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"We believe, with true competition, we'll be able to reduce the excess capacity charges that we have been confronted with over the past years"

H.E. John Peter Amewu,
Minister of Energy for Ghana

55 YEARS
SERVING BUSINESS IN AFRICA SINCE 1964

Cover picture: Explosives in operation at a mine in South Africa
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Editor's Note

As an exciting new decade fast approaches, *African Review* looks back at the steady growth in sub-Saharan Africa over the last 10 years, and the economic outlook for 2020 amid global uncertainty (page 17). Following this report, we recognise some of the major business developments in the region that continue to positively impact African economies (page 20). Elsewhere in the edition, Egypt, Morocco, South Africa, Djibouti, Togo and Mauritius are revealed as the best connected ports in Africa, according to the latest Liner Shipping Connectivity Index, with recommendations for port and access infrastructure improvements, notably in East and Southern Africa, (page 22).

China's controversial role was debated during this year's GTR Africa London. As a major investor in Africa, the question remains has their influence been positive overall? (page 35).

Finally, bulk explosives are playing a crucial role in some of the continent's most important and productive mining operations, (page 44).

Samantha Payne, *Editor*

Contents

ENGIE Africa consortium starts commercial operation of Egypt's first private wind farm


Image Credit: ENGIE
The wind farm has been completed ahead of schedule.

ENGIE Africa has announced that the construction and commissioning of the 262.5 MW Ras Ghareb wind farm on the Gulf of Suez in Egypt was completed 45 days ahead of schedule. The wind farm is now fully connected to the grid and is ready for commercial operation at maximum capacity.

The project company, Ras Ghareb Wind Energy SAE is owned by ENGIE (40 per cent) and its consortium partners Toyota Tsusho Corporation/Eurus Energy Holdings Corporation (40 per cent) and Orascom Construction (20 per cent). The energy was sold under a 20-year Power Purchase Agreement (PPA) to the Egyptian Electricity Transmission Company (EETC). The total investment cost of the project is approximately US$380mn.

Ras Ghareb Wind Energy is the first wind farm tendered on a Build-Own-Operate (BOO) scheme and is part of the Egyptian government's drive to increase the share of renewables in the energy mix with a target wind generation capacity of 7 GW by 2022.

Yoven Moorooven, CEO of ENGIE Africa said, "There is a huge potential for low-cost renewable energy in Africa. We are honoured that the Egyptian authorities have selected the ENGIE consortium to be part of their strategic energy plan. ENGIE's clean energy solutions are based on competitiveness, reliability and safety. Ras Ghareb Wind Energy has been developed with a continuous focus on health and safety and is completely in line with ENGIE's ambition in the zero-carbon transition. We are committed to applying the same standards with the same success for the adjacent 500 MW wind farm that is being developed by this consortium."

The consortium arranged non-recourse project financing from The Japan Bank for International Corporation (JBIC) in coordination with Sumitomo Mitsui Banking Corporation and Société Générale under a Nippon Export and Investment Insurance (NEXI) cover. Commercial International Bank (CIB) Egypt is acting as working capital bank and Attijariwafa Bank provided an equity bridge loan for Orascom Construction.

EIB APPOINTS NEW HEAD OF CAIRO OFFICE

The European Investment Bank (EIB) has appointed Alfredo Abad as the bank's head of the Cairo office to strengthen engagement with Egyptian partners. Abad's previous experience covering multilateral development and external relations will make a significant contribution to reinforcing the effective engagement of the European Investment Bank as a leading financier in Egypt.

"The EIB is delighted to have Alfredo join as head of its Cairo office in Egypt. Alfredo brings extensive experience of development finance which will make a valuable contribution to our cooperation with Egypt. This appointment reflects the increased commitment of the EU bank to support the economic resilience of the Egyptian economy," said EIB vice president Dario Scannapieco.

The EIB has invested 8.7bn euros in more than 95 priority projects in different sectors in Egypt, including renewable energy, transportation, sanitation and small and medium enterprises (SMEs).

INITIATIVES ANNOUNCED AT SSOP 2019

South Sudan Oil & Power (SSOP) 2019, which took place in October, was host to delegations and officials from Kenya, Ethiopia, Egypt, Somalia, Norway, USA and South Africa.

During his opening keynote, H.E. Minister of Petroleum of South Sudan, Daniel Awow Chuang, expressed the country's vision in the oil and gas sector, amid increased production numbers. He said, "The oil production in South Sudan has reached 178,000 barrels per day. We hope to reach 250,000 barrels per day in the near future. We are successfully reaching target thanks to extensive support from our partners and neighbouring countries." He emphasised the importance of its cooperation with Sudan, with whom a historic peace agreement was signed last September.

Several initiatives were highlighted by H.E. Chuang as well as H.E. First Vice President of South Sudan, Taban Deng Gai, showing the country's efforts to significantly increase oil production. Sudd Petroleum Operating Company has announced it will resume oil production at the end of the year. With a capacity of 80,000 barrels per day, the oilfields have been shut down since 2016.

The event saw the signing of a Memorandum of Understanding between the South Sudanese government and Egypt's state oil company Egyptian National Petroleum Corporation (EGPC) regarding regional cooperation in the field of downstream oil and gas. This came a few weeks after Egyptian President Al-Sisi called upon Egyptian exploration and production companies to increase participation in African countries and urged service companies to invest in South Sudan.

South Sudan announced it would launch its first ever licensing round in the first quarter of 2020, putting up 13 onshore blocks for tender.

BRIEFS


Image Credit: ICARDA/Flickr
Deals in sectors including agriculture are under discussion.

Ithmar to double investments

Ithmar Capital, Morocco's sovereign wealth fund, hopes to double its investments to US$6bn within the next five years, reports UAE newspaper 'The National'. Ithmar is looking to increase investment in Morocco next year as it gets more funding from the government, its managing director Obaid Amrane said during the Africa Investment Summit in Abu Dhabi. It is discussing with investors deals in agriculture, industry, energy and renewable energy projects, he said.

North Africa agrees to push development


Image Credit: Adobe Stock
Trade facilitation measures will be increased in North Africa.

At the conclusion of the 34th Inter-Governmental Committee of Senior Officials and Experts for North Africa (CIHFE), participants agreed the implementation of trade facilitation measures to be accelerated in North Africa in order to maximise the benefits and fulfill the AfCFTA potential, especially in the areas of investment and employment. "It's been agreed that the AfCFTA holds potential for North Africa," said Lilia Hachem Naas, director of the ECA Office for North Africa.

DP World to develop free economic zone for industry and logistics in Namibia

Global trade enabler DP World has signed an agreement with Namibia's Nara Namib Free Economic Industrial Zone to develop a free economic zone for industry and logistics in Walvis Bay to support the growth of Namibia as a regional hub.

The development will help Namibia grow as a centre for industrial operations and logistics, creating opportunities and jobs across multiple sectors including automotive and mining. The facility at Walvis Bay will provide businesses with development-ready land for industrial and logistics operations, pre-built warehouses and office accommodation. The first phase will be a gross developed area of 50 ha, with expansion opportunities up to 1,500 ha. The parties have set the second quarter of 2020 as the target date for reaching a definitive agreement on the project.

Image Credit: GDMO

Suhail Al Banna, CEO and managing director - Middle East and Africa at DP World, with Titus Nakuumba, executive director at Nara Namib Free Economic Industrial Zone.

The development of the first 50 ha phase of the zone has the potential to create 3,000 jobs and help attract investment to Namibia of US$237mn. Expansion to 1,500 ha is expected to increase the potential investment to US$1.7bn with 20,000 job opportunities.

Enhancing Walvis Bay as a hub will support Namibia by increasing trade flows with surrounding markets such as Angola, the Democratic Republic of Congo, Zambia, Zimbabwe, Botswana, Malawi and South Africa. Namibia is in a prime location on the Southern Africa Development Community (SADC) Corridor.

Andre Olivier of Nara Namib said, "The MoU brings us a step closer to fulfilling Namibia's vast trade and economic development prospects, and we look forward to benefiting from DP World's global expertise and network in the areas of parks, economic zones, ports and logistics while creating synergies with our strong local footprint and industry reach."

Suhail Al Banna, CEO and managing director – Middle East and Africa at DP World, said, "DP World is pleased to work with Nara Namib to explore how we can work together to enable smarter trade in Namibia."

BOTSWANA GRANTS FIRST INTERNATIONAL TERRESTRIAL AUTHORITY TO GLOBALSTAR

The Botswana Communications Regulator Authority (BOCRA) has granted terrestrial authority to Globalstar's Botswana subsidiary to provide terrestrial mobile broadband services over 16.5 MHz of S-band spectrum at 2483.5 to 2500 MHz. With this approval, Botswana becomes the first country outside of the USA to approve Globalstar's terrestrial S-band authority and the first country to approve the authority over 16.5 MHz across Globalstar's licensed 2.4 GHz holdings.

Jay Monroe, CEO of Globalstar, said, "We would like to thank the team at BOCRA for their prompt review and approval of our application. BOCRA is a leader in spectrum policy for the continent of Africa and this approval provides Botswana with significant expanded spectrum for terrestrial mobile broadband."

FIRST LNG HUB TO BE ESTABLISHED AT COEGA

In his speech at the Africa Oil Week 2019, the South African Minister of Mineral Resources and Energy Gwede Mantashe has urged investors to pursue investment opportunities in the proposed LNG Hub at the Coega Special Economic Zone (SEZ) in the Eastern Cape.

"Within the next couple of weeks, the Coega Development Corporation (CDC) will be engaging stakeholders, within the private and public sector and inviting them to the Coega (SEZ) for a tour of the proposed sites and update them on progress thus far," said Sandisiwe Ncemane, CDC project development manager, Energy.

With an established market for LNG within Coega, over the years, the CDC in collaboration with the Eastern Cape Provincial government has put in place extensive gas market analysis and preparation to enhance Coega's readiness for the implementation of energy programmes towards an integrated gas economy.

"The Coega SEZ is one of the most advanced in terms of preparations for the LNG hub and is the ideal location for the associated gas to power programmes. One of the critical game changers for the CDC is the cost factor. The 342MW Dedisa Power Peaking Plant currently in operation within the SEZ, has existing environmental authorisation for a 400kV transmission line between the plant site and the Dedisa substation which reduces the costs of the gas to power project for investors quite significantly," added Ncemane.

The Coega SEZ has prime and serviced land that is available to host major gas-to-power projects with spin-offs for other sectors. Additionally, the approved Coega Infrastructure Master Plan is in place. It defines a services corridor from the LNG Project site to Dedisa substation as well as good access via National Road (N2) and the ancillary road network.

BRIEFS

Zimbabwe committed to attracting investors

Image Credit: Wam

The fifth edition of GBF Africa is organised by Dubai Chamber.

Zimbabwe is open for business and committed to creating conducive conditions and incentives for investors, Zimbabwean President Emmerson Mnangagwa said on 19 November at the Global Business Forum (GBF) Africa 2019 in Dubai. Mnangagwa explained that economic zones are being created in Zimbabwe as the government looks to attract foreign investment. He stressed importance of developing new initiatives that invest in skills development and human capital.

NamPost pushes for financial inclusion

Image Credit: German Embassy.

The agreement will be backed by a sovereign guarantee.

State-owned savings bank and mail delivery company NamPost and German development bank KfW Development Bank have signed an agreement for a concessional loan of US$22mn to provide micro-loans to micro-, small- and medium sized companies and households in rural and remote areas via NamPost subsidiary PostFin. By enabling PostFin to expand its loan book over the medium term, the funding directly supports poverty reduction and social progression.

AfDB supports Mozambique LNG project


Image Credit: kees torn/Flickr

The Mozambique LNG Area 1 Project is ranked Africa's single largest foreign direct investment to date.

The African Development Bank Group (AfDB) has approved a long-term senior loan of US$400mn to support the construction of an integrated LNG plant, including a liquefaction facility in Mozambique.

In a statement, the AfDB said the Mozambique LNG Area 1 project, ranked Africa's single largest foreign direct investment to date, comprises a global team of energy developers and operators, led by Total alongside Mitsui, Oil India, ONGC Videsh Limited, Bharat Petroleum, PTT Exploration, as well as Mozambique's national oil and gas company ENH.

Akinwumi Adesina, Bank Group President, said, "Through its participation, the AfDB again demonstrates its leading role in supporting Africa's transformation. The catalytic effect brought about by the Bank is strategically aimed to help transform Mozambique from a 'developing' to 'developed' nation."

"Working closely with the government of Mozambique, we can ensure that the local population reaps the benefits from its nascent natural gas value-chain, thus creating growth opportunities and widespread industrialisation, while at the same time accelerating regional integration across Southern Africa," Adesina added.

Through this approval, the bank carries a mandate to ensure the project's adherence to international transparency standards and full compliance with environmental and social requirements, in line with its Integrated Safeguards System. The LNG liquefaction plant will have a production capacity of 12.88 MTPA. The project is the first of several LNG trains expected to undergo development in the northern part of the country.

The project has already signed eight long-term off-take contracts with some of the prominent LNG players, including Bharat, Centrica, China offshore state-owned oil & gas producer CNOOC, Taiwan's CPC Corporation, Electricite de France EDF, JERA, Pertamina, Shell, Tohoku Electric, and Tokyo Gas.

The bank joins a global syndicate of commercial banks, development finance institutions and export credit agencies to jointly provide the requisite senior debt financing for the project. Financial close is expected within the first half of 2020.

BOURBON WINS NEW INTEGRATED LOGISTICS CONTRACT WITH TOTAL E&P IN NAMIBIA

Bourbon Marine & Logistics, a marine services firm for the offshore oil and gas industry, has been awarded an integrated logistics contract to support a deep offshore exploration campaign of Total E&P in South Namibia in 2020.

The project scope covers the provision of a logistics base, freight forwarding, custom clearance, material storage and warehousing, handling and lifting, marine port visits support along with tank cleanings and logistics operations planning and conduct (material and personnel).

Bourbon will provide integrated logistics services through a local branch 'Bourbon Logistics Namibia' with a well-established local partner: 'Logistics Support Services' (LSS). Working with a solid local partner is a major aspect of Bourbon local content strategy. The project started early August 2019 and should last approximately one year with drilling activities expected in the first semester 2020. The operations will be managed out of Lüderitz, a port in the south of Namibia.

SERCO TO BOX CLEVER TO ACHIEVE GROWTH IN 2020

South African truck and trailer building company Serco aims to achieve moderate growth in 2020 after increasing its market share during the past year.

This is according to CEO Clinton Holcroft who said Serco will continue to prioritise initiatives to minimise its impact on the environment – an area growing in importance in the transport industry in South Africa and one which the company performs exceptionally well in, an example being the recent installation of 1,029 solar panels on the roof of its Durban factory.

"We began 2019 with a strong order book which was a carry over from a good previous 12 months," said Holcroft. "The positive start stalled somewhat as business confidence waned and customers started putting on the brakes in the area of new vehicle purchases.

"Business improved in the later part of this year with the festive season demand resulting in retailers needing more vehicles to handle growing volumes but we expect a slow start to the first quarter of next year."

Holcroft said his company was up for the challenge of helping grow the local economy. "As a proudly South African manufacturer we have boosted employment over the past four years through increasing market share and keeping global imports down with a stringent cost focus and efficiency improvements."

"We intend to continue offering great value and innovations to customers, such as our captive load securing solution recently introduced on SPAR and Shoprite trucks which has the potential to assist in significantly reducing losses suffered through product damage during transit," he added.

A definite highlight of the year for Serco was being the KwaZulu-Natal regional winner in the Corporate Sector of the 2019 Productivity Awards competition, which aims to inspire a competitive and productive South Africa.

BRIEFS

AWS expands its tech support for startups


Image Credit: Christina Morillo/Pexels

Sw7, AWS have launched virtual B2B technology business accelerator.

AWS South Africa has embarked on a journey to bring AWS Startup Days to Johannesburg, Lagos, Accra and Nairobi. AWS South Africa said technology wise, all these cities are home to some incredible initiatives like agrotech startup Cowtribe building out vaccination solutions to save farming or church tech startup Asoriba using serverless to scale. Not to be ignored are payment and financial service startups like Cellulant, Paystack, Aela Credit, and Flutterwave.

Botswana's GDP to rise to 4.2 per cent


Image Credit: Jorge.do.Brasil/Flickr

Botswana's GDP slowed to 3.5 per cent in 2019.

Botswana's economic growth will increase to at least 4.2 per cent in 2020 as the diamond market normalises and copper production comes into stream, said the International Monetary Fund in a statement. Inflation will accelerate amid accommodative monetary policy but remain in the bottom half of the Bank of Botswana (BoB) target band. Fiscal consolidation will gradually reduce the deficit and would contribute to a gradual rebuilding of buffers over the medium term, the IMF reported.

Rwanda becomes first African country to introduce Volkswagen electric car

Image Credit: Volkswagen

Volkswagen and Siemens launch joint electric mobility pilot project in Rwanda.

In a first for the African continent, the Volkswagen brand has launched a pilot project in partnership with Siemens to test the feasibility of electric mobility in an African country.

The pilot project, which will form part of Volkswagen's operations in Rwanda, was officially announced by Thomas Schäfer, CEO of Volkswagen Group South Africa and responsible for the sub-Sahara Africa Region, in the presence of Rwanda's Prime Minister, Rt Hon Dr. Edouard Ngirente.

During the pilot phase, four e-Golfs and one charging station will be introduced in the capital of Rwanda, Kigali. Volkswagen has signed a joint development agreement with Siemens to provide the charging infrastructure for the electric cars.

With the launch of the pilot project, Rwanda becomes the first African country to introduce a Volkswagen electric car.

Thomas Schäfer said, "The success of our innovative and pioneering mobility solutions business has shown us that Rwanda has the potential to leapfrog the internal combustion engines into electric cars. Rwanda has a young and progressive population that appreciates individual and modern mobility. Together with our development partner Siemens and with the support from the government of Rwanda, Volkswagen wants to make the e-Golf pilot project in Rwanda a blueprint for electric mobility in Africa."

Sabine Dall'Omo, CEO for Siemens Southern and Eastern Africa said, "Our partnership with Volkswagen on this project solidifies our commitment not only to Rwanda but to the East Africa region. By contributing towards shaping the African market for intelligent, adaptive infrastructure, while addressing skills challenges in this sector, Siemens is helping to build a more sustainable future for the people of Rwanda."

The plan is to increase the number of the electric cars to 50 units and 15 charging stations, depending on the outcomes of the pilot project. The drivers and technicians, who will be working with the electric cars, have received specialised training in preparation for launch of the pilot project.

SUDAN NEEDS US$5BN TO AVOID COLLAPSE

The country of Sudan is in need of up to US$5bn to avoid financial ruin, its finance minister has said, according to a report by Reuters.

Ibrahim Elbadawi warned US money reserves were on the verge of running out unless the country received much needed development funds.

"We have started the process of reforms," Elbadawi said in an interview on Thursday. "The people of Sudan deserve to be seen in a radically different prism than the international community used to see Sudan, as a country ruled by a pariah state," adding that,"Now we have a revolution." When questioned about how much budget support was needed for 2020, he said: "Some estimates say between three to four billion (US dollars), maybe even five billion."

Sudan has been in crisis since it lost most of its oil reserves, following South Sudan's secession in 2011.

WORLD BANK PRESIDENT VISITS SOMALIA

The World Bank Vice President for the Africa Region, Hafez Ghanem praised the progress made by the government and people of Somalia, following his visit in November.

"I commend the government and the people of Somalia for making progress on improving the security and economic situation in the country," he said. "The World Bank Group will continue to be a steadfast partner, to help ensure that reform efforts yield positive and tangible results for all Somalis."

