THE OIL & GAS YEAR

The Who's Who of the Global Energy Industry

ARTICLES | INTERVIEWS | VIEWPOINTS | MARKET ANALYSIS | RESOURCES | PROJECTS | MAPS | INVESTOR SPOTLIGHTS

NIGERIA 2015

www.theoilandgasyear.com

ISBN 978-1-78302-098-0

Plug the gaps
Elisabeth PROUST
Managing Director
TOTAL UPSTREAM COMPANIES IN NIGERIA

New law, fresh opportunities
George OSAHON
Director
DEPARTMENT OF PETROLEUM RESOURCES

Strategic Roundtable

Leverage decades of local experience in Nigeria along with innovative technology and global expertise.

Baker Hughes has collaborated with customers and local companies to push performance boundaries in the areas of drilling, formation evaluation, completions, and production operations. Today, we remain committed to providing world-class service, fit-for-purpose technologies, and state-of-the-art facilities so you get the most oil and gas assets.


long-term
growth.


A LEADING
ENERGY COMPANY,
RESPECTED AND
ADMIRED
FOR ITS
ENTERPRISING
SPIRIT
AND
FOR DELIVERING
VALUE TO
STAKEHOLDERS.


AMNI
AMNI INTERNATIONAL PETROLEUM DEVELOPMENT COMPANY LIMITED
BUMI ARMADA
▶ Amni is one of the most successful indigenous upstream companies in Africa with over 17 years of offshore oil production experience and 15 years as an operator.
▶ Amni has been successfully operating in Nigeria since 1993, and is the operator of two offshore blocks: OML 112 and OML 117.
▶ Amni has now expanded into Ghana with a license awarded in March 2014.
Head Office
Plot 1377 Tiamiyu Savage Street
Victoria Island Lagos, Nigeria
Tel: +234 01 7404679-82 Fax: +234 01 4613904
Field Office
1 St. Thomas Close, Nkpogu Road
Off Trans Amadi Industrial Layout Port Harcourt, Nigeria
Tel: +234 01 7404679-82 Fax: +234 01 4613904
www.amnipetroleum.com

Official partners:

Nigerian Content Development and Monitoring Board

Department of Petroleum Resources

Content partner:

Oando

28

Policy & Economy

The March 2015 presidential election of Muhammadu Buhari brings new hope to Nigeria's oil and gas industry; however, the country must continue to work towards stabilising the domestic industry. Recent measures such as the Nigerian Content Act of 2010, subsidy reforms and the soon-expected passing of the country's Petroleum Industry Bill are all signs of further progress.

42

Nigerian Content

In 2010, the Nigerian government made a concerted effort to develop local content with the passing of the Nigerian Content Act. The industry has since seen the share of domestic companies' assets and activities grow significantly. The drive for increased local content has positively impacted the oil and gas industry and the local economy, bringing about $5 billion in investments, according to the Nigerian Content Development and Monitoring Board.

60

Exploration & Production: International

Several international oil companies have suffered significant losses in Nigeria due to oil theft, vandalism and infrastructure gaps. Global companies have begun divesting from their onshore assets and moving into the country's offshore concessions, where opportunities for profit abound and the potential for theft and sabotage is less severe.

90

Exploration & Production: Marginal fields

As international oil companies move offshore, domestic firms are buying up divested onshore assets, including marginal fields. Though more Nigerian companies are now active in the local oil and gas industry, only a small percentage of the marginal fields are producing due to financial and technical hurdles. The increase of local capacity is central to Nigerian firms' success in these fields.

100

The Year's Focus: Indigenous Companies

Nigeria's indigenous oil and gas companies are taking advantage of assets sold off by international oil companies and the country's concerted push to develop local content. While encountering challenges in garnering sufficient funding for exploration and production, many companies benefit from experience gained in other areas of Nigeria's oil and gas value chain.


