

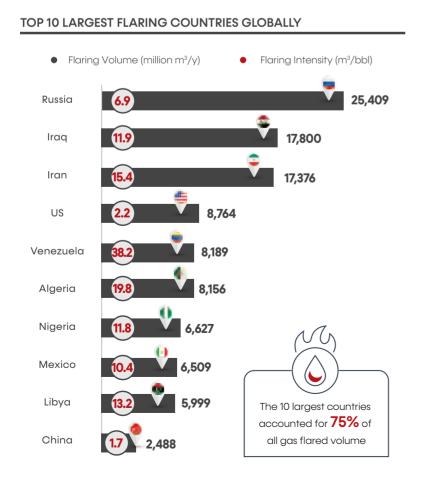
# **Gas Flaring in Egypt:**

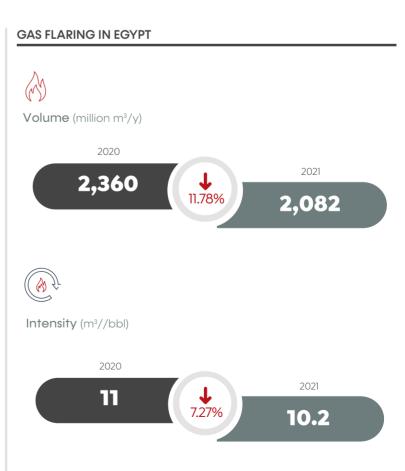
# **Opportunities and Challenges**

BY JOLLY MONSEF, MARIAM AHMED & YOUSTINA MOUNIR

Gas flaring is generated by the combustion of gas coming from many industries; mostly from refineries and petrochemicals complexes. Globally, in 2021 about 143 billion cubic meters (bcm) of natural gas were flared. This resulted in the direct release of 270 million tons (mmt) of CO2 and nearly 8 mmt of methane into the atmosphere. In the mentioned period, Egypt represented about 1.5% of global gas flaring, according to the World Bank. In this regard, Egypt spares no efforts in implementing gas flaring recovery projects.

# Gas Flaring in 2021



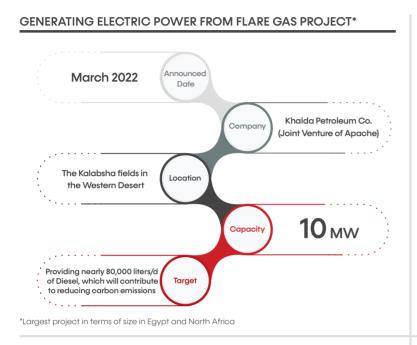




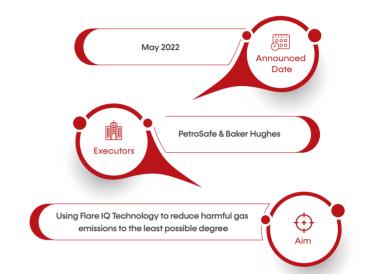
## Egypt's Efforts Towards Reducing Gas Flaring in 2022

Egypt contributes to the global efforts to keep the environment safe and reduce gas flaring emissions. In light of the oil and gas sector's Modernization program, Egypt made 13 flare gas recovery projects in 10 companies with a total recovery of 40 mcf/d of gas. Moreover, Egypt has entered into major partnerships and joined the "Zero Routine Flaring by 2030" Initiative in 2017 which was launched by the World Bank in 2015 to find solutions to end routine flaring at existing oil production sites by 2030. Since that, Egypt has signed several memoranda of understanding (MoUs) to strength cooperation in gas flaring reduction projects.

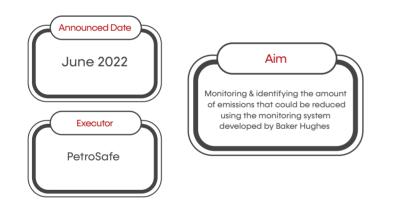
### 1. Major Projects



# **FLARE GAS REDUCTION PROJECT**



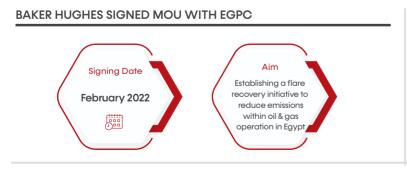




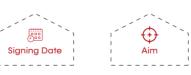
#### ZERO FLARE GAS RECOVERY PROJECT



#### 2. International Partnerships



#### HIIROC SIGNED MOU WITH EGAS



November 2022

- Reducing Gas Flaring Emissions
- Zero-emission Hydrogen project using a British technology for electrolysis of thermal plasma

#### **FEASIBILITY STUDY AGREEMENT**



November 2022



Egyptian LNG & Bechtel-led Coalition for decarbonization (ENPI, Petrojet, Baker Hughes, GE Digital, HSBC and NBE)



Evaluating the implementation of a zero-flaring system at the Egyptian LNG export terminal (ELNG) in Idku

# **Challenges**

Countries face interlinked challenges in reducing and eliminating gas flaring. These challenges differ from one country to another and cover a wide range of factors, including technical, regulatory, economic, and political factors.

#### **REDUCING GAS FLARE CHALLENGES**

Lack of compression and transportation infrastructure

High cost of gas capturing in small oil production sites within large areas

regulations between the rights of the country and the company

coordination or integration between energy and environment olicies addressed gas flaring

Conflict and oolitical instability which add to the financial and environmental costs

Financing obstacles for some countries

Gas flaring is not only a climate change threat but also a monumental waste of natural resources that should either be used for productive purposes or conserved. In this regard, Egypt pledges to reduce emissions from gas flaring in the oil and gas sector in its Nationally Determined Contributions (NDC), as well as its Long Term Low Emission Development and Climate Change Strategies. Egypt still has a long journey toward reducing emissions, yet it leans over backwards to transform its environment into a more sustainable and green one.

