	25.57	
Observers												
Azerbaijan	9,862,429	40.75	0.10	19.84	17.10	1,277	28.11	17.00	7.84	-	9.38	
Iraq	38,274,618	197.72	-0.78	74.40	71.81	3,700	25.86	10.55	-	-	10.55	
Kazakhstan	18,037,646	159.41	4.00	-	-	1,900	46.93	22.00	13.50	-	14.00	
Norway	5,282,223	398.83	1.92	141.48	131.82	2,314	172.61	128.28	109.54	5.85	5.51	
Oman	4,636,262	72.64	-0.27	-	-	703	39.16	31.52	-	11.39	21.95	
Peru	32,165,485	211.39	2.53	51.29	47.78	450	18.38	13.00	-	4.90	7.74	

Graph 1.1.2. GECF Member, Observer Countries: GDP, Exports and Imports of Good and Services



Graph 1.1.3. GECF Member, Observer Countries: Natural Gas Gross and Marketed Production, Domestic Consumption and Exports





Section 2

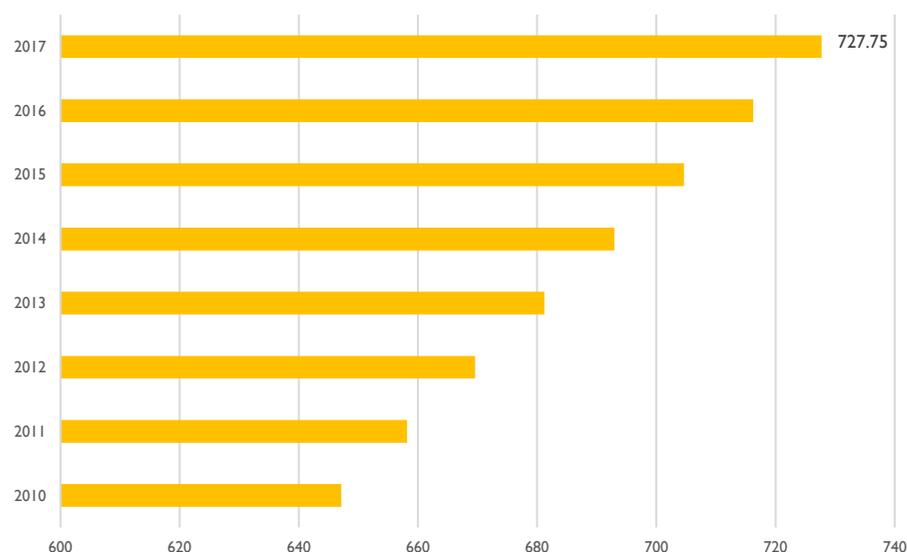
GECF Macroeconomics

2.1 Population

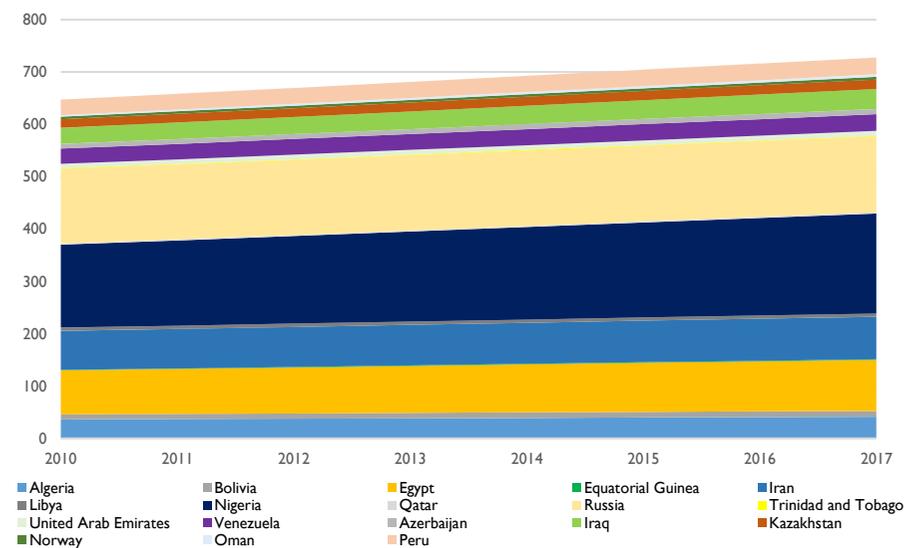
Table 2.1.1 GECF Countries Population (Inhabitants)

	2010	2011	2012	2013	2014	2015	2016	2017
Members								
Algeria	36,117,637	36,819,558	37,565,847	38,338,562	39,113,313	39,871,528	40,606,052	41,318,142
Bolivia	9,918,242	10,078,343	10,239,004	10,400,264	10,562,159	10,724,705	10,887,882	11,051,600
Egypt	84,107,606	85,897,561	87,813,257	89,807,433	91,812,566	93,778,172	95,688,681	97,553,151
Equatorial Guinea	951,104	994,290	1,038,593	1,083,746	1,129,424	1,175,389	1,221,490	1,267,689
Iran	74,567,511	75,491,582	76,453,574	77,435,384	78,411,092	79,360,487	80,277,428	81,162,788
Libya	6,169,140	6,193,501	6,198,258	6,195,970	6,204,108	6,234,955	6,293,253	6,374,616
Nigeria	158,578,261	162,877,076	167,297,284	171,829,303	176,460,502	181,181,744	185,989,640	190,886,311
Qatar	1,779,676	1,952,054	2,109,568	2,250,473	2,374,419	2,481,539	2,569,804	2,639,211
Russia	142,849,449	142,960,868	143,201,676	143,506,911	143,819,666	144,096,870	144,342,396	144,495,044
Trinidad and Tobago	1,328,100	1,334,788	1,341,588	1,348,248	1,354,493	1,360,092	1,364,962	1,369,125
United Arab Emirates	8,270,684	8,672,475	8,900,453	9,006,263	9,070,867	9,154,302	9,269,612	9,400,145
Venezuela	29,028,033	29,463,291	29,893,080	30,317,848	30,738,378	31,155,134	31,568,179	31,977,065
Observers								
Azerbaijan	9,054,332	9,173,082	9,295,784	9,416,801	9,535,079	9,649,341	9,757,812	9,862,429
Iraq	30,762,701	31,727,053	32,776,571	33,883,145	35,006,080	36,115,649	37,202,572	38,274,618
Kazakhstan	16,321,872	16,557,201	16,792,089	17,035,550	17,288,285	17,542,806	17,794,055	18,037,646
Norway	4,889,252	4,953,088	5,018,573	5,079,623	5,137,232	5,190,239	5,234,519	5,282,223
Oman	3,041,460	3,237,268	3,464,644	3,711,481	3,960,925	4,199,810	4,424,762	4,636,262
Peru	29,373,646	29,759,989	30,158,966	30,565,716	30,973,354	31,376,671	31,773,839	32,165,485
Totals	647,108,706	658,143,068	669,558,809	681,212,721	692,951,942	704,649,433	716,266,938	727,753,550

Graph 2.1.1. GECF Member and Observer Countries Population
Totals | 2010 - 2017 | Million Inhabitants



Graph 2.1.2. GECF Member and Observer Countries Population
Per Country | 2010 - 2017 | Million Inhabitants



2.2 GDP

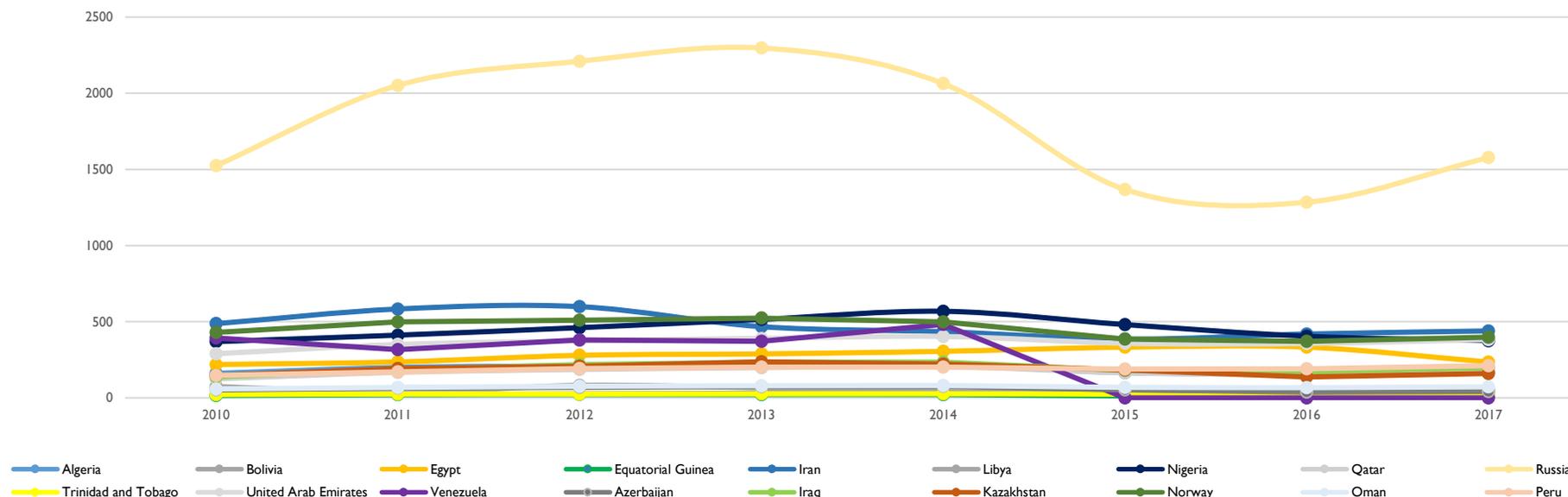
Table 2.2.1 GECF Countries GDP (current billion US\$)

	2010	2011	2012	2013	2014	2015	2016	2017
Members								
Algeria	161.21	200.02	209.06	209.76	213.81	165.87	159.05	170.37
Bolivia	19.65	23.96	27.08	30.66	33.00	33.00	33.94	37.51
Egypt	218.89	236.00	279.37	288.59	305.53	332.70	332.93	235.37
Equatorial Guinea	16.30	21.33	22.39	21.94	21.74	13.18	11.26	12.49
Iran	487.07	583.50	598.85	467.41	434.47	385.87	418.98	439.51
Libya	74.77	34.70	81.87	65.50	41.14	29.27	32.26	50.98
Nigeria	369.06	411.74	460.95	514.97	568.50	481.07	404.65	375.77
Qatar	125.12	167.78	186.83	198.73	206.22	164.64	152.45	167.61
Russia	1,524.92	2,051.66	2,210.26	2,297.13	2,063.66	1,368.40	1,284.73	1,577.52
Trinidad and Tobago	22.16	25.43	25.62	26.58	27.20	24.40	22.32	22.10
United Arab Emirates	289.79	350.67	374.59	390.11	403.14	358.14	357.05	382.58
Venezuela	393.19	316.48	381.29	371.01	482.36	-	-	-
Observers								
Azerbaijan	52.90	65.95	69.68	74.16	75.24	53.07	37.87	40.75
Iraq	138.52	185.75	218.00	234.65	234.65	179.64	171.49	197.72
Kazakhstan	148.05	192.63	208.00	236.63	221.42	184.39	137.28	159.41
Norway	429.13	498.83	510.23	523.50	499.34	386.66	371.08	398.83
Oman	58.64	67.94	76.69	78.94	81.08	68.91	66.82	72.64
Peru	147.53	171.76	192.65	201.22	201.08	189.93	191.64	211.39

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

	2010	2011	2012	2013	2014	2015	2016	2017
Members								
Algeria	4,463.39	5,432.41	5,565.13	5,471.12	5,466.43	4,160.22	3,916.88	4,123.39
Bolivia	1,981.16	2,377.68	2,645.23	2,947.94	3,124.00	3,077.03	3,117.33	3,393.96
Egypt	2,602.48	2,747.48	3,181.44	3,213.39	3,327.75	3,547.71	3,479.28	2,412.73
Equatorial Guinea	17,136.45	21,451.89	21,557.65	20,246.99	19,245.65	11,213.47	9,217.89	9,850.01
Iran	6,531.93	7,729.34	7,832.90	6,036.19	5,540.98	4,862.30	5,219.11	5,415.21
Libya	12,120.56	5,602.55	13,209.14	10,571.85	6,631.53	4,695.27	5,125.68	7,998.03
Nigeria	2,327.32	2,527.94	2,755.30	2,996.96	3,221.68	2,655.16	2,175.67	1,968.56
Qatar	70,306.23	85,948.07	88,564.82	88,304.88	86,852.71	66,346.52	59,324.34	63,505.81
Russia	10,674.99	14,351.21	15,434.57	16,007.09	14,125.91	9,346.62	8,759.04	10,743.10
Trinidad and Tobago	16,683.95	19,053.97	19,098.95	19,713.38	20,081.21	17,941.80	16,352.11	16,145.18
United Arab Emirates	35,037.89	40,434.37	42,086.69	43,315.14	44,443.06	39,122.05	38,517.80	40,698.85
Venezuela	13,545.26	10,741.58	12,755.00	12,237.19	15,692.41	-	-	-
Observers								
Azerbaijan	5,842.81	7,189.69	7,496.29	7,875.76	7,891.31	5,500.31	3,880.74	4,131.62
Iraq	4,502.75	5,854.61	6,651.12	6,925.22	6,703.07	4,974.03	4,609.60	5,165.71
Kazakhstan	9,070.49	11,634.00	12,386.70	13,890.63	12,807.26	10,510.77	7,714.84	8,837.46
Norway	87,770.27	100,711.22	101,668.17	103,059.25	97,199.92	74,498.14	70,890.04	75,504.57
Oman	19,281.00	20,986.08	22,134.80	21,268.84	20,469.14	16,406.71	15,102.38	15,668.37
Peru	5,022.49	5,771.57	6,387.79	6,583.12	6,492.05	6,053.11	6,031.37	6,571.93

Graph 2.2.1. GECF Member and Observer Countries GDP
Per Country | 2010 - 2017 | Current Billion US\$



2.3 Exports & Imports of Goods and Services

Table 2.3.1 Exports of Goods & Services (current billion US\$)

	2010	2011	2012	2013	2014	2015	2016	2017
Members								
Algeria	61.98	77.58	77.12	69.66	64.61	38.46	33.40	40.94
Bolivia	8.09	10.57	12.77	13.52	14.29	10.19	8.31	9.34
Egypt	46.73	48.54	45.81	49.11	43.52	43.86	34.44	38.36
Equatorial Guinea	13.98	16.02	16.10	14.84	14.34	7.47	5.78	7.06
Iran	118.84	149.57	144.50	125.65	100.54	76.18	93.87	104.55
Libya	49.06	19.03	61.10	46.14	19.34	11.13	-	-
Nigeria	93.24	129.00	144.92	92.95	104.80	51.31	37.30	-
Qatar	77.98	121.84	142.88	144.51	140.23	92.29	72.40	-
Russia	445.51	573.99	594.19	592.50	558.28	391.45	330.16	410.78
Trinidad and Tobago	12.11	15.88	13.88	19.74	15.59	11.85	10.11	-
United Arab Emirates	225.27	314.83	375.80	392.57	399.57	361.25	360.63	384.04
Venezuela	112.18	94.76	99.79	91.88	80.52	-	-	-
Observers								
Azerbaijan	28.73	37.21	36.91	35.84	32.55	20.06	17.58	19.84
Iraq	54.60	82.51	96.90	93.10	97.00	62.73	55.77	74.40
Kazakhstan	65.50	89.50	91.75	91.38	87.11	52.58	43.71	-
Norway	170.47	205.66	207.02	204.89	193.66	145.84	126.67	141.48
Oman	38.50	49.42	52.14	56.43	53.57	35.69	27.55	-
Peru	41.05	52.39	52.88	49.91	45.39	40.40	43.00	51.29

Table 2.3.3 Imports of Goods & Services (current billion US\$)

	2010	2011	2012	2013	2014	2015	2016	2017
Members								
Algeria	50.65	57.38	59.61	63.77	68.26	60.62	56.10	61.91
Bolivia	6.74	9.20	10.23	11.39	13.85	12.23	10.83	11.93
Egypt	58.20	58.26	67.93	67.40	69.28	72.07	65.51	67.05
Equatorial Guinea	9.60	8.38	10.02	8.61	8.35	5.56	4.64	4.73
Iran	94.35	102.45	139.20	109.61	93.25	74.37	87.19	97.95
Libya	31.48	15.54	32.54	42.46	37.80	20.68	-	-
Nigeria	64.17	88.38	59.65	66.94	70.78	51.31	46.55	-
Qatar	29.72	43.79	54.69	58.95	64.00	59.27	63.46	-
Russia	322.37	408.78	447.05	468.62	426.06	281.49	263.71	326.37
Trinidad and Tobago	6.89	11.06	13.26	14.07	12.77	11.27	10.64	-
United Arab Emirates	184.22	217.47	242.81	253.22	277.90	266.28	270.44	277.09
Venezuela	69.23	62.33	92.40	109.49	151.45	-	-	-
Observers								
Azerbaijan	10.94	15.88	17.62	19.77	19.72	18.47	16.53	17.10
Iraq	47.21	51.55	63.44	84.50	86.70	73.52	70.14	71.81
Kazakhstan	44.26	51.34	61.60	63.40	56.75	45.24	39.08	-
Norway	122.15	141.51	140.53	148.44	148.72	124.09	123.47	131.82
Oman	24.17	29.24	28.64	35.58	30.94	29.68	23.78	-
Peru	35.18	43.77	48.49	50.25	48.68	45.32	43.73	47.78

Table 2.3.2 Exports of Goods & Services (% of GDP)

	2010	2011	2012	2013	2014	2015	2016	2017
Members								
Algeria	38.44	38.79	36.89	33.21	30.22	23.19	21.00	24.03
Bolivia	41.19	44.09	47.17	44.09	43.29	30.87	24.49	24.90
Egypt	21.35	20.57	16.40	17.02	14.24	13.18	10.35	16.30
Equatorial Guinea	85.76	75.10	71.90	67.65	65.96	56.66	51.31	56.53
Iran	24.40	25.63	24.13	26.88	23.14	19.74	22.40	23.79
Libya	65.60	54.83	74.62	70.43	47.01	38.01	-	-
Nigeria	25.26	31.33	31.44	18.05	18.44	10.67	9.22	-
Qatar	62.32	72.62	76.47	72.72	68.00	56.06	47.49	-
Russia	29.22	27.98	26.88	25.79	27.05	28.61	25.70	26.04
Trinidad and Tobago	54.67	62.46	54.01	74.66	59.54	50.31	48.14	-
United Arab Emirates	77.74	89.78	100.32	100.63	99.12	100.87	101.00	100.38
Venezuela	28.53	29.94	26.17	24.76	16.69	-	-	-
Observers								
Azerbaijan	54.30	56.43	52.97	48.33	43.26	37.79	46.43	48.69
Iraq	39.42	44.42	44.45	39.68	41.34	34.92	32.52	37.63
Kazakhstan	44.24	46.46	44.11	38.62	39.34	28.52	31.84	-
Norway	39.73	41.23	40.57	39.14	38.78	37.72	34.14	35.47
Oman	65.65	72.75	67.99	71.48	66.07	51.79	41.22	-
Peru	27.83	30.50	27.45	24.80	22.57	21.27	22.44	24.26

Table 2.3.4 Imports of Goods & Services (% of GDP)

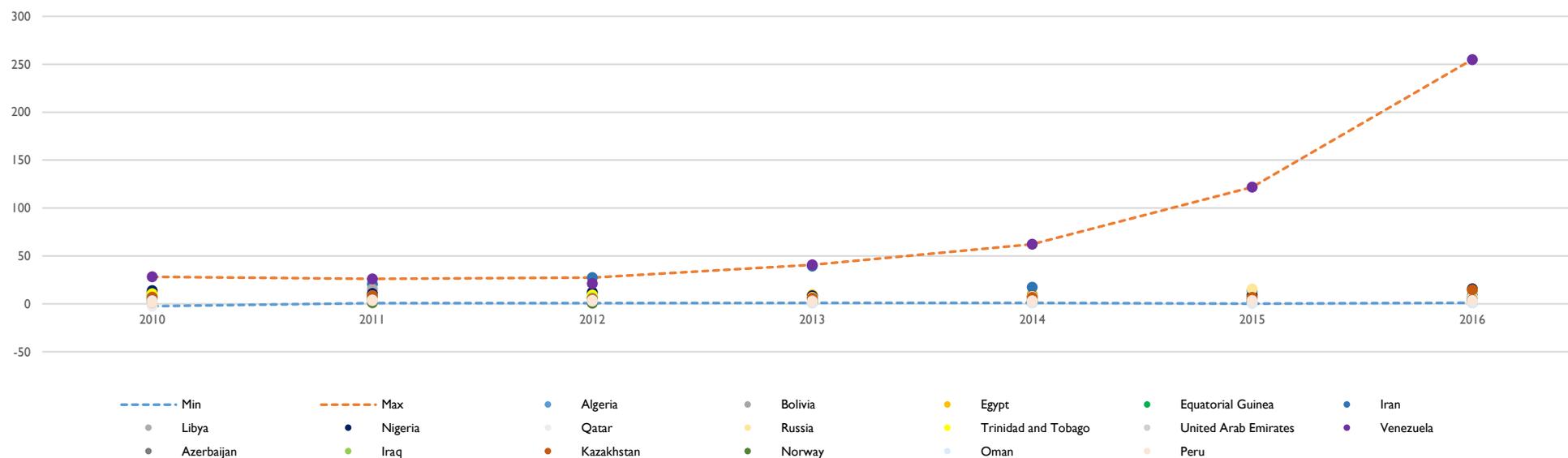
	2010	2011	2012	2013	2014	2015	2016	2017
Members								
Algeria	31.42	28.69	28.51	30.40	31.93	36.55	35.27	36.34
Bolivia	34.32	38.39	37.78	37.14	41.97	37.06	31.91	31.80
Egypt	26.59	24.69	24.31	23.36	22.68	21.66	19.68	28.49
Equatorial Guinea	58.91	39.28	44.77	39.24	38.42	42.22	41.18	37.88
Iran	19.37	17.56	23.24	23.45	21.46	19.27	20.81	22.29
Libya	42.10	44.79	39.75	64.83	91.88	70.64	-	-
Nigeria	17.39	21.46	12.94	13.00	12.45	10.67	11.50	-
Qatar	23.75	26.10	29.27	29.67	31.04	36.00	41.63	-
Russia	21.14	19.92	20.23	20.40	20.65	20.57	20.53	20.69
Trinidad and Tobago	31.10	43.48	51.61	53.21	48.77	47.85	50.67	-
United Arab Emirates	63.57	62.02	64.82	64.91	68.94	74.35	75.74	72.43
Venezuela	17.61	19.70	24.23	29.51	31.40	-	-	-
Observers								
Azerbaijan	20.68	24.08	25.29	26.65	26.21	34.81	43.65	41.98
Iraq	34.08	27.75	29.10	36.01	36.95	40.92	40.90	36.32
Kazakhstan	29.89	26.65	29.61	26.79	25.63	24.53	28.47	-
Norway	28.46	28.37	27.54	28.35	29.78	32.09	33.27	33.05
Oman	41.21	43.04	37.34	45.07	38.17	43.07	35.59	-
Peru	23.85	25.49	25.17	24.97	24.21	23.86	22.82	22.60

2.4 Inflation

Table 2.4.1 Inflation Consumer Prices (annual %)

	2010	2011	2012	2013	2014	2015	2016
Members							
Algeria	3.91	4.52	8.89	3.25	2.92	4.78	6.40
Bolivia	2.50	9.81	4.59	5.72	5.78	4.06	3.63
Egypt	11.27	10.05	7.12	9.42	10.15	10.36	13.81
Equatorial Guinea	7.79	4.81	3.66	2.95	4.31	1.67	1.42
Iran	10.14	20.63	27.36	39.27	17.24	13.71	8.57
Libya	2.80	15.52	6.06	2.61	-	-	-
Nigeria	13.72	10.84	12.22	8.48	8.06	9.02	15.70
Qatar	-2.43	1.92	1.87	3.13	3.08	1.88	2.88
Russia	6.85	8.44	5.09	6.74	7.83	15.53	7.05
Trinidad and Tobago	10.55	5.10	9.27	5.20	5.68	4.66	3.06
United Arab Emirates	0.88	0.88	0.66	1.10	2.35	4.07	1.62
Venezuela	28.19	26.09	21.07	40.64	62.17	121.74	254.95
Observers							
Azerbaijan	5.67	7.85	1.01	2.38	1.39	4.17	4.18
Iraq	2.88	5.80	6.09	1.88	2.24	1.39	-
Kazakhstan	7.12	8.35	5.11	5.84	6.72	6.65	14.51
Norway	2.40	1.30	0.71	2.13	2.03	2.17	3.55
Oman	3.20	4.07	2.91	1.25	1.01	0.07	1.10
Peru	1.53	3.37	3.65	2.82	3.23	3.56	3.60

Graph 2.4.1 GECF Member and Observer Countries Inflation
2010 - 2016 | 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
United Arab Emirates	5.40	5.35	5.32	5.22	5.27	5.08
Venezuela	6.31	5.62	5.79	5.38	5.47	4.72
Observers						
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
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

Graph 2.5.1. GECF Member and Observer Countries Energy Intensity 2010 vs 2015 | MJ/\$2011 PPP GDP

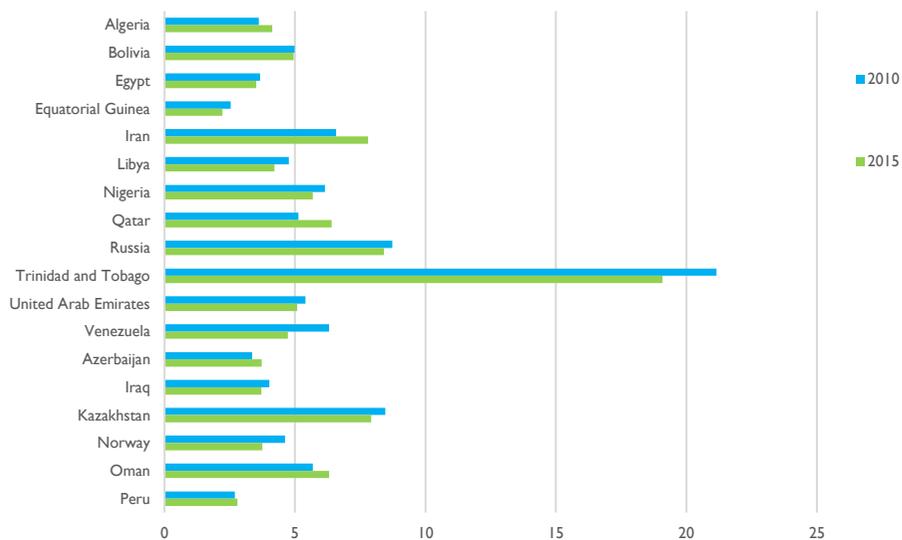
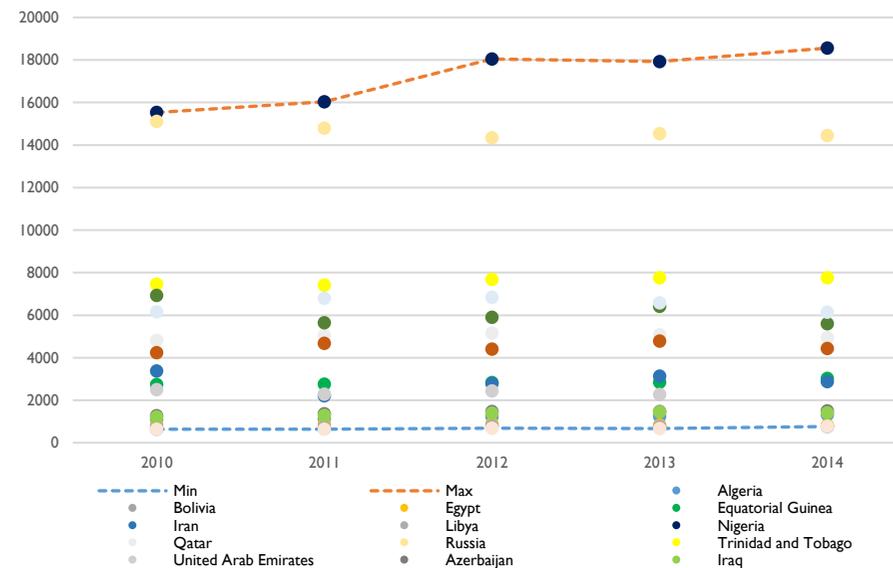


Table 2.5.2 Energy Use (kg of oil equivalent per capita)

	2010	2011	2012	2013	2014
Members					
Algeria	1,109.89	1,135.74	1,223.59	1,241.04	1,321.10
Bolivia	644.50	669.82	758.00	750.28	788.80
Egypt	862.51	886.31	891.24	835.37	814.99
Equatorial Guinea	2,739.57	2,759.44	2,835.04	2,853.54	3,023.49
Iran	3,369.03	2,209.89	2,782.75	3,133.49	2,880.14
Libya	755.99	778.50	798.30	779.85	763.39
Nigeria	15,531.78	16,030.61	18,055.61	17,926.72	18,562.67
Qatar	4,819.04	5,049.43	5,167.01	5,078.63	4,942.88
Russia	15,109.19	14,791.36	14,346.84	14,537.48	14,446.75
Trinidad and Tobago	7,458.88	7,418.41	7,683.88	7,766.67	7,769.23
United Arab Emirates	2,493.47	2,280.73	2,444.10	2,268.06	-
Venezuela	-	-	-	-	-
Observers					
Azerbaijan	1,279.55	1,369.35	1,472.90	1,474.00	1,502.08
Iraq	1,219.37	1,293.56	1,399.27	1,456.66	1,413.50
Kazakhstan	4,234.85	4,670.82	4,398.94	4,786.59	4,434.64
Norway	6,934.59	5,649.70	5,906.14	6,415.99	5,595.65
Oman	6,154.42	6,800.14	6,832.83	6,583.46	6,141.77
Peru	635.49	638.44	677.97	666.43	767.69

Graph 2.5.2 GECF Member and Observer Countries Energy Use 2010 - 2014 | Annual %





Section 3
GECF in the World

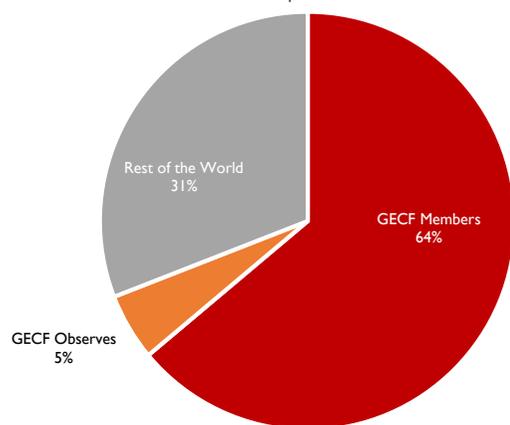
3.1 Gas Proven Reserves

Table 3.1.1 Gas Proven Reserves of GECF Countries (Bcm)

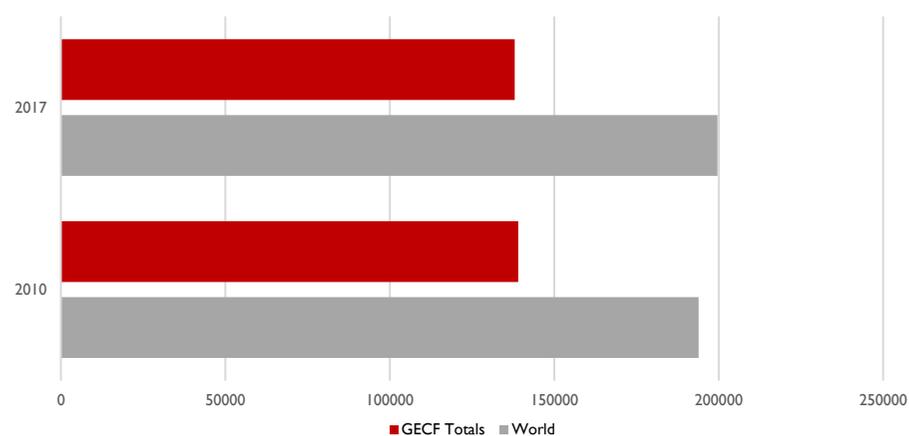
	2010	2011	2012	2013	2014	2015	2016	2017
World	193,931	197,813	197,608	198,808	197,664	196,932	198,254	199,618
GECF Totals	139,597	141,208	140,965	140,865	141,183	137,088	137,177	137,475
Members	129,552	130,990	130,681	130,619	130,930	126,793	126,872	127,132
Observers	10,046	10,218	10,284	10,246	10,252	10,295	10,305	10,344
GECF Share	72%	71%	71%	71%	71%	70%	69%	69%
Members								
Algeria	4,504	4,504	4,504	4,504	4,504	-	-	-
Bolivia	266	250	231	296	274	252	264	303
Egypt	2,202	2,119	1,957	1,777	2,186	2,086	2,221	2,221
Equatorial Guinea	82	78	71	66	60	54	47	47
Iran	33,620	33,790	33,710	33,850	33,440	33,720	33,820	33,330
Libya	1,500	1,507	1,505	1,503	1,503	1,503	1,500	1,500
Nigeria	5,106	5,171	5,115	5,108	5,303	5,280	5,475	5,627
Qatar	25,124	25,089	25,009	24,680	24,530	24,414	24,300	24,500
Russia	45,200	46,538	46,605	46,868	47,148	47,443	47,465	47,805
Trinidad and Tobago	381	375	371	347	326	300	-	-
United Arab Emirates	6,041	6,041	6,041	6,041	6,041	6,041	6,041	6,091
Venezuela	5,525	5,528	5,563	5,581	5,617	5,702	5,740	5,708
Observers								
Azerbaijan	1,311	1,311	1,289	1,283	1,261	1,284	1,277	1,277
Iraq	3,200	3,400	3,460	3,460	3,600	3,700	3,700	3,700
Kazakhstan	1,925	1,925	1,920	1,916	1,916	1,905	1,900	1,900
Norway	2,549	2,521	2,523	2,471	2,366	2,304	2,276	2,314
Oman	684	681	676	703	703	703	703	703
Peru	377	380	418	413	407	400	450	450

Note: The figures of 2015, 2016 and 2017 were calculated with the available data by the time of this publication.