LEADING THE WAY IN AFRICA.
Erin Energy is leading growth efforts for oil & gas exploration and production in Africa. With a deep-rooted history and a global perspective, we are building on success.
erinenergy.com
ERIN ENERGY

130

Engineering & Construction

The push for local content has seen many sectors of the Nigerian oil and gas industry develop into robust markets for domestic opportunity. In the country's engineering and construction sector, local firms are partnering up to tackle complex manufacturing and fabrication contracts for major projects such as Total's Egina project and Shell's Bonga West field development. Though opportunities abound, firms must be careful not to overextend their resources.

154

Marine Services & Logistics

The recent scramble for concessions in Nigeria's offshore has necessitated the strengthening of marine infrastructure. As exploration and production in the country's water continues to increase, Nigeria's maritime sector will see a boost in activity. Shallow- and deepwater oil and gas operations will help Nigeria reach its 2030 target of producing upwards of 3 million barrels of oil per day.

184

Downstream

Despite the country's high oil and gas reserves and production, Nigeria imports nearly 70 percent of refined petroleum products. Ageing infrastructure, corruption and financial woes have all been inhibitors to the growth of the country's downstream sector. However, a reduction in corruption and renewed interest in increasing Nigeria's refining capacity provides hope that the country can turn a new leaf and begin supplying the majority of domestic petroleum product demand.

Publisher: Emmanuelle Berthemet **Editor-in-Chief:** Gilles Valentin **COO:** Aslı Konyalı **Regional Director:** Ioana Marins **Country Director:** Gergana Urdarevska **Country Editor:** Ben Leblois **Managing Editor:** Simon Johns **Production Manager:** Alex Mazonowicz **Chief Sub-Editor:** Amanda Towle **Deputy Chief Sub-Editor:** Suzanne Carlson **Web Editor:** Angus Foggie **Co-ordinating Sub-Editor:** Daniel Salinas **Sub-Editors:** Leyla Amur, Jessica-Elise Turner Austin, Jessenia Chapman, John Houghton-Brown, James Kiger, Laura Moth, Jordan Schultz, Matthew Vance **Editorial Intern:** Dilara Gülekçi **Contributors:** Ian Ackerman, Dan Brookes, Joseph Dana, Jordan Duquette, Matt Mossman, Daniel Rosinsky-Larsson, Reuben Silverman, Oliver Tree, Dominic Whiting **Creative Director:** Begüm Alpay **Co-ordinating Art Director:** Didem Tereyağoğlu **Art Directors:** Javier González, Ahmet Sağır, Melis Tüzün **Global Circulation Director:** Ebru Ak **HR:** Ece Özmen **Head of Finance:** Hasan Meriç **Printing:** APA Uniprint **Production:** The Oil & Gas Year, Ltd. **ISBN** 978-1-78302-098-0 **E-mail** info@theoilandgasyear.com **visit** www.theoilandgasyear.com **Cover:** Photograph courtesy of Seplat

WILDCAT INTERNATIONAL
Exploring knowledge
Extracting intelligence
Refining communication

THE YEAR IN REVIEW

New law, fresh opportunities

Director of Nigeria's Department of Petroleum Resources (DPR) George Osahon speaks to TOGY about the details of proposed fiscal terms under the Petroleum Industry Bill (PIB) and the changing dynamics in the country's downstream and midstream sectors. The DPR is responsible for ensuring that oil and gas companies comply with Nigeria's petroleum laws, regulations and guidelines.

George OSAHON
Director
DEPARTMENT OF PETROLEUM RESOURCES

What is the philosophy behind the fiscal terms for upstream companies proposed in the PIB?
The difference in opinion on the proposed changes remains the key obstacle to the PIB being passed. Current fiscal terms compensate contracted companies through an investment tax credit (ITC) or investment tax allowance (ITA) depending on the nature of the arrangement.

The ITC and ITA both reward companies by making expenses part of their tax-deductible cost. While ITC fully reimburses companies' expenses, ITA is a deduction for tax purposes and the impact is about 50 percent of what companies gain through ITC. For this reason, operators do not appreciate the change from ITC to the ITA as contained in the Deep Offshore and Inland Basin Production-Sharing Contracts Act of 1999.

> "When a company or equity partner has a history of overrun work-related costs, financial institutions tend to avoid working with them."

