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DECEMBER 2018 / JANUARY 2019

# African Review

of BUSINESS and TECHNOLOGY

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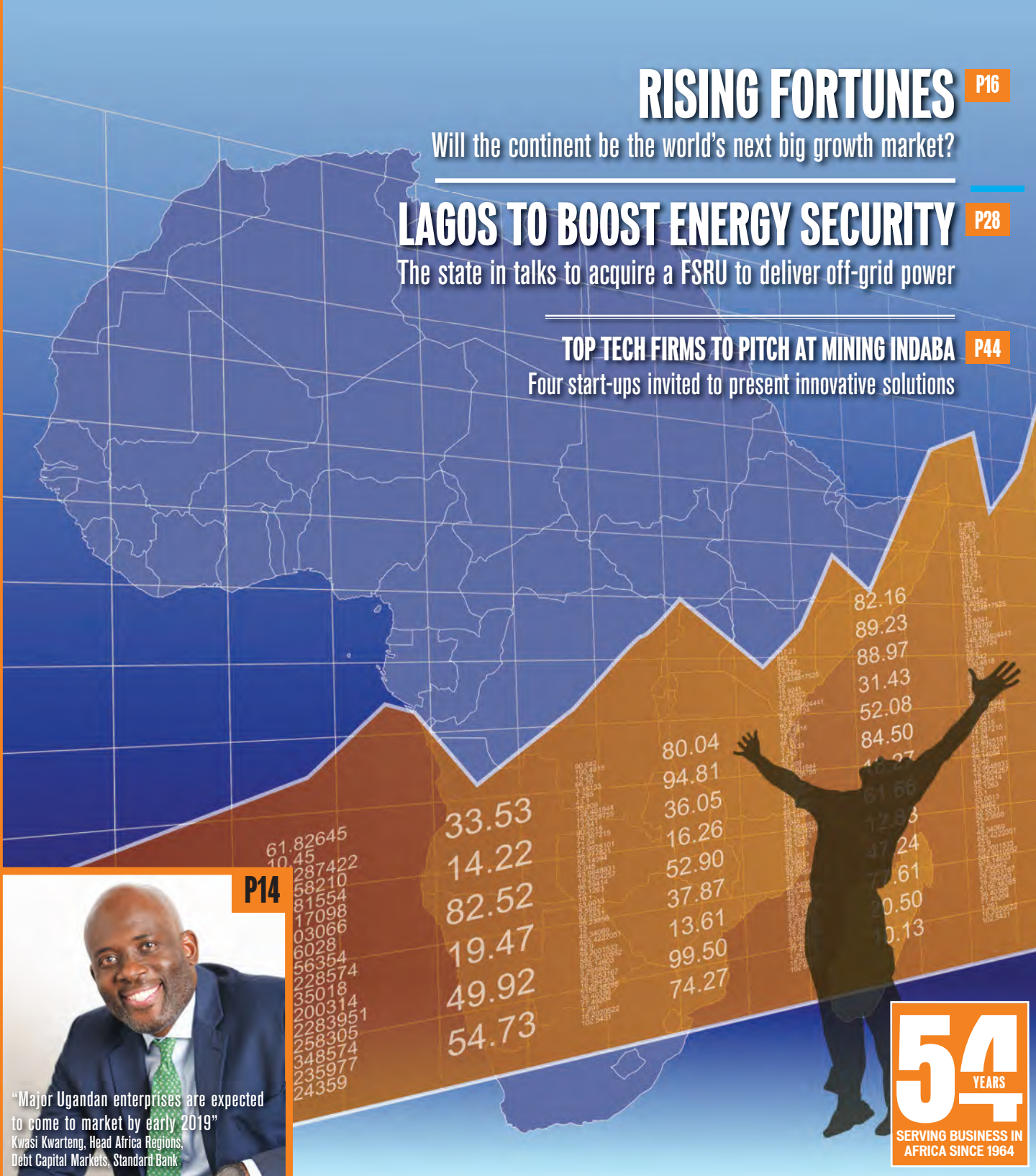
Will the continent be the world's next big growth market?

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“Major Ugandan enterprises are expected to come to market by early 2019”  
Kwasi Kwarteng, Head Africa Regions, Debt Capital Markets, Standard Bank

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# Editor's Note

Welcome to our final edition of 2018. It has been an eventful and action-packed year, with all sectors continuing to go from strength to strength. The region in 2019, in fact, will be revealed as the world's next growth market according to a new book by McKinsey & Company, (page 16). This is in spite of the economic and political uncertainties surrounding two of the continent's major economies; Nigeria and South Africa.

Interestingly, Lagos State is in talks with Golar LNG to acquire a FSRU to meet the city's power needs, which could kick-start the deregulation of the Nigerian Power sector, (page 28).

The formwork and scaffolding industry continues to respond to a lively construction sector in many markets, especially with landmark projects, such as The Pinnacle in Nairobi, which will be the tallest building in Africa when it is completed by 2020, (page 36).

Finally, a quiet revolution is taking place across the continent thanks to the marvel of mobile finance which is lifting thousands of people out of poverty. To find out more, turn to page 50.

Season's greetings and a happy new year!

Samantha Payne, Editor

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Four emerging tech companies will have the opportunity to pitch their solutions at Investing in Mining Indaba on 4-7 February.

## Morocco joins South Africa as leading investment destinations

Morocco, South Africa, Kenya, Nigeria and Ethiopia were the dominant anchor economies within their respective regions, collectively accounting for 40 per cent of the continent's total FDI projects, according to EY's latest Africa Attractiveness report.

The Turning Tides report stated that overall these four major sub-regions each attract similar FDI when measured by project numbers. For the first time ever, East Africa became the single largest beneficiary of FDI with 197 projects (27 per cent of total projects). Southern Africa, by contrast, fared lowest of the four major regions, at 162 projects (23 per cent).

The 2017 data shows that Africa attracted 718 FDI projects which is up six per cent from the previous year. This was in line with a recovery in the continent's economic growth, following a difficult preceding year. The higher project numbers were driven by interest in 'next generation' sectors, namely manufacturing, infrastructure and power generation. Despite the rise in FDI, project numbers remain below the 10-year average of 784 projects (per annum).

The report also highlights the countries with the strongest FDI gains, with Ethiopia, Kenya and Zimbabwe experiencing a major uptick in FDI during the 2017 year. By contrast, South Africa, Egypt, Mozambique and Côte d'Ivoire experienced declines in FDI projects in the same year.

Ajen Sita, EY Africa CEO, says, "2017 was in many respects a major year for the continent. We saw multiple changes in leadership across a number of countries, including South Africa, Zimbabwe and Angola. In addition, Kenya's election was drawn out which created uncertainty at the time. Changes in leadership have in turn led to a renewed urgency to implement fresh policies as new administrations move to address slow economic growth."



Image Credit: Adobe Stock

Morocco was one of five economies that collectively accounted for 40 per cent of the continent's total FDI projects.

## UN WELCOMES MOVE TOWARDS EQUAL RIGHTS

UN High Commissioner for Human Rights Michelle Bachelet said the Tunisian Cabinet's approval of a draft law that provides for equal inheritance rights for women is a significant step towards gender equality in the country, and sets an example for the region.

The Council of Ministers in Tunisia has sent a draft law to parliament that would give male and female heirs equality, unless the deceased person had registered an explicit objection before a bailiff during his or her lifetime. "I warmly welcome this significant move to secure equal rights for women and men in Tunisia," Bachelet said. "In many ways, Tunisia sets an example for other countries in the region. Over the past few years, we have seen the Tunisian parliament reform a number of laws to bring them in line with the commitment to human rights, equality and non-discrimination enshrined in its constitution and its ratification of international human rights treaties."

## WORLD OIL, GAS AND SOLAR REVIEW RELEASED

Eni has released the second volume of the World Oil, Gas and Renewables Review, following the first edition published on the oil market and the refining industry. It provides data and statistics on natural gas, biofuels and renewable energy sources that are acquiring an important role in the energy landscape by leading the transition to a less carbon intensive and more sustainable energy system.

In 2017, world gas reserves decreased slightly, by -0.2 per cent. Russia remains the top holder of gas reserves, with 25 per cent of the world's total. Among the top ten, seven are OPEC countries with 44 per cent of the world's total.

World gas production increased by 3.6 per cent, the highest y-o-y increase since 2010. Pushed by new LNG plants, Australia's production jumped by 21 per cent and ranks as the world eighth producer and sixth exporter. The output of Russia, the second gas producer, strongly increased by 7.7 per cent, but the USA is still the world's largest natural gas producer production, with an increase of 0.7 per cent.

In Africa, Egypt overtook Nigeria as the second continental producer after Algeria with a steep increase of 23 per cent thanks to the Zohr field start-up. In Europe, Norway's production hit record levels growing by 5.8 per cent, outpacing the big drop in Netherlands, a decline of 12.8 per cent due to Groningen field reduction.

World gas demand has been strong in 2017 increasing by 3.3 per cent, growing in regions except in America where the USA, the first global consumer, saw levels decrease by 2.7 per cent. Asia-Pacific led the growth with the strongest increase of 41 bcm, (5.7 per cent), driven by the Chinese boom thanks to the Battle for Blue Skies policies supporting coal-to-gas switch. China became the third world gas importer and the second LNG importer.

## BRIEFS

### Morocco inaugurates high-speed line



Image Credit: Alstom/A.Fevrier

Alstom at the centre of the Tangier-Casablanca high-speed rail line.

His Majesty, King Mohammed VI and President Emmanuel Macron has inaugurated the Tangier-Casablanca high-speed train line.

Alstom supplied the Office National des Chemins de Fer Marocain (ONCF) with 12 very high-speed trains for the Tangier-Casablanca railway section. "We are extremely proud to bring high-speed rail for the first time to the African continent," said Henri Poupart-Lafarge, Alstom chairman and CEO.

### World Bank visits Egypt's sewage programme



Image Credit: Adobe Stock

The World Bank is giving loans up to US\$850mn to fund Egypt's sewage works.

A delegation from the World Bank has visited Egypt to assess its sewage services programme.

The first phase of the programme – costing US\$550mn – will help 150 villages in the governorates of Daqahliya, Sharqiya and Behaira, according to a report in Egypt Today. An additional US\$300mn World Bank loan will cover the second phase of the programme. Also, a US\$300mn loan from the Asian Infrastructure Investment Bank will assist in costs of the project.

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## Mozambique invites South Africa to invest in gas-rich Cabo Delgado Province

The provincial permanent secretary of Mozambique's Cabo Delgado Province, Antonio Domingos Mapure, has extended an invite to the South African businesses during a trade and investment seminar to come and do business in the province.

The seminar was the first leg of the week-long Outward Trade and Investment Mission (OTIM).

He thanked the businesses for joining the province in writing the new story of oil and gas and expressed confidence in the growth of the economy post the trade and investment mission.

He said the mission came at an important time when the province was getting ready to start the 2018-2027 development programme, which includes attraction of investments of more than US\$50mn in the extraction of gas in the Rovuma basin and as well as the initiation of graphite exploration. All these activities presented a huge opportunity for South African businesses, the permanent secretary added.

Mapure commented, "South Africa has been a privileged partner of Mozambique for years. Its participation in the agricultural sector is very active, which is a source of interest in this province. We hope this meeting will provide opportunities and further create strong ties and the know-how for local businesses. Our priority areas are in line with the South African interest to invest in Mozambique and they include tourism, fisheries, human capital, aquaculture, mining and energy."

He assured businesses of Mozambique commitment to share the business opportunities, create a conducive environment for businesses with regards to laws and regulations and to encourage domestic and international investments.

The South African High Commissioner to Mozambique, Mandisi Mphahla, said South African businesses were aware the world was looking at Cabo Delgado Province's oil and gas exploration, and that the volumes of gas were massive and attracting much attention from major energy foreign companies.

"The implementation of investments of more than US\$50mn with the exploration of gas in the Rovuma basin presents important opportunities for South African companies and we would like to partner with Mozambique and the province as it builds its new future," Mphahla concluded



Image Credit: The DTI, South Africa

The South African High Commissioner to Mozambique Mandisi Mphahla with the Provincial Permanent Secretary of Mozambique's Cabo Delgado Province, Antonio Domingos Mapure.

## ORANGE AND MTN LAUNCH 'MOWALI' ACROSS AFRICA

Two of Africa's largest mobile operators and mobile money providers, Orange Group and MTN Group have announced a joint venture, Mowali (mobile wallet interoperability), to enable interoperable payments across the continent. Mowali makes it possible to send money between mobile money accounts issued by any mobile money provider, in real time and at low cost.

Mowali will immediately benefit from the reach of MTN Mobile Money and Orange Money, bringing together over 100 million mobile money accounts and mobile money operations in 22 of sub-Saharan Africa's 46 markets. Mowali is ready to enable interoperability between digital financial service providers beyond MTN and Orange operations and markets, to support the existing 338 million mobile money accounts in Africa.

Stéphane Richard, Chairman & CEO of Orange, said, "By providing full interoperability between platforms, Mowali will provide an important step forward that will allow mobile money to become a universal means of payment in Africa. Increasing financial inclusion through the use of digital technology is an essential element in furthering the economic development of Africa, particularly for more isolated communities. This solution embodies Orange's ambition to be a leading player in the digital transformation of the continent. By joining forces with another of Africa's market leaders, MTN, we aim to accelerate the pace of this transformation in a way that will change the lives of our customers by providing them with simpler, safer and more advantageous services."

"One of MTN's goals is to accelerate the penetration of mobile financial service in Africa, Mowali is one such vehicle that will help us achieve that objective," said Rob Shuter, group president and CEO of MTN.

## SA JOINS IEA AS EIGHTH ASSOCIATION COUNTRY

Jeff Radebe, minister of energy, Republic of South Africa and Dr Fatih Birol executive director of IEA has signed an agreement for South Africa to join the International Energy Agency (IEA).

In March this year, the minister approved South Africa to join the IEA as an eighth association country after Brazil, China, India, Indonesia, Morocco, Singapore and Thailand.

Signing the agreement at the 25th African Oil Week in Cape Town on 6 November 2018, the minister said, "I believe this decision positions our country at the centre of the global energy forum and will yield positive economic benefits to our country as we learn from IEA member countries and other association members. This membership will provide South Africa with a form of regular dialogue with the IEA and association countries through the participation of standing groups, committees and ministerial meetings."

## ► BRIEFS

### SAA needs US\$540mn to survive from 2019 onwards

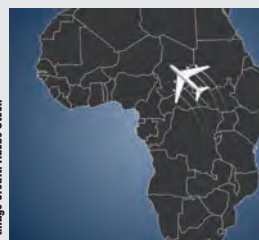


Image Credit: Adobe Stock  
It is predicted South African Airways's finances will not improve until 2021.

Struggling South African Airways (SAA) needs US\$540mn from next month to fund its daily operations in 2019, according to a report by Reuters. The airline revealed its dire finances during a presentation to a parliamentary committee on 4 December. SAA is expected to make a US\$383mn (R5.2bn) loss in the 2019 financial year and another US\$140mn (R1.9bn) in 2020 before making a profit a year later, the presentation showed.

### SA to invest US\$1bn in South Sudan's oil sector



Image Credit: Adobe Stock  
A new pipeline in South Sudan will serve field in the southern part of the country.

South Africa and South Sudan have signed a US\$1bn deal to develop the oil industry in the east African country including the construction of a refinery, a new pipeline and the exploration of new oil blocks. "When this refinery is complete, it'll have the capacity of producing 60,000 barrels of oil per day," said Jeff Radebe, South Africa's minister of energy. "It is instrumental to have a new pipeline," added Ezekiel Lol Gatkuoth, petroleum minister for South Sudan.

# Johannesburg is most popular city, index says

Johannesburg has emerged as the most popular destination city in Africa for the fifth consecutive year, according to the annual Mastercard Global Destination Cities Index.

Johannesburg, dubbed the City of Gold, attracted 4.05 million international overnight visitors in 2017. Close on its heels, Marrakech in Morocco is the second most popular African destination city, welcoming 3.93 million international overnight visitors last year. Polokwane (1.88 million), Cape Town (1.73 million) and Djerba in Tunisia (1.65 million) rounded out the top five African cities ranked in the Index.

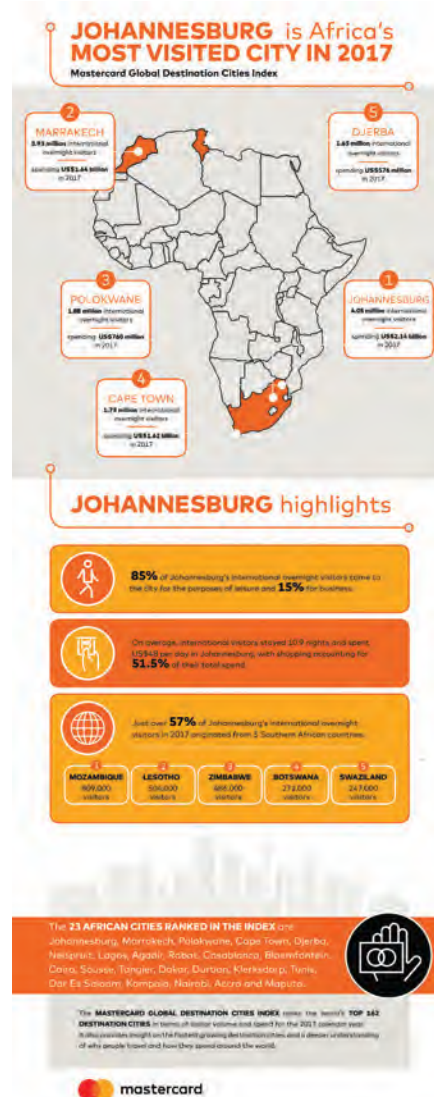
Johannesburg also recorded the highest international overnight visitor expenditure among African cities with travellers spending US\$2.14bn in 2017, well ahead of Marrakech (US\$1.64bn). On average, international visitors stayed 10.9 nights and spent US\$48 per day in Johannesburg, with shopping accounting for more than 50 per cent of their total spend.

"The City of Gold has once again topped the ranks of this year's African index, with its mix of shopping and tourism offerings still hitting the mark with international travellers," says Mark Elliott, Division President of Mastercard Southern Africa. "The ranking is significant for Joburg's economic prospects as visitor expenditure contributes an important source of revenue to the retail, hospitality, restaurant and cultural sectors."

The Mastercard Global Destination Cities Index ranks the world's top 162 destination cities in terms of visitor volume and spend for the 2017 calendar year. It also provides insight on the fastest growing destination cities, and a deeper understanding of why people travel and how they spend around the world. This year's Index ranks 23 major African cities including Cairo, Nairobi, Lagos, Casablanca, Durban, Tunis, Dar es Salaam, Accra, Kampala, Maputo and Dakar among others.

As an indication of the importance of intra-regional travel, just more than 57 per cent of international overnight visitors to Johannesburg in 2017 originated from five Southern African countries. Mozambique was the number one country that sends visitors to Johannesburg, accounting for 809,000 visitors or 20 per cent of the total, followed by Lesotho (12.4 per cent), Zimbabwe (12 per cent), Botswana (6.7 per cent) and Swaziland (6.1 per cent).

According to the City of Johannesburg, the Index rating affirms Johannesburg's position as the major economic and cultural hub in Africa. "As the strong numbers of visitors from our



Johannesburg attracted 4.05 million visitors in 2017.

neighbouring countries show, Johannesburg is one of the continent's most significant metropolises for business, trade, investment and leisure," says City of Johannesburg executive mayor Herman Mashaba. "The Index re-affirms Johannesburg's status as a destination that continues to attract international overnight visitors each year due to its continually evolving tourism offerings – from popular shopping destinations and our world-class malls to a wide range of lifestyle, sporting and business events."

## South African cities show strong performance

Cape Town and Polokwane ranked third and sixth in terms of the African cities with the highest international overnight visitor expenditure in 2017, with visitors spending US\$1.62bn and US\$760mn respectively. While visitors to Cape Town stayed 12.5 nights and spent US\$75 per day on average, travellers to Polokwane stayed for a shorter period (4.3 nights), but spent more per day (US\$95). Shopping is also a drawcard for visitors to both Cape Town and Polokwane, accounting for 22 per cent and 60 per cent of their total spend respectively.