Graph 3.1.1. GECF Countries and Rest of the World Natural Gas Proven Reserves 2017 | Bcm



Graph 3.1.2. GECF Countries vs Rest of the World Natural Gas Proven Reserves 2010 vs 2017 | Bcm

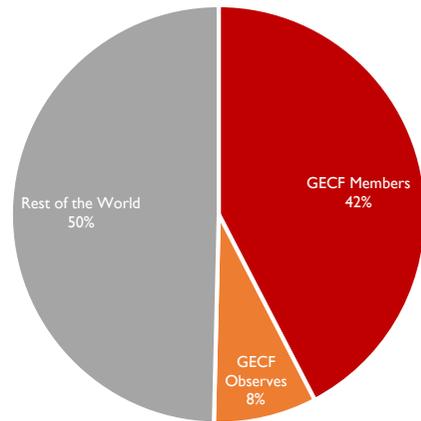


3.2 Natural Gas Production

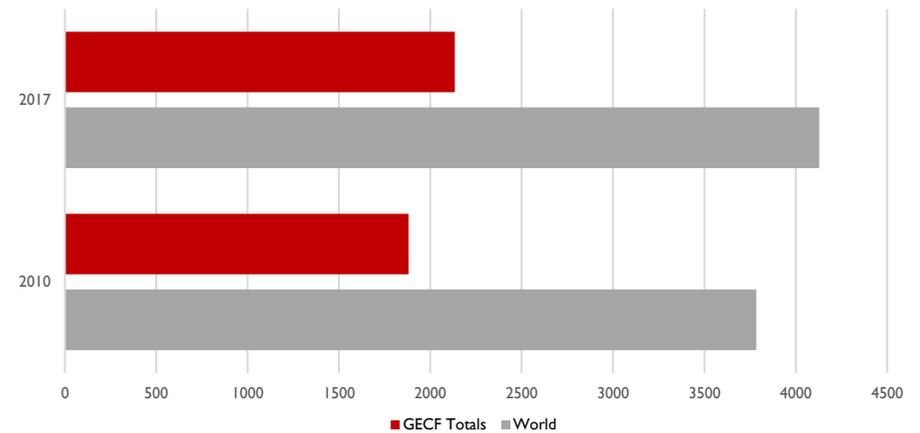
3.2.1 Natural Gas Gross Production of GECF Countries (Bcm)

	2010	2011	2012	2013	2014	2015	2016	2017
World	3,784.54	3,833.25	3,878.41	3,916.09	3,966.28	4,008.28	4,027.81	4,127.71
GECF Totals	1,873.15	1,900.80	1,933.25	1,942.39	1,946.36	1,966.88	1,976.42	2,075.73
Members	1,600.84	1,626.71	1,638.52	1,651.90	1,645.98	1,655.15	1,661.01	1,744.69
Observers	272.31	274.08	294.73	290.50	300.37	311.72	315.41	331.04
GECF Share	49.49%	49.59%	49.85%	49.60%	49.07%	49.07%	49.07%	50.29%
Members								
Algeria	192.21	190.13	182.60	179.49	186.75	183.83	189.14	188.74
Bolivia	15.18	16.45	19.24	22.47	23.18	22.27	21.35	20.91
Egypt	66.33	66.46	66.02	61.36	54.10	49.34	46.71	55.77
Equatorial Guinea	10.87	11.03	11.94	13.99	13.66	15.45	14.76	13.80
Iran	222.64	227.48	229.14	229.83	245.68	256.98	277.39	301.45
Libya	30.26	9.86	23.44	22.87	20.94	22.56	14.35	15.15
Nigeria	79.85	84.01	84.85	79.63	86.33	85.22	76.78	79.49
Qatar	136.25	150.02	163.03	171.06	173.40	175.92	172.17	171.40
Russia	651.30	670.80	654.68	667.59	642.81	633.54	640.81	691.10
Trinidad and Tobago	45.61	44.77	44.40	42.85	38.10	39.59	34.00	35.36
United Arab Emirates	79.27	82.43	83.21	84.32	84.31	90.27	91.40	94.63
Venezuela	71.08	73.27	75.97	76.44	76.72	80.20	82.16	76.89
Observers								
Azerbaijan	24.37	23.88	25.00	27.52	28.10	28.00	28.11	28.11
Iraq	16.88	18.70	20.49	21.40	21.85	23.46	25.06	25.86
Kazakhstan	35.09	36.61	37.23	38.99	40.14	42.35	42.84	46.93
Norway	148.75	147.68	161.24	150.24	155.98	164.42	162.51	172.61
Oman	33.34	32.72	34.95	36.15	35.91	36.21	37.36	39.16
Peru	13.89	14.50	15.84	16.20	18.40	17.29	19.54	18.38

Graph 3.2.1. GECF Countries and Rest of the World Natural Gas Gross Production 2017 | Bcm



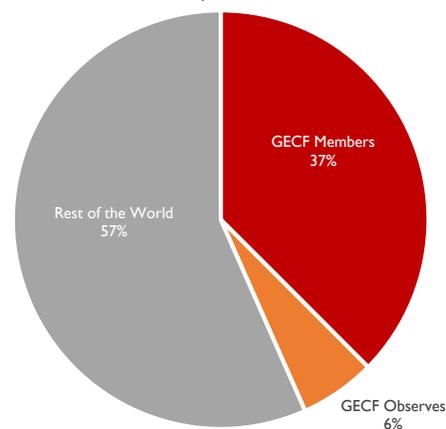
Graph 3.2.2. GECF Countries vs Rest of the World Natural Gas Gross Production 2010 vs 2017 | Bcm



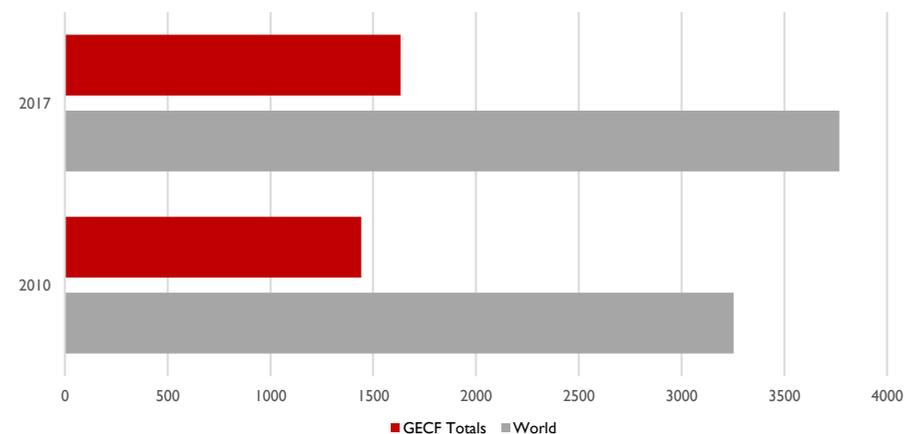
3.2.2 Natural Gas Marketed Production of GECF Countries (Bcm)

	2010	2011	2012	2013	2014	2015	2016	2017
World	3,252.64	3,325.82	3,401.41	3,453.95	3,522.63	3,603.80	3,630.77	3,766.78
GECF Totals	1,441.86	1,474.41	1,510.16	1,517.62	1,508.08	1,535.01	1,546.75	1,632.73
Members	1,260.41	1,294.20	1,310.27	1,323.80	1,311.19	1,327.90	1,336.80	1,410.37
Observers	181.45	180.21	199.89	193.82	196.89	207.10	209.96	222.36
GECF Share	44.33%	44.33%	44.40%	43.94%	42.81%	42.59%	42.60%	43.35%
Members								
Algeria	85.46	83.37	86.06	82.43	83.30	84.58	94.95	96.60
Bolivia	14.41	15.71	18.36	21.60	22.40	21.58	20.62	20.23
Egypt	61.32	61.26	60.80	56.13	48.79	44.26	41.93	50.71
Equatorial Guinea	7.76	8.48	8.22	8.41	8.23	7.44	7.88	8.24
Iran	165.01	170.78	172.31	171.57	188.02	202.97	211.14	217.80
Libya	16.81	6.96	16.07	16.99	16.59	15.15	9.43	9.40
Nigeria	36.19	41.32	42.57	38.41	43.84	45.15	41.99	45.79
Qatar	131.17	145.27	157.05	164.96	167.43	170.05	166.10	165.37
Russia	628.93	647.60	631.15	645.91	619.75	612.74	619.81	668.94
Trinidad and Tobago	42.25	39.69	39.34	39.84	35.51	36.94	31.81	33.48
United Arab Emirates	51.37	52.98	55.61	55.73	55.45	61.04	62.23	65.52
Venezuela	19.73	20.77	22.73	21.82	21.88	26.00	28.90	28.29
Observers								
Azerbaijan	15.37	15.08	15.85	16.45	17.55	17.80	17.50	17.00
Iraq	7.57	6.61	6.98	7.43	7.87	7.61	10.35	10.55
Kazakhstan	17.59	18.61	18.92	19.34	20.09	21.07	21.73	22.00
Norway	106.71	102.21	115.79	108.30	109.86	118.15	115.85	128.28
Oman	26.99	26.33	30.48	30.10	28.62	29.98	30.53	31.52
Peru	7.22	11.38	11.88	12.20	12.91	12.50	14.00	13.00

Graph 3.2.3. GECF Countries and Rest of the World Natural Gas Marketed Production 2017 | Bcm



Graph 3.2.4. GECF Countries vs Rest of the World Natural Gas Marketed Production 2010 vs 2017 | Bcm

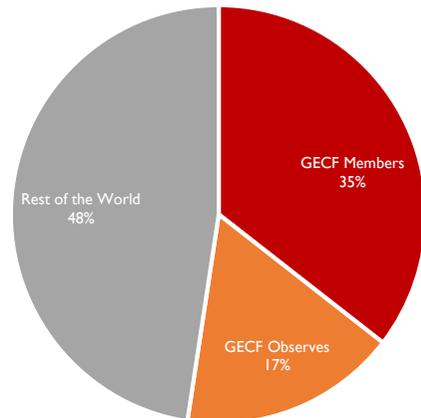


3.3 Natural Gas Exports

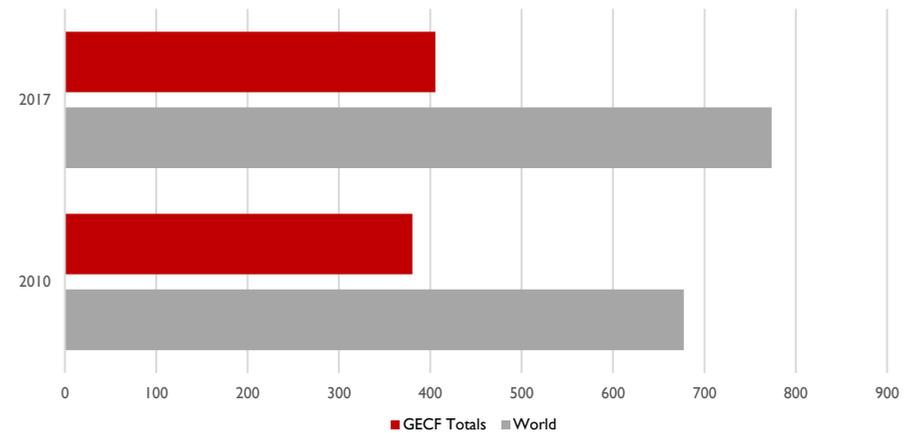
3.3.1 Natural Gas Pipelines Exports of GECF Countries (Bcm)

	2010	2011	2012	2013	2014	2015	2016	2017
World	677.30	694.67	694.83	705.78	672.07	703.68	736.40	773.50
GECF Totals	380.22	379.35	390.37	402.27	374.45	393.36	415.65	405.43
Members	266.41	268.79	266.45	282.09	256.06	266.03	286.63	274.55
Observers	113.81	110.55	123.93	120.18	118.39	127.33	129.02	130.88
GECF Share	56.14%	54.61%	56.18%	57.00%	55.72%	55.90%	56.44%	52.42%
Members								
Algeria	37.85	35.72	37.33	32.23	27.08	27.04	38.44	37.59
Bolivia	11.54	12.48	14.61	16.94	17.62	17.34	15.92	15.25
Egypt	5.46	1.79	0.68	0.88	0.23	0.24	0.00	0.00
Equatorial Guinea	-	-	-	-	-	-	-	-
Iran	8.49	9.12	9.18	9.54	9.76	8.60	8.65	12.89
Libya	9.53	2.57	6.35	5.55	6.42	7.03	4.80	4.32
Nigeria	0.12	0.83	0.40	0.60	0.60	0.60	0.12	0.39
Qatar	19.15	19.20	19.22	19.90	20.09	19.75	20.00	21.96
Russia	174.26	187.09	178.68	196.45	174.26	185.44	198.70	182.15
Trinidad and Tobago	-	-	-	-	-	-	-	-
United Arab Emirates	-	-	-	-	-	-	-	-
Venezuela	-	-	-	-	-	-	-	-
Observers								
Azerbaijan	5.95	6.68	6.74	7.61	7.74	7.71	7.74	7.84
Iraq	-	-	-	-	-	-	-	-
Kazakhstan	11.79	11.37	11.17	11.62	11.12	11.80	12.48	13.50
Norway	96.07	92.50	106.02	100.95	99.53	107.83	108.81	109.54
Oman	-	-	-	-	-	-	-	-
Peru	-	-	-	-	-	-	-	-

Graph 3.3.1. GECF Countries and Rest of the World Natural Gas Pipeline Exports 2017 | Bcm



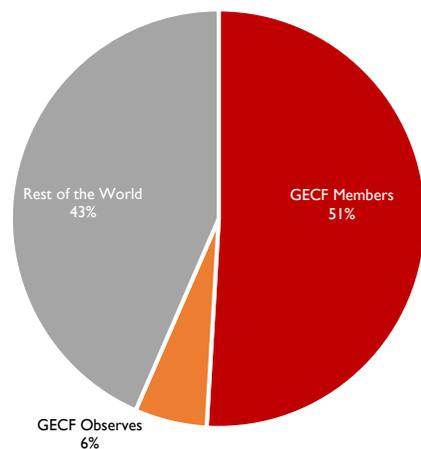
Graph 3.3.2. GECF Countries vs Rest of the World Natural Gas Pipeline Exports 2010 vs 2017 | Bcm



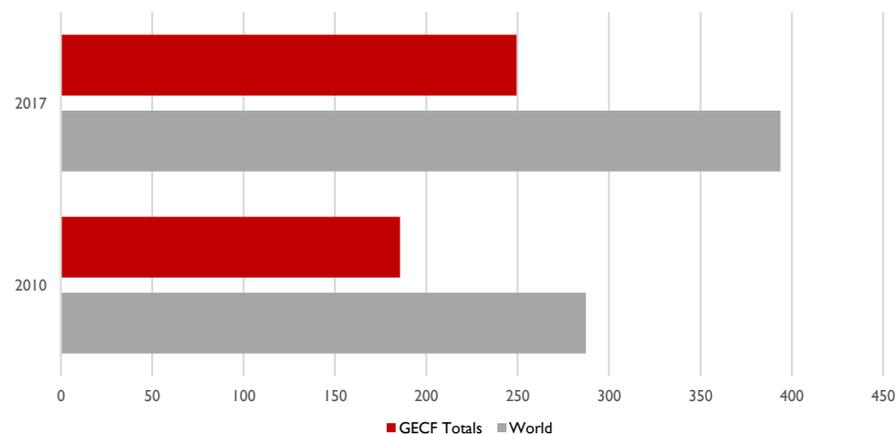
3.3.2 LNG Exports of GECF Countries (Bcm)

	2010	2011	2012	2013	2014	2015	2016	2017
World	287.40	320.93	315.03	315.81	318.83	326.70	350.84	393.76
GECF Totals	196.36	223.53	222.24	215.30	215.14	214.84	211.34	222.70
Members	178.47	202.13	200.75	193.93	193.97	192.61	189.24	200.56
Observers	17.89	21.40	21.50	21.37	21.17	22.23	22.09	22.14
GECF Share	68.32%	69.65%	70.55%	68.17%	67.48%	65.76%	60.24%	56.56%
Members								
Algeria	19.51	16.30	14.52	14.48	17.11	16.47	15.53	16.41
Bolivia	-	-	-	-	-	-	-	-
Egypt	11.94	11.19	8.26	4.87	0.44	-	0.99	1.33
Equatorial Guinea	5.87	5.61	5.55	5.77	5.87	5.30	5.31	5.88
Iran	-	-	-	-	-	-	-	-
Libya	0.29	0.09	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
Qatar	75.75	102.60	102.98	103.41	102.32	104.53	105.20	104.23
Russia	13.60	14.51	14.84	14.67	14.61	14.73	14.86	15.99
Trinidad and Tobago	20.03	18.32	18.96	19.00	18.94	16.90	14.27	14.61
United Arab Emirates	7.82	7.57	7.37	7.19	7.91	7.98	8.06	7.78
Venezuela	-	-	-	-	-	-	-	-
Observers								
Azerbaijan	-	-	-	-	-	-	-	-
Iraq	-	-	-	-	-	-	-	-
Kazakhstan	-	-	-	-	-	-	-	-
Norway	4.65	4.25	4.80	3.89	5.06	5.95	6.12	5.85
Oman	11.46	11.78	11.38	12.09	10.64	11.37	10.81	11.39
Peru	1.78	5.37	5.32	5.39	5.47	4.92	5.16	4.90

Graph 3.3.3. GECF Countries and Rest of the World Natural Gas LNG Exports 2017 | Bcm



Graph 3.3.4. GECF Countries vs Rest of the World Natural Gas LNG Exports 2010 vs 2017 | Bcm

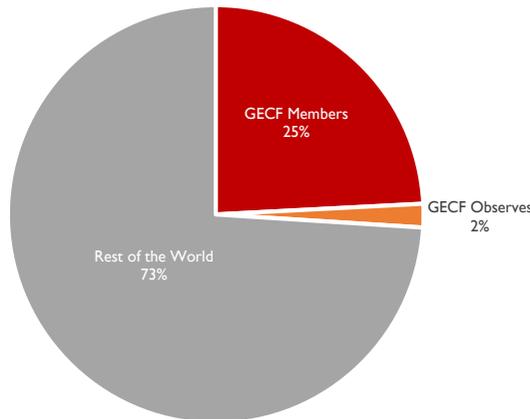


3.4 Natural Gas Domestic Consumption

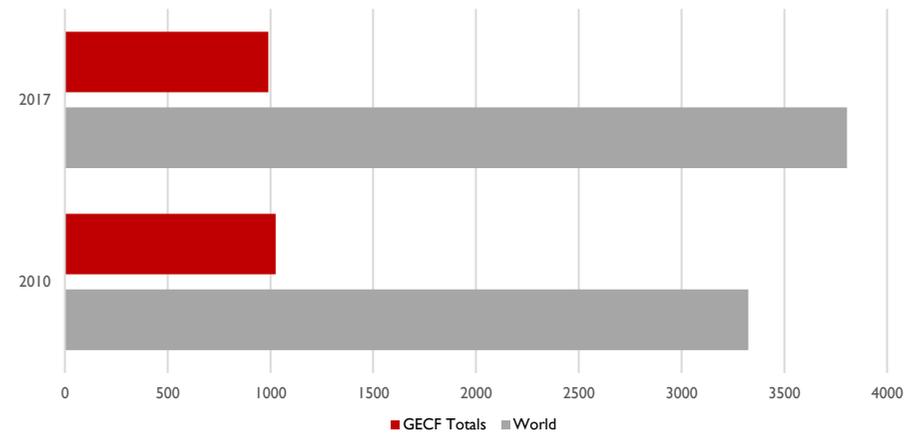
3.4.1 Natural Gas Domestic Consumption of GECF Countries (Bcm)

	2010	2011	2012	2013	2014	2015	2016	2017
World	3,325.12	3,395.43	3,472.06	3,515.30	3,531.21	3,577.71	3,659.53	3,804.17
GECF Totals	910.76	929.46	948.88	955.84	976.49	992.49	996.20	1,013.19
Members	853.47	873.94	888.80	892.92	910.63	925.49	926.76	944.06
Observers	57.30	55.53	60.08	62.92	65.87	67.00	69.44	69.13
GECF Share	27.39%	27.37%	27.33%	27.19%	27.65%	27.74%	27.22%	26.63%
Members								
Algeria	27.13	28.86	32.09	33.30	36.22	40.00	40.14	40.99
Bolivia	2.93	3.27	3.39	3.63	4.14	4.22	4.50	4.79
Egypt	45.15	49.62	52.60	51.42	48.02	47.80	51.28	58.16
Equatorial Guinea	1.18	1.39	1.45	1.47	1.44	1.29	1.59	1.58
Iran	165.01	170.79	172.33	171.57	188.02	202.97	211.15	217.76
Libya	6.99	4.30	9.71	11.44	10.17	8.62	4.63	5.08
Nigeria	5.00	6.16	7.33	7.70	7.73	11.11	8.88	11.07
Qatar	29.80	19.60	23.40	38.19	40.52	43.90	41.70	38.02
Russia	471.14	487.52	480.59	467.94	469.84	452.17	449.83	454.05
Trinidad and Tobago	17.44	17.35	17.03	16.93	16.61	16.63	15.06	15.02
United Arab Emirates	60.80	63.20	65.60	66.90	65.90	71.83	71.95	71.98
Venezuela	20.89	21.87	23.29	22.44	22.01	24.96	26.05	25.57
Observers								
Azerbaijan	9.67	8.67	9.36	9.27	10.25	10.60	9.58	9.38
Iraq	7.57	6.61	6.98	7.43	7.87	7.61	10.35	10.55
Kazakhstan	11.49	12.44	11.68	13.00	13.81	13.97	14.48	14.00
Norway	5.50	4.56	4.34	5.15	5.87	5.23	4.29	5.51
Oman	17.58	17.54	21.11	21.05	20.41	21.92	21.81	21.95
Peru	5.49	5.71	6.61	7.02	7.66	7.67	8.94	7.74

Graph 3.4.1. GECF Countries and Rest of the World Natural Gas Domestic Consumption 2017 | Bcm



Graph 3.4.2. GECF Countries vs Rest of the World Natural Gas Domestic Consumption 2010 vs 2017 | Bcm



3.5 Liquefaction Plants

3.5.1 Liquefaction Plants of GECF Countries

Country	Plant	Liquefaction (No. of Trains)	Total Capacity (MPTA)	Status	Start Year	Owner(s)	Operator(s)
Algeria	GLIZ	6	7.8	Operational	1978	Sonatrach	Sonatrach
	GL2Z	6	8.0	Operational	1981	Sonatrach	Sonatrach
	GLIK	1 Mega	4.5	Operational	2013	Sonatrach	Sonatrach
	GL3Z	1 Mega	4.7	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	Equatorial Guinea (EG) LNG	1	3.7	Operational	2007	Marathon, Sonagas, Mitsui, Marubeni	Marathon Oil
	Fortuna FLNG	1	2.2	Planned	2022	Ophir, OneLNG	Golar
Iran	Iran LNG	2	6.7	Under Construction	2018	NIOC	Iran LNG
	Iran FLNG	1	0.7	Planned	2018	NIOC	-
Libya	Marsa al Brega	1	3.2	Offline	1960	Libya NOC	Sirte Oil Company
Nigeria	NLNG 1 & 2	2	7.0	Operational	1999	Nigeria LNG	Nigeria LNG
	NLNG 3	1	3.3	Operational	2002	Nigeria LNG	Nigeria LNG
	NLNG 4	1	4.1	Operational	2005	Nigeria LNG	Nigeria LNG
	NLNG 5	1	4.1	Operational	2006	Nigeria LNG	Nigeria LNG
	NLNG 6	1	4.1	Operational	2007	Nigeria LNG	Nigeria LNG
	NLNG 7	1	-	Planned	-	Nigeria LNG	Nigeria LNG
	NLNG 8	1	-	Planned	-	Nigeria LNG	Nigeria LNG
	Qatar	Qatargas 1	3	9.9	Operational	1996/1997/1998	Qatar Petroleum, ExxonMobil, Total, Mitsui, Marubeni
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
Rasaffan (II)		3	14.1	Operational	2004	Qatar Petroleum, ExxonMobil	Qatargas
Raslaffan 3		2	15.6	Operational	2010	Qatar Petroleum, ExxonMobil	Qatargas
North Field Expansion		4	33.0	Project	2024/2025	Qatar Petroleum	Project Phase
Russia	Sakhalin II	2	9.6	Operational	2009	Sakhalin Energy	Sakhalin Energy
	Yamal LNG	2	11.0	Operational	2017/2018	Novatek	Novatek
	Yamal LNG	1	5.5	Under Construction	2018/2019	Novatek	Novatek
	Gorskaya LNG	1	1.3	Under Construction	2019/2021	Gazprom	Gazprom
	Portovaya LNG	1	1.5	Planned	2020	Gazprom	Gazprom
	Kamchatka LNG	4	20.0	Planned	2022/2023	Novatek	Novatek
	Baltic LNG	2	10.0	Planned	2023	Gazprom	Gazprom
	Sakhalin II	2	10.0	Planned	2023/2024	Sakhalin Energy (Gazprom)	Sakhalin Energy
	Arctic LNG	3	19.8	Planned	2023	Novatek	Novatek
	Far East LNG	1	5.0	Planned	2023	Rosneft	Rosneft
Trinidad and Tobago	Atlantic LNG	4	14.8	Operational	1999/2002/2003/2005	Atlantic LNG	Atlantic LNG
United Arab Emirates	Das Island	3	5.6	Operational	1977/1977/1994	ADNOC, Mitsui, BP, Total	ADGAS
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

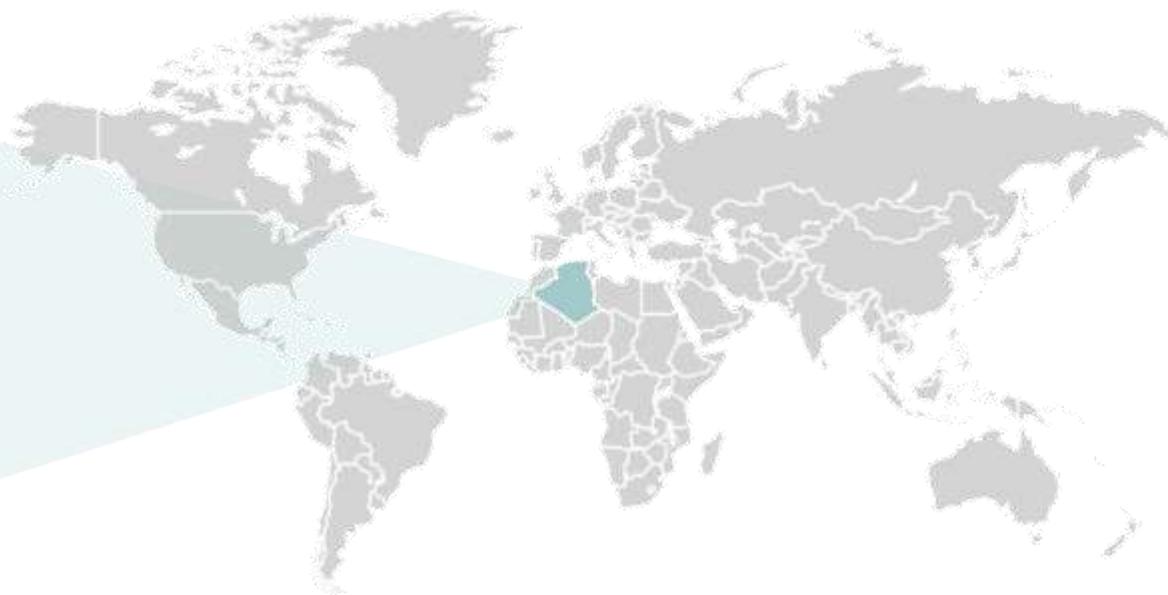


Section 4
GECF Member Countries



People's Democratic Republic of

ALGERIA



Population:
41 318 142



Capital:
Algiers



Continent:
Africa



Currency:
Algerian Dinar



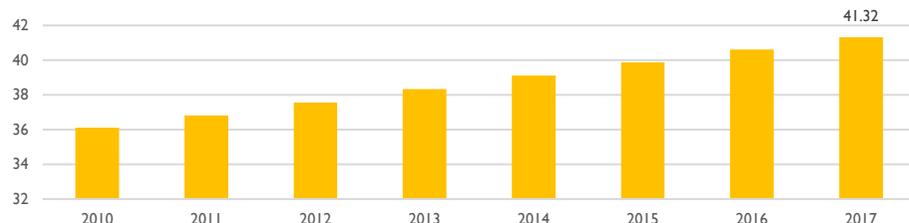
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4.1.1 Macroeconomics

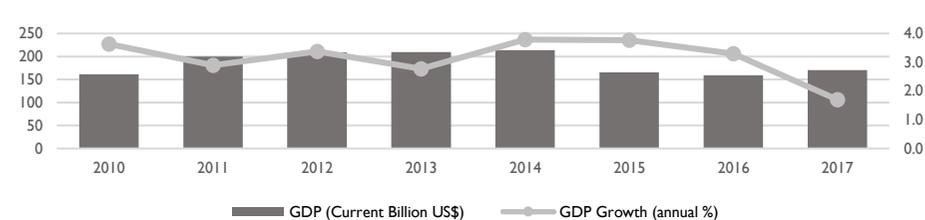
4.1.1.1 Algeria Macroeconomic Indicators

	2010	2011	2012	2013	2014	2015	2016	2017
Population (Inhabitants)	36,117,637	36,819,558	37,565,847	38,338,562	39,113,313	39,871,528	40,606,052	41,318,142
GDP (Current Billion US\$)	161.21	200.02	209.06	209.76	213.81	165.87	159.05	170.37
GDP Growth (annual %)	3.63	2.89	3.37	2.77	3.79	3.76	3.30	1.70
GDP per capita (Current US\$)	4,463.39	5,432.41	5,565.13	5,471.12	5,466.43	4,160.22	3,916.88	4,123.39
Exports of Goods and Services (Current Billion US\$)	61.98	77.58	77.12	69.66	64.61	38.46	33.40	40.94
Exports of Goods and Services (% of GDP)	38.44	38.79	36.89	33.21	30.22	23.19	21.00	24.03
Imports of Goods and Services (Current Billion US\$)	50.65	57.38	59.61	63.77	68.26	60.62	56.10	61.91
Imports of Goods and Services (% of GDP)	31.42	28.69	28.51	30.40	31.93	36.55	35.27	36.34
Inflation consumer prices (annual %)	3.91	4.52	8.89	3.25	2.92	4.78	6.40	-
Energy use (kg of oil equivalent per capita)	1,109.89	1,135.74	1,223.59	1,241.04	1,321.10	-	-	-

