COUNTRY REPORTS

Hopeful signs for the markets of Zambia and DRC P18

RAILWAYS

Major Nigerian projects are on track P27

EARTHMOVING

The latest solutions for earthmoving and excavation P40

ROAD BUILDING

The future of the Belt and Road Initiative in a pandemic P42

African Review

of BUSINESS and TECHNOLOGY

A RENEWABLE FUTURE

Special report on the southern Africa energy industry and its new opportunities

WAREHOUSING BOOM

The warehousing and storage sector bounces back

Stephen Karingi, Director of Regional Integration & Trade, UNECA, on how Africa can survive and thrive





Engineer - Install - Maintain



Protect your energy supply and your business

Reliable power supplies are essential for profitable business. Natural gas is an abundant clean-burning low-carbon fuel. Jenbacher gas engines are renowned for reliable performance. This performance is supported by our network of local service engineers.

For more information on the benefits of gas-fuelled captive power plants go to clarke-energy.com or contact your local sales dept on the numbers below.

- 9-18 months repayment of capital switching from diesel to natural gas
 For electricity, heating and cooling loads
 Engineer, procure and construct services available

- Supported by a network of local service engineers



Cover picture: Adobe Stock Cover Inset: UNCTAD

Editor: Samantha Payne

Email: samantha.payne@alaincharles.com

Editorial and Design team: Mariam Ahmad, Prashanth AP, Fyna Ashwath Miriam Brtkova, Praveen CP, Manojkumar K, Nonalynka Nongrum Abhishek Paul, Rahul Puthenveedu, Deblina Roy and Louise Waters

Managing editor: Georgia Lewis
Contributing editor: Martin Clark
Publisher: Nick Fordham
Sales Manager: Richard Rozelaar
Email: richard.rozelaar@alaincharles.com

Magazine Manager: Serenella Ferraro
Tel: +44 207 834 7676 Fax: +44 207 973 0076
Email: serenella.ferraro@alaincharles.com

Email: tanmay.mishra@alaincharles.com

Nigeria BOLA OLOWO
Tel: +234 80 34349299
Email: bola.olowo@alaincharles.com

Tel: +91 98800 75908

UAE MURSHID MUSTAFA
Tel: +971 4 448 9260 Fax: +971 4 448 9261

Email: murshid.mustafa@alaincharles.com

RICHARD ROZELAAR

Tel: +44 20 7834 7676 Fax: +44 20 7973 0076

Email: richard.rozelaar@alaincharles.com

USA MICHAEL TOMASHEFSKY

Tel: +1 203 226 2882 Fax: +1 203 226 7447 Email: michael.tomashefsky@alaincharles.com

Head Office: Alain Charles Publishing Ltd, University House, 11-13 Lower Grosvenor Place, London SW1W OEX, United Kingdom Tel: +44 (0)20 7834 7676, Fax: +44 (0)20 7973 0076

Middle East Regional Office: Alain Charles Middle East FZ-LLC, Office L2-112, Loft Office 2, Entrance B, PO Box 502207, Dubai Media City, UAE,

Tel: +971 4 448 9260, Fax: +971 4 448 9261

Production: Srinidhi Chikkars, Swati Gupta, Nelly Mendes and Arjun S

E-mail: production@alaincharles.com

Chairman: Derek Fordham Printed by: Buxton Press Printed in: MAY 2020 ISSN: 0954 6782

UK

SUBSCRIPTIONS:

Rates for one year (11 issues):

Europe €107, Kenya KSh3400, Nigeria N6600, South Africa R460, United Kingdom £77, US\$140

To subscribe: visit www.africanreview.com/subscribe
For any other enquiry email circulation@alaincharles.com



Editor's Note

Keeping up with the ever-changing pandemic advice from governments across Africa, while still doing business in these often-restrictive times has been a major challenge for the whole continent. But there are signs of hope, especially as Africa has, so far, experienced a relatively low rate of COVID-19 infection overall. Many countries are determined to get back to business as safely as possible as we all find a way forward through the "new normal" – and *African Review* is equally determined to be there for our readers every step of the way.

It is in this spirit of optimism that we bring you the June issue and we are delighted to report on the positive stories from across the continent. Our cover story on page 33 is a special report on southern Africa's energy industry, with renewables paving the way for investment opportunities as well as a cleaner, greener way to power countries and revitalise economies. Elsewhere, we have upbeat news to report on the warehousing and storage sector (p28), which looks set to emerge well despite the impact of COVID-19, plus an update on the progress being made on Nigerian railway projects on page 27.

Stay safe and we look forward to serving our readers in an evolving world.

Samantha Payne, Editor

Contents









News

4

The latest updates and events from the continent, quotes from leading figures in business and government, as well as top stories from www.africanreview.com

10 Country reports

A detailed analysis of how Zambia can overcome pandemic-related economic challenges, as well as the opportunities for the Democratic Republic of Congo in traditional and emerging markets.

ባባ Infrastructure

The importance of innovative project finance solutions and public-private partnerships for building Africa.

Information technology and communications
Applying Internet of Things technology over a wide range of sectors, from mining to accessibilty, plus the latest IT and communications news

Transport and logistics
Nigerian railway projects con

Nigerian railway projects continue apace, plus good news for the African warehousing and storage sector.

∩ Powe

A special report on the bold future in renewable energy for southern Africa, along with news and the latest technology.

30 Construction

Solutions across the earthmoving and excavator markets, as well as an in-depth report on the Belt & Road Initiative.

