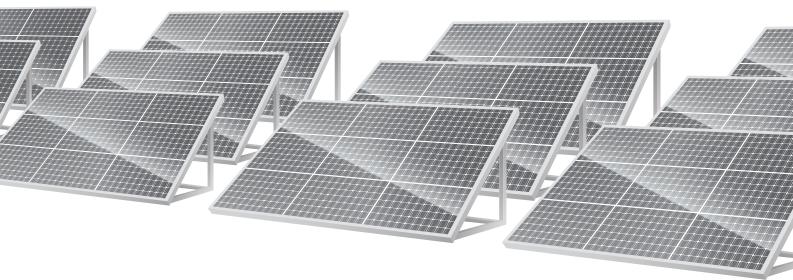


ENERGY AND INFRASTRUCTURE 2017

The guide to the industry's leading law firms and lawyers

WWW.IFLR1000.COM



In association with



Creating liquidity in Nigeria's power sector and making it more bankable

Nicholas Okafor, Adeola Sunmola, Busayo Balogun Agusto and Franklin Onwuzu of Udo Udoma & Belo-Osagie in Nigeria analyse and propose solutions for the challenges facing the country's power sector

igeria's electricity supply industry (NESI) was privatised in 2013, pursuant to the Electric Power Sector Reform Act, 2005 (EPSRA). While the privatisation programme has brought about certain benefits, the sector is still bedevilled with many challenges, the most significant of which is the severe lack of liquidity. The power sector's illiquidity has significantly affected progress in the value chain and impacted on the risk appetite of investors that may wish to invest in various facets of the value chain.

This article will, therefore, consider the core causes of the liquidity challenges in the NESI and proffer solutions, which we believe, if implemented by the various stakeholders, will assist in resolving what has been described as the power sector's most critical challenge.

Nigeria's power sector value chain

Electricity generated by the generation companies (gencos) flows in one direction from the gencos down the value chain, while the revenue required to pay all the market participants flows in the opposite direction. This revenue is derived from the payment (tariff) made by the consumers to the distribution companies (discos) as consideration for the electricity supplied by the discos.

At the beginning of the value chain for thermal power plants, therefore, are the fuel suppliers that provide fuel (gas) to the gencos for the production of electricity. Following production of electricity by the gencos, this electricity is, contractually, sold to the Nigerian Bulk Electricity Trading Company (NBET), the central offtaker for electricity connected to the grid, which in turn, sells the power purchased from the gencos to the discos. The electricity from the gencos is wheeled through the Transmission Company of Nigeria (TCN) directly to the discos before the discos then sell the electricity to the final consumers at a tariff prescribed by the sector regulator - the Nigerian Electricity Regulatory Commission (NERC). Gencos are permitted, under applicable law, to sell electricity directly to a class of customers referred to in the EPSRA as 'eligible customers', which are a group of large consumers of electricity that the gencos can negotiate power purchase agreements directly with outside the regulated tariff model. In May 2017, the Minister of Power declared an 'eligible customer regime' by directing the NERC to permit four categories of eligible customers to buy electricity from licensees other than discos. This development, which facilitates direct supply of power from gencos to customers, continues to generate discussion in the power sector.

The tariffs collected by the discos, from the consumers, provide liquidity for the entire value chain, and the funding required to settle costs associated with the generation and transmission of electricity as well as fuel transportation expenses. After the electricity is generated and consumed, the consumers pay the discos, the discos pay the NBET and TCN, NBET pays the gencos and the gencos in turn, pay

Load distribution in Nigeria

Disco	% Share of generation
Abuja	11.38
Benin	8.53
Eko	9.22
Enugu	9.36
Ibadan	10.91
Ikeja	11.60
Jos	4.21
Kaduna	8.67
Kano	7.54
Port Harcourt	6.78
Yola	3.09

the fuel suppliers. The effect of the foregoing, therefore, is that a disco's revenue shortfall and consequential liquidity challenge, affects the profitability of the entire value chain.

Causes of illiquidity in the NESI

The liquidity challenge is essentially caused by the revenue shortfall in the NESI, which is affecting the settlement of invoices submitted by market participants, thereby making the debt in the NESI increase on a daily and monthly basis. The illiquidity is caused by several factors, including accumulated debt arising from unpaid invoices; poor collection by the discos; substantial technical and commercial losses that has resulted in very high aggregate technical, commercial and collections Loss (ATC&C loss) in the NESI; the legacy debt owed to the value-chain participants, by the defunct integrated national utility, the Power Holding Company of Nigeria (PHCN) and exacerbated by the introduction of the Rules for the Interim Period between Completion of Privatisation and the Start of the Transitional Electricity Market, 2013 (Interim Market Rules) in the NESI.

Set out below are further details on the combination of factors, which are responsible for the current liquidity challenges in the Nigerian power sector.

ATC&C Loss

The ATC&C loss is the difference between the amount of electricity received by a disco from the TCN and the amount of electricity for which it invoices its customers, arising from a combination of technical, commercial and collection factors such as obsolete transmission and distribution infrastructure, inaccurate customer database, inadequate metering, internal collusion, electricity theft, wrong tariff classification of customers, unmetered customers and unaccounted

Tariff assumptions

Tariff assumptions	MYTO 2015 projections for 2016	2016 Actuals
Nigerian inflation (%)	8.80	18.50
US inflation (%)	0.2	1.22
FX Rate (N/\$)	198	305/495
Nominal WACC (%)	20.74	31.59
Generation capacity	5,465	3,611
(MW)		

electricity, poor billing data, revenue collection inefficiencies and refusal of consumers to pay, etc. It has been estimated, that up to 46% of electricity is lost in NESI and this has prevented the discos from upgrading basic infrastructure, including metering systems, for effective and profitable take-off. This has in turn, affected the ability of discos to collect their bills efficiently for electricity supplied to customers and ultimately affected revenue cash flow.

Legacy gas debts

The Nigerian Electricity Liability Management Company (NELMCO) was established to enable the government to inherit and be responsible for settling the legacy debts, which accrued as a result of unsettled invoices and payments due to gas suppliers that had been supplying gas to the defunct PHCN. Given that NELMCO has remained largely unfunded and was unable to perform the functions for which it was established, the electricity market participants inherited and assumed the responsibility for satisfying these legacy debts, which ought to have been settled by the government.

Interim Market Rules

The legacy gas debt was exacerbated by the suspension of the application of the contracts, including power purchase agreements by the sector regulator, NERC, through the introduction of the Interim Market Rules, which applied between the last quarter of 2013 and January 31, 2015, as well as the regulator's failure to publish a cost reflective tariff. The Interim Market Rules prescribed that gencos and discos could only be paid a fraction of the revenue due to them, while the balance will be recognised as receivables and debts owed to them in their books. Thus, only 45% to 60% of invoices were paid.

Lack of cost-reflective tariff

The current electricity tariff (i.e. the multi-year tariff order 2015 (MYTO 2015), which became effective on February 1, 2016, is not cost-reflective, as guaranteed under the EPSRA. As indicated in the tariff assumption statistics, the difference between the projected and assumed inputs (inflation, available generation capacity, foreign exchange rate fluctuation, etc), and the actual figures of each of those inputs is quite substantial.

The MYTO methodology sets electricity tariff based on certain key assumptions and variables (which are required to be reviewed every six months by the NERC), including:

- Inflation rate:
- Exchange rate fluctuations;
- Increase in the price of natural gas; and,
- Capital expenditure requirements for the entire electricity sector.
 Unfortunately, the current electricity tariff has not, in a timely manner, taken into account current changes in the macroeconomic indices listed above. The assumptions on which the current electricity tariff was based have changed; for example, the assumption of an exchange rate of the naira to the US dollar (USD) calculated at the official Central Bank of Nigeria (CBN) exchange rate plus a 1%

premium, is no longer the same. Currently, the cost of generating

1kw/h of electricity is between N50 and N70 for consumers, while the actual average price paid by consumers for 1kw/h of electricity is about N35.00. The effect of the foregoing is that the gencos and discos operate at a loss on a daily basis, and this is further exacerbated by the foreign exchange issues discussed below.

Crisis in Nigeria's foreign exchange market

Following the devaluation of the naira, the liquidity challenge has further affected the ability of the discos and gencos to meet their debt service obligations, and implement the necessary infrastructure upgrades required to improve efficiency. A lot of the sector costs including the price of gas, equipment components, operation and maintenance services are denominated in USD. In addition to the foregoing, the investors obtained USD denominated financing when they invested in the gencos and discos during the privatisation programme. In contrast, the revenues accruing to the sector through tariff payments are in naira. The implication of this, is that the wider the gap in the exchange rate between the naira and the USD, the greater the increase in the amount in volumes of naira that would be required to satisfy the USD obligations in the sector. When the sector privatisation was concluded, in 2013, the acquisition finance documents were negotiated on the basis of an exchange rate of N197 to \$1. Currently, the interbank exchange rate hovers around N322.93 to \$1.

In addition, the scarcity of foreign exchange in the Nigerian foreign exchange market increases the difficulty of sector participants obtaining foreign exchange to meet their debt service and contractual obligations.

Having said the foregoing, however, the expectation is that the Naira's value will significantly improve as a result of the recent regulatory changes including the introduction of the Nigerian Autonomous Foreign Exchange Rate Fixing window by the CBN.

Shortage of gas supply

Nigeria's power sector relies heavily on gas fired power plants, which contribute over 80% of the country's present available capacity on the grid. Due to shortage in the generation of electrical energy from the gencos as a result of lack of gas, discos are not receiving enough power to distribute to consumers. As a result, discos are only in a position to remit to NBET, about 30% to 40% of their cash collections for settlement of obligations in the power sector value chain while they retain the rest for capital and operational expenditure.

Nigeria power sector debt

N402 Billion	N357 Billion	
Worth of loans given to different consortiums by Nigerian commercial banks for the acquisition of Gencos in 2013	Owed to Nigerian banks by Gencos as at March 2016 (according to CBN's Q1 Statistical Bulletin	
As of December 2016, NBET owed Gencos N200 billion		

Bankable solutions to the liquidity challenge

The first solution (option one) will involve massive intervention in the sector by the Federal Government of Nigeria (FGN) through a series of funding programmes and having a value up to \$10 billion. The second solution (option two) involves a private sector driven agenda, propelled by clear, predictable and steady regulatory guidelines which guarantees against sudden changes in published guidelines. Option two is estimated to cost about \$3 billion of, mostly, private capital. The key apprehension associated with implementing

option one is that the FGN may be seen as providing funds to the sector without undertaking a complete restructuring of the sector through the publication of sensible regulations, and the cancellation of unhelpful published regulation (such as the regulation relating to compliance with local content requirements in the electricity sector). We believe therefore, that a modified simultaneous implementation of options one and two will yield optimal results.

Option one

Under this option, we recommend an increased budgetary allocation of funds to NBET to fund its operations and ensure settlement of invoices issued by gencos, and also, a targeted subsidy based on a fund that the FGN will establish, under the management of a private sector asset management company. The fund will have clear criteria on the basis of which investors could benefit from it up to a maximum amount in every billing cycle, and should have a life span of not more than five to seven years. With regard to the funding of NBET, the recent approval by the Federal Executive Council of a N701 billion payment assurance guarantee for NBET through the CBN for the purpose of guaranteeing payment of all invoices issued by gencos within a 12 month period is commendable. In addition, we recommend that the FGN can through the CBN or the Federal Ministry of Finance issue sovereign debt notes (SDN) to cover all the existing debts in the sector with supporting documentation on how to amortise collection of the debts represented by the SDN from the consumers over five to 10 years. The collection should be implemented through tariff reviews, adjustments and special interventions by the FGN, supported by instruments approved by development finance institutions (DFIs). Alternatively, liquidity and payment support mechanisms/solutions from the government such as the inconclusive NBET bond programme/issuance of medium term notes can be further explored in order to enable NBET to shore up its capital to ad-



Nicholas Okafor Partner Udo Udoma & Belo-Osagie

About the author

Nicholas Okafor heads the firm's power team. His core specialisations are energy (including electric power), projects and infrastructure transactions. He has advised on numerous transactions and issues as diverse as establishment, operation and maintenance of independent power plants, debt restructuring, derivatives and eurobonds. He is ranked as a IFLR1000 leading lawyer for project finance, and is recognised by Legal 500 and Chambers for his banking and finance practice.

Okafor routinely advises generation companies and distribution companies on ways to legally resolve the issues arising from the liquidity challenges in the power sector, including corporate restructuring, refinancing, and advocacy.

dress the existing debt to gencos and potential future revenue shortfalls from discos. Such instruments/solutions should be medium to long term in nature, possibly for the duration of the NBET licence or until such a time that the revenue shortfall has been completely addressed.

Recently, the World Bank Group approved the Nigerian power sector recovery programme. We understand that controlling the cost of electricity is a critical element of the recovery plan. Furthermore, a full range of instruments will be deployed to help the FGN mobilise investments directly from the private sector and through private sector guarantees. It is also believed that this will attract private sector investment to the sector when implemented. While not being a direct intervention, the FGN's decision, in the case of the 561MW Calabar power plant, constituted under the National Integrated Power Project (NIPP), to provide a cash-backed indemnity on the gas partial risk guarantee granted to Accugas, to deliver gas to the power station, is a step in the right direction. Such initiatives will encourage the mobilisation of private capital to fund project development and construction of power projects.

We recommend that FGN interventions in the sector should be adequately priced and should not exceed 200 to 300 basis points. The CBN's Nigerian Electricity Market Stabilisation Facility is in our view, overpriced at 10%.

Going forward, electricity consumed by military ministry department and agencies of the government (MMDAs) should be deducted directly from their budgetary allocations. The outstanding debts owed to the sector by the MMDAs should also be deducted at source from their budgetary allocation. Given that the debt is so huge and may not be repayable at once, an amortisation methodology spanning three to five years and which guarantees monthly payments by the MMDAs from their budgetary allocation until all outstanding invoices are settled in full, may be agreed with the sector participants.



Adeola Sunmola Managing associate Udo Udoma & Belo-Osagie

About the author

Adeola Sunmola is a member of the firm's projects and project finance teams. Her specialties include syndicated lending, debt restructuring, corporate restructuring and project finance. She has advised lending syndicates on project finance agreements for power plants, steel mills and a cement plant. Recently, she co-lead the team that advised Actis on its investment in the 459 MW Azura-Edo gas fired independent power plant in Edo State, Nigeria.

NIGERIA / SPONSORED ARTICLE

Option two

This option will entail the creation and use of regulations in the sector to enhance revenue generation. The regulations will deal with issues such as timely reviews of electricity tariff to tackle changes in macroeconomic assumptions, such as inflation and foreign exchange, which will affect the price and cost of electricity in Nigeria.

The NERC could adopt one or more of the following three approaches to regulating utility prices in order to achieve optimal result:

- a. Rate of return regulations;
- b. Cost of service regulations; or
- c. Price regulations e.g. MYTO.

The primary driver in option two is that NERC should publish, and maintain a cost reflective tariff and a regulation that will enable discos, based on established, auditable indices to, automatically adjust for the:

- difference between the actual cost of electricity and the tariff at which energy is sold to consumers;
- · foreign exchange fluctuations.;
- changes in inflation the difference between the rate of inflation published by the Federal Bureau of Statistics (at the time of writing around 17.24%) and as contained in the MYTO methodology (at the time of writing around 10%); and
- adhering to the tafiff review timelines in the MTYO.

The NERC has approved a 10 year tariff path for each disco, and should therefore, publish an amendment to each disco tariff, which will grant discos the rights to automatically adjust their tariff and billing to take into consideration fluctuations in exchange rate, inflation, gas prices, e.t.c.

The NERC should also publish a regulation on the payment and collection of MMDA debts owed to discos. The debt should be ascertained, and amortised over a three to five year period, and deducted from each MMDA's budgetary allocation monthly along with tariff for current consumption.

DFIs, such as the World Bank Group and the African Development Bank, should work with the FGN in developing more policy support instruments that create benchmarks for providing financial support for the power sector.



Busayo Balogun Agusto Associate Udo Udoma & Belo-Osagie

About the author

Busayo Balogun Agusto specialties are electric power, projects and infrastructure and telecommunications, employment law and business establishment advisory. She has advised on the development of gas and coal fired independent power plants in Nigeria. She has also provided general corporate advice to power distribution companies which were privatized. Recently, she was part of the team that advised Actis' on its investment in the 459 MW Azura-Edo gas fired independent power plant in Edo State.

The FGN, under any funding plan with DFIs should provide guarantees against political interference with published regulations forming part of the reform, such as those dealing with tariff regulation. Any change by the regulator in published regulation should constitute an event of default on the part of the FGN that will result in cross defaults under other funding agreements.

The NERC should issue a regulation against the depletion of disco customer base through off-grid distribution and embedded generation facilities by estates and industrial parks. Such regulation should provide a clear path and mechanism on the sharing of revenue between the disco and the investors in such projects through the payment of franchise fees to discos by off-grid distributors (e.g. similar to the manner in which the NERC receives 1.5% of the revenue collected per kilowatt hour of electricity consumed by consumers as NERC's annual operating levy).

Power theft regulation will also be necessary to address the issue of who pays for such losses.

Other solutions include (a) improving infrastructure to reduce ATC&C Losses and increase collection efficiency; (b) securing the management of the TCN by an independent private sector based contractor; (c) allowing consumers to directly purchase their own meters based on disco specifications; (d) implementing clear policy on energy mix, especially incentives and support for renewables; and (e) enhancing community protection of pipelines to address militancy and pipeline vandalism, which affect gas supply for power generation.



Franklin Onwuzu Associate Udo Udoma & Belo-Osagie

About the author

Franklin Onwuzu advises clients on issues in the Nigerian power sector, and represents clients involved in the oil and gas industry. He has worked on several transactions in the power sector, including advising an electricity generator company on its bilateral arrangements with distribution companies. He also provides legal advice in respect of greenfield and brownfield power projects. He routinely provides regulatory advice to companies operating in the Nigerian electric supply and oil and gas industry, including foreign investment approvals.

Deal analysis: Genesis Energy thermal power plant IPP

Onyinye Chukwu and Okechukwu Okoro of G Elias & Co disucuss their roles advising Genesis Energy on the power purchase agreements for a thermal power plant it is builiding in Nigeria

he Genesis Energy thermal power plant independent power project (IPP) was a two-phase project that involved the provision of legal advice to Genesis Electricity (Genesis), a full service energy company, in relation to its proposed sale of power to the Nigerian National Petroleum Corporation (NNPC), Nigeria's state-owned oil company, under a power purchase agreement (the project). Phase one of the project required the NNPC to utilise 24MW of the installed capacity of 84MW, while an additional 250MW will be installed under phase one. Under phase one, the power purchase agreement (PPA 1) provided for an installed capacity that was more than the size of the contracted capacity.

Phase two involved the sale of the excess capacity under phase one as well as the additional installed capacity to the Nigerian Bulk Electricity Trading (NBET) under a separate power purchase agreement (PPA 2) between NBET and Genesis. The project was unique in the sense that it provided for the supply of off-grid electric power by Genesis to the Port Harcourt Refinery Company (PHRC), a subsidiary of the NNPC, a non-contracting party to PPA 1. Genesis constructed the power plant on a build, own and operate (BOO) basis. Critical to the success of the project was its unique structure especially in view of the existing federal laws on off-grid generation licensing by the Nigerian Electricity Regulatory Commission and the need to comply with those laws.

The deal

The project involved independent power production actualised through turnkey project engineering, procurement and construction. The key contractual documentation under phase one include, a long term power purchase agreement, a gas supply agreement (between the Nigerian Gas Company (NGC) and Genesis) to match the term of the power purchase agreement and a land allocation agreement to situate the plant close to the end-user, PHRC. Phase one required Genesis to install the power plant within the premises of the PHRC under a BOO structure.

G Elias & Co had a team of five lawyers on the project. The team advised on all the phases of the project including, the operation and maintenance agreement and the engineering, procurement and construction contract both with Walters Power Africa, BVI, as contractors and operators of the power plant. G Elias & Co also advised on the financing of the project and on the gas sale contract with the NGC. As security for phase one of the project, an escrow account was established under an escrow agreement between the NNPC, Genesis and First Bank of Nigeria, as the escrow agent or bank. NNPC was required to fund the escrow account at all times to cover its payment obligations under the PPA 1. The additional capacity was to be sold to NBET under a separate power purchase agreement with Genesis.

"The project in a way offers an off-grid solution, driven by the private sector, as a viable alternative to the challenge of on-grid power in Nigeria"

Under phase one, G Elias & Co advised Genesis on the installation of an addition capacity of 250MW. The additional capacity is to be sold entirely to NBET. Phase two also involved the sale to NBET of any additional capacity which the PHRC did not buy under the PPA 1. Under PPA 2, NBET agreed to a cost reflective tariff to cover the additional capacity procured.

Challenges and innovations

A unique feature of the deal was that although NNPC was the buyer of record, power supplied under PPA 1 was to be utilised by PHRC. From a commercial perspective, the parties agreed that capacity was to be built from multiple turbines with dual-firing capability enabling the plant to run alternatively on both diesel and gas and eliminating the need for a complete shutdown of the power plant during maintenance. The installation of multiple turbines threw up the problem of how, or, more importantly, when, to achieve commercial operations, especially in view of the parties' desire to commence commercial operations within the shortest possible time. The innovation from a legal perspective was the particularisation of three commercial operations dates to the three turbines. PPA 1 was thus drafted to allow the seller to commence commercial operations with respect to capacity covered

"The political climate at the time required PPA 1 to deal with the effect of the proposed reorganisation of the petroleum industry"

by each of the turbines after commissioning of each turbine (with the pro-rata take or pay obligation on the buyer), thus providing better financing terms from a bankability perspective for the seller.

The project took cognisance of the challenges prevalent in the gas supply sector in Nigeria. The dual-firing capability of the turbines was thus imperative to the project. Under the PPA 1, the buyer was also obliged to source for alternative gas where the NGC for whatever reason, failed to perform its obligation to supply gas. It was thus important to have a turbine that could operate with either gas or diesel, to prevent a total shut down where there is gas supply failure.

Situating the plant within PHRC premises and as close as possible to NGC's gas pipeline assisted in eliminating transmission losses which would have been borne by the seller, the capital expenditure on procuring land for the power plant, installing transmission lines from the plant to the delivery point and from the delivery point to the buyer's connection facility, real estate, security and infrastructure. To address the effect of the common law principle (a part of Nigerian law) to the effect that the owner of land also owns fixtures on the land, the project had a land allocation agreement between the seller and PHRC that expressly provided for a lease that matched the tenor of the PPA, specifically delineated the area of land for the construction,



Onyinye Chukwu Senior associate G Elias & Co

About the author

Onyinye Chukwu holds a master of laws degree from University College, London. She has advised on numerous transactions in the Nigerian energy sector including advising on the largest acquisitions to date of electricity generation and distribution companies. She also advised on the development and negotiation of the precedent power purchase contracts and vesting contracts for the Federal Government-backed single buyer of grid electric power. She has advised on a number of on-grid and off-grid power projects including the Genesis deal.

installation and commissioning of the power plant and also specifically provided for the de-commissioning of the power plant by the seller upon completion of the term.

Another innovation in phase one was the security arrangement which is the creation of an escrow account that is required to be funded at all times by the NNPC to cover its three months payment obligations under the PPA. Its uniqueness turned on the fact that the escrow agent was the buyer's banker and had the authority to draw from the buyer's account to replenish the escrow account once drawdown had been made by the seller.

Also of particular importance to the seller and significant in PPA 1 was the 'change of law' provision. The political climate at the time required PPA 1 to deal with the effect of the proposed reorganisation of the petroleum industry. The Petroleum Industry Bill was considered one which when passed into law, would involve the corporate reorganisation of the NNPC. It was therefore important to the seller to protect itself from the effect of any change of structure or transition by the buyer as a business entity under the Petroleum Industry Bill upon its passage into law.

Liquidity also played a key role in structuring the project from a bankability perspective. The project was structured to meet the majority of the seller's recurring expenditure in dollars so as to avoid any foreign exchange risk which the seller would bear, were the payment to be in the Nigerian local currency. The project was thus structured as a currency pass through with the payments covering costs in dollars being made to be payable in dollars. The parties agreed that where a change in law became a force majeure event, the seller would still be entitled to its monthly payments until PPA 1 was terminated under the 'Prolonged Change of Law' provisions.

Phase two was essentially an amendment of the PPA 1 under phase one to provide for the installation of additional turbines to achieve an additional capacity of 250MW to the existing installed capacity of 84MW. The amendment of the project structure in phase two threw up issues vis-à-vis phase one: tenor of the PPA in view of the tenor of the lease under the land allocation agreement; and increase in gas supply and the need to renegotiate the gas supply agreement. The parties agreed that an additional fee was to be paid by Genesis to NNPC for the land within the PHRC premises to house the turbines for the additional capacity of 250MW. The tariff under PPA 2 was made cost



Okechukwu Okoro Associate G Elias & Co

About the author

Okechukwu Okoro holds a Bachelor of Law degree from Ebonyi State University. He has been involved in several of the firm's energy deals. He has been actively involved in the legal review of gas sale documentation and is currently advising three embedded power projects. He was on the team that recently advised two distribution companies on the Central Bank of Nigeria's Nigerian Electricity Supply Industry Power Intervention Fund. He was part of the team that advised on the Genesis deal.

reflective to cover the additional capacity installed. There were also issues as to which obligation will take priority in the event that Genesis is unable to produce up to the contracted capacity within a specified time-frame. PPA 1 was to take precedence and so in such an event, Genesis was obliged to supply PHRC the available power.

A key issue that arose subsequent to the phase two was in relation to the operation of the escrow account. In 2015, the Treasury Single Account (TSA) policy of the Federal Government of Nigeria became effective. According to the TSA policy, all government ministries, agencies, parastatals and corporations (including the NNPC) were required to remit their earnings into a single account. It thus became difficult for the NNPC to meet its obligations under the escrow agreement. This was because the NNPC's revenue bank accounts with the escrow agent, from which the escrow account had hitherto been fed under the escrow agreement, no longer constituted a source of revenue for the escrow account. There was also no alternative source that was available for funding the escrow account. The parties have been negotiating to find a solution and do not have any yet.

It is pertinent to mention that the Project is one of the few power projects in Nigeria with foreign investment. The Project was sponsored by investors from three continents, two foreign investors from North America and Asia respectively, and Genesis, as the local partner. Both foreign entities have been involved in several power deals in their respective countries.

Lessons learnt

The project in a way offers an off-grid solution, driven by the private sector, as viable alternative to the challenge of on-grid power in Nigeria. The structure employed in the two phases of the project has subsequently encouraged more private sector participation and the diversification of energy generation sources. The structure has also made the IPP operational and increased the supply of petroleum products in the Nigerian market through the increased efficiency of the PHRC. The PPAs has formed a precedent for subsequent power deals where available capacity is to be sold to more than one end-user. In fact, phase one of the project was rated and awarded the Africa deal of the year by Africa Utility award in 2014.

Behind The Deal – Isa Alade – Banwo & Ighodalo

Banwo & Ighodalo partner Isa Alade discusses his work for Ropeways as developer of the Lagos cable car in Nigeria with Jon Moore

Can you outline the scope of the project?

Nigeria has about 180 million people, out of which about 20 million live in Lagos, the economic and commercial centre of the country. Although Lagos is Nigeria's smallest state geographically, it is the most densely populated state in Africa. The land mass of the city is very heavily populated and this puts a lot of stress on the city's infrastructure.

It is also important to note that the government historically did not pay much attention to – or invest as much in – infrastructure as it should have. So, we find ourselves in the situation where the population of the city has increased significantly, over and above the capacity of the existing infrastructure that is in place.

"The project is designed to ease traffic on these routes, particularly from the mainland"

One key area is the transport sector. Lagos has a very bad reputation for traffic, so bad that one of the very first thing you have to learn and get used to when you come to the city is the traffic. The road network is heavily constrained, again because you have a road network that was to support less than five million people and is now supporting a population that is over three times what it was designed for. The absence of an effective public transport system, like a functional rail system, has also contributed to the situation. Therefore, a lot of residents have to own a car. Even though there are some commercial transport options like buses they often just increase the problem with the traffic. The government tried to bring in buses on the more significant routes, but that has not been fully successful in terms of usage or numbers and doesn't serve the needs of many of the residents who commute into the city.

An average resident will spend an hour or two sitting in traffic every day, and often more. Indeed, they can spend as much as four hours regularly and when it is really bad that can go up to six hours in traffic, just trying to get from one point to the other.

So, traffic in Lagos is horrible and putting in a complex rail network that covers much of the city is difficult because there is limited land for that. Even though the government is developing a rail network, a light rail along certain routes, it has been delayed for a long time. They have had a lot of challenges with that because they've been constrained in terms of the limited land opportunities in the state, among other issues.

That is where the cable car comes in. It addresses the land challenges that would ordinarily be an issue for a complex rail project. Since there is no land for a lot of rail, you can put in a cable car system that can then connect people and even interface with the limited rail projects that are currently being put in place by the government as well.

What areas will the cable car serve in the city?

The cable car project actually has three different routes. It also interconnects with other services, but the central focus will be the business centre, Lagos Island/Ikoyi/Victoria Island, the economic centre of Lagos. You have a lot of people coming from the mainland, so the system is expected to carry a huge number of people coming from the Apapa side into the Island every day. The project is designed to ease traffic on these routes, particularly from the mainland. There are three different pick up points and they cross the water to the Island.

And how did the firm become involved in the process?

We were requested to submit a proposal to the project company and subsequently informed we had been engaged. It wasn't a government project so we didn't have to go through any public procurement process for our engagement. It is a privately sponsored project, even though it does receive support from the government.

Are you the sole counsel on the project, or lead counsel? What is your exact role?

The firm is the lead counsel on the project. In terms of support, we have had to work with law firms in the UK as well. For instance, White & Case was engaged as English counsel because some of the project documents are governed by English law, so we called them in for English law-governed documentation and also for some aspects of the financing.

That leads on nicely to the structure of the financing. It was a mixture of a loan facility and a bond issue - are they related or separate?

They are completely separate. Part of the financing is being arranged and provided by a development finance institution (DFIs). Something like 40-50% of the entire project costs are expected to be covered by a term loan, another 30-40% from a bond issuance and then there is a pure equity element. The sponsors and some other investors have taken an equity stake in the project. There might still be some slight movement around those ratios because there have been some negoti-

ations about the total equity stake, but it is unlikely to go above 30% of the total financing at most.

Is the term loan solely provided by DFIs, or are there commercial banks involved as well?

Yes, there are some local commercial banks that are also involved, but it will be led by the DFI.

On completion, will this be run by the state – either local or national – or will it be run by the sponsor as a commercial enterprise?

It will be run by the sponsor as a commercial enterprise. As I said, it is not really a government-sponsored project. It is a privately sponsored project but we had to obtain the franchise and licence from the government to deploy the system and operate it for public use. So the government regulates the project in terms of safety and had to signoff on approvals for the design.

The government also has some inputs around the pricing to be paid by users, just to be sure the sponsors are not unduly exploiting the members of the public that have to use it. Other than that, the management and operations of the project will be done solely by the sponsor.

We have engaged a leading cable car manufacturing company, who serves as a technical partner and potential investor in the project. They will, in addition to supplying the equipment, also be handling the operation and maintenance post-commission.

You touched on it there, but in a project like this there are more safety and structural concerns than, for example, a rail network. Was it particularly challenging to get those approvals?

It was a painful, drawn-out process moving towards approval. As you might imagine, there was no precedent for this project so that immediately presented a problem. You are trying to put up a system they are not familiar with so you need to instil a lot of comfort, you need to take them out to see some of the places where some of these types of systems are already deployed, you need to give a lot of assurances. People were saying, 'this thing is just going to drop on our heads' and asking 'what happens if the wire breaks?'. So it was quite a challenge to secure the approval.

One of the biggest challenges was that there was nothing in the existing regime that could anticipate a project like this. There is an existing transportation master plan which did not make room for, or contemplate, a cable car system. So the master plan had to be amended, which again took some time. One of the key requirements for securing approval for the project was that it had to integrate with existing and contemplated projects. For example, there is a rail project being contemplated and we needed to factor this into the cable car project.

Looking at the wider market how would you describe the health of the transportation sector in Nigeria at the moment?

I think we are still very far short from where we should be. Clearly there is a lot of commitment from the government, made obvious by the kind of support we have received on the cable car project. The process should perhaps be faster than it is but you can't take away the fact that the government has been quite supportive. There is also a lot of incidental supporting infrastructure, such as telecoms infrastructure, being done concurrently.

On the broader level looking at Nigeria, the federal government has initiated a transportation initiative. There is a major rail project being proposed by the federal government that will originate from Lagos State and will cut across several other states. There is also a light rail project that has been completed between Kaduna and Abuja, which is now functional.

In what areas could the government perhaps be doing more?

There continues to be room for improvement. Some of the laws that have a direct or indirect impact on infrastructure projects, particularly transportation, need to be worked on. You have to obtain permits at two different levels of government for some of these projects, at a federal level and at a state level. It would be good if there was a single permitting framework. That would have eased some of the challenges we faced. There is a multiplicity of permitting, which makes things take a longer time than they need to.

And in terms of legislation is there one thing they could do to streamline that process, or is it just a question of efficiency at the different levels?

I believe both would help. The process needs to be streamlined because at the moment, you have to get the same permits from different departments of state and federal government. If you had a single infrastructure support law that put all these departments under one uniform system, so you get one permit and you only have to deal with a committee or board comprised of representatives of all of those departments, that would have eased the process. It would be easier to have a single law, or a law that creates a simpler framework for getting all the permits you need to obtain.