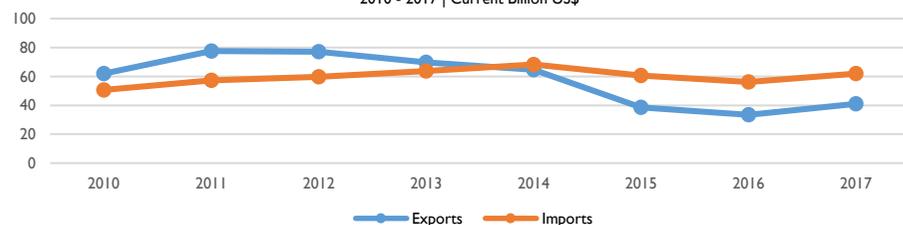
Graph 4.1.1.1. Algeria: Population
2010 - 2017 | Millions Inhabitants



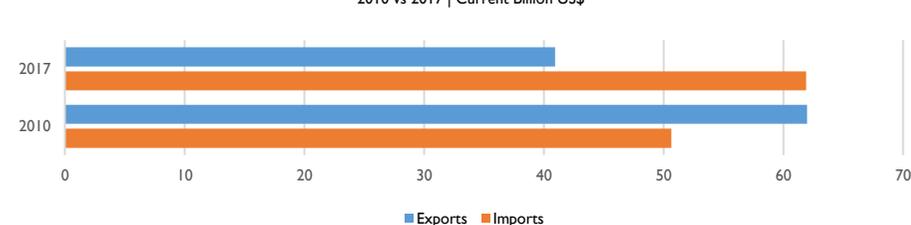
Graph 4.1.1.2. Algeria: GDP and GDP Growth
2010 - 2017 | Current Billion US\$ and Annual %



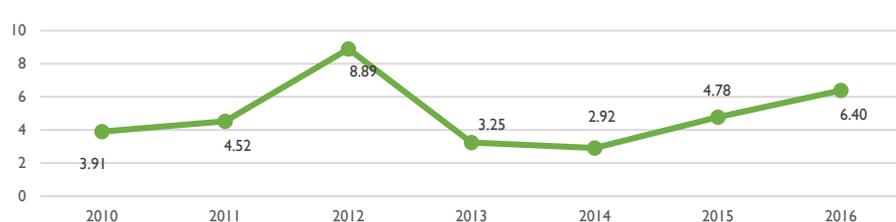
Graph 4.1.1.3. Algeria: Exports and Imports (Goods and Services)
2010 - 2017 | Current Billion US\$



Graph 4.1.1.4. Algeria: Exports and Imports (Goods and Services)
2010 vs 2017 | Current Billion US\$



Graph 4.1.1.5. Algeria: Inflation (Consumer Prices)
2010 - 2016 | Annual %



Graph 4.1.1.6. Algeria: Energy Use
2010 - 2014 | kg of Oil Equivalent per Capita



4.1.2 Reserves and Production

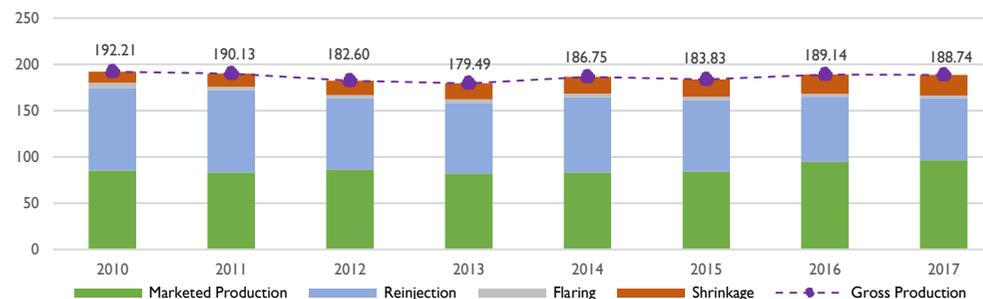
Table 4.1.2.1 Proven Gas Reserves (Bcm)

	2010	2011	2012	2013	2014	2015	2016	2017
Proven Gas Reserves	4,504	4,504	4,504	4,504	4,504	-	-	-

Table 4.1.2.2 Natural Gas Production (Bcm)

	2010	2011	2012	2013	2014	2015	2016	2017
Gross Production	192.21	190.13	182.60	179.49	186.75	183.83	189.14	188.74
Marketed Production	85.46	83.37	86.06	82.43	83.30	84.58	94.95	96.60
Reinjection	89.10	88.75	77.40	76.20	81.21	77.05	70.12	66.94
Flaring	5.80	3.60	3.50	3.70	3.95	3.51	3.26	3.00
Shrinkage	11.85	14.41	15.65	17.16	18.30	18.68	20.81	22.21

Graph 4.1.2.1. Algeria: Natural Gas Production
2010 - 2017 | 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
Residential	4.35	5.02	5.96	6.62	7.07	7.90	8.13	8.68
Industrial	3.54	3.55	3.52	3.68	3.83	4.04	4.21	4.63
Power Generation	12.07	13.04	14.11	14.45	15.75	17.72	17.45	18.53
Transportation	0.01	0.01	0.01	0.01	0.01	0.71	0.81	0.89
Petrochemical (feedstock)	1.50	1.48	2.06	1.82	2.83	3.66	4.00	3.18
Refineries	0.55	0.49	0.61	0.73	0.70	0.72	0.77	0.68
Others	5.20	5.22	5.94	6.11	6.00	5.25	4.77	4.39
Totals	27.21	28.80	32.21	33.41	36.19	40.00	40.14	40.99

Graph 4.1.3.1. Algeria: Natural Gas Domestic Consumption
2010 - 2017 | Bcm

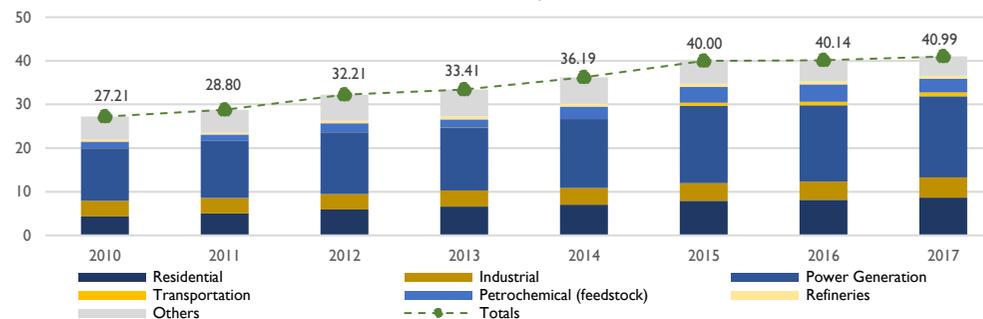
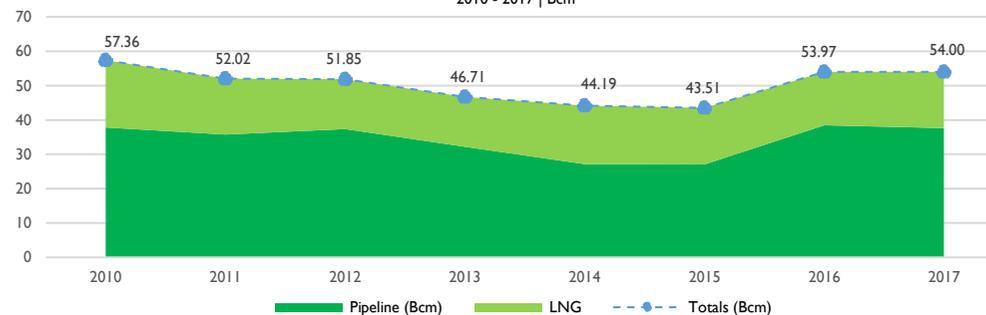


Table 4.1.3.2 Trade: Natural Gas Exports

	2010	2011	2012	2013	2014	2015	2016	2017
Pipeline (Bcm)	37.85	35.72	37.33	32.23	27.08	27.04	38.44	37.59
LNG								
Bcm*	19.51	16.30	14.52	14.48	17.11	16.47	15.53	16.41
MMT	14.35	11.98	10.68	10.64	12.58	12.11	11.42	12.07
Totals (Bcm)	57.36	52.02	51.85	46.71	44.19	43.51	53.97	54.00

* Gas equivalent

Graph 4.1.3.2. Algeria: Natural Gas Exports
2010 - 2017 | Bcm



4.1.4 Transport and Plants

4.1.4.1 Natural Gas Exports 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, Sergas, TMPC	Operational	32.0	Export	1983	2,475	47/20/42/48
Pedro Duran Farell	Algeria	Spain-Portugal	Morocco	Sonatrach, Enagas, Transgas	Sonatrach, Metragaz, Enagás Transgas	Operational	12.0	Export	1996	1,620	47/28/32/22
Medgaz	Algeria	Spain	Med Sea	Sonatrach, CEPSA Iberdrola, Endesa, GDF Suez	Sociedad para el Estudio y Promocion del Gasoducto Argelia-Europa	Operational	8.0	Export	2011	210	48/24
Trans-Saharan Gas	Algeria	Nigeria	Niger	Sonatrach, NNPC	-	Planned	20.0 – 30.0	Export	-	4,128	48/56

4.1.4.2 LNG Carrier Fleet

Tanker	Ownership	Year Built	Status	Size	
				(1000 Scm)	(1000 Tons)
Bachir Chihani	Sonatrach Group	1979	Operational	129.70	58.95
Larbi Ben M'hidi	Sonatrach Group	1977	Operational	126.13	57.33
Abane Ramdane	Sonatrach Group	1981	Operational	126.13	57.33
Didouche Mourad	Sonatrach Group	1980	Operational	126.13	57.33
Berge Arzew	Sonatrach/Bergessen	2004	Operational	138.00	62.73
Lalla Ftama N'soumer	Sonatrach/Mol Itochu	2004	Operational	145.00	65.91
Cheikh El-Mokrani	Sonatrach/Mol Itochu	2007	Operational	75.50	34.32
Cheikh Bouamama	Sonatrach/Mol Itochu	2008	Operational	75.00	34.09
Total				941.59	428.00

4.1.4.3 Liquefaction Plants

LNG Plant	Liquefaction (No. of Trains)	Total Capacity (MTPA)	Status	Start Year	Owner(s)	Operator(s)
GL1Z	6	7.8	Operational	1978	Sonatrach	Sonatrach
GL2Z	6	8.0	Operational	1981	Sonatrach	Sonatrach
GL1K	1 Mega	4.5	Operational	2013	Sonatrach	Sonatrach
GL3Z	1 Mega	4.7	Operational	2014	Sonatrach	Sonatrach



Plurinational State of
BOLIVIA



Population:
11 051 600



Capital:
Sucre



Continent:
South America



Currency:
Bolivian Boliviano



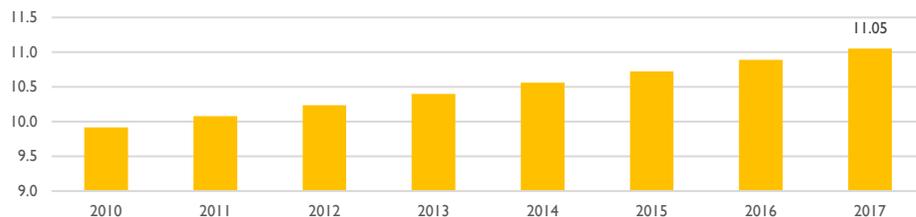
Time Zone:
Bolivia
GMT-4

4.2.1 Macroeconomics

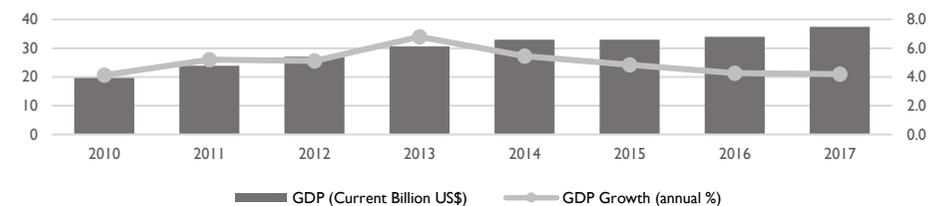
4.2.1.1 Bolivia Macroeconomic Indicators

	2010	2011	2012	2013	2014	2015	2016	2017
Population (Inhabitants)	9,918,242	10,078,343	10,239,004	10,400,264	10,562,159	10,724,705	10,887,882	11,051,600
GDP (Current Billion US\$)	19.65	23.96	27.08	30.66	33.00	33.00	33.94	37.51
GDP Growth (annual %)	4.13	5.20	5.12	6.80	5.46	4.86	4.26	4.20
GDP per capita (Current US\$)	1,981.16	2,377.68	2,645.23	2,947.94	3,124.00	3,077.03	3,117.33	3,393.96
Exports of Goods and Services (Current Billion US\$)	8.09	10.57	12.77	13.52	14.29	10.19	8.31	9.34
Exports of Goods and Services (% of GDP)	41.19	44.09	47.17	44.09	43.29	30.87	24.49	24.90
Imports of Goods and Services (Current Billion US\$)	6.74	9.20	10.23	11.39	13.85	12.23	10.83	11.93
Imports of Goods and Services (% of GDP)	34.32	38.39	37.78	37.14	41.97	37.06	31.91	31.80
Inflation consumer prices (annual %)	2.50	9.81	4.59	5.72	5.78	4.06	3.63	-
Energy use (kg of oil equivalent per capita)	644.50	669.82	758.00	750.28	788.80	-	-	-

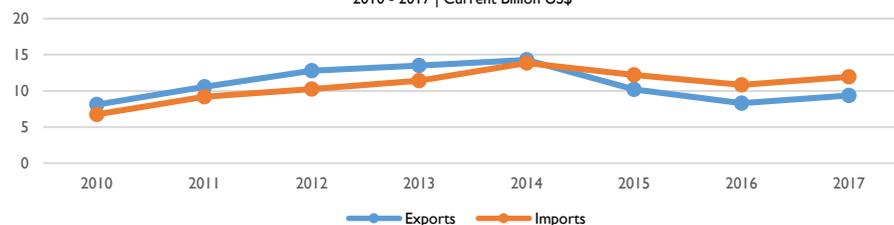
Graph 4.2.1.1. Bolivia: Population
2010 - 2017 | Millions Inhabitants



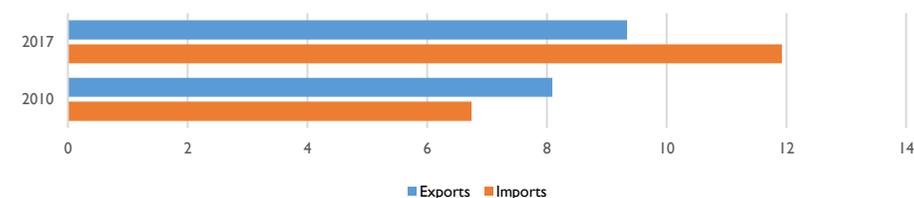
Graph 4.2.1.2. Bolivia: GDP and GDP Growth
2010 - 2017 | Current Billion US\$ and Annual %



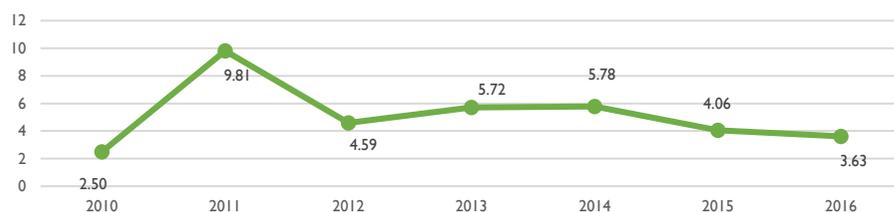
Graph 4.2.1.3. Bolivia: Exports and Imports (Goods and Services)
2010 - 2017 | Current Billion US\$



Graph 4.2.1.4. Bolivia: Exports and Imports (Goods and Services)
2010 vs 2017 | Current Billion US\$



Graph 4.2.1.5. Bolivia: Inflation (Consumer Prices)
2010 - 2016 | Annual %



Graph 4.2.1.6. Bolivia: Energy Use
2010 - 2014 | kg of Oil Equivalent per Capita



4.2.2 Reserves and Production

Table 4.2.2.1 Proven Gas Reserves (Bcm)

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

Table 4.2.2.2 Natural Gas Production (Bcm)

	2010	2011	2012	2013	2014	2015	2016	2017
Gross Production	15.18	16.45	19.24	22.47	23.18	22.27	21.35	20.91
Marketed Production	14.41	15.71	18.36	21.60	22.40	21.58	20.62	20.23
Reinjection	0.11	0.00	0.10	0.00	0.00	0.00	0.00	0.00
Flaring	0.20	0.12	0.07	0.10	0.07	0.07	0.09	0.07
Other losses	0.46	0.61	0.71	0.76	0.71	0.62	0.64	0.61

4.2.3 Domestic Consumption and Trade

Table 4.2.3.1 Domestic Gas Consumption (Bcm)

	2010	2011	2012	2013	2014	2015	2016	2017
Residential	0.08	0.10	0.12	0.14	0.16	0.18	0.20	0.22
Industrial	0.67	0.75	0.81	0.89	0.96	0.96	0.97	1.00
Power Generation	1.39	1.54	1.53	1.50	1.74	1.75	2.14	2.02
Transportation	0.45	0.52	0.57	0.64	0.67	0.69	0.70	0.74
Refineries	0.10	0.10	0.09	0.09	0.10	0.13	0.12	0.12
Others	0.23	0.25	0.26	0.37	0.51	0.52	0.37	0.70
Totals	2.93	3.27	3.39	3.63	4.14	4.22	4.50	4.79

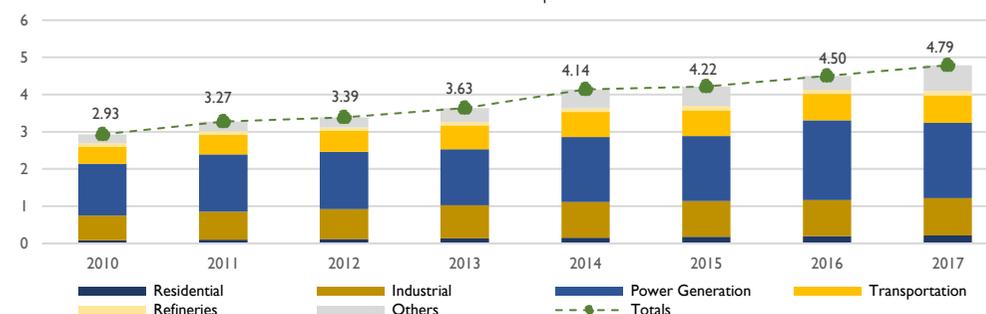
Table 4.2.3.2 Trade: Natural Gas Exports (Bcm)

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

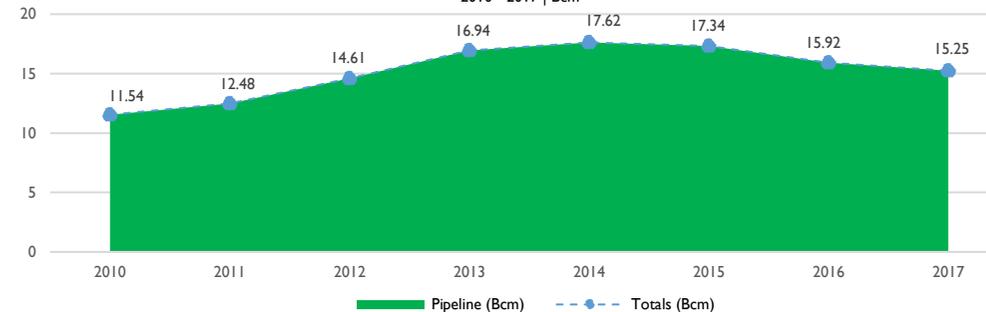
Graph 4.2.2.1. Bolivia: Natural Gas Production
2010 - 2017 | Bcm



Graph 4.2.3.1. Bolivia: Natural Gas Domestic Consumption
2010 - 2017 | Bcm



Graph 4.2.3.2. Bolivia: Natural Gas Exports
2010 - 2017 | Bcm



4.2.4 Transport and Plants

4.2.4.1 Natural Gas Exports Pipelines

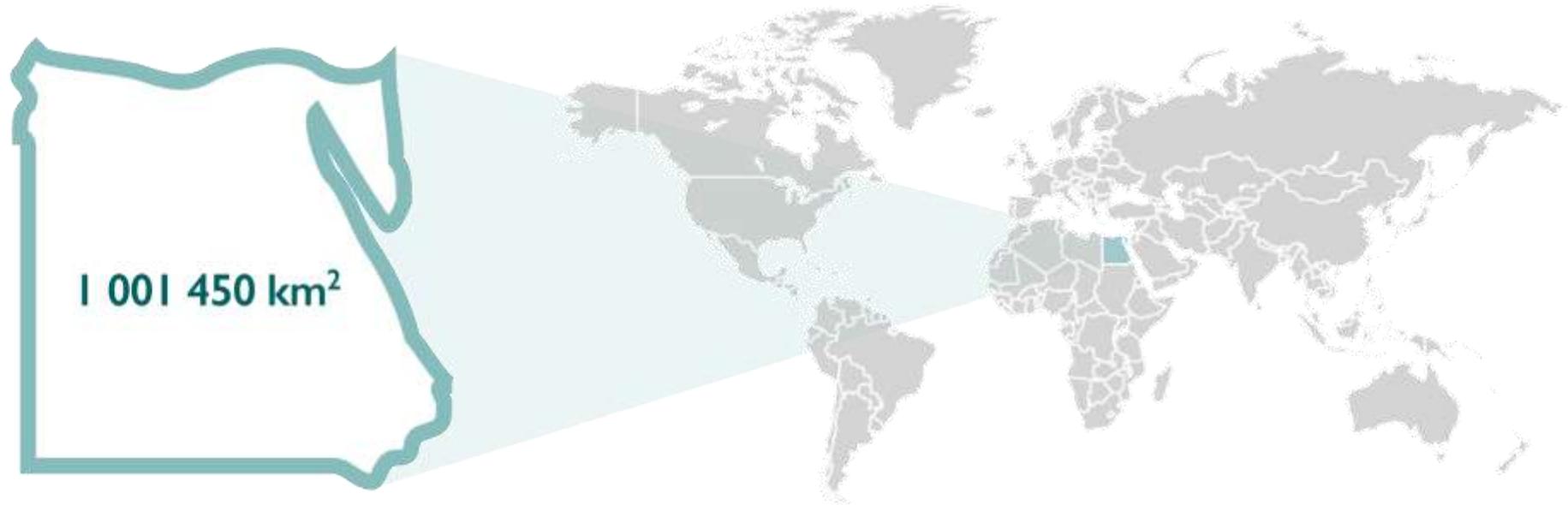
Pipeline	Connection			Owner(s)	Operator(s)	Status	Capacity (Bcm/year)	Type	Start Year	Length (km)	Diameter (Inches)
	From	To	Via								
GASBOL	Bolivia	Brazil	-	Gas TransBoliviano	Gas TransBoliviano	Operational	11.5	Export	1999	557	32
GIJA (Juana Azurduy)	Bolivia	Argentina	-	YPFB Transporte	YPFB Transporte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

4.2.4.2 Domestic Gas Plants

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



Arab Republic of
EGYPT



Population:
97 553 151



Capital:
Cairo



Continent:
Africa



Currency:
Egyptian Pound



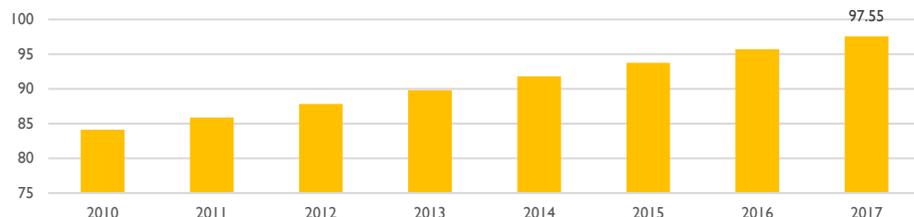
Time Zone:
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GMT+2

4.3.1 Macroeconomics

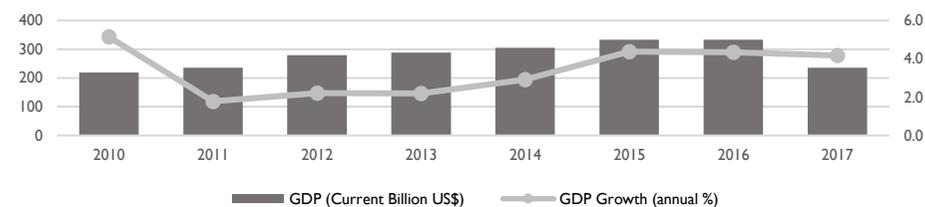
4.3.1.1 Egypt Macroeconomic Indicators

	2010	2011	2012	2013	2014	2015	2016	2017
Population (Inhabitants)	84,107,606	85,897,561	87,813,257	89,807,433	91,812,566	93,778,172	95,688,681	97,553,151
GDP (Current Billion US\$)	218.89	236.00	279.37	288.59	305.53	332.70	332.93	235.37
GDP Growth (annual %)	5.15	1.78	2.22	2.19	2.92	4.37	4.35	4.18
GDP per capita (Current US\$)	2,602.48	2,747.48	3,181.44	3,213.39	3,327.75	3,547.71	3,479.28	2,412.73
Exports of Goods and Services (Current Billion US\$)	46.73	48.54	45.81	49.11	43.52	43.86	34.44	38.36
Exports of Goods and Services (% of GDP)	21.35	20.57	16.40	17.02	14.24	13.18	10.35	16.30
Imports of Goods and Services (Current Billion US\$)	58.20	58.26	67.93	67.40	69.28	72.07	65.51	67.05
Imports of Goods and Services (% of GDP)	26.59	24.69	24.31	23.36	22.68	21.66	19.68	28.49
Inflation consumer prices (annual %)	11.27	10.05	7.12	9.42	10.15	10.36	13.81	-
Energy use (kg of oil equivalent per capita)	862.51	886.31	891.24	835.37	814.99	-	-	-

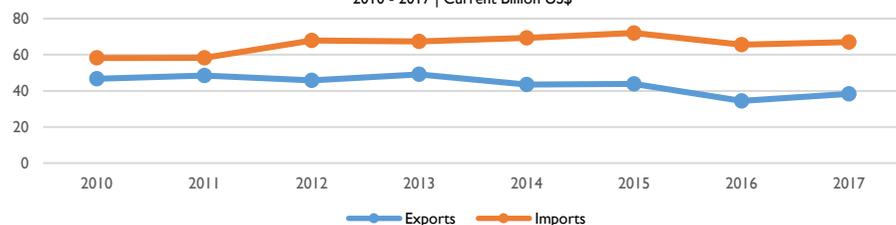
Graph 4.3.1.1. Egypt: Population
2010 - 2017 | Millions Inhabitants



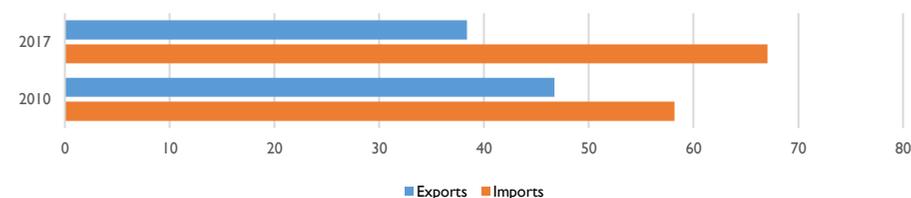
Graph 4.3.1.2. Egypt: GDP and GDP Growth
2010 - 2017 | Current Billion US\$ and Annual %



Graph 4.3.1.3. Egypt: Exports and Imports (Goods and Services)
2010 - 2017 | Current Billion US\$



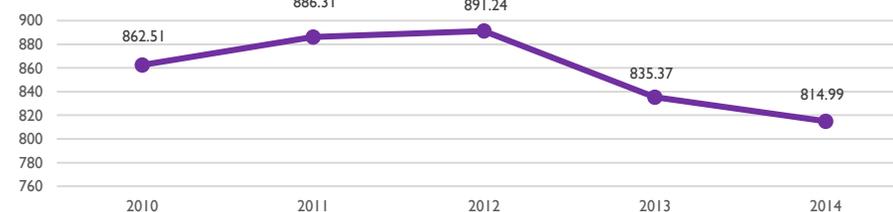
Graph 4.3.1.4. Egypt: Exports and Imports (Goods and Services)
2010 vs 2017 | Current Billion US\$



Graph 4.3.1.5. Egypt: Inflation (Consumer Prices)
2010 - 2016 | Annual %



Graph 4.3.1.6. Egypt: Energy Use
2010 - 2014 | kg of Oil Equivalent per Capita



4.3.2 Reserves and Production

Table 4.3.2.1 Proven Gas Reserves (Bcm)

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

Table 4.3.2.2 Natural Gas Production (Bcm)

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

Graph 4.3.2.1. Egypt: Natural Gas Production

2010 - 2017 | 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
Residential	1.02	1.21	1.43	1.64	1.75	1.96	2.16	2.36
Industrial	13.75	14.10	14.73	14.40	12.12	10.49	12.21	13.23
Power Generation	25.14	27.83	30.08	29.04	28.63	30.64	31.25	36.06
Transportation	0.46	0.48	0.50	0.52	0.49	0.45	0.40	0.38
Petrochemical (feedstock)	0.48	1.48	1.46	1.60	1.41	0.83	1.35	1.70
Refineries	2.72	2.62	2.44	2.28	1.91	1.86	2.15	2.40
Others	1.59	1.90	1.95	1.94	1.71	1.57	1.77	2.04
Totals	45.15	49.62	52.59	51.42	48.02	47.80	51.29	58.16

Graph 4.3.3.1. Egypt: Natural Gas Domestic Consumption

2010 - 2017 | Bcm

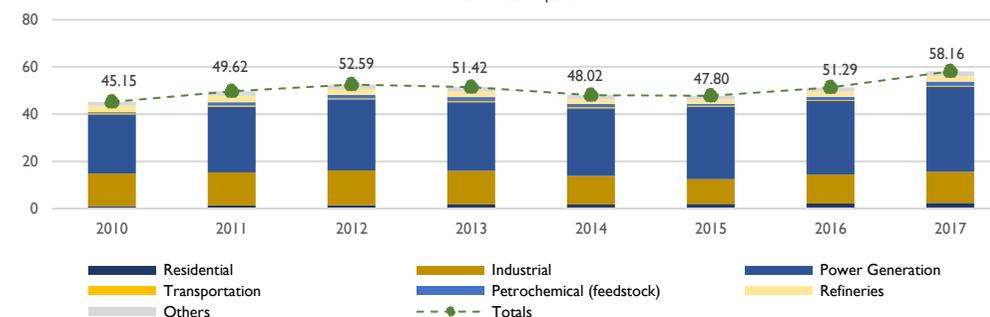


Table 4.3.3.2 Trade: Natural Gas Exports

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

* Gas equivalent

Table 4.3.3.3 Trade: Natural Gas Imports

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

* Gas equivalent

Graph 4.3.3.2. Egypt: Natural Gas Exports and Imports

2010 - 2017 | Bcm



4.3.4 Transport and Plants

4.3.4.1 Natural Gas Exports Pipelines

Pipeline	Connection		Owner(s)	Operator(s)	Status	Capacity (Bcm/year)	Type	Start Year	Length (km)	Diameter (Inches)
	From	To								
Arab Gas Pipeline	Egypt	Jordan, Syria, Lebanon	EGAS, ENPPI, GASCO PETROJET 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