The PIB seeks to change the fiscal concept entirely. Its passing would see companies rewarded through production-based royalties and the general production allowance (GPA), which depends on a company's production rather than its investment or expenditure.

Apart from the GPA, other elements such as the asset location, production volume and price per barrel received versus the official selling price will be factored into the equation in determining how a company is repaid.

The aim is to reward companies for producing rather than spending, which should lower costs across the board, while incentivising them to be more aggressive in achieving production. One of the big flaws under the ITC/ITA regime is that it does not matter whether the claim of a company translates to incremental production or not, the cost expended enjoys the incentive. This is why there is a wide range of unit costs in the industry, from $5-50 per barrel.

A value-for-money audit, which assessed expenditure after the fact, had previously been attempted in the industry. This did little to change habits and the audit was received negatively by the industry. The GPA does not aim to mitigate costs via penalties; instead it targets a production-focused incentive. For private-sector companies, bottom-line interests will drive the change to mitigate costs. The government cannot reward you for only spending money.

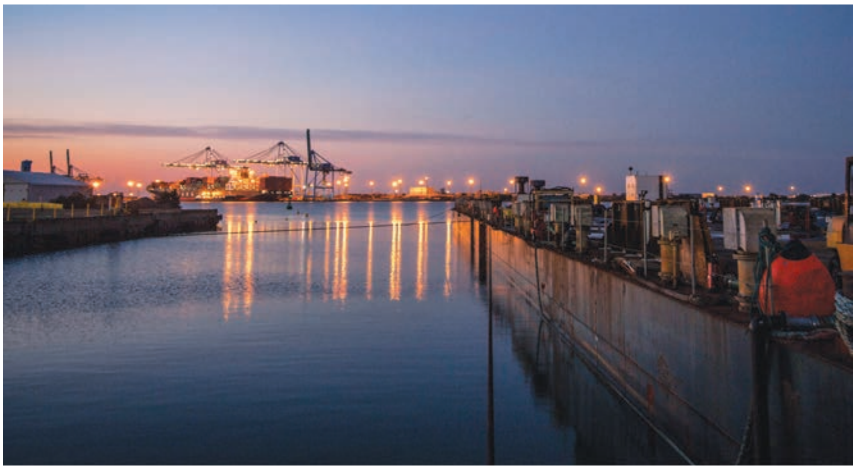
Could the proposed fiscal terms of the PIB help the Nigerian National Petroleum Corporation and Nigerian Petroleum Development Company fund their upstream projects?
The limitation on the part of government to fully fund projects has led to delays in joint venture upstream projects. The government has three options to fund the development of its upstream assets. One is to use state funds, another is to sell equity in assets and the third is to seek external funding from banks or other financial institutions. The latter has been the least attainable due to the inflated cost of government projects, stemming from the ITC and ITA.

Financial institutions would like to engage in partnerships with businesses that have successful track records in operations. When a company or equity partner has a history of overrun work-related costs, financial institutions tend to avoid working with them.

In the past, operators did not want to work on government projects. For example, in the development of the Oso gas condensate field in oil mining licence 70 in the late 1980s, the government had to enact a new law to create access to external funding for the project.

With the new GPA, there will be downward pressure on projects with the government as a partner, as the incentive to spend will be removed and replaced with an incentive to produce. Financial institutions will be more inclined to fund the Nigerian National Petroleum Corporation's projects, opening the door for funding oil and gas operations involving government participation and speeding up final investment decisions for several projects that are on the drawing board.

About the Department of Petroleum Resources
Initially formed as the Hydrocarbons Section of the Ministry of Lagos Affairs in the 1950s, the DPR is responsible for supervising the petroleum industry's activities and ensuring compliance with established laws and regulations. The agency has been credited with the adoption of the electronic and competitive licensing processes, and through its comprehensive review of the fiscal terms for production-sharing contracts, has helped see an additional 780,000 bopd of new oil extracted between 2003 and 2011 from deepwater plays.



