

# ENERGY FOR A BETTER FUTURE



## GHANA GAS FORUM

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The companies in which Royal Dutch Shell plc directly and indirectly owns investments are separate legal entities. In this presentation “Shell”, “Shell group” and “Royal Dutch Shell” are sometimes used for convenience where references are made to Royal Dutch Shell plc and its subsidiaries in general. Likewise, the words “we”, “us” and “our” are also used to refer to Royal Dutch Shell plc and its subsidiaries in general or to those who work for them. These terms are also used where no useful purpose is served by identifying the particular entity or entities. “Subsidiaries”, “Shell subsidiaries” and “Shell companies” as used in this presentation refer to entities over which Royal Dutch Shell plc either directly or indirectly has control. Entities and unincorporated arrangements over which Shell has joint control are generally referred to as “joint ventures” and “joint operations”, respectively. Entities over which Shell has significant influence but neither control nor joint control are referred to as “associates”. The term “Shell interest” is used for convenience to indicate the direct and/or indirect ownership interest held by Shell in an entity or unincorporated joint arrangement, after exclusion of all third-party interest.

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## NATURAL GAS: FORCE FOR GOOD

Energy is critical to economic and social development and can improve the lives and livelihoods of people.

Globally, **1.1 billion** people lack access to energy, **50% in Africa.**

Natural gas is key to reducing energy poverty and development of the continent.

## ARIARIA INTERNATIONAL MARKET

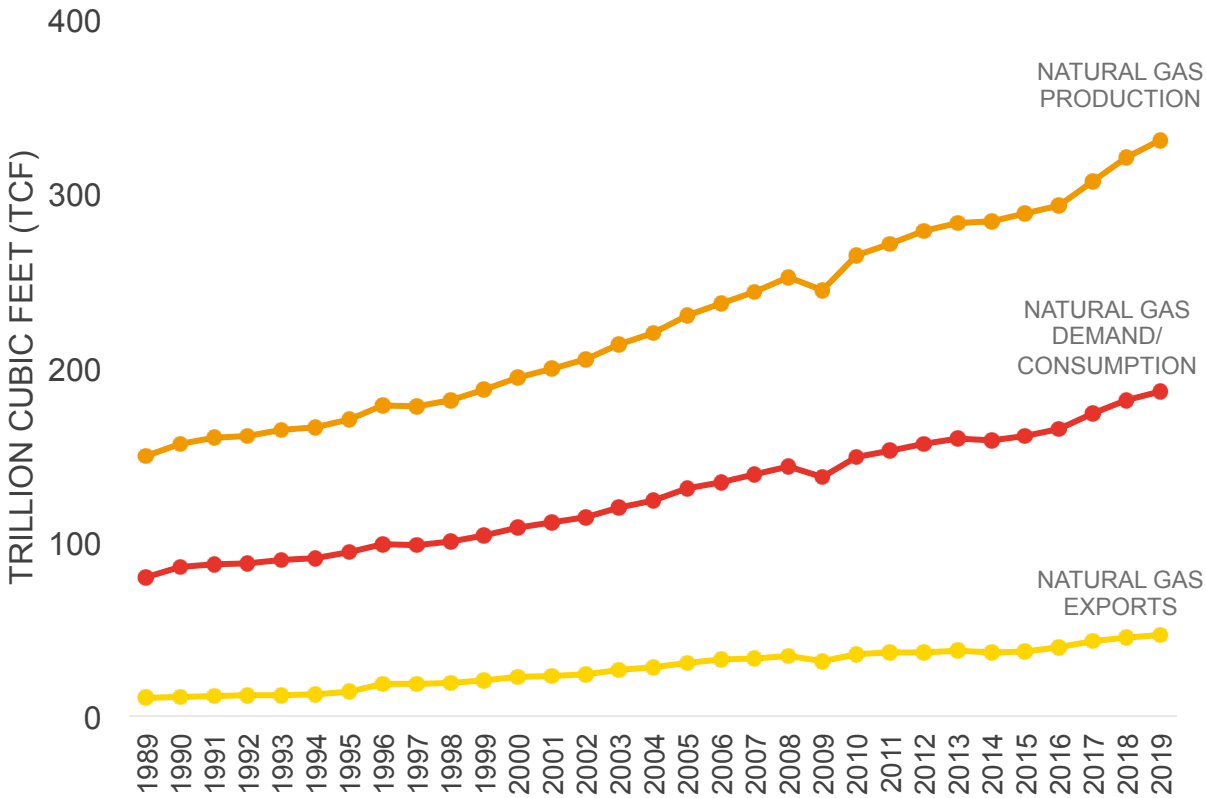
Largest Open Stall Market in West Africa  
> 37,000 shops  
>1,000,000 Traders