Of course, if each of the departments had been efficient in their own way, maybe the process would not have been so difficult and we could still have worked faster within the existing regime.

Generally speaking, are you positive about the project environment in Nigeria?

Definitely, and clearly there is also a lot of support from the government because the government has clearly shown that infrastructure development is part of its core agenda. It has helped bring investors into the sector and has shown a willingness to provide an enabling environment for the projects. It has even made significant financial commitments in the sector in terms of its willingness to part-finance projects across the country. And at a sub-sovereign level, Lagos state government for example, there has also been a show of commitment and a lot of support.

We have also seen a lot of investors showing interest in the infrastructure space in Nigeria, including the transport sector. So there are a lot of opportunities there and this has been reflected in the number of enquiries we continue to receive in this regard.



Isa Alade Partner Banwo & Ighodalo

About the author

Over the last decade partner Isa Alade has advised local companies and multinationals on structuring a significant number of novel and complex transactions covering various sectors including banking, financial technology, insurance, manufacturing, telecommunications, energy and mining.

Behind The Deal - Vera De Brito de Gyarfas - King & Spalding

King & Spalding's Vera De Brito de Gyarfas speaks with Sam Duke about Anadarko's Mozambique LNG project and broader trends in the African gas market

How did the firm get involved on this project?

Anadarko opened the tender for firms to represent them on the Mozambique LNG project in 2010, after it found huge gas reserves in Mozambique. King & Spalding prepared a pitch highlighting its extensive global LNG expertise and won the tender for legal services.

We've been working from the onset of the project, which is really fascinating as this is a greenfield project in east Africa, and in Mozambique itself there was just one prior gas project, a pipeline to South Africa. It's a project that can take Mozambique from a country that lives off of donations to one of the largest gas exporters in the world.

What is the scope of the firm's role on this project?

It's an amazing project, and King & Spalding was hired to provide legal services across the entire value chain. We have teams working on government negotiations in-country, commercial negotiations with other oil companies, all the engineering, procurement and construction contracts and the sales contracts for marketing of LNG.

King & Spalding also worked on the unitisation of the Prosperidade/Mamba reservoir, which straddles Area 1 and Area 4 of the Rovuma Basin, offshore Mozambique. Eni, the operator of Area 4, also found gas in a block adjacent to Area 1 resulting in the largest gas unitisation and unit operating agreement in the world, I believe.

At the beginning of the project, we advised Anadarko with respect to the proper structuring of the project, given the large natural gas reserves discovered, so that the initial two-train project may be expanded over time to effectively monetize all the gas.

Philip Weems, a King & Spalding partner who retired in December, was really the "brains" behind the initial structuring of the LNG Mozambique project to ensure that the government agreements and the commercial agreements may be expandable and financeable. LNG projects are very different from oil projects because LNG needs to be sold under long-term LNG sales and purchase agreements before a final investment decision (FID) is made, as the proceeds from the LNG sales are used as security for the financing. So it's a very complex, but fascinating structure.

This is a once-in-a-lifetime project, and I'm very thankful it's to be involved with it, these types of opportunities usually only occur once in a career.

Had you and the firm worked with Anadarko before?

It's a very small world and King & Spalding represented Anadarko in other projects before and continues to do so in other LNG projects, environmental matters, international E&P and international arbitration matters.

"When the country is struggling and survives on donations, it's very difficult to explain that the Government will not have access to the profits until at least five years in the future"

Before joining King & Spalding in 2011, I was a partner with the Travieso, Evans, Arria, Rengel & Paz law firm in Venezuela, and I had represented Anadarko in their operations in Venezuela.

What stage is the project at now?

The main milestone of the project was achieved in December 2014, when the Mozambique government enacted a special decree law that would permit the implementation of this project. This law contains the legal framework for the implementation of the Rovuma Basin Project. There were certain laws in the Mozambique legislation that were very restrictive, so it was necessary to address certain specific legal issues that would permit the implementation of a major LNG greenfield export project in east Africa, including certain special financing terms that will be required by lenders for the project financing. From then on, Anadarko has continued to negotiate certain other key agreements to allow for the project financing and implementation of the project.

Currently, Anadarko is negotiating a number of LNG sales and purchase agreements. It is expected that a FID will be made sometime in 2018, but that will depend on the execution of binding LNG sale and purchase agreements.

"Mozambique is a very democratic country. It is very different from a country like Angola or Nigeria, where you have a very strong executive or president that can get things done if there is political will"

As part of the project, a resettlement plan relating to certain villages at the site is being enacted. What stage is that at?

That's a parallel procedure because of where the LNG trains will be located onshore there are villages, and these villages will need to be relocated to another location within the area that has been allocated to the Rovuma Basin Project for development of the onshore facilities. The resettlement plan has been approved by the government, but construction has not yet started.

Did the firm have any involvement on the resettlement negotiations?

Anadarko handled the resettlement themselves. We handled the drafting of the EPC contract with the EPC contractor, which is going to build the houses and facilities in the resettlement village.

The project has been ongoing since 2011. Was that timeframe expected?

Greenfield export LNG projects take a long time to develop. For example, the Angola LNG project took ten years. LNG export projects are extremely complex and governments do not always have the knowledge of what they entail or adequate legislative framework to support such large investments. First, it is necessary to explain the value chain of an LNG project to the government and the relevant ministries and agencies that are stakeholders in the project.

In Mozambique, workshops were held to explain how LNG projects were implemented in other parts of the world and in Africa. The Mozambique government also worked with the World Bank, the IMF and advisors and visited LNG projects in Qatar and Trinidad & Tobago to understand how the governments had addressed and participated in such projects. A lot of explaining of what is required and what the LNG project entails is necessary because, generally, the government officials think that the project is similar to an oil project when it's actually very different.

Special technical and financial consultants went in country to give workshops and other concessionaires, like Mitsui, also gave workshops to certain government officials, so they understood what all is required to be successful.

We analysed other LNG export projects and made comparisons to explain how LNG projects in other countries were implemented.

This was especially relevant with respect to the special decree law, where we evidenced that in other countries decree laws were issued as the legal basis for LNG projects because the existing legislation just doesn't contemplate LNG, including in Angola, Egypt and Peru.

What are the biggest challenges you've faced on the project?

I think the biggest challenge is very common in developing countries, and it reflects the inherent struggle between the government wanting to increase its revenue quickly and the companies' requiring that the legal and contractual framework contains stabilization provisions to ensure its feasibility in the long-term. This is a long-term project for which, because it's going to be project financed, the government is only going to see significant profit a long time down the line. When the country is struggling and survives on donations, it's very difficult to explain that the Government will not have access to the profits until at least five years in the future, especially with elected officials that have a shorter term and want things done and economic expectations met. But these projects take a long time to develop and construct and government cooperation will be required at every step along the way.

LNG is very different from crude because in oil projects, you start selling the crude right away, and the government will receive royalties and its share of production almost immediately.

What happened in Mozambique is that a lot of expectation was built-up because the Anadarko LNG project is the foundational project. Once you have the LNG trains in place and you are exporting LNG, there will be other gas projects, like petrochemicals, fertilizer and others that can be developed, but their feasibility depends on the launching of this foundational project.

Had you worked in Mozambique before?

No, I had not worked in Mozambique before. It's a special place. I'm a Portuguese citizen, so I speak the language and write it, and Mozambique still has a lot of Portugal in it.

How does doing business in Mozambique differ from other African countries you've experienced?

I guess the main difference is that unlike in other countries, like in Angola, because there is no oil production, there's no strong national oil company that will participate in the projects. In Mozambique, ENH is the national oil company and it will greatly benefit from its participation in the LNG project through training, so that eventually it will someday be able to operate the project.

Mozambique is a very democratic country. It is very different from a country like Angola or Nigeria, where you have a very strong executive or president that can get things done if there is political will. In Mozambique, the different commissions of Parliament and the different ministers all had to be involved in the review and approval of the special decree law, so there was a lot of analysis and discussion and convincing of individuals that were not just the president.

You are based in the US. On a project like this, how often would you be required to advise 'on the ground'?

There was a lot going on in the country during the negotiations of the decree law. 2014 and 2015 were the heaviest years, work-wise, and I was in Mozambique around eight times a year.

We, as a firm, worked on different portions of the project from different offices, so for example, the government negotiations, commercial negotiations and the construction work were led out of Houston because Anadarko is in Houston. The marketing was led out of our Singapore office due to its strategic location with respect to LNG buyers, and the unitisation negotiations were led from our London office.

BEHIND THE DEAL

How important is a law firm's specific LNG expertise when it comes to projects like this?

LNG expertise is key because LNG projects are very different from traditional oil and gas work. Our firm has actively participated in export LNG projects all around the world and our attorneys bring a greater added value to the table due to their knowledge of different types of contractual structures, issues and strategies.

Did you have much or any interaction with local Mozambique firms on this project?

At the beginning of the project, we worked very closely with Sam Levy of Sal & Caldeira. He's a unique character – a US lawyer trained in Mozambique law who participated in the peace negotiations that ended the civil war in Mozambique in 1992. He has extensive knowledge of the country and the players, and he was a key aspect of our work there. We worked with Sal & Caldeira on land and tax issues. We also worked and continue to work with the Miranda law firm in Lisbon, specifically Diogo Xavier da Cunha, who has been instrumental in key aspects of Mozambique law.

Mozambique's legislation is based on Portuguese law, so there's a lot of involvement from Portuguese firms.

On the project financing, Latham & Watkins has led that work with support from VdA Vieira de Almeida, another Portuguese law firm.

What are the broad trends that you can point to in the LNG and oil and gas areas?

Because of the decrease in prices of LNG and excess supply of LNG as a result of the U.S. shale gas revolution and export projects, other LNG export projects around the world have slowed down.

The LNG market has changed since 2013. You are no longer able to sell LNG at \$12 to \$16 –the number is much lower because there's a glut of excess gas from the US. I think that until the China and India LNG demand increases significantly that glut is going to continue.

What about trends in Latin America?

It's an amazing time for Latin America. Since the early 2000s there was a leftist turn in Latin America, with Chávez, Lula, the Kirchners, Correa, Morales etc., which were very nationalistic governments that opposed foreign investment. Now all those systems have collapsed, and there's a new trend. The pendulum is going to the right and to pro-investment, and there are very favourable changes in Argentina, Brazil and Peru. So there's a trend of pro-investment legislation, and all these countries really require foreign investment. Argentina is the success story today but I expect that such trend will extend to other countries.

In Mexico, the investment reform has gone really well. Mexico amended its constitution and all the oil and gas legislation. The last offshore deep-water bid round was a success – all the oil majors participated, and blocks were awarded way beyond the expectations of the Mexican government. The opportunities are not only in upstream, but also in natural gas and downstream. They are opening the fuels market to private investment, so Mexico from an oil and gas point of view, is the number one on the list.

What about the firm's own practice. Are there any plans for expansion or shifts of focus?

King & Spalding has 10 international offices in countries like Singapore, France and the UK. We opened our most recent new office in Tokyo in 2015, and that has really expanded our practice with Japanese and Korean investors in the U.S. and Latin America. As a result, there is a natural expansion into Latin America because those countries are showing a lot of interest there.



Vera De Brito de Gyarfas Partner King & Spalding

About the author

Vera De Brito de Gyarfas is a partner in the global transactions practice group at King & Spalding. Her practice is focused on energy projects in Africa and Latin America representing companies in upstream exploration and production projects, LNG and other gas projects, under joint ventures, profit sharing agreements, operating services agreements, EPC contracts, oilfield service contracts, as well as in M&A.

Her expertise in LNG involves the negotiation and drafting of host government and other investment agreements, analysis of existing regulation and Government negotiations, LNG sales and purchase agreements, gas supply agreements and terminal usage agreements, among others.

Behind The Deal – Aly El Shalakany – Shalakany Law Office

Shalakany Law Office partner Aly El Shalakany speaks with Jon Moore about the challenges of advising on the development of Egypt's first independent power producer (IPP) wind farm, the Gulf of Suez 250MW IPP

Could you outline the scope of the project?

It is a 250MW IPP project in a place called Gabel El-zeit, which is in the Gulf of Suez on the Red Sea. That's one of best locations for wind farms globally so it is an ideal location. It is where a lot of our existing wind farms are, but those were all done based on development finance institution (DFI) support in the 1990s, through soft loans and grants, etc. We've never had an IPP project on a fully commercial basis, this was the first one.

There was a bid conducted about three years ago and the winning bidder was a consortium of EDF Suez – which is now Engie – Toyota and Orascom Construction.

While we already had an excellent relationship with all of the project sponsors we pitched for both the sponsor and lender roles and were selected as lenders' counsel. So we represent The Japan Bank for International Cooperation (JBIC), Nippon Export and Investment Insurance (NEXI) and a few other commercial banks. Notably, this is only JBIC's second project financing deal in Egypt. Apart from the fact the sponsors were very meticulous, this was a pathfinder project and that presented a number of challenges.

Given this was the first such example of an independent power producer (IPP) wind farm in Egypt, what were the regulatory problems you had to overcome, both at a national and local level?

There was a lot of structuring we had to work on. The first thing is, if you want to use an IPP model then you need to secure all of the assets. Unlike other jurisdictions where you can use all-asset security, in Egypt – and in many other jurisdictions based on the French system – you actually have to use specific asset security models and you need to make sure your assets fit into these security models in order to take security. If it doesn't fit, you have to figure out a way to make it fit.

Because this type of project had never been done before, we had to try and figure out how to secure the wind turbines themselves. The land is something that is quite straightforward, you can just get a real estate mortgage. But the turbines are a little bit more complicated because there is a question over what type of asset it actually is. Is it machinery, or is it a fixture on the land? From a high level perspective these may seem like small problems but from a security and technical perspective these are the really hard questions, especially if it has never been done before. Getting that through the regulators was a big win because we have cleared the path for others to follow that model successfully.

For IPP projects, one of the unique aspects of the work is that there is no transfer of the land. You get the equivalent of a leasehold, which under the French system is called a usufruct. It simulates land ownership, but you don't actually own the land. The registration of a

"...you often need to work as something of a peacemaker to ensure that everyone's needs are covered"

usufruct takes a very long time – it can take up to six months – so we had to use a model that assured the lenders' rights fully while at the same time providing flexibility for the sponsors to be able to draw down and not have to wait six months.

Another challenge was related to JBIC. Unlike commercial banks, DFIs are a lot more conservative and have a low risk tolerance for any gaps or risks that are not fully mitigated. Even compared to other DFIs I would say JBIC are particularly meticulous.

Given this was an independent project, did you face any particular challenges in the implementation of the project that might have been easier if it was a public project?

The first thing to say is that we do have a lot of government stake-holders involved in the project. It is not like you are dealing with just one entity, you are actually dealing with two or three that have direct involvement. It is quite challenging because the government as a whole wants this project to succeed but you are dealing with different government entities with different interests and agendas, so you often need to work as something of a peacemaker to ensure that everyone's needs are covered while at the same time making sure the project is workable.

BEHIND THE DEAL

For example, the Ministry of Finance – which gives the guarantee that is a major credit element – wanted to give as little as possible in terms of credit support. But at the end of the day we need to cover that risk and that is a key credit item from the lenders' perspective. At the same time, the land owners don't want to give up too many rights on the land but if we can't secure it in a way that creates flexibility for the sponsors for the six-month issue I mentioned then that's a problem.

These are all relatively small issues in isolation but when you add them altogether they are the things that define whether a project is bankable or not bankable.

On the licensing front in particular it can be a bit of a nightmare; for this project we needed to secure 11 different authorisations. If you look at somewhere like the UAE you just need one licence, an operating licence, and then you are good to go. Over here you need to go to the local municipality to get a construction licence, to the Ministry of Antiquities to sign off on the land and confirm there isn't some sort of hidden tomb underneath the area you want to develop and so on and so forth.

You mention that this was a pathfinder project. Looking forward will this serve as the model for others or do you see potential new challenges for each new project?

Well, there already is another project that has already been agreed to at the higher level, one with another group of sponsors. But what the government has said is that where they have these pathfinder projects they will not give the go ahead to any subsequent projects until the completion of the first one, so they can use that as a benchmark. So this is very much a gateway project for not one, but at least two other projects that are waiting for this to reach financial close.

We are also working for the government on the first coal-fired project and that is in a similar situation, with two other projects waiting in the wings for that to happen.

You also highlighted that the main lenders of this project were JBIC and NEXI, both Japanese DFIs. Is that an area you see a lot of interest from right now, Japan and the Asia-Pacific region?

We are seeing a lot more Asian, especially East Asian, interest in energy and infrastructure in Egypt. JBIC certainly don't see this as a standalone investment.

You've seen FDI increase quite dramatically in the past year, and the government hopes to increase that over the next three years. Do you see a lot of appetite from foreign investors for investing in renewable power projects?

There is a huge appetite. Projects and project finance is very big part of our work and we have developed a strong reputation as a go-to firm in that sector so we get to see the interest quite early. An area where we are very optimistic, and somewhere we are looking to get a jump on, is the development of the Suez Canal Zone. There are a number of logistical projects, a number of power projects and a number of infrastructure projects that will take place there and it is going to become something of a hub for industry.

Mentioning hubs, the government has announced ambitions to become the North Africa centre for wind energy, aiming to bring 4.3 GW of wind power online by 2022 alongside developing manufacturing facilities. Do you think this will be achieved?

I think 4.3GW by 2022 is perhaps overly optimistic but I certainly think we could realistically bring half of that online by then. That is still a very high amount (Egypt's current installed wind capacity is

only 750 MW by comparison). I would say a more realistic target is 2 GW, but that is still very impressive.

What do you see as the biggest potential roadblocks to that?

There are really two big obstacles. The first, which is the key obstacle, is that it simply takes too long to complete these projects. We need to follow the models implemented in other countries where you lay out the project and present a well-developed template of documentation that can be negotiated very efficiently, where I can ensure value for money. It should then really take no more than a year between tendering and signing, certainly no more than 18 months. Taking everything into account for this first project it has taken something like three and a half years. People are going to factor that into the costs, so you cannot expect to get the best tariffs available if it takes you double the amount of time to get to financial close.

The second challenge relates to the political will for these types of project. We have been very lucky in that we have had two major gas finds in the Eastern Mediterranean, and this was before we launched our renewable energy programmes. My worry is that with the development of these fields gas will become more readily available and – of course because gas-fired projects are still cheaper than renewables – this might squeeze out some of the renewable energy projects.

Looking ahead to the rest of 2017, do you expect it to be a good year for your practice?

Honestly, it has been a fantastic year for us so far, although it is only very early days. We are seeing a lot of appetite from foreign investors because assets are cheap. Our initial internal expectations were that the first half of the year would be a lot slower than the second half. We had that big FX devaluation in Q4 of last year and we thought that it would take at least six months for the market to be able to absorb that kind of a shock. What we have found instead is that it has been full steam ahead.



Aly El Shalakany Partner Shalakany Law Office

About the author

Qualified in Egypt and England and Wales, Aly El Shalakany joined Shalakany from Linklaters in London. He has been consistently recognised as a leading lawyer by the top legal directories as a result of working on a range of pathfinder transactions within the Egyptian jurisdiction. He specialises in finance, projects and M&A.

Behind The Deal – Mohammed Ghannam – Helmy Hamza & Partners (Baker McKenzie)

Mohammed Ghannam of Helmy Hamza & Partners in Cairo speaks with Jon Moore about the Al Nowais coal power plant project and the energy and infrastructure market in Egypt

Could you outline the scope of the project?

This is the first coal-fired power project in Egypt, so we are actually going through a number of new issues. It is a really important project because it sets the model for other projects in this region and in this industry.

The first issue is this is a fairly large project – circa \$4 billion in three phases – and the location that was selected by the government is Oyoun Moussa, on the Sinai side of the Gulf of Suez. The project is tied in with very ambitious development plans the government has for developing the Sinai Peninsula.

This ties in with the economic zone being developed in the Suez region where the government wants to build significant value-added industries around the canal. This will be done in phases as well, but the power project is important both for the development of Sinai and also to cater to the economic zone.

Sinai has been neglected for many years. There have been no significant developments there and part of the problem we see in Sinai in general is a lack of projects, investment and services; that all contributes to the terrorism we see there. And because of the situation there are a lot of security clearances and approvals that are required for projects in Sinai. For example, if you want to invest in any other region in Egypt it is quite easy, it is very open; it can be 100% non-Egyptian with no restrictions. But when it comes to Sinai, the government has passed a law which regulates investment requiring 55% Egyptian ownership of the project company. If you want to transfer any shares in a Sinai company you need government approval. You can get a waiver from the nationality requirement in certain cases.

The third major challenge was the import of coal itself. Coal doesn't have the best reputation when it comes to environmental impact, emissions and so forth and there were virtually no regulations dealing with coal projects under Egyptian law. It took a lot of discussion with the Egyptian government and eventually EU-standard environmental regulations were passed for coal projects. The regulations are quite strict.

Given all the additional challenges involved working there, why was Sinai chosen as the location for the project?

The main factor was that the ministry of electricity, through the holding company, already had a site there. There is a conventional thermal power plant with a plot of land next to it that was planned to be used for an extension or expansion. Therefore, this was the optimum place to have the new power plant. It is close to the grid, it is already connected and it served the desire to have a project near the Suez economic zone and on the Sinai Peninsula.

"It sets the model for other projects in this region and in this industry"

And where is the coal sourced from, is it Egyptian coal?

No. We don't have a history of using coal for power so do not have the expertise for that type of energy. There are various issues related to coal handling, storage, processing from an industrial point of view, how you control emissions and so forth.

The coal itself will be sourced from the international market through a combination of long-term supply agreements and spot-based purchases.

The size of this project is pretty substantial, even more so within an Egyptian context. How was the financing structured?

The consortium was led by Al Nowais and has mainly Korean and Japanese investors. It will be project financed through international export credit agencies (ECAs), developmental banks and there will also be a tranche for commercial banks from the international and local market.

What are the biggest challenges in pulling together that kind of consortium?

There are the usual challenges that you see in any project financing. But, I think, in addition to that one of the biggest issues will be rebuilding confidence in the Egyptian market and Egyptian economy. We had the disruption in 2011-12 and ever since then the banks have been wary of investing in Egypt. I think they are much more comfortable now than they were perhaps two years ago, with many financings taking place in the last 18 months or so, but they are mostly led by developmental institutions and ECAs.

"The government now wants to have a more intelligent energy strategy and that involves a good fuel mix for power generation"

The project also includes the development of a jetty to directly receive the imported coal. This is another heavily regulated area where you need to have a concession agreement with the Egyptian government on a BOT (build-operate-transfer) basis, or something of that nature, and that requires separate negotiations.

You mention the environmental concerns. With all the renewable programmes taking place in Egypt and across the continent right now, do you see much of a future for coal projects?

I think it will very much depend on the cost and the tariff to be agreed with the government. This will set a benchmark for other projects in the future, though.

There were a lot of power outages and blackouts in Egypt a few years ago and we also had a terrible crisis in natural gas, so it was chaos. Therefore, the government now wants to have a more intelligent energy strategy and that involves a good fuel mix for power generation plants. Renewable energy, for instance, is becoming very important and is a really growing really sector but I think coal will play an important part and you need the diversity. Also, the technology and environmental issues with coal are very advanced and it is used in the EU very successful.

Looking at the wider market, the last few years have been particularly challenging but there still seems to be a strong appetite for investment. What are the obstacles that remain for investors?

There are still concerns, of course. We cannot ignore the challenges we have here in Egypt and the level of uncertainty has impacted a lot.

Political stability is much improved, that is one thing. There is a freely elected president and freely elected parliament. The new administration has made important changes, important developments for Egypt because the regulations with the previous administration were in bad shape. The crackdown on corruption is serious and real, and the latest is repossessing vast plots of state-owned land.

There is also more international acceptance, warmth between Egypt and the major powers like the US and the EU, and that is important. Relations with the Gulf States are at their best now too.

Away from politics, the flotation of the Egyptian pound was also a very important step that took place in November 2016, which nobody believed was going to happen. It has been a bitter medicine to take but I think there is a wide acceptance of this move and the reforms that went with it, at least in the business community among the bankers, lawyers, etc. Overall, these are difficult times, these are

difficult reforms, but I think in the short and medium term there is optimism and we think it is definitely better that we have taken those steps.

Something we have been seeing across the continent is the interest from Asia seems to be really strong at the moment, have you seen that change in the investor profile in Egypt?

We have seen some Korean and Japanese investors, but not as many as we would perhaps like. Having more of these investments in Egypt is certainly something good for the economy generally. Chinese companies are very visible now in the construction space, including the new administrative capital of Egypt. I think you are going to see more and more Chinese investment because there are some significant projects in the pipeline that will no doubt draw their interest. We had not seen significant Chinese investment before but now they are here for sure

How do you see the year ahead?

We are already seeing more investment, we are already seeing more interest in Egypt. There are more clients exploring opportunities, doing due diligence, getting advice on projects. I think this is the first phase, looking around and seeing what is happening in Egypt.

At the very least we are seeing people trying to finish open projects, projects that had problems in recent years and were put on hold. I think towards the end of this year we could see some really positive developments.



Mohamed Ghannam Partner Helmy Hamza & Partners

About the author

Mohamed Ghannam is a partner in the Cairo office of Helmy Hamza & Partner and is the head of both the banking and finance practice group and the energy, mining and infrastructure group. His work focuses on project finance, infrastructure, M&A, oil and gas, debt capital markets and transactional work.

Behind The Deal – Martin Kavanagh, Rowena van de Grampel – Herbert Smith Freehills

Herbert Smith Freehills global Africa practice co-head Martin Kavanagh and senior associate Rowena van de Grampel speak with Ben Naylor about the complexities of advising one of the sponsors on Africa's first project financing of a large scale gas-to-power project, Sankofa, (part of the Offshore Cape Three Points development in Ghana), and trends in project development in Sub-Saharan Africa

How did the firm win the mandate for Vitol on the Sankofa project?

MK: Vitol is a long-standing client of the firm. We do a lot of work for the company across all of its operations including trading operations, structured trade finance and some project work. We have a strong relationship with its commercial and legal teams, and when they started looking at this project they came to us.

The financing for the Sankofa project has been called the first project financing of a largescale gas-to-power project in Africa. Did the fact the deal was a first on the continent affect negotiations with lenders and the structure of the loan agreements?

MK: I think the deal is genuinely a first on the continent, a proper project financing of a large scale gas-to-power project. From a legal sense what makes it complex is Vitol was not the majority owner and not the operator, and they project financed their share of it.

Aside from the fact it was a project financing in Ghana, which is complicated enough, there was a huge World Bank angle in terms of restructuring the gas industry in Ghana which had to be fitted into a commercial bank financing. In Africa in the coming years there will be lots more gas-to-power projects and this will be the path-finder project.

RvG: Vitol and eni engaged with the Government of Ghana and the relevant state entities from a very early stage in the project's development. Vitol always knew that it wanted to project finance its minority non-operator interest, so the deal structure needed to be bankable. This early engagement meant that Vitol was able to present its lenders with a bankable project structure addressing the key risks before the complex financing negotiations were too far progressed.

For example, one of the challenges for the Offshore Cape Three Points [OCTP] project structure is that it is not fully integrated with the downstream, creating significant project-on-project risk. This was a key risk that Vitol knew, as a sponsor, it would have to be comfortable with, and that it needed to ensure the banks were comfortable with too. The sponsors' strategic decision engage with the state early in the process enabled them to structure arrangements which gave the banks adequate comfort in respect of the implementation of the downstream infrastructure.

Can you outline the risk mitigation instruments included in the deal structure?

RvG: There are several layers of protection built into the structure to create security of cash flows and to buy time in circumstances when those cash flows are coming under stress.

The first is a series of segregated accounts administered by a third

"In Africa in the coming years there will be lots more gas-to-power projects and this will be the path-finder project"

party trustee into which GNPC's [Ghana National Petroleum Corporation's] two revenue streams are diverted, namely its allocation of carried and participating interest (CAPI) in upstream projects (TEN, Jubilee and Sankofa) from the Petroleum Holding Fund and GNPC's receipts from downstream sales of gas. Distributions from the segregated accounts are made in accordance with a prescribed waterfall. In summary, payments under the Sankofa gas sales agreement are paid in priority pari passu with GNPC debt service, subject to limits on tenor and quantum.

Secondly, there is a reserve account which GNPC must fund in an amount equivalent to up to four and a half months' worth of gas payments.

Thirdly, the IDA is providing a partial risk guarantee. It's the biggest IDA partial risk guarantee that's ever been provided by the IDA, \$500 million. The letter of credit is procured by GNPC and given in favour of Eni and Vitol as beneficiaries and covers non-payment by GNPC under the terms of the gas sales agreement. If there's a demand under that letter of credit, the amount paid out gets automatically converted into a 12 month loan under a reimbursement of

"The export mentality for everything produced in Africa is changing and clients like Vitol are thinking about what they can do to sell the product closer to home"

credit agreement. GNPC as borrower has 12 months to repay the loan. Repayment of that loan is back-stopped by the IDA under an IDA guarantee. If the loan is repaid, then that amount becomes available for drawing again under the letter of credit. However, if IDA pays out under its guarantee, then the guarantee cover is permanently reduced by the amount paid out by the IDA. Together with the reserve account, the letter of credit structure will provide over 12 months' cover of gas payments allowing time for the IDA, Sponsors and GNPC to try to resolve any issues causing financial distress.

The Govenrment of Ghana has also provided a sovereign guarantee with various tranches of cover.

Finally, MIGA [Multilateral Investment Guarantee Agency] has provided four point cover to approximately \$100 million of the debt covering the risks of currency restriction, war, terrorism, expropriation and breach of contract.

What reforms did the World Bank require Ghana to make for the bank to participate in the financing, and how were they implemented?

MK: The World Bank provides an incredibly important service when they guarantee a project like Sankofa. They use their balance sheet to provide protection to commercial parties and extract something in return to ensure in future it won't be necessary for them to stand behind the obligations of government for deals to get done. What the bank will typically do is provide a guarantee, but, so it's not needed in future on the next big project it will create an environment where the government is credit worthy. One way of doing this - and as Rowena has mentioned there was some of this involved in the Sankofa project - is creating a set of quarantined bank accounts where the revenues earned from a project like this go into separate accounts that are separated from the government's general revenue. In these circumstances they create a collection account and an escrow account regime - we've seen this in Nepal, in Sierra Leone - which makes these entities far, far more credit worthy.

On the Sankofa project there was around a year and half of intense negotiations on structuring to put in place a regime which gave the World Bank comfort that they were making a difference long-term in Ghana. Our team negotiated with Vitol, the World Bank, the Government of Ghana and GNPC to create a very detailed structure. To look at the structure of all the money flows and where the guarantees fit in, it's an A3 piece of paper with a numerous different boxes and arrows between them all. If someone else does a project in Ghana three years from now, that structure will mean money is accumulated and flows in a way that provides protection for private sector participants.

People will argue about whether the World Bank's conditions go too far or whether it's the most effective way to achieve its aims for Ghana, but when the World Bank brings \$700 million of its own money, it has a strong bargaining position. Local commentators will probably say the new structure fetters Ghana's ability to do what they want with their own money and local press will probably ask, why are we ceding our sovereign right to do what we want with our own money to do what the World Bank tells us to? The way it should be viewed by anyone thinking impartially is that the World Bank are facilitating a regime that's far more stable and sustainable for many years to come, and one which will facilitate much more investment in Ghana.

Were there any other novel features to the finance agreement?

RvG: Going back to the fact Vitol was non-operator, that meant we had to approach negotiations very differently than if Vitol were running the project. No non-operator wants to take performance risk on its joint venture partner.

Eni as operator is appointed under the terms of the joint operating agreement to run the joint operations. Consequently, in a project financing where you typically have an extensive suite of covenants around project performance there was a great deal of negotiation around the scope of obligations Vitol could assume; many of those obligations are circumscribed by reference to what Vitol can procure under the terms of the joint operating agreement.

The project began around the time the oil price began to fall. Did the low oil price have any impact on the project financing for OCTP?

RvG: On Sankofa it may have made the banks wait a little longer to see how the price settled, but that process was fairly synchronised with the time we needed for the negotiations.

MK: By the time this project got to signing phase there was enough knowledge in the market about what had happened that everyone had got over the initial shock. You've got a high quality asset with a good operator and a good shareholder, which provided people with confidence that their predictions of gas prices in 2019 onwards were viable enough to run a project like this. The deal reached credit committee by the time oil had recovered sufficiently that people weren't worried about oil going to \$20 or \$25.

How is the low oil price affecting the financing of African projects in general?

MK: For projects operating in low margin environments like the North Sea or in some parts of Africa, I think the oil price is still causing a problem. In Nigeria, for example, the local bank market has got no money left to put into oil and gas because all the projects were banked when oil was \$100 a barrel. They're all under water now and the banks are having to extend tenors and do bail-outs. This means you can't do a financing at the moment in Nigeria with local banks, and because the local content requirements stipulate you must use domestic banks, it's a block on new financings.

Do you see any trends in how African energy projects are being financed?

MK: In oil and gas financing there is a move towards the assets being developed using project financing rather than reserve-based lending. For many years African upstream has been the domain of reserve-based lending because most of the developers looking there have been your mid-cap and small-cap companies, and it was really the only type of financing available to them.

What you're seeing now across Africa in both oil and gas is a different class of player coming in, and not just on the bigger projects like Mozambique LNG. Medium and large developers are involved

in projects and they are looking to project finance. There is no reason for a decent mid-cap or a large, or even small major to use reserve-based lending because they're putting their balance sheet on the line and paying more than they would for a corporate loan in terms of margin. So for these players much more of what they are looking at is project financing and taking things off their balance sheets, particularly to protect themselves from political risk.