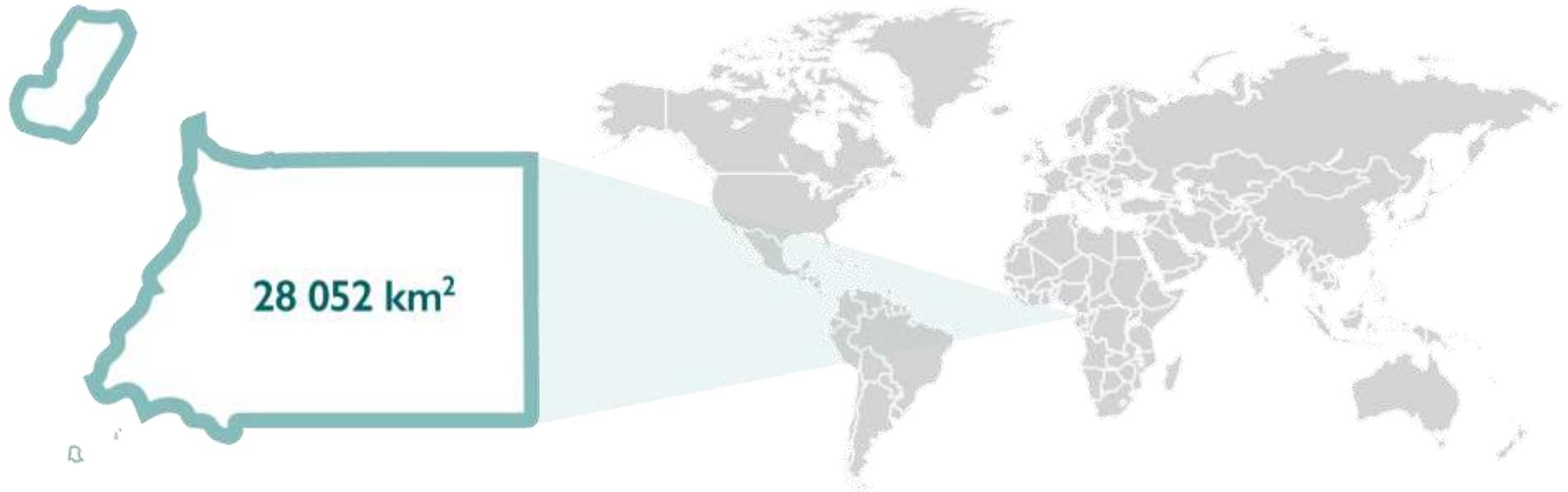
4.3.4.3 Regasification Plants

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:
1 267 689



Capital:
Malabo



Continent:
Africa



Currency:
Central African
CFA franc



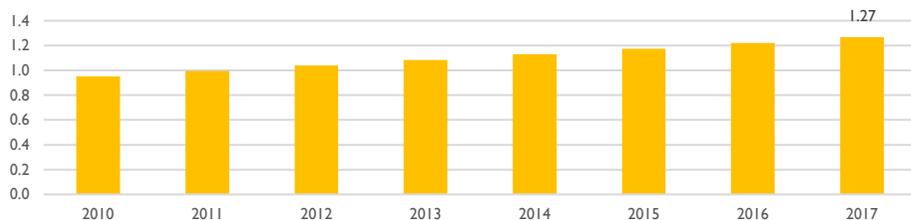
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4.4.1 Macroeconomics

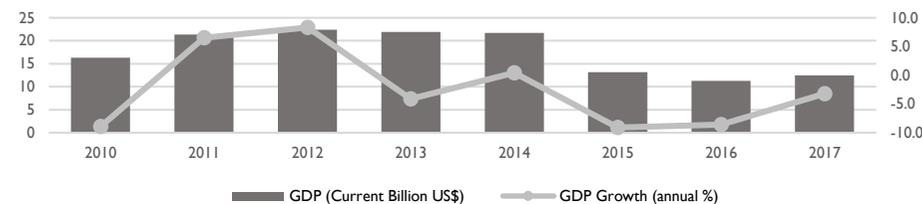
4.4.1.1 Equatorial Guinea Macroeconomic Indicators

	2010	2011	2012	2013	2014	2015	2016	2017
Population (Inhabitants)	951,104	994,290	1,038,593	1,083,746	1,129,424	1,175,389	1,221,490	1,267,689
GDP (Current Billion US\$)	16.30	21.33	22.39	21.94	21.74	13.18	11.26	12.49
GDP Growth (annual %)	-8.92	6.52	8.31	-4.13	0.42	-9.09	-8.58	-3.22
GDP per capita (Current US\$)	17,136.45	21,451.89	21,557.65	20,246.99	19,245.65	11,213.47	9,217.89	9,850.01
Exports of Goods and Services (Current Billion US\$)	13.98	16.02	16.10	14.84	14.34	7.47	5.78	7.06
Exports of Goods and Services (% of GDP)	85.76	75.10	71.90	67.65	65.96	56.66	51.31	56.53
Imports of Goods and Services (Current Billion US\$)	9.60	8.38	10.02	8.61	8.35	5.56	4.64	4.73
Imports of Goods and Services (% of GDP)	58.91	39.28	44.77	39.24	38.42	42.22	41.18	37.88
Inflation consumer prices (annual %)	7.79	4.81	3.66	2.95	4.31	1.67	1.42	-
Energy use (kg of oil equivalent per capita)	2.53	2.61	2.61	2.52	2.63	-	-	-

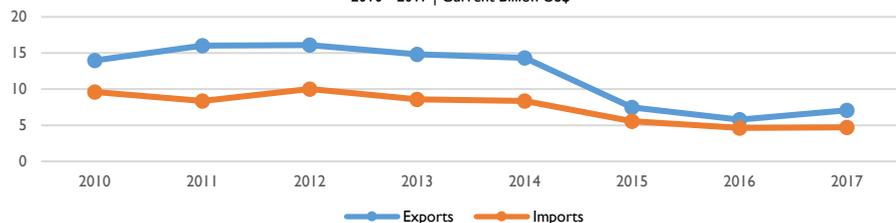
Graph 4.4.1.1. Equatorial Guinea: Population
2010 - 2017 | Millions Inhabitants



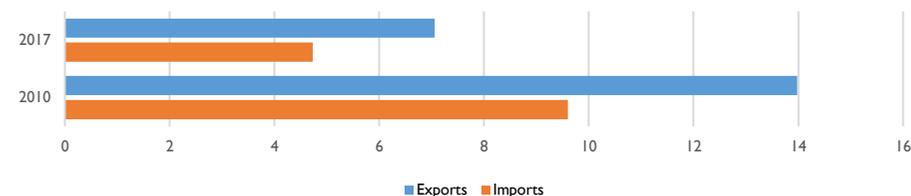
Graph 4.4.1.2. Equatorial Guinea: GDP and GDP Growth
2010 - 2017 | Current Billion US\$ and Annual %



Graph 4.4.1.3. Equatorial Guinea: Exports and Imports (Goods and Services)
2010 - 2017 | Current Billion US\$



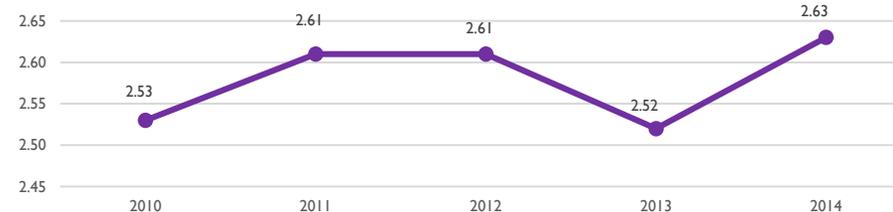
Graph 4.4.1.4. Equatorial Guinea: Exports and Imports (Goods and Services)
2010 vs 2017 | Current Billion US\$



Graph 4.4.1.5. Equatorial Guinea: Inflation (Consumer Prices)
2010 - 2016 | Annual %



Graph 4.4.1.6. Equatorial Guinea: Energy Use
2010 - 2014 | kg of Oil Equivalent per Capita



4.4.2 Reserves and Production

Table 4.4.2.1 Proven Gas Reserves (Bcm)

	2010	2011	2012	2013	2014	2015	2016	2017
Proven Gas Reserves	82	78	71	65	60	54	47	47

Table 4.4.2.2 Natural Gas Production (Bcm)

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

4.4.3 Domestic Consumption and Trade

Table 4.3.3.1 Domestic Gas Consumption (Bcm)

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

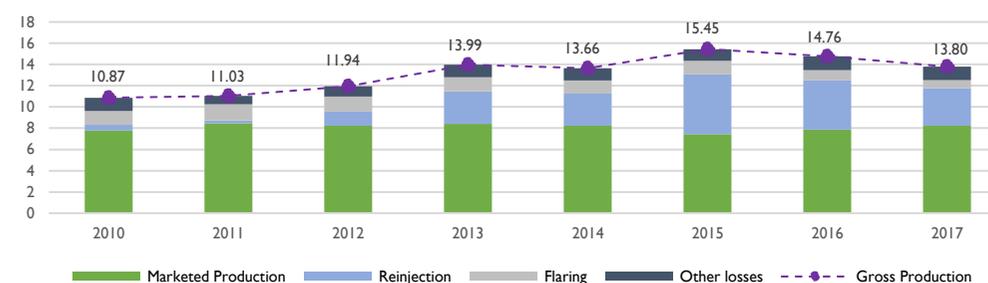
Table 4.4.3.2 Trade: Natural Gas Exports

		2010	2011	2012	2013	2014	2015	2016	2017
LNG	Bcm*	5.87	5.61	5.55	5.77	5.87	5.30	5.31	5.88
	MMT	4.32	4.13	4.08	4.25	4.31	3.89	3.90	4.32
Totals		5.87	5.61	5.55	5.77	5.87	5.30	5.31	5.88

* Gas equivalent

Graph 4.4.2.1. Equatorial Guinea: Natural Gas Production

2010 - 2017 | Bcm



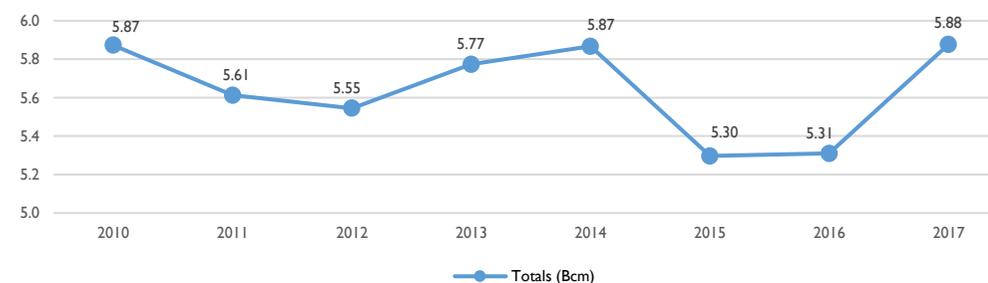
Graph 4.4.3.1. Equatorial Guinea: Natural Gas Domestic Consumption

2010 - 2017 | Bcm



Graph 4.4.3.2. Equatorial Guinea: Natural Gas Exports

2010 - 2017 | 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	Marathon Oil
Fortuna FLNG	1	2.2	Planned	2022	Ophir, OneLNG	Golar



Islamic Republic of
IRAN



Population:
81 162 788



Capital:
Tehran



Continent:
Middle East



Currency:
Iranian Rial



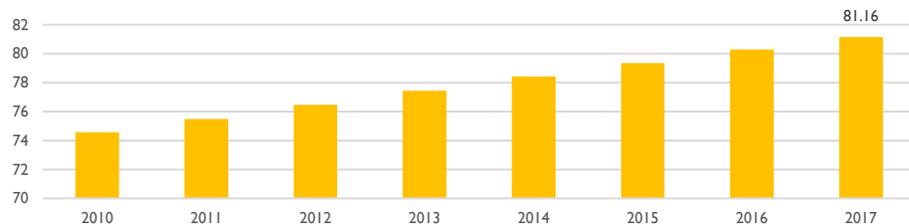
Time Zone:
**Iran Standard
GMT+3.5**

4.5.1 Macroeconomics

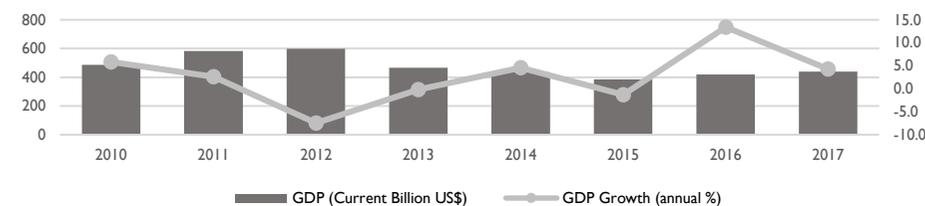
4.5.1.1 Iran Macroeconomic Indicators

	2010	2011	2012	2013	2014	2015	2016	2017
Population (Inhabitants)	74,567,511	75,491,582	76,453,574	77,435,384	78,411,092	79,360,487	80,277,428	81,162,788
GDP (Current Billion US\$)	487.07	583.50	598.85	467.41	434.47	385.87	418.98	439.51
GDP Growth (annual %)	5.80	2.65	-7.44	-0.19	4.60	-1.32	13.40	4.30
GDP per capita (Current US\$)	6,531.93	7,729.34	7,832.90	6,036.19	5,540.98	4,862.30	5,219.11	5,415.21
Exports of Goods and Services (Current Billion US\$)	118.84	149.57	144.50	125.65	100.54	76.18	93.87	104.55
Exports of Goods and Services (% of GDP)	24.40	25.63	24.13	26.88	23.14	19.74	22.40	23.79
Imports of Goods and Services (Current Billion US\$)	94.35	102.45	139.20	109.61	93.25	74.37	87.19	97.95
Imports of Goods and Services (% of GDP)	19.37	17.56	23.24	23.45	21.46	19.27	20.81	22.29
Inflation consumer prices (annual %)	10.14	20.63	27.36	39.27	17.24	13.71	8.57	-
Energy use (kg of oil equivalent per capita)	2,739.57	2,759.44	2,835.04	2,853.54	3,023.49	-	-	-

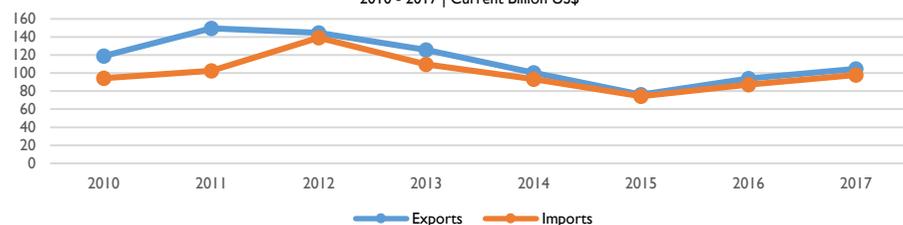
Graph 4.5.1.1. I.R.Iran: Population
2010 - 2017 | Millions Inhabitants



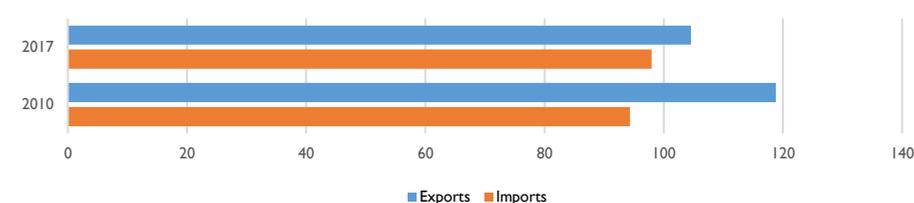
Graph 4.5.1.2. I.R.Iran: GDP and GDP Growth
2010 - 2017 | Current Billion US\$ and Annual %



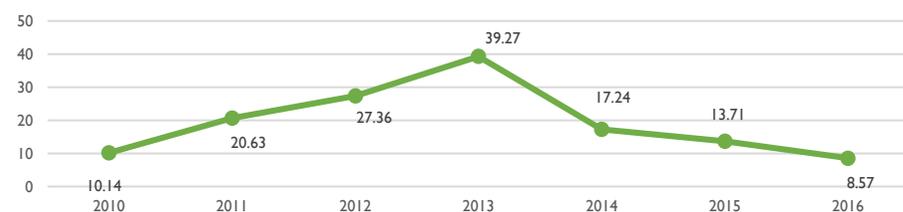
Graph 4.5.1.3. I.R.Iran: Exports and Imports (Goods and Services)
2010 - 2017 | Current Billion US\$



Graph 4.5.1.4. I.R.Iran: Exports and Imports (Goods and Services)
2010 vs 2017 | Current Billion US\$



Graph 4.5.1.5. I.R.Iran: Inflation (Consumer Prices)
2010 - 2016 | Annual %



Graph 4.5.1.6. I.R.Iran: Energy Use
2010 - 2014 | kg of Oil Equivalent per Capita



4.5.2 Reserves and Production

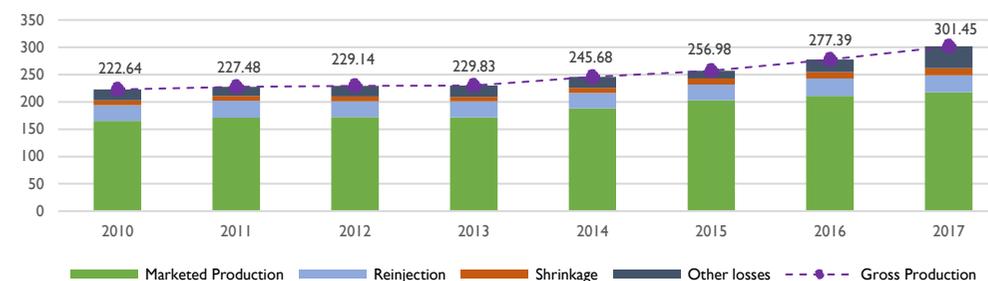
Table 4.5.2.1 Proven Gas Reserves (Bcm)

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

Table 4.5.2.2 Natural Gas Production (Bcm)

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

Graph 4.5.2.1. Iran: Natural Gas Production
2010 - 2017 | Bcm



4.5.3 Domestic Consumption and Trade

Table 4.5.3.1 Domestic Gas Consumption (Bcm)

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

Graph 4.5.3.1. Iran: Natural Gas Domestic Consumption
2010 - 2017 | Bcm

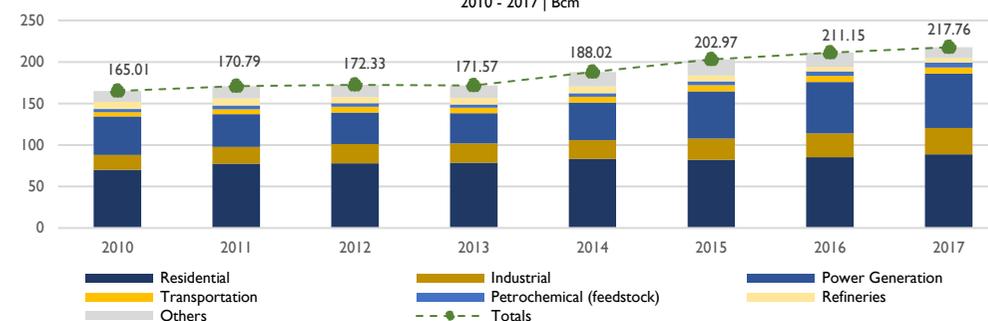


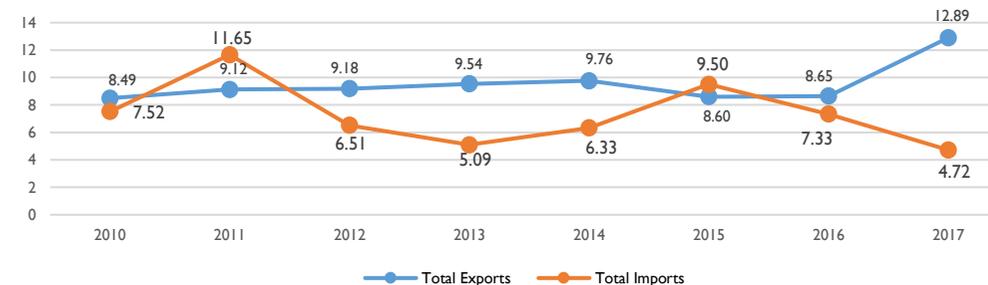
Table 4.5.3.2 Trade: Natural Gas Exports (Bcm)

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

Table 4.5.3.3 Trade: Natural Gas Imports (Bcm)

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

Graph 4.5.3.2. Iran: Natural Gas Exports and Imports
2010 - 2017 | Bcm



4.5.4 Transport and Plants

4.5.4.1 Natural Gas Exports Pipelines

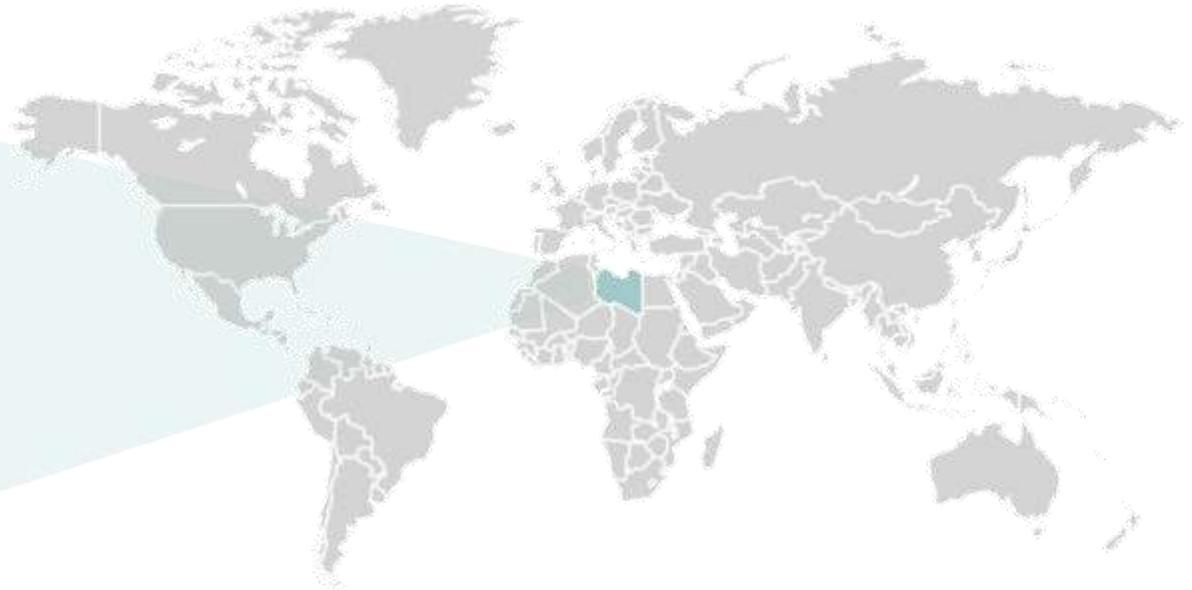
Pipeline	Connection		Owner(s)	Operator(s)	Status	Capacity (Bcm/year)	Type	Start Year	Length (km)	Diameter (Inches)
	From	To								
Tabriz-Ankara	Iran	Turkey	NIOC, Botas	NIOC, Botas	Operational	14.0	Export	2002	3,250	40
Jolfa-Nakhchivan	Iran	Azerbaijan	NIGC, SOCAR	NIGC, SOCAR	Operational	10.0	Swap	2005	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	Turkmengaz	Turkmengaz	Operational	12.0	Import	2007	182	48
Asaluye-Basrah	Iran	Iraq	NIOC, INOC	NIOC, INOC	Under Construction	-	Export	-	-	-
Asaluye-Nawabshah	Iran	Pakistan	NIOC, SNGPL, SSGC, Gazprom JSC	NIOC, SNGPL, SSGC, Gazprom JSC	Under Construction	40.0	Export	-	2,775	56
Asaluye-Sohar	Iran	Oman	NIOC, OGC	NIOC, OGC	Planned	9.9	Export	2020	-	-

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	2018	NIOC	Iran LNG
Iran FLNG	1	0.7	Planned	2018	NIOC	-



State of
LIBYA



Population:
6 374 616



Capital:
Tripoli



Continent:
Africa



Currency:
Libyan Dinar



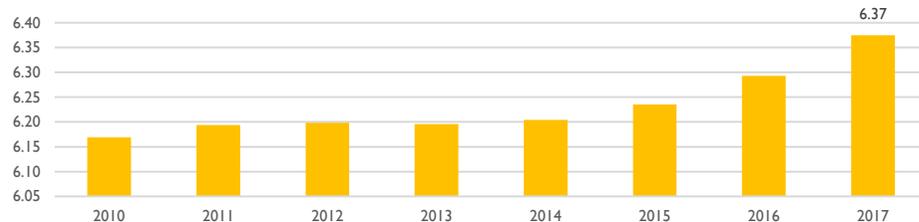
Time Zone:
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4.6.1 Macroeconomics

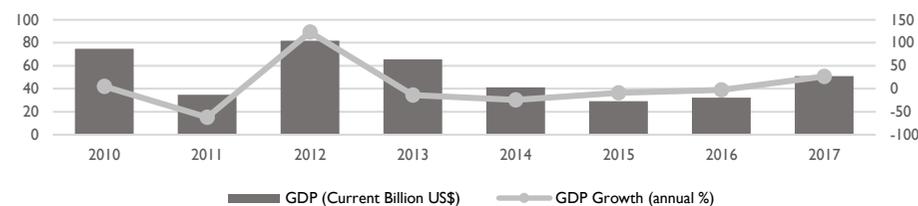
4.6.1.1 Libya Macroeconomic Indicators

	2010	2011	2012	2013	2014	2015	2016	2017
Population (Inhabitants)	6,169,140	6,193,501	6,198,258	6,195,970	6,204,108	6,234,955	6,293,253	6,374,616
GDP (Current Billion US\$)	74.77	34.70	81.87	65.50	41.14	29.27	32.26	50.98
GDP Growth (annual %)	5.02	-62.08	123.14	-13.60	-24.00	-8.86	-2.80	26.68
GDP per capita (Current US\$)	12,120.56	5,602.55	13,209.14	10,571.85	6,631.53	4,695.27	5,125.68	7,998.03
Exports of Goods and Services (Current Billion US\$)	49.06	19.03	61.10	46.14	19.34	11.13	-	-
Exports of Goods and Services (% of GDP)	65.60	54.83	74.62	70.43	47.01	38.01	-	-
Imports of Goods and Services (Current Billion US\$)	31.48	15.54	32.54	42.46	37.80	20.68	-	-
Imports of Goods and Services (% of GDP)	42.10	44.79	39.75	64.83	91.88	70.64	-	-
Inflation consumer prices (annual %)	2.80	15.52	6.06	2.61	-	-	-	-
Energy use (kg of oil equivalent per capita)	3,369.03	2,209.89	2,782.75	3,133.49	2,880.14	-	-	-

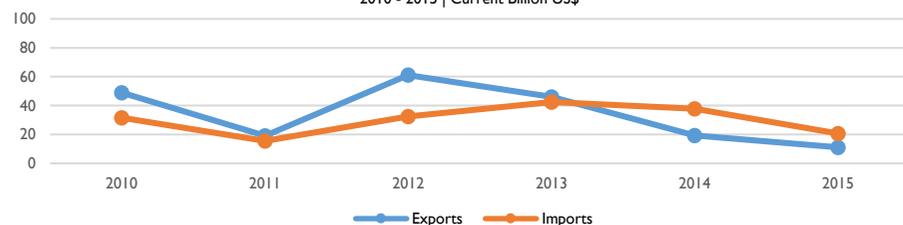
Graph 4.6.1.1. Libya: Population
2010 - 2017 | Millions Inhabitants



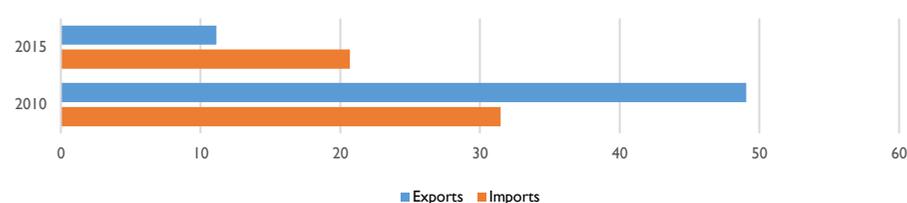
Graph 4.6.1.2. Libya: GDP and GDP Growth
2010 - 2017 | Current Billion US\$ and Annual %



Graph 4.6.1.3. Libya: Exports and Imports (Goods and Services)
2010 - 2015 | Current Billion US\$



Graph 4.6.1.4. Libya: Exports and Imports (Goods and Services)
2010 vs 2015 | Current Billion US\$



Graph 4.6.1.5. Libya: Inflation (Consumer Prices)
2010 - 2013 | Annual %



Graph 4.6.1.6. Libya: Energy Use
2010 - 2014 | kg of Oil Equivalent per Capita



4.6.2 Reserves and Production

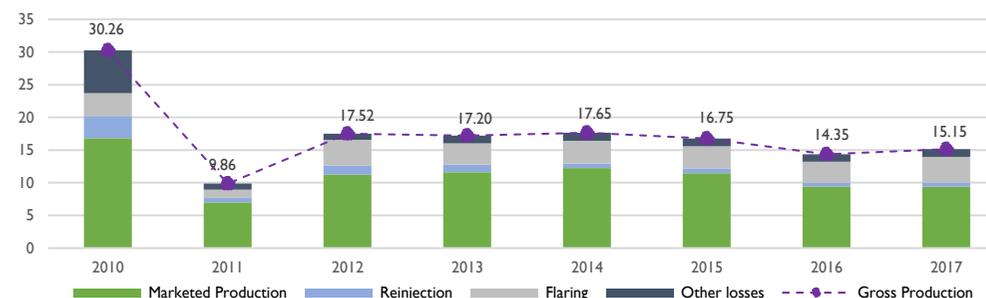
Table 4.6.2.1 Proven Gas Reserves (Bcm)

	2010	2011	2012	2013	2014	2015	2016	2017
Proven Gas Reserves	1,500	1,507	1,505	1,503	1,503	1,503	1,500	1,500

Table 4.6.2.2 Natural Gas Production (Bcm)

	2010	2011	2012	2013	2014	2015	2016	2017
Gross Production	30.26	9.86	17.52	17.20	17.65	16.75	14.35	15.15
Marketed Production	16.81	6.96	11.25	11.61	12.23	11.47	9.43	9.40
Reinjection	3.40	0.70	1.40	1.15	0.70	0.70	0.60	0.65
Flaring	3.48	1.30	3.92	3.25	3.49	3.44	3.20	3.89
Other losses	6.57	0.90	0.95	1.19	1.23	1.14	1.12	1.21

Graph 4.6.2.1. Libya: Natural Gas Production 2010 - 2017 | Bcm



4.6.3 Domestic Consumption and Trade

Table 4.6.3.1 Domestic Gas Consumption (Bcm)

	2010	2011	2012	2013	2014	2015	2016	2017
Residential	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003
Industrial	0.92	0.97	0.66	1.28	1.32	0.76	0.67	0.67
Power Generation	4.84	2.56	3.25	3.34	3.50	2.57	2.80	3.13
Petrochemical (feedstock)	0.96	0.61	0.91	0.93	0.72	1.08	0.98	1.09
Refineries	0.27	0.16	0.22	0.36	0.36	0.17	0.18	0.19
Totals	6.99	4.30	5.03	5.91	5.89	4.57	4.63	5.08

Graph 4.6.3.1. Libya: Natural Gas Domestic Consumption 2010 - 2017 | Bcm

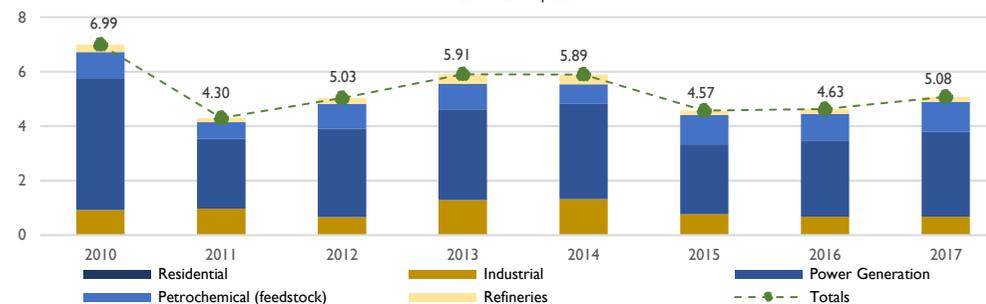
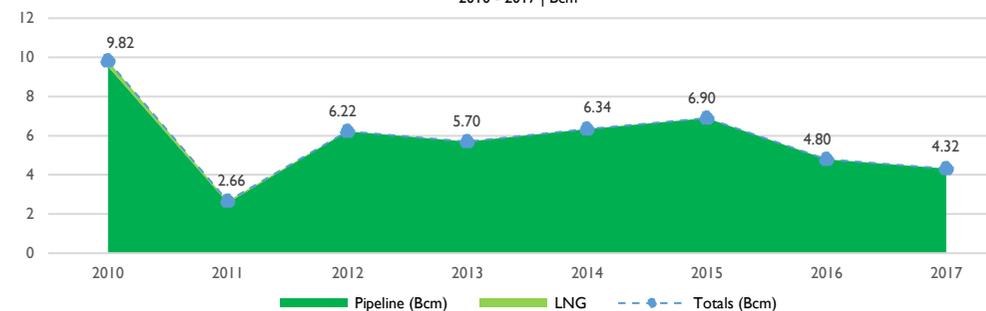


Table 4.6.3.2 Trade: Natural Gas Exports

	2010	2011	2012	2013	2014	2015	2016	2017
Pipeline (Bcm)	9.53	2.57	6.22	5.70	6.34	6.90	4.80	4.32
LNG								
Bcm*	0.29	0.09	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
Totals (Bcm)	9.82	2.66	6.22	5.70	6.34	6.90	4.80	4.32

