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CONTENTS
—July 2016

2 ACKNOWLEDGEMENTS
5 PREFACE
6 NATIONAL ECONOMY  Macroeconomic Indicator
8 THE NOC PERSPECTIVE INTERVIEW  James Mataragio, Managing Director of the TPDC
10 REGULATORY FRAMEWORKS INTERVIEW  Jamidu Katima, Chairman of EWURA
14 LIQUEFIED NATURAL GAS (LNG) INFRASTRUCTURE FEATURED  Readying for Export
16 A FORTHCOMING GAS BONANZA INTERVIEW  Øystein Michelsen, Country Manager of Statoil
18 BRACED FOR THE BIG SCRAMBLE COVER STORY
21 Seizing the moment
22 The Zanzibar stalemate
24 Neighbourly rivarly
25 The spectre of populism
26 Introducing a new constellation of state actors
28 Boom or bust?

30 JUNIOR AMBITIONS INTERVIEW  Neil Ritson, Non Executive Chairman, Solo Oil
32 TRANSNATIONAL PIPELINES FEATURE Becoming a Regional Energy Heavyweigh
34 INVEST-ABILITY OF TANZANIAN OIL AND GAS INTERVIEW  Salim Bashir, Partner at KPMG
Tanzania

Additional full-feature interviews from our Tanzania 2016 Report can be accessed on EnergyBoardroom, the premier website for C-Level executives, consultants and state actors in the pharmaceuticals and life sciences sector, alongside hundreds of exclusive interviews featuring the main movers and shakers of the industry, free country reports and sector insights supplemented by the latest news from global markets.

AMPLIFIED CONTENT

JAMES MATARAGIO – Managing Director, TPDC

JIM BABAN – VP International Business & Managing Director, Heritage Oil

MATTHEW ALLEN – Managing Director & CEO, Otto Energy

ØYSTEIN MICHELSEN – Country Manager of Statoil

NEIL RITSON – No-Executive Chairman, Solo Oil

@energyboardroom
Øystein Michelsen of @StatoilASA #Tanzania talks #localcontent #LNG plant and #offshore #gas http://buff.ly/28OEEP6

@energyboardroom
Jamidu Katima of #Tanzania’s energy regulator EWURA talks #localcontent and #FDI http://buff.ly/25vUm9M

@energyboardroom
Salim Bashir of @KPMGAfrica on #oil&gas competitiveness and potential in #Tanzania buff.ly/1UqlkYw

@solooilgas
Why OIL $ GAS in TANZANIA? READ the exclusive interview with SOLO’s Chairman by @EnergyBoardroom
Preface

Discovery of significant quantities of commercially viable natural gas deposits within Tanzania have witnessed the East African state transformed into a hive of activity with world-renowned oil and gas multinationals now frantically jostling for a stake in the hitherto largely overlooked nation’s lucrative hydrocarbon resource.

On the face of it, findings of over 55tcf of largely untapped natural gas reserves are a godsend for one of the region’s fastest growing economies and a burgeoning population with a seemingly insatiable appetite for electricity. Couple that with the fresh politics of an energetic and action-orientated new president committed to spending big on infrastructure and it is easy to see why there is so much excitement amidst the investor community. But the talk of swift prosperity is softened by concerns over the ‘resource curse’ so prevalent across the region and the ongoing volatility and instability of global oil prices.

This report surveys the myriad actors in this much-hyped new frontier; including the domestic regulators and government officials attempting to balance the requirements for local content with the need for foreign investment as well as the buccaneering international companies, large and small, attempting to strike it lucky and capitalize on Tanzania’s enormous potential.
NATIONAL ECONOMY
Macroeconomic Indicators

TANZANIA MACROECONOMIC PROJECTIONS 2017-18

Real GDP growth
Inflation (CPI, %)
Overall fiscal balance
Current account balance
Gross official reserves ($ million)

Source: World Bank

HEADLINE FORECAST
(TANZANIA 2014-2020)

6.968% GDP Growth
US$ 44.904 Billion GDP (Current prices, US Dollars)
US$ 941.804 Billion GDP per capita (Current prices, US Dollars)
US$ 138.461 Billion GDP (PPP) (US Dollars)
US$ 2,904.04 GDP per capita (PPP) (US Dollars)
47.679 Million Population

Source: IMF

TANZANIA GDP GROWTH
PERCENTAGE CHANGE

Source: World Bank
Tanzania Oil & Gas July 2016

Macroeconomic Indicators

TANZANIAN OIL & GAS TIMELINE:
A FLAGSHIP INDUSTRY GATHERS PACE

- New tougher PSA terms introduced
- BG Group and Ophir discover 56 metres of net pay in Mzia discovery, offshore block 1
- Ophir sells 20% of its assets in blocks 1, 3 and 4 to Pavilion

2013

11/04

Statoil and ExxonMobil announce flow rate of 1.87 mcm (66 mcf) of gas per day from initial drilling in Zafarani gas reservoir on block 2, offshore Tanzania

11/13

Tanzania Electric Supply Company announces higher power utility tariff, despite public criticism

11/14

03/04

Statoil makes high-impact natural gas discovery in Pir-1 well offshore Tanzania in block 2

01/12

Swala Oil & Gas becomes first O&G Company to go public in East Africa

06/18

John Magufuli is elected President of Tanzania, winning 58% of the vote

08/12

Tanzania Petroleum Act 2015 is passed

10/14

Statoil and ExxonMobil make natural gas discovery with Giligiliani-1 exploration well; 34 bcm (1.2 tcf) of gas in place to existing offshore block 2 volumes

10/25

USD 1.33 billion 542 km gas pipeline project finalised to transport gas from onshore gas fields in Mtwara and Lindi to Dar Es Salaam

07/19

2015

2016

01/02

Solo Oil confirms it has increased its interest in Tanzania’s Kilwani North development to 10%

02/14

PanAfrican Energy Tanzania ready to commission new well at Songo

02/01

Land acquisition finalised for the site of a planned LNG plant

02/14

Kilwani North reaches “first gas” production milestone

04/23

Solo Oil confirms it has increased its interest in Tanzania’s Kilwani North development to 10%

01/16

Minister of Energy and Materials Sospeter Muhongo reveals plans to open up TANESCO to private sector investment

04/07

Uganda chooses Tanzania over Kenya for pipeline route to transport its oil to international markets

04/23

54 BCf of helium gas reserves discovered in Tanzania

07/04
RESHUFFLING THE RULES OF THE GAME

Preface: The Tanzania Petroleum Development Corporation’s Managing Director discusses the restructuring of the local oil and gas market and unveils the company’s long-term plans, including investing heavily in LNG, and exploiting East Africa’s enormous gas potential.

**EBR:** How will recently approved new oil and gas legislation impact the structure, mandate and responsibilities of the TPDC? What sort of transformative changes will these developments necessitate within the national oil champion?

**JAMES MATARAGIO (JM):** The TPDC is undergoing a transformation from being a 100 percent government-owned entity to a properly functioning commercial corporation. Our vision is to follow in the footsteps of other national oil companies round the world and to ultimately go global. We currently have a full time staff of 400 employees, which is quite a lot given the size of our existing project portfolio. It’s important to remember that alongside our in-house service expertise, we were, until very recently, also doubling up as the national oil and gas regulator.

The recent legislation entails a full restructuring of the sector in which Tanzania’s oil and gas regulatory functions will be spun off from the NOC to an entirely new organizational entity called the Petroleum Upstream Regulatory Authority (PURA). This will be of great benefit to the TPDC as it will enable us to concentrate on our core tasks of exploration and production (E&P) without other distractions. My own appointment is indeed a product of this far-reaching, industry-wide restructuring.