The advantage of project financing is you can bring in lenders which will provide you with political risk cover just by being on the deal. Even majors will quite frequently finance deals even when they don't need to because once you have the World Bank or a large export credit agency on the deal you bring a lot of weight in risk capital.

Have you noticed any trends in the type of energy projects being developed in Africa?

MK: Traditionally around most of the coast line of Africa people were only interested in two things: extracting oil or finding gas, liquefying it and exporting it on a ship to the West or Asia. What we're seeing much more of now - and Ghana's a classic example of this - is the domestic use of gas. South Africa's gas-to-power programme, which is in the process of going to market, a huge part of that is not only going into creating electricity onshore but creating a petro-chemical industry for the domestic use of some of the gas. Once you see other projects like this developed - Senegal is another possibility, maybe Tanzania - there will be an increasing link between using gas onshore rather than for export.

Everyone knows you can liquefy gas, put it on a ship and sell it abroad, but if you can put it in a pipe and extract it to a power or petrochemicals plant, you save all that transportation risk and you have a market much closer to home. The export mentality for everything produced in Africa is changing and clients like Vitol are thinking about what they can do to sell the product closer to home. Partly this is being driven by the world oversupply of LNG and the impact that's had on LNG prices.



Martin Kavanagh Head of energy, natural resources and infrastructure finance (London) / cohead Africa business (global) Herbert Smith Freehills

About the author

Partner Martin Kavanagh specialises in energy and infrastructure project finance and project development, and has significant experience acting for corporates, borrowers, commercial lenders, multilateral agencies and Export Credit Agencies, as well as governments, particularly in Africa and other emerging markets. He has acted on in excess of fifty project finance transactions around the world.



Rowena van de Grampel Senior associate Herbert Smith Freehills

About the author

Rowena van de Grampel specialises in energy finance in the EMEA regions and has 14 years' experience advising corporates, lenders and borrowers in the oil and gas, petrochemicals and power sectors. She most recently led on the project financing of Vitol's interest in the Sankofa gas project, Offshore Cape Three Points in Ghana.

Behind The Deal – Eric le Grange – ENSafrica

ENSafrica partner Eric le Grange speaks with Jon Moore about his role advising on the Boikarabelo coal mine handling and preparations plant, and challenges to developing projects in the region

Could you outline the scope of the project?

It is not something new; it has been in the works for the better part of the last decade. It has been tried to be put into the ground by various promoters and developers but seems to be heading to finality. The time to implementation seems to be indicative of the difficulties encountered by mining houses, in particular in relation to the regulatory environment, such as the acquisition of prospecting and mining rights, water rights and licences and environmental approvals. Overcoming these was certainly the first problem.

The second issue was access to the markets and, with Eskom not interested in long-term off-take commitments, access to the export market via the Richards Bay Coal Terminal was of fundamental importance. The solution entailed the upgrading of some 300 km of railway line, with roughly 30 km of line being procured and owned by the mine. The three-way interface between the mine, the processing facilities and the rail connection required significant contractual and risk allocation alignment so as to render this bankable.

There was also the acquisition of land, but, more importantly, the acquisition of servitudes and real rights in order to allow for the rail link, the Eskom power lines, access roads and conveyor systems.

If we get to financial close it will be even more special, given the fact that it is actually carrying significant support by commercial banks and not, as one often finds in these kind of projects, by development finance institutions (DFIs) only.

How challenging was it securing a coal project given renewables seem to be on the rise in South Africa?

The international demand for coal will remain, but the Eskom position may be influenced by the same policy uncertainty described below. Initially, the idea was to supply coal to the export market and the Medupi power plant, but, in the end, the focus was on the domestic and international coal market.

If you look at renewables and say that renewables are on the rise, I think that you need to also see that in the context of the policy uncertainty and the political climate around energy procurement specifically, and in South Africa generally. There is a lot of uncertainty around the future of the renewables programme in South Africa. The nuclear programme, the gas-to-power programme and renewables have, over the last two years or year and a half, been competing for space in terms of the procurement of energy in South Africa. There is obviously a political imperative for nuclear to happen.

There is also the challenge related to the integrated resource plan (IRP) and the development and adjustment of the IRP since 2010. It is supposed to be updated every two years. It hasn't been updated for the last seven years. The plan itself, on the one hand, sees gas-to-power

"There is a lot of uncertainty around the future of the renewables programme in South Africa"

as competing for baseload space with nuclear. Now that nuclear is on the backburner, gas-to-power may become more of an attainable ambition for government in order to utilise more gas and move away from the coal baseload we have always lived with.

We know that there are a number of Eskom power plants that are currently being, and slated to be, taken out of commission because they are very old, were built in the 1950/60s and are dirty and inefficient. But that space needs to be taken up by something else. The idea has always been that gas-to-power, or gas power plants, being mid-merit and also being able to be run as a baseload, could provide the kind of flexibility that you need if you have a strong renewable energy component.

If you have gas-to-power becoming really feasible, then there will be new impetus given to the renewable programme. For the last 18 months, Eskom and the DOE haven't signed any new power purchase agreements (PPAs) exactly because of this political tug-of-war that was going on (over which energy source to focus on). Hopefully that will come to an end soon and the renewable programme will again pick up some momentum.

The renewable programme anticipates some 19,000MW of energy to be installed through to 2030. At the moment, we are just shy of 4,000MW, so there is quite a distance to go as far as the renewable programme is concerned.

Two issues that may influence the renewable programme: (i) affordability, influenced by the credit rating downgrade, and (ii) the cost of debt in the South African market, also as a consequence of the downgrade. We don't yet know how that is going to play out but it

may have an impact on the cost of renewable energy. However, renewable energy has come down significantly from the first round of the renewable programme. I think, on solar, the price has come down by more than two-thirds, from close to R2/kWh, to around c70/kWh. The same has happened with wind. Wind went from around R1.35/kWh four or five years ago and, at the moment, it is priced at around c60-c70/kWh. The IRP needs to be finalised and it needs issues around the tug-of-war between nuclear and gas-to-power to be resolved, but I think there is real hope in the market that all of this will happen in the next couple of months.

Looking at the mining sector in a wider context, it has been suffering a little in recent years with lower commodity prices making things difficult. What is the current state of play?

There are a couple of strands of uncertainty faced by the mining industry at the moment. The first is the renegotiation or the adjustment of the current MPRDA, the Mineral and Petroleum Resources Development Act, which is the Act that underpins mining rights in South Africa. It has been criticised ever since its inception in 2004. The way in which mining rights have been removed from private ownership to ownership by the state is not that unusual at all. But the licensing and permitting regime that follows on from that and how people apply for, and were actually awarded, mining rights has been criticised.

But the problem is not so much in the MPRDA itself; it is the way in which it overreaches itself, not only in respect of mining rights but also in relation to oil and gas.

The mining charter deals with the equitable distribution of the proceeds of mining in a societal context in South Africa and was negotiated between the mining houses, government and labour. The issues around the current draft of the mining charter are that it is too vague and too ambiguous to be implemented in a way that gives certainty to mining companies to make the kind of investments they need to make in the long term in order to continue operating in South Africa. It also puts a spanner in the works, so to speak, as far the development of new mines is concerned. You are not going to put a couple of billion into a new mine if you don't understand how you will be able to ultimately either extract your equity value, being able to dispose of it or trade in it, or be able to run the business profitably. So, for example, you need to know what the regulatory regime will comprise over the long term - it needs to be predictable, and you need to understand exactly what the tax regime is going to be and how it is going to affect you. You also need to understand the possibility of having long-term labour relations agreements in place that relate to the disruption of production.

We also need a lot more certainty on how government looks at mine health and safety. Under the Act, the government has wide-ranging powers to shut down operations for health and safety breaches, but the feeling in the past has been that this is being used as political tool in some instances, when mines are being shut down for relatively minor infringements, and where there are major infringements in other mines, nothing happens. So it is the even application of the charter, the MPRDA and mine health and safety rules that is required to benefit from the upturn of the resources market.

There is uncertainty in the mining sector and the minute there is uncertainty, investors are going to jurisdictions where there isn't uncertainty.

Then, of course, there is the question of pure economics. The coal price hasn't been what it is supposed to be for a long time, while metals prices are only beginning to pick up now, to some extent. Platinum is still under an enormous amount of pressure. Gold is picking up slightly but it is still hovering around \$1,200/oz. level. Manganese is still under pressure. The mining industry remains depressed given the political situation and the market itself.

What are the challenges for project development at the moment generally, given the political and economic situation?

There are really two things that law firms have to be aware of. First, how will the market respond to the downturn in the renewables market? Our focus has immediately been to ask what the captive power market players are up to. The players in the captive power market are mostly mining houses. So, with the same resources that we had, we simply shifted our focus to the private sector instead of playing in the public-private sector.

Secondly, over four or five years, quite a bit of know-how and knowledge has been built up in the renewable industry in South Africa. It is a lot easier for those companies, when things slow down in South Africa, to simply go across the border in the region. So you have seen the expansion of the renewable energy programme in Namibia, under their refit programme. They have procured with a number of 5MW solar projects over the last two years. They are running their own procurement programme on baseload, which is about 200MW. Zambia is introducing renewable energy. Mozambique is looking at gas-to-power. Tanzania is also looking at gas-to-power. Then, going further north, Kenya is obviously one of the bigger renewable energy players. Uganda is looking at expanding its oil business. If it slows down in one area, it is going to pop up somewhere else and we simply chase those markets across the region. That is really the business plan and that is the model. You don't go and reduce your production capacity; you go and find a new market.

Finally, looking ahead to the rest of the year, do you have a positive outlook for your projects practice?

The political uncertainty at the moment doesn't help. I suppose it depends on your personal outlook; I am an eternal optimist. My feeling is that the renewable programme, at least as far as the procured projects are concerned, is going to go ahead. We are well invested in the renewable programme and the deals that have already been awarded.

The mining industry is going to be under pressure for some time to come, although we are seeing more and more project financing being employed in the mining space, especially emanating from midcaps. Large-cap mining companies are not going to use project finance because it is too expensive and it is too difficult to implement, but mid-caps and small-caps are still going to look at project financing. Especially with the reviving Chinese market, we will hopefully see a lot more of those in the mining space. Between the captive energy space, the emerging mining space in mid-caps and small-caps, other alternatives, especially the ocean economy with ports and harbours, I think that the work flow will be reasonably strong.



Eric le Grange Partner ENSafrica

About the author

Eric le Grange is head of ENSafrica's project development and project finance department. He specialises in energy, oil and gas, and mining, and has acted as lead counsel on projects developed, promoted and/or funded across Sub-Saharan Africa for a variety of clients.

Behind The Deal – John Smelcer – Webber Wentzel

Webber Wentzel partner John Smelcer speaks with Jon Moore about his role as adviser to the Independent Power Procurement (IPP) Office in South Africa on developing its documentation, and trends and challenges in South African projects

Could you outline the scope of your work in this area?

Webber Wentzel and our projects and energy and resources team have been one of the lead legal counsel in creating the structure for a range of projects. This started with renewables and the focus has now shifted to thermal projects, particularly gas but also the coal IPP.

Our practice, like many of the South African law firms, is split into a private sector and a government-side team and I sit on the government side for these IPP Office-related procurement projects. What probably distinguishes our practice is that we have taken the lead on the legal project structuring and drafting the documents, etc. Some of the other counsel focus on regulatory issues or the evaluation of submissions.

And who are you working for, are you directly engaged by the South African government?

We work for the IPP Office itself. Our fees, like all the advisers, are paid for by the Development Bank of South Africa (DBSA).

How did you get involved in that, was it a tender process or do they have a panel of firms?

They have a wide array of advisers but generally the IPP Office has used that DBSA funding to engage world-leading and market-leading experts on the legal, commercial, technical and financial sides. That creates a kind of panel that allows the office to use the advice of the different entities involved where it sees fit.

Presumably a lot of these projects are the first of their kind under South African law, so do you have to do a lot of pioneering work in terms of regulation and what are the challenges that come with that?

The government will provide the key documents such as the PPA and the other core documents on a non-negotiable basis to the bidders. So unlike other procurements where the private sector would take the lead in drafting the documents, in these projects the government side does that and after a period of intensive engagement with the private sector, the core documents are served up for the bids on a take-it-or-leave-it basis. Our work therefore makes a central contribution to underpinning what has been a massively successful programme. In excess of \$15 billion of foreign direct investment (FDI) has been done off the back of documents that we have advised on. So, if you look at the practice of projects and energy transactions in the South African jurisdiction specifically, it's driven majority significant amount of the deal volume and dollars and rand invested in this market on a resources and projects basis.

"It has defined the terms of project finance in this jurisdiction and now we are advisers to the IPP Office when it advises other jurisdictions in Sub-Saharan Africa on their own procurement of renewables and thermal power"

Can that documentation also be applied to the wider Sub-Saharan market, are you setting a precedent that can be rolled out to other jurisdictions?

I believe so. It is actually a difficult strategic decision to make, especially for an organisation such as ours that tends to focus on the private sector, to take on these large government mandates. The reason why we decided to do it is exactly what you're pointing to. We really think it is a market-making type of role, a gateway type of transaction. It certainly has been for South Africa. It has defined the terms of project finance in this jurisdiction and now we are advisers to the IPP Office when it advises other jurisdictions in Sub-Saharan Africa on their own procurement of renewables and thermal power.

Indirectly as well, organisations like the IFC, US Powering Africa and the African Development Bank (AFDB) who have been developing assistance programmes for other Sub Saharan Africa jurisdictions, actively engage with the South African programme because of its success as they look to design the programmes that they themselves are advising on to other governments. So we feel that we are directly engaging with multiple governments and indirectly having a real influence on how the energy and projects market is taking shape in the

BEHIND THE DEAL

rest of the continent, particularly in the power sector where there is direct government involvement.

In terms of obstacles and challenges to overcome that are unique to the South African market, things such Black Economic Empowerment (BEE) legislation, how do you address those?

BEE is certainly something Webber Wentzel has a real bench strength with. What is interesting is that the structures that we're developed for this project have benefited from learnings by our group in other transactions- and also been deployed by our group in other transactions, such as mining matters, etc., and they are now being evolved and used in other African jurisdictions in terms of structuring for optimal local content structures. So even features that have been very South Africa-specific tend to also have an influence as investment turns from a South African base to the rest of the continent.

Is there anything you feel the government could do legislatively that would help to streamline the whole process?

One of the big roles we've had has been on the gas procurement programme, so that's for gas-fired power and that means LNG imports, and that has attracted a large amount of investor attention over the past couple of years. We've been able to bring in our international skillset and help design the programme here in a way that is familiar to international investors. I think that the gas programme can proceed without legislative changes, which is helpful. But if you look at the upstream, for oil and gas exploration, that will require legislative amendments to have a more stable and investable regime. While all legislation can be improved, I do not think it is fundamental to the downstream power procurement projects but for the upstream it certainly is.

Looking at the wider market, it is interesting to note that FDI actually increased in South Africa last year, despite some of the challenges currently in place. But from your perspective, how has the disruption on the political side had an impact on investor appetite?

It is certainly something that is of direct strategic concern, but I think it is premature to make any definitive statements around it, though there have obviously been some delays. For example, the gas programme released its first step of the procurement, the information memorandum, in November last year and there was tremendous investor appetite. The request for qualifications (RFQ), which is the next step in the road, was meant to have come out by now but that issuance has been delayed. So it has slowed down what would have been dollar very large scale investments. But it certainly hasn't terminated that investment. I was in London engaging with a number of market players including LNG suppliers and power developers recently and they were certainly still very interested in the programme and investing in South Africa and were just evaluating where things might be headed.

I think there is an open question as to what impact some of those macro political events will have. South Africa has always been a place where, even if it bumps along in the middle of the road, most large-scale investment goes forward despite political issues. There may be a question of whether that is still the case but if we see the RFQ in the gas programme, and we see that upstream legislation I was talking about, by about by the end of this year I think you will investment proceed at quite a large scale. If we don't, we may then be starting to migrate into the land where we have to see movement on the political side before you can see really large-scale private sector investment in the energy space.

One of things we are seeing from an investor point of view in emerging markets has been a change in investor profile, moving away from Western investment and seeing more interest from Asia in particular. Have you seen that in the South African market?

Not yet, at least not in terms of the geographical origin of the investments. Make no mistake, the alternative investors such as China or India – Russia even – they are here; but they have been here for a while. The shift away from Western investment has certainly not happened.

One thing I would say though, that has changed in terms of profile, is that you see a lot more private equity investment in resources. In a way, I think that is perhaps an earlier shift that we saw, a move to more flexible equity that is willing to come on board with a different type of risk profile. We are seeing a lot more of that private equity-backed investment both in South Africa, and setting up shop in South Africa and investing into the rest of the continent.

Looking ahead to the rest of 2017, then, what sort of year do you expect to see for the market?

I think it is a year that answers a lot of questions. At the end of this calendar year we will really understand whether investment is going to proceed, if not even pick up because some of the uncertainty is addressed in a positive way. Alternatively, we could be in a picture that says we will need to wait for 18 months or two years for things to resolve themselves politically, in which case there will most likely be a slowdown in the South African jurisdiction in the near term.



John Smelcer Director Webber Wentzel

About the author

John Smelcer specialises in energy and infrastructure projects across Sub-Saharan Africa and is the head of Webber Wentzel's oil and gas group. He represents sponsors, governments, financial institutions and private equity investors in all aspects of project development and financing. He also represents key upstream oil and gas companies across Sub-Saharan Africa.



1st Floor Delta Office Suites Waiyaki Way Nairobi City Kenya T: +254 703 068 000 F: +254 203 258 222 hhm@hhm.co.ke www.hhm.co.ke



Energy and infrastructure key contacts

Partner, **Andrew Mugambi**, amugambi@hhm.co.ke Partner, **Daniel Wanjau**, dwanjau@hhm.co.ke

Quick facts

Hamilton Harrison & Mathews (HH&M) is one of Kenya's leading legal firms with 14 partners and 56 qualified lawyers. HH&M has an exceptionally strong core team available to provide legal services, having the right range of skill sets and experience. The firm is able to advise on cross border transactions in the East African region through our network of firms. We also have strong relationships with international law firms in the U.K, Europe, America and Asia.

Energy and Infrastructure practice overview

HH&M has advised on a number of energy and infrastructure projects, including rail and transport projects, power generation projects (including the drafting and negotiation of power purchase agreements) and mining.

Sector expertise

- Energy
- Oil and gas
- Social infrastructure
- Transport

Recent matters advised on

- Advising on a 960 megawatt coal power project;
- Advised two local investors on the development of a special economic zone in Eldoret:
- Advising the Government of Kenya on a model mining agreement.

Other offices

2nd Floor, Sea View Plaza, Mama Ngina Drive Mombasa, P.O. Box 84759 - 80100

T: +254 772 446446 F: +254 20 3258222

E: hhm@hhm.co.ke

W: www.hhm.co.ke



47, Bd. De la République Immeuble Sorano Dakar 15023 Senegal PO Box 14392

T: +221 338 211 916 F: +221 338 426 275 info@gsklaw.sn www.gsklaw.sn



Key contacts

Partner, Dr Aboubacar Fall, a.fall@gsklaw.sn

Managing Partner, Mouhamed Kebe, mhkebe@gsklaw.sn

Quick facts

GENI & KEBE is Senegal's oldest and largest law firm, with affiliate offices in 14 sub-Saharan countries alongside our Senegal offices in Dakar, Mbour and Tambacounda. Our internationally experienced team advise on major projects throughout the region.

Energy and Infrastructure practice overview

Energy and Infrastructure are growth areas for Africa. We advise on traditional and renewable energy projects, mining interests, private-public partnerships, transport and infrastructure projects.

Sector expertise

- Energy
- Oil and gas
- On and gaTransport
- Mining
- Social infrastructure

Recent matters advised on

- Representing *Jindal Power* in the \$900 million, 350 MW power plant deal - Senegal's largest ever energy project;
- Acting for Summa on the Operation and Management Agreement for Senegal's new international airport;
- Advising *Cairn Energy* on Senegal's first off-shore oil discovery;
- Representing American Capital, lenders in a wind farm operation in Taiba Ndiaye;
- Advising Kosmos Energy on their significant gas discovery along the Senegalese /Mauritanian coast;
- Representing *Toro Gold* on the Mako Project joint venture.

Other offices

Benin, Burkina Faso, Cameroon, Chad, Côte d'Ivoire, DR Congo, Gabon, Ghana, Guinea, Guinea Bissau, Mali, Mauritania, Niger, Togo



2nd Floor, The AXIS
26 Bank Street, Cybercity
Ebene 72201
Mauritius
T: +230 403 2400
F: +230 403 2401
chambers@blc.mu
www.blc.mu



Energy and Infrastructure key contacts

Partner Jean-Eric Sauzier Jean-eric.sauzier@blc.mu

Quick facts

- BLC Robert is the leading independent full service business law firm in Mauritius. The firm has 5 partners and over 30 locally and internationally trained lawyers serving a diverse client base including regional and multinational companies, global financial institutions and funds, public sector bodies amongst others. The firm has 6 dedicated lawyers to energy and infrastructure work.
- BLC Robert is a member of ALN (African Legal Network), the leading network of Law Firms in Africa, and also has an association with international offshore law firm Harney Westwood & Riegels.

Energy and Infrastructure practice overview

The firm is heavily involved in generation and financing with a particular focus on renewable (solar and wind). BLC Robert is regularly instructed by power producers, investors and lenders both in the local and in the offshore market segments (Africa and Asia). Other than energy, its local infrastructure experience also touches on transport and utilities. The firm's offshore energy and infrastructure practice is quite Africa focussed and touches on energy, mining, oil and gas, social infrastructure, transport, telecommunications and utilities.

The firm's involvement in the above industries is quite diverse and we regularly act for local as well as global promoters and developers, investors and lenders.

Sector expertise

- Energy (renewable and traditional energy, generation and distribution)
- Mining
- Oil and gas (upstream and downstream)
- Social infrastructure (hospitals, public buildings and other developments)
- Transport (road, rail and sea)
- Telecommunications networks
- Utilities (sewage, waste and water)

Recent matters advised on

- Currently advising numerous producers on a number of renewable (solar and wind) and non-renewable power projects in Mauritius:
- Currently advising a consortium of lenders including World Bank affiliate on the proposed financing of a windfarm in Mauritius:
- Currently advising a *Mauritian/European consortium* on the award and setting up of two solar farms in Mauritius for an aggregate production of approximately 30 MW;
- Currently advising a public sector related entity on the financing of the railway network in Mauritius;
- Advised an *England based renewable energy financier* with operations focused in sub-Saharan Africa on a multi-tranche facility for the financing of exploration, drilling and construction of a 70 MW geothermal plant in Kenya;
- Advising an American private equity firm and asset manager in relation to the financing of a 151.8 MW windfarm in Senegal.

Other offices

8, George Guibert Street
Port Louis
Mauritius
T: +230 2122 154
F: +230 2118 595

E: chambers@blc.mu W: www.blc.mu

FIRM PROFILES / MOZAMBIQUE/NIGERIA



Av. 24 de Julho, Nº 7 – 7ª Andar Maputo Mozambique T: +258 21 486 438/40; +258 21 496 900 F: +258 21 496 802 cga@cga.co.mz www.cga.co.mz



Energy and Infrastructure key contacts

Practice Leader of Energy, Infrastructure and Natural Resources

Faizal Jusob, fjusob@cga.co.mz

Chairman

Pedro Couto, pcouto@cga.co.mz

Team structure: 7

Number of lawyers dedicated to Energy and Infrastructure work: 7 Regional/global networks and memberships: ALER Associação Lusófona de Energias Renováveis, Lex Africa

Sector expertise

- Energy
- Mining
- Oil and gas
- Project finance

Recent matters advised on

- Legal assistance to a gas fired power project, negotiations for the concession contract for the generation and sale of electricity in Ressano Garcia, Province of Maputo, Mozambique;
- Wind Farms Energy, legal advice to promoters in the development of the project, assistance in negotiations of joint development agreements and the framework agreement with the Government for the establishment of wind farms in Mozambique.
- Legal advice to developers, in the framework of the development of the project for the establishment of solar farms in the province of Cabo Delgado, Mozambique;
- Legal Assistance to mining company in all mining issues including due diligence and acquisition of Mining rights;
- Permanent legal advisor to oil company under the Area 4 of the Rovuma Basin.



33B Adebayo Doherty Street Lekki Phase 1 Lagos Nigeria T: +234 7000 2384 7679 info@advisoryng.com www.advisoryng.com



Chief Consultant: Ike Oguine, oguine@advisoryng.com Number of lawyers dedicated to Energy and Infrastructure work: 6 Jurisdictions admitted: Nigeria, New York

Energy and Infrastructure practice overview

ADVSIORY is a boutique law firm that is dedicated to clients operating in the energy, natural resources and infrastructure sectors. Our competitive advantage lies in our unrivalled mastery of the nuances and subtleties of our focal sectors by senior-level subject matter experts who routinely proffer cutting-edge solutions to a myriad of complex regulatory and commercial issues that arise in project development, financing, operations, regulatory compliance and transactions.

We blend our extensive sector experience and insights to deliver high quality advice and solutions to our clients at a reasonable cost.

Sector expertise

Energy, Mining, Oil and gas, Social infrastructure, Transport, Utilities

Recent matters advised on

- Advising Brass Fertilizer & Petrochemical Company Limited on the development of a \$3.5 billion urea/methanol facility;
- Project counsel to *Energia* on the development and financing of a ~\$100 million modular multi-products oil refinery in Delta State;
- Advising the West African Gas Pipeline (WAGP) Company on the proposed interconnection between the WAGP and the Atuabo-Aboadze pipeline in Ghana;
- Represented Waltersmith Petroman Oil Limited in the negotiation of a production sharing agreement with the Government of Uganda in connection with the award of two oil blocks in Uganda;
- Advised a renowned *global oil service company* on options for securing net profit interests in petroleum assets without holding an equity interest;
- Advised the developers of the Aje Field in OML 113 on crude oil lifting and marketing arrangements in preparation for first oil and on the monetisation of its gas resources;
- Advising a project promoter on the development of a 80-90km gas distribution network in the Agbor-Onitsha axis on a BOT basis;
- Acting on the buy and sell-side of several gas sale agreements including a cross-border gas sale agreement involving parties in Nigeria and Ghana via the WAGP.



Lynnwood Bridge, 4 Daventry Street, Lynnwood Manor, Pretoria, South Africa

T: +27 12 432 6000 F: +27 12 432 6599

E: andre.visser@adamsadams.com

W: www.adamsadams.com



Senior Consultant

Gavin Noeth, Gavin.Noeth@adamsadams.com

Energy and Infrastructure practice overview

General project finance, with experience in renewable energy (solar and on-shore wind), toll roads, ports, rail, public private partnerships, and the South African Export Credit Scheme

Sector expertise

Renewable and conventional energy, mining, prisons, public buildings and developments, toll roads, sea ports, rail

Recent matters advised on

- Advised the Mauritian Road Development Authority and Ministry of Finance on the financing of Phase 1 of the Port Louis – Curepipe Corridor Road Decongestion and Toll Road Programme
- Advised the Uganda Police Force on its Partially Serviced Accommodation PPP Project (Uganda)
- Advised MLA on the financing of the N3 Toll Road project
- Advised one of a bidders of the N1-N2 Winelands Toll Highway (South Africa)
- Advised MLAs on 2 provincial and one municipal accommodation PPP
- Advising Gauteng Provincial Government on its Kopanong Accommodation PPP project, comprising 21 buildings
- Lesedi 75 MW (DC) PV solar energy power plant Advised mandated lead arranger (South Africa)
- Lesatsi 75 MW (DC) PV solar energy power plant Advised mandated lead arranger (South Africa)
- Jasper 96 MW (DC) PV energy power plant Advised mandated lead arranger (South Africa).
- Rheboksfontein Project Retained by GDF Suez to advise it on procurement law aspects of its Wind Renewable Power Project (South Africa)
- Advised OXFAM (Just Energy) on the development of its Wind Renewable Power Projects (South Africa).
- Advised Department of Minerals and Energy on procuring peaking power in South Africa's the first-ever IPP project (South Africa)

2nd fl 34 Fredman Drive, cnr 5th Street Sandton, Gauteng, South Africa T: +27 11 895 1020 F: +27 11 784 2889



IMMMA House, Plot No. 357 United Nations Road, Upanga Dar es Salaam Tanzania PO Box 72484 T: +255 22 211 1622 F: +255 22 211 1621



Partner: Protase Ishengoma, ishengoma@immma.co.tz

- Lead by Protase Ishengoma, assisted by Sadock Magai, Burure Ngocho, Madina Chenge and Pascal Mwanyika
- Lawyers: 5

info@immma.co.tz www.immma.co.tz

 Part of DLA Piper Group. In 2010, IMMMA became the founding member of a group of independent law firms affiliated to the DLA Piper Group in the East African Community known as Juris East Africa.

Energy and Infrastructure practice overview

Represented a number of international oil and gas companies in the drafting, negotiation & structuring of power purchase agreements, development agreements and acquisition of concessions exploration. Actively involved in major infrastructure projects in roads and port development. Our Clients include the Government of Tanzania and its agencies, foreign and local investors. Ranked Tier 1 in Energy and Infrastructure by the IFLR 1000 (2017).

Sector expertise

Energy, Oil and gas, Transport (sea ports)

Recent matters advised on

- Review of the Zanzibar Energy Policy and legislative drafting of the Energy Act for the Revolutionary Government of Zanzibar;
- External counsel to the Government of Ghana with respect to the provision of legal advisory services related to Ghana PPP Capacity building project;
- External counsel to the *Federal Republic of Somalia* with respect to the provision of legal advisory services related to the Somalia Production Sharing Agreement Toolkit Project;
- Advise the *Government of Tanzania* in relation to the Bagamoyo Port Project in structuring, negotiating with the Chinese port operating company, developing the project agreements and the financing worth 10 billion USD;
- Advising Ferrostaal Industrial Projects GMBH, Haldor Topsoe A/S and Fauji Fertilizer Company Limited on the establishment of \$2 billion ammonia/urea fertilizer plant with national gas as feedstock;
- Legal advisors by a shortlisted *EPC contractor* to provide EPC services in relation to the planning and construction of the Kilwa 320 MW combined cycle greenfield power station.



61 Princess Drive Corner Glenara Avenue Newlands, Harare Zimbabwe T: +263 4 746 787; 746 749 enquiries@manokore.com www.manokore.com



Partner Rainor Robinson, rrobinson@manokore.com **Team structure:** Rainor Robinson – Lead Partner; Ronald Mutasa – Senior Associate (rmutasa@manokore.com); Bridget Mafusire – Associate (bmafusire@manokore.com)

Energy and Infrastructure practice overview

Manokore Attorneys is one of very few firms in the Zimbabwean market that has a clear Energy and Infrastructure (inc. PPPs) Practice. That approach has seen the firm's Energy and Infrastructure team being regarded as the go-to team for advise in relation to large scale energy-related projects and PPPs. Our expertise has rapidly grown in line with the need for power and infrastructure improvements in Zimbabwe and its renewed interest as an investment destination.

The firm is active across the country and the Southern African region in general, in the areas of power, oil and gas, and renewable energy. We have the capacity to assist clients in drafting and advising on concessions and related agreements; contracts for design, construction, operation and maintenance, supply; Joint Venture agreements and joint-operating agreements. The firm's affiliations with other regional and international firms puts us in an excellent position to tap into global knowledge on Energy and Infrastructure.

Sector specialisation

Energy, Oil & Gas, Renewable Energy, Public-private partnerships in social infrastructure (hospitals, public buildings and developments), Transport (road, rail), Utilities (water)

Recent matters advised on

- Deal structuring for a large scale Solar PV rooftop project involving a large blue chip property investor for over 600 rooftops countrywide;
- Providing local legal advisory support and guidance to the *Infra-structure Development Bank of Zimbabwe* (IDBZ) (for Client-Ministry of Transport and Infrastructure Development) for procurement of the private partner in the design, financing, construction/dualisation, operation and maintenance of the (a) Harare-Beitbridge Highway (Phase 1); (b) Harare-Chirundu Highway (Phase 2); Harare-Ring-Road (Phase 3); worth USD2.7 billion.
- Assisting the *Ministry of Finance and Economic Development*in the drafting of Joint Venture Regulations and setting up of JV
 Unit and JV Committee to provide for the regulation of all PPPs
 or JVs between public entities and private parties.



Mahmoud Bassiouny
Partner, Head of Finance & Projects
Matouk Bassiouny - Egypt
T: +202 2796 2042 (Ext. 103)
mahmoud.bassiouny@matoukbassiouny.com
matoukbassiouny.com

Linked in

Biography

Mahmoud Salah Bassiouny heads the Finance & Projects group at Matouk Bassiouny. His experience in trade and project finance and in the oil and gas industry has earned him the trust of large commercial banks, export credit agencies and major players in the energy industry. Mahmoud has worked on the largest projects and project financings in these sectors in Egypt.

Client Feedback

"[He is] very forthright. He has experience handling various commercial matters and legal issues of a varied nature and knows how to protect an investment." IFLR 1000, 2013.

