

Unveiling a Legacy

# A Deep Dive into Egypt's Oil and Gas Landscape

## EGYPT Oil & Gas **Production Report**

June 2024

Egypt's oil and gas story is one of rich history and promising potential. In this report, Egypt Oil & Gas delves deep into the current landscape, leveraging official data to provide a comprehensive analysis of E&P activities.

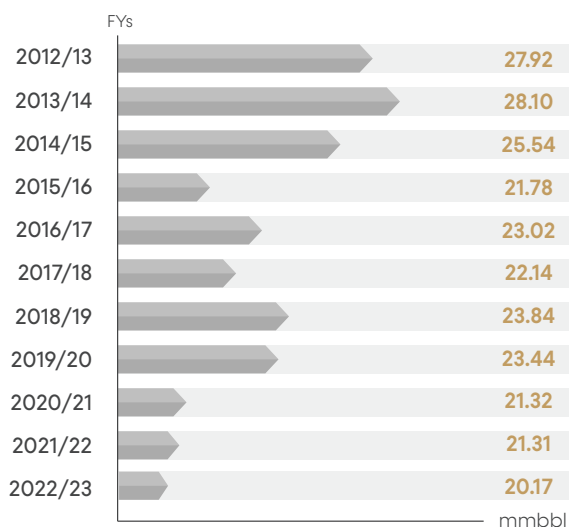
We will not only shed light on recent discoveries, key players, and major fields but also explore the government's initiatives to attract investment and unlock the true potential of Egypt's hydrocarbon reserves. So, prepare to embark on a journey through Egypt's oil and gas realm, where legacy meets opportunity.

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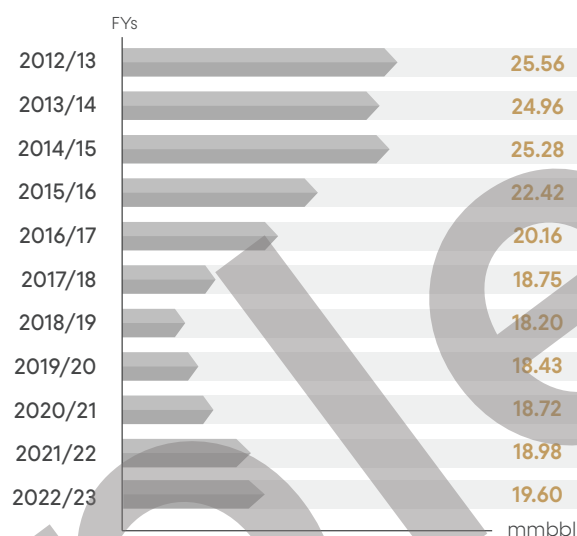
### Eastern Desert

#### Crude Oil Production



### Sinai

#### Crude Oil Production



## 4. Sinai

The drilling operations in Sinai started between 1910–1920 with five drilled wells. Over the period from 1886–1951, the total drilled wells in Sinai were 43, which resulted in a total of six discoveries, according to Hamdy El Banby's book.

Over the course of the past 11 years, Sinai's production recorded an annual average of 21.01 mmbbl. The total production from Sinai's crude oil fields recorded 231.06 mmbbl from FYs 2012/13 to 2022/23, according to EGPC's data.

The highest production level, 25.56 mmbbl, was recorded in FY 2012/13. The production recorded the lowest level of 18.2 mmbbl in FY 2018/19, according to EGPC's data.

Production in Sinai fluctuated over the referred period. It started with a slight increase of 1.26% from FY 2013/14 to FY 2014/15. However, from 2015/16 to 2021/22, the region's production levels experienced a continuous decline, reaching their lowest point between FYs 2014/15–2015/16, which was 11.3%, according to EGPC's data. Unlike other regions, Sinai's crude oil production witnessed a positive growth rate over the COVID-19 period during FYs 2019/20–2021/22.