**EBR:** Under the new rules of the game, what will the frame of the Production Sharing Agreements (PSAs) look like? Will the TPDC feature as a mandatory partner on all upstream oil and gas projects?

**JM:** The rationale behind the reforms is to foster expansion of the industry. Under the new regulations the TPDC, as a freshly structured national oil company will participate with a stake of at least 25 percent in each and every domestic field. We will also act as the owner of the licenses. Therefore, anyone that wants to operate in Tanzania will automatically need to partner with the TPDC.

We were keen to combat an issue that we noticed cropped up previously with the mining sector in which private sector investors hung on to licenses so as to trade them, but with very little intention of actually producing. Tanzania’s oil and gas resources are national endowments, the proceeds...
We have, to date, barely explored half of the country, yet from what we have witnessed so far, the potential is absolutely enormous.

JAMES MATARAGIO MANAGING DIRECTOR OF THE TPDC

of which the entire nation has the right to benefit from. The TPDC, as the custodian of all upstream activity in the country, will ensure that the full benefits of this resource base flow back to the people. To this aim, we are in the process of setting up a national petroleum fund composed of the revenues derived from the development of the sector. A proportion of that will then be reinvested back into oil and gas activity thus securing the sustainable future of the local industry.

EBR: What is the overall development strategy for exploiting Tanzania’s full oil and gas potential?
JM: When it comes to gas, we possess a huge domestic and regional market. We are now producing gas onshore, and we have recently completed a pipeline from our onshore gas fields in Mnazi Bay (Mtwara) and Songo Songo (Lindi) to Dar es Salaam. In October 2015, we started pushing first gas through the pipeline to a gas power plant in Dar es Salaam, which represents a massive milestone for the country. This 542 km pipeline and the two gas processing plants together constitute a mega project for a country like Tanzania and are financed to the tune of some USD 1.2 billion.

EBR: Electricity prices in Tanzania are comparatively low. How will you handle the inevitable tensions that are created between gas partners that would like to see their gas equity being exported and the needs of Tanzanians in consuming affordable electricity?
JM: We are currently working out the policy framework for this area, but for this year, the gas we are producing in the country will be exclusively for local consumption. There is huge potential for Tanzania’s gas industry to blossom: offshore alone, our discoveries are estimated to be as large as 45 Tcf of gas, and this volume is set to be developed within the next eight to ten years. We are also in the pre-FEED stage of building a two-train LNG export terminal in the southern town of Lindi that will ultimately help us export gas. Although we do need to negotiate contracts with our partners regarding this facility, we also have to be appreciative of the fact that the gas price could be in a very different place five years from now.

EBR: Bearing in mind the possibility of volatility in gas pricing, just how risky is this LNG project?
JM: I believe that over the long-term, the oil and gas business is always cyclical. I am optimistic that, within the next two or three years, oil prices will rebound. TPDC’s focus takes into account a long-term perspective. We consider that future prices will be good enough for us to not delay in proceeding with the development of our LNG project. Today, as partners on the project, we have Statoil, BG Group, ExxonMobil, Ophir Energy and if Shell come, that will be even better! These are all very solid financial partners. TPDC will enter the project with the land for the terminal as its equity, and later down the line, we will invest using local financing, but the finer detail of this is still under discussion.

EBR: What is your outlook for the future of oil and gas in Tanzania?
JM: In oil and gas, East Africa is now a very well established player. We have oil in Kenya and Uganda and plenty of gas in Tanzania and Mozambique. I hope that international companies will realize the real potential of Tanzania for both oil and gas. We have, to date, barely explored half of the country, yet from what we have witnessed so far, the potential is absolutely enormous.
PUTTING IN PLACE THE BUILDING BLOCKS

Preface: The Chairman of the Energy, Water and Utilities Regulatory Authority (EWURA), speaks out about the organization’s restructured role in the light of fresh legislation, recounts how he and other players are forging ahead with the building a ‘regulatory state’ to oversee the development of the country’s oil wealth and describes the authority’s steadfast enactment and roll-out of powerful new local content rules.

EBR: What is EWURA’s mandate as Tanzania’s midstream and downstream regulator?

JAMIDU KATIMA (JK): In 2001, the Parliament enacted the Energy and Water Utilities Regulatory Authority Act and in 2003, revised the National Energy Policy so as to introduce an independent regulatory regime. By August 2006, EWURA had been fully established and the Tanzanian natural gas industry classified into three segments – Upstream (exploration and development), Midstream (processing and liquefaction) and Downstream (storage, transportation and distribution) – each with its own rules of the game. EWURA essentially regulates the midstream and downstream petroleum space by performing technical, economic and safety regulatory functions. The upstream part of the value chain, by contrast, used to be presided over by the country’s national oil company, the TPDC, but this function has recently been vested in an entirely new agency called PURA, which is still being established.

Under the recently enacted 2015 Petroleum Act, EWURA has been bequeathed the following mandate: (i) to issue, renew, suspend or cancel construction approvals and operational licences; (ii) to establish standards for goods and services in the natural gas industry; (iii) to regulate rates and charges, monitor and evaluate performance of gas activities including levels of investment, cost of services and availability of gas supply; (iv) to facilitate the resolution of complaints and disputes; (v) to initiate and conduct investigations relating to technical, economic and safety issues in the delivery of service to consumers; and finally (vi) to give any necessary directions to any person granted a licence or approval under this Act.

EWURA has also crucially been tasked with promoting least-cost investment and security of supply for the benefit of customers and in ensuring that appropriate standards...
of quality, reliability and affordability of petroleum are maintained at all times. This means that we are charged with setting and monitoring health and safety standards within the working environment of persons employed in the petroleum industry.

We also see ourselves as the guardians of Tanzania’s natural resources and of ensuring that the country’s petroleum wealth is used for the benefit of the entire population and the national economy. We are thus positioning ourselves at the forefront of promoting the use of local goods and services in the development of the country’s oil and gas endowments. We are keen to ensure the maximum participation of Tanzanians in every part of the petroleum value chain while at the same time guaranteeing competition in petroleum activities in those areas open for investment.

**EBR:** What changes regarding local content were made to EWURA’s functions by the Tanzania Petroleum Act 2015 and what effects have these changes produced?

**JK:** Section 258 of the Petroleum Act 2015 empowers the Minister for Energy and Minerals to draw up regulations providing for local content principles including the requirement for technology transfer of knowledge and skills to Tanzanians; these regulations set the base for what oil and gas local content requirements will be in Tanzania. Our task is to ensure that these guidelines are faithfully carried out.

Minister Muhongo has thus developed draft comprehensive regulations on local content requirements and expectations. He has made it clear that the government wants to attain higher levels of local content than previously in force. As an implementation to the specifics of these regulations, EWURA will, going forward, ensure that any subsidiary legislation drafted by EWURA takes into account the requirements of the local content regulations. All principal legislation previously issued by EWURA will thus be reviewed to take into account these fresh guidelines. Applicants for licences will now need to meet certain requirements with regard to shareholding structures and number of Tanzanians hired before any license is issued. Once licences are granted, the licensee is further expected to meet requirements in respect of local goods and services. The regulations specifically provide what is expected of each licensee in terms of local content.

