



# COMPENDIUM OF NIGERIAN CONTENT OPPORTUNITIES IN THE OIL AND GAS INDUSTRY

# 2021





**COMPENDIUM  
OF NIGERIAN  
CONTENT  
OPPORTUNITIES  
IN THE OIL AND  
GAS INDUSTRY**

**2021**



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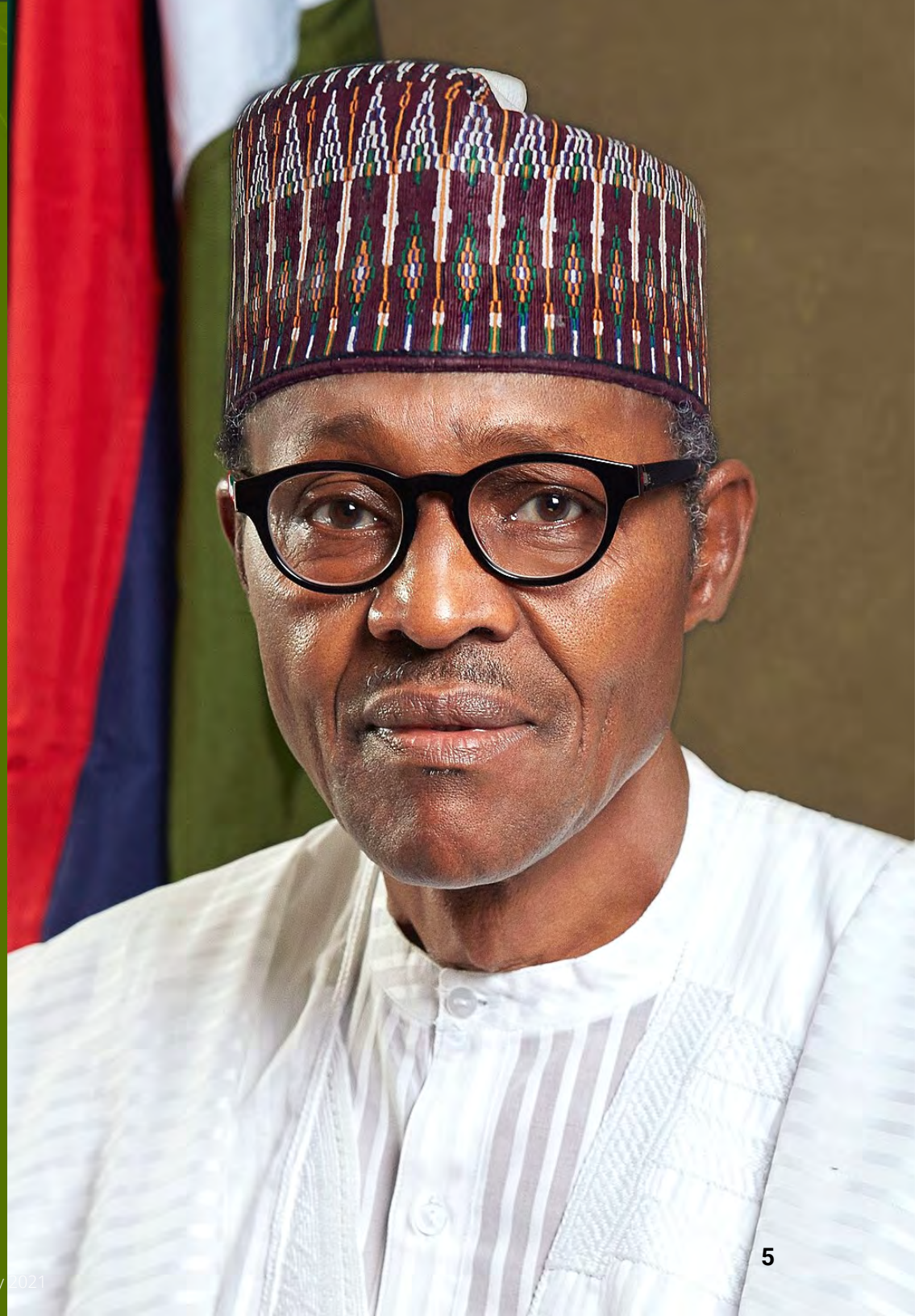
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"Africa presents a huge opportunity for our export base diversification and we are developing our strategy to grow intra-Africa trade through the Africa Continental Free Trade Area Agreement"

*12th June, 2020*

**H.E. Muhammadu Buhari GCFR**  
President and Commander-in-Chief of the  
Armed Forces of the Federal Republic of  
Nigeria





"Our strategy to strengthen the Nigerian oil and gas industry in a post-COVID-19 world is to transform our national oil company into a diversified energy holding company.

This will enable us respond swiftly to the twin challenges of a future crash in crude oil prices and decarbonization, by moving rapidly to becoming an energy holding company with more diverse interests"

**Chief Timipre Sylva**

Honourable Minister of State for Petroleum  
Federal Republic of Nigeria



**Engr. Simbi Wabote**

Executive Secretary,  
Nigerian Content Development and Monitoring  
Board (NCDMB)



# FOREWORD

Given the success of the biennial initiative to create and update the database of the Nigerian Content Opportunities covering the upstream, midstream and downstream sectors of the oil and gas industry, local and international investors, as well as stakeholders, have been able to enhance their business strategies and operations.

Having ensured inclusivity of the local content providers in the oil and gas industry, by putting together a concise database that not only encouraged but assisted indigenous operators to become active participants in the Nigeria Content Capacity Building Initiative. Aimed at improving the oil and gas sector, we are pleased to announce that great achievements were recorded by the initiative.

The first and second editions recorded the desired goals. It's our pleasure to release the third edition and reaffirm our commitment to ensuring that indigenous operators are supported in becoming active players in the upstream, midstream and downstream sectors of an ever-growing oil and gas industry.

We are sure this third edition will be a great improvement on the previous editions.



**Mr. Akintunde Adelana**

Director Monitoring and Evaluation  
Nigerian Content Development and Monitoring  
Board (NCDMB)

# INTRODUCTION

With the endless Opportunities that abound in the upstream, midstream and downstream oil sector, it has been our great desire to keep indigenous and potential investors abreast of the Opportunities included in this year's edition of the compendium; hence the creation of a database that not only provides this information but also assists stakeholders in employing them.

The drive to create a community that brings about a level playing field among all players has been the core of our vision and mission at NCDMB.

As you go through this compendium, you will find it not only informative but also an interesting read that shows how indigenous companies have made giant strides in growing their output and emerging as key-stakeholders in such a short period.

We invite you to engage and draw inspiration from their stories of success. Having said this, we hope this year's edition will convey knowledge and answer all pending questions from future investors.

A big thank you to the team that has put this year's edition together.

# FEATURED COMPANIES



Azikel Group



TotalEnergies



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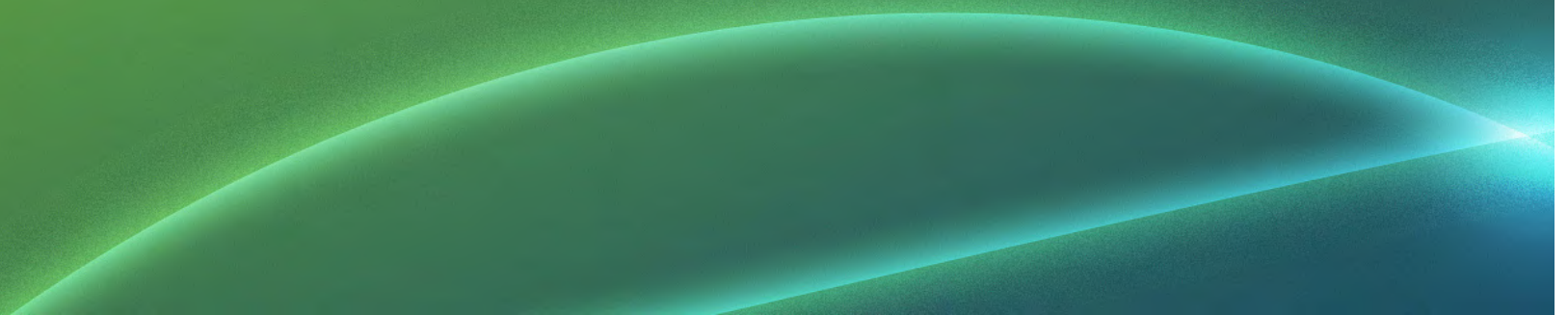
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# BUSINE ENVIRO



**ISS**

**ONNMENT**

# BUSINESS ENVIRONMENT

*The Nigerian Oil & Gas Industry is a fertile business ground full of several Opportunities from the upstream to the midstream and downstream sector of the industry. This section gives an insight into the industry and a broad idea of the Opportunities that exist within it. It highlights the key achievements in industry growth as well as the regulations and regulators of the industry.*

*While it examines some of the challenges faced in the industry, it also provides a foresight on the future of the industry by examining the various investment Opportunities in the different segments of the Nigerian Oil & Gas Industry.*

Since the discovery of crude oil in 1956, the Nigerian Oil & Gas Industry has been vibrant while playing a vital role in supporting the Nigerian economy by accounting for more than 98% of export earnings and about 83% of federal government revenue. The majority of Nigerian Oil & Gas reserves are concentrated around the delta of the Niger River or “South-south” region. With a total of 159 oil fields and 1,481 wells in operation, according to the Department of Petroleum Resources, Nigeria is noted as one of the oil-producing nations still capable of exceeding peak production.

In terms of its infrastructure, the Nigerian Oil & Gas Industry is divided in the upstream sector, downstream sector (usually including the mid-stream operations) and service sector. Concerning gas, Nigeria has a proven natural gas reserve of 5.29 trillion cubic metres, 2.82% of the world's estimated reserve. Activities in the sector are usually carried out under various arrangements including Joint Ventures (JVs).

Production Sharing Contracts (PSCs), Service Contracts (SCs) and Marginal Field Concessions (MFCs).

Some of the Key Regulatory Agencies in the Nigerian Oil & Gas Industry are:

- Ministry of Petroleum Resources
- Nigerian National Petroleum (NNPC)
- Nigerian Content Development & Monitoring Board (NCDMB)
- Department of Petroleum Resources (DPR)
- Nigerian Investment Promotion Commission (NIPC)
- National Maritime Administration and Safety Agency (NIMASA)
- Nigerian Customs Service Board (NCSB)
- Niger Delta Development Commission (NDDC)



Actors operating in the industry are primarily governed by the following legislation:

- The Petroleum Act
- Companies Income Tax Act (CITA)
- Petroleum Profits Tax Act (PPTA)
- Deep Offshore and Inland Basin Production Sharing Contracts Act (DOIBPSCA)
- Tertiary Education Trust Fund Act (TETFU)
- Capital Gain Tax Act (CGT)
- Withholding Tax (WHT)
- Value Added Tax Act (VAT Act)
- Niger Delta Development Commission Act
- Cabotage Act and Nigerian Maritime Administration Safety Agency Act (NIMASA)
- Royalties (Royalty rates vary and are paid by the holder of an OPL or an OML as soon as production starts)

Several issues currently abound in the industry. One of such is increasing the level of Nigerian content in the industry. The Nigerian Oil and Gas Industry Content Development Act defines content in this context as “the quantum of composite value added to or created in the Nigerian economy by a systematic development of capacity and capabilities through the deliberate utilization of Nigerian human, material resources and services in the Nigerian Oil and Gas Industry.”

Other issues include the increase in the country's percentage of proceeds to the federal government of Nigeria from the production of crude oil, the increase in the participation of Nigerians in the industry (as elaborated on above) and the realignment and integration of different departments in the NNPC,

## **THE FUTURE OF THE NIGERIAN OIL & GAS SECTOR IS VERY BRIGHT. THE MIDSTREAM AND DOWNSTREAM SECTORS OF THE INDUSTRY HAVE INVESTMENT OPPORTUNITIES WORTH OVER \$51 BILLION TO SUPPORT THE GROWTH PHASE OF NIGERIA.**

DPR and Ministry of Petroleum Resources. The Petroleum Industry Bill (PIB) adequately addresses these issues, being legislation to regulate the activities of the Nigerian Oil & Gas Industry, as well as stipulating guidelines for operations in the upstream and downstream sectors.

Also, the industry faces the issue of the cost of environmental remediation from years of militancy and pipeline vandalism (Niger- Delta Crisis), as well as, crude oil & petroleum product theft.

The future of the Nigerian Oil & Gas Sector is very bright. The midstream and downstream sectors of the industry have investment opportunities worth over \$51 billion to support the growth phase of Nigeria. This certainly gives an insight into the future of the sector, which has always been a valuable support to the Nigerian economy. Opportunities abound for both operators and investors with around \$35.4 billion investment opportunities in gas exploration &

production activities, power plant projects, fertiliser plants, virtual pipelines and flare gas commercialisation initiatives, as well as \$16 billion investment opportunities in the Free Trade Zones (FTZ) infrastructure development & concessioning, port infrastructure, Central Gas Processing Facilities (CPFs), gas transmission, Liquefied Petroleum Gas (LPG) plants, real estate development, pipe milling and local fabrication yards among others.

Divestment of assets by International Oil Companies (IOCs), sale of marginal fields by the Federal Government of Nigeria, and Granting of pioneer status incentive to indigenous exploration & production companies are some of the recent developments in the industry that will further support this projected future growth.

The industry targets of the realisation of 4 million barrels per day of oil production and 40 billion barrels of crude oil reserves in the nearest future.



**Mallam Mele K. Kyari, FNMGS**

Group Managing Director, Nigerian National  
Petroleum Corporation

# GOODWILL MESSAGE

I would like to commend the Management and leadership of the NCDMB for this noble and conscious effort to project industry Opportunities for our esteemed stakeholders, especially investors.

Let me start by reiterating NNPC's unflinching support and full alignment with the NCDMB in its quest to engage industry professionals towards achieving its primary mandate of building and supporting the development of local capacities and capabilities in the Nigerian Oil & Gas Industry. You will agree with me that for an industry that has been ravaged and disrupted by the impact of the dreaded COVID-19 pandemic, the Oil & Gas Industry will benefit from this veritable platform where heart-to-heart, constructive discussions on recovery and the way forward will be highlighted. I am optimistic that this conference will further foster institutional collaborations, maximise participation of Nigerians in oil and gas activities, link the oil and gas sector to other sectors of the economy, and maximise utilisation of Nigerian resources for the benefit of Nigerians and other stakeholders. From the upstream, midstream to the downstream and even to the services sectors, opportunities abound for potential investors to join us – in line with this year's theme – Create synergies towards post pandemic recovery of the nation's Oil & Gas Industry.

It will not be fair to weigh you down with the numerous Investment Opportunities that flourish in this country's Oil & Gas Industry. I am pretty sure that the NCDMB will take care of that. However, let me just briefly share with you some of the areas where I believe synergies could be created between the NNPC and potential investors, towards assured value creation and a guaranteed fair share of Return on Investment (RoI).

In the upstream, Opportunities abound in the area of exploration of frontier basins, the development of upstream gas fields and the financing of greenfield/brownfield additional production on de-risked assets. In Gas & Power infrastructure development, there are Opportunities in expanding our Gas Pipeline networks, development of gas-based industries as well as the Integrated Power Plants.

In line with our aspiration towards becoming a net exporter of petroleum products, Opportunities exist in the rehabilitation of our existing refineries as well as the construction of greenfield condensate refineries. As we strive to deepen domestic gas utilisation, it has created more opportunities in the downstream sector especially in LPG and CN plants across the country. There are also Opportunities in the pipeline and storage tank construction; as well as developing Shipping Capacity. In Ventures & Business Development, we are ready to partner with investors in the development of multi-specialist hospitals to strengthen healthcare service availability and support telecommunication infrastructure availability.

Finally, let me once again re-assure you that, at NNPC we are ready to collaborate with investors to turn Opportunities into real value, for the benefit of all, and especially towards taking our industry to even greater heights.

# SECTION I UPSTREAM

# UPSTREAM



# REAM



### **Adokiye Tombomieye**

Chief Operating Officer, Upstream at Nigerian National Petroleum Corporation (NNPC)

Adokiye Tombomieye is a graduate of Chemical Engineering from the Rivers State University of Science & Technology, Port Harcourt-Nigeria. He is a fellow of the Nigerian Society of Engineers (NSE) and the Nigerian Society of Chemical Engineers (NSChE).

His career in NNPC began in 1991 and he currently occupies the position of the Chief Operating Officer (COO), Upstream.

Prior to his appointment as a COO, he was the Group General Manager, COMD as well as the General Manager, Commercial in the Crude Oil Marketing Division (COMD).

His decades of experience in the Oil & Gas Industry spans across Operations, Engineering, Project Management and Commercial Business Management.

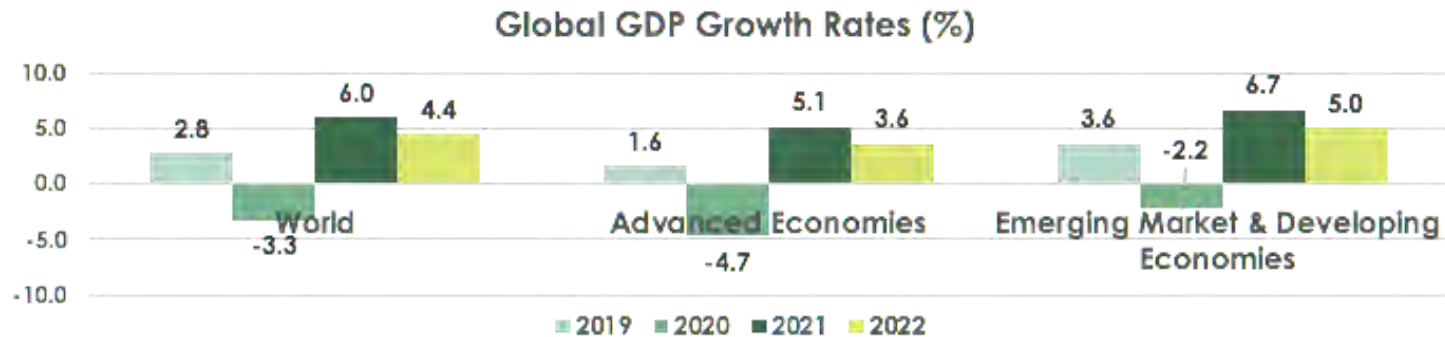
Mr. Adokiye is currently facilitating the sustenance of Upstream oil & gas production and the attainment of key projects to support the directorate's resolve in increasing production reserves. Under his watch, commercial hydrocarbon reserves were discovered in the Upper Benue Trough, the OML 83&85 Anyala Madu field achieved first Oil and the OML 111 Integrated Gas Handling Facility (IGHF) was successfully commissioned to supply incremental gas to the domestic market.

He is also championing the industry objective towards reducing costs and improving revenue for the corporation.

# NIGERIAN NATIONAL PETROLEUM CORPORATION

## ECONOMIC OUTLOOK

- IMF's recent forecast shows that the Nigerian economy will grow by 2.53% in 2021 and maintain a similar trend in 2022. This shows remarkable improvement from the 2020 recession at -1.92 GDP figure;
- The projected GDP growth, which is an indicator of better economic performance, will translate into increased spending, employment opportunities and value creation for the nation;
- Investments in all sectors of the economy will be required to support the actualisations of this target.



## OVERVIEW OF THE UPSTREAM SECTOR

- The upstream sector of Nigeria Oil and Gas Industry is strategically important to the country;
- It is mainly focused on the efficient exploration and production of crude oil & gas;
- The sector is currently undergoing critical reforms to meet stakeholders' expectations.

### Oil and gas sector is critical to the nation's economy

- Contributes 70% of FGN revenues and 90% of foreign exchange earning;
- Impacts the country's GDP by about 8% ;
- Enables local content development across the oil and gas supply chain;
- Enables development of the power sector and gas based industries.

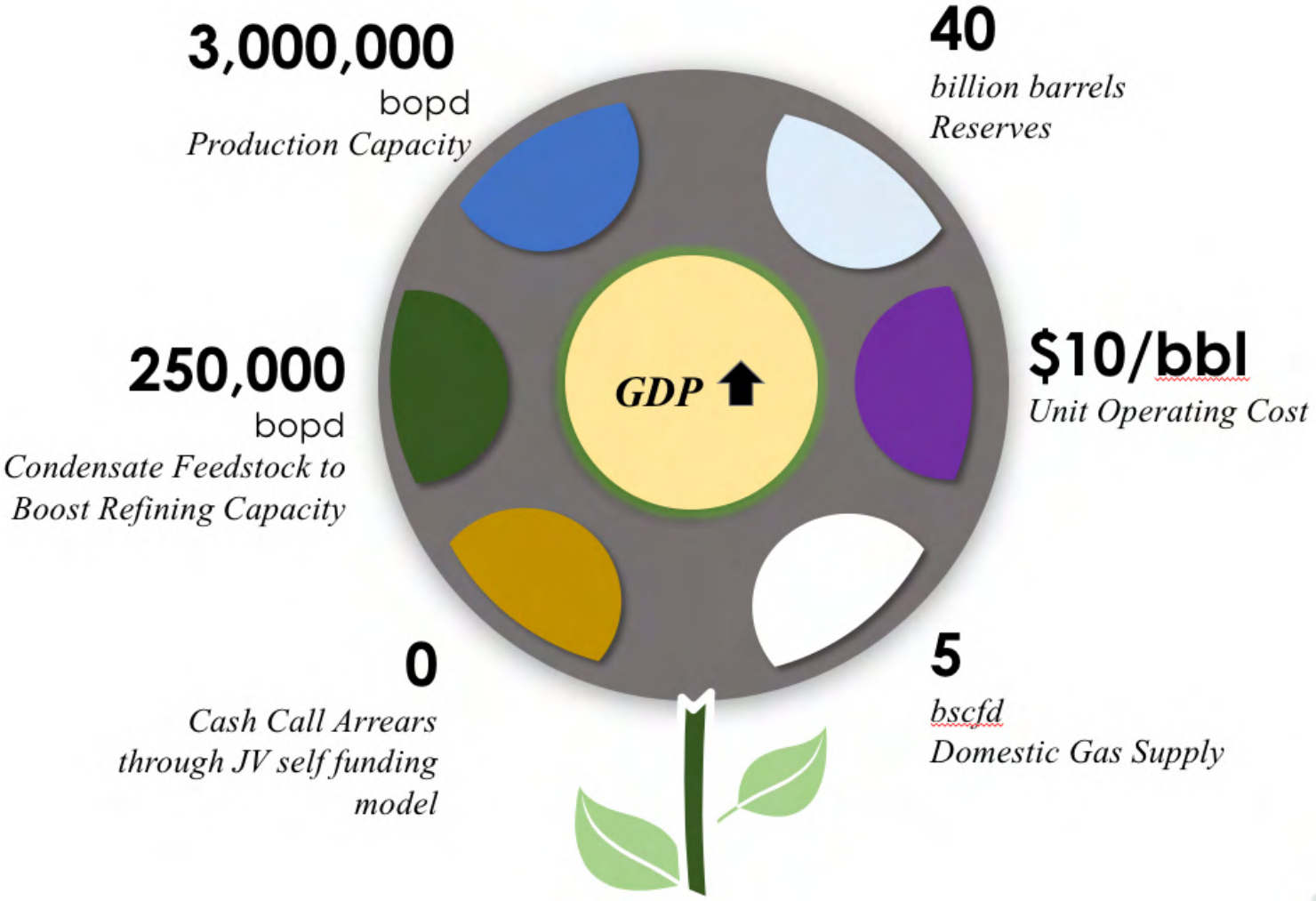
### Upstream critical reforms are:

- Initiated **cost optimization** frameworks to enhance profitability;
- Deep-water Gas Development Framework to support of **energy transition** drive;
- Domestication of onshore condensate volumes to support in-country refining capacity.





# NNPC UPSTREAM STRATEGIC ASPIRATION - MEDIUM TERM



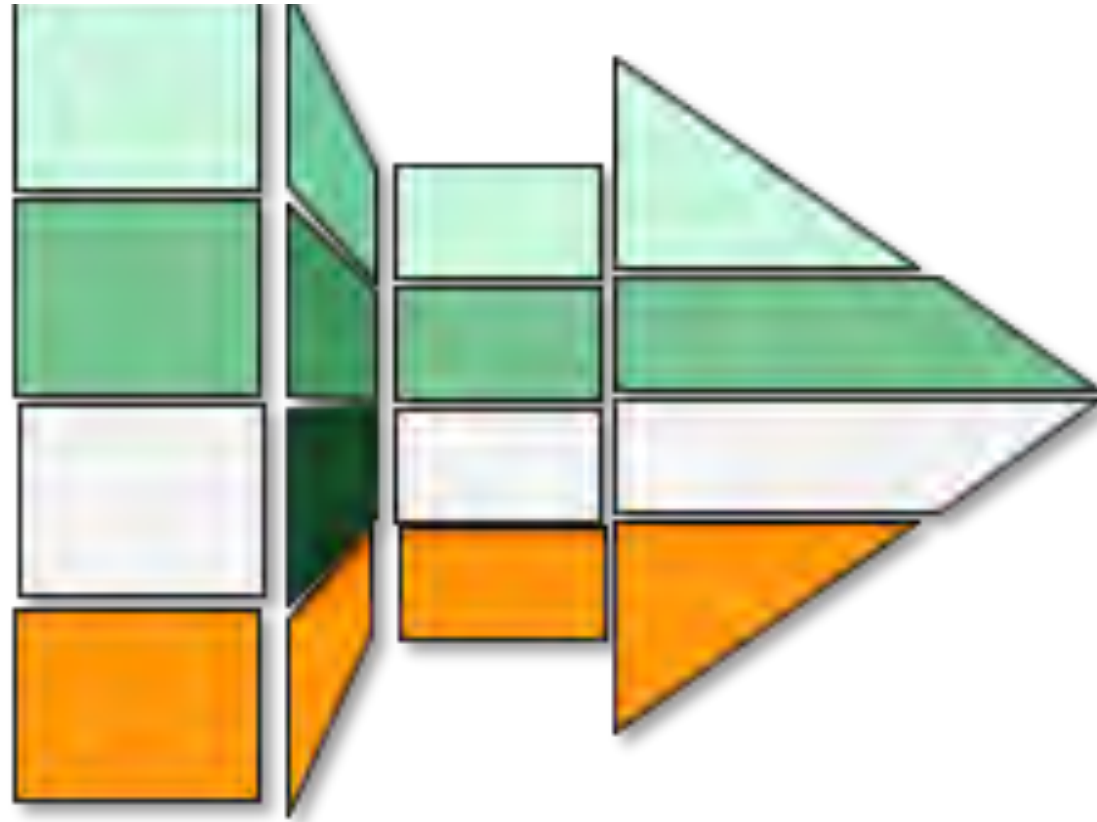
Additional investment opportunities in Nigeria are available to support the Upstream Sector Mid-Term Growth Aspirations, with resultant impact on GDP.



## TRENDS IN THE UPSTREAM SECTOR

- Until recently, the impact of the COVID-19 pandemic dampened the global oil industry outlook. The upstream sector was one of the worst hit, which necessitated a review of Operating Cost elements to remain profitable even in a low oil price regime.
- Resultantly, NNPC put in place strategies to reduce Unit Operating Cost (UOC) to sub US\$10/bbl, part of which led to the launch of the Nigerian Upstream Cost Optimisation Programme (NUCOP).
- However, the upstream sector remains an essential building block for our economic growth, particularly as a developing country with appreciable crude oil & gas reserves.
- We at the NNPC recognize the challenge as well the opportunity oil demand growth has presented us, particularly as an exporter experiencing a surge in local demand.
- The balance of objectives requires that we undertake a paradigm shift in our business model to ensure we attract capital and sustain flow of investment.
- Importantly, the recent fiscal challenges experienced by the nation calls for reappraisal, hence we have undertaken to diversify and broaden the base of investment sources outside traditional government funding.



