## **TRACKING EGYPT'S**

# HYDROCARBON

# Production through FY 2017/18

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gypt is a hydrocarbon production pioneer, as it is one of the oldest energy producers in the Middle East & North Africa (MENA) region. The country is considered the largest oil producer in Africa out of the Organization of the Petroleum Exporting Countries (OPEC) and the thirdlargest natural gas producer on the continent following Algeria and Nigeria, according to the Energy Information Administration (EIA). Egypt is also an active member of the Organization of Arab Petroleum Exporting Countries (OAPEC) since 1973

Moreover, the country's developed infrastructure has allowed it to maintain sizeable liquefied natural gas (LNG) and crude oil export markets through shipped products and pipelines, as well as a sizeable downstream sector. Egypt used to be a net natural gas exporter before starting to import LNG in December 2012. In 2014, the country completely halted exports, turning into a net natural gas importer in fiscal year (FY) 2015/16. Egypt is aiming to reach natural gas self-sufficiency again, especially after the discovery of the Zohr field.

In FY 2017/18, Egypt crude oil and condensates production showed stable performance, while its natural gas production witnessed fluctuations. This report aims to highlight Egypt's hydrocarbon production from July 2017 to June 2018. It covers the performance of the country's production of crude oil, equivalent gas, and condensates.

#### **CRUDE OIL**

Egypt produced 201,626,003 of crude oil barrels between July 2017 and June 2018, with a monthly average production of 16,802,166 barrels per month (b/m). Figures show that the

Western Desert is the major crude oil production area in Egypt, representing around 56% of the country's production in FY 2017/18, with an average of 9,481,890 b/m. The Gulf of Suez is the second most productive area for crude oil production, while the Eastern Desert comes in at the third place. It is worth noting that Egypt produces mostly heavy crude oil.

**EQUIVALENT GAS PRODUCTION (JULY 2017-JUNE 2018)**(RARRELS)

MONTH	MEDITERRANEAN SEA	EASTERN DESERT	WESTERN DESERT	GULF OF SUEZ	DELTA	SINAI	UPPER EGYPT	TOTAL/MONTH
7\2017	15,684,326	23,000	8,600,941	918,295	8,322,598	8,365	0	33,557,525
8\2017	13,451,436	15,192	7,748,503	715,564	7,629,951	10,001	0	29,570,647
9\2017	12,071,252	13,964	6,933,889	655,273	7,159,726	5,344	0	26,839,448
10\2017	12,757,890	30,150	7,195,680	743,708	7,366,860	36,000	0	28,130,288
11\2017	12,332,627	29,145	6,955,824	770,269	7,121,298	34,800	0	27,243,963
12\2017	13,608,416	31,155	7,435,536	823,391	7,612,422	372	0	29,548,120
1\2018	14,809,727	0	7,193,845	670,614	7,499,661	839	0	30,174,686
2\2018	13,039,060	0	6,571,443	588,625	6,577,370	589	0	26,777,080
3\2018	14,536,197	0	6,332,665	600486	7,295,315	429	0	28,765,092
4\2018	14,023,105	0	7,015,160	574,589	7,054,960	554	0	28,668,368
5\2018	17,230,001	22,080	7,233,189	588,227	7,406,715	339	0	32,450,550
6\2018	17,131,583	35,009	7,046,406	535,010	7,143,314	446	0	31,891,768
Total/area	170,675,620	199,695	86,263,081	8,184,051	88,190,190	98,078	0	353,617,535

Source: EGPC & EGAS

#### CRUDE OIL PRODUCTION (JULY 2017-JUNE 2018) (BARRELS)

MONTH	MEDITERRANEAN SEA	eastern Desert	Western Desert	GULF OF SUEZ	DELTA	SINAI	UPPER EGYPT	TOTAL/MONTH
7\2017	-	2,016,525	9,428,766	4,054,621	42,583	1,865,259	-	17,407,754
8\2017	-	1,986,523	9,385,426	4,135,487	44,321	1,738,859	-	17,290,616
9\2017	-	1,742,659	9,216,732	3,952,359	38,259	1,653,859	7,503	16,611,371
10\2017	59,550	1,837,050	9,708,630	3,895,950	36,900	1,537,680	15,690	17,091,450
11\2017	57,565	1,775,815	9,385,009	3,766,085	35,670	1,486,424	15,167	16,521,735
12\2017	25,000	1,780,000	9,500,000	3,900,000	30,000	1,500,000	6,000	16,680,000
1\2018	25,000	1,720,000	9,540,000	3,900,000	30,000	1,480,000	6,000	16,640,000
2\2018	15,000	1,660,000	8,700,000	3,380,000	20,000	1,340,000	5,000	15,080,000
3\2018	18,723	1,986,123	9,990,125	4178921	18,542	1,723,514	7,129	17,923,077
4\2018	16,000	1,866,000	9,477,000	3,715,000	135,000	1,395,000	5,000	16,453,000
5\2018	18,000	1,978,000	9,909,000	4,160,000	15,000	1,545,000	5,000	17,612,000
6\2018	19,000	1,790,000	9,542,000	3,494,000	16,000	1,489,000	3,000	16,315,000
Total/area	253,838	22,138,695	113,782,688	46,532,423	462,275	18,754,595	75,489	201,626,003

\*Crude total excludes Upper Egypt production Source: EGPC & EGAS

In May, Eni announced an oil discovery in the Faghur Basin in the Western Desert. The exploratory well, has been drilled to a total depth of 5,090 meters and encountered 18 meters of light oil in the Paleozoic sandstones of Dessouky Formation of Carboniferous age. The well has also encountered other hydrocarbon levels in the Alam El Bueib sandstones of Cretaceous Age. This discovery gives hope of finding more crude oil either in the Western Desert or in any other onshore area in Egypt, according to Eni's press release.

