



NIGERIA'S DECADE OF GAS: THE INDUSTRY LEADERSHIP OUTLOOK

Accompanying slides for Speech of Chairman, Oil Producers
Trade Section (OPTS)

National Gas Association (NGA) 2021 Conference

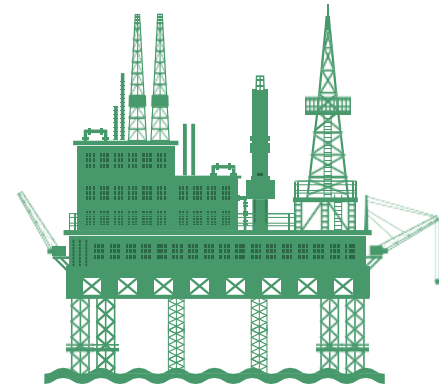
February 25th, 2021

Introduction – Who is OPTS and what do we do?











- **Private industry group** operating under umbrella of the Lagos Chamber of Commerce and Industry
- Cornerstone of the exploration, development and production of Nigeria's **petroleum resources**
- Represent interests of 29 **oil and gas companies** and operate approximately **90% of Nigeria's oil and gas industry production** (in partnership with the Nigerian National Petroleum Corporation (NNPC) or other local and international lease holders)
- Collective objective to **strengthen long-term health** of the Industry
- Committed to **development of local content** in the Industry, to ensuring **environmentally sound** OPTS operations and to extensive corporate social responsibility initiatives and projects:
 - Together, from 2008-2019, we awarded over **138,300** national and international **scholarships**, contributed over **\$909 million to community development projects**, over **\$58 million to medical facilities and programs** and over **\$89 million to education initiatives**



Oil Producers Trade Section
OPTS



Nigeria has the world's 10th largest gas reserves but ranks only 17th on production – demonstrating untapped potential

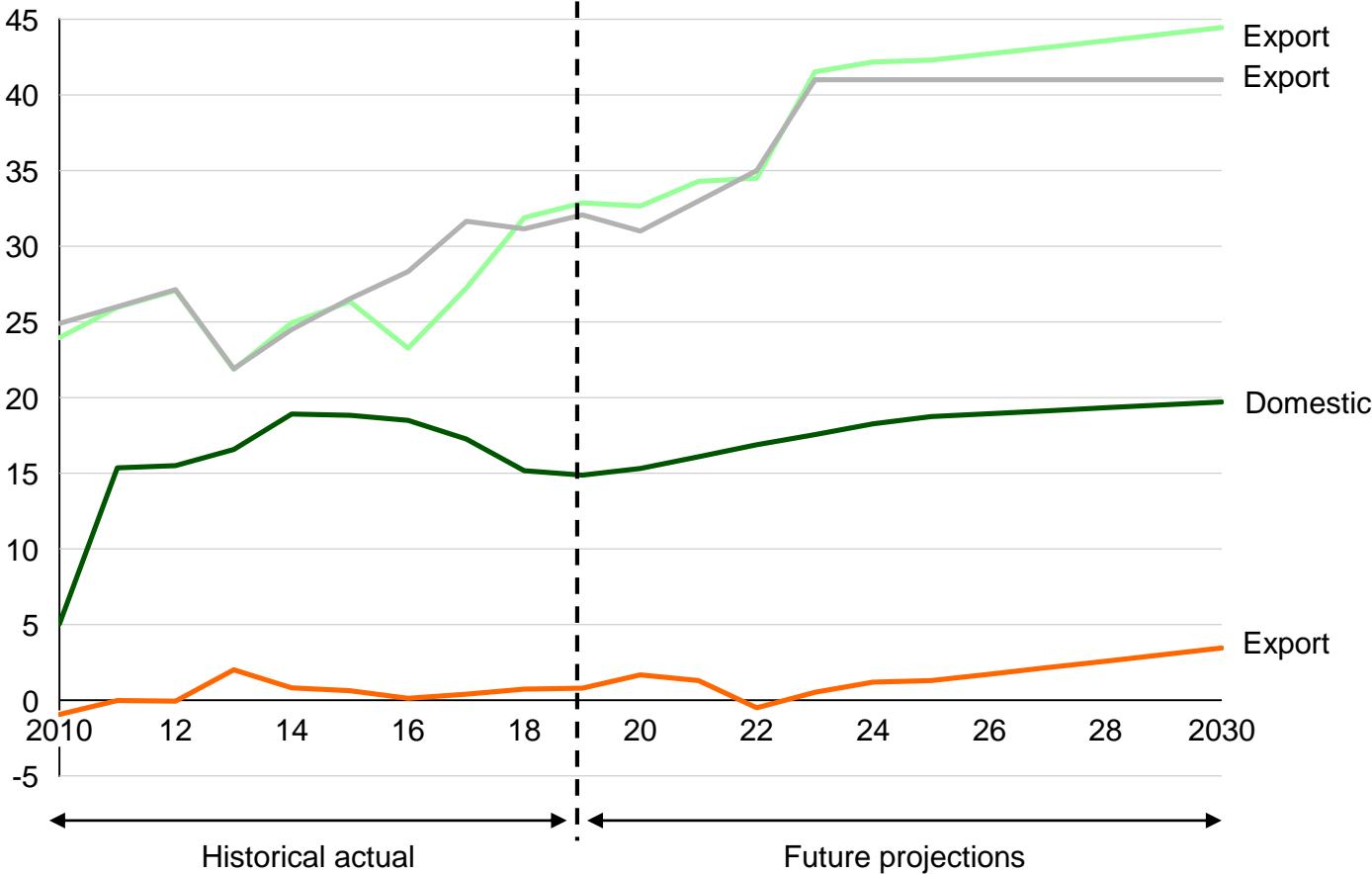
Country	2020 Proven gas reserves tcf	Production rank
 Russian Federation	1,341	2
 Iran	1,131	3
 Qatar	872	4
 Turkmenistan	688	14
 US	455	1
 China	297	5
 Venezuela	222	30
 Saudi Arabia	211	9
 United Arab Emirates	210	15
 Nigeria	190	17