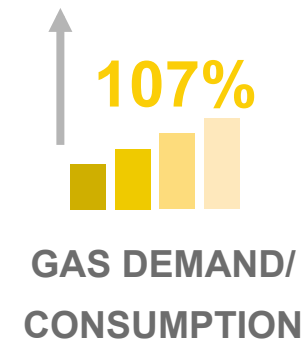
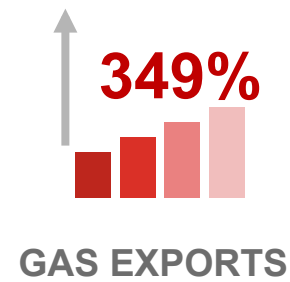
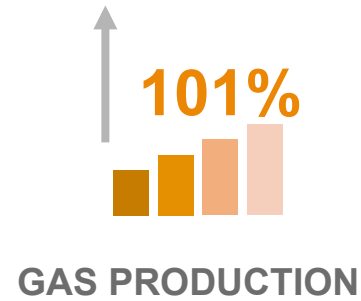
# THE NATURAL GAS REVOLUTION

Gas is the fastest -growing fossil fuel and the only fossil fuel expected to grow beyond 2030

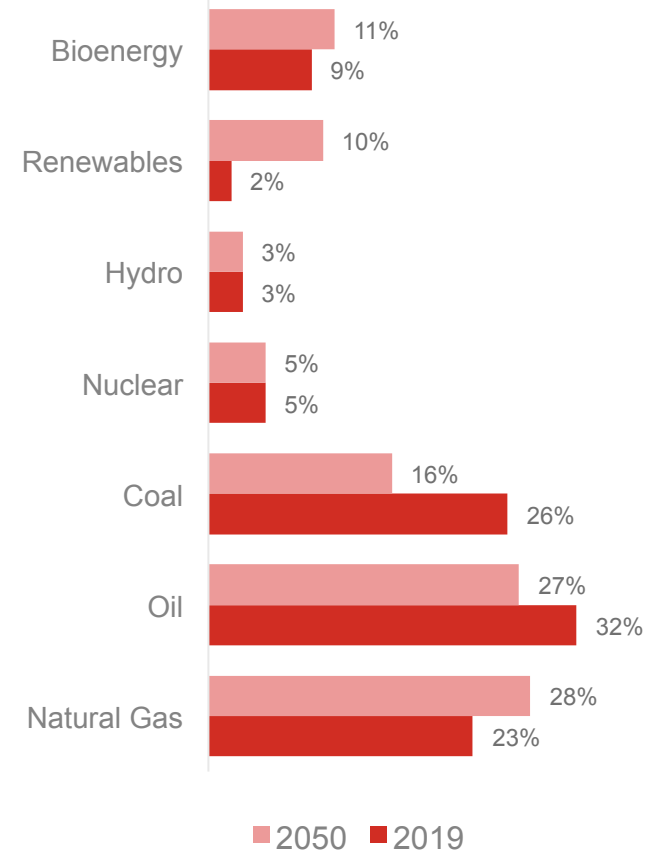
### NATURAL GAS REVOLUTION (1989-2019)



Source: OPEC Annual Statistical Bulletin (2020)



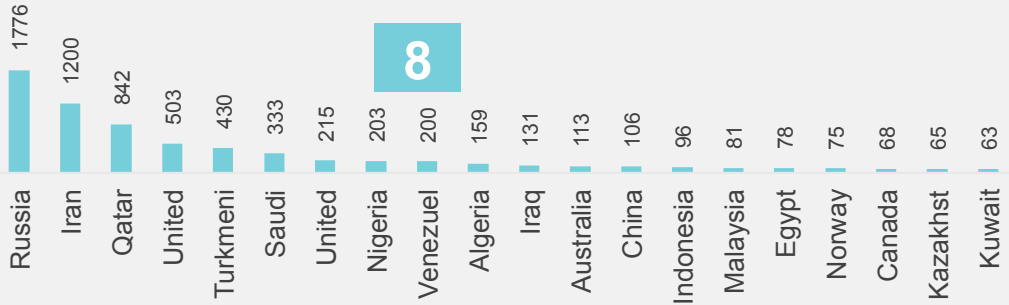
### GLOBAL PRIMARY ENERGY DEMAND FORECAST (2019-2050)



