



INTERNATIONAL ENERGY FORUM

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# Natural Gas and Sustainable Development Goals

## Opportunities and Challenges for Africa

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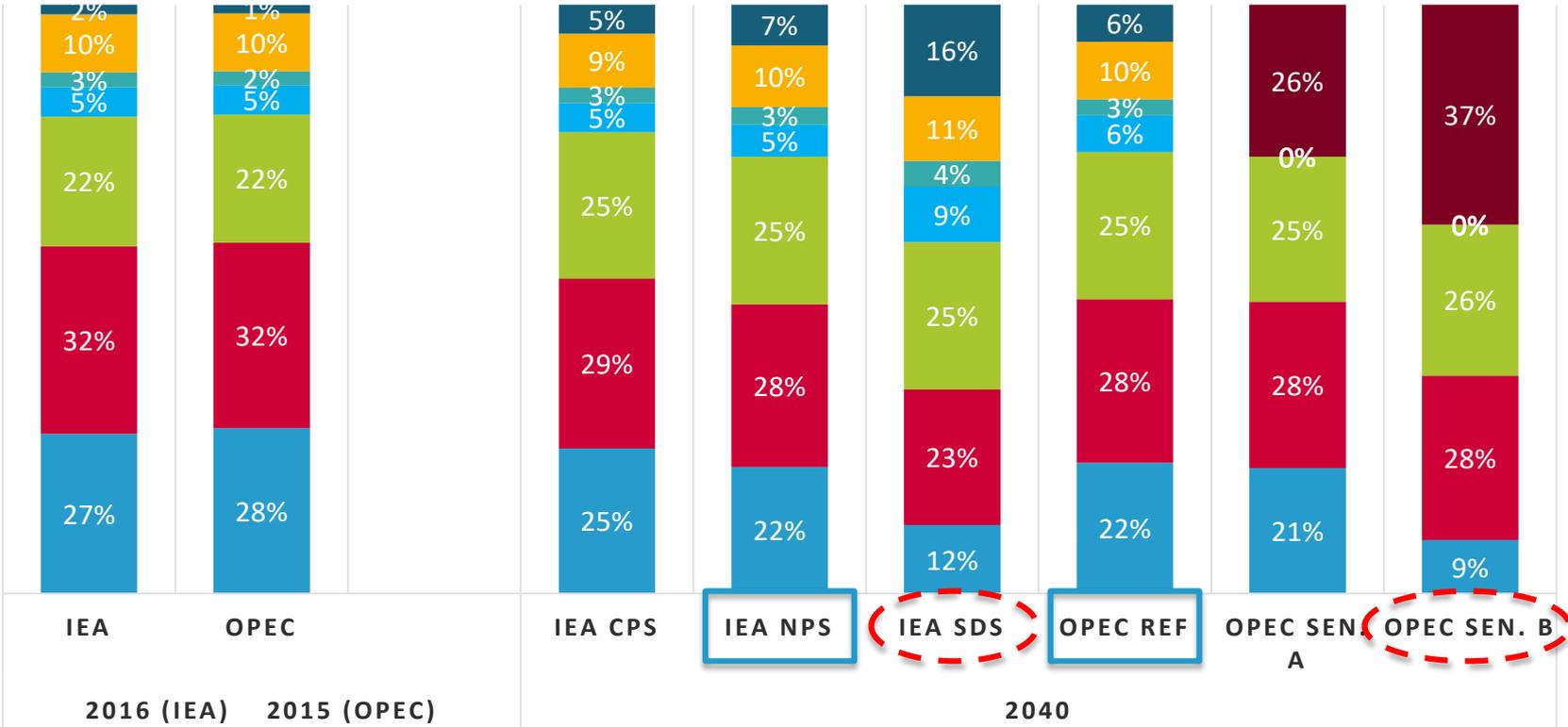
- **Current reality: Where we are today**
- **Global energy trends and projections**
- **Natural Gas Advantages**
- **Three Key Challenges**