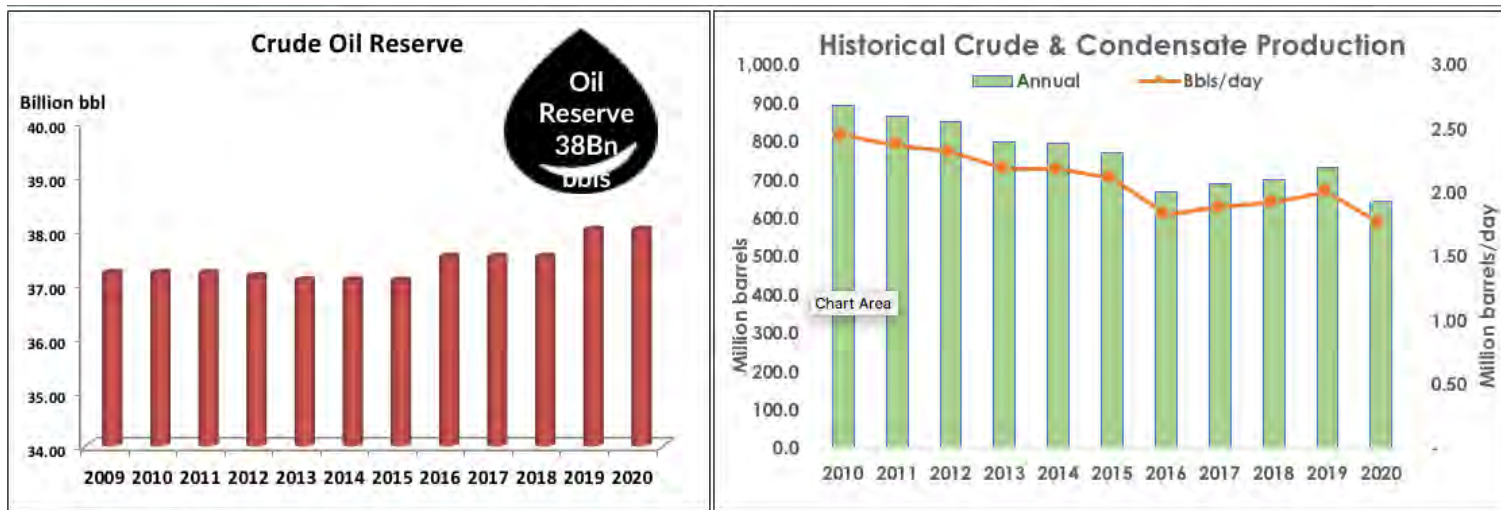


### The Big-Ticket items include:

1. Ongoing hydrocarbon exploration campaign in the **frontier & Inland basins**;
2. Enormous **deep-water hydrocarbon potential** underpinning the 3 million barrels per day aspiration;
3. Upstream **gas development opportunities** to leverage deepening domestic consumption;
4. **Financial & technical services** for NPDC repositioning.



## OIL RESERVES & PRODUCTION TREND



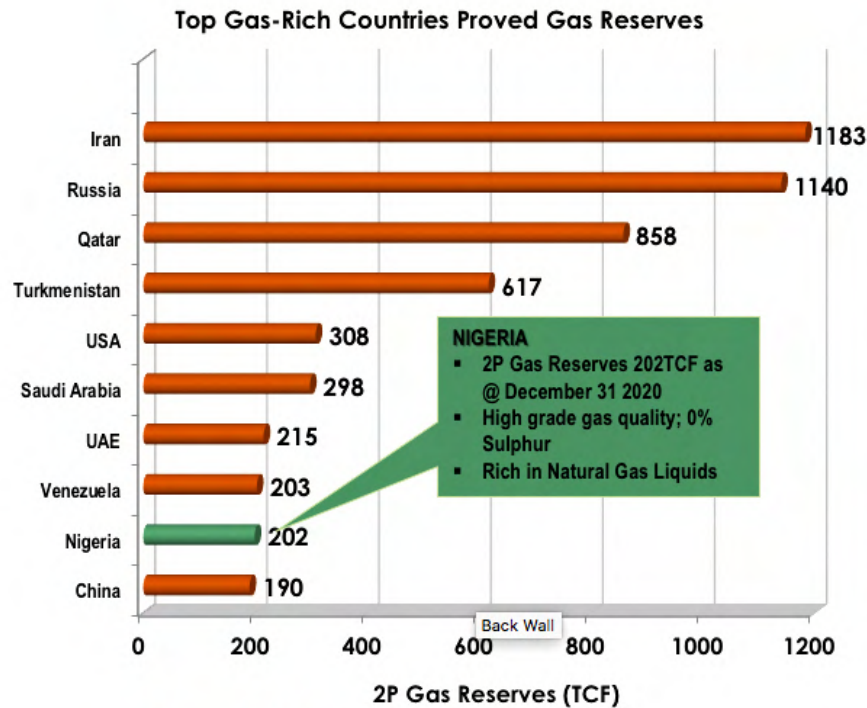
Source: DPR, NNPC CP&S

- Efforts have been intensified towards the attainment of the 40Bln bbls reserve base aspiration;
- With the recent discoveries in Gongola Basin, our crude oil reserve has increased from about 37.5bn barrels in 2018 to 38bn barrels in 2020, ranking 11th globally, holding about 2.2% of global oil reserves, 2nd largest in Africa after Libya;
- Exploration activities in other inland basins are being progressed;
- Current oil reserves can sustain about 47 years of 2.2 million barrels per day production assuming no further reserves additions;
- 13th Largest oil Producer globally, accounting for about 2.1% of global oil production;
- Crude oil production has been curtailed and currently stands at 1.535 mbopd (excluding condensate) by OPEC+ agreement in response to the price slump associated with the COVID-19 pandemic;
- Commercialisation of new and potential discoveries for incremental production are good opportunities for the industry.

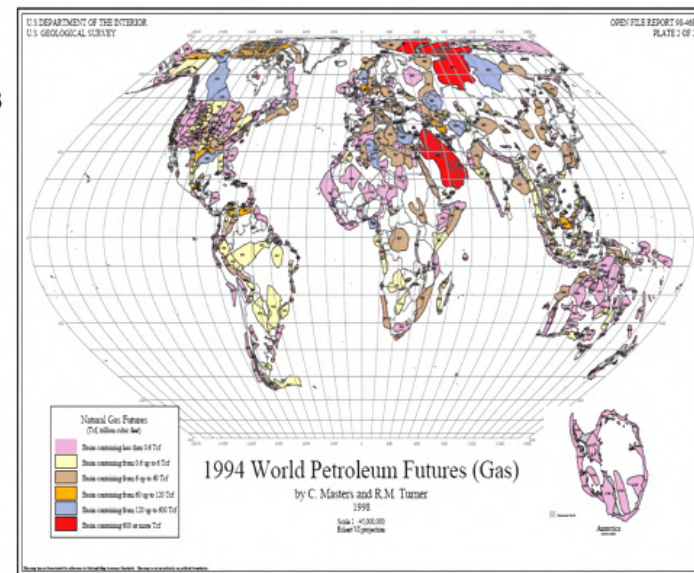


# NATIONAL GAS RESERVES

- Nigeria has enormous **economic potential** trapped in its vast natural gas resource.
- Currently it's the **9th largest** in the world with **2P gas reserves** of about **202TCF** as of 31.12.2020 with undiscovered potential of about **600TCF**.



Source: BP Statistical Report

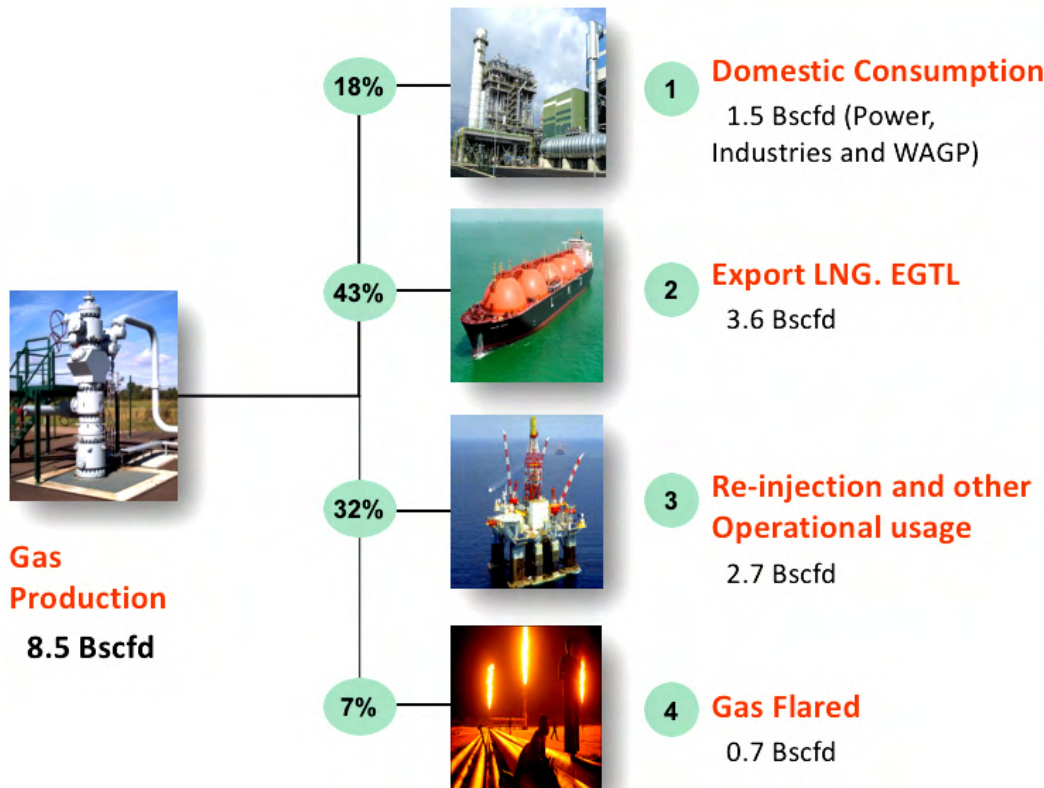


Source: US Geological Survey



# GAS PRODUCTION & UTILISATION BALANCE

Nigeria's average daily gas production is about 8.4Bscfd. The domestic market consumes 18% of the production (Power, Industries & WAGP), 43% is exported as LNG, 32% is re-injected for enhanced oil recovery and other operational uses while 7% of total gas production is currently being flared.



- 2020 was declared as the year of Gas in Nigeria;
- 2021 – 2030 is also declared the Decade of Gas Development for Nigeria;
- The declaration offers an opportunity to exploit gas resources for the benefit of the country;
- Nigeria is trying to meet the rising global demand for cleaner energy sources with specific focus on monetising its gas resources;
- This undertaking can be achieved with the support of competent industry players.



## **PARADIGM SHIFT**

- The IOC divested some acreages between 2010 – 2015 to Indigenous companies;
- The Indigenous companies have since continued to operate these assets, which clearly demonstrates technology transfer and capacity building over time;
- Similar opportunities abound in the upstream space, noting the recent divestment of OML 17 to Heirs Oil & Gas Ltd.;
- The industry also witnessed the growth of qualified EPC Contractors who have gained cognate experience;
- The established footprint is an indication of resource availability to execute diverse scope in the oil & gas space;
- Investment opportunities exist within the upstream sector for these players to further create value for the entire industry.

## **UPSTREAM INVESTMENT OPPORTUNITIES**

We have created a platform in the upstream sector to exploit a vast range of investment opportunities that broadly span the value chain.



### ASSET ACQUISITION



### EXPLORATION & DEVELOPMENT



### ENGINEERING & SERVICES



### MARINE SERVICES



### FINANCIAL SERVICES



### ASSET ACQUISITION

- Oil block divestment
- Service Contracts

### EXPLORATION & DEVELOPMENT

- Conventional & unconventional exploration technologies
- Drilling rigs and related services
- Turnkey development services
- Brownfield optimisation

### ENGINEERING & SERVICES

- Engineering Procurement & Construction services
- Construction Management services
- Pipe mills
- Fabrication yards

### MARINE SERVICES

- Offshore going vessels
- Floating storages
- Crude Transportation Services
- Hydrographic Surveys

### FINANCIAL SERVICES

- Third Party financing
- Syndication of competitive finance
- Concessionary Government to Government loans
- Forward Sale Agreements





# ADDITIONAL AREAS FOR POTENTIAL COLLABORATION



**Talent and knowledge exchange**



**Security infrastructure partnerships**



**Research and development partnerships**



**Strategic partnerships for crude off-take**





### **Osagie Okunbor**

Managing Director at The Shell Petroleum Development Company of Nigeria Ltd

Osagie Okunbor was appointed the Managing Director of The Shell Petroleum Development Company of Nigeria Ltd. (SPDC) and Country Chair, Shell Companies in Nigeria in 2015.

A graduate of Business Administration, Osagie has over 30 years industry experience in Nigeria, the UK, Brunei and the Netherlands.

His previous roles in the Shell Group include: Senior Adviser for Upstream International Operated Business; Vice President Human Resources for Sub-Saharan Africa; Vice President for Infrastructure and Logistics in Nigeria; and Human Resources Director in Nigeria.

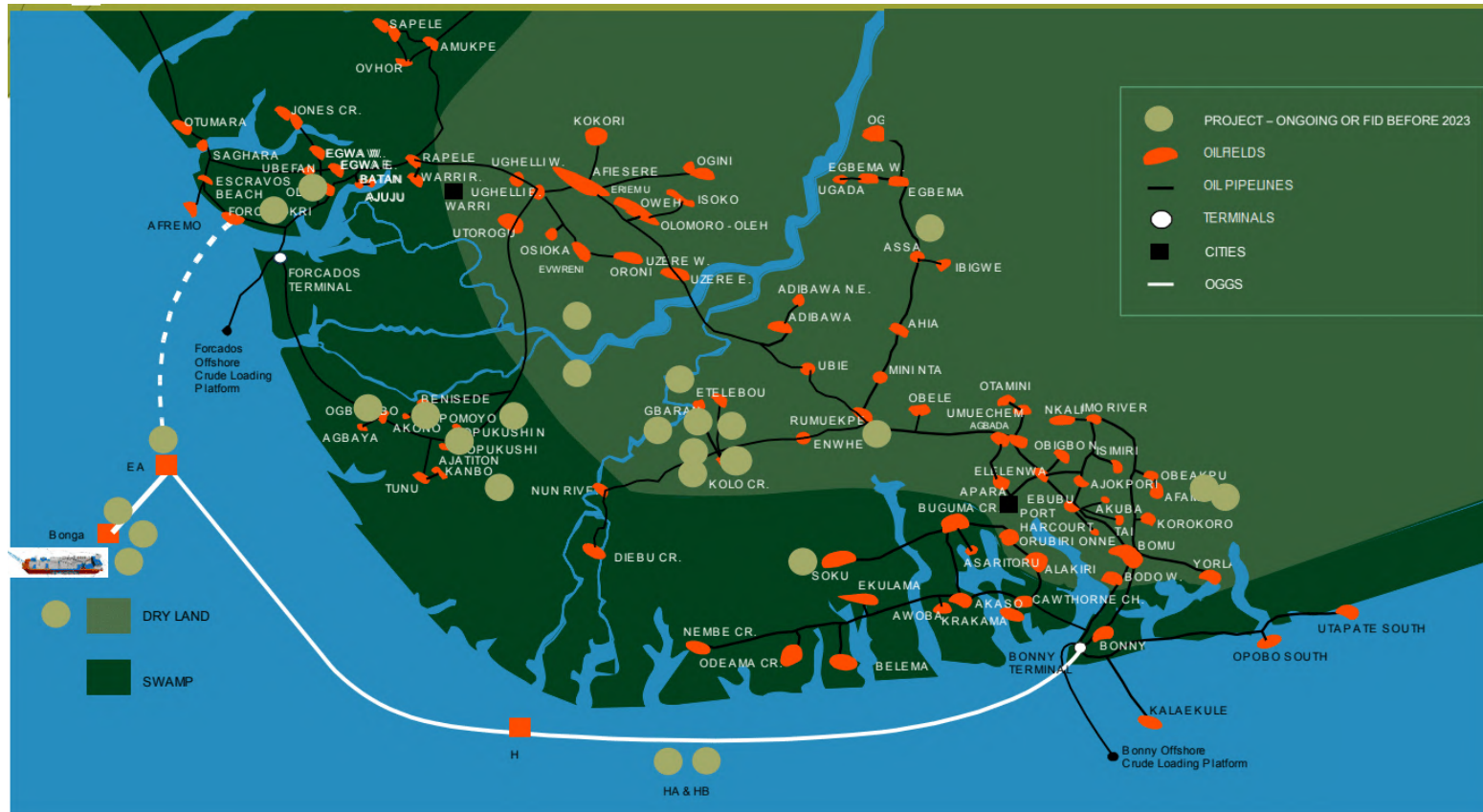
He also chairs the Board of The Shell Nigeria Pension Fund Administrators (SNCPFA), as well as All-On a recently established off-grid energy entity.

He is married and blessed with three children.

He enjoys music and football.

## PORTFOLIO OUTLOOK (2021-2025)

- Investment portfolio of over **\$15bln** in the next **5 years**.
- **22 Projects** covering Export & Domestic Gas; Oil projects spread across Deep-Water, Shallow Water, Swamp and Land terrains.
- **Benchmark** to meet where possible and surpass the **NC** target set for **BSWA**.

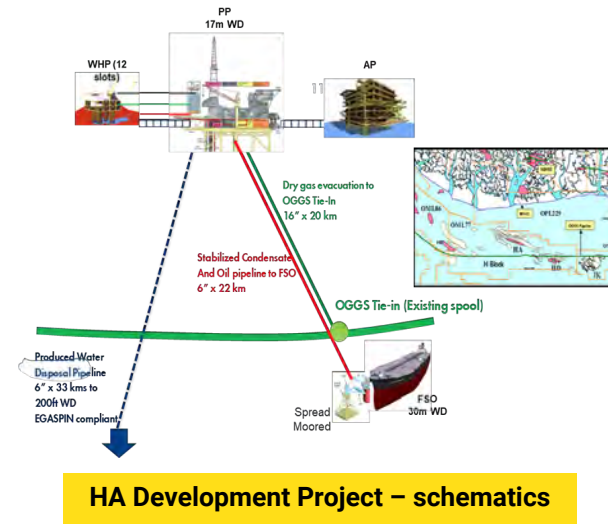


## EXPORT GAS PROJECTS (2021-2025)

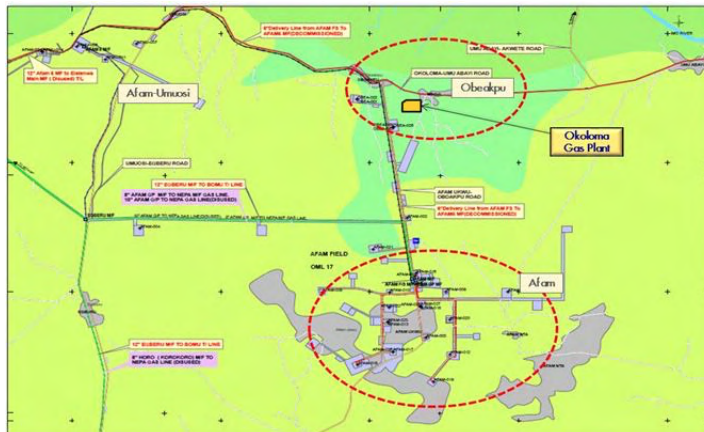
**7** gas projects, including the HA & HB shallow water projects, are focused on delivering Train 7 OSD and keeping the T1-6 engine full.

### Potential Nigerian Content

- FEED, Design
- Drilling (re-entry, work overs and new drills) > 24 wells
- Procurement - Line pipes (flowlines and pipelines) > 200 km; Meters – allocation and fiscal; compressors
- Fabrication - Structural steel fabrications (platforms, manifolds, skids etc);
- Floating Storage Offshore vessel (FSO),
- Pressure vessels, gas processing equipment, gas facility modifications.
- Marine vessels, barges, flotel services, helicopter services



## DOMESTIC GAS PROJECTS (2021-2025)



**Okoloma Development Project - schematics**

**8** gas projects are focused on domestic gas supply to power industries and commercial markets.

### Potential Nigerian Content

- FEED, Design
- Drilling (re-entry, work overs and new drills) > 24 wells
- Procurement - Line pipes (flowlines and pipelines) > 150 km; meters – allocation and fiscal; compressors
- Fabrication - Structural steel fabrications (manifolds, skids et pressure vessels, gas processing equipment
- Civil works - Location preparation; access roads; jetty construction

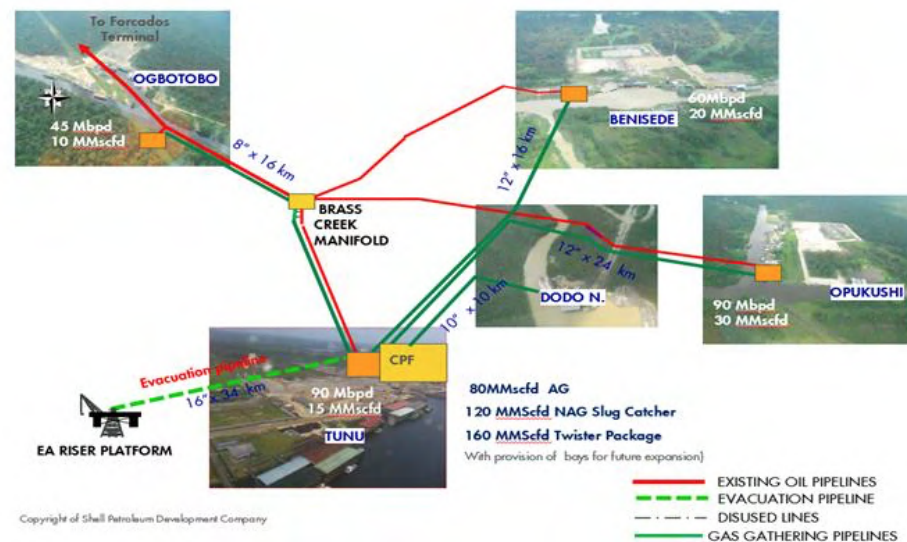


## ONSHORE OIL PROJECTS (2021-2025)

**4** Infill projects, across swamp and shallow water terrains focused on maximising existing infrastructure.

### Potential Nigerian Content

- FEED, Design
- Drilling (re -entry, work overs and new drills) > 20 wells
- Procurement - Line pipes (flowlines and pipelines) > 130 km; meters – allocation and fiscal
- Fabrication - Structural steel fabrications ( manifolds et Pressure vessels, oil & gas processing equipment, facility modifications and upgrades
- Civil works - Location preparation (dredging, piling etc.)



**Southern Swamp AGS 3B Project - schematics**



## DEEPWATER PROJECTS (2021-2025)

**3** Deep Water projects, consisting of **BSWA, Bonga North** and **Bonga Main Life** extension.

### Potential Nigerian Content

- **FEED, Design**
- **Drilling** (re-entry, work overs and new drills) - 57 wells
- **Procurement**
- **Fabrication** - (construction of well head jackets, processing platforms, subsea manifold, hull, topside modules etc.)
- Mooring and loading systems
- Pressure vessels, gas processing equipment
- **Marine vessels, barges, flotel services**
- **Helicopter services**



**Bonga Main Life Extension project**



## Mike Sangster

Chairman OPTS/ MD Total E&P

Mike Sangster is the Managing Director, TotalEnergies EP Nigeria Limited. He is also the Country Chair and Representative of TotalEnergies S.E. in Nigeria. He is also the current Chairman, Oil Producers Trade Section (OPTS) of the Lagos Chamber of Commerce & Industry, a position he assumed in September 2020.

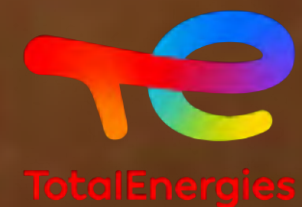
In a career spanning over 24 years at TotalEnergies, Mr. Sangster has served in various capacities with extensive experience in business and management.

Prior to his appointment as Managing Director of TotalEnergies EP Nigeria Limited in July 2019, Mike Sangster was the Senior Vice President, Investor Relations of the then Total Group.

Before his role in Investor Relations, Mr Sangster was Managing Director of TotalEnergies EP Australia; President & General Manager of TotalEnergies EP Thailand; Vice President Economics, Strategy and Planning; Vice President Business Development & Strategy for TotalEnergies EP USA Inc, and Senior International Negotiator.

A graduate of Electrical Engineering from the University of Aberdeen, Mr. Sangster worked as a Corporate Development Manager at Scottish Power, before joining the then Total Group.

Prior to joining the Company, Mike qualified as an Electrical Engineer at the University of Aberdeen and was Corporate Development Manager at Scottish Power.



# TOTAL ENERGIES EP NIGERIA LIMITED

## TOTAL ENERGIES IN NIGERIA

### A STRATEGIC AND RELIABLE PARTNER

TotalEnergies EP Nigeria Limited

TotalEnergies Upstream Nigeria Limited



- Active in Nigeria since 9th May 1962
- Limited liability companies
- 100% TotalEnergies
- 5 production sites
- TEPNG operator of Joint-Venture with NNPC
- TUPNI operator of OML130
- Assets operated by others and indigenous licenses
- Lagos: DW operations & support
- Port Harcourt JV operations & support
- Abuja: registered Head Office & Gov't Relations
- Staff Strength: 1,134

TotalEnergies Marketing Nigeria Plc



- Active in Nigeria since 1st June 1956
- Publicly listed company
- Ownership: 62% TotalEnergies, 38% Shareholders
- 577 service stations
- 3 product storage facilities; 5 aviation facilities; 3 lube blending plants; 1bitumen storage; 18 transporters (984 trucks)
- Lagos: head office
- 3 territorial offices (Lagos, Abuja, Port Harcourt)
- 18 Customer Service Centers
- Distribution activities in all 36 States of Nigeria
- Staff Strength: 434



Over 1,166 employees



10 billion \$ investment in recent years



2nd Largest Oil & Gas Producing Company in Nigeria



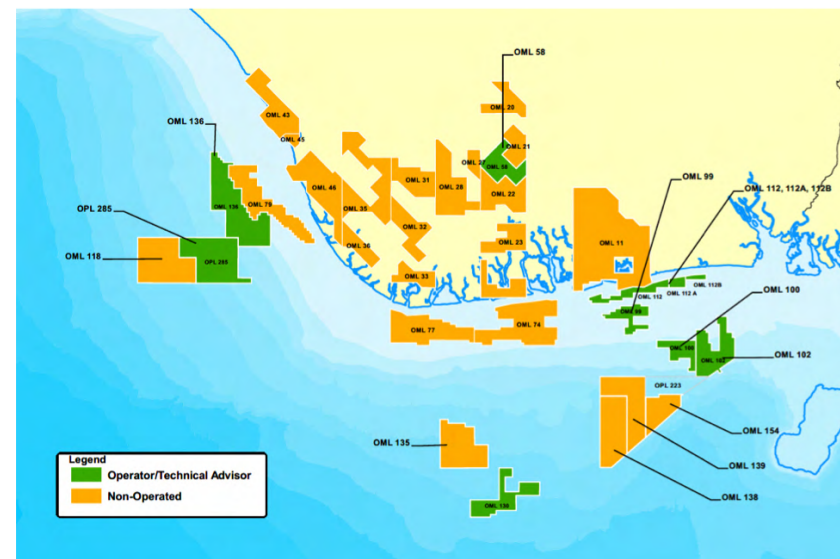
Leader in downstream activities with >577 Service Stations



- 5 Production Sites
  - Operator of OML 130 & JV Fields with NNPC
- Present throughout the entire value chain of the Nigeria Oil & Gas sector
  - Upstream, Midstream & Downstream
- Distribution activities in all 36 states of the country & FCT

\*2020 Production

### TEPNG OPERATED AND NON-OPERATED ASSETS





## EGINA PROJECT: NC OPPORTUNITIES



- Total started up production on 29th December, 2018 from Egina field, located 150km offshore in OML 130; water depths of 1,400 – 1,700 m; FPSO 330 m x 60 m with 2.3 Mb storage capacity; 44 subsea wells; No flaring: gas export to Bonny LNG via Akpo-Amenam pipeline
- Egina's production of 200,000 bopd represents about 10% of Nigeria's production
- Total owns 24% (operator); CNOOC 45%; Prime 16%; SAPETRO 15%
- Development drilling: world record of Deepwater well (21 days)
- Fabrication of the largest subsea production manifold, first buoy hull for turret system, and first Integration Control and Safety System for an FPSO in-country
- 6 FPSO topside modules built and integrated in-country, a first in Africa
- The construction of the first FPSO Integration Quay in Africa, with first Nigeria-based FPSO Project Management Team
- Over 569,000 man-hours of Human Capacity Development training across all Egina EPCI contracts
- Over 46 million man-hours worked in Nigeria, representing >3,000 jobs for 5 years and 77% of jobs mobilised on the project; over 60,000 tonnes of fabrication in-country
- Several thousand (indirect) local jobs created, and extensive local infrastructure (mainly yards) upgraded or built, contributing to Nigeria's sustainable development
- Total supported Paints and Coatings Manufacturers Nigeria Plc (PCMN) to meet global quality standards, and manufacture and export 60% of the Egina FPSO Hull coatings to SHI Yard in South Korea
- EGINA Project, in conjunction with the NCDMB and Contractors, trained over 250 Nigerians for a minimum of one year over project life, both in-country and overseas

## EGINA PROJECT: NC OPPORTUNITIES



- The construction of the first FPSO Integration Quay in Africa, with the first Nigeria-based FPSO Project Management Team
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# IKIKE DEVELOPMENT PROJECT



- Ikike Development – Offshore campaign ongoing, jacket installed, AMD2 module and topside under construction
- EGINA & PREOWEI 3D/4D NODES Seismic - **Tendering in progress** (Nipex Tender Ref: 1000003361)

## IKIKE PROJECT FIELD LAYOUT

### Wellhead Platform

- Tripod design jacket
- 6 slots, unmanned
- Oil: 32 kbl/d
- Gas: 3.5 Mm3/d
- WI: 72 kbl/d
- *Under construction in Nigeria*