The Mother City attracted the largest proportion of long-haul visitors in South Africa, with travellers coming from the United Kingdom (14.4 per cent), Germany (12.4 per cent), United States (10.9 per cent), and France (6.6 per cent). Cape Town's highest number of African visitors came from Namibia (6.2 per cent). Polokwane's top three countries of origin were Zimbabwe (77.7 per cent), Botswana (6.9 per cent), and the United States (2.5 per cent).

## The world's top destination cities

With roughly 20 million international overnight visitors, Bangkok retained the top spot this year. Visitors tend to stay in Bangkok 4.7 nights and spend US\$173 per day. London (19.83 million), Paris (17.44 million), Dubai (15.79 million) and Singapore (13.91 million) round out the list of top five global cities by visitor numbers.

Not all cities are created equal when it comes to the amount visitors spend in the local economy. Dubai continues to be the top-ranking destination city based on overnight visitor spend, with visitors spending a whopping US\$29.7bn in 2017 or US\$537 per day on average. It is followed by Makkah, (US\$18.45 bn), London (US\$17.45bn), Singapore (US\$17.02bn) and Bangkok (US\$16.36bn).

"International travel is crucial to many urban economies, enriching the lives of both residents and tourists. The bar is rising for cities to innovate to provide both a memorable and authentic experience," says Elliott. "We're partnering closely with cities around the world to ensure they have insights and technologies to improve how they attract and cater to tourists while preserving what makes them so special in the first place." ■

## Seychelles launches world's first sovereign blue bond

Seychelles has launched the world's first sovereign blue bond – a pioneering financial instrument designed to support sustainable marine and fisheries projects.

The bond, which raised US\$15mn from international investors, demonstrates the potential for countries to harness capital markets for financing the sustainable use of marine resources. The World Bank assisted in developing the blue bond and reaching out to the three investors: Calvert Impact Capital, Nuveen, and Prudential.

"We are honoured to be the first nation to pioneer such a novel financing instrument. The blue bond, which is part of an initiative that combines public and private investment to mobilise resources for empowering local communities and businesses, will greatly assist Seychelles in achieving a transition to sustainable fisheries and safeguarding our oceans while we sustainably develop our blue economy," said Vincent Meriton, Vice-President of the Republic of Seychelles, who announced the bond at the Our Ocean Conference in Bali.

Proceeds from the bond will include support for the expansion of marine protected areas, improved governance of priority fisheries and the development of the Seychelles' blue economy. Grants and loans will be provided through the Blue Grants Fund and Blue Investment Fund, managed respectively by the Seychelles' Conservation and Climate Adaptation Trust (SeyCCAT) and the Development Bank of Seychelles (DBS).

"The World Bank is excited to be involved in the launch of this sovereign blue bond and believes it can serve as a model for other small island developing states and coastal countries. It is a powerful signal that investors are increasingly interested in supporting the sustainable management and development of our oceans for generations to come," said Laura Tuck, vice president of Sustainable Development at the World Bank.



Seychelles' sovereign blue bond will help harness capital markets for financing sustainable use of marine resources.

Image Credit: Adobe Stock

## "SUDAN IS POSITIONED FOR ANOTHER BOOM"

Sudan is ready to take off and experience a 'second boom' after years of war and US economic and financial sanctions, says Azhari Abdalla Abdelgader, minister of petroleum and gas.

On the verge of having the USA embargo removed, the minister announced on 6 November during the 25th Africa Oil Week that the first oil field has come back on stream following an agreement with his counterpart minister in South Sudan.

Sudan's oil production has decreased to 75,000bpd from 500,000bpd after South Sudan gained independence in 2011, taking with it 75 per cent of the country's oil resources.

But with the imminent lifting of sanctions, both governments have now agreed to put on stream oil fields which have been left idle since the civil war ravaged the country over the past five years.

Abdelgader said, "We put the first field back on stream in August, with 100 per cent resources from the two countries. Our future is a lot brighter now and plans are in place."

"Oil fields from South Sudan have started to flow to the systems and facilities of Sudan and oil prices have started to pick up. All reasons are in place for Sudan to take off and experience a second boom," he added. The Sudan government has supported South Sudan in the resumption of oil production at Toma South, which had been offline for five years. Oil output levels have risen to 135,000 bpd.

The promise of higher oil production and more drilling activity has gained the interest of investors including ONGC Videsh. Guillaume Doane CEO Africa Oil and Power said, "Even without new exploration, the country has the capacity to become the third largest oil producer in sub-Saharan Africa. With a peace deal in place, South Sudan is one of Africa's most exciting resource plays."

## EIB SIGNS LOAN TO SUPPORT ENERGY INVESTMENT

On the margins of its Africa Day in the Ethiopian capital, Addis Ababa, the European Investment Bank signed a 15-year EUR 200mn (US\$228mn) loan agreement with Afreximbank, aimed at supporting trade-related investments, including in renewable energy projects in Africa. The facility will support promoters in more than 40 countries across Africa with long-term funding.

By improving access to finance for private enterprises, and specifically SMEs and mid-caps, this loan will enhance intra-African trade as well as trade with the European Union. It will enable smaller companies to sustain and create new jobs and will stimulate the expansion, diversification and development of African trade. At least 25 per cent of this financing will be dedicated to projects which will diversify the power mix in the region, reducing reliance on fossil fuels and supporting climate goals. Werner Hoyer, President of the European Investment Bank said, "The EIB is committed to supporting investment in Africa."

## ► BRIEFS

### Warning over volatile commodity markets



Tanzania suffered civil unrest following the pricing of its 2018 cashew nut harvest.

Volatility in commodity markets is set to increase over the coming months, leading to greater civil unrest and requiring military intervention, warned Unleashing the Wealth in Nations, a blockchain business. It cited what happened in Tanzania over the pricing of its 2018 cashew nut harvest and where the army was ordered to buy the harvest to diffuse friction between farmers and buyers. UWIN says commodity-driven countries need to use blockchain technology to modernise operations.

### Ethiopia names country's first woman president



Sahle-Work Zewde who is Ethiopia's new President, used to be head of UNON.

Addressing parliament, she said, "The absence of peace victimises firstly women, so during my tenure I will emphasise women's roles in ensuring peace and the dividends of peace for women," adding that Malatu showed "us the way for change and hope".



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## Vantage Capital provides a US\$21.5mn mezzanine facility to Pétro Ivoire

Vantage Capital Africa's largest mezzanine fund manager has announced it has provided US\$21.5mn of mezzanine funding to Pétro Ivoire, a leading distributor of oil and gas products in Côte d'Ivoire. The company operates a network of 72 petrol stations across the country and is also the largest gas distributor, with more than 1.7 million gas bottles in circulation. It also holds a 40 per stake in Côte d'Ivoire's largest gas storage and bottle filling facility, SAEPP. The company sold 230 million litres of petroleum products in 2017.

Vantage Capital's funding has enabled the founding family to regain a controlling equity stake in the company by facilitating the buy-back of equity from two exiting private equity investors, Amethis and the West Africa Emerging Markets Growth Fund. Founded in 1994 by Mathieu Kadio-Morokro, the company is now run by his son, Sébastien Kadio-Morokro, who was recently selected as one of the top ten Young Global Leaders in sub-Saharan Africa by the World Economic Forum. The exit of the private equity investors has made room for a French-based gas trading company, Geogas Entreprise SAS, to take a stake in the business alongside the founding family.

Luc Albinski, managing partner at Vantage Capital, explained that, "Vantage is proud to have structured the first-ever leveraged management buyout in Francophone West Africa. Vantage's mezzanine product provided the ideal solution to Pétro Ivoire's shareholders: enabling the private equity investors to achieve a successful exit and the founding family to acquire a controlling stake in their business without having to write out a big equity cheque."

David Kornik, partner at Vantage Capital, added that, "Pétro Ivoire is run by an experienced and deeply talented management team. They have successfully established the business amongst the leading players in Côte d'Ivoire's downstream oil and gas sector and we look forward to partnering with them through the company's next phase of growth."



Image Credit: Vantage Capital

**Pétro Ivoire is a leading distributor of oil and gas products in Côte d'Ivoire.**

## CONGO LAUNCHES PHASE II LICENSING ROUND

Congo officially launched its phase II licensing round for 13 new open blocks during Africa Oil Week in Cape Town. They are situated in two main basins; the coastal and culvette basins. Five blocks are located in the shallow, deep and ultra-deep areas, three onshore in the coastal basin and five in the culvette basin, covering Koba, Mbese, Mboloko, Mboti and Ntsinga.

The coastal basin produces 350,000 bpd and is the third largest in sub-Saharan Africa.

Companies have until 30 June 2019 to submit their offers in Brazzaville. The results of the phase II licensing round will be awarded in September 2019.

Teresa Goma, director general, hydrocarbons also announced at the 25th African Oil Week the results of the phase I licensing round. Marine 21 was awarded to Kosmos, Marine 27 was awarded to Perenco and Marine 20 to Total. In 31 December 2017, oil reserves stood at 496,847,000 bbl (1P) and 2,613,793,000 bbl (2P).

## BOLLORÉ LOGISTICS STARTS NEW HUB IN GABON

Bolloré Logistics has opened a new logistics hub in Lastourville, Gabon.

Connected to the railway operated by Société d'Exploitation du Transgabonais, (SETRAG), the new logistics platform will store, manage and carry processed wood in containers from the production sites in the forest to the Owendo container terminal (OCT), 55km away.

With an area of 14,000 sq m, the hub will be able to handle 4,500 TEUs per year during the start-up phase. It will streamline the timber shipment process for the four main forestry companies in the province of Ogooué-Lolo. The first train of 15 wagons loaded with empty containers for the region's four forestry companies: PW-CEB, SBL, SBK and BH. By joining forces with Bolloré Logistics and SETRAG, the four companies are seeking to address the difficulties in shipping their processed timber by road, and to limit transshipments between the production sites and container terminal.

To further improve the efficiency of the new site, Bolloré Logistics plans to set up a central office offering administrative and customs services in early 2020. The containers will be then cleared through customs directly in Lastourville instead of Libreville. As a result, the time required for operations and shipment, including packing the wood into containers and shipping it to the port should fall by 15 days, bringing gains in productivity of between 15 and 20 per cent.

"The hub in Lastourville has advantages for all the players in the timber industry. The opening of a customs office in 2020 will complete our existing services, making it possible to cut transit times for gains in productivity and reductions in cost," said Jean-François Olliver, managing director of Bolloré Transport and Logistics in Gabon.

## BRIEFS

### Landmark power station investment in Cameroon



Image Credit: Alohe Stock

The US\$1.3bn power project will consist of a 420MW hydro-electric power station.

The Africa Finance Corporation was pleased to announce that it is to invest in the Nachtigal Hydro Power Company, located north of Yaounde in Cameroon. The US\$1.3bn power project will consist of a 420MW hydro-electric power station as well as a 50km transmission line. Construction is expected to commence by the end of 2018. "We are pleased to be investing in the country's infrastructure that will help unlock economic growth," said Samaila Zubairu, CEO at AFC.



Image Credit: AFC

AFC President Samaila Zubairu meeting the Togolese minister of finance, Sani Yaya.

### Togo joins AFC as 20th member

Togo has become the 20th Member State of Africa Finance Corporation. Togo's membership of Africa Finance Corporation (AFC) also makes it the 12th West African member of AFC after Nigeria, Guinea Bissau, Ghana, Sierra Leone, Gambia, Liberia, Guinea, Chad, Cape Verde, Benin and Côte d'Ivoire. Togo has in recent years delivered one of the highest growth rates across the continent, averaging more than five per cent since the beginning of the commodity downturn (2011).

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## Upcoming Events Calendar 2019

### FEBRUARY

4 - 7

#### INVESTING IN AFRICA MINING INDABA

Cape Town, South Africa  
www.miningindaba.com

19 - 20

#### AFRICA ENERGY INDABA

Johannesburg, South Africa  
www.africaenergyindaba.com

### MARCH

12 - 15

#### PROPAK AFRICA

Johannesburg, South Africa  
www.propakafrica.co.za

20 - 21

#### INTERMODAL AFRICA

Mombasa, Kenya  
10times.com/intermodal-africa-mombasa

28

#### TMT FINANCE AFRICA

Cape Town, South Africa  
www.tmtfinance.com/capetown

### APRIL

8 - 14

#### BAUMA

Munich, Germany  
www.bauma.de

16 - 17

#### SECUREX WEST AFRICA 2019

Lagos, Nigeria  
www.securexwestafrica.com

### MAY

14 - 16

#### AFRICAN UTILITY WEEK

Cape Town, South Africa  
www.african-utility-week.com

14 - 16

#### POWER-GEN AFRICA/DISTRIBUTECH

Cape Town, South Africa  
www.powergenafrika.com

### JUNE

11 - 14

#### AFRICA ENERGY FORUM

Lisbon, Portugal  
www.africa-energy-forum.com

11 - 12

#### 2ND ANNUAL FUTURE BANKING EAST AFRICA SUMMIT

Nairobi, Kenya  
www.fleming.events/future-banking-east-africa-summit

### SEPTEMBER

4 - 6

#### THE BIG 5 CONSTRUCT NIGERIA

Lagos, Nigeria  
www.thebig5constructnigeria.com

## bauma 2019 will create new prospects for MEA

Taking place from 8-14 April, the 32nd edition of bauma in Munich will cater to the entire construction equipment sector including mining. In 2016, 20 per cent of the exhibitors came from the mining industry and interested visitors for the sector covered 24 per cent of the footprint.

As Saudi Arabia declares to invest US\$22.6bn in a new mining sector and Egypt prepares to revamp its mining strategy for investors, Mareile Kaestner, exhibition director of bauma, feels that the show will give the Middle East and Africa companies an ideal platform to source solutions from global players.

To keep up with the evolving construction sector, bauma 2019 will focus on three trends – digitisation, sustainability and efficiency. “Sustainable mining as well as workplace safety is a huge part of our agenda at bauma. Apart from product showcase, we also have special mining halls for seminars and lectures,” she adds.

Kaestner points towards another evolving trend – alternative drives. “The construction machinery industry is increasingly opting for these. In the future there will no longer be one single typical drive system but instead an increasingly wide range of competing drive systems on the market. Electromobility and driverless vehicles in particular are seen as key future drivers. The leading manufacturers will be showcasing their developments and discussing

Image Credit: Messe München



bauma 2019 will focus on three trends; digitisation, sustainability and efficiency.

the opportunities and challenges presented by new technology at bauma 2019.”

She added that electromobility and driverless vehicles are two areas that are increasingly gaining traction with manufacturers and service providers in the construction machinery industry. These will also be the hot topics at the fair. Leading exhibitors here include Doosan Bobcat, Liebherr, Perkins Engines and Bosch Rexroth.

As always, there will be new introductions at the show. bauma 2019 will see the launch of two new halls. With these put together, the total area of the event will cover 20,000 sq m. There will also be a new lifting technology area inside as

well as outside the halls. A dedicated hall for digital solutions will feature an augmented reality and virtual reality technologies for the attendees.

World’s seventh biggest construction machinery market Canada is the designated partner country of bauma 2019. According to Kaestner, this gives an opportunity to bauma, until now a Europe-focused market, to look for partners as far as North America.

“We have been preparing for three years now and believe that such forward-thinking agendas will help attract visitors from Middle East and Africa gain partnerships and procure new products.”

# AfricaCom 2018: Pathway to a connected Africa

The 21st edition of AfricaCom — Africa's largest technology conference in Cape Town — offered a glimpse of the connectivity divide in Africa and new trends to connect the unconnected. Nancy Onyango finds out more.

AfricaCom was jam-packed with stimulating panel discussions, networking forums, product launches and showcases. It was held at the Cape Town Convention Centre from 13 to 15 November.

The conference featured more than 17,000 attendees from more than 150 countries, ranging from telecom operators, government representatives and researchers.

Lanre Kolade, CEO of CSquared, said, "Africa needs to showcase success stories in the African continent and AfricaCom provides the opportunity for Africans to do just that. African governments need to understand that we have restless youth across the continent who need to be empowered."

More than 60 per cent of the African population comprises youth below the age of 25. They are mostly unemployed and live in rural and peri-urban poverty-stricken areas where the provision of services such as health care, education and transport are constrained due to a lack of funding, infrastructural gaps and conflict. For the majority of young Africans, mobile phones are not just a communication device but also a vital tool for accessing either life-enhancing or life-changing services and opportunities.

Highlights and announcements during AfricaCom 2018 aimed at shaping Africa's digital future and closing the connectivity gaps included MTN, KaiOS Technologies, China Mobile, and UNISOC announcing a partnership to launch Africa's First Smart Feature Phone. The mobile phone will initially be available from MTN in Nigeria and South Africa. The handset will allow customers to upgrade from a feature phone with only voice and text capabilities to a fully connected



AfricaCom featured more than 17,000 attendees from 150 countries.

handset with fast, 3G Internet. Of the partnership, Rob Shuter, Group President and CEO of MTN, said, "As MTN we are proud to be part of this partnership that supports our ambitions to deepen digital inclusion in our markets. This initiative contributes to the achievement of one of our major goals to provide affordable data enabled handsets to our customers, and by so doing, remove some of the barriers to mobile internet adoption in Africa."

The handset will retail between US\$20-US\$25 which is relatively affordable compared to the average price of US\$40 of entry-level smartphones across the African continent. MTN is aiming to sell around 10 million of the devices over the next three years.

## Fiber connectivity

Angola Cables, a multinational

telecommunications company running a variety of international submarine cable systems announced that it had signed a Memorandum of Understanding with Broadband Infraco, a wholesale state-owned service provider in the South African telecommunication space to provide extensive regional long-distance network coverage and connectivity in the SADC region. Broadband Infraco currently has nearly 15,000km of fiber networks across South Africa.

Geographic and infrastructural challenges are among the complexities faced by mobile network operators when trying to expand mobile connectivity in rural areas of Africa. According to the African Digital Outlook 2019, a report by Ovum, "Even as Africa sees progress with broadband and digital services, basic connectivity remains out of reach for many people on the

continent. The gaps in connectivity represent a missed commercial opportunity as well as an obstacle to achieving economic and social benefits that should arise as broadband penetration increases."

Pan-African telecoms group Liquid Telecom partnered with Kymeta in a bid to extend its VSAT service in the most under-served and remote parts of Africa.

## Broadband outlook

Nigeria, South Africa, Egypt, Ethiopia and Algeria are the biggest mobile markets in the African continent in terms of subscriptions. Mobile data is the leading revenue growth area for mobile operators in Africa.

5G is being punted globally, but in reality, Africa will see a much larger uptake of 3G in the next few years. According to Ovum's African Digital Outlook 2019 report which was launched at the conference, "3G and increasingly LTE will power the growth of mobile broadband in Africa for the coming few years. The number of mobile 3G subscriptions on the continent will rise from 456.6 million at the end of 2018 to 697.6 million in 2023." Ovum expects mobile 5G services to be launched in Africa by 2021, but the number of mobile 5G subscriptions will be small, rising to 5.9 million by 2023.

Agriculture, education, health sector are best positioned to benefit from digital connectivity in the immediate future.

According to the 2017 African Futures report by the Institute for Security Studies (ISS), "Mobile technology uptake can help banking, health and education services to reach underserved populations, but increasing business productivity and attracting foreign direct investment (FDI) will require investments in pricey ICT infrastructure." ■

“3G and increasingly LTE will power the growth of mobile broadband in Africa for the coming few years”

OVUM'S AFRICAN DIGITAL OUTLOOK 2019

# Debt capital markets resilient amid global change

Kwasi Kwarteng, Head Africa Regions, Debt Capital Markets for Standard Bank shares the reasons why the continent's debt capital markets are expected to sustain the region's ability to import capital and manage debt.

Activity in Africa's debt capital markets remains remarkably resilient despite global trade wars, Brexit concerns and high interest rates in a resurgent United States economy which is translating into emerging market jitters. Even as concerns around African sovereign debt mount, increasing global integration and the internal capability of the continent's debt capital markets looks set to sustain Africa's ability to import capital and manage debt through the current global cycle.

As an example, for the Southern and Central Africa region, the recent slowdown in US dollar denominated transactions in Southern and Central Africa, excluding South Africa, has been offset by an increase in local currency debt capital markets interest and transactions for certain issuers. Markets such as Namibia and Botswana have experienced increased local currency issuance activity in 2018 with Mozambique undertaking its largest listed metical transaction for a non-government issuer ever. Zambia has also seen a local currency issuance in 2018, the first in more than a year and half. In addition, issuers in traditionally smaller markets, such as Swaziland and Lesotho, are pursuing significant local currency issuance initiatives, and developments in Malawi present promising local currency opportunities in 2019 and beyond.

