

NIGERIA AND THE FUTURE GLOBAL GAS MARKET

BY

THE GROUP MANAGING DIRECTOR  
OF THE NIGERIAN NATIONAL PETROLEUM CORPORATION  
(NNPC),  
ENGR. F.M KUPOLOKUN

AT

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PROTOCOL

Distinguished Ladies and Gentlemen,

It is a great honour for me to deliver this presentation at the Baker Institute Energy Forum. I will like to express gratitude to the two great institutions, The James A. Baker III Institute for Public Policy, Rice University and the Center for Energy Economics, Bureau of Economic Geology, Jackson School of Geosciences, The University of Texas At Austin, co-sponsoring this lecture.

NNPC shares the goals of the Baker Institute Energy Forum in serving the need to improve understanding of the complex political, cultural, religious, economic, and social forces that influence open access to energy resources and their equitable distribution.

Many senior statesmen and energy industry leaders have visited the Baker Institute Energy Forum to discuss a variety of public policy issues with its members including President Olusegun Obasanjo of Nigeria in November 2003. President Obasanjo discussed his vision for Africa and various initiatives to ensure peace, stability and economic

growth in Africa and in Nigeria in particular. Indeed, he discussed the fundamental but difficult institutional reforms and Governments determination to 'leave a lasting legacy in terms of a solid foundation for sustainable socio-economic transformation.' It is my delight to address this august gathering on the Nigeria Oil and Gas Sector Reform within the context of the President economic reforms agenda with specific focus on the Nigeria Gas sector and Nigeria's initiatives to meet increasing global energy demand whilst at the same time driving Nigeria's economic growth.

### **Overview of the Energy Industry**

The world has continued to witness sustained band shift in crude oil and gas prices since 2004 and this has triggered major changes in the global energy landscape. The high prices are likely to be sustained in view of continued robust global economic growth and unrelenting oil demand growth in recent years particularly in Asia. Whilst average global oil demand growth from 2002 - 2025 is estimated at about 2%, demand in Asia is forecast at about 4%.

Similarly, the short/medium term imbalance between global LNG demand and supply also suggests that high gas prices may be sustained unless the proposed capacity additions mature. Therefore, rapid

capacity additions in oil and gas are key to ensuring stability and easing the current situation.

Nigeria's aspiration is aligned with global energy needs. It focuses on delivering significant capacity additions in both crude oil and natural gas. Specifically, the targets are to grow crude oil reserves to 40 billion barrels and production capacity to 4.5 mmb/d in 2010, maximize oil and gas sector value to the economy, and transit from an oil industry to an integrated oil and gas industry. Other aspirations include creating as much revenue from gas as oil within the decade, addressing environmental issues, developing the domestic gas market and creating new industries out of the old oil industry.

In line with these aspirations, reserves have grown steadily to over 35 billion of which over 7 billion barrels of oil and 19 tcf of gas have been discovered from the deepwater since 1996. In addition, crude oil production capacity addition has been steady and in deed, over 500,000 b/d will be added in 2006 alone.

The Nigerian economy which is heavily dependent on oil revenue has had a disproportionate low contribution to GDP (30%) and economic development as the industry has hitherto not catalyzed commensurate

economic activity. Addressing this disconnect is therefore an imperative

Africa's economy emancipation cannot be divorced from Nigeria's economic revival. Nigeria is the most populous black country. One out of every five African is a Nigerian. In essence, realigning the industry is vital to economic revival in Nigeria and ensuring regional stability

### **Delivering Economic Growth**

There are three key levers to delivering economic growth in most economies. These are: sustained investment inflows; stimulation of growth in domestic labour and capital; and emplacement of institutional reforms and efficient industry. The Nigerian oil and gas industry has significant potential to impact on these 3 levers.

#### *Investment Inflows*

The industry's investment outlay is estimated at about \$67 billion for the next 4 years (2005-2008) compared to about \$80 billion between 1990 and 2004. This proposed investment is expected to generate about \$30 billion annually at a crude oil price of \$30/bbl.