* Gas equivalent

Graph 4.6.3.2. Libya: Natural Gas Exports 2010 - 2017 | Bcm



4.6.4 Transport and Plants

4.6.4.1 Natural Gas Exports Pipelines

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

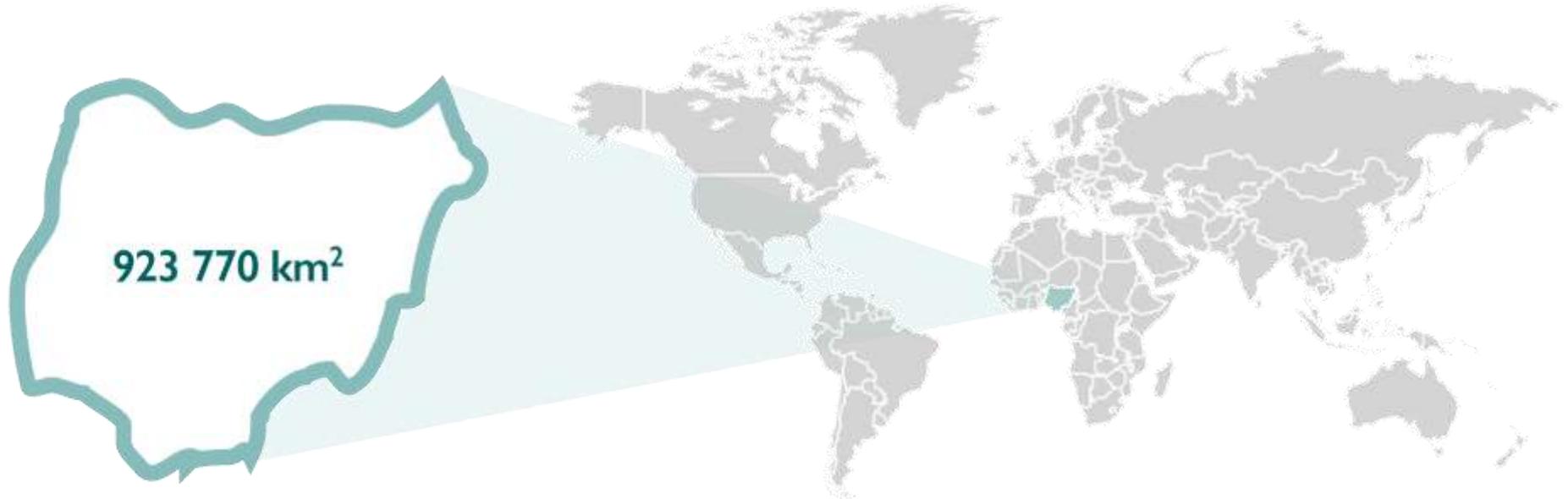
4.6.4.2 Liquefaction Plants

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:
190 886 311



Capital:
Abuja



Continent:
Africa



Currency:
Nigerian Naira



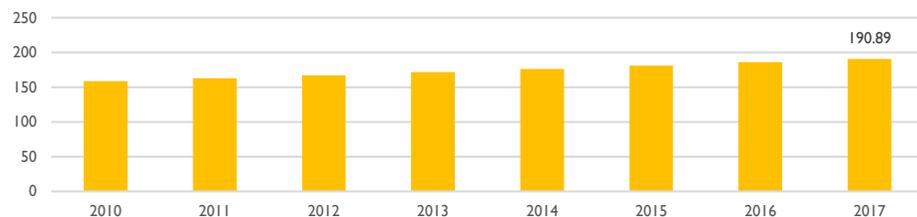
Time Zone:
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4.7.1 Macroeconomics

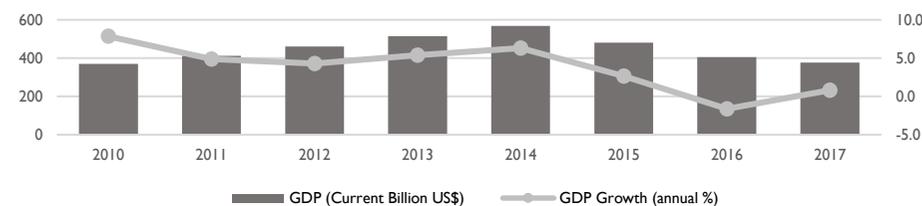
4.7.1.1 Nigeria Macroeconomic Indicators

	2010	2011	2012	2013	2014	2015	2016	2017
Population (Inhabitants)	158,578,261	162,877,076	167,297,284	171,829,303	176,460,502	181,181,744	185,989,640	190,886,311
GDP (Current Billion US\$)	369.06	411.74	460.95	514.97	568.50	481.07	404.65	375.77
GDP Growth (annual %)	7.84	4.89	4.28	5.39	6.31	2.65	-1.62	0.81
GDP per capita (Current US\$)	2,327.32	2,527.94	2,755.30	2,996.96	3,221.68	2,655.16	2,175.67	1,968.56
Exports of Goods and Services (Current Billion US\$)	93.24	129.00	144.92	92.95	104.80	51.31	37.30	-
Exports of Goods and Services (% of GDP)	25.26	31.33	31.44	18.05	18.44	10.67	9.22	-
Imports of Goods and Services (Current Billion US\$)	64.17	88.38	59.65	66.94	70.78	51.31	46.55	-
Imports of Goods and Services (% of GDP)	17.39	21.46	12.94	13.00	12.45	10.67	11.50	-
Inflation consumer prices (annual %)	13.72	10.84	12.22	8.48	8.06	9.02	15.70	-
Energy use (kg of oil equivalent per capita)	755.99	778.50	798.30	779.85	763.39	-	-	-

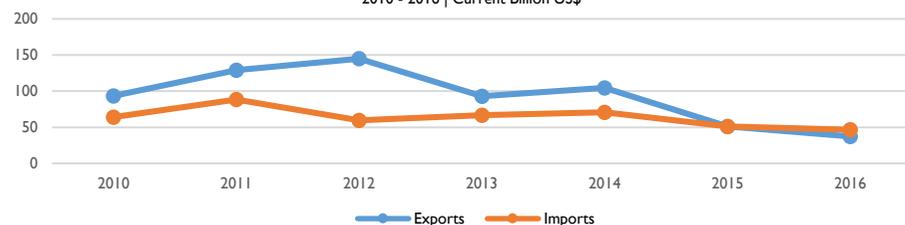
Graph 4.7.1.1. Nigeria: Population
2010 - 2017 | Millions Inhabitants



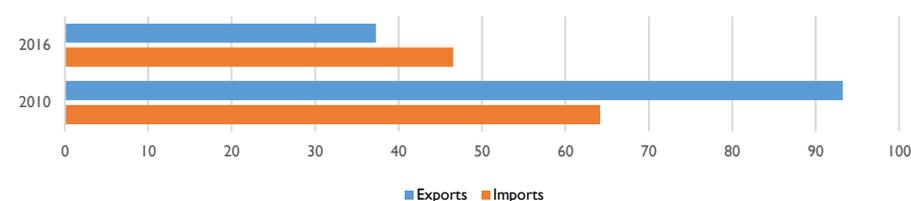
Graph 4.7.1.2. Nigeria: GDP and GDP Growth
2010 - 2017 | Current Billion US\$ and Annual %



Graph 4.7.1.3. Nigeria: Exports and Imports (Goods and Services)
2010 - 2016 | Current Billion US\$



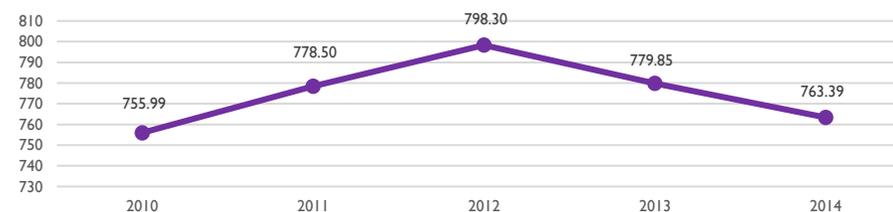
Graph 4.7.1.4. Nigeria: Exports and Imports (Goods and Services)
2010 vs 2016 | Current Billion US\$



Graph 4.7.1.5. Nigeria: Inflation (Consumer Prices)
2010 - 2016 | Annual %



Graph 4.7.1.6. Nigeria: Energy Use
2010 - 2014 | kg of Oil Equivalent per Capita



4.7.2 Reserves and Production

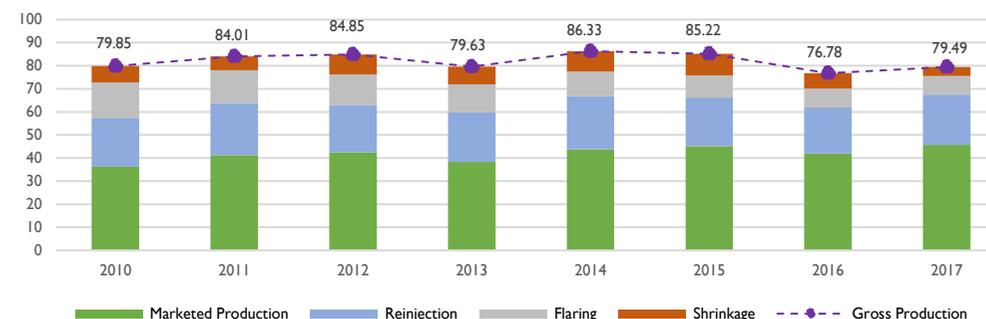
Table 4.7.2.1 Proven Gas Reserves (Bcm)

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

Table 4.7.2.2 Natural Gas Production (Bcm)

	2010	2011	2012	2013	2014	2015	2016	2017
Gross Production	79.85	84.01	84.85	79.63	86.33	85.22	76.78	79.49
Marketed Production	36.19	41.32	42.57	38.41	43.84	45.15	41.99	45.79
Reinjection	21.29	22.52	20.52	21.47	22.89	21.04	19.90	21.68
Flaring	15.29	14.27	13.18	12.11	10.74	9.69	8.18	8.14
Shrinkage	7.08	5.89	8.57	7.64	8.85	9.35	6.70	3.88

Graph 4.7.2.1. Nigeria: Natural Gas Production 2010 - 2017 | Bcm



4.7.3 Domestic Consumption and Trade

Table 4.7.3.1 Domestic Gas Consumption (Bcm)

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

Graph 4.7.3.1. Nigeria: Natural Gas Domestic Consumption 2010 - 2017 | Bcm

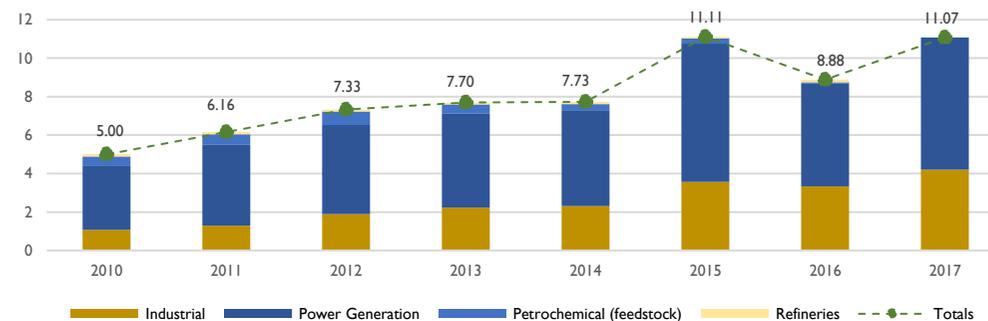
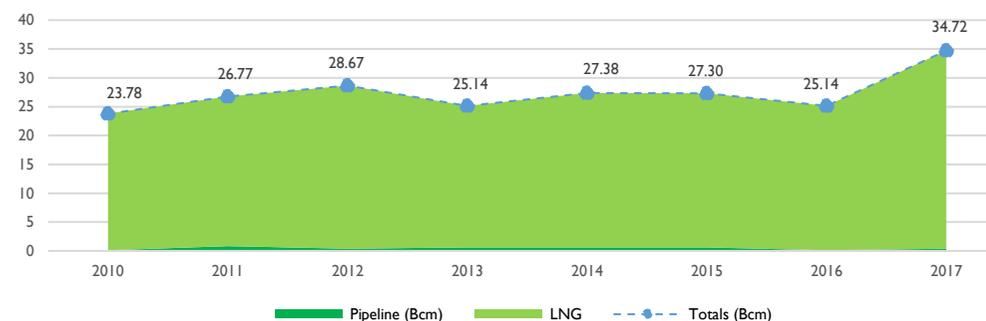


Table 4.7.3.2 Trade: Natural Gas Exports

	2010	2011	2012	2013	2014	2015	2016	2017
Pipeline (Bcm)	0.12	0.83	0.40	0.60	0.60	0.60	0.12	0.39
LNG								
Bcm*	23.66	25.94	28.27	24.54	26.78	26.70	25.02	34.33
MMT	17.40	19.07	20.79	18.04	19.69	19.63	18.40	25.24
Totals (Bcm)	23.78	26.77	28.67	25.14	27.38	27.30	25.14	34.72

* Gas equivalent

Graph 4.7.3.2. Nigeria: Natural Gas Exports 2010 - 2017 | Bcm



4.7.4 Transport and Plants

4.7.4.1 Natural Gas Exports 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

Number of Vessels	Status	Technology	
		Membrane	Moss
23	Operational	16	7

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	-	Planned	-	Nigeria LNG	Nigeria LNG
NLNG 8	1	-	Planned	-	Nigeria LNG	Nigeria LNG



State of
QATAR



Population:
2 639 211



Capital:
Doha



Continent:
Middle East



Currency:
Qatari Riyal



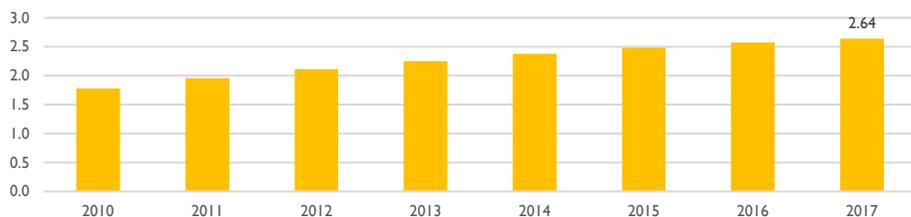
Time Zone:
Arabia
GMT+3

4.8.1 Macroeconomics

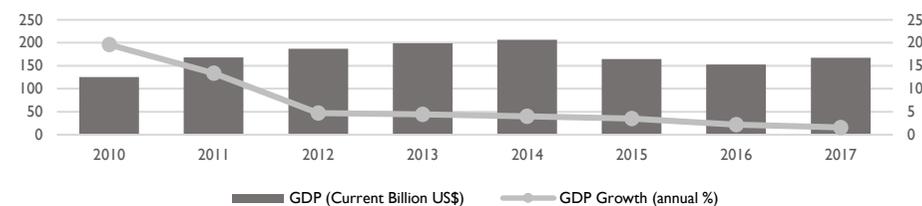
4.8.1.1 Qatar Macroeconomic Indicators

	2010	2011	2012	2013	2014	2015	2016	2017
Population (Inhabitants)	1,779,676	1,952,054	2,109,568	2,250,473	2,374,419	2,481,539	2,569,804	2,639,211
GDP (Current Billion US\$)	125.12	167.78	186.83	198.73	206.22	164.64	152.45	167.61
GDP Growth (annual %)	19.59	13.38	4.69	4.41	3.98	3.55	2.22	1.60
GDP per capita (Current US\$)	70,306.23	85,948.07	88,564.82	88,304.88	86,852.71	66,346.52	59,324.34	63,505.81
Exports of Goods and Services (Current Billion US\$)	77.98	121.84	142.88	144.51	140.23	92.29	72.40	-
Exports of Goods and Services (% of GDP)	62.32	72.62	76.47	72.72	68.00	56.06	47.49	-
Imports of Goods and Services (Current Billion US\$)	29.72	43.79	54.69	58.95	64.00	59.27	63.46	-
Imports of Goods and Services (% of GDP)	23.75	26.10	29.27	29.67	31.04	36.00	41.63	-
Inflation consumer prices (annual %)	-2.43	1.92	1.87	3.13	3.08	1.88	2.88	-
Energy use (kg of oil equivalent per capita)	15,531.78	16,030.61	18,055.61	17,926.72	18,562.67	-	-	-

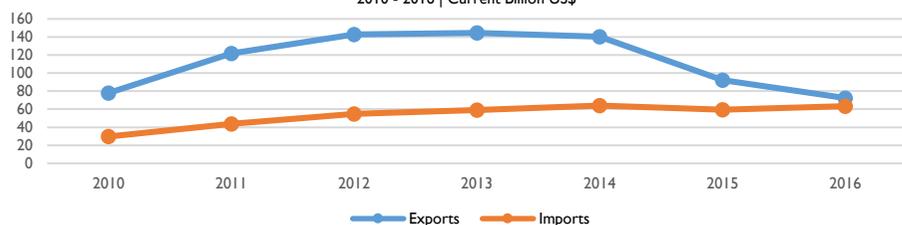
Graph 4.8.1.1. Qatar: Population
2010 - 2017 | Millions Inhabitants



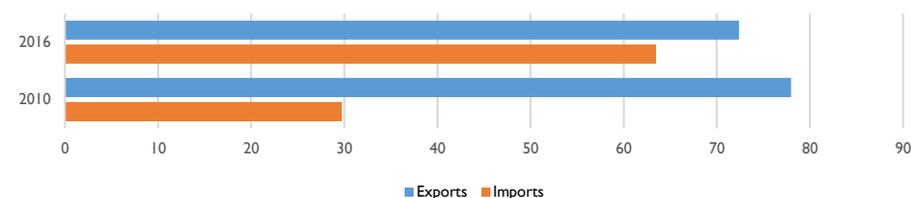
Graph 4.8.1.2. Qatar: GDP and GDP Growth
2010 - 2017 | Current Billion US\$ and Annual %



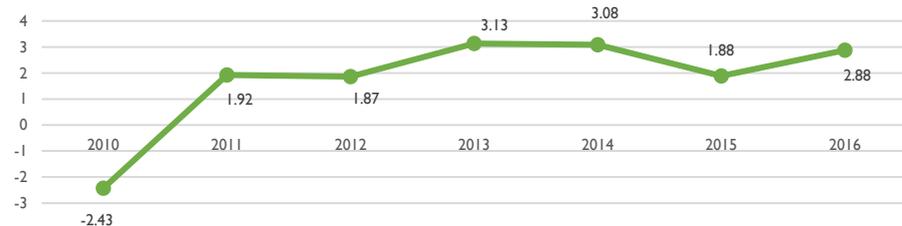
Graph 4.8.1.3. Qatar: Exports and Imports (Goods and Services)
2010 - 2016 | Current Billion US\$



Graph 4.8.1.4. Qatar: Exports and Imports (Goods and Services)
2010 vs 2016 | Current Billion US\$



Graph 4.8.1.5. Qatar: Inflation (Consumer Prices)
2010 - 2016 | Annual %



Graph 4.8.1.6. Qatar: Energy Use
2010 - 2014 | kg of Oil Equivalent per Capita



4.8.2 Reserves and Production

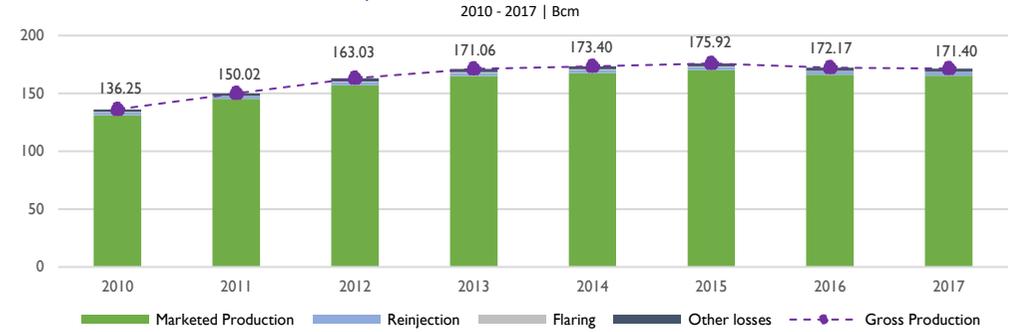
Table 4.8.2.1 Proven Gas Reserves (Bcm)

	2010	2011	2012	2013	2014	2015	2016	2017
Proven Gas Reserves	25,124	25,089	25,009	24,680	24,530	24,414	24,300	24,500

Table 4.8.2.2 Natural Gas Production (Bcm)

	2010	2011	2012	2013	2014	2015	2016	2017
Gross Production	136.25	150.02	163.03	171.06	173.40	175.92	172.17	171.40
Marketed Production	131.17	145.27	157.05	164.96	167.43	170.05	166.10	165.37
Reinjection	2.07	2.11	2.66	2.71	2.65	2.53	2.74	2.66
Flaring	1.02	0.56	0.70	0.74	0.71	0.72	0.75	0.75
Other losses	1.99	2.08	2.62	2.65	2.61	2.62	2.58	2.62

Graph 4.8.2.1. Qatar: Natural Gas Production



4.8.3 Domestic Consumption and Trade

Table 4.8.3.1 Domestic Gas Consumption (Bcm)

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

Graph 4.8.3.1. Qatar: Natural Gas Domestic Consumption

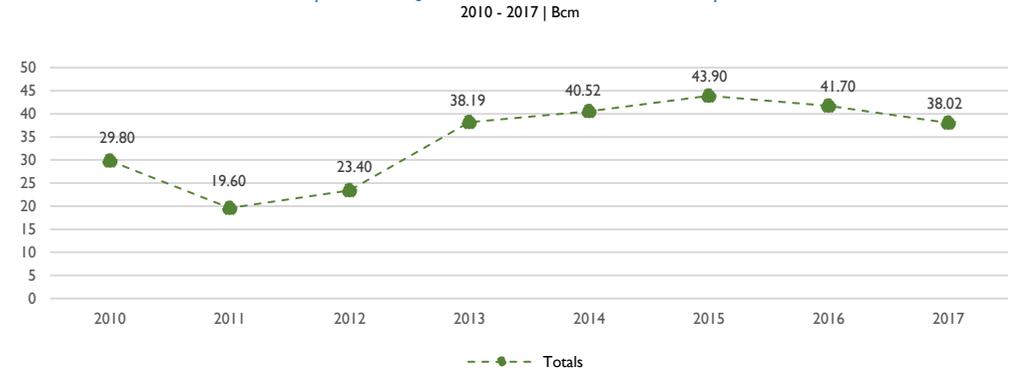
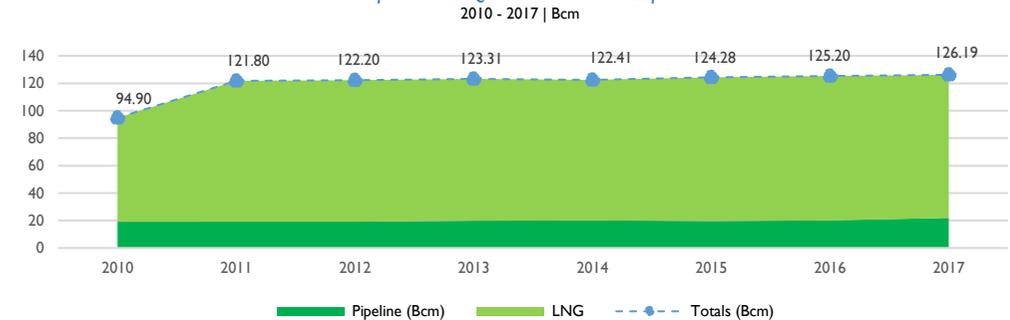


Table 4.8.3.2 Trade: Natural Gas Exports

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

* Gas equivalent

Graph 4.8.3.2. Qatar: Natural Gas Exports



4.8.4 Transport and Plants

4.8.4.1 Natural Gas Exports Pipelines

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

4.8.4.2 LNG Carrier Fleet

Number of Vessels	Status	Total Capacity	
		Bcm	MMT
>70	Operational	-	-

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	4	33.0	Project	2024/2025	Qatar Petroleum	Project Phase



Russian Federation
RUSSIA



Population:
144 495 044



Capital:
Moscow



Continent:
Euroasia



Currency:
Russian Ruble



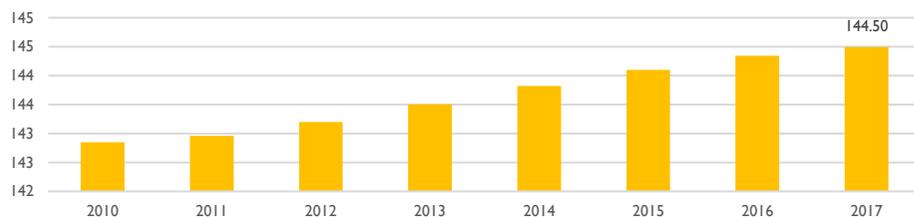
Time Zone:
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(Moscow)

4.9.1 Macroeconomics

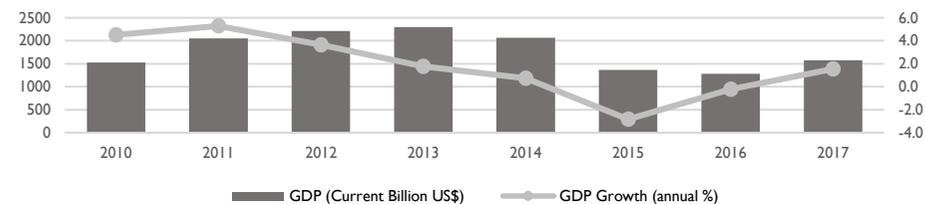
4.9.1.1 Russia Macroeconomic Indicators

	2010	2011	2012	2013	2014	2015	2016	2017
Population (Inhabitants)	142,849,449	142,960,868	143,201,676	143,506,911	143,819,666	144,096,870	144,342,396	144,495,044
GDP (Current Billion US\$)	1,524.92	2,051.66	2,210.26	2,297.13	2,063.66	1,368.40	1,284.73	1,577.52
GDP Growth (annual %)	4.50	5.28	3.66	1.79	0.74	-2.83	-0.22	1.55
GDP per capita (Current US\$)	10,674.99	14,351.21	15,434.57	16,007.09	14,125.91	9,346.62	8,759.04	10,743.10
Exports of Goods and Services (Current Billion US\$)	445.51	573.99	594.19	592.50	558.28	391.45	330.16	410.78
Exports of Goods and Services (% of GDP)	29.22	27.98	26.88	25.79	27.05	28.61	25.70	26.04
Imports of Goods and Services (Current Billion US\$)	322.37	408.78	447.05	468.62	426.06	281.49	263.71	326.37
Imports of Goods and Services (% of GDP)	21.14	19.92	20.23	20.40	20.65	20.57	20.53	20.69
Inflation consumer prices (annual %)	6.85	8.44	5.09	6.74	7.83	15.53	7.05	-
Energy use (kg of oil equivalent per capita)	4,819.04	5,049.43	5,167.01	5,078.63	4,942.88	-	-	-

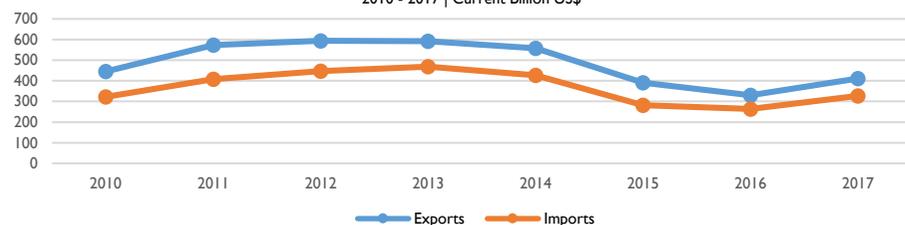
Graph 4.9.1.1. Russia: Population
2010 - 2017 | Millions Inhabitants



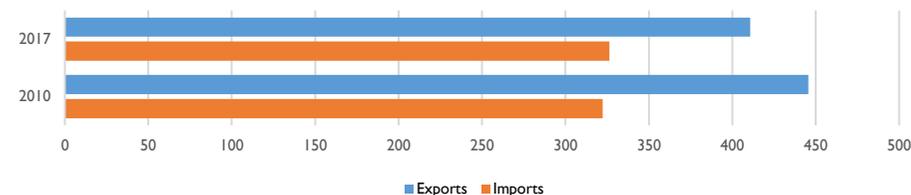
Graph 4.9.1.2. Russia: GDP and GDP Growth
2010 - 2017 | Current Billion US\$ and Annual %



Graph 4.9.1.3. Russia: Exports and Imports (Goods and Services)
2010 - 2017 | Current Billion US\$



Graph 4.9.1.4. Russia: Exports and Imports (Goods and Services)
2010 vs 2017 | Current Billion US\$



Graph 4.9.1.5. Russia: Inflation (Consumer Prices)
2010 - 2016 | Annual %



Graph 4.9.1.6. Russia: Energy Use
2010 - 2014 | kg of Oil Equivalent per Capita



4.9.2 Reserves and Production

Table 4.9.2.1 Proven Gas Reserves (Bcm)

	2010	2011	2012	2013	2014	2015	2016	2017
Proven Gas Reserves	45,200	46,538	46,605	46,868	47,148	47,443	47,465	47,805

Table 4.9.2.2 Natural Gas Production (Bcm)

	2010	2011	2012	2013	2014	2015	2016	2017
Gross Production	651.30	670.80	654.68	667.59	642.81	633.54	640.81	691.10
Marketed Production	628.93	647.60	631.15	645.91	619.75	612.74	619.81	668.94
Flaring	15.49	16.73	17.09	15.33	15.67	14.51	14.60	15.12
Other losses	6.59	6.67	6.76	6.76	6.59	6.76	6.59	7.04

4.9.3 Domestic Consumption and Trade

Table 4.9.3.1 Domestic Gas Consumption (Bcm)

	2010	2011	2012	2013	2014	2015	2016	2017
Totals	471.14	487.52	480.59	467.94	469.84	452.17	449.83	454.05

Table 4.9.3.2 Trade: Natural Gas Exports

	2010	2011	2012	2013	2014	2015	2016	2017
Pipeline (Bcm)	174.26	187.09	178.68	196.45	174.26	185.44	198.70	182.15
LNG								
Bcm*	13.60	14.51	14.84	14.67	14.61	14.73	14.86	15.99
MMT	10.00	10.67	10.91	10.79	10.74	10.83	10.93	11.76
Totals (Bcm)	187.86	201.60	193.52	211.12	188.87	200.17	213.56	198.14

* Gas equivalent

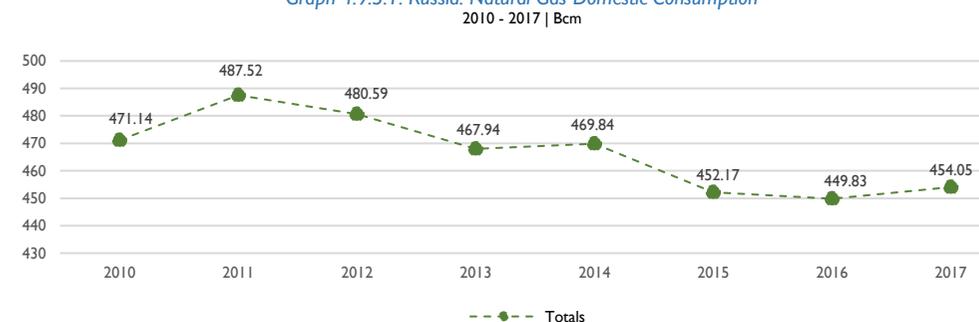
Table 4.9.3.3 Trade: Natural Gas Imports (Bcm)

	2010	2011	2012	2013	2014	2015	2016	2017
Pipeline	4.25	7.97	8.06	8.23	8.58	8.84	8.93	8.94
Totals (Bcm)	4.25	7.97	8.06	8.23	8.58	8.84	8.93	8.94

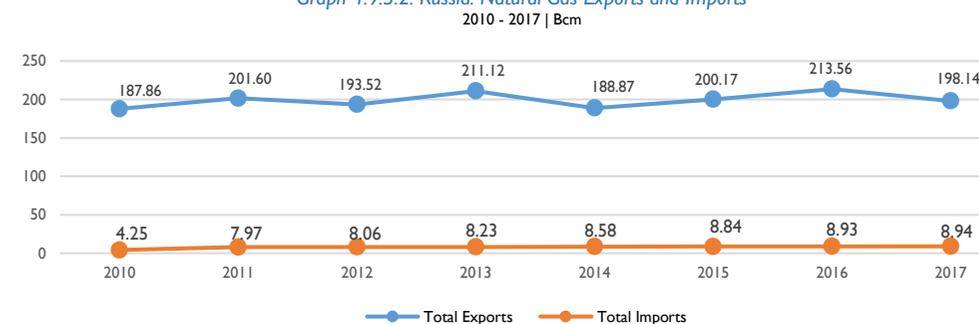
Graph 4.9.2.1. Russia: Natural Gas Production