Once passed, the Petroleum Industry Bill will have a major impact on Nigeria's oil and gas industry

How would changes to block management and allocation impact acreage utilisation?
The PIB's terms do not propose the redrawing of concessions. The bill will implement a "drill or drop" policy. This means that if a company has a five- to 10-year licence for a 500-square-kilometre concession and makes a discovery in a section, it cannot ignore the remainder of the block.

If the company does not have plans to engage in exploratory or development works in those remaining areas, they will be subdivided into 2-square-kilometre units, called quadrants.

> "In the future, no single operator will be allowed to wholly own infrastructure, including pipelines, increasing transparency."

These quadrants will form a unit of leasable block that other companies can bid for.

Between 2005 and 2007, the government awarded 77 blocks. Today only one of those blocks is in production because firms are sitting on them while waiting for funding. This level of activities is unacceptable to the government.

How can efficiency in the downstream sector be improved in the context of a growing economy and increased demand for petroleum?
The PIB will restructure the downstream and midstream sectors. Firstly, a new independent regulatory body will be set up to cater to the downstream and midstream, separating technical and commercial regulatory capacities. In addition, there will be an increased emphasis on the maximisation of facility usage. One of the major issues restricting the midstream and downstream sectors today is the open access to facilities.

For example, some pipelines and associated infrastructure used for transporting liquids and gas are out of use. This is because pipeline owners are not co-operating with producing companies to maximise the usage of their pipelines. An operator that holds a 100-percent ownership of a pipeline can deny anyone's production from entering that pipeline, even if it is operating below capacity.

The new law will allow the regulator to compel the facility owner to open its system for use by deserving companies. When enforced, it will encourage businesses to invest further in Nigeria's infrastructure. In the future, no single operator will be allowed to wholly own infrastructure, including pipelines, increasing transparency in the midstream and downstream sectors and enabling Nigeria to maximise its existing infrastructure.

There is also an urgent need to boost in-country refining capacity. The DPR encourages investment in mini-refineries, which are less capital-intensive and can be commissioned at a faster rate. These mini-refineries can be established to serve a particular geographical area or projects.

Operators can be incentivised to invest in their own mini-refineries, which offer value-added revenue streams. This will remove the uncertainty associated with crude evacuation, which is subject to theft and changing oil prices, while adding revenue for refined products.

As domestic operators continue to increase their participation and share of production in the upstream sector, what are the long-term prospects for these companies?
The Nigerian Content Act of 2010 has seen many domestic operators emerge as capable players with real credibility. In the short to medium term, the majority of growth in this industry will come from brownfield projects through the divestment of assets by international oil companies. While many of these assets have matured, much of the gas reserves remain untouched.

In the future, the DPR expects to see more investment from domestic operators in the gas industry as the economics become more favourable. As oil reserves begin to deplete, a secondary gas gap will develop.

Nigeria's gas reserves are estimated at 5.15 tcm (182 tcf) and there is an opportunity for domestic operators to switch their focus to gas production. This is common in most maturing oil provinces, such as the North Sea.

How do changes to structural pricing for domestic gas utilisation help incentivise growth in gas production, transportation and use in the power generation sector?
In September 2014, the government announced a benchmark increase in the price of produced gas from $1.50 to $2.50 per million British thermal units, and pegged transportation costs at $0.80 per million British thermal units. This price was put in place to encourage gas producers to make long-term financial projections that would allow them to invest in gas production and monetisation in the domestic market.

While the Nigerian Gas Company continues to occupy the centre stage of the gas transportation market, private companies are moving into this area, making the industry more robust and easing concerns over creditworthiness. ■

IN FIGURES

Nigeria's estimated gas reserves
5.15 tcm

Gas price set by the government in 2014
$2.50 per million British thermal units

Range of industry unit costs for oil production
$5-50 per barrel

MAN OF THE YEAR

President Muhammadu BUHARI

With his landmark victory in the 2015 presidential elections, retired Major General **Muhammadu Buhari** took the helm of Africa's leading oil producer at a critical time. As the first democratically elected, non-incumbent president in Nigeria, Buhari has plans to revamp the oil industry by implementing structural reforms such as improving transparency in the Nigerian National Petroleum Corporation, as seen through his promise to release an audit of the national oil company. With President Buhari's promises to work more closely with the legislative branch than his predecessor, the Petroleum Industry Bill has received increased support as it is a fresh chance to boost Nigeria's most lucrative industry.