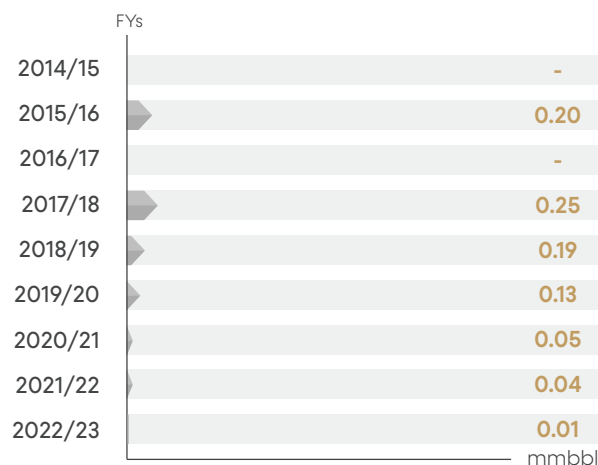
## 5. The Mediterranean Sea

The Mediterranean Sea is considered a significant natural gas producing area rather than being a crude oil producing area. Over the period from FYs 2015/16 to 2022/23, the total crude oil production in the Mediterranean fields amounted to 0.7 mmbbl. The annual average crude production of the region is 0.10 mmbbl, according to EGPC's data.

Unlike other regions and the overall crude production, the region's highest level of production was 0.25 mmbbl in FY 2017/18.

### Mediterranean sea

#### Crude Oil Production

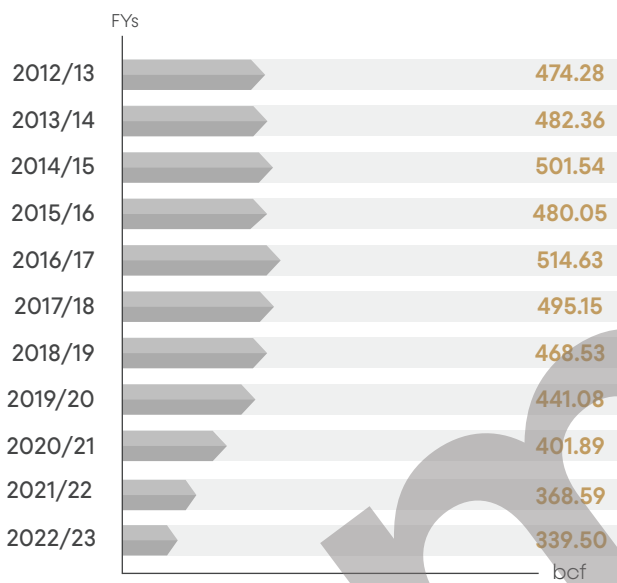


## 2. The Western Desert

The Western Desert is mainly known for its oil fields, yet it is ranked second among natural gas production areas in Egypt as well. Over the mentioned period, the Western Desert produced 4,968 bcf, while on average it produced 451.6 bcf annually. The area's natural gas production generally witnessed a fluctuating trend.

### Western Desert

Natural Gas Production



In August 2016, Shell made a gas discovery in its North Alam Al Shawish exploration concession in Egypt's Western Desert through BTE-2 well. The discovery added 500 bcf, making it one of the biggest gas discoveries in the Western Desert. Accordingly, FY 2016/17 had the highest production of about 514.63 bcf of natural gas, according to Shell's website, EGPC and EGAS.

On the contrary, the production level followed a declining trend over FYs 2017/18-2022/23 as most of the E&P activities were concentrated in the Mediterranean and the Nile Delta regions.

