



DEVELOPMENTS IN THE NIGERIAN OIL AND GAS INDUSTRY, INVESTMENT OPPORTUNITIES

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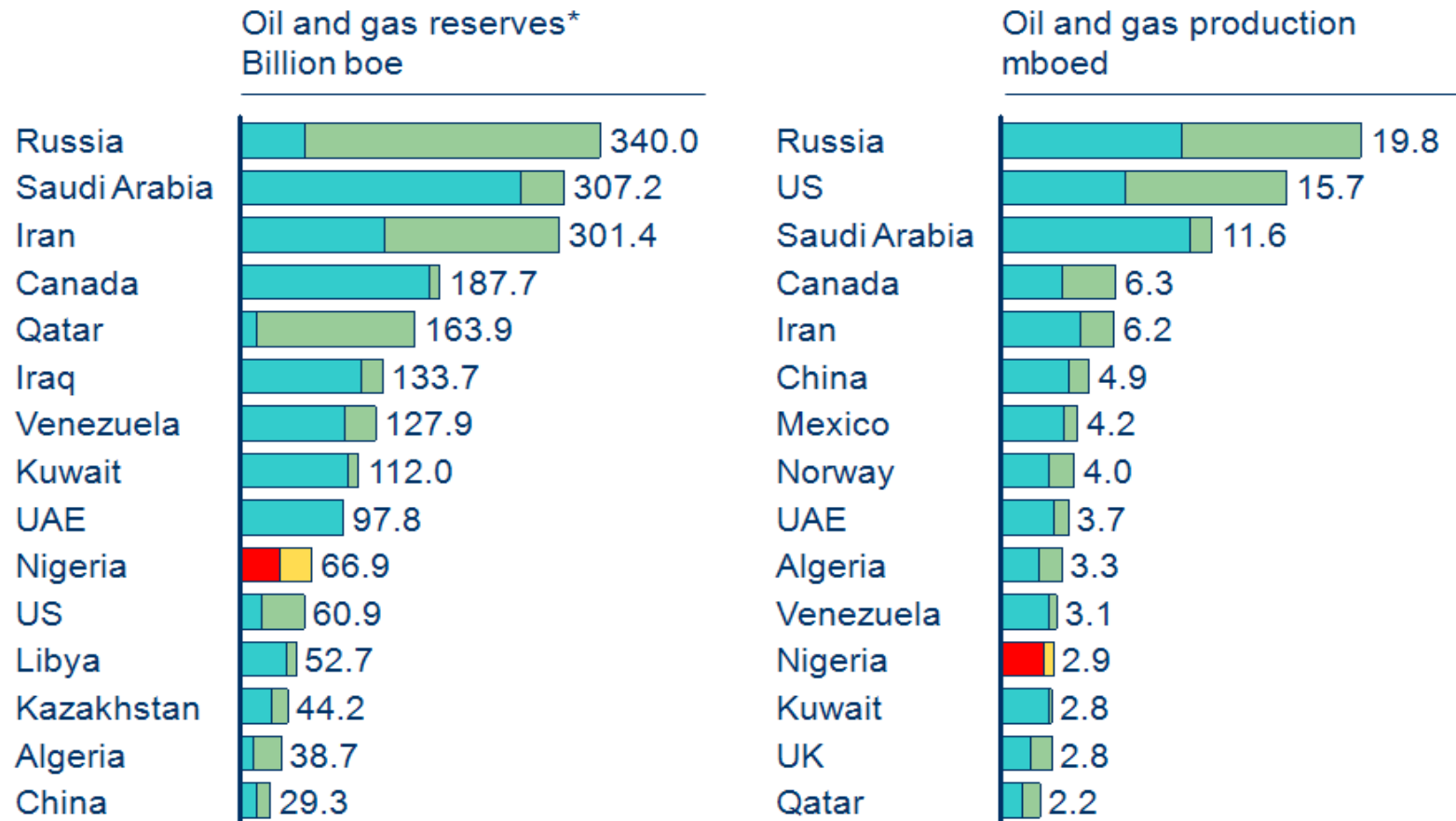
OUTLINE



- **Introduction**
- **Production Stabilization & Expansion**
- **Natural Gas Revolution**
- **Petroleum Industry Bill**
- **Investment Opportunities**

INTRODUCTION

Nigeria's Global Ranking in Reserves and Production



Nigeria's hydrocarbon potential is enormous – global ranking within top 15 in both reserves and production. Sector contributes over 80% of foreign earnings and almost 20% of GDP

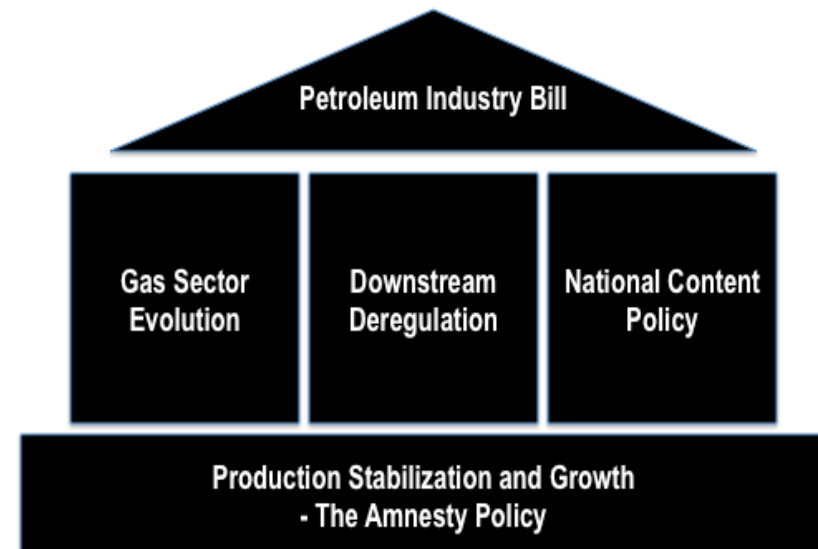
INTRODUCTION

Sector Aspirations and Key Levers of its' Transformat



National Aspiraton for Oil and Gas

- **Grow crude oil reserves to 40bn bbls and production capacity to 4mmb/d by turn of decade**
- **Eliminate wasteful gas flares and leverage the huge potential of natural gas for unprecedented economic growth**
- **Ensure better linkage between the sector and the wider economy – essentially increase the GDP impact of the sector**
- **Entrench a legislative framework that supports competitiveness, transparency and long run self renewal of the sector**



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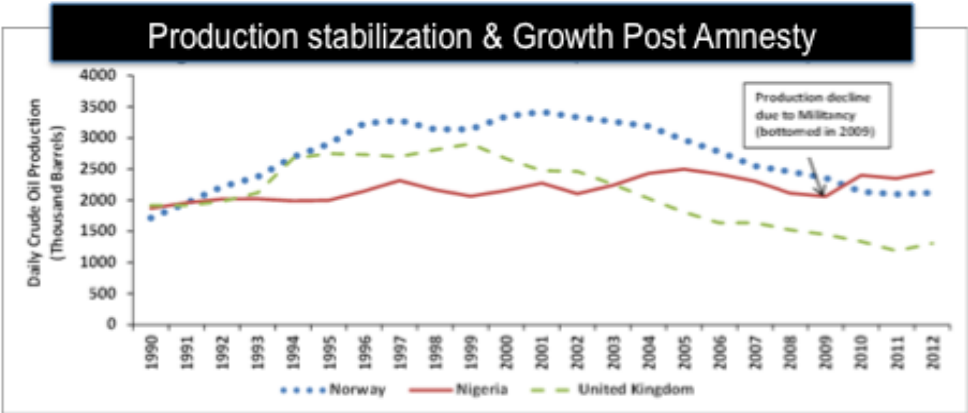
- Investment Opportunities



PRODUCTION STABILIZATION AND CAPACITY GROW



FGN Amnesty Policy



Crude oil production has stabilized at about 2.5mmb/d!!

PRODUCTION STABILIZATION AND GROWTH Niger Delta Security



5 PRONGED EFFORT

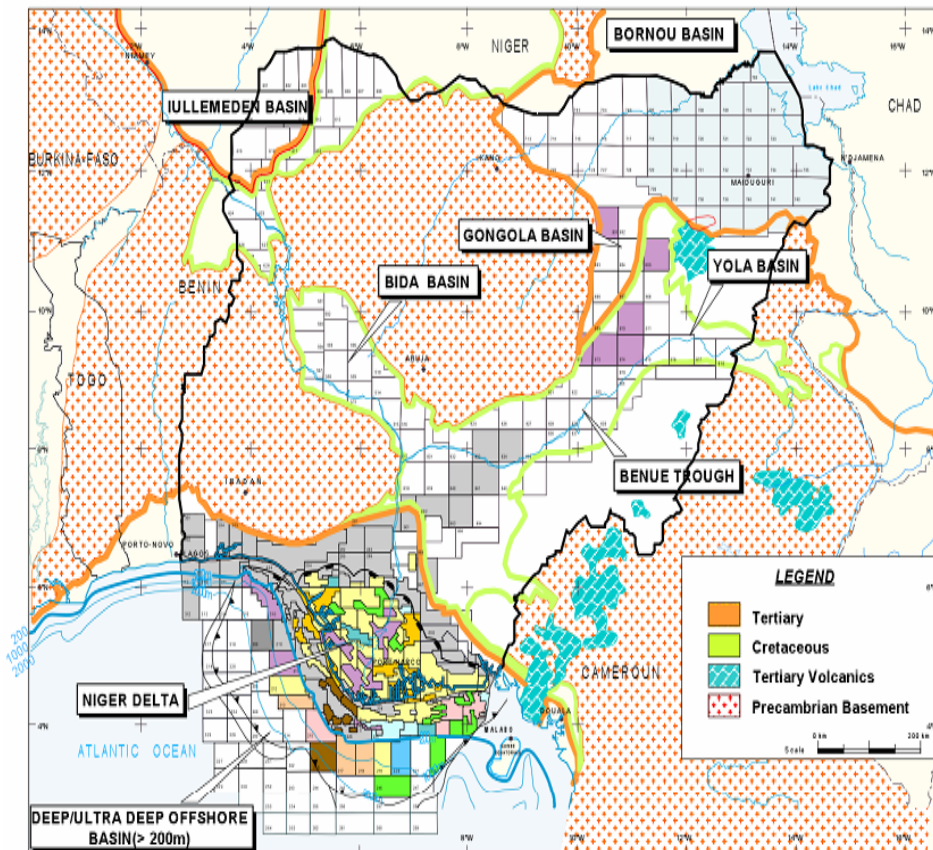
- 1. Law Enforcement**
- 2. Amnesty and Rehabilitation**
- 3. Infrastructural Development of Region**
- 4. Economic Empowerment of the Communities**
- 5. Stimulating Investment Inflows into Region for Sustainability**