The slowdown of US dollar denominated debt raising in Southern and Central Africa is temporary and to some extent cyclical, with an uptick in US dollar denominated activity expected across the region in the first quarter of 2019.

Despite regional and global macro headwinds, East Africa is emerging from two years of slower debt capital market activity. The collapse of three financial institutions in Kenya drove wariness among legislators concerned about the role of debt in driving instability. Combined with prolonged uncertainty over the Kenyan elections, this wariness drove a similar reticence among East African issuers. In recent months, however, confidence and appetite have returned to East Africa underpinned, for example, by a number of potential issuer/issuance related initiatives across the region. In Tanzania there has been a recent financial institution transaction, while the Rwandan sovereign has increased their interest in developing the regional debt capital markets with



Image Credit: Standard Bank

improved infrastructure while providing open berth for regionally focused issuers. Looking ahead, major Ugandan enterprises as well as some of their larger corporate entities are expected to come to market by early 2019 pointing to a sustained period of debt capital market activity in East Africa.

The most significant indicator, however, that East Africa's debt capital market is bouncing back has been Kenya's issuance of 10 and 30-year sovereign bonds. Kenya's 30-year bond is, in fact, one of the longest dated US\$ bond issued by an African sovereign.

In West Africa, Standard Bank acted as local advisor for the sovereign of Nigeria's 2017 and 2018 Eurobond transactions. Major Nigerian corporates Dangote Cement and Union Bank successfully raised local currency debt. Other Nigerian corporates pursuing local currency transactions are expected to come to market in late 2018 and 2019. Ghana has also recently

issued US\$ denominated sovereign transaction. Additionally, Standard Bank has acted as joint lead arranger on all of Ghana's longer dated treasury bonds for the last two years or more. More broadly across the West African region, a number of development finance institutions and financial institutions based in Francophone Africa are expected to approach the market with US dollar and local currency structures.

The current uptick in West Africa's local currency issuance is expected to continue into 2019 as various non-bank financial institutions come to market.

A common theme evident across all Africa's regions is that, increased debt servicing pressure is, in fact, creating the opportunity for experienced debt teams to restructure, and extend US dollar sovereign debt. This same pressure is driving an increased interest in local currency issuance. This response very much reflects, Africa's ability to adapt challenges into opportunity though the judicious combination of innovative policy and the application of new technologies to support rapid market development.

For example, the pressure to restructure debt is, fortunately, coming at a time when many African economies are evolving deeper with more liquid domestic markets – especially through pension fund reform and other progressive legislation driving the growth of new asset classes. This is happening at a time when Asia and other emerging markets in the Middle East and the Gulf are making broader US dollar debt opportunities available to Africa. Certainly, China and wider Asia offer Africa a broader selection of capital opportunities. Standard Bank's institutional relationship with the Industrial and Commercial Bank of China – and the access that this provides to the highest level of the Chinese banking and capital system – presents yet another opportunity for Africa to widen its access to global capital on more competitive and extended terms.

Since Africa has still a way to go in accessing the size of local currency liquidity available to support large debt transactions and being able to partner with a global bank to identify the right opportunities, picking the right windows to approach traditional and new global US dollar debt markets remains essential. ■

“ Africa has a way to go in accessing the size of local currency liquidity available to support large debt transaction ”

KWASI KWARTENG

# African governance lags behind vital needs

Despite strong GDP growth over the last 10 years, Africa has failed to generate economic opportunities for its booming youth population, according to the 2018 Ibrahim Index of African Governance.

The 2018 Ibrahim Index of African Governance (IIAG), launched by the Mo Ibrahim Foundation, highlights that public governance progress in Africa is lagging behind the needs and expectations of a growing population, composed mainly of young people.

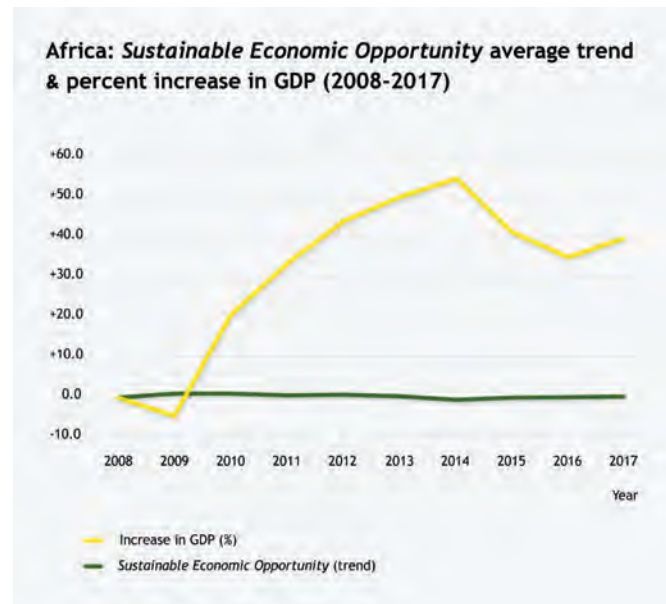
Over the last decade, overall governance has on average maintained a moderate upward trajectory, with three out of four of Africa's citizens (71.6 per cent) living in a country where governance has improved.

African governments have struggled to translate economic growth into improved Sustainable Economic Opportunity for their citizens.

Since 2008, the African average score for sustainable economic opportunity has increased by 0.1 point, or 0.2 per cent, despite a continental increase in GDP of nearly 40 per cent over the same period. There has been virtually no progress in creating sustainable economic opportunity, meaning it remains the IIAG's worst performing and slowest improving category. Defined as the extent to which governments enable their citizens to pursue economic goals and prosper, the almost-stagnant Sustainable Economic Opportunity trend strikes a concerning contrast with demographic growth and youth expectations. Africa's population has increased by 26 per cent over the last ten years and 60 per cent of the continent's 1.25 billion people are now under the age of 25.

## A diverging picture across Africa

African countries show increasing divergence in overall governance performance. Continental progress is mainly driven by 15 countries that



have managed to accelerate their pace of improvement over the last five years. Progress is most striking in Côte d'Ivoire, Morocco and Kenya. Divergence is also reflected in sustainable economic opportunity trends. While 27 of Africa's countries have shown some improvement, in 25 countries, accounting for 43.2 per cent of Africa's citizens, sustainable economic opportunity performance has declined over the last 10 years.

There is no strong relationship between the size of a country's economy and its performance in sustainable economic opportunity. In 2017, four of the 10 countries with the highest GDP on the continent score below the African average score for sustainable economic opportunity and sit in the lower half of the rankings, namely: Algeria, Angola, Nigeria and Sudan. Meanwhile, two of the smallest economies on the continent, Seychelles and Cape Verde, reach the fifth and sixth highest scores in providing sustainable economic opportunity for their citizens.

## Declining business environment

The trajectory of the African average score for business environment is critical. Deteriorating by almost -5.0 points over the past 10 years, this is a worrying trend given that the number of working age Africans (15-64 years old) is expected to grow by almost another 30 per cent over the next 10 years.

This will increase demand for jobs in an environment where on average progress in sustainable economic opportunity is almost non-existent. Such demographic figures create a further striking contrast with the drop of -3.1 points in satisfaction with employment creation since 2008.

Additionally, the indicator measuring promotion of socio-economic integration of youth registers an average continental decline of -2.3 over the last decade.

## Education outcomes are worsening

Further cause for concern is

education. While human development is one of the bigger success stories of the 2018 IIAG, driven by improvements in health, the stalling progress in education seen in last year's IIAG has now turned to decline.

For 27 countries, education scores registered deterioration in the last five years, meaning that for more than half (52.8 per cent) of Africa's youth population, education outcomes are worsening. This drop is driven by a fall in the indicators measuring whether education is meeting the needs of the economy, education quality, and citizens' expectations of education provision.

## Civil society space is shrinking

Progress in participation & human rights has been made on average. Almost four out of five of Africa's citizens (79.6 per cent) live in countries that have progressed in this dimension over the last decade. However, 'free and fair' executive elections do not always translate into a better participatory environment. Alarming, citizens' political and civic space in Africa is shrinking, with worsening trends in indicators measuring civil society participation, civil rights and liberties, freedom of expression and freedom of association and assembly.

Although personal safety and national security continue to show average decline over the last decade, rule of law and transparency and accountability have begun to register welcome progress. Rule of law is the most improved sub-category in the IIAG over the last five years. African average performance in transparency and accountability has also improved, though more needs to be done in this category. ■

# Africa is the world's next big growth market

A new book by McKinsey & Company confirms that Africa is poised for economic acceleration like the Asian boom.

In *Africa's Business Revolution: How to Succeed in the World's Next Big Growth Market*, Acha Leke, Mutasa Chironga, and Georges Desvaux detail the research that McKinsey & Company have done and share insights into Africa's future growth prospects. The conclusions they draw are distilled from 3,000 McKinsey client engagements, in-depth proprietary research and interviews with 40 of Africa's most prominent business and development leaders. The authors reveal how companies can better understand the African market and seize the opportunities for building profitable, sustainable businesses.

## Major trends indicate Africa is poised for explosive growth

Africa has a fast-growing, rapidly urbanising population with big unmet needs. This means there is a trillion-dollar opportunity to industrialise Africa, to meet rising domestic demand and create a bridge-head in global export markets. In addition, there has been a big push by governments and the private sector to close infrastructure gaps. There is a continued resource abundance in agriculture, mining, and oil and gas, with innovation and investment in these sectors unlocking new production on the continent. The rapid adoption of mobile and digital technologies could leapfrog Africa past many obstacles to growth.

Leke and Desvaux, both senior McKinsey Partners and Chironga, an executive at Nedbank, say, "With more than 400 African companies earning annual revenues of US\$1bn or more, we can identify what works. The highly successful businesses are often African companies, but many are entrepreneurial firms with Western, Indian or Chinese founders. The most consistently profitable businesses, which demonstrate a higher tolerance for risk, are eager to



adapt their products, production and distribution for African consumers, and commit to investing and building their businesses for the long-term."

## African success stories

The book examines several examples of African businesses that have translated opportunities into enduring business value. For instance, it shows how Nigerian

conglomerate, Dangote Industries, industrialised to serve regional markets through import substitution and improved margins through vertical integration. South African retail giant, Shoprite, adapted its supply chain and distribution centres for local logistics. Technology driven start-up, Kenya's M-Kopa, is providing mobile money financed off-grid solar energy kits.

The authors study global companies which have succeeded in Africa, such as Coca-Cola, GE, and Total.

## Four imperatives to achieve long-term sustainable growth

Leke, Chironga and Desvaux believe that building a successful business in Africa requires a long-term approach and four essential practices:

- **Mapping an Africa strategy** – setting a clear aspiration, prioritising markets, defining how to achieve scale and relevance and creating an ecosystem to thrive.
  - **Innovating business models** – truly engaging with customers, creating products and services to fulfil unmet needs, getting lean to drive down costs and price points, and harnessing technology.
  - **Build resilience for the long-term** – riding out short-term volatility, diversifying portfolios, integrating up and down the value chain, understanding local context and engaging with governments.
  - **Unleashing talent** – developing skills in frontline workers, creating robust talent development processes and harnessing the power of women's advancement.
- Leke says, "At the heart of these four imperatives is a commitment to doing well by doing good. We've had the privilege of meeting and working with many business leaders from around the world. They look at Africa's high levels of poverty; its gaps in infrastructure, education and healthcare, and its governance problems. But they don't just see barriers to business – they see human issues they feel responsible for solving. They show us that contributing to the social and economic development of the countries within which their thriving businesses operate creates value for both shareholders and stakeholders." ■

“The highly successful businesses are often African companies”

ACHA LEKE AND GEORGE DESVAUX, MCKINSEY PARTNERS AND MUTSA CHIRONGA, EXECUTIVE, NEDBANK





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Image Credit: Adobe Stock

# Africa holds steady amid external uncertainties

Economist Moin Siddiqi provides a comprehensive overview of the opportunities and challenges facing African economies in 2019 and beyond.

The US\$2 trillion-plus sub-Saharan Africa (SSA) economy, home to a growing urban middle-class population and vast untapped markets continues to strengthen from a low point in 2016, thanks to domestic policy adjustments and improved global economic activity. Growth was projected to increase from 2.7 per cent in 2017 to 3.1 per cent in 2018 (IMF data), exceeding growth outcomes in the Middle East but lower than in emerging Asia. There remains a noticeable disparity in growth performances across sub-regions, with consistent solid growth attained in east Africa, which attracts significant investor interest.

Energy exporters have experienced a growth revival, but still below levels of pre-2014/15 oil price slumps. In Nigeria, the non-oil industrial sector is constrained by sluggish private demand, whilst recent reforms in Angola bode well for non-oil activity. However, the positive effects of high oil prices were offset by lower crude output in both countries due to capacity constraints. By contrast, growth during 2018 was buoyant among non-resource rich countries led by Ethiopia, Côte d'Ivoire and Kenya, due to better agricultural conditions, increased consumer spending and public investment coupled with abating inflation. In

South Africa, contractions in agriculture, mining and construction as well as uncertainties over the 2019 national elections and lower government spending are preventing sustained robust growth for combating high unemployment and boosting critical investments, notably in the energy sector and social housing.

Continued economic stagnation in SSA's two biggest markets (Nigeria and SA) impacts neighbouring countries through remittances, import demand and financial flows. According to the IMF, spillovers to Benin and Niger's growth from non-oil activity in Nigeria are estimated at 0.5 and 0.3 percentage points, respectively. Similarly, workers' remittances to Lesotho and Swaziland depend heavily on SA. Nonetheless, the rest of SSA has grown at 5.3 per cent on average in 2010-17 (IMF data), but with wider heterogeneity across countries. Hence, there are plenty of opportunities for dedicated investors in frontier markets.

The regional business climate is improving, with 40 African countries implementing a total of 107 reforms in the past year, up 24 on previous year, according to the World Bank 2019 'Doing Business' report. SSA is home to five of 2018's top 10 improvers – Côte d'Ivoire, Djibouti, Kenya, Rwanda and Togo. Strengthening governance, fighting corruption and tackling obstacles such as inadequate electricity and financial services will support further business growth.

## Debt vulnerabilities

One area of concern is rising public debt and fiscal imbalances in the region. In 2017, 15 SSA economies were classified either in 'debt distress' or at 'high risk' of debt distress (compared to six in 2013), reflecting heavy borrowing and large deficits, with refinancing cost of dollar-denominated liabilities becoming in future more expensive due to local currency depreciations in several cases.



Image Credit: Moin Siddiqi

Moin Siddiqi.

The IMF 2018 figures show government debt in 12 countries could average between 70-to-100 per cent of GDP, chiefly Angola, Congo (Rep), Ghana, Mozambique, Zambia and Zimbabwe, while fiscal deficit is predicted to hit 4-to-10 per cent of GDP in 18 countries; Burundi, Eritrea, Ghana, Kenya, Uganda, Mozambique, Nigeria, Zambia and Zimbabwe, among others.

At the same time, foreign exchange reserve buffers are below international threshold of three-months 'import-cover' in about half of SSA countries. The share of foreign currency denominated public debt in total government debt increased across SSA from more than one-fifth in 2011-13 to one-third of GDP in 2017. While the share of concessional (i.e. soft) funding by multilateral and bilateral

“ Rising US interest rates will increase debt service burdens and hike the cost of new borrowing ”

MOIN SIDDIQI, ECONOMIST

creditors is unchanged, African debt held by private banks and bondholders has risen in recent years. In the first-half of 2018, six countries (Angola, Côte d'Ivoire, Ghana, Kenya, Nigeria and Senegal) raised US\$14.3bn in Eurobond issuances (World Bank data), compared to US\$7.8bn for the full year of 2017.

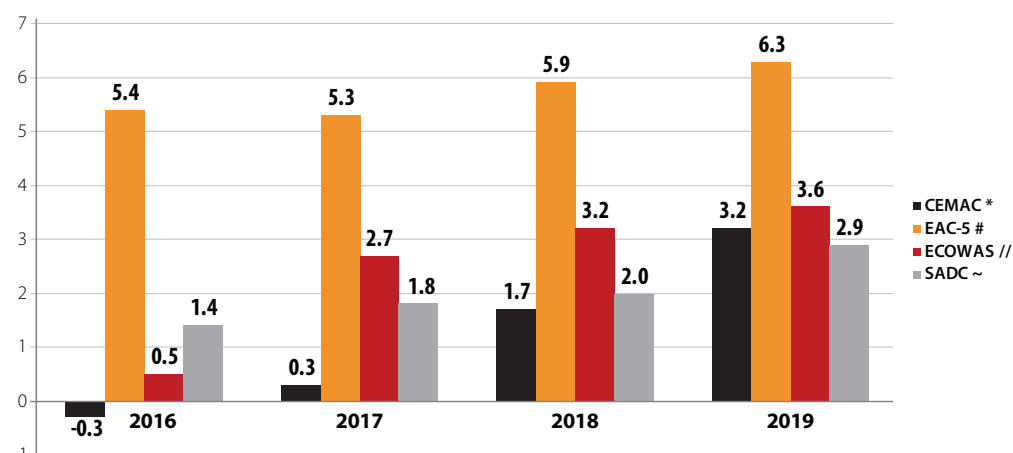
Moreover, a strong dollar and rising US interest rates will increase debt service burdens and hike the cost of new borrowing, including for large amounts of maturing SSA global bonds in 2019-20 and in 2024-25 – thus indications of future 'refinancing risks' facing Africa region. The IMF advised, "Improving debt management frameworks could help better manage risks. Further revenue-based adjustment is needed to reduce debt vulnerabilities and generate resources for development." Many countries require new sources of finance to provide more services to their populations. Africa needs US\$100bn a year for infrastructure investment (World Bank data), but present capital spending across the region is about US\$50bn – leading to a swelling infrastructure deficit.

### Navigating against headwinds

Overall, regional prospects are benign, although greater economic diversification would shield Africa from commodity price shocks. Real GDP growth (excluding Nigeria and SA) could reach 5.4 per cent in 2019, boosted by public investments, high exports, increased agriculture output and strong domestic demand. More encouraging, the IMF expects 18 out of 45 SSA countries (two-fifths) to grow briskly at 6 per cent or more compared to 10 in 2016 – well above global trends. While further fiscal consolidation in SSA is likely, double-digit inflation is expected in Liberia, Nigeria, Angola, Congo (DRC) and Sierra Leone.

Current account positions (i.e. net trade in goods/services) are expected to stabilise in 2019, with prices of the region's exports:

### Large disparity in growth performance across sub-Saharan African regions



\* Economic & Monetary Community of Central African States: Cameroon, Central African Rep. Chad, Congo, Rep of Equatorial Guinea and Gabon.

# East Africa Community-five: Burundi, Kenya, Rwanda, Tanzania and Uganda.

// Economic Community of West African States: Benin, Burkina Faso, Cabo Verde, Côte d'Ivoire, Gambia, The, Ghana, Guinea, Guinea-Bissau, Liberia, Mali, Niger, Nigeria, Senegal, Sierra Leone and Togo

~ Southern African Development Community: Angola, Botswana, Congo (DRC), Eswatini, Lesotho, Madagascar, Malawi, Mauritius, Mozambique, Namibia, Seychelles, South Africa, Tanzania, Zambia and Zimbabwe.

Source: IMF Regional Economic Outlook, Oct 2018.

SSA macro-economic indicators (per cent)	Projections			
	2016	2017	2018	2019
Real GDP growth (per cent)	1.4	2.7	3.1	3.8
Nigeria	-1.6	0.8	1.9	2.3
South Africa	0.6	1.3	0.8	1.4
Angola	-2.6	-2.5	-0.1	3.1
Inflation, annual (per cent change)	11.2	11.0	8.6	8.5
Fiscal balance* incl. Grants	-4.5	-4.8	-4.2	-3.9
Government debt *	43.8	45.4	48.5	48.2
External official debt*	20.6	22.2	23.0	23.1
Foreign reserves **	5.2	4.9	4.9	4.8
External current account *	-3.9	-2.3	-2.8	-3.4
Crude oil (US\$/barrel)	43	53	72	74
Gold (US\$/oz)	1,249	1,258	1,259	1,245

\* Per cent of GDP; \*\* Month of imports of goods and services.