## 3. The Nile Delta

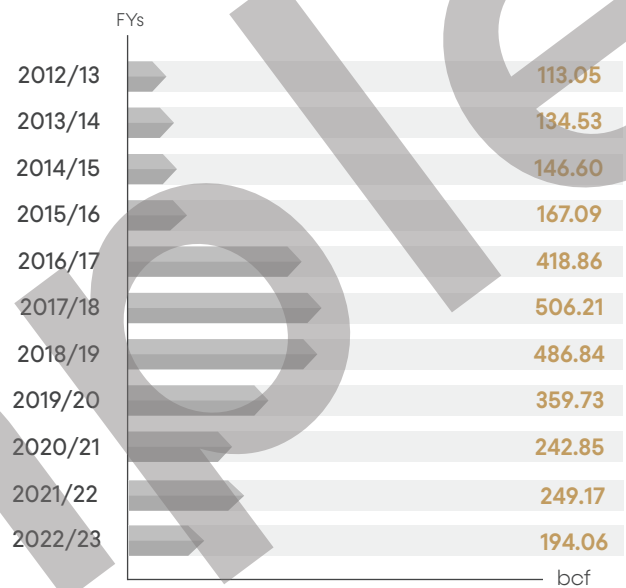
The Nile Delta is one of the regions that witnessed major natural gas discoveries and development projects. The most famous of these projects, which are currently taking place in the region, are: The West Nile Delta (WND) & WDDM development projects as well as Nooros, Atoll discoveries.

Over the discussed period, the Nile Delta produced about 3,000 bcf of natural gas. On average, the region contributed 274.5 bcf annually. Natural gas had been increasing since FY 2013/14 until FY 2017/18, according to EGAS's data.

It is worth mentioning that in early 2017, Atoll field and WND project came online, while Nooros recorded the targeted production of 1 bcf/d. Consequently, FY 2016/17 witnessed an outstanding increase by more than 150% in the production to reach 419 bcf.

### Nile Delta

Natural Gas Production



## 4. The Gulf of Suez

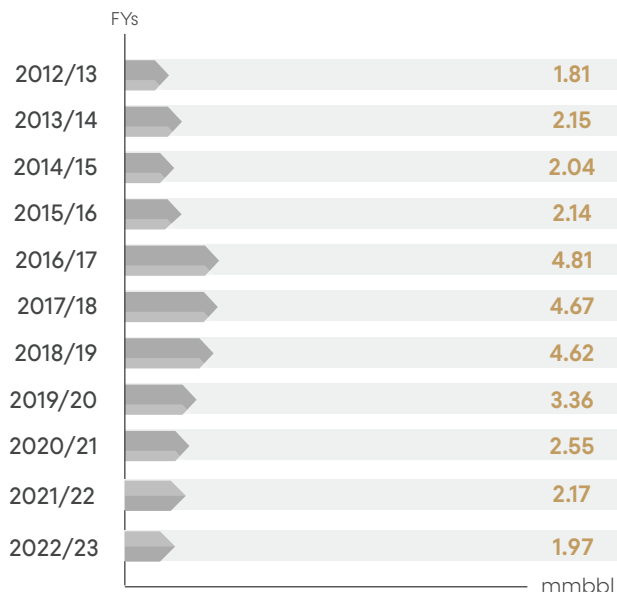
Compared to the abovementioned regions, the Gulf of Suez contributes little to the national natural gas production as it is traditionally an area rich in crude oil production. Over the referred FYs, the total natural gas production from the Gulf recorded about 460.7 bcf, with an annual production of 41.88 bcf on average, according to data from EGAS.

Despite being relatively inconsequential, the area's contribution to the national production has boomed over that time. The region's production outstandingly increased by 153% in FY 2022/23, compared to FY 2012/13, according to data from EGAS.

In 2019, the MoPMR signed an agreement with Wintershall Dea for oil and gas exploration in the Gulf of Suez's Ras Badran and Ziet Bay areas with investments worth \$20 million, as stated in a ministerial statement released in March 2019. Along with the development of the fields, FY 2020/21 witnessed the highest production rate of 65.35 bcf, increasing by 33%, YoY, bringing to light a promising future for the natural gas production in the region.

### Nile Delta

#### Condensates Production



The highest production of condensates was in FY 2016/17, with 4.8 mmbbl, compared to 2.14 mmbbl in FY 2015/16. It is worth noting that, condensates production in the Nile Delta in FY 2016/17 recorded the highest growth of 125%. While the lowest production amount was in FY 2012/13, where it reached about 1.8 mmbbl.