Ghanem was accompanied by Jumoke Jagun-Dokunmu, IFC regional director for Eastern Africa. He held high-level talks with President Mohamed Abdullahi Mohamed, Prime Minister Hassan Ali Khaire, Minister of Finance Abdirahman Duale Beileh, and other senior government officials.

Ghanem reiterated the World Bank Group's support for Somalia's reform efforts as the country approaches the Decision Point for the Heavily Indebted Poor Countries (HIPC) program. At this milestone, the country's eligibility for debt relief will be determined and Somalia will have access to much needed development grants from international finance institutions.

Ghanem also praised the progress of the regional cooperation on infrastructure, trade and human capital development between Somalia, Ethiopia, Djibouti, Kenya, and Eritrea, and commended other development partners for their support to Somalia. He used the opportunity of his visit to open the new World Bank Group office in Somalia.

The World Bank Group and other partners have been supporting Somalia's reforms since 2014 through the Somalia Multi-Partner Trust Fund (MPF), which finances government-led state-building for service delivery and economic growth, with more than US$447mn from eleven donors. The MPF is a pooled fund under the Somalia Development and Reconstruction Facility.

BRIEFS

GE appoints Selam Amare as Ethiopia leader


Image Credit: GE

Selam Amare joined GE in 2012.

General Electric (GE) has announced the appointment of Selam Amare as the country leader for Ethiopia. Selam will oversee GE's operations in the country and strengthen their businesses presence in the market. Farid Fezoua, president and CEO, General Electric Africa said, "With projects in Healthcare, Aviation and Power, there is a huge potential to grow GE's business. Selam's experience, performance makes her the right person to continue our vision for the market."

Uganda showcases oil & gas opportunities at AOW


Image Credit: Adobe Stock

Uganda highlighted the second licensing round for oil exploration.

Uganda's minister of Energy and Mineral Development, Irene Muloni, led a delegation of private and public sector players from Uganda's oil and gas sector at Africa Oil Week.

Over the course of the week, in a National Showcase, Uganda highlighted the ongoing second licensing round for oil exploration, which covers five highly prospective blocks with relatively good seismic and other data, said Minister Muloni.

"Investment opportunities exist in Ghana," says energy minister

H.E. John Peter Amewu, Minister of Energy for Ghana, has told investors there are plenty of investment opportunities in the power sector.

Speaking at the DLO Power Roundtable London event on 29 October, he stated the sector was in a much healthier place than just a few years ago since it adopted its energy sector recovery programme.

Since 2012, the government has been forced to pay for power not generated or consumed under previously agreed flawed 'take-or-pay' contracts with IPPs, costing the government US$500mn a year.

Image Credit: DLO Africa Power Roundtable London

John Amewu, Minister of Energy for Ghana.

But from August this year, the government has been engaging with each of the IPPs to reduce capacity charges and change existing contracts to take-and-pay – meaning it pays for energy and gas that the country actually consumes.

He told delegates, "New investments in power generation beyond the year 2024 are still expected, considering our demand for power. Ghana is growing at almost 250MW-300MW per annum. After 2024, we will no longer be subject to power generation [agreements] through negotiations. Generation [agreements] will take on a competitive nature. We believe with true competition we will be able reduce the excess capacity charges that we have been confronted with over the past years."

The minister also mentioned that Ghana was exporting around 240MW of combined power on a daily basis to Côte d'Ivoire, Burkina Faso, Benin and Togo.

He added, "My colleagues in Burkina Faso, a week ago, let me understand that their demand will be in the arena of 400MW-500MW."

In the area of renewable energy, he stated that there are more than 20 islands and 2,000 communities that cannot be connected to the national grid in 2020, adding that, "The government agenda for Electricity for All, is to have a penetration rate of almost 90 per cent by the year 2020. The idea is to provide these communities with decentralised solutions. Opportunities exist therefore for feasibility studies and development for embedded technologies in that region."

EIB EXPANDS TRADE BENEFITS TO WEST AFRICA

The European Investment Bank (EIB) has formally agreed to support the membership expansion of the African Trade Insurance Agency (ATI) with a concessional financing facility to cover the shareholding of three prospective members – Cameroon, Niger and Togo. This represents the first time the European Investment Bank has backed ATI's membership expansion. Unlocking additional investment insurance is expected to transform public and private sector investment in the countries. Investment insurance includes the full spectrum of political and credit risk insurance covering both sovereign and corporate risks.

The agreement with ATI to enable the EIB to finance membership of countries was signed on 12 November at the Africa Investment Forum in Johannesburg by Ambroise Fayolle, vice president of the EIB and John Lentaigne, Ag CEO of ATI. The agreements will enable West African countries to benefit fully from ATI membership and benefit from increased investment in agriculture, energy and manufacturing sectors.

ORANGE IMPLEMENTS WEST AFRICAN NETWORK

Orange announced at this year's AfricaCom the construction of a new international backbone network in West Africa. This infrastructure will be built around a terrestrial fibre optic network coupled with submarine cables and will benefit from centralised supervision. This multi-regional West African network will connect to the rest of the world through various submarine cables and will link up all the main capital cities in the region.

The network will offer high levels of resilience and seamless availability thanks to diversified paths. As a result, a complete range of international connectivity services with accelerated delivery will be proposed. This includes IPL (International Private Line) services with bandwidth of 2 Mbps to 100 Gigabits and EPL (Ethernet Private Line) offers enabling natively secure point to point connections (L2 VPN) and available bandwidth from 2 Mbps to 10 Gigabits.

Alioune Ndiaye, CEO of Orange Middle East and Africa, said, "For Orange, this West African backbone network represents a major investment that will secure availability of international connectivity."

Image Credit: Orange

Orange is planning to build an optical fiber network across eight west African countries.

BRIEFS

Côte d'Ivoire releases five oil blocks at AOW

Image Credit: Adobe Stock

Five blocks along the west coast of Côte d'Ivoire have been released for requests of EOIs.

Côte d'Ivoire used Africa Oil Week to release a request for expressions of interest in five blocks on the eastern side of the sedimentary basin.
The three new blocks, CI-800, CI-801 and CI-802, along with existing blocks CI-102 and CI-503, benefit from shallow waters, good geological data and are adjacent to existing discoveries and the proximity of infrastructures. The Côte d'Ivoire basin is a passive transform margin that lies along the west coast from Liberia to Ghana.

4G LTE network launched in Nigeria

Image Credit: Adobe Stock

4G connectivity will empower more Nigerians and boost economic activity.

Tizeti, West Africa's pioneer solar-based internet service provider, has launched its 4G LTE network in Nigeria. Announcing the rollout of high-speed 4G services to Rivers, Ogun and Edo States, in a first phase launch, Tizeti's CEO Kendall Ananyi promised its 4G connectivity will empower more Nigerians in the South-South and South-West states, stimulate economic activities and provide unlimited access to affordable and reliable broadband services.

Image Credit: Adobe Stock

Unlocking 5G in Africa and beyond

The theme for the 2019 AfricaCom conference was "Accelerating business transformation to strengthen African Economies". Here are some major takeaways from some of the main speakers during the annual event in Cape Town.

The buzzword during AfricaCom on 12 to 14 November was 5G, the essential ingredient for the fourth industrial revolution. According to Nicolas Blixell, vice president at Ericsson, "If you don't have 5G, you won't have the fourth industrial revolution".

Is Africa ready for 5G?

Africa is uniquely positioned to benefit from the new technology, in terms of the new jobs from the increased automation, the societal problems that it solves, the developments in education, infrastructure and health. At the end of 2019, around 25 per cent of mobile subscriptions are expected to be for LTE in the Middle East and North Africa while in sub-Saharan Africa, LTE will account for around 11 per cent of subscriptions. The region is anticipated to evolve over the forecast period and by 2025, 82 per cent of subscriptions in the MENA are expected to be of broadband while in sub-Saharan Africa will increase to 70 per cent of mobile subscriptions, according to the 2019 Ericsson Mobility Report.

On the first day of the opening of AfricaCom, MTN together with Huawei launched their 5G trial in an effort to bring African businesses and consumers better technologies. During the launch Dean Yu, Huawei Cartier Business vice president for Southern Africa said, "5G is at the stage of large scale deployment in 2019 globally. In the 5G era more cloud native services will appear."

During the 5G track held at the conference, Matt Reed, practice leader, Middle East and Africa at Ovum argued that, "5G will roll out across the continent slower than most of the world regions. Contributing factors that will stymie the process include market dynamics such as expensive devices and regulatory bottlenecks of releasing spectrum. The African market is dominated by 3G.

Framing the challenge of adoption to current technologies, Chafic Traboulsi, head of networks for Ericsson Middle East and Africa said that it will take Africa time to adopt current technologies like 4G and then move to 5G. "There is still work to do in addressing infrastructure challenges. The slow connectivity is a result of regulatory barriers, handset costs that are beyond the means for many Africans, a large African population that is dispersed more than other continents making coverage a challenge," he added. Looking into the future, Traboulsi estimates that in 2024, 5G will still be insignificant in Africa compared to other technologies. It will mainly be 3G and 4G for data.

Comparing the African market to the Middle East, Traboulsi added that Middle East is more advanced when it comes to 5G. This is due to the progressive regulatory moves. The regulators understood that the advancement of the country's economy is tightly linked to infrastructure and they understood that by providing access to 5G spectrum in a quick, non prohibitive way.

Arnauld Blondet, chief innovation officer at Orange for Africa and Middle East said operators in Africa need to focus on 4G to enhance the customer journey. Blondet further added that the critical application in the future for Africa for 5G will be home broadband. "This will be beneficial to many households particularly in the rural and remote areas with no access to fixed broadband," said Blondet.

5G trials in Middle East, southern and North Africa

Middle East and North Africa (MENA) region is the second least penetrated region in the world. The region had close to 400 million unique subscribers by mid-2018, equivalent to close to 60 per cent of its population. The increased consumer appetite for streaming and gaming across North Africa creates demands for faster downloads via 5G networks.

North Africa and Middle East operators such as Etisalat, Ooredoo, STC and Zain have taken steps to develop their 5G network. It is estimated that 5G will account for 6 per cent of total connections in the Middle East and North Africa region by 2025.

In Morocco, Maroc Telecom has been conducting 5G trials from March 2018 in collaboration with Ericsson. Fadoua Laaroussi, program and planning director at Inwi shared Morocco's 5G trial experience. "Inwi is also conducting 5G trials in collaboration with Huawei and is installing new equipment on its radio to expand its backhaul fiber backbone network," she said.

During the conference, MTN South Africa and ZTE showcased 5G use cases, these included how the ultra high speed network of more than 1.678Gbs supporting applications, such as AR/VR and voice.

Smartphones at the epicentre of 5G

The average income per capita per month in Africa is under US$100 per month and the average cost of a smartphone with all the basic features is US$40. According to the report, *'Connecting Africa Through Broadband A strategy for doubling connectivity by 2021 and reaching universal accessibility 2030'*, "Mobile is the most common form of broadband connectivity in Africa. In 2018, the median cost of an entry-level internet-enabled device in Africa was 40 per cent of monthly income, and the mean average was 62 per cent of monthly income. For the poorest 20 per cent of the population, the average cost of a device in sub-Saharan Africa was 375 per cent of monthly income in 2018. Furthermore, the affordability of devices has not significantly improved in most African countries between 2016 and 2018."

Today a 5G handset is in the range of US$1,000, that is way beyond the means of many people, that itself is a barrier to connectivity. Ericsson Mobility report states that, "smartphones continue to be at the epicenter of this development as they generate most of the mobile data traffic, more than 90 per cent today and 95 projected in 2025. In 2025, 5G networks will carry nearly half of the world's mobile data traffic. The Middle East and Africa region is set to have the highest growth rate in the forecast period. ■

By Nancy A Onyango

Upcoming Events Calendar 2020

FEBRUARY

3 - 6
MINING INDABA
Cape Town, Africa
www.miningindaba.com

14 - 16
ITME AFRICA
Addis Ababa, Ethiopia
www.itme-africa.com

24 - 26
POWERING AFRICA
Maimi, USA
www.poweringafrica-summit.com

MARCH

3 - 4
AFRICA ENERGY INDABA
Cape Town, South Africa
www.africaenergyindaba.com

10 - 14
CONEXPO-CON/AGG
Las Vegas, America
www.conexpoconagg.com

17 - 19
PROPAK EAST AFRICA
Nairobi, Kenya
www.propakeastafrica.com

17 - 18
SECUREX WEST AFRICA
Lagos, Nigeria
www.securexwestafrica.com

APRIL

9 - 11
INTERPLAST-INTERPACKPRINT 2020
Dar es Salaam, Tanzania
www.mxmexhibitions.com/interplastpackprint_tanzania

21 - 23
WAITEX 2020
Accra, Ghana
www.waitex.com.gh

MAY

12 - 14
AFRICAN UTILITY WEEK/POWER-GEN AFRICA
Cape Town, South Africa
www.african-utility-week.com

JUNE

2 - 4
SECUREX SOUTH AFRICA
Johannesburg, South Africa
www.securex.co.za

3 - 5
WAMPEX 2020
Accra, Ghana
www.wampexghana.com

Al Tayer Motors launches Ford Trucks F-MAX

F-MAX Ford Truck.

Image Credit: Ford Trucks

Al Tayer Motors, the official Ford Trucks importer-dealer in the United Arab Emirates, launched the '2019 International Truck of the Year' F-MAX in the UAE.

The F-MAX takes its name from Ford's legendary F Series, and stands out in terms of its size, high level of comfort and durability.

"The launch of Ford Trucks F-MAX heralds the beginning of a new era in commercial transportation in the UAE. With its class-leading features such as a powerful engine, fuel efficiency, cabin comfort and competitive cost of ownership, the award-winning vehicle is poised to offer a reliable and comfortable option for customers," said Ashok Khanna, CEO, Al Tayer Motors.

"F-MAX, with its 2.5-metre full-width cab and 500 PS engine power, becomes a major player in the international transport industry. The new Ford Trucks F-MAX, is a global player with its 12.7 litre, 500 PS, 2500 Nm Ecotorq engine and 400 kW braking power. Our modern design language based on prestige and power combines professionalism, innovation superior aerodynamics, optimum calibration and technical specifications of powertrain and transmission, as well as a significant reduction in fuel consumption when compared to the current model."

MITSUBISHI FUSO PRESENTS FIRST FUEL CELL TRUCK AT TOKYO MOTOR SHOW 2019

Mitsubishi Fuso Truck and Bus Corporation, under the umbrella of Daimler Trucks Asia, featured the world premiere of the "Vision F-CELL", a concept fuel cell-powered light duty truck at the 46th Tokyo Motor Show 2019.

"The Vision F-Cell is our concept of an electric truck that uses the power of a Fuel Cell as one option to extend the range of an electric vehicle. Fuso is a leader in electric trucks and was the first brand to launch an all-electric truck in small series production in 2017, the eCanter. Since then, more than 140 eCanters have been delivered to customers in Japan, Europe and the United States. With the Vision F-Cell, a fully drivable concept model, we explore the benefits of fuel cell technology for use in our vehicles," the company said in a statement.

Specifications

- Max. motor power: 135kW
- Max. continuous power: 75kW (fuel cell) + 135kW (3 HV battery)
- Energy storage: 13.8 – 40 kWh (HVB) + 5 to 10 Kg H2 @ 70MPa (3-4 tanks)
- Range: 270-300km (estimate)
- Gross vehicle weight: 7.5 tons

AFRICAN REVIEW / ON THE WEB

A selection of product innovations and recent service developments for African business
Full information can be found on www.africanreview.com

IATA HIGHLIGHTS FOUR PRIORITIES FOR AFRICAN AVIATION


Image Credit: Pierre-Yves Babelon/Adobe Stock

Africa is accelerating its aviation sector.

The International Air Transport Association (IATA) called on governments and industry in Africa to focus on four priorities to allow aviation to drive economic and social development on the continent, enrich people's lives and enable the United Nations Sustainable Development Goals (UN SDG's).

The four priorities are safety, cost-competitiveness, Opening the continent to travel and trade and gender diversity.

"Across the African continent, the promise and potential of aviation is rich. Already it supports US$55.8bn in economic activity and 6.2 million jobs. And, as demand more than doubles over the next two decades, the critical role that aviation plays in Africa's economic and social development will grow in equal proportion. With the right tax and regulatory framework, the opportunities aviation creates to improve people's lives are tremendous," said Alexandre de Juniac, IATA's director general and CEO in a keynote speech at the 51st Annual General Assembly of the African Airline Association (AFRAA) in Mauritius.

"Our top priority is always safety. And we must never forget that global standards have helped to make aviation the safest form of long-distance transport. There is a good example of that in the safety performance of African airlines. The continent had no fatal jet accidents in 2016, 2017 and 2018. That is largely due to the coordinated efforts of all stakeholders with a focus on global standards, guided by the Abuja Declaration. But there is still more work to do. Taking these three steps will raise the safety bar even higher," said de Juniac.

"African carriers lose US$1.54 for every passenger they carry. High costs contribute to these losses Flying is not a luxury – it is an economic lifeline for this continent. That's why it is critical for governments to understand that every extra cost they add to the industry reduces aviation's effectiveness as a catalyst for development," added de Juniac.

SECOND INTRA-AFRICAN TRADE FAIR TO CAPITALISE ON RWANDA'S ECONOMIC SUCCESS


Image Credit: Intra-African Trade Fair

The event will focus on numerous high-value intra-African trade and investment contracts by showcasing African goods, services and investment opportunities.

The second Intra-African Trade Fair (IATF2020) will be organised by the African Export-Import Bank (Afreximbank), the African Union and the government of Rwanda in Kigalifrom 1-7 September 2020.

The event will focus on numerous high-value intra-African trade and investment contracts by showcasing African goods, services and investment opportunities. IATF2020 is expected to see the conclusion of contracts for African trade and investment deals exceeding US$40bn.

Benedict Oramah, president of Afreximbank, said, "The second Intra-African Trade Fair has found a fitting venue in Kigali, as, over the course of the last two decades, Rwanda's economic and structural transformation has delivered one of Africa's economic success stories."

"The African continent has much to learn from Rwanda's impressive transformation. Holding the IATF in Kigali will provide the vital spark to kickstart numerous trade and investment deals to the benefit of Africa and Africans across the entire continent," Oramah added.

AFDB BECOMES A SHAREHOLDER IN AFRICA FINANCE CORPORATION


Image Credit: World Bank Photo Collection/Flickr

Dr Akinwumi A Adesina is the president of AfDB.

The African Development Bank (AfDB), Africa's highest investment-grade rated (AAA with stable outlook) multinational financial institution, has invested US$50mn in the equity of Africa Finance Corporation (AFC).

The bank group's investment in AFC is set to enable both institutions to accelerate infrastructure development and delivery on the continent by deepening co-financing opportunities, joint implementation, knowledge transfer and capacity development for the benefit of Africa.

The addition of the AfDB as a shareholder and development finance institution member of AFC complements the corporation's strategy of addressing Africa's infrastructure deficit. It also marks a further step in the bank's undertaking to help reduce poverty, improve living conditions for Africans and mobilise resources for the continent's economic and social development.

The equity investment in AFC further broadens its shareholder base and follows recent equity investments in the corporation by African Re-Insurance Corporation and the Republic of Ghana. The AfDB will have representation on the AFC Board of Directors as part of the equity investment.

SOUTH AFRICA REVEALS ITS BLUEPRINT FOR ENERGY FUTURE


Image Credit: GovernmentZA/Flickr

Mantashe explained that South Africa gas to power technologies will provide the flexibility that is needed to back up the intermittent nature of renewable energy.

At Africa Oil Week, the Minister of Minerals, Resources and Energy in South Africa Gwede Mantashe outlined the role that oil and gas will play in the future.

In October 2019, the South African cabinet approved the Integrated Resource Plan (IRP 2019) that plotted the path for the nation's generation technology mix to assuage the current energy crisis in the country.

