



EGYPT'S NATURAL GAS: BRIGHT PROSPECTS

By Amina Hussein, Mahinaz El Baz

Egypt is closer than ever to becoming a natural gas energy hub in the Eastern Mediterranean region. It is moving steadily towards reaching natural gas self-sufficiency in 2019 and even resuming exporting activities by 2020.

The state recently put efforts in restructuring the natural gas legal framework in order to facilitate the transformational phase. The new law supports liberalizing the market and guarantees its competitiveness.

In 2017, natural gas represented 53% of the Egyptian energy mix, according to the British Petroleum (BP) 2018 Statistical Review. In addition, natural gas investments represented around 12.1% of Egypt's total inward investments from fiscal year (FY) 2010/11-2015/16, the Ministry of Planning, Monitoring and Administrative Reform (MPMAR) reported. This indicates the importance of the commodity in the different aspects of Egypt's economic activities.

LEGAL FRAMEWORK

Prior to 2017, natural gas activities in Egypt were covered by law No. 217 of 1980. Under this law,

the Egyptian Natural Gas Holding Company (EGAS) was responsible for all operations related to transportation and domestic supply of natural gas to different sectors. Private companies were allowed to construct and operate gas pipelines as well; however, carrying out these activities depended on EGAS's approval and monitoring.

The decreasing domestic supply and the growing domestic demand of natural gas forced Egypt to start importing natural gas. Over the past few years, the state has invested billions to close this supply-demand gap. As a result, the government made the decision to liberalize the natural gas market. EGAS and the Egyptian General Petroleum Corporation (EGPC) announced in May 2015 the decision to allow private companies to use the state-owned national gas grid to import, transfer, and distribute natural gas to the local market.

The decision to liberalize was enshrined in law in July 2017, when EGAS and EGPC declared the issuance of the Gas Market Law No. 196 for 2017. At the same time, it was announced that the market would be fully liberalized by 2022. In February 2018, the law was followed by the promulgation of the executive regulation to implement the law.



Egypt's **production** of natural gas reached **31.9 mtoe/y**

Egypt's **consumption** of natural gas reached **41.5 mtoe/y**

Source: MPMAR

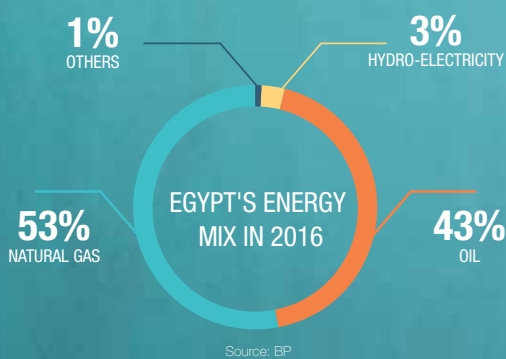
cubic feet per year (bcf/y), according to EGPC and EGAS.

In 2012, the Mediterranean Sea and the Western Desert regions produced 94% of Egypt's natural gas. Over time, this share declined in favor of production coming from the Nile Delta. During FY 2016/17, 19 new natural gas discoveries were announced, of which five were in the Nile Delta and 10 in the Western Desert, according to EGAS's Annual Report. The new natural gas discoveries added about 2008.3 bcf to actual reserves.

Meanwhile, Egypt's share of natural gas production from Sinai and the Eastern Desert is nearly zero. Natural gas wells in these regions participate annually with 0.01% and 0.08% of the total natural gas production in Egypt, respectively.

PRODUCTION

According to official figures, Egypt's natural gas production was almost stable between FY 2010/11 and FY 2011/12, with a slight decrease from approximately 46.3 million tons equivalent per year

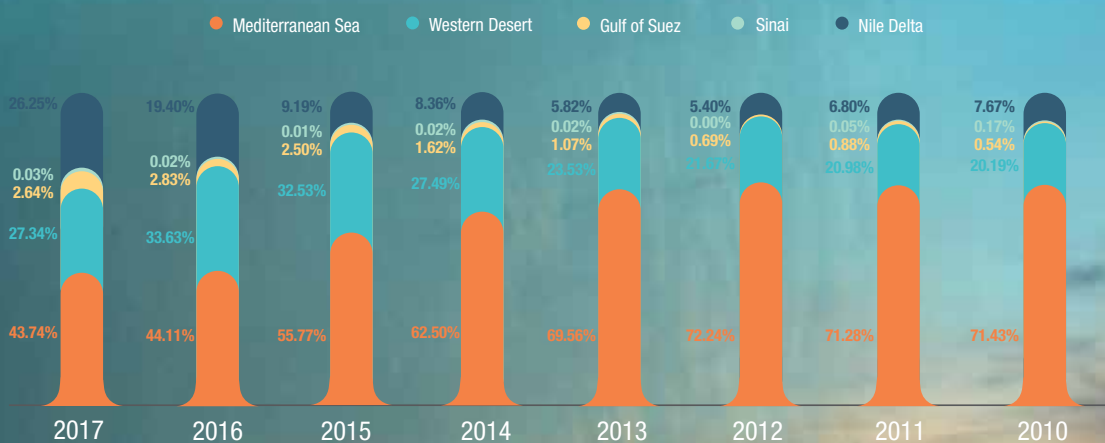


MAIN PRODUCTION AREAS

Egypt's production of natural gas comes mainly from the Mediterranean Sea, which possesses around 87% of the country's total proven gas reserves. On average, the Mediterranean's natural gas production represented 58.1% of Egypt's annual production between 2010 and 2017. Moreover, Egypt has more than 40 producing wells in the area. In 2017, Mediterranean fields produced around 27569.3 billion

MEDITERRANEAN NATURAL GAS PRODUCTION REPRESENTED 58.1% OF EGYPT'S ANNUAL PRODUCTION BETWEEN 2010 AND 2017.