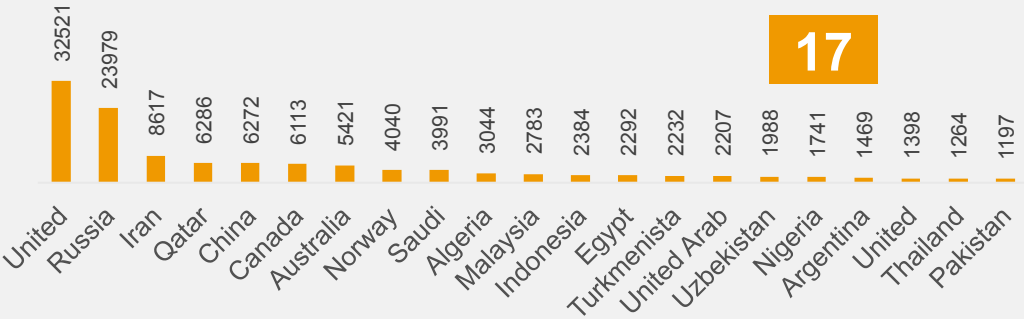
Source: GECF Global Gas Outlook 2050

# NIGERIA: GLOBAL & LOCAL GAS LANDSCAPE

Proven Gas Reserves (TCF)



NATURAL GAS PRODUCTION (BCF)



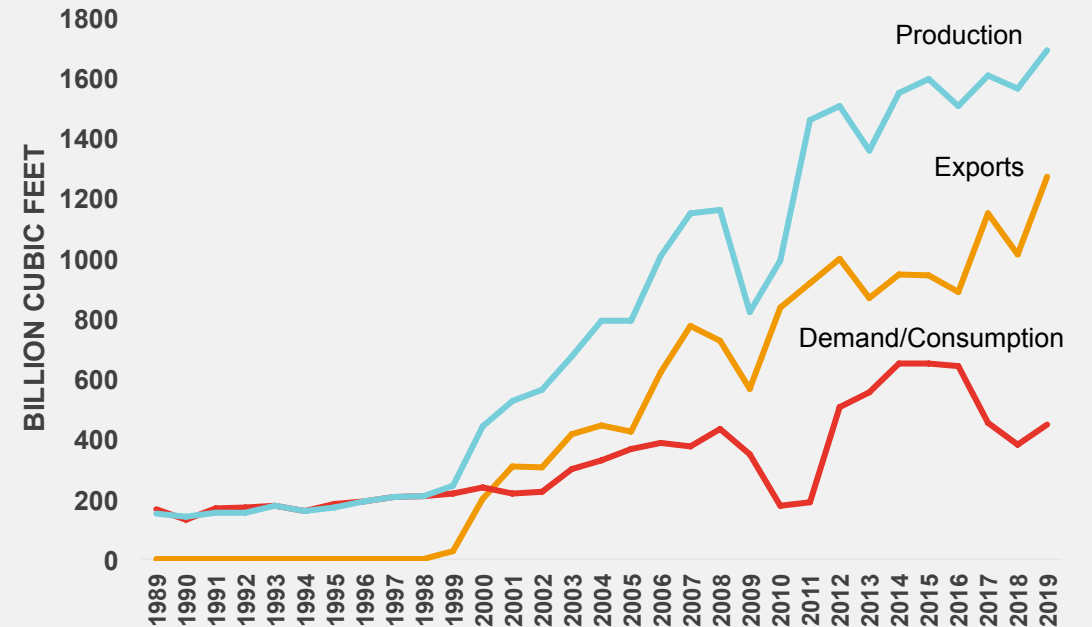
NATURAL GAS DEMAND/CONSUMPTION (BCF)