# Fossil Fuel demand will range between 60% and 75%

## Natural gas shows strongest growing share among fossil fuels

Global Primary Energy Fuel Shares and Outlook for 2040

Coal Oil Gas Nuclear Hydro Biomass Other renewables All other



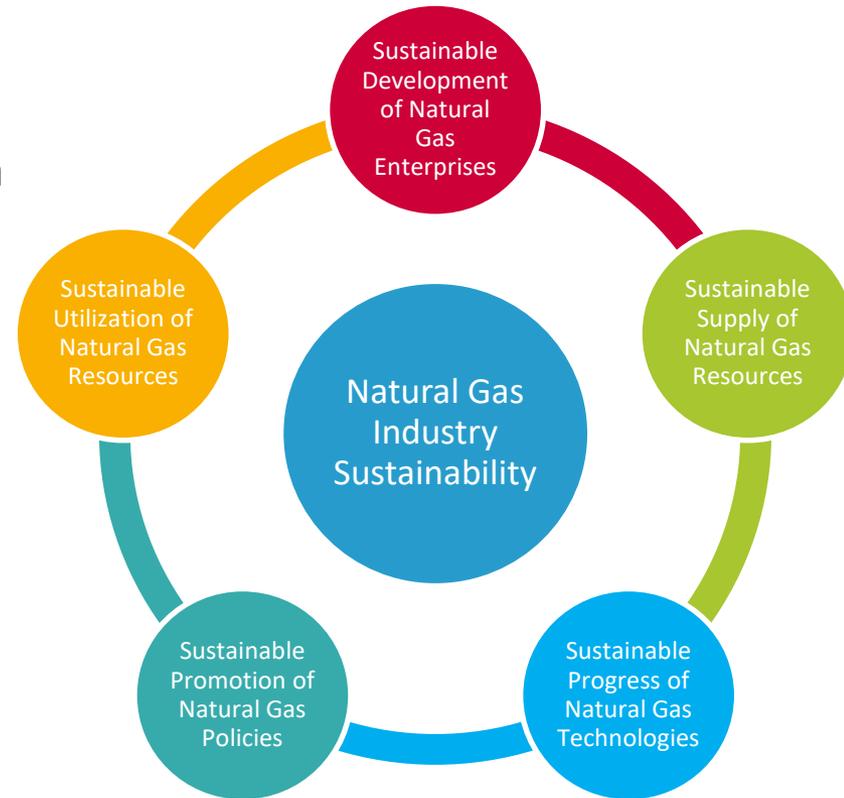
Sources: IEA WEO 2018, Annex Tables; OPEC WOO2018, Table 2.2 and 9.10.

# Natural Gas Advantages For Africa

## Five key advantages for natural gas

### 1. Sustainability

- Natural gas will **improve energy access** in Africa (electrification rate) and facilitate orderly energy transitions.
- Energy transition is a **comprehensive strategy** that should include both natural gas and renewables.
- Natural gas releases up to **50 percent less carbon than coal and 20-30 percent less than oil.**



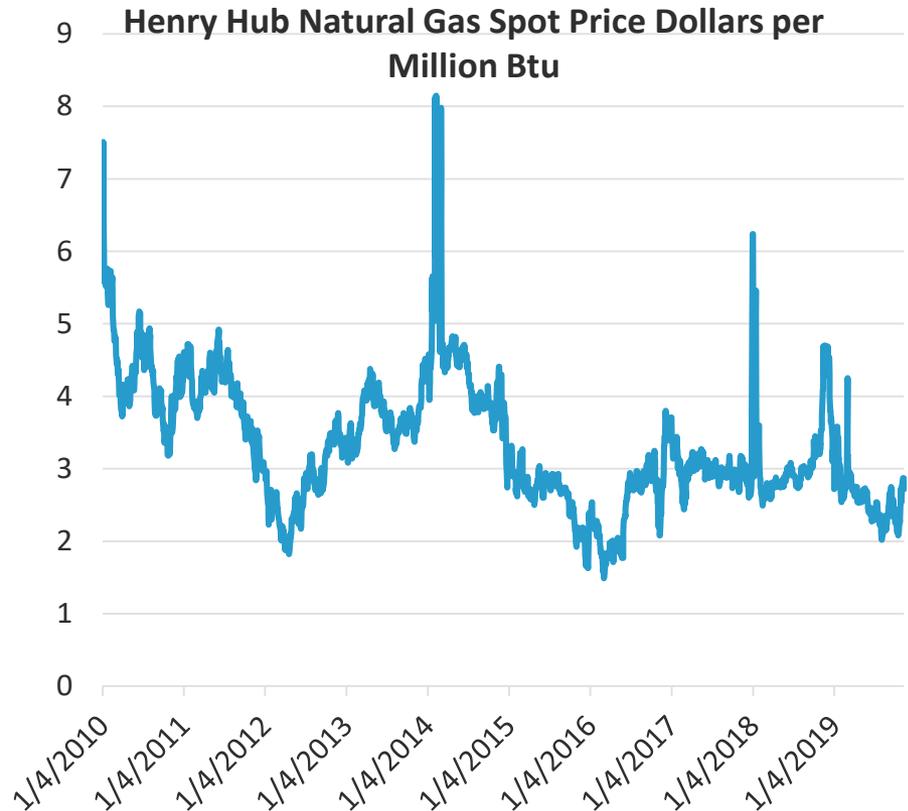
Source: Uppsala University, China University Petroleum

# Natural Gas Advantages for Africa

## Five key advantages for natural gas

### 2. Cost Competitiveness

- A price of around **\$8/MMBtu** can be **competitive** with oil-fired power at an oil price as low as \$50/barrel.
- Use of **oil in power generation is one reason why electricity is expensive** in many Sub-Saharan African countries.