Recent matters advised on

- Representation of Abu Dhabi Islamic Bank Egypt, Banque Audi, Banque Misr, as Senior Mandated Lead Arrangers, and the Islamic Corporation Representation for the Development of the Private Sector (ICD), together with Clifford Chance, as Mezzanine Mandated Lead Arranger in connection with granting a EGPC 2.5 billion Senior and Mezzanine Istisn'a Ijara/Istisn'a Facilities to Al Sharkeya Sugar Manufacturing Company SAE.
- Representation of Sonker Bunkering Company SA.E. in negotiations with the Suez Economic Zone and with a group of lenders (including EBRD, IFC and CIB) for a USD 320 Million facility for the construction of the Liquid Bulk Terminal Project in Sokhna port;
- Representation of *Infinity 50* on a 50 MW solar plant under the Egyptian government's Feed in Tariff Scheme;
- Representation of Aqualia Infraestructuras ias in relation to the development of a 150,000m3/d reverse osmosis desalination plant in El Alamein, Marsa Matruh Govenorate, the Arab Republic of Egypt.

Sector specialisations

- Energy oil & gas, power (including renewable), gas pipelines, and transmission and distribution assets.
- **Financing** project financing, conventional and Islamic.
- Property development commercial, residential, industrial and large scale mixed used developments.
- Resources mining and process plant infrastructure.
- **Transport infrastructure** roads, rails, airports and ports.
- Utilities infrastructure water, wastewater, sewage, gas, and electricity.

Practice areas

Finance and projects

Association memberships

- Egyptian Business Lawyers Association Member
- Association of International Petroleum Negotiators Member
- American Chamber of Commerce Member
- Canadian Chamber of Commerce Member



Jean-Eric Sauzier
Partner
BLC Robert & Associates - Mauritius
T: +230 403 2400
jean-eric.sauzier@blc.mu
www.blc.mu

Linked in

Biography

Jean-Eric is the leading partner of energy practice at BLC Robert. He advises all the actors in the energy and infrastructure chain including operators or power producers, investors or lenders and contractors. While also being the Head of the Banking and Finance group, Jean-Eric has a wealth of finance experience and is able to draw on same in assisting clients in putting together funding plans for their projects. He is also involved in other areas of infrastructure both locally and in the offshore sector (Africa and Asia) including transport, mining and utilities.

Recent matetrs advised on

- Currently advising a pan-African bank/Indian bank consortium on the financing of a windfarm of just under 30 MW in Mauritius;
- Currently advising a *Mauritian/European consortium* on the award and setting up of two solar farms in Mauritius for an aggregate production of approximately 30 MW;
- Currently advising either promoters or lenders/investors on numerous energy projects in Mauritius, Africa and in Asia

Practice areas

- Banking and finance
- Energy and infrastructure
- Restructuring and insolvency
- Real estate and hospitality

Languages

English, French, beginner level Japanese

Bar admissions

- Bar of England and Wales
- Bar of the Republic of Mauritius

Association memberships

Mauritius Bar Association, Honourable Society of Gray's Inn

Academic qualifications

 Bar Vocational Course (UK-2001), LLM (UK-2000), LLB (UK-1999), DEUF (France-1998)

LAWYER PROFILES / AFRICA



Pedro Couto Chairman Couto Graça & Associados -Mozambique T: +258 2149 6900 pcouto@cga.co.mz www.cga.co.mz

Linked in

Biography

With 23 years of experience, as General Counsel of private companies, State organisations and corporations throughout Mozambique, is involved in initiatives such as BOT, BOOT, restructuring of companies, foreign investment, financing, privatization and public procurement (transport, mining, aviation, energy, oil, gas, Port, rail and business infrastructure). He is an expert in Project Finance and Finance Structure having participated in most Power and Infrastructure projects in recent years in Mozambique.

Recent matters advised on

- Legal assistance to a gas fired power project, negotiations for the concession contract for the generation and sale of electricity in Ressano Garcia, Province of Maputo;
- Legal Adviser to Solar Power Plant, Liaison and negotiation with the public entities and public offtake. Assistance with matters in relation to environmental license, land issues, investment and tax benefits:
- Legal Adviser to develop combined-cycle gas turbine power plant, incorporation of the SPV, Maputo;
- Refinancing of combined-cycle plant in Mozambique;
- EPC negotiation to the construction of Nacala port.

Sector specialisations

- Energy
- Oil and gas
- Financial services
- Natural resources

Practice areas

- Financial restructuring
- Project development
- Project finance
- Structured finance/securitisation

Academic qualifications

- Degree in Law, from Universidade Eduardo Mondlane, in 1995
- Post-graduation on Corporate Law, from Faculdade de Direito, na Universidade de Lisboa, in 1996
- Post-graduation on Administrative Law, from Universidade Eduardo Mondlane and Supreme Administrative Court, in 1998
- Post-graduation on Project Finance Structures, from Universidade de Cape Town, in 2000



Soji Awogbade Partner ÆLEX - Nigeria T: +234 1 461 5880 sawogbade@aelex.com www.aelex.com

Linked in

Biography

Soji is Head of the Energy and Environment practice groups at ÆLEX. He advises majors, independents and marginal field operators on the legal, regulatory, commercial, fiscal and environmental aspects of upstream operations. He is respected by local and international investors, financial institutions, project owners, developers and contractors for his experience in transactional matters.

Recent matters advised on

- Advising the Borrower in respect of a US\$171 million financing towards the proposed development of a multi-purpose port terminal in Lagos State;
- Advising a seller on the sale of participating interests in two OPLs, including drafting of sale and purchase agreement, novation agreement, deed of assignment, escrow agreement and other ancillary documents;
- Advising an energy solutions company and its subsidiaries on the acquisition of interests in marginal fields and an OML; scope includes advising on a financial and technical service structure with recovery of investments via share in cost oil and profit oil.

Sector specialisations

Agriculture, Energy, Fisheries and aquaculture, Forestry, Government and public policy, Investment management, Mining, Natural resources, Oil and gas, Transport, Utilities

Practice areas

Agricultural law, Business development, Energy, Environmental law, Infrastructure, PPP/PFI, Project development

Bar admissions

Nigeria

Association memberships

- Nigerian Bar Association
- · Nigerian Environmental Law Society
- American Bar Association
- International Bar Association
- Association of International Petroleum Negotiators

Academic qualifications

- LLB (Hons), University of Ife, Ile-Ife, 1976
- BL, Nigerian Law School, 1977

Languages

English



Blaize Vance
Regional Managing Partner for Africa
Fasken Martineau
T: +27 11 586 6067
bvance@fasken.com
www.fasken.com

Linked in

Biography

Blaize Vance is the Regional Managing Partner for Africa. His legal practice focuses on major energy, infrastructure and mining projects, with particular emphasis on coal, gas and renewable energy projects and he has had extensive involvement with business rescue, distressed debt and debt restructuring for banks and financiers throughout Africa.

Having led the firm's legal teams on a number of base-load, renewable and peaking energy projects, negotiated and prepared finance contracts, projects contracts, power purchase agreements, wheeling agreements, gas supply agreements and implementation agreements, he has demonstrated his in-depth industry knowledge and leadership qualities. Blaize has also structured the financing of a number of cross-border transactions in Africa and advised on the tax aspects of these transactions.

Recent matters advised on

- Advising the lenders, developers, borrowers, sponsors and contractors for energy and power projects in Africa;
- Advising on the Renewable Energy Independent Power Producer Programme in South Africa;
- Advising international bond holders on distressed debt restructuring.

Sector specialisations

PPP/PFI, Banking and Finance, Tax, Corporate and M&A, Investment funds, Restructuring and Insolvency

Practice areas

- Energy
- Mining
- Banking
- Natural resources
- · Oil and gas
- Infrastructure
- Construction and materials
- Transport

Bar admissions

- South Africa, 1996
- England and Wales, 2009

Academic qualifications

- LLM, Tax, University of Witwatersrand, 2000
- LLB, University of Natal, 1995
- BA, English, Political Philosophy, Industrial Sociology, University of Cape Town, 1991

Central and Eastern Africa

In Burundi the biggest story continues to be the country's oil supply crisis. The sector is suffering due to a foreign currency shortage, with importers unable to get enough US dollars to import the fuel they need. While the clearest impact has been a chronic petrol shortage it has also affected the energy sector as a large part of the country's generating capacity comes from diesel burning power plants.

The trend is part of a wider economic and political crisis brought about by President Pierre Nkurunziza's attempt to run for a third term of office. This led to a coup attempt and a wave of protests, crackdowns and alleged human rights abuses across the country which show no sign of abating.

Political turmoil has also hampered attempts to improve the country's electricity coverage. Gigawatt Global had been developing a 7.5MW solar plant in the country, the first of its kind and one it hopes will set a precedent for similar projects, however the disruption has caused delays and complications. While the project is still forging ahead, the prospects for future projects are significantly reduced, a distinct problem in a country with only 54MW of installed electricity capacity.

On average only one in 20 people have electricity in Chad, and it is another country in the region attempting to improve its power deficit by domestically producing green energy. Solar is the country's most abundant resource, and the Chad's first utility scale development, a 60MW photovoltaic power plant is being built by Dermaya Solar 30km north of its capital.

One project dwarves all others in the Democratic Republic of Congo, that being the Inga 3 hydroelectric power plant. The initial 4800MW power plant at the Inga Falls is the first phase of an ambitious project to construct a series of dams right across the Congo river with a total generating capacity of 40,000MW. The so-called Grand Inga

project, would be the largest hydroelectric development in the world, eclipsing even China's Three Gorges project.

Ethiopia remains one of East Africa's few energy exporters and this has largely been driven by hydroelectric power. The country already has over 4000MW of installed capacity and opened the 1870MW Gilgel Gibe III plant in 2016. In addition it is currently developing the Grand Ethiopia Renaissance Dam, a 6540MW plant on the Blue Nile.

Other renewable energy sources are also gaining traction in the country. In the Rift Valley the 500MW Corbetti project is already in development, while in the wind sector, farms are planned in the North and Central regions of the country at locations in Ashegoda and Adama.

The country is also planning the construction of interconnectors to neighbouring countries Kenya and South Sudan in order to increase further its electricity exports. However despite this great expansion in power, domestic consumption remains low with just over half the population having access to electricity.

In the oil and gas sector, sizeable projects include the Horn of Africa Pipeline carrying oil between Djibouti and Ethiopia, and the oil exploration projects in the Rift Valley being developed by Africa Oil Corporation and Maersk.

In transport, the country has focused on rail improvements in recent years with the most prominent project being the rail links, internally between Awash Woldia and Hara Gebeya and the wider project connecting Addis Ababa and neighbouring Djibouti.

In Kenya, renewable energy is one of the focus areas. Kenya Vision 2030 identifies access to reliable and sustainable energy sources as crucial to transforming the country's industry, and meeting increasing demand for power and greater operational efficiency. To promote development in this

area, Kenya has changed its legal framework to encourage investment.

Currently the government promotes the wind, thermal and geothermal sources with the latter area where it expects to see most activity. The country's potential geothermal capacity, accounts for seven of the 15 gigawatts of potential geothermal energy in Africa. Akiira One and Menengai power plants are examples of geothermal projects in the country.

Wind farm Lake Turkana secured a number of foreign investors and at the time of announcement was the largest private investment in Kenyan history as well as the largest wind farm in Africa. More projects are under development including Kipeto 100MW wind farm southwest of Nairobi and Lamu 90MW wind farm in Mpeketoni.

There are a number of projects which aim to ease traffic and improve infrastructure in Kenya. The Mombasa–Nairobi railway will decrease travel time between the two cities by approximately six hours and it is the first phase of the standard gauge project that aims to connect Kenya with Uganda, Rwanda and South Sudan. The second Nyali bridge will serve as alternative connection between Mombasa Island. The first bridge is not sufficient to supports the volume of traffic caused by the country's increasing population.

In Rwanda, the big hope in the energy sector is geothermal power. The country started a feasibility study in 2013 to get a grip on the energy potential and the results are expected to be delivered this year. Elsewhere the most significant project already underway is the Yuma-South Akanyaru peat fired power plant.

In the oil and gas space, Rwanda and the Democratic Republic of Congo have signed agreements to explore for oil in Lake Kivu, which lies on the border of the two countries, with the two governments sharing geological data from the project.

AFRICA / CENTRAL AND EASTERN AFRICA

While Somalia is often written off as a potential investment destination, significant projects are underway in the coastal nation. In 2014 the country invited international companies to explore for oil and gas in deep water areas off its coast and the first signs are positive. In the autonomous Republic of Somalialand, development of the Port of Berbera continues apace with DP World having secured a 30 year concession for the logistics hub. This was followed by the news that Ethiopia had signed a significant agreement to use the Red Sea port for shipping goods.

In Tanzania, a high profile project in the oil and gas space is the construction of an oil pipeline between the country and neighbouring Uganda. The project is a key part of the exploitation of the oil reserves of Uganda's Hoima region, with the project enabling 200,000 barrels of crude a day to be moved to the Tanga port in Tanzania. The project is also part of a wider strategy by Tanzania to link inland regions with the ports of Tanga and Dar es Salaam.

The country is also developing its natural

gas resources through the Tanzania LNG Project, which comprises the construction of infrastructure to exploit and export the country's offshore reserves.

In the energy space one of the country's success stories is the uptake in small scale solar power projects in the country's rural areas. The country's Energy Access Situation Report 2016 revealed that 64.8% of rural consumers used solar generated electricity. This being said the statistics also reveal that only 16.9% of households in rural areas were connected to the electricity grid by 2016

One of the country's most significant infrastructure projects is the development of a new port at Bagamoyo. If and when the project is complete it will be the largest port in East Africa eclipsing the existing port at Dar es Salaam and competing with the new port being constructed at Lamu in Kenya. The desire to be considered an East African logistics hub is driving the development of both new projects with the focus being exports to and imports from Asia, particularly China. In Uganda some of the biggest developments can be seen in the oil and gas sectors. The proposed refinery being built in the region of Hoima is to help with the exploitation of oil in the region, as will the Hoima-Tanga pipeline, mentioned above, which will transport the oil to Tanga in neighbouring Tanzania for export. Unfortunately the refinery project has been hit by numerous delays and is unlikely to be complete before 2020.

In the energy sector one of the biggest developments was the announcement that the Ugandan government is looking at the possibility of constructing a nuclear power plant with Chinese support. The project, if it goes ahead, is part of the country's attempt to increase its clean energy generating capacity.

Hydroelectric is another area of focus with projects like the 250MW Bujagali II project and the 600MW Karuma project being developed. Solar projects are also moving ahead, although generally on a smaller scale with one example being the 10MW plant at Soroti.



Below is a selection of energy and infrastructure deals taken from IFLR1000 Deal Data.

For more information and to browse the full database for the EMEA region please visit: http://www.iflr1000.com/Search/Deals

Ruzizi III 147MW hydroelectric power plant PPP

lurisdictions:

Burundi; Democratic Republic of Congo; Rwanda Deal types:

PPP; Project development; Project finance

Industry sector:

Energy

Firms:

Gide Lovrette Nouel

Party: Energie des Pays des Grands Lacs (Sponsor); Government of Burundi (Shareholder); Government of Democratic Republic of Congo (Shareholder); Government of Rwanda (Shareholder)

Hunton & Williams

Party: Energie des Pays des Grands Lacs (Sponsor); Government of Burundi (Shareholder); Government of Democratic Republic of Congo (Shareholder); Government of Rwanda (Shareholder)

Rubeya & Co Advocates

Party: Energie des Pays des Grands Lacs (Sponsor)

Overview

- The project is a run-of-river hydroelectric power plant on the Ruzizi River on the border between DRC and Rwanda and will provide electricity to both countries and Burundi.
- It is being implemented by the Energie des Pays des Grands Lacs (Great Lakes Energy Organization).
- The Sithe Group (owned by Blackstone) and IPS (a division of The Aga Khan Fund for Economic Development) are developing the project.
- It is the first regional power plant in east Africa to be developed using a PPP model.
- The African Development Bank Group (AfDB) is providing \$138 million to help finance the project.
- The project is the third plant to be developed on the river following Ruzizi I (29.8MW) and Ruzizi II (43.8MW). It is part of the wider Programme for Infrastructure Development in Africa (PIDA) strategy.

Kasomeno-Mwenda toll road PPP

Jurisdictions:

Democratic Republic of Congo; Zambia

Deal types:

PPP; Project development

Industry sector:

Transport

Firm:

Trinity International

Party: Group Européen de Development du Congo (GED) (Project developer)

Overview:

- Group Européen de Development du Congo (GED) has won the concession to construct a 180km toll road between Kasomeno in the Democratic Republic of Congo and Mwenda in Zambia.
- The project is made up of two parts: a 95km stretch between Kasomeno and Kaluba and an 85km stretch between Kaluba and Mwenda. The project also includes a crossing over the Luapula river.
- One of the drivers behind the road's construction is the need to speed up the transportation of goods from the DRC to the port of Dar es Salaam in Tanzania.
- The project is the first to be implemented under Zambia's PPP law.

Horn of Africa Pipeline

Jurisdictions:

Djibouti; Ethiopia

Deal type:

Project development

Industry sector:

Oil and gas

Firms: Linklaters

Party: Black Rhino Group (Sponsor)

Webber Wentzel

Party: Black Rhino Group (Sponsor); MOGS - Mining Oil & Gas

Services (Sponsor)

Overview:

- The 550km pipeline will carry oil between the Port of Djibouti to Awash in Ethiopia and will replace the current 500 trucks a day that transport oil over the same route.
- The pipeline will be able to handle 240,000 barrels of fuel per day.
- Alongside the pipeline itself the project also includes the construction of an import facility, buffer storage tank farm and pump and monitoring stations.
- The project is being developed by the Black Rhino Group (an infrastructure investor owned by Blackstone) in a joint venture with MOGS, a subsidiary of Royal Bafokeng Holdings.
- It is expected to be completed in 2018.
- The project is being developed in part in response to Ethiopia's increasing demand for oil, which is growing at an estimated rate of 15% per year

Addis Ababa International Airport cargo terminal

Jurisdiction:

Ethiopia

Deal types:

Project development; Project finance

Industry sectors:

Aviation; Logistics; Transport

Firm:

Allen & Overy

Party: Agence Française de Développement (Arranger, Lender); KfW IPEX-Bank (Arranger, Lender)

Overview

- The new cargo terminal is set to open in April 2017.
- The terminal will be the largest in Africa with have an annual capacity of 1.2 million tons.
- Ethiopian Airlines is the largest air freight carrier in Africa.
- Agence Française de Développement (AFD) and KfW acted as arrangers and lenders on the financing of the project.

Awash Woldia-Hara Gebeya railway

Jurisdiction:

Ethiopia

Deal type:

Project development

Industry sector:

Transport

Firms

Clifford Chance

Party: Credit Suisse (Arranger)

Pinsent Masons

Party: Yapi Merkezi İnşaat ve Sanayi (Project developer, EPC contractor)

Overview

- Ethiopian Railway Corporation is investing \$1.7 billion in a new 400km rail line to be constructed between Awash and Woldia in Ethiopia, linking the country's north and east rail networks. It will connect with the Addis Ababa – Djibouti rail line.
- The project also includes 40km of maintenance lines, 18km of station lines, tunnels, three terminal stations and six intermediate stations.
- The project is part of the country's five year growth and transformation plan, which includes five rail projects in phase one.
- Turkish construction company Yapi Merkezi İnşaat ve Sanayi has been selected as the EPC contractor for the project.
- \$865 million of the cost of the project has been provided by combined commercial loan and ECA backed facilities guaranteed by the Ethiopian state. Credit Suisse acted as arranger.

AFRICA / CENTRAL AND EASTERN AFRICA

Chemoga Yeda 260MW hydroelectric power plant

Jurisdiction: Ethiopia Deal type: Project development Industry sector: Energy Firm:

Cliffe Dekker Hofmeyr

Party: Ethiopian Electric Power Corporation (EEPCo) (Grantor); Government of Ethiopia (Grantor)

Overview

- The Ethiopian government and Ethiopian Electric Power Corporation (EEPCo) is seeking developers and financing for a new hydroelectric power project at Chemoga Yeda on a tributary of the Blue Nile.
- Sinohydro had been the original developer of the project, which was supposed to be completed by 2015, however this arrangement was later cancelled.
- Posco Engineering & Contracting and Shikun & Binui Group are believed to have expressed interest in developing the project.
- The project is part of a wider plan to increase the country's renewable energy generation capacity.

Corbetti 500MW geothermal power plant

3015 4661 3 0 0111 11	Sootherman Power
Jurisdiction:	
Ethiopia	
Deal type:	
Project development	
Industry sector:	
Energy	
Firms:	
Bracewell	
Party: Africa Renewable Energy Ho	oldings (Investor)

Party: Africa Renewable Energy Holdings (Investor)

Eversheds Sutherland Party: InfraCo Africa (Investor)

Trinity International

Party: Corbetti Geothermal (Project company)

Overview:

- The plant is being developed by Reykjavik Geothermal, who along with partner Rift Valley Geothermal established Corbetti Geothermal, which signed a PPA for the project with Ethiopian Electric Power in July 2015.
- Reykjavik Geothermal owns 28.5% of Corbetti Geothermal with investors Berkley Energy (through Africa Renewable Energy) and Iceland Drilling holding 53.5% and 18% stakes respectively.
- The project is being developed alongside another 500MW geothermal plant at Tulu Moye.
- Ethiopia intends to have installed capacity of 37,000MW by 2037 and to become an even more prominent energy exporter.
- It is estimated that the country has 10,000MW of untapped geothermal potential.

Akiira One 140MW geothermal power plant

Jurisdiction: Kenya Deal type: Project development Industry sector: Energy Firms:

Cliffe Dekker Hofmeyr Party: CfC Stanbic (Lender)

DLA Piper

Party: European Investment Bank – EIB (Lender); Overseas Private Investment Corporation (OPIC) (Sponsor); Standard Bank (Lender)

Stephenson Harwood

Party: Green Africa Power (Investor)

- The project is the first private sector greenfield geothermal development in Sub-Saharan Africa.
- Located in the region of Naivasha it is focused on an area covering 120km2, in a block known as Akiira.
- The project is being developed in two phases of 70MW each.
- The project is being financed by a grant from OPIC, while EIB and Standard Bank are acting as lenders.
- Green Africa Power, a fund established by the Private Infrastructure Development Group, is also investing in the project.

Itare Dam

Jurisdiction:

Kenya

Deal types:

Project development; Project finance

Industry sectors:

Utilities

Construction and materials

Firms:

Kaplan & Stratton

Party: Intesa Sanpaolo (Lender); BNP Paribas (Lender); Intesa Sanpaolo (Lender); SACE – Servizi Assicurativi del Commercio Estero (Lender)

Linklaters

Party: BNP Paribas (Lender); Intesa Sanpaolo (Lender); SACE – Servizi Assicurativi del Commercio Estero (Lender)

Overview:

- The development of Itare Dam site is identified as the most viable long term source of water to address water shortages in Nakuru Municipality and the Kuresoi, Molo, Njoro and Rongai areas.
- Situated in Molo, Nakuru County, the project includes a 57m high dam and related water treatment facilities and has been designated as a high priority flagship project by the Government of Kenya.
- The project is due for completion in 2020.
- Intesa Sanpaolo and BNP Paribas are providing export credit financing for the project with a guarantee provided by Italian ECA SACE.

Kipeto 100MW wind farm

Jurisdiction:

Kenya

Deal type:

Project development

Practice area:

Project development

Industry sector:

Energy

Firms: Allen & Overy

Party: Kipeto Energy (Project company)

Anjarwalla & Khanna

Party: Kipeto Energy (Project company)

Overview:

- The project consists of the development, construction and operation of a 100MW wind farm located at Kipeto southwest of Nairobi.
- The project is being developed by Kipeto Energy which is owned by African Infrastructure Investment Fund 2 (55%), a fund managed and advised by African Infrastructure Investment Managers, Craftskills Wind Energy International (20%), the International Finance Corporation (IFC) (20%) and the Kipeto Community Trust (5%).
- The project has received \$233 million in financing from the Overseas Private Investment Corporation.
- Kenya is targeting installed wind energy capacity of over 2000MW by 2030.

Lake Turkana 310MW wind farm

Jurisdiction:

Kenya

Deal types:

Project development; Project finance

Industry sector:

Energy

Firms:

Allen & Overy

Party: Lake Turkana Wind Company (Project company)

Anjarwalla & Khanna

Party: Lake Turkana Wind Company (Project company)

Bracewell

Party: Vestas Eastern Africa (Supplier)

CMS Cameron McKenna Nabarro Olswang

Party: Aldwych International (Project developer, Investor); Finnfund (Investor); Industrial Fund for Developing Countries (IFU) (Investor); Norfund (Investor); Vestas Eastern Africa (Investor)

Trinity International

Party: African Development Bank (Lender); DEG – Deutsche Investitionsund Entwicklungsgesellschaft (Lender); East African Development Bank (Lender); EKF – Eksport Kredit Fonden (Lender); European Investment Bank – EIB (Lender); FMO – Nederlandse Financierings-Maatschappij voor Ontwikkelingslanden (Lender); Nedbank (Lender); Proparco (Lender); PTA Bank (Lender); Standard Bank of South Africa (Lender); Triodos Bank (Lender)

Walker Kontos

Party: African Development Bank (Lender); DEG – Deutsche Investitionsund Entwicklungsgesellschaft (Lender); East African Development Bank (Lender); EKF – Eksport Kredit Fonden (Lender); European Investment Bank – EIB (Lender); FMO – Nederlandse Financierings-Maatschappij voor Ontwikkelingslanden (Lender); Nedbank (Lender); Proparco (Lender); PTA Bank (Lender); Standard Bank of South Africa (Lender); Triodos Bank (Lender)

- The project consists of 365 turbines covering an area of 162km2 in Loiyangalani District, Marsabit County.
- The project is being developed by the Lake Turkana Wind Power Project (LTWP) consortium, made up of: KP&P Africa, Aldwych International, Finnish Fund for Industrial Cooperation (FinnFund), Industrial Fund for Developing Countries (IFU), KLP Norfund Investments, Vestas Eastern Africa and Sandpiper.
- At the time of its announcement the project represented the largest private investment in Kenyan history and was also the largest wind farm to be constructed in Africa.
- A 428km transmission line running from Loiyangalani in northern Kenya to Suswa will connect the project to the national grid.
- Financing is being provided by African Development Bank, European Investment Bank (EIB), Nederlandse Financierings Maatschappij Voor Ontwikkelingslanden (FMO), Proparco, PTA Bank, Nedbank, The Standard Bank of South Africa, Eksport Kredit Fonden (EKF), Deutsche Investitions- und Entwicklungsgesellschaft (DEG), East African Development Bank and Triodos.

AFRICA / CENTRAL AND EASTERN AFRICA

Lamu 90MW wind farm

Jurisdiction:

Kenya

Deal type:

Project development

Industry sector:

Energy

Firm:

Anjarwalla & Khanna

Party: Elicio (Sponsor); International Finance Corporation (IFC) (Sponsor)

Overview:

- Kenwinds Holdings, a subsidiary of Electrawinds, Elicio and the International Finance Corporation (IFC) are developing a 90MW wind farm in Mpeketoni in Lamu.
- The move is part of a wider project to increase Kenya's renewable energy generating power.
- In September 2016 the developers reached an agreement with local landowners over compensation for the impact of the project.

Lamu 981.75MW coal power plant

Jurisdiction:

Kenya

Deal types:

Project development; Project finance

Industry sector:

Energy

Firms:

Dentons

Party: Amu Power (Project developer); Gulf Energy (Sponsor)

Hamilton Harrison & Matthews

Party: Amu Power (Project developer); Gulf Energy (Sponsor)

Iseme Kamau & Maema Advocates

Party: Industrial and Commercial Bank of China Ltd (Lender); Stanbic IBTC Bank (Lender); Standard Bank of South Africa (Lender)

Shearman & Sterling

Party: Industrial and Commercial Bank of China Ltd (Lender); Stanbic IBTC Bank (Lender); Standard Bank of South Africa (Lender)

Overview:

- Amu Power Company, a company owned by a consortium made up
 of Centrum Investments, Gulf Energy and Sichuan Electric Power
 Design and Consulting Company, is developing the project in the
 Kwasasi area.
- Construction had been expected to begin in 2015 but the project has faced a number of challenges from the local community primarily for environmental reasons.
- The project was finally given regulatory approval in January 2017 by the Kenyan Energy Regulatory Commission though it still faces court challenges,
- CfC Stanbic Bank, Standard Bank of South Africa and Industrial & Commercial Bank of China are providing financing for the plant.

Lamu Port

Jurisdiction:

Kenya

Deal type:

Project development

Industry sectors:

Logistics; Shipping

Ashurst

Party: Aeolus Kenya (Project developer)

- The project will include the development and financing of a port, road, rail, 800MW combined cycle gas power station and LNG import terminal.
- The project is being developed by Aeolous Kenya.
- The port will have 32 deep sea berths, with the first three to be financed by the government and the remaining 29 by private investors. The first berth is set to be completed by 2018.
- The overall project is expected to cost \$5 billion
- The project is part of the wider Lamu Port-South Sudan-Ethiopia-Transport (LAPSSET) Corridor.
- The port will compete for its position as East Africa's primary logistics hub with Tanzania's Bagamoyo Port which is also under development.

Menengai 105MW geothermal power plants

Jurisdiction:

Kenya

Deal type:

Project development

Industry sector:

Energy

irm:

Anjarwalla & Khanna

Party: Ormat (Sponsor); Quantum Power (Sponsor); Sosian Energy (Sponsor); Symbion Power (Sponsor); Transcentury (Sponsor)

Overview

- Three separate geothermal power projects are being developed in Menengai in the Great Rift Valley which will generate a combined 105MW of power.
- The project is being developed by the Geothermal Development Company and investors include Quantum Power East Africa, Orpower Twenty Two (A consortium of Ormat, Civicon and Symbion) and Sosian Energy.
- Instead of private investors taking on the risk associated with steam exploration, the Geothermal Development Company works on government owned land, develops the steam gathering system and supplies steam to the independent power producer.
- The projects were delayed in 2015 due to a lack of state guarantees.

Mombasa-Nairobi railway

Jurisdiction:

Kenya

Deal type:

Project development

Industry sector

Transport

Firm:

MMC Africa Advocates

Party: Kenya Railways Corporation (Project developer)

Overview:

- The new standard gauge railway (SGR) is the largest project to be undertaken by the Government of the Republic of Kenya in five decades and is a flagship project under the Kenya Vision 2030 development agenda.
- The Mombasa-Nairobi line constitutes the first phase of the SGR Project that aims to connect Kenya, Uganda, Rwanda and South Sudan.
- The railway will shorten travel time from Mombasa to Nairobi from more than ten hours to a little more than four hours.
- The project began tests of the infrastructure in May 2017.

Mombasa-Nairobi Highway PPP

Jurisdiction:

Kenya

Deal types:

PPP; Project development

Industry sector:

Transport

Firms:

Anjarwalla & Khanna

Party: Bechtel (Project developer) Hamilton Harrison & Matthews

Party: Kenya National Highways Authority (Grantor); PricewaterhouseCoopers (PwC) (Structuring advisor)

- Bechtel is developing a 500km toll road between Mombasa and Nairobi.
- The project will see the existing road expanded with more lanes added.
- The road forms part of the longer Great North Road that runs through East Africa.
- The project is one of a number of PPP projects to be undertaken to expand and improve the road network in the country.
- The road is planned to start with twelve lanes in Mombasa and narrow down to six in Nairobi.
- The road, along with the Mombasa-Nairobi railway, is part of a wider plan to improve transport links to the port at Mombasa.

AFRICA / CENTRAL AND EASTERN AFRICA

Second Nyali Bridge PPP

Jurisdiction:

Kenya

Deal types:

PPP; Project development

Industry sector:

Transport

Firm

Iseme Kamau & Maema Advocates

Party: Kenya Urban Roads Authority (Grantor)

Pinsent Masons

Party: Kenya Urban Roads Authority (Grantor)

Overview:

- The Government of Kenya is looking to construct a second Nyali bridge to serve as alternative connection between the Mombasa Island and the mainland.
- The deal is a joint venture between Deloitte Consulting and Deloitte Touche Tohmatsu India Private and it is the first ever PPP deal for a bridge in Kenya.
- Over the last 37 years the population of Mombasa has increased to one million, yet there is currently only one bridge connecting the island to the mainland.

Yuma-South Akanyaru 80MW peat power plant

Jurisdiction:

Rwanda

Deal types:

Project development; Project finance

Industry sector:

Energy Firms:

Clifford Chance

Party: Quantum Power (Project developer); Hakan Madencilik ve Elektrik Üretim (Project developer); Themis Energy (Project developer)
Trinity International

Party: African Export-Import Bank (Lender); Africa Finance Corporation (Arranger, Lender); Development Bank of Rwanda (BRD) (Lender); Export-Import Bank of India (Lender); Finnfund (Arranger, Lender); PTA Bank (Lender)

Overview

- Hakan Madencilik ve Elektrik Üretim, Quantum Power and Themis Energy are constructing a peat fired power plant in Southern Rwanda in the Gisagura district.
- The concession runs for 26 years after which the plant will revert to ownership by the Rwandan government. The plant is due to come online in 2020.
- \$281 million of the \$400 million cost of the project is being provided by Africa Finance Corporation (AFC), Finnfund, PTA Bank, Afreximbank, the Development Bank of Rwanda (BRD) and the Export-Import Bank of India.
- The project is the second largest IPP in Rwanda to date. The country intends to install 563MW by 2018.