- Much of Nigeria's discovered gas can **only be delivered to market with higher prices** and better infrastructure
- Experts believe there is **much more to find** - but incentive for finding gas is limited
- Nigeria has **enough discovered gas** to support both domestic and export supply

Nigeria's domestic and global gas demand (historical and forecasted)

— Dry natural gas net exports, bcm
 — LNG net exports, bcm
 — Dry natural gas consumption, bcm
 — Pipeline gas net exports, bcm

Gas volumes, bcm

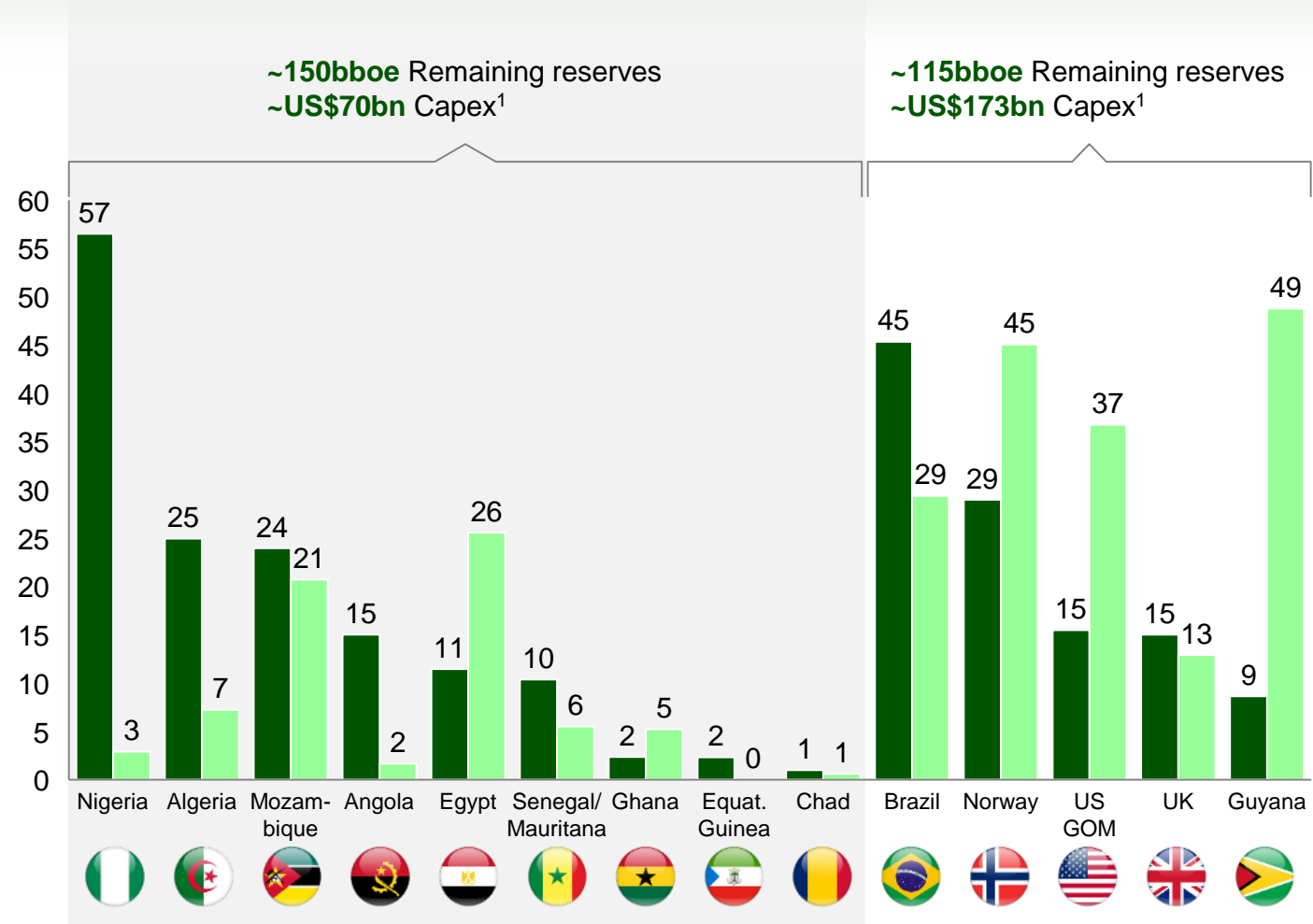


Key takeaways

- **Nigeria's domestic natural gas consumption in 2019 was about 15 bcm, and is expected to rise to about 20 bcm by 2030**
- **Nigeria's net exports:**
 - **Natural gas: 33 bcm in 2019** and is expected to increase to 44 bcm by 2030
 - **LNG: 32 bcm in 2019**, and is expected to rise to 41 bcm by 2030