Sources: IMF database, World Bank Commodity Report, Oct 2018.

agricultural and energy commodities (oil, natural gas and coal) plus minerals and precious metals trading slightly above 2017-18 levels. A modest external surplus is forecast among oil-exporters, but oil-importers (comprising three-quarters of SSA countries) face large deficits as oil prices are projected by World Bank to average US\$74/barrel in 2019 – reflecting inadequate global supply and

depleting volume of spare capacity in major OPEC producers. Though prices could fall in coming months weighed by rising inventories and slower global growth.

Against this background, SSA faces challenges to strong expansion with the downside risks to global growth over the past six months, reflecting geopolitical strains, rising protectionism, greater volatility in assets markets and elevated policy

uncertainty in the UK over Brexit. Moderate growth in China and the Euro area (SSA's major trading partners) would reduce commodity prices, export demand and foreign direct investment flows to Africa. An abrupt tightening of US monetary policy (i.e. higher financing costs) or a sudden reversal in capital flows to emerging markets also impacts SSA. This could prompt steep currency depreciations in countries with

weak fundamentals.

Equally, a protracted trade war between the US and China can hit metal-exporters hardest than oil-exporters since base metal prices could drop faster than oil prices. Also, countries like SA, Kenya, Mauritius and Ethiopia – more integrated in global supply chains would suffer from rising trade tariffs/barriers.

Escalating trade conflicts in the developed world could lead to a cumulative loss of 1.5 per cent in SSA's economic output over 2018-21 period (IMF data). The World Bank echoed, "Further escalation of trade restrictions between major

economies could lead to large economic losses and cascading trade costs through global value chains." Such adverse conditions hinder Africa from achieving the Sustainable Development Goals and coping with demographic pressures.

**New policy approach**

With SSA's growth remaining below pre-crisis averages, national governments need to adopt policies/reforms to raise medium-term output potential and strengthen resilience to risks. The IMF said, "Creating strong, sustained and

“Improving debt management frameworks could help better manage risks”

IMF

inclusive growth will require several steps." These include both 'product' and 'labour' market reforms to underpin structural transformation of the region. Policies under former entail fostering private investment and risk-taking by improved regulation and open competition, ensuring reliable infrastructure

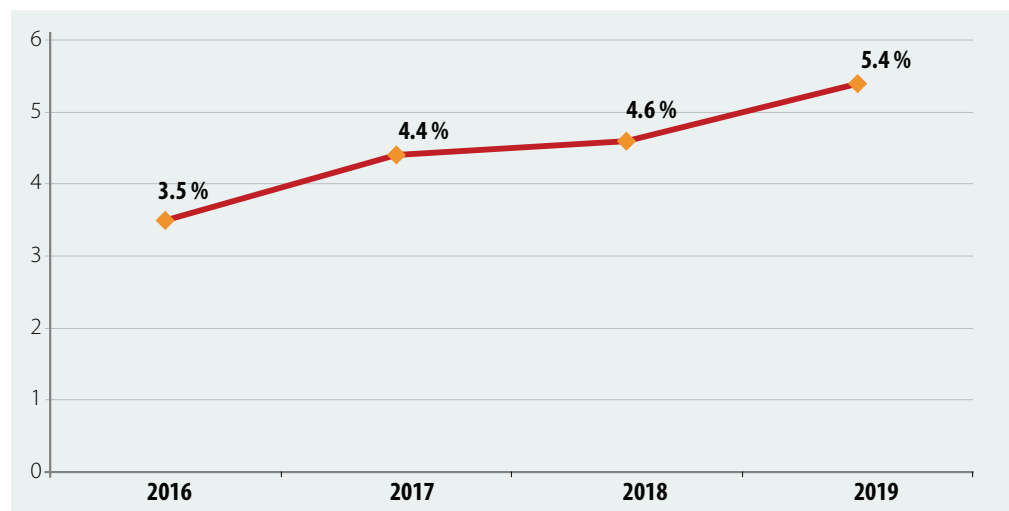
services, improving the efficiency of parastatals in utility sectors and enhancing access to credit, as well as deepening trade and financial integration.

Major labour reforms include developing human capital, promoting digital connectivity and better education and vocational training (emphasis on science/technology), and creating more productive jobs – thus delivering on demographic dividend. The number of Africans reaching working age (15-64) might exceed 100 million during 2030-35 (IMF forecast). Furthermore, SSA should boost domestic tax receipts – currently among lowest in developing world – and improve the efficiency of public spending to fund growth-enhancing investments.

In sum, Africa is a growing region of colossal natural wealth, however, some years may see feeble growth as in 2016-17 caused by external factors. As growth momentum gathers pace driven by increased urbanisation and demand for supporting infrastructure, future growth sectors are wholesale/retail trade, financial services (including fintech), housing, utilities and transportation.

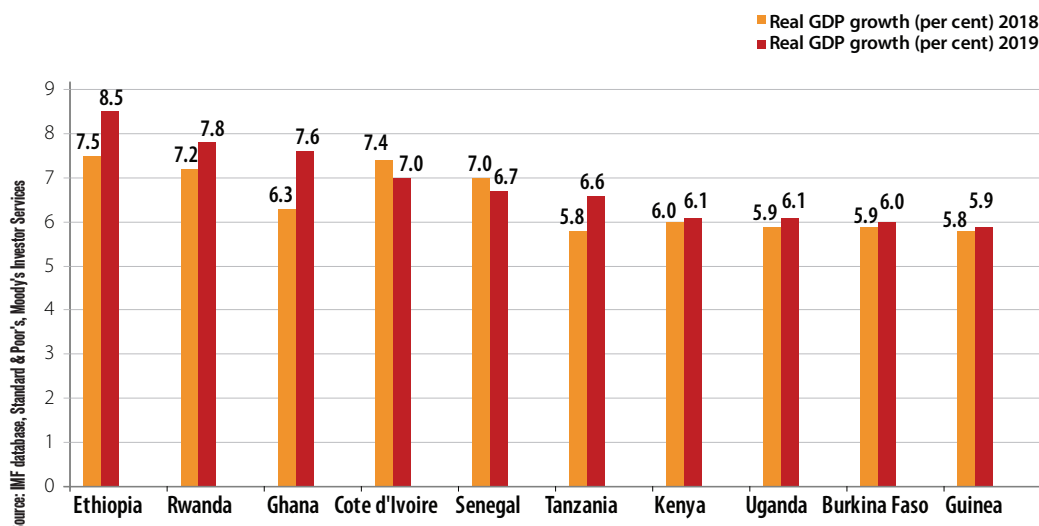
"While there are a number of opportunities across Africa, the biggest opportunity is undoubtedly the sizable and growing middle-class. They are an empowered generation, looking to consume more and more products and services," noted Africa-focused private equity firm DPI. Large SSA cities remain 'consumer hubs' where per capita consumption is more than double the national average, according to Mckinsey Global Institute. It predicted the business-to-business market in Africa could reach US\$3.5 trillion by 2025, up from US\$2.6 trillion in 2015 mainly in SA and Nigeria. ■

**Sub-Saharan Africa GDP percentage growth (excl. Nigeria & South Africa)**



Source: IMF Regional Economic Outlook, Oct 2018.

**Top 10 SSA performing economies of 2018-19**



Source: IMF database, Standard & Poor's, Moody's Investor Services

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## Six-axle MultiMAX semi-trailer: all-rounder transport solution



Faymonville's new six-axle MultiMAX semi-trailer.

Customers from P & L Machine Moving and Rigging in South Africa made a special trip to Belgium and Luxemburg to visit Faymonville facilities and get first-hand training on its new six-axle MultiMAX semi-trailer.

The fully steerable trailer on hydraulic suspension is equipped with timber floor, outriggers and hydraulic double ramps, which significantly reduce the drive-on angle for any type of machinery. Thanks to its extendable loading deck, the company says the MultiMAX is a real versatile all-rounder, making it the ideal tool for P&L's abnormal transport and rigging activity.

"I am very impressed with the facilities and quality of the product. We are looking forward to putting this trailer to work and excited to keep building a strong partnership with Faymonville", says Gareth Lucas, director from P & L Machine Moving and Rigging, who added he was looking forward to the unit being shipped, so it can soon fulfil its first transport tasks on South African roads and job sites.

## COMETTO MSPE EXCELS IN HARSH CONDITIONS IN SUB-SAHARAN AFRICA

Four modular combinations of Cometto self-propelled trailers MSPE 40t in side-by-side configuration have been involved in heavy duty movements for customer Marine Maroc.

The project consisted of the transport of six diesel engines each weighing 215t and six generators each weighing 72t for the power plant of Kayes in Mali. The transport company, Marine Maroc, handled this challenging project for its final customer Bolloré Logistics on behalf of BWSC Denmark.

"The MSPE convoy formed by eight axle lines has been coupled side-by-side with other eight axle vehicles", explains Daniel Delorme, the CEO of Marine Maroc. "We reached a platform width of five metres and a payload of about 600t always assuring the safest transport conditions of the load. They were used for the final movement of the project to position the engines inside the power house on the job site, alongside the foundations."

Marine Maroc, based in Casablanca, is a major player in international logistics. The Cometto MSPE is part of their vehicle park since 2013.

The MSPE convoy was formed by eight axle lines.



## IVECO's updated list of sales and after sales dealers as of December 2018.

### Algeria

#### Ival S.P.A.

Zone Industrielle D'Extension Oued Smar Lot 88, BP 140, Alger, Algeria  
Tel: +213 217 548 94  
Web: www.ival.dz

### Angola

#### IVECAR S.A

Estrada de Catete, Km 23  
Av. Deolinda Rodrigues  
Sentido Viana, Luanda, Angola  
Tel: +244 916 652 751  
Web: www.vecauto.com

### Burkina Faso

#### ATS Truck Solutions Burkina Faso

Parcelle 08, Lot 04, Section 118  
Secteur 30, ZAD Arrondissement de Bodogodogo, 13218, Ouagadougou  
Burkina Faso  
Tel: +226 66 59 80 80  
Web: www.africatruckservice.com

### Cameroon

#### ATS Truck Solutions Cameroun

Route de la base Navale, BP 344  
Douala, Cameroon  
Tel: +237 650 10 51 52  
Web: www.africatruckservice.com

### Côte d'Ivoire

#### ATS Truck Solutions Côte d'Ivoire

Boulevard de Vridi, 18 BP, 3298  
Abidjan, Ivory Coast  
Tel: +225 78 51 80 36  
Web: www.africatruckservice.com

### Democratic Republic Of Congo

#### Societe de Production d'Import et d'Export S.A. (Prodimpex)

Croisement des avenues marche et Bas-Congo N° 3419  
Kinshasa, Gombe, D.R.C.  
Tel: +243 81 934 6432  
Web: www.prodimpex.com

### Djibouti

#### Al Ghandi Automotive Group

Djibouti Free Zone Branch  
P.O. Box 6406, Pbt 41B  
Republic of Djibouti  
Tel: +25321356026  
Web: www.alghandi.com

### Egypt

#### Armada Egypt Co.

58 Syria Street, Mohandseen  
Giza Governorate  
Arab Republic of Egypt  
Tel: +202 3539 2411 / 12  
Web: Sales@armada-eg.com

### Ethiopia

#### Automotive Manufacturing Company Of Ethiopia (A.M.C.E.)

Bole Subcity Woreda 06  
House No.306, P.O Box 5736  
Addis Ababa, Ethiopia  
Tel: +251-116 463352/53/54/11

### Gabon

#### Libreville Service Auto

BB3737 Zone, Industrielle Nomba  
Domaine, Libreville, Gabon  
Tel: +241 074 096 69

### Ghana

#### Tanink (Ghana) Limited

Off Accra Tema Motorway  
Light Industrial Area Comm. 12  
Box CE 11386, Tema, Ghana  
Tel: +233 (0303) 310631/2  
Web: www.taninkgroup.com

### Kenya

#### Global Motors Centre Limited

P.O. Box 43021-80100, Mombasa  
Kenya  
Tel: +254 774 911 912  
Web: www.globalmotorscentre.com

### Libya

#### EDRI - Import Iveco Trucks And Spare Parts

Fourt Round Road, P.O. Box 650  
Misurata, Libya  
Tel: +218 217 125 937  
Web: www.ivecoedri.com

### Mali

#### ATS Truck Solutions Mali (Africa Mining Supply Equipment)

Zone Industrielle de Sotuba  
BPE 4570, Bamako, Mali  
Tel: +223 76 40 90 20  
Web: www.africatruckservice.com

### Morocco

#### Atlas Vehicules Industriels S.A.

Route Principale N°1 Km 6 Ain Sebaa  
Casablanca, Morocco  
Tel: +212 5223 55070  
Web: www.iveco.ma

### Nigeria

#### Motor Parts Industry Ltd.

231, Moshood Abiola Way, Ijora  
P.O. Box 198 Apapa, Nigeria  
Tel: +234 177 537 03  
Web: www.mpi.com.ng

### Sénégal

#### ATS Truck Solutions Sénégal

BP 313 Rocade Fann Bel Air  
Côte Felix Eboué, Dakar, Senegal  
Tel: +221 777 400 706  
Web: www.africatruckservice.com

### Sudan

#### Abbarci Engineering Company Ltd.

Ghaba Street  
Khartoum Industrial Area  
P.O. Box 1190  
Tel: +249 183 472594 /  
+249 183 580650  
Web: www.abbarcieng.com

#### CTC Engineering Ltd

Zubier Pasha Street  
P.O. Box 980, Khartoum, Sudan  
Tel: +249 187 144 000

### Togo

#### ATS Truck Solutions Togo

Zone portuaire, Route A3  
d'Akodessewa, BP 13755 Lomé, Togo  
Tel: +33 (0)1 53 83 32 22  
Web: www.africatruckservice.com

### Tunisia

#### Italcar S.A.

Zone Industrielle Megrine  
5.5 Km Route de Sousse GP1  
Tunis, Tunisia, P.O. Box 2014  
Tel: +216 31 363 240  
Web: www.italcar-sa.tn

#### Société Le Moteur Diesel

1 Avenue de Paris, 2033  
Megrine, Tunisia  
Tel: +216 71 427 507  
Web: www.moteurdiesel.com.tn

#### Société Tunisienne Sotradies

14, Rue du Commerce  
Zone Industrielle La Charguia  
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## Togo and Eranove Group sign an agreement for a 65MW gas plant

The Togo president Faure Essozimna Gnassingbé, Minister of Mines and Energy, Marc Dederive Ably-Bidamon and Director General of Eranove Marc Albérola signed a power generation concession agreement for a 65MW electricity plant.

The Kékéli Efficient Power plant, which will be located in Lomé port, will provide power for 263,000 Togolese households. The Eranove group will develop and operate the plant while Group TSK will be carrying out the plant's construction. Siemens, which plans to be involved

in the electrification of Togo, will be providing the turbines, technology and maintenance services.

The gas plant will use combined cycle technology which makes it possible to produce more electricity without extra gas consumption while limiting CO<sub>2</sub> emissions. This is in line with the government's agenda to boost the economy and meet increasing demand for electrical power. The project will be financed by CFA Francs - the first for an independent electricity producer in Africa.

Marc Albérola, CEO of Eranove Group, said, "We are extremely proud to contribute in designing the national strategy and implementing the National Development Plan by developing the new electricity production unit alongside the Togolese Republic, and we thank the country's authorities for their trust. In order to ensure a successful quality public/private partnership, we have assembled an innovative pan-African financing mechanism denominated exclusively in CFA francs mobilised by regional institutions, as well as by renowned pan-European technical partners with Eranove, Siemens and TSK. The project is a perfect illustration of the model we want to promote in order to meet the challenge of access to electricity and water in Africa."

Eranove already operates 1,247MW of generating capacity and is developing projects in Côte d'Ivoire, Gabon, Madagascar and Mali, with the aim to bring 1,000MW to the continent.



The new Kékéli Efficient Power Plant will be situated in Lomé Port.

## SOUTH SUDAN'S OIL DRIVE LEADS TOWARDS PEACE

The African Energy Chamber reported it was encouraged by the progress made in South Sudan's oil sector after the peace agreement. The success of the South Sudan Oil & Power 2018 conference on November 20-22, which was attended by more than 750 participants representing upstream, midstream and downstream sectors of the oil sector from Africa, Europe, North America and the Middle East, is a step in the right direction, the chamber says.

It was encouraged by the ministerial delegations from many countries such as Equatorial Guinea, Sudan, Somalia, Saudi Arabia, Nigeria, Russia and Uganda. The success is an indication of South Sudan's increased attractiveness for African and international investors, as the East African nation works to ensure a stable peace and has doubled efforts to ramp up production and drill more wells.

"The presence of several international oil companies in Juba was very encouraging and shows that South Sudan is doing its best to restore the trust of the international investment community and should be encouraged by all parties," said Executive Chairman NJ Ayuk.

The chamber supported South Sudan's efforts to build a lasting peace, which resulted in a new peace agreement signed in October between rival factions.

"The local and international oil community has an obligation to support peace talks and the South Sudanese leadership to promote peace and reconciliation. We call on the government to continue its efforts in encouraging an enabling environment, promoting local content and prioritising the role of women in the oil sector," said NJ Ayuk.

South Sudan remains under-explored, despite being East Africa's oldest and biggest oil producing nation.

## SOLAR PROJECT IN SENEGAL WINS AWARD

Phanes Group has announced Mbaye Hadj and his Gossas Solar Farm Project (30 MW) as the winner of the second edition of its Solar Incubator. The announcement was made at the "Unlocking Solar Capital: Africa" conference in Kigali, Rwanda, where three finalists presented their proposal to a panel of international industry experts from responsAbility, ECREEE, Hogan Lovells, Phanes Group, RINA, and African Development Bank.

"We are proud to announce Mr Hadj as the winner of this year's Solar Incubator. It was a difficult decision as we received a strong response of project proposals with the potential to positively impact their communities. Our experience now in the second year of the incubator encourages us to continue with this initiative because there is a great deal of local talent on the continent who have the potential to benefit from such a platform," said Andrea Haupts, COO of Phanes Group.

## BRIEFS

### CGN EE chooses Greenbyte for wind assets



Greenbyte will be integrating CGN EE's wind and solar assets in Africa.

CGN Europe Energy has chosen renewable energy management system Greenbyte Energy Cloud for their wind and solar PV farms.

Greenbyte will be integrating CGN EE's wind and solar assets in Europe and Africa, amounting to a total of 900MW. Olivier Texier, head of engineering and O&M at CGN Europe Energy, said, "Greenbyte stood out for their service availability, their specialised features and for their worldwide vision, in accordance to our global mission."

### Unity Bank moves to solar power



Tomi Somefun, managing director of Unity Bank.

Unity Bank has agreed to work with Daystar Power to move the power supply of Unity Bank's branches across Nigeria from diesel to solar. Unity Bank is one of Nigeria's retail banks with 240 branches across the country and the eighth largest bank in Nigeria by business locations. Tomi Somefun, managing director of Unity Bank, said, "We believe that our transition to clean solar energy solutions will help to provide a better experience to customers visiting our branches."



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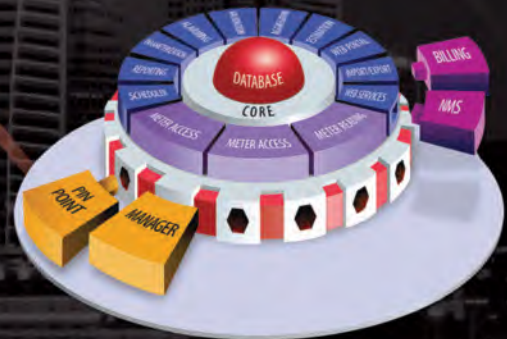
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# Portable power remains integral to energy mix

The outlook for onsite power in Africa remains positive despite the huge injection of funding into mainstream energy supplies in recent years.

Onsite power remains an important part of Africa's overall energy supply mix, something that looks set to continue for the foreseeable future.

For those industries seeking dependable power in the face of an often erratic electricity supply – from small businesses right through to giant offshore oil rigs – it remains a critical tool in maintaining safe and stable operations.

Moreover, with the development of mini grids connecting isolated and rural communities across the continent, it is also a niche that looks set for expansion.

The evolution of renewable technologies has likewise provided a whole new array of products and solutions for end users seeking a reliable onsite power supply.

That includes solar-based micro generators serving remote telecommunications outposts, which are now a relatively common sight in Africa and elsewhere.

Even with the massive influx of funding for the power sector in recent years from international donors and lenders, the patchy coverage and geography of Africa bodes well for onsite power.

Agencies such as the African Development Bank and US AID have prioritised investments in the energy sector, especially in new generation, transmission and the renewables sector.