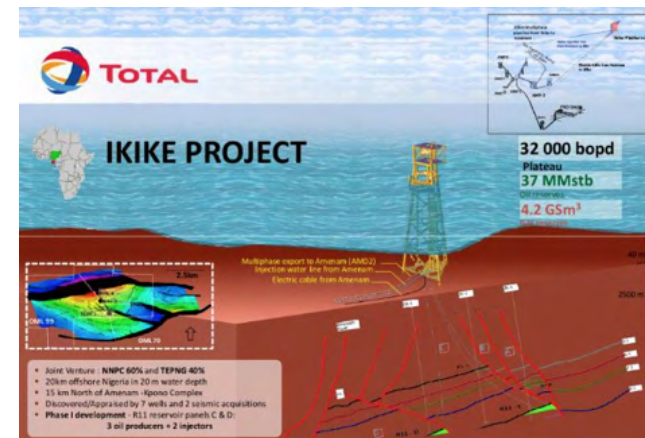
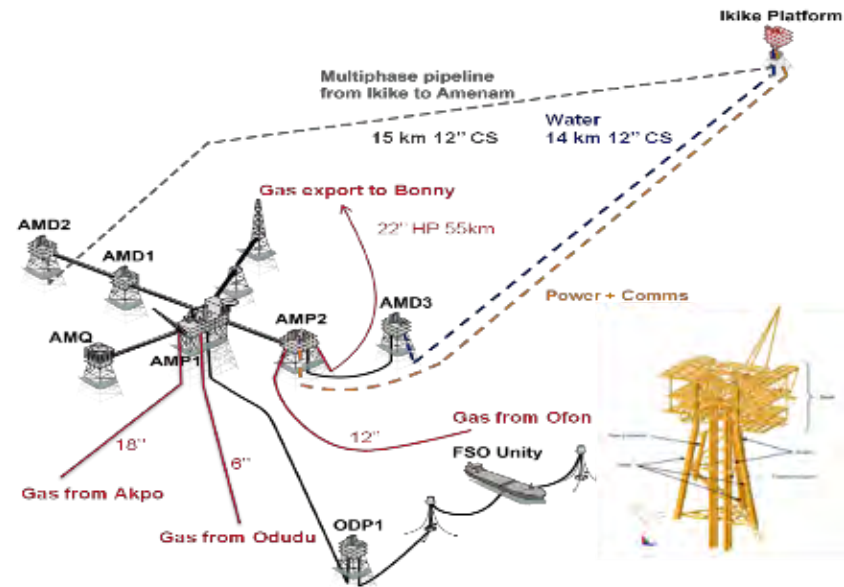
### SURF:

- Prod. 12" CS fully rated
- WI: 12" CS
- Umbilical
- *Offshore works ongoing in Nigeria*

### Brownfield work on Amenam

- New module at AMD2
- Receiving equipment + tie-in
- Overpressure Protection
- *Offshore works ongoing in Nigeria*

DESIGNED TO PROMOTE NIGERIAN CONTENT IN THE OIL & GAS INDUSTRY



## IKIKE PROJECT TIMELINE



Period	Activity
Pre-2010	Developed: <ul style="list-style-type: none"> <li>• 3 reservoirs: R11 (30P/2WI), R5 (40P/1WI), R7 (2 WO of R11 wells)</li> <li>• 15+3 dummy slots Platform</li> <li>• 2P reserves (R11 only): 41.1 Mbbbl oil + 4 Gm3</li> </ul>
2010	<ul style="list-style-type: none"> <li>• Submission of FDP and approval by NAPIMS and Department of Petroleum Resources (DPR)</li> </ul>
2011	<ul style="list-style-type: none"> <li>• Basic Engineering by Delta Afrik</li> </ul>
2013	<ul style="list-style-type: none"> <li>• 2nd Basic Engineering by CresTech, cost increase was not validated</li> </ul>
2014	<ul style="list-style-type: none"> <li>• A decision to optimise Ikike development scheme review of well architecture and completion</li> <li>• Redesign facilities with minimalist concept and fit for purpose principle</li> </ul>
2017	<ul style="list-style-type: none"> <li>• Re-launch of Ikike project based on CAPEX and DRILLEX optimisation</li> <li>• Approval of a revised FDP &amp; a Nigerian Content plan</li> </ul>
2019	<ul style="list-style-type: none"> <li>• Final Investment Decision (FID)</li> </ul>
Q2 2022	<ul style="list-style-type: none"> <li>• First Oil</li> </ul>

## IKIKE PROJECT TIMELINE



- 100% detailed engineering in Nigeria Netco
- 100% in country fabrication of jacket, topside & TDD by SCNL
- 100% in-country fabrication of AMD2 module by SNL
- 100% participation of Nigerian vendors in procurement
- 100% fabrication of spools/risers/riser protectors/sleepers at Aveon Offshore yard
- 100% in-country assembly of AMP1 PCS and SIS Cabinets by Cisan/Intech
- Coating of 2,352 lengths of pipe in-country by PCN
- Offshore mobilisation of installation and pipelay vessel with relevant spread in country

## IKIKE PROJECT: NC OPPORTUNITIES

At 80% completion, few opportunities exist in the following:

- Construction & Fabrication
- Installation
- Flotel
- ROVs services
- Drilling and completion
- Classroom block, hostel and workshop for Government Technical College Port Harcourt





## Roberto Daniele

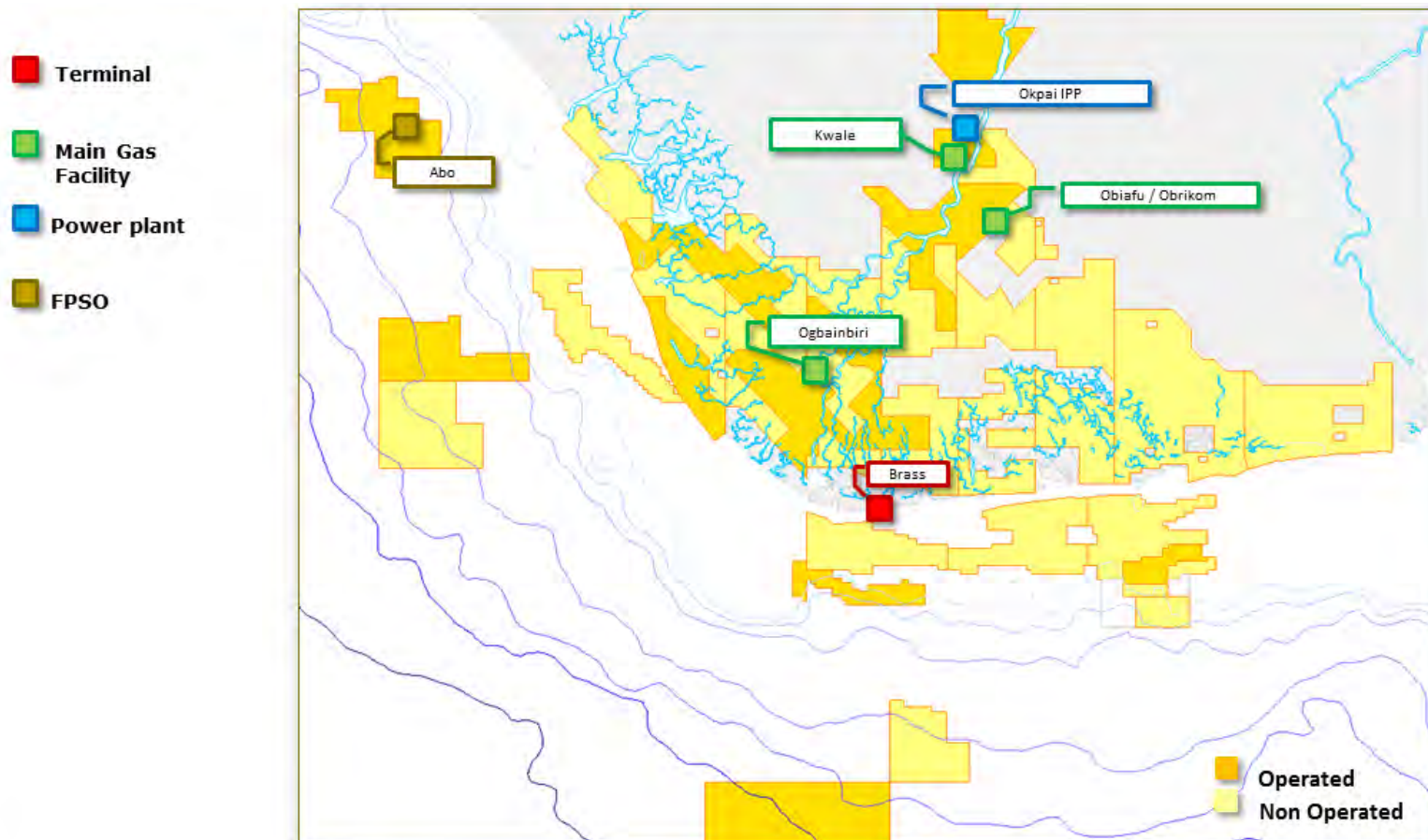
Managing Director at ENI's Companies in Nigeria

Roberto Daniele has been the Vice Chairman/Managing Director of NAOC, NAE and AENR, Eni's companies in Nigeria, since September 2020.

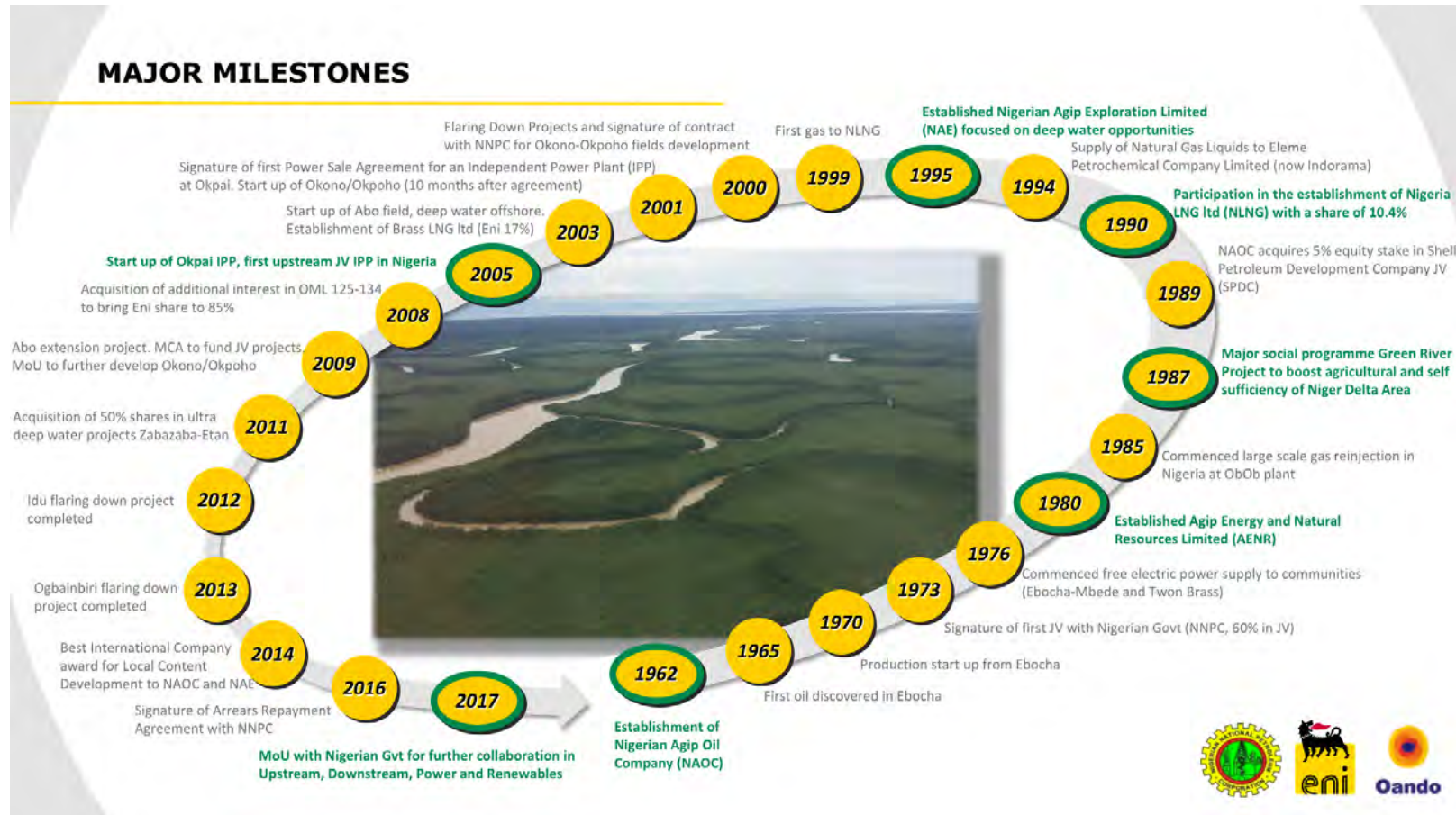
A Geo-computer Engineer with 26 years of experience in the Oil and Gas Industry, Mr. Daniele began his career in Eni in 1995, at Agip's Reservoir and Petroleum Department. In 1999, he served as a Reservoir Engineer for Nigerian Agip Oil Co., Port Harcourt. He then served in the Petroleum, Petrochemical and Power Production and Environment Department in Agip Congo. Mr. Daniele began his Managerial duties as the Reservoir Division Deputy General Manager in the Eni Exploration & Production Division, Cairo, Egypt in 2003. His role in senior management progressed in 2009 as the Technical Director for Eni E&P Division. In 2010, he was the General Director for Eni Energhia in Moscow, Russia. In 2015, he served as General Manager for Cardon IV, Venezuela. Prior to his appointment in Nigeria, he served as Managing Director for Eni Ghana.

## NAOC AND NAE PROJECT OPPORTUNITIES

### ENI IN NIGERIA: A SNAPSHOT ON SOME PRODUCTION SITES

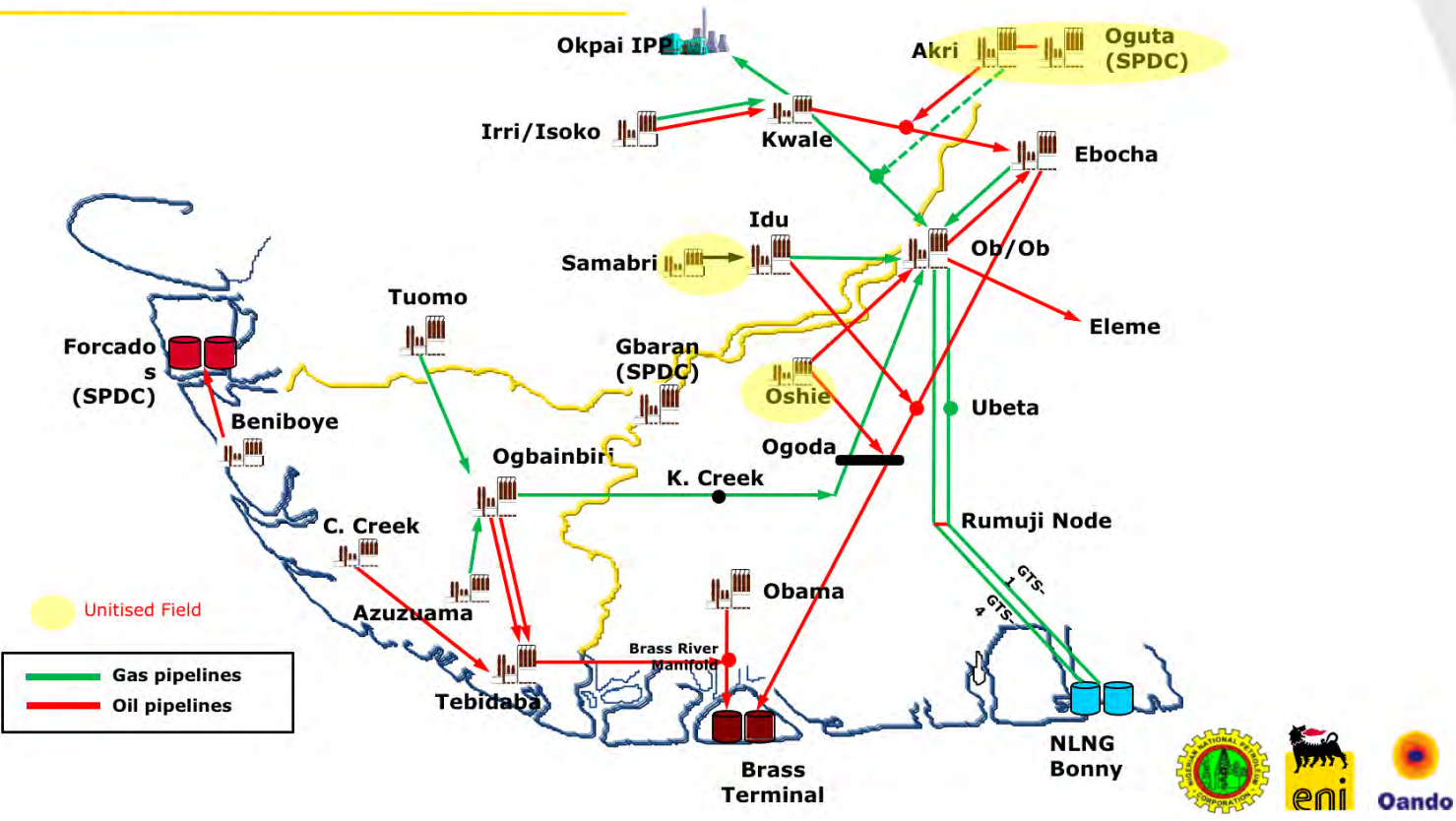


# MAJOR MILESTONES





# NAOC JV ASSETS



# NAOCJV – OPPORTUNITY OVERVIEW

## New Developments

### Project Description:

- Train 7 gas-related projects
- Development of the three Unitised Fields (Samabri Biseni, Akri Oguta, Oshie Ubie) with Oil & Gas Producers and facilities upgrade

### Scope of Work

- Upgrade of the existing flow station, to accommodate oil & gas treatment facilities
- Installation of new separation, compression, injection system and metering units
- BoP installed power
- Wellheads interconnection flowlines cumulated lengths: 119 km
- Oil will be shipped to Brass terminal through NAOC JV pipeline network and treated gas delivered to Ob/Ob gas hub

## Production Maintenance

### Project Description:

- Development of newinfilling projects with further development of the existing fields
- Phased development

### Scope of Work

- Connection of new wells (over 50 new wells plus S/T and W/O) to the existing facilities with flowlines
- New remote manifolds or mini flow station
- New pipelines

## Asset Integrity

### Project Description:

- ObOb Gas PlantAsset Integrity programs:
  - Plant Turnaround
  - Electrical revamping
  - Major turbines and compressors overhauls
- Brass Terminal rehabilitation program, including:
  - SBM maintenance
  - Platform Structural Integrity
  - Sealine Structural Integrity
  - Tank maintenance and upgrade of deluge system
  - Upgraded produced water treatment facility and related offshore pipeline



Oando

## NAOC JV – OKPAI PHASE 2

- GT 21 and 22 have been successfully completed and commissioned since Q1 2020. The plant is now ready for operation
- Both units are now ready to go into commercial operations
- Minor upgrades and electrical tie-in activities are expected to be carried out to facilitate production of the full capacity from Okpai Phase 1 & 2 to the national grid
- Presently the PPA award process is ongoing with NBET
- Other requirements including the Plant License, EIA and Evacuation permit (from Transmission Company of Nigeria) are all in place
- The Steam Turbine and Heat Recovery Steam Generator (HRSG) are presently suspended
- The inclusion of the additional 320MW into the grid is expected to add stability to the national grid and provide more homes with electricity



**MAJOR INVOLVEMENT OF LOCAL CONTRACTORS AND COMPANIES AND SUBSTANTIAL INCREASE OF POWER GENERATION FOR THE LOCAL ELECTRICITY MARKET**

# NAOC JV OKPAI IPP PHASE 2 - START-UP AND COMMISSIONING

UNIT	STATUS
<p>GT #1 (160 MW)</p>	<ul style="list-style-type: none"> <li>•First Start-up achieved on 16th December 2019</li> <li>•First Synchronisation to Grid on 24th December 2019</li> <li>•Status – Unit ready to produce</li> </ul>
<p>GT #2 (160 MW)</p>	<ul style="list-style-type: none"> <li>•First Start-up achieved 11th September 2020</li> <li>•First Synchronisation achieved 23rd September 2020</li> <li>•Status – Unit ready to produce</li> </ul>
<p>STEAM TURBINE (CLOSED-LOOP) (140 MW)</p>	<ul style="list-style-type: none"> <li>•All main equipment on ground (Steam Turbine, Heat recovery steam generator and balance of plant) works are currently suspended</li> </ul>



**NAOC is arranging to test overall performance of Okpai IPP Phase 1 and 2 at 800 MW**

## NAOC JV – DRILLING AND PRODUCTION

### D&C Activities

- 3 Rigless Units LAR and 1 in SAR / 1 Pulling Unit / 1 Rigsin place
- Over 72 Nigerian contractors involved in the drilling and completion
- Over 25 Nigerian contractors involved in the location preparation and flowline laying
- Irri and Ogbainbiri manifold assigned to Dormanlong and Tomba Engineering under execution

## NAOC JV – JV ACTIVITIES

### Tuomo phase 2 - Optimised

#### Concept Definition:

- 6 wells (1 existing, 1 side track, 1 work over, 2 new)
- 10 slot inlet manifold
- Bulk flow/ Multiphase pipeline evacuating Tuomo fluids to Ogbainbiri
- Ogbainbiri Area – Pig Launcher/Receiver, Slug catcher
- Accommodation, offices, power generation and utilities
- Slug catcher at Ogbainbiri

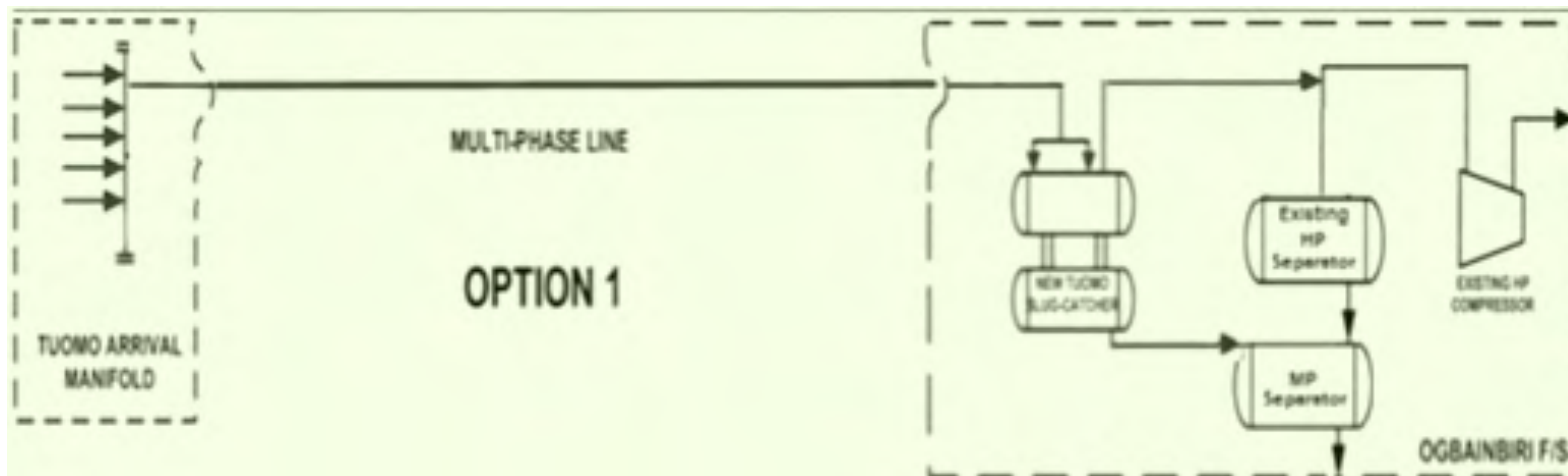
#### Opportunities for Indigenous Contractors

- Coating of line pipes
- Supply of line pipes
- Testing and Pre-commissioning of pipelines
- Supply of Inlet manifold, Pigs and slug catcher
- Fabrication and Installation of O&G service lines

## TUOMO PHASE 2

### Status:

- Preparation of ITT documents
- Alignment of contract strategy with JV Partners and NCDMB



## NAOC JV - UNITISED FIELD

### Project - Status:

- Akri Oguta – Planning
- Oshie Ubie – Integrated Reservoir Study
- Samabri Biseni – Ready for EPC tender

**FOCUS ON SAMABRI BIENI**

### Samabri Biseni - Optimised

#### Selected Concept:

- 7 Clusters (1 existing)
- 26 Development Wells in clusters – 14 Oil/12 Gas
- New gas line 20”
- New Oil line 14”
- Brown field – New pig traps and Separator

#### Status

- FEED Finalised: NETCO locally involved with a substantial engineering package

#### Next Steps (2021 and onwards)

Start the tendering process of the following Work Packages

- Site Preparation
- EPC Works
- Rig and D&C Services



## NAOC JV – MAINTENANCE AND ASSET INTEGRITY



- Over 43 projects assigned to indigenous companies
- 21 Projects over \$44 M in tender to be assigned to indigenous companies
- Activities include:
  1. Auto Corrosion Mapping of Vessels
  2. Coating Defect Survey and Repair
  3. Inspection Evaluation Diagnosis Pipelines, Flowlines and Process Lines (UTM)
  4. Inspection/Certification of Lifting Equipment and Accessories
  5. Installation and Maintenance of Potable Water Treatment Plants
  6. Internal Corrosion Monitoring
  7. Long range Ultrasonic Testing (Guided Wave) of Pipelines
  8. Monitoring and Maintenance of Cathodic Protection System
  9. Monitoring and Maintenance of Lifting Equipment And Accessories
  10. Online Leak Sealing/Composite Repairs
  11. Supply and Monitoring of Production/Gas Treatment Chemicals
  12. Wellhead and Process Valve Maintenance And Greasing



Oando



## **NAOC JV ACTIVITIES – BRASS PRODUCED WATER MANAGEMENT PROJECT (BPWMP)**

### **Project Description:**

The project objective is to comply with the regulatory requirements on the treatment and disposal of Produced Formation Water (PFW) and Storm Water (CSW) with the following main objectives:

- Install additional Waste Water Treatment Facilities and discharge treated waste water offshore via pipeline
- Isolate the canal for rehabilitation works
- Implement offshore treated water discharge

Project SoW includes Engineering, Procurement, Construction, Installation and Commissioning of a water filtration package and other treatment equipment to enhance the treatment of the PFW and CSW along with civil/structures/electrical works, pumping and onshore/offshore pipeline discharge systems.