A multi-pronged approach to security in the region is yielding results, creating a more stable environment for production

PRODUCTION STABILIZATION AND GROWTH Reserves Growth through Focus on Frontiers



NIGERIA SEDIMENTARY BASINS AND LEASES



- Historical focus was on Niger Delta basin
- In the 90s' the Deepwater Basin was focus, resulting in over 6 bn bbls reserves addition and now about 40% of total daily production
- New focus now on the inland Basins - Chad and Benue Basins
 - Significant spend now being committed to aeromagnetic surveys for better definition
 - Establishment of a Frontier Exploration Basin to focus on these frontiers

Extending the Frontiers of the Nigerian Oil and Gas Industry!!

OUTLINE



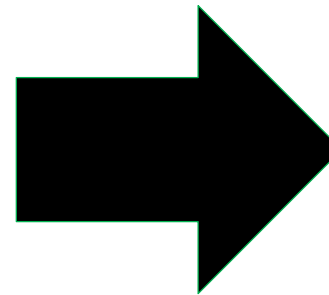
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THE NATURAL GAS REVOLUTION

Flares to Value

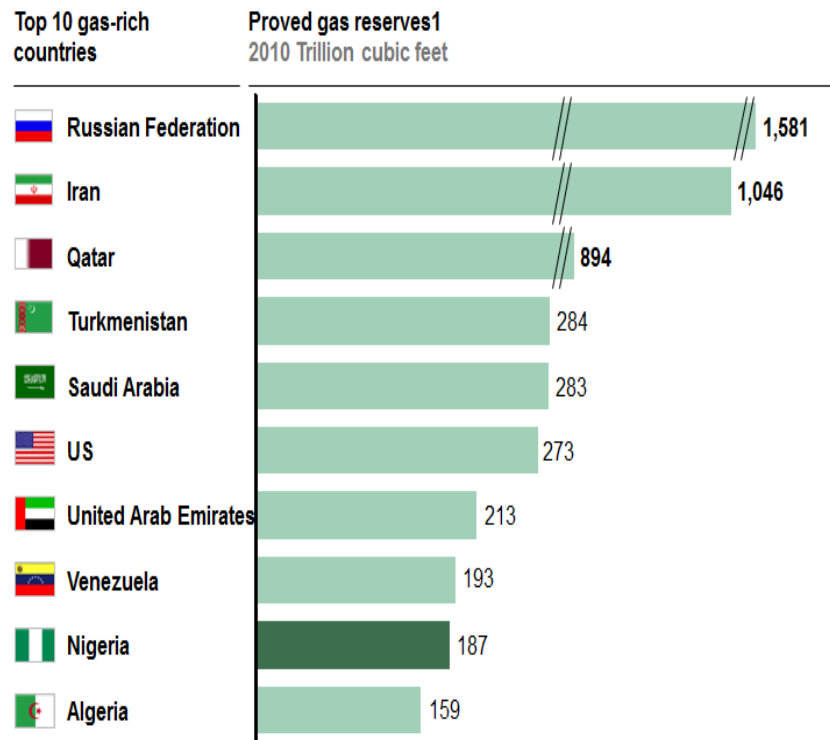


Major expansion in gas utilization and reduction in flares is our objective



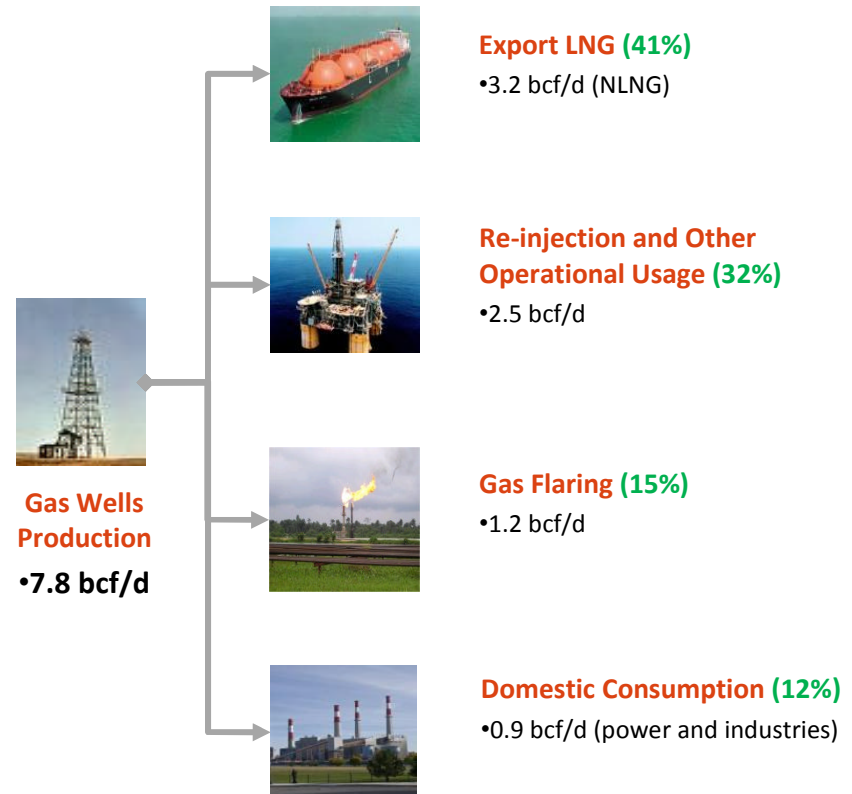
We are embarking on the most aggressive repositioning of the Nigerian Gas Sector to create wealth!!

Enormous Gas Reserves



SOURCE: BP Statistical Review of World Energy June 2011

CURRENT DAILY GAS PRODUCTION AND UTILISATION



THE NATURAL GAS REVOLUTION

Focused 3-Point Strategic Agenda



STRATEGIC THEMES OF GAS MASTER PLAN

GAS TO POWER



- Deliver Gas for at least threefold increase in generation capacity by 2015

GAS BASED INDUSTRIALISATION



“... By 2014, we would have positioned Nigeria firmly as the undisputed regional hub for gas-based industries such as fertilizer, petrochemicals and methanol.”

Deliver on President's Gas Revolution Agenda to:

- Create regional hub for gas-based industries – **fertilizer, petrochemical and methanol**
- Transform gas sector to value adding sector