The latest mining news and innovative solutions for efficient operations.

Trade and African economies
Stephen Karingi, Director of Regional Integration & Trade, ECA, discussed how Africa can benefit from expanded free trade across the continent despite COVID-19.

New report highlights attractiveness of North Africa for G20 low-carbon investors

A research report by international law firm Ashurst has shown growing interest in the Middle East and North Africa (MENA) region from G20 investors in renewable energy, energy transition and decarbonisation technologies - but companies in the region lag behind their overseas counterparts.

The report, Powering Change: Energy in Transition, compiles the views of more than 2,000 senior business leaders from across G20 countries on the changing global energy market as it seeks to



North Africa's renewable energy potential is attractive to G20 investors

meet rising energy demand and a drive towards decarbonisation. 94 per cent of respondents expect their organisation's investment in the energy transition to increase over the next five years.

Asia-Pacific and Latin America investors in particular see North Africa as an attractive market, with 35 per cent and 38 per cent respectively invested, committed to invest or considering the region in the next five years, reflecting the more advanced wind and solar markets in Egypt and Morocco.

In terms of potential new markets, North Africa was the joint second most popular region that G20 investors were considering over the next five years, led by respondents from Argentina (31 per cent), India (30 per cent) and Saudi Arabia (24 per cent). The development of large-scale solar power in North Africa and interconnectors to Europe has been a much discussed and highly attractive proposition to European markets looking to diversify their power sources. David Wadham, Ashurst's global co-head of power and utilities, said.

"It is indisputable that investment in renewable energy and decarbonisation technologies is on the rise. Across the globe there is significant pressure on governments, corporates and financial institutions to take action now. The outlook for MENA is no different. The region has historically experienced strong demand growth and while perhaps slower than some other regions to turn to renewables, it is now very much in the vanguard of cost-effective, large-scale low carbon power production."

David Charlier, Ashurst's head of Middle East, added, "With large solar projects underway, like those planned in Morocco and Algeria, as well as the much discussed interconnectors to Europe, it is clear that global investors appreciate the low-carbon potential in the region despite it being the centre of the world's oil and gas trade."

EGYPT-SAUDI LINKAGE PROJECT SET TO GO AHEAD

It is reported that contracts for the electricity interconnection project between Egypt and Saudi Arabia will be signed by the end of May.

The project involves linking the grids of Egypt and Saudi Arabia and will play an important role in securing urgent power supplies via load sharing, especially during periods of strong demand.

According to a report in Egypt Today, execution works will begin immediately in June, and the Saudi side will determine the pathway of the linkage line as the project will be part of the planned cross-border city, Neom, located in the Tabuk Province of northwestern Saudi Arabia.

The electricity linkage project consists of three phases. The first, which is in Egypt, includes two AC-DC transmission plants with a capacity of 500 kv at Badr City, and the control room of the linkage between the overhead power lines and the marine cables at Nabq city.

MANUFACTURING RESUMES IN TANGIER

Manufacturing firms are gradually reopening their activities in Tangier to revive industrial activity and to prepare for the end of the novel coronavirus crisis, according to a report in Morocco World News. Some companies in the textile, automotive, and aeronautical sectors are already operating.

They are working under strict safety and sanitation measures imposed by the Ministry of Health, and so no unit can work without government authorisation.

According to a statement from the Association of the Tangier Industrial Zone (AZIT) and the General Confederation of Moroccan Entreprises (CGEM) of the Tangier-Tetouan Al Hoceima region, production lines for clothing, food, cabling, and the automotive sector are subject to additional measures developed by the Province of Tangier-Tetouan-Al Hoceima, with failture to comply leading to withdrawal of authorisation to operate.

The measures include reducing the workforce by one third and distributing workers over separate shifts, as well as the installation of thermal cameras to measure workers' temperatures at the entrance of factories. The press release emphasised the importance of the permanent presence of a doctor at workplaces, the implementation of distancing measures in addition to the daily disinfection of transport vehicles and workplaces. The factories should also make available hydrochloric gel and masks for all staff.

On 17 April 2020, French carmaker Renault announced its decision onto gradually resume production at its plants in Tangier and Casablanca amid strict protective measures.

In a statement, Renault Maroc said it was preparing the two plants "to adapt and adjust production as the market recovers to meet the demand both in Morocco and abroad."

BRIEFS

Support for Egyptian SMEs

The European Investment Bank (EIB) has signed a financing agreement worth

The funds will support Egyptian SMEs.

US\$100mn with Banque du Caire (BDC) to support Egyptian SMEs in the manufacturing and services sectors, which is expected to sustain 4,000 job opportunities in 100 companies. While QNB Alahli has received US\$100mn in financial aid from the European Bank for Reconstruction and Development (EBRD), which will be lent to businesses most affected by the Covid-19 pandemic, in particular