Yet the scale of the onsite power business in Africa is equally vast and, it seems, still growing.

One major industry player, Cummins Inc., has thousands of units in operation across the continent.

It recently landed a new contract worth almost US\$500mn to produce diesel powered generators for the US Department of Defense to be deployed at military sites worldwide.

Today, it says there are more than 24,000 of its Advanced Medium Mobile Power Sources (AMMPS) generator sets in use in Africa, Afghanistan, South Korea and the USA.

And innovation likewise continues at pace in this sector, driven by all the leading players.

## East Africa

Cummins' East Africa joint venture, Car & General, demonstrated the group's new gensets powered by the QSX15G8 engine to customers in Nairobi.

Car & General is the distributor for Cummins in Kenya, Tanzania, Uganda, Ethiopia, Djibouti, Seychelles, South Sudan, Rwanda, Somalia, Eritrea and Burundi.

The 500 kVA generator sets, manufactured in China, feature reduced noise levels, efficient fuel consumption, automatic synchronising, and remote monitoring which allows customers to keep an eye on the performance of their generator from a separate location.

Another major player is Doosan Portable Power, which also released a new range of four generators from 20-60 kVA for the Africa and Middle East regions, available in both 50 Hz and 60 Hz versions.

As well as construction, rental and agriculture, the new generators extend the Doosan portfolio to a wider audience to cover applications such as home standby, telecommunications and back-up power for small businesses – underlining the strength and depth of this market.

The four new generators – the G20, G30, G45 and G60 – provide prime power outputs of 20, 30, 45 and 63 kVA, respectively, and all four units are available as open units (XF) or sound attenuated

versions (XW). The equivalent 60 Hz versions are also available in a range of voltages between 220V and 480V.

All are powered by Cummins diesel engines and fully supported by the Doosan Portable Power dealer network for the region, from start-up to servicing, maintenance and troubleshooting.

"Sharing the same design and characteristics, the new generators offer robustness and reliability, high performance and a wide choice of features to meet the needs of a very wide range of power applications from prime power in remote areas to stationary units in grid back up," a Doosan statement read.

Given the historical plight of Africa's notoriously unreliable power sector, it is hard to overstate the importance of these and other similar units on day-to-day business activities. From small firms and households, through to the multinationals, these gensets are keeping Africa ticking.

## Finance sector

Indeed, one recent Cummins project is supporting a part of Africa's critical financial sector itself.

It provided standby power for the headquarters of Standard Chartered Bank in Ghana, supplying four of its 630 kVA generator sets.

The system will provide the bank's head office in Accra with standby power whenever interruptions to the grid supply require it.

Despite massive investment in the nation's power infrastructure in recent years, it highlights the ongoing demand for onsite power solutions even in one of Africa's more dynamic economies.

The four gensets – synchronised to come online within three seconds of utility failure – are installed in a purpose-built room on the ground floor of the Accra building.

The main contractor for the project was WBHO/MBS of South Africa, while CKR Consulting Engineers acted as the electrical consultant to the project. It represents just one part of Africa's

onsite power make-up – an area that remains integral to the smooth functioning of the continent's economy. ■

By Martin Clark



Doosan's G45XF unit.

Image Credit: Doosan

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# Lagos in talks with Golar LNG to acquire FSRU

Wale Oluwo, Lagos State commissioner for energy and mineral resources, talks about negotiations to acquire an FSRU to meet the city's power supply needs at the DLO Africa Power Roundtable event in London.

The Lagos State Government says it is in discussions with Golar about providing a floating storage and regasification unit (FSRU) to deliver off-grid energy security for the region.

A FSRU in the city's free trade zone could meet the vision of the region's US\$3bn gas-to-power programme.

"A floating storage special unit has the capacity to regasify 750 million standard cubic feet of gas per day - that's enough to power 3,000MW," Wale Oluwo, Lagos State commissioner for energy and mineral resources, said at the DLO Africa Power Roundtable event.

The government was negotiating with Golar to acquire one of its vessels; the Tundra or the Golar Spirit.

"We have got very far with our negotiations with Golar LNG Ltd – a major supplier of energy – which particularly deploys FSRUs in Africa. We wanted the best supplier and in the case of Golar, they gave us the option to either choose from the Golar Tundra which was in Ghana earlier this year or the Golar Spirit which has finished its assignments in Brazil."

The Golar Tundra is able to produce 750 million cubic ft/day of gas and the Golar Spirit is able to turn out 250 million cu ft/d.

Oluwo also said the state was finalising talks with Nigeria LNG (NLNG) to buy liquefied natural gas from its facility in Finima, Bonny Island.

"We have gone into extensive negotiations with Nigeria LNG," he said.

The commissioner added he is hoping to capitalise on NLNG's Train 7 expansion project, involving two trains with a total capacity of 8 million tonnes per annum expected to start in 2024, whereby a part of



The FSRU Toscana, which is permanently moored off the Italian coast in Tuscany, is similar to the vessel that might be used offshore in Lagos.

Image Credit: Wikimedia Commons/Wallacep67

that LNG could be used in Lagos.

"The attraction for me is that I can freeze the price for two to three years and NLNG are very receptive to it. We are working out the economics so that they do not lose money and we do not also pay too much."

It is hoped the region's US\$3bn gas-to-power project, known as the Embedded Power Supply Programme, which aims to provide 3,000MW of electricity, will kick start the deregulation of the Nigerian Power Sector from Lagos. The state receives about 25 per cent of the power generated from the national grid.

The commissioner further explained the FSRU's location to the main gas line was important because in the event of any disruption in the Niger Delta due to

issues such as militant attacks, gas could be transported via a new pipeline into the city.

"The intention is that if the FSRU is pumping gas and the gas is coming from the Delta area as it enter Lagos, I have about of 20km of pipeline to construct. This means that anytime that the gas from the southern part shuts down, we can close the pipeline and the FSRU can replace production," adding that anyone who uses gas in Lagos for whatever purpose, power or manufacturing, can have 24/hr gas supply.

The gas-to-power project, also known as the Embedded Power Supply Programme, aims to kick start the deregulation of the Nigerian Power Sector from Lagos. The state currently receives about 25 per cent of the power generated

from the national grid.

The programme involves also expanding its energy mix with waste-to-energy power and deploying power plants in strategic locations in the state within three to five years. Up to 1,000MW will be delivered during the first phase within 12 months and the remaining 2,000MW will be delivered in the second and third phase.

## Mitigating financial risks

Oluwo said the Central Bank of Nigeria had put together mechanisms to mitigate any financial risks, adding "we have the economy to support the programme and the capacity".

The commissioner praised the DLO Roundtable event in London on 30-31 October describing it as "an eye-opener" because it was looking at how to bring power to Africa.

"I know clearly that for economies to develop you need three major commodities in regard to energy, you need power, petroleum products and need gas. You need these three items to power the economy. Unfortunately, the

**“ We have the economy to support the programme and the capacity ”**

**WALE OLUWO, LAGOS STATE COMMISSIONER FOR ENERGY AND MINERAL RESOURCES**

reality of is that these three areas in most countries in Africa haven't been managed in a way to enhance productivity and increase supply."

He admitted it was ironic in Nigeria, as the eighth largest exporter of crude oil and major gas producer, that until now it couldn't install gas-to-fire power plants despite the country having 11,000MW of installed power – only 3,500-3,800MW reaches consumers.

Providing some context to the power supply problem, he said that it was related to the mindset and the models implemented after Nigeria and other African countries gained independence. "In my own country we were made to understand that the government provided for all the utilities; telecoms, energy, railway, aviation etc, and there was legislation to prevent competition, so consumers got used to getting services without paying competitive prices for them. As a result, sectors were destroyed and efficiency disappeared and businesses were not coming – this is where we are today."

That's why he stressed it was important to continue along the path of reform such as around changing mindsets and vehicles that make the sector unattractive. In power, he continued, pricing was still an issue.

"For my country, leakages in respect to the completion of the business circle. You put money in it and don't get money to come out. Gas loss in technical and commercial losses, gas loss in power jets, gas loss in all sorts of thefts that makes the sector unattractive so we must continue to improve those leakages and improve competition in the power space and make sure that at every level of the chain,

investment opportunities are highlighted in an environment created for you to bring money in. Reforms don't make sense until the private sector in your country can start to put its money into sectors that will create productivity," adding that local investors are important to attract foreign investors to come.

He stressed the second major issue the conference should address was how to handle foreign exchange challenges as many African currencies were not stable, relative to international currencies. "In many African countries today, they are subsidising it, which at the end of the day is not going to be sustainable and we are going to go full circle and come back from where we started from," he said.

**“ In 2018, a total of 3GW was added to our generation capacity, which was funded through private and public investors.”**

**THEMBISILE MAJOLA, SOUTH AFRICA'S DEPUTY MINISTER FOR ENERGY**

"I'd encourage the conference to continue to look at those difficulties that makes it hard for Africa to attract investment in a quantity that ordinarily we should be attracting. We can do that in relation to the macro variables, particularly exchange rates, inflation rate, interest rate, debt profile and the balance of government issues. It is when we put this together and compare it to the infrastructure investments that you begin to see a moderation of macro variables that can drive business into Africa, the power sector and increase supply."



**Thembisile Majola, South Africa's deputy minister for energy, and Wale Oluwo, Lagos State Commissioner for energy and mineral resources.**

Image Credit: ACP

Lagos is the most populous state with 22 million people and is the commercial hub of the whole of West Africa. It accounts for almost a quarter of Nigeria's US\$493bn GDP, which is more than Ghana

and hydro projects. "The region plans to commission 4,667MW – this demonstrates our investment environment which has changed for the better," adding that gas is planned to be part of the region's energy mix.

She said South Africa was open for business and creating policy certainty was critical to attracting investors.

"For example, we hope those who want to produce components for wind towers that they wouldn't be concerned about what happens to them if the bid window for wind was only going to happen in two years time. They should be able to say that they are going to bid in Botswana or Angola, so that the factory will continue to be operational and they won't have to stop and start. This harmonious way of working is making sure that we have the economies of scale but also have some certainty around it, allowing people to bid in Botswana or Zambia. As long as you have registered with the South Africa Company Registration (SACR) you can work anywhere."

"Forums like the DLO Africa Power Roundtable are very important to us. You get to learn about innovative solutions that have come up in other areas and the possible steps we can take to have a win-win situation.

"The time for investment into the energy sector in Africa is now. Energy is the golden thread that runs through the economy that stimulates and sustains economic growth." ■

*By Samantha Payne*

**Comparison of estimated power supply**

Location	Population (million)	Power Generation (MW)
Egypt	88	30,000
South Africa	53	50,000
Ghana	30	3,900
Kenya	48	2,300
Nigeria	170	4,000
Lagos	22	900

(Source: Lagos State Government)

# Africa is changing into an innovative region

Yoven Mooroven, CEO of ENGIE Africa, discusses the central role that innovation is playing on the continent today.

The last decade has seen a quick succession of reports and speeches on Africa’s “rickety infrastructure, skills shortages and a reliance on commodities”. This narrative however has changed in the last couple of years and the challenges that previously hampered growth and development are now a catalyst for innovation.

This is the result of thousands of entrepreneurs and innovators in Africa rising to meet the challenges. Among the 10 countries with the highest number of start-ups in the entire world, five are in Africa (according to the Global Entrepreneurship Monitor), and investment into African tech start-ups hit the highest levels in 2017.

Those positioned in the centre of this innovation and positive change have shifted in approach. While at first many innovators in Africa were reacting to the lack of jobs and were looking for avenues to sustain themselves, now innovators are challenge-driven. “We are moving away from creating jobs to identifying challenges and solving them,” says Barbara Birungi, the director of Ugandan tech hub and incubator Hive Colab. This approach has a wider impact on the betterment of the population, as opposed to improving the livelihood of the few employed.

Many of these innovations rely on developments in digital and new technologies. One of the most well-known innovation success stories in Africa is, of course, the rapid spread of mobile money. African countries account for more than half of all mobile money services worldwide. This has in turn unlocked many new business models and innovations, such as that of Fenix International, an ENGIE company which provides solar home systems on a lease-to-own basis. Customers make daily micro-payments via their mobile to



Anchor cage II-11 (wind farm) in Ras Ghareb, Egypt was developed by Engie and other players such as Orascom Construction.

Image Credit: Engie

finance their daily energy needs on an affordable plan. If Africa’s sunshine is the spark that gives this service life, mobile money is the lifeblood keeping it alive. Emerging innovations in Africa, such as Fenix International’s, have the potential to transform the continent.

In much the same way that mobile banking has catalysed growth, energy is critical to this transformation and will unlock many more innovations. When we speak to our stakeholders who range from African regulators and governments to lenders, banks and investors as well as domestic businesses and local communities – their message remains constant: there is an urgent need for reliable, safe and affordable energy solutions and infrastructure.

Innovation will be at the centre of meeting this demand for energy. Africa is a place where unique challenges such as sparsely populated regions, extreme climate conditions and political unrest have made traditional energy provision less possible. Hence, a dramatic cost reduction in solar and battery

technology, as well as the spread of mobile payment systems, have made innovative renewable energy solutions increasingly viable. This is largely met with an eagerness and willingness among customers to adopt innovative energy solutions which match their needs.

The challenges and opportunities in Africa are very different from elsewhere, and African countries will need innovation tailored to their specific needs more than anything else. Therefore the challenge for those seeking to promote transformation in Africa is to find and support innovations which are not ‘imported’. These must be ideas, products and solutions which are developed on the ground to meet specific needs and constraints. African economies will also need innovations that are about developing completely new business models.

Innovation on the ground – by Africans, for Africans – is vital to success. This will involve large energy providers prioritising partnerships with local businesses to develop a platform to boost innovative business development in

Africa. The purpose of this platform would be to capture both internal and external ideas for new solutions which focus on improving the lives and businesses of African customers. The platform will help to rapidly develop ideas in pilot applications, and bring them to the market quickly. It will be a place where challenges become opportunities.

One example where a uniquely ‘African’ character can be developed is when it comes to mobility in Africa. This mobility is currently characterised by extensive use of cycles, motorcycles and small collective transport solutions typically used for small distances in and around cities. The development of electric vehicles for instance offers the chance for mass electrification of these urban transport choices. Another way innovation can be used is to address the growing water scarcity problem in Africa – decentralised energy production could be combined with very small-scale water desalination and purification technology to offer not only electricity but also drinking water.

At ENGIE Africa, our core purpose is to create shared value for all our stakeholders by developing business models that ensure sustainable energy access and meet the needs of African communities, industries and households. Africa’s energy sector, with its enormous need for power and its readiness to adopt innovative solutions, presents a historic opportunity. The African continent is a perfect amalgamation of challenges and opportunities. As people with skills and enthusiasm are joining together, the government and regulatory bodies are increasingly advocating innovation. Together, these factors combine to give hope that countries across the African continent can be in a position to develop world-leading innovations. ■

“ We are moving away from creating jobs to identifying challenges and solving them”

BARBARA BIRUNGI, DIRECTOR OF HIVE COLAB

## CONTRACTORS SAVE SPACE USING WEG CWB RANGE OF CONTACTORS

Engineered to provide the most compact contactor solution, the WEG CWB range of devices offers a width space saving of up to 18 per cent. Add to this that the range was developed according to IEC 60947 and UL 508 international standards and you will understand why this new generation contactor is finding such favour with electrical contractors.

Developed in two frame sizes, the new WEG CWB line of contactors meets a range of industrial and domestic applications requirements. The first contactor in the range, covering up to 38A, has a width of only 45 mm while the second contactor, ranging from 40 to 80A, has a width of 54 mm. Two mounting options, standard DIN rail or oblong mounting holes makes interchangeability easy.



Image Credit: Zest WEG

**The WEG Zero-Width mechanical interlock specifically designed for applications requiring mechanical interlocking between contactors.**

Significantly, the space saving offered by the WEG CWB contactors, especially when compared to similar product ranges, will allow contractors to use six contactors where previously only five could be used.

Another innovative engineering feature is the use of WEG's Zero-Width mechanical interlocking system. Traditionally contactors use a mechanical interlock device which is external to the contactor. The Zero-Width system facilitates quick and easy mechanical interlocking between contactors, without the need for tools. In addition, this feature allows the user to build a reversing starter up to 38A with a total width of only 90 mm.

Built-in front 1NO+1NC auxiliary contacts not only further enhance the space saving benefit of the WEG CWB contactors, but also eliminates the need for contractors to purchase additional auxiliary contacts. This feature also offers greater flexibility as it facilitates optimisation of the internal space in electrical panels.

## Hatz presents New Silent Pack at Eima

At the Eima in Bologna, Motorenfabrik Hatz presented the New Silent Pack for the H-series of three and four-cylinder engines for the first time.

The plug-and-play solution combines sound insulation of more than 60 per cent with protection against contact, rain, dirt or vandalism. It is based on open power unit (OPU) engines and can therefore be ordered as complete and ready-to-install variants ex works. The New Silent Pack can also be used to retrofit existing machines.

The New Silent Pack has a modular structure and is suitable for the Hatz H-series engines 3H50TI, 3H50TIC, 3H50TICD, 4H50TI, 4H50TIC, 4H50TICD. Thanks to the universal design, it is very easy for machine manufacturers to include the New Silent Pack in the machine structure or to equip the machines with different engines with the same encapsulation. Virtually all parts are identical for all H-series engine variations. A suitable cover for the

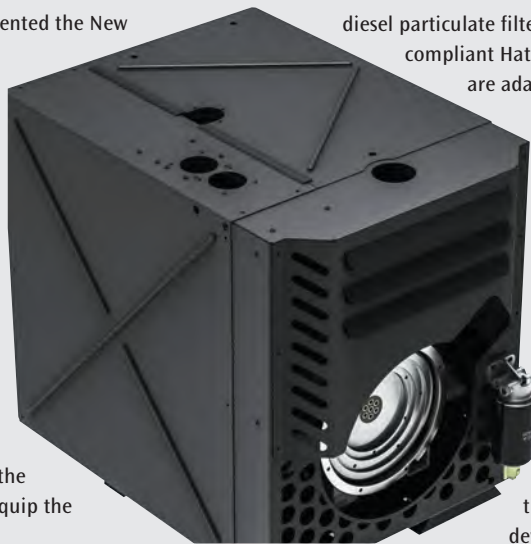


Image Credit: Hatz

**The universally applicable Hatz H-series Silent Pack requires less space in the machine.**

diesel particulate filter (DPF) is available for the EU Stage V-compliant Hatz TICD models. The maintenance hoods are adapted to the dimensions of the three- and four-cylinder engines.

The New Hatz Silent Pack has been redesigned from the ground up and offers significant benefits to both machine manufacturers and operating companies: The low weight of less than 100kg supports in particular manufacturers who need to keep their machines as light as possible. In the three-cylinder TI and TIC model versions, the encapsulation weighs only 91kg, in the largest version – the Hatz 4H50TICD – the encapsulation weighs 98kg. During development, the encapsulation dimensions were reduced by more than 10 per cent compared to the predecessor.



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## Kenya receives new US\$267mn from AfDB

The African Development Bank (AfDB) has approved two loans worth US\$267mn to complete the construction of the Thwake Dam on the Thwake River in southern Kenya.

This is a strategic water supply project for the large semi-arid area of Makueni county and surrounding regions, including the new technology city of Konza. The loans – US\$218mn from the AfDB and US\$49mn from Africa Growing Together Fund (AGFT) – were requested by the Kenyan authorities and were approved on 14 November.

This additional support follows a US\$86mn loan granted by the bank in 2013 to start building the dam as part of the Thwake Multi-Purpose Development Programme (TMWDP), which aims to provide drinking water, hydroelectric energy and irrigation.

Completion of the 80.5 m high multi-purpose dam will enable the storage of 681mn m<sup>3</sup> of water, of which 625mn m<sup>3</sup> will be used for electricity production and downstream irrigation of agricultural land; 22mn m<sup>3</sup> for upstream irrigation and 34mn m<sup>3</sup> for human use. Construction in the initial phase of the TMWDP project should be completed in December 2022.

This will be followed by three further phases: The construction of hydraulic plants to treat up to 34,600 m<sup>3</sup> of water for household use for 674,700 rural inhabitants and up to 117,200 m<sup>3</sup> for 640,000 residents in the technology city of Konza, hydroelectric energy production and 40,000 ha of irrigation.

The AfDB's US\$3.6bn Kenya portfolio comprises 33 operations, of which 22 per cent account for water and sanitation operations.