Graph 4.9.3.1. Russia: Natural Gas Domestic Consumption



Graph 4.9.3.2. Russia: Natural Gas Exports and Imports



4.9.4 Transport and Plants

4.9.4.1 Natural Gas Exports Pipelines

Pipeline	Connection			Owner(s)	Operator(s)	Status	Capacity (Bcm/year)	Type	Start Year	Length (km)	Diameter (Inches)
	From	To	Via								
Urengoy-Pomary-Uzgorod	Russia	Europe	Ukraine	Gazprom	Gazprom	Operational	100.0	Export	1967	2,000	54
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	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	56
Minsk-Vilnius-Kaunas-Kaliningrad	Russia	Belarus, Lithuania	-	Gazprom	Gazprom	Operational	2.5	Export	2011	155	20
Nord Stream 2	Russia	Germany	-	-	-	Under Construction	55.0	Export	End 2019	1,200	48
TurkStream	Russia	Turkey	-	Gazprom	Gazprom	Under Construction	31.5	Export	End 2019	930	32
Power of Siberia	Russia	China	-	Gazprom	-	Under Construction	38.0	Export	2019	3,000	56

4.9.4.2 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	2	11.0	Operational	2017/2018	Novatek	Novatek
Yamal LNG	1	5.5	Under Construction	2018/2019	Novatek	Novatek
Gorskaya LNG	1	1.3	Under Construction	2019/2021	Gazprom	Gazprom
Portovaya LNG	1	1.5	Planned	2020	Gazprom	Gazprom
Kamchatka LNG	4	20.0	Planned	2022/2023	Novatek	Novatek
Baltic LNG	2	10.0	Planned	2023	Gazprom	Gazprom
Sakhalin II	2	10.0	Planned	2023/2024	Sakhalin Energy (Gazprom)	Sakhalin Energy
Arctic LNG	3	19.8	Planned	2023	Novatek	Novatek
Far East LNG	1	5.0	Planned	2023	Rosneft	Rosneft

4.9.4.3 Regasification Plants

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



Republic of

TRINIDAD AND TOBAGO



Population:
1 369 125



Capital:
Port of Spain



Continent:
South America
Caribbean Sea



Currency:
Trinidad and
Tobago Dollar



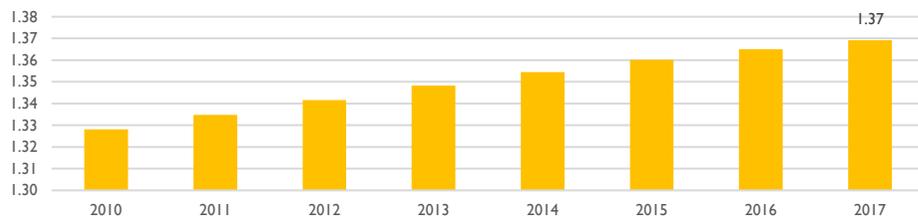
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4.10.1 Macroeconomics

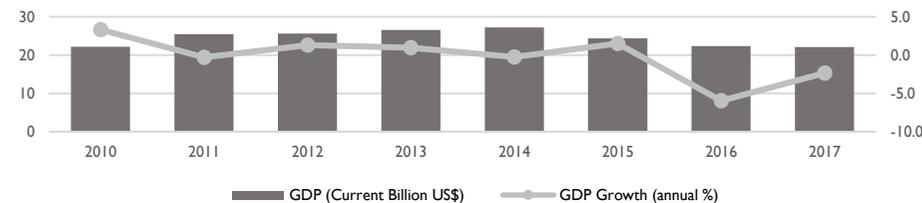
4.10.1.1 Trinidad and Tobago Macroeconomic Indicators

	2010	2011	2012	2013	2014	2015	2016	2017
Population (Inhabitants)	1,328,100	1,334,788	1,341,588	1,348,248	1,354,493	1,360,092	1,364,962	1,369,125
GDP (Current Billion US\$)	22.16	25.43	25.62	26.58	27.20	24.40	22.32	22.10
GDP Growth (annual %)	3.32	-0.29	1.29	0.98	-0.25	1.52	-5.96	-2.34
GDP per capita (Current US\$)	16,683.95	19,053.97	19,098.95	19,713.38	20,081.21	17,941.80	16,352.11	16,145.18
Exports of Goods and Services (Current Billion US\$)	12.11	15.88	13.88	19.74	15.59	11.85	10.11	-
Exports of Goods and Services (% of GDP)	54.67	62.46	54.01	74.66	59.54	50.31	48.14	-
Imports of Goods and Services (Current Billion US\$)	6.89	11.06	13.26	14.07	12.77	11.27	10.64	-
Imports of Goods and Services (% of GDP)	31.10	43.48	51.61	53.21	48.77	47.85	50.67	-
Inflation consumer prices (annual %)	10.55	5.10	9.27	5.20	5.68	4.66	3.06	-
Energy use (kg of oil equivalent per capita)	15,109.19	14,791.36	14,346.84	14,537.48	14,446.75	-	-	-

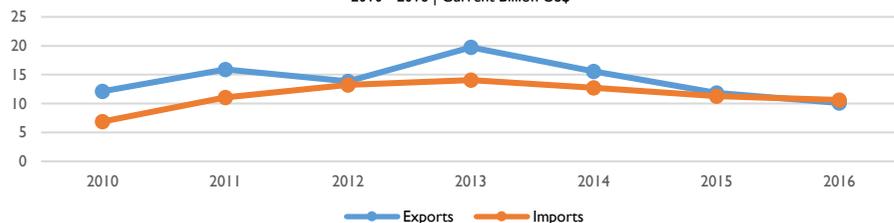
Graph 4.10.1.1. Trinidad and Tobago: Population
2010 - 2017 | Millions Inhabitants



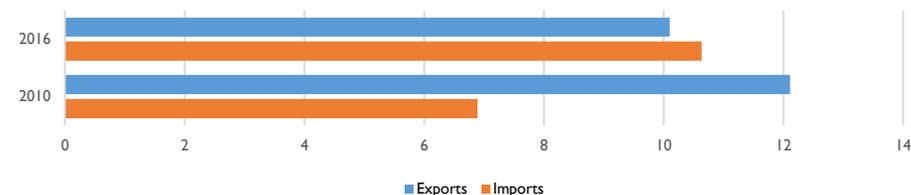
Graph 4.10.1.2. Trinidad and Tobago: GDP and GDP Growth
2010 - 2017 | Current Billion US\$ and Annual %



Graph 4.10.1.3. Trinidad and Tobago: Exports and Imports (Goods and Services)
2010 - 2016 | Current Billion US\$



Graph 4.10.1.4. Trinidad and Tobago: Exports and Imports (Goods and Services)
2010 vs 2016 | Current Billion US\$



Graph 4.10.1.5. Trinidad and Tobago: Inflation (Consumer Prices)
2010 - 2016 | Annual %



Graph 4.10.1.6. Trinidad and Tobago: Energy Use
2010 - 2014 | kg of Oil Equivalent per Capita



4.10.2 Reserves and Production

Table 4.10.2.1 Proven Gas Reserves (Bcm)

	2010	2011	2012	2013	2014	2015	2016	2017
Proven Gas Reserves	381	375	371	347	326	300	-	-

Table 4.10.2.2 Natural Gas Production (Bcm)

	2010	2011	2012	2013	2014	2015	2016	2017
Gross Production	45.61	44.77	44.40	42.85	38.10	39.59	34.00	35.36
Marketed Production	42.25	39.69	39.34	39.84	35.51	36.94	31.81	33.48
Reinjection	1.74	1.74	1.99	1.82	1.47	1.47	1.36	0.74
Flaring	1.61	1.17	1.12	1.19	1.12	0.92	0.72	1.05
Shrinkage	0.00	1.80	1.24	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

4.10.3 Domestic Consumption and Trade

Table 4.10.3.1 Domestic Gas Consumption (Bcm)

	2010	2011	2012	2013	2014	2015	2016	2017
Industrial	1.71	1.65	1.62	1.62	1.59	1.31	0.89	0.91
Power Generation	3.03	3.14	3.14	3.13	3.11	3.04	2.81	2.62
Petrochemical (feedstock)	12.29	12.02	11.51	11.48	11.34	11.50	10.58	10.85
Refineries	0.42	0.54	0.76	0.70	0.57	0.78	0.78	0.64
Totals	17.44	17.35	17.03	16.93	16.61	16.63	15.06	15.02

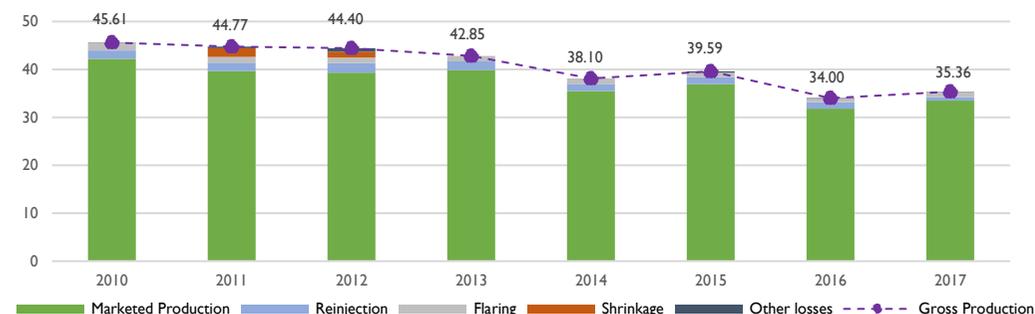
Table 4.10.3.2 Trade: Natural Gas Exports

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

* Gas equivalent

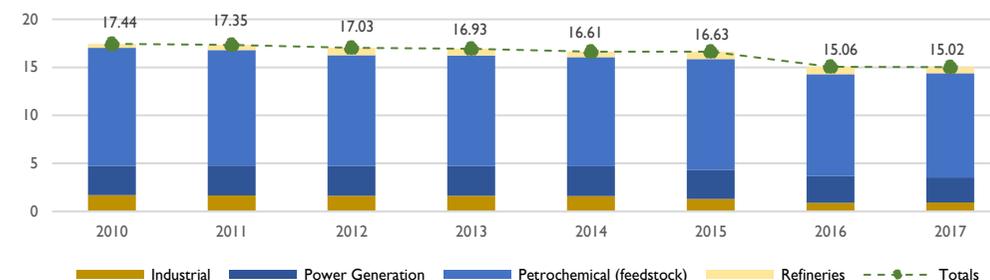
Graph 4.10.2.1. Trinidad and Tobago: Natural Gas Production

2010 - 2017 | Bcm



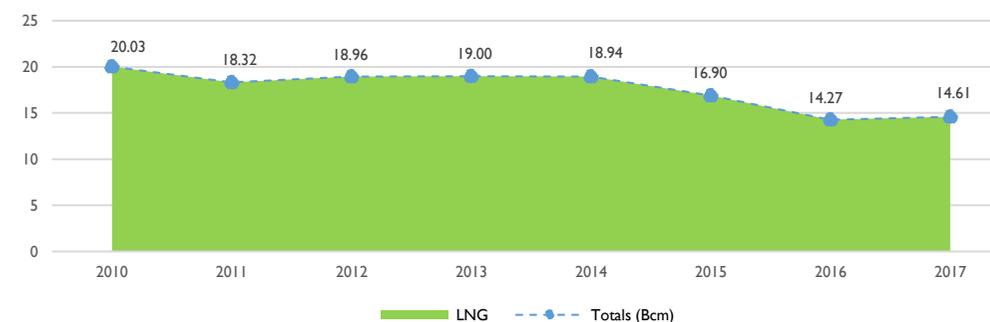
Graph 4.10.3.1. Trinidad and Tobago: Natural Gas Domestic Consumption

2010 - 2017 | Bcm



Graph 4.10.3.2. Trinidad and Tobago: Natural Gas Exports

2010 - 2017 | Bcm



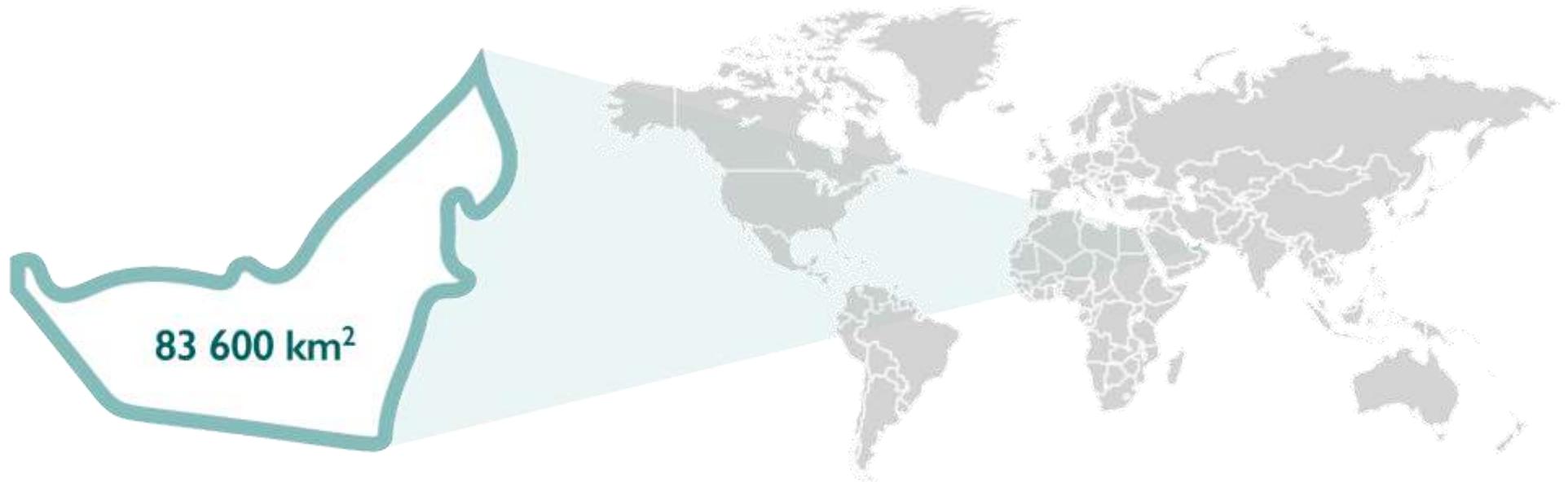
4.10.4 Transport and Plants

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



UNITED ARAB EMIRATES



Population:
9 400 145



Capital:
Abu Dhabi



Continent:
Middle East



Currency:
United Arab
Emirates Dirham



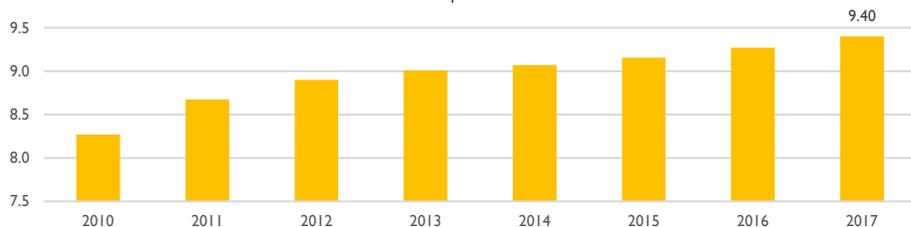
Time Zone:
Gulf
GMT+4

4.1.1.1 Macroeconomics

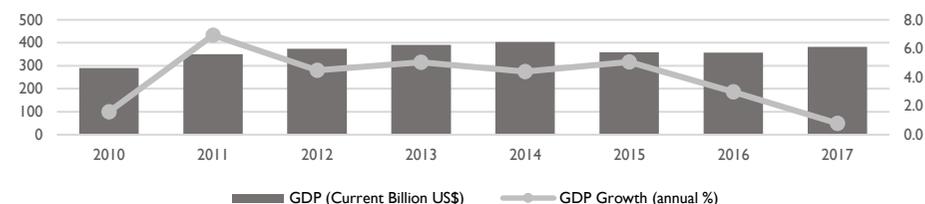
4.1.1.1.1 United Arab Emirates Macroeconomic Indicators

	2010	2011	2012	2013	2014	2015	2016	2017
Population (Inhabitants)	8,270,684	8,672,475	8,900,453	9,006,263	9,070,867	9,154,302	9,269,612	9,400,145
GDP (Current Billion US\$)	289.79	350.67	374.59	390.11	403.14	358.14	357.05	382.58
GDP Growth (annual %)	1.60	6.93	4.48	5.05	4.40	5.06	2.99	0.79
GDP per capita (Current US\$)	35,037.89	40,434.37	42,086.69	43,315.14	44,443.06	39,122.05	38,517.80	40,698.85
Exports of Goods and Services (Current Billion US\$)	225.27	314.83	375.80	392.57	399.57	361.25	360.63	384.04
Exports of Goods and Services (% of GDP)	77.74	89.78	100.32	100.63	99.12	100.87	101.00	100.38
Imports of Goods and Services (Current Billion US\$)	184.22	217.47	242.81	253.22	277.90	266.28	270.44	277.09
Imports of Goods and Services (% of GDP)	63.57	62.02	64.82	64.91	68.94	74.35	75.74	72.43
Inflation consumer prices (annual %)	0.88	0.88	0.66	1.10	2.35	4.07	1.62	-
Energy use (kg of oil equivalent per capita)	7,458.88	7,418.41	7,683.88	7,766.67	7,769.23	-	-	-

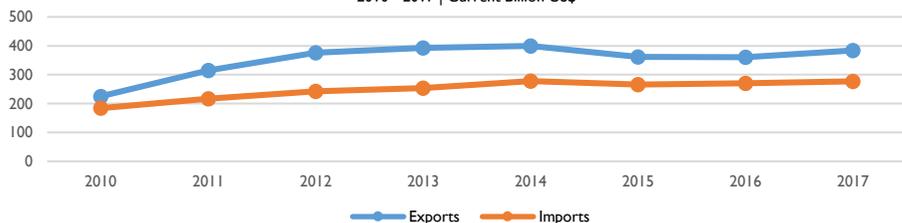
Graph 4.1.1.1.1. United Arab Emirates: Population
2010 - 2017 | Millions Inhabitants



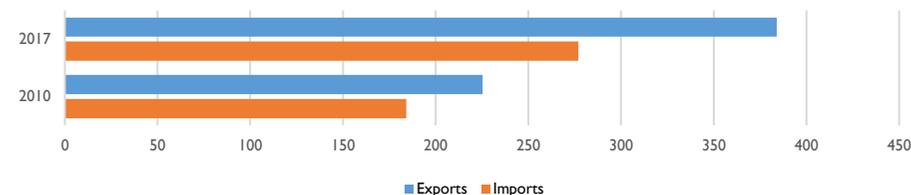
Graph 4.1.1.1.2. United Arab Emirates: GDP and GDP Growth
2010 - 2017 | Current Billion US\$ and Annual %



Graph 4.1.1.1.3. United Arab Emirates: Exports and Imports (Goods and Services)
2010 - 2017 | Current Billion US\$



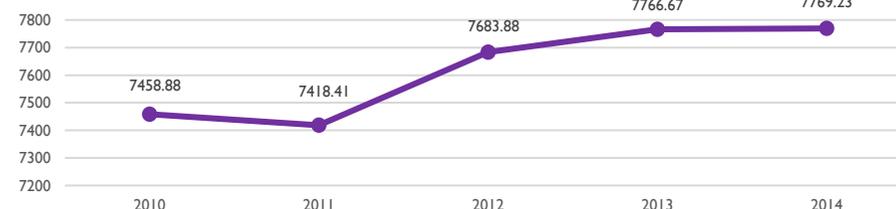
Graph 4.1.1.1.4. United Arab Emirates: Exports and Imports (Goods and Services)
2010 vs 2017 | Current Billion US\$



Graph 4.1.1.1.5. United Arab Emirates: Inflation (Consumer Prices)
2010 - 2016 | Annual %



Graph 4.1.1.1.6. United Arab Emirates: Energy Use
2010 - 2014 | kg of Oil Equivalent per Capita



4.11.2 Reserves and Production

Table 4.11.2.1 Proven Gas Reserves (Bcm)

	2010	2011	2012	2013	2014	2015	2016	2017
Proven Gas Reserves	6,041	6,041	6,041	6,041	6,041	6,041	6,041	6,091

Table 4.11.2.2 Natural Gas Production (Bcm)

	2010	2011	2012	2013	2014	2015	2016	2017
Gross Production	79.27	82.43	83.21	84.32	84.31	90.27	91.40	94.63
Marketed Production	51.37	52.98	55.61	55.73	55.45	61.04	62.23	65.52
Reinjection	22.41	23.97	22.39	23.18	23.40	23.69	23.75	23.38
Flaring	0.97	0.98	1.02	1.02	1.02	1.04	1.02	1.03
Other losses	4.52	4.50	4.19	4.39	4.44	4.50	4.40	4.70

4.11.3 Domestic Consumption and Trade

Table 4.11.3.1 Domestic Gas Consumption (Bcm)

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

Table 4.11.3.2 Trade: Natural Gas Exports

	2010	2011	2012	2013	2014	2015	2016	2017
LNG	7.82	7.57	7.37	7.19	7.91	7.98	8.06	7.78
MMT	5.75	5.57	5.42	5.29	5.82	5.87	5.93	5.72
Totals	7.82	7.57	7.37	7.19	7.91	7.98	8.06	7.78

* Gas equivalent

Table 4.11.3.3 Trade: Natural Gas Imports

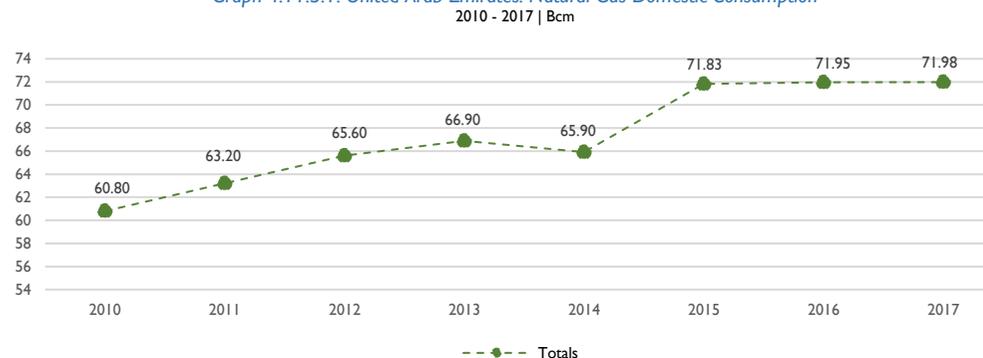
	2010	2011	2012	2013	2014	2015	2016	2017
Pipeline (Bcm)	19.15	19.20	19.22	19.90	20.09	19.75	20.00	21.96
LNG	0.00	0.54	0.08	0.41	0.26	1.04	0.03	1.50
MMT	0.00	0.00	0.06	0.30	0.19	0.76	0.02	1.10
Totals (Bcm)	19.15	19.74	19.30	20.31	20.35	20.79	20.03	23.46

* Gas equivalent

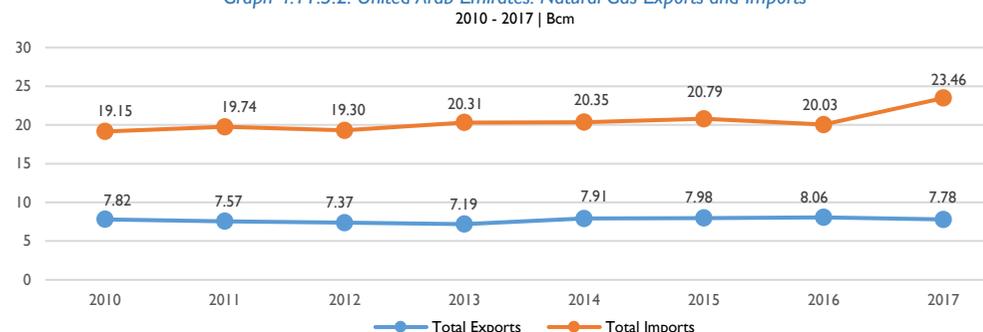
Graph 4.11.2.1. United Arab Emirates: Natural Gas Production



Graph 4.11.3.1. United Arab Emirates: Natural Gas Domestic Consumption



Graph 4.11.3.2. United Arab Emirates: Natural Gas Exports and Imports



United Arab Emirates

4.1.1.4 Transport and Plants

4.1.1.4.1 Natural Gas Exports Pipelines

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

4.1.1.4.2 LNG Carrier Fleet

Number of Vessels	Status	Total Capacity	
		1000Scm	1000MT
9	Operational	1233.0	560.0

4.1.1.4.3 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

4.1.1.4.4 Regasification Plants

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



Bolivarian Republic of

VENEZUELA



Population:
31 977 065



Capital:
Caracas



Continent:
South
America



Currency:
Venezuelan
Bolivar



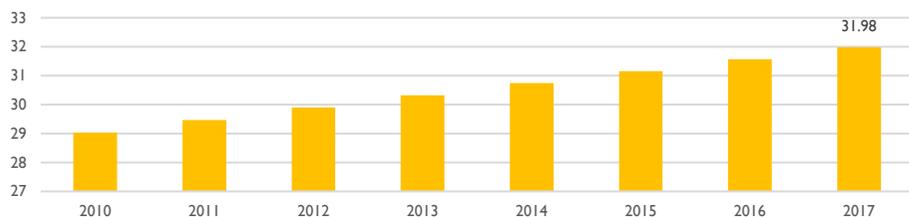
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GMT-4

4.12.1 Macroeconomics

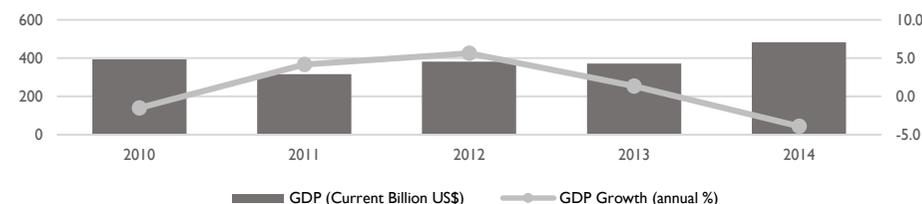
4.12.1.1 Venezuela Macroeconomic Indicators

	2010	2011	2012	2013	2014	2015	2016	2017
Population (Inhabitants)	29,028,033	29,463,291	29,893,080	30,317,848	30,738,378	31,155,134	31,568,179	31,977,065
GDP (Current Billion US\$)	393.19	316.48	381.29	371.01	482.36	-	-	-
GDP Growth (annual %)	-1.49	4.18	5.63	1.34	-3.89	-	-	-
GDP per capita (Current US\$)	13,545.26	10,741.58	12,755.00	12,237.19	15,692.41	-	-	-
Exports of Goods and Services (Current Billion US\$)	112.18	94.76	99.79	91.88	80.52	-	-	-
Exports of Goods and Services (% of GDP)	28.53	29.94	26.17	24.76	16.69	-	-	-
Imports of Goods and Services (Current Billion US\$)	69.23	62.33	92.40	109.49	151.45	-	-	-
Imports of Goods and Services (% of GDP)	17.61	19.70	24.23	29.51	31.40	-	-	-
Inflation consumer prices (annual %)	28.19	26.09	21.07	40.64	62.17	121.74	254.95	-
Energy use (kg of oil equivalent per capita)	2,493.47	2,280.73	2,444.10	2,268.06	-	-	-	-

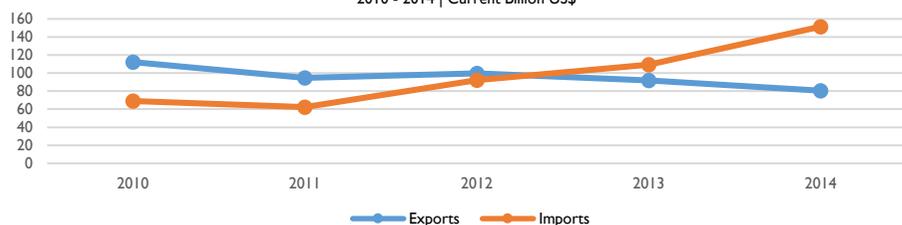
Graph 4.12.1.1. Venezuela: Population
2010 - 2017 | Millions Inhabitants



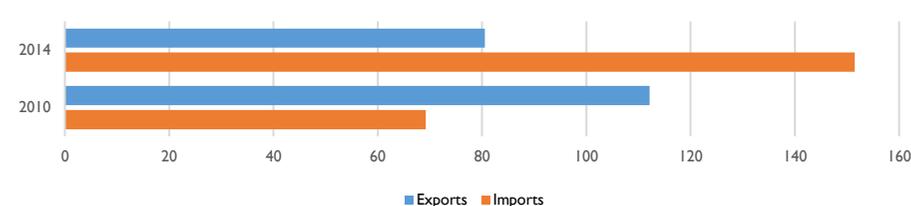
Graph 4.12.1.2. Venezuela: GDP and GDP Growth
2010 - 2017 | Current Billion US\$ and Annual %



Graph 4.12.1.3. Venezuela: Exports and Imports (Goods and Services)
2010 - 2014 | Current Billion US\$



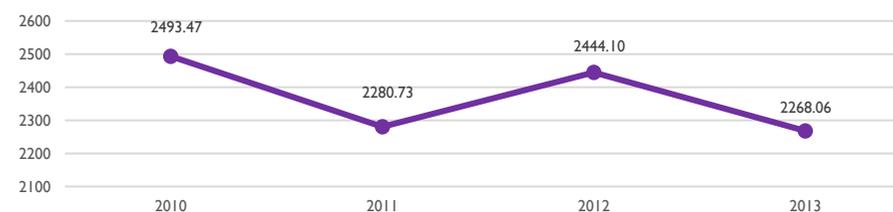
Graph 4.12.1.4. Venezuela: Exports and Imports (Goods and Services)
2010 vs 2014 | Current Billion US\$



Graph 4.12.1.5. Venezuela: Inflation (Consumer Prices)
2010 - 2016 | Annual %



Graph 4.12.1.6. Venezuela: Energy Use
2010 - 2013 | kg of Oil Equivalent per Capita



4.12.2 Reserves and Production

Table 4.12.2.1 Proven Gas Reserves (Bcm)

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

Table 4.12.2.2 Natural Gas Production (Bcm)

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

4.12.3 Domestic Consumption and Trade

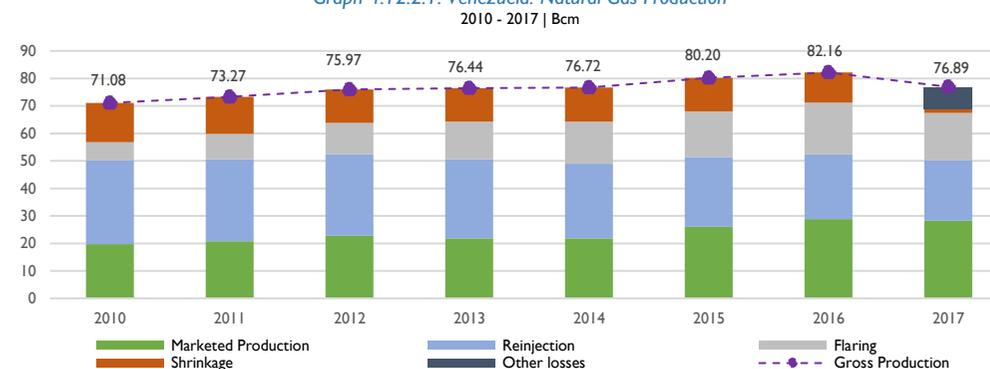
Table 4.12.3.1 Domestic Gas Consumption (Bcm)

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

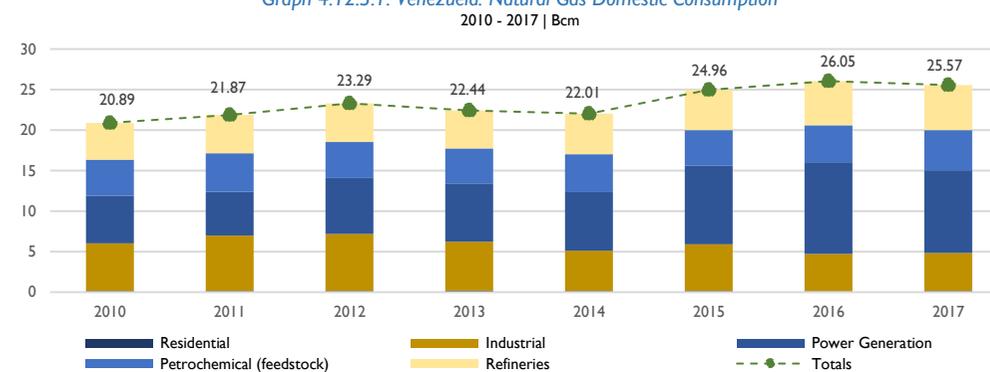
Table 4.12.3.2 Trade: Natural Gas Imports (Bcm)