NATURAL GAS PRODUCTION BY AREA (2010-2017)



Source: EGPC and EGAS

(mtoe/y) to 46.07 mtoe/y. Since FY 2012/13, the level of production has been declining steadily. Annual production reached its lowest level of 31.3 mtoe/y in FY 2015/16, before recovering slightly in FY 2016/17 to reach 31.9 mtoe/y.

On average, Egypt produces approximately 39.2 mtoe/y of natural gas, which makes Egypt the fifth largest natural gas producer in the Organization of Arab Petroleum Exporting Country (OAPEC) during the comparison period. In terms of percentage share, Egyptian production represents 8% of the total amount produced by OAPEC member states.

CONSUMPTION

Egypt's gas consumption reached its highest level in FY 2016/17 with 41.5 mtoe/y. On the other hand, it reached the lowest level in FY 2010/11 with 35.2 mtoe/y, according to MPMAR. The Egyptian domestic market, on average, consumes 37.8 mtoe annually, which represents approximately 14% of the natural gas consumed across OAPEC countries.

Egypt is the fourth largest natural gas consumer in OAPEC, following Saudi Arabia, the United Arab Emirates, and Qatar.

Egyptian consumption significantly increased from FY 2010/11 to FY 2012/13 by 4 mtoe/y. After that, consumption witnessed a decline until FY 2014/15, and increased once more in FY 2015/16.

CONTRIBUTION TO INVESTMENT

Natural gas private investment declined to its lowest level during the comparison period in FY 2013/14, recording EGP 21900 million. Similarly, public investment reached its lowest levels in the same year, contributing only EGP 3609.4 million. Overall investment, therefore, hit a low of EGP 25509.4 million in that year.

Both private and public natural gas investments reached a peak in FY 2011/12, recording EGP 39512 million and EGP 14779.2 million respectively. This meant that overall investment peaked in FY 2011/12 with EGP 54291.2 million.

From FY 2010/11 to FY 2015/16, total public investment amounted to EGP 40998.6 million, while total private investment reached EGP 175350.4 million. Overall investments over the comparison period reached EGP 206349 million.

The highest percentage of natural gas investment as a share of the total inward investments in the Egyptian economy was achieved in FY 2011/12. Natural gas activities represented approximately 22% of the total investments that took place in Egypt in this fiscal year. Nevertheless, this declined dramatically in the following year, decreasing by

50% and representing only 11% of the total inward investments.

Moreover, the share of natural gas investments compared to other sectors hit a low of 9.1% in FY 2015/16.

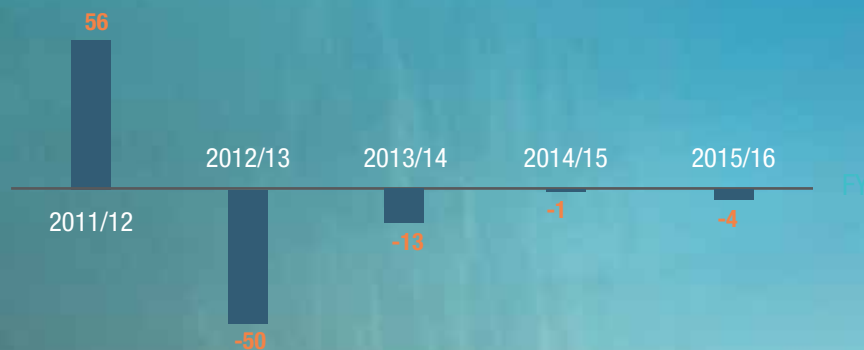
Despite the increasing consumption trend, the recent natural gas discoveries – Zohr field in particular – have encouraged Egypt to set plans to reclaim its old position as a natural gas exporter, and establish itself as a regional energy hub.

Egypt is currently working towards several objectives, including speeding up output at newly discovered natural gas fields, liberalizing the natural gas market, reducing gas flaring, and diversifying energy sources to obtain self-sufficiency.

The Egyptian government is optimistic about achieving natural gas self-sufficiency by 2019. Moreover, the state expects to restart exporting natural gas by June 2020, according to the statements made by the president and the petroleum minister.

EGYPT IS THE FIFTH LARGEST NATURAL GAS PRODUCER IN OAPEC.

CHANGE IN NATURAL GAS CONTRIBUTION TO INVESTMENT (%)



Source: MPMAR

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