He pointed out that hydrocarbons, particularly gas, will be an important part of the energy mix in the future. "We intend to establish the first LNG hub in the Coega IDZ, in the Eastern Cape Province," he said. "I have been talking to investors at this conference and they should take the opportunity to engage with our officials on this matter as it is an opportunity not only to invest but to also help develop the gas industry in this country."

Mantashe explained that South Africa gas to power technologies will provide the flexibility that is needed to back up the intermittent nature of renewable energy and meet peak demand during busy periods. "In the short term the opportunity is to pursue gas import options, in the future, local and regional gas resources will allow for scaling up within manageable risk levels," he said. "Indigenous gas like coal-bed methane and, ultimately, local recoverable shale and coastal gas are options we are considering. On the upstream, work is underway on a Petroleum Resources Development Bill, which will be before cabinet soon."

AFDB SIGNS US$250MN RISK FACILITY TO ADDRESS TRADE FINANCING GAP

Image Credit: AfDB

The AfDB has signed a US$250mn risk facility agreement with ABSA.

The African Development Bank (AfDB) has signed an unfunded US$250mn Risk Participation Agreement (RPA) facility with ABSA.

The three-year RPA facility was signed on 12 November, on the sidelines of the Africa Investment Form through its trade finance operations. Under the facility, the bank and ABSA will share default risk on a portfolio of eligible trade transactions originated by African Issuing Banks (IBs) and confirmed by ABSA. Leveraging the bank's AAA rating, ABSA will underwrite trade transactions issued by African issuing banks across major sectors, such as agriculture, energy, and light-manufacturing with a special focus on small and medium-sized enterprises (SMEs) in fragile and low-income African countries.

The bank's commitment under the RPA is to assume up to 50 per cent (and 75 per cent in special cases) of every underlying transaction issued by the IBs, while ABSA will confirm such a transaction and bear not less than 50 per cent of its underlying risk.

"The RPA facility is one of the tools employed by the AfDB to alleviate poverty and achieve robust economic growth and sustainable development on the continent through: increased trade facilitation of import-export activities of African local corporates and SMEs; enhanced inter and intra-Africa trade; and regional integration," said Pierre Guislain, bank vice president for Infrastructure, Private Sector and Industrialisation.

GHANA ORDERS GENX ENGINES FOR BOEING 787-9 AIRCRAFT

Ghana has announced its intention to purchase GEnx-1B engines for its three Boeing 787 Dreamliners that will be used to relaunch an airline in the African nation. The engine order is valued at more than US$150mn.

"GE Aviation is honoured to provide GEnx engines for the new 787 Dreamliners that Ghana will acquire to re-launch a national carrier," said Mahendra Nair, general manager of the GEnx

Image Credit: Adobe Stock

Ghana has announced that it will purchase GEnx-1B engines for its three Boeing 787 Dreamliners.

program. "The GEnx engine has proven itself with the highest reliability and utilisation rates that benefit our customers, and we look forward to working with Ghana as the country progresses on its strategy to re-enter the aviation industry."

This year has been a big year for the GEnx engine. The engine celebrated its 15th anniversary since its launch and marked the assembly of its 2,000th engine. With more than 2,500 engines sold, the GEnx has become the fastest selling high-thrust GE engine in history.

DOING BUSINESS IN AFRICA: WORLD BANK FORECAST IN 2020

Image Credit: Adobe Stock

Nigeria and Togo came out as the top places in Africa to do business, according to a recent study.

African economies continued to improve their business climates, with the region's largest economy, Nigeria, earning a place among the year's top global improvers alongside Togo, according to the World Bank Group's latest Doing Business study.

Economies of the region enacted 73 reforms in the 12 months leading to 1 May, down from a record high of 108, and the number of countries implementing one reform fell to 31 from 40. The regional average ease of doing business score was 51.8 on a scale of 0 to 100, below the OECD high-income average of 78.4 and the global average of 63.0.

Togo is on the list of top improvers for the second year in a row thanks to reforms lowering fees for construction permits and streamlining property registration procedures, among other measures. Nigeria conducted reforms impacting six indicators, including making the enforcement of contracts easier, which placed the 200-million-person economy among the world's top improvers, the study showed.

Kenya also carried out six reforms, including improving the reliability of its electricity supply and introducing an online system for social security contributions, positioning it third highest in the regional rankings, behind Mauritius and Rwanda. With four reforms implemented this year, Mauritius remains the easiest place to do business in the region, ranking 13th globally. Among other reforms, the country made resolving insolvency easier and improved contract enforcement.

The region's economies performed best in the areas of starting a business and getting credit, with three economies – Kenya, Rwanda and Zambia – ranking among the world's top 10 in the latter category. On average, it now takes around 20 days and costs 33.5 per cent of income per capita to start a new business in the region, faster and less expensive than the 62 days and 305 per cent of income per capita it took in 2003.

See below the full list of rankings for African countries in 2020.

Doing Business 2020 Rankings in Africa

Economy	2020	Economy	2020
Mauritius	81.5	Mauritania	51.1
Rwanda	76.5	Gambia, The	50.3
Morocco	73.4	Guinea	49.4
Costa Rica	69.2	Algeria	48.6
South Africa	67	Ethiopia	48
Zambia	66.9	Madagascar	47.7
Botswana	66.2	Sierra Leone	47.5
Togo	62.3	Burundi	46.8
Malawi	60.9	Cameroon	46.1
Côte d'Ivoire	60.7	São Tomé and Príncipe	45
Djibouti	60.5		
Egypt	60.1	Gabon	45
Uganda	60	Sudan	44.8
Ghana	60	Liberia	43.2
Lesotho	59.4	Guinea-Bissau	43.2
Senegal	59.3	Angola	41.3
Nigeria - Kano	58.2	Equatorial Guinea	41.1
Nigeria	56.9	Congo, Rep	39.5
Niger	56.8	Chad	36.9
Nigeria - Lagos	56.5	Congo, Dem. Rep.	36.2
Mozambique	55	Central African Republic	35.6
Cabo Verde	5		
Zimbabwe	54.5	South Sudan	34.6
Tanzania	54.5	Libya	32.7
Mali	52.9	Eritrea	21.6
Benin	52.4	Somalia	20
Burkina Faso	51.4		

Will investor appetite for opportunities lead to longer term prosperity for the region's economies?

Christian Toben, regional head of Africa, Commerzbank talks on the risks and rewards of foreign direct investment.

Africa has come a long way since the slump in global commodities prices in 2014 crippled a number of its economies and highlighted the downside of economic dependency on export of natural resources. Now many African countries are showing signs of economic diversification, venturing into manufacturing and services provision. A key factor driving this change has been the multitude of foreign corporates and investors keen to increase their market share in the region via infrastructure and development-seeking investments.

Yet to ensure that such investment translates into longer-term trade growth and economic prosperity, a few lingering challenges need first to be addressed – both by foreign entities operating in the region, and by local governments with the power to implement large scale change.

Christian Toben.

Risk versus reward

The inflow of foreign direct investment (FDI) into Africa increased by 11 per cent over the past year – and this upward trend looks likely to continue. China remains the largest single investor, having invested more than US$266 billion already, and with another US$60 billion in the pipeline. But Germany, the UK, France, US, India, Korea and Singapore are among the other countries that have identified the region's potential and are hungry to participate in its growth story.

Increased foreign participation holds both risks and rewards for the region's economies. Correctly managed, growth in FDI could be to the benefit of all, but care must be taken to avoid issues that have arisen in the past during similar periods of increased international attention in Sub-Saharan Africa. Rising debt levels bring dangers – refinancing risks attached to the large debt maturities approaching in next decade, for instance – which could have crippling effects yet again if not properly managed.

Infrastructural challenges

Perhaps unsurprisingly, the unprecedented spike in commercial activity has put strain on local infrastructure, which, in many cases, has not yet caught pace with the rate of investment. While some of this is hard infrastructure, such as transportation links (constraining the movement of goods intra-regionally), one of the major challenges remains soft infrastructure (such as efficient cross-border payments systems). And this, over such a vast geography with so much untapped intra-regional trading potential, has proved economically self-limiting.

The African region is served by 53 currencies – many of which are illiquid, or rarely traded on the global markets – so currency inconvertibility has long presented an obstacle for both African corporates looking to trade intra-regionally, and foreign investors or corporates seeking to finance their on-the-ground activities. Augmented by a reliance on hard currencies in commercial transactions, such illiquidity has historically stifled cross-border trade, whilst simultaneously putting undue pressure on local G10 currency reserves, which in many countries are already in scarce supply. Marry this with high tariffs on trades across borders, and its unsurprising that intra-regional African trade has lagged behind other regions in volume in the past.

Catalysing change

But change is now afoot. Progress is being made in the shape of trade facilitation initiatives, which are helping balance trade flows across the continent. Special Economic Zones and Free-Trade Zones have popped up across the region in recent years with promising levels of participation by countries such as Ethiopia, Nigeria, Rwanda and Angola. The Djibouti International Free Trade Zone (DIFTZ), for example, which was established by China in 2018 to facilitate trade and investment, permits a number of tax exemptions for users operating within the zone.

On an even larger scale, the African Continental Free Trade Area (AfCFTA) – which, since Nigeria signed in July 2019, has now been signed by 54 African states – eliminates tariffs on 90 per cent of intra-regional goods trades, laying the groundwork for further regional integration. In the same vein, Afreximbank's ambitious Pan-African Payment and Settlement Platform (PAPSP), launched earlier this year, seeks to remedy the soft infrastructure deficit on the continent and reduce the reliance on hard currencies. The scheme is expected to significantly reduce transaction costs – not to mention the margin for time-delays – by eliminating the need for a third "clearing" currency in intra-regional trade transactions.

At Commerzbank, we hope to see increasing collaboration between African countries in respect of trade affairs in the future; something that could pay dividends in the long-term, particularly with respect to promoting more effective capital allocation across the continent. A collaborative inter-governmental approach would facilitate oversight on incoming FDI and give more control over its wider implications on the region's economies.

Opportunity on the African continent abounds. But foreign corporates and investors seeking to increase their market share in the region would do well to exercise prudent risk management – both to protect themselves and the economic health of the recipient country. The risk margin predominantly resides in the lag between infrastructural capacity and investment appetite – a gap that policy-makers and governments are making strides towards closing. A solid understanding of the region's nuances and sensitivities – whether garnered in-house or via a trusted banking partner – would ensure a mutually beneficial solution, and go some way towards promoting sustainable and controlled economic development across Africa. ■

Africa hopes for a better year despite global outlook

Economist Moin Siddiqi evaluates the financial opportunities and challenges ahead for the continent.

Overall, growth in sub-Saharan Africa (SSA), home to over one billion people, remains at below potential in recent years because of continued external headwinds and climate shocks, such as droughts, cyclones and heavy rainfalls coupled with security tensions and the lack of domestic reforms in some countries.

Global uncertainty is weighing on business confidence, investor sentiment and commodity prices, which are expected to remain below their 2018 peak. "Softening global growth, falling commodity prices, increased trade tensions, and heightened uncertainty, compounded by the slow pace of reforms domestically, are weighing on activity across the region," said the International Monetary Fund (IMF). Capital flows to SSA fell in tandem with a downturn in global trade and manufacturing, whilst the US-China tariff war has reduced the region's exports – affecting mostly oil and metal exporting countries.

Commodity exporters, led by the 'top-three' economies (Nigeria, South Africa and Angola) carry a significantly larger weight in SSA's gross domestic product (GDP) and host around two-thirds of total population. Softer commodity prices are reflected in weaker regional macro-economic fundamentals – leading to falls in import demand, remittances and financial sector activity, thereby curtailing output growth and worsening the fiscal and external positions of most countries.

Africa's fortunes are heavily tied to the global economy. The IMF in its October 2019 Regional Economic Outlook remarked: "The challenge for the region is to boost growth to create jobs for the growing labour force, while protecting against debt vulnerabilities and risk from a difficult global environment."

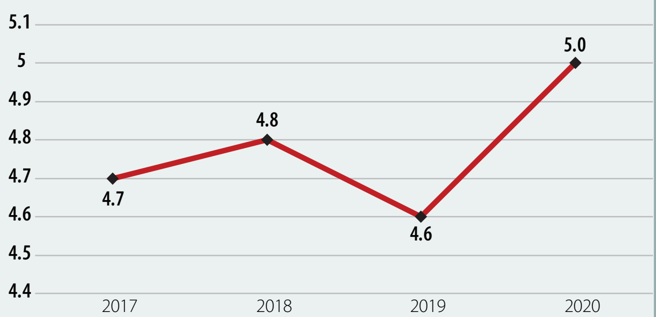
Mixed trends

The African Development Bank (AfDB) 2019 estimates for regional GDP growth at four per cent exceed both figures from the World Bank and IMF at 2.6 and 3.2 per cent, respectively. Sustained anaemic growth in South Africa and Nigeria is holding the continent back. Excluding them from the calculation leaves the rest of SSA growing at a healthy pace of around five per cent (see Figure 1). The regional slowdown mainly reflected weaker fixed investment and net exports. In 2019, the manufacturing and mining industries saw a modest expansion, but the services sector lost some momentum and agricultural output suffered from El Nino in parts of Angola, Botswana, Ethiopia, Kenya, Zambia and Zimbabwe. Whilst Mozambique and other southeastern countries were hit by cyclones – translating into higher inflation and lower state revenues.

Growth performance continues to exhibit noticeable heterogeneity across countries. According to the IMF, non resource-intensive countries are growing almost three times faster (at six per cent in 2019) than oil-exporters and other resource-intensive countries at 2.1 and 2.7 per cent, respectively, well below population growth. Continued insipid growth in the latter group (with a few exceptions) largely reflects structural constraints, the lack of diversification and low investment in non-oil sectors and poor public enterprise efficiency. By contrast, growth in non resource-intensive countries is driven by private consumption/ investment, productivity growth and public infrastructure programmes.

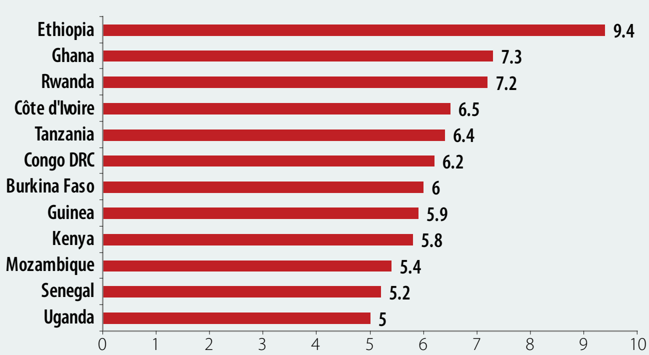
Feeble growth in Nigeria, South Africa and Angola with a combined GDP and population in 2018 of US$871.4bn and 284.5mn (World Bank data), respectively, continues to undermine SSA's overall performance. Growth among the top three is expected to remain sluggish in the absence of far-reaching structural reforms.

Figure 1: SSA output growth (excl. Nigeria & South Africa)



Source: IMF, Regional Economic Outlook (SSA) Oct 2019.

Figure 2: 12 fastest growing SSA economies Real GDP (avg per cent chg) 2010-19



Source: IMF, Regional Economic Outlook (SSA) Oct 2019.

Three-tier groupings

The African continent is a highly diverse regional economy grouped into three broad categories. The 'top-growth' performers comprise 10 countries: Burkina Faso, Côte d'Ivoire, Ethiopia, Ghana, Guinea, Kenya, Rwanda, Senegal, Tanzania, and Uganda. This group houses 375 million people and produces a quarter of SSA's total GDP. The 'middle-growth' performers are 14 countries: Benin, Botswana, Cameroon, Central African Republic, Congo (DRC), The Gambia, Guinea-Bissau, Madagascar, Mali, Mauritius, Mozambique, Niger, Sierra Leone, Togo. The group houses 237 million people and produces a tenth of regional GDP. The 'bottom' group accounts for more than 40 per cent and two-thirds, respectively, of SSA's

The decade of steady growth in sub-Saharan Africa

Gross domestic product			GDP (avg annual % growth)		Population (mn)		Labour force (mn)		FDI stock (US$bn)		Total exports (US$bn)	
	2010	2018	1990-2000	2010-2019	2010	2018	2010	2018	2010	2018	2010	2017
(US$bn)	1,098.0	1,700.0	2.2	4.1	853.4	1,078.3	340.4	403.0	613.55	894.68	425.68	529.03

Sources: World Bank, IMF, World Investment Report (UNCTAD).

population and GDP. They include Nigeria, South Africa and Angola as well as Burundi, Chad, Congo Republic, Equatorial Guinea, Eswatini, Gabon, Lesotho, Liberia, Namibia, South Sudan and Zimbabwe.

Those diversified countries with prudent policies and improving business environment enjoy on average much higher economic growth (See Figure 2).

> "Africa faces both external and regional challenges deriving from rising protectionism, slowdown of key trading partners and a sharp hike in risk premiums"
>
> **MOIN SIDDIQI**

Risk factors

Africa faces both external and regional challenges deriving from rising protectionism, slowdown of key trading partners and a sharp hike in risk premiums leading to reversal in capital inflows as well as facing a debt burden.

"The risks to the macro outlook are mostly on the downside and the recovery will remain fragile," said Albert Zeufack, chief economist for Africa at the World Bank. The bank expects average SSA growth at 3.1 per cent in 2020.

The IMF reckons that intensification of trade tensions in advanced economies could reduce world exports by US$674bn and global income by a whopping US$1.4 trn, with losses across all regions. Consequently, Africa could see a two per cent drop in GDP growth if the US-China trade war escalates, coupled with tighter global financial conditions. The most affected sectors are commodities such as minerals, food-related products and other tradeables.

A severe slowdown in China due to soaring US tariffs on exports would hit hard commodity prices as private consumption plunges and demand from China for African exports fall. Likewise, a recession in the Euro-area would reduce regional growth through lower investment and abruptly disturbing global supply channels. China and the Euro-area account for one fifth and one third of total trade, respectively. Europe and China are also major foreign investors in SSA.

A sharp tightening of financial conditions (i.e. interest rates) in advanced economies, resulting in rising 'risk aversion' would intensify pressures upon frontier markets in terms of refinancing, exchange-rate risks and higher debt service costs due to greater reliance on commercial external debt and Eurobonds. In 2019, the issuances of sovereign bonds by African countries on international capital markets were estimated at US$14bn.

Besides external headwinds, the African continent faces fiscal stress that could derail 'hard-won' progress in growth and development over the past decade. Several countries have elevated debt levels, depleting foreign exchange reserves and weaker bank balance sheets. In 2018, over two-fifths of SSA countries were in 'debt distress' or at 'high risk'. Government debt exceeds half of GDP in 23 countries; most heavily indebted are Angola, Congo Rep; Eritrea, Mozambique, Togo and Zambia. Elevated debt levels and low external buffers – hence limited repayment capacity – are fuelling vulnerabilities, especially as public debt stocks are shifting from official multilateral and bilateral to commercial sources.

Africa's growth compares favourably with peer developing regions (%)

	2018	2019	2020
Sub-Saharan Africa	3.2	3.2	3.6
Emerging & Developing Asia	6.4	5.9	6.0
Emerging & Developing Europe	3.1	1.8	2.5
South America	1.0	0.2	1.8
Middle East & Central Asia	1.9	0.9	2.9

Source: IMF, World Economic Outlook, October 2019.

SSA Macro-economic indicators (%) (regional average)

	2018	2019	2020
Real GDP growth (percent)	3.2	3.2	3.6
Nigeria	1.9	2.3	2.5
South Africa	0.8	0.7	1.1
Angola	-1.2	-0.3	1.2
Inflation, annual (percent chg)	8.5	8.4	8.0
Fiscal balance* incl. Grants	-3.7	-4.3	-4.3
Government debt *	49.0	50.2	50.4
External official debt*	24.0	25.9	25.8
Foreign reserves **	4.9	4.7	4.6
External current account *	-2.7	-3.6	-3.8

* Percent of GDP; ** Month of imports of goods and services.

