



### 202411681J001 ENERGY POLICY – COUNTRY REPORT

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# Agenda

- **1** General Information.
- 2 Past energy demand and supply.
- **3** Outlook of energy demand and supply.
- 4 Current energy policy.
- 5 Target learning.

# **Country Profile**

General		Geographic	
Language	Arabic (Official)	Location	Northeast Africa
Currency	Egyptian Pound (EGP)	Area	1,010,408 km <sup>2</sup>
Population	118,000,000 (Growth 1.6%)	Governorates	27
Religion	Islam (91%) / Christianity (9%)	Capital	Cairo
Government		Economic	
Form	presidential republic	GDP	\$348 billion in 2024
Head of State	President Abdel Fattah El-	GDP Growth	3%
Prime Minister	Mostafa Madbouly	Households	24.29 millions in 2025
Parliament	House of Representatives (596 seats) and the Senate (300 seats)	Key Sectors	Agriculture, natural gas, tourism, manufacturing and services

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# **Energy Organizational Structure**



# Primary Energy Supply





5

# **Final Energy Consumption**



#### Final Energy Consumption by Sector in Ktoe

■ Industry ■ Transportation ■ Residential ■ Commercial ■ Agriculture ■ Other



### **Electricity Generation and Co2 Emissions**

Egypt Electricity Generation By Energy Source in GWH



Gas Oil REN



**CO2 Emissions in Mton** 

# Egypt Energy Supply and Demand Outlook



Egypt Energy Cosnumption Outlook in Ktoe



# Egypt Electricity and CO2 Emissions Outlook

Egypt Electricity Generation Outlook in GWH



■Gas ■Oil ■Hydro ■Wind ■PV ■Nuclear

Egypt Co2 Emissions Outlook in Mton



# Egypt Energy Policy



Reduce relying on traditional fossil fuel and diversifying energy mix Due to successful explorations in last two decades, natural gas became the dominant source.



#### Increasing renewable energy production with targeting 42% of electricity production in 2035.

Government set an ambitious plan to increase renewable energy share by 2035 considering the privileges of vast solar radiation 2000-3000KWHR/m2/year and excellent wind speed particularly in Gulf of Suez with average wind speed 10.5m/sec in addition to hydraulic power from Aswan high dam and new EL-Dabaa nuclear power plant with total capacity of 4.8GW.



Reduce GHG emissions by 2035 (33% for electricity, 65% for oil and gas, 7% for transportation). Government set an ambitious plan to cut the GHG emissions with a target to reduce CO2 by 23% in 2035 through net zero flaring in oil and gas sector as well as increasing renewable energy production.

### **Difficulties and Bottlenecks**

#### Increased dependency of natural gas as the dominant energy source

While natural gas was the dominant energy sources in last two decades reaching around 95% of electricity generation in last years, the production nature decline as well as decrease of new developments introduced the need of increased LNG imports since 2023.

#### Financing issues and lack of hard currency

Lack of hard currency and challenges in securing new investments for renewable energy projects resulted in deacceleration of achieving energy targets.

Energy demand continuous increase

Energy demand continuous increase to meet country population and economic growth, electricity consumption increased by around 35% during last decade.

# **Training Program Expectations**

#### **My expectations**

- Share knowledge, thoughts and ideas about energy transition and energy management that could be applied in my company, sectors and country.
- Understand more about ideas and technologies for decarbonization and energy efficiency.
- Get more background and exchange information with participants from different countries about energy.
- Understand more about Japan energy sector, energy transition and energy policy.

#### **My Supervisor expectations**

- Gain more knowledge and experience in the field of energy transition, energy policy and decarbonization.
- Collect and study new ideas for energy improvement that can be applied in my company, sector and country.

### Appendix

#### **Electricity Prices**

 Electricity price varies by sector and consumption with residential and commercial tariff varies between 0.014 to 0.47 USD / KWHR, industrial KWHR tariff around 0.35USD (varies depend on voltage level), additional customer service and maximum load fees applied to industrial and commercial sectors.

#### **Gas Prices**

- Gas prices to power plant cost around 3.5 USD / MBTU.
- Gas prices for industrial sectors varies from 5 to 12 USD / MBTU based on sector (Steel around 7 USD/MBTU, Cement 12 USD/MBTU, other 5.5 USD/MBTU).

#### **Oil Prices**

- Fuel cost varies between 0.3 and 0.4 USD / Liter depend on fuel quality.
- Diesel fuel cost around 0.3 USD / Liter.

## Appendix

#### **Major Renewable Energy Projects**

- **Abydos 1 Solar Power Plant**: A 560 MW solar power plant in Aswan, inaugurated as a flagship project within the National Platform for the NWFE Program.
- Benban Solar Park: Africa's largest solar park with 1.8GW capacity located in Aswan.
- Gabal Al-Zait Wind Farm: A 580 MW wind farm located near Ras Gharib.

#### **Nuclear Energy**

 El Dabaa Nuclear Power Plant: Egypt's first nuclear power plant with total capacity of 4.8GW, cosntrction started in 2022, commissioning is expected to be in 2027.

#### **Major Gas Projects**

- Zohr Gas field: located in the Egyptian sector of the Mediterranean Sea, started production in 2017 with production reached 2.7 BCFD in 2019.
- Raven Gas field: located in the Egyptian sector of the Mediterranean Sea, started production in 2019 with production reached 1 BCFD in 2021.

# Appendix

Oil Infrastructure



#### Gas Infrastructure Egypt & East Med



#### **Gas Treatment Facilities**



Gas Treatment Facilities Map

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### Reference

Source	Links
NREA Annual Report 2021 NREA Annual Report 2022 NREA Annual Report 2023 NREA Annual Report 2023	http://nrea.gov.eg/test/en/Media/Reports
EEHC Annual Reports 2015/ 2016 EEHC Annual Reports 2016/ 2017 EEHC Annual Reports 2017/ 2018 EEHC Annual Reports 2018/ 2019 EEHC Annual Reports 2019/ 2020 EEHC Annual Reports 2020/ 2021 EEHC Annual Reports 2021/2022 EEHC Annual Reports 2022/2023	http://www.moee.gov.eg/english_new/report.aspx
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# **THANK YOU**