Port of Berbera concession

Jurisdiction:

Somalia

Deal types:

Concession; Project development

Industry sector:

Logistics; Shipping

Firms:

Ashurst

Party: DP World (Project developer, Joint venture partner, Concessionaire) Simmons & Simmons

Party: Somaliland Government (Project developer, Joint venture partner)

- The Government of Somaliland, a self-declared autonomous state of Somalia, has entered into a 30-year concession and joint venture arrangement with DP World to develop the Port of Berbera.
- The project will require an investment of €442 million, transforming the existing port and positioning it as a key transport and logistics hub for the region.
- The financing arrangements for the project have yet to be determined, with a decision pending on whether funding will come from DP World's balance sheet, project financing, or both.
- DP World currently operates more than 75 terminals worldwide, and is keen to open a point of access to the Red Sea.

Bagamoyo Port

Jurisdiction:

Tanzania

Deal types:

Project development; Project finance

Industry sectors:

Logistics; Shipping; Transport

Firm:

DLA Piper

Party: African Development Bank (Lender); African Legal Support Facility (ALSF) (Lender); Government of Tanzania (Grantor)

IMMMA Advocates

Party: African Development Bank (Lender); African Legal Support Facility (ALSF) (Lender); Government of Tanzania (Grantor)

Overview

- China Merchant Holdings International (CMHI) and State General Reserve Fund of Oman are funding and developing a new port at Bagamoyo and an adjacent special economic zone.
- The port, when complete, will be the biggest port in East Africa handling 20 million containers a year and will also represent the region's biggest single investment.
- CMHI is responsible for the construction of the port itself with Omani contractors constructing the special economic zone.
- Financing is being provided in part by African Legal Support Facility.
- Construction was set to begin in 2015 with a completion date for the
 first phase set for 2017 however the project has been hit by delays
 and the Tanzania government had to issue a statement in May 2016
 denying reports that the project had been shelved in favour of
 expanding existing ports.
- The completed port is set to compete with a new port development at Lamu in Kenya.

Dar es Salaam-Chalinze toll road PPP

Jurisdiction:

Tanzania

Deal types:

PPP; Project development

Industry sector:

Transport

Firm:
Pinsent Masons

Party: Government of Tanzania (Sponsor); Tanzania National Roads Authority (TANROADS) (Project developer)

Overview:

- The Tanzania National Roads Authority (TANROADS) is upgrading part of the Dar es Salaam to Morogoro trunk road to a toll expressway.
- The first 50km of the 100km stretch will consist of a six lane road before reducing to a four lane road.
- The road is key in terms of carrying freight from the post of Dar es Salaam.

Dar es Salaam-Morogoro railway

Jurisdiction:

Tanzania

Deal type:

Project development

Industry sector:

Transport Firm:

FB Attorneys

Party: Yapi Merkezi İnşaat ve Sanayi (Project developer)

Pinsent Masons

Party: Yapi Merkezi İnşaat ve Sanayi (Project developer)

- Reli Assets Holding Company (RAHCO) have selected Yapi Merkezi İnşaat ve Sanayi and Mota-Engil, Engenharie and Construcao Africa as the winner of the tender to construct a new 205km stretch of standard gauge railway between Dar es Salaam and Morogoro.
- The project is the first phase of a project to construct 2561km of line linking Dar es Salaam, Kigoma and Mwanza and is expected to be complete by 2019.

AFRICA / CENTRAL AND EASTERN AFRICA

Hoima-Tanga crude oil pipeline

Jurisdictions:

Tanzania; Uganda

Deal type:

Project development

Industry sector

Oil and gas

ABMAK Associates

Party: China National Offshore Oil Corporation (Sponsor); Total (Sponsor); Tullow Oil (Sponsor)

FB Attorneys

Party: Total (Sponsor)

Overview:

- Total E&P, Tullow Oil and China National Offshore Oil Corporation (CNOOC) are developing a 1403km pipeline to transport crude oil from Hoima in Uganda to Tanga port in Tanzania.
- The project will transport 200,000 barrels of crude a day and is set to be complete by June 2020
- An alternative plan had been for Uganda to run its oil exports through Kenya, but ultimately Tanzania was chosen.
- Uganda has around 2.2 billion barrels of recoverable oil and intends to build a refinery in the west of the country.

Kilwa 348MW gas power plant

Tanzania

Deal types:

Project development; Project finance

Industry sector:

Energy

Norton Rose Fulbright

Party: Kilwa Energy Company (Project developer)

- The Kilwa Energy Company is developing a 348MW combined cycle gas power plant in Tanzania.
- The government of Tanzania, through TANESCO (the state-owned electricity utility company) will own a 20% stake in the project.
- The Development Bank of South Africa, PTA Bank, CRDB Bank and TIB Development Bank are granting financing, on a limited recourse basis, for the project.

Singida 100MW wind farm

Jurisdiction:

Tanzania Deal type:

Project development

Industry sector:

Energy

Trinity International

Party: Aldwych International (Sponsor); Wind East Africa (Project company)

- Wind East Africa an SPV backed by Six Telecoms, Aldwych International and IFC-Infra Ventures is constructing a 100MW wind farm in Singida.
- The project represents Tanzania's first wind project.
- Tanzania is in need of extra renewable energy capacity with only 38% of the country having access to power.
- Construction is expected to begin in Q2 2017.

Tanzania LNG Project

Jurisdiction:

Tanzania

Deal type:

Project development

Industry sector:

Oil and gas

Firm:

King & Spalding

Party: Statoil (Sponsor)

Overview:

- BG Group, Statoil, ExxonMobil, Ophir Energy and Tanzania
 Petroleum Development Corporation (TPDC) intend to construct a liquefaction plant and an onshore two-train LNG export terminal in Lindi.
- Tanzania has 55 trillion cubic feet of natural gas reserves.
- The project was first announced in 2014 but was hit by delays, mainly related to land acquisitions and legislative issues. In April 2017, the government announced that a draft agreement with the project developers was now in place.
- The country intends to export its LNG to Asian markets.

Bujagali II 250MW hydroelectric power plant

Jurisdiction

Uganda

Deal types:

PPP; Project development; Project finance

Industry sector:

Energy Firms:

Allen & Overy

Party: SN Power (Acquirer)

Kirkland & Ellis

Party: SG Bujagali Holdings (Seller)

Linklaters

Party: African Development Bank (Lender); European Investment Bank – EIB (Lender); International Finance Corporation (IFC) (Lender);

Standard Chartered Bank (Lender)

MMAKS Advocates
Party: SN Power (Acquirer)
Sebalu & Lule Advocates

Party: Standard Chartered Bank (Lender)

Overview

- The project is being developed by Bujagali Energy, a special purpose company owned by Sithe Global Power and the Aga Khan Fund for Economic Development.
- The plant is located at the Bujagali falls near Lake Victoria and initial construction began in 2007.
- The project has obtained additional financing, although the amount remains confidential.
- The lenders were led by Standard Chartered Bank London.
- Additional lenders included the IFC, African Development Bank and the European Investment Bank.
- In April 2016 Norwegian hydroelectric power company SN Power acquired a stake in the project previously owned by Mauritian company SG Bujagali Holdings, which is indirectly owned by funds managed by Blackstone.

JLOS House Project PPP

Jurisdiction:

Uganda

Deal types:

PPP; Project development

Industry sectors:

Government and public policy; Real estate

Firm:

Dentons

Party: Twebaze Development (Project developer)

- The project is a government office development to house several government departments.
- It consists of three parts: the JLOS Towers, the appellate courts and the new police headquarters.
- The JLOS Towers part of the project includes buildings for the Ministry of Justice and Constitutional Affairs, the Ministry of Internal Affairs, the Uganda Human Rights Commission, the Uganda Prison Services, URSB, TAT, ULRC, JSC, DPP, JLOS secretariat and several divisions of the High Court.
- The project will also include the police headquarters.
- The project covers 80,000 square metres.

AFRICA / CENTRAL AND EASTERN AFRICA

Kampala-Jinja Expressway PPP

Jurisdiction:

Uganda

Deal types:

PPP; Project development

Industry sector:

Transport

Firms:

Ashurst

Party: International Finance Corporation (IFC) (Structuring advisor)

MMAKS Advocates

Party: International Finance Corporation (IFC) (Structuring advisor)

Pinsent Masons

Party: Government of Uganda (Grantor)

Overview

- The project is a 77km four lane toll highway linking Kampala to Jinja in the East of the country.
- The existing road is part of the Trans-Africa Highway.
- The project will be constructed in two phases: a 33km stretch between Kampala and Namataba including the Kampala Southern Bypass, and a 43.7km stretch between Namataba and Jinja.
- The project is estimated to create around 1500 jobs from the construction.

Karuma 600MW hydroelectric power plant

Jurisdiction:

Uganda

Deal types:

Project development; Project finance

Industry sector:

Energy

Firms

Kigozi Ssempala Mukasa Obonyo

Party: Sinohydro Corporation (Project developer)

Sebalu & Lule Advocates

Party: Sinohydro Corporation (Project developer)

Overview:

- The Sinohydro Corporation has obtained \$2.2 billion in financing towards the Karuma power plant in Uganda.
- Located on the Victoria Nile, construction on the 600MW project began in 2013 and is expected to be completed by the end of 2018.
- Once completed, Karuma will be the largest power generator in Uganda.

Uganda Oil Refinery

Jurisdiction:

Uganda

Deal type:

Project development

Industry sector:

Oil and gas

Firms

ABMAK Associates

Party: GS Engineering & Construction (Bidder); RT Global Resources (Bidder); Tatneft (Bidder); VTB Capital (Bidder)

Freshfields Bruckhaus Deringer

Party: GS Engineering & Construction (Bidder); RT Global Resources (Bidder); Tatneft (Bidder); VTB Capital (Bidder)

Katende Ssempebwa & Co

Party: Government of Uganda (Grantor)

- The proposed refinery, at Kabaale in Hoima, will process 60,000 barrels a day and the wider project also includes a 205km pipeline to a distribution terminal near Kampala.
- A consortium led by RT Global Resources and made up of GS
 Engineering & Construction, Tatneft and VTB Capital was selected
 as the winning bidder in February 2015 but talks broke down in June
 2016 following issues over government funding for the project.
 Questions have also been raised about the project's location in the
 Hoima region, which, while close to the country's oil reserves, is
 considered remote.
- In July 2016 it was announced that discussions had begun with South Korea's SK Engineering & Construction, one of the backup bidders on the original tender, however these are not believed to have advanced. China Petroleum & Chemical Corporation (Sinopec) has also been cited as a potential developer.
- While originally scheduled for completion in 2017, the date has now been pushed back to 2020.

AFRICA / CENTRAL AND EASTERN AFRICA

Central and Eastern Africa

Project finance transactions which reached financial close in 2016 (Data provided by IJ Global)

Name	Country	Sector	Sub sector	Transaction type	Value
Kipoi Copper Mine Refinancing and Expansion	Democratic Repub- lic of the Congo	Refinancing	Mining	Base Metals	\$162 million
Off-Grid Electric Tanzanian Solar and Battery Storage	Tanzania	Primary Financing	Renewables	Photovoltaic Solar	\$40 million
Soroti Solar Power Plant (10MW)	Uganda	Primary Financing	Renewables	Photovoltaic Solar	\$14.2 million

North Africa

Algeria

For more than half a decade the common motivation driving infrastructure development in Algeria has been the government's plans to diversify the economy, which relies heavily on revenue from hydrocarbons. The recent fall in oil and gas prices has shrunk the budget, created difficulties with balancing payments, and somewhat inhibited the scope of proposed new development.

Prior to the collapse of the oil price in 2014, Algeria's government approved a €233.7 billion five year (2015-2019) infrastructure programme. New housing, roads, ports, rails, and schools were all earmarked to receive investment. The decline in the value of crude has forced the government to take a more conservative approach to new projects, but it has also illustrated the vulnerability of the economy to fluctuations in fossil fuel prices, encouraging Algeria to continue with priority projects which will aid economic diversification.

In transport, one key project – recently resurrected following the resolution of a dispute with a contractor – is construction of the final section 84 km of the country's 1216 km, six lane East-West Highway, which has an estimated cost of €11 billion. The road will connect the country with Morocco and Tunisia. A new road project, which featured prominently in the five-year plan, is also seemingly going ahead. Two contracts for €6.6 billion1020 km Hauts Plateaux Highway from Tlemcen to Tébessa on the Tunisian border were approved by the Algerian government in 2015.

Substantial investment is also planned for the country's railways. The five year plan allocated €32 billion for development of Algeria's rail network, and the intention is to have 12,500 km of electrified track by 2025. Among the swathe of projects, a new main line linking Algiers, Oran, Annaba, Constantine and Bechar is arguably the most significant.

Building a new port is also high on Algeria's agenda. The government approved plans for the construction of a \$3.3 billion deep sea port in El Hamdania in 2017. Chinese contractors are developing the port, and some of the country's lenders are providing funding. The project will also receive €900 from the African Development Bank. The first phase of the port is scheduled for completion in 2021.

Other areas of infrastructure which look likely to receive investment are utilities (water specifically) and social housing.

In the energy sector, Algeria has set itself a target of producing 27% of the power the country consumes from green sources by 2030 through the installation of 22GW of renewable power plants. The government has an enacted a feed-in tariff for wind and solar and eased foreign investor restrictions to encourage development.

Egypt

It was a year of ups and downs for the Egyptian economy, one that culminated with a significant devaluation of the Egyptian pound in November 2016. An initial drop of about 32% against the dollar has since dropped to more than 50%; going from about ££8.80/\$1 to ££13.17/\$1. The devaluation was one of the key demands made by the International Monetary Fund to allow Egypt to receive a loan of \$12 billion over the next three years.

Despite these economic challenges, faith in the country's stability under the new government continues to increase and major projects are still being undertaken to address key infrastructure challenges, especially in the energy sector.

After many years of delay, the government is pushing ahead with its renewable energy drive, aiming to develop the country into a regional hub. It plans to bring online an additional 4,300MW of renewable energy alone by 2022, while simultaneously

developing manufacturing capabilities to also start producing and exporting renewable energy technologies.

For example, German engineering giant Siemens has signed power generation agreements with the government worth almost \$9 billion, including propositions for up to 12 wind farms and a rotor blade manufacturing facility in Ain Sokhna.

In addition to wind, there are also a number of large-scale solar parks under construction. Since late 2015 a number of international agreements have been reported by the government that would bring in developers from places like Norway to add an additional 2,000MW of solar power to the Egyptian market.

Despite the slowdown caused by the devaluation of the pound, the Ministry of Electricity and Renewable Energy has said it would like to bring on 870 MW of installed capacity from wind power and 2,000MW from solar photovoltaic production by 2018.

Besides renewables, the country's insatiable thirst for new power sources means it is also developing a diversified portfolio of production methods, including – for the first time – coal. Several large-scale plants are in planning stages, with the first at Ayoun Moussa looking to stand as a benchmark case for all future developments.

As ever, natural gas also continues to play a significant part in energy production in the country. New technologies are allowing existing plants to be upgraded to provide significantly more energy from the same quantity of gas, while new plants are also under construction throughout the country.

Behind this active energy drive is the county's increasing need for electricity resources to service both domestic consumption and – more notably – industrial need. This is most visible with the Suez Canal Corridor Area Project, a massive, multifaceted planned scheme that includes an industrial zone, fish farms and a raft of shipping facilities.

The Suez Canal Economic Zone as a whole is a wide-ranging project that could have a significant impact on the Egyptian economy. Beyond the initial construction phase, and the development of manufacturing facilities it is hoped it will boost the nation's productivity, the development of the region as a regional trading hub and allow for the long-mooted development of the Sinai region through the improved facilities.

There are unquestionably a number of significant challenges that remain to Egypt's emergence as a significant economic player. Currency and security issues have not gone away but the appetite for new projects is clear and with strong government support and willing foreign investment the energy and infrastructure market has bright years ahead.

Morocco

Lacking hydrocarbon reserves, Morocco depends on fossil fuel imports for more than 95% of its energy. Its royal family's ambitions to achieve greater energy independence in tandem with the country's need to satisfy increasing demand for electricity and abide by a commitment to be more carbon neutral, have ensured project development in renewables has been high.

Morocco has pledged to produce more than half the electricity the country consumes from renewable sources by 2030. To meet this target, it has launched initiatives and reforms to facilitate and incentivise investment in projects, including adopting a new public-private partnership (PPP) law permitting PFI type arrangements in 2015.

In solar, Morocco aims to install a minimum of 2000MW of capacity by 2020. State controlled entity, Moroccan Agency for Sustainable Energy (Masen), has been charged with overseeing this programme. It has introduced a procurement scheme for independent power projects (IPPs), structured as BOOTs (build, own, operate and transfer) where it is the minority shareholder, to good effect.

Morocco's headline solar project is Noor Ouarzazate. A complex being built in three stages using the IPP BOOT model, Noor will be the world's largest concentrated solar power (CSP) plant when complete with a capacity of 580MW. The first stage of Noor is operational and the second and third are under construction.

Morocco's royal family have been investing in wind power too. A tender for a \$1.2 billion PPP contract to construct five wind farms with a combined output of 850MW was awarded to a consortium led by Moroccan energy firm Nareva Holding and including Siemens.

Morocco's new PPP law is not just aimed at addressing deficiencies in the energy sector. Infrastructure is another area the country hoped the legislation would encourage development, and an extensive programme is under way with various transport and logistics projects in progress. In Casablanca, for example, expansion of the tramway network and road have begun, and in Tangier the Tanger-Med port is being extended.

Tunisia

New public infrastructure development in

Tunisia is limited, largely hindered by a lack of investment by the government.

Protests in Tunisia in late 2010 began what became known as the Arab Spring, a series of uprisings across North Africa and the Gulf rallying against economic inequality and corruption often perpetuated – as it was in Tunisia's case – by dictatorships. More than six years on from ousting the country's former ruler, dictator Ben Ali, there is still dissatisfaction in Tunisia as unemployment remains high and the economy flounders.

In April 2017, the Tunisian Forum for Economic and Social Rights (FTDES) reported there were 1,441 incidents of protest across the country. Fundamentally the recent protestors were instigated by a new law which would enable those who profited from Ali's regime to walk free providing they recompense the state. Given the country's history with corruption, this has not been well-received.

Another more general criticism of the government among Tunisian's is that none of the revenue the country accrues from selling hydrocarbons is invested into the enhancing the country's infrastructure, which could help address the country's high employment rate.

The south of the country is the where unemployment is highest, and it also where the oil and gas production assets are based. Protesters have made themselves heard, blocking roads and contributing to a slow-down in domestic oil and gas production.

Tunisia does have plans to invest in renewable energy production plants, although only the relatively small amount of 210MW.



Below is a selection of energy and infrastructure deals taken from IFLR1000 Deal Data. For more information and to browse the full database for the EMEA region please visit: http://www.iflr1000.com/Search/Deals

Abu Qir 180MW gas power plant

Egypt; Italy Deal type: Project development; Project finance Industry sectors: Energy Firm: Herbert Smith Freehills

Overview:

- Milan-based energy company Edison and Qalaa Holdings are jointly developing a combined cycle gas turbine power plant in Egypt.
- The total project cost is expected to exceed \$200 million.
- The plant is expected to begin producing energy before the end of 2017.
- It will be located adjacent to the Abu Qir gas field, which sits offshore to the north of Egypt's Mediterranean coast.
- Edison, which is part of the EDF Group, has eight oil concessions in Egypt, with three currently in production.

Assiut and West Damietta gas power plants upgrade (750MW)

Jurisdiction: Egypt Deal type: Project finance **Industry sectors:** Energy Firm:

Baker McKenzie

Party: Edison (Project developer)

Party: BNP Paribas (Documentation agent, Lead arranger); Crédit Agricole Corporate and Investment Bank (Lead arranger); ING Bank (Lead arranger); Crédit Industriel et Commercial (Lead arranger); SACE - Servizi Assicurativi del Commercio Estero (Guarantor)\

- The Egyptian Electricity Holding Company secured a \$650 million loan for the conversion of the Assiut and West Damietta power plants from simple to combined cycle gas turbines.
- BNP Paribas acted as coordinating initial mandated lead arranger, with Crédit Agricole, Crédit Industriel et Commercial and ING Bank serving as the other mandated lead arrangers. Italian export credit agency SACE is extending insurance cover for 100% of the loan.
- The conversion will increase the capacity of the plants from 1,500MW to 2,250MW, using the same amount of fuel and reducing the carbon and NOx emissions by 32%.

Ayoun Moussa 3,960MW clean coal plant

Jurisdiction: Egypt Deal type: Project development; Project finance Industry sectors: Energy Helmy Hamza & Partners

Party: AlNowais Investments (Project developer)

White & Case

Party: AlNowais Investments (Project developer)

- The Ayoun Moussa Clean Coal Power Plant is a planned project located on the Sinai Peninsula in the Suez region of Egypt. It is the first coal-fired plant in Egypt.
- It is being developed by Emirati investment company AlNowais Invesments.
- The total planned capacity of the plant is 3,960MW. The initial phase involves the construction of two 660MW coal-fired power units and associated ash handling facilities, with two additional phases of the same size to be added at a later date.
- It will use ultra super-critical low NOx pulverised-coal burners to cut down on emissions.
- HSBC serves as the financial adviser for the project, with Italian firm Technimont acting as a technical consultant.
- As the first coal-fired plant in the country it will require the import of coal to operate, which will be sourced from international markets such as South Africa, Indonesia and others.
- The project is financed by a consortium led by AlNowais that includes international investors from Japan and Korea.

Benban 50MW solar photovoltaic power plant

Jurisdiction: Egypt Deal type: Project development Industry sectors: Energy

Helmy Hamza & Partners

Party: TAQA Arabia (Project developer)

- TAQA Arabia Solar Energy is developing a \$115 million solar photovoltaic (PV) project in the New and Renewable Energy Authority's (NREA) 37.2km2 Benban 1GW PV solar park.
- It will comprise a 206 400-PV-panel, single-axis tracking system, with an estimated capacity of 50MW.
- The project includes the construction of a 1km 22kV underground transmission line connecting the project to the nearest of four Egyptian Electricity Transmission Company (EETC) high-voltage substations.
- All power generated will be acquired by the EETC under a 25-year power purchase agreement.
- TAQA Arabia is a subsidiary of Qalaa Holdings.

Blumberg Grain shouna development phase two

Jurisdiction:	
Egypt	
Deal type:	
Project development	
Industry sectors:	
Food and beverage	
Firm:	

Akin Gump Strauss Hauer & Feld

Party: Blumberg Grain (Project developer)

Shalakany Law Office

Party: Blumberg Grain (Project developer)

- US company Blumberg Grain is undergoing the construction of 300 shounas (wheat storage facilities) as part of phase two of its wheat storage development project.
- The project includes the development of 93-grain treatments and assembly centres across 20 governorates
- It will cost \$120 million, three times the cost of the first phase of the project.

BW Gas Cyprus regasification services agreement

Jurisdiction:
Egypt
Deal type:
Project development
Industry sectors:
Oil and gas
Firm:
Helmy Hamza & Partners
Party: BW Gas Cyprus (Project company)

- BW Gas Cyprus a subsidiary of the BW Group secured a fiveyear LNG regasification and storage services agreement with the Egyptian Natural Gas Holding Company.
- The total value of the agreement is \$242 million.
- As per the agreement, BW is responsible for project management and construction of jetty topside facilities at the Port of Ain Sokhna in Egypt and for the delivery of the floating storage regasification unit (FRSU) from the shipyard to the FSRU terminal site.
- The 170,212 m3 LNG FSRU BW Singapore began operation in October 2015 and will provide 500-600 mmscf/d of natural gas on a daily basis into the Egyptian national grid for five years thereafter.

AFRICA / NORTH AFRICA

Party: Arab Republic of Egypt (Sponsor)

Dabaa' nuclear power plant

Jurisdiction:	
Egypt	
Deal type:	
Project development ; Project finance	
ndustry sectors:	
Energy	
Firm:	
Shearman & Sterling	

Overview:

- The Dabaa' project is a \$30 billion plan to construct the first nuclear power plant in Egypt.
- Rusatom, a Moscow-based nuclear power company, signed an agreement with Minister of Electricity and Energy of the Arab Republic of Egypt to construct the plant.
- A statement from Rosatom said this is the largest project between Egypt and Russia since the Aswan Dam.

Dairut combined 2250MW gas power plant

Jurisdiction:	
Egypt	
Deal type:	
Project development	
Industry sectors:	
Energy; Oil and gas	
Firm:	

Helmy Hamza & Partners

Party: ACWA Power (Project developer)

Hunton & Williams

Party: Egyptian Electricity Holding Company (Off-taker)

Shalakany Law Office

Party: Egyptian Electricity Holding Company (Off-taker)

Overview

- Dairut Combined 2250MW Gas Power Project.
- The government of Egypt through the Egyptian Electricity Holding Company (EEHC) is developing a gas-fired IPP greenfield project in Egypt.
- ACWA Power is the project developer.
- The project will have a capacity of 2250MW.
- IFC is acting as financial adviser.

El Alamein sea water desalination plant

Jurisdiction:	
Egypt	
Deal type:	
Project development	
Industry sectors:	
Utilities	
Firm:	
Matouk Rassiouny	

Party: Aqualia Infraestructuras (EPC contractor)

- Aqualia Infraestructuras is developing a 150,000m3/d reverse osmosis desalination plant in El Alamein in Egypt.
- Aqualia Infraestructuras is a Spanish water company.

ETHYDCO \$75 million loan facility

Jurisdiction:

Egypt

Deal type:

Project finance

Industry sectors:

Industrials and manufacturing

Firm:

Dentons in association with Afifi Law Office

Party: African Export-Import Bank (Lender)

Helmy Hamza & Partners

Party: Egyptian Ethylene and Derivatives Company – ETHYDCO (Borrower)

White & Case

Party: African Export-Import Bank (Lender)

Overview:

- The Egyptian Ethylene and Derivatives Company (ETHYDCO) secured a \$75 million loan facility from the African Export-Import Bank (Afreximbank) to support the expansion of Egypt's petrochemical sector.
- The facility will be used to complement the closure of a \$1.25 billion syndicated facility initiated in 2012 by a consortium of 18 Egyptian Banks.
- It will be used to part-finance the \$1.925 billion ETHYDCO
 Complex, a greenfield project between the Egyptian Petrochemicals
 Holding Company, Egyptian Natural Gas Company, Sidi Kerir
 Petrochemicals and several Egyptian banks.

Gulf of Suez 250MW IPP onshore wind farm

Jurisdiction:

Egypt

Deal type:

Project development; Project finance

Industry sectors:

Energy

Firm:

Clifford Chance

Party: Engie (Sponsor); Orascom Construction (Sponsor); Toyota Tsusho (Sponsor)

Milbank Tweed Hadley & McCloy

 $\textbf{Party:}\ Japan\ Bank\ for\ International\ Cooperation\ (Lender); NEXI-$

Nippon Export and Investment Insurance (Lender)

Shalakany Law Office

Party: Japan Bank for International Cooperation (Lender); NEXI-

Nippon Export and Investment Insurance (Lender)

Zaki Hashem & Partners

Party: Engie (Sponsor); Orascom Construction (Sponsor); Toyota

Tsusho (Sponsor)

Overview

- A consortium of Engie, Toyota Tsusho and Orascom Construction are developing a 250MW onshore wind farm in the Gulf of Suez, with a total project cost in excess of \$500 million.
- It is the first independent power project (IPP) wind farm in Egypt.
- The Japan Bank for International Cooperation and Nippon Export and Investment Insurance served as lenders on the matter.

Infinity 50 64.1MW photovoltaic power plant

Jurisdiction:

Egypt; Germany; Netherlands; United Kingdom

Deal type

Project development, Project finance

Industry sectors:

Energy

Al Kamel Law

Party: Bayerische Landesbank (Lender); Arab African International Bank (Lender)

Baker McKenzie

Party: Bayerische Landesbank (Lender); Arab African International Bank (Lender)

Matouk Bassiouny

Party: Infinity 50 for Renewable Energy (Borrower)

Norton Rose Fulbright

Party: Infinity 50 for Renewable Energy (Project developer, Borrower)

- A consortium made up of Infinity Solar, ib vogt and Solizer through the Infinity 50 for Renewable Energy SPV – is developing a new solar power plant at Benban in Aswan in Egypt.
- The project includes 200,000 solar panels generating 64.1MW of electricity.
- It is part of the wider Benban solar project, which is aiming at capacity of 1.86GW.
- \$126 million in financing for the project was provided by Bayerische Landesbank and Arab African International Bank backed by Euler Hermes.

AFRICA / NORTH AFRICA

Sokhna Port bulk liquids terminal

Jurisdiction:

Egypt, United Arab Emirates

Deal type:

Project development

Industry sectors:

Oil and gas

Firm:

Freshfields Bruckhaus Deringer

Party: Sonker Bunkering Company (Joint venture partner)

Overview:

- A joint venture between the Sonker Bunkering Company, Dubaibased DP World, the Suez Canal Authority, and Red Sea Ports Authority is sponsoring the development of a bulk liquids terminal and FSRU terminal project at Ain Sokhna Port, Egypt.
- The project will facilitate the imports of LNG, and LPG from the Red Sea to Egypt.
- Financing packages included a \$72 million senior loan and \$22 million mezzanine loan from the European Bank for Reconstruction and Development; a \$70 million senior loan and a \$22 million mezzanine loan from the International Finance Corporation; \$52.5 million loan from other investors mobilised by the IFC; and a \$28 million loan, a \$30 million loan and the equivalent of \$44 million in Egyptian pounds from the Commercial International Bank.

Suez Steel Company E£3.5 billion financing for steel complex

Jurisdiction:

Egypt

Deal type:

Project finance

Industry sectors:

Industrials and manufacturing

Firm:

Matouk Bassiouny

Party: Suez Steel Company (Borrower)

Zulficar & Partners

Party: Arab African International Bank (Lender)

Overview

- The Suez Steel Company has secured a E£3.5 billion loan facility from a syndicate of banks for the construction of a steel complex in the Suez region.
- The syndicate was led by the Arab African International Bank.

Tahrir Petrochemicals Complex

Jurisdiction:

Egypt

Deal type:

Project finance

Industry sectors:

Oil and gas

Firm

Al Kamel Law

Party: Export-Import Bank of the United States (Lender); UK Export Finance (UKEF) (Lender); Overseas Private Investment Corporation (OPIC) (Lender); SACE – Servizi Assicurativi del Commercio Estero (Lender)

Mayer Brown

Party: Export-Import Bank of the United States (Lender); UK Export Finance (UKEF) (Lender); Overseas Private Investment Corporation (OPIC) (Lender); SACE – Servizi Assicurativi del Commercio Estero (Lender)

White & Case

Party: Tahrir Petrochemicals Corporation (Project company); Carbon Holdings (Project developer)

- The Tahrir Petrochemical Complex is a planned petrochemicals plant to be built in the Ain Sokhna industrial zone, near the Gulf of Suez, by the Tahrir Petrochemical Corporation, a subsidiary of Carbon Holdings.
- The project is expected to cost in excess of \$10 billion.
- The Export-Import Bank of the United States, UK Export Finance (UKEF), the Overseas Private Investment Corporation (OPIC) and Servizi Assicurativi del Commercio Estero (SACE) are providing finance for the project.
- Société Générale has been named as the financial adviser to the project.
- It is expected to generate in excess of 20,000 jobs during the construction phase and 100,000 direct and indirect jobs, annual revenue of \$6bn and a 25% increase in exports when it becomes operational.

Khalladi 120MW wind farm

Jurisdiction:

Morocco

Deal types:

Project development; Project finance

Industry sector:

Energy

Firms

Chadbourne & Parke

Party: ACWA Power (Project developer)
Naciri & Associés Allen & Overy

Party: European Bank for Reconstruction and Development (Lender); Banque Marocaine de Commerce Exterieur (BMCE) (Lender)

Overview:

- ACWA Power is developing the Khalladi 120MW wind farm near Tangiers.
- European Bank for Reconstruction and Development (EBRD) and the Banque Marocaine de Commerce Exterieur (BMCE) are providing €126 million in financing for the project.
- The wind farm will have 40 Vestas turbines, each with an output of 3MW.
- Construction of the wind farm began in July 2016.

NOORo II 200MW and NOOro III 150MW concentrated solar power plants

Jurisdiction:

Morocco

Deal type:

Project development

Governing law:

Morocco

Industry sector:

Energy

Firms:

Ashurst
Party: ACWA Power (Concessionaire)

Norton Rose Fulbright

Party: Moroccan Agency for Solar Energy (Project developer)

Overview

- MASEN (Moroccan Agency for Solar Energy) awarded a contract to ACWA Power, a Saudi Arabian electricity company, and Sener JV to develop NOORo II, a concentrated solar power (CSP) plant parabolic trough project with a capacity of 200MW, and NOORo III, a CSP solar project with a capacity of 150MW.
- The two projects are part of the NOOR PVI, a state run programme to develop three photovoltaic power plants, one of which is already operational.
- African Development Bank, Agence Française de Développement, Clean Technology Fund, European Commission, European Investment Bank, KfW Bankengruppe, World Bank are providing funding for the projects.
- MASEN purchased power under a 25-year power purchase agreements from the project companies.
- MASEN owns a 25% stake in NOORo II and NOORo III.

Peugeot manufacturing plant

Jurisdiction:

Morocco

Deal type:

Project finance Industry sectors:

Automotive, Industrials and manufacturing

Firm

Naciri & Associés Allen & Overy

Party: The Kingdom of Morocco (Borrower)

- French car maker Peugeot entered into an investment agreement with the Kingdom of Morocco to develop a new car production factory near Kenitra, Morocco.
- The factory will produce compacts, subcompacts and engines.
- The factory should be able to build 100,000 vehicles a year by 2019, and 200,000 vehicles a year by 2023.
- The investment agreement was signed in Rabat on June 19, 2015.