#### *Stimulating growth in domestic labour and capital*

In addition, understanding the breakdown of annual industry spend of about \$12 billion has provided a basis for developing a national content agenda which aims at stimulating local labour and capital. The strategy is to leverage the transferability of the industry focus areas of engineering, fabrication and materials and to exploit the linkages to key service sectors such as banking, shipping etc as basis for growth.

Equally cross sectoral linkages are being perceived to deliver these aspirations an example being the ethanol production program that is expected to link the oil industry with the agriculture sector. The Ethanol project will reduce domestic use of petrol, freeing more crude oil for export and position Nigeria for the development of green fuels.

#### *Emplacement of institutional reforms and efficient industry*

Additionally, the industry through the work of the Oil and Gas Implementation (OGIC) is undergoing restructuring which is aimed at separation of roles and providing clarity on the functions of the Ministry, and the National Oil Company and the Regulator.

- NNPC Transformation

Similarly, NNPC is transforming rapidly through the Project PACE. PACE is an acronym for Positioning, Aligning, Creating and Enabling. The objective is to ensure that NNPC evolves as a high performing National Oil Company. Project PACE also focuses on delivering and sustaining best practices in asset and hydrocarbon management within the Corporation and the requisite human capacity development. Significant process re-engineering is ongoing across the Corporation leading to improved MIS systems and IT transformation, establishment of the industry emarket place, and Joint Qualification System (JQS). The leadership of NNPC has also been strengthened through new recruitments.

- Downstream Reform

Equally, the downstream oil sector has been deregulated while price liberalization is being implemented for prime products. Furthermore, the price modulator which is a self adjusting petroleum prices mechanism has also been put in place. In addition, the planned privatization of refinery/petrochemical plants is ongoing. Also, some domestic facilities are been made available for third parties on an open access non discriminating basis. In summary, the reforms in the Nigerian downstream oil sector have resulted in stability in domestic

energy supplies putting an end to the chaos of the past and the attendant socio-economic disruptions due to products scarcity.

### **Nigerian Gas Sector and Economic Growth**

Nigeria has a gas reserve of about 184 tcf high quality- sweet gas the discovery of which was incidental to oil exploration. Even at that, the Country has the 7<sup>th</sup> largest gas reserves in the world. However, five key barriers have delayed the pace of its growth and economic impact to date. These are: *pricing, fiscal terms, institutional and infrastructural arrangements, legal and regulatory framework and Financing*

### **Strategic Intervention to Reposition Nigerian Gas**

To address the above barriers, a four- pronged approach was initiated in order to reposition the gas sector. These are: the development of a Natural Gas Policy, Legislative Reviews, Fiscal Reforms, and a Gas Master Plan.

The Natural Gas Policy is aimed at promoting a public-private sector partnership for the orderly and rapid commercialization of Nigeria's natural gas resources for the development and diversification of the domestic economy. It is also aimed at recovering maximum revenue

possible from gas utilization. The Downstream Gas Act addresses the legal, regulatory, institutional and policy constraints to investment in the Nigerian downstream gas sector.

In the same vein, the Fiscal reform deals with the development and legislation of a new fiscal regime for gas projects that is simple and flexible and that will ensure that Nigeria receives an appropriate share of the economic rent generated from the production and utilization of natural gas resources. The proposed fiscal system is anchored on the principle of sustainability that will stimulate participation of new players and ensure that government revenues are aligned with expenditure in the sector for broader economic growth

Lastly, the Gas Master Plan is being developed to provide a framework for Nigeria to maximize value from its gas resources through leveraging the multiplier effect of gas in the domestic economy and optimizing Nigeria's share in the high value export market. The Gas Master Plan is to facilitate timely and cost effective gas capacity additions to meet unprecedented global and domestic gas demand.

## **Evolving Success Stories in the Nigerian Gas Sector**

Tremendous progress has been made in the gas sector in the last few years. Nigeria is growing LNG capacity rapidly and on course to having about 30% of total Atlantic LNG capacity by 2010. The Nigerian LNG capacity additions are expected to increase to about 30mtpa by 2012..