The most important objective of local content is to develop and support manufacturing of local goods and provision of local services. Local Content Principles as provided by the Regulations require firms to harness local companies for the procurement of goods and services and multinational oil companies to domicile economic activities in the countries of extraction. Physical and human
capital development are also central to local content as they stress that it is not trade but the accumulation of physical and human capital that is fundamental for economic growth.

**EBR:** Just how open is Tanzania to inward investment and what is being done to attract more foreign investors to the country? Is infrastructure and construction a particular area of focus?

**JK:** It is evident that investors require transparency and predictability of regulatory decisions if they are going to feel in a position to inject large volumes of capital into the market. In order to shorten the negotiation period and enhance the general level of investor confidence, EWURA has made it its business to develop a Power Purchase Agreements Framework and Standard Power Purchase Agreements for small power plants up to 10MW for different power sources. Meanwhile, EWURA has been proactively assisting the Ministry of Energy and Minerals to develop a Competitive Bidding Framework for the large power plants. It is our anticipation that this will significantly reduce the time used for negotiations between our power utility and the would-be suppliers.

Tanzania aspires to be a middle-income country by 2025. To achieve this, considerable investment is undoubtedly required in infrastructure. That being the case, infrastructural sectors including energy generation and

> “Tanzania aspires to be a middle income country by 2025. To achieve this, considerable investment is required in infrastructure the onus is on us and the ministry to create the right kind of operating environment [for this]

**JAMIDU KATIMA**  **CHAIRMAN OF EWURA**
distribution; road construction; railways; ICT, to mention a few, are necessary. More investments are required in these areas and the onus is on us and the ministry to create the right kind of operating environment that will attract foreign direct investment and also all the technology transfer that big-ticket investment generally entails.

**EBR:** What direction do you see the Tanzanian oil and gas industry taking in the future?  
**JK:** We are witnessing the dawn of a brave new economic trajectory for our country. There is much to be optimistic about. So far, Tanzania has discovered 57.25 Tcf of natural gas, which is testimony to the fact that we are sitting on considerable hydrocarbons wealth. A number of exploration activities are on going with the potential to hit oil in certain blocks on top of the natural gas bounty already known to exist.

In view of the recent sizable discoveries, the government and international oil companies are now negotiating to start the construction of Liquefied Natural Gas plant to facilitate the export of natural gas by 2025. This will be another important milestone in the development of the local industry and the first stepping-stone in our engagement as an exporter nation in the international gas markets. Growing these sorts of capabilities is what will take us to the next level.

More investors are expected to enter the sector with a potential to discover more hydrocarbons. We have also companies wishing to invest in other petrochemical industries such as fertiliser. To that end, more jobs will be created and also the Government will earn more revenues in terms of taxes and royalties. The future is bright.
Preface: Tanzania’s proposed LNG export plant, to be based in the southern town of Lindi close to the deep-sea offshore blocks where most of Tanzania’s gas discoveries have been made, has the potential to be a game-changer in the history of the country’s energy industry.

After a long delay, a land deal has finally been agreed for Tanzania’s LNG plant. The plant is to be constructed by international heavyweights Statoil, BG Group, ExxonMobil, and Ophir Energy in partnership with Tanzania’s NOC, the TPDC. So significant is this project that the Tanzanian central bank believes that simply starting work on the plant would add two percentage points to the country’s seven percent GDP growth rate due to the billions of dollars of international investment it would draw in.

Statoil’s Country Manager for Tanzania, Øystein Michelsen speculates that the project “may represent the start of a new era in the Tanzanian gas industry” and that it “will provide significant long term benefits to Tanzania in the form of income, employment, local content, domestic gas, contribution to GDP, and favourable trade balance.” Matthew Allen of Otto Energy, an Australian junior with stakes in two separate frontier projects in Tanzania, concurs with Michelsen’s optimism about Tanzanian LNG; “Having seen the impact that [becoming an LNG producer] has had in my very own home state of Western Australia, I can certainly attest to the flow-on effects to jobs, employment, education, future careers for young people, and ultimately the ability to improve the infrastructure in the region.

However, concerns have been raised about the costs of the project (between USD 20 to 30 billion), the volatility of gas prices, and the speculative contention that global demand will eventually outstrip supply for LNG. TPDC Managing Director James Mataragio plays down fears of an eventual gas price slump by asserting that “over the long-term, the oil and gas business is always cyclical” and “that future prices will be good enough for us to not delay in proceeding with the development of our LNG project.” TPDC Director of Downstream Operations Willington Hudson backs this up by taking a long-term view; “You need to look at energy demand for the next 50 years... demand for gas will simply continue to rise.”
LIQUEFIED NATURAL GAS (LNG) INFRASTRUCTURE
Ready for Export

JOBCREATION FORECAST FOR LINDI LNG PLANT

4 – 10 indirect jobs for every direct job

Source: Oxford Management Policy
Note: Based on a two-train LNG project in Tanzania, LNG train size yet to be decided

ARCHITECT’S MOCKUP OF FORTHCOMING LNG FACILITY

Courtesy of: Tanzania Exchange
USHERING IN THE NEW EPOCH OF EAST AFRICAN GAS

Preface: The country manager of Norway’s prolific gas explorer and NOC evaluates the recent discovery of considerable offshore gas in Tanzania and lifts the lid on how it is to undertake business in this frontier market.

EBR: Statoil has been present in Tanzania since 2007; could you begin by outlining the main developments both in your operations and in the domestic market in general over this period?

ØYSTEIN MICHELSEN (ØM): In 2007 Statoil signed a production sharing agreement (PSA) for Block 2 with Tanzania Petroleum Development Corporation (TPDC). Statoil Tanzania AS is the operator with 65% working interest with ExxonMobil Exploration and Production Limited as a partner with 35% interest.

Since then Statoil and its partner have made significant gas discoveries in Block 2, which covers an area of approximately 5,500 square kilometres and lies in water depths between 1,500 to 3,000 metres. In total, 14 explorations and appraisal wells have been completed through an ambitious drilling campaign with an extraordinary success rate. The total discovered gas volume in place is estimated to be approximately 22 Tcf. All the eight discoveries in Block 2 are predominantly made in high reservoir quality sandstones.

The success in Block 2 is emblematic of Statoil’s exploration strategy in accessing high quality acreage and testing high impact potential.

EBR: The Mdalasini-1 exploration well, in which Statoil holds a 100% stake, recently discovered natural gas offshore in Tanzania. This is the company’s eighth discovery in Tanzania; what is its real significance?

ØM: Mdalasini gas discovery has been made in tertiary and cretaceous sandstones. The discovery of an additional 1.0-1.8 tcf of natural gas in place in the Mdalasini-1 well, brings the total of in-place volumes up to approximately 22 tcf in Block 2. The Mdalasini-1 discovery is located at a 2,296-metre water depth at the southernmost edge of the block. Statoil has drilled the Mdalasini-1 well with a 100% working interest. The Mdalasini-1 discovery marked the completion of the first phase of an efficient and

To attain an optimal level of local content in developing Tanzania’s gas resources, effective collaborative efforts between Statoil, the suppliers, and the government will be absolutely imperative.
successfu... have made seven discoveries in Block 2, including the five high-impact gas discoveries Zafarani-1, Lavani-1, Tangawizi-1, Mronge-1 and Piri-1, as well as the discoveries in Lavani-2 and Gilligiliani-1.

**EBR:** Under the Joint Venture obligation in the Tanzania Petroleum Act 2015, private companies must partner with the TPDC, Tanzania’s National Oil Company, on oil and gas projects. How would you characterize Statoil’s relationship with the Tanzanian government? Are they supportive of international investment in oil and gas in general?