HIGH VALUE EXPORT



LNG



Regional Pipelines

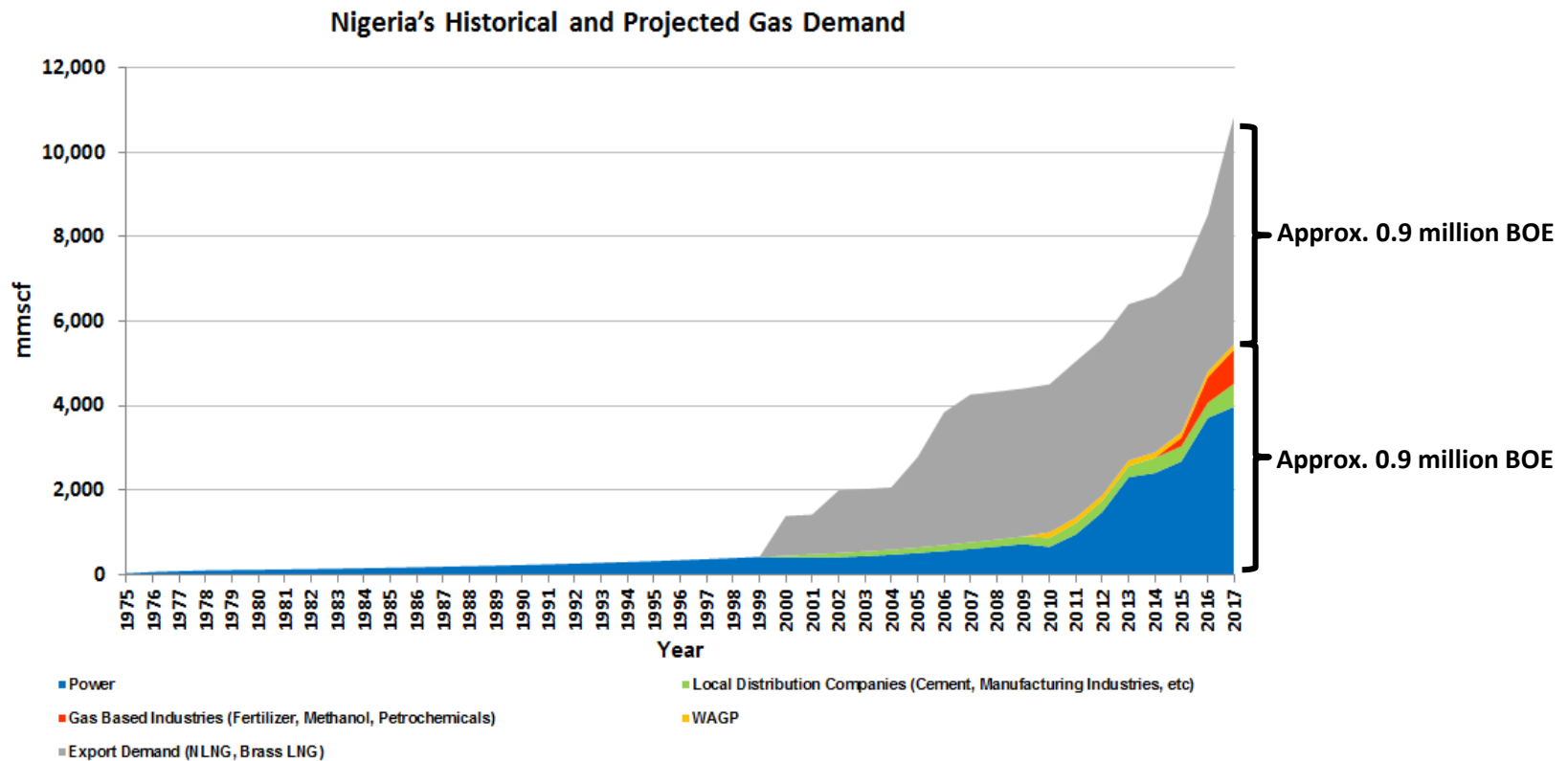
Consolidate Nigeria's position and market share in high value export markets

- Regional gas pipelines – consolidate national footprint and influence

Birth of a New Industry



Gas growth agenda translates to a 1.8mmBOE/d industry – potentially within top 3 in Africa. An unprecedented platform for investment opportunities



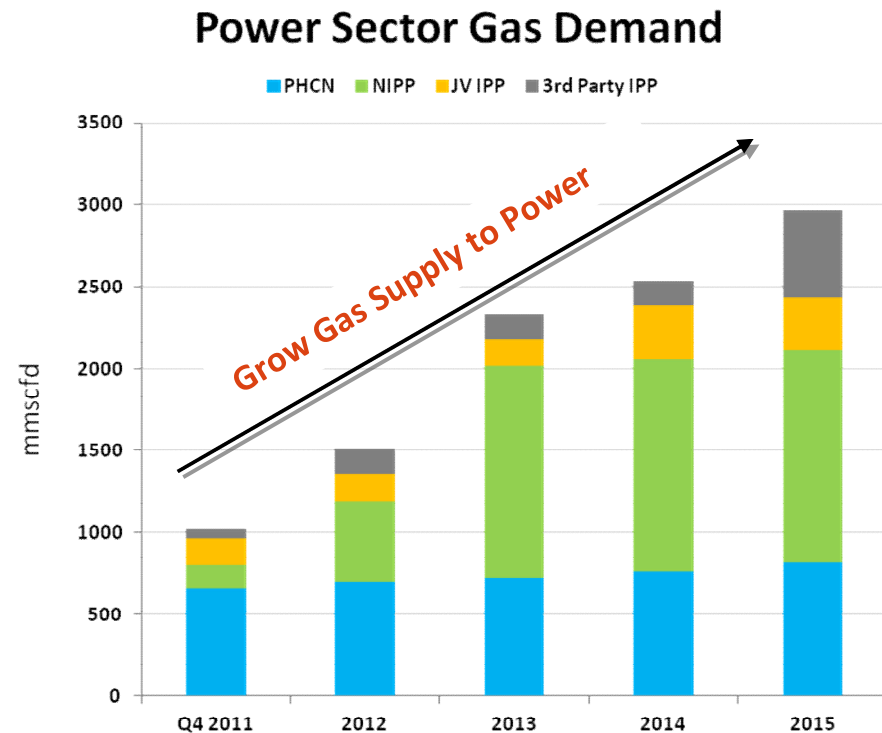
Our unique blend of huge domestic market coupled with solid export footprint provides unparalleled capacity to mitigate risks in an uncertain global gas market!!

Gas to Power Progress



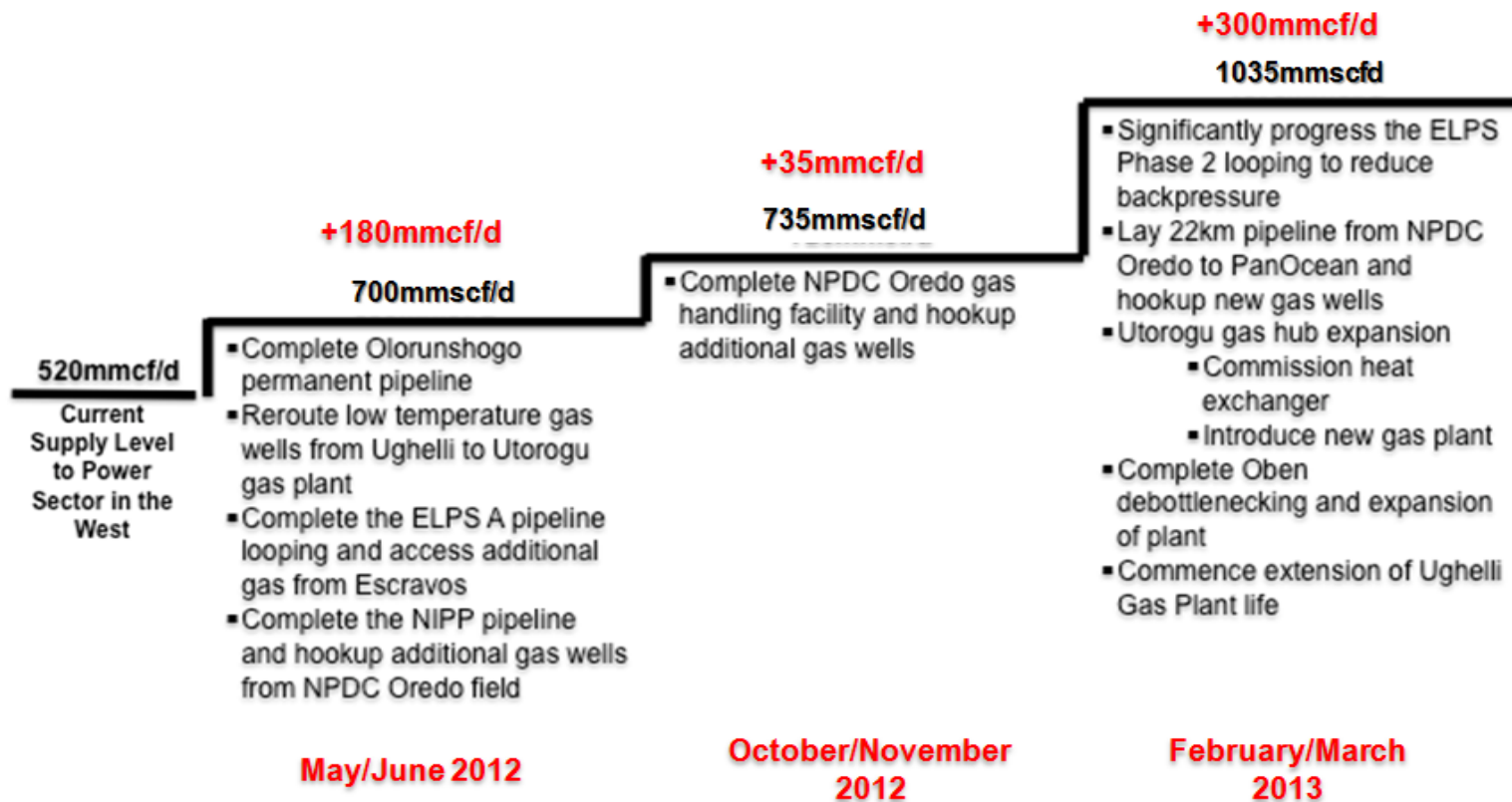
Our efforts in Power are focused on meeting a projected 3 bcf/d of gas demand by about 37 existing and proposed power plants which have a collective potential to generate about 12GW by 2015

<p>1</p> <p>PHCN</p> <p>818 mmscfd</p>	<ul style="list-style-type: none"> • Egbin + AES • Delta IV • Sapele • Olorunshogo • Omotosho <ul style="list-style-type: none"> • Geregu • Afam I-V
<p>2</p> <p>NIPP</p> <p>1,297 mmscfd</p>	<ul style="list-style-type: none"> • Olorunshogo • Sapele • Alaoji • Geregu • Omotosho <ul style="list-style-type: none"> • Ihovbor • Egbema • Gbaran • Omoku • Calabar
<p>3</p> <p>JV IPP</p> <p>322 mmscfd</p>	<ul style="list-style-type: none"> • NAOC, Okpai • Shell, Afam VI • Chevron Agura • Total, Obite • ExxonMobil, QIT
<p>4</p> <p>3rd Party IPP</p> <p>531 mmscfd</p>	<ul style="list-style-type: none"> • Rivers IPP • Ibom Power • Geometric • Hudson Power • Westcom <ul style="list-style-type: none"> • MBH • Ethiopie • Supertek • Negris • Obajana • Tower <ul style="list-style-type: none"> • Wempco • ETG • Notore • Brass