An artist's impression of Konzo tech city in Kenya which will benefit from water supply from the Thwake Dam.

Image Credit: www.konzacity.go.ke/resource-center/gallery

## CONCOR WESTERN CAPE EYES TALLEST BUILDING PROJECT

Despite the troubled times in the construction industry, Concor Western Cape continues with a range of quality projects in and around Cape Town, where the company's legacy has been stamped for more than a century.

"Our close relationship to developers, consultants and other clients over many years ensures that we are always aware of what is happening in the market, and what the industry requires of us," Mark Fugard, managing director of Concor Western Cape, says. "Even with conditions being depressed, we have secured work where we can deliver value with some of the finest skills and teams in the business."

Recently completed projects include the Signature Lux 1 hotel, an 80-key establishment outside the waterfront area in an historic building whose situation precedes even the reclamation of the foreshore. Work has now begun on the Signature Lux 2, a larger hotel with 167 beds in the central business district.

"Perhaps one of the most exciting current projects is 16 On Bree," says Fugard. This will be the tallest residential building in the city centre and is only slightly under the height of Portside Tower, also part of Concor Western Cape's legacy in Cape Town. It will include two levels of retail and several levels of parking, and will reach 120 metres high, looking onto Bree Street. There will be 38 levels in total, accommodating 380 apartments of various sizes. "On the Atlantic seaboard, we are busy with two exciting high-end residential developments which are really setting the standard for luxury living in Cape Town," he says. One is a large seven-storey home on Nettleton Road in Clifton, and the other is the Aurum development in Bantry Bay. The latter comprises eight Aurum Presidential Residences along Victoria Road towards the ocean's edge.

## INCREASING PROJECTS TO MEET BUILDING GAPS

Accelerating solutions to Africa's infrastructure gaps must be taken seriously if Africa is to realise the aspirations of its people outlined in the continent's blueprint for development, Agenda 2063, and the global agenda for sustainable development, said the United Nations Economic Commission for Africa (ECA) in a statement during the fourth Programme for Infrastructure Development in Africa (PIDA), in Victoria Falls, Zimbabwe.

Zimbabwe's state minister for Matabeleland North Province, Richard Moyo said the acceleration would add impetus to the continent's integration process. "We need to have the right infrastructure mix and align our national infrastructural projects to the PIDA programme for collective gain," he added.

NEPAD CEO, Ibrahim Assane Mayaki stressed the need to, "continue holding a constructive dialogue with all the partners, including the private sector so that we can deliver concretely".

The African Union's infrastructure director, Cheik Bedda, emphasised the importance of good governance to promote infrastructural development that will impact the continent's economies.

EU and GIZ representatives spoke in support of Africa's quest for an integrated infrastructure network.

## ► BRIEFS

### Lagos-Ibadan road due for completion by 2021

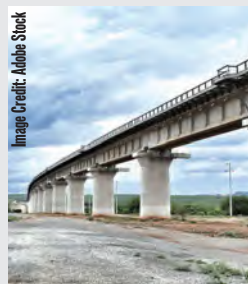


The Lagos-Ibadan road is due for completion by 2021.

Contractor firm Julius Berger has given assurances to the Nigerian Senate that the Lagos-Ibadan road will be completed by 2021.

It was meant to be finished in 2017 but was delayed due to lack of funds.

According to local media reports, Senator Kabiru Gaya disclosed the cost of infrastructure had been increased by the federal government from US\$1.3mn to US\$1.6mn. He added the Apapa Wharf Road was due for completion in December.



KETRACO is planning to electrify the US\$3bn Standard Gauge Railway.

### Kenya electrifies SGR

State-firm Kenya Electricity Transmission Company (KETRACO), has begun plans to electrify the US\$3bn Standard Gauge Railway (SGR). It plans to start work on 12 transmission lines and 14 substations along the SGR line.

"The main purpose of this venture is to ensure that when the SGR switches to clean energy power source, the supply will be reliable and sufficient for not only the train but other facilities along the Mombasa-Nairobi economic belt," said KETRACO.



# Population drives demand for oil and gas projects

Could a renewed climate of optimism push investment towards EPC projects, especially in North and West Africa?



Image Credit: David Stockwell/Flickr

A 60,000 bpd capacity refinery will be built in Uganda.

The decline in the oil price had mixed effects along the engineering, procurement and construction (EPC) value chain – it increased the profit margins downstream in Europe, while in the US, it led to an over-supply of end-product downstream. Overall, the slump was not great news for midstream operators, but upstream, there were opportunities to acquire blocks cheaply and wile away the low price era exploring in readiness for when the prices increased again. With prices hovering at around US\$60, is the time right for increased EPC investment?

For Africa, industrial growth, increased urbanisation, population growth and a growing middle class in multiple markets are driving demand for oil and gas and this should, in turn, drive investment in EPC projects. The refinery sectors of North and West Africa are lacking investment but a renewed climate of optimism could push more money towards these projects and facilitate their construction.

There are plenty of companies across the continent keen to promote their services to the EPC market and, for African-owned-and-operated companies, it represents

an opportunity to develop local talent and meet local content requirements.

One such example is AECOM Uganda, which delivers infrastructure projects to a range of industries, including oil and gas. The company's managing director for Uganda, Bridget Ssamula is upbeat about the opportunities available.

"The largest opportunities are in the oil and gas sector, where AECOM's global skills, expertise, and project experience, coupled with our local know-how, and a demonstrated commitment to local content, are key strengths," Ssamula said.

Increased private sector involvement is helping the EPC sector, according to Ssamula, "This has opened up opportunities for various sectors that support the construction and services industries."

Another sign of optimism in the

EPC sector from Uganda comes in the form of a joint venture led by the Ugandan government and the Albertine Graben Refinery Consortium (AGRC), and comprises YAATRA Ventures, Baker Hughes, a GE company (BHGE), LionWorks Group and Saipem. A project framework agreement was signed in April this year to construct a 60,000 bpd capacity refinery with an estimated project value of US\$3bn. The AGRC will have each member undertake a specific role during pre-FID activities and EPC of the refinery.

Ronald Mincy, CEO and managing partner of LionWorks, said, "This is a unique opportunity to work with Uganda on a transformational project that will provide jobs and skills to the country through improved access to substantially cleaner refined products for Uganda

and the East Africa region."

Meanwhile, in North Africa, construction for the Algerian gas sector received a boost when KBR was awarded an EPC and project management services contract last year by JV GAS, an ambitious joint venture of Sonatrach, Statoil and BP. Under the terms of the contract, KBR is providing detail design engineering, procurement services as well as construction management at the major gas developments at In Salah Gas and In Amenas.

Moving away from oil and gas, Angola, a heavily oil-reliant economy is looking to increase the use of renewables in the energy mix with US\$18bn of investment in this sector planned by the government between now and 2025. The hydroelectric generation projects programme will enhance capacity and provide opportunities in for construction contracts. Other countries where construction opportunities could grow in the renewable energy sector include Botswana, Ethiopia, Ghana, Kenya, Mauritius, Morocco, Mozambique, Nigeria, Senegal, South Africa and Zambia. ■

By Georgia Lewis

“ This is a unique opportunity to work with Uganda on a transformational project that will provide jobs and skills to the country ”

RONALD MINCY, CEO AND MANAGING DIRECTOR OF LIONWORKS



The new Ciber plant brings the number of total plants that are owned by Actop Asphalt to four.

Image Credit: Actop Asphalt

# Investing in quality machinery to make roads safer

To meet the asphalt needs of a newly-awarded road rehabilitation project in the Mpumalanga area, asphalt specialist, Actop Asphalt invests in a new Ciber continuous mobile plant.

When contracted to supply 38,000 tonnes of hot mix asphalt for the Bambi-Lydenburg road in Mpumalanga in eastern South Africa, Actop Asphalt, part of the Actophambili Group, went straight into the market for a new asphalt plant and purchased a new Inova 2000 continuous mobile asphalt plant, manufactured by Ciber, part of global road technologies leader, Wirtgen Group. The unit is the first of the new Ciber range to arrive in South Africa.

The new plant, which can produce up to 200 tonnes of asphalt per hour, is a contract-specific investment to service the Bambi-Lydenburg road rehabilitation project over an 18-month period. Actop Asphalt will supply asphalt to its sister company, Actophambili Roads, a specialist road surfacing contractor that has been subcontracted by the main contractor on the project, Klus Civils.

## Growing capacity

The new Ciber plant brings to four the total number of asphalt plants in Actop Asphalt's stable in the three years of its inception, which is testimony to the company's strong growth trajectory in a very short period of time, in the face of a constrained construction market in South Africa. The company's sturdy growth over the past three years has

hinged on its relentless focus on quality asphalt production, according to managing director, Francois Kemp.

"As a result, we have done extremely well in the three years of our existence. Our early success has, to a large extent, hinged on our affiliation to the larger Actophambili Group, a major player in the road construction sector in South Africa," says Kemp. While almost 90 per cent of Actop Asphalt's work stream has come from Actophambili Roads in the past three years, the pattern has started to change in recent months with a sturdy flow of external contracts. Kemp reiterates that the quality of the product is the company's major competitive edge.

Quality is the mantra at Actop Asphalt, the figure of merit – and is a core parameter that is sought in every aspect of the company's business. And that also extends to its equipment needs; Actop Asphalt never compromises quality of its machinery, which is central to both

reliability and quality of its asphalt supply. The very same core principle informed the decision to invest in a new, technologically-advanced Ciber Inova 2000.

## Critical drivers

A major driving factor in the buying decision was the plant's "super mobility". "We were looking for an asphalt plant that we could install in a very short space of time," says Kemp. The Ciber 2000 fits the bill due to its high production capacity – 200 tonnes per hour – and its compact build; it comes in just two units. This is in stark contrast to some of the existing plants in the stable, which come in six units, but only producing 120 tonnes per hour. "The compact nature of the plant translates into lower cost of transport when moving from one site to the other, as well as the lower area and cost of installation," says Kemp.

According to Waylon Kukard, sales manager at Wirtgen Group South Africa, the Ciber 2000 is about 60 per

cent below the average of other asphalt plants of its class size when it comes to cost of transportation. "This is complemented by less time for mobilisation and assembly on site," says Kukard. "The plant's mobility is its key strength. It can simply be hauled to site on two trailers, get plugged in, start production and easily decommissioned and commissioned again onto the next site."

Rudi du Toit, operations manager at Actop Asphalt, has already experienced the benefits of the new plant. While full production is yet to start, the commissioning of the plant only took seven days. "With some of the competitor plants, you are looking at up to a month to put it up. The Inova 2000 takes only seven days to mobilise and commission, which translates into three weeks of extra production when compared to other plants," says Du Toit.

Du Toit, who was recently part of a South African contingent that made the trip to Brazil to witness Ciber's innovations first hand, also makes special mention of the EasyControl system, an intuitive software which affords total control of all the production processes. "It allows for automated control – without operator interference – of the burner flame and other components," concludes Du Toit. ■

“ Our early success hinged on our affiliation to the Actophambili Group – a major construction player in South Africa ”

FRANCOIS KEMP, MANAGING DIRECTOR, ACTOP ASPHALT

## African Development Bank grants US\$20mn loan for ring-road project in Cameroon

The African Development Bank (AfDB) has approved a US\$20mn loan to the Republic of Cameroon to finance the construction of a ring-road project in the north west province of the country.

The ring-road project, which falls under phase three of the country's Transport Sector Support Programme, aims to improve the movement of goods and people. It will also strengthen the foundations for strong and sustainable growth by promoting domestic and regional trade, the bank said in a statement.

The loan for the 365 km ring-road is the bank's third intervention in the implementation of this important road network rehabilitation and upgrading project. The loop road crosses five of Cameroon's seven divisions of the north west region and includes several links to the Nigerian border, it added.

The project will include institutional support for the transport sector and related works such as the development of rural roads, the rehabilitation of socio-economic infrastructure for improving women and youth living conditions.



Image Credit: Adobe Stock

African Development Bank has approved a US\$20mn ring-road project to improve socio-economic growth in the north west province of Cameroon.

The road project is in line with the government's Growth and Employment Strategy Paper (GESP) 2010-2020, to build an integrated and efficient transport network at low cost that covers the entire country opening the country to neighbouring countries to effectively enhance economic growth and reduce poverty.

The Transport Sector Support programme under which the project falls is also consistent with Pillar I of the Country Strategy Paper (CSP) 2016-2020 for Cameroon.

Cameroon's northwestern region has enormous economic potential, particularly in agriculture, which stands to benefit from the road. Other lucrative sectors include livestock and fisheries; tourism, particularly the natural landscapes such as the Menchum Falls, Lakes Awing, and the Mbengwi Caves.

The project is expected to have a impact on transportation – reducing travel time; an increase in traffic of passenger and goods; foster job creation for women and work for 30,000 youths. The road will result in savings on vehicle operating costs; an increase in household income and reduction in post-harvest losses.

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Many contractors in Africa have used bamboo or wood as an alternative to standardised formwork.



Image Credit: Adobe Stock

# Reaching the heights

With Africa’s construction sector showing ever greater ambitions, the challenge is on for formwork and scaffolding providers to respond.

**A** dynamic economy across many parts of Africa, and a lively construction sector, are together driving the demand for formwork and scaffolding solutions.

These are essential services for all major projects, or where any work at height is required.

That includes flagship new builds such as Kenya’s The Pinnacle in Nairobi – set to become the tallest building on the continent when completed.

Work is also now getting underway on what will be Morocco’s tallest skyscraper, in the capital Rabat. The Bank of Africa tower, which will stand at 820ft tall, will become the second-highest skyscraper on the continent behind the 984-foot Nairobi project.

These are major showcase projects for all involved, including the scaffolding teams making the work possible.

The two buildings will both outstrip the previous tallest building record held by the 732-foot Carlton Centre in Johannesburg, South Africa.

The new Rabat skyscraper is being built by construction firms BESIX Group and Travaux Generaux de Construction de Casablanca (TGCC), and was designed by architect Rafael

de la Hoz and Hakim Benjelloun.

The 55-floor building is set to be completed by mid-2022 and will include a luxury hotel, apartments, office space and a viewing terrace at the top.

And, it seems, while activity is strong on all sides of the continent, North Africa has shown itself to be especially attractive right now.

After the tumult of the so-called Arab Spring in 2011, businesses are making up for lost time with major investment decisions being taken by banks, hotel chains and other major businesses to expand operations, resulting in an uptick of new builds.

It’s good news for the region’s major scaffolding suppliers.

## Condor spreads its wings

Among them, scaffolding and formwork firm, Condor, recently announced that it would strengthen its presence in the area, with the

opening of a new operational branch in Sfax, Tunisia.

It comes hot on the heels of another branch in Algiers, where the company says it has had a ‘positive experience’ so far.

Morocco, Tunisia, Egypt and Algeria are all seeing a revival in investment, most visibly with the opening of new luxury hotels by the likes of Hilton, Marriott, and others.

Announcing its plans for Tunisia, Condor said that the general growth and development of Africa in recent times means it has been able to “commit to the latest construction technologies, especially in the infrastructure and civil construction fields”.

The company has been stepping up its profile across the African region generally over the years, working in cooperation with local companies in major markets and on selected projects.

That includes critical infrastructural works, such as the Algerian section of the trans-Saharan highway connecting Algiers with Lagos, Nigeria, as well as the expansion of Algiers port.

Across the border, its activities have also included work at Tunisia’s Enfidha Airport.

Condor has also supported various other civil works projects elsewhere from the Gibe III dam in Ethiopia, right down to the construction of the Nelson Mandela Children Hospital in Johannesburg, South Africa.

Condor said in September that the main driver for its African push was to provide more timely and direct engineering support, across an area reaching from the Mediterranean (Algeria, Tunisia and Morocco), to the the Maghreb and out into West Africa (citing Senegal, Côte d’Ivoire, Benin, Cameroon, Guinea, Mali and Mauritania, as markets).

**“ We are committed to the latest construction technologies, in the infrastructure and civil construction fields ”**

**CONDOR**

## Safety, standards and ambition

Other major players with a strong footprint in the Africa market include Peri, Layher, ULMA Construction and RS Group.

At a time when Africa’s construction industry is becoming

ever more ambitious, it seems good timing for all the major players.

And this is an industry where reputations count for a lot, with so much at stake.

Earlier this year, three South African construction workers were hospitalised after being injured when formwork collapsed on them in KwaZulu-Natal, underlining the priority on safety at all costs.

The roll out of more mega projects is likewise prompting officials to regulate and set standards for formwork and scaffolding, as well as across all other areas of construction, equipment and building materials.

Many contractors in Africa have traditionally used bamboo or wood as an alternative to standardised formwork.

Across the border, Mozambique recently opened its Maputo-Katembe bridge, Africa's longest suspension bridge at 3km long, another

An artist's impression of The Pinnacle in Nairobi.



Image Credit: White Lotus Group

showcase for the continent's growing construction industry prowess.

Standards look set to rise as authorities respond to the challenge, alongside deepening involvement from the likes of Condor and others.

According to forecasts, the global construction scaffolding rental market is expected to grow at around 5.32 per cent a year through to 2022.

While the more developed markets of Europe, Asia and North America will provide the bulk of any work and activity, it is possible that Africa will offer the greatest growth potential given the continent's chronic long-term under-development.

That opens the door for more investment, competition and a sector more committed to safety and quality than ever before. ■

By Martin Clark

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## BOBCAT LOADER DEVELOPMENTS INCREASE CUSTOMER BENEFITS

Bobcat has announced a number of new developments in the company's compact loader range for Europe, Middle East and Africa (EMEA), such as Auto Ride Control, Heated Cloth Air Ride Seats and several more, offering numerous additional benefits for customers. The new developments provide an increased choice of features for the Bobcat skid-steer, compact track and all-wheel steer loader ranges.

Complementing this, Bobcat has also launched the S100E model for EMEA, an updated version of the company's popular S100 skid-steer loader that meets Stage V emissions regulations. Like the S100, the new S100E skid-steer loader meets customer requirements for manoeuvrability, size, weight, uptime protection, lift capacity and push force for this loader class. In addition, customers benefit from improvements Bobcat has made in operator comfort, ease of operation, noise levels, running costs and asset management.

These new advances come in the year that Bobcat celebrates the 60th anniversary of the loader, forming part of a 60 year legacy in compact loaders that the company says is second to none in the worldwide construction



Image Credit: Bobcat

**Bobcat has launched the S100E model for EMEA, an updated version of the popular S100 skid-steer loader.**

equipment market. Over the last 60 years, the same outstanding quality, workmanship and innovation have helped to maintain Bobcat's market leadership, so that one in every two skid-steer loaders sold today is a Bobcat machine.

Available as a factory option or as an aftermarket kit, the new Auto Ride Control system improves operator comfort when driving with a load in the bucket, especially on rough terrain. This feature lets the operator lock in travel at a speed of their choice, so that they

only have to think about where they are going without feeling the need to avoid bumps or any other surface level obstacles.

Benefits include reduced spillage caused by vibrations due to an uneven operating speed and/or irregular surfaces; more stability when moving up and down with a load/weight and the ability to drive faster on rough terrain.

The new Heated Cloth Air Ride Seat is available on the Bobcat 600, 700 and 800 Series compact loader models. This is an alternative to the previous Air Ride Seat with a vinyl surface and further enhances operator comfort with the move to the cloth surface. It is designed to enhance comfort and productivity, particularly for customers operating loaders in cold weather.

On the 400 and 500 Series models, Bobcat has also introduced the Cloth Suspension Seat, again replacing the Air Ride Seat with a vinyl surface. The cloth surface improves the operator's comfort all year round – in both cold and hot weather – and provides more comfortable seating on slopes and inclines.

The Air Ride Seat with vinyl surface remains available for Bobcat loader customers through the company's Aftermarket service.

## NLMK SOUTH AFRICA MAKES IT RIGHT THE FIRST TIME, EVERY TIME

NLMK South Africa, based in Johannesburg, specialises in Quenched and Tempered steels produced in Belgium by NLMK Clabecq. The local company offers merchant plates and cut-to-size steel plates to the market.

Its operations started in 2012 as part of the Duferco Group. It was acting then as agent for the NLMK Clabecq products in the South African market, distributing abrasion resistant (Quard®) and high yield strength steels (Quend®) directly from the mill.

In 2018, NLMK acquired 100 per cent of the shares of Duferco Distribution Services who pursued its activities under the name NLMK South Africa.