Source: IMF, Regional Economic Outlook (SSA) Oct 2019.

Benign prospects

Looking ahead, regional growth is expected to be higher as domestic demand, plus trade volumes strengthen, supported by a gradual uptick in global economy. The IMF envisages 13 out of 45 SSA countries surging at six per cent or above, led by Ethiopia, Côte d'Ivoire and Rwanda – ranked as the world's most buoyant economies. Furthermore, 4-5 per cent GDP growth is predicted for 15 countries, led by Botswana, Cameroon, Ghana, Sierra Leone and Tanzania.

However, the recovery remains patchy and debt levels are high, underscoring the need for continuation of structural reforms to boost inward investment, competitiveness and intra-regional trade in the context of the African Continental Free Trade Area (AfCFTA). SSA medium-term expansion (excluding Nigeria and South Africa) could exceed five per cent, fuelled by robust growth in services, especially retail, wholesale, communication and banking/finance, as well as construction related to infrastructure development.

On a positive scenario, if investor sentiment rises in the New Year from the resolution of trade and geopolitical tensions, stronger global activity could boost SSA growth above current projections through higher exports and increased investment flows in mining, oil/gas and infrastructure projects. The region must close a galloping infrastructure deficit in order to realise AfCFTA aims. That demands better roads, ports, railways, air links and networks of fibre-optic cables. The AfDB estimates SSA's infrastructure upgrades at US$170bn/year, with a financing gap of up to US$107bn. Africa offers many untapped opportunities but formidable challenges remain for the investment community. ■

Developing Africa: 2010-2019

As 2020 approaches, *African Review* selects a few milestones that some companies have achieved across the continent over the last 10 years.

2010 MB CRUSHER

Since the very beginning MB Crusher company has been providing solutions for construction and mining sites all over Africa.

In 2010 a MB Crusher attachment was used on the construction site for the Soccer City Stadium in Johannesburg. More recently, in 2019, a crusher bucket was used to crush more than one million of cu/m of basalt for road construction purposes in Djibouti International Free Trade Zone site. MB units can be attached to any brand and model of heavy machinery and the crushing operations can be carried out directly at the construction site.

2011 AGGREKO

Power firm Aggreko was awarded a major US$37mn contract to provide 100MW of emergency power to Tanzania in 2011 in the midst of the region's worst drought in 60 years. Aggreko supplied two 50MW diesel-powered plants at Ubungo and Tegeta, and provided fuel to the two plants.

2012 DANGOTE CEMENT

The biggest cement factory in sub-Saharan Africa was opened in Nigeria by Africa's richest man, Aliko Dangote.

2013 MAN ENERGY SOLUTIONS

The Thika Power Plant was commissioned in 2013 and has made a substantial contribution to a more stable energy supply in Kenya. It was the first plant in Africa to use MAN's diesel combined-cycle power technology. Historically, the country has relied on hydropower for its power generation. Now when hydropower production declines in times of drought, the 88MW plant ensures a stable, safe and efficient provision of electrical energy for the country.

Waldemar Wiesner, regional head of sales for MAN Energy Solutions' Power Plant Business in Middle East and Africa, said, "Upon the launch, the government was able to decommission emergency power suppliers, which were expensive and used a lot of fuel. As a result of its efficiency, the robust, near-maintenance free MAN technology, led to consistent power supplies to the larger Thika District, an industrial town. Thika Power also stabilised the grid, complementing other sources, such as geothermal plants and the hydropower plants in Masinga.

"MAN was the first to install a combined-cycle engine in Africa. With this efficient solution, lower tariffs could be achieved, a benefit that couldn't be enjoyed before. It was also important for us to ensure a knowledge transfer to local engineers as well as to tertiary institutions, who were keen to learn about the operation of a combined cycle system.

"Additionally to the stable electricity supply, which is the basis for all economic growth, the project created income for more than 100 families, who will contribute to the business in their communities. The power plant has directly provided 65 permanent jobs and employs approximately another 30 as casuals. Further to that, this project has indirectly created another 20 jobs for outsourced employees."

2014 BOBCAT

In 2014, Cape-Town based Mpeke Plant Hire was established as a social responsibility project and has now grown into a flourishing plant hire business, working in partnership with Bobcat Equipment South Africa (BESA). Its most recent Bobcat purchase was in early 2019 for three new Bobcat B730 backhoe loaders and a new Bobcat S550 skid-steer loader. The latest arrivals added to two Bobcat B730 backhoe loaders that Mpeke Plant purchased in 2018. All of the machines were supplied by BESA, part of the Goscor Group of Companies and the authorised Bobcat dealer for South Africa.

Brian Rachman, district manager at BESA, said, "The Western Cape is an important growth area for the Bobcat range and it is the biggest sector for backhoe loaders in South Africa."

Caption & Credits:

2010 : MB Crusher Bucket BF120.4 in action at the Djibouti International Free Trade Zone: MB Crusher
2011 : Aggreko power plant: Aggreko
2012 : Aliko Dangote: Dangote Industries
2013 : Waldemar Wiesnar, regional head of sales for MAN Energy Solutions' Power Plant Business in Middle East and Africa: MAN Energy Solutions
2014 : Staff from BESA and Mpeke Plant Hire celebrating the arrival of three Bobcat B730 backhoe loaders: Bobcat

2015 JUMIA

Jumia, Africa's Amazon equivalent, generated US$234mn in revenue, achieving a 265 per cent growth from 2014. The company made history four years later when it became the first African tech startup to be listed on the New York Stock Exchange.

2016 ECOBANK

Since its launch in 2016, the Ecobank Mobile App now serves more than nine million customers. It is available in four languages and enables payments across 33 countries. It has been hailed as one of the best banking apps in Africa.

Ade Ayeyemi, CEO of the Ecobank Group, said, "The idea that brick-and-mortar is the only way to deliver banking services is no longer the current route. We have to have mobility at the core of banking services."

2017 VISA SPA

The Onis Visa gensets have been put to work across the continent since 2002, from the markets of North Africa (Algeria, Tunisia, Libya, Morocco, Egypt), South Africa, Kenya, Ethiopia, and Sudan in the east, to the Democratic Republic of Congo, Cameroon, and Côte d'Ivoire, Republic of Benin and Senegal to the west. In the context of powering the needs of electricity, Visa SpA has long made a determined effort to underpin Africa's economic growth, supporting projects in areas such as mining and energy, government ministries, public organisations, telecommunication companies, data centers, water pumping stations and infrastructure developments, deploying generating sets across many African countries ranging in scale from 9.0 to 2500.0 kVA. Between 2015 and 2017 alone, it supplied more than 2,500 Onis Visa gensets across many countries.

2018 AZURA POWER WEST AFRICA

Nigeria's largest independent power plant – Azura Edo Power Plant – started its first phase of operation in 2018.

Edu Okeke, managing director of Azura Power West Africa, said, "The Azura-Edo power plant was constructed in record time, eight months ahead of schedule and under budget. It is currently putting 454MW into the Nigerian grid, about eight per cent of the total grid output. Without downplaying this quantum of power the plant puts on the grid, I will say that the greatest contribution of the plant is its ability to showcase what can be achieved in the country when government and the private sector work together for the common good.

Azura will continue to support the government's efforts in attracting foreign investment into the country, leveraging on its broad array of investors spanning multiple countries and multilateral institutions and counting on the government's commitment to the respect and sanctity of contracts, a key ingredient for increasing investor confidence."

2019 LAKE TURKANA WIND POWER

Africa's largest wind farm in Kenya, the Lake Turkana Wind Power project, was officially inaugurated in 2019. It consists of 365 turbines, providing a total installed capacity of 310MW, delivering approximately 17 per cent of Kenya's peak and up to 30 per cent of off-peak electricity demand. "The project is now a model of how successful public-private partnerships can be executed on the continent and has placed Kenya on the international map as a safe and reliable investment destination," said Rizwan Fazal, executive director, Lake Turkana Wind Power (LTWP).

Caption & Credits:

2015 : E-commerce businsess Jumia makes record profit: Adobe Stock

2016 : Ade Ayeyemi, CEO of Ecobank Group

2017 : Onis Visa genset Galaxy F 400 GX, 400.0 kVA for a telecom installation: Visa SpA

2018 : Azura Edo Power Plant: Azura Power West Africa

2019 : The Lake Turkana Wind Power Project in the Sarima valley, northern Kenya: LTWP

Port volumes can improve if economies diversify

Africa can improve its containerised trade and port volumes by diversifying its economies, says the United Nations Conference on Trade and Development (UNCTAD).

Africa's ports account for at least four per cent of global containerised trade volume, much of which are imported manufactured goods.

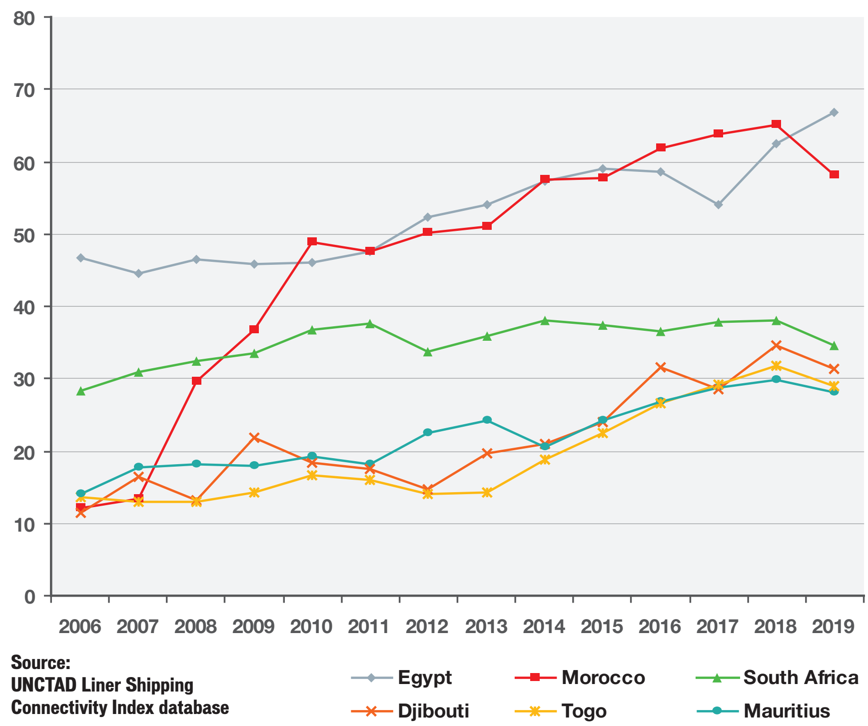
Africa's exports are mainly commodity-based, such as oil, coal, iron ore, ferrochrome, precious metals, cocoa, palm oil and timber.

Forty per cent of goods exported by sea in 2017 comprised crude oil, while over two thirds of imports were made up of dry cargoes (dry bulks and containerised goods) and close to 20 per cent of imports were petroleum products and gas, stated United Nations Conference on Trade and Development (UNCTAD) in a 2018 report.

UNCTAD argued Africa could improve its containerised trade and port traffic volumes and emerge as an exporter of containerised goods by diversifying their economies and enabling greater integration into regional and global value chains. In a press statement, it stated, "For this to happen, however, trade policy and regional integration initiatives such as the African Continental Free Trade Agreement (AfCFTA) will not be enough.

"Africa's container ports and hinterland transport networks need to support these efforts by upgrading infrastructure and services, and improving performance, to match international standards. This entails, among other things, enhancing productivity levels: on average, crane productivity is around 20 moves per crane per hour in West Africa, 25 to 30 in South Africa, and 35 to 40 in Asia."

Figure 1: Top six African Liner Shipping Connectivity Index (LSCI*), 2006-2019



Source: UNCTAD Liner Shipping Connectivity Index database

Connectivity

UNCTAD stated Africa's shipping and ports do not always match global trends and standards. Apart from four container terminals in Morocco, Egypt and South Africa, no other African port was featured in the 2016 list of Top 100 global container ports.

"Combinations of public and private investments, port reforms, and improved transit to connect to neighbouring landlocked countries have helped these countries to become leaders in African container shipping connectivity," the report continued.

In UNCTAD's 2019 Liner Shipping Connectivity Index (LSCI)* Egypt, Morocco and South Africa were revealed as the best connected ports in Africa, followed by sub-regional load centres such as Djibouti, Togo and Mauritius.

In comparison, ports in West Africa displayed poor maritime transport networks due to their the position outside of major north-south and east-west shipping routes.

Although Mombasa (Kenya) and Dar es Salaam (Tanzania) connect Burundi, Rwanda and Uganda to overseas markets through dedicated corridors, they remain highly congested, it noted.

The World Bank Group's 2019 report: *Port Development and Competition in East and Southern Africa* says there are landside access gaps in the fifteen main ports in East and Southern Africa, and recommends much-needed port and access infrastructure improvements. These ports are Beira, Berbera, Dar es Salaam, Djibouti, Durban, East London, Lamu, Mahajanga, Maputo, Mombasa, Morani, Nacala, Port Louis, Toamasina and Zanzibar.

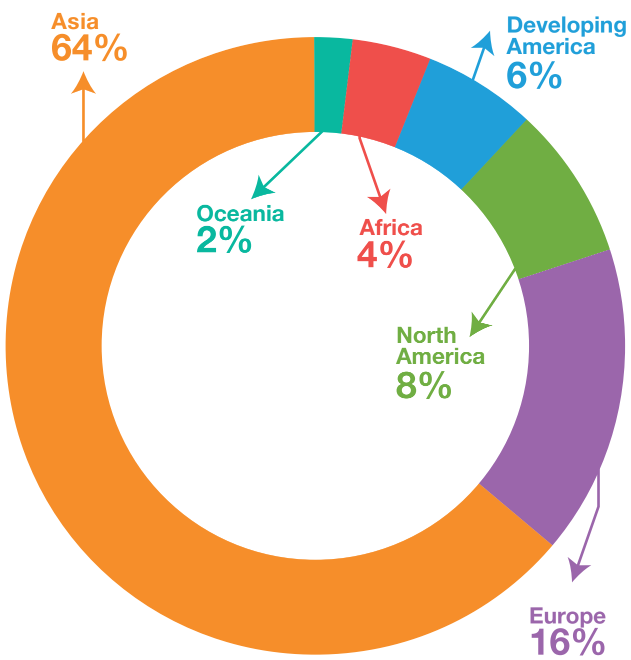
The report stated overall container demand in the 15 ports will eventually exceed total current capacity between 2025 and 2030, recommending that there needs to be improvements in containerised cargo transport services so that goods can be delivered efficiently and at minimum cost.

According to PwC's report, *'Strengthening Africa's gateways to trade-April 2018'*, many containers returned empty due to the trade imbalance between the types of commodities imported and exported. It stated these empty containers take up valuable port capacity, which "could be a significant advantage if exports could be processed or beneficiated to a state and exported as containerised freight".

Also, it highlighted that most imports arrived in containers, while most exports are of raw materials, meaning that greater port specialisation is required while the need to develop port infrastructure remains essential for ease of development of trade with the rest of the world.

And while China is a major financial investor in Africa's infrastructure projects, some countries

Figure 2: World Container Port Traffic, 2017



Source: UNCTAD - Review of Maritime Transport 2018

have been asserting their rights, which was recently seen with the government of Tanzania demanding Chinese investor – China Merchants Holding International – behind the development of Bagamoyo Port in Tanzania, to accept their terms and conditions of contract or simply leave the country.

Despite political setbacks, such as these, the expansion of existing and development of new port facilities are underway or in the planning stages. In July, two major expanded ports opened in Africa, the Tema Port in Ghana and the Tanger Med 2 Port near Tangier in Morocco,which is the largest container port on the continent along with Port Said in Egypt.

According to UNCTAD, Africa is a "dormant giant" because of its strong economic growth, wide resources, and growing investment and financing commitments from foreign investors such as China. It recommends the region prepares its ports for larger vessels and adequate cargo handling and equipment, improves access to the hinterland and landlocked countries by multimodal transport and transport corridor approaches, and builds inland transport infrastructure, as well as adopting technologies to cut inefficiencies and promote security. If it does so, the region is is well on its way to fulfilling its potential. ■

By Samantha Payne

** The LSCI covers 178 countries and shows maritime connectivity trends from 2006 to 2019. It is calculated from data on the world's container ship deployment and released annually. The components of the 2019 index include the number of companies that provide shipping services, the number of services, the number of ships that call per month, the total deployed container-carrying capacity, and the size of the largest vessel. The index also includes a new metric covering countries that can be reached without the need for transhipment.*

Source: UNCTAD

Africa's energy future matters for the world

Africa is set to become increasingly influential in shaping global energy trends over the next two decades as it undergoes the largest process of urbanisation the world has ever seen, according to a new report from the International Energy Agency.

Image Credit: Adobe Stock

With the right policies, governments could provide 530 million people with access to electricity.

Africa Energy Outlook 2019, a special in-depth study published on 8 November, finds that current policy and investment plans in African countries are not enough to meet the energy needs of the continent's young and rapidly growing population. Today, 600 million people in Africa do not have access to electricity and 900 million lack access to clean cooking facilities.

The number of people living in Africa's cities is expected to expand by 600 million over the next two decades, much higher than the increase experienced by China's cities during the country's 20-year economic and energy boom. Africa's overall population is set to exceed two billion before 2040, accounting for half of the global increase over that period. These profound changes will drive the continent's economic growth, infrastructure development and, in turn, energy demand, which is projected to rise 60 per cent to around 1,320 million tonnes of oil equivalent in 2040, based on current policies and plans.

The IEA report includes detailed energy profiles of 11 countries that represent three-quarters of the region's gross domestic product and energy demand, including Nigeria, South Africa, Ethiopia, Kenya and Ghana.

The report makes clear that Africa's energy future is not predetermined. Current plans would leave 530 million people on the continent still without access to electricity in 2030, falling well short of universal access, a major development goal. But with the right policies, it could reach that target while also becoming the first continent to develop its economy mainly through the use of modern energy sources. Drawing on rich natural resources and advances in technology, the continent could by 2040 meet the energy demands of an economy four times larger than today's with only 50 per cent more energy.

"Africa has a unique opportunity to pursue a much less carbon-intensive development path than many other parts of the world," said Dr Fatih Birol, the IEA's Executive Director. "To achieve this, it has to take advantage of the huge potential that solar, wind, hydropower, natural gas and energy efficiency offer. For example, Africa has the richest solar resources on the planet but has so far installed only five gigawatts of solar photovoltaics (PV), which is less than one per cent of global capacity."

If policy makers put a strong emphasis on clean energy technologies, solar PV could become the continent's largest electricity source in terms of installed capacity by 2040.

Natural gas, meanwhile, is likely to correspond well with Africa's industrial growth drive and need for flexible electricity supply. The region is home to more than 40 per cent of global gas discoveries so far this decade, notably in Egypt, Mozambique and Tanzania.

PAYG SOLAR LEADER ENTERS TELCOMS MARKET

A market leader in the expanding pay-as-you-go (PAYG) solar industry has successfully partnered with major telecom operators in Africa. Recognising the natural synergy between the telecom and PAYG solar industries, Greenlight Planet is pursuing a strong telecom-focused strategy that aims to have a far-reaching impact on more than 600 million unelectrified consumers across the African continent.

So far the company has collaborated with more than fifteen telecom operators, banks and payment gateways to make Sun King products more affordable and accessible for rural individuals, increasing long-term value for a common consumer base.

Fully-fledged sales and distribution partnerships have been launched with three leading telecom operators, Vodacom (Tanzania), Orange (Burkina Faso) and Telma (Madagascar), to enable sales of solar-powered energy solutions through each operator's subscriber base and mobile money channels. In addition, Greenlight Planet has integrated its innovative PAYG technology platform with leading mobile money providers across sub-Saharan Africa, enabling consumers to make continuous installment payments in a secure and simple way. Greenlight Planet establishes operating models with each telecom partner to work with each service provider's goals, local business model and competitive landscape.