ENGINEERING PROJECT OF THE YEAR

In June 2013, a consortium led by DeltaAfrik Engineering and including National Engineering and Technical Company, and International Energy Services won the topsides engineering contract for Total's $15-billion **Egina project**. The $100-million contract will see **detailed design and engineering of topsides process modules** for the project's floating production, storage and offloading facility. A full 80 percent of the work will be done in Nigeria, creating 800,000 work hours and 400 jobs. With 56 percent completed in 2014, the project is set to end in late 2015.

DEAL OF THE YEAR

In October 2014, local downstream giant Aiteo Group revealed that it had acquired Shell, Total and Italian multinational Eni's **45-percent stake in oil mining licence 29 and the 100-kilometre Nembe Creek Trunk Line pipeline for an estimated $2.5 billion.** The field has reserves of 2.2 billion barrels of oil equivalent. In 2014, the asset produced 43,000 barrels of oil equivalent per day from the Nembe, Santa Barbara and Okoroba fields and associated facilities. The pipeline's throughput capacity is 600,000 barrels of crude oil per day.

LOCAL CONTENT PERFORMER OF THE YEAR

Created in 1997 as a metering supplier and installation company, **Makon Group** has grown substantially over the past 18 years, achieving a turnover of more than $700 million in 2014. In addition to its own successes, Makon Group contributed significantly to the country's Gas Master Plan ambitions in 2014 through a number of key projects, including re-entering sites such as Utorogu, where the company built a 4.25 mcm (150 mcf) gas facility, along with engineering work on the Alakiri and Agbada Non-Associated Gas Facilities.

FINANCIAL INSTITUTION OF THE YEAR

In April 2014, the **Nigerian Stock Exchange** completed its first-ever dual listing with the London Stock Exchange through a $500-million initial public offering (IPO) of Nigerian independent hydrocarbons company Seplat Petroleum. With almost 50 percent of locally sourced capital and more than 65 percent of trading volumes done on the exchange, the role of capital markets in advancing local oil and gas firms is clear. The listing was the largest European initial public offering of an exploration and production company since the 2008 financial crisis.

UPSTREAM COMPANY OF THE YEAR

Marginal field producer **Midwestern Oil & Gas** complemented its five drilled wells with the completion of the 51-kilometre Umugini pipeline to increase production from the Umusadege field from 11,000, to more than 18,000 barrels of oil per day by the close of 2014. It aims to produce 25,000 bopd from the field in 2015. In March 2015, the company jointly purchased Shell's oil mining licence 18 for $1.1 billion as part of the Etrotron consortium. The asset produced 21,000 bopd from six fields and 339,802 cubic metres (12 mcf) per day of gas in 2014.

POLITICS

- **Official name:** Federal Republic of Nigeria
- **Population:** 177,155,754
- **Capital city:** Abuja
- **Languages:** English (official), Hausa, Igbo, Yoruba, Fulani, Kanuri and more than 500 others
- **Political system:** Federal republic

ECONOMY

- **Currency:** Naira (NGN1 = $0.0058)
- **GDP (2014):** $594.3 billion
- **Inflation (2014):** 8.3 percent

GEOGRAPHY

- **Climate:** Equatorial in the south, tropical in the centre, arid in the north
- **Area:** 923,768 square kilometres
- **Natural resources:** Oil and gas, tin, niobium, iron ore, coal, limestone, lead, zinc, arable land

HYDROCARBONS

- **Oil reserves (2015):** 37 billion barrels
- **Gas reserves (2015):** 5.1 tcm (180 tcf)
- **Oil production (2014):** 2.43 million barrels per day
- **Gas production (2013):** 38.2 bcm (1.35 tcf)

Sources: CIA World Factbook, Oanda, EIA