As a sign of their success, the two flagship products distributed in South Africa, Quard® and Quend®, have already been tested by a large majority of OEMs. The approval by the latter seems to praise the good quality of the steel. And the colour of the plates – green for Quard® and blue for Quend® – make them easily recognisable in the market. The two products own also their reputation to their increased workability, due among others to their tight thickness tolerances and superior flatness.

NLMK South Africa keeps Quard 400, Quard 450 and Quend 700 in its local stock. An asset



**Quard 400 abrasion resistant steel.**

Image Credit: NLMK South Africa

for customers looking for stable supply of quality steel to ensure a smooth running of their fabrication processes.

Through its service centre operations, NLMK South Africa offers high depth plasma cutting as well as profile cutting. It completes its services to customers with bending, drilling, chamfering and rolling through trusted suppliers. The company takes pride in giving to its clients quality service from the first call to NLMK South Africa through to the final product delivery. As a milestone of its service-orientated focus, the company is ISO9002 approved and work to SABS standards throughout the company. This

approach has ensured its continuous growth, even in period of recession.

NLMK South Africa vision is to keep aligned to its customers growing needs, as well in terms of product quality, service and advice, making sure that it makes it right the first time, every time. NLMK Clabecq continually works on improving the existing grades and on developing wider ranges of products and as well different quality steels. With this in focus, the company is keen to introduce new products and grades into its offering in 2019, such as the high protection armoured steel plate Quardian or like thinner abrasion resistant steel.

# 3D to 4D BIM: It's time to SYNCHRO (nise)

Rhonita Patnaik attended Bentley's Year in Infrastructure (YII) Conference to find out more about the benefits of 4D modelling for designing and building construction projects.

**A**s optimism renews with higher oil prices, the construction industry is picking up pace across the globe as well as Africa and the Middle East, which is eagerly completing projects for the much-awaited Expo 2020 Dubai. However, everywhere else the cost factor remains the primary challenges to complete projects on time due to inefficient workflow status. Developers are becoming more and more conscious so as to not outdo their financial budgets.

Traditionally, construction projects are based on 3D models that depict their current status. However, there are a lot of concept projects that are solely intended for design. That would not show the real-time status of the project. Today, the demand is inching towards timely project delivery as accurately as planned.

As challenging as it may seem, the good news is that it is not impossible and with Bentley's 4D modelling and Synchro, it is possible to achieve the desired results at an optimal cost.

In June 2018, Bentley Systems announced the acquisition of Synchro, a 4D modelling software, to help overcome project design challenges as well as to smooth digital workflow. This acquisition broadens Bentley's ProjectWise construction offerings, which also includes ConstructSim, used mainly for 4D modelling of industrial plants. At Bentley YII 2018 in London on 15-18 October, Tom Degenis, senior director, Constructioneering, Project Delivery, SYNCHRO Platform, spoke to Rhonita Patnaik about the significance of 4D modelling.

"Construction is a natural environment of 3D spatial modelling and then you incorporate time. It is our ability to visually see the project as an animation. This means that projects can be scheduled on a day-



Image Credit: Bentley Systems

to-day basis. This can help owners and developers gain control on the delivery deadlines. Also, the tracking of progress of progress is visible. It is a very transparent process."

Accuracy is the major aspect of Synchro. With a 15-min difference between the reality and the digital modelling, the turnaround time on the project is identical. Now you can keep track of the progress by the minute. As Synchro can be adapted to 3D modelling at any construction phase, the benefits of this tool are infinite.

"Synchro will analyse the available plan and create a work platform for construction planning."

Degenis assures that it is an extremely viable investment. It is a promise of a payback but it needs encouragement from the owners and developers. Steve Jolley, V-P, Construction, adds that the next step is to feed the right information into

the model. Once you have the spatial info of the model, it is much easier to adopt the technology. So do not underestimate the value of data.

The Synchro Software's 4D construction-modelling solution can be augmented better with Microsoft HoloLens. Users can now digitally visualise 4D projects with a high amount of accuracy and detail. The HoloLens overlays the dimensional Synchro graphics on the job site and users can watch the structures and systems being built and installed across the timeline.

Demonstrating HoloLens during the technical presentations, Greg Demchak, technical architect, Bentley Systems says that the representation is almost identical as on the drawings. Microsoft is now working on Version 2.0, which will be lighter and with improved holographic displays.

As Bentley moves to the future of construction and engineering, it also

took a step back to leverage the potential of aging and existing infrastructure with digital twins. The digital twin concept refers to a digital replica of physical assets.

Bentley Systems announced the launch of iTwin Services for infrastructure projects and assets: Bentley's Connected Data Environment (CDE) for ProjectWise and AssetWise users.

Infrastructure asset owners and their teams have recognised the potential for leveraging digital twin services from the application of analytics, artificial intelligence (AI) and machine learning simulations to provide decision support throughout the design and construction lifecycle of a project. To realise this potential, representations of assets need to be digital, but to be relied upon as a twin there must be practical solutions for their synchronisation to changing actual conditions in the real world. Moreover, merely capturing and representing physical conditions, including IoT inputs, can never be sufficient to understand, analyse, or model intended improvements, without also comprehending the "digital DNA" captured in the project or asset's engineering specifications.

Once synchronised through digital context and digital components, iTwinServices deliver their benefits via Bentley's open-source iModel.js library for web-based visualisation. Keith Bentley, Bentley Systems founder and CTO, said, "I look forward to working with users and external developers to create an ecosystem of innovation for iTwin Services, leveraging the iModel.js library. I expect Bentley Systems to lead the infrastructure engineering community, as the 'infrastructure digital twin' company." ■

**“Construction is a natural environment of 3D spatial modelling and then you incorporate time”**

**TOM DENGENIS, SENIOR DIRECTOR, PROJECT DELIVERY, SYNCHRO PLATFORM**

## Raysut cement eyes acquiring ARM cement in Kenya

Oman's largest cement manufacturer, Raysut Cement Company is eyeing acquiring ARM Cement of Kenya as part of the company's aggressive strategy to expand in East and Central Africa.

ARM Cement, which is a producer and major supplier of cement in Kenya and Africa in general, went into administration with a debt of over US\$140mn and Raysut has expressed its interest to the administrators to acquire the company, a statement released by the company said. The acquisition is estimated to be valued at more than US\$100mn.

The acquisition will complement Raysut's revised strategy to manufacture clinker in proximity to the markets it supplies to in East Africa.

Raysut Cement Company is already in the process of setting up a grinding unit in Somaliland and Mogadishu, Somalia with a Dubai-based partner. The company is also in advanced discussions to acquire various cement producers in Uganda and Djibouti.

Plans are afoot to build a one million tonne per annum cement plant in Berbera, Somalia and the construction work could start as early as January 2019. Raysut Cement Company is in advanced negotiations with Kampala Cement.



Image Credit: Adobe Stock

The acquisition of ARM Cement of Kenya by Raysut Cement Company is estimated to be valued at US\$100mn.

Raysut Cement Company is one of the major clinker suppliers to the East African region and the ARM assets will fit very well with its plans for East Africa where in the last quarter alone it supplied more than 300,000 tonnes of clinker from its home plant at Salalah, Oman to Kenya and Tanzania.

According to industry reports, Mr. Joey Ghose, the Group CEO of Raysut Cement had presented

a five-year strategy to grow Raysut Cement Company into a 20 million tonne company by 2022. The proposal of the Kenyan-born Mr Ghose, based in Oman, has been approved at a recent board meeting with significant support from all stakeholders of the company, including the government representatives.

The group is also building a one-million-tonne plant in Georgia, near Tbilisi.

## REAL-TIME TRACKING COVERING EAST AFRICA AND BEYOND

Spedag Interfreight, the leading logistics company in East Africa, unveiled their real-time tracking solution PeriSpoor to more than 500 interested stakeholders. This innovative product allows the tracking of cargo along its journey by sea, rail and road. From or to any seaport of the globe to or from any location in Eastern Africa, Spedag Interfreight customers can track their

goods both by mobile app and web application showing the position in real time on Google Maps.

The new product was presented by Daniel Richner, chairman, and Dilip Bhandari, CEO of Spedag Interfreight, during the year-end events in Kigali and Kampala.

The service feature was developed by Periplus, Switzerland, a start-up company focusing on

incremental innovation solutions for the logistics industry. "It is our first jointly developed solution with this young start-up. The speed of its realisation in only a few months is impressive and the potential for enhancements are enormous," said Richner.

Periplus creates the link to products based on distributed ledger technologies. The company is working on a private blockchain solution to verify and provide signed delivery orders in real-time to Spedag Interfreight customers.

The group also unveiled their expansion plan and decision to open offices in Zambia, DR Congo and Burundi where they will continue to work closely with their existing agents and partners. Bhandari said, "We need these primarily commercial presences to serve our esteemed customers in their respective industries and country of operations, whether it is in energy and infrastructure on one side or aid and relief on the other.

"Spedag Interfreight is leading the way, offering bespoke logistics solutions to the oil and gas industry where they are working with many prominent companies. Oil and gas activities are gaining momentum in East Africa and as a market leader, we are well positioned to embrace the needs."

To impress customers is a central objective of Spedag Interfreight. These announcements show the group lives up to its own expectations.



Image Credit: Spedag Interfreight

Daniel Richner, chairman and Dilip Bhandari, CEO of Spedag Interfreight East Africa.



## SDLG MOTOR GRADERS SMOOTHING THE WAY FOR THE BRI

Extensive transport infrastructure is being built under the Belt and Road Initiative (BRI), known as the Chinese Marshall Plan.

From Southeast Asia to Eastern Europe and Africa, Belt and Road includes 71 countries that account for half the world's population and a quarter of global GDP. One Chinese firm alone is responsible for 10,320 km of new roads. With many more road projects in the pipeline, SDLG presents five benefits that SDLG motor graders can bring to these jobs.

### 1. Lubrication and maintenance-free

Both the SDLG G9138 and G9190 motor graders, the two models available in APAC and the latter in EMEA, have swing frames whose composite bearings are lubrication and maintenance-free. This offers greater durability and ease of operations over the machine's lifetime.



Image Credit: SDLG

### 2. Range of options for different project needs

SDLG offers a variety of motor graders for different project needs. In increasing order of size, the models available are the G9190 (APAC and EMEA) and G9220 (EMEA).

### 3. Comfortable and safe cabs

The G9190 and G9220 both feature cabs that are

air-conditioned. Offering a comfortable environment for operators to work in helps boost productivity, especially since they often chalk up long hours and are under high stress to meet the deadlines of Belt and Road Initiative projects.

### 4. Precise grading

The G9138 and G9190 graders have fully-digital instrument panels with three-stage alarm electronic monitoring to ensure precise operator control.

### 5. Reliability in a cost-effective package

SDLG motor graders, like the company's other product lines, are reliable and cost-effective. SDLG machines are simple to use, therefore minimising the amount of training required.

## COMANSA: 21LC660 and 21LC750 upgrades

The design of new solutions for the 21LC1050 Flat-Top tower crane, allowed COMANSA's R&D team to apply some of these developments to two of the manufacturer's most successful cranes – 21LC660 and 21LC70 – used in Angola and Côte d'Ivoire. These models, mainly designed for large industrial projects, energy, mining and PPVC construction, improve their performance significantly, the company said.

The versions of 24, 36 and 48 tonnes (52,910, 79,360 and 105,820 lb) of both models have increased their maximum load capacity to 25, 37.5 and 50 tonnes (55,120, 82,670 and 110,230 lb). This improvement is achieved thanks to the use of a compacted wire rope, of smaller diameter, and an optimised design of the now lighter trolley-hook set. Such change does not only increase the maximum load capacity of the crane, but also improves the loads in all radius, including the jib-end load. During the design of the 21LC1050, space restrictions at construction sites that exist in some countries due to regulation were taken into account. That is why a highly modular counterjib was created for such model, which allows up to six different configurations according to the jib length. The advantages of this new counterjib encouraged COMANSA to apply this design to cranes 21LC660 and 21LC750, which will improve the counterjib radius of both models when they are erected with reduced jib-lengths. Thus, when the 21LC750 crane is erected with a 50-metre jib (164 ft), the counterjib radius is 25 metres instead of 31, of the previous design (82 ft instead of 102).

As a novelty in terms of jib length, COMANSA now offers an optional 90 metre radius (295.3 ft), for special applications. This option is available for the 21LC660 and 21LC750 models, as well as for the 21LC1050 crane. COMANSA also added the Effi-Plus system to the 110kW hoist mechanisms (148hp).



Image Credit: COMANSA

## NEW BROKK 170 OFFERS 15 PER CENT MORE POWER

Brokk, the world's leading manufacturer of remote-controlled demolition machines, introduces the Brokk 170. With SmartPower™ – the company's signature intelligent power management system – the new machine offers 15 per cent more power than its predecessor, the Brokk 160, but retains the same compact dimensions. The Brokk 170 is one of four new next generation Brokk remote-controlled demolition machines Brokk is launching at World of Concrete 2019 in Las Vegas.

"Contractors work in some of the most confined spaces, and to get their jobs done successfully they can't sacrifice power or safety," said Martin Krupicka, president and CEO of Brokk Group. "That's why maintaining the same footprint as the former model and boosting the machine's power was a must. This new machine truly tests the limits of compact power."

The Brokk 170 incorporates the revolutionary new SmartConcept system, which ensures improved performance and uptime. SmartConcept consists of SmartPower, SmartDesign and SmartRemote. SmartPower senses when the power supply is poor or faulty then compensates before damage to components occurs. This allows contractors to use the machine with generators or unreliable power sources. SmartDesign extends machine life and provides ease of maintenance due to 70 per cent fewer cables, hardened components, LED headlights and accessible grease points and hydraulic hoses. An ergonomic remote-control, the SmartRemote, incorporates adjustable straps, controls and professional-grade radio technology with a 300m working range.

## Hytec commissions hydraulic systems at Black Rock Mine Operations

Hytec has been commissioned to supply R10mn hydraulic systems for the new bulk handling equipment at Assmang's Black Rock Mine Operations in the Northern Cape. Black Rock Mine Operations is being operated by Assmang Proprietary Limited which is jointly owned by African Rainbow Minerals Limited and Assore Limited.

This bulk handling system includes two stackers, a bucket wheel reclaimer and a rapid load-out station – each automated using Hytec's proportionally controlled hydraulic systems assembled from Bosch Rexroth technologies.

"The proportional control achieved by the system delivers precise remote flexibility in adjusting, varying and optimising the load handling characteristics of the machinery to accommodate any changes in the nature of the material," said Hytec System sales manager, Klaus Marggraff.

The two stackers, manufactured by ELB Engineering Services, were equipped with 7.5 kW hydraulic systems that will control the stacking of manganese ore in the stockyard in various grades of material.

The Sandvik (now FLSmidth) bucket wheel reclaimer was supplied with a 45 kW hydraulic system and includes dual luffing cylinders.

At the load-out station, Hytec's hydraulic systems extend from the control of the exit gates of the loading bin, across the weigh flask that divides the load into batches that are then transferred into the wagons below.

Up to 600 l/min of hydraulic flow is required at specific stages of the load-out station, which also needs to deliver precise distribution control within each wagon with strict tolerances.

"The load-out station is also equipped with an emergency closure system, which, when activated in the event of a power failure or an emergency stop, will automatically close each gate and park the machine," continues Marggraff. "Each component used on the system, from valves, cylinders and the filtration systems filtering the oil down to six microns to the control, is from the Bosch Rexroth range of drive and control products."



Image Credit: Hytec

**The hydraulics ensure that loads are evenly distributed, maintaining the integrity of the axle load to strict tolerances.**

### FIRST MAKHADO HCC OFF-TAKE DEAL SECURED

MC Mining was pleased to announce the conclusion of a hard coking coal (HCC) agreement to be produced by the Makhado Project in South Africa's Limpopo province. The parties in the agreement are MC Mining's subsidiary, Baobab Mining & Exploration, the owner of the Makhado Project and the Huadong Coal Trading Center Co, a Chinese state-owned firm and a subsidiary of the China Forestry Group Corporation.

The Makhado Project is expected to produce up to 800,000t of HCC annually as well as between 900,000t and 1,000,000t of export quality thermal coal. The development of MC Mining's flagship Makhado Project is expected to facilitate economic growth in the Limpopo province, and the agreement has the potential to generate significant foreign currency inflows for South Africa.

David Brown, CEO said, "The signing of the first HCC off-take agreement is a significant step for Makhado, reaffirming its world class coal qualities and international appetite for this type of coking coal."

### CALL FOR SUSTAINABLE DEVELOPMENT REPORTS

Mining companies, including Anglo American Platinum (Amplats), need to disclose the impact of their activities more consistently than they currently do in their sustainable development reports (SDR), according to Bench Marks Foundation.

Speaking at the launch of its latest study in its Policy Gap series, *Critical analysis of Amplats Sustainable Development Reporting (SDR) from 2003 to 2015*, executive director of Bench Marks, John Capel, said that the report had highlighted many shortcomings in Amplats' sustainable development reporting. However, he hoped that the report would be seen as a "positive contribution" to assist Amplats and other mining companies to develop an ever-deepening understanding of sustainability "so that, in the end, all stakeholders, including communities and their dependents, will benefit from the extraction of our natural resources."

"Amplats, together with other mining companies, does not consider the wider context of its mining activity. Instead, its impacts are judged from inside its own gates," Capel added.

"Most mining companies regard shareholders and owners as the most important stakeholders, and therefore the ones to which special attention must be paid. However, mining would not be possible without the land from which the minerals are extracted, the communities which live on top of this land, and the workers whose labour results in the extraction of the minerals. In the vast majority of cases, these stakeholders are at the bottom of the pile of priorities, if they are on the list at all.

"If Amplats and other companies were to prioritise environment, communities and workers, it would stand to create a strong legacy that would go a long way to taking responsibility for the privilege of being given a licence to mine," the study says.

### BRIEFS

#### Tech centre supports global mining solutions



Image Credit: Adobe Stock

Rio Tinto's development centre is analysing a new mineral to meet global demand for lithium.

Latest research and development is paving the way for a unique new mineral called Jadarite with the potential to supply a significant portion of global demand for lithium and borates.

Rio Tinto's Technical Development Centre in Bundoora, Melbourne in collaboration with the company's team of global experts, is developing a chemical procedure to process Jadarite, which was discovered in 2004 with concentrations of lithium and boron, known only to occur in Serbia.

#### All sorted at Jwaneng diamond plant



Image Credit: DebTech

Two XRT ore sorters from De Beers have been installed at Debswana's Jwaneng diamond mine.

Two high-throughput X-Ray Transmission (XRT) ore sorters from De Beers Technologies SA have been installed at Debswana's Jwaneng diamond mine, as key elements of its new Large Diamond Recovery Pilot Plant. According to Gordon Taylor, head of DebTech, the XRT Coarse Concentrator Plus (CC+) units were developed for the Botswana mine to treat run-of-mine at combined throughputs of up to 500 tonnes per hour while allowing for the recovery of large diamonds.

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# Emerging tech firms set to benefit at Mining Indaba

Four African emerging technology businesses will have the chance to pitch their solutions at Investing in Mining Indaba at the Cape Town Convention Centre on 4-7 February.

**U**nearthed and Investing in African Mining Indaba have partnered to offer four African emerging technology businesses the opportunity to pitch their innovative industry solutions at next month's Mining Indaba in Cape Town.

Startup Unearthed Africa is an online competition aimed at raising the profile of African hardware or software companies across the global mining sector, with applications open to any business across the continent that has a prototype, product or service that can impact industry.

"Companies do not need to have worked on a mining project before, they just need to have exciting technology solutions that can make a difference," Unearthed and Investing in Mining Indaba said in a joint statement.

In addition to awarding four pitching spots, each startup will receive one full complimentary pass to Mining Indaba that runs from Monday to Thursday.

Holly Bridgwater, industry lead, Crowdsourcing at Unearthed, will moderate the startup session showcasing these up-and-coming transformative mining technologies.

Bridgwater said, "I am excited that we have the opportunity to share some of the amazing tech being built across Africa with an audience of potential customers and investors at one of the world's largest mining conferences."

Investing in African Mining Indaba Managing Director, Alex Grose, said the the mining industry has been perceived as an old-fashioned sector, but this is not the case as technology has rapidly been changing the way the sector operates.

"From AI and big data to new satellite technologies and more efficient production, mining



Ghana President H.E. Nana Akufo-Addo will be speaking at Investing in Mining Indaba in February.