### **Opportunities for Indigenous Contractors**

- Topographic for onshore section
- G&G Surveys for both onshore and offshore section
- Site Location Preparation
- Supply of line pipes
- Fabrication and Installation of relevant facilities
- Human Capital Development training for NCDMB nominees – local content
- Logistics; transportation of equipment/materials to site
- Manpower supply



**Status:**

- FEED – Completed in November 2020
- G&G Survey for the project location – Completed in October 2020
- G&G for Pipeline RoW – Contract awarded in April 2021
- Project Main EPC (NIPEX tender)
- Tender exercise is about to start

**NAOC JV ACTIVITIES - OTHER ACTIVITIES IN BRASS****Brass Tank 7 Refurbishment Project****Description of the Project Main EPC SoW:**

- Include installation of a double deck floating roof (due to the collapse of the existing single deck roof), carry out the refurbishment of the existing foundation, installation of double bottom, complete with leak detection system, carry out repairs on the damaged tank shells where necessary and the total change out of the existing firefighting system on the tank in order to guarantee the service life of Brass tank 7

**Opportunities for Indigenous Contractors**

- Fabrication and Installation of relevant facilities
- Logistics; transportation of equipment/materials to site
- Manpower supply

**Project EPC is currently at Execution phase: – Construction Status:**

- Fabrication and Installation of relevant facilities
- Logistics; transportation of equipment/materials to site
- Manpower supply
- New Tank Concrete Foundation – Completed
- New Double Bottom with Leak Detection – Completed
- New Double Deck Floating Roof with roof accessories – Ongoing Blasting and painting – Ongoing



## **NAOC JV ACTIVITIES – OTHER ACTIVITIES IN BRASS**

### **Brass Deluge System Upgrade Project**

#### **Description of the Project Main EPC:**

NAOC Brass Terminal Tank Farm Deluge Upgrade aims to address safety issues in the plant and to complete NAOC's goal to achieve complete safe operations and cover all safety aspects in the plant operations and foresees the following main items:

- Change out of the existing firewater ring main system
- Change out of the existing risers and rings around the tanks
- Procurement of Deluge system
- Integration of the E&I system with the existing controls

#### **Opportunities for Indigenous Contractors**

- Supply of line pipes and piping
- Supply of Pre-mixers and Deluge Valve System
- Fabrication and Installation of relevant facilities
- Human Capital Development training for NCDMB nominees – local content
- Logistics; transportation of equipment/materials to site
- Manpower supply

#### **Status**

- FEED – Completed in November 2020
- Project Main EPC NIPEX tender to start



## **NAE – OML 125 P&A/INFILLING CAMPAIGN**

### **Plug and Abandonment of Abo 4ST (HOR) and Drilling & Completion of Abo AN-03 planning:**

\*One firm well for Plug & Abandonment and one development well are identified;

\*Awarded Services Contracts (under extension until end of 2022):

- Mixing & Pumping Services for Cement Slurries & Bridge Plugs
- Provision of Downhole Pumping Services Gravel Pack / Fracpac
- Provision of Surface Well Testing & TCP/Casing Perforation
- Services, Coil Tubing Pumping, Nitrogen, Lifting Frame & Slickline
- Wireline Unit & Logging Services
- Mud Logging Unit
- Provision of Wellbore Clean-Out & Debris Collection Tools
- Provision Of (7") Liner Hanger Equip. Assembly, Personnel & Installation Services
- Fishing Services & Downhole Rental Equipment and Whipstock

\*Installation Vessel assigned to Nigerian Contractor for subsea system repairs in April 2021 (CNS Marine)

#### **Abo 4 ST (HOR) – P&A planning ongoing**

- Re-enter, establish circulation and kill well, proceed with P&A activities
- Recover tubing/tubing hanger and X-Mas Tree (TBC)

#### **Abo AN-03 OP-1 New Well**

- Drilling of previous wells were assigned to Indigenous Company – Rig for AN-03 To Be Confirmed
- Installation of Horizontal Subsea XT on New Abo An-03 Well
- Installation of lower Completion of Abo AN-03 New Well
- To install new flowlines / flying leads to the new Abo An-03 Well – Contractor TBC
- Topside Controls Software update



Below is an indigenous company already assigned with ongoing contracts/planned activities and ongoing tenders may favor more local companies:

- Mud logging – FRED RIKOV

## NAOC'S CONTRIBUTION TO ACCESS TO ENERGY I/2

### Supply of safe, reliable and affordable energy to local communities

#### Power supply to communities connected to NAOC JV main facilities

- 37 communities
- About 39 MW of power capacity
- ≈ 300,000 beneficiaries

#### Power supply to communities through off-grid system

- 48 communities
- About 12.5 MW of power capacity
- ≈ 165,000 beneficiaries

#### Connections to the national grid

- 16 communities
- ≈ 100,000 Beneficiaries

### Industrial initiatives

- Okpai IPP Phase 1 – Completed
- Okpai IPP Phase 2 - Open Cycle Complete (320MW)
- Bayelsa Power Project Phase 1 – Completed
- Other future initiatives to support Eco-Industrial Parks (NOGAPS) in the development stage

### Access to Energy

Total Power  
» 51.5 MW

Total Power  
» 1 GW

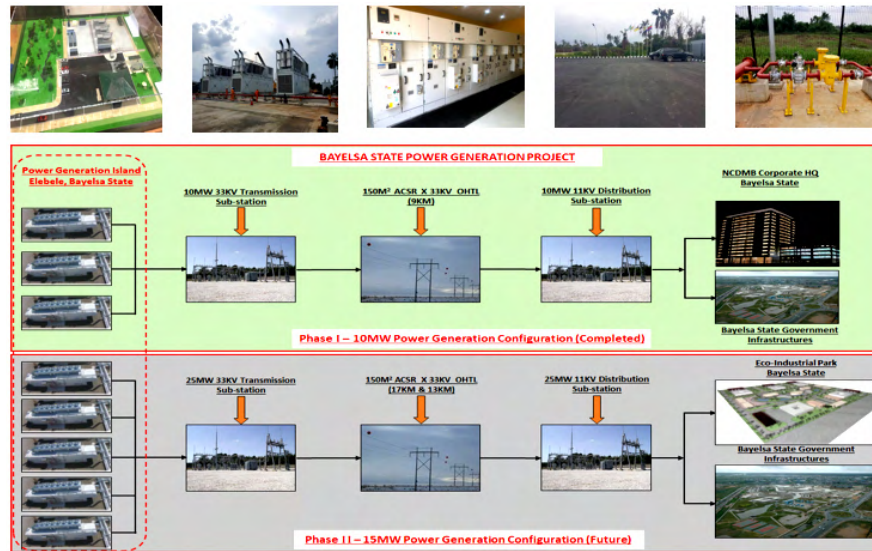


# NAOC'S CONTRIBUTION TO ACCESS TO ENERGY 2/2



Okpai IPP Phase 2 Project





## Bayelsa State Power Generation Project

- 100% realised by Indigenous Companies (except generators manufacturing) for Bayelsa Power Plant:
  - Cables
  - Poles
  - Transformers
  - Engineering, Procurement, Construction/Installation & Commissioning
- Power Plant was commissioned by Nigerian President on 13th August 2020
- Power Plant in position to commence Operation thereafter
- Commenced full (24/7) Power Supply to NCDMB Corporate HQ in April 2021
- Access to power for other end users / people of Bayelsa State - Now Available
- Power Plant, OHTLs & BoP have been handover to NOGAPS/NCDMB - 19th May 2021
- Transmission Lines to Government Infrastructures to be completed in June 2021



### **Richard Kennedy**

MDirector, Deepwater Assets & PSCs  
Chevron Nigeria/Mid-Africa Business Unit

Richard Kennedy (Rick) is the Director, Deepwater Assets and Production Sharing Contracts, Chevron Nigeria/Mid-Africa Business Unit, a role he assumed in January 2017. He is based in Lagos, Nigeria.

In this role, he oversees the company's operated and non-operated Deepwater producing assets in Nigeria, as well as new business opportunities with partners to develop exploration opportunities in the Deepwater.

Rick started his career 35 years ago, at Chevron Canada as a production engineer. Since then, he has held numerous technical and management upstream positions of increasing responsibility in various locations: Caltex Pacific Indonesia, Chevron North America Exploration and Production and Chevron Shipping Co., gaining extensive experience in reservoir management, asset development and production operations.

He received his bachelor's degree in Petroleum Engineering from Texas A&M University. Having worked in the Organizational Capability group in Houston, Texas, United States of America, he is passionate about people development, safety and operational discipline.

Rick is happily married with children and loves sports - soccer, rugby and hockey.



## PROJECTS QUEUE

### Ongoing Projects:

- EscravosExport System Project
- Okan GGCP Debottlenecking
- MejiGGCP Debottlenecking
- MerenWater Injection Platform (MWIP) Revamp
- EscravosProduced Water Disposal
- Tank 2 & 8, 4,6,7 &12 Repair and Upgrade Project
- AgbamiGas Project
- DibiSouth 18" Bulk Flowline Replacement
- Cheetah, Falcon and Accelerated Post Cheetah Program
- Post Cheetah Tranche 1 Program
- Supply Chain Management Activities

### Future Projects:

- MACC
- Drilling Program
  - oOnshore and Offshore
  - oAgbamiInfill Drilling Program



# ESCRAVOS EXPORT SYSTEM PROJECT (EESP)

## Project Scope

Installation of a new crude export system comprising:

- 5 Turbine-driven Shipping Pumps
- 43 km of 30-inch pipeline with Pig Launcher & Subsea Pig Receiver
- 2 Pipeline End Manifolds and 2 Single Point Mooring (SPM) buoys

## Key Accomplishments

- Commissioned 2 of 5 Shipping Pumps; remainder by 2H21
- Installed 43 km of 30-inch onshore & offshore pipeline
- Installed onshore Pig Launcher
- Constructed 2 subsea Pipeline Manifolds and a Subsea Pig Receiver; completed installation of the 2 subsea manifolds
- Installed 12 sets of SPMs mooring piles & chains
- Constructed 2 SPM Buoys with tow-away for offshore installation ongoing
- Zero SIF/TRIR in 236,879 hours in 2021; 4.8MM manhours Inception to Date

## Key Resources / Interfaces

- Consistently strong NAPIMS, DPR and NCDMB alignment
- Cross-functional HES, SCM, Legal and PGPA integrated in common objectives

## Milestones for 2021

- Completed & Commissioned Pump House B: 1Q21
- Completed Pipeline Hydrotest: 1Q21
- Completed SPMs Repair, Testing, & Loadout: 1Q21
- Achieve Ready for Startup / First Oil: 2Q21 [On-Track]
- Complete Pump House A Retrofit: 2H21 [On-Track]



Pump House B with 2 Turbine-Driven Pumps Installed



Offshore Installation of Subsea Manifolds



SPM Buoys in Water



## ESCRAVOS EXPORT SYSTEM PROJECT (EESP) NIGERIAN CONTENT PERFORMANCE/OPPORTUNITIES

Scope of Work	NC Percentage	
	Gramen Petroserve (GP)	Deltatek-Fenog Consortium (DFC)
Project Management	100%	90%
Engineering	100%	90%
Procurement (Pipes, Valves & Fittings, SPM components)	51%	40%
Fabrication (PLEMs, SPM, Pig Launcher & Receiver)	100%	100%
Transportation & Installation (T&I) (marine vessels, etc.)	100%	90%
Hook up and Commissioning	100%	100%



# OKAN GGCP DEBOTTLENECKING PROJECT

## Project Scope

- IOkan GGCP: Replacement of Tri-ethylene Glycol (TEG) regeneration package with a new 320 MMSCFD package, Upgrade of existing lift gas system from 32 MMSCFD to 100 MMSCFD, Upgrade of existing NAG Separator from 128 MMSFD to 200 MMSCFD, Tie-in of production from Okan NWP to the existing Okan GGCP compressors
- Okan PRP / NWP; Installation of new 200 MMSCFD Okan PRP slug catcher, condensate pumps and chemical injection skid, Piping tie-ins from Okan NWP production system to the Okan PRP slug catcher
- Pipeline; Installation of a 16" gas pipeline from Okan PRP to Okan GGCP

## Key Accomplishments

- Completed 16" gas pipeline installation
- Completed stage 1 offshore campaign
- Received all major Equipment (TEG, Sludge Catcher, Pig Launcher and receiver)
- Completed Shop Fabrication
- Completed Okan Nag Well Platform Manifold Modification
- Completed Slug Catcher installation at Okan Pig Receiver Platform

## Key Resources / Interfaces

- EST, OCG, PSL, INTECH and OCTA integrated throughout project
- Consistently strong NAPIMS, DPR, and NCDMB alignment
- HES, SCM, Legal and PGPA integrated in common objectives

## Milestones for 2021

- Complete Shop Fabrication: 1Q21 –Achieved
- Commence stage 2 Offshore Installation Campaign: 1Q21 –Achieved
- Heavy Lift at Okan PRP: Q2 2021 –Achieved
- Heavy Lift at GGCP: 2Q21 –On track
- Shut down at GGCP and NWP: 2Q21 –On track (NWP shutdown completed in April)
- First Gas: Q421 –On track



Completed NWP Manifold Modification



Completed Slug Catcher Installation



## OKAN GGCP DEBOTTLENECKING PROJECT NIGERIAN CONTENT PERFORMANCE

Scope of Work	NC Percentage
Project Management	100%
Engineering	95%
Procurement (piping, valves, E&I items, TEG package, Pressure Vessels etc.)	90%
Fabrication (piping and structural items etc.)	90%
Pipeline Installation	100%
Construction/Hook up	100%

## MEJI GGCP DEBOTTLENECKING PROJECT NIGERIAN CONTENT PERFORMANCE

Scope of Work	NC Percentage
Project Management	100%
Engineering	100%
Procurement (steel plates & sections, pipes, grit & paints, electrical & ICS materials etc.)	95%
Fabrication (piping, structures etc.)	100%
Equipment/Tools	100%
Construction/Installation	98%



# MEJI GGCP DEBOTTLENECKING PROJECT

## Project Scope

The Meji GGCP Debottlenecking Project will increase the gas handling capacity of Meji Field by about 13MMSCFD. The work scope includes installation of new 2 - Phase Horizontal HP Production & Test Separators at Meji Riser (MR) Platform, upgrade of associated interconnecting piping, fitting of ICS and structural modifications on Meji Production & Riser Platforms and Meji GGCP.

## Key Accomplishments

- Completed Shop Fabrication
- Completed all tie-in
- Completed installation of all equipment and spools
- Completed Pre-commissioning
- HUC is 100% complete

## Key Resources / Interfaces

- EST, OCG, GIL Automation, and SCADA integrated throughout project
- Consistently strong NAPIMS, DPR and NCDMB alignment
- HES, OCG and Operations integrated in common objectives

## Milestones for 2021

- Complete Systems Integration and commissioning; 2Q21 –Achieved
- First Gas: 2Q21 –Achieved



COMPLETED INSTALLATION OF HP & TEST SEPARATOR ON MEJI RP



GRATINGS & HANDRAILS INSTALLED AT THE LAST DECK OF THE MODULE



# MEREN SOURCE WATER WELLS/MWIP PROJECT

## Project Scope

- Pipeline: Install 16" pipeline from M102 to MWIP for brackish water supply to the water injection system
- Submarine cable: Install 2 Nos electrical submarine cables for power supply to ESPs at M102 wells
- MWIP Topsides piping: Modify and replace corroded topsides piping in order to prevent further topsides deterioration
- MCC buildings installation: Install 2 No.s MCC building for additional power requirements for ESPs
- Generators: Install 2 Nos Solar Generators for power supply reliability and demand for the water injection system

## Key Accomplishments

- Installed 3 Nos equipment deck extensions
- Completed programming of Process controls and shut down safety systems panels
- Completed fabrication of topside piping spools, Riser, J-tubes, clamps at for Meren Jacket 102 and MWIP locations
- Completed Mattresses, J-tube, and Riser installations

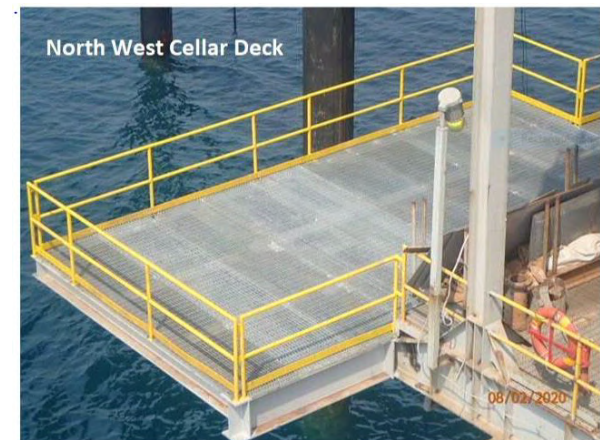


## Key Resources / Interfaces

- EST, OCG, PSL, E&I group integrated throughout project
- Consistent NAPIMS, DPR, and NCDMB alignment
- HES, SCM, Legal, and PGPA integrated on the project

## Milestones for 2021

- Complete concrete mattress installation; 1Q2021 –Achieved
- Complete pipeline installation; 2Q2021 –Deferred to Q4 2021
- Complete cable installation; 2Q2021 –On track
- Complete MCC building unit installation; 3Q2021 –Deferred 2022
- Complete 2 Nos. Generator Installation; 3Q2021 –Deferred to 2022
- Complete E&I upgrade; 4Q2021 –Deferred 2022
- Commission 1 No. Electric Submersible Pump; 4Q2021 –Deferred to 2022



## MEREN WATER INJECTION PLATFORM REVAMP AND SOURCE WATER WELL PROJECT NIGERIAN CONTENT PERFORMANCE

Scope of Work	
Project Management	100%
Engineering	100%
Procurement-(pipes, structural ,grit & paints, electrical & ICS materials etc.)	100%
Fabrication - (piping, structures etc.)	100%
Equipment/Tools	100%
Construction/Installation	100%





# ESCRAVOS PRODUCED WATER DISPOSAL PROJECT

## Project Scope

Design, fabrication and installation of a new produced water disposal solution for Escravos operation, which includes:

- Pumping station at Escravos Terminal
- 2km X 20" piping from Escravos Terminal to pig launcher at EGP
- Offshore Produced Water Disposal platform
- 11km X 20" offshore pipeline from Delta South field to new offshore PWD platform
- 15km X 8" offshore pipeline from Okan GGCP to Delta field
- Modifications to existing SOWIP facility



Installed Envirocell#1 and completed foundations for pipeline pumps

## Key Accomplishments

- Completed Engineering
- Installed new water treatment vessel 1 of 2 (Envirocell#1)
- Installed 2km x 20" piping on intra-plant pipe corridor (IPC) piperack
- Installed concrete foundation for pipeline pumps and transformers
- Completed fabrication of PWD Platform, Connecting Bridge, Pig receiver and Piles
- Completed Procurement of 20" pipes
- Overall Project Scope Completion ~65%



Envirocell#2 at Escravos Storage Area



Jacket

## Key Resources / Interfaces

- CTC
- Consistent strong NAPIMS, DPR and NCDMB alignment
- HSE, SCM, Legal, and PGPA integrated in common objectives

## Milestones for 2021

- Installation of Onshore equipment including Envirocell#2, Pumps, Surge vessel, Chemical injection skid, hook-up and commissioning: -4Q2021
- Line pipes coating and installation engineering: -4Q2021
- Dredging of access to quayside to enable loadout of platform facilities: -4Q2021
- Platform facilities remediation and preparation for loadout: -4Q2021
- Loadout, transport and install 20" pipeline, platform and bridge: -1Q2022



Bridge



Offshore Platform



## ESCRAVOS PRODUCED WATER DISPOSAL PROJECT NIGERIAN CONTENT PERFORMANCE

Scope of Work	NC Percentage
Engineering	100%
Procurement	100%
Materials	80%
Pipes	100%
Fabrication	100%
Equipment/Tools/Vessels	85%
Construction/Installation	100%



# TANKS REPAIR AND UPGRADE PROGRAM

## Key Accomplishments

- Successfully commissioned Tank 1 in storage mode in 2Q2020
- Completed installation of Double Deck Floating roof and floated roof in 2Q 2020
- Robust external stakeholder engagement and received DPR approval of DED package for Tanks 1, 2, 4, 6, 7, 8, 10 & 12
- Completed bid opening & issued Contract Award Recommendation for Tanks 4, 6, 7 & 12 Tanks 3 & 5 ATC

## Key Resources / Interfaces

- NAPIMS, DPR, NCDMB engagement and alignment
- Terminal Construction, Operations, HES, SCM, Legal, PGPA

## Milestones for 2021

Tank 2 TRU:

- Mechanical completion of Tank 2 & installation of Foam system (Q22021)
- Commissioning and Handover –Q32021

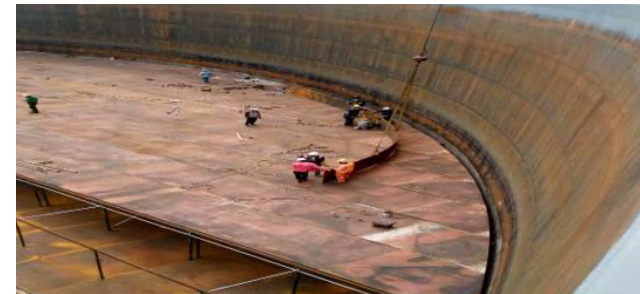
Tank 8 TRU

- Mechanical completion –Q42021



Coating of stained sections on Tank 1 shell

Connection of Tank 1 30-inch inlet



Tank 8: Welding of roof deck plates & positioning of outer rim plates



Blasting and painting of Tank 2 external shell

## TANKS 2 & 8 REPAIR AND UPGRADE PROJECT NIGERIAN CONTENT PERFORMANCE

Scope of Work	NC Percentage
Project Management	100%
Engineering	98%
Procurement (steel plates & sections, pipes, grit & paints, civil materials etc.)	80%
Fabrication (piping, structures, foam system, drain system etc.)	100%
Equipment/Tools	100%
Construction/Installation	98%



# AGBAMI GAS PROJECT

## Project Scope

- Fabrication & installation of a 150MM scfd Gas Turbine Compression (GTC) Module, Essential Generator and Gas Metering Unit
- Fabrication & installation of subsea equipment to enable gas export from existing subsea gas injection infrastructure within Agbami Field

## Key Accomplishments

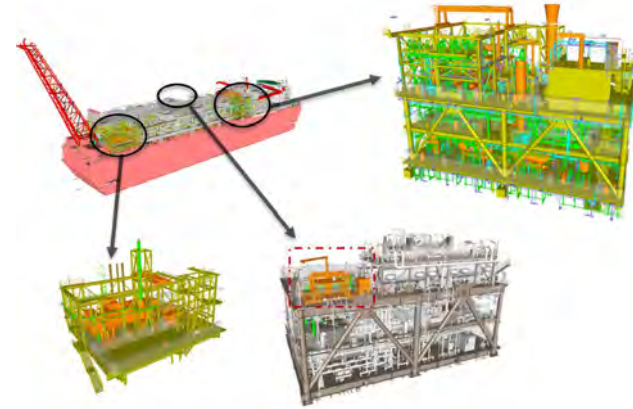
- Delivered Zero SIF (serious injuries and fatalities); 243,378 manhours to-date
- Received Conceptual Design Approval from DPR
- Completed HAZOP Workshop
- Completed 60% Model Reviews
- Completed Constructability Workshops

## Key Resources / Interfaces

- CTC –FD & S, Capital Projects, Peer Advisory Board
- NAPIMS, DPR and NCDMB alignment
- SCM, HES, Legal team integrated support
- PSC Co-Venture Partners – Equinox & Prime
- Chevron Shipping and ABS

## Milestones for 2021

- P&ID's Issue for Design (GTC Scope): Completed 1Q21
- Complete Gas Export Tie-ins IFC Deliverables: 2Q21
- Complete 90% Model Review -GTC Scope: 2Q21
- Develop Class 3 Estimate and Level 3 schedule: 3Q21
- EPCI Bid Package Ready for Issue to Bidders: 4Q21 (pending alignment on Contracting Strategy)



## AGBAMI GAS PROJECT

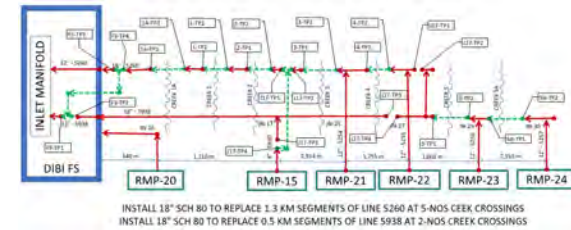
Scope of Work	NC Percentage <sup>(*)</sup>
Project Management	80%
Engineering	90%
Procurement (Equipment packages, steel plates & sections, pipes, grit & paints, etc.)	75%
Fabrication	100%
Equipment/Tools	100%
Construction	70%
Installation	50%



# DIBI SOUTH 18" BULK PIPELINE AND INTERCONNECTING FLOWLINES REPLACEMENT

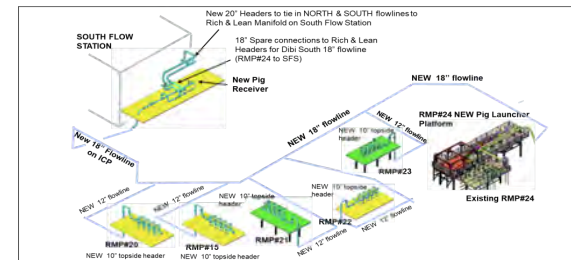
## Short-term Strategy

- Sectional replacement of 7 creek crossings using schedule 80 pipe
- Installation of jumper between 18"-5938 and 18"-5260 within ROW near Creek Crossing at Junction 29
- Installation of jumper between RMP-15 to 18"-5260 at Junction 17



## Long-term Strategy

- Replace 18" Flowline (11km) between RMP#24 & South Flow Station (SFS)
- Install new topside headers & replace 12" flowlines from 5no RMPs (#15, 20, 21, 22, 23) to new 18" line
- The new line will have pigging facilities



# DIBI SOUTH 18" BULK PIPELINE AND INTERCONNECTING FLOWLINES REPLACEMENT - NIGERIAN CONTENT OPPORTUNITY

Scope of Work	NC Percentage
Engineering (in-house)	100%
Procurement - Line pipe, piping, fittings, valves, coating, structural materials etc.	100%
Fabrication – topside piping spools, pipe supports, pigging platforms etc	100%
Installation	100%



# POST CHEETAH TRANCHEI PROJECT FACILITIES ENGINEERING SCOPE

## Project Scope

- Preparation of facilities to support drilling of infill development wells across JVOffshore and Shallow water fields to mitigate decline and sustain production in the CNL-JV
- Engineering, procurement, fabrication and installation to support Facilities Topsides jacket modifications

## Key Accomplishments

- Secured NNPC board approval of Contracting strategy
- Work Authorisation for Survey contract awarded to NNPC board approved contractors

## Key Resources / Interfaces

- EST, OCG, PSL, INTECH and OCTA integrated throughout project
- Consistently strong NAPIMS, DPR and NCDMB alignment
- HES, SCM, Legal and PGPA integrated in common objectives

## Milestones for 2021

- Complete survey of seven jackets and pipeline routes
- Placement of purchase order for flexible pipeline
- Commence engineering for the top side modifications



Typical Offshore Jacket layout





## **NNPC/CNL-JV DEVELOPMENT DRILLING PROGRAMS (CHEETAH, FALCON & ACCELERATED POST CHEETAH)**

<b>Scope of Work</b>	<b>NC Percentage<sup>(*)</sup></b>
Project Management	100%
Engineering	90%
Procurement	75%
Fabrication	100%
Equipment/Tools	100%
Construction	70%
Installation	50%

# MAKARABA GAS DEVELOPMENT PROJECT

## Project Scope

- Eliminate stoppage of routine flaring at the Makaraba Field and monetise stranded gas resources in the Makaraba GO3 Reservoirs. Execution scope includes the drilling of the Makaraba GO3 NAG well (scope deferred to NGC Facility Readiness) access dredging, 8"X0.8KM flowline installation, New Deck Fabrication and Installation, New NAG High Pressure Separator Fabrication and Installation, Flare System Upgrade as well as installation of custody transfer metering.

## Key Accomplishments

- Completed dredging of the Makaraba Slipway as well as the GO3 Well locations
- Completed fabrication and installation of double deck NAG Well Head Platform
- Completed Fabrication and installation of Triple deck platform for NAG HP Separator and appurtenances
- Completed coating of Makaraba Line Pipes

## Key Resources / Interfaces

- NAPIMS, DPR, NCDMB engagement and alignment
- Onshore Construction, Operations, HES, SCM, Legal, PGPA, Commercial, NCD Group

## Milestones for 2021

- Mobilise Local PAUT Contractor to Site - Q12021
- Issue Purchase Orders for all MTOs – Q22021
- Complete Factory Acceptance Test for Control Systems (FGS, PCS, SSS)
- Complete Piping Fabrication - Q42021



**Magnetic Particle Inspection in progress**



**Coated Line Pipes**



## MAKARABAGAS DEVELOPMENT PROJECT NIGERIAN CONTENT PERFORMANCE

Scope of Work	NC Percentage
Project Management	100%
Engineering	90%
Procurement (piping, valves, E&I items, Pressure Vessels etc.)	100%
Fabrication (piping and structural items etc.)	100%
Installation	100%
Construction/Hook up	100%



# OVERVIEW OF SCM ACTIVITIES

## Operational SCM

Operational Procurement, Materials/Warehouse Management, Facilities Management, International Sea/Air Cargo Shipments, Customs, Marine, Aviation and Ground Logistics

## Strategic SCM

Strategic Procurement & Contracts services such as Contracts & Category Management

## Business Management

Business planning, Budgeting & eProcurement Technology System



Community Provided Crane



## POTENTIAL FUTURE OPPORTUNITIES

- Marginal Abatement Cost Curve (MACC)
- Drilling Program (Onshore and Offshore)
- Agbami Infill Drilling Program
- Deepwater Operations Support
- Helicopter/Aviation Services
- Dredging Services
- Pipeline Coating
- Rope Access
- Supply of Chemicals and Petroleum Products
- Engineering Design Services
- Diving Services
- Vessels Supply
- 3rd Party Procurement Services
- Warehousing Services
- Hospitality Services (Room/Boarding)

## POTENTIAL FUTURE OPPORTUNITIES

### Project Details

- Equity: NNPC: 60% /Chevron: 40% (Operator)
- Project Description: The JV-future drilling program will monetise resources for the Nigerian Government and stakeholder partners by continuing the rig drilling program in the NNPC/CNL-JV – Offshore Area
- Scope: Infill Development wells between 2022–2026
- Facilities Scope
  - Delta South Field Gas Management
    - o Pipelays
      - Mejo & Delta Field Intra field gas lift
      - Malu & Delta Field Water Injection
    - o Site preps and Hook-Ups
    - o Drilling will be executed by Jack-up rigs

### Project Status

- Well defined project scope and maturing execution plan
- Nigerian contractors participating in the subsurface maturation plan
- Completed technical engagement & alignment with NAPIMS, and Sign-off on rate, EUR and cost
- Achieved the endorsement of the NNPC Board for 3rd Party Financing
- Commenced prework activities and continue surveillance in the Offshore area to provide for an evergreen knowledge of subsurface reservoirs
- Stakeholder engagement, alignment and support for the Proposed Project Scope & Rig Contracting Plans ongoing
- Tenders initiated for jack-up rigs



# AGBAMI INFILL DRILLING PROGRAM (AIDP)

## Project Scope

- Parties: NNPC, Famfa, Chevron (Operator), Equinox & Prime 127 (formerly Petrobras)
- Project: Agbami Infill drilling program that will monetise resources for the Nigerian Government & stakeholder partners
- Stage 1 – 8 producers (2016 –2019)
- Stage 2 – 3 producers (2022 –2023)
  - oFacilities Scope: Subsea production manifold, flowline, trees, umbilicals, flying leads and hook-ups
  - oStage 1 drilling scope Completed
  - oStage 2 scope is expected to commence in 2022/2023



	2016	2017	2018	2019	2020	2021	2022	2023	2024
Stage 1									
Stage 2									

Stage 1

Stage 2



**Agbami FPSO**



## Roger Thompson Brown

Chief Executive Officer at Seplat Plc

Mr. Brown was appointed Chief Executive Officer of Seplat Plc in August 2020. He joined the company as Chief Financial Officer, Executive Director in July 2013. During his time at Seplat, he was instrumental in completing the dual listing of the company on the main markets of the Nigerian and London Stock Exchanges, which was a first for a Nigerian corporate. He has also been instrumental in broadening the capital base of the company and increasing Seplat's footprint in Nigeria by acquiring oil & gas assets. With a background in finance, he is a qualified Chartered Accountant with the Institute of Chartered Accountants of Scotland. Mr. Brown has over 25 years' experience, primarily focused on emerging markets with extensive experience in structuring energy and infrastructure transactions on the African continent.