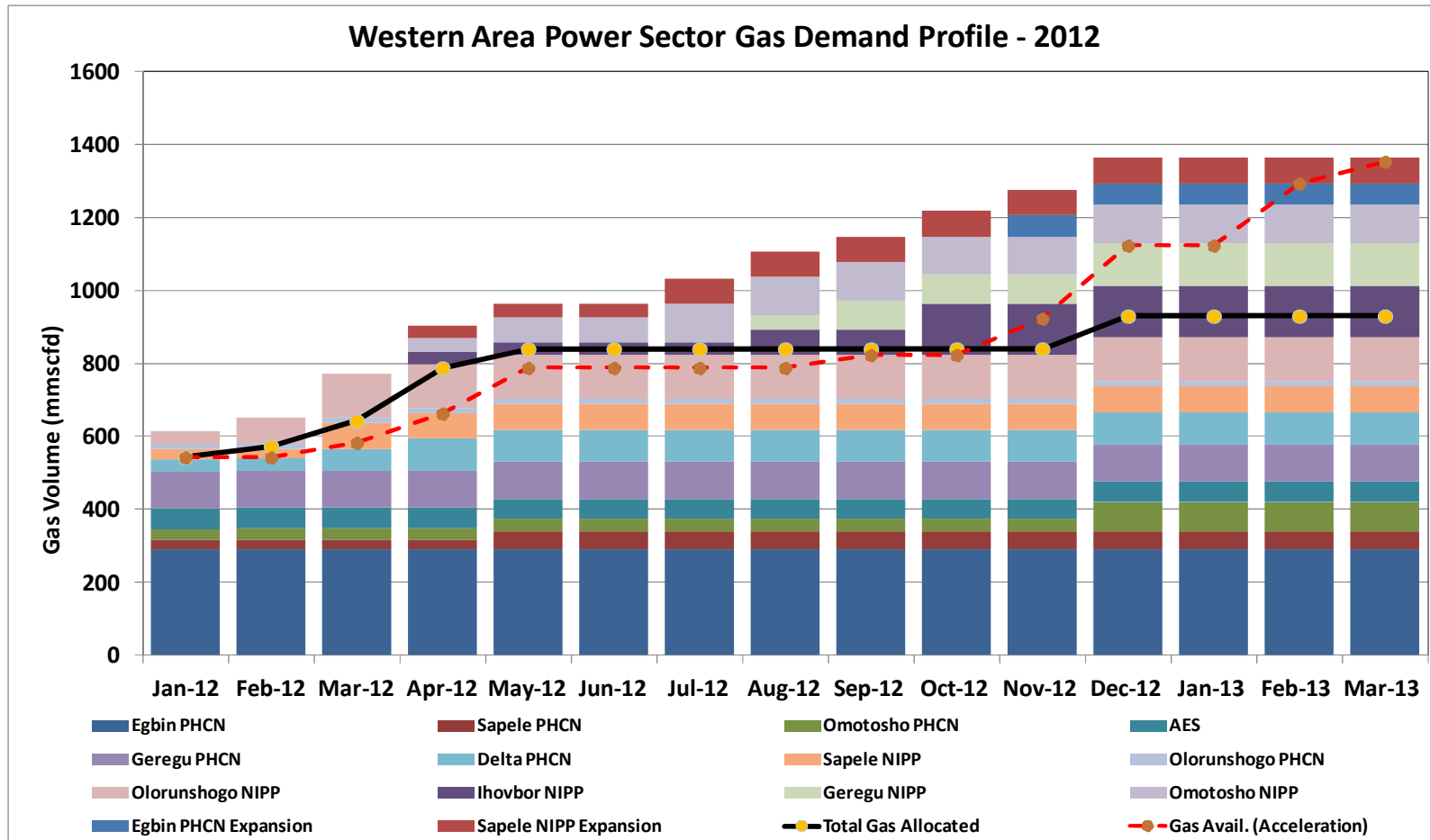


Short Term Gas Supply Plan



By the end of 2012, we would have added enough gas to support a 30% expansion in power generation capacity relative to position at the beginning of the year

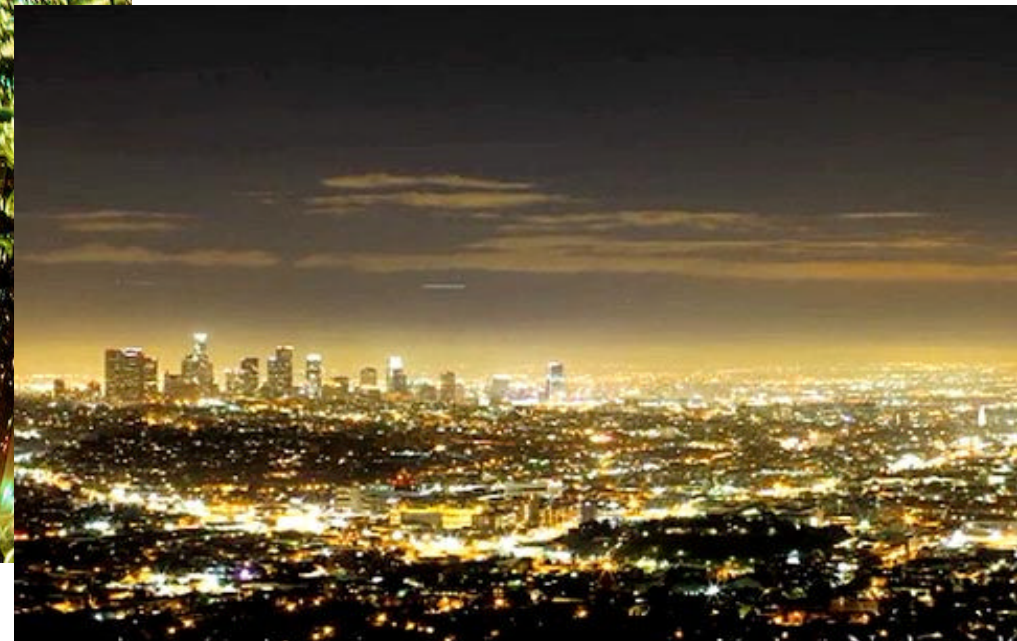
Short Term Impact of Interventions (to Q1 2013)



Nigeria is Lighting up!



The impact of improved gas supply to power is the recent improvement in power availability across Nigeria. This is set to grow as the reforms in gas take a foothold in delivering sustainable supply.



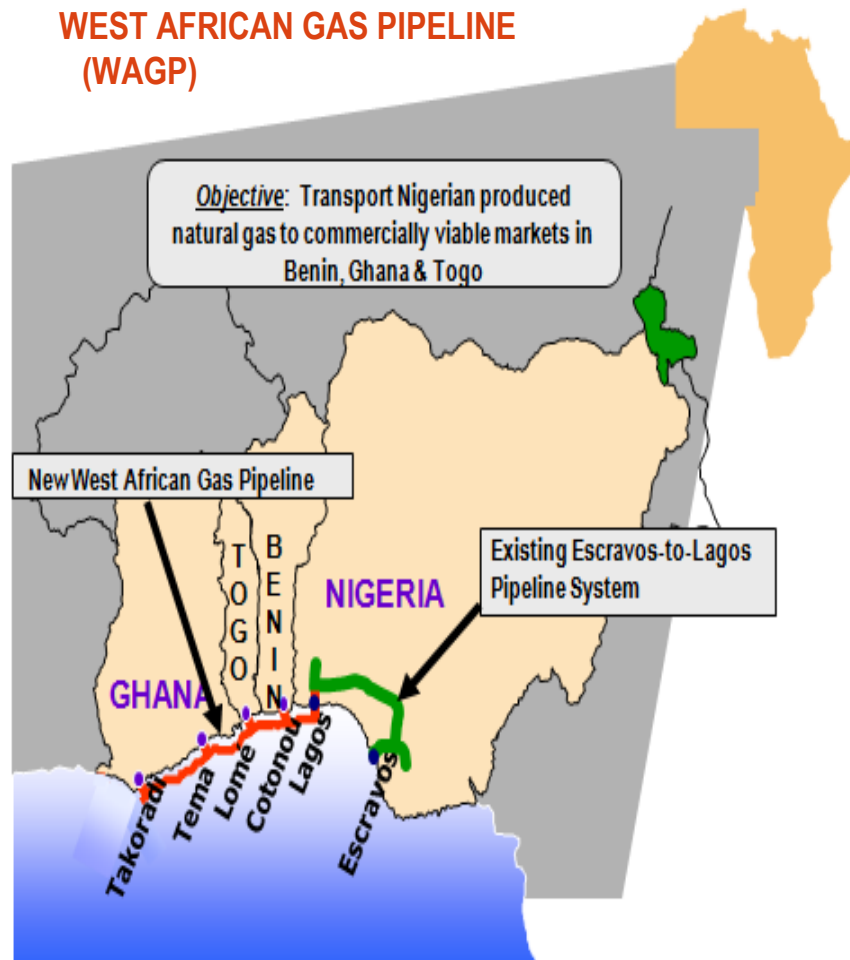
Lagos at night is now much brighter!! Nigeria is lighting up!!