Image Credit: Présidence du Bénin

companies are embracing innovation. We are very proud and excited to be running this fantastic initiative together with Unearthed, set to bring new ideas to one of the world's oldest industries as well as provide four African tech startups with exposure to the world's largest mining companies."

Other must-see opportunities at the conference, will be Ghana President H.E. Nana Akufo-Addo's keynote address where he will be discussing plans to open up small-scale mining in Ghana, which is the second largest producer of gold. This will bring lucrative opportunities for mining companies and investors alike. Ghana has 23 large-scale

mining companies producing gold, diamonds, bauxite and manganese, and there are also more than 300 registered small scale mining groups and 90 mine support service companies.

Hon. Jean-Clude Kouassi, minister of mines and geology from Côte d'Ivoire, Hon. Winston Chitando, minister of mines and mining development, Zimbabwe, Hon. Abubakar Bawa Bwari, minister for mines and steel development, and H.E. Oumarou Idani, minister of mines and quarries, Burkina Faso are also confirmed to speak at the event, which has grown into the world's largest mining investment event since its inception in 2014.

Last year it saw a 15 per cent increase in its overall attendance, including 47 per cent more mining executives.

"We've seen attendance figures grow, lots of international investor companies are now attending. I think the perception of Indaba is changing; historically it's been seen as a tradeshow but investors are coming back," said Hanre Rossouw, former head of resources, frontier and emerging markets, Investec Asset Management.

"Excellent networking conference with many government officials and industry players of all sizes and interests," said Max de Vietri, principal advisor, African Geopolitics.

More than 200 CEOs and CFOs, 190 junior mining companies and 750 investors and dealmakers will be attending this year's show. Issues such as digitalisation, sustainability development goals, land reform and massive job cuts affecting the sector, especially in South Africa, as well as investment opportunities will be discussed by ministers and investors.

There will be a new investment pavilion combining the Junior Mining Showcase, a Sustainable Development Day and extra half a day to debate the tech and innovations for futuristic operations, such as maximising exploration efficiency with big data and AI and the impact of automation on your future workforce.

Harry Chapman, director of content said, "We are quickly becoming more than just a conference – we are here to support your businesses. As a team we also have a long-term, laser sharp focus in driving investment into African mining and actively contributing to Africa's sustainable economic growth, to help your business thrive." ■

**“ Companies do not need to have worked on a mining project before, they just need to have solutions that can make a difference ”**

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# Cutting water usage while optimising coal washing

Multotec introduces short courses so customers can understand how centrifugal washers work to improve higher coal tonnage per footprint, while still maintaining optimal separation efficiency.

The growing scarcity of water is placing pressure on the coal mining industry in many countries. On the one hand, mines must treat more lower quality coal as better coal reserves are depleted which coincides with increasing tonnages, and on the other, they must reduce water consumption. The coal preparation process is normally water-based and uses substantial amounts of water, so optimising its performance will impact positively not only the environment but also the bottom line.

One important response to this pressure has been the move from the traditional technology of bath washers to centrifugal washers such as cyclones, as this allows for a higher tonnage per footprint while maintaining optimal separation efficiency. Depending on the coal characteristics, it may be possible to reduce the medium to ore ratio while still maintaining optimal separation efficiency and by doing so reduce the water use in the medium circuit. These types of changes can, however, only be made if the material characteristics, the separation process and factors affecting the separation process are properly understood.

To optimise the effectiveness of cyclones, the parameters surrounding the dense media separation (DMS) cyclone must be well understood. The cyclone's efficiency is determined by the nature of the feed, by the cyclone's dimensions and maintenance and by the circuit's influences on the equipment.

The cyclone appears to be a simple piece of equipment, but the operator needs to understand the physics of how it operates, as well as the mechanism of separation. For this reason, Multotec introduced short courses for customers, addressing topics such as principles of separation, operation and fault-finding.

An additional process that is incorporated into modern designs to reduce water loss is the use of coal centrifuges which can reduce the surface moisture content of the dense medium circuit product from eight to 15 per cent to five to 12 per cent depending of the size of particles being processed. A proper understanding of the design of this equipment and factors affecting the performance of centrifuges goes a long way in helping to optimise this process.



Image Credit: Multotec

Multotec has optimised dense medium separation in the pre-concentration of minerals, specifically in coal and diamonds, for more than 40 years.

The performance of screens is becoming an important point of focus in coal washing, in the light of rising tonnages per footprint and medium volumes. Factors such as bed depth, spray water addition and the open area on screen panels all affect the performance of desliming screens. Here, it is vital to understand screening principles, so that optimal screen performance is ensured; this not only improves screening efficiency but also conserves water.

With drain and rinse screens, it is crucial to drain higher volumes of medium associated with ever increasing tonnages being processed, to minimise medium losses. While it may not be practical to replace the screen with a larger version, alternative screen panel designs may be an option to improve drainage capability.

When drain sections perform optimally, they reduce the need to add more spray water on the rinse section of the screen, saving water. The Multotec short course on screening principles transfers knowledge to customers and industry on how to achieve this.

The fine coal circuit is also an area deserving of focus, especially with increasing feed tonnages being fed to coal preparation plants. Not only can this circuit become a bottleneck if it is unable to process the full fine fraction stream but, as the separation process is mostly water-based, this is where much of the water is used. The objective here would be to minimise excessive water use without sacrificing separation efficiencies. To achieve this objective a proper understanding is required of the limitations of each piece of equipment in the circuit as well as which process factors will contribute the most towards separation efficiency while reducing water consumption.

Again, Multotec's training courses focus on improving the operation's understanding of the equipment and how to improve its performance.

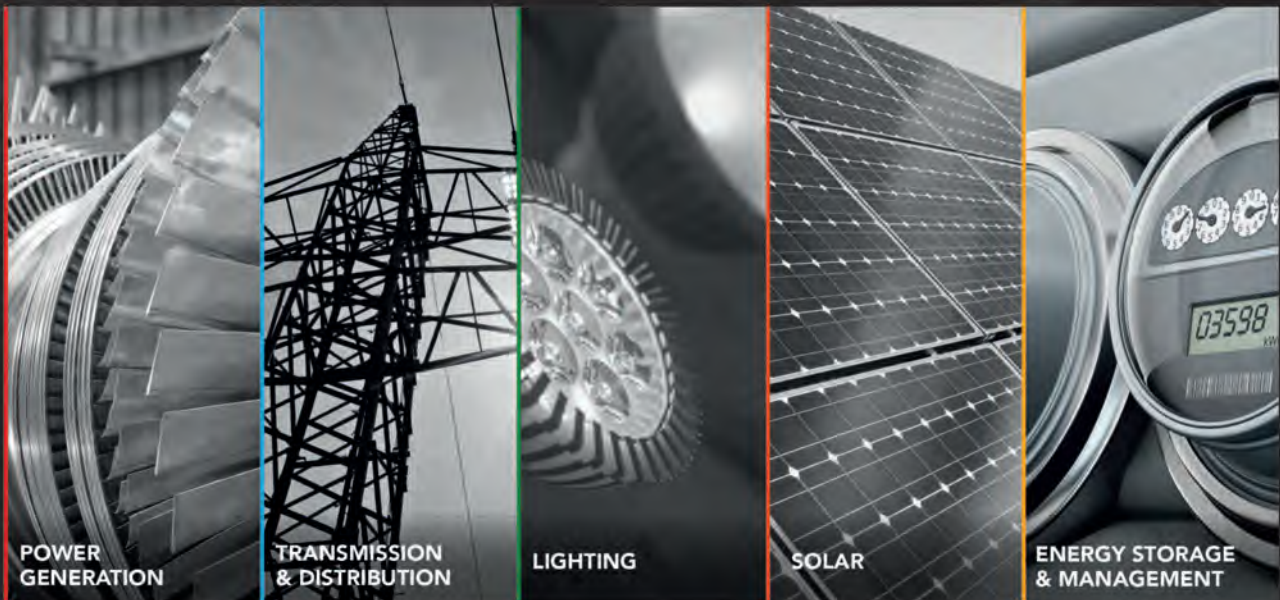
This kind of industry training can have a considerable impact on the sector's water footprint, if operators take the knowledge into their working environments and look proactively for opportunities to reduce water usage. ■



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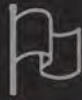
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## FLSMIDTH TO SUPPLY ACID-BAKE KILN TO HASTINGS TECHNOLOGY METALS

FLSmidth has been chosen as the supplier of an acid-bake rotary kiln to the Rare Earths Hastings Technology Metals (Hastings) Yangibana Rare Earths Project in Australia. The agreement means FLSmidth will design and supply the kiln and provide technical assistance for this essential component in rare earths processing.

The Acid-Bake Rotary Kiln incorporates concentrate mixing and feeding equipment, directs waste gas to a separate scrubbing facility, and provides a natural gas fired heating system essential for the processing of rare earths. Following receipt of tender submissions, Hastings awarded the Acid-Bake Rotary Kiln contract to FLSmidth.

The deal is significantly strategic for FLSmidth as it recognises the depth of pyrometallurgical processing technology the company can provide for rare earths production of neodymium and praseodymium (NdPr).

NdPr is an important ingredient in the production of Permanent Magnets which are widely used in electric vehicle (EV) motors, direct drive wind turbines, medical equipment-MRI, and high-end electronics.

“The order of an acid-bake rotary kiln to the Hastings Yangibana Rare



Photograph of a typical kiln section being installed.

Image Credit: FLSmidth

Earths Project in Australia is significant for FLSmidth on a global perspective. It recognises the ability of FLSmidth to provide technology for the processing of rare earths. The growth in demand for battery minerals has allowed us to use pyrometallurgical processing experience to facilitate the needs of our fast-growing customers,” says Laurie Barlow, Head of Mining, Australia at FLSmidth.

## Concrete admixtures for mining applications

Mines have particular logistical, safety and environmental requirements that need to be considered when designing concrete and this is in addition to meeting demanding performance specifications. Among the global leaders in concrete admixtures, CHRYSO has developed an extensive product offering to meet varying operating

conditions.

In addition to experience in designing shaft lining concrete, CHRYSO formulates high-flow, highly accelerated concrete that can be transported through slick lines. This expertise encompasses providing solutions for shotcreting, thin skin liners, tailings grout support and backfill.

Driven by the advances in admixture technology, the use of sprayed concrete as a temporary and permanent support element on mines has increased significantly in recent decades. CHRYSO admixtures control the workability of concrete and create longer open times. They also lower cement-to-water ratios, improve early or late strength development and reduce rebound.

Used extensively on copper, gold, platinum and diamond mines, the CHRYSO Jet range of accelerators ensures early hydration of concrete. It allows the concrete to be formulated to suit the size of the shotcrete machine, as well as shotcrete thickness. To reduce rebound and improve early strength in dry shotcrete, CHRYSO HPB Powder assists with bonding in wet conditions.

CHRYSO’s expertise has made it the first supplier to develop the use of tailings shotcrete and concrete to help alleviate mines’ logistical issues. Now, the bulk of the material can be pumped over long distances and stored before being sprayed.



Advances in concrete admixture technology has increased and CHRYSO has a range of solutions for shotcrete applications.

Image Credit: CHRYSO

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## THE PASSAGE TO DEVELOPMENT

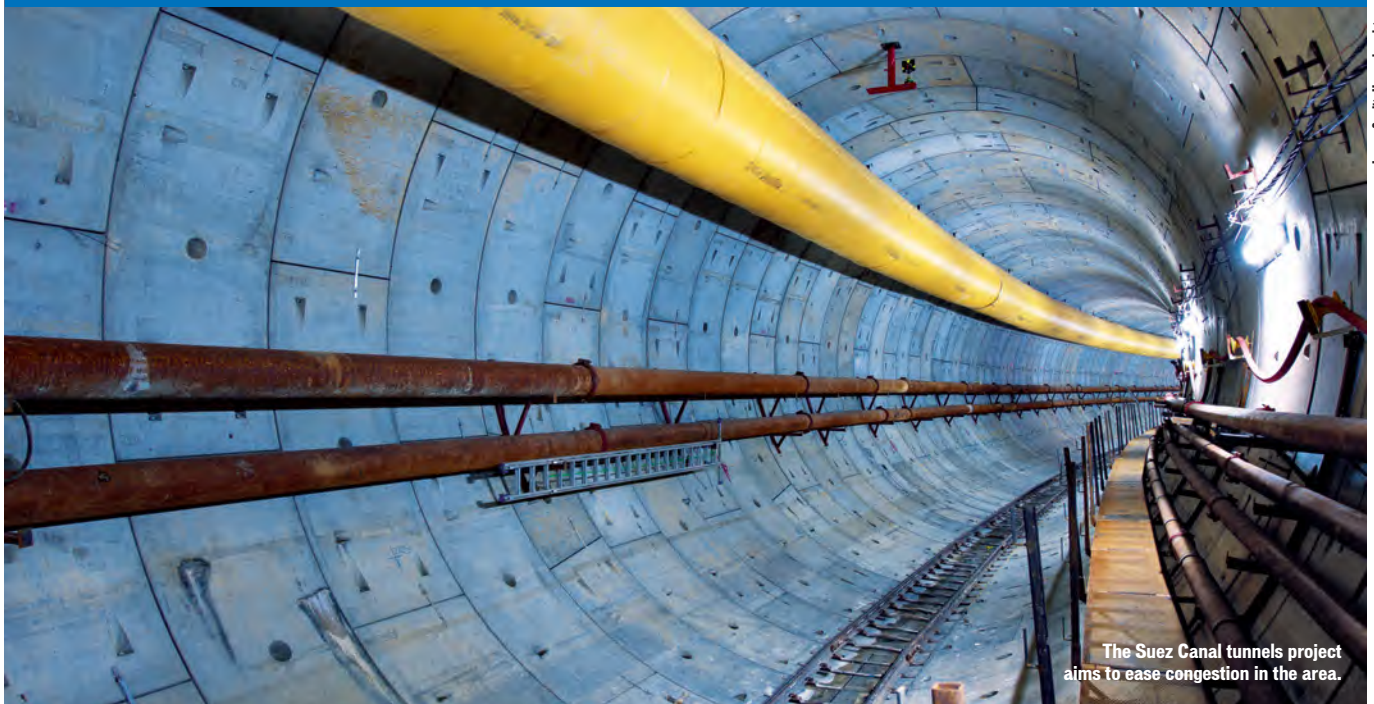


Image Credit: Herrenknecht

The Suez Canal tunnels project aims to ease congestion in the area.

In December 2017, Egyptian President Abdel Fattah el-Sisi inaugurated several development projects in the East Suez Canal development zone in northern Ismailia, including tunnels and two floating bridges to facilitate commercial and civilian access to Sinai and the East Suez Canal Development Zone.

The East Suez Canal development project, which is part of the larger Suez Canal development plans, was launched in 2015. The project aims to develop major residential and

industrial centres in the central Suez Canal governorate of Ismailia.

The Suez Canal tunnels project aims to ease congestion in the area due to industrial development and population growth. Instead of spending up to five days in a ferry, crossing the Suez Canal via the efficient tunnels will only take 10 minutes in future.

On both sides of the canal, the North African country has invested in commercial and industrial business parks and residential areas.

German tunneling expert Herrenknecht is providing the tunnelling technology for the construction of the necessary underground transport infrastructure: four large-diameter Mixshields (13,020mm). From September 2015 to January 2016, four Mixshields were handed over to the customer at the Schwanau plant before beginning their sea journey to Egypt by freighter. The four new highway tunnel drives under the canal were excavated in 19 months by two construction joint ventures, the Arab Contractors/Orascom JV and the Petrojet/Concord/CMC JV. To help the project run smoothly, Herrenknecht trained 40 Egyptian engineers at its headquarters in Schwanau, Germany, and on the jobsites in Egypt to provide on site support.

Herrenknecht's role in the project includes support for optimal jobsite with a comprehensive technology and service package; VMT looks after navigation and process data management systems and Herrenknecht Formwork is equipping the lining segment production plants with moulds. Multiservice vehicles at the jobsite are being taken care of by Techni-Métal Systèmes.

As early as January 2018, excavation was complete on the first of two new twin-tube road tunnels being built under the Suez Canal at Port Said. In addition to the transport infrastructure, Herrenknecht technology is also being used for the construction of supply and disposal lines. Two HDD rigs from Herrenknecht are installing pipelines for the expansion of the power grid. Two AVND machines in turn are handling the construction of water pipelines for agriculture.



Image Credit: Herrenknecht

Four tunnel boring machines were supplied by Herrenknecht for the construction of two new road tunnels under the Suez Canal.

# When a revolution becomes a success

More people are being lifted out of poverty thanks to mobile finance. Sergio Pimenta IFC Vice President, Middle East and Africa and Ann Miles, Thought Leadership and Innovation, Director, Mastercard Foundation explain why.

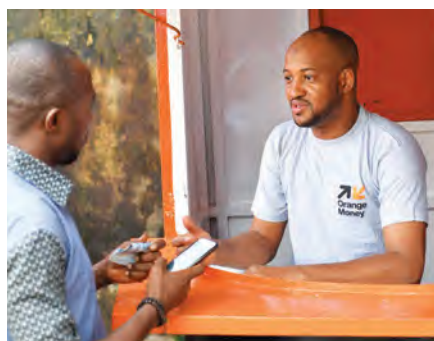
There is a quiet revolution underway in Africa and, like all of them, its success depends on the beliefs and behaviours of ordinary people. People like Constance Sampa, in Lusaka, Zambia. Seven years ago, she got a job as a teller at a banking agent outlet for Zoono, a mobile payments provider. Today, she owns 37 outlets of her own and employs 47 people, almost all of them women.

According to Constance, “Mobile finance has grown rapidly, because it is easy to use, and people are very familiar with mobile phones. Since almost everyone has a phone, the future is bright for mobile financial services in Africa.”

Constance’s story is an example of the movement that is enabling more people across Africa to access and use basic financial services. In fact, financial inclusion is one of the continent’s remarkable success stories of this decade. Thanks to new technology and innovative business models, the financial inclusion rate on the continent has jumped from 23 per cent in 2011 to 43 per cent in 2017, according to new data from the World Bank Group Findex survey.

Mobile money facilities and banking through agents now offer affordable, instant, and reliable transactions to poor people in urban areas or those people living in remote parts of a country. Savings, credit, and insurance services are now available in places where no bank has ever established a branch.

This is, quite literally, banking at your fingertips – for everyone. It is breaking the conventional ways of thinking about banking and it is certainly cause to celebrate. The goal of this revolution is to achieve universal financial access by 2020, meaning all adults will then have access to at least a basic transaction account or mobile money account.



Mobile money banking through agents offer affordable and reliable transactions to poor people in urban and rural areas.

Despite remarkable advances, many low-income people, small-scale entrepreneurs, and rural communities still lack the ability to store money safely, make swift and low-cost transactions, or access formal credit to invest in a business or provide for a family emergency. That is why it is now time for the regional financial industry, investors, development finance institutions, and regulators to make a final push and build on the gains made so far so that the benefits of formal financial services extend to all African adults.

IFC and the Mastercard Foundation’s latest report, Digital Access: The Future of Financial Inclusion in Africa, outlines challenges that need

to be addressed for further growth in Africa’s financial services sector. Expanding financial services to the last mile will require investments in merchant and agent networks. There needs to be greater innovation along agricultural value chains. As well, new products and services are needed to meet an increasingly nuanced demand from an even broader variety of users, such as entrepreneurs, merchants, smallholder farmers, youth and women.

Regulators across the continent can now learn from a decade of experience as the most mature markets have been leading the way to promote innovation and access while also protecting consumers. Tanzania’s ground-breaking efforts to enable interoperable mobile money payments is one inspiring example.

In Kenya, the leading market for digital financial services on the continent, account ownership is now above 80 per cent and on par with China. Other markets can follow. In Benin, Burkina Faso, Cameroon, Central African Republic, Chad, the Democratic Republic of Congo, the Republic of Congo, Gabon, Guinea, Lesotho, Liberia, Madagascar, Malawi, Mali, Niger, Senegal, Tanzania, Togo, Uganda and Zambia, the financial inclusion rate has at least doubled since 2011.

With success it is easy to become complacent, but it is now important and urgent to make a concerted effort to cross the finishing line of universal financial access. Ultimately, the opportunity for people like Constance to provide financial services far and wide across the continent to reach the millions that still lack access to formal financial services depends on a collective and sustained effort of all private and public actors in the market. Together, we can truly achieve change and proclaim success in this quiet, but decidedly essential, revolution. ■

“The future is bright for mobile financial services in Africa”

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