**ØM:** Statoil works well with authorities in Tanzania; this includes the TPDC, Ministry of Energy and Minerals, and other central and local government stakeholders. Every country has its own way of dealing with foreign investors and what I can say is that this specific project is unique and the first in Tanzania so it has to involve a lot of government entities in the decision making process. As a company it is our responsibility to ensure that the government through TPDC and MEM properly understand the project so that we can have alignment as we take further steps to develop the resources found in Tanzanian deep sea.

**EBR:** Statoil, along with ExxonMobil and BG-Shell, is involved in the planning for an LNG plant in Tanzania. At what stage is this project?

**ØM:** We are still at the early stages of the project. The current task at hand is the Host Government Agreement discussions which are important in setting up the framework for the project.

LNG projects are characterized by large capital investments over many years before any income can be realized. For the investors to undertake such commitments, stable fiscal and commercial terms are important. A capital intensive strategic project like this will require a tailor-made commercial solution and stability of terms and framework conditions. This is common practice for LNG projects in many countries.

**EBR:** How do you assess the ease of doing business in Tanzania compared to other countries in the region?

**ØM:** It is fairly challenging to roll out initiatives like the LNG project in a country like Tanzania. Generally, according to the World Bank’s data, Tanzania is considered a challenging environment and is indeed ranked at number 139 out of 189 countries in terms of ease of doing business. We do expect the authorities to learn the ropes fast and to align with international norms over time. Tanzania’s hydrocarbons industry is after all still very young.

Tanzania offers an excellent prospect, but we still have to be very realistic about time frames. We, in Statoil, recognise the realities that it will take time to develop and execute the offshore projects and the LNG plant.

[The LNG plant project in Lindi] is emblematic of the dawning of a new era in East African gas and of the resolve to make Tanzania an important player in the gas space.

("OYESTEIN MICHELSEN COUNTRY MANAGER OF STATOIL")
Tanzania has certainly been on a roll in natural gas finds. Earlier this year, Dubai-based Dodsal Group stumbled across what it estimated as 2.17 trillion cubic feet (tcf) of deposits – valued at around USD8 billion – in Tanzania’s Ruvu Basin Coast Region. The amount was soon afterwards revised closer to 2.7 trillion, with a potential upside of 3.8 trillion making it by far the country’s biggest onshore discovery to date. “The sheer size and the scale will hand us a huge capital in the years to come enabling us to strengthen our activities in this abundantly prolific region,” exclaimed Dodsal’s jubilant owner Rajen Kilachand.

Indeed Tanzania’s newfound hydrocarbons wealth, now totalling recoverable natural gas reserves of in excess of 57 trillion cubic feet, is part of a broader regional picture in which the East African coastline is fast becoming the global oil and gas industry’s most prospective frontier. According to US Geological Survey estimates, the combined gas reserves of Mozambique and Tanzania could now prove to be as high as 250tcf, which marks a dramatic reversal in fortunes for an area long considered to be the continent’s poor cousin.
In a nation where a full 20 per cent of the population languish below the food poverty line and only 24 per cent enjoy reliable access to electricity, the USD 10 to 20 billion of energy investment projected to flow into Tanzania over the coming decade could, if expended wisely, have a transformative impact and wide reaching repercussions. As the full thrust of the global oil industry descends down upon a hitherto overlooked backwater, all eyes will be looking to see whether the nation can fully capitalize on this rather unexpected blast of fortuity.

SEIZING THE MOMENT

These days, at least, no one can accuse Tanzania of dithering when it comes to normalizing its nascent oil and gas industry. Last year, the country rolled out a welter of energy policy reform notably enacting three pieces of new legislation: The 2015 Petroleum Act (setting the rules of the game for E&P firms), The Tanzania Extractive Industries Act (ensuring transparency and accountability), and the Oil and Gas Revenues Management Act, 2015 (detailing the fiscal terms). This in itself went a long way towards aligning the sector with international norms. “Despite this being a very new industry for us, we are making definitive headway in building up Tanzania’s domestic oil and gas capacity and capabilities,” attests James Mataragio, managing director of the Tanzania Petroleum Development Corporation (TPDC), the country’s state-owned national oil company. What’s more, many of the initial gaps and irregularities in the regulatory framework have now been ironed out. “The TPDC was until very recently, also doubling up as the country’s oil and gas regulator, but the 2015 legislation removes this conflict of mandate and has established an independent state regulator for the upstream part of the value chain called PURA,” he elaborates.

Meanwhile, many credit newly elected President John Magufuli for delivering a clear policy vision for the industry and pragmatic, no-nonsense approach to unblocking bottlenecks that have formerly stymied its development. “Magufuli, nicknamed the bulldozer, is known to be a technocrat and someone with a lot of prior experience in public infrastructure... he is going to be a very results-oriented president and already we can identify a new sense of urgency applied to the energy sector,” reflects Robert Besseling, principal advisor in Africa country risk at IHS.

Already some quick wins have been realized on Magufuli’s brief watch. In a move that signalled a push to expedite LNG development and exports, Tanzania on January 29 announced it had finalized a 2,071.705 hectares land acquisition for the site of a planned two-train LNG plant at Lindi. The news was significant because the facility forms the centrepiece of foreign investors’ gas export intentions and the consortium seeking to build the complex – comprising BG Shell Group, Statoil, ExxonMobil and Ophir – had been withholding final investment decision (FID) due to uncertainty over the land’s ownership. The surprise announcement that Tanzania had beaten out Kenya in a race to carry land-locked Uganda’s oil to international markets via a 1,410-kilometre heated pipeline from Hoima to Tanzania’s deep water port at Tanga represented yet another eye-catching success and cemented the country’s credentials as one of the lead protagonists of East Africa’s oil and gas revolution.

What seems to have particularly delighted the investor community has been the new administration’s clear efforts to streamline bureaucracy, root out corruption and open the country up for international business. “President Magufuli’s measures against corruption have
Braced for the big scramble

been magnificent and his personal input to maximise the efficiency of all government institutions have been roundly welcomed by international oil companies operating in Tanzania,” asserts Jim Baban, managing director of Heritage Oil, an early entrant that targets plays that have been overlooked and which is aspiring to become the first junior E&P outfit to discover oil in the country.

On eradicating corruption, Magufuli has himself been especially strident. “The way to treat a boil is to squeeze it out, and I have made it my responsibility to do that… I know squeezing out a boil hurts, but unfortunately there are no two ways about it,” affirms the president. On welcoming in investment to the energy sector, the government has also been making all the right noises. “The Government of Tanzania is thoroughly committed to working with the private sector, current and new investors, to grow the country together and very much welcomes the participation of European investors in our energy market,” assures Elli Pallangyo, Assistant Director in the Ministry of Trade, Industry and Investments.

Already steps are afoot to streamline foreign interactions with the local market, shorten timeframes and facilitate inward flows of capital. “We are actually right now busy setting up a system where each potential investor is able to meet all the relevant institutions – namely the national oil company, upstream regulator, downstream regulator and state electricity company, TANESCO – at a single joint meeting for speedy decisions... I personally consider that one month is quite enough time to decide whether or not a project is worthy pursuing,” declares Energy

Despite this being a very new industry for us, we are making definite headway in building up Tanzania’s domestic oil and gas capacity and capabilities

JAMES MATARAGIO,
MANAGING DIRECTOR OF THE TANZANIA PETROLEUM DEVELOPMENT CORPORATION (TPDC)
Minister, Sospeter Muhongo. “Steadily we are removing all the impediments that have been holding up the production and development of our national gas resource like permitting and land right issues…we are doing all we can to make it easy for foreign entities to reach final investment decision (FID) on energy infrastructure projects,” concurs Secretary of State, January Makamba.