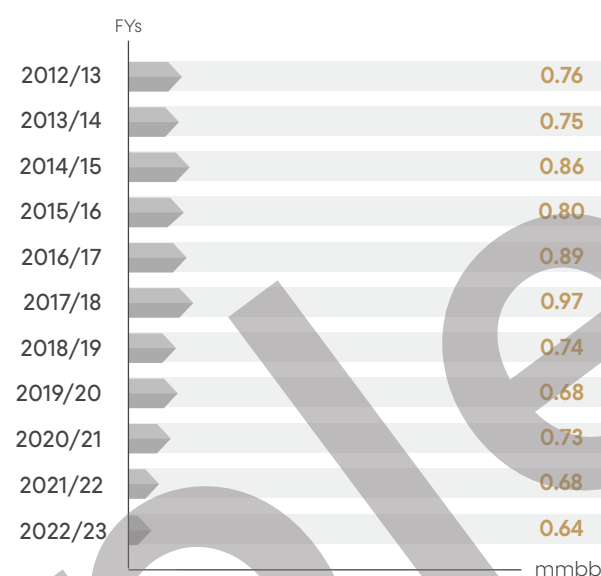
There was a general increasing trend over the FYs (2012/13-2016/17), then the production witnessed a downward trend where over the period from FY 2017/18 to 2022/23, where FY 2019/20 faced the largest decline with 21.3%, followed by 29.81% decline in FY 2020/21 that reached 2.55 mmbbl, according to EGPC and EGAS's data.

### 4. The Gulf of Suez

In the Gulf of Suez, total condensates production reached 8.5 mmbbl, with annual average production reaching 0.77 mmbbl, over the referred FYs. The highest levels of condensates production were in FY 2017/18, reaching 0.97 mmbbl. The lowest levels of condensates production were in FYs 2019/20 and 2022/23, recording 0.68 and 0.64 mmbbl, with a declining rate of 7.79% and 6.46% respectively. Condensates production in FY 2020/21 reached 0.73 mmbbl, recording an increase of 6.78%, compared to the previous year. It is worth noting that the region's production decreased by about 16.12% from FY 2012/13 to FY 2022/23. The production levels in the referred years are relatively close to each other, according to EGPC and EGAS's data.

### Gulf of Suez

#### Condensates Production



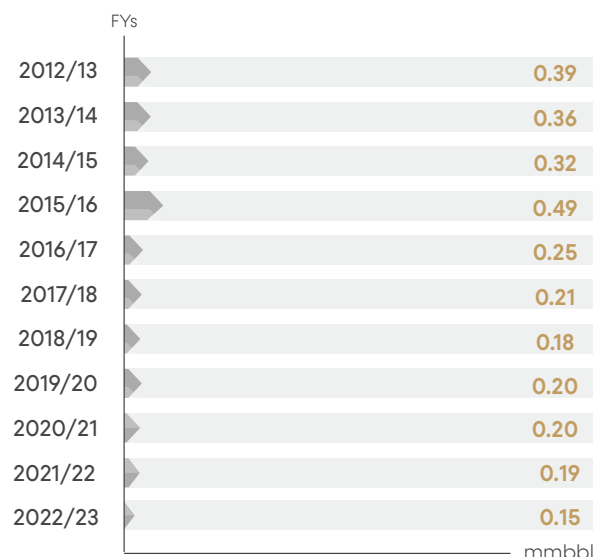
### 5. Sinai

Sinai's production of condensates reached 2.96 mmbbl, with an annual average production recorded at 0.27 mmbbl/y in the mentioned period. It is worth mentioning that there is a massive difference of 29.6 mmbbl between the amount produced from the Nile Delta and that produced from Sinai, according to EGPC and EGAS's data.

Condensates production was at its peak in FY 2015/16 at 0.49 mmbbl with a 53% increase in comparison to FY 2014/15. Meanwhile, production reached its trough of 0.146 mmbbl with a decline of 62.7% in FY 2022/23 comparison to FY 2012/13. Condensates production was almost the same in FYs 2019/20 and 2020/21 recording 0.20 mmbbl each, increasing by 10% in comparison to FY 2018/19 production, according to EGPC and EGAS's data.