Dhaval Radia, senior vice president at Greenlight Planet, says, "The time is right for telecoms to look beyond their traditional revenue earning models and explore innovative partnerships that can lead to a sustained increase in ARPU and customer retention. By expanding to rural consumer segments with value-added services such as PAYG solar products for daily energy and infotainment, telecom operators can help deliver higher value to their customer base."

BRIEFS

Attracting power sector financing across Africa

Image Credit: Adobe Stock

Power sector financing is to receive a boost from the Power Africa and Africa50 pact.

Power Africa and Africa50 have signed a memorandum of understanding for a new partnership focused on attracting power sector financing and developing innovative public private partnership models in sub-Saharan Africa (SSA). Africa50 will be the 19th development partner to join the Power Africa initiative. This partnership between Power Africa and Africa50 provides a foundation for collaboration in the energy sector at the country and regional level throughout SSA.

Volvo Penta presents Stage V diesel engines

Image Credit: VolvoPenta

The new engines reduce standstill DPF regeneration to a minimum.

At Agritechnica 2019, Volvo Penta presented its next generation of fuel-efficient Stage V engine solutions. The new Stage V diesel engines reduce standstill DPF regeneration to an absolute minimum, while at the same time retaining Volvo Penta's signature ease of installation, operation and maintenance. The new engines have a common interface. Installation in the machine is very similar, regardless of the emission level for which the engine is optimised.

Genset suppliers sign off year in style

Business remains robust for temporary genset power solutions in Africa, with the major players strengthening their presence in the market.

The demand for genset power solutions remains as robust as ever in Africa as a result of the region's poor energy infrastructure and the upward growth trajectory in many territories.

Sometimes, these on-site power plants provide vital electricity supply to key installations where the national grid cannot, and for critical applications such as back-up power for hospitals.

They can be integral in the support of major industry applications where erratic energy supplies might otherwise undermine successful operations.

In Lesotho, for example, one UK-based mining firm has been forced to seek alternatives after the failure of its grid-based supply.

Firestone Diamonds plc, which is listed on London's Alternative Investment Market, said in November that it had resumed production at its Liqhobong diamond mine after an alternative power supply had been implemented in the absence of grid electricity.

The company said it had now successfully commissioned the rented diesel generators, with the mine processing plant again close to full capacity.

"The generators are expected to be used to generate power until grid power is restored from the Muela hydropower station, which, according to the Lesotho Electricity Company, is scheduled to take place on 1 December, 2019," a statement read. "Normal operating costs are expected to increase by the cost of renting the gensets and of the associated diesel consumption," Firestone added.

Algeria project

Despite the heightened costs, it is hard to overstate the importance of such facilities.

In one recent project, Himoinsa was called in to supply emergency generation to Algeria's main international airport in Algiers in the event of a mains outage.

One of the gateways to the African continent, more than 7.5 million passengers pass through the airport each and every year, with over a hundred flights daily.

Himoinsa's distributor in the area, SARL Globale Réalisation, stepped in with a range of generating sets to provide a reliable power supply to keep operations running smoothly in the event of any grid outage.

The 6.3MW portfolio includes one HTW-2030 T5 unit; four HTW-1030 T5 units; one HTW-1030 T5, unit with a built-in load bank; and one HTW-670 T5 unit. Together, it provides installed power of 7,875 kVA on stand-by.

The configuration of the power plant included a redundant control system for the generation of emergency power in critical infrastructure, a built-in load bank inside the container of one of the gensets and tanks with a fuel capacity of 3,000 litres.

Together, the package underpins electricity supply across three core locations: the main international terminal, a domestic terminal, and a separate hub which specialises in charter flights.

HSK78G natural gas generator series.

Image Credit: Cummins

But Himoinsa has enjoyed success in Algeria, supplying emergency power for two large hotels belonging to the AZ Hotels chain that opened in Kharouba and Mostaganem.

In September, it opened a new sales office in neighbouring Morocco, reflecting the strength of the North Africa market. It marks the company's third sales office in the African continent, following the opening of similar facilities in Angola in 2012 and in southern Africa in 2016.

Nigeria market

Cummins, likewise, has deepened its commitment to the Nigeria and West Africa market, reflecting the country's strong, historical demand for genset solutions of all shapes and sizes.

> "The HSK78G models are suitable for a diverse set of industries from mining and manufacturing to shopping malls and hospitals"
>
> CRAIG WILKINS, DIRECTOR OF CUMMINS PRIME POWER SEGMENT AND GLOBAL SALES SUPPORT

Its Cummins West Africa subsidiary opened a office in Lagos in November, as part of efforts to build on existing business in Nigeria and across West Africa. The company is around 135-strong across Nigeria, spread across assembling and kitting out of generators, sales, service and support, with more to come, according to Thierry Pimi, executive managing director, Cummins Africa Middle East Pty Ltd.

At the launch, he said it marked a vote of confidence in the market and hinted that the company hopes to bring its manufacturing capabilities to Africa when the time is right.

For now, the company continues to lead through innovation, this year unveiling its HSK78G natural gas generator series.

With a power density of up to 2 MW from a 78L engine, the HSK78G series is designed to provide reliable power, regardless of the gas source or the climate, including extreme heat.

"The HSK78G models are suitable for a diverse set of industries from mining and manufacturing to shopping malls and hospitals," said Craig Wilkins, director of Cummins prime power segment and global sales support. ■

By Martin Clark

Image Credit: Adobe Stock

Banking on renewables

Barry Mansfield provides an update on the adoption of new energy storage technology across Africa.

While adoption of battery storage on a utility scale across Africa is still some way off, technological advances and cost reductions have already combined to allow local communities and businesses to invest. Export credit agencies and development banks are helping to ramp up investment in smaller energy storage installations as part of micro-grid or off-grid distributed projects – a trend that contrasts sharply with the sluggish progress at national level. Compact, renewable, off-grid solutions with battery storage are a viable alternative to the traditional centralised generation model.

A Nigeria-wide project of this type was awarded a grant by the US Trade and Development Agency (through Power Africa) for the development of 25 solar microgrids, enabling a local firm to cover feasibility studies around use of solar PV modules, micro-grid infrastructure, battery storage and smart control systems and meters in local communities. These microgrids are designed to be run on a pay-as-you-go basis by consumers using mobile payments, a new business model that is expected to kick-start Africa's rural electrification process, along with similar off-grid solar plus storage plants.

Further examples can be found in rural Eritrea in communities that previously relied on diesel; they now receive energy from two solar-storage-diesel mini-grids constructed by Solarcentury. Hybrid power systems at Areza (1.25MW) and Maidma (1MW) which took eight months to build, make use of solar PV, Tesla's lithium-ion batteries and Caterpillar's backup diesel generators. The sites, operated by the Eritrean Electricity Company, will provide continuous clean energy to 40,000 people, schools, hospitals and businesses. Funding came from the Eritrean government and United Nations Development Programme.

EU agreements

Elsewhere, an agreement was reached by the European Investment Bank (EIB), the World Bank and the EU to support a project in Gambia to connect 1,100 rural schools and healthcare centres to a solar and battery-based system. The EU contributed 106mn euros, with the EIB providing a 65mn euros concessional loan and the World Bank an extra 35.7mn euros. The scheme is to be carried out by NAWEC, the main Gambian utility supplier. When completed, it will increase Gambia's total energy supply by around 20 per cent.

> "A final kWh price at roughly a third of the cost of running a diesel generator"

Another good omen for Africa's electrification ambitions is highlighted in Bloomberg's New Energy Finance report on the levelised cost of energy (LCOE), which suggests that lithium-ion batteries are finally becoming a cost-competitive alternative to natural-gas-fired power plants. The report found the benchmark LCOE for utility-scale lithium-ion batteries has dropped by 35 per cent to US$187. This new low price means that use of lithium-ion batteries in conjunction with solar or wind is approaching competitiveness (without subsidy) with coal and gas for provision of dispatchable power.

South African utility Eskom is reportedly developing a renewables-linked large scale storage project, which could explain the company's recent purchase of 20 lots of 50kW inverters. Eskom is exploring possibilities for dismantling its energy monopoly as it suffers regular blackouts, partly due to maintenance issues at its creaking coal-fired plants. As for micro-grids, the technology's performance and reliability levels continue to improve; most batteries are sold with long-term warranties, providing greater assurance to developers and financiers.

Kenyan renewable energy developer Xago Africa has received a Power Africa grant, allowing it to accelerate its work with US storage specialist Alevo on its long delayed project at Siaya County, which should eventually become Kenya's inaugural utility-scale (40MW) solar PV plant with accompanying lithium-ion battery storage. These projects are becoming comparatively easier to finance given declining capital costs, briefer construction periods and a reduction in the complications and risks involved.

MOU with Nordic

In other news, Azelio signed a memorandum of understanding with Swedish company Nordic Distributed (ND) Power AB for a small-scale project in Zambia that will offer a final kWh price at roughly a third of the cost of running a diesel generator. In late November, Bohusläningen revealed that Azelio was planning a total investment of SEK 1bn (US$104mn) in storage technology, including a new manufacturing plant on the old Volvo site in Uddevalla. As for ND Power, the upcoming installation will serve as a model for its future operations in the Southern African region.

Azelio will receive an undisclosed sum for the initial project, a plant of 50 kWe that is set to become fully operational in the third quarter of 2020. Its system will store energy from solar PV and supply it on demand at any time. When the storage system is fully utilised, electricity can be produced for 13 hours at nominal power. This is particularly convenient for the end user's business, which has been plagued by frequent power disconnections due to the severe drought that has afflicted the Kariba Dam – a facility that is relied upon to produce most of the country's electricity.

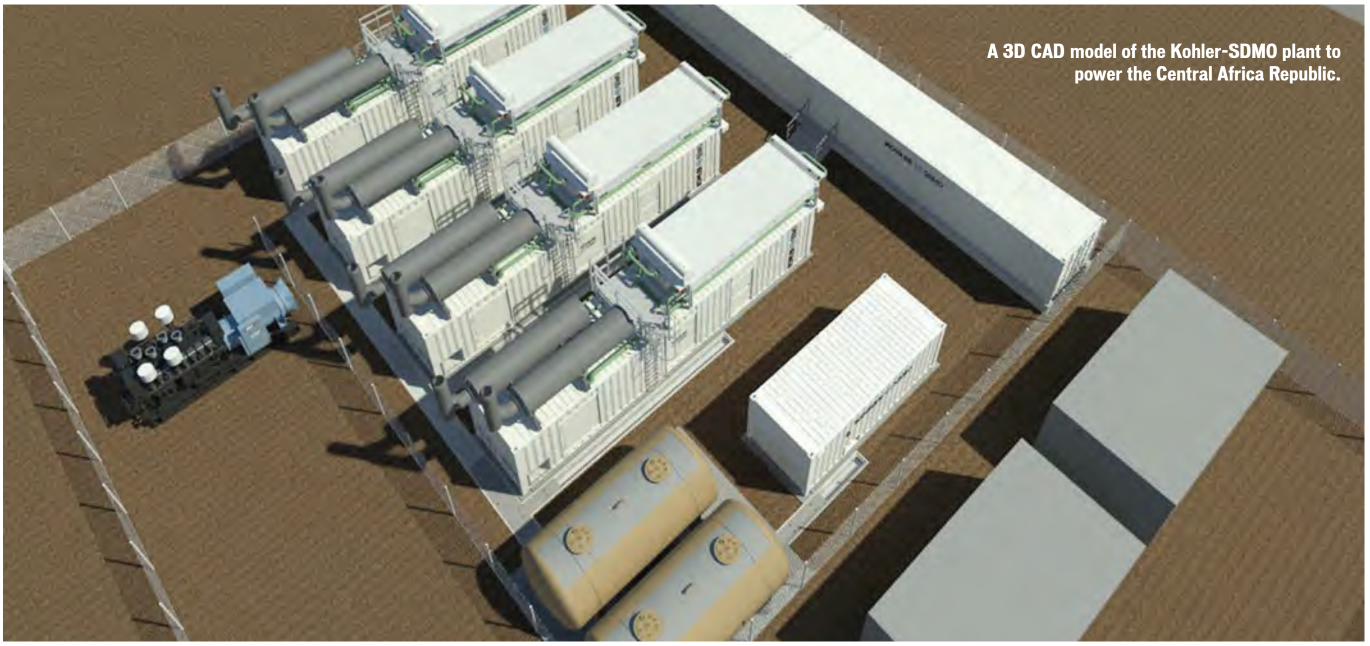
What makes Azelio's preferred approach different is that it is based on thermal energy for what CEO Jonas Eklind describes as a "distributed and long-duration energy storage" solution. Solar PV produces electricity, which is used to create thermal energy at 600°C. This is stored and converted back to electricity by the use of a Stirling engine. The mechanical movement runs a generator, which produces the electricity. After sunset, the Zambia project should be capable of delivering 650 kWh of electricity and 1,300 kWh of thermal energy.

The agreement between ND Power and Azelio involves around 7.55 MWe of capacity, to be launched in the African market between 2021 and 2023. Eklind draws attention to the "years of under-investment in electrical infrastructure," which echoes the concerns in IFC's November report that diesel generators are a massive economic burden on African customers. It estimates annual spending on generators at US$50bn, with an average service cost of US$0.30 per unit for fuel alone – that's roughly double the average cost of grid electricity.

In markets with the most intensive generator use, like sub-Saharan nations, more money is spent on fuel for generators than on the entire power grid. ■

Clarke Energy to supply 10MW Kohler-SDMO power plant to Central African Republic

Kohler-SDMO KD3500-F diesel generator sets will be provided to TRAGEDEL to power the electricity network in the Central Africa Republic.



A 3D CAD model of the Kohler-SDMO plant to power the Central Africa Republic.

Image Credit: Clarke Energy

Clarke Energy is delighted to announce the provision of four units of highly robust Kohler-SDMO KD3500-F diesel generator sets, to Tunisian-based TRAGEDEL to power the Central Africa Republic electricity network. This project is an important milestone to Clarke Energy as it will be the first reference in Central Africa Republic and its largest diesel power plant in Africa outside hundreds of units of Jenbacher power generator sets already installed and running across the continent on gas.

The project will add 10MW to the country's capital city electricity network, hence improve the living conditions of the population as the capital city Bangui suffers several hours of interrupted power on a daily basis. The new units will also offer the necessary flexibility to implement heavy overhaul maintenance on an existing obsolete hydroelectric generating plant.

The generator sets are built in 40-foot weatherproof containers which meet the strictest criteria in terms of performance, soundproofing, robustness and ease of maintenance. The base of the container is designed to have internal retention, able to retain a possible fuel, oil or coolant leak.

Kohler-SDMO's 'Contenergy' container concept will offer a special adaptation for the customer's needs. Thanks to their standard size, Contenergy containers are easily transportable and, once on site, installation is simplified on an external concrete slab with a relatively small footprint.

Kohler-SDMO premium performant engine KD3500-F produces 2.5MW nominal electric power, and runs very smoothly thanks to the engine's conception and integral vibrator isolation mounted between components and skid. The engine is also characterised by low fuel consumption thanks to a high common rail injection technology and also a smaller footprint as a result of high power density.

> "The generator sets are built in 40ft weatherproof containers which meet the strictest criteria in terms of performance"

The power plant will run as base-load or peaking and the electrical energy generated will be injected into the public utility grid, owned and managed by ENERCA.

Clarke Energy's ability to manage the project turnkey while meeting project specifications and the installation footprint of the package were important selection criteria for TRAGEDEL. Clarke Energy's SDMO package was also selected as a result of best compromise power/footprint, installation constraints, long maintenance intervals, availability, reliability, simplified maintenance, competitive price and best lead time.

TRAGADEL has acted as the EPC contractor for the project which has been funded by the Saudi Fund for Development, under the umbrella of the CAR Ministry of Economy, Planning and Cooperation. ■

Uganda benefits from 5.25MW hydropower plant

Project stakeholders have started the commercial operations for the 5.25MW Sindila hydropower plant in Western Uganda, supplying the national grid and promoting socio-economic development in the region.

Sindila is located in the Bundibugyo District of western Uganda and is owned by a special purpose vehicle, Butama Hydro Electricity Company.

Sindila benefits from its location in the foothills of the Ruwenzori Mountains and is a high-head run-of-river project with a total gross head of 402m which is used to drive two pelton turbines of 2.8MW each. The water is conveyed via an enclosed steel low-pressure headrace and high-pressure penstock from a tyrolean weir to the powerhouse.

Metier, via its Lereko Metier Sustainable Capital (LMSC) fund, is the majority investor. Minority shareholders alongside Metier are KMRI, the original project developers; Fieldstone Africa Investment Resources (FAIR) and WK Power. FAIR, a development support arm of Fieldstone, provided development funding alongside LMSC as well as active development support. WK Power is a wholly-owned subsidiary of WK Construction, a privately held South Africa construction firm, which is both the civils Engineering Procurement and Construction contractor on the project as well as the operator via its Ugandan entity, Sindila Hydro Construction. The electro-mechanical contractor and turbine supplier is the Slovenian firm, Kolektor Turboinštitut.

The Uganda and South African offices of SMEC provided owner's engineer and project management services, Aurecon acted as the lender's independent engineer and Synergy Global Consulting provided social and environmental management support during construction.

SMEC provided a local Ugandan resident engineer to ensure understanding of local conditions and standards was incorporated into the Project, supported by a technical review team based out of Nairobi, Kenya and a project management team based out of Johannesburg, South Africa. This blend of resources provided cost-effective support to Butama Hydro Electricity Company, epitomising SMEC's motto of 'local people, global experience'.

The spillway for the Sindila hydropower plant. in Uganda.

The project is funded by a combination of debt and equity, with debt provided by the Overseas Private Investment Corporation (OPIC), the US development finance institution. The project represents an investment of US$20 million into the Uganda power sector and created well over 500 jobs at peak employment, the majority of which went to workers from the local community.

Sindila is part of the Government of Uganda and KfW GETFiT programme and benefits from a support grant under the programme. The project development was also supported by the United Nations Environment Programme Seed Capital Assistance Facility (SCAF) which provided a valuable development matching grant.

The project will generate approximately 28GWh of electricity per year which will be purchased by the Uganda Electricity Transmission Company Limited (UETCL) under a 20-year power purchase agreement. It will consequently reduce greenhouse gas emissions by about 15,120 tonnes of CO_2 per year based on the standard Uganda grid emissions factor.

The project has also implemented a range of socio-economic development projects in the area. The local economy is based on subsistence and cash farming and local households have no formal infrastructure services. Project initiatives include a stand-pipe water reticulation system for households who currently collect water from the river, a bean-planting programme and other agricultural support, anti-poaching and other measures to protect the nearby Ruwenzori Mountain National Park and a planned solar-homes programme to provide electricity to households in the vicinity of the plant.

Sindila was retrospectively granted a certificate for achievement of commercial operations on 18 April 2019. It has been supplying power to the national grid since that date and is now in its operating phase. Operations have been slightly hampered by an unstable grid connection, however the project is working closely with UETCL and the Rural Electrification Agency of Uganda who have been very supportive of the project and are in the process of implementing a major grid strengthening programme between the project site and Fort Portal, the nearest major town, which will improve the stability of power evacuation.

A SMEC spokesman said, "SMEC looks forward to the project continuing to be an important contributor to the energy sector and economy of Uganda in the years to come." ■

SDLG launches biggest wheel loader to date

SDLG's 7-tonne L975F wheel loader.