EGYPT HAS MANY COMPETITIVE ADVANTAGES, AS IT BENEFITS FROM ITS LOW PRODUCTION COSTS AND A RELATIVELY LARGE VOLUME OF BOTH ONSHORE AND OFFSHORE OIL AND GAS FIELDS.

### **EQUIVALENT NATURAL GAS**

Egypt's equivalent natural gas total production recorded 353,617,535 barrels in FY 2017/18, with an average monthly production of 29,468,128 barrels. Almost half of Egypt's gas production comes from offshore fields, as 48% of the country's equivalent gas production was extracted from the Mediterranean Sea, making 14,222,968 b/m on average.

In December 2017, natural gas production dynamics changed after Italy's Eni began producing from Zohr, the largest discovery of gas in the Mediterranean Sea. The first production unit of Zohr increased the natural gas production from the Mediterranean by around 1,201,311 b/d in January 2018 compared to December 2017, Eni's press release announced.

Four months later, the Italian company announced the start-up of the second production unit (T-1) of the Zohr project, which increased installed capacity by 400 million standard cubic feet per day (MMScfd). Accordingly, it subsequently increased the Mediterranean Sea's total natural gas production, as it reached 17,230,001 b/m in May compared to 14,023,105 b/m in April.

Achieving outstanding progress, Eni announced in May the start-up of the third production unit (T-2) of the Zohr project, increasing the installed capacity to 1.2 billion cubic feet per day (bcf/d). Zohr increased its production up to 1.1 bcf/d in ramp-up, equivalent to approximately 200,000 barrel of oil equivalent per day (boe/d), of which 75,000 boe/d net to Eni at working interest.

Eni recently revealed that the field's production capacity, which stood at 1.6 bcf/d in July, is slated to reach 2 bcf/d by September, Reuters reported.

The production of Zohr increased again after Eni brought the third unit online. Following this, Minister of Petroleum and Mineral Resources, Tarek El Molla, declared that recent production increases had pushed Egypt's total natural gas production to about 6 bcf/d, Reuters reported. Despite this, total equivalent natural gas production from the Mediterranean Sea slightly declined by 898,418 barrels in June compared to May.

In the mid-term, Egypt is planning to become a regional energy hub. President Abdel Fattah el-Sisi affirmed on July 29 that Egypt would achieve natural gas self-sufficiency and a surplus by the middle of 2020, Egypt Oil & Gas reported.

#### **CONDENSATES PRODUCTION (JULY 2017-JUNE 2018) (BARRELS)**

MONTH	MEDITERRANEAN SEA	EASTERN DESERT	WESTERN DESERT	GULF OF SUEZ	DELTA	SINAI	UPPER EGYPT	TOTAL/MONTH
7\2017	635,728	1,300	1,512,253	74,562	506,427	17,251	0	2,747,521
8\2017	583,814	2,001	1,520,214	73,569	449,568	19,542	0	2,648,708
9\2017	609,295	1,001	1,434,526	78,111	405,168	18,296	0	2,546,397
10\2017	684,480	15,030	1,178,884	105,630	345,268	19,992	0	2,349,284
11\2017	661,664	15,030	1,220,987	102,109	357599	20,706	0	2,378,095
12\2017	684,480	16,032	1,305,193	109,151	369,930	21,420	0	2,506,206
1\2018	853,040	0	1,247,010	75,227	468,358	17,517	0	2,661,152
2\2018	809,016	0	1,112,493	68,117	68,117	14,737	0	2,416,799
3\2018	921,627	0	1,157,163	76540	447,833	15,480	0	2,618,643
4\2018	883,700	0	1,192,909	74,938	425,452	14,580	0	2,591,579
5\2018	914,187	0	1,259,217	72,128	422,312	17,123	0	2,684,972
6\2018	891,733	0	1,227,377	64,786	407,814	17,260	0	2,608,970
Total/area	9,132,764	50,394	15,368,226	974,868	4,673,846	213,904	0	30,758,326

Source: EGPC & EGAS



From his side, El Molla said in 2017 that Zohr, North Alexandria, and Nooros gas fields are expected to increase Egypt's natural gas output by 50% in 2018 and 100% by 2020.

#### **CONDENSATES**

Egypt's production of condensates was stable through FY 2017/18 with a total production of 30,758,326 barrels. Half of this production came from the Western Desert, with a monthly average production of around 2,563,194693 b/m. The highest level of condensates production in the Western Desert came in the first quarter of FY 2017/18.

In addition, July 2017 recorded the highest level of total condensates production at around 2,747,521 barrels. Conversely, October 2017 saw the lowest output, producing 2,349,284 barrels.

Figures show that from October to December 2017, production from the Eastern Desert, the Gulf of Suez, and Sinai witnessed a remarkable increase, while the Delta's production sharply decreased in February 2018 by around 68% month-on-month.

New oil and gas discoveries have supported Egypt's hydrocarbon production in FY 2017/18, especially crude oil and condensates. As for equivalent natural gas, the current FY 2018/19 is expected to witness a significant increase in production, as more units will be put online in the Zohr field throughout this year. However, equivalent natural gas production recorded some decreases during the comparison period - it recorded the highest level of production by reaching a total of 353,617,535 barrels - while total crude oil production stood at 201,626,003 barrels, and total condensates production at 30,758,326 barrels.