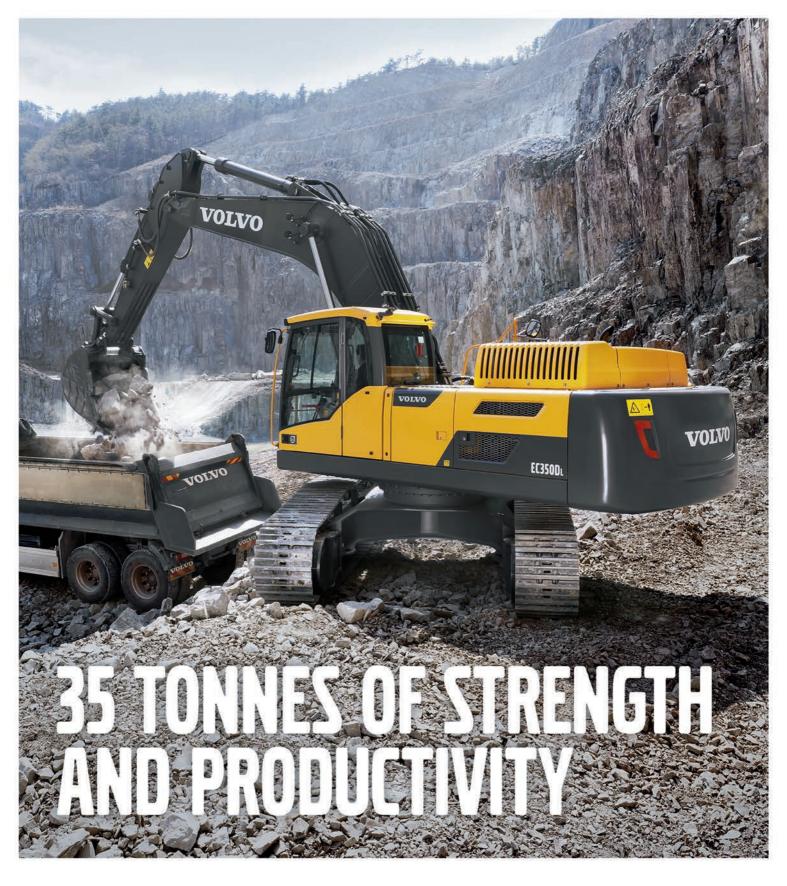
Substation contract

Egypt's Elsewedy Electric for Trading and Distribution has signed a contract to build



The contract will be implemented over

Al Lahoon substation with a value of US\$13.27mn in Faiyum governorate on turnkey basis. The engineering, procurement and construction (EPC) contract will be implemented over six months. Elsewedy Electric for Trading and Distribution is one of the leading wires and cables and integrated energy solutions providers in the Middle East and Africa.



When we set out to make our 35 tonne excavator, we wanted to put strength and productivity first. So we put in a Volvo D8 engine to give it high performance yet with superb fuel economy. We gave it a Volvo CareCab — acknowledged as being probably the best operator environment in the market today, with climate control as standard. And we gave it a strong, reinforced undercarriage and frame to help it survive even the roughest of terrains. We believe this makes it the best excavator in its class. We think you'll believe it too. Talk to your local Volvo dealership today.



CTF extends US\$10mn loan to develop Tulu Moyo power plant in Ethiopia

The Clean Technology Fund (CTF), managed by the Climate Investment Funds (CIF), has extended a US\$10mn concessional loan to develop 50MW Tulu Moyo Geothermal Power Plant in Ethiopia.

The project involves the design, construction, commissioning and operation of a 50MW geothermal power plant under a build, own, operate and transfer (BOOT) scheme, marking the first phase of the Ethiopian government's plan to build 150MW cumulative generation capacity by 2024. The project will include a sub-station and an 11km transmission line.

The investment makes CTF the first progressive geothermal independent power producer (IPP) in



The project is further set to reduce greenhouse gas emissions by more than 10mn tonnes CO2 and create around 600 iohs.

Ethiopia. The initiative is seen as a critical step to Ethiopia's drive to harness sustainable and resilient energy resources to support the country's economy and livelihoods.

Anthony Nyong, director of climate change and green growth at the African Development Bank (AfDB), said, "The concessional resource will be instrumental in helping the country to diversify its energy mix by facilitating the deployment of renewable energy technologies while supporting Ethiopia in meeting the targets under its National Electrification Plan 2.0."

Antony Karembu, principal investment officer and renewable energy apecialist at the AfDB noted that as the first progressive geothermal independent power producer in Ethiopia, CTF will leverage climate finance options in mobilising private sector operators for the project.

The project is further set to reduce greenhouse gas emissions by more than 10mn tonnes CO₂ and create around 600 jobs.

AEM SUBMITS INDUSTRY PRIORITIES FOR US-KENYA TRADE AGREEMENT

Association of Equipment Manufacturers (AEM) has submitted the industry's priorities for the proposed US- Kenya trade agreement.

While equipment manufacturers continue to focus on addressing the immediate economic impacts caused by COVID-19, it is important to stay focused on establishing future rules and regulations across the globe benefiting manufacturing and consumers alike, stated AEM.

Kenya, as the economic and transportation hub of East Africa, is a vital lynchpin in global trade. As consumers demand upgraded infrastructure systems and producers invest in modern agricultural production, establishing a comprehensive trade agreement has the potential to boost the US equipment exports and incentivise increased foreign direct investment throughout Kenya.

Customs and trade facilitation, digital trade, intellectual property protection, rules of origin and eliminating restrictions on remanufactured equipment are some areas to be addressed in forthcoming negotiations. AEM looks forward to working with the US and Kenyan governments on the agreement.

OATAR CHARITY SIGNS DEAL WITH SOMALIA'S ENERGY MINISTRY

Qatar Charity (QC) has signed a cooperation and partnership agreement with the Ministry of Energy and Water Resources in Mogadishu. Somalia to continue its efforts for the benefit of those affected by recurrent droughts and floods.