AFRICA / NORTH AFRICA

Tanger Med II port PPP

Jurisdiction:

Morocco
Deal type:

DDD

Industry sectors:

Transport; Logistics

Firms

Naciri & Associés Allen & Overy

Party: APM Terminals (Concessionaire)

Willkie Farr & Gallagher

Party: Tangier Mediterranean Special Agency (Grantor)

Overview:

- The Tangier Mediterranean Special Agency awarded a concession for the development of a container terminal within the Tangier Med port complex in Morocco to APM Terminals, a subsidiary of the AP Moller Maersk group.
- AP Moller Maersk is a Danish transport and logistics company.
- The concession is for 30 years.
- The terminal will be 1,600 linear metres.
- The port is expected to be operational by January 2019.

North Africa

Project finance transactions which reached financial close in 2016 (Data provided by IJ Global)

Name	Country	Sector	Sub sector	Transaction type	Value
Benban Solar PV Plant (50MW)	Egypt	Primary Financing	Renewables	Photovoltaic Solar	\$100 million
ETHYDCO Complex Addtional Facility	Egypt	Additional Facility	Oil & Gas	Petrochemical	\$75 million
Aftissat Wind Farm (201.6MW)	Morocco	Primary Financing	Renewables	Onshore Wind	\$332 million

Southern Africa

One of the headline stories in the oil sector in Angola in the first half of 2017 was the news that Cobalt International Energy was engaging in arbitration against Sonangol, Angola's state oil company. The company is demanding \$2 billion in a case relating to the cancellation of an agreement over the extension of licences relating to two deepwater blocks. The company claims that the issue has impacted its attempts to sell the licences on.

In the energy sector, the focus for the country is on expanding its hydroelectric capacity. Most of the key projects are located on the Kwanza River including the Caculo Cabaça project, the Laúca project and the Cambambe project. The government has a target to build 9GW of capacity by 2025 with the intention of becoming an energy exporter.

In Botswana, attempts are being made to exploit the country's estimated 212 billion tonnes of coal reserves including the proposed development of the 450MW Sese power plant and the expansion and rehabilitation of the Morupule A and B plants. The government is also developing a renewable energy strategy with a particular focus on solar power.

In August 2016 the country passed a new energy regulatory bill, opening up the market to independent power producers (IPPs). It is hoped this will reduce Botswana's reliance on South Africa and other states from it imports around 40% of its electricity.

In Lesotho the key development in the energy sector is the Lesotho Highlands Power Project (LHPP), which it is hoped will generate 6000MW of wind power and 4000MW of hydroelectric power from developments in the Maluti Mountains. The country is also hoping to discover coal and shale gas, with around two thirds of the country's landmass estimated to hold resources.

In Malawi, the country's main challenge in the energy space is to try to reduce the frequent blackouts the country experiences. This is primarily being done through the construction of new substations to strengthen the network. However the country is facing problems of capacity, with state energy supplier Escom estimating that demand will equal 430MW by the end of 2016 despite installed capacity sitting at 361MW.

Efforts are being made to tackle this shortfall by encouraging more IPPs into the market, one example of this is the proposed Kamwamba coal power plant being developed by the China Energy Engineering Cor-

poration. The country is also developing hydropower projects on the Buwa and Shire rivers.

In the oil and gas sector, the country is still in dispute with Tanzania over potential oil and gas reserves in Lake Malawi. The territorial dispute is historic but the area's potential has enflamed the row, with Malawi threatening to take the case to the Hague.

For Mauritius, the focus for the island nation in the energy space remains renewables, with a particular focus being put on wind power. The country established the Mauritius Renewable Energy Agency in order increase energy production from renewable sources to 35% by 2025 and some farms like the Plaine des Roches development are already operational.

The oil and gas industry in Mozambique is built around the natural gas finds in the Rovuma Basin. Since the first discoveries in 2010, the country has been working towards becoming a significant LMG exporter through the development of Areas 1 and 4, including the construction of a floating LNG plant in Area 4 and an onshore terminal in Area 1. The country has also entered talks with South Africa over a proposed gas pipeline connecting the two countries.

While the potential for these LNG projects is huge, both have been hit by delays, with the Area 1 developments now not expected to be online till 2023.

A key factor in these delays is the slump in global gas prices, which has made securing funding difficult. In addition, the Mozambique government has been caught in a debt crisis, relating to \$2 billion in loans the country took out but could not repay, bringing it into conflict with the IFC and World Bank. As well as hampering state oil and gas company Empresa Nacional de Hidrocarbonetos's (ENH) attempts to raise funds, the developments have also affected investor confidence in the country.

In the energy sector, the government has announced plans to ensure that the whole country is connected to the electricity grid by 2030. Currently only 26% of the country has access and for the plan to succeed the country will need investment in both generation and distribution infrastructure. Part of this extra capacity it is hoped will be provided by two significant new power plants, the 300MW Moatize coal plant and the 400MW Sasol gas plant.

Namibia is another country looking to increase its energy generation capabilities. The country is a net importer of electricity but is looking at options to increase capacity, most notably through the 250MW gas

power plant in Walvis Bay. On the renewables side, projects in development include a 45.5MW solar project outside of Mariental, a 40MW biomass plant in Otjiwarongo and a 150MW solar project near Swakopmund.

It is a somewhat unusual time for the South African energy and infrastructure market at the moment. Politically and economically the country is struggling, with its credit rating downgraded to junk status in April 2017 and the rand continuing to drop against the dollar. Yet in 2016 there was a 38% uptick in foreign direct investment (FDI) – leading Africa for FDI that year – with energy and telecommunications making up a significant proportion of it.

Energy development is guided by the Department of Energy's Integrated Resource Plan 2010-30 (IRP), first published in 2011. It is what the government describes as a 'living plan', in that it is open to change in the face of new developments, but one of the key takeaways from it is the aim to increase net installed capacity to 81,000MW by 2030, from just under 50,000MW currently.

Reaching that goal involves a multipronged approach, developing new generation from a diversified portfolio of sources including coal, gas-to-power, nuclear and renewables. In particular there is a plan to move away from coal, reducing the country's reliance on that to about two-thirds of the total installed capacity – down from more than four-fifths currently. While megaprojects such as the Medupi power plant are going ahead, others such as the planned Thabametsi coal plant may fall foul of that goal.

Instead, the country will be looking to alternatives, with renewables set to make up a big part of the coal shortfall. The IRP sets out a plan to produce 21% of the country's power from renewable sources, a total output of 17,800MW, by 2030. And investment interest in renewables is very strong as well, with more than \$12 billion coming into the market between 2011 and the middle of 2016.

Under the government's Renewable Energy Independent Power Producer Procurement Programme (REIPPPP) more than 6,000MW of renewable energy have been procured in the first four rounds. These programmes have included large-scale solar parks – utilising photovoltaic, concentrated solar and solar thermal technologies, wind farms and even biomass plants. In total, the IRP calls for 8,400MW of solar and 8,400MW of wind to be installed by 2030.

AFRICA / SOUTHERN AFRICA

The other major energy source in the IRP is nuclear, with 9,600MW of planned capacity. While upgrades to existing resources are ongoing, however, the subject of new capacity has become something of a political hot potato. A review of the programme in 2016 set much lower targets than the original document while the costs spiralled upwards. Political pressure for the projects to go ahead remains strong but reports that the additional production would be surplus to requirements and questions of corruption in the procurement process have made it an increasingly unpopular option. Indeed, the escalating planned costs of more than ZAR1 trillion played a part in the decisions by credit rating agencies to downgrade the country to junk status.

Political and economic challenges do threaten to derail South Africa's seemingly inexorable expansion of its power generation capabilities. It has been reported that one of the biggest threats to new projects comes not from a lack of willing investors and developers but from the inability of the powers that be to maintain an effective procurement process. However, the appetite certainly remains and many in the market feel that 2017 will be a defining year, whether positively or negatively. If the political storm can be weathered and the ship righted by the beginning of 2018, the fu-

ture ahead looks very bright. If it can't, and projects are pushed back by 18 months or two years because of political rather than economic issues, then it could very well be that investors abandon the market and look elsewhere, leaving South Africa to sink without a trace.

Swaziland is another southern African country looking to exploit natural reserves of fossil fuels. The clearest sign of this is the signing of a memorandum of understanding (MoU) with JSW Energy related to the construction of a new 500MW coal fired power plant in the country. 2016 also saw the completion of the country's first solar power plant at Buckswood and the announced intention to build a 35MW biomass plant as the country tries to diversify its energy mix.

In Zambia, efforts are underway to increase renewable energy generation. Only around 20% of the country has regular access to electricity but the country has ambitious plans to not only increase this but also become an electricity hub for the Southern Africa region.

In solar the firm is making full use of the World Bank's Scaling Solar programme, which has been set up to encourage the development of renewable energy. In 2017 the country announced a procurement round for 200MW of new capacity with an ultimate aim of having 500MW of installed capacity.

Hydroelectric is another area of activity with projects like the 2400MW Batoka Gorge, the 750MW Kafue Gorge Lower and the 120MW Itezhu Tezhi being developed.

In May 2017 the government also announced that it was looking at nuclear as a way of diversifying its energy mix. Although at a very early stage, the country has already had discussions with China, Russia and South Africa about the technology required.

In Zimbabwe, the two most significant projects being developed in the energy sector are the extension and rehabilitation of the Kariba South hydroelectric plant and the Hwange coal power plant.

The projects have taken on an increased importance given the issues the country has had with importing electricity from South Africa. In May 2017, South African state utility Eskom threatened to cut off power to the country due to unpaid bills, a serious issues considering that the country imports 300MW a day from its neighbour.

The country is also facing challenges in regards to infrastructure, with vast investment needed to spur economic growth. While some projects like the north/south Beitbridge-Harare-Chirundu highway are underway, much more is needed to encourage much needed foreign investment.



Below is a selection of energy and infrastructure deals taken from IFLR1000 Deal Data.

For more information and to browse the full database for the EMEA region please visit: http://www.iflr1000.com/Search/Deals

Caculo Cabaça 2171MW hydroelectric power plant

Jurisdiction:

Angola

Deal types:

Project development; Project finance

Industry sector:

Energy

Firms: Ashurst

Party: Industrial and Commercial Bank of China Ltd (Arranger)

Norton Rose Fulbright

Party: Angola Ministry of Finance (Borrower)

Overview:

- The dam is to be built on the Kwanza River in northwest Angola and is set to be the biggest power project in Angola's history.
- The project is part of a wider plan by the Angolan government to produce 9000MW of energy by 2025, turning the country into an exporter of electricity to markets such a Namibia and South Africa.
- The project is being developed and constructed by a consortium made up of China Gezhouba Group Corporation, Boreal Investments and Niara-Holding.
- \$4.5 billion in financing is being provided by a consortium of lenders led by Industrial and Commercial Bank of China (ICBC).
- Hydropower accounts for more than two thirds of Angola's energy generation and the Kwanzi river itself already has two dams: the 180MW Cambambe and the 130MW Capanda, while a third the 2069.5MW Laúca Dam is under construction.

Cambambe II 700MW hydroelectric power plant

Jurisdiction:

Angola

Deal types:

Project development; Project finance

Industry sector:

Energy

Firms: Dentons

Party: HSBC (Mandated lead arranger); Societé Générale (Mandated lead arranger)

MC&A in association with Mota Veiga Advogados

Party: HSBC (Mandated lead arranger)

Norton Rose Fulbright

Party: CESCE – Compañía Española de Seguros de Crédito a la Exportación (Lender); Euler Hermes (Lender); HSBC (Mandated lead arranger); Societé Générale (Mandated lead arranger)

- The Angolan government has secured an aggregated €560 million export credit facility to fund Phase II of the Cambambe Hydroelectric Power Station, in Kwanda.
- The project consortium is made up of Construtora Norberto Odebrecht, Sucursal Angola and Odebrecht Angola Projectos e Serviços.
- The financing is made up of three facilities; a €292 million Miga backed facility, a €156.7 million Cesce backed facility and a €111.1 million Euler Hermes guaranteed facility.
- HSCB and Société Génerale acted as mandated lead arrangers, BBVA, BHF, Caixabank, Santander and SEK also acted as arrangers.
- Phase II consists of the 180MW expansion of the existing plant, and the construction of four new turbines with an additional 700MW of generating power.
- The project is part of a wider plan by the Angolan government to produce 9GW of energy by 2025, turning the country into an exporter of electricity to markets such a Namibia and South Africa.

Laúca Dam 2070MW hydroelectric power plant

Jurisdiction:

Angola

Deal types:

Project development; Project finance

Industry sector:

Energy

.....

Norton Rose Fulbright

Party: Angola Ministry of Finance (Borrower)

Overview

- The dam is to be built on the Kwanza River in Angola. It is 132m tall
 and will create will create a reservoir of 188 square km. Electricity will
 be produced by six generating units.
- Brazilian company Odebrecht is the EPC contractor.
- The overall cost of the project is \$4.3 billion. Part of this financing (€400 million) was provided by HSBC, UniCredit and AKA Bank and supported by CESCE, Oesterreichische Kontrollbank Aktiengesellschaft and a Hermes led consortium.
- The project is part of a wider plan by the Angolan government to produce 9GW of energy by 2025, turning the country into an exporter of electricity to markets such a Namibia and South Africa.
- Hydropower accounts for more than two thirds of Angola's energy generation and the Kwanzi river itself already has two dams: the 180MW Cambambe and the 130MW Capanda, while a third, the 2.171GW Caculo Cabaça is being developed.

Morupule A 132MW coal power plant rehabilitation

urisdiction:

Botswana

Deal type:

Project development

Industry sector:

Energy Firm:

Norton Rose Fulbright

Party: Botswana Power Corporation (BPC) (Grantor)

Overview

- The Botswana Power Corporation (BPC) and Doosan Heavy Industries & Construction Co have entered into agreement for the rehabilitation of the coal power plant.
- The plant consists of four generators, each producing 33MW.
- Morupule A was originally set to be shut down following the development of Morupule B before plans were put in place to refurbish the plant in 2013.
- The power station was initially constructed in 1989.

Morupule B coal power plant Units 5-6 (300MW)

Jurisdiction:

Botswana

Deal types:

Project development; Project finance

Industry sector:

Energy

Firms:

Baker McKenzie

Party: Marubeni Corporation (Project developer); Posco Energy (Project developer)

Collins Newman & Co

Party: Botswana Power Corporation (BPC) (Grantor); Government of Botswana (Grantor)

Linklaters

Party: The Export-Import Bank of Korea (Lender); Japan Bank for International Cooperation (Lender); Mizuho Bank (Lender); NEXI – Nippon Export and Investment Insurance (Lender); Sumitomo Mitsui Banking Corporation (Lender); The Export-Import Bank of Korea (Lender); The Bank of Tokyo-Mitsubishi UFJ (Lender)

Minchin & Kelly

Party: Marubeni Corporation (Project developer)

Norton Rose Fulbright

Party: Botswana Power Corporation (BPC) (Grantor)

- The Botswana Power Corporation (BPC) has undertaken a project to expand the existing Morupule B power station.
- Morupule B was initially planned as a 600MW power station consisting of four 150MW units.
- In 2014 it was announced that BPC was looking to add an additional two units (Units 5 and 6) with a combined capacity of 300MW to the existing plant. This expansion had originally been planned as a separate plant called Morupule C.
- The project is adjacent to the existing Morupule A power plant.
- Marubeni Corporation and Posco Energy are developing the project and have signed a 30-year PPA.
- The Export-Import Bank of Korea (KEXIM), Nippon Export and Investment Insurance (NEXI), Japan Bank for International Cooperation, Mizuho Bank, The Bank of Tokyo-Mitsubishi UFJ and Sumitomo Mitsui Banking Corporation are providing \$600 million of the projects cost.

Moatize-Nacala railway and port project

Jurisdictions:

Mozambique; Malawi

Deal types:

Project development; Project finance

Industry sector:

Transport

Firms:

Avillez Bacar Centeio & Cambule - Sociedade De Advogados (ABCC)

Party: International Finance Corporation (IFC) (Lender); Japan Bank for International Cooperation (Lender)

Linklaters

Party: International Finance Corporation (IFC) (Lender); Japan Bank for International Cooperation (Lender)

Shearman & Sterling

Party: Vale (Borrower)

Overview

- Corredor Logístico Integrado de Nacala a joint venture between Mozambique state railway operator CFM (20%) and Brazilian mining firm Vale (80%) – is developing the railway line linking Mozambique with neighbouring Malawi.
- The Nacala railway is a 912km line connecting the Moatize mine in Mozambique to the Nacala port in Malawi.
- The project also involves the development of a deep-sea port at Nacala.
- Japan Bank for International Cooperation and the IFC have provided around \$3 billion in financing for the project.

Coral South floating LNG project (Rovuma basin Area 4)

Jurisdiction:

Mozambique

Deal types:

Project development; Project finance

Industry sector:

Oil and gas

Firms:

Allen & Overy

Party: Bank of China Ltd (Lender); China Development Bank (Lender); China Export & Credit Insurance Corporation (Sinosure) (Lender); COFACE – Compagnie Française d'Assurance pour le Commerce Extérieur (Lender); Industrial and Commercial Bank of China Ltd (Lender); Korea Trade Insurance Company (K-Sure) (Lender); SACE – Servizi Assicurativi del Commercio Estero (Lender); The Export-Import Bank of China (Lender); The Export-Import Bank of Korea (Lender)

Dentons

Party: Government of Mozambique (Grantor)

Linklaters

Party: China National Petroleum Corporation (CNPC) (Borrower, Project developer); Empresa Nacional de Hidrocarbonetos – ENH (Borrower, Project developer); Eni (Borrower, Project developer); Galp Energia (Borrower, Project developer); Korea Gas Corporation – KOGAS (Borrower, Project developer)

Overview

- Eni, China National Petroleum Corporation (CNPC), Korea Gas Corporation – KOGAS, Galp Energia and Empresa Nacional de Hidrocarbonetos – ENH are developing Area 4 of the Rovuma basin LNG project.
- The project consists of six subsea wells linked to an FLNG vessel.
 The project has a liquefaction capacity of 3.3 million tonnes annually.
- The project developers have signed a 20-year agreement with BP for the sale of the LNG produced.
- Financing for the project was provided by Bank of China, China
 Development Bank, The Export-Import Bank of China, Industrial and
 Commercial Bank of China, The Export-Import Bank of Korea
 (KEXIM), Korea Trade Insurance Company (K-Sure), SACE,
 COFACE, China Export & Credit Insurance Corporation (Sinosure)
 and 20 commercial lenders.
- Samsung Heavy Industries is believed to be the company chosen to construct the FLNG vessel itself.
- In March 2017 ExxonMobil acquired a 25% indirect interest in the Area 4 block from Eni for \$2.8 billion.

Moatize 300MW coal power plant

Jurisdiction:

Mozambique

Deal type:

Project development

Industry sector:

Energy

Firms

Chadbourne & Parke

Party: Lenders (Lender)

Shearman & Sterling

Party: ACWA Power (Borrower, Sponsor); Mitsui (Borrower, Sponsor); Vale (Borrower, Sponsor)

- ACWA Power is developing a 300MW coal fired power project in Tete province in Mozambique.
- The 25 year concession from the Mozambique government is for the development of a 600MW project, the current 300MW project is the first phase.
- Vale, a Brazilian mining company, and Mitsui are also acting as sponsors. Electricity de Mozambique (EDM) and Whatana Investment Group are minority shareholders in the project.
- 250MW of the power output will go toward powering the Moatize coal mine.
- GS Engineering & Construction is acting as EPC contractor.

Mozambique LNG project (Rovuma basin Area 1)

Jurisdiction:

Mozambique

Deal types:

Project development; Project finance

Industry sector

Oil and gas

Firms:

Dentons

Party: Government of Mozambique (Grantor)

King & Spalding

Party: Anadarko Petroleum (Project developer)

Latham & Watkins

Party: Anadarko Petroleum (Borrower)

Overview

- Anadarko Petroleum is developing Area 1 of Mozambique's LNG resources in the Rovuma basin in the Prosperidade and Golfinho/Atum areas.
- Anadarko first made an LNG discovery in 2010, with a final investment decision expected in 2017.
- Production is expected to begin in 2022-23. It is estimated that the area contains 75 trillion cubic feet of gas reserves.
- The project also includes the construction of an LNG terminal on the Afungi peninsula which requires a resettlement plan for the existing community on the site.
- In December 2015 Anadarko and Eni (the developer of Area 4)
 executed a unitization and unit operating agreement (UUOA) relating
 to the gas resources that straddle Areas 1 and 4.

Walvis Bay 250MW gas power plant PPP

Jurisdiction:

Namibia

Deal types:

PPP; Project development; Project finance

Industry sector:

Energy

Firms:

Bowman Gilfillan

Party: Nedbank (Lender); Standard Bank of South Africa (Lender)

Engling Stritter & Partners

Party: Xaris Energy (Project developer)

Freshfields Bruckhaus Deringer

Party: Nedbank (Lender); Standard Bank of South Africa (Lender)

Webber Wentzel

Party: Xaris Energy (Project developer)

Overview

- Xaris Energy is developing a gas fired power plant fuelled by natural gas brought to the plant via pipeline from a floating storage and regasification unit (FRSU).
- Xaris Energy is an SPV with Xaris Holdings, Ariya Capital Group and NamPower as shareholders.
- Garanti Koza is acting as EPC contractor.
- Standard Bank of South Africa is acting as lead arranger on the debt financing with Nedback also acting as lender.
- The project is vital for the country which in 2017 still imports 60% of its electricity.

Beitbridge border post redevelopment

Jurisdiction

South Africa; Zimbabwe

Deal type:

Project development

Industry sectors:

Social infrastructure

Norton Rose Fulbright incorporated as Deneys Reitz

Party: Standard Bank of South Africa (Lender)

Werksmans Attorneys

Party: WBHO Construction (EPC contractor)

- Beitbridge is one of the busiest border crossings in Southern Africa, with a notable volume of rail and road transported goods are currently transported via the corridor.
- Redevelopment of the border post will make the crossing between South Africa and Zimbabwe much quicker.
- The Standard Bank of South Africa acted as lender, providing \$125 million financing.

Boikarabelo coal mine handling and preparations plant

risdiction:	
outh Africa	
eal type:	
roject development	
dustry sectors:	
ining	
rm:	
NSafrica	
arty: Ledjadja Coal (Project company)	

Overview

- Project company Ledjadja Coal is developing a coal handling and preparations plant (CHPP) for the Boikarabelo coal mine being developed by parent company Resource Generation.
- The project includes the development and financing of a CHPP, with the intended outcome the supply coal to international and local offtakers, primarily South Africa's state-owned electricity public utility Eksom.
- The coal quantity to be delivered is 15mt/annum, making this one of the largest greenfield mining developments in South Africa.

Bokpoort 50MW concentrated solar thermal plant

Jurisdiction:
South Africa
Deal type:
Project development; Project finance
Industry sectors:
Energy
Firm:
Baker McKenzie

Party: ACWA Power (Project developer)

Overview:

- Bokpoort 50MW concentrated solar thermal plant in the Northern Cape of South Africa.
- ACWA Power acted on the development, construction, financing and commissioning of the project.
- The project is valued at approximately ZAR3.5 billion.
- The plant is part of South Africa's renewable energy independent power producer procurement (REIPPP) programme.
- The plant opened on March 14, 2016.

Denneboom Station development funding

Party: Interden Management Services (Project company)

- The Denneboom Station in Mamelodi is undergoing a massive redevelopment.
- When completed, the precinct will include a mall and a public transport facility.
- The space will serve all public transport modes in the area including taxis, subway, buses and trains.
- Equity and debt funding was provided by the Public Investment Corporation.

AFRICA / SOUTHERN AFRICA

Party: Enel Green Power (Project company)

Gibson Bay 111MW wind farm

Jurisdiction:	
South Africa	
Deal type:	
Project development	
Industry sectors:	
Energy	
Firm:	
Clifford Chance	

Overview:

- The Gibson Bay wind farm in South Africa consists of 37 turbines with a total capacity of 111 MW.
- Italian company Enel Green Power and its South African subsidiary are developing the project.
- It was constructed primarily by Nordex and should generate about 420,000 MWh of power per year.
- The farm began operations in May 2017.
- KfWIPEX-Bank provided the €160 million financing, part of which was secured by an export credit guarantee by the Federal Republic of Germany.
- Enel is a major global operator in the field of renewable energy generation with 740 plants in 15 countries across Europe, North and South America and Africa.

Goldwind Africa 120MW and 32.5MW wind farms

dolawilla milea 1201/1 w alla 32.31	V .
Jurisdiction:	
South Africa	
Deal type:	
Project development	_
Industry sectors:	
Energy	
Firm:	
ENSafrica	-
Party: Goldwind Africa (Project developer)	

Overview:

- Goldwind Africa 120MW and 32.5MW wind farms.
- The projects include the construction of the 120MW Golden Valley wind farm in the Eastern Cape province and the 32.5MW Excelsior wind farm project in the Western Cape province.
- The Golden Valley farm is comprised of 48 2.5MW Goldwind 121/2500 low wind turbines and will be the first direct drive turbines to be installed in South Africa.

Kalkaar 150MW concentrated solar power plant

Jurisdiction:
South Africa
Deal type:
Project development Project development
Industry sectors:
Energy
Firm:
Werksmans Attorneys
Party: SolarReserve (Project company); Engie (Sponsor)

- The Kalkaar 150MW concentrated solar power (CSP) plant project is a solar project based in Free State province.
- It is being developed by US developer SolarReserve and French utility Engie, which are also developing the Rooipunt 150MW CSP project and the Kotulu Tsatsi 150MW CSP project.
- This is one of the largest CSP projects bid under the government's independent power producers procurement programme.

Kathu Solar Park concentrated solar power plant

Jurisdiction:

South Africa

Deal type:

Project development; Project finance

Industry sectors:

Energy

Firm

Chadbourne & Parke

Party: Engie (Sponsor)

Linklaters

Party: Rand Merchant Bank (RMB) (Lender); Absa Bank (Lender); Investec (Lender); Nedbank (Lender); Development Bank of Southern Africa (DBSA) (Lender)

Norton Rose Fulbright incorporated as Deneys Reitz

Party: Engie (Sponsor)

Webber Wentzel

Party: Rand Merchant Bank (RMB) (Lender); Absa Bank (Lender); Investec (Lender); Nedbank (Lender); Development Bank of Southern Africa (DBSA) (Lender)

Overview

- The Kathu Solar Park is a 100MW greenfield concentrated solar power (CSP) project that uses parabolic trough technology.
- It uses a molten salt storage system that allows for 4.5 hours of thermal energy storage.
- The site is located in the Northern Cape Province, 600km to the south west of Pretoria.
- The park is expected to be operational by the second half of 2018.
- After construction Kathu will be one of the largest CSP plants in the world
- Engie was nominated as the preferred bidder by the South African Department of Energy, in the third round of the Renewable Energy Independent Power Producer Procurement (REIPPP) programme.
- Firstrand Bank, acting through its Rand Merchant Bank division, ABSA Bank, Investec Bank, Nedbank and the Development Bank of South Africa (DBSA) were lenders for the project.
- The debt funding structure will utilise a large tranche of CPI Index linked debt
- The project signed a 20-year power purchase agreement with South Africa's state-owned power utility Eksom in May 2016.

Khi Solar One 50MW concentrated solar power plant

Jurisdiction:

South Africa

Deal type:

Project development

Industry sectors:

Energy

Firm:

Hogan Lovells (South Africa)

Party: Abeinsa EPC Khi (Project company)

Overview:

- Khi Solar One is a 50MW utility-scale concentrating solar power plant being constructed by Abengoa near the town of Upington in the Northern Cape Province.
- The project is a partnership between Industrial Development Corporation, the Black Economic Empowerment Program and Abengoa.
- Khi deploys a new technology in South Africa and provides sustainable power for approximately 65,000 homes.

Koeberg nuclear power plant upgrade

Jurisdiction:

South Africa

Deal type:

Project development

Industry sectors:

Energy Firm:

Dentons

Party: Areva NP (Project developer)

- Koeberg nuclear power plant upgrade.
- Areva is working on replacing steam generators at the Koeberg nuclear power plant.
- The company is responsible for designing, manufacturing and installing the generators.
- Installation of the components is expected to take place during scheduled shutdowns of the two units in 2018.
- This was the first major nuclear transaction in South Africa in the last 10 years.

Kotulo Tsatsi 150MW concentrated solar power plant

Jurisdiction: South Africa Deal type: Project development Industry sectors: Energy Firm:

Werksmans Attorneys

Party: SolarReserve (Project company); Engie (Sponsor)

Overview:

- The Kotulo Tsatsi 150MW concentrated solar power (CSP) plant project is a solar project based in Northern Cape province.
- It is being developed by US developer SolarReserve and French utility Engie, which are also developing the Rooipunt 150MW CSP project and the Kalkaar 150MW CSP project.
- This is one of the largest CSP projects bid under the government's independent power producers procurement programme.

Medupi dry-cooled power station

Jurisdiction: South Africa Deal type: Project development Industry sectors: Energy

Baker McKenzie

Firm:

Party: Medupi Power Station Joint Venture (EPC contractor)

Bowman Gilfillan
Party: Eskom (Owner)

Overview:

- The Medupi dry-cooled power station is a greenfield coal-fired, drycooled power plant located near Lephalale, Limpopo.
- The plant is owned and operated by Eksom, South Africa's stateowned public electricity utility.
- It will be the largest of its kind in the world upon completion. The boiler and turbine contracts for the plant are the largest contracts Eskom has signed in its 90-year history.
- It is the fourth dry-cooled, baseload station built by Eskom in the past 20 years after Kendal, Majuba and Matimba.
- Unit five of the station began commercial operations in April 2017, one year ahead of schedule.

Mkuze 16.5MW biomass facility

Jurisdiction: South Africa Deal type: Project development Industry sectors: Energy Firm:

Baker McKenzie

Party: Rand Merchant Bank (RMB) (Lender)

Chadbourne & Parke

Party: Building Energy (Sponsor)

- The Mkuze 16.5MW biomass facility is a power plant begin constructed in KwaZulu-Natal by Tongaat Hulett.
- The facility will burn sugar cane tops and trash to generate power.
- The main plant components will consist of a boiler steam turbine, a generator and a fuel handling system.
- This transaction is the first biomass project in South Africa's Renewable Energy Independent Power Producer Procurement Programme (REIPPPP).
- Rand Merchant Bank, a division of FirstRand Bank, acted as lender in the almost \$100 million transaction.

Noupoort Wind Farm

Jurisdiction:

South Africa

Deal type:

Project development

Industry sectors:

Energy

irm:

Bowman Gilfillan

Party: Absa Bank (Lender); Development Bank of Southern Africa (DBSA) (Lender)

Fasken Martineau incorporated as Bell Dewar

Party: South Africa Mainstream Renewable Power Noupoort (Borrower)

Simmons & Simmons

Party: Absa Bank (Lender); Development Bank of Southern Africa

(DBSA) (Lender)

Stoel Rives

Party: South Africa Mainstream Renewable Power Noupoort (Borrower)

Overview:

- The Noupoort Wind Farm is an 80MW Mainstream Noupoort plant located in the Umsobomvu Municipal Area, 10km east of Noupoort in the Northern Cape.
- It has 35 99m-high wind turbines turbines and was completed in 2016.
- A consortium of Murray & Roberts and Conco completed the construction while Siemens Wind supplied and installed the turbines
- When operating at full capacity, the farm generates around 304,800MWh of clean renewable energy per year and is expected to supply electricity to power up to 69,000 South African homes.
- Lenders Absa Bank and Development Bank of Southern Africa provided the \$135 million financing.

Prieska 75MW photovoltaic solar power plant

Jurisdiction:

South Africa

Deal type:

Project development

Industry sectors:

Energy

Firm:

Fasken Martineau incorporated as Bell Dewar

Party: Nedbank (Lender); Absa Bank (Lender); Industrial Development Corporation (Lender)

Norton Rose Fulbright incorporated as Deneys Reitz

Party: Total (Sponsor); SunPower (Project developer); Mulilo Renewable Energy (Borrower)

Overview:

- The Prieska 75MW photovoltaic solar power plant was constructed by Total through its South African affiliate SunPower in the Northern Cape province.
- Nedbank, Absa Bank and the Industrial Development Corporation of South Africa provided a term loan facility for the project.
- The plant was secured through a co-development contract signed with Mulilo Renewable Energy.
- Total holds a 27% stake in the project alongside Calulo Renewable Energy (25%), Mulilo Renewable Energy (18%), Industrial Development Corporation (15%), Futuregrowth Asset Management (10%) and a local municipality (5%).
- The plant was initiated by the Department of Energy under its Renewable Energy Independent Power Producer Procurement Programme (REIPPPP).

Redstone 100MW solar thermal power plant

Jurisdiction:

South Africa

Deal type:

Project development; Project finance

Industry sectors:

Energy

Firm

Webber Wentzel

Party: International Finance Corporation (IFC) (Lender); Standard Bank of South Africa (Lender); Nedbank (Lender); KfW (Lender); Overseas Private Investment Corporation (OPIC) (Lender)

Werksmans Attorneys

Party: ACWA Power (Project developer); SolarReserve (Project developer)

- The Redstone 100MW solar thermal power plant is a tower facility project in the Northern Cape Province of South Africa.
- It is part of the Renewable Energy Independent Power Producer Procurement Programme's (REIPPPP) third round.
- When complete, it will produce 480,000MW-hours annually.
- The project has been financed by ZAR2.4 billion of equity investment and ZAR5.6 billion of debt provided by local and international lending institutions including DFIs.