Image Credit: SDLG

SDLG has introduced the new Stage III L975F wheel loader to market – the OEM's biggest wheel loader to date. The Chinese firm says it has developed the wheel loader with a focus on durability, fuel efficiency and improving productivity on a job site. The highly reliable L975F can be used for a range of tough applications on construction sites, as well in quarries, mines and port terminals.

"We are proud to introduce the L975F to our wheel loader offering," says SDLG product manager Henrik Sjöstrand. "We understand customers' demand for equipment that is going to maximise the output of any job, no matter how demanding. We listened, and our biggest wheel loader is our most durable yet, with no compromise on fuel efficiency or safety."

The 24,900kg L975F is designed with robust rear and front frames to withstand load distribution. Equipped with a large tonnage driving axle and reliable braking, SDLG says there is no task the L957F can't tackle. Fitted with a 199kW engine, its transmission uses a HTE205C fixed-axis electro-hydraulic automatic shifting gearbox for flexibility and ease of operation – SDLG's first machine that uses a fully automatic transmission built by Volvo. An integrated cooling system uses technology to automatically adjust fan speed according to engine temperature, which is advantageous in hot climates.

With greater load capacity and durability, the SDLG L975F wheel loader can tackle the toughest of applications. The standard 4.2m³ bucket with eight bolted on teeth and two wear plates features a spill guard plate to prevent material loss. The maximum dump height, at 3.2m, is supported by a 3.6m boom.

The second stage 93 sand filter in the hood of the machine filters more than 95 per cent of particles when working in dusty conditions such as mines to keep the job smooth and efficient.

Featuring six standard LED lights with high brightness capacity for darkness, the operator's line of vision is never compromised. The machine's new generation cab includes a safety lock, increased sealing, field of view width and 12 per cent more space, so the operator is ensured a reliable, safe and easy experience.

With efficiency in view, the SDLG L975F's fuel consumption is halved. With the same material load, the L975F's fuel consumption is almost 50 per cent lower than that of two standard 5-tonne wheel loaders, saving businesses on expensive operational costs.

At seven tonnes, the loader faces large and heavy material moving jobs, so operational efficiency is crucial. The improved confluent hydraulics system automatically adjusts its fuel pump according to the load size, reducing overflow loss by 12 per cent in comparison to older models. Its proprietary power matching system sets a new benchmark for energy saving.

PPPS IN AFRICA: VITAL FOR DEVELOPMENT FINANCING

The Economic Commission for Africa (ECA) and its partners the Global Infrastructure Hub and the African Development Bank held a workshop in Dakar from 26-28 November as part of efforts by the ECA to respond to the overwhelming demand by member states for increased mobilisation of stakeholders to support the development of PPPs in Africa.

"PPPs are a means of financing development as per SDG 17: they enable inter-sectoral and inter-regional linkages. The path to achieving development also requires a range of stakeholders, and PPPs play a crucial role in this respect," said Eunice Ajambo, economic affairs officer at ECA's Macroeconomic and Governance Division, and Focal Point.

"PPPs can help solve the dire need for public services and goods, if structured and managed well, and thus contributing to outcomes in health, education, water, energy, transport, with consequences on wellbeing. But for this to happen, PPP units must have the capacity to initiate, develop, and manage the pipeline of bankable and sustainable PPP projects," she added.

For her part, Morag Baird, director at the Global Infrastructure Hub, noted that the Global Infrastructure Hub is an international organisation and an initiative of the G20, with the mandate to connect infrastructure communities to help facilitate improved flow and quality of infrastructure. The workshop was held to help build the capacity of government policymakers to improve the quality of infrastructure investment in francophone Africa.

She says, "We are working in partnership with government and development partners to meet these objectives through sharing best practice, knowledge and learnings. The workshop builds on the success of the hub in delivering workshops on practical tools and knowledge in other areas of Africa."

BRIEFS

Africa's tallest tower under construction

Image Credit: Adobe Stock

The Iconic Tower will be the largest in Africa when it is completed by 2025.

Construction work has started on the Iconic Tower at the New Administrative Capital, in Egypt, housing minister Asem al-Gazzar said.

The 390m tall tower will be the tallest building in Africa, taking over from Johannesburg's 223m high Carlton Centre, when it is finished by 2025.

It is being built by the China State Construction Engineering Corporation company, which is already responsible for building 20 towers in the central business area of the capital.

Learning how to manage equipment costs

Image Credit: CONEXPO-CON/AGG

Crowd view at the CONEXPO-CON/AGG show 2020.

Visitors to next year's CONEXPO-CON/AGG in Las Vegas are being invited to an education session on *"How To Manage Rising Equipment & Rental Costs"* on 12 March.

Gregg Christensen, vice president, nationals account, United Rentals, said, "Renting enables a company to augment its owned fleet with rental equipment to help smooth out workload peaks and valleys." Founded in 1997, the company is the largest equipment rental company in the world.

Infrastructure financing surpasses US$100bn

The Infrastructure Consortium for Africa (ICA), launched at the 2005 G8 Gleneagles Summit, continues to play a role in raising capital for infrastructure projects.

A view of the third mainland bridge from the Lagos lagoon

Image Credit: Adobe Stock

The Infrastructure Consortium for Africa (ICA) announced a 24 per cent leap in infrastructure financing in Africa in 2018, surpassing US$100bn for the first time, but significant financing gaps remain.

Launched on 12 November at the Africa Investment Forum in Johannesburg, the ICA's *Infrastructure Financing Trends in Africa 2018* report shows that financing of infrastructure in Africa reached a new high of US$100.8bn in 2018, a jump of around a quarter on 2017 and 38 per cent up on the 2015-2017 average.

Mike Salawou, ICA coordinator, and manager of Infrastructure Partnerships, at the African Development Bank, said, "Over the years the *Infrastructure Financing Trends in Africa* report has become an important document for presenting, in a consistent manner, how funding is being mobilised to develop the continent's infrastructure.

"The report's publication during the Africa Investment Forum is extremely timely. While the increase in financial commitments in 2018 is very welcome, the report also serves to highlight the size of Africa's infrastructure financing gap – one of the key issues addressed during the forum," Salawou said.

This years' report shows the role ICA continues to play in institutional and policy reform as well as its consistent financial contribution within the infrastructure space. This, along with a 65 per cent and 33 per cent increase in commitments over the previous three-year average by China and African Governments respectively, and the role of other multilateral organisations, resulted in the 24 per cent increase recorded in infrastructure financing for 2018.

Among the major findings of the report was an increase in financing commitments across all sectors, with a notable increase in the energy sector, which attracted financing commitments worth US$43.8bn, an all-time high and a 67 per cent increase on the 2015-2017 average. The ICT sector also saw record commitments in 2018 of US$7.1bn, mostly from the private sector.

Even with the significant increase in commitments in 2018, there remains a total financing gap of US$52bn to US$92bn per year. Yearly estimates of Africa's financing requirements range from US$130bn to US$170bn. Water and sanitation has the largest financing gap of all the sectors, based on annual financing needs of US$56-$66bn and a 2016-2018 average commitment of US$13bn.

Inal Henry, head of export financing, Investment Banking, Rand Merchant Bank (RMB), during a talk at GTR Africa London on 12 November, suggested more action was needed to fund water projects from banks and credit agencies.

"Given the sanctity of water, perhaps we need more risk appetite from the DFIs, the World Bank, and the ECAs. Perhaps we need a special programme in respect to water and food security that won't necessarily call on the individual governments to put their balance sheet forward, but will look at social principles in order to implement and assist the commercial banks and then provide the funding for those projects."

Faruq Muhammad, managing director, head of structured export finance, Standard Chartered, agreed and said at Standard Chartered, it had already provided financing in Zambia and Angola for water infrastructure projects.

The most recent project to date was the US$1.3bn Bita Water Supply Project Guarantee. The bank is working alongside the World Bank in south Luanda, bringing new and improved piped water service to around one million people, with the capacity to double demand in the future.

Muhammad added that, "Sustainable lending is part of our objective in sub-Saharan Africa."

Despite water being a being a difficult bankable infrastructure project, there was a huge need for desalination plants/waste recovery plants across Africa.

Henry said, "In the South African market, we are seeing privatisation of these water systems as well as seeing municipalities and the Metro implementing these projects on the balance sheet and/or with government support.

"We haven't had many of these projects being done on a project finance basis because it is a social infrastructure type project. User pay principles have not been enshrined or have been put in place to date."

In certain transactions, user pay principles were not explained to the community. She added, "They had no idea that post-implementation of a new plant providing clean drinking water would come as an additional charge to them, which caused huge consternation in certain transactions – and needs to be addressed going forward."

> "Given the sanctity of water, perhaps we need more risk appetite from the DFIs"
>
> **INAL HENRY, HEAD OF EXPORT FINANCING, INVESTING BANKING, RANK MERCHANT BANK**

Image Credit: Adobe Stock

Has China's strategic investment in Africa been positive overall?

At this year's GTR Africa London a debate was held on the true impact China is having on the continent. Samantha Payne reports.

China's Belt and Road Initiative (BRI) was hailed as a "deepening" positive contribution to developing Africa, by Helena Huang, China Economist, ICBC Standard Bank during a heated debate about the superpower's controversial role on the continent.

Speaking in favour of China's investment into Africa at GTR Africa London in November – an annual gathering for domestic and international trade, export and finance professionals, she used the example of the BRI – Beijing's multi-country US$64bn development and investment scheme – as evidence about the fundamental change China is bringing to the continent.

She said it was in "China's interest to see successful projects being harnessed and completed in the local market" and that it "would be against providing poor quality lending to the countries."

Robert Besseling, executive director, EXX Africa, disputed this, and said some countries such as Zambia, had suffered from US$10bn of Chinese project financing which had put the government in serious debt sustainability issues.

He continued China Export Credit Insurance Corporation (SINOSURE) and the Chinese government had written off loans based on the lack of commercial viability of the Kenya Standard Gauge Railway, linking Uganda, South Sudan, the Democratic Republic of the Congo, Rwanda, and Burundi.

He said, "It's happened in Djibouti, Ethiopia and Uganda, which is moving towards rehabilitating its own railway, rather than building a new railway. It is also happened in Kenya where the first phase was sponsored by US$3.2bn but the second phase will not be financed by Chinese financing. This raises the question whether debt sustainability and Chinese investment can be matched."

He also cited examples of African governments refusing to give in to Chinese investors' terms.

"Over the past few months, we have seen African governments saying no to China for some of the largest construction projects in East and West Africa. The most recent example is in Tanzania where China had pledged US$10bn for the Bagamoyo Port, which would have been East Africa's largest sea port. In June, the Tanzania government said no to the deal, with the president coming out with a range of stringent conditions, which will now essentially kill off the deal. There is no way China will now agree to these terms. The Sierra Leone government cancelled a US$400mn deal for the construction of an airport in Freetown, based on the argument that it would cost way too much – 11 per cent of its GDP, which would've been mostly debt-financed. African governments are not forced to take on Chinese debt, but the conditions of payment are very often too stringent. The Chinese are turning to alternative financing."

Calvin Walker, director, CWP, however countered this argument of leading Africa into so-called "debt-traps", saying African borrowers are not forced to borrow from China.

He said, "The reality is that the top 10 African borrowers from China have successfully integrated Chinese borrowing into their overall debt exposure and budget management. "It's not clear what China would seek to gain by encouraging non-performing loans. The reality is the debt trap narrative has led to a positive change in Chinese lending practices.

"Fifteen years ago China was offering cheap cash, inferior technology and equipment and poor procurement compliance. Nowadays Chinese developers and contractors are more accustomed to international procurement of documentation processes. They compete fairly in the processes, albeit maybe not always on a transparent basis. But they do now have more credibility on the technology and plant side. They are increasingly capable of supplying sophisticated equipment. For example on the FPSO market, the floating platforms are heavily reliant on Chinese technology. This is reflected in the bank syndicate on recent FPSO financings in Africa where the presence of a Chinese bank is now deemed essential, whereas 15 years ago the Chinese were largely absent from such international bank groups."

He continued, "The bottom line is after starting out as inexperienced lenders, the Chinese banks are now more sophisticated and better able to assess their credits. Under the auspices of BRI, it introduced better risk assessment practices, better coordination of various agencies involved in BRI and better focus on quality in their projects. It remains to be seen how the long term projects turn out. Recently the signs have been good. But with a shift towards more quality projects, we should see more transparency and a reduction of associated risks.

> "BRI appears to be offering an alternative vision of what globalisation might look like under a Chinese sponsored industrialisation"
>
> **CALVIN WALKER, DIRECTOR, CWP**

"On the African side, some of the poorest yet fastest developing nations with huge population projections have received an average of US$15bn a year of Chinese loans since 2012. That represents one third of total loans made in the infrastructure sector over that time. Furthermore, going back to 2000, 25 per cent of all infrastructure investment came from China. This massive investment has not only filled infrastructure gaps, led to increase in foreign investment, expansion of trade and reduced poverty. Businesses that have been set up on the back of investments are now employing local people, creating jobs and at least 10,000 private enterprises.

"So while the Chinese have forged ahead with investment in Africa what have the Western nations been doing? Western nations and development finance institutions have been relatively slow in mobilising their funding programmes. After a brief flurry under the Obama administration with the *Power Africa* initiative, things have fizzled out under the Trump administration.

"The Chinese, however, have stepped up to the plate. They are the ones who have filled the funding gap, encouraged by Western prevarication, and the BRI appears to be offering an alternative vision of what globalisation might look like under a Chinese sponsored industrialisation and digital connectivity."

He added, "Foreign investments into Africa are not an altrusic exercise. Of course, China has its own policy objectives, but how exactly do we provide jobs and bring people out of poverty in this new vast expanded population?" ■

Local content rules benefit scaffolding firms

Africa's scaffolding companies are set to reap the benefits of oil and gas industry growth on the back of local content rules. But it has not stopped international players seeking entry into this vast emerging market.

Image Credit: RMD Kwikform

RMD Kwikform has launched the Ascent 200 safety screen syste to provide protection for workers and the public on high-rise construction sites.

One of Africa's most important strategic industries is providing a rich stream of work for the continent's scaffolding firms.

The oil and gas sector has long supported many of the region's major economies, such as Nigeria, Angola, Algeria and Egypt.

Continued growth in these countries and the emergence of other, newer producer markets is resulting in opportunity for ambitious scaffolding contractors.

In Equatorial Guinea, which has been an oil and gas producer since the late nineties, indigenous service company, Apex Industries, is stepping up its profile in this segment.

The company recently signed a deal with the Duscaff Organisation, a joint international scaffolding supply company headquartered in Dubai.

The deal covers the supply of scaffolding products that comply with the very best in industry and global norms.

"Apex is determined to work with the oil sector and build alliances with international companies to add value to Equatorial Guinea's economy," said Apex chief executive Leoncio Amada Nze. "This partnership allows us to gain the know-how from a reputable industry leader like Duscaff and work with them to create jobs for our people."

The agreement means Apex Industries and the Duscaff Organisation will be able to support ongoing and future construction and industrial projects both in Equatorial Guinea itself and across the Economic Community of Central African States (CEMAC) region.

Local content

Such agreements raise the bar in terms of standards and credibility, a boost not only for oil and gas project developers, but also for the local scaffolding industry.

> "African services companies can attract the best international agreements when they position themselves as strong and credible local partners in their market"
>
> NJ AYUK, EXECUTIVE CHAIR OF THE AFRICAN ENERGY CHAMBER

Indeed, the use of scaffolding services for the oil and gas industry is something being nurtured by host governments in a bid to drive local content.

One of West Africa's more recent oil exporters is Ghana, which has seen a huge growth in its energy industry in the wake of a succession of discoveries over the past decade.

Scaffolding is one of the specific niches reserved for local players in the development of energy projects.

Kwasi Agyeman Manu Senya, business advisory and enterprise development manager at the Petroleum Commission is keen to encourage more Ghanaian firms to take advantage of the opportunity as the oil sector expands.

Areas reserved for indigenous firms in the oil and gas sector as

include not only scaffolding, but also waste management, security services, fire fighting, vehicle rental and leasing, among others.

Many indigenous firms do not know the rules on local content, however. He called on companies to take the time to understand the regulations in order to actively play a part in supporting the sector.

"Assess yourself and know your capability and do your assessment before engaging in the sector," he told a recent Takoradi business briefing.

International partnership

International partnerships have become a route to achieving success for local players, both within the energy sector and across other industries markets.

South-African-based Waco Africa Pty Ltd recently signed an agreement with Austria's Doka GmbH for the exclusive distribution of Doka products and systems across sub-Saharan Africa and the Indian Ocean Islands.

Image Credit: African Energy Chamber

Duscaff CEO and APEX CEO Leoncio Amada have signed a deal to supply APEX with scaffolding products.

The agreement will see Waco Africa Pty Ltd become one of the largest formwork providers on the continent in terms of presence and capacity through its subsidiary Form-Scaff.

The Waco Africa Pty Ltd footprint covers more than 30 branches in nine sub-Saharan African countries.

"One of the most technologically-advanced formwork companies in the world, Doka will add enormous value to Form-Scaff – the African market leaders – who are renowned for their extensive branch network and stockholding as well as their robust product range supported by detailed designs, engineering services and on-site technical support," said Mike Els, chief executive officer of Waco Africa Pty Ltd.

Paolo Zumaglini, a member of the Doka GmbH management board, said that Africa remains an exciting opportunity for the international scaffolding and formwork industry. He said Doka's priority when working in any market is to deliver suitable, cost-effective solutions that make construction sites safer, while ensuring projects are delivered on time.

RMD Kwikform is also another leading formwork and supplier in Africa and the Middle East, offering solutions to construction companies across a wide range of markets. Its South African branch was established in 2007 and has since expanded to other branches in Johannesburg, Cape Town, Durban, Bloemfontein and Nelspruit.

> "With Ascent 200, we have delivered the highest level of design to ensure maximum debris sealing around the site perimeter"
>
> **IAN FRYER, DIVISIONAL PRODUCT INNOVATION MANAGER, RMD KWIKFORM**

Among the company's African projects to date include the new 162,500sq m Mall of Egypt, which opened in 2017 and is one of the world's five star super malls. According to its website, RMD Kwikform designed solutions for the construction of the ski park, including 80kN Rapidshor modular shoring with Superslim Soldier and GTX Beam decking; Superslim Soldier and GTX Beam wall formwork for the pile caps, shear and retaining walls; and independent Rapidshor stair towers for safe site access.

RMD Kwikform's Megashor also proved to be a trusted solution during the construction of the Cornubia Bridge in Durban. At the time of construction Jason Van Der Wath, senior technical sales executive at RMD Kwikform South Africa said, "Megashor is an amazing system to work with. Erecting this system was super easy, like Lego. We successfully completed three trusses within one week."

The Cornubia Bridge, which opened in 2018, is a major part of eThekwini's GO!Durban IRPTN network which crosses the N2 and links onto the uMhlanga Ridge Boulevard.

In November this year, RMD Kwikform launched its new high-rise safety screen solution, Ascent 200, which is suitable for commercial buildings in Africa.

The product has taken into account the changing requirements of the high-rise building sector. The company recognised some of the common challenges contractors face when constructing high-rise buildings. This included health and safety and debris containment, ease of assembly and solution flexibility.

Ian Fryer, divisional product innovation manager at RMD Kwikform, said, "With the new Ascent 200, we have delivered the highest level of manufacturing specification and design to ensure maximum debris sealing around the site perimeter. Another feature of the Ascent 200 is the slab jaw brackets that have been designed for the system. Once opened, the jaws allow for the screens to be removed without having to lift the system up the building. Ultimately, this reduces the crane height, and overall usage of cranes, in order to exit the solution." ■

Unlocking Africa's US$3trn free trade opportunity

Addressing the infrastructure gap will be vital to ease trade integration across the continent, according to latest research by Baker McKenzie and Oxford Economics.

Large infrastructure projects in the pipeline such as the North-South Multimodal Corridor will make intra-African trade easier.