The deal aims to support the efforts of the Ministry in achieving sustainable development gradually in the energy and water sectors of Somalia, in coordination and cooperation with relevant governmental international authorities.

The agreement was signed by Fawzia Mohamed Sheikh, minister of energy and water resources, and Abdulnour Haj Ali, director of OC's office in Somalia in the presence of the deputy minister of the energy and water resources and several members of the ministry.

The cooperation between the ministry and QC includes drilling deep and surface water wells and ponds, repairing deep water wells, installing solar-powered water pumps for drilled wells and training technical personnel in the field of renewable energy and water technology and other water and energy sectors.

The agreement comes at a time when the Somali government started moving towards a gradual transition from the humanitarian response to supporting development and stability efforts in the country through the implementation of sustainable development projects aimed at providing water and energy services for all citizens.

QC implemented more than 2,377 projects in Somalia during the past year in various fields, benefiting 1,027,415 people, covering water, sanitation, education, culture and health, with the goal of accelerating Somalia's economic empowerment, as well as social and relief projects.

BRIEFS



This is Diibouti's first utility-scale wind

MIGA invests in Djibouti's first wind power project

The Multilateral Investment Guarantee Agency (MIGA), the World Bank subsidiary, has announced to support the construction of Djibouti's first utility-scale

MIGA guarantees an investment of US\$91.6mn, which covers up to 90 per cent of investments made and future earnings in the project for up to 20 years.

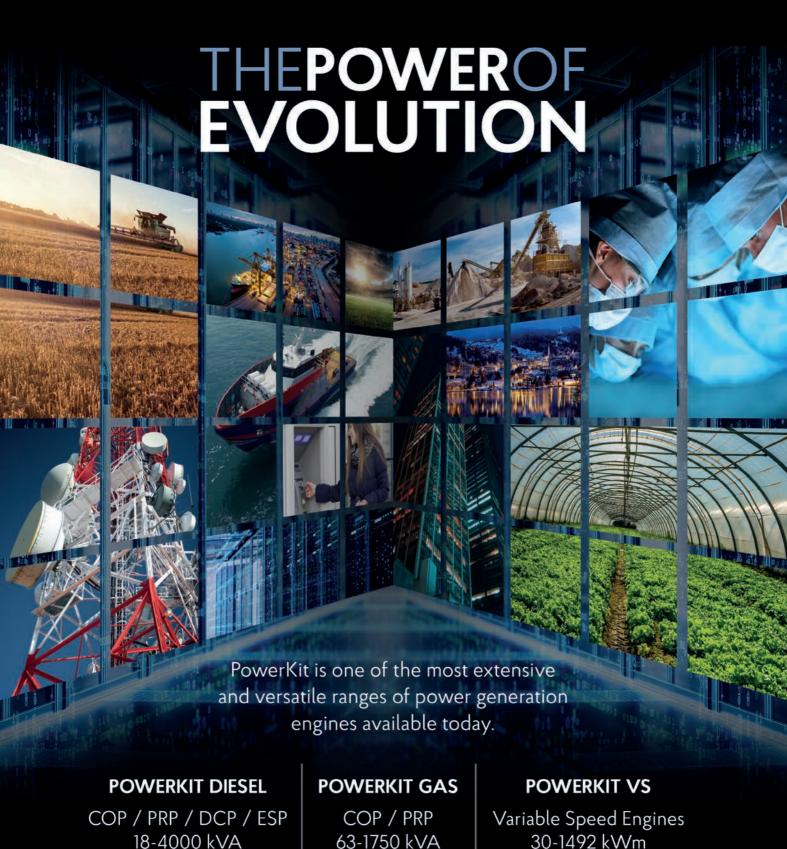


Isaias Afwerki is the president of

Eritrea president concludes two-day visit to Ethiopia

Eritrea's president Isaias Afwerki met Ethiopia's prime minister Dr Abiy Ahmed during his two-day visit. As reported in The Shabait, president Isaias held extensive discussion with Dr Ahmed on bilateral cooperation and regional developments between the two countries. The topic include agricultural and water development projects in the Zuway area of the Oromia Regional State.





LET'S TALK ABOUT THE FUTURE

Baudouin.com

Hexicon, Genesis partner for South African offshore wind market exploration

Swedish floating windfarm developer Hexicon AB has agreed to partner with South African wind developer Genesis Eco-Energy Developments to explore the development of offshore wind.

The development programme will be driven through a joint venture company in South Africa that will be named GenesisHexicon.

Henrik Baltscheffsky, CEO of Hexicon, said, "This is the winning formula for large-scale energy production in South Africa, one of the top ten long term markets for deep water deployment.

"We are proud to have teamed up with



The purpose is to jointly develop large scale floating wind projects for South Africa.

Genesis Eco-Energy Developments that since 2002 has a proven track record developing onshore wind and solar projects and also collaborating with the government stakeholders in shaping the renewable energy policies in South Africa."

According to Hexicon, the purpose is to jointly develop large scale floating wind projects, contribute to the ocean economy and clean energy targets for South Africa, and transfer the Hexicon IP for deep water deployment to the South African market.

Davin Chown, managing director of Genesis Eco-Energy Developments, said, "As one of South Africa's pioneering wind energy development companies, the logical progression for Genesis will be to focus offshore along South Africa's coastline which has abundant unexplored resources.