Prior to joining the Seplat, he held the position of Managing Director of Oil and Gas EMEA for Standard Bank Group and prior to Standard Bank Group, he was Senior Manager in the Corporate Finance department of Pricewaterhouse Coopers.

Mr. Brown has extensive financial, accounting, M&A, debt and equity capital markets experience in the emerging markets space, and in particular the African oil & gas sector. He has advised on and provided capital to some of the largest and highest profile transactions that have occurred across the African Continent, including many of the asset divestments in the onshore Niger Delta undertaken by Shell, Total and ENI.



### **PROJECT: OBEN LPG**

#### **Project Objective and Benefits**

- Oben Gas Plant is currently flaring mid-stream gas as by-product of gas processing to WAGP quality specification with the major contributor being the condensate stabiliser off-gas, which is rich in C3/C4 components.
- In keeping with government regulations and Seplat's commitment to achieve flare-out in all its facilities, the existing Oben Gas Plant will be retrofitted with LPG processing modules in order to harness and commercialise LPG streams, and recover lean gas and condensates from the Oben gas plant flare.

*The Oben LPG project will eliminate the routine flaring of LPG grade gas at the Oben gas plant to:*

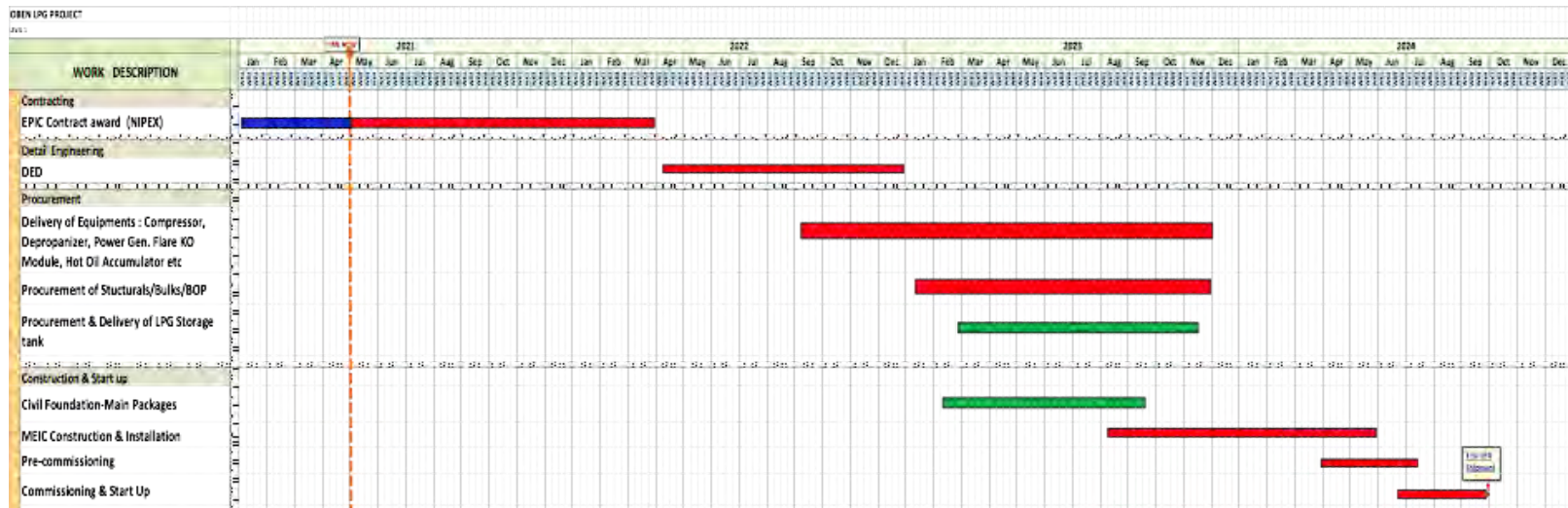
- Ensure compliance with government regulations
- Eliminate environmental hazards associated with gas flaring
- Generate additional revenue from the monetisation of 7.4 MMScfd of gas, which otherwise would have been flared and aid recovery of circa 1,000 bpd of condensate and 140 MT/d of LPG



# OBEN LPG - CURRENT STATUS

- Front End Engineering Design (FEED) – completed
- Secured DPR FEED Approval/License to Establish
- Revised EPIC contracting strategy approved by Seplat Tender Board and NPDC MEXCOM. Proposal is now awaiting NNPC Tender board (NTB)
- After securing JV-Partner (NPDC) concurrence, strategy will then be sent to NCDMB for concurrence

# OBEN LPG - TIMELINE



## **OBEN LPG - NIGERIAN CONTENT OPPORTUNITY**

The following jobs will be awarded to Nigeria Contractor(s):

- Engineering design
- Fabrication and installation (MEI) works
- Logistics
- Nigerian banks/insurance
- Site Preparation, Survey and Civil works
- Pipeline/flowline Installation
- Installation of Packages and tank erection

Training opportunities on the projects:

Human capacity development training in line with NCDMB objectives in the following areas:

- Training of Nigerians by the OEM in operations/running of the LPG plant
- Training of Nigerians by the OEM in maintenance of the equipment in LPG plant

## **PROJECTS: Oben Gas Plant Inline Separator Installation**

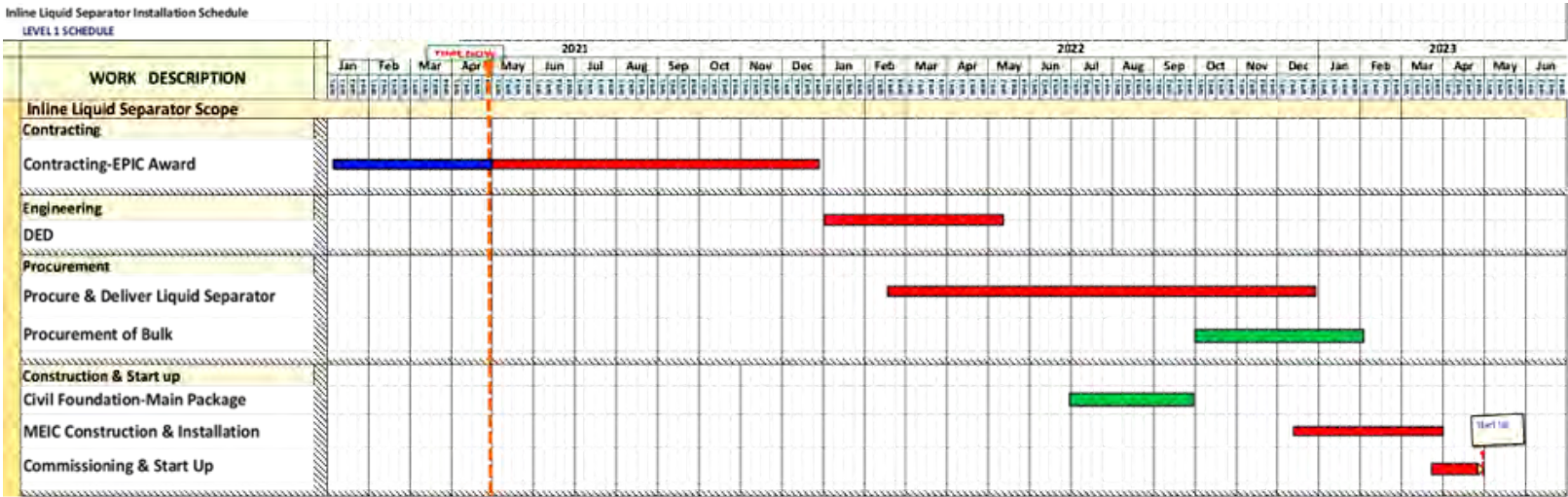
### **Project Objective and Benefits:**

- Prevent liquids overload of glycol regeneration unit due to higher gas stream temperatures
- Expand operating envelope of the Gas plant and hence restore nameplate gas processing capacity
- Prevent possibility of up to 10% revenue loss to company from sale of off-spec gas during periods of high sales line pressure when power supply from hydro plants are prioritised

# OBEN GAS PLANT INLINE SEPARATOR INSTALLATION -CURRENT STATUS

- Development of project contracting strategy ongoing

# OBEN GAS PLANT INLINE SEPARATOR INSTALLATION - TIMELINE



## **OBEN GAS PLANT INLINE SEPARATOR INSTALLATION -NIGERIAN CONTENT OPPORTUNITY**

The following jobs will be awarded to Nigeria Contractor(s)

- Fabrication and installation (MEI) works
- Logistics
- Nigerian banks/insurance
- Site Preparation, Survey and Civil works
- Pipeline/flowline Installation
- Installation of Packages

Training opportunities on the projects:

Human capacity development training in line with NCDMB objectives in the following areas:

- Training of Nigerians by the OEM in operations/running of the Inline Separator.
- Training of Nigerians by the OEM in maintenance of Inline Separator.

### **PROJECTS: Oben Gas Plant Old Module 1 & 2 life Extension**

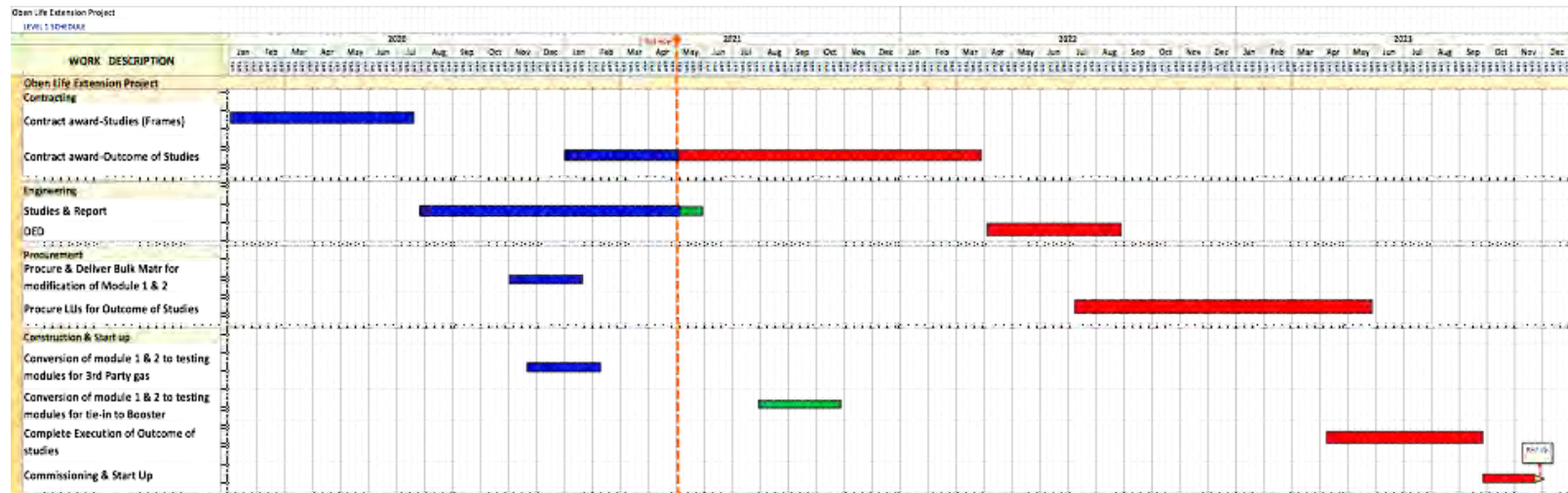
#### **Project Objective and Benefits:**

- Carry out study on Oben Gas Plant modules 1 & 2 implement outcome to achieve the following:
- Reinstate the plant to its original design/operating performance and name-plate capacity and to process/deliver WAGP quality gas product
- Piping modification on the modules to provide flexibility and capacity for fiscal quality well testing
- Extension of life span of the plant/equipment by 15 years

## OBEN GAS PLANT OLD MODULE 1 & 2 LIFE EXTENSION - CURRENT STATUS

- Piping modification for conversion of modules for well testing is completed
- Engineering Studies ongoing
- Tendering process for EPIC of the Outcome of Engineering Studies: Contract strategy approved by Seplat, sent to Partner (NPDC) for concurrence

## OBEN GAS PLANT OLD MODULE 1 & 2 LIFE EXTENSION - TIMELINE



## **OBEN GAS PLANT OLD MODULE 1 & 2 LIFE EXTENSION - NIGERIAN CONTENT OPPORTUNITY**

The following jobs will be awarded to Nigeria Contractor(s)

- Fabrication and installation (MEI) works
- Logistics
- Nigerian banks/insurance
- Site Preparation, Survey and Civil works
- Pipeline/flowline Installation
- Installation of Packages

Training opportunities on the projects:

Human capacity development training in line with NCDMB objectives in the following areas:

- Training of Nigerians by the OEM in operations/running of the Upgraded modules
- Training of Nigerians by the OEM in maintenance of Upgraded modules

### **PROJECTS: New Amukpe Buffer Tanks**

#### **Project Objective and Benefits:**

Construction of 2 X 50,000bbls Buffer Storage Tanks in Amukpe location to add storage capacity at Seplat's Amukpe Field. As part of Seplat's production deferment curtailment strategy, the new buffer storage tanks shall:

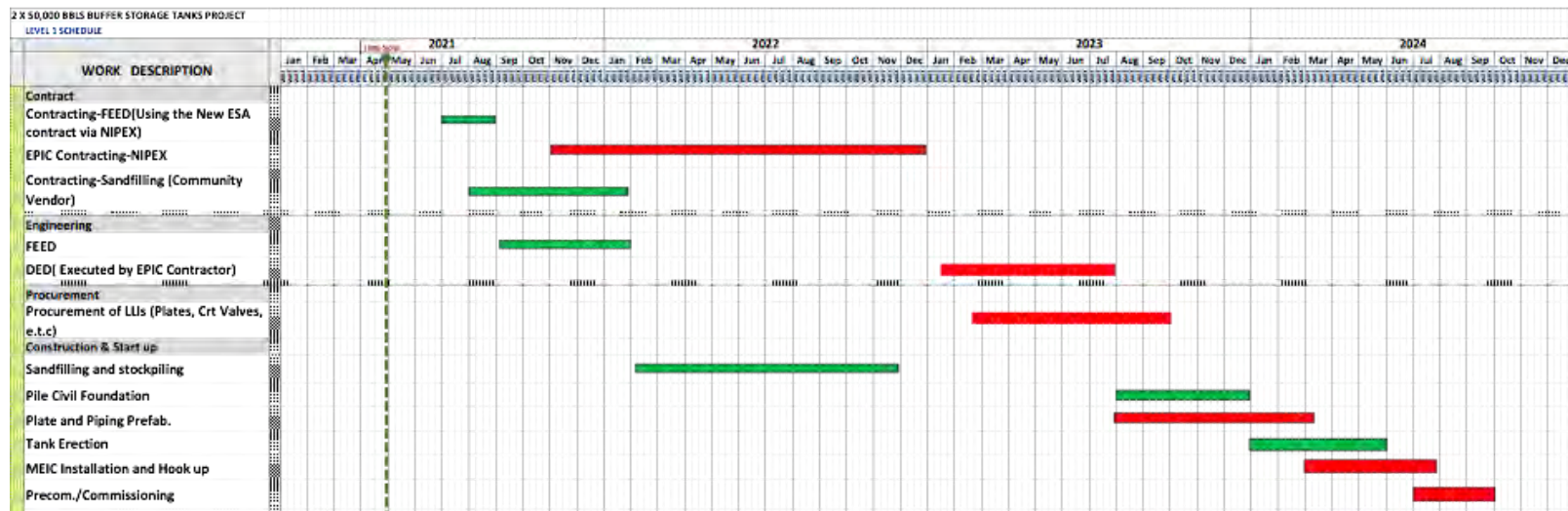
- Avail increase of crude oil storage capacity in the event of a planned, unplanned or prolonged outage of the TFP (Trans Forcados pipeline)
- Enhance gravity separation to meet the required commercial crude oil specification

- With over 40,000bbl/d of produced water from Seplat crude oil production and the use of the existing Buffer Tanks for produced water settling, these new tanks would enhanced produced water processing
- Ensure consistent availability and supply of dry crude oil to AEP (Amukpe – Escravos Pipeline)
- Enhance uninterrupted operation of the Oben NAG plant and the proposed Sapele NAG plant whenever there is prolonged outage of the crude oil evacuation delivery/trunk line. This will reduce the penalty paid for failure to deliver gas to customers under the various GSPA already endorsed by Seplat

## AMUKPE BUFFER TANK - CURRENT STATUS

- Development of Project Execution Strategy ongoing

## AMUKPE BUFFER TANK - TIMELINE



## **AMUKPE BUFFER TANK - NIGERIAN CONTENT OPPORTUNITY**

The following jobs will be awarded to Nigeria Contractor(s)

- Tank Erection including Fabrication and installation (MEI) works
- Engineering design
- Fabrication and installation (MEI) works
- Logistics
- Nigerian banks/insurance
- Site Preparation, Survey, Sandfilling and Civil works

Training opportunities on the projects:

Human capacity development training in line with NCDMB objectives in the following areas:

- Training of Nigerians on HSE
- Training on welding and welding processes

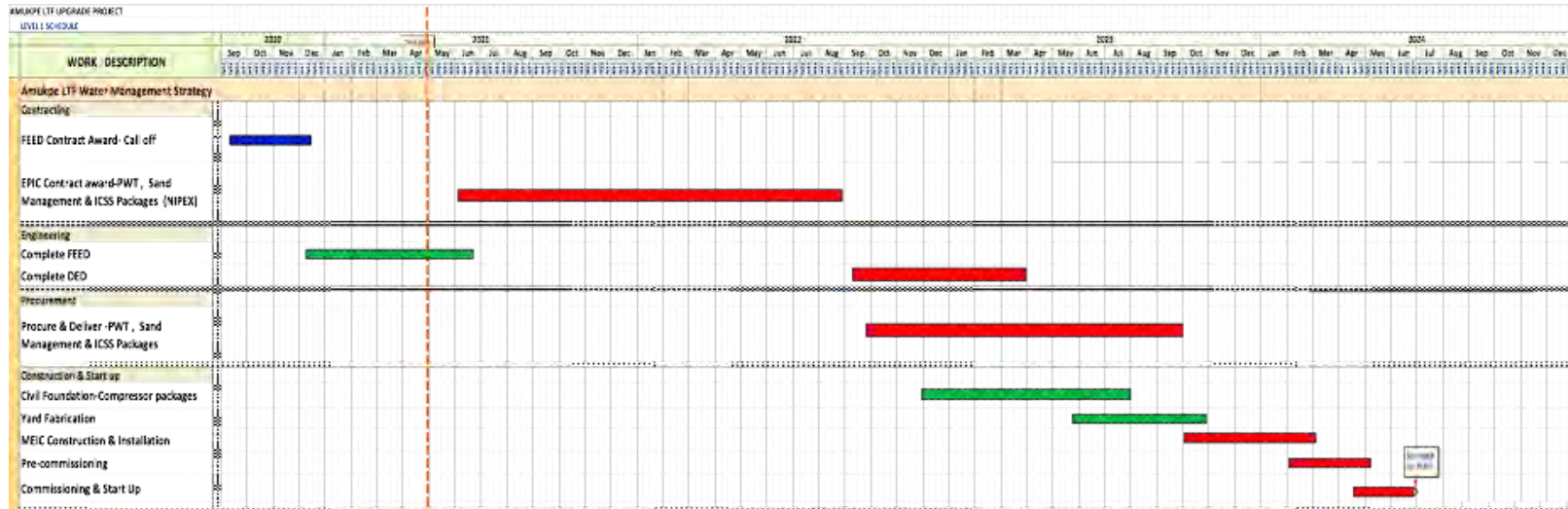
## **PROJECTS: Sapele Further Oil Development**

### **Project Objective and Benefits:**

- To design, procure, construct and install surface facilities required for Phase 1 delivery of Sapele Further Oil Development Project
- The Sapele Further Oil Development Project Phase 1 - is targeting 47.2MMstb reserves contained in the shallow reservoirs with more viscous oil by drilling and completing 12 oil producers and 3 water injection/disposal wells with associated surface facilities
- The execution of the Sapele FDP is expected to increase production from the Sapele shallow reservoirs



# AMUKPE LTF UPGRADE PROJECT - TIMELINE



## AMUKPE LTF UPGRADE PROJECT - NIGERIAN CONTENT OPPORTUNITY

The following jobs will be awarded to Nigeria Contractor(s):

- Engineering design
- Fabrication and installation (MEI) works
- Logistics
- Nigerian banks/insurance
- Site Preparation, Survey and Civil works
- Installation of Packages

## PROJECTS

- Jisike Flowstation Debottlenecking & Gaslift System Upgrade

## CURRENT STATUS

- Engineering Design (FEED/DED) completed
- Procurement of AG Compressor Package completed
- Procurement of Balance of Plant (BoP) equipment ongoing
- Fabrication and Installation Works to commence in Q3 2021

## TIMELINE

- Delivery of Process Equipment by Q3/Q4 2021
- Mechanical Completion by Dec 2021



## NIGERIAN CONTENT OPPORTUNITY

- Site Preparation Works (bush clearing, earthworks and fencing)
- Civil/Structural Construction Works (equipment foundations, shelters, drainage, road, etc.)
- Fabrication of piping spools
- ME&I Installation Works
- Provision of utilities (service water system, etc.)

## PROJECT IMAGES



SITE PREPARATION FOR COMPRESSOR STATION



FAT OF AG COMPRESSOR PACKAGE

## PROJECTS

- Provision of Light duty (750HP/1000HP) Rig and 10K 2000HP Heavy duty Rig
- Ancillary Services for Western Asset

## CURRENT STATUS FOR WESTERN ASSET TENDERS

### 33# SERVICES PUBLISHED

- 33 of 36 services published to pre-qualified bidders on NipeX portal. TECs for the 33 services being reviewed for sign-off by partner – NPDC.
- Bid opening and technical evaluation will commence immediately after the TECs are signed off / approved on NipeX portal



### 1# SERVICE

- Finalising TEC for Consultancy services

### 3# RIG SERVICES

- Following up with NCDMB for release of certifications for Heavy Duty and Light Duty Rig Services
- ITT package for Light Duty Rig, Heavy Duty Rig and Rig Inspections services to be published on NipeX portal to pre-qualified bidders on receipt of certifications

## NIGERIAN CONTENT OPPORTUNITY

- Provision of Land / Swamp rigs by Nigerian companies
- Procurement opportunities for Nigerian companies for Pup Joints & Crossovers, Casing Accessories
- Development of threading in-country facilities
- Machining and Fabrication of piping spools

## Demola Adeyemi Bero

Managing Director/CEO First E & P

Ademola Adeyemi-Bero is an accomplished and respected Petroleum Industry professional with a solid experience base across various roles and geography over the last 35 years. He is the founder and CEO/Managing Director of FIRST Exploration & Petroleum Development Company Limited (FIRST E&P), a Nigerian Independent focused on the Nigeria oil & gas industry and the Operator of the NNPC-FIRST E&P OML 83 and OML 85 Joint Venture.

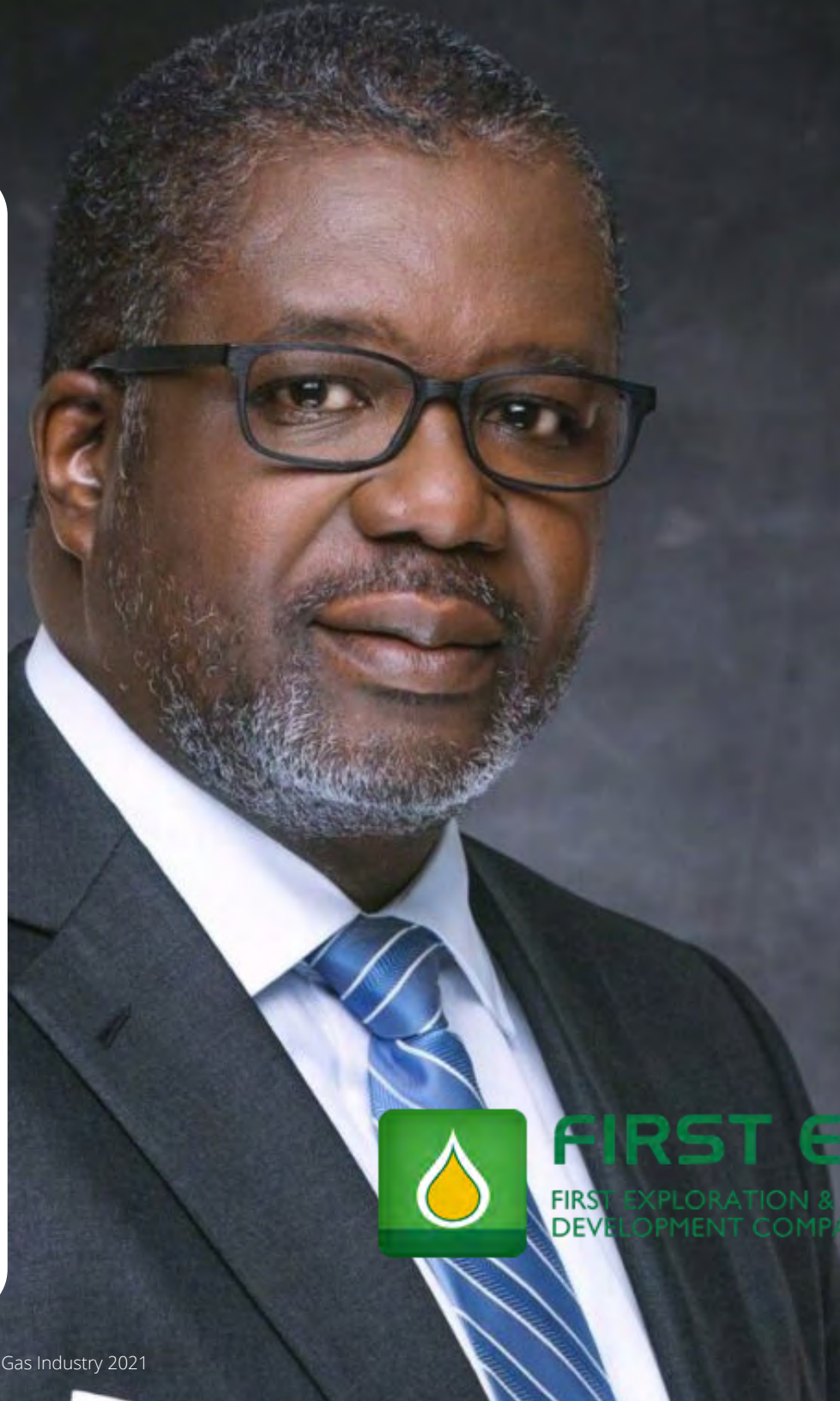
Prior to embarking on the entrepreneurial journey, 'Demola spent 5 years with British Gas Exploration and Production Company Nigeria as President/Managing Director with responsibility for the Integrated Gas, Exploration & Production businesses of the British Gas Group in Nigeria. 'Demola also spent 20 years with Shell, where he occupied several significant roles in several countries including Business Director/Board Executive of Shell Petroleum Development Company Nigeria Limited (SPDC) and Vice President - New Business Development in Africa within Shell International E&P.