At the same time, many E&P companies have duly noticed an improvement in relations with the state apparatus. “We enjoy an excellent relationship with the TPDC and MEM (Ministry of Energy and Minerals) and receive valuable support and understanding from both on a regular basis… The stance of these state actors is actually greatly appreciated by many of the IOCs operating in out here,” discloses Heritage Oil’s Baban.

Matthew Allen, CEO of Australian junior explorer Otto Energy, which is highly active in the Kilosa-Kilombero and Pangani frontier exploration areas, very much agrees. “We’ve found the TPDC and regulatory apparatus, to be surprisingly open and approachable to the point where they have actively worked with operating companies to accelerate exploration activity in the region… The TPDC, in particular, has recognised the need to be flexible in working with operators to ensure that the best industry practices are being followed in order to deliver the best chance of success in unlocking new discoveries,” he assesses.

One prickly topic perplexing successive Tanzanian administrations has been the issue of how best to ensure that the self-governing territory of Zanzibar partakes equitably in the wealth derived from the nation’s oil and gas endowments. Under the current constitution, formulated following the union between Tanganyika (i.e. the mainland) and Zanzibar back in 1964, the government of Tanzania wields control over “Union matters” while local issues that solely affect the Indian Ocean archipelago are duly devolved to the government of Zanzibar.

While petroleum exploration has historically been deemed a ‘Union matter’, the growing awareness of the existence of potentially large quantities of hydrocarbons in and around Zanzibar has lead the devolved authority to question the legitimacy of Tanzania’s national oil company, the state-owned TPDC’s ability to conclude production sharing agreements with foreign and local enterprises seeking to explore, develop and commercialise the resource.

The on-going dispute and a hardening of positions has ultimately led to Zanzibar forming its own regional oil company, the Directorate of Petroleum, through which it is seeking to negotiate on its own terms and collect its own revenues. Such a development has consequently triggered a state of unease amongst many E&P companies wary of entering into business with an entity not officially recognised by the central government on the Tanzanian mainland. The ultimate consequence has thus been a downing of tools and halting of further exploration activity.

With no end in sight for breaking the deadlock, the President of the Zanzibar government, Dr. Ali Mohamed Shein has been careful to downplay expectations. “It will take time to earn the confidence of investors, who are naturally worried about investing locally without the mainland controlling the licensing process,” he notes, urging Zanzibaris to appreciate that “it could well take another 7 years or so before they start experiencing the tangible benefits from their oil and gas reserves.
I want people to seriously work to consider the national interest first... my government is ready to help our own indigenous investors to develop our own hydrocarbons endowments.

JOHN POMBE MAGUFULI
PRESIDENT OF TANZANIA

NEIGHBOURLY RIVALRY

One reason for Tanzania’s uncommonly pro-investment sentiment could well be to do with its budding rivalry with neighbouring Mozambique and an awareness that the two are locked in direct competition for foreign capital. Similarly endowed with natural gas reserves and with its Rovuma Basin estimated to hold over 160tr cubic feet, Maputo is happens to be aiming for the very same East Asian markets that Tanzania regards as its future consumers. “With both countries vying to become Africa’s newest LNG exporter and to snap up contracts before supplies from rival producers in other parts of the world come to market, it is increasingly clear that both are competing head-to-head for the same space,” assesses Business Monitor International’s senior analyst for Africa.

Both nations have, for instance, enacted ambitious targets to commence exporting gas by the early 2020s and have been rushing ahead to try and install the requisite infrastructure. The Magufuli administration’s haste to secure FID for the flagship LNG facility in Lindi, in part, reflects a desire to outpace Mozambique’s development of its own LNG park on the Afungi peninsula in Cabo Delgado province – an initiative that has already secured the strong backing of oil multinationals Anadarko and Eni. “There’s a real race underway to become Africa’s newest LNG exporter and each side is on the lookout for any possible advantage they can gain,” reveals Ronke Luke, analyst at Oilprice. “Even Shell’s recent acquisition of BG Group has been celebrated inside Tanzania, with the rationale being that Shell’s expertise in dealing with national governments, technical know-how and general appetite for risk could boost the country as it competes with Mozambique for limited capital,” she reasons.

Only a few years ago, the bets had been squarely on Mozambique to become the international poster child of East African offshore gas and the country was commonly accepted to hold the edge over Tanzania owning to its having gained a head start in hydrocarbon resource discoveries. Now many are not so sure. A growing number of commentators are today predicting that Mozambique’s LNG dreams will be blown off course by the country’s on-going economic woes. Not only is state-owned Mozambique Asset Management set to default on USD 535 million in loans, which it took out to construct shipyards to service natural gas drilling off of its coast, but Fitch Ratings has also downgraded the country’s sovereign credit rating to CCC – a ranking that denotes a very real risk of default and will likely scare many an investor.

“We wanted to get involved with the growth of indigenous energy projects in East Africa and based on our initial assessment, which has subsequently proved to be largely correct, identified Tanzania as possessing the gas market that would develop most quickly,” reveals Neil Ritson, non-executive Chairman of Solo Oil, a company that has successfully identified over 5tcf of prospective resources in Tanzania and is notable for its activity in the Ruvuma PSA, Kiliwani North, and Ntorya-1 projects.
The Lake Albert basin holds over a billion barrels of proven reserves and possibly twice that in potential finds.

Experts say Uganda’s oil reserves could rival that of the Gulf of Guinea countries.

Tanzania has approx. 7.5 bn cubic feet of gas reserves.

Uganda’s energy ministry and Tullow Oil both estimate that the current reserves alone could generate over USD 2 bn in annual revenue for more than 20 years.

Total oil production in the region (excluding Sudan) could reach 210,000 bpd in 2015, and nearly 389,000 bpd by 2020.

Tullow now compares prospects in the Turkana region and across the border in Ethiopia to Britain’s bonanza from the North Sea.

BG Group and Ophir Energy said they had found more gas off the coast of Tanzania, raising hopes that the country will become a major new gas supplier.

Statoil’s recent gas find alone is estimated to hold almost a billion barrels of oil equivalent.

With plans to build a liquefied natural gas (LNG) terminal, Mozambique could be a big exporter within a decade.

Eni unveiled a find of 1.3 billion boe in 2012, matching similar finds by an American firm, Andarko.

Mozambique, the fastest growing energy player in the region, this month estimated that energy firms will spend $50 billion over the next decade.

Kenyan officials now see their country as a regional hub that combines geographical advantages, and its own newly discovered energy resources, with tax breaks, skills and services.

Mozambique has potential recoverable reserves of 30 trillion cubic feet.

Enormous opportunities and potential of block 14 in Kenya.

Tanzania, East Africa’s second-biggest economy, is expected to see an increase in revenue of up to USD 3 bn a year following major offshore gas discoveries in the country.

Mozambique, the fastest growing energy player in the region, this month estimated that energy firms will spend $50 billion over the next decade.