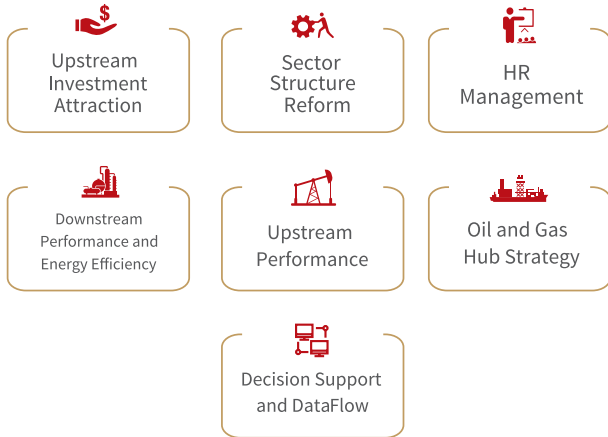
### Sinai

#### Condensates Production



The MoPMR initiated a project in 2016 aimed at revitalizing the petroleum sector, centered around seven core pillars. This initiative, dubbed the Modernization Project, charts a course for Egypt to emerge as a pivotal hub for oil and gas in the region.

**Pillars of the Modernization Project**



Upon the full implementation of the Modernization Project's pillars, Egypt anticipates forging robust collaborations with neighboring nations and global stakeholders, positioning itself as a key energy hub in the region. To facilitate further progress, the Ministry foresees a substantial uptick in investment inflows. The engagement of international oil companies (IOCs) within Egypt's oil and gas sector is deemed pivotal in meeting this anticipation. As a result, this is aligned with ongoing modernization endeavors, as the government pledges to settle the outstanding arrears owed to IOCs.

**IMPACT OF OIL AND GAS MODERNIZATION PROJECT**



**I. MODERNIZATION PROJECT INITIATIVES**

The Modernization Project stands upon a sturdy foundation, with a robust implementation framework. Initial projections indicate a potential total profit of approximately \$7 billion, signaling substantial economic gains. MoPMR envisages deepening the sector's integration into the Egyptian economy and envisions it as a beacon for other industries domestically and internationally.

**1. Upstream Performance**

The fifth pillar principally aims to boost and increase oil and gas production, minimize exploration costs, and concentrate on lean operations. Moreover, the pillar targets improving recovery rates and cost performance through world-class technology. The pillar aims to support the sector's companies to improve efficiency and adopt new technologies.

In 2021, the industry embraced innovative solutions to attract investments, marking the launch of the inaugural digital investment platform, Egypt Upstream Gateway (EUG). This milestone was followed by the announcement of the results of the inaugural digital tender in January 2022, spanning regions such as the Mediterranean, Western Desert, and the Gulf of Suez. EUG includes two digital centers for exploration and production data. These centers involve comprehensive technical data spanning seven decades and extensive geological basin studies, serving as foundational elements for delineating bidding zones and fostering investment.

Significantly, EUG granted international companies unfettered access to geological and geophysical data across all regions, comprising approximately 438 3D-seismic surveys, 654 2D-seismic surveys, 550 oil & gas facilities, and more than 14,500 wells.



The MoPMR also exerted many efforts in completing the projects to develop and modernize the information technology infrastructure and data centers in petroleum companies.

» Investment Diversity

In order to attract investments to unexplored areas, the MoPMR promoted seismic data acquisition on around 11,000 km of the Red Sea territorial waters. In this context, two contracts were signed between South Valley Egyptian Petroleum Holding Company (Ganope), SLB (formerly known as Schlumberger) and TGS to collect geophysical data in the Red Sea and South Egypt region with investments of more than \$750 million, awarding the first three blocks identified during this initial Red Sea bid round in 2019. They are actively building on this success with a second phase that includes acquiring 3D seismic data across 13,000 square kilometers of the Red Sea in 2020.