In the same vein, significant progress is being made on the Olokola (OK) LNG project which is expected to deliver 22 mtpa LNG capacity to global gas market from 2010 and subsequently an additional 11 mtpa.

Similarly, the Brass LNG project with 10 mtpa capacity is going on satisfactorily with the Front-End Engineering Design (FEED) nearing completion and Final Investment Decision (FID) planned for the end of 2006 while the 1<sup>st</sup> cargo is billed for the 4<sup>th</sup> quarter of 2010.

Additionally, gas is being leveraged as the fuel to power Nigeria's economy. Already, 15 new gas fired plants are under construction and will add over 7gigawatts of electricity to the national grid.

Consequently, power sector growth is expected to translate into an increase in gas demand from less than 1 bcf/d in 2005 to about 3 bcf/d in 2009 representing over 50% annual growth.

Furthermore, the fertilizer sector with expected demand of over 1 bcf/d day in 2010 is also targeted as a critical infrastructure sector that will have multiplier effects and positively impact economic growth via the agricultural sector.

On the regional front the oil and gas industry is progressing on three key gas projects. These are the West African Gas Project (WAGP), the Trans- Saharan Gas Project to Europe via Algeria and Gas supply to Equatorial Guinea. The WAGP which is a 630 km pipeline is expected to deliver gas to Benin, Ghana and Togo by 1<sup>st</sup> quarter 2007. The project which will ultimately to monetize 580 mmscf/d and provide a platform for regional cooperation and economic growth is now under construction.

Similarly, discussions are ongoing for the supply of about 600 mmscf/d to Equatorial Guinea in 2009. Already, Heads of Agreement between the two countries is expected to be signed shortly. NNPC also plans to commence exploration and production operations in Equatorial Guinea which will internationalize NNPC operations.

More importantly, the gas sector is attracting new players which will increase competition and stimulate more gas supply and utilization system in Nigeria.

In conclusion, the foregoing is translating into a rapid evolution of the Nigerian gas sector. Not only is demand for gas expected to increase from 1.5 bcf/d to 15 bcf/d by 2010, gas flares are down to 40% and will continue to drop, with a view to achieving flare out by 2008. Additionally, the anticipated 25% annual growth rate in Nigeria's gas demand by 2010 (about the highest in the world) is expected to generate about \$13 billion annually by 2012.

### **Socio-Economic Development in the Niger Delta**

Although the recent unrest in the Niger Delta is a challenge. Equally, high level dialogue which is ongoing, signals hope for peaceful and sustained resolution. There has been significant progress through key initiatives such as the local content drive, increased local participation, establishment of skills acquisition centres etc.

Already, the oil industry has changed its social investment strategy from "Community Assistance" (CA) to "Sustainable Community Development" (SCD). This is a more robust approach in dealing with the

Niger Delta which has resulted in more sustained gains for the industry. The SCD approach places emphasis on greater consultation and needs analysis prior to agreeing to Memorandum of Understanding (MOU); empowering communities to do things for themselves; local capacity building to ensure sustainability and multiplier effects of interventions; use of NGOs as key implementing mechanism and operational synergy with Niger Delta Development Commission (NDDC).

On its part, the Government has recently proposed bold and far reaching Presidential initiative for the region. The Federal Government's intervention is addressing issues of unemployment, infrastructure, agriculture, power, water resources and development projects. All these initiatives which have been well received by stakeholders have had positive effects of dousing tension in the region. Other stakeholders like the Federating States, the oil industry and Non-Governmental Organizations (NGOs) are expected to announce their contributions by July 2006.

### **Concluding Remarks**

Distinguished Ladies and Gentlemen, Nigeria possesses tremendous oil and gas potentials and has had significant capacity additions in the last few years. The industry is also being realigned to ensure sustainability

through cross-sectoral linkages and value addition to the economy. In the same vein, the oil and gas industry is rapidly evolving not only as a catalyst to national development but also helping to meet global demand. Consequently, Nigeria is well positioned to meet the global oil and gas supply needs sustainably whilst ensuring ongoing wealth creation in the domestic economy

I thank you for your attention