Source: African Intelligence
Others point out that Tanzania’s economic fundamentals are looking very bright. “One shouldn’t forget that Tanzania ranks as the second biggest economy in the East African community and has shown good GDP growth rates in recent years (7% in 2014/2015 according to the Tanzania National Bureau of Statistics) and relatively low inflation (CPI of 5.1% in April, 2016)...and politically the country has remained reasonably stable compared to much of the rest of the region,” evaluates Salim Bashir, partner at KPMG. He does acknowledge, however that “other neighbouring countries such as Mozambique offer a diverse range of alternative propositions, which could ultimately impact on FDI attractiveness dynamics,” and will serve to keep Tanzania “on its toes.”

In some ways those differences could even turn out to be complementary. “There is certainly a lot of gas in Mozambique, but I do not see this as a problem in itself; in fact, I believe many synergies could be developed in terms of expertise and other forms of collaboration,” reflects Derek Hudson, president & general asset manager of BG Group in East Africa. “As we further develop capacity here, though, we have to ensure that that capacity is not sucked elsewhere... so, in that respect, the right institutional arrangements have to be made in order to encourage people to stay within the country,” he counsels.

Not everyone agrees that Tanzania is quite as hospitable to foreign business as it might outwardly appear at first glance. Statoil Tanzania’s country manager Øystein Michelsen counsels entrepreneurs to approach the market with a “healthy dose of realism” and to accept the reality that “it can take time” to properly execute local offshore projects and attain expected returns on investment. In Statoil’s own case, the unwavering perseverance and sustained commitment certainly seems to be paying off: The company’s Mdalasini-1 exploration well
3 pieces of new legislation – the Petroleum Act 2015, the Tanzania Extractive Industry Act 2015, and the Oil and Gas Revenues Management Act 2015 – have triggered a shake-up of Tanzania’s regulatory landscape for hydrocarbons development. From now on, the main state protagonists charged with overseeing the sector will be the following:

**INTRODUCING A NEW CONSTELLATION OF STATE ACTORS**

**The Tanzania Petroleum Development Corporation (TPDC)**

The TPDC is designated as the National Oil Company and will exclusively manage the Government of Tanzania’s commercial interests and involvement in petroleum projects. The TPDC will participate in petroleum reconnaissance, aggregate natural gas, own and operate major gas infrastructure either directly or via subsidiaries, and collect and account for non-tax oil and gas revenues, surface rentals and block fees.

Under the new framework the NOC is freed to concentrate on the bread and butter tasks of hydrocarbons exploration and exploitation while losing its regulatory function, which now gets handed to PURA and EURWA.

**Petroleum Upstream Regulatory Authority (PURA)**

An entirely new regulatory authority, PURA, will oversee the upstream petroleum sub-sector and perform audits of the cost recovery on the exploration, development, production and sale of oil and gas in order to determine the government profit share, royalties and rents.

**Energy, Water and Utilities Regulatory Authority (EWURA)**

For the midstream and downstream petroleum subsector, EWURA is afforded a similar regulatory oversight function to PURA: issuing, renewing, suspending, and cancelling construction approvals and operational licenses; collecting fees and levies; approving applications for tariffs and prices; promoting the use of local goods and services; and ensuring the maximum participation of Tanzanians in every part of the petroleum value chain.

recently reported a gas discovery of 1.0-1.8 tcf, which stacks up as the 8th such discovery of its kind since the start up of their operations in 2007. Yet for all of these headline-making successes, Michelsen is still keen to point out that “setting up energy infrastructure projects like the Lindi LNG plant remains challenging” and that “Tanzania ranks a lowly 139 out of 189 countries in terms of ease of doing business in the latest World Bank stats.”

Others speak of political uncertainties. “For investors struggling to understand what influences his decisions, it may be helpful to think of President Magufuli as a politically astute Robin Hood: taking popular political decisions in the interests of a poor population, but ones that can nonetheless produce serious economic upheaval for holders of capital,” suggests Elliot Kratt of the Economist Intelligence Unit. “We’ve already witnessed [from recent expropriations] that he’s prone to making high-impact decisions with ostensibly little commercial consideration.” Kratt’s advice to foreign investors for managing this risk and uncertainty is thus to “pursue a dual prong strategy of strict compliance with local laws and engagement with the government so as to shield investments from Magufuli’s fearless approach to Robin Hood economics of taking from the rich – in his view, investors that do not add value and corrupt officials – and giving to the poor, his electorate.”

One issue of particular concern to prospective foreign investors is ‘local content.’ The 2015 Petroleum Act already requires that goods and services in the petroleum industry should be provided by Tanzanian companies and, in those instances where there are no local suppliers to be found, then that they must be provided by a foreign company in joint venture with a local company, with that local entity possessing a minimum of 25 per cent of the shares. Having been elected to high office on a manifesto unambiguously dedicated to “empowering...
indigenous workers”, the signs are that such requirements will get ever more stringent. “I want people to seriously work to consider the national interest first... my government is ready to help our own indigenous investors to develop our own hydrocarbons endowments as a matter of priority and to keep the proceeds of growth within the national economy... this government wants to empower local Tanzanians so that they can partner with foreigners through joint ventures,” he affirms.

According to Jamidu Katima, Chairman of the Energy, Water and Utilities Regulatory Authority (EWURA), which is the primary state body charged with overseeing the roll out and enforcement of such criteria, enhanced local content regulations are “going to be absolutely essential for local job creation and to support manufacturing of local goods and provision of local services.” “We will be requiring firms to harness local companies for the procurement of goods and services and to domicile economic activities within Tanzania... we firmly believe that physical and human capital development are also central to local content as they stress that it is not just trade but the accumulation of physical and human capital that is fundamental for economic growth,” he elaborates.

**BIG-TICKET GAS INFRASTRUCTURE**

One particular industry area expecting is big upswing in business is the engineering and construction segment, with the government delineating “energy and transport infrastructure” as “tier one status for capital injection” with a view to enabling the country to meet its ambitious growth objectives. “The target is actually for Tanzania to attain middle income country by 2025 and to properly achieve this, massive investment is going to be channelled towards bolstering our base infrastructure,” reveals EWURA’s Katima.

Much of this will revolve around a reorientation of the national power grid to run on gas. “Right now,
only 36 per cent of Tanzanians have access to electricity, and a mere 7 percent of those in rural areas. Also demand for electricity is surging by between 10 and 15 per cent a year so we’re staring down the barrel of a full-blown energy crisis, which will impede our economic development unless we take remedial action,” explains Felchesmi Mramba, Managing Director of the Tanzania Electric Supply Company (TANESCO). The solution that has thus been identified is “to transition away from unreliable hydropower, which is not only leading to blackouts, but costing TANESCO losses of up to 500 million Tanzanian shillings (USD 230,000) a day, and to build more gas-fired power plants to supply the national grid,” he reasons. By his calculations, hydropower dependence can “feasibly be reduced down to a mere 15 per cent” with gas power plants deployed to make up “a full 60 per cent of the country’s electricity needs.”

In order to bring about such structural gymnastics, Tanzania will be opening the door wide to outside investment. Under the Tanzania Electricity Supply Industry Reform Strategy and Roadmap 2014 to 2025, the bulk of the financing of power projects is to be left squarely to the private sector. Japan’s Koyo Corporation has already been commissioned to add some 2,000 MW of new gas-fired electricity generation by 2018 and other sources of FDI are being actively sought out. “As a country we currently have a supply deficit of 1,000MW, which has led to load-shedding... although we have committed to inject 2.4 trillion Tanzanian shillings (USD 1.2 billion) over the next decade to ensure that 3 in 4 of all households gain uninterrupted access to electricity, we warmly invite private investors capable of generating 100MW to 5,000MW to step up to the plate,” affirms Minister Muhongo.