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

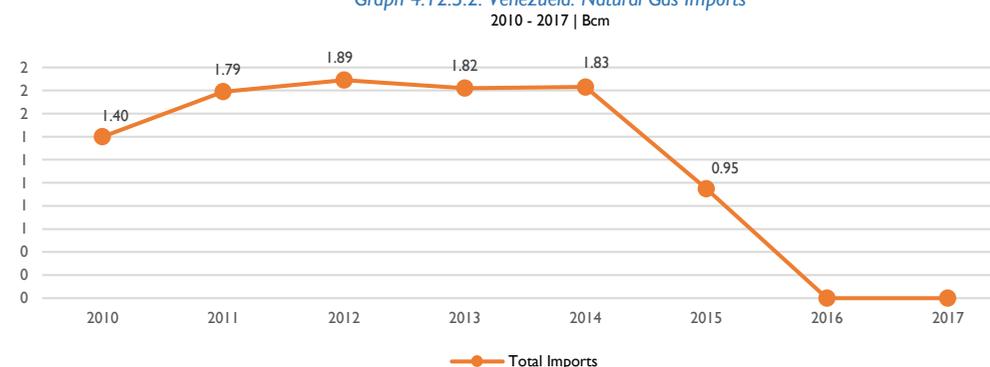
Graph 4.12.2.1. Venezuela: Natural Gas Production



Graph 4.12.3.1. Venezuela: Natural Gas Domestic Consumption



Graph 4.12.3.2. Venezuela: Natural Gas Imports



4.12.4 Transport and Plants*4.12.4.1 Natural Gas Exports 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	2007	225	26

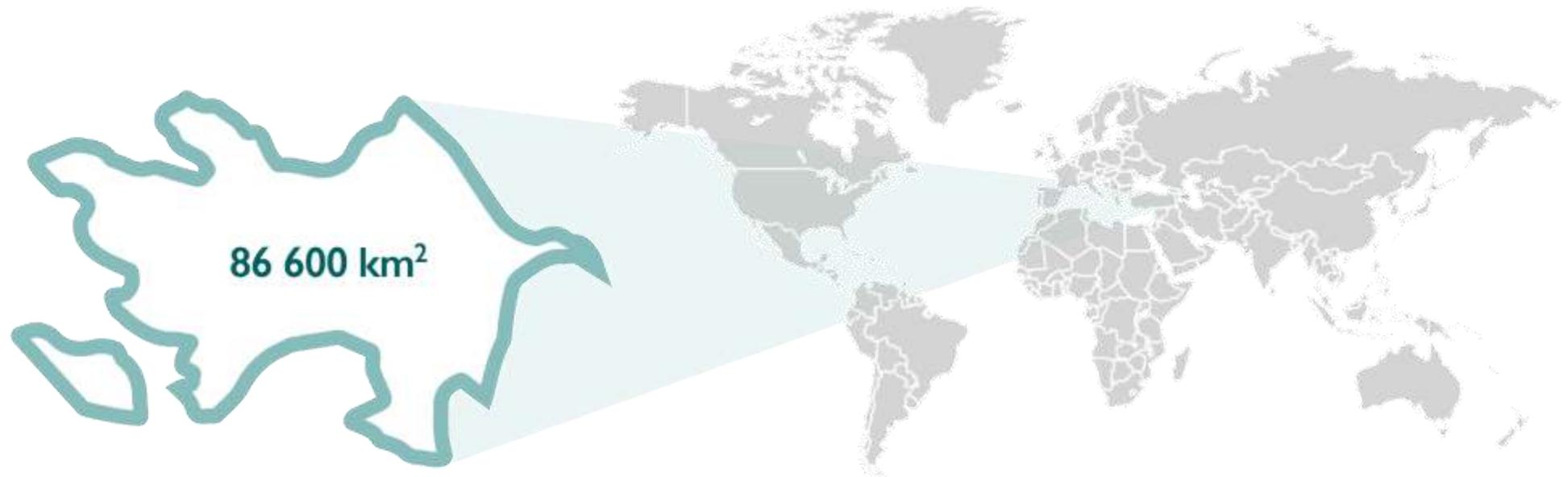


Section 5
GECF Observer Countries



Republic of

AZERBAIJAN



Population:
9 862 429



Capital:
Baku



Continent:
Euroasia



Currency:
Azerbaijani
Manat



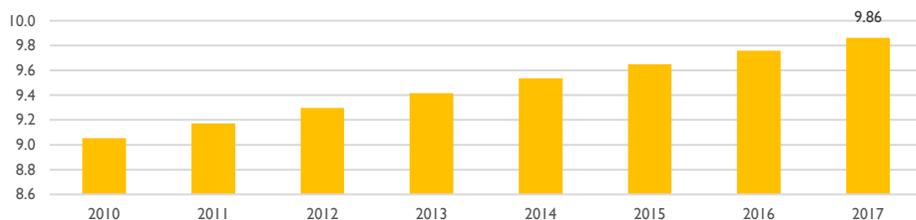
Time Zone:
Azerbaijan
GMT+4

5.1.1 Macroeconomics

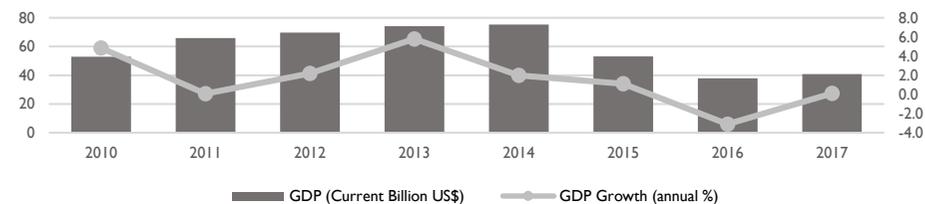
5.1.1.1 Azerbaijan Macroeconomic Indicators

	2010	2011	2012	2013	2014	2015	2016	2017
Population (Inhabitants)	9,054,332	9,173,082	9,295,784	9,416,801	9,535,079	9,649,341	9,757,812	9,862,429
GDP (Current Billion US\$)	52.90	65.95	69.68	74.16	75.24	53.07	37.87	40.75
GDP Growth (annual %)	4.85	0.07	2.20	5.80	2.00	1.10	-3.10	0.10
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	4,131.62
Exports of Goods and Services (Current Billion US\$)	28.73	37.21	36.91	35.84	32.55	20.06	17.58	19.84
Exports of Goods and Services (% of GDP)	54.30	56.43	52.97	48.33	43.26	37.79	46.43	48.69
Imports of Goods and Services (Current Billion US\$)	10.94	15.88	17.62	19.77	19.72	18.47	16.53	17.10
Imports of Goods and Services (% of GDP)	20.68	24.08	25.29	26.65	26.21	34.81	43.65	41.98
Inflation consumer prices (annual %)	5.67	7.85	1.01	2.38	1.39	4.17	4.18	-
Energy use (kg of oil equivalent per capita)	1,279.55	1,369.35	1,472.90	1,474.00	1,502.08	-	-	-

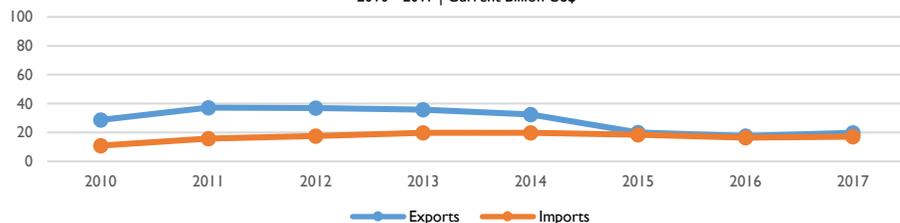
Graph 5.1.1.1. Azerbaijan: Population
2010 - 2017 | Millions Inhabitants



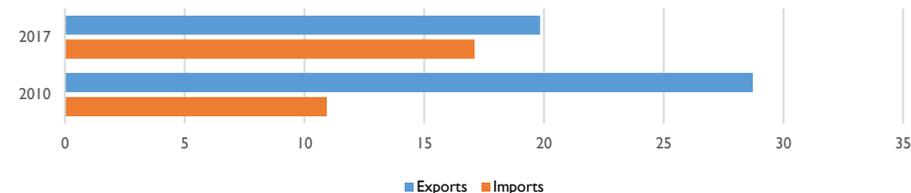
Graph 5.1.1.2. Azerbaijan: GDP and GDP Growth
2010 - 2017 | Current Billion US\$ and Annual %



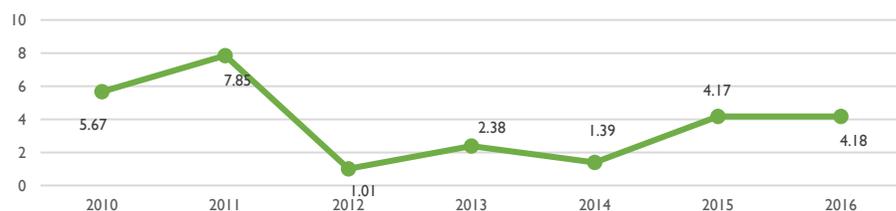
Graph 5.1.1.3. Azerbaijan: Exports and Imports (Goods and Services)
2010 - 2017 | Current Billion US\$



Graph 5.1.1.4. Azerbaijan: Exports and Imports (Goods and Services)
2010 vs 2017 | Current Billion US\$



Graph 5.1.1.5. Azerbaijan: Inflation (Consumer Prices)
2010 - 2016 | Annual %



Graph 5.1.1.6. Azerbaijan: Energy Use
2010 - 2014 | kg of Oil Equivalent per Capita



5.1.2 Reserves and Production

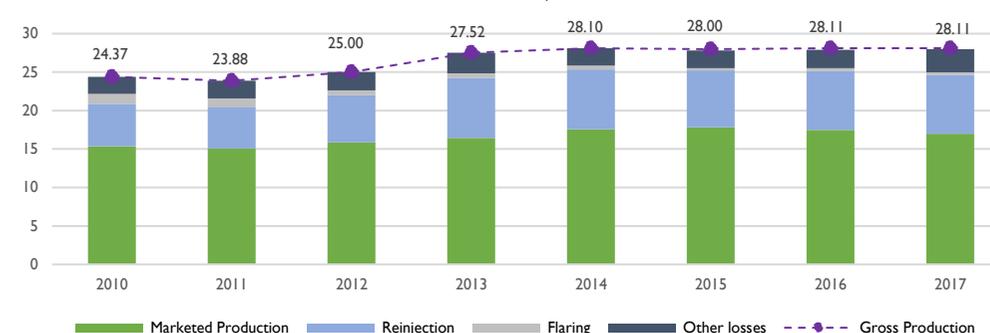
Table 5.1.2.1 Proven Gas Reserves (Bcm)

	2010	2011	2012	2013	2014	2015	2016	2017
Proven Gas Reserves	1,311	1,311	1,289	1,283	1,261	1,284	1,277	1,277

Table 5.1.2.2 Natural Gas Production (Bcm)

	2010	2011	2012	2013	2014	2015	2016	2017
Gross Production	24.37	23.88	25.00	27.52	28.10	28.00	28.11	28.11
Marketed Production	15.37	15.08	15.85	16.45	17.55	17.80	17.50	17.00
Reinjection	5.50	5.40	6.15	7.75	7.80	7.40	7.65	7.62
Flaring	1.30	1.10	0.65	0.65	0.50	0.30	0.35	0.35
Other losses	2.20	2.30	2.35	2.67	2.25	2.30	2.41	2.99

Graph 5.1.2.1. Azerbaijan: Natural Gas Production
2010 - 2017 | Bcm



5.1.3 Domestic Consumption and Trade

Table 5.1.3.1 Domestic Gas Consumption (Bcm)

	2010	2011	2012	2013	2014	2015	2016	2017
Totals	9.67	8.67	9.36	9.27	10.25	10.60	9.58	9.38

Graph 5.1.3.1. Azerbaijan: Natural Gas Domestic Consumption
2010 - 2017 | Bcm

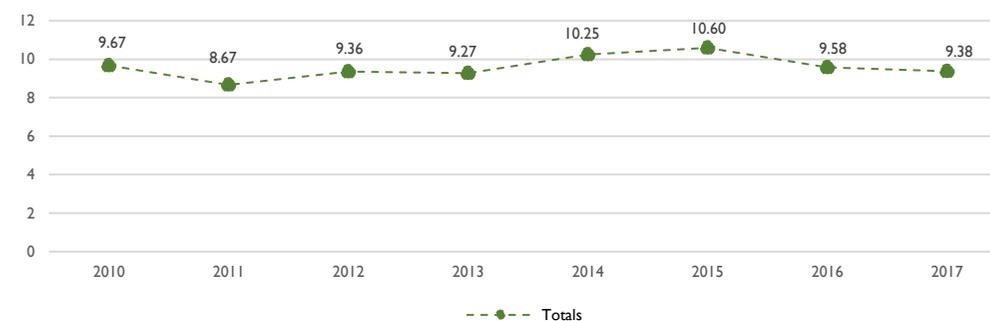


Table 5.1.3.2 Trade: Natural Gas Exports (Bcm)

	2010	2011	2012	2013	2014	2015	2016	2017
Pipeline	5.95	6.68	6.74	7.61	7.74	7.71	7.74	7.84
Totals	5.95	6.68	6.74	7.61	7.74	7.71	7.74	7.84

Table 5.1.3.3 Trade: Natural Gas Imports (Bcm)

	2010	2011	2012	2013	2014	2015	2016	2017
Pipeline	0.25	0.28	0.25	0.44	0.44	0.50	0.52	0.30
Totals	0.25	0.28	0.25	0.44	0.44	0.50	0.52	0.30

Graph 5.1.3.2. Azerbaijan: Natural Gas Trade and Marketed production
2010 - 2017 | Bcm



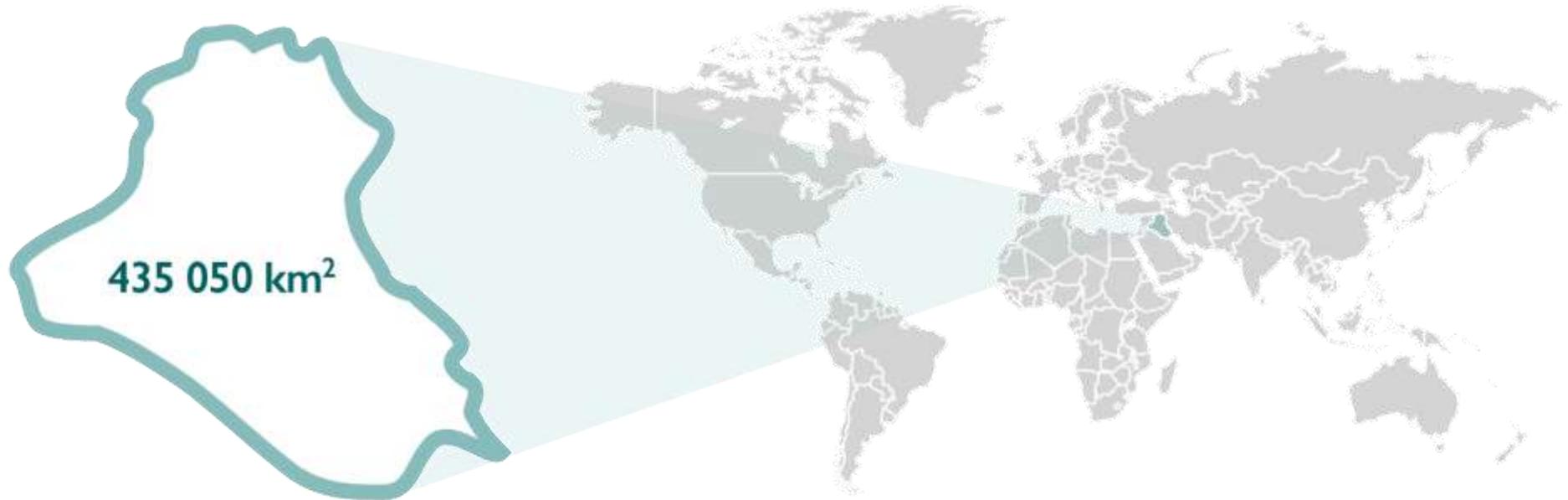
5.1.4 Transport and Plants

5.1.4.1 Natural Gas Exports 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	Georgia	TANAP Consortium	SOCAR	Operational	31.0	Export	2018	1,850	56/42
Trans-Caspian	Azerbaijan	Turkmenistan	-	-	-	Planned	30.0	Export	-	300	-



Republic of
IRAQ



Population:
38 274 618



Capital:
Baghdad



Continent:
Middle East



Currency:
Iraqi Dinar



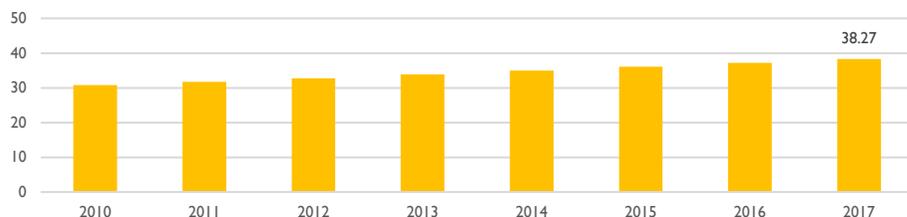
Time Zone:
Arabia
GMT+3

5.2.1 Macroeconomics

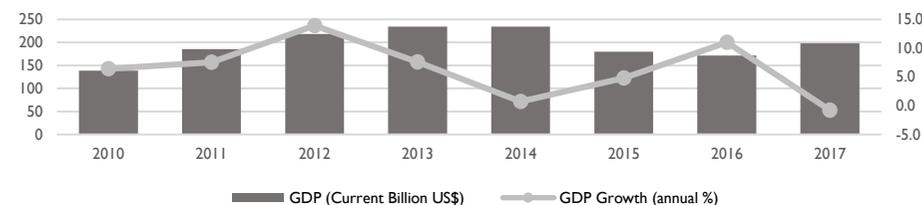
5.2.1.1 Iraq Macroeconomic Indicators

	2010	2011	2012	2013	2014	2015	2016	2017
Population (Inhabitants)	30,762,701	31,727,053	32,776,571	33,883,145	35,006,080	36,115,649	37,202,572	38,274,618
GDP (Current Billion US\$)	138.52	185.75	218.00	234.65	234.65	179.64	171.49	197.72
GDP Growth (annual %)	6.40	7.55	13.94	7.60	0.70	4.80	11.00	-0.78
GDP per capita (Current US\$)	4,502.75	5,854.61	6,651.12	6,925.22	6,703.07	4,974.03	4,609.60	5,165.71
Exports of Goods and Services (Current Billion US\$)	54.60	82.51	96.90	93.10	97.00	62.73	55.77	74.40
Exports of Goods and Services (% of GDP)	39.42	44.42	44.45	39.68	41.34	34.92	32.52	37.63
Imports of Goods and Services (Current Billion US\$)	47.21	51.55	63.44	84.50	86.70	73.52	70.14	71.81
Imports of Goods and Services (% of GDP)	34.08	27.75	29.10	36.01	36.95	40.92	40.90	36.32
Inflation consumer prices (annual %)	2.88	5.80	6.09	1.88	2.24	1.39	-	-
Energy use (kg of oil equivalent per capita)	1,219.37	1,293.56	1,399.27	1,456.66	1,413.50	-	-	-

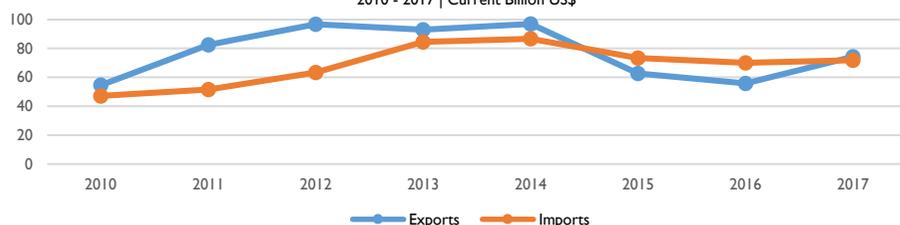
Graph 5.2.1.1. Iraq: Population
2010 - 2017 | Millions Inhabitants



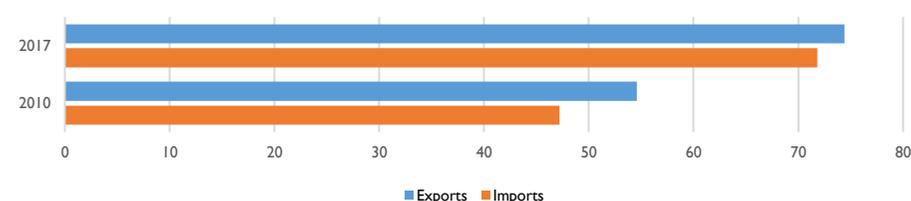
Graph 5.2.1.2. Iraq: GDP and GDP Growth
2010 - 2017 | Current Billion US\$ and Annual %



Graph 5.2.1.3. Iraq: Exports and Imports (Goods and Services)
2010 - 2017 | Current Billion US\$



Graph 5.2.1.4. Iraq: Exports and Imports (Goods and Services)
2010 vs 2017 | Current Billion US\$



Graph 5.2.1.5. Iraq: Inflation (Consumer Prices)
2010 - 2016 | Annual %



Graph 5.2.1.6. Iraq: Energy Use
2010 - 2014 | kg of Oil Equivalent per Capita



5.2.2 Reserves and Production

Table 5.2.2.1 Proven Gas Reserves (Bcm)

	2010	2011	2012	2013	2014	2015	2016	2017
Proven Gas Reserves	3,200	3,400	3,460	3,460	3,600	3,700	3,700	3,700

Table 5.2.2.2 Natural Gas Production (Bcm)

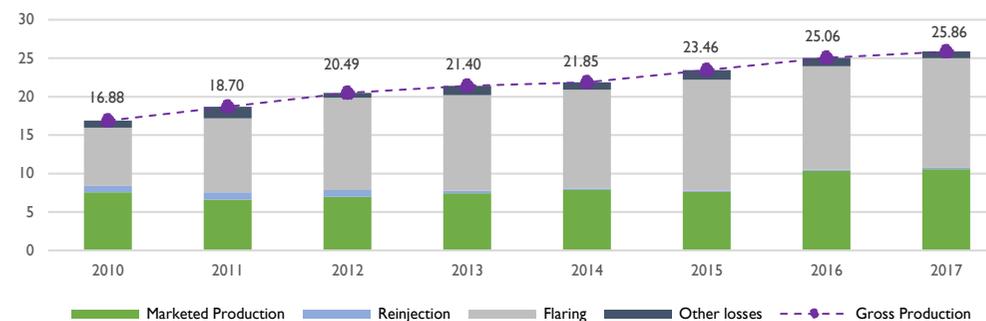
	2010	2011	2012	2013	2014	2015	2016	2017
Gross Production	16.88	18.70	20.49	21.40	21.85	23.46	25.06	25.86
Marketed Production	7.57	6.61	6.98	7.43	7.87	7.61	10.35	10.55
Reinjection	0.81	0.97	0.88	0.34	0.15	0.16	0.17	0.17
Flaring	7.57	9.61	11.98	12.43	12.87	14.41	13.45	14.26
Other losses	0.93	1.51	0.65	1.20	0.96	1.28	1.10	0.88

5.2.3 Domestic Consumption and Trade

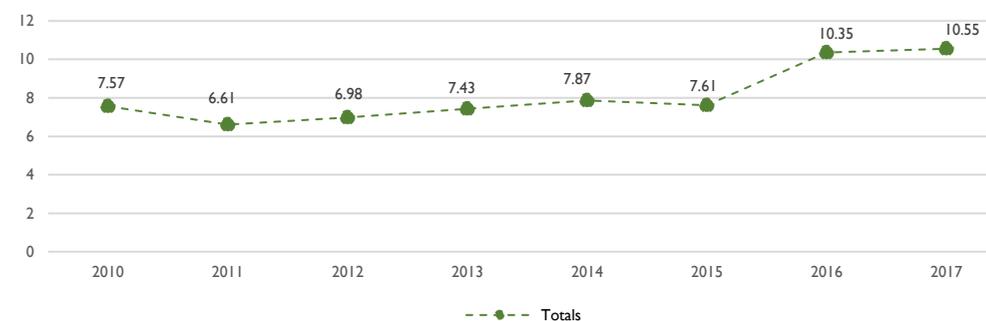
Table 5.2.3.1 Domestic Gas Consumption (Bcm)

	2010	2011	2012	2013	2014	2015	2016	2017
Totals	7.57	6.61	6.98	7.43	7.87	7.61	10.35	10.55

Graph 5.2.2.1. Iraq: Natural Gas Production
2010 - 2017 | Bcm



Graph 5.2.3.1. Iraq: Natural Gas Domestic Consumption
2010 - 2017 | Bcm



5.2.4 Transport and Plants

5.2.4.1 Natural Gas Exports Pipelines

Pipeline	Connection		Owner(s)	Operator(s)	Status	Capacity (Bcm/year)	Type	Start Year	Length (km)	Diameter (Inches)
	From	To								
Asaluye-Baghdad	Iran	Iraq	NIOC, INOC	NIOC, INOC	Operational	12.8	Import	2017	230	-
Asaluye-Basrah	Iran	Iraq	NIOC, INOC	NIOC, INOC	Under Construction	-	Import	-	-	-



Republic of

KAZAKHSTAN



Population:
18 037 646



Capital:
Astana



Continent:
Asia



Currency:
Kazakhstani
Tenge



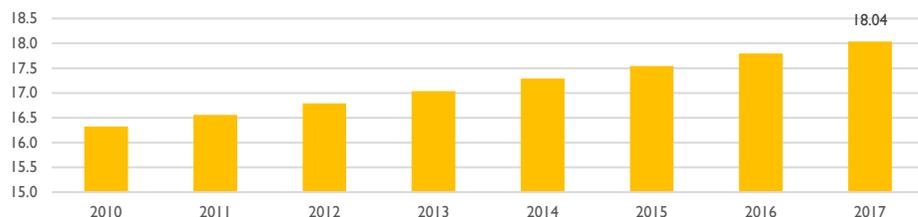
Time Zone:
Oral,Alma-Ata
GMT+6 (Astana)

5.3.1 Macroeconomics

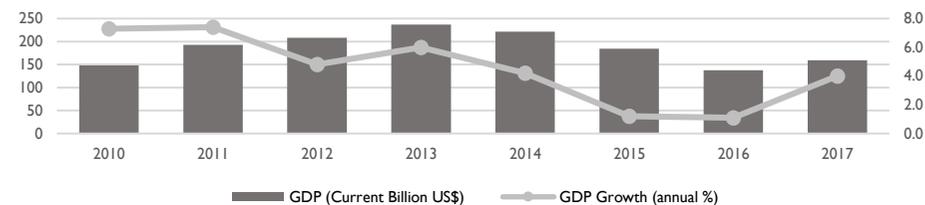
5.3.1.1 Kazakhstan Macroeconomic Indicators

	2010	2011	2012	2013	2014	2015	2016	2017
Population (Inhabitants)	16,321,872	16,557,201	16,792,089	17,035,550	17,288,285	17,542,806	17,794,055	18,037,646
GDP (Current Billion US\$)	148.05	192.63	208.00	236.63	221.42	184.39	137.28	159.41
GDP Growth (annual %)	7.30	7.40	4.80	6.00	4.20	1.20	1.10	4.00
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	8,837.46
Exports of Goods and Services (Current Billion US\$)	65.50	89.50	91.75	91.38	87.11	52.58	43.71	-
Exports of Goods and Services (% of GDP)	44.24	46.46	44.11	38.62	39.34	28.52	31.84	-
Imports of Goods and Services (Current Billion US\$)	44.26	51.34	61.60	63.40	56.75	45.24	39.08	-
Imports of Goods and Services (% of GDP)	29.89	26.65	29.61	26.79	25.63	24.53	28.47	-
Inflation consumer prices (annual %)	7.12	8.35	5.11	5.84	6.72	6.65	14.51	-
Energy use (kg of oil equivalent per capita)	4,234.85	4,670.82	4,398.94	4,786.59	4,434.64	-	-	-

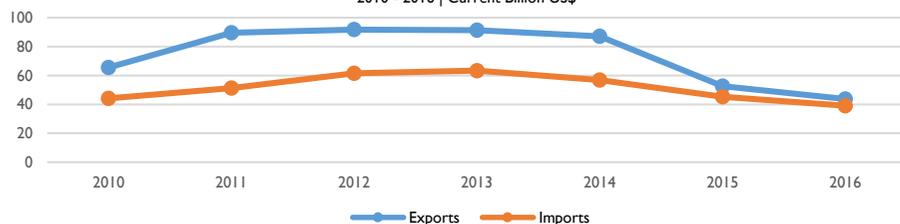
Graph 5.3.1.1. Kazakhstan: Population
2010 - 2017 | Millions Inhabitants



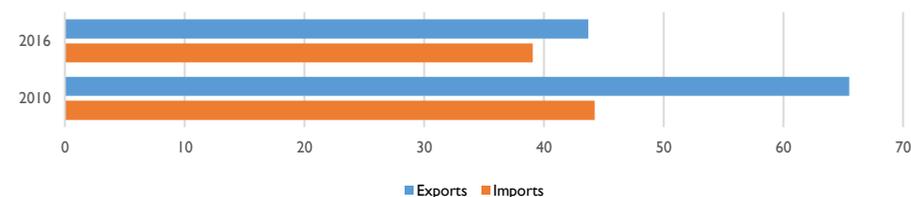
Graph 5.3.1.2. Kazakhstan: GDP and GDP Growth
2010 - 2017 | Current Billion US\$ and Annual %



Graph 5.3.1.3. Kazakhstan: Exports and Imports (Goods and Services)
2010 - 2016 | Current Billion US\$



Graph 5.3.1.4. Kazakhstan: Exports and Imports (Goods and Services)
2010 vs 2016 | Current Billion US\$



Graph 5.3.1.5. Kazakhstan: Inflation (Consumer Prices)
2010 - 2016 | Annual %



Graph 5.3.1.6. Kazakhstan: Energy Use
2010 - 2014 | kg of Oil Equivalent per Capita



5.3.2 Reserves and Production

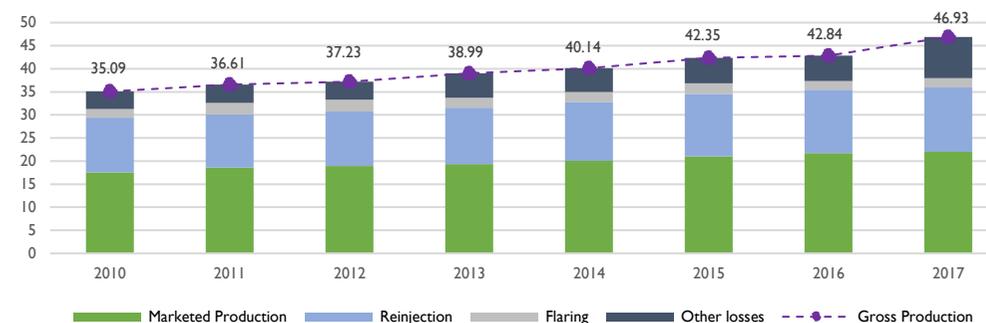
Table 5.3.2.1 Proven Gas Reserves (Bcm)

	2010	2011	2012	2013	2014	2015	2016	2017
Proven Gas Reserves	1,925	1,925	1,920	1,916	1,916	1,905	1,900	1,900

Table 5.3.2.2 Natural Gas Production (Bcm)

	2010	2011	2012	2013	2014	2015	2016	2017
Gross Production	35.09	36.61	37.23	38.99	40.14	42.35	42.84	46.93
Marketed Production	17.59	18.61	18.92	19.34	20.09	21.07	21.73	22.00
Reinjection	11.80	11.50	11.80	12.25	12.75	13.50	13.75	13.96
Flaring	1.90	2.50	2.56	2.15	2.15	2.30	1.90	2.05
Other losses	3.80	4.00	3.95	5.25	5.15	5.49	5.46	8.92

Graph 5.3.2.1. Kazakhstan: Natural Gas Production
2010 - 2017 | Bcm



5.3.3 Domestic Consumption and Trade

Table 5.3.3.1 Domestic Gas Consumption (Bcm)

	2010	2011	2012	2013	2014	2015	2016	2017
Totals	11.49	12.44	11.68	13.00	13.81	13.97	14.48	14.00