Source: US Energy Information Administration

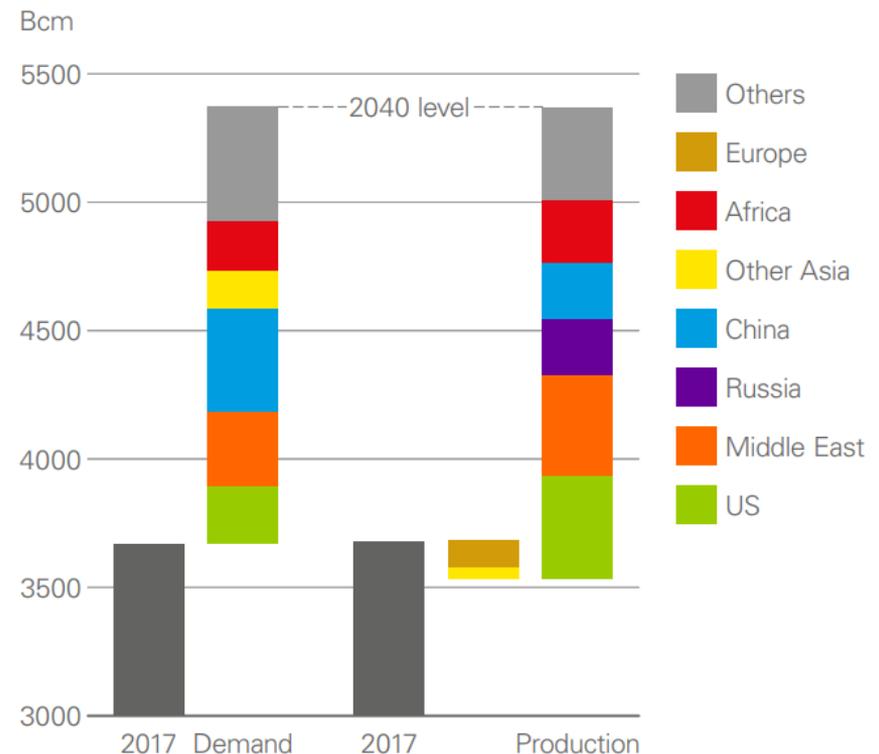
# Natural Gas Advantages for Africa

## Five key advantages for natural gas

### 3. Resource Abundance

- Africa has **7 percent of global reserves** and sub-Saharan Africa is estimated to have 400 gigawatts of gas-generated power potential.
- Development of **natural gas supply ensures robust energy security** and decreases dependence on foreign markets.

Gas demand and production, 2017-2040



Source: BP Energy Outlook 2019

# Natural Gas Advantages for Africa

## Five key advantages for natural gas

### 4. Regional Integration

- **Natural gas infrastructure** (pipelines, LNG, cross-border interconnections) between countries can enhance cooperation and transparency.
- Signing of African Continental Free Trade Area (AfCFTA) has sown the seeds for **pan-African collaboration and investment**.
- Potential precursor to an **Asian Gas Hub** to establish transparent and reliable market signals and liquidity.





# Natural Gas Advantages for Africa

## Five key advantages for natural gas

### 5. Economic Opportunities

- Expanding Africa's infrastructure for natural gas would **promote rapid industrialization**.
- Availability of local natural gas supply can **spur investment in other industries** such as agriculture and petrochemicals.



# SDG's are contingent on **policy and technology** dialogue and cooperation



# 3 Key Challenges for Africa

1. Improving Energy Access
2. Facilitating Energy Transition
3. Increasing Cooperation and Dialogue



# Key Dialogue Meetings

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- 1. The 10th IEA-IEF-OPEC Symposium on Energy Outlooks on 18 February 2020 in Riyadh, Saudi Arabia**
- 2. The 7th IEF-IGU Ministerial Gas Forum on 20-21 September 2020 in Kuala Lumpur, Malaysia**
- 3. 5<sup>th</sup> IEA-IEF-OPEC Symposium on Gas and Coal Market Outlooks November 2020**
- 4. The 17th IEF Ministerial Meeting in Riyadh in 2020**



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