**TOTAL PRODUCTION**  
(7.8 BCF/D)

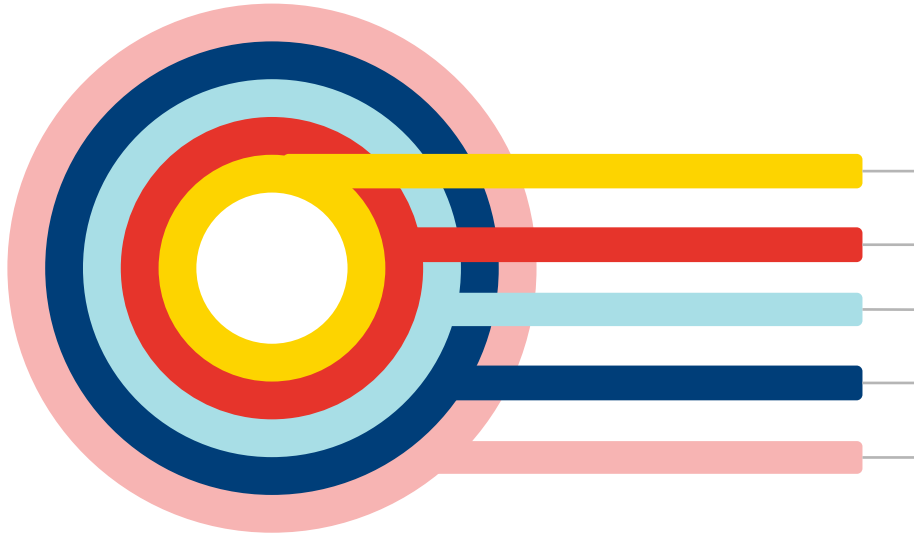


NIGERIA GAS LANDSCAPE: 1989-2019



# THE NIGERIAN GAS REVOLUTION: DECADE OF GAS (2021-2030)

Nigeria's Decade of Gas: Increasing Gas Exports and Domestic Gas Consumption



## GAS BASED INDUSTRIALISATION

- ❖ Refineries, Petrochemical & Fertilizer Plants, Industrial clusters, Free Trade Zones with gas infrastructure



## GAS TO POWER

- ❖ Address structural issues across the value chain
- ❖ Close gap between Generation capacity & distribution
- ❖ Payment of outstanding invoices



## LPG PROLIFERATION & AUTOGAS

- ❖ Reliable & Affordable LPG as primary fuel for cooking
- ❖ Develop Autogas market



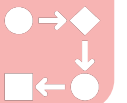
## LNG EXPORTS

- ❖ NLNG Train 7++



## REGIONAL INFRASTRUCTURE INTERCONNECTIVITY

- ❖ Virtual Pipelines - CNG, Mini LNG
- ❖ WAGP - Develop regional infrastructure
- ❖ AKK Pipeline, OB-OB Link Line, ELPs Expansion



## STABLE REGULATORY /PRICING FRAMEWORK

NIGERIAN GAS MASTER PLAN (NGMP)

~5 BCF/D (Export + Domestic)



## HUMAN CAPITAL DEVELOPMENT

NIGERIAN DECADE OF GAS MASTER PLAN I (NDGMP I)?

~15 BCF/D (Export + Domestic)?

# SHELL'S CLIMATE AMBITION

Changing in step with society and our customers

A net-zero emissions energy business by 2050 or sooner

## Net Carbon Footprint ambition 1.5°C

Aim to reduce the Net Carbon Footprint<sup>1</sup> of the energy products we sell by 30% by 2035 and by 65% by 2050, consistent with society's ambition to achieve a 1.5°C future

## Partnering for decarbonisation of energy use

Aim to help customers reduce the emissions from their use of our energy products<sup>3</sup> to net-zero by 2050 or sooner

## Net-zero emissions from own operations

Aim to be net-zero on all the emissions from the manufacture of all our products<sup>2</sup> by 2050 or sooner

<sup>1</sup> The Net Carbon Footprint (NCF) is a weighted average of the lifecycle CO<sub>2</sub> intensities of different energy products sold by Shell normalising them to the same point relative to their final end-use. The calculation includes all emissions associated with bringing these energy products to the market as well as our customers' emissions from using them

<sup>2</sup> Refers to the Scopes 1 and 2 emissions in absolute terms associated with operations under direct Shell control

<sup>3</sup> Refers to the Scope 3 emissions in absolute terms associated with the customers' emissions from the use of the energy products Shell sells