Graph 5.3.3.1. Kazakhstan: Natural Gas Domestic Consumption
2010 - 2017 | Bcm

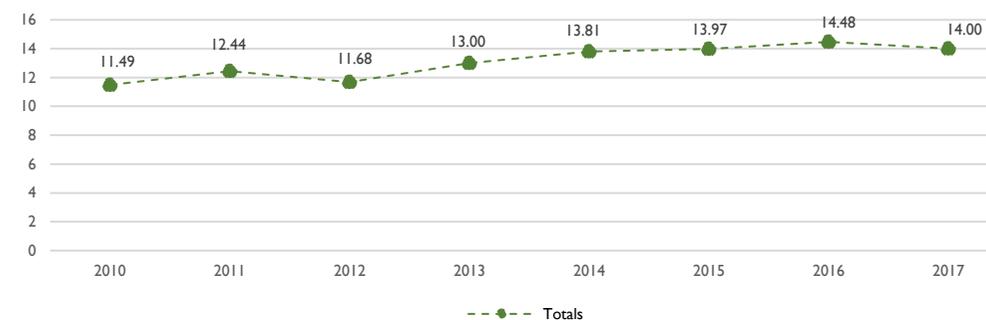


Table 5.3.3.2 Trade: Natural Gas Exports (Bcm)

	2010	2011	2012	2013	2014	2015	2016	2017
Pipeline	11.79	11.37	11.17	11.62	11.12	11.80	12.48	13.50
Totals	11.79	11.37	11.17	11.62	11.12	11.80	12.48	13.50

Table 5.3.3.3 Trade: Natural Gas Imports (Bcm)

	2010	2011	2012	2013	2014	2015	2016	2017
Pipeline	5.69	5.20	3.93	5.28	4.84	4.70	5.23	5.50
Totals	5.69	5.20	3.93	5.28	4.84	4.70	5.23	5.50

Graph 5.3.3.2. Kazakhstan: Natural Gas Trade and Marketed production
2010 - 2017 | Bcm



5.3.4 Transport and Plants

5.3.4.1 Natural Gas Exports 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



Kingdom of
NORWAY

385 178 km²



Population:
5 282 223



Capital:
Oslo



Continent:
Europe



Currency:
Norwegian
Krone



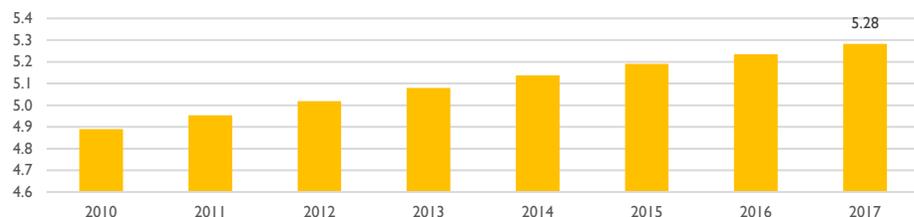
Time Zone:
Central European
GMT+2

5.4.1 Macroeconomics

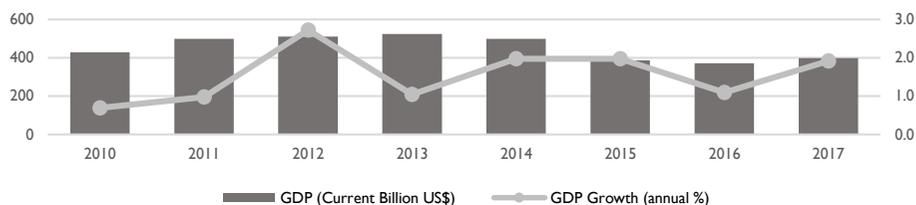
5.4.1.1 Norway Macroeconomic Indicators

	2010	2011	2012	2013	2014	2015	2016	2017
Population (Inhabitants)	4,889,252	4,953,088	5,018,573	5,079,623	5,137,232	5,190,239	5,234,519	5,282,223
GDP (Current Billion US\$)	429.13	498.83	510.23	523.50	499.34	386.66	371.08	398.83
GDP Growth (annual %)	0.69	0.97	2.72	1.04	1.98	1.97	1.09	1.92
GDP per capita (Current US\$)	87,770.27	100,711.22	101,668.17	103,059.25	97,199.92	74,498.14	70,890.04	75,504.57
Exports of Goods and Services (Current Billion US\$)	170.47	205.66	207.02	204.89	193.66	145.84	126.67	141.48
Exports of Goods and Services (% of GDP)	39.73	41.23	40.57	39.14	38.78	37.72	34.14	35.47
Imports of Goods and Services (Current Billion US\$)	122.15	141.51	140.53	148.44	148.72	124.09	123.47	131.82
Imports of Goods and Services (% of GDP)	28.46	28.37	27.54	28.35	29.78	32.09	33.27	33.05
Inflation consumer prices (annual %)	2.40	1.30	0.71	2.13	2.03	2.17	3.55	-
Energy use (kg of oil equivalent per capita)	6,934.59	5,649.70	5,906.14	6,415.99	5,595.65	5,815.81	-	-

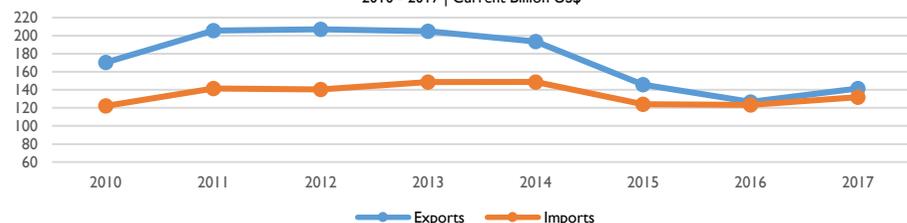
Graph 5.4.1.1. Norway: Population
2010 - 2017 | Millions Inhabitants



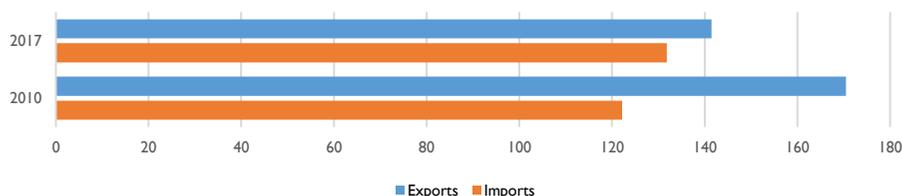
Graph 5.4.1.2. Norway: GDP and GDP Growth
2010 - 2017 | Current Billion US\$ and Annual %



Graph 5.4.1.3. Norway: Exports and Imports (Goods and Services)
2010 - 2017 | Current Billion US\$



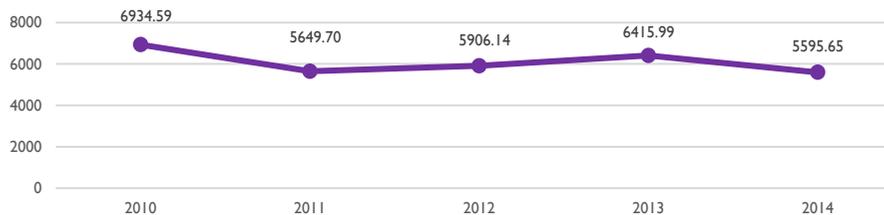
Graph 5.4.1.4. Norway: Exports and Imports (Goods and Services)
2010 vs 2017 | Current Billion US\$



Graph 5.4.1.5. Norway: Inflation (Consumer Prices)
2010 - 2016 | Annual %



Graph 5.4.1.6. Norway: Energy Use
2010 - 2014 | kg of Oil Equivalent per Capita



5.4.2 Reserves and Production

Table 5.4.2.1 Proven Gas Reserves (Bcm)

	2010	2011	2012	2013	2014	2015	2016	2017
Proven Gas Reserves	2,549	2,521	2,523	2,471	2,366	2,304	2,276	2,314

Table 5.4.2.2 Natural Gas Production (Bcm)

	2010	2011	2012	2013	2014	2015	2016	2017
Gross Production	148.75	147.68	161.24	150.24	155.98	164.42	162.51	172.61
Marketed Production	106.71	102.21	115.79	108.30	109.86	118.15	115.85	128.28
Reinjection	39.15	42.45	42.20	39.10	43.50	43.70	43.90	44.03
Flaring	0.60	0.65	0.68	0.30	0.30	0.30	0.30	0.30
Other losses	2.29	2.37	2.57	2.54	2.32	2.27	2.46	0.00

5.4.3 Domestic Consumption and Trade

Table 5.4.3.1 Domestic Gas Consumption (Bcm)

	2010	2011	2012	2013	2014	2015	2016	2017
Totals	5.50	4.56	4.34	5.15	5.87	5.23	4.29	5.51

Table 5.4.3.2 Trade: Natural Gas Exports (Bcm)

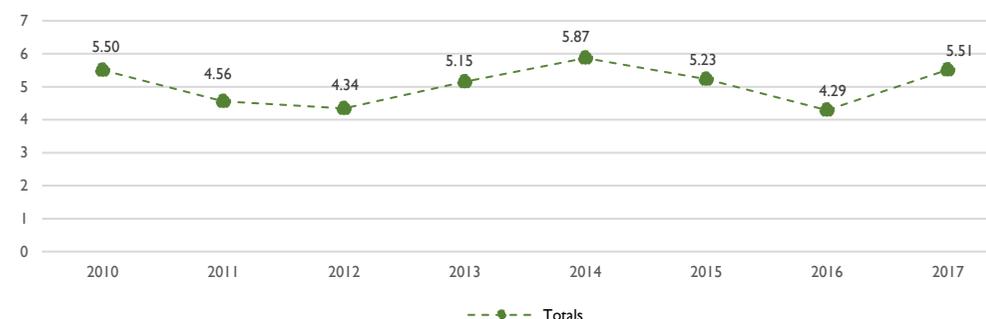
	2010	2011	2012	2013	2014	2015	2016	2017
Pipeline (Bcm)	96.07	92.50	106.02	100.95	99.53	107.83	108.81	109.54
LNG								
Bcm*	4.65	4.25	4.80	3.89	5.06	5.95	6.12	5.85
MMT	3.42	3.12	3.53	2.86	3.72	4.38	4.50	4.30
Totals (Bcm)	100.73	96.75	110.82	104.84	104.59	113.78	114.93	115.40

* Gas equivalent

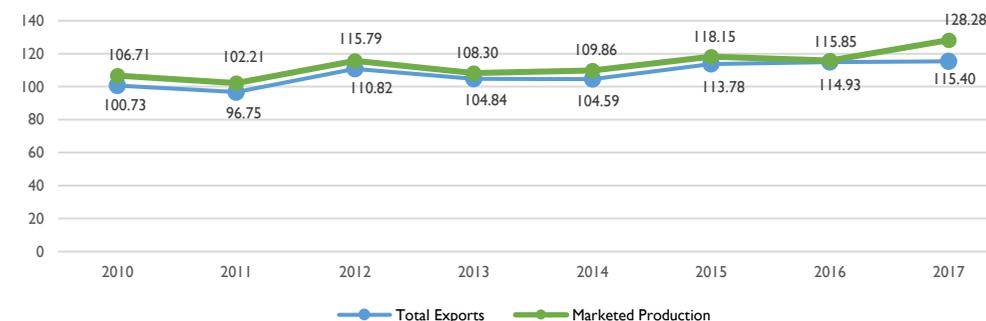
Graph 5.4.2.1. Norway: Natural Gas Production
2010 - 2017 | Bcm



Graph 5.4.3.1. Norway: Natural Gas Domestic Consumption
2010 - 2017 | Bcm



Graph 5.4.3.2. Norway: Natural Gas Trade and Marketed production
2010 - 2017 | Bcm



5.4.4 Transport and Plants

5.4.4.1 Natural Gas Exports Pipelines

Pipeline	Connection			Owner(s)	Operator(s)	Status	Capacity (Bcm/year)	Type	Start Year	Length (km)	Diameter (Inches)
	From	To	Via								
Norpipe	Norway	Germany	-	Gassco AS	Gassco AS	Operational	11.7	Export	1977	440	36
Vesterled	Norway	UK	-	Gassco AS	Gassco AS	Operational	14.2	Export	1978	360	32
Zeepipe I	Norway	Belgium	-	Gassco AS	Gassco AS	Operational	15.3	Export	1993	808	40
Europipe I	Norway	Germany	-	Gassco AS	Gassco AS	Operational	16.8	Export	1995	620	40
Franpipe	Norway	France	-	Gassco AS	Gassco AS	Operational	20.1	Export	1998	840	42
Europipe II	Norway	Germany	-	Gassco AS	Gassco AS	Operational	26.0	Export	1999	660	42
Langeled	Norway	UK	-	Gassco AS	Gassco AS	Operational	26.3	Export	2006	536	44

5.4.4.2 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:
4 636 262



Capital:
Muscat



Continent:
Middle East



Currency:
Omani Rial



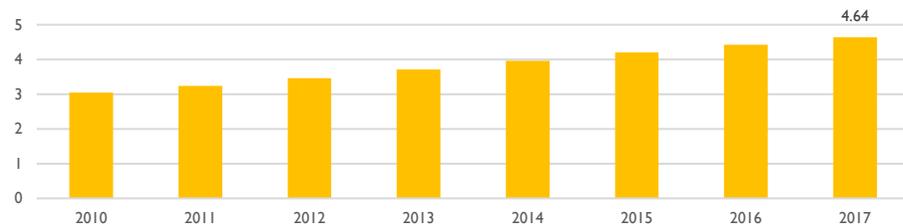
Time Zone:
Gulf
GMT+4

5.5.1 Macroeconomics

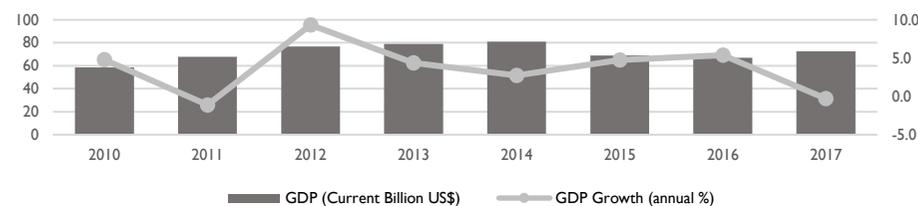
5.5.1.1 Oman Macroeconomic Indicators

	2010	2011	2012	2013	2014	2015	2016	2017
Population (Inhabitants)	3,041,460	3,237,268	3,464,644	3,711,481	3,960,925	4,199,810	4,424,762	4,636,262
GDP (Current Billion US\$)	58.64	67.94	76.69	78.94	81.08	68.91	66.82	72.64
GDP Growth (annual %)	4.80	-1.11	9.33	4.37	2.75	4.74	5.38	-0.27
GDP per capita (Current US\$)	19,281.00	20,986.08	22,134.80	21,268.84	20,469.14	16,406.71	15,102.38	15,668.37
Exports of Goods and Services (Current Billion US\$)	38.50	49.42	52.14	56.43	53.57	35.69	27.55	-
Exports of Goods and Services (% of GDP)	65.65	72.75	67.99	71.48	66.07	51.79	41.22	-
Imports of Goods and Services (Current Billion US\$)	24.17	29.24	28.64	35.58	30.94	29.68	23.78	-
Imports of Goods and Services (% of GDP)	41.21	43.04	37.34	45.07	38.17	43.07	35.59	-
Inflation consumer prices (annual %)	3.20	4.07	2.91	1.25	1.01	0.07	1.10	-
Energy use (kg of oil equivalent per capita)	6,154.42	6,800.14	6,832.83	6,583.46	6,141.77	-	-	-

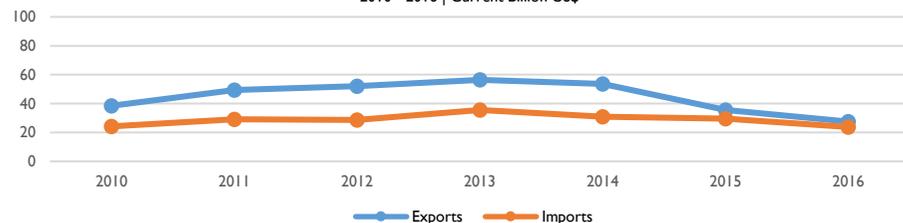
Graph 5.5.1.1. Oman: Population
2010 - 2017 | Millions Inhabitants



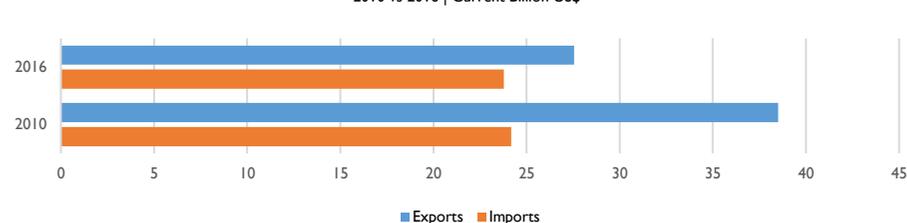
Graph 5.5.1.2. Oman: GDP and GDP Growth
2010 - 2017 | Current Billion US\$ and Annual %



Graph 5.5.1.3. Oman: Exports and Imports (Goods and Services)
2010 - 2016 | Current Billion US\$



Graph 5.5.1.4. Oman: Exports and Imports (Goods and Services)
2010 vs 2016 | Current Billion US\$



Graph 5.5.1.5. Oman: Inflation (Consumer Prices)
2010 - 2016 | Annual %



Graph 5.5.1.6. Oman: Energy Use
2010 - 2014 | kg of Oil Equivalent per Capita



5.5.2 Reserves and Production

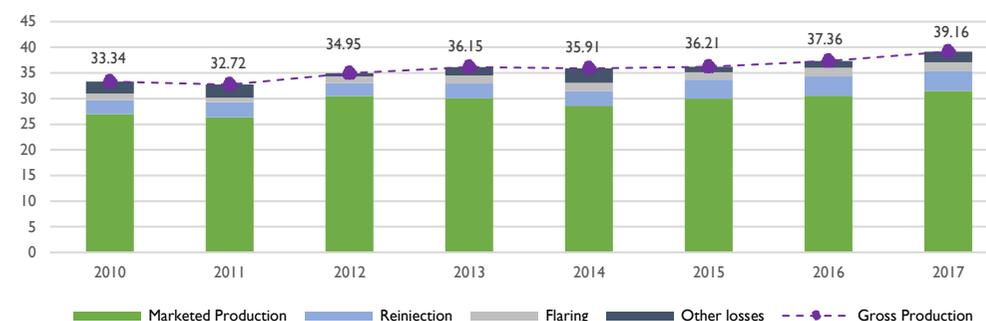
Table 5.5.2.1 Proven Gas Reserves (Bcm)

	2010	2011	2012	2013	2014	2015	2016	2017
Proven Gas Reserves	684	681	676	703	703	703	703	703

Table 5.5.2.2 Natural Gas Production (Bcm)

	2010	2011	2012	2013	2014	2015	2016	2017
Gross Production	33.34	32.72	34.95	36.15	35.91	36.21	37.36	39.16
Marketed Production	26.99	26.33	30.48	30.10	28.62	29.98	30.53	31.52
Reinjection	2.69	2.96	2.53	2.86	2.85	3.71	3.80	3.83
Flaring	1.29	0.92	1.30	1.53	1.57	1.43	1.70	1.75
Other losses	2.37	2.52	0.64	1.66	2.87	1.09	1.32	2.06

Graph 5.5.2.1. Oman: Natural Gas Production
2010 - 2017 | Bcm



5.5.3 Domestic Consumption and Trade

Table 5.5.3.1 Domestic Gas Consumption (Bcm)

	2010	2011	2012	2013	2014	2015	2016	2017
Totals	17.58	17.54	21.11	21.05	20.41	21.92	21.81	21.95

Graph 5.5.3.1. Oman: Natural Gas Domestic Consumption
2010 - 2017 | Bcm

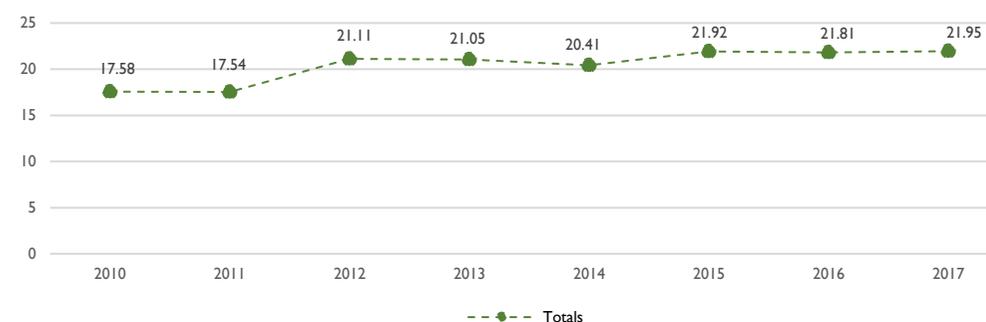


Table 5.5.3.2 Trade: Natural Gas Exports (Bcm)

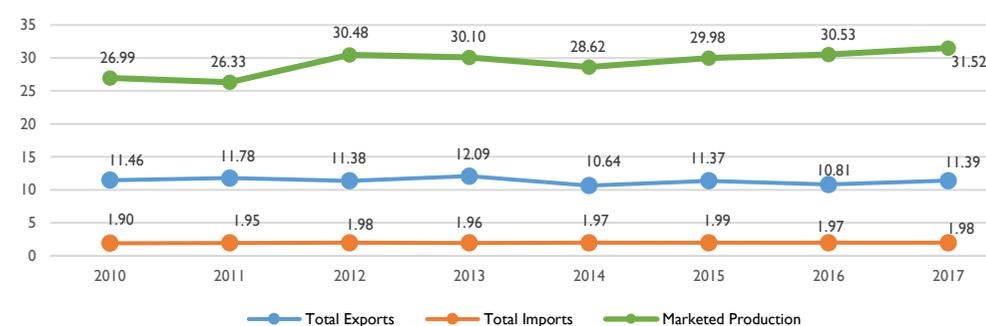
	2010	2011	2012	2013	2014	2015	2016	2017
LNG								
Bcm*	11.46	11.78	11.38	12.09	10.64	11.37	10.81	11.39
MMT	8.43	8.66	8.37	8.89	7.82	8.36	7.95	8.37
Totals	11.46	11.78	11.38	12.09	10.64	11.37	10.81	11.39

* Gas equivalent

Table 5.5.3.3 Trade: Natural Gas Imports (Bcm)

	2010	2011	2012	2013	2014	2015	2016	2017
Pipeline (Bcm)	1.90	1.95	1.98	1.96	1.97	1.99	1.97	1.98
Totals	1.90	1.95	1.98	1.96	1.97	1.99	1.97	1.98

Graph 5.5.3.2. Oman: Natural Gas Trade and Marketed production
2010 - 2017 | Bcm



5.5.4 Transport and Plants

5.5.4.1 Natural Gas Exports 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	-	NIOC, OGC	NIOC, OGC	Planned	9.9	Import	2020	-	-

5.5.4.2 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:
32 165 485



Capital:
Lima



Continent:
South
America



Currency:
Peruvian Sol



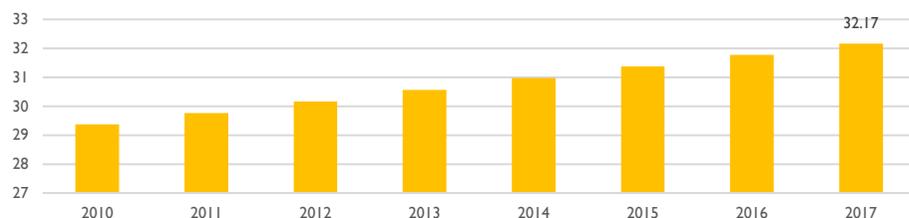
Time Zone:
Peru
GMT-5

5.6.1 Macroeconomics

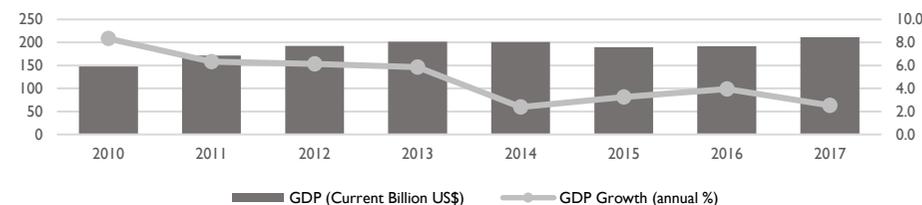
5.6.1.1 Peru Macroeconomic Indicators

	2010	2011	2012	2013	2014	2015	2016	2017
Population (Inhabitants)	29,373,646	29,759,989	30,158,966	30,565,716	30,973,354	31,376,671	31,773,839	32,165,485
GDP (Current Billion US\$)	147.53	171.76	192.65	201.22	201.08	189.93	191.64	211.39
GDP Growth (annual %)	8.33	6.33	6.14	5.85	2.38	3.25	3.95	2.53
GDP per capita (Current US\$)	5,022.49	5,771.57	6,387.79	6,583.12	6,492.05	6,053.11	6,031.37	6,571.93
Exports of Goods and Services (Current Billion US\$)	41.05	52.39	52.88	49.91	45.39	40.40	43.00	51.29
Exports of Goods and Services (% of GDP)	27.83	30.50	27.45	24.80	22.57	21.27	22.44	24.26
Imports of Goods and Services (Current Billion US\$)	35.18	43.77	48.49	50.25	48.68	45.32	43.73	47.78
Imports of Goods and Services (% of GDP)	23.85	25.49	25.17	24.97	24.21	23.86	22.82	22.60
Inflation consumer prices (annual %)	1.53	3.37	3.65	2.82	3.23	3.56	3.60	-
Energy use (kg of oil equivalent per capita)	635.49	638.44	677.97	666.43	767.69	-	-	-

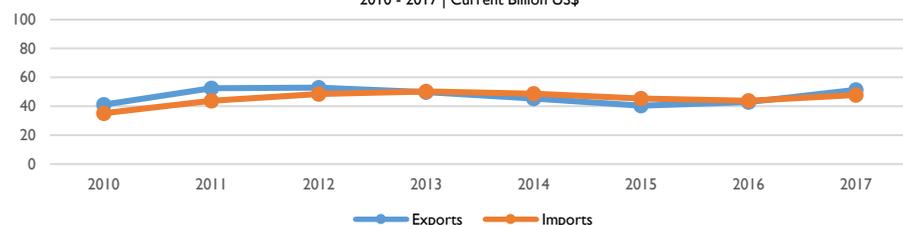
Graph 5.6.1.1. Peru: Population
2010 - 2017 | Millions Inhabitants



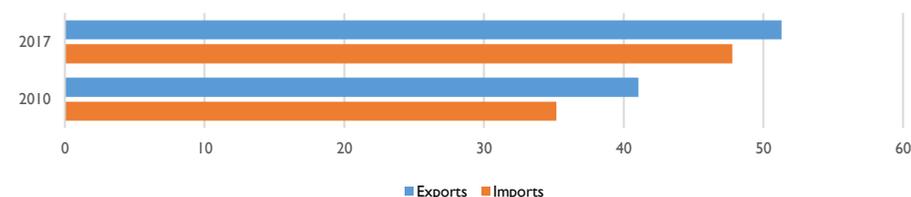
Graph 5.6.1.2. Peru: GDP and GDP Growth
2010 - 2017 | Current Billion US\$ and Annual %



Graph 5.6.1.3. Peru: Exports and Imports (Goods and Services)
2010 - 2017 | Current Billion US\$



Graph 5.6.1.4. Peru: Exports and Imports (Goods and Services)
2010 vs 2017 | Current Billion US\$



Graph 5.6.1.5. Peru: Inflation (Consumer Prices)
2010 - 2016 | Annual %



Graph 5.6.1.6. Peru: Energy Use
2010 - 2014 | kg of Oil Equivalent per Capita



5.6.2 Reserves and Production

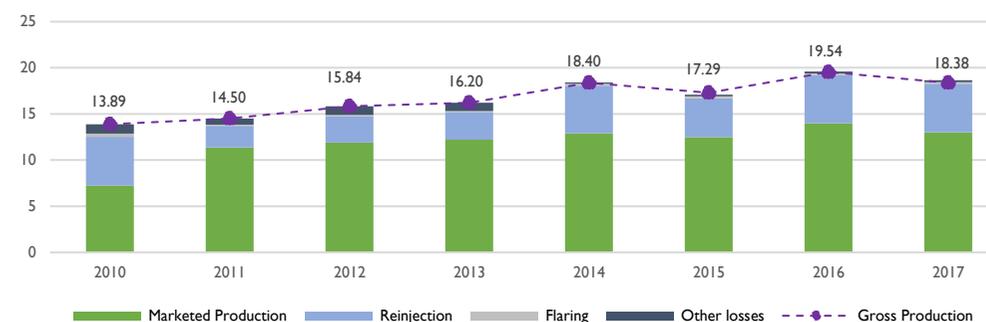
Table 5.6.2.1 Proven Gas Reserves (Bcm)

	2010	2011	2012	2013	2014	2015	2016	2017
Proven Gas Reserves	377	380	418	413	407	400	450	450

Table 5.6.2.2 Natural Gas Production (Bcm)

	2010	2011	2012	2013	2014	2015	2016	2017
Gross Production	13.89	14.50	15.84	16.20	18.40	17.29	19.54	18.38
Marketed Production	7.22	11.38	11.88	12.20	12.91	12.50	14.00	13.00
Reinjection	5.32	2.32	2.87	3.00	5.14	4.20	5.20	5.26
Flaring	0.33	0.16	0.15	0.10	0.21	0.20	0.20	0.19
Other losses	1.02	0.64	0.94	0.90	0.14	0.20	0.21	0.20

Graph 5.6.2.1. Peru: Natural Gas Production
2010 - 2017 | 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
Totals	5.49	5.71	6.61	7.02	7.66	7.67	8.94	7.74

Graph 5.6.3.1. Peru: Natural Gas Domestic Consumption
2010 - 2017 | Bcm

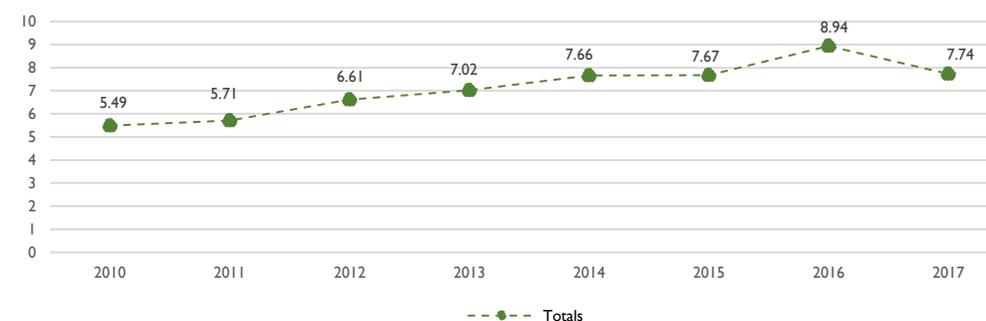
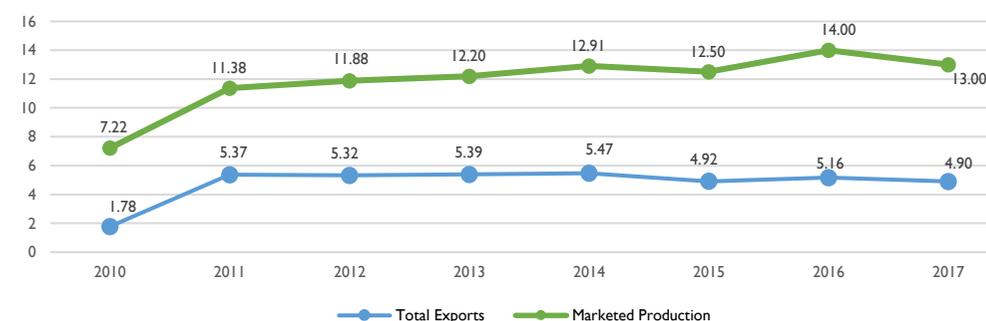


Table 5.6.3.2 Trade: Natural Gas Exports (Bcm)

	2010	2011	2012	2013	2014	2015	2016	2017	
LNG	Bcm*	1.78	5.37	5.32	5.39	5.47	4.92	5.16	4.90
	MMT	1.31	3.95	3.91	3.96	4.02	3.61	3.80	3.60
Totals	1.78	5.37	5.32	5.39	5.47	4.92	5.16	4.90	

* Gas equivalent

Graph 5.6.3.2. Peru: Natural Gas Trade and Marketed production
2010 - 2017 | Bcm



5.6.4 Transport and Plants

5.6.4.1 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

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 2040 (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.

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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 and 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-GECF Countries, portraying the status of Gas Markets and its changes.

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.

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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.

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