AFRICA / SOUTHERN AFRICA

Roggeveld 140MW wind farm

Party: Rand Merchant Bank (RMB) (Mandated lead arranger)

Jurisdiction:	
South Africa	
Deal type:	
Project development; Project finance	
Industry sectors:	
Energy	
Firm:	
Bowman Gilfillan	

Overview

- The project comprises a 140 MW wind farm facility in the Northern Cape province.
- The farm is expected to start commercial operation in September 2018.
- The financing provided by Rand Merchant Bank involves a complex mix of CPI Linked Debt funding together with a normal JIBAR Facility.

Rooipunt 150MW concentrated solar power plant

Jurisdiction:	
South Africa	
Deal type:	
Project development	
Industry sectors:	
Energy	
Firm:	
Werksmans Attorneys	

Party: SolarReserve (Project company); Engie (Sponsor)

Overview:

- The Rooipunt 150MW concentrated power plant (CSP) project is a solar project based in Northern Cape province.
- It is being developed by US developer SolarReserve and French utility Engie, which are also developing the Kotulo Tsatsi 150MW CSP project and the Kalkaar 150MW CSP project.
- This is one of the largest CSP projects bid under the government's independent power producers procurement programme.

Sappi Southern Africa biomass plant

Jurisdiction:
South Africa
Deal type:
Project development
Industry sectors:
Energy
Firm:

Norton Rose Fulbright incorporated as Deneys Reitz Party: Sappi Southern Africa (Project company)

- The Sappi Southern Africa biomass plant project involves the ZAR1 billion construction of a 25MW biomass-to-power plant located at Sappi's Ngodwana mill.
- Sappi Southern Africa acts as the project company and sponsor in relation to the financing required for construction and operation of the facility.
- It is one of the first biomass facilities to be built in South Africa to contribute also to the renewable energy mix, which makes it both geographically and commercially important.
- The project is expected to be completed in 2018.

Sinopec \$900 million acquisition of Chevron South Africa and Chevron Botswana

Jurisdiction:

South Africa; Botswana

Deal type:

Public acquisition

Industry sectors:

Oil and gas

Firm:

DLA Piper

Party: China Petroleum & Chemical Corporation (Acquirer)

Latham & Watkins
Party: Chevron (Seller)

Overview

- The China Petroleum & Chemical Corporation (Sinopec) has completed the \$900 million acquisition of Chevron South Africa and Chevron Botswana from Chevron Global Energy.
- Sinopec purchased 75% of the shares in Chevron South Africa and 100% of the shares in Chevron Botswana and the move marks the company's entry into the South African and Botswanan downstream markets.
- Chevron South Africa and Chevron Botswana collectively form one of the largest integrated downstream oil businesses in Sub-Saharan Africa

Steyn City complex development

Jurisdiction:

South Africa

Deal type:

Project development

Industry sectors:

Realestate

Firm

Werksmans Attorneys

Party: Steyn City Properties (Project company)

Overview

- The Steyn City complex development involves the construction of a new residential and commercial complex to the north of Fourways in Johannesburg.
- It is a 2,000 acre estate comprised of residential units, a golf course and commercial space.
- ZAR6.5 billion was been spent on the first phase and more than ZAR50 billion is expected to be spent for the second phase of the development
- Specifics of the project included a major upgrade of provincial roads, the development of new provincial roads and the construction of a entire new residential disrtict.

Thabametsi 630MW coal fired power plant

lurisdiction

South Africa

Deal type:

Project development

Industry sectors:

Energy

Firm:

Baker McKenzie

Party: Marubeni Corporation (Sponsor)

Werksmans Attorneys

Party: Marubeni Corporation (Sponsor); Korea Electric Power Corporation (KEPCO) (Sponsor)

- The Thabametsi 630MW coal fired power plant, also known as also known as the Grootegeluk power station, is a proposed power plant being developed by the Marubeni Corporation and Exxaro Resources.
- The plant will be located in Lephalale, Limpopo, adjacent to Exxaro's existing Grootegeluk Complex.
- It is one of the first projects bid under the government's Coal Baseload IPP Procurement Programme.
- The financing for the project is provided by Nedbank, Standard Bank, Rand Merchant Bank (part of FirstRand Bank), the Development Bank of Southerb Africa and Absa Bank.
- In March 2017 the High Court in Pretoria set aside a decision by Environmental Affairs Minister Edna Molewa to authorise the plant due to the lack of a climate change impact assessment, one of the first climate change litigations in the country.

AFRICA / SOUTHERN AFRICA

Tshwane fibre optic network

Jurisdiction:

South Africa

Deal type:

Project development

Industry sectors:

Technology and telecommunications

Firm:

ENSafrica

Party: Thobela Telecoms (Project developer)

Werksmans Attorneys

Party: Absa Capital (Mandated lead arranger, Lender)

Overview

- Thobela Telecoms has completed the rollout of a terrestrial broadband fibre optic network for the City of Tshwane.
- The total project cost was ZAR1.7 bilion.
- Absa Capital a division of Absa Bank served as mandated lead arranger and lender for the matter.
- The project was structured as a build-operate-transfer deal.

Western Cape Government – 13 Dorp Street

Jurisdiction:

South Africa

Deal type:

PPP; Project development

Industry sectors:

Government and public policy

Firm:

Werksmans Attorneys

Party: Lwazi Consortium (Project company); WBHO Construction Proprietary (Project developer)

Overview

- The Western Cape Education Department is developing a new office site at 13 Dorp Street in Cape Town.
- The project is expected to cost in the region of ZAR1 billion and will be structured as a public-private partnership (PPP).
- The site to be developed is bordered by Loop, Leeuwen, Dorp and Bree Streets and entails the construction of a 22,000m2 office building.
- It has been registered with the National Treasury and Treasury Approvals (TA 1 and TA 11A) have been granted.

Xina Solar One 100MW concentrated solar power plant

lurisdiction:

South Africa

Deal type:

Project development; Project finance

Industry sectors:

Energy Firm:

ENSafrica

Party: Abengoa (Project developer) Lawyers: Eric le Grange, Sasha Singh

Webber Wentzel

Party: African Development Bank (Lender), International Finance Corporation (IFC) (Lender), Industrial Development Corporation (Lender); Development Bank of Southern Africa (DBSA) (Lender); Barclays (Lender); Nedbank (Lender)

- Xina Solar One is a 100MW parabolic trough solar plant being constructed in Pofadder, South Africa, by Abengoa.
- Construction on the plant began in 2014, and should be completed by 2017.
- It will supply Eskom, South Africa's electricity supply company, with electricity under a 20-year power purchase agreement.
- The project was funded through a \$660 million credit facility, lent by a consortium of international finance institutions and commercial banks.
- The lenders included the African Development Bank, the IFC, the Industrial Development Corporation (IDC), the Development Bank of Southern Africa, Barclays, Nedbank and Rand Merchant Bank.
- The developer estimates that total investment will amount to \$880 million.
- Abengoa controls 40% of the consortium that owns the project, with the other 60% controlled by the IDC, the Public Investment Corporation (PIC) and the KaXu Community Trust.

Bangweulu 50MW solar power plant

Jurisdiction:

Zambia

Deal type:

Project development

Industry sector:

Energy

Firm:

Trinity International

Party: Neoen (Project developer)

Overview:

- Neoen and First Solar are developing a new solar photovoltaic project in Bangweulu.
- The project is part of the World Bank's Scaling Solar programme.

Batoka Gorge 2400MW hydroelectric power plant

Jurisdictions:

Zambia; Zimbabwe

Deal type:

Project development

Industry sector:

Energy

Firm:

Webber Wentzel

Party: Zambezi River Authority (Grantor)

Overview:

- Located on the border between Zambia and Zimbabwe, 54km downstream from Victoria falls and upstream of the Kariba hydroelectric power plant, the project will see the construction of a 181m high dam and two generators, one on each side of the border.
- The original capacity of the project was 1600MW but this was expanded in early 2015 to 2400MW.
- The size of the project should allow both Zambia and Zimbabwe to become electricity exporters.
- The African Development Bank is acting as lead financial adviser on the project.

Itezhi Tezhi 120MW hydroelectric power plant PPP

Jurisdiction:

Zambia

Deal types:

PPP; Project development

Industry sector:

Energy Firm:

Chadbourne & Parke

Party: Itezhi Tezhi Power Corporation (Project company)

- Itezhi Tezhi Power Corporation, a joint venture between ZESCO and Tata, is constructing a new hydroelectric power plant on the Kafue river.
- The project consists of two 60MW turbines.
- The original dam at the site built in 1977 has a height of 62m creating a reservoir of 390 square km.
- In the mid-2000s the government took the decision to build a power plant at the site to tackle the country's energy crisis.
- The African Development Bank (AfDB), the Dutch Development Bank FMO, the Development Bank of Southern Africa (DBSA) and Propaco of France provided \$142 million in financing for the project.

Kafue Gorge Lower 750MW hydroelectric power plant

Jurisdiction:

Zambia

Deal types:

Project development; Project finance

Industry sector:

Energy

Firms

Corpus Legal Practitioners

Party: Zambia Electricity Supply Corporation (ZESCO) (Grantor)

Herbert Smith Freehills

Party: Zambia Electricity Supply Corporation (ZESCO) (Grantor)

Norton Rose Fulbright incorporated as Deneys Reitz

Party: Development Bank of Southern Africa (DBSA) (Lender)

Overview

- Zambia Electricity Supply Corporation (ZESCO) and Sinohydro are developing the project which is located on the Kafue river, 17.3km downstream from the existing Kafue Gorge Upper hydroelectric power plant.
- The project consists of the construction of a 140m high dam and five 150MW generating units.
- Development Bank of Southern Africa (DBSA) has provided \$100 million in financing for the project.

Lusaka South 100MW solar photovoltaic power plant

Jurisdiction:

Zambia

Deal types:

Project development; Project finance

Industry sector:

Energy

Firms

Corpus Legal Practitioners

Party: International Finance Corporation (IFC) (Lender)

Linklaters

Party: International Finance Corporation (IFC) (Lender)

Overview

- The IFC has signed an MoU (memorandum of understanding) with the International Development Corporation Zambia (IDC), to develop two 50MW photovoltaic plants.
- The project is part of the World Bank's Scaling Solar initiative to create viable markets for solar power.
- Neoen First Solar and Enel Green Power are the project developers.
- IDC is the parent company of ZESCO, the state-owned electricity company.
- In July 2015 President Edgar Chagwa Lungu directed IDC Zambia to develop at least 600MW of solar power.

Maamba 300MW coal power plant

Jurisdiction:

Zambia

Deal types:

Project development; Project finance

Industry sector:

Energy Firms:

Clifford Chance

Party: Standard Chartered Bank (Lender); Barclays (Lender); Development Bank of Southern Africa (DBSA) (Lender); ICBC (Lender); Industrial Development Corporation (Lender); Standard Chartered Bank (Lender)

Lewis Nathan

Party: Standard Chartered Bank (Lender)

Musa Dudhia & Co

Party: Standard Chartered Bank (Lender)

- Maamba Collieries and strategic partner Nava Bharat are developing a new mine-mouth power plant and 50km transmission line at a site in Zambia's southern province.
- SEPCO is the EPC contractor.
- The project can be potentially expanded to 600-900MW in future.
- The financing package includes one export credit facility and two DFI (Development Finance Institution) facilities.
- Barclays Africa, Standard Chartered Bank, and Bank of China acted as ECA lenders.
- Industrial Development Corporation and Development Bank of Southern Africa (DBSA) acted as DFI Lenders.

Beitbridge-Harare-Chirundu highway PPP

Jurisdiction: Zimbabwe Deal type: Project development Industry sector: Transport Firm:

Manokore Attorneys

Party: Infrastructure Development Bank of Zimbabwe (IDBZ) (Structuring advisor)

Overview

- The project is made up of two separate roads, one at a length of 75km between Chirundu and Harare and one at a length of 571km between Harare and Beitbridge.
- The project is part of the Trans-African Highway Network.

Hwange coal power plant Units 7 and 8 (600MW)

Jurisdiction: Zimbabwe Deal type: Project development; Project finance Industry sector: Energy Firms: Atheretone & Cook

Atherstone & Cook

Party: Standard Bank of South Africa (Arranger); PTA bank (Lender)

Cliffe Dekker Hofmeyr

Party: Southern Energy (Project developer)

Norton Rose Fulbright

Party: Zimbabwe Power Company (ZPC) (Grantor)

Webber Wentzel

Party: Standard Bank of South Africa (Arranger); PTA bank (Lender)

Overview

- Zimbabwe Power Company (ZPC) and Sinohydro have established a joint venture SPV called Hwange Electricity Supply Company (HESCo) to undertake the expansion of the Hwange coal power plant.
- The original plant was constructed between 1983 and 1987 with a capacity of 920MW.
- The China Export Import Bank (Eximbank) is providing \$1.2 billion in financing for the expansion. In addition Standard Bank is acting as arranger on \$120 million of financing to be used both for this project and the Kariba South plant.

Kariba South hydroelectric power plant extension (300MW)

Jurisdiction: Zimbabwe Deal type: Project development; Project finance Industry sector: Energy Firms:

Atherstone & Cook

Party: Standard Bank of South Africa (Arranger); PTA bank (Lender)

Gill Godlonton & Gerrans

Party: Zimbabwe Power Company (Sponsor)

Norton Rose Fulbright

Party: Zimbabwe Power Company (Sponsor)

Webber Wentzel

Party: Standard Bank of South Africa (Arranger); PTA bank (Lender)

- The project will add 300MW to the existing 750MW power plant at Kariba.
- Zimbabwe Power Company has signed an EPC agreement with Sinohydro who are developing the project.
- Standard Bank is acting as arranger on \$120 million of financing to be used both for this project and the rehabilitation of the Hwange plant.
- The first phase 150MW is expected to be complete by 2017 with the second phase due for completion in 2018.
- The original plant had been built in 1962 with a capacity of 666MW before expanding to 750MW.

AFRICA / SOUTHERN AFRICA

Southern Africa

Project finance transactions which reached financial close in 2016 (Data provided by IJ Global)

Name	Country	Sector	Sub sector	Transaction type	Value
Angola LNG Refinancing	Refinancing	Angola	Oil & Gas	LNG	\$1.79 billion
Elandsfontein Phosphate Mine	Primary Financing	South Africa	Mining	Minerals	\$30 million
Harrismith Private Hospital	Primary Financing	South Africa	Social & Defence	Healthcare	\$19 million
Kathu CSP Power Plant (100MW)	Primary Financing	South Africa	Renewables	Thermal Solar	\$782 million

Western Africa

A primary concern for Benin is addressing the country's electricity shortage. To remedy the situation, the government is working with the private sector and development banks on projects to increase the country's power output through both conventional and renewable sources. A 360MW capacity project to develop multiple gas power plants by Genesis Energy is underway and will account for 30% of the country's total production capacity when complete. The EU also recently approved funding of a 25MW solar power plant in the country. Discussions to build LNG import terminal at the Port of Cotonou to support gas-to power projects in the country also continue.

Boosting Benin's economy by increasing regional trade through improved transport links is another priority for teh government. Most obviously this strategy can be seen in two cross-border rail projects. The more advanced is a standard gauge line between Parakou in Benin and Ilorin in Nigeria. The latter, more ambitious project is the West Africa rail loop (Blueline, as its been dubbed), which is intended to connect Ivory Coast, Burkina Faso, Niger, Benin and Togo through a 3000km railway.

Blueline is being developed in stages and French company Bollore has been awarded the concession to build the 1065km stretch – partially through rehabilitating an existing line – between Niger and Benin. One potential obstacle for this section is a lawsuit filed by rival French company Geftarail against the Niger and Benin governments. Geftarail claims the concession granted to Bollore overlaps rights it holds to develop a railway through a an agreement signed in 1999.

Gold is an important resource for Burkina Faso's economy and there have been recent discoveries which may engender new mining projects. Teranga Gold made two discoveries at Golden Hill, and it is exploring eight further target sites.

Cameroon, another country in the re-

gion that regularly suffers power outages as its grid struggles to match demand, is investing in various projects to increase its domestic power production capacity.

Cameroon has a nascent but burgeoning renewable industry. The country's geography gives it the second largest hydropower potential in Africa, and several projects looking to harness this are in progress. The 420MW Nachtigal and 485MW Kpep projects are the most significant, with the first expected to meet around a third of the country's electricity needs and the latter expected to increase domestic power production capacity by 40%.

Benefitting from high proven natural gas reserves, Cameroon has awarded the rights to exploit gas field offshore Kribi to gas company Golar, which is developing a floating LNG project.

Island nation Cape Verde has set itself the admirable target of functioning purely on clean energy by 2020. Almost devoid of mineral resources, the country is dependent on costly imports and, given a lot of the islanders live below the poverty line, it is a strategy which makes a lot of sense. Wind and solar are the resources the country is utilising, principally wind. In 2009 the archipelago's Cabeolica wind farm went into opbecoming eration, the commercial-scale, privately financed, public private partnership (PPP) wind farm in Sub-Saharan Africa.

Several oil and gas projects are in development in Congo Brazzaville as it looks to increase exports to offset lost revenue from the low oil price. The Moho Nord offshore Pointe-Noire development is set to be the biggest oil project in the country's history with output expected to reach 140,000 barrels a day when it is fully operational. A 1200km oil pipeline from Pointe-Noire to Ouesso is also is also being built. An interesting infrastructure development, on which construction began in 2017, is the country's

new parliament. The \$58 million project is being financed by China.

With one of the most developed power sectors in Africa, Cote d'Ivoire has regionally high domestic electricity coverage and generates revenue from exporting electricity to neighbouring countries. To keep pace with increasing domestic power demand and to grow the economy by maintaining its position as a key exporter in the region, Cote d'Ivoire is undertaking various projects to increase power production capacity.

The government has set a target of increasing the country's power production capacity to 4000MW by 2020, which it intends to do by building new gas-to-power and hydroelectric power plants, and increasing its capacity to receive and regassify LNG. Among the large projects are the Songon combined cycle power plant, which will have an eventual capacity of 1200MW; the Côte d'Ivoire-GNL LNG import terminal being built by a consortium led by Total; and the 275MW Soubre hydroelectric power plant.

Cote d'Ivoire's government is also keen on improving the country's infrastructure for the eocnomy's benefit. Notable projects include expanding Abidjan's port's container terminal.

One of the most significant projects in oil rich Equatorial Guinea is the \$2 billion Fortuna deep-water floating LNG project which will utilise offshore gas. The country, which recently joined OPEC, also recently signed deal with fellow member Saudi Arabia to participate in the construction and financing of Bioko Oil Terminal tank farm, which will be West Africa's largest oil storage facility.

Ghana's focus in energy development is on renewables and downstream oil and gas production. Key projects include Ghana 1000, a green field gas-to-power project. A 1300MW combined cycle power plant and Amandi, a 190MW combined cycle gas

power plant, which will supply 130,000 households and is expected to start operating in 2018. Tema LNG import terminal, meanwhile, could help establish Ghana as an energy hub in West Africa and relieve the ongoing power crisis. And the Atuabo oil and gas port is expected to serve as operating headquarters for multinational companies in the West Africa region.

Infrastructure projects are under development in Ghana too. The renovation of Kumasi Market aims to relieve congestion and upgrade security in the largest open-air market in West Africa and the University of Ghana is building additional facilities in Legon City.

Guinea has large mineral resources and projects of scale in the country relate to mining. Rio Tinto's Simandou project, which aims to exhume two billion tonnes of iron ore, will elevate the country into the realm of the largest exporters of this commodity in the world. Bauxite is another of the country's resources – it has 7 billion tonnes beneth its soil, roughly a quarter of the known reserves in the world – and a handful of large projects are in progress. Alufer's Bel Air project and Rio Tinto's Sangaredi are two are the large developments underway.

Mali's steadily expanding population, which is growing roughly at a rate of 3.5% annually, has encouraged the government to invest in renewables to meet demand for more power. Several solar power plants are being built, including the \$58-million Ségou 33MW photovoltaic plant. The country has hydro-power potential too, and is developing — on a PPP basis with private party Eranove — a 42MW hydroelectric dam in Kénié.

A notable project development in Mauritania saw the country double its renewable energy capacity in 2016 when eight photovoltaic power plants, producing 16.6MW collectively, came online. Renewable development is part of the government's strategy for economic diversification.

Nigeria has had another challenging year, seeing the economy shrink by more than 1.5% as it continues to suffer from the ongoing depression in oil and commodity prices.

One of the biggest issues facing new projects, therefore, is the ability to find funding. Without FDI, developers are having to turn to the debt markets to secure financing. But given the precarious economic situation that funding usually comes with a hefty high price and this is stalling development.

Despite these constraints, Muhammadu Buhari's government has been pushing towards strengthening some of the more glaring issues in the economy. By fixing the fundamental problems that exist it is hoped that external investment will return, thus alleviating some of the economic pressure. In particular, through a crackdown on corruption and an attempt to rein in expenditure the government hopes to free up assets that can be put to good use developing the country's currently insufficient infrastructure. With N1.6 trillion (\$5.8 billion) earmarked in the 2016 budget for major capital projects, and the promise of more to come in 2017, there has been a concrete commitment made to turning the corner.

At a federal and state level there is a lot of support for new infrastructure projects to help boost the commercial viability of the country. In Lagos, for example, projects such as a light rail system and the introduction of a cable car should alleviate some of the city's chronic traffic problems and help boost productivity. Along the Atlantic coast different projects to develop deep-sea ports are vying for attention and investment as the country seeks to develop itself as a regional shipping hub.

Improving hydrocarbon production is also focus for new projects. There are a number of major gas production projects currently under construction or in the planning stages.

There are also ongoing plans to develop alternative power sources In Nigeria. Independent power producers (IPP) are being heavily encouraged to enter the solar energy market, with a particular focus on photovoltaic energy. This was exemplified in July 2016 when the federal government – through Nigerian Bulk Electricity Trading – signed power purchase agreements with 14 solar power developers and investors.

Significant news for Senegal, both economically and in terms of its energy security, was offshore discoveries of gas which could potentially signal the start of an energy boom. Kosmos Energy and BP made the 'major' discoveries of gas in the Cayar and Rufisque offshore blocks in 2016 and 2017, which they say could enable the country to act a gas hub for West Africa.

The main energy project in development in Sierra Leone is the expansion of the Bumbuna hydroelectric power plant, which is intended to add 202MW to the country's capacity. In Dakar several important infrastructure projects are also close to conclusion. The redevelopment of the airport and extension of the Dakar-Diamniadio Toll Road to connect the airport to the city.



Below is a selection of energy and infrastructure deals taken from IFLR1000 Deal Data.

For more information and to browse the full database for the EMEA region please visit: http://www.iflr1000.com/Search/Deals

Genesis Energy 360MW gas-fired power plants

Jurisdiction: Benin; Nigeria Deal type: Project development Industry sectors: Energy; Utilities Firms:

Allen & Overy

Party: Government of Benin (Sponsor); Africa Legal Support Facility (Sponsor)

G Elias & Co

Party: Genesis Energy (Project developer)

Overview:

- London based company Genesis Energy is developing multiple gasfired power plants in Benin, which will have a total combined capacity of 360MW.
- When complete the plants will produce 30% of the electricity used by Benin.
- A power purchase agreement for the first plant in the programme, which will have a 120MW capacity, has been agreed between Genesis and Benin's government.
- The gas turbines being used in the plants will be provided by General Electric and the engines will be made by Cummins.

West Africa rail loop (Blueline)

Jurisdictions:

Benin; Burkina Faso; Côte d'Ivoire; Niger

Deal type:

Project development

Industry sector:

Transport

Hogan Lovells

 $\textbf{Party:} \ Government \ of \ Benin \ (Sponsor); Government \ of \ Niger \ (Sponsor)$

King & Wood Mallesons

Party: Bolloré Group (Project developer)

Overview:

- The West Africa railway loop, Blueline is a project to develop a railway running through Niamey in Niger, Ouagadougou in Burkina Faso, Abidjan in Cote d'Ivoire, Cotonou in Benin and Lomé in Togo.
- The railway has been conceived to help revive the mining sector in West Africa by linking mining hubs and ports.
- The states of Benin and Niger have finalised terms for the construction and operation of the project's first stage – a 1050 km single metric railway line between Niger's capital Niamey and the port of Cotonou in Benin – awarding the concession to French group Bolloré.

Golar Hilli FLNG terminal

Jurisdiction:

Cameroon

Deal types:

Project development; Project finance

Industry sectors:

Oil and gas

Herbert Smith Freehills

Party: Perenco (Originator)
Orrick Herrington & Sutcliffe

Party: Golar (Project developer)

Zangue & Partners

Party: Golar (Project developer)

- Gazprom, Société Nationale des Hydrocarbures (SNH), Perenco Cameroon (PERCAM), Golar Hilli and Golar Cameroon have signed a contract to develop a floating liquefied natural gas (FLNG) terminal off the coast of Kribi in Cameroon.
- The project will utilise 500 billion cubic feet of the natural gas reserves to be supplied by SNH and PERCAM from the Sanaga Sud and Ebome fields of Cameroon.
- The FLNG terminal is to be owned and operated by Golar on its vessel the Golar Hilli, which is under development at a depot in Singapore.

Makay 400MW hydroelectric power plant PPP

Jurisdictions:	
Cameroon; Morocco	
Deal types:	
PPP; Project development	
Practice area:	
Project development	
Industry sector:	
Energy	
Firm:	
Linklaters	
Party: Platinum Power (Project developer)	

Overview:

- Platinum Power is developing a 400MW hydroelectric power plant and related infrastructure in Makay in Cameroon under a public private partnership (PPP) agreement with the country's government.
- Platinum Power, a Morocco based renewable energy developer owned by US fund Brookstone Partners, will invest \$854 million in the project.
- The plant will increase Cameroon's installed electrical capacity by 30%.
- Construction of the complex will begin in 2017 and is scheduled to be complete in 2020.

Nachtigal 420MW hydroelectric power plant PPP

Jurisdictions: Cameroon; France Deal types: PPP; Project development Industry sector: Energy Firm:

Herbert Smith Freehills

Party: International Finance Corporation (IFC) (Sponsor); EDF International (Sponsor); Government of Cameroon (Sponsor); Nachtigal Hydro Power Company (NHPC) (Project company)

Overview:

- A consortium is developing a 420MW hydroelectric power plant and 25kV electricity transmission line in Cameroon in the Sanaga river basin under a public private partnership (PPP) agreement.
- When complete the plant will be Cameroon's largest power plant and produce 30% of the electricity the country consumes.
- The project sponsors are EDF International (40%), the State of Cameroon (30%), and the International Finance Corporation (30%).
- The sponsors established company Nachtigal Hydro Power Company (NHPC) to hold their interests in the project.
- NHPC signed a concession agreement to development the plant and operate it for 35 years in April 2017.
- The project is expected to reach financial close by the end of 2017 and be complete in 2020.

Anglo African Oil & Gas acquisition of 49% of Petro Kouilou

Jurisdiction: Congo Brazzaville Deal type: Public acquisition Industry sector: Oil and gas Firm: DLA Piper

Party: Anglo African Oil & Gas (AAOG) (Acquirer)

- Anglo African Oil & Gas (AAOG) has acquired a 49% stake in Petro Kouilou from Sister Holdings.
- Petro Kouilou has a 56% stake in the Tilapia offshore oil and gas field in Congo Brazzaville (Republic of Congo).
- The company intends to increase the field's output to 185-250 barrels per day.
- The deal was financed via funds raised from AAOG's recent IPO on the London AIM market on March 6 2017.

Côte d'Ivoire-GNL LNG import terminal

Jurisdictions:

Côte d'Ivoire; France

Deal type:

Project development

Industry sector:

Oil and gas

Firms:

Gide Loyrette Nouel

Party: Société nationale d'opérations Pétrolières de la Côte d'Ivoire (PetroCI) (Sponsor); Société des Energies de Côte d'Ivoire

(CI-Energies) (Sponsor)

Linklaters

Party: State Oil Company of Azerbaijan Republic (SOCAR) (Sponsor)

Norton Rose Fulbright Party: Total (Sponsor) Orrick Rambaud Martel Party: Golar (Sponsor)

Overview

- A consortium led by French major Total has been awarded the rights to construct and operate an LNG import terminal and related infrastructure in Vridi, Abidjan in Côte d'Ivoire.
- Total is the largest shareholder (34%) in the consortium, which has
 established company Côte d'Ivoire-GNL to own the project, and
 other shareholders are State Oil Company of Azerbaijan Republic
 (SOCAR) (26%), Shell (13%), PetroCI (11%), Golar (6%), and
 Endeavor Energy and CI Energies (both 5%).
- The consortium will build and operate a terminal with a floating storage and re-gasification unit (FSRU) and a pipeline connecting it to Abidjan and other areas in Côte d'Ivoire.
- The terminal with have an initial daily capacity of 90 million cubic feet, and it could eventually increase to as much as 400 million.
- The terminal will help Côte d'Ivoire meet increased domestic demand for electricity and enable it to act as a hub for imported LNG sold in West Africa.
- The terminal is scheduled to be commercially operational in 2018.

Snedai 700MW coal power plants

Jurisdiction:

Côte d'Ivoire

Deal types:

Project development; Project finance

Concession

Practice areas:

Project finance; Project development

Governing laws:

Côte d'Ivoire; France

Industry sector:

Energy

ADKA

Party: Snedai (Sponsor)
Gide Lovrette Nouel

Party: Snedai Group (Sponsor)

Overview:

- Snedai has been awarded the concession by Côte d'Ivoire's government to develop a 700MW coal power plant and related infrastructure in San Pedro.
- Broto IPP, a subsidiary of S Energies is developing the power plant.
- The project includes the construction of a 321 km, 400kV network cable connecting San Pedro and Abidjan, and linking the power plant to the country's grid.

University of San Pedro campus PPP

Jurisdiction

Côte d'Ivoire

Deal types:

PPP; Project development

Industry sector:

Real estate Firms:

Cleary Gottlieb Steen & Hamilton

Party: Envol Immobilier (Sponsor, Investor)

FDKA

Party: Government of Republic of Côte d'Ivoire. (Sponsor)

- Côte d'Ivoire is developing a campus for a new university in San Pedro on public-private partnership (PPP) basis.
- Developer Envol Immobilier is sponsoring the project.
- The campus will provide enough accommodation for 22,000 students
- The new university is part of the government's national development plan and will have courses that qualify students to work in core industries in San Pedro – home to the country's second largest port – such as fishing and logistics.
- The project is in the structuring and negotiation phase, and is scheduled to be completed in 2018.

Fortuna deepwater floating LNG terminal

Jurisdictions:

Equatorial Guinea; United Kingdom

Deal type:

Project development

Industry sector

Oil and gas

Firms:

Bracewell

Party: Ophir Energy (Sponsor) Miranda & Associados Party: Ophir Energy (Sponsor) Shearman & Sterling

Party: OneLNG (Sponsor)

Overview

- A joint operating company (JOC) owned by Ophir (33.8%) and OneLNG (66.2%) is developing a floating LNG (FLNG) project offshore Equatorial Guinea in licence Block R.
- Fortuna is Africa's first deep-water independent FLNG project.
- OneLNG, a joint venture between US oil and gas company Schlumberger and Golar LNG, was established specifically for the Fortuna project.
- Golar LNG, a midstream LNG infrastructure supplier, is providing the technology for the development including vessel which will be used, Gandria FLNG.
- Equatorial Guinea's national oil and gas company, La Compañía Nacional De Petróleos De Guinea Ecuatorial (GEPetrol)has signed an umbrella agreement entitling it a 20% stake in the upstream segment of the project, and a possible 30% stake in the Gandria FLNG.
- The JOC has agreed term sheets with a group of China-based lenders to provide \$1.2 billion debt financing for the project.
- Initial off-take is expected to be 2.2 to 2.5 metric tonnes annually for between 15 and 20 years.
- First production of gas is scheduled for 2020.

Oyem Stadium

Jurisdictions:

China; Gabon

Deal type:

Project development

Governing law:

Gabon

Industry sectors:

Entertainment; Social infrastructure

Firms:

Pinsent Masons

Party: Shanghai Construction Group (EPC contractor)

VdA Vieira de Almeida

Party: Shanghai Construction Group (EPC contractor)

Overview

- Oyem Stadium (Stade d'Oyem) is a 20,000 seat football stadium built in Oyem in Gabon for the Africa Cup of Nations.
- Shanghai Construction Group was awarded the EPC contract for the project.
- The gabon public authorty was represented by its in-house team on the project.

Atuabo oil and gas port

Jurisdiction:

Ghana

Deal type:

Project development

Industry sector:

Oil and gas

Bentsi-Enchill Letsa & Ankomah

Party: Lonrho Ports (Project company)

Norton Rose Fulbright

Party: Standard Chartered Bank (Lender); Standard Bank (Lender); International Finance Corporation (IFC) (Lender)

- The port is being developed in the Western Region of Ghana and will provide a 18.5m deep channel and three quays of varying depths from 16.5m, 12m and 9m.
- The project is financed by Standard Chartered Bank, Standard Bank and International Finance Corporation.
- The Port is expected to act as a regional operating headquarters for multinational companies from which they can serve multiple markets in the West Africa region.