"This is an ideal opportunity to explore the deployment of this innovative floating wind technology from Hexicon. Now is the right time to start to develop the South African offshore wind energy market and contribute to operation Phakisa, the ocean's economy programme," Mr Chown added. For more on renewable energy in southern Africa, turn to our cover story on page 33.

USTDA SUPPORTS COALBED METHANE-FUELLED POWER PLANT IN BOTSWANA

The US Trade and Development Agency has awarded a grant to Kalahari Energy Botswana for a feasibility study of a power plant that will generate up to 100 megawatts of electricity using indigenous coalbed methane. The project, located in the Central Kalahari Karoo Basin, will bring critically important additional power to Botswana's electrical grid. Kalahari Energy selected the US company Advanced Resources International to conduct the study. Thomas R. Hardy, USTDA's acting director, said, "USTDA is helping enhance Botswana's energy security and economic growth, while creating opportunities for US companies to develop world-class infrastructure. This project will build upon USTDA's commitment to working with our partners in Botswana to develop and expand the country's natural gas options."

Craig Cloud, US ambassador to Botswana, said, "The US is proud to support this feasibility study, which could be the first step toward energy independence for Botswana and the literal fuel for the country's aspirations toward being a net exporter of electricity in the region."

NEW ANGOLAN BUDGETARY RESTRICTIONS

Vera Daves, Angola's minister of finance, signed on 22 April a ministerial order suspending the implementation of all contracts signed under the Public Investment Programme whose source of funding has not yet been definitively secured.

This is one of a number of emergency measures, including a hiring freeze in the public sector announced in recent weeks in response to the crash in oil prices and the expected decrease in government revenue for 2020. Minister Daves' order is in line with Presidential Decree No. 96/20 of 9 April which, in response to the COVID-19 pandemic, declared a state of emergency.

These budgetary restrictions not only represent the government's attempt at fiscal responsiveness and responsibility, they also give credence to Angola's commitment to adhere to its latest commitments within the Organization of the Petroleum Exporting Countries (OPEC). Following an oil price crash which drove oil prices down to historic lows below US\$20 per barrel on 9 April, oil producers including Angola under OPEC+, led by Russia and Saudi Arabia, agreed to cut their supplies to the global market by 23 per cent compared to October 2018. These cuts are meant to reverse the downward trend in prices when combined with an expected recovery in crude oil demand in the wake of COVID-19 related restrictions, expected later this year. Angola, the second largest crude producer in Africa behind Nigeria with an estimated daily average production preagreement of 1.4 mmbbl per day, is set to drop output to and average daily output of 1.18 mmbbl per day.

African producers such as Angola and Nigeria continue to be significant in ensuring OPEC is effective. In that light, decisions to ensure compliance like those made by Angola are important globally for the industry as a whole.

BRIEFS

Baynes Power Plant construction to start after 2022



The plant is estimated to cost

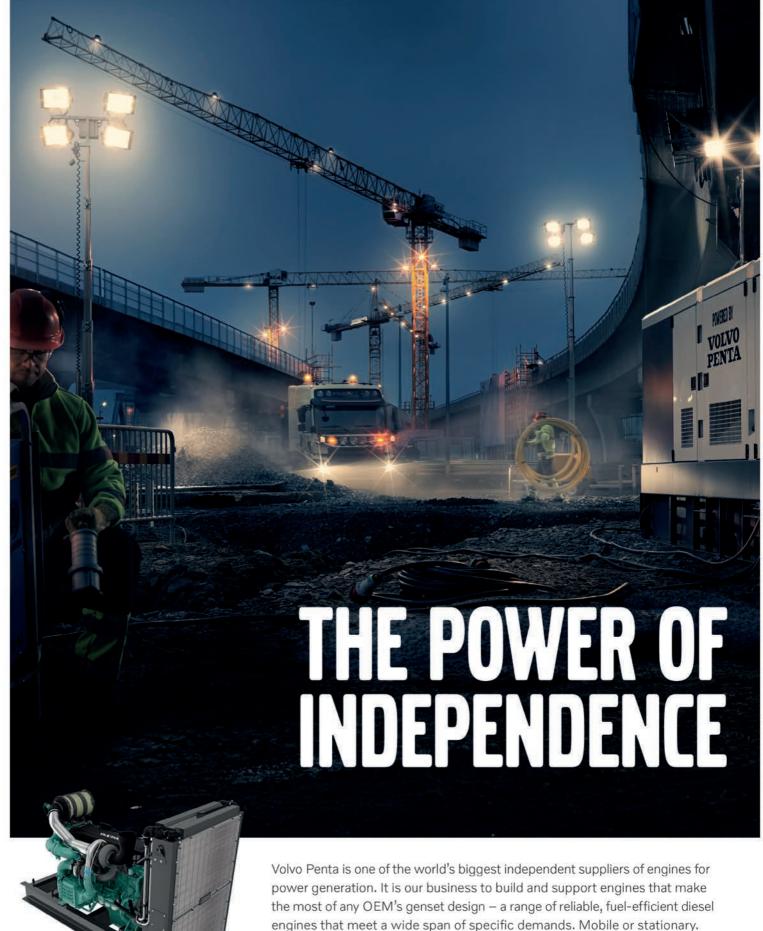
The governments of Angola and Namibia intend to start the construction of Baynes Power Plant in Southern Africa after 2022. The project will involve the construction of the Baynes dam, and then a hydroelectric power station. The plant, which is estimated to cost US\$1.2bn based on the 2014 techno-economic study, is set to commission by the end of 2028 through the first quarter of 2029. The dam at Baynes will operate with a 600 MW hydroelectric power plant.