The listing of Tanzania’s power utility firm on the Dar es Salaam Stock Exchange has already been announced as the government scrambles to attract in sufficient private capital to be able to increase power production sevenfold from 1,400MW to 10,000MW by 2025. Under a freshly liberalised regime, TANESCO will for the first be exposed to private sector competition
While the country awaits commercialization of recent deepwater offshore discoveries, the bulk of present gas production is carried out from 2 small fields: Songo Songo and Mnazi Bay. The producing fields are small and took decades to bring to production because of the lack of a local market and the impracticability of export in view of the limited reserves.

The Songo Songo field has been in production since 2004 and produces around 105 million standard cubic feet of gas per day (mmscfd), which is then transported to Dar es Salaam for power generation and for industrial and household usage. The Mnazi Bay gas field meanwhile feeds power production for Mtwara and Lindi regions.

Following the country’s demand for more power the government has been pressing ahead with an ambitious pipeline infrastructure network. A 36 inch 330 mile natural gas pipeline linking the Mnazi Bay field to Dar es Salaam has now been completed. This project includes a 24-inch spur line to Songo Songo. Construction was carried out by an affiliate of CNPC and was financed by China Exim Bank. With a pipeline capacity of almost 0.8 Bcf per day, this provides a potentially feasible transport option for domestic sales of the recent offshore gas discoveries.
and the company itself unbundled into two different entities — one handling generation and the other transmission and distribution — before December 2017. A special department is also being established within the ministry specifically dedicated to identifying ways to easing investor entry into the power-engineering segment.

BOOM OR BUST?

It is clear that Tanzania is now at a critical juncture in its development trajectory and that the decisions over coming weeks and months will prove decisive as to whether the country can actually fulfil its enormous hydrocarbons promise. It is, of course, important to remember that Tanzania’s tremendous gas discoveries are occurring right at a time when global oil prices are experiencing strong declines with forecasts rife for an L-shaped recovery characterised by sustained low pricing that will dissuade many a firm from re-entering ‘growth mode.’

“It’s a crucial time right now: if Tanzania is unable to provide investors with a strong set of incentives, the country will likely rapidly fall behind more cost-competitive international rivals...It’s not the best time to be investing. If the government were seen to be turning people off the idea nowadays, you might see the majors reconsidering their plans so it’s massively important that they maintain this interest at a time of flagging enthusiasm,” concludes John Ashbourne, Africa economist at Capital Economics.

“...There’s a real race underway to become Africa’s newest LNG exporter and each side is on the lookout for any possible advantage they can gain.”

RONKE LUKE
ANALYST AT OILPRICE

HEADLINE FORECAST (TANZANIA 2014-2020)

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e/f=BMI estimate/forecast. Source: EWURA, EIA, BMI
JUNIOR AMBITIONS
Neil Ritson, Non Executive Chairman, Solo Oil

WHO DARES, WINS

Preface: Solo Oil’s Chairman explains what drew the portfolio investment company into Tanzania in the first place and why the East African country remains the go-to destination for investors who dare.

EBR: Solo has been very active in Tanzania and is staking a lot on success in the country. Could you begin by explaining what drew you Tanzania initially, as opposed to neighbouring Mozambique or other oil and gas producing nations, and why you plan to stay?
NEIL RITSON (NR): We wanted to get involved with the growth of indigenous energy projects in East Africa and based on our initial assessment, which has proved largely correct, Tanzania had the gas market that would develop most quickly. When the opportunity arose to participate in the onshore Ruvuma PSC with Aminex and Tullow Oil this was the ideal situation. Ruvuma was a large unexplored onshore block and had a good operator. The first well, Likonde-1, was encouraging and the second well made the Ntorya discovery. During the last few years gas infrastructure has been built by the Tanzanians with Chinese aid and so our original prediction that Tanzania would have the best opportunity to commercial gas to a local market has been borne out.

EBR: Your company has identified over 5tcf of prospective resources in Tanzania and is involved in the Ruvuma PSA, Kiliwani North, and Ntorya-1 projects. Could you give us the rationale behind investing in these particular assets and explain the differences between them?
NR: The Ruvuma PSC was our first investment and is still our main involvement as it contains the potentially 1 tcf Ntorya-1 discovery and the prospective resources that you mention. We farmed in to the Aminex share of the first well, Likonde-1, which had good oil shows and discovered gas at the very bottom of the well. A second well in the Ruvuma PSC, Ntorya-1, discovered the Ntorya gas field which has now been given a separate appraisal licence. The next phase at Ntorya, following additional seismic data that has been acquired and interpreted, is to
drill two appraisal wells. These are anticipated to start this year. Our other investment at Kiliwani North was designed to give us earlier access to production and revenue. The Kiliwani North gas field was already discovered when we joined the partnership, also with Aminex as operator, and gas sales discussions were well advanced. The gas sales agreement took rather longer to finalise than we expected, but during that time the gas pipeline infrastructure was completed so once we had the agreement earlier this year the commissioning was able to start immediately.

**EBR:** On April 7th 2016, Kiliwani North reached the “first gas” production milestone. How significant was this for Solo and how does it affect your strategy moving forward? We noticed your intent to increase your stake to 10% on the back of new funding.

**NR:** First gas is a key milestone as you say. With that comes revenue as we are paid for all the gas produced during commissioning phase and then when the commissioning on Songo Songo island is completed we will move to a standard long term take-or-pay arrangement under the gas sales agreement. When we originally acquired a 6% interest we also obtained the right to increase that to about 12% at a later stage. With the project on stream we have arranged to increase our stake progressively to 10% on the back of project performance. That level of involvement provides us with the anticipated revenue we would previously have received on 12% since the expected production rate has been increased since our original purchase.

**EBR:** Under the Joint Venture obligation in the Tanzania Petroleum Act 2015, private companies must partner with the TPDC, Tanzania’s National Oil Company, on oil and gas projects. How would you characterise Solo’s relationship with the Tanzanian government? Are they supportive of international investment in oil and gas in general?

**NR:** The TDPC and the Tanzanian government in general are very supportive of energy investments. The country has a fast growing economy and therefore a growing demand for energy. The droughts that have affected the region have severely limited the hydroelectricity generation and therefore new gas production is key to the energy mix if that growth is not to stall. We have experienced some delays with approvals, but that is understandable as the necessary experience and governance have to be put in place to allow Tanzania to transition effectively to an indigenous gas economy.

**EBR:** How big can Tanzania become as an oil and gas producer, especially in light of the election of President Magufuli?

**NR:** Tanzania has the potential to be a very major international gas player with the massive gas reserves discovered offshore which total around 100 tcf. That is, however, quite distinct from our onshore production for the local market as much of the offshore gas will be exported as LNG. President Magufuli also promised to tackle the endless power shortages Tanzanians face, and to exploit its gas resources for the benefit of the nation, which are exactly the policies we are looking for. As Works Minister, Mr Magufuli gained the reputation for being a results-driven, no-nonsense politician. He seems ideally suited to the immediate challenges facing Tanzania as it continues its hydrocarbons development.
Now the green light has been given for a ‘southern route’ comprising a 1,410-kilometre heated pipeline from Hoima to Tanzania’s deep-water port at Tanga on the Indian Ocean. Heavy lobbying by international oil majors, a newly elected ‘business-friendly and action minded’ presidency in Tanzania and an increasingly unravelling and fragile security landscape in Kenya have all been touted as reasons for the sudden change of heart.