 - **Pipeline gas: 0.8bcm in 2019**, and is expected to rise to 3.5 bcm by 2030

Despite having the largest reserves, only ~4% of all funds invested in Africa for projects FID'd between 2015-2019¹ were attributed to Nigeria

Total remaining reserves and capex¹ in selected countries, bboe and US\$bn



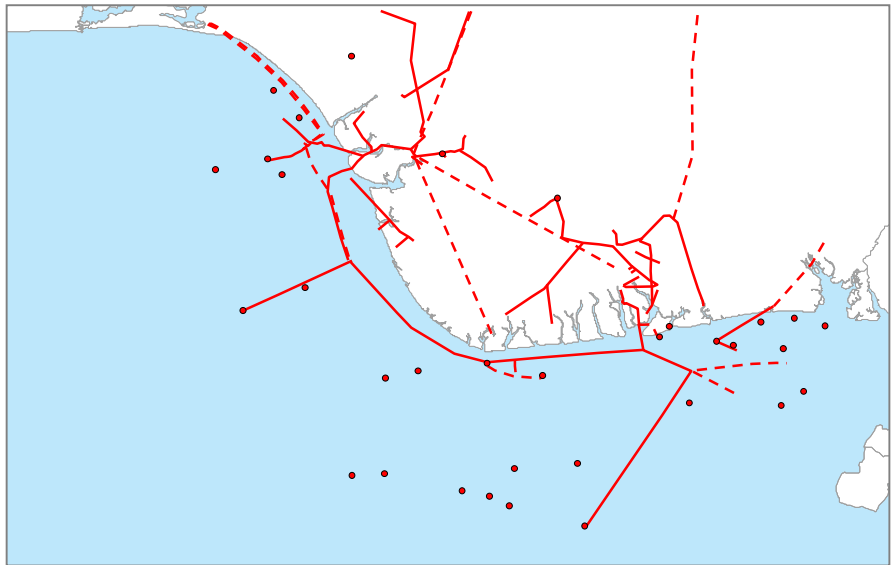
- Remaining reserves, bboe
- Total Capex for Projects FID'd 2015-19 (USDbn)
- Nigerian projects FID'd between 2015 and 2019 will bring US\$3bn of investment over their lifecycle and represent only ~4% of all expected investments in Africa
- Nigeria's uncompetitive fiscals and low investment are corroborated by FGN's presentation to NASS
- No major investment decision was taken in Deepwater Nigeria between 2015 – 2019
- Uncompetitive fiscal terms, increasing cost, unsettled deep water disputes, and upcoming deep water lease expiry increases risk for investors and prevents new investments