Namibia grants Gratomic graphite mining licence



The licence covers industrial minerals and precious metals.

Mining company Gratomic has received confirmation from the Ministry of Mines and Energy of Namibia that the minister has issued mining licence No. 215 (ML215) for the company's Aukam graphite property located 120 miles from the Port of Luderitz, southern Namibia. The licence covers base and rare metals, industrial minerals, and precious metals. The company said that securing the mining licence is a critical step toward moving the Aukam mine into commercial production.



the most of any OEM's genset design – a range of reliable, fuel-efficient diesel engines that meet a wide span of specific demands. Mobile or stationary. 24/7 or standby. In any climate: freezing or scorching, dry or wet, in deep shafts or at high altitudes. Tell us your needs and we'll show you the engine. www.volvopenta.com

85-800 KVA

VOLVO PENTA

Equatorial Guinea's Year of Investment advances, despite coronavirus challenges

COVID-19 has slowed global trade, but Equatorial Guinea is not relenting in its drive for investment and downstream diversification, said the country's Minister of Mines and Hydrocarbons, Gabriel Mbaga Obiang Lima.

"Definitely the Year of Investment is still very important," said the Minister during a webinar hosted by Africa Oil & Power. "2019 was the Year of Energy, and



the Year of Energy was to show to the world Equatorial Guinea ... 2020 is the Year of Investment. It is the year that we put our money where our mouth is. And we are definitely going to continue."

The Year of Investment is adapting to the new restrictions under COVID-19. Webinars and virtual roadshows will continue throughout the year, and will culminate in a Malabo conference on 25-26 November, 2020. The Africa Oil & Investment Forum will attract regional and international investors to Malabo, as the country continues to engage at the regional and international level.

The Year of Investment is laying the groundwork for 2021, which will be the country's year to focus on petrochemicals, the minister said. Equatorial Guinea has been addressing downstream diversification efforts in recent years, with a focus on gas monetisation and building refining capacity.

"Downstream is the future of our industry. It is king. It will create jobs and enable us to use our entire resources to be processed in-country," Lima said. "Clearly, one of our solutions to COVID-19 is going to be diversification within oil and gas."

New projects and investments are expected to be announced in the fourth quarter of this year, including the groundbreaking of Equatorial Guinea's first refinery.

In addition, the country is developing liquified natural gas for LNG-to-power scenarios, for domestic and international use. Equatorial Guinea is on track to complete the country's first LNG regasification plant by the end of 2020.

GHANA PORTS AND HARBORS AUTHORITY RECEIVE ROUGH-TERRAIN CRANE TRAINING IN ITALY

Technicians from Ghana Ports and Harbors Authority (GPHA) visited Manitowoc's facility in Niella Tanaro, Italy, to learn proactive maintenance and basic repairs on the Grove RT530E-2 rough-terrain crane. These include hydraulic schematics, load sensing and proportional controls, CAN-BUS data transfer, electricals and electronics and error codes interpretation.

"The training's main goal was to familiarise the technicians on how to use the Manitowoc Crane Care technical documentation and where to find answers to everyday questions, which if not proactively addressed, often causes problems," said Grove master engineer Mirco Minoccheri who taught the five-day programme,.

GPHA purchased the two RT530E-2 rough terrain cranes in January 2020 and is using them to handle general cargo at the Port of Tema, the largest ports in Ghana.

FINANCING BY DEUTSCHE BANK AND ICIEC FOR CRITICAL HEALTH INFRASTRUCTURE IN CÔTE D'IVOIRE

Deutsche Bank has been mandated by the Côte d'Ivoire government to finance the construction and equipment of two regional hospitals as well as five medical units in five hospitals of the country, together with Islamic Corporation for the Insurance of Investment and Export Credit (ICIEC). The project is a part of the government's National Development Plan for 2016-2020, and an important milestone in the Republic's efforts to contain COVID-19. With a financing value of around US\$155.69mn, the project is underway with the two new hospitals, one in Adzope and the other in Aboisso, expected to be completed in October 2020.

"Deutsche Bank is deeply committed to supporting sustainable development projects in Africa", said Claire Coustar, Deutsche Bank's head of emerging markets structuring and the institutional client group for Central and Eastern Europe, Middle East & Africa. "We are proud to partner with the ICIEC, enabling the Ivorian population to access a better healthcare system and helping Côte d'Ivoire achieve its National Development Plan targets. Furthermore, as the coronavirus crisis continues to be felt all around the world, the transaction is testament to how much our clients appreciate our advice and financial solutions in difficult times and acts as an example of how Deutsche Bank can help both clients and communities increase critical health infrastructure for years to come."

"ICIEC is very pleased to be partnering with Deutsche Bank for the first time on a project in Africa. ICIEC remains focused on facilitating critical investments and trade transactions, supporting the well-being and livelihoods of the citizens of member countries," the CEO of ICIEC Oussama Kaissi said.

BRIEFS

Nigeria Airways' workers to be paid full entitlement



The Nigerian government has restated its resolve to pay all former workers of Nigeria Airways.

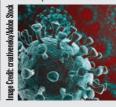
The Nigerian government has restated its resolve to pay all former workers of the liquidated national airline, the Nigeria Airways.

In 2018, it paid about 50 per cent of the sum owed, while a legislative stamp authorising the remaining is required before making the payment, the Nigerian government said.