'Demola is the current Chairman of the Independent Petroleum Producers Group (IPPG), a group of about 25 Nigerian Indigenous Upstream E&P companies who are increasingly relevant players in the upstream oil & gas development and production dynamics of the Nigerian Petroleum sector.

'Demola Adeyemi-Bero is a seasoned and respected Oil & Gas Executive with experience spanning the international and national business environment and can be regarded as one of the leading Oil & Gas professionals in Nigeria. He brings integrity, a sound business head and a wealth of invaluable leadership experience and capability to the Nigerian Petroleum Industry.

He completed early education at Staff School-University of Lagos, Igbobi College Yaba and Wesley College Dublin. This was followed with undergraduate education in Offshore Civil Engineering at the Heriot-Watt University, Edinburgh, Scotland and a post-graduate in Petroleum Engineering from the Imperial College of Science & Technology, University of London, England in 1986.

'Demola is married to Oluyemisi, a medical doctor, and they are blessed with two lovely children, 'Gbeminiyi and 'Derinsola. He has a passion for golf, lawn tennis and listening to jazz music.



**FIRST E & P**  
FIRST EXPLORATION & PETROLEUM  
DEVELOPMENT COMPANY LIMITED

# FIRST EXPLORATION AND PETROLEUM DEVELOPMENT COMPANY LTD

## PROFILE

FIRST Exploration and Petroleum Development Company (FIRST E&P) is a fully indigenous company established in 2011 that commenced operations in July 2012. In its relatively short period of existence, it has successfully acquired a robust portfolio of upstream and infrastructure assets:

- 40% interest in OML83 and OML85 – *Operators of the shallow water assets proceeding into field development; First Oil in 2019*
- 4.5% interest in OML34 – *A large oil mining lease currently producing oil, condensate and gas to key Domestic Gas Markets in Nigeria and the West African market (feeding Power, Gas-Based Industrial market); (Non-Operated Venture)*
- 6.75% interest in OML71 and OML72 – *Shallow water assets proceeding into existing field production re-entry and First Oil by end 2016, followed by full field development (Non-Operated Venture)*

Is in Joint Venture (“JV”) partnerships with the Nigerian National Petroleum Corporation (“NNPC”) on all its oil & gas assets.



## LOCATION & ASSET DESCRIPTION

- OML 83 lies in the central portions of the Shallow Offshore of the Niger Delta on the edge of the present-day continental slope. The areal extent is 125 sq. km. Anyala field is the sole asset in the block.
- OML 83 was discovered in 1972 by ANY-1 Exploration well.
- OML 85 is located in the central offshore area of the Niger Delta and lies north of OML 83. Areal extent is 521 sq. km. The Madu field is the sole discovered, appraised and undeveloped asset in the block.
- Madu field (OML 85) was discovered in 1993 by MAD-1 Exploration well.



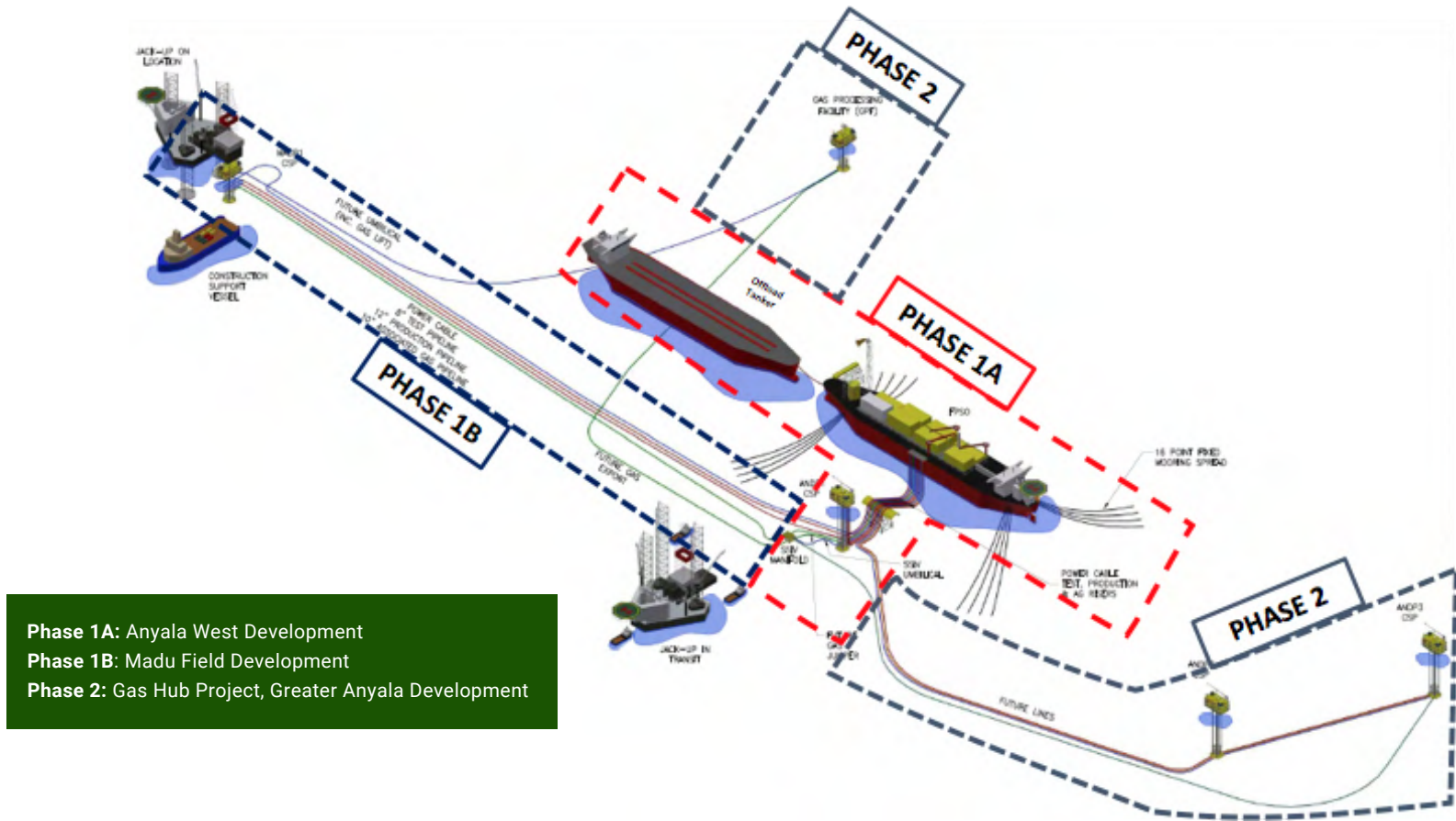
FIRST E&P operates an OML 83/85 license on behalf of the NNPC-FIRST E&P Joint Venture.



# OML 83 & 85 FIELD DEVELOPMENT CONCEPT

## Phase-1A (Completed, Commissioned & On-Stream)

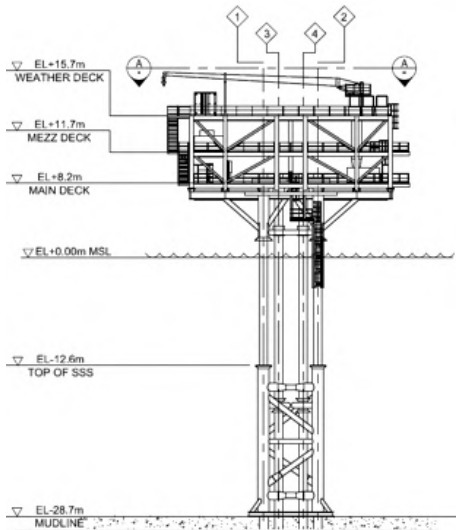
- HSE: "GOAL ZERO" sustained
- FPSO Abigail Joseph in-place and in operations
- Anyala West (ANDP-1) commissioned and in operations
- SURF & Mid-Water Arch installed and commissioned
- Achieved First Oil in Anyala West 21st Oct. 2020



**Phase 1A:** Anyala West Development  
**Phase 1B:** Madu Field Development  
**Phase 2:** Gas Hub Project, Greater Anyala Development

# ENGINEERING & PROJECTS

## MADU CONDUCTOR SUPPORTED PLATFORM: BASIC FEATURES



- OML 83 lies in the central portions of the Shallow Offshore of the Niger Delta on the edge of the present-day continental slope. The areal extent is 125 sq. km. Anyala field is the sole asset in the block.
- OML 83 was discovered in 1972 by ANY-1 Exploration well.
- OML 85 is located in the central offshore area of the Niger Delta and lies north of OML 83. Areal extent is 521 sq. km. Madu field is the sole discovered, appraised and undeveloped asset in the block.
- Madu field (OML 85) was discovered in 1993 by MAD-1 Exploration well.

## MADU CSP DELIVERY

- Overall fabrication progress – 62.5%
- Subsea Structure (SSS) + Mudmat fabrication progress – 84.4%
- Planning activities for Integration of SSS and Mudmat in progress
- Drilling Deck Module (DDM) fabrication progress – 100% and ready for Loadout
- Production Deck Module (DDM) fabrication progress – 56.8%
- Fabrication of PDM topside piping and equipment integration in progress
- Loadout of structures, transportation and installation activities planned to commence in Q4 2021





# ENGINEERING & PROJECTS

## MADU SURF DELIVERY



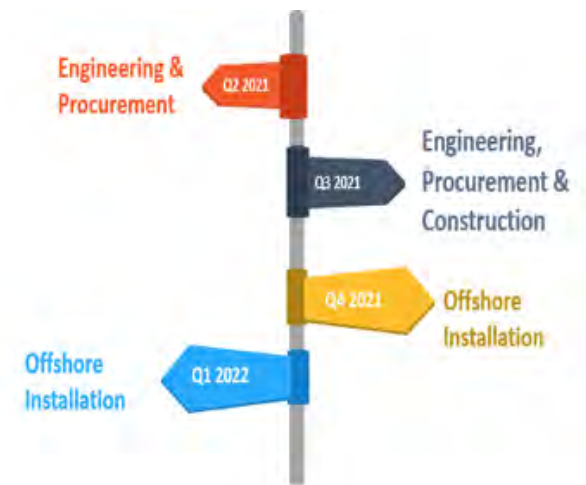
### Project Scope

The engineering, procurement, construction, installation and commissioning (EPCIC) of the following:

- 3 x 22km pipelines from Anyala to Madu
- Subsea isolation manifold
- Flexible flowlines
- Power and controls cables
- Multiphase pipelines to the FPSO
- Gas injection pipeline from Anyala field

## MADU SURF DELIVERY

- Westfield Subsea Limited is the contractor for delivery of the SURF EPCIC project
- Project kick-off meeting was successfully held
- Mobilisation of project team is ongoing
- Engineering is scheduled to commence upon completion of key personnel mobilisation
- Preparations for the pre-engineering survey of the pipelay route are ongoing



# DEVELOPMENT & WELL ENGINEERING

## PROJECT PHASE 1A & 1A+ COMPLETION



### MAJOR HIGHLIGHT:

- Drilling Rig package was awarded to Uniterm Nigeria Limited
- Project Phase 1A & 1A+ Well Delivery, consisting of 7 development wells on 8 strings completed with zero LTI
- Completed Wells Hook-up campaign
- Secured all relevant unloading permits for timely well start-up
- Unloaded and ramped up all new wells with no HSE incident

### **2021 Look Ahead**

- Progressed optimisation of Madu (OML 85) field development to rill and develop
- 5 development oil wells
- 1 development gas well

# PRODUCTION OPERATIONS

## ABIGAIL JOSEPH FPSO

### Specifications:

FPSO Name: Abigail Joseph  
Contractor: Yinson  
Storage capacity: 1 MMbbls  
Oil Production: 60kbod  
Gas Production: 39MMscfd  
New/Converted: Built as Tanker in 1992  
Converted to FPSO: 2008



## NIGERIAN CONTENT OPPORTUNITY

S/N	CONTRACT TITLE	TARGET PERIOD	S/N	CONTRACT TITLE	TARGET PERIOD
1.	Madu CSP Transport and Install	Q4, 2021	6.	Vehicle Purchase	Q3, 2021
2.	Drilling Support Services	Q4, 2021	7.	Asset Maintenance Contract	Q4, 2021
3.	IT Equipment	Q4, 2021	8.	Helicopter Service	Q3, 2021
4.	Platform Spares and Supply	Q3, 2021	9.	Fuel Supply	Q3, 2021
5.	Environmental Monitoring Services	Q3, 2021	10.	Procurement of Chemical Injection Check Valves	Q3, 2021

## PROJECT IMAGES



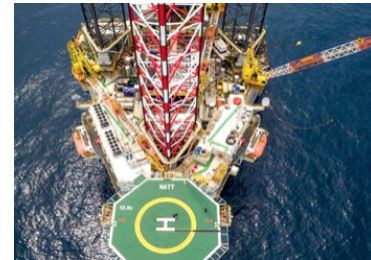
MADU CSP IN FABRICATION



INSTALLED ANYALA CSP



PIPELAYING BARGE



NATT DRILLING RIG



## Victor Okolo

MD/CEO at Eroton E & P Company Limited

Mr. Victor Okolo holds a Bachelor of Engineering degree in Petroleum Engineering (1987) from the University of Port Harcourt, Rivers State, Nigeria. His oilfield experience started with Transocean (then Sedco Forex) as a trainee drilling engineer in 1988. This was followed by Schlumberger D&M (then Anadrill Schlumberger) with a focus on MWD and directional drilling services from 1988 to 1994. He left Schlumberger as a General Field Engineer. Among others, his experiences include being involved in drilling the first horizontal well in Nigeria for SPDC West.

He further worked for over 20 years (1994 to 2015) in various capacities with Statoil (Nigeria) Limited and Statoil ASA Norway from 1994 to 2015. He worked in well construction delivery as drilling engineer and offshore drilling supervisor mainly in subsea and deep water exploration drilling projects in Nigeria and the Norwegian North Sea. Victor was also involved in the engineering and supervision of the first deep water well in Nigeria (Oyo-1) in 1995 for the Statoil/BP-Allied Energy Resources partnership. Until now, he was Lead Engineer/Project Manager for Early Phase Field Development in Statoil ASA Norway in a team of engineers and experts and achieved project sanctions for subsea and platform-based field developments.

He was the Executive Director, Technical of Midwestern Oil & Gas Company Limited from 2015 to 2020.

In the course of his professional career, he has attended numerous courses both locally and overseas in operations and management as relates to the industry. He is a member of the Society of Petroleum Engineers and the Nigerian Society of Engineers.

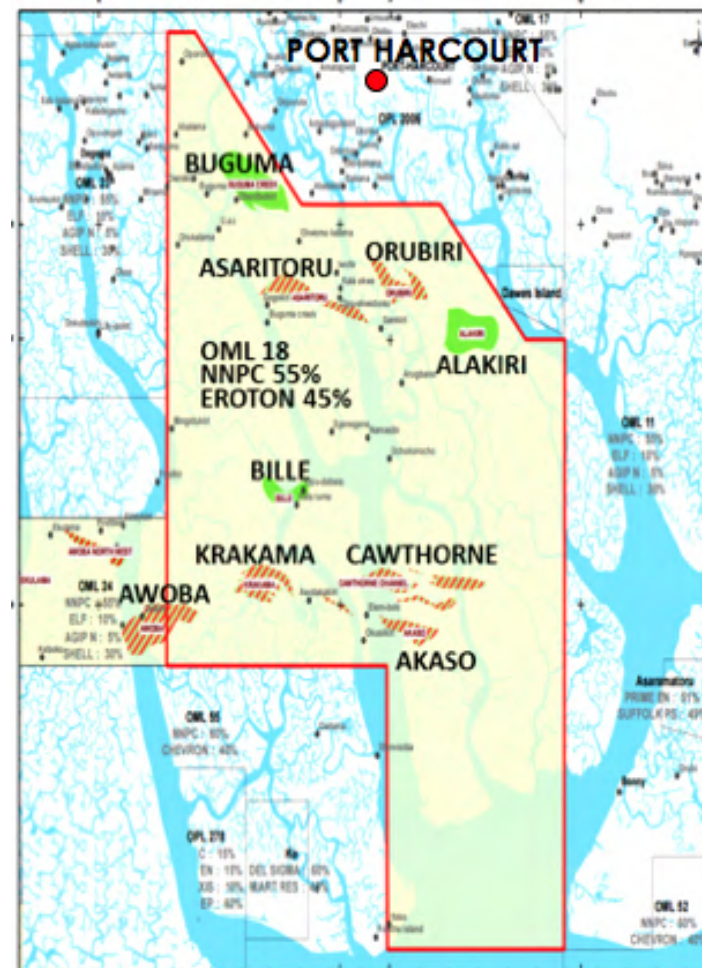
Mr. Okolo is currently the Managing Director/CEO, Eroton Exploration & Production Company Limited.



# EROTON - EXPLORATION AND PRODUCTION COMPANY

## OML 18 ASSET OVERVIEW

- **Category:** Matured Fields
- **Location:** Eastern Niger Delta
- **Operations:** Onshore (Swamp)
- **Area:** 1035sqkm
- **Fields:** 9 (8 Operated & 1 NOV) developed fields with exploration prospects
- **Wells:** 151
- **Oil export:**
  - 7 Oil flow stations (5 operational and 2 not in use) exports via NCTL to Bonny Terminal
  - Installed Capacity: 220 Mbpd
  - Peak Fields Production: 196 Mbpd (1970 -1993)
- **Gas Export:**
  - Gas – 1 AG and 1 NAG plant
  - Installed Capacity: 270MMscfd – Export to Domestic Gas via NGC pipeline (Alakiri)
- **Straddling field: Awoba** –~50/50% (Operator: Newcross, ongoing discussion on Unitisation, Pre-Unitisation Agreement signed)
- **API:** Average of 30
- **Drive mechanism:** Moderate Water Drive



## OML 18 ASSET OVERVIEW



## EROTON 2021 PLANS AND OPPORTUNITIES

Well Intervention: EROTON plans to increase crude oil production in 2021 through scheduled well intervention projects.

### Opportunities:

- Coiled tubing services
- Slickline services
- Wellhead integrity and restoration services
- Wireline services
- Lease of marine vessels (houseboats/barges) in support of operations
- Nigerian companies with proven experience and competence will actively participate
- Award Selection Process
- Competitive tendering process (Technical and Commercial)

## 2021 - 2025 PROJECT SCHEDULE

The table below highlights Eroton Projects and Timelines

S/N	Proposed Project	No of Planned wells	2021	2022	2023	2024	2025
1	Rigless well intervention services	6	Q2-Q3				
2	Exploration wells	3		Q4		Q4	Q4
3	Appraisal wells	5			Q4	Q2-Q3 2 wells	Q3-Q4 2 wells
4	Development wells (Oil)	8		Q2	Q1-Q2 3 wells	Q1-Q2 2 wells	Q1-Q2 2 wells
5	Development well (Gas)	1		Q1			
6	Injector wells (water)	2		Q3	Q3		

## List of Services to be Advertised in the Dailies & NipeX

S/N	Service Description
1	Provision of Solid control services
2	Provision of Cementing services
3	Provision of downhole rental tools and services
4	Provision of casing and tubing running services
5	Provision of Electrical wireline services
6	Provision of Sand control services
7	Provision of Gravel Pack services
8	Provision of casing whip stock and services
9	Provision of hydraulic hammer services
10	Provision of pumping services

## List of Services to be Advertised in the Dailies & NipeX

S/N	Service Description
11	Provision of Surface Testing services
12	Provision of Wellhead Maintenance services
13	Provision of Completion Equipment and services
14	Provision of Filtration services
15	Provision of Drilling and Workover Fishing services
16	Provision of DST/TCP services
17	Provision of Slick line services
18	Provision of Coiled tubing services





## Chidi Egonu

Acting Managing Director Energia limited

Chidi Egonu is an exceptionally experienced professional and Fellow of The Institute of Chartered Accountants of Nigeria, with an HND in Accounting and an MBA from ESUT Business School. His industry career started in 1994 as a member of a high-performance team focused on a company-wide Process Improvement program in Texaco and grew to Treasury Accountant and Region Accountant for South East Nigeria operations. At the turn of the millennium, he joined BJ Services Nigeria Limited / BJ Pumping SA, where he held the roles of Internal Auditor and later country Senior Finance Manager, including heavy interface with the Europe and Africa Region office in Aberdeen. After a brief stint with MTech Plc. as Finance Director, he joined South Atlantic Petroleum Limited (SAPETRO) in 2009, building a best in class finance function in the role of Financial Controller, at a time the company achieved First Oil, from where he moved to Energia in 2018.

## ENERGIA LIMITED (OPERATOR OF THE ENERGIA-OANDO JOINT VENTURE)

### PROFILE

- Oil & Gas Exploration and Production Company
- Operator of the Energia-Oando Joint Venture
- Holds the lease to the Ebendo-Obodetti marginal fields in OML 56
- Achieved First Oil in October 2009
- Collaborated with XENERGI to install a 25MMSCF gas processing facility in 2011
- Dedicates 3% of its revenue to the Host Community Trust Fund.

### FACILITIES ENGINEERING PROJECTS



Ebendo Flowstation  
Integrated Metering System



Ebendo Flowstation  
Produced Water Treatment Plant



Ebendo Flowstation  
Upgrade FEED



Ebendo North  
Drilling Location Construction



Intelligent Pigging of the  
Ebendo Delivery Pipeline



Ebendo-North Satellite  
Manifold and Pipelines

## CSR PROJECTS

- Isumpe Medical Centre
- Ebendo Housing Estate
- Ebendo Community Roads
- Umusam Primary School
- Umusam Community Hall
- Obodougwa Community Road
- Umusadege Community Roads & Solar Powered Street Lights

## CURRENT STATUS



**96% Completion**  
Awaiting final commissioning



**78% Completion**  
Equipment modules in-country



**42% Completion**  
P&ID under review



**17% Completion**  
Earthworks in progress



**95% Completion**  
Final Report under review



Tendering to commence  
in August 2021

# NIGERIAN CONTENT OPPORTUNITIES



Contracts Awarded to  
**TREXM and WELTEK**



EPC Contract Awarded to  
**CHRISTOHOUSTON ENERGY**



FEED Contract awarded to **ARIOSH**



Location Construction Contract Awarded to  
**EDGE CONSTRUCTION**



Pipeline Pigging Contract Awarded to  
**BG TECHNICAL**



Tendering to commence in  
August 2021

## TIMELINE



## EBENDO F/S METERING SYSTEM



**GAS CUSTODY TRANSFER METER**



**COMMISSIONED GAS IN-PLANT METER**

## EBENDO PWT PLANT



**FABRICATION OF REGEN VESSELS**



**FABRICATION OF POLISHER VESSELS**

## PIPELINE INTELLIGENT PIGGING



MFL PIG AT THE PIG RECEIVER AFTER RECOVERY



INSPECTION OF PIG CONDITION BY ENERZIA PERSONNEL

## EBN LOCATION CONSTRUCTION



EXCAVATION OF ACCESS ROAD TO RECEIVE FILL MATERIAL



LATERITE FILLING AND COMPACTION OF THE ACCESS ROAD

# CSR PROJECTS



UMUSAM COMMUNITY PRIMARY SCHOOL



EBENDO COMMUNITY ROAD



UMUSADEGE ROAD & SOLAR POWERED STREET LIGHT



ISUMPE MEDICAL CENTRE



EBENDO HOUSING ESTATE & INTERNAL ROADS



OBOUDOGWA/ OGUME ROAD



Operator of Enerzia/Oando Joint Venture  
(Ebendo/Obodeti field OML 56)





**SECTION 2  
DOWNSTREAM**

**DOWNNS**





**TREATMENT**

## Engr. Mustapha Y. Yakubu

### COO Refineries at NNPC

Engr. Mustapha holds a Bachelor of Engineering (B. Eng.) degree and Masters of Science (M.Sc.) degree, both in Civil Engineering from the prestigious Ahmadu Bello University (ABU), Zaria in 1985 and University of Lagos in 1988, respectively.

Engr. Mustapha Y. Yakubu is the Chief Operating Officer, Refineries & Petrochemicals (COO, R&P) of NNPC. He joined the services of the Corporation as Senior Civil/Structural Engineer in 1992 and rose to become the Managing Director, National Engineering & Technical Company Limited (NETCO) and later, the COO, R&P in July 2019.

He started his working career with Bayero University, Kano in the Department of Civil Engineering in 1986 as a Graduate Assistant. He also worked as Project Engineer with Ove-Arup & Partners, a firm of consulting Engineers in Lagos between 1989 and 1991.

He joined the services of the Corporation as Senior Civil / Structural Engineer in 1992 and was deployed to National Engineering and Technical Company (NETCO) Limited, Lagos.

Within the period 1992 to 2006, he worked and held various positions as Senior Civil/Structural Engineer, Lead Engineer, Field Engineering coordinator and Project Manager.

His previous engineering design efforts involved a broad band of projects activities in the Oil & Gas industry which include Fixed Platforms and Floating Structures, from Conceptual, Front End Engineering Design (FEED), Detailed Engineering Design (DED), through to Fabrication and Construction Supervision. Notable projects he actively participated in, include Escravos Gas Project (EGP), NLNG Expansion Projects, Erha FPSO Design Development Project, East Area Projects, Bonga SW / Aparo Field Development Project and the MPN EPCm2 Contract Major Integrity Project. He became Head Civil / Structural Group in 2006. Through hard work and dedication, Engr. Mustapha Yakubu was promoted to Deputy Manager in 2007. In 2009, he became Acting Manager, Projects Department. In this capacity and in collaboration with his array of Project Managers, Engr. Mustapha Yakubu successfully delivered a number of projects, meeting stakeholders' expectations.

In 2013, Engr. Mustapha Yakubu was promoted to Manager, Engineering Department. His responsibilities included Engineering resource management, project engineering, contract negotiation in collaboration with Business Development Group and provision of technical support to top management.

In August 2015, Engr. Mustapha Yakubu was appointed the Executive Director Operations (EDO), the position he held until the President and Commander-in-Chief of the Armed Forces of Nigeria, President Muhammadu Buhari confirmed his appointment as the Managing Director, NETCO effective May 16, 2018. With this appointment, Engr. Mustapha Yakubu became the 12th Managing Director of NETCO since its inception in 1989.

He is now the COO, R&P with the enormous responsibility of overseeing the rehabilitation of NNPC's 3 refineries in Port-harcourt, Warri and Kaduna and piloting other initiatives to boost in-country refining of petroleum products.

He is a Fellow of the Nigerian Society of Engineers (FNSE) and Corporate Member of the Council for the Regulation of Engineering in Nigeria (COREN).

His hobbies include fitness, travelling and exploring different places.



# NIGERIAN NATIONAL PETROLEUM CORPORATION

## NNPC BUSINESS PORTFOLIO IN BRIEF

The Nigerian National Petroleum Corporation (NNPC) is a National Oil Company and the largest asset holder across the Nigerian oil & gas industry value chain with over 4 decades operating expertise.

### UPSTREAM ASSETS

- JVs with IOCs (~1MMbopd)
- PSC concession ownership (~1MMbopd)
- Three 100% owned & operated OMLs
- DI JV interest held with local partners (55% equity)

### GAS & POWER ASSETS

- Over 1,700 km of backbone gas transmission infrastructure
- 49% stake in 22 MTPA NLNG; and equity stakes in pre-FID Brass LNG and OKLNG of 59% and 100% respectively.
- Equity positions in various assets including:
- 55-60% equity stake in 2 power JV IPPs.