Image Credit: Adobe Stock

If fully implemented, the African Continental Free Trade Area (AfCFTA) will unlock significant but uneven growth opportunities on the continent. This is according to new research from global Baker McKenzie and Oxford Economics, *AfCFTA's US$ 3trn Opportunity: Weighing Existing Barriers against Potential Economic Gains*, which found that some countries are currently better placed than others to reap the rewards of intra-regional trade. Countries with good trade integration and open economies are most likely to benefit economically from lower trade tariffs. However, numerous obstacles mean that the tangible benefits of the agreement will likely only be realised from 2030.

Mattias Hedwall, Partner and Head of Baker McKenzie's Global International Commercial & Trade Group, notes that the AfCFTA agreement will create the world's largest free trade zone by number of countries and is expected to revolutionise trade across the continent.

"Once implemented, it will lead to sustainable socio-economic development, increased diversification, a boost in investment, trade liberalisation, the industrialisation of African economies, the establishment of new cross-border value chains and better insulation from global shocks," he says.

"Our analysis show countries that have already been bold enough to create more open, business-friendly environments stand to make the biggest gains. The message should be that freeing up trade is going to be the big engine of African growth through the 2020s and the first movers have the biggest advantages."

South Africa stands to maximise the benefits of AfCFTA due to its existing strong connections across the continent and a well-established manufacturing base. Smaller economies, such as those of Ghana and Côte d'Ivoire, will also benefit from the agreement, due to their open economies, good infrastructure and supportive business environments.

The report also reveals that to unlock the full US$3trn in growth potential that free trade will bring to the region, governments and businesses across the continent will need to fully support the AfCFTA agreement and prioritise it over the patchwork of regional and competing agreements in Africa.

> "AfCFTA is expected to act as a strong impetus for African governments to address their infrastructure needs"
>
> **WILDU DU PLESSIS, HEAD OF AFRICA AT BAKER MCKENZIE**

Kamal Nasrollah, partner and head of Baker McKenzie in Casablanca explains that, currently, regional integration in Africa is largely an unattained goal, despite the continent's Regional Economic Communities (RECs). Overall, the RECs have complex and often conflicting policies and have achieved very different levels of integration to date.

"Despite the challenges, however, some RECs have successfully encouraged effective trade between member countries. For example, Côte d'Ivoire, Kenya, Senegal and South Africa have become regional trading hubs, having leveraged alliances they established through their RECs. Morocco is also an active trade hub within the Union du Maghreb Arab (UMA) trade agreement as well as the various trade agreements it has entered into with the US, the EU and the francophone Africa free-trade zone (UEMOA). One of the ways forward for African economies to further implement effective intra-regional trade may be to draw on the lessons learned from the successful RECs," Nasrollah says.

Currently, Africa ranks behind other regions in terms of its overall level of regional trade integration. The AfCFTA's intraregional trade share of 17 per cent compares to 64 per cent for the European Union and 50 per cent for the US Mexico Canada Agreement. At present, trade links between Africa and the rest of the world are often stronger than trade between countries on the continent. According to the report, African nations currently tend to trade more with Europe (35 per cent) and Asia (31 per cent) than with neighbouring markets. In contrast, less than a fifth of African countries' exports are headed to other countries on the continent.

"These intracontinental trade shortcomings underscore the extent of lost revenue and development opportunities for African countries. They also highlight the benefits of supporting the AfCFTA and working together towards its successful implementation," says Nasrollah.

Virusha Subban, partner specialising in Customs and Trade at Baker McKenzie in Johannesburg, explains that while African nations may trade within their respective RECs under preferential terms, trade beyond these regional agreements is generally subject to most-favoured nation (MFN) tariffs, which are much higher and act as a disincentive to trade integration.

The report compares Africa's 20 largest economies in terms of the share of exports destined for other economies on the continent. Some economies, such as Uganda and Zimbabwe, buck the overall trend, trading more with their neighbours than other African nations do. Yet, their economies are small in contrast to those of Egypt, Nigeria and South Africa, which together represent more than half of the continent's GDP. Egypt and Nigeria, for instance, have very limited trade relationships with their African peers. As major fuel exporters, they are focused on exports outside the continent.

"Over three quarters of African exports to the rest of the world are heavily focused on natural resources, primarily raw materials. In contrast, a look at African imports from outside the continent reveals that manufacturing products, industrial machinery and transport equipment constitute more than 50 per cent of Africa's combined needs. Currently, Africa's external imports account for more than half of the total volume of imports, with the most important suppliers being Europe (35 per cent), China (16 per cent) and the rest of Asia including India (14 per cent). By contrast imports from other parts of Africa account for only 16 per cent of total merchandise imports.

"Manufacturing GDP represents on average only 10 per cent of GDP in Africa. This means that limited production capabilities within Africa are currently being compensated for through foreign imports. Yet, this manufacturing deficit could be eventually satisfied within the continent and enabled by AfCFTA. Manufactured products currently exported to African countries by their peers, primarily industrial machinery and motor vehicles, represent a third of the total trade flow in Africa. But a significant share of these intraregional exports of manufactured goods are re-exports of imported manufactured products from the rest of the world," says Subban.

"This shows that African nations do not trade more with each other because of a misalignment between what various African countries need and what is produced on the continent. This misalignment signals missed opportunities to reduce foreign imports from outside Africa and increase trade flows within the continent. For AfCFTA to succeed fully, more countries need to diversify their production of goods to better match the import needs of their continental neighbours," she notes.

Infrastructure

Wildu du Plessis, Head of Africa at Baker McKenzie in Johannesburg, says the report underscores the importance of not only lowering tariff barriers, but also addressing non-tariff barriers to intra-regional trade. Some of the most significant obstacles to AfCFTA are inadequate infrastructure, poor trade logistics, onerous regulatory requirements, volatile financial markets, regional conflict and complex and corrupt customs procedures. These can be even more detrimental to trade expansion than tariff measures. "There is a strong consensus that the vast infrastructure gap in Africa, including transport and utilities infrastructure, must be urgently addressed so as not to restrict increased trade integration," du Plessis notes.

Du Plessis explains that large infrastructure projects in the pipeline should including the Trans-Maghreb Highway in North Africa and the North-South Multimodal Corridor, connecting extensive parts of Southern Africa, as well as the Central Corridor project and the Abidjan-Lagos Corridor Highway project, should help.

"AfCFTA is expected to act as a strong impetus for African governments to address their infrastructure needs as well as to overhaul regulation relating to tariffs, bilateral trade, cross-border initiatives and capital flows. Both domestic and foreign trade will benefit from reforms to regulation, political climate and trade policies that enhance competitiveness and improve the ease of doing business.

"It is important to be realistic about timeframes, however, as effective solutions will take years, given limited financial capacity in many countries, high risks to private financing of infrastructure, political hurdles, administration shortfalls and lack of resources. Less developed economies that are likely to find themselves more exposed initially will therefore prefer a more gradual implementation of the trade deal," du Plessis says.

"South Africa is next to chair the African Union, starting in January 2020 and will be keen to facilitate progress in free trade on the continent under the agreement, especially as it is one of the nations with the greatest opportunities for growth," du Plessis notes.

"Egypt has chaired the African Union through the year since the agreement has come into force in 27 nations – a huge achievement – and now has the opportunity to focus on bringing forward implementation measures to fully activate AfCFTA in one of the continent's largest economies by growing cross-border trade with nearby countries and diversifying the economy," said Lamyaa Gadelhak, a partner in Baker McKenzie's Cairo office.

Multinationals will benefit most from building out their business across Africa to support intra-African trade. Governments should seek to develop policies and regulations to bolster economic relations with their nearest neighbours as well as courting foreign direct investment from Asia, Europe and the USA.

"While the benefits may not be immediate, the launch of the AfCFTA is a positive step, not just for the African continent, but for world trade in general. While there are still numerous challenges to be resolved, we expect that if the barriers to its effective implementation can be addressed, the next decade will see the growth of the African Continental Free Trade Area into one world's most exciting new global trading zones," adds Hedwall.

For more information visit www.bakermckenzie.com/en/insight/publications/2019/11/africa-free-trade ■

**Baker McKenzie helps clients overcome the challenges of competing in the global economy. It solves complex legal problems across borders and practice areas.*

REVOLUTIONARY NEW SIDE GRIPPER GUARANTEES HIGHER RELIABILITY

Dieseko Group B.V., the global market leader of Innovative Foundation Equipment and within their product range both PVE and ICE Vibratory Hammer has launched a revolutionary new Side Gripper: the 2308SG.

The exchangeable excavator connection adapter allows the Side Gripper to fit onto any excavator adapter type, whereas the unlimited 360˚ rotary head with ± 35˚ tilting adapter makes it possible to operate the Side Gripper in any position while handling a profile. It's distinctive design is easily accessible for maintenance.

"Dieseko is using over 45 years of experience in Vibratory Hammers to be applied in their new Side Gripper making it a unique and reliable machine. Unique in the side clamp-principle and in elastomer geometry, and

PVE2308SG: the Side Gripper.

reliably applied by proven vibratory technology," says Dirk

Smulders, CEO of Dieseko Group.

Before we started to develop, Dieseko performed an extensive study on existing Side Grippers available in today's market and interviewed a lot of Side Gripper-operators to understand their challenges. During the development phase of our Side Gripper, Dieseko's R&D engineers focused on providing a concept which improves the challenges experienced with Side Grippers currently available, without neglecting Dieseko's design philosophy (limited number of moving parts, protected hoses; both resulting in a high reliability, only 3 hoses for connection)."

After extensive testing, partly by very experienced Side Gripper operators, the results and experiences are promising. The 2308SG uses an oilflow of 214 l/min at 350 bar. A 35 tonnes excavator is required for best performance. Operating the Side Gripper can be done by remote controlled joystick or excavator controls.

Doosan Infracore introduces 'Concept-X' construction solution

DOOSAN INFRACORE HAS introduced its 'Concept-X' solution for operating construction equipment such as excavators and wheel loaders and surveying worksite topography via 3D drone scanning

The unique solution, which realises the construction site of the future by having all dangerous construction work performed by machinery and freeing up human resources for analyst work, was unveiled at its training centre in Boryeong City, Korea.

More than 200 people were in attendance, including National Assembly members, the Mayor of Boryeong City, business executives from Bosch, ASI, LG U+ and PoteNit related to the development of Concept-X, as well as representatives of government agencies and scholars from various academic institutions.

"Concept-X is not just an unmanned technology: Rather, it integrates multiple state-of-the-art technologies that can respond immediately to all and any of the changes that may arise at construction sites simultaneously," declared Doosan Infracore President & CEO, Dongyoun Sohn. "It will become a human-centred technology that not only brings about remarkable improvements in economics and safety but also creates more jobs in high-tech industries."

Doosan Infracore asserts that the solution will boost productivity and economic feasibility significantly by reducing the time and costs required for construction equipment operations, while introducing a revolutionary improvement to the issue of construction worksite safety. Doosan Infracore plans to commercialise Concept-X by 2025.

For more on Doosan construction equipment, visit the www.doosanequipment.eu

Doosan Infracore Concept-X. This unmanned tech realises the construction site of the future.

WIRTGEN 2.0 SPEEDS UP PAVING PROJECTS

A concrete contractor from Virginia is one of the first companies in North America to upgrade to Wirtgen's new AutoPilot 2.0 for stringless concrete paving, the company said in a statement.

Talley & Armstrong, Inc., based in Henrico, Virginia, had already equipped its Wirtgen slipform paver SP 15i with the first version of the AutoPilot, and relied on the system when using the machine. After the experienced users had the opportunity to experience the new AutoPilot 2.0 at the 2018 World of Concrete, they equipped the SP 15i with the new system.

The AutoPilot 2.0, which is compatible with Wirtgen's SP 15i und SP 25i slipform pavers, eliminates the need to measure, mount, and remove stringlines. In addition, the ground crew can do their job without the stringlines constantly getting in the way. The 3D system is suitable for paving concrete safety barriers, curbs, gutter profiles, or traffic islands, but also for road surfaces with a width of up to 3.5m using the inset method and 2.5m using the offset method.

Clay Armstrong believes in lean structures and operates the company's SP 15i himself. In his eyes, stringless paving with the AutoPilot 2.0 system saves an enormous amount of time. "Stringless paving has many advantages," explains Armstrong. "First of all, you eliminate all the work involved in setting up the stringlines. Another factor are the costs saved from no longer having to purchase the wire and the support arms."

According to Clay Armstrong, the first AutoPilot system was already easy to use, but upgrading the SP 15i brings other major benefits.

Boosting productivity at Uitspan Colliery


Image Credit: Goscor Earthmoving Equipment

SANY SYL956 front-end loader.

The addition of special coal-handling buckets to three SANY SYL956 front-end loaders acquired by Kusile Mining from Goscor Earthmoving Equipment has improved productivity dramatically at the company's two opencast mines.

Kusile Mining is part of African Coal Trading (ACT), a 51 per cent black-owned junior mining company.

Kusile Mining operates Uitspan Colliery just outside Emalahleni, and Noodhulp Colliery close to Eskom's Hendrina Power Station. Uitspan Colliery supplies its run-of-mine material to Puleng, while Noodhulp Colliery supplies Woestleen. The two processing plants have a combined throughput of about 220,000 tph, with Puleng accounting for 80,000 t, and Woestleen the remaining 140,000 t.

Two of the three SANY SYL956H loaders have been deployed at Puleng, while the third works at Woestleen. Brad Freeman, sales consultant for both brands under GEM explains that, having previously used rented front-end loaders, Kusile Mining recently decided to purchase its own equipment outright due to assistance from Goscor Finance.

The front-end loaders had to be supplied with special 4.6 m^3 coal buckets, as opposed to the standard 3.2 m^3 buckets. Mine manager Dries van der Vlies explains that the bigger bucket loads a typical 15 m^3 tipper in three loads, compared with six or more with a standard bucket.

The relative density (RD) of coal is light at 1.2 compared to other materials like sand at 2.7. "We took into account the lifting capacity of the wheel loader, the weight and dimensions of the bucket, and the specific weight of the material being handled," ACT group engineer Hendrik Pieterse explains.

This made it possible to equip the 5 t SANY SYL956H front-end loaders, with an operating weight of 17,100 kg, with the larger buckets, to allow for quick and precise loading, resulting in faster cycle times. It not only increases productivity, but reduces fuel consumption significantly.

The SANY SYL956 front-end loaders feature a Cummins Tier 3 QSL8.9 engine for maximum power, high efficiency, and large displacement. A multipoint fuel injection system allows for instantaneous throttle response, enhanced fuel efficiency, and reduced noise.

SIEMENS AND JUWI DEVELOP MICROGRIDS

Siemens and the renewable energy developer juwi have joined forces to enter into a strategic technology partnership to focus on microgrids in the mining industry. The two companies aim to roll out and continually develop the advanced microgrid control system that enables the seamless integration of power from renewable energy to a mine's off-grid power supply.

The Siemens Sicam based microgrid control platform is a proven and tested technology which is the basis for juwi's Hybrid IQ microgrid controller. juwi, on the other hand, brings industry-specific domain know-how and an excellent track record of planning and executing renewable energy projects at mine sites.

"Microgrids can bring high levels of reliability and improved energy quality to energy-intensive industries such as mining; and are an attractive alternative when autonomous power supply is needed," said Robert Klaffus, CEO digital grid at Siemens Smart Infrastructure.

ENTEC SECURES CONTRACT WITH LAFARGE AFRICA

UK based Entec International has broken into the mining and minerals market with a multimillion-euro contract win to optimise MRO supply chains in Nigeria for a leading global building materials and solutions company, Lafarge Africa.

Entec specialises in saving significant cost and reducing complexity for client companies by managing their procurement and consolidating MRO supply chains; the company already operates on a global basis for blue-chip household brand clients in the fast-moving consumer goods sector.

According to Entec sales director Charlie Patterson, by delivering economies of scale, the Entec service improves profitability for clients and creates a real competitive edge. He expects Entec to achieve 12 per cent reduction (freight, clearance and handling costs) for Lafarge in year one of the three to five-year contract.

In addition, supply chain consolidation is predicted to cut the number of shipments by more than half and will deliver a massive reduction in the volume of purchase orders and invoices over the first 12 months.

The project will involve the consolidation of 125 separate suppliers into a single supply chain, which will be managed by Entec, operating in a single currency.

"Consolidating multiple trading currencies into a single currency, for example, simplifies the process to pay for our clients and mitigates the risk of having to manage the different exchange rates," Patterson explains. "At the same time, replacing multiple payment terms from different suppliers – some of whom may require pre-payment – into a single payment term agreed with Entec releases cash and delivers better Return on Capital Employed."

"We will be converting multiple air freight shipments from Europe and China into consolidated ocean freight," Patterson added.

BRIEFS

Two more +100 carat diamonds found at Lesotho


Image Credit: Lucapa Diamond Company

220 carat low quality diamond recovered from the Mothae kimberlite mine in Lesotho.

Lucapa Diamond Company has recovered two more +100 carat diamonds from the Mothae kimberlite mine in Lesotho. Ownership of the mine is split between 70 per cent Lucapa and 30 per cent, Lesotho government. The 220 carat stone is the largest of the three +100 carat diamonds recovered to date from Mothae since commercial production begun in January. Both stones were discovered from the treatment of recovery tailings.

Image Credit: Adobe Stock

Vanadium is a major component of flow battery storage technology.

Bushveld acquires Enerox

South Africa Vanadium producer, Bushveld Minerals Limited, has acquired Enerox, one of the world's largest researchers, manufacturers and distributors of vanadium redox flow batteries (VRFB). Bushveld Minerals CEO Fortune Mojapelo said the acquisition was in line with its strategy to help VRFB OEMs build scale to respond to a growing stationary energy storage market opportunity.

Vantage exits its Genser Ghana investment

Image Credit: Kinross

Kinross Gold Corporation's mine at Chirano in Ghana.

Vantage Capital, Africa's largest independent mezzanine fund, has announced that it successfully exited its US$18.5mn mezzanine investment in Genser Energy, a management-owned, independent power producer.

Genser provides distributed power generation solutions in Ghana to multinational industrial and mining companies including Gold Fields Ghana, Kinross Gold Corporation, and more recently, Perseus Mining Limited and Golden Star Resources.

Vantage's exit was financed by a consortium of South African banks including Standard Bank, Nedbank and the Development Bank of Southern Africa which, alongside the Barak Fund and Africa 50, have committed over US$365mn of facilities to the company for debt refinancing and further expansion.

When Vantage invested in March 2013, Genser had built and operated two power facilities with a combined output of 35MW. Vantage's funding enabled Genser to almost double its capacity, by constructing a 30MW power plant contracted by Kinross Gold Corporation's mine at Chirano. With the support of local Ghanaian banks, Genser went on to complete two additional power plants at Gold Fields Ghana's Tarkwa and Damang mines, adding substantial capacity to the company's portfolio. The additional debt now being provided by the incoming South African banks will enable Genser to further expand the total capacity of its existing plants from 100MW to 190MW. Genser also intends to build an additional 190km of natural gas pipeline to connect the rest of its power plants, and once completed Genser will have increased the onshore natural gas pipeline infrastructure in Ghana by nearly 160 per cent.

Luc Albinski, Vantage's co-managing partner, said, "Vantage has realised an excellent return on its investment in Genser. The company has quickly scaled up to address the energy shortages in the country, and Vantage provided support to help bring about this vision. Genser's 'in-the-fence' business model, whereby plants are constructed on the site of major clients underpinned by ten-year power purchasing agreements, has proved to be very successful."

Johnny Jones, a partner at Vantage, stated, "The Genser investment is a good example of the productive use of mezzanine to assist companies in achieving their growth objectives when banks have limited appetite to lend, without requiring significant equity dilution by the owners. Since Genser is a family-owned business, the owners appreciated the fact that mezzanine provided them with growth capital which did not materially dilute their shareholding."