THE NATURAL GAS REVOLUTION

Regional Gas Supply – The West African Gas Pipeline



WEST AFRICAN GAS PIPELINE (WAGP)



- Commenced supply to the West African Sub-region
- About 100mmcf/d is being supplied and growing steadily
- Sub-region demand is growing in turn - - estimated at 400mmcf/d by 2015, creating further opportunities in Nigeria to grow supply

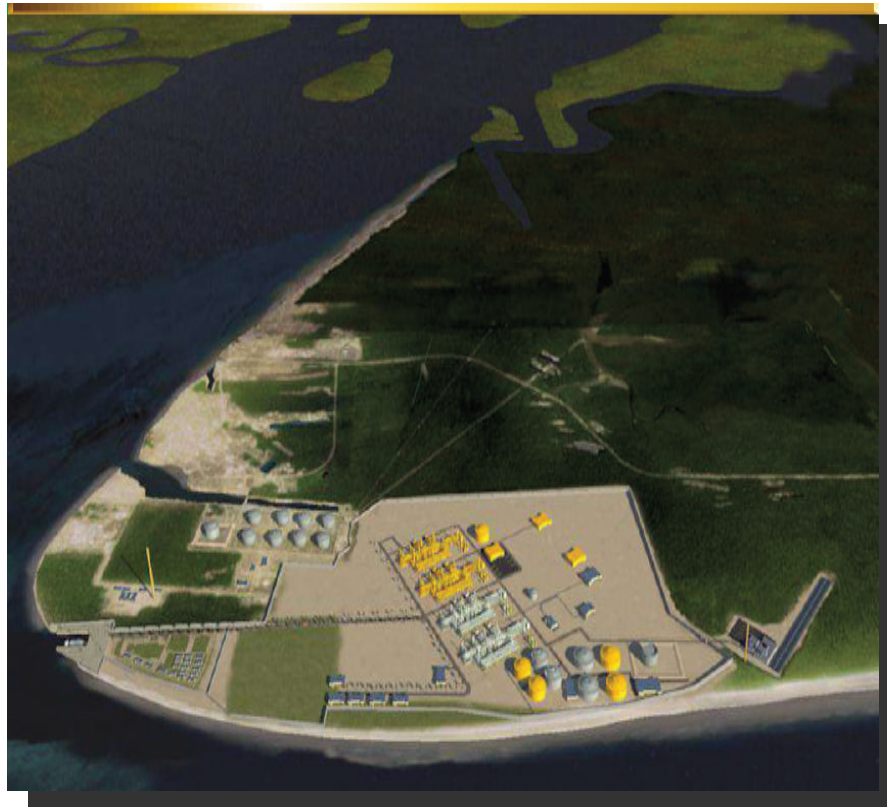
Sub-regional demand growth is creating huge investment opportunities in Nigeria to grow supply

THE NATURAL GAS REVOLUTION

Export LNG – The Brass Project



BRASS LNG



- 10MTPA of LNG, 2.4MTPA of LPG and 0.2 MTPA of NGLS; Will monetize about 12TCF of gas reserves
- NNPC 49% equity, Agip 17%, Total 17% and ConocoPhillips 17%
- Target FID in Early 2013; Project development in very advanced stages
- Significant planned export to Japan
 - NNPC in JV with Japan LNG and Itochu to jointly market LNG
- Other LNG projects under evaluation - NLNG T7 and OK-LNG

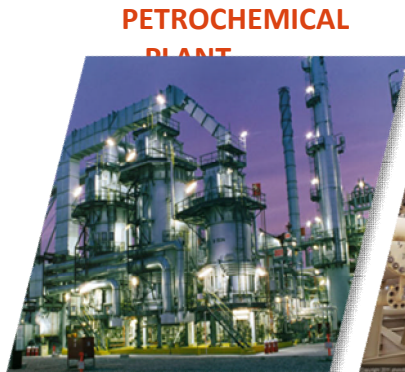
THE NATURAL GAS REVOLUTION

Gas Based Industrialization Programme



The complex will house a 2bcf/d gas processing plant, Petrochemical plant, Fertilizer Plant, port etc. Over the next few years, over \$12bn is planned to be expended on this complex

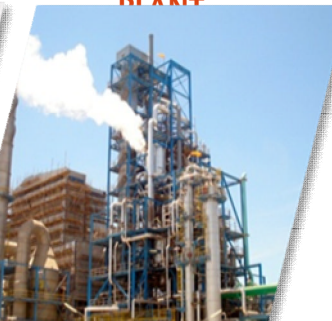
- Xenel/NNPCJV
- 1.3MTPA/400KTPA Polyethylene and Polypropylene plant



PETROCHEMICAL PLANT



CENTRAL PROCESSING FACILITY



FERTILIZER PLANT

- Nagarjuna/NNPC/DSG
- 2.6MTPA Urea/Ammonia Fertilizer plants and 6 fertilizer blending plants



FTZ BASE INFRASTRUCTURE



PORT INFRASTRUCTURE



POWER PLANT



OTHER SUPPORT SERVICES

SPV provides Infrastructure

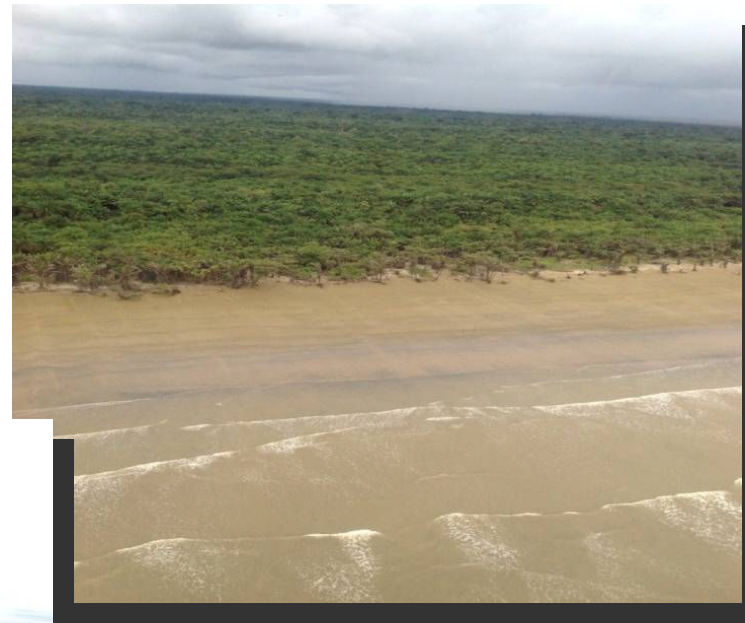
- Petrosaudi/NNPC/DSG

THE NATURAL GAS REVOLUTION

Gas Based Industrialization Programme



Africa's largest gas industrial park to be located in Delta state, Nigeria.

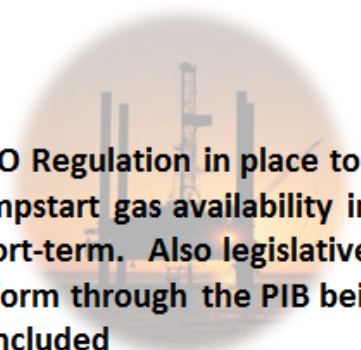


- Coastal location – well suited for export
- Served by existing gas infrastructure
- Close to Chevron's Escravos location
- Purpose built to support gas based industrialization


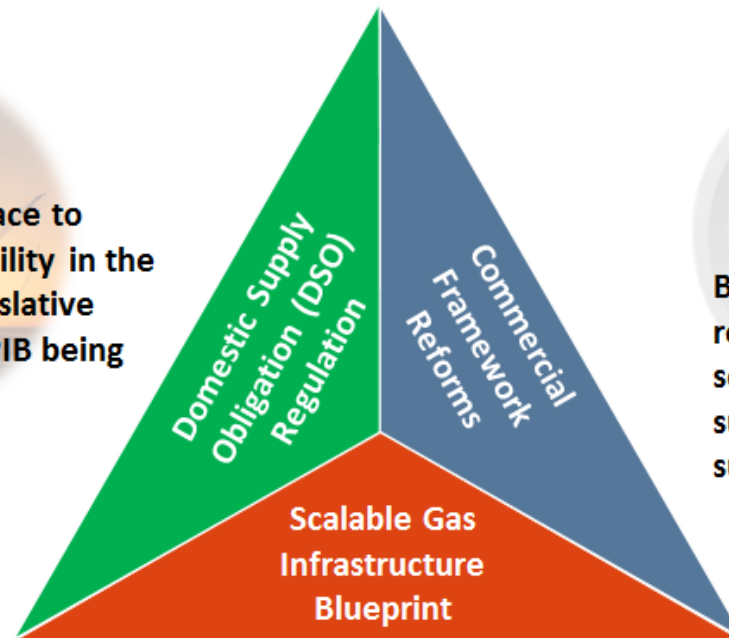
Enabling Policy Thrust




The aspiration is supported by a set of enabling policy interventions which are already being implemented



DSO Regulation in place to jumpstart gas availability in the short-term. Also legislative reform through the PIB being concluded



Bankable commercial framework reforms in pricing and revenue securitization to enable sustainable investment in gas supply