### REFINERIES ASSETS

- 3 Refineries with total capacity of 445 kbopd
- Lube, polypropylene, carbon black, LAB, & tin and drum plants

### EXPANSIVE DOWNSTREAM ASSETS

- 5,000+ km pipeline network
- 4 Jetties
- 21 Depots
- 575 retail stations
- 25 Pump Stations

## NNPC BUSINESS PORTFOLIO IN BRIEF



## NNPC ROADMAP FOR ENHANCED LOCAL REFINING CAPACITY



Rehabilitation of existing NNPC Refineries (PHRC, WRPC & KRPC) to 90% capacity utilization

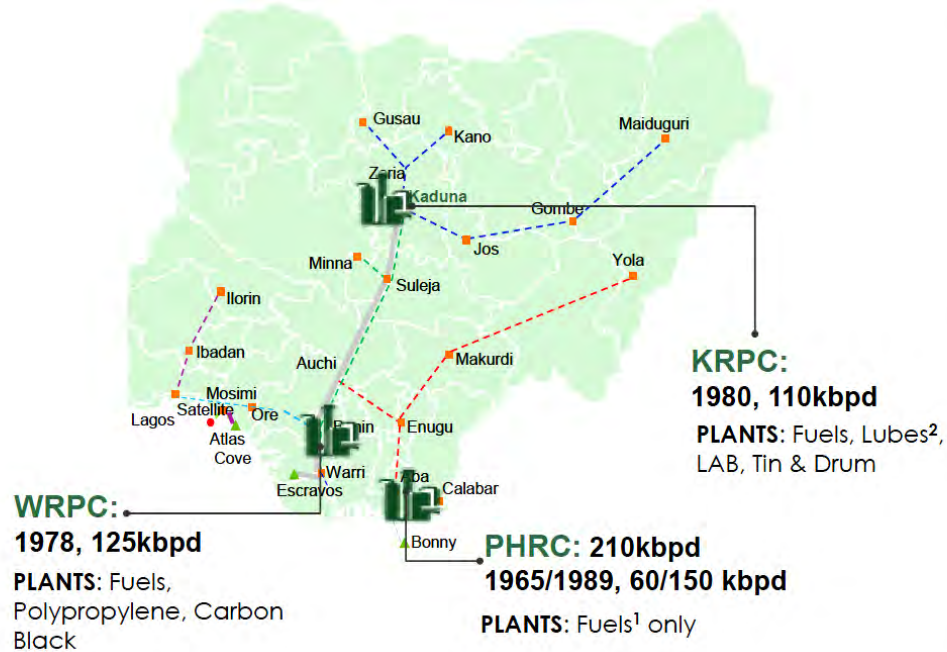
Greenfield Refinery Projects Division (GRPD) Initiatives

*Strategy:  
Partnerships & Collaboration*

- Complete Refinery Rehabilitation (PHRC, WRPC, KRPC)
- Emplace Operations & Maintenance (O&M) Contract for sustainability of operations
- Support private sector establishment of Refineries, i.e Full Conversion and Modular Refineries:
  - Dangote Refinery, Lekki
  - African Refinery Port-Harcourt Limited (ARPHL) -Collocation
  - CNCEC-SEDIN Group, etc.
  - Waltersmith, OPAC, AmakpeRefineries, etc.
- Development of Condensate Refineries in partnership with potential investors:
  - Identified Corridors; ANOH, OBEN, OREDO, UGHELLI, UTAPATE, EGP/EGTL, GBARAN-UBIE
  - Identified Partners:
    - BORKIR for ANOH, OML 21, 53
    - AZIKEL for Gbaran-Ubie, OML 28



## OVERVIEW OF NNPC REFINERIES



**NNPC Refineries -  
Total Refining  
Capacity' 445Kbpd**

Notes: 1. Fuels – includes LPG, PMS, DPK, AGO & Fuel Oil

2. Lubes – Base Oils, Waxes & Asphalt, etc.

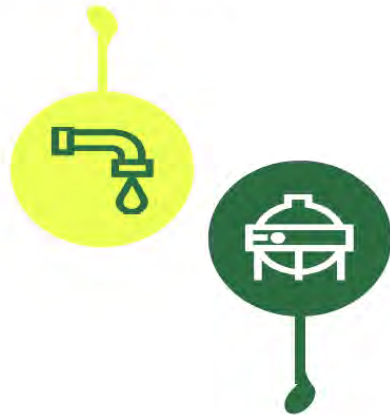
## OPPORTUNITIES & KEY ENABLERS

- High Demand for Gasoline in both local and Regional Markets
- Sole / Consortium Investments: *Full Conversion Plants, Modular and Condensate refineries*
- Opportunities in Downstream Infrastructure: *BOT for Pipelines Upgrade (crude and products), Depots and Terminals*
- Refineries Project Financing:– *Credit Agencies, Lenders & Traders*
- On-going Refineries Rehab Projects: *Creates Job Opportunities (Direct & Indirect); Spin-off economic activities within the host communities and its environs*
- Opportunities for *Operations & Maintenance(O&M) Contracts* post Rehab



Emplacing an effective Fiscal and Governance framework, Access to Financing, Availability of Condensate, Demand for products backed by adequate infrastructure is key to the success of Modular refining.

Increase domestic petrochemical capabilities to meet industrial needs



Increase refining capacity to meet the rising demand for petroleum products in Nigeria and the West African sub-region

### Key Enablers

#### Fiscal Policy and Enabling Infrastructure

- DPR Guideline for Establishment of Modular Refineries provides basic guidance information
- Tax holiday
- Possibility of Custom Duty Waivers

#### Commercial Viability

- Deregulation of downstream sector to allow market forces to determine price
- Facilitation of Crude Commercial Agreement
- Strategic partnership with upstream operators for steady supply of feedstock

#### Financing

- Access to capital from Local and Foreign Lenders
- PPP with Foreign Technical Partners, State Government, Cooperative Societies, Community Equity participation, etc

#### Human Resource Capacity

- Significant in-country refining experience



### **Devakumar V. G. Edwin**

Group Executive Director (Portfolio Development & Capital Projects) Dangote Industries Limited

Mr. Edwin manages the training and development of staff and manages NCD for the Project. He designed & introduced Career Mgt & Counseling units of a Telecoms company in Nigeria; was the team lead that designed the project on development of Generic Competencies in 10 courses for a liquefied gas company in Nigeria; set up and ran the inclusiveness, accountability & diversity program for two oil & gas companies in Nigeria; led the team that researched and surveyed issues in Intercultural Communication for a liquefied gas company; led the team that developed and implemented the Foundation Leadership Development Program for young professionals; was part of the team that implemented the Pre-Retirement training programme for staff of different ministries in Nigeria (project sponsored by Nigeria's Bureau for Public Enterprises in (2006); managed NCD on EGINA; and is currently managing development of Nigerian engineers and Nigerian Content on the Dangote Refinery Project.

# DANGOTE PETROLEUM REFINING AND PETROCHEMICALS

## PROJECTS

- The refinery is designed to process 650 KBPSD of Nigerian Crudes and condensate.
- Diesel & Gasoline Products from the refinery will conform to Euro V specifications. This refinery is optimised to produce more of gasoline; however, a wide swing between Diesel, Kerosene and Gasoline production is feasible.
- The refinery design complies to World Bank, US EPA, European emission norms and Department of Petroleum Resources (DPR) emission / effluent norms.
- Dedicated Marine facilities for crude and product movement.





## PROJECTS

- The Refinery operates in island mode with respect to power requirement, independent of the public distribution system. The Refinery has its own dedicated Steam and Power generation system with adequate standby units for reliable / uninterrupted utility supply to operating plants.
- The Refinery has been designed for 10 different scenarios for Base Crude / Alternate Nigerian Crude & Condensate [Escravos, Abo, Akpo, Antan, Bonga, etc.]
- All ISBL units have been designed based on least energy consumption which is well within industry's best practice.



## PROJECTS STATUS

- **Overall Progress:** The Project has achieved an overall progress of 88.7%, which includes Engineering, Procurement and Construction.
- **Construction:** On the Construction front, the project has achieved cumulative progress of 76.82%. The remaining 23.18% comprises 3.37% attributable to infrastructure & marine activities, 11.31% critical activities and about 8.5% to Pre-commissioning / Commissioning.

### Major Construction Milestones achieved

SL.	Activities	Progress
01.	Piling	100.0%
02.	Stone Columns and Dynamic Compaction	100.0%
03.	Civil Works excluding Roads & Pavements	98.4%
04.	Roads and Pavements	82.0%
05.	Plant Buildings	80.2%
06.	Structural Steel	87.8%
07.	Under Ground Piping	97.6%
08.	Above Ground Piping	63.7%
09.	Equipment Erection	81.1%
10.	Tankages	93.5%

### Key Remaining Milestones (Construction)

SL.	Activities
01.	Electrical
02.	Instrumentation
03.	Insulation
The electrical, Instrumentation and Insulation are in full swing	





## **CURRENT STATUS**

### **Mechanical Completion and Project Commissioning**

The refinery has so far achieved considerable milestones considering the global health crisis that has hindered the desired progress. The project's mechanical completion was scheduled for Q1 2020. However, the COVID-19 pandemic has caused considerable delays to the project. Within the current reality, construction has progressed to 76.8 percent and overall project completion of 88.7%.

At the current rate of progress, the mechanical completion is now expected to be accomplished by Q4 of 2021. Commissioning is expected to commence immediately.

### **System Completion**

As the project is moving to the advanced stage, we have begun to monitor the project in terms of systems completion

# **NIGERIAN CONTENT OPPORTUNITY LOCAL CONTENT DEVELOPMENT**

## **Marine Facilities**

To service the needs of its 650 kbpsd in terms of feed stock supply and finished products evacuation, DORC established following marine infrastructure:

- A.** Two crude SPMs to handle VLCC (ULCC) up to 320,000 DWT connected via 2 nos. X 48” sub-sea pipelines.
- B.** 3 Products SPMs to handle a range of vessels 20,000 DWT to 160,000 DWT (Suez Max vessels) via 4 nos. X 24” sub-sea pipeline.
- C.** 3 Jetties at Dangote Quay, Ibeju-Lekki dedicated to refinery operations.
  - 1 for Dry / Bulk for Polypropylene.
  - 2 for Products: Motor Spirit & HSD / SKO Lines & Carbon Black Feedstock.
- D.** 5 SPMs installed
  - 2 Crude SPM capable of unloading ships from Aframax to VLCC
  - 3 SPM for Hydrocarbon products and Ethanol unloading



# NIGERIAN CONTENT OPPORTUNITY LOCAL CONTENT DEVELOPMENT

## Product Evacuation

- The dispatch facilities by road (Tanker) for the product (Gasoline, Diesel, Kerosene/Jet Fuel, Propane and Slurry) is up to 75% of the total production and up to 75% through Marine Facilities
- Year-round operation for road loading operation.
- Two shift operations, 20 effective working hours, per day. 4 hours for shift changeover, zero hour for material balance, peak loading requirement and critical maintenance jobs.
- Total tanker loading of 2,415. This number is based on tanker capacity of 33 KL.



## Product Evacuation

- Individual gantry is capable of loading Tankers in the capacity range of 33-60 KL.
- Top loading for Gasoline, Diesel, Jet Fuel/ Kerosene & Slurry. For C3 (Propane) bottom loading.
- Complete loading cycle for each tanker is 30 to 40 Minutes.
- Back bone for Loading CR CR-04, FAN issuance office, Weigh bridge cabin, Security cabins at main entry and invoice room at exit have been already created under LAS.



## **NIGERIAN CONTENT OPPORTUNITY - LOCAL CONTENT DEVELOPMENT**

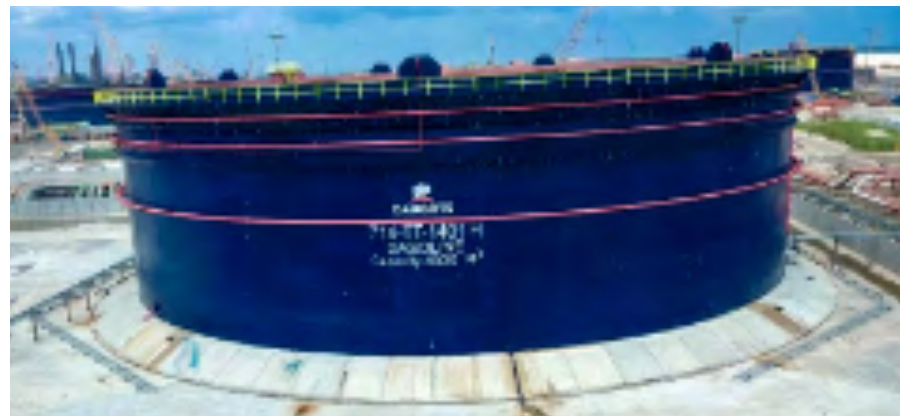
### **Product Evaluation**

- The loading automation system comprises of Server, Display screens, switches, fire walls, HMI, Printers, SMS facilities, etc.
- Loading Automation System (LAS) shall be interfaced with SAP system. Necessary Fire Wall installed in Loading Automation System.
- SAP interface format shall be provided by LAS vendor.



## LOCAL CONTENT DEVELOPMENT

- **Artisans:** We have trained 400 artisans selected from the host communities in the areas of Masonry, Carpentry, AC Electricians, Plumbing, Welders, Iron-benders and Auto Mechanics in collaboration with the Nigerian Directorate of Employment with advice from Nigerian Content Development and Monitoring Board.
- **Engineers:** We have trained 250 young engineers in Refinery Operations outside the country. We target to complete 900. Another 10 have been mechanically trained at the GE University in Italy. 50 Process have been trained by Honeywell/UOP for 6 months; 50 MTs trained; Secondment for Succession. Currently 6 have been selected and are training in ABU for R & D in Zeolites in conjunction with NCDMB.
- **Fabrication:** We have 4 fabrication yards inside the Refinery Site. All tanks, metal works are fabricated in-country.
- **Logistics:** We have bought trucks and tippers to improve the capacity of the local logistics.
- **Ready Mix Concrete:** We have set up the world's largest ready-mix concrete capacity at any given location to produce ready mix concrete including 72 concrete pumps and 141 transit mixers since the annual concrete manufacturing capacity in the country is inadequate.



# **NIGERIAN CONTENT OPPORTUNITY - PROCUREMENT AND MAINTENANCE**

## **Chemicals and Catalysts**

- 16.8Kg of Perchloroethylene (PERC) is required per day for Reactor Regeneration section
- 340,000 CuM of Nitrogen is required for startup alone
- 320,000 Kg of Soda Ash (Sodium Carbonate) is required in Sulphur Recovery Unit-SRU, Crude Distillation Unit-CDU and Mild Hydrocracking-MHC process block

## **Lubricants**

### **Heavy Moving Equipment**

- Engine Service: 50,000 liters of engine oil is required every 250 hours
- Final Drive: 50 million liters of lubricant oil every 1,000-1,500 hours of usage
- Transmission: 50 million liters of transmission fluid every 2,000 hours
- Lubricants for statics and rotating equipment





# PROJECT IMAGES AERIAL VIEW



CRUDE DISTILLATION UNIT



RESIDUE FLUID CATALYTIC CRACKING



MS UNIT



PRODUCT DISPATCH TERMINAL



CRUDE TANKS



MILD HYDROCRACKING



PRODUCT TANKS

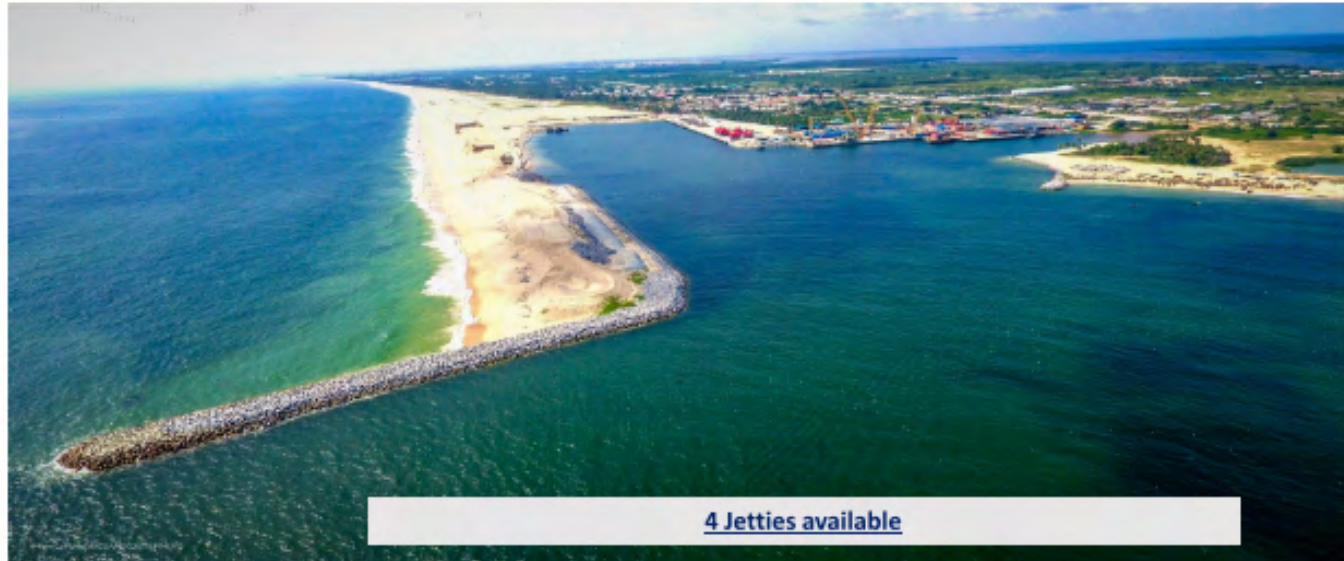


PRODUCT TANKS WITH LOADING GANTRY



PPU

## **PROJECT IMAGES** **AERIAL VIEW**



## **MANPOWER ENTRY AT 7.30AM DAILY**





## Dr. Eruani Azibapu Godbless

President at Azikel Petroleum Nig Ltd

Dr. Eruani was born on 25th December 1973 to the Royal Family of King Allwell Eruani, Aguda IX, of Emadike Kingdom, Bayelsa State and his wife, Mrs Rachael Eruani.

Following the completion of his primary and secondary education, he enrolled in the University of Port Harcourt, College of Health Sciences and graduated with MBBS.

In his quest to better himself professionally and be properly positioned to play a pivotal role in meeting the health services needs of the Nigerian people, Dr Eruani proceeded to the United States of America for specialist training in Surgery and Family Medicine Practice. He is a registered member of the American Society of Family Medicine Practitioners.

Dr. Eruani, having witnessed first hand and identified the major obstacles to infrastructural developments in the challenging Niger Delta terrain, decided to venture into the private business of dredging, sandfilling and reclamation. To this end, he established Azikel Dredging Nigeria Limited in 2008 solely for the purpose of providing sand in a commercial quantity to facilitate the infrastructural development of Bayelsa State and the Niger Delta. As always, Dr. Eruani made a huge success of this foray into business, and Azikel Dredging Nigeria Limited grew to become the number one indigenous dredging company in the Niger Delta Region and South South Region of Nigeria. In ensuring the ease, safety and reliability of movement as to enhance his business activity, Dr. Eruani acquired his first private Aeroplane and Helicopter in 2011. This endeavour led to his investment into the Aviation Sector, with huge business potentials. Dr. Eruani incorporated Azikel Air to serve unscheduled flights for VIP and offshore operations. Azikel Air with its Air Operating Certificate and other licences now has fleets of helicopter and aeroplanes.

Dr. Eruani acquired further training in business at the Lagos Business School, with certification in Owner Management Programme (OMP), at the London Business School with certification in Senior Executive Programme (SEP) and then further business studies at the prestigious Wharton Business School in University of Pennsylvania, Philadelphia, USA with certification in Advance Management Programme (AMP). Dr. Eruani is the President of Azikel Group, a conglomerate with vast interests and investments in Dredging, Aviation, Power Generation and Petroleum.

Azikel Petroleum Limited is the recent subsidiary of the Azikel Group. Azikel Petroleum is the progenitor of the Azikel Refinery 12000 BPSD hydroskimming Oil Refinery, in Obunagha, Gbarain-Ubie in Yenagoa Local Government Area of Bayelsa State, the first Private hydroskimming Refinery in Nigeria. The Refinery has products slates of PMS, AGO, DPK, JET A1, HFO and LPG. The Azikel Refinery is a game changer for Nigeria's reliance on imported refined petroleum products, and helps drive the Federal Government's efforts to make Nigeria self sufficient in refined petroleum products production.

# AZIKEL PETROLEUM LIMITED

## PROFILE

- Azikel Refinery is the First Private Modular Hydro-skimming refinery in Nigeria
- Established on a 19.9 hectares of Land, situated in Obunagha, Yenagoa LGA Bayelsa State, Nigeria
- License To Establish (LTE) and Approval To Construct (ATC) was granted in 2015 by President Muhammadu Buhari's administration



## PROJECTS

- Refinery capacity is 12,000 BPSD in Phase 1
- Products produced are Gasoline (PMS), Diesel (AGO) as primary products with Heavy Fuel Oil, Kerosene, Aviation Fuel as secondary
- Expansion Programme of 25,000 BPSD in Phase 2 and 30,000 BPSD in Phase 3



## CURRENT STATUS

- Outside Battery Limit Completion of 67%
- Feedstock Storage completed
- Helipad, Perimeter fencing, 3.1km road network completed
- Administrative and Terminal Operating, Maintenance Building Completed
- Sandfilling, Man Camp, Utilities Completed



## TIMELINE

- Civil works ongoing planning completion 2022
- Material deliveries are ongoing
- Major Equipment deliveries in 2022
- Commissioning could begin in 2023, but it is more likely that cold commissioning will start in 2024
- Project was impacted by COVID-19
- Land acquired for Phase 2 refinery of 25,000 BSPD using condensate



## **NIGERIAN CONTENT OPPORTUNITY**

- 100% of the civil works are being performed by Nigerian companies
- Labour for the construction of the project will be minimum 50% from Nigeria
- Permanent plant operating and maintenance staff are 90+% from Nigeria
- Construction and Operating Insurance is through a Nigerian entity
- Professional services (legal, banking) are provided by local firms





# PROJECT IMAGES



PROCESS MODULES

MAN-CAMP



CRUDE DISTILLATION UNIT



PROCESS MODULES



ADMINISTRATION AND TERMINAL  
OPERATOR BUILDINGS



**SECTION 3**  
**GAS & POWER**

**GAS & P**

The background of the image shows a complex industrial machine, possibly a robotic arm or a manufacturing component, with various metal parts, wires, and bolts. The entire scene is overlaid with a semi-transparent green filter. The word "POWER" is prominently displayed in the lower half of the image.

**POWER**



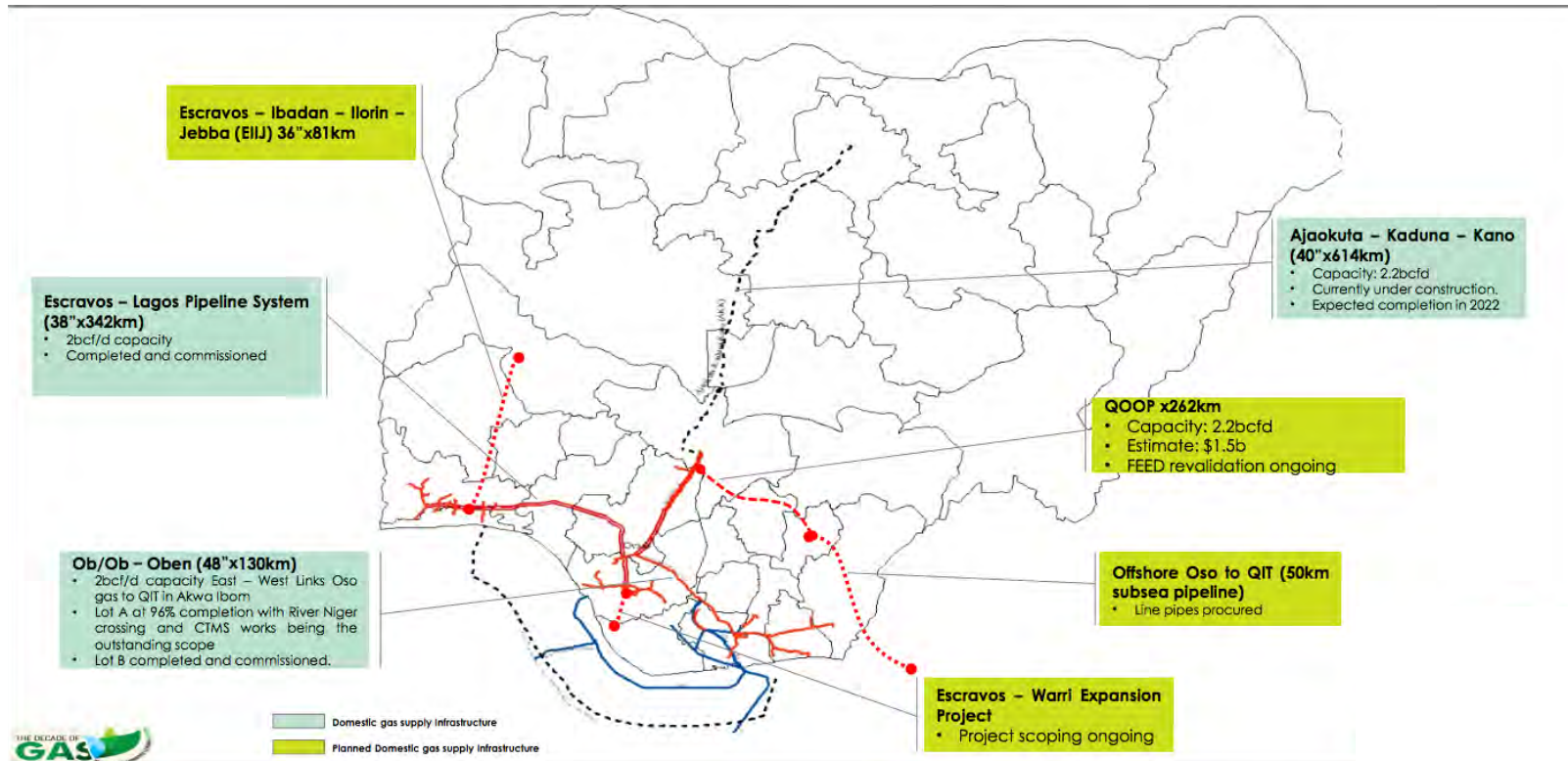
**Engr Yusuf Usman**

Chief Operating Officer, Gas & Power at NNPC

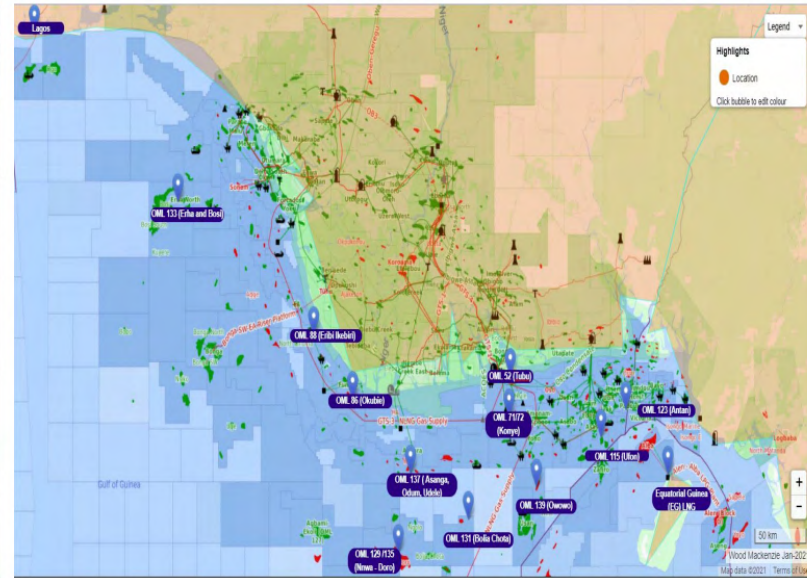
# NIGERIAN NATIONAL PETROLEUM CORPORATION

## 2 GAS SUPPLY INFRASTRUCTURE - DOMESTIC & EXPORT

To achieve the objectives of 'The Decade of Gas' by 2030, the key focus will be to provide the backbone infrastructure to support Nigeria's aspiration of becoming Africa's most industrialised nation through natural gas.