French oil and gas multinational, Total, which possesses a 33% stake in four blocks in the Lake Albert region in Uganda where oil has already been found, says work will begin with immediate effect on the construction of the newly branded Uganda–Tanzania Crude Oil Pipeline (UTCOP) with Vice President of Total East Africa, Javier Rielo, declaring that the company expects to invest “as much as USD 4bn on the project.”

The news cements Tanzanian’s claim to be one of the lead protagonists in an East African oil and gas bonanza that promises to transform the region’s economic profile. As recently as February, Tanzania, known for its prowess in mining, but a relative newbie to hydrocarbons development, discovered an additional 2.17 trillion cubic feet of possible natural gas deposits, raising the east African nation’s total estimated recoverable natural gas reserves to in excess of 57 tcf. Were discoveries to continue at their current tempo the country could be looking at as much as 200 trillion cubic feet within only a couple of years.

Commentators warn, however, that converting this natural resource wealth into national prosperity
“will not happen overnight.” Most of the petroleum hydrocarbons discovered to date constitute dry gas resources, located deep off-shore thus carrying significant complications with regard to commercialization.

“This is not only due to the physical characteristics of gas that necessitate setting up of the comparatively expensive and technically demanding liquefaction and re-gas facilities, but also because the pre-completion phase (i.e. first LNG cargo) takes longer to come on-stream, than in oil extraction,” explains one analyst.
THE LOW-DOWN ON AFRICA’S LATEST OIL & GAS OUTLIER

Preface: KPMG’s top in-country oil and gas analyst frankly assesses the local market’s comparative competitiveness, the importance of infrastructure growth, and the Tanzania’s considerable potential as an oil and gas producer.

EBR: In your time at KPMG Tanzania, how have you seen the oil and gas landscape change? How has the constellation of actors in Tanzanian oil and gas changed over time?

SALIM BASHIR (SB): Starting with the first gas discovery of about one trillion cubic feet (‘tcf’) at Songo Songo Island back in the 1970s which was earmarked for a gas-to-electricity project, followed by the Mnazi Bay onshore gas discovery in the 1980s and the recent offshore gas finds giving which have given rise to a current total proven gas reserve of circa 45tcf (recent estimates point towards 55tcf) with a number of International Oil Companies (IOCs) actively involved; the country’s journey in the sector has been sensational.

Despite being in its infancy, the sector has witnessed a number of key developments, for example, the introduction of new oil and gas legislation which has essentially carved out the regulatory role of the National Oil Company, the TPDC, and a new Petroleum Upstream Regulatory Authority (PURA); development of gas infrastructure including the newly built 542 kilometre gas pipeline, the upcoming LNG project in the south, a wave of new gas-fired power generation projects at Kinyerezi in Dar es Salaam; and at large the growing awareness of the public about this resource and what it can do for betterment of the economy and their day-to-day lives.

Tanzania is regarded as being relatively stable within the region and the new regime has thus far demonstrated steady progress in addressing the issues of accountability and transparency... nevertheless state actors now face a fine balancing act between incentivizing investors and maintaining steady revenue flows for the public purse.

“SALIM BASHIR  PARTNER AT KPMG
This triggers a number of questions around local content policy and its implementation strategy for the country. The big one is how the local business community is empowered to take an active role in the upcoming gas economy and turn the gas fortunes to the benefit of the wider public while still making the sector an attractive business proposition for investors.

**EBR:** Tanzania retains a high capital threshold of USD 300 million and investors have to employ a minimum of 1,500 Tanzanians in their projects. On top of this, the 2015 Petroleum Act has increased fuel prices and production costs. With this in mind, why is Tanzania still an attractive investment destination?

**SB:** Well, country competitiveness remains a key factor in an endeavour to attract FDI. Because of significant levels of investment in oil and gas there is no question that appropriate strategies to create and sustain competitive edge are required to keep a steady flow of FDI, bearing in mind recent pressure as a result of the global oil price downturn and discoveries elsewhere. Tanzania needs FDI to continue to explore the larger part of the country.
which remains unexplored and monetize existing gas finds.

The fact that there are available proven resources in the country and East Africa at large means that the region is in the investment spotlight. Major IOCs are already in the country which tells you that there are good prospects; Tanzania is also seen as being relatively stable in the region and the new regime has thus far shown good progress in addressing the issue of accountability and fighting against corruption. It has also aimed to champion a move to industrialize the economy which would require a balancing act between incentivizing investors and keeping steady revenue flows for the government.

Investors are expected to remain sensitive, however, in selecting their preferred investment destination with matters like implementation of the new O&G legislation, counter incentives available to investors compared to regional competitors like Mozambique and Egypt, stability of the tax regime, local content requirements, availability of skilled resources and the ability to hire foreign expertise, domestic gas sale commitment versus export, and the global trend in oil prices being critical in reaching their decision.

EBR: What do you see as the areas of growth with most potential in Tanzanian oil and gas?

SB: In the long-run, infrastructure growth will be key for the sector especially upstream E&P infrastructure (LNG plants, pipelines, ports etc), downstream distribution networks, and energy projects. Industries in the gas value system will also come in which in my view are crucial in driving the country’s local content agenda. Oilfield service firms also have a good opportunity. The country needs to develop capacity for the sector in terms of both skills and capital resources. This creates opportunities for specialized O&G consultancies and venture capital. The upside of a well-managed O&G sector directly results in overall prosperity arising from increased funding available for education and health, net forex inflows, increased agricultural output and business multiplier effect.

EBR: How is Tanzania’s potential as an oil and gas producer, especially in light of the election of President Magufuli? To what extent has the new administration changed the rules of the game?

SB: With the right structures in place, Tanzania has enormous potential as a gas producer. Improving the country’s attractiveness is critical and should continue to maintain political stability. As mentioned before, the new administration has shown good progress in addressing the issue of accountability. Sustainable efforts to bring openness, fairness and accountability are critical for the sector to flourish. Dialogue will now be critical to winning over hearts and minds.

EBR: How does Tanzanian oil and gas fare in terms of “country risk” compared to its regional neighbours?

SB: Tanzania is a second biggest economy in the East African community and has shown good GDP growth rates in recent years (7% in 2014/2015 according to the Tanzania National Bureau of Statistics) and relatively low inflation (CPI of 5.1% in April, 2016 according to the Tanzania National Bureau of Statistics), despite its debt levels, other economic fundamentals have remained fairly even over the past couple of years. Politically the country has remained reasonably stable in the region. This sets it somewhat apart from its neighbours.
EBR:
You were appointed Acting Managing Director and General Manager for the Oceania Region back in July 2015. What have you established as your strategic priorities since taking over the reins?

ANDREW TAN (AT):
The focus of my attention has been INPEX's Ichthys construction, as Chiyoda is part of the joint venture, alongside KBR and led by JGC, which was awarded the construction contract for the downstream LNG facility part of the project. As a partner of this joint venture, we are keen to ensure that our contribution on this project is conducted with the best quality standards possible, while ensuring that safety remains absolutely paramount until the termination of construction.

In this regard, Chiyoda has been able to build out of the success in the construction of the PNG LNG project in Papua New Guinea, where we displayed more than 80 million man-hours LTI free. Our objective for Ichthys is very much to replicate this remarkable safety achievement in Australia.

Secondly, we want to make sure the joint venture maintains the closest possible control on the construction operations in order to strictly respect our timelines and deliver the project on schedule. Finally, it is my ongoing goal to identify fresh business opportunities for the company in this region.

EBR:
For the fiscal year 2014, Australian revenues...