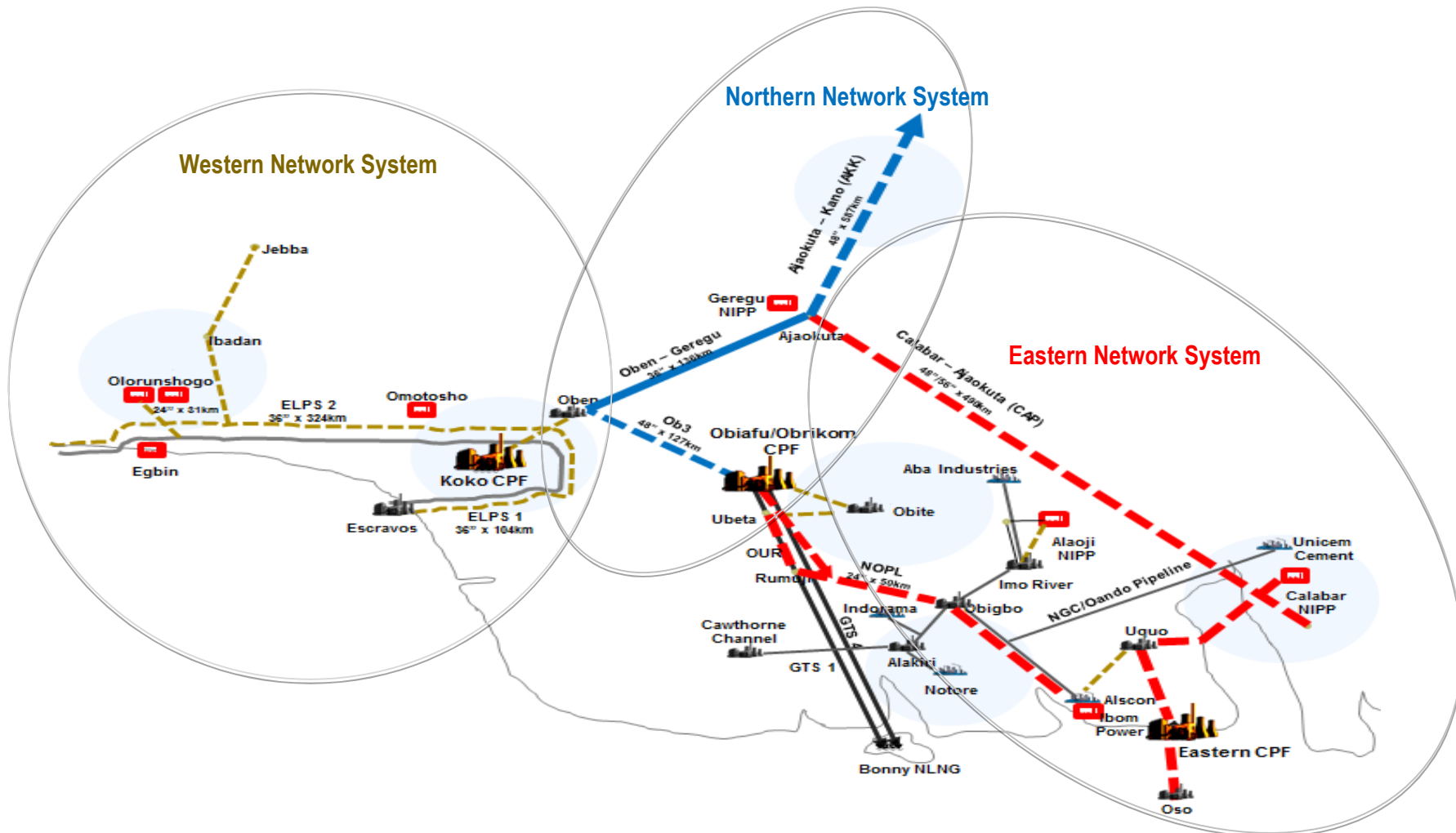
National Blueprint for Backbone gas pipeline and processing infrastructure that will enable flexibility in supply delivery

THE NATURAL GAS REVOLUTION

Aggressive Gas Infrastructure Expansion Ongoing



Our effort is implementing three (3) Infrastructure network, expanding the western network system (ELPS) and reinforcing the Northern Network and Eastern Network Systems



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ENHANCING GDP CONTRIBUTION

Nigerian Content Development Policy



Medium Term Objectives

Retention of significant industry spend on design engineering services as a result of growth in in-country engineering man-hours and consolidation /growth in the number of engineering companies

To create the required fabrication infrastructure and facilities where Oil and Gas work will be done and where Nigerians will be employed.

Long run attain cost competitiveness through local capacity utilization for a major portion of industry expenditure

Chevron Flare Knockout Drum



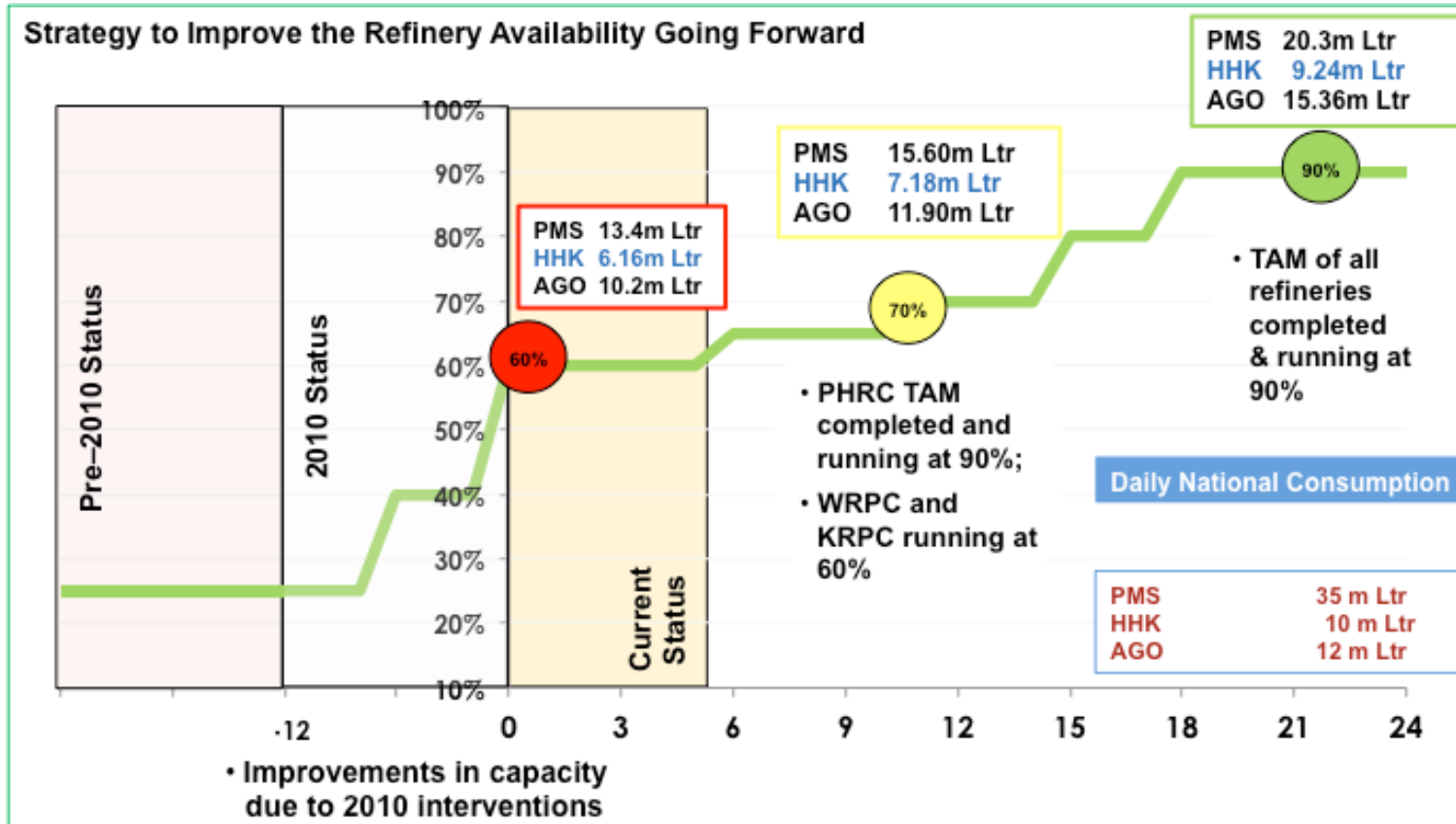
AGIP Separator 2



The Nigerian Content initiative is vehicle for better linkage of sector with wider economy. Our aspiration is to Operate the NCD Act in an investor friendly manner



Refineries Rehabilitation Programme: Attaining 90% Capacity Utilization Sustainably



At full capacity, the refineries are still unable to meet the growing PMS demand of Nigeria. Additional investment is required in new refineries