# GAS SUPPLY INFRASTRUCTURE – REGIONAL AND EXPORT INFRASTRUCTURE



## Nigeria – Morocco Gas Pipeline Project (48”x 6548km)

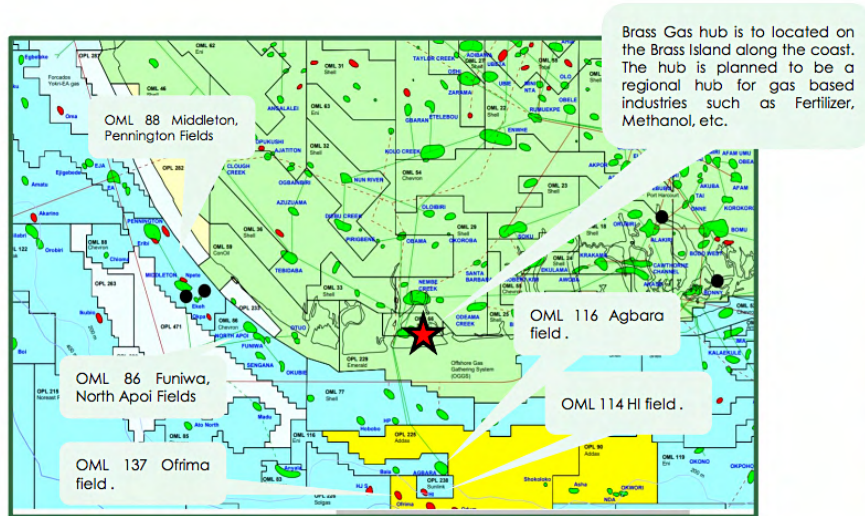
- Project currently at FEED stage
- Co-sponsored by NNPC and ONHYM on behalf of Nigerian and Moroccan Governments
- Collaborating with ECOWAS to extend benefit of the pipeline to member states
- Estimate: ~\$20b

## Gas Supply to Punta Europa – Equatorial Guinea

- Discussions ongoing for gas supply from Nigerian oil and gas fields



# GAS SUPPLY INFRASTRUCTURE - GAS HUBS



## Brass Gas HUB

- Petrochemicals: ~\$3b investment opportunities
- Gas Processing Facilities: ~\$3b investment opportunities
- Gas fired power plant and condensate refinery: ~\$2b investment opportunities

## Gas Revolution Industrial Park (GRIP)

- Deep Sea Port: ~\$3b investment opportunities
- Gas Processing facility: ~\$3b investment opportunities
- Integrated Power Solution: ~\$2b investment opportunities



# GAS SUPPLY INFRASTRUCTURE - INVESTMENT OPPORTUNITIES

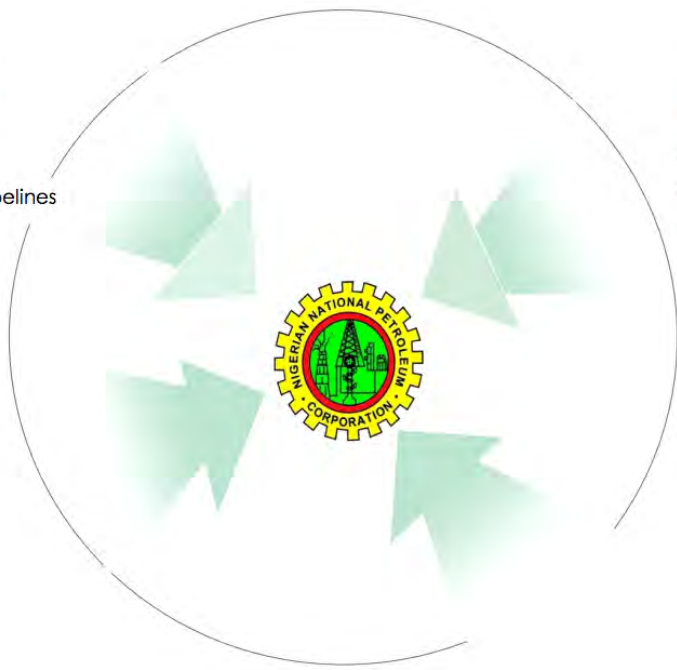
*Declaration of the Decade of Gas*  
 .....unlocking opportunity for the investment of circa **\$40 Billion**

**Pipeline**  
**>\$20.0 Billion**

- Regional Pipelines
- Domestic gas supply pipelines

**Gas Hubs**  
**~\$16 Billion**

- Three power plants
- Processing facilities
- Petrochemicals







## Engr. Tony Attah

Managing Director at NLNG

Tony Attah is the Managing Director/Chief Executive Officer of Nigeria LNG Limited and the Vice President of Bonny Gas Transport.

Tony has over 25 years' experience in the oil & gas industry. Prior to his current role at Nigeria LNG Limited, he was the Managing Director and Board Chairman of Shell Nigeria E & P Company (SNEPCo), Vice President HSE and Corporate Affairs and Vice President Human Resources (HR). He has managed other technical and non-technical roles in Operations and major projects including being Head of Joint Venture Economics in the commercial function.

He holds a Bachelor's degree in Mechanical Engineering from the University of Ibadan and a Master of Business Administration from the University of Benin. He is a Fellow of the Nigerian Society of Engineers (FNSE), member of Council for the Regulation of Engineering in Nigeria (COREN), and member of Society of Petroleum Engineers (SPE).

Over his distinguished career across Europe, Russia and Africa, Tony has led multi-disciplinary teams across diverse cultures. He is renowned for his strong strategic and commercial mind-set, which is underpinned by a solid technical background and excellent leadership capabilities. His goal in NLNG is to sustain the historical excellent performance, move the company to the next level and continue to make NLNG an inspiration to Nigeria and a company committed to helping build a better Nigeria. With revenue exceeding \$90bln since 1999, the company will easily rank with other FTSE 100 companies globally and is being managed to world class standards.

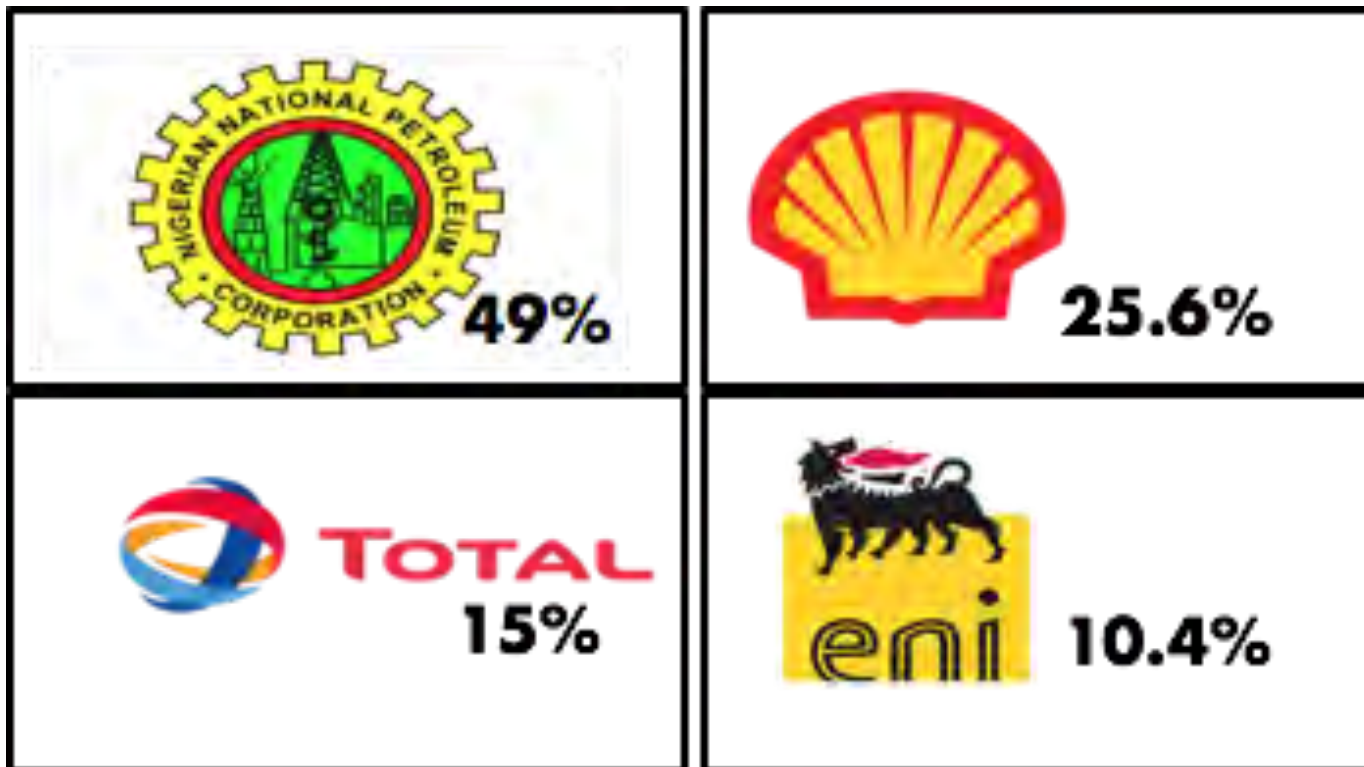
Tony is epitomised by his focus on people and on delivering business value to stakeholders. His personal core values are humility, excellence, integrity and respect for people. He is married with children and his hobbies are watching soccer, playing golf and listening to music.

# NIGERIA LNG LIMITED

## OUR VISION

Be a global Liquefied Natural Gas Company helping to build a better Nigeria.

## OUR SHAREHOLDERS



## OUR SUBSIDIARIES

- Bonny Gas Transport Limited



- NLNG Ship Management Limited

## COMPANY OF THE DECADE - OUR SUCCESS STORY

- Over 5,000 LNG cargoes delivered
- 23 dedicated LNG Ships
- 6 LNG Trains: 22mtpa
- \$11bn asset base
- \$108bn in Revenue
- \$35bn Dividends
- \$8bn in Taxes

## TRAIN 7 AND OPPORTUNITIES!

Construction	Cables	Welding
Valves	Scaffolding	Legal
Furniture	Paints	Medical

- \$10bn FDI
- 12,000 Jobs

# GAS PROVISION TO INDUSTRIES



**PETROCHEMICALS**



**AGRICULTURE/FERTILIZERS**



**TRANSPORTATION**



**AUTO GAS**



## DECADE OF GAS

It's not about what we have, it's what we do with it!

**AUSTRALIA -128 TCF**  
**OUTPUT: 88MTPA (3%)**

**MALAYSIA - 97 TCF**  
**>29 MTPA (1.4%)**

**INDONESIA -103 TCF**  
**>26 MTPA (1.2%)**

**NIGERIA - 200 TCF**  
**22 MTPA (0.5%)**



## ED Ubong

Managing Director at Shell Nigeria Gas

Ed Ubong is the Managing Director of Shell Nigeria Gas Limited (SNG) and is responsible for leading the company and safely delivering its domestic gas growth aspirations. He is passionate about unlocking the domestic gas to energy value chain.

He joined Shell in 2001 as a Systems Engineer and has worked across various functions in the organisation including Strategy, Deal delivery and Asset Commercial.

He holds a Bachelor's Degree in Electrical & Electronics Engineering from the Federal University of Technology Owerri; Masters Degree in Engineering from the University of Southampton, UK and an MBA from INSEAD (France, US, Singapore).

Ed is the President of the Nigerian Gas Association (NGA), the umbrella association for gas advocacy and development in Nigeria. He is also a member of other professional associations including the Society of Petroleum Engineers.

Ed is happily married to Agatha, and they are blessed with two children.

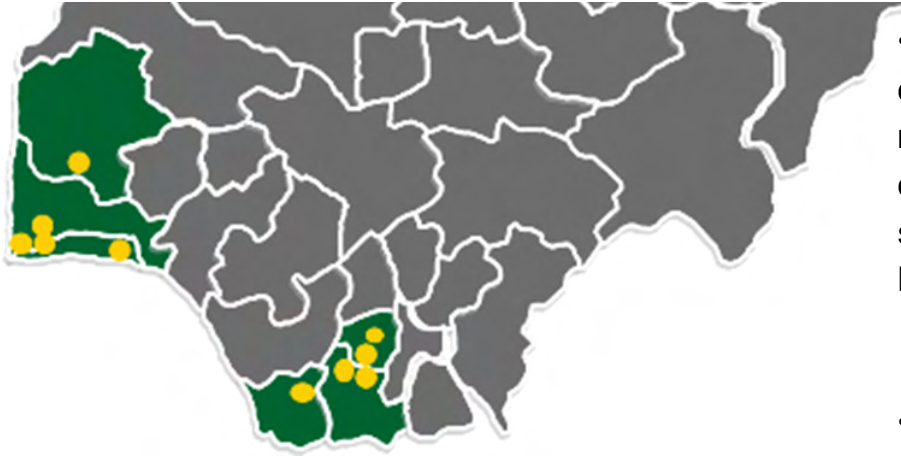


### THE 'ACCESS TO ENERGY' CHALLENGE

- **Energy is critical to economic and social development** and can improve the lives and livelihoods of people.
- Shell's ambition is to provide access to energy to **100 million people by 2030**.
- Our approach is based on developing tailored approaches drive **by local markets, needs and opportunities**.



## SNG PORTFOLIO OUTLOOK



- Shell Nigeria Gas Limited (SNG) has built and currently operates a gas transmission and distribution network of approximately 150 kilometers; it supplies customers across the Agbara-Ota cluster in Ogun state, the Aba Cluster in Abia State, and the Port Harcourt Cluster in Rivers State.

- SNG is executing and maturing projects to deliver cleaner and more reliable energy to over 120 industrial and commercial customers.

- These projects offer substantial Nigerian Content opportunities for various EPC type scopes.

# 6

States

- 3 states have active customer connections ongoing.
- 3 states have capital projects under execution.
- 2 states have developments being matured.
- 4 states have post FID execution ongoing.





# DRIVING INDUSTRIALISATION IN NIGERIA

# > 120 Customers

in industries as diverse as glass-making, ceramics, food and beverages, packaging, pharmaceuticals, chemicals and power.



## THE PORT HARCOURT NETWORK

SNG gas supply to customers started in 2011 and the network has been expanding since then. Available opportunities cover expansion projects and O&M contracts.



## Potential Nigerian Content

- **FEED, Design**
- **Procurement** - Customer stations EPC; pipeline Bends, valves, coating materials
- **Fabrication** - gas processing modules.
- **Pipelines** - constructions and installations.  
> 10 km



# ABA CLUSTER GAS PROJECT

In 2020, SNG completed the second phase of its 20-kilometre domestic gas pipeline expansion project in Abia State which connects three key industrial zones. This project enabled the supply of gas to an independent consortium that provides electricity to the Ariaria market, and industrial customers. SNG is currently building a large gas processing plant in the city of Aba which offers opportunities in addition to O&M activities.

## Potential Nigerian Content

- **FEED, Design. Engineering**
- **Pipelines** - constructions and installations. > 10 km
- **Fabrication** - gas processing modules.
- **Procurement** - Customer stations EPC; pipeline Bends, valves, coating materials.
- **Supply** - Gas fueled Power generators and O&M services to gas consumers.



## **SPOTLIGHT: ARIARIA IPP PROJECT, ABIA STATE**



**SNG signed an agreement with IPP to provide gas to electrify Ariaria market in Abia State.**

**Ariaria Market is one of the largest open stall markets in West Africa**

**>37,000 shops**

**~2 million traders**

**One of the largest leather shoe-making markets in West Africa**



# THE AGBARA-OTA IGBESA-BADAGRY TRANSMISSION AND DISTRIBUTION SYSTEM

Our Western gas transmission and distribution system is over 80 kms with a Pressure Reduction and Metering Station (PRMS) that has the capacity to distribute over 100 MMscf/day to more than 100 customer stations. SNG has signed a long term (20 year) gas distribution agreement that will enable it expand this network to Badagry.

## Potential Nigerian Content

- **FEED, Design**
- **Pipelines** - constructions and installations. > 10 km
- **Fabrication** - gas processing modules.
- **Procurement** - Customer stations EPC; pipeline Bends, valves, coating materials.
- **Supply** - Gas fueled Power generators and O&M services to gas consumers.



## SPOTLIGHT: OGUN GUANGDONG FREE TRADE ZONE, IGBESA, OGUN STATE

**OGFTZ is the first FTZ in Nigeria with full natural gas infrastructure.**

- SNG has been a partner to OGFTZ since 2009
- SNG now supplies gas to major industries in the zone: Goodwill Ceramics, Greenpower Utilities, CNG Glass Limited Huading Energy and Nitoo Sanitary.
- SNG has contributed to localisation of industries, employment generation and contribution to state Internally Generated Revenue through gas supply.



**OGUN GUANGDONG FREE TRADE ZONE**

### **Goodwill Ceramics**

One of the biggest ceramic factories in Africa  
35,000 sqm of ceramics per day capacity

### **CNG Glass Nigeria FTZ**

1st float glass-manufacturing plant in Nigeria  
500 tonnes per day capacity



## GBARAN GAS DISTRIBUTION PROJECT BAYELSA

In 2020, SNG completed the second phase of its 20-kilometre domestic gas pipeline expansion project in Abia State which connects three key industrial zones. This project enabled the supply of gas to an independent consortium that provides electricity to the Ariaria market, and industrial customers. SNG is currently building a large gas processing plant in the city of Aba which offers opportunities in addition to O&M activities.

### Potential Nigerian Content

- **FEED, Design. Engineering**
- **Pipelines** - constructions and installations. > 5 km
- **Fabrication** - gas processing modules.
- **Procurement** - Customer stations EPC; pipeline Bends, valves, coating materials.
- **Supply** - Gas fueled Power generators and O&M services to gas consumers.



## OYO GAS PROJECT

SNG signed a Memorandum of Understanding with the Oyo State Government for the acceleration of processed domestic gas infrastructure development to enable distribution of cleaner and more reliable energy to industries in Oyo State. Shell Nigeria Gas (SNG) has identified 6 major Industrial clusters with potential demand of up to an equivalent 100MW of gas demand. Opportunities exist for indigenous contractors to build the distribution infrastructure that will deliver gas.

### Potential Nigerian Content

- **Pipeline constructions and installations** - > 50 km, Pipeline Bends, Valves, Coating materials.
- **Local Engineering and Fabrication** - installation of gas processing modules.
- **Instrumentation and Control Engineering**
- **Customer stations EPC or Procurement and Supply**
- **Gas fueled Power generators and O&M services to gas consumers.**





## Okechukwu Mba

Managing Director at AGPC

Okechukwu has over 20 years of experience with a diversified background covering Commercial, Planning, Finance and Operations. Prior to his appointment as Managing Director of Anoh Gas Processing Company Limited (AGPC), he held the position of General Manager Gas business and in that capacity, Okechukwu transformed Seplat's Gas business into an Industry-recognised leading supplier of Gas into the domestic market, delivering gas to a diversified portfolio of customers.

He was responsible for the delivery of new Gas projects, domestic and regional Gas Sale Agreements (GSA), new Gas business development, GSA operations, revenue collection, customer relations and overall implementation of Board-approved Gas strategy. Prior to that role, Okechukwu served as Seplat's General Manager, Commercial and in that capacity, he led the successful delivery of several commercial agreements in addition to managing Treasury, Tax and Insurance functions.

Prior to Seplat, Okechukwu worked with Mobil Producing Nigeria and BG (British Gas) Nigeria, where he managed the Planning and Budget function. He started his career with Arthur Andersen as a Tax Consultant.

Okechukwu plays an active role in the Oil & Gas industry and recently served as the elected Chairman of OPTS Gas Subcommittee. He has a keen interest in the Gas to Power value chain and as a trusted advisor to key industry stakeholders, Okechukwu is regularly invited to domestic and international conferences to share his unique perspectives on the Gas to Power value chain. He has a strong passion for developing people and spends time coaching and mentoring young professionals.

Okechukwu has a first-class degree in Accounting and is a Fellow of the Institute of Chartered Accountants of Nigeria (ICAN). On a continuous quest for development, Okechukwu has taken a post-graduate course in Finance from Manchester Business School and an executive course from Harvard Business School.



# ANOH GAS PROCESSING COMPANY

## ABOUT AGPC

- Anoh Gas Processing Company Limited (AGPC), is a 50:50 joint venture between Seplat Energy Plc and the Nigerian Gas Company, a subsidiary of NNPC
- AGPC is the first incorporated joint venture in Nigeria
- AGPC is a midstream gas company set up to purchase gas from upstream and process same to deliver dry gas, condensate and LPG to customers
- The Anoh project is the single largest greenfield integrated domestic gas project undertaken by an indigenous company

## ANOH GAS PLANT PROJECT

- The \$650 million Anoh integrated gas plant project, at full capacity, will deliver:
  - ✓ 300MMScfd of processed gas
  - ✓ About 18,000bpd of condensate
  - ✓ 1,200 bbl/d LPG recovery
- Plans are already in place to expand the capacity of the gas plant to process additional gas from NNPC/Seplat JV's OML 53

## CURRENT STATUS

- The fabrication of processing modules, LPG package, rotating equipment and other balance of plant packages has been completed and being shipped to Nigeria
- The civil works to deliver critical static and rotating equipment foundations, site roads and drainages have progressed and nearing completion
- The Mechanical Installation phase of the project has commenced with the start of installation of the locally fabricated inlet manifolds and pipe racks
- \$420m equity injection by both shareholders completed and \$260m debt financing signed in February 2021
- On course to deliver the project before end of H12022

**Ongoing installation of inlet manifold at the site**



## **SIGNIFICANCE TO NIGERIAN ECONOMY**

- Anoh project will increase current domestic gas volume by 25% and support the government's Decade of Gas ambition.
- Anoh gas can generate 1.2GW of electricity, increasing power generation by 25%. It will support our strategy of displacing diesel generated power with cheaper and cleaner gas fired power generation.
- LPG will provide a cleaner cooking fuel, helping to improve health and living conditions.
- Open to delivering condensate to a local refineries to improve local value creation.
- The project will generate a number of direct and indirect jobs, improve energy security with attendant multiplier effect on the Nigerian economy.

## **NIGERIAN CONTENT**

- Committed \$10M to a Capacity Development Initiative project – the completion of the Centre for skills development and training (CSDT) in Port Harcourt
- Planned investment in human capacity development project for training and skills acquisition for youths in our host community
- Over 97% of the project team delivering the Anoh project are Nigerians
- Working with Nigerian contractors at the project site and prioritising host community contractors and a number of jobs

## Chief Ben Okoye

Managing Director at Brass Fertilizer and Petrochemical Company Limited

Chief Ben Okoye is the Managing Director and the Executive Vice-Chairman of Brass Fertilizer & Petrochemical Company Limited (BFPCL). He is a graduate of Business Administration with over 30 years of experience in several sectors. Chief Ben is an astute and a dynamic result-oriented business guru who has carved a niche for himself in corporate excellence both nationally and internationally across several business undertakings in key sectors of the Nigerian economy and with various corporate interests spanning across the globe.

He has strong entrepreneurial savvy and proven leadership capacity, having conceived and nurtured several successful businesses over the last 2 decades, including, but not limited to BFPCL, DSV Pipetronix Limited, DSV Engineering Limited, Northgate Limited, Blue Waters Development Company, etc.

Chief Ben has handled significant executive leadership responsibilities, including strategy, business development, policy formulation and operations across several companies in the communications, oil & gas (upstream, midstream and downstream), hospitality and real estate sectors.

He is a member of the Nigeria Institute of Public Relations and Professionals. In 2009, he became a recipient of an honorary award – FNIPR and also received an award on professionalism and excellence. He is well known for his noble gestures, and this earned him the Ziks Award from the Nnamdi Azikiwe University as the best philanthropist from the South-East zone.

He currently sits on the board of several companies where he holds significant interests.

# BRASS FERTILIZER & PETROCHEMICAL COMPANY LIMITED

## BFPCL'S PROFILE

- Brass Fertilizer and Petrochemical Company Limited (BFPCL) is developing a worldclass greenfield integrated methanol and gas processing facility in the Niger Delta Region – Odioma Community in Brass Island, Bayelsa State
- Project Site – 667 hectares of land situated in an oil & gas free trade zone (Brass FTZ) q Two trains of 5,000 MTPD Methanol Plant producing a total of 10,000 MTPD of methanol
- Feedstock for the Methanol Plant is to be supplied by the SPDC JV from 5 fields with an overall commitment for the supply of 2.2 TCF of natural gas for a period of 20 years

## THE BRASS GAS HUB

- Presidential approval received in line with the National Gas Expansion Plan as the Brass Gas Hub is one of the 7 critical gas projects in Nigeria as identified by the Federal Government
- BFPCL will be developing an additional 2 x 340 mmscf/d (680 mmscf/d)
- The Brass Gas Hub is underpinned by about 14 TCF of stranded gas located within the project area to boost domestic supply and export opportunities

## TIMELINE - TARGET TIMELINE FOR COMMENCEMENT OF OPERATIONS



## NIGERIAN CONTENT OPPORTUNITY

- BFPCL is majorly owned by Nigerian Shareholders with minority equity to be taken by foreign shareholders
- Projected to create 15,000 jobs during the construction phase and 5,000 jobs during the operation phase
- Engagement of several qualified Nigerian contractors at different stages of the project
- The Methanol Plant will be a catalyst for further industrialization in Nigeria as methanol will form the base feedstock and diversify the economy

## BFPCL'S PROJECT SITE

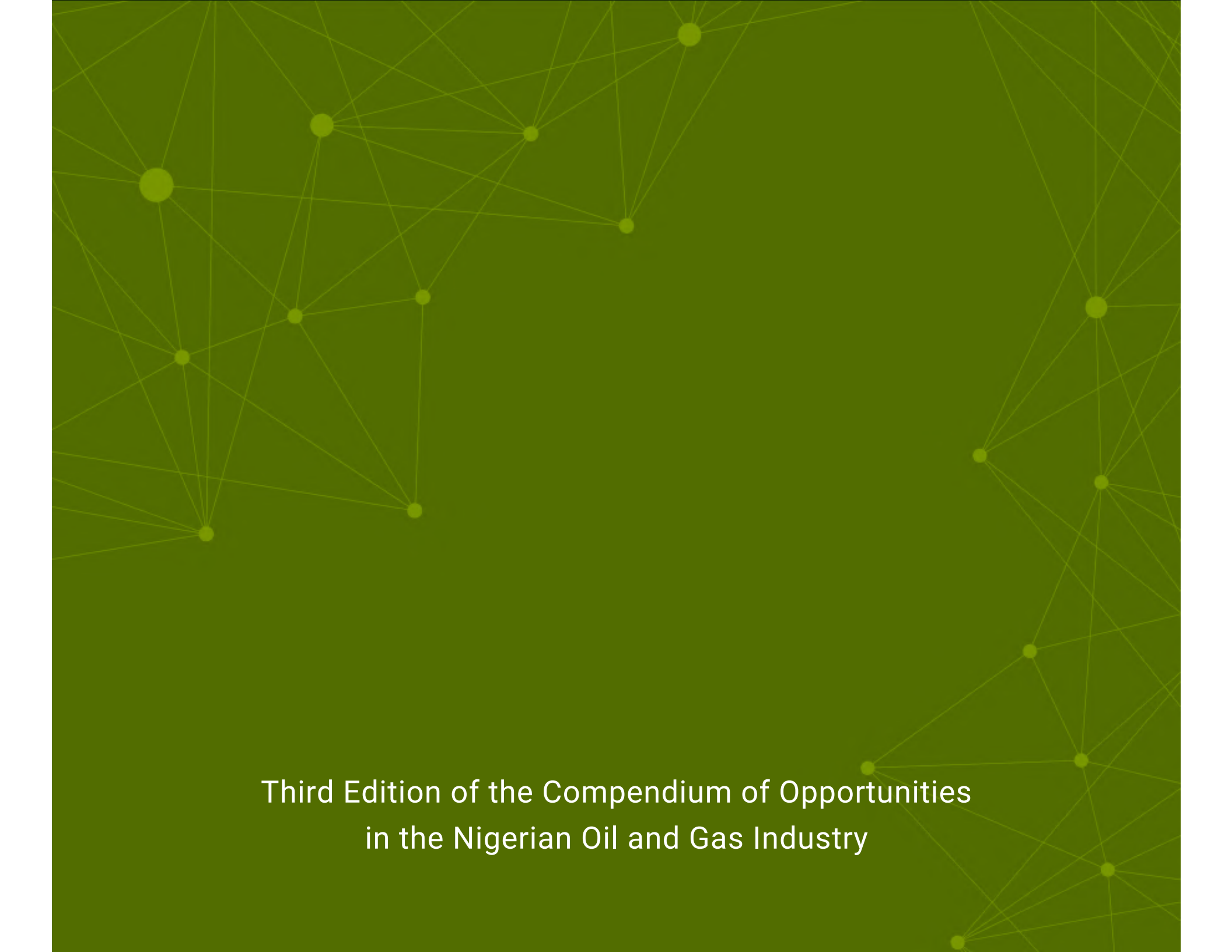


Project Site will house all the producing facilities – the gas processing plant, the captive power, utility plants and the residential colony with full amenities

Project Site (667 hectares) is designated as an oil & gas free trade zone – the Brass FTZ







Third Edition of the Compendium of Opportunities  
in the Nigerian Oil and Gas Industry



## Contact Us

For enquiries, Please contact us:

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Website: [www.jakeriley.org](http://www.jakeriley.org)

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Rivers State.

## ABOUT JAKE RILEY

Jake Riley, publishers of Nigerian Content Opportunities in the Oil & Gas Industry 2021, is a consulting firm with a strong reputation and track record of supporting public sector organisations with services that bring results, save time and improve productivity. With over 25 years cumulative experience in this sector, we have brought best in class standards to delivering projects for our clients.

In the publishing industry, we have achieved a reputation with our clients for professionalism, accuracy, dependency, quality and integrity. We have published a variety of books and the one thing they all have in common is that they promote transformation and leadership. Some of them are:

- Power of Vision - Tony Elumelu
- Growing with the hand that gives the rose, my testimony - Folorunsho Alakija
- 7 big wins - Ministry of Petroleum Resources
- Nigeria Petroleum Industry Review - Ministry of Petroleum Resources
- Caught in the Crossfire - Tunde Ayeni
- China Investor Roadshow Book - NNPC
- The Nigerian Fixed Income Market - Securities and Exchange Commission
- The Nigeria Capital Market a compendium of Listed Companies - Securities and Exchange Commission
- Jetlife Nigeria - Ministry of Aviation
- Fascinating Nigeria - Ministry of Tourism
- Annual Programme Implementation Report - National Primary Healthcare Development Agency
- Fifth Chucker Magazine - Fifth Chukker Polo and Country Club
- The Lion King - United Bank of Africa

### Our Vision

Our aim is to help our clients make innovative and substantial improvements to their performance in the long term.

### Our Services Include

People Services  
Technology Services  
Brand and Communication  
Corporate Services



## **NIGERIAN CONTENT DEVELOPMENT & MONITORING BOARD**

Nigerian Content Tower,  
Oxbow lake Road, Swali,  
Yenegoa, Bayelsa State