"We are willing to pay but we have to legalise it by going through the National Assembly for an approval," said Haidi Sirika, minister of aviation.

Central Bank of Nigeria to provide funding for COVID-19 vaccine production

The Central Bank of Nigeria (CBN) has committed to provide funding for the development and research of drugs and vaccines for the COVID-19 pandemic.



"To encourage greater research and development in Nigeria, of drugs and vaccines that would help prevent the spread of the virus, the CBN is developing a framework under which grants and long term facilities will be provided to researchers, science institutions and biotechnology firms to develop the Nigerian vaccine," said Godwin Emefiele, governor of the CBN.

Agricultural support for Nigerian states to boost cocoa production and local upskilling

Ondo and Edo States have obtained support for their agricultural sectors, with Ondo State receiving a boost for cocoa production and Edo State in the process of developing training for young people in rural areas.

Olam Nigeria, a subsidiary of the Singapore-based food and agri-business, Olam International, is training more than 8,000 cocoa farmers in Ondo State to help them improve their crop yields. Odo is the largest cocoa-producing state in Nigeria, with up to 77,000 metric tons per annum. Cocoa is the major cash crop cultivated in the state.

Arun Kartchic, Olam Nigeria Ondo State branch manager, said that such training will help farmers improve their income. The company, which has operated in Ondo State for 25 years, is assisting the state to mitigate the effect of COVID-19 on cocoa yields.



Ondo State's cocoa farmers will receive a boost from Olam Nigeria with an extensive

"We are making videos to educate the farmers on ways to avoid COVID-19. We do radio jingles and through the community representatives, we are reaching out to the farmers. COVID-19 is a global epidemic causing a lot of havoc, and the training is our way of giving back to the people where we have been working in the state for the past 25 years," said Mr Kartchic.

Meanwhile, in Edo State, Governor Godwin Obaseki, said that post COVID-19, the state government would focus on developing human capital in agriculture, agribusiness, agro-processing and allied fields to train its large youth population for an agriculture-based economy.

"If the state must move on after the COVID-19 pandemic, we must improve capacity, knowledge and skills of our people," Governor Obaseki said. "Our focus is on creating an agriculture-based post COVID-19 economy, After the COVID-19 pandemic, we would not have the money to rely on import but rather grow what we need to consume and process our produce for export."

The governor made his comments during the inspection of ongoing construction work at the stateowned Edo State College of Agriculture Government which he promised to transform into a "world-class" school of agriculture, specialising in extension services and intensive courses to train young men and women to support farmers in rural communities across the state.

EKITI STATE CUTS TELECOMMUNICATIONS CHARGE

Kayode Fayemi, governor of the south-west Nigerian state of Ekiti, has slashed Right of Way charges for telecommunications infrastructure by 97 per cent from N4,500 to N145.

Right of Way charges are controversial across Nigeria as critics see them as a platform for states to increase their internally generated revenue, while telecommunication companies often complain that it is an additional cost they can ill-afford. Consumer groups, meanwhile, have criticised these charges, claiming that telecommunications operators will pass on the charges to customers in the form of increased tariffs on data usage and voice calls.

Akin Oyebode, special adviser, Investment, Trade and Innovations, for Ekiti State said that reducing the charges in the state would ensure that the state achieves full broadband penetration by 2021 and help to "attract new businesses, create jobs and improve access to quality healthcare and digital education".

WEST AFRICA TO BENEFIT FROM ITFC FUNDS

The International Islamic Trade Finance Corporation (ITFC), a member of the Islamic Development Bank (IsDB) Group, released its 2019 Annual Development Effectiveness Report (ADER), which outlines how West African countries have benefited from disbursements which aim to boost economies across a range of sectors and lift people out of poverty.

According to the report, in 2019, ITFC signed framework agreements worth US\$4.8bn with nine countries, which included Mali, Niger and Senegal.

Of US\$755mn disbursed to food and agriculture projects, US\$290 million was extended to cotton and groundnuts producers in West Africa.

In Mali, ITFC supported OPAM (Office des Produits Agricoles du Mali) to support the rice sector, for which production does not support local demand.

Meanwhile, in Senegal, ITFC supported the country's involvement in the West Africa Program, which promotes food security for economic prosperity and to fight hunger and malnutrition. This included the support of a soil fertility project for farmers.

Dakar, the Senegalese capital, has been named as the West African hub for ITFC.

Eng. Hani Salem Sonbol, CEO, ITFC commented on the release of the report, "ADER demonstrates how important ITFC's work is in supporting inclusive and sustainable socio-economic growth in the developing world. By aligning trade finance and development initiatives, we are providing Integrated Trade Solutions designed for the needs of member countries targeting key economic sectors of agriculture, energy, and SMEs. Global value chains have an increasing importance in the development agenda because of the role that they play in reducing rural poverty and ensuring food security."

BRIEFS



Benjamin Akabueze stays on.

Akabueze's tenure renewed

The tenure of Benjamin Akabueze, director general of Nigeria's Budget Office, has been renewed. The government statement on his reappointment said that Mr Akabueze, who has been in role since June 2016, "has a track record of sterling performance" and "that tenure was renewed for another term in order to institutionalise the achievements for a sustainable improvement in the Budget Office of the federation".