PETROLEUM INDUSTRY BILL

Key Objectives

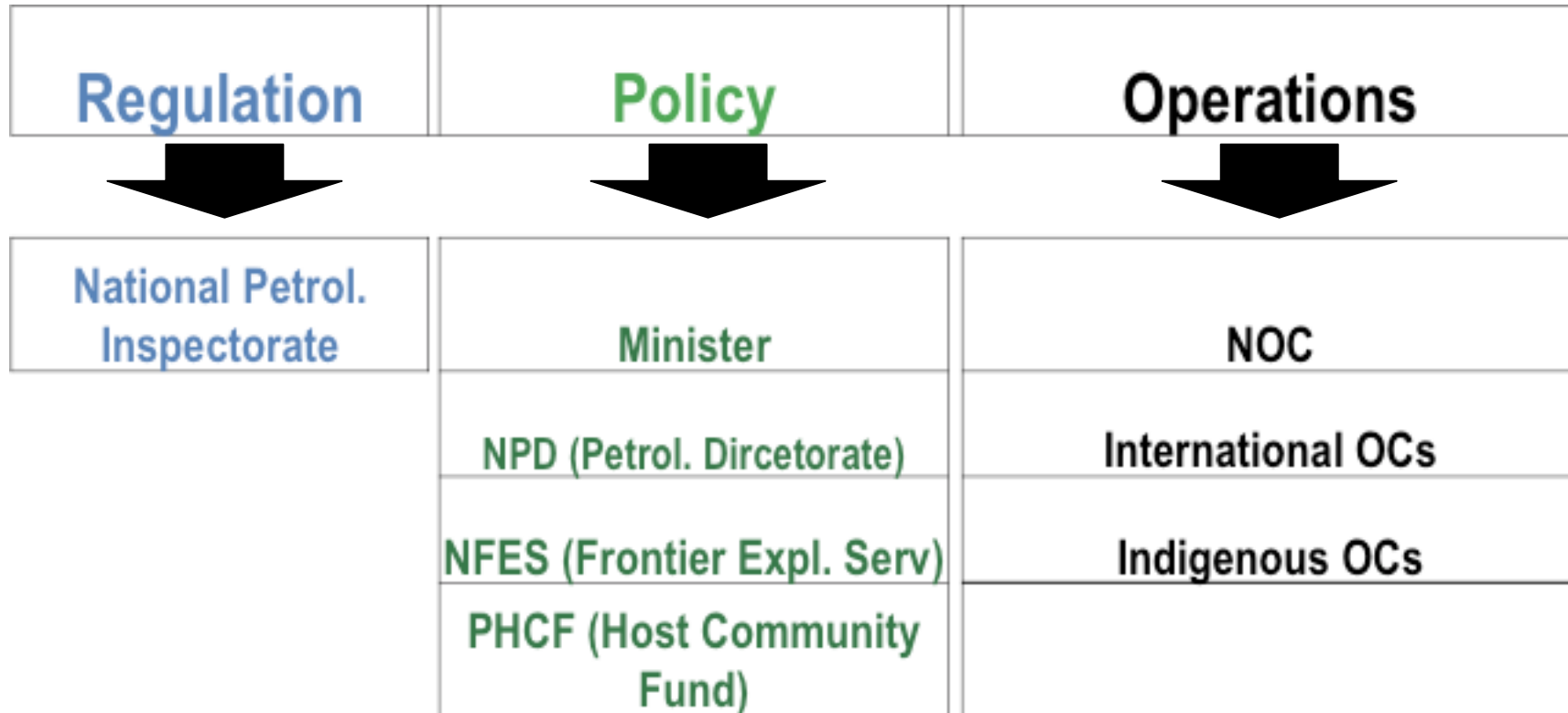


- 1. Enhance industry transparency**
- 2. Entrench effective institutional structures – delineate Policy, Regulatory and Commercial roles**
- 3. Distinct legislative framework for gas from oil**
- 4. Establish a fiscal framework that is flexible, stable, progressive and competitively attractive**
- 5. Create a commercially viable National Oil Company as well as Gas company**
- 6. Improved environmental standards**
- 7. Empowered host communities**
- 8. Promote and protect Health Safety and Environment**

One stop shop for oil and gas legislation

PETROLEUM INDUSTRY BILL

Institutional Clarity



Simple & Transparent; The Minister oversees all industry

PETROLEUM INDUSTRY BILL

Transparency, Accountability & Good Governance



Transparency will be increased significantly through:

- Establishing an open and competitive bid process for the granting of all petroleum prospecting licenses and petroleum mining leases and contracts to be entered into by the NOC.

An open framework is created by eliminating confidentiality of:

- All texts of licenses, leases, contracts and their amendments
- Amounts of any petroleum revenue payments to government by individual companies
- Basis for petroleum revenue payments
- All geological, geophysical, technical and well data shall be accessible for all in a national data base
- Approved budgets for JV's and PSC's, Production, lifting, and quantities and values lifted by COMD

A clear guideline for revocation of licenses and leases

PETROLEUM INDUSTRY BILL

World Class National Oil Company



- **Limited liability public company, free from Government interference, not subject to FR & Public Procurement Act**
- **Fully integrated across the value chain**
- **Pays royalty, tax and dividends; Retain some earnings**
- **Actively manages portfolio; Assets to be initially endowed**
- **Ownership structure; initially largely Govt owned, followed by partial privatisation**
- **Strong and accountable governance**
- **Funding....from its cash flow**
- **Could have assets internationally**

PETROLEUM INDUSTRY BILL

Fiscal Framework



- **Improve overall competitiveness in the oil and gas sector.**
- **Maintain percent government revenues from onshore/swamp and shallow offshore for crude oil and condensate at the current level.**
- **Increase government revenues from deepwater PSC operations, through adjusted royalty rates.**
- **Create attractive fiscal terms for gas in all terrains.**
- **Improve savings index by reducing tax rate (Sole risk/JV) and eliminating investment based fiscal incentives.**
- **Special incentive provisions (increased production allowances) included for PSCs in onshore/swamp/shallow offshore to partially compensate for investor value erosion due to profit share with government given the higher royalty and tax rates in these terrains compared to deepwater PSCs.**

Defining a New Era in the Nigerian Oil & Gas Industry

Enhanced Fiscal Regime



- **Simplification of allowable deductions for NHT purposes**
 - Only direct costs wholly and necessarily incurred in petroleum operations are eligible for deductions
 - No home office expenditures are eligible
- **Capture of Windfall profits**
 - Introduction of price based royalty for crude prices beyond \$70/bbl and gas prices beyond \$7/mmbtu
- **Removal of all cost based incentives**
 - Investment tax credits (ITC) or Allowances (ITA) have been removed in favour of defined production allowances for onshore, offshore and deep-offshore.
- **Harmonization of oil & gas fiscal systems**
 - Gas fiscal terms are fully integrated into oil fiscal systems for the first in Nigeria
- **Preference for Nigerian goods and services**
 - Foreign goods and services capped at 80% for deductions against NHT
 - Alignment with the National Content Act
- **The PIB represents a complete overhaul of the Nigerian Petroleum Fiscal System**

OUTLINE



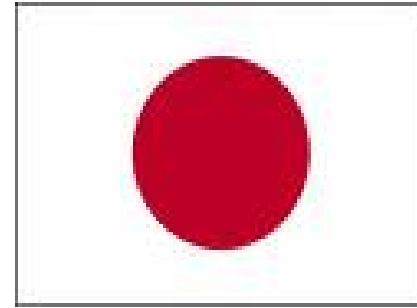
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INVESTMENT OPPORTUNITIES

Nigeria/Japan Relationship



- Unprecedented oil and resource base
- Aggressive and clearly articulated expansion plan – unparalleled investment platform
- Sustained effort at creating a viable and enabling environment

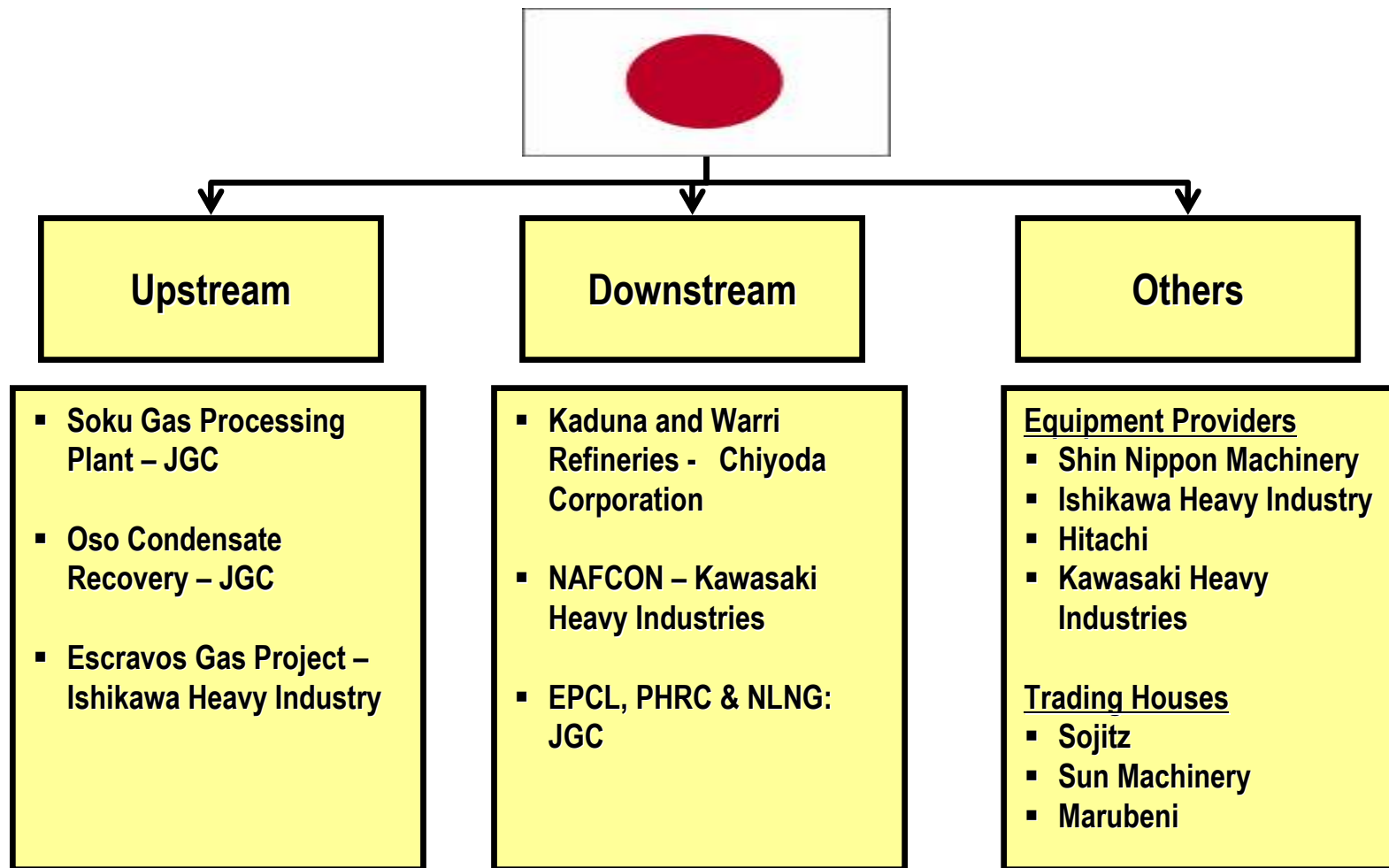


- Extensive manufacturing and technological base
- Huge appetite for resource import
- Access to low cost funds and investment capital

Huge scope for Japanese investment and sustained relationship in Nigeria!!