1. Total Capex over the lifecycle of Projects FID'd between 2015-2019

The Niger Delta, where the bulk of proven reserves lie, has far less gas infrastructure than comparable basins

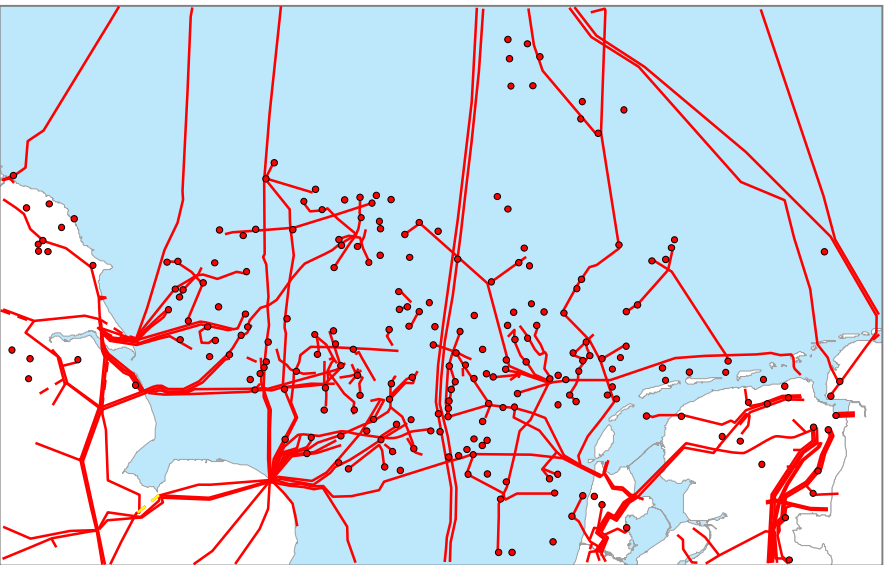
● Gas field — Gas pipeline - - - Gas pipeline under construction / planned

Niger Delta



~190 Tcf of gas reserves
~ 7,500 km of gas pipelines

North Sea



~117 Tcf of gas reserves
~ 43,000 km of gas pipelines

**Pipelines are the primary means of transporting gas to market
Lack of infrastructure leads to relatively high unit development costs**

To achieve the desired increase in domestic gas supplies, the following areas should be considered as priorities

Areas

Importance



Potential solutions

1 Developing adequate infrastructure



- Infrastructure remains inadequate along the value chain:
 - Pipelines to deliver gas to off-takers
 - Power generation capacity and other gas off-takers

2 Ensuring sufficient funding



- JV funding issues limit gas development and production
- Due to the persistent shortfall in funding viable new projects cannot progress

3 Repaying outstanding gas invoice arrears



- Without assurance of repaying gas invoice arrears, investors are reluctant to commit additional investments to grow domestic gas production

4 Providing enabling commercial and fiscal terms



- Gas prices and fiscals must be competitive to appropriately cover development, production and transportation costs and make commercial returns possible

5 Ensuring a conducive business environment



- A conducive business environment is essential to attract investments and have reliable operations

- Attract investment in infrastructure development
 - Complete critical National Integrated Power Project (NIPP) transmission lines
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- Implement sustainable solutions which will fully fund the JV budgets including gas
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- Settle outstanding debts
 - Establish bankable credit support facilities for future gas sales
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- Promote willing-buyer / willing-seller marketplace
 - Ensure a power tariff level that provides a commercial return
 - Set globally competitive fiscals for gas
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- Have efficient and effective regulatory bodies
 - Maintain stable laws and policies
 - Maintain Nigeria's reputation for honoring contracts
 - Eliminate structural factors that increase operating and capital costs
 - Ensure security of life and property