Amandi Energy 200MW combined cycle dual-fuel power plant

Jurisdiction:

Ghana

Deal types:

Project development; Project finance

Industry sector:

Energy

Firms:

Clifford Chance

Party: Overseas Private Investment Corporation (OPIC) (Lender); CDC Group (Lender); Nedbank (Lender); Rand Merchant Bank (RMB) (Lender)

ENSafrica

Party: Overseas Private Investment Corporation (OPIC) (Lender); CDC Group (Lender); Nedbank (Lender); Rand Merchant Bank (RMB) (Lender)

Norton Rose Fulbright

Party: Endeavor Energy (Project developer, Owner)

Trinity International

Party: Amandi Energy (Project developer, Sponsor); Amandi Founder Group (Investor); Aldwych (Investor); Pan African Infrastructure Development 2 (Investor); ARM-Harith Infrastructure Fund (Investor)

Overview

- Amandi Energy has announced that it has successfully reached financial close and begun construction of its Amandi Energy Power Plant, a 200MW combined cycle, dual-fuel power project in Aboadze, Ghana.
- The project was the only base-load independent power generation (IPP) project in Sub-Saharan Africa, of this scale, to achieve financial close in 2016, and should be completed by 2019.
- The project will help Ghana to meet its rising power requirements, producing over 1600 GWh per year – enough to provide for a million Ghanaian households.
- Financing for the project ran to \$522 million, \$134 million was provided in equity from the sponsor group and \$418 million in debt
 financing by a group of lenders.
- The sponsor group was made up of Endeavor, Association Francaise de Gestion financière, Aldwych, Pan African Infrastructure Development Fund 2 (a fund managed by Harith General Partners) and ARM-Harith Infrastructure Fund (ARMHIF).
- Overseas Private Investment Corporation (OPIC) provided a \$250 million loan, CDC Group provided an \$83 million loan and Nedbank Limited and Rand Merchant Bank made up the balance.

Asutsuare water treatment plant PPP

Jurisdictions:

Ghana, France

Deal types:

PPP; Project development

Industry sectors:

Utilities; Social infrastructure

Firms:

Clifford Chance Party: Denys (Sponsor) Gide Loyrette Nouel

Party: Government of Ghana (Sponsor)

Overview

- The project entails the construction of a raw water intake and a 360,000 m3/per day capacity water treatment plant in Asutsuare on the Volta River on a public-private partnership (PPP) basis.
- Further there will be construction of two 70km pipelines running from the water treatment plant into Accra Tema and Accra Dodowa.

Ghana 1000 1300MW gas-to-power plant

Jurisdiction:

Ghana

Deal type:

Project development

Industry sector:

Energy

Firms

Bentsi-Enchill Letsa & Ankomah

Party: General Electric (Sponsor); Endeavor Energy (Sponsor); One Energy (Project company); Eranove (Sponsor); Sage Petroleum (Sponsor)

Clifford Chance

Party: General Electric (Sponsor); Endeavor Energy (Sponsor)

King & Spalding

Party: One Energy (Project company)

Overviev

- Ghana 1000 is a greenfield gas-to-power project located near Takoradi in the Western Regions of Ghana that will consist of approximately 1300MW of combined cycle power.
- It is the largest power project in Ghana since the 1960s and is jointly developed by General Electric, Endeavor Energy and Finagestion.
- The project will be built three phases with two 375MW power block with two gas turbines and one steam turbine and one 550MW power block with three gas turbines and one steam turbine.

Kumasi Central Market

	lict	

Ghana

Deal type:

Project finance

Industry sector:

Social infrastructure

Firm

Ashurst

Party: Deutsche Bank (Lender)

Overview:

- Republic of Ghana is working on renovation of the Kumasi Market which is the largest open-air market in West Africa.
- The project aims to relieve the congestion at the market which welcomes 600,000 visitors each day, install proper infrastructure and increase security.
- Deutsche Bank acted as lender and provided \$172 million financing.

Legon City project

Jurisdiction:

Ghana

Deal type:

Project development

Industry sector:

Social infrastructure

Firm

Ashong Benjamin & Associates

Party: The Consortium CIHD (Project developer)

Overview

- The University of Ghana is undertaking a project to utilise its land by developing a variety of facilities including hotels, offices, shops and hospitals.
- Consortium CIHD will supervise and manage the construction of the infrastructure, source and recommend developers, enter into project development agreements with developers.

Offshore Cape Three Points (OCTP) integrated oil and gas facility

Jurisdictions:

Ghana; United Kingdom

Deal types:

Project development; Project finance

Industry sector:

Oil and gas

Firms:
Allen & Overv

Party: Government of Ghana (Concessionaire)

Bentsi-Enchill Letsa & Ankomah

 $\textbf{Party:} \ Eni\ Ghana\ Exploration\ and\ Production\ (Sponsor)$

Curtis Mallet-Prevost Colt & Mosle

Party: Ghana National Petroleum Corporation (Sponsor)

ENSafrica

Party: Vitol Ghana Upstream (Sponsor)

Herbert Smith Freehills

Party: Vitol Ghana Upstream (Sponsor)

Milbank Tweed Hadley & McCloy

Party: International Finance Corporation (IFC) (Lender); HSBC (Lender); ING (Lender); Société Générale (Lender); Standard Chartered Bank (Lender); UK Export Finance (UKEF) (Lender)

Norton Rose Fulbright

Party: Eni Ghana Exploration and Production (Sponsor)

- OCTP is an offshore oil and gas exploration and production project being built roughly 60km from Ghana's west coast.
- Five fields in the OCTP block in the Tano Basin are being developed under the project – three gas (Sankofa Main, Sankofa East, and Gye Nyame) and two oil (Sankofa East Cenomanian and Sankofa East Campanian).
- In combination the fields hold an estimated 1.5 trillion cubic feet of gas and 500 million barrels of oil.
- The project is owned by three sponsors: Eni Ghana Exploration and Production (47.22%), Vitol Upstream Ghana (37.78%), and Ghana National Petroleum Corporation (15%).
- A multi-sourced \$1.65 billion finance package for OCTP, which includes facilities provided by International Finance Corporation, United Kingdom Export Finance (UKEF), HSBC, Société Générale, ING, Standard Chartered Bank, Bank of China, Natixis, Mizuho and Mitsubishi UFJ Financial Group, was signed on December 14, 2016 and closed on March 9, 2017.
- UKEF's \$400 million loan to the project is the first it has provided directly towards a development in Africa.
- The World Bank has provided \$700 million in backstop guarantees to the project, the largest assurance the lender has given in its history.
- The project is Ghana's first large gas development and, once operational, is expected to provide enough gas to power the country's thermal power stations until 2036.
- OCTP is scheduled to begin producing oil in 2017 and gas in 2018.

Port of Tema expansion

Jurisdiction:

Ghana

Deal types:

Project development; Project finance

Industry sectors:

Shipping; Logistics

Firms:

Bentsi-Enchill Letsa & Ankomah

Party: Meridian Port Services (Project developer)

King & Wood Mallesons

Party: Meridian Port Services (Project developer)

Overview:

- Meridian Port Services, a joint venture between Bolloré Africa Logistics, APM Terminals, and the Ghana Ports and Harbour Authority, is to redevelop the existing Port of Tema in Ghana to accommodate larger vessels and Western African trade growth, both funding and developing the project.
- The new deep-water port is set to cost \$1.5 billion to expand as the project looks to become a regional hub for Western Africa by upping the capacity from 1 million TEUs to 3.5 million.
- Part of the development will be a deep water quay, as well as an access channel that will allow the project to accommodate the larger ships that are now entering West African trade lanes.
- The port will open up Ghana's potential as a major player in Western Africa, an important development considering its maritime tensions with Côte d'Ivoire.
- The government of Ghana is currently under discussions to possibly extend a tax waiver to the project that will cover almost two thirds of its overall cost, as recommended by the Ghanaian Finance Committee.

Ring Road Flyover

Jurisdiction:

Ghana

Deal type:

Project development

Firm:

ENSafrica

Party: BNP Paribas (Lender); Deutsche Bank (Lender); Société Générale (Lender); BMCE Bank International (Lender)

Overview:

- The project consists of the construction of a three-tier interchange at the current Obetsebi Lamptey Circle and a Graphic Road flyover to grade separate traffic on the Kaneshie-Mallam Road towards the Graphic Road.
- The project involves a syndicated facility to the Government of Ghana for financing the construction of the Ring Road Flyover Project
- BNP Paribas, Deutsche Bank, BMCE Bank International and Société Générale are providing financing.

Alufer Bel Air bauxite mine

Jurisdiction:

Guinea

Deal types:

Project development; Project finance

Industry sector:

Mining

Brown Rudnick

Party: Government of Guinea (Grantor)

Herbert Smith Freehills

Party: Alufer Mining (Project developer)

Norton Rose Fulbright

Party: Alufer Mining (Borrower)

- London based Mining company Alufer Mining is developing a bauxite mine (Bel Air) and related facilities in northwest Guinea.
- Alufer has agreed a \$205 million finance package to fund the development – \$90 million convertible debt and \$35 million of equity – from a consortium of Resource Capital Funds, the Africa Finance Corporation, Orion Mine Finance and existing in Alufer shareholders, and an addition \$80 million in senior debt from Orion.
- Construction began in 2017, production is scheduled to start in the third quarter of 2018.

Sangaredi bauxite mine expansion

Jurisdiction:

Guinea

Deal types:

Project development; Project finance

Firms:

Norton Rose Fulbright

Party: Compagnie des Bauxites de Guinée (CBG) (Sponsor)

White & Case

Party: BNP Paribas (Lender); Crédit Agricole (Lender); International Finance Corporation (IFC) (Lender); ING (Lender); Natixis (Lender); Overseas Private Investment Corporation (OPIC) (Lender); Société Générale (Lender)

Overview:

- Owner of the Sangaredi bauxite mine, Compagnie des Bauxites de Guinée (CBG), is expanding the site to increase production capacity from 13.5 million to 18.5 million metric tonnes.
- CBG is owned by Alcoa, Rio Tinto and Dadco (51%) and the Republic of Guinea (49%).
- CBG has negotiated a \$700 million loan to finance construction.
- BNP Paribas, Crédit Agricole, IFC, ING, Natixis, OPIC, Société Générale and two local banks are providing the financing.
- CBG is expanding the mine to fulfil a contract to supply 10 million tonnes of bauxite to Abu Dhabi investment fund, Mubadala, and Dubai Aluminium (Dubal).

Kénié 42MW hydroelectric dam PPP

lurisdictions:

France; Mali

Deal types:

PPP; Project development

Industry sector:

Energy Firm:

White & Case

Party: Eranove (Sponsor)

Overview

- Pan-African power and water company Eranove signed a 30-year concession agreement with Mali to build and operate a 42 MW hydroelectric power plant on the Niger river.
- Construction began in 2016.
- The dam is scheduled be operational in 2020.

BP \$916 million acquisition of a stake in Kosmos Energy's exploration blocks

Jurisdictions:

Bermuda; Mauritania; Senegal; United Kingdom

Deal type:

Private acquisition

Industry sector:
Oil and gas

Firms

Herbert Smith Freehills

Party: BP (Acquirer)

Slaughter and May

Party: Kosmos Energy (Seller)

- British multinational oil company BP successfully acquired a majority stake in the offshore exploration blocks of Kosmos Energy in Senegal and Mauritania for \$916 million.
- Kosmos is to receive \$162 million in cash, \$221 million in exploration and appraisal costs and development costs of up to \$533 million.
- The company acquired a 62% stake in four blocks in Mauritania, covering blocks C6, C8, C12 and C13, and a 32.49% stake in two blocks in Senegal, covering the Saint Louis Offshore Profond and Caya Offshore Profond.
- The two companies have agreed to work together on further explorations across the space.
- It is estimated the blocks could contain as much as 50 trillion tcf of liquid gas and a billion barrels of oil.
- This moves follows an acquisition by BP in Egypt's Zohr gas field in November.

Abia 1080MW gas power plant

Jurisdiction:

Nigeria

Deal type:

Project development

Industry sectors:

Energy; Oil and gas

Firm:

Allen & Overy

Party: Rand Merchant Bank (RMB) (Lender); Overseas Private Investment Corporation (OPIC) (Lender); Standard Chartered Bank (Lender); World Bank (Lender)

Clifford Chance

Party: Oma Power (Project company)

Olaniwun Ajayi

Party: Rand Merchant Bank (RMB) (Lender); Overseas Private Investment Corporation (OPIC) (Lender); Standard Chartered Bank (Lender); World Bank (Lender)

Olaniwun Ajayi

Party: Rand Merchant Bank (RMB) (Lender); Overseas Private Investment Corporation (OPIC) (Lender); Standard Chartered Bank (Lender); World Bank (Lender)

Overview

- The OMA Power Project is a three-phase 1080MW greenfield gas facility located in Orgwu-Ogwe Town, Ukwa West, Abia, in southern Nigeria.
- It is being developed by a joint venture between Geometric Power and General Electric (GE).
- The first phase is a 500MW simple cycle facility driven by GE Frame 9 turbines.
- The first phase is expected to cost around \$300 million.

Abuja Centenary City

Jurisdiction:

Nigeria

Deal type:

PPP

Industry sectors:

Real estate

Firm:

Sterling Partnership

Party: Centenary City (Project company)

Overview

- The Nigerian government has awarded the tender for PPP project for the development of a smart city near Abuja, Centenary City, to UAE based developer Eagle Hills.
- The city will be built over a 10 year period at a cost of \$50 billion.
- A project company, Centenary City, which is led by chairman and former Nigerian president Abdulsalami Abubakar, has been established to own the project
- Centenary City's sponsors comprise 22 private sector investors.
- The new city, which is being built to commemorate the country's 100 year anniversary, has a projected population of 150,000.
- Another UAE developer, Emaar, has invested \$18.5 billion in the project.

Adiyan Phase II water treatment plant

Jurisdiction:

Nigeria

Deal type:

Industry sectors:

Utilities

Firm:

Abdulai Taiwo & Co

Party: The Infrastructure Bank (Arranger); AG Goldtrust Company (Sponsor)

- The Adiyan Phase II water treatment plant is a public-private partnership (PPP) concession from the Lagos state government.
- The total project cost is expected to exceed N280 billion.
- The AG Goldtrust Company is serving as the project sponsor and The Infrastructure Bank is acting as the financial arranger.

Azura-Edo 450MW gas power plant

Jurisdiction:

Nigeria

Deal type:

Project development; Project finance

Industry sectors:

Oil and gas

Firm

Allen & Overy

Party: International Finance Corporation (IFC) (Lender); Proparco (Lender); Emerging Africa Infrastructure Fund (Lender); Overseas Private Investment Corporation (OPIC) (Lender); JPMorgan Chase (Issuer)

Clifford Chance

Party: Standard Chartered (Lender); International Finance Corporation (IFC) (Lender); Siemens Bank (Lender); Standard Bank of South Africa (Lender); ICF (Lender): FMO (Lender); Caixa Directa (CDG) (Lender); Deutsche Investitions- und Entwicklungsgesellschaft mbh (DEG) (Lender); KfW (Lender); Proparco (Lender); Swedfund (Lender); Overseas Private Investment Corporation (OPIC) (Lender); Rand Merchant Bank (RMB) (Lender); First City Monument Bank (Lender); Emergency Africa Infrastructure Fund (Lender)

Olaniwun Aiavi

Party: First City Monument Bank (Lender); International Finance Corporation (IFC) (Lender); FMO (Lender); Caixa Directa (CDG) (Lender); Deutsche Investitions- und Entwicklungsgesellschaft mbh (DEG) (Lender)

Party: ICF (Lender); KfW (Lender); Proparco (Lender); Swedfund (Lender); Overseas Private Investment Corporation (OPIC) (Lender); Standard Chartered (Lender); Rand Merchant Bank (RMB) (Lender); Siemens Bank (Lender); Standard Bank of South Africa (Lender); Emerging Africa Infrastructure Fund (Lender)

Templars

Party: Azura Power West Africa (Project developer)

Trinity International

Party: Amaya Capital (Sponsor); American Capital Energy & Infrastructure (Sponsor); Aldwych Azura (Sponsor); African Infrastructure Investment Fund 2 Power Holding (Sponsor); Asset & Resource Management Company (ARM) (Sponsor)

Overview:

- Azura-Edo 450MW Open Cycle Gas Turbine in Edo State Nigeria.
- The deal is Nigeria's first independent power project (IPP) as the country looks to reduce its power deficit.
- The Nigeria Bulk Electricity Trader (NBET) will be the sole offtaker from the plant under a 20-year PPA.
- The deal involved 15 lenders including Standard Chartered, Standard Bank and the IFC,
- The project follows on form a series of legislatorial reforms and is set to provide a precedent for similar projects in the country.
- The multi-tranche deal comprises \$190 million equity, and \$686 million of debt.

Badagry deep-sea port

Jurisdiction:

Nigeria

Deal type:

PPP; Project development

Industry sectors:

Shipping; Logistics

Firm:

Adepetun Caxton-Martins Agbor & Segun

Party: APM Terminals (Sponsor)

GRF Dalley & Partners

Party: Badagry Development Council (Project developer)

Holman Fenwick Willan

Party: APM Terminals (Sponsor)

Olajide Oyewole

Party: Orlean Invest (Sponsor); Hyundai (Technical adviser)

- A consortium comprising APM Terminals, Orlean Invest, the Macquarie Group, Oando, Chagoury Group and Terminal Investment has been awarded the 21 year concession to develop a deep-sea port in the Nigerian coastal town Badagry in Lagos.
- Set to be the largest deep-sea port in Africa, it will be developed on a PPP (public-private partnership) basis.
- Public sector involvement comes from the Nigerian Ports Authority and the Governor of Lagos State.
- The projected cost of the development is \$2 billion.
- In August 2016 the Federal Executive Council (FEC) of Nigeria approved construction.

Bakassi deep-sea port

Jurisdiction:	
Nigeria	
Deal type:	
Project development	
Industry sectors:	
Logistics	
Shipping	
Firm:	

Abdulai Taiwo & Co

Party: Cross River State Government (Grantor)

Overview:

- The Bakassi deep-sea port is a planned project in Cross River State in eastern Nigeria.
- The estimated project cost is expected to exceed N300 billion.
- It is hoped the project will help boost banana exportation from a proposed world-leading banana plantation in the state.

Bauchi 100MW photovoltaic power plant

Jurisdiction: Nigeria Deal type: Project finance Industry sectors: Energy

Firm: AELEX

Party: Nigerian Solar Capital Partners (Project developer)

Allen & Overy

Party: Overseas Private Investment Corporation (OPIC) (Lender);

African Development Bank (Lender)

Olaniwun Ajayi

Party: Overseas Private Investment Corporation (OPIC) (Lender);

African Development Bank (Lender)

Party: Brass LNG (Project company)

Overview:

- Nigeria Solar Capital Partners entered into a joint development agreement with Globeleq Advisors and the ARM-Harith Infrastructure Fund to finance and co-develop the Bauchi 100MW photovoltaic power plant.
- The Overseas Private Investment Corporation and the African Development Bank provided \$106 million of financing for the project.
- The project developers have agreed with the Nigerian Bulk Electricity Trading to a power purchase agreement for a 20 year period.
- Bauchi state is one of the most affected states by the national energy deficit in Nigeria.

Brass Island liquefied natural gas power plant

Jurisdiction:		
Nigeria		
Deal type:		
Project development		
Industry sectors:		
Energy		
Oil and gas		
Firm:		
Banwo & Ighodalo		

- The Nigerian National Petroleum Corporation is currently developing a liquefied natural gas (LNG) power plant on the Island of Brass, Bayelsa State, in Nigeria's Central Niger Delta.
- It is the second LNG project undertaken in Nigeria.
- The project stalled in 2014 when shareholder ConocoPhilips sold off all its Nigerian assets, since when the shares have been ring-fenced by the government. It is now in the process of trying to revive the project.
- Nigeria has the eighth largest proven natural gas reserves in the world, but ranks only 29th in production.

Ibom deep-sea port

Jurisdiction:		
Nigeria		
Deal type:		
Project development		
Industry sectors:		
Logistics; Shipping		
Firm:		
Ranwa & lahadala		

Banwo & Ighodalo

Party: Global Maritime And Port Services (Project developer)

G Elias & Co

Party: Dar Al-Handasah (Sponsor); Akwa Ibom State Government (Sponsor)

Overview:

- The Ibom deep-sea port is a planned port project located on the Gulf of Guinea in Akwa Ibom state in southern Nigeria.
- Global Maritime and Port Services is serving as an adviser and consultant on the project, while Dar Al-Handasah is acting as the master planner.
- It is being developed as part of the Federal Government Greenfield Development Programme.
- The Federal Government has approved a 50-yr concession to help it attract investors.
- It is hoped the port will serve as a regional shipping hub upon completion.
- Initial construction began in March 2017.

Ikot Abasi 228.5MW gas power plant

	 0	
Jurisdiction:		
Nigeria		
Deal type:		
Project development		
Industry sectors:		
Energy		
Firm:		
Hunton & Williams		

Party: Federal Government of Nigeria (Sponsor)

Party: Petrolex Oil and Gas (Project developer)

Overview

- The Ikot Abasi 228.5MW gas power plant is a planned project located in the Ikot Abasi local government Area of Akwa Ibom state.
- The Federal Government of Nigeria, through Nigeria Bulk Electricity Trading, is sponsoring the project.

Ilaje integrated deep-sea/mining port

		 01
Jurisdiction:		
Nigeria		
Deal type:		
Project devel	lopment	
Industry sec	tors:	
Shipping; Lo	gistics	
Firm:		
Olaniwun Aj	ayi	

- The llaje integrated deep-sea mining port is a \$3.5 billion planned project in Ondo state in the south of Nigeria.
- It involves the creation of an inland stock piling yard (a dry port) that will be linked to an ultra deep-sea mining port with a direct rail connection. The yard will be located in the north of the state while the port is located on the Atlantic coastline.
- It is being developed by Inland Deep Sea Ports, a subsidiary of Petrolex Oil and Gas.

Ibom deep-sea port

Jurisdiction:
Nigeria
Deal type:
Project development
Industry sectors:
Logistics
Shipping
Firm:

Banwo & Ighodalo

Party: Global Maritime And Port Services (Project developer)

G Elias & Co

Party: Dar Al-Handasah (Sponsor); Akwa Ibom State Government (Sponsor)

Overview:

- The Ibom deep-sea port is a planned port project located on the Gulf of Guinea in Akwa Ibom state in southern Nigeria.
- Global Maritime and Port Services is serving as an adviser and consultant on the project, while Dar Al-Handasah is acting as the master planner.
- It is being developed as part of the Federal Government Greenfield Development Programme.
- The Federal Government has approved a 50-yr concession to help it attract investors.
- It is hoped the port will serve as a regional shipping hub upon completion.
- Initial construction began in March 2017.

Jigawa 80MW photovoltaic power plant

Jurisdiction:	
Nigeria	
Deal type:	
Project development	
Industry sectors:	
Energy	
Firm:	
Clifford Chance	

Party: Nova Scotia Power Development (Sponsor)

Overview

- Nova Scotia Power Development is constructing an 80MW photovoltaic power plant in Dutse, the Jigawa state capital.
- The company has signed a power purchase agreement with Nigerian Bulk Electricity Trading – representing the federal government – and will sell electricity at \$0.115/kWh.
- The project has been developed by CDIL, a Canadian renewable energy development company focused on Africa, and Business Process Solutions Consult, a Nigerian strategic consulting firm.

Kaduna 75MW photovoltaic power plant

Jurisdiction:	
Nigeria	
Deal type:	
Project development	
Industry sectors:	
Energy	
Firm:	
Olaniwun Aiavi	

Party: Access Quaint Solar Nigeria (Sponsor)

- Access Quaint Solar Nigeria a subsidiary of UAE-based Access Power MEA – is developing a 75MW photovoltaic power plant to be located in Kaduna.
- The estimated project cost is in the region of \$100 million.
- It will be Kaduna's first privately developed renewable power facility and its first solar project.

Lagos cable car PPP

Jurisdiction:

Nigeria

Deal type:

PPP; Project finance

Industry sectors:

Transport

Firm

Aluko & Oyebode

Party: African Development Bank (Lender)

Banwo & Ighodalo

Party: Ropeways Transport (Project company)

Herbert Smith Freehills

Party: African Development Bank (Lender)

White & Case

Party: Ropeways Transport (Project company)

Overview:

- The Lagos State Government and Lagos Metropolitan Area
 Transport Authority (LAMATA) have awarded a 30 year public-private
 partnership (PPP) contract to Ropeways Transport to develop a
 cable car transportation system in Lagos to ease the city's commuter
 congestion problems.
- The deal is being partially funded by a project finance facility from the Africa Development Bank.
- Construction of the project began in September 2016.

Lagos Metro rail transit system (red line)

Jurisdiction:

Nigeria

Deal type:

Project development

Industry sectors:

Transport

Firm:

Abdulai Taiwo & Co

Party: Marina Express Train Services (Sponsor)

SimmonsCooper Partners

Party: Marina Express Train Services (Sponsor)

Overview

- Lagos Metro Rail Transit System (Red Line).
- Marina Express Train Services served as the sponsor for the development of this project.
- It involved the negotiation of right of way with the federal government and National Railway Corporation as well as the negotiation of a joint project development agreement with the Lagos State Project Committee.

Lagos-Ibadan Expressway reconstruction PPP

Jurisdiction:

Nigeria

Deal type:

PPP; Project development; Project finance

ndustry sectors:

Government and public policy; Transport; Social infrastructure

Detail Commercial Solicitors

Party: The Infrastructure Bank (Arranger); Motorways Asset Limited (Project company)

- The Infrastructure Bank and Motorways Asset secured N170 billion of funding to reconstruct the 127.6km Lagos-Ibadan Expressway, one of Nigeria's oldest road networks, via a public-private partnership (PPP).
- Work initially stalled, but as of June 2016 was back underway.
- The project company initially raised a bridge finance for the early operations, and a secondary tranche of financing.
- Julius Berger won the concession to carry out the repairs.

Lekki deep sea port PPP

Jurisdiction:	
Nigeria	
Deal type:	
PPP	
Industry sectors:	
Shipping	
Firm:	
ΔFIFX	

Party: Lekki Port LFTZ Enterprise (LPLE) (Project developer)

Overview:

- A new deep sea port is being developed in Lekki through a PPP
 (public-private partnership) as Nigeria seeks to accommodate
 increasing amounts of container traffic through the Lagos port, which
 is a key transit route for shipping cargo to and from the country and
 West Africa.
- The partners on the project are the Federal Government of Nigeria (FGN), Nigerian Ports Authority (NPA), Lagos State Government (LASG) and the Tolaram Group, the project sponsor.
- The Singapore based Tolaram Group, has established project company, Lekki Port LFTZ Enterprise (LPLE), to handle the development.
- LPLE was awarded a 45-year concession by the NPA to develop the port on a BOOT (build-own-operate-transfer) basis.
- A 21 year sub-concession for the operation of the container terminal has been awarded to International Container Terminal Services (ICTSI) as LPLE does not have the requisite experience in port operations.
- The initial phase of the project constructing the port entrance and the terminal – is excepted to cost around \$1.5 billion, and began in March 2015.
- At present, finance for the project has been confirmed from NPA (\$118 million) and six banks – African Development Bank (AfDB), the African Finance Corporation (AFC), European Investment Bank (EIB), Standard Chartered Bank, Rand Merchant Bank (RMB) and Standard Bank.
- The port is expected to be operational by 2018.
- A second new port is being developed in Lagos, in the town of Badgary.

Marina Quayside strip development

Jurisdiction:
Nigeria
Deal type:
Project development
Industry sectors:
Government and public policy

Firm: Abdulai Taiwo & Co

Party: Marina Quayside Development Company (Sponsor)

Overview

- The Marina Quayside Development Company is involved in the proposed development of 144 acres of water front real estate in Lagos.
- The development is a public-partnership project (PPP) that is intended to serve as an exemplary Green City Center project.
- The Federal Government of Nigeria and Lagos State Government are acting as grantors.

Nasarawa 50MW photovoltaic power plant

urisdiction:
ligeria
Deal type:
Project finance
ndustry sectors:
nergy
irm:
ones Day
Party: AEE Power (Project developer)

- AEE Power, an international EPC contractor and power developer specialised in the energy industry, has secured \$70 million financing for a 50MW solar power plant located in Nasarawa.
- The project is being developed by Afrinergia Power.

NNPC/Chevron joint venture \$1.2 billion financing

Jurisdiction: Bahamas; Nigeria Deal type: Asset finance; Project finance Industry sectors: Oil and gas Firm:

G Elias & Co

Party: Standard Chartered (Lender); United Bank for Africa (Lender)

Stephenson Harwood

Party: NNPC (Nigerian National Petroleum Corporation) (Borrower)

Sterling Partnership

Party: NNPC (Nigerian National Petroleum Corporation) (Borrower)

White & Case

Party: Standard Chartered (Lender); United Bank for Africa (Lender)

Overview:

- A joint-venture between NNPC (Nigerian National Petroleum Corporation) and Chevron has secured \$1.2 billion in financing from a syndicate of Nigerian and international lenders to develop 23 onshore and 13 offshore wells in Nigeria.
- The multi-year funding will finance two stages of development between 2015 and 2018 in OML (oil mining lease) 49, 90 and 95.

Ossiomo electricity distribution network

Jurisdiction: Nigeria Deal type: Project development Industry sectors: Utilities Firm: G Elias & Co

Party: Ossiomo Offsite and Utilities Company (Project developer)

Overview

- The Ossiomo Offsite and Utilities Company is developing an independent electricity distribution network at Ossiomo Industrial Park in Edo State.
- The project is being progressed under licence from the Nigerian Electricity Regulatory Commission.

Second Niger bridge PPP

Party: Julius Berger Investments (Sponsor)

Party: Nigerian Sovereign Investment Authority (Sponsor)

occond 1 vigor binage 1 1 1	
Jurisdiction:	
Nigeria	
Dealtype:	
PPP	
Industry sectors:	
Transport	
Firm:	
Templars	

- Nigeria's government awarded a 25-year concession to develop a second bridge over the Niger River on a BOT (build-operatetransfer) basis to German construction company Julius Berger.
- The project sponsors are Julius Berger Investments, a subsidiary of Julius Berger, and the Nigerian

Sokoto 300MW photovoltaic power plant

Jurisdiction:

Nigeria

Deal type:

Project development

Industry sectors:

Energy

Firm:

Clifford Chance

 $\textbf{Party:} \, \mathsf{Themis} \, \mathsf{Energy} \, (\mathsf{Sponsor}); \mathsf{Phanes} \, \mathsf{FZ} \, (\mathsf{Sponsor})$

Hogan Lovells

Party: Themis Energy (Sponsor); Phanes FZ (Sponsor)

Olaniwun Ajayi

Party: Themis Energy (Sponsor); Phanes FZ (Sponsor)

Overview

- Themis Energy, a subsidiary of the Abraaj Group, and Phanes FZ are developing a 300MW photovoltaic (PV) solar project in Yabo, Sokoto.
- The first stage will entail the construction of a 100MW solar farm, with the first 50MW phase of the plant pencilled in for completion in the first quarter of 2018,
- It is one of the first 14 PV projects in Nigeria to have its power purchase agreements signed by Nigerian Bulk Electricity Trading.

Cap des Biches 52.9MW combined cycle power plant expansion (33MW)

Jurisdictions

France; Luxembourg; Senegal; United Kingdom; United States Deal types:

Project development; Project finance

Industry sectors:

Energy; Oil and gas

Firm

Clifford Chance

Party: Overseas Private Investment Corporation (OPIC) (Lender); International Finance Corporation (IFC) (Lender)

Overview

- ContourGlobal is expanding the capacity of its Cap des Biches project, a thermal power plant in development in Senegal.
- To new project will be add an additional 33MW to the capacity of the planned development – a 52.9MW combined cycle power plant.
- Development banks Overseas Private Investment Corporation (OPIC) and International Finance Corporation (IFC) are financing the cost of the expansion.
- The project is vital for Senegal which is unable to meet domestic demand for electricity.

Iluka Resources £215 million acquisition of Sierra Rutile

Jurisdictions:

Australia; United Kingdom; Sierra Leone

Deal type:

Public acquisition

Industry sector:

Mining

Firms:

Ashurst

Party: Iluka Resources (Acquirer)

Conyers Dill & Pearman

Party: Iluka Resources (Acquirer)

Herbert Smith Freehills

Party: Sierra Rutile (Target)

Ogier

Party: Sierra Rutile (Target)

- Australian based producer Iluka Resources acquired mining company Sierra Rutile. announced for £215 million.
- The company paid shareholders 36p per Sierra Rutile share.

Western Africa

Project finance transactions which reached financial close in 2016 (Data provided by IJ Global)

Name	Country	Sector	Sub sector	Transaction type	Value
Transgabonais Railway Rehabilitation PPP	Gabon	Primary Financing	Transport	Heavy Rail	\$350 million
Amandi Gas-Fired Power Plant (200MW)	Ghana	Primary Financing	Power	Gas-Fired, Oil-fired	\$552 million
Ghana Powership (225MW)	Ghana	Primary Financing	Power	Oil-fired	\$200 million
Bel Air Mine	Guinea	Primary Financing	Mining	Minerals	\$205 million
Compagnie des Bauxites de Guinée (CBG) Expansion	Guinea	Primary Financing	Mining	Base Metals	\$795 million
Fekola Gold Mine	Mali	Primary Financing	Mining	Precious Metals	\$80 million
Bokhol Solar PV Plant (20MW)	Senegal	Primary Financing	Renewables	Photovoltaic Solar	\$29 million
Ten Merina Solar PV Plant (30MW)	Senegal	Primary Financing	Renewables	Photovoltaic Solar	\$46 million