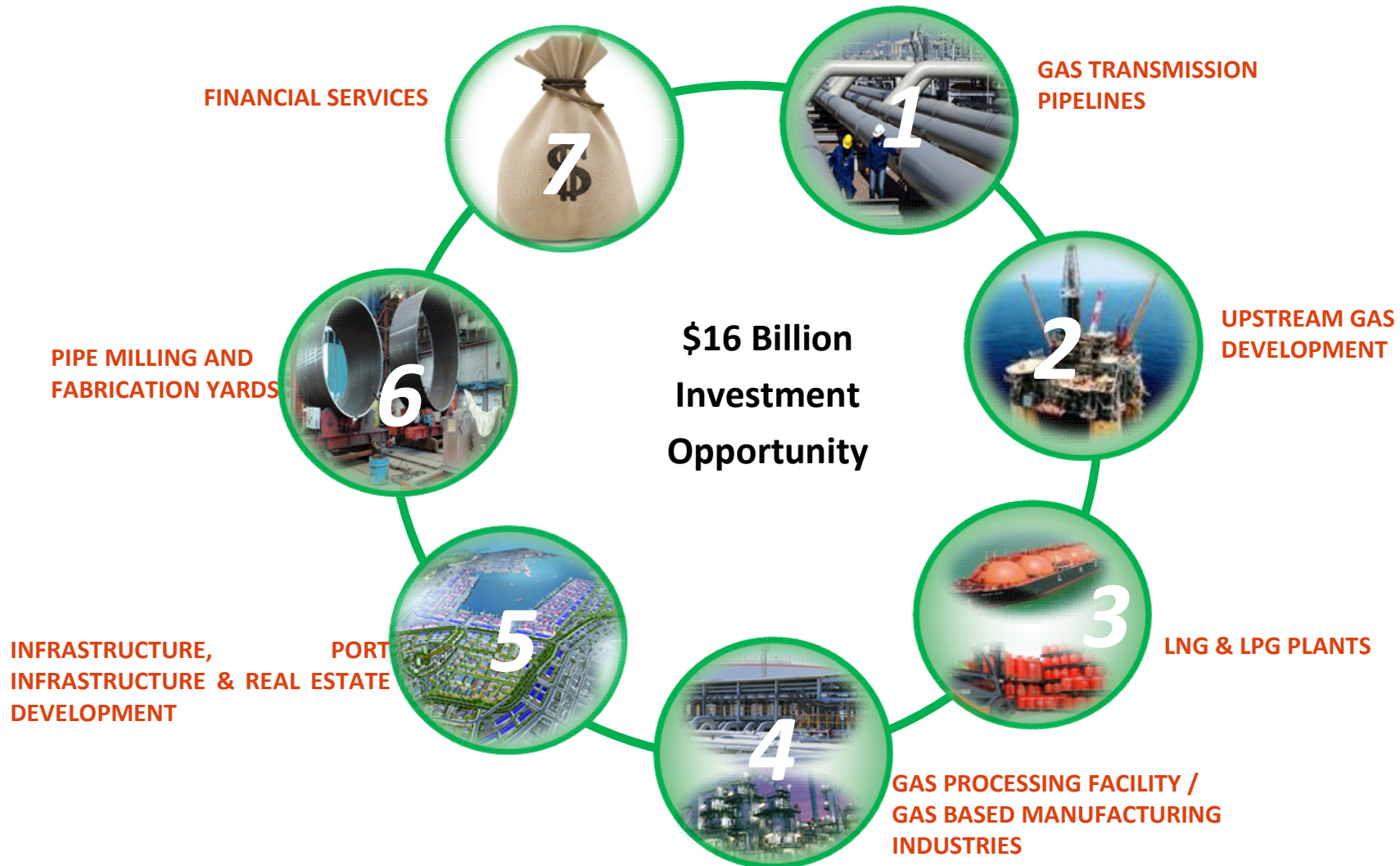
INVESTMENT OPPORTUNITIES

Historical Involvement in Nigeria's Oil & Gas Sector



Japanese companies have played a major role historically in the Nigerian oil and gas industry

New Investment Opportunities





Nigeria is Open for Business!!

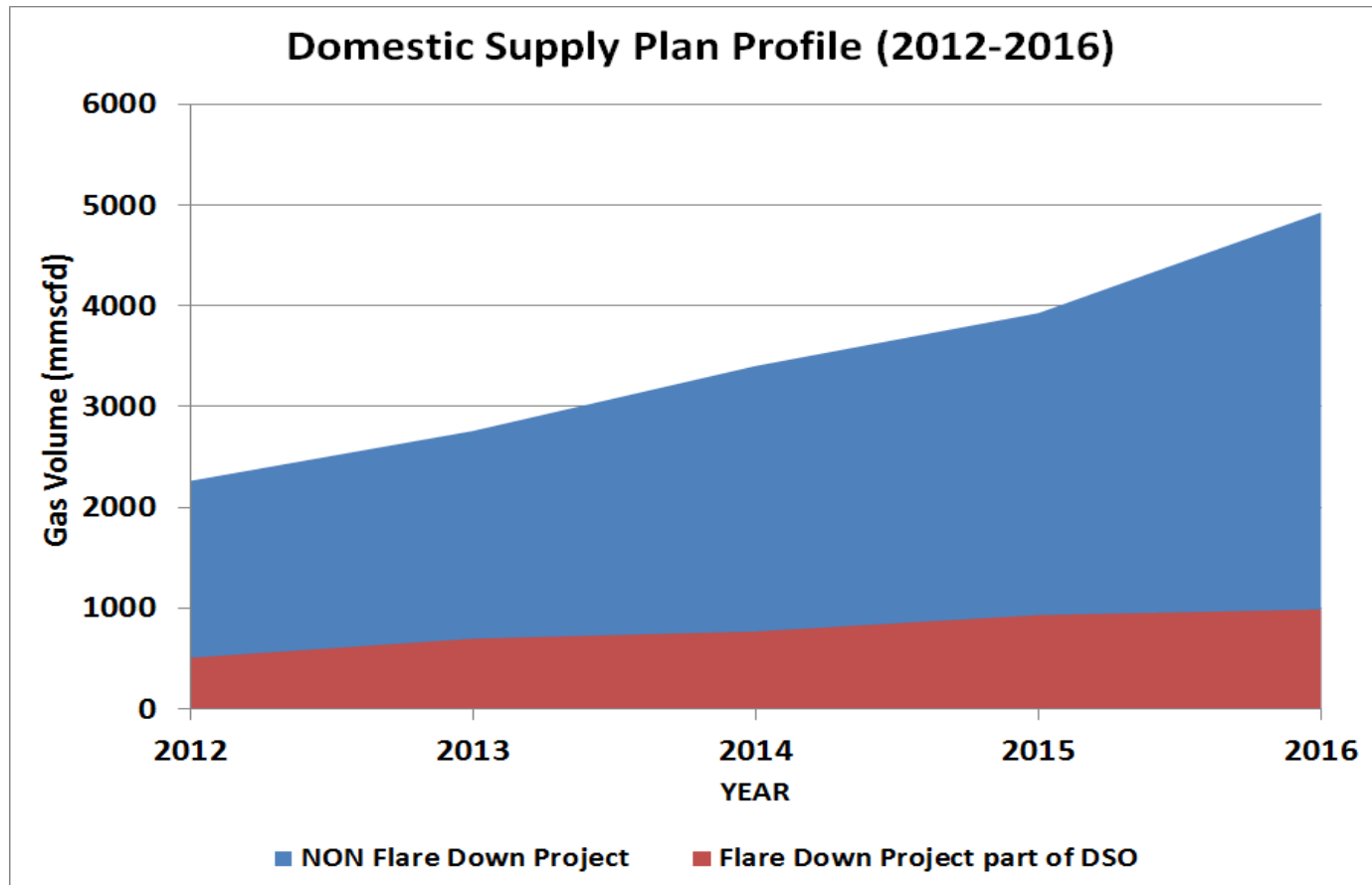


THANK YOU!!



THANK YOU

An Aggressive Gas Supply Growth Programme



To support the agenda is an aggressive gas supply growth programme which implicitly targets gas flares too



Domestic Gas Supply Development Projects

Our supply plan is expected to grow from a current supply of 1.3bscfd to about 5bscfd by 2016. Numerous projects are ongoing