Similar initiatives are underway in the Western Mediterranean, where the West Med Phase-2 multi-client project has identified promising blocks, with seven blocks being awarded to the largest petroleum companies. This basin will see further exploration with the finalization of the West Med Phase-2 project, which involves acquiring an additional 31,000 square kilometers of 3D seismic data.

The eastern part of the Western Desert had 36 merged 3D seismic volumes into a single. This allowed, for the first time, a regional study that addressed 1) the potential of plays to be extended beyond heartlands, and 2) how existing fields are interrelated.

Moving to brownfields, Egypt holds significant potential with approximately 100 crude oil brownfields, half of which are currently operational and account for about 70% of Egypt's total production. It is worth noting that Egypt's brownfields are divided into four regions: the Western Desert, the Gulf of Suez, the Eastern Desert, and Sinai.

In the same context, in 2023, The EGPC launched the first-ever digital international brownfield bid round, offering eight brownfields in the Gulf of Suez and the Eastern Desert.

Beyond innovative data acquisition strategies, Egypt is enhancing its upstream investment attractiveness by offering more competitive terms and fiscal regimes for IOCs, making Egypt a more attractive destination for exploration and production investment.

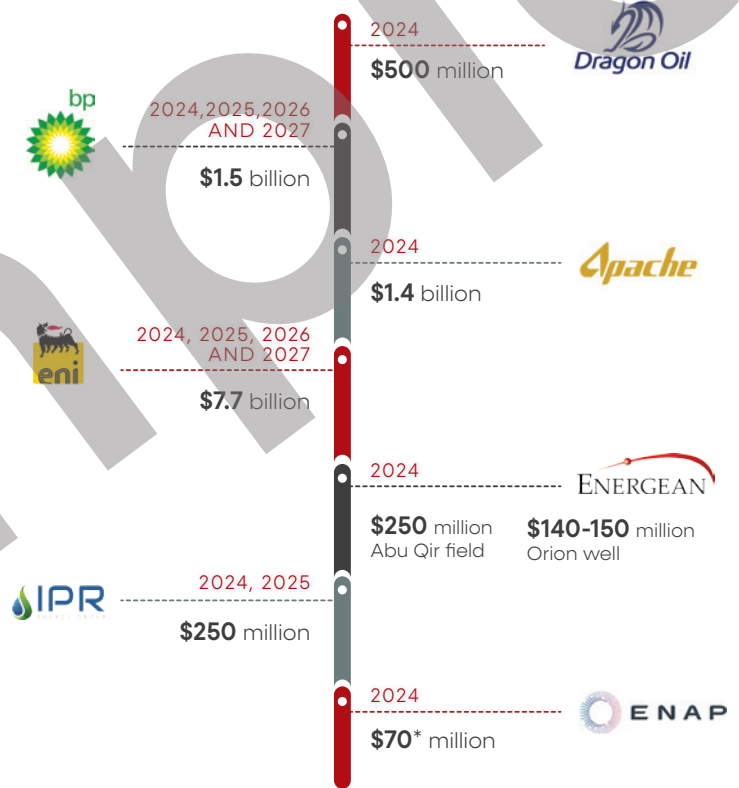
» Gathering Outcomes

The upstream investment attraction pillar will support the ministry in accelerating the signing of landmark agreements, increasing transparency in choosing bidders, boosting investments, attracting new international investors, and accumulating oil and gas reserves. Investments in the Egyptian oil and gas sector increased to reach a total of \$ 5.6 billion in FY 2022/23.

» IOCs Investment Plans

In order to boost its oil and gas sector, Egypt has set an ambitious target of increasing foreign investment by 25% to reach \$7.5 billion in FY 2024/25. To achieve this objective, the Egyptian government has actively engaged with IOCs, several of whom have already announced substantial investment plans focused on exploration, drilling, and development activities. This strategic collaboration presents a mutually beneficial scenario. Egypt benefits from the influx of critical expertise and capital necessary to propel the sector's growth and development. This concerted effort is expected to be a key driver in unlocking Egypt's full oil and gas potential.

IOCs Investment Plans



\*for drilling activities in 4 exploration blocks

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