Warren van der Merwe, Vantage's co-managing partner concluded, "2019 has been a year of significant realisations for Vantage. This year we have exited Timrite, a mining supplies business, Austell, a pharmaceutical company, and now we have achieved a third significant exit with Genser. In aggregate we have returned US$318mn to investors across 11 exits."

Frances Rogoz, vice president of project development for Genser, acknowledges Vantage's role in the growth of the company, she said, "With Vantage as an early-stage mezzanine investor, Genser was able to access capital that allowed us to kick start a period of rapid growth. The strong return we are able to provide to Vantage is a testament to that growth and to the robust energy sector in West Africa in which we operate."

Bulk explosives in mining

Across Africa, bulk explosives now play a crucial role in mining, providing the right amount of energy to move and reduce rock to practical and optimal size for mine operators. Tim Guest reports.

Image Credit: Maxam

Bulk explosives can be pumped directly into blast holes without fear of ignition. Maxam has recently been selected by NFCA Africa Mining to supply Rioflex bulk blasting solutions for NFCA's Chambishi, Zambia, underground copper mine operations.

Explosives that are not individually packaged, but are delivered directly to the site of a required blast and pumped into a blast hole by a bulk delivery truck are called bulk explosives and include such products as ammonium nitrate fuel-oil (ANFO), emulsions, slurries, water gels and others.

The use of such agents has been widespread in the global mining industry for decades as a preferred option in many scenarios, due to their superior performance over packaged explosives, as well as their inherent safety. But their high cost has meant the use of bulk explosives has been restricted chiefly to large-scale operations. That said, they do achieve a better breakage performance and decreased powder factor – the amount of explosives required to break a unit measure of rock – thereby reducing the amount needed and the resulting cost. On the safety side, being insensitive to initiation before the explosive is sensitised is their key safety differentiator. It means that bulk explosives can be handled, transported, pumped into storage vessels, down pipelines and directly into blast holes without fear of ignition.

Bulk players

Leading players in Africa such as AEL, BME, Maxam and TitanNobel all produce bulk explosives used in some of the continent's most important and productive mining operations.

BME's cold emulsions, such as its Innovex brand of bulk emulsions are used widely in major South African opencast mines including its Innovex206 and 207 high-energy, blended-emulsion variants containing 60 per cent and 70 per cent emulsion blended with ammonium nitrate prill (small aggregate or globule material). They are formulated for surface mining and quarrying in both wet and dry hole applications. Transported and stored as bulk product, they are blended and sensitised in BME's explosives trucks on-site. By changing the ratio of emulsion to prill the energy of the end product can be altered to meet specific needs of mine operators.

Underground bulk systems are a major product range from AEL, and its UG100 base emulsions are used in underground applications where horizontal charging is prevalent, including in all underground small-diameter holes and stoping scenarios (i.e. leaving empty space behind once ore extraction has taken place and where geology is strong enough to do so). UG100 is a series of emulsions ideal for most geological conditions with an energy output that can be altered for different rock/breaking conditions. The explosive also has excellent water resistance, crucially important considering water is the biggest 'energy thief' for explosives. Minimising the water content of bulk products during manufacture is critical in ensuring performance, so water resistance throughout the mining process is fundamental, particularly where blast holes may be waterlogged. Pre-sensitisation, the explosive has a yellow/white appearance, but once it is sensitised, UG100 adopts the colour of the sensitiser so that identification between the two and of the sensitising process can be verified. Once sensitised, UG100 has a velocity of detonation in excess of 4000m/s, depending on confinement and ground conditions.

> "The current gold price trend is having a positive impact on the development of gold mines in West Africa"
>
> **BERNARD KANINDA, MAXAM AFRICA'S REGIONAL DIRECTOR**

With operations in central, southern and western Africa, Titanobel has two types of bulk emulsions in its product range and in use in Africa. Gemulsite 80 is made for on-site delivery into vertical holes and has been designed specifically for use in quarries and on public works sites. It is recommended for blasting hard and very hard rocks that require high blasting powder factors. It, too, has excellent water resistance and is suitable for use in blasting holes where water is present without risking degrading its performance. The other bulk product is Gemulstar V, a pumpable emulsion, pre-sensitised during manufacture using glass microchips. Once again, this emulsion is ideal for blasting hard and very hard rocks that require high blasting powder factors.

Bulk for Zambia's copper

Operating in Africa for the past 20 years explosives maker, Maxam, has recently been selected by NFCA Africa Mining to supply the bulk blasting solutions for its Chambishi, Zambia, underground copper mine operations based on Maxam's Rioflex bulk explosive. The selection followed extensive trials. *African Review* spoke with Maxam Africa's regional director, Bernard Kaninda, about the deal. He said the company had competed against one of the main blasting solutions players in Africa adding that Maxam had adapted its offering to NFCA's key performance areas, making the offering and Maxam more than just a blasting solutions supplier, but a productivity enhancer, as well. Of Rioflex, Kaninda said that Rioflex is


Image Credit: Maxam

Rioflex explosive can be matched to rock type by manipulating density.

not just one product but a family consisting of a wide range of solutions depending on the challenges that customers have to face. "Rioflex allows us to match explosive type to rock type by manipulating density (0.6 gram/cc – 1.32 gram/cc). This is unique to our product offering and allows Maxam, through its technical support, to maximise efficiency and results in all environments." He added that, "In the case of NFCA, we offered Rioflex UG 10000, which provides greater advance rates for underground operations, as well as an optimal rock fragmentation." According to Kaninda, deliveries of Rioflex to NFCA are already underway and the companies are working together to deploy the system 'while securing the continuity of supply'.

Of other African opportunities, Kaninda said, "We have identified great growth opportunities for Maxam in Africa. On one hand, the current gold price trend is having a positive impact on the development of gold mines in West Africa. Also, the new bauxite mines in Guinea and the restart of the Simandou iron ore project represent interesting opportunities. On the other hand, Democratic Republic of the Congo, is expanding its mining industry while Zambia continues to be an area of focus for copper, where we at Maxam have vast experience. South Africa remains one of the largest mining markets in sub-Saharan Africa despite economic challenges the country faces.
So, although the mining sector has seen recent declines, this should remain a focus area for growth, certainly for Maxam." ■

Volvo CE machinery in action at a mine.

Hitting the target

Lomeza Mining Services recognises Babcock's support in helping the mine to reach its production requirements.

Babcock's open-door policy, values of transparency and candid dialogue, combined with a range of leading construction machinery and equipment, is a recipe for successful collaborations with its customers. As a partner who is trusted to deliver, this philosophy has struck a chord with Lomeza Mining Services who required reliable construction equipment to fulfil its obligations as part of a long-term contract for an open-cast mine.

Simon Mkhonza, managing director of Lomeza Mining Services, says he initially approached Babcock three years ago seeking reliable construction equipment for the contract. Today Lomeza's fleet includes 18 Babcock-supplied Volvo Construction Equipment machines that have helped the growing business meet and increase their production capacity.

Most recently Lomeza has taken delivery of three Volvo A60H articulated dump trucks (ADTs) and one EC950E excavator, adding to their existing fleet that includes six A35G ADTs, three A45G ADTs, and three EC750D crawler excavators.

Mkhonza says that as a young organisation Lomeza did not have extensive access to machinery that larger contract mining companies have, and recalls his first meetings with Babcock as the owner of a small business with a large equipment supply problem. After initial negotiations, Mkhonza took delivery of two Volvo EC750D excavators and six A35G ADTs in November 2017. "My business was still in the start-up stages and I wasn't yet known to the leading equipment suppliers. However, Babcock chose to support me and this was the beginning of a solid and long-lasting relationship," said Mkhonza.

He adds that the mine soon recognised the quality and performance of the Volvo Construction Equipment and increased Lomeza's production capacity which in turn required more machinery. "I went back to Babcock and again they offered me fantastic support. Together with Babcock and Volvo, we have grown and advanced Lomeza's fleet to 18 Volvo machines, enabling us to meet our production targets."

Mkhonza highlights the distinction between simply supplying equipment and maintaining it in good working order, saying that Babcock has provided unwavering support in regard to the latter. "Babcock's service goes far beyond the sales and the team is fully committed to after-sales support and maintenance. Servicing is done on site and their skilled technicians offer excellent assistance and fast turnaround times if there is a breakdown," he said.

Babcock's Rob Baker, Volvo & SDLG Equipment Sales, echoes Mkhonza's sentiment and says that over the course of three years a relationship based on mutual respect and trust has developed between the two businesses.

He said, "Simon is a fantastic customer and our relationship with him has grown from strength to strength." A recent letter of gratitude to Lomeza Mining Services from the mine thanking the business for meeting their targets bears testament to this successful collaboration.

The company said strength, durability and developing products and services that increase productivity are all hallmarks of Volvo Construction Equipment. A brand that has long been associated with low energy consumption, reduction of lifecycle costs and ease of use. The Volvo articulated dump trucks and crawler excavators are both considered ideal for open-cast mining operations in southern Africa, with robust drivelines designed specifically for the challenging applications. The A60H ADT, in particular, is perfectly suited for open-cast mining, where short, yet extremely steep ramps have to be negotiated to access boxcuts made through overburden. The EC950E excavator pairs perfectly with the A60H and has the ability to handle high-capacity duties in tough applications.

> "Babcock's service goes far beyond the sales and the team is fully committed to after-sales support and maintenance"
>
> **SIMON MKHONZA, MANAGING DIRECTOR OF LOMEZA MINING SERVICES**

With its name deriving from the phrase 'to shout out loud', Lomeza Mining Services was established by Simon Mkhonza in February 2015 and currently operates within South Africa's mining industry. The company's long-term goal is to extend their operations outside of South Africa and develop their own mining operations. Lomeza's services include open-cast truck and shovel mining systems as well as equipment solutions for stock pile management and mine rehabilitation; skills and support infrastructure necessary for underground mining; consulting services for open-cast mining design, equipment selection, operational readiness, resource optimisation and support, mine rehabilitation, and environmental monitoring solutions; and experience based on one-on-one coaching for miners, shift bosses and mine overseers. ■


EKO HOTELS
& SUITES

Mining Indaba continues to unlock mining opportunities

Image Credit: Mining Indaba

Building on from the success of the 2019 Mining Indaba, industry experts from across the value chain will tackle topics including the industry's role in addressing climate change and decarbonisation as well as sustainability measure for investment in the next decade.

Tom Quinn, head of content at Investing in Africa's Mining Indaba provides an overview of what delegates can expect from the 2020 programme.

African Review (AR): The theme for 2020 Mining Indaba is 'Optimising growth and investment in the digitised mining economy', can you explain why this was decided?

Tom Quinn (TQ): Digitisation has gone from concept to reality and is now a way of life in a global context. From the perspective of business, we are increasingly engaging with digitised, automated and even AI systems whether it be through operations, supply chains or the financial ecosystem that underpins the way in which we do business. The whole concept of the fourth industrial revolution is becoming more mainstream and we can see this in our industry from automated mines, blockchain incubators securing the transparency of mined materials, safety technologies to reduce accidents, and our ongoing interaction with data in which to grow mining in a more efficient and sustainable way.

AR: What discussions will be taking place at Mining Indaba that tackle the theme?

TQ: We're offering a range of content formats and topics which will resonate with multiple stakeholders along the mining and natural resources value chain. The issue of digitisation and harnessing new technologies will be included in many sessions from the Main Plenary stage, the Sustainable Development day, and Junior Mining Showcase – to our Young Leaders programme and, of course, our extended Mining 2050 platform.

AR: With digitisation bringing more than US$425bn of value for the mining industry, it's clear to see that opportunities are lucrative and vital not to be left behind. How is the content at Mining Indaba highlighting this across the three days?

TQ: As that figure suggests, the potential investment opportunities in digital optimisation for the mining industry are enormous. Given the fundamental goal of Mining Indaba to platform debate at the forefront of industry challenges and opportunities, we are delighted to announce the expansion of Mining 2050 which will now run over two days.

AR: Are there any new additions to the 2020 programme, what can the delegates expect?

TQ: We have launched the General Counsel Forum in partnership with Africa Legal. Tackling legal issues unique to those working in the mining sector, providing a platform for law firms and in-house legal teams to connect and widen their industry. As Pan-Africa regional legal systems can be complex, we will bring together Africa's finest legal minds to debate and share knowledge on Africa's resources sector. Focusing on how companies can navigate the opportunities and challenges in the sector by strengthening portfolio management, examining falling productivity against increasing costs and M&A market updates.

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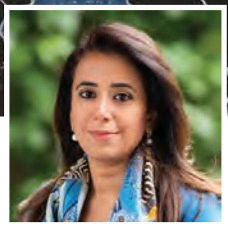

Image Credit: AfDB

Hanan Morsy, director, Macroeconomic Forecasting and Research at African Development Bank Group.

Fostering jobs, entrepreneurship, and capacity development for youth

The 2019 African Economic Conference (AEC) was held in Sharm el-Sheikh, Egypt from 2-4 December and was hosted by the African Development Bank on the theme of jobs, entrepreneurship and capacity development for African youth.

"There is no greater asset to Africa than its youth," a statement that has been repeatedly proclaimed, but the continent still has a long way to go. Despite robust economic growth over the past two decades, a 1 per cent increase in growth between 2000–14 was associated with only 0.41 per cent growth in employment. This figure suggests that employment stood at less than 1.8 per cent a year, far below the nearly 3 per cent annual growth in the labour force. If this trend continues, 100 million people will join the multitudes of the unemployed in Africa by 2030.

With this in mind, researchers, youth representatives, business leaders, and policymakers have joined more than 350 stakeholders in Sharm El Sheikh, Egypt, to significantly move the needle on youth empowerment.

The annual African Economic Conference (AEC), is jointly organised by the African Development Bank, (AfDB), the Economic Commission for Africa and the United Nations Development Programme, to discuss pertinent issues affecting the continent.

The 2019 AEC is held in Egypt and hosted by the bank on the theme; "Jobs, entrepreneurship and capacity development for African youth" and ran from 2-4 December.

Turning the youth bulge into opportunities has been the focus of the AfDB's game-changing approach to job creation, entrepreneurship, and capacity development. In recognition of the crucial role that entrepreneurship plays in the creation of high-quality jobs, the bank developed its Jobs for Youth in Africa (JfYA) Strategy (2016-2025). The strategy aims to create 25 million jobs for African youth over the next decade as well as equipping 50 million youth with a mix of hard and soft skills to increase their employability and their entrepreneurial success rate.

Youth skills

The impact is already being felt. Since its launch in 2016, more than US$20bn has been invested by the bank across 318 projects. These investments are directly making a difference in the African youth skills, entrepreneurship, business development, and job creation.

In parallel and working closely with its partners, the bank is helping strengthen entrepreneurship ecosystems in Africa. The flagship Youth Entrepreneurship and Innovation Multi-Donor Trust Fund (YEI MDTF) programme provides interventions that equip the African youth, women-led start-ups, and micro, small, and medium enterprises (MSMEs) with skills and financial support to run bankable businesses.

The programme also assists regional member countries (RMCs) in their implementation of economic and social reforms toward job creation.

In just one short year, the trust fund's resources leapfrogged from US$4.4mn (in 2017) to almost US$40mn (in 2018). By providing technical assistance through enterprise support organisations and financial institutions, the fund is anticipated to reach more than 480 youth-led start-ups in Ghana, Mali, Nigeria, Togo, and Zimbabwe.

The bank has also been very active on the education front, supporting higher education institutions to deliver innovative training curricula that are adapted to the changing demand of the labour market and the private sector. Academic incubators, also known as innovation centres of excellence, have been established.

One great example of success is the African Institutions of Science and Technology (AIST) Programme, whose mission is to deliver quality postgraduate education and build collaborative research capacity in various fields of science, engineering, technology and innovation (SETI). With funding from the bank, a total of 1,477 PhD and MSc students have graduated, out of which 676 are women. Additionally, 35 partnerships have been brokered with the private sector to enhance the quality and relevance of research.

Technical and Vocational Education and Training (TVET) has also been acknowledged by the bank as one of the main drivers of human capital development alongside enhanced basic education that generates knowledge and skills more broadly. As such, the bank's TVET project in Tanzania, has bolstered TVET and teacher education with an investment amounting to US$52mn. The expected outputs include expanded infrastructure of 13 institutions targeting about 8,000 trainees, expanded and extensive use of ICT in instruction at 53 institutions, and increased capacity for teaching, policy creation, planning, and quality assurance.

> "Turning the youth bulge into opportunities has been the focus of the AfDB's game-changing approach to job creation, entrepreneurship and capacity development"

The insights provided by other African stakeholders, youth, and political leaders on the debate on jobs, skills, and entrepreneurship during the AEC 2019 were important in helping the continent move forward. ■

By Dr. Hanan Morsy, director, Macroeconomic Forecasting and Research at the AfDB

ANGOLA SET TO ATTRACT EVEN MORE FOREIGN DIRECT INVESTMENT IN 2020

The Angola Oil & Gas (AOG) Conference & Exhibition, endorsed by the Ministry of Mineral Resources and Petroleum and in partnership with the African Energy Chamber, will return for a second year as the focal point of an international investment drive aimed at bringing new deals to the table and signing up new entrants to Angola's oil and gas sector.

The next edition will be held on 16-17 June, 2020 in Talatona. Surrounding the conference will be a year-long global drive to present opportunities to a targeted audience of relevant investors.

"Thanks to the president's sweeping reforms, Angola has embarked on an ambitious drive to attract foreign direct investment," said Guillaume Doane, CEO of Africa Oil & Power. "Africa Oil & Power is proud to support those ongoing efforts with a global promotional campaign. The AOG Conference & Exhibition, which has become an unmissable, unrivalled national investment event, will provide a strong anchor point for the 2020 initiative."

Capital inflows into bankable projects will be a primary objective of the 2020 effort. Ongoing initiatives being promoted include the 2020 oil and gas licensing round, marginal field development, gas monetisation, Sonangol's Regeneration Programme and attractive projects across the value chain, including the international tender for the Soyo refinery and the ramp-up of the Cabinda and Lobito refineries.

The AOG Conference & Exhibition is the second edition following a highly successful inaugural event in June 2019 that brought more than 1,700 delegates, 67 speakers and nearly 50 exhibitors. AOG 2019 gathered major government officials and C-suite executives from across the energy value chain for a week of keynote presentations, moderated panel discussions, exhibitions, networking gatherings and investment facilitation. With two days of conference and exhibition, and one day of workshops led by Microsoft, PwC, Centro de Apoio Empresarial, Friburge and Administração Geral Tributária, Angola Oil & Gas 2019 was one of the most highly attended events in Angola's oil and gas history.

H.E. President Lourenço and H.E. Diamantino Pedro Azevedo, Minister of Mineral Resources and Petroleum, opened the conference, with speeches delivered by H.E. José de Lima Massano, Governor of the National Bank of Angola, Eng. Seabstião Pai Querido Gaspar Martins and Eng. Paulino Jerónimo, CEO of ANPG. Private sector keynotes and appearances were given by Total CEO Patrick Pouyanné and ExxonMobil's Senior VP of Upstream Oil & Gas Deepwater Hunter Farris, among others. The event received strong support from the Angolan oil and gas industry, with major players including Sonangol, Total, ExxonMobil, Chevron, Eni, Equinor, BP, Schlumberger, Baker Hughes, Halliburton and other international companies participating as sponsors, exhibitors, speakers and delegates.

The 2020 event aims to expand in size, scale and prestige. Anchored by a VIP programme of senior government officials and global CEOs, AOG 2020 will be the premier gathering for deal making and networking. Discussion points will include market entry, the ease of doing business in Angola, digitalisation and oilfield technologies. A digitalisation and technology forum will showcase advanced technologies pioneered in Angola on the exhibition floor.


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