Motor spirit prices controlled in Nigeria

Timipre Sylva, Nigeria's junior minister for petroleum resources has said the country's government will continue to "interfere" in determining the pump price of



Nigeria petrol prices reined in.

petroleum prices "to protect the generality of the public from undue exploitation and prevent inordinate profiteering by oil marketers". He added that despite deregulation, petroleum products are "strategic commodities, so you cannot allow the prices of these commodities to be determined wholly by the marketers."

Upcoming Events Calender 2020

JUNE

02-05

AFRICA SHARED VALUE LEADERSHIP VIRTUAL SUMMIT

Virtual Summit

www.africasharedvaluesummit.com

JUNE-JULY

30-1 July

CÔTE D'IVOIRE OIL, GAS & MINING INVESTMENT

Abidjan, Cote d'Ivoire www.ciogmi.com

JULY

22-24

LIGHTEXPO AFRICA 2020

Nairobi, Kenya

www.expogr.com/lightexpo

AUGUST

13-14

SEAMLESS AFRICA

Johannesburg, South Africa www.terrapinn.com/exhibition/seamlessafrica/index.stm

POWER & ELECTRICITY WORLD AFRICA

Johannesburg, South Africa

www.terrapinn.com/exhibition/power-electricityworld-africa/index.stm

SEPTEMBER

ELECTRA MINING

Johannesburg, South Africa www.electramining.co.za

6TH SOLAR TANZANIA 2020

Dar-es-Salaam, Tanzania

www.expogr.com/tanzania/solarexpo/index.php

22-24

POWER NIGERIA 2020

Lagos, Nigeria

www.nigeria-energy.com/en/home.html

23-24

6TH ARE ENERGY ACCESS INVESTMENT FORUM

Lusaka, Zambia

www.ruralelec.org/event-calendar/new-dates-6th-are-energy-access-investment-forum

OCTOBER

12-13

3RD NORTH AFRICA RENEWABLE ENERGY SUMMIT

Casablanca, Morocco www.moroccorenewable.org

14-17

ADDIS POWER

Addis Ababa, Ethiopia www.addispower.com/#home

Ecomondo and Key Energy 2020: Sustainable circular economy, smart cities and energy efficiency in focus in Italy

The "Green Deal", the new European economic policy of the Commission will be covered in depth from 3-6 November at Rimini Expo Centre on the occasion of the 24th edition of Ecomondo, the leading international exhibition of environmental technology and the 14th Key Energy dedicated to renewable energies, smart cities and energy efficiency.

A crucial role is played by the two expos thanks to their top-grade informative facilities, in the form of seminars and conferences, organised by the Ecomondo Scientific Committee, led by Professor Fabio Fava, and Key Energy's, led by Professor Gianni Silvestrini, scientific director of the Kyoto Club.

Ecomondo 2020 will be formed by four expo macro-sectors: Waste And Resources; Water (with the integrated water cycle), Circular Bioeconomy; Remediation and Hydrogeological Risk.

With the highest circularity index, Italy has a virtuous cycle



worth US\$96.57bn for country's economy, an added value of US\$24.14bn and an overall workforce of 575,000.

Key Energy will host the launch of LUMIexpo, a section dedicated to "smart spaces" and "people centric" technology: the factors of strategic development of digital technologies will be based on the

idea of smart spaces focused on people and therefore on their needs, where and when necessary, paying the utmost attention to reducing energy consumption and environmental impact.

At the 2019 edition, Ecomondo and Key Energy proposed a comprehensive showcase of more than 1,600 companies, attracting

93,000 professional attendees.

Ecomondo 2020 will focus on green public procurement; ecodesign and the market of secondary raw materials; infrastructures suitable for the innovations of sharing economy; the role of cities and local areas; regulations on waste recycling; end of waste targets; soil protection and its essential role for a complete bio-supply chain of materials.

Key Energy will feature four expo sectors - and will have as its 2020 leitmotif "Where Energy Meets The Future": Wind, Solar & Storage, Efficiency (distributed generation) and Sustainable City (Digital, Electric and Circular), where, as well as the topics of Smart Cities and electric transport, there will be LUMIexpo, a thematic focus on the sustainable development of urban areas.

For more information, visit en ecomondo com and en.keyenergy.it

Equatorial Guinea has given natural gas a priority in terms of development and monetisation, and we believe gas is the key to industrialisation and jobs creation."



GABRIEL MBAGA OBIANG LIMA

Minister of Mines and Hydrocarbons, Equatorial Guinea

A unified stand is what we need to combat this pandemic in the region. We continue to actively enforce contact tracing, which has proved to be very effective in identifying those who have come into contact with infected persons."

UHURU KENYATTA

President of Kenya

We have focused a lot of attention on the technology infrastructure sector with its high growth potential. In line with our pan-African mandate, we have looked at opportunities across the continent including markets such as Nigeria, the East African Community and Egypt. We hope to be able to announce further investments in this sector shortly."

HUGO VAN DEN HEEVER

Associate Partner at Vantage Capital

Professional cloud infrastructures are usually safer and more reliable than many on-premise platforms. One of the most common reasons for this is the lack of security resources organisation can employ. Security skills are hard to come by even globally, and in Africa we only have about 10 000 security professionals across the entire continent. Large companies, such as Oracle, have employed a security team that is bigger than all the African security professionals together."

ANNA COLLARD

Managing director, KnowBe4

The report from S&P affirming ATI's rating amidst such an unprecedented market turbulence supports our recent statements to the financial markets about our capacity and institutional commitment to stay the course and help our African member countries through the anticipated COVID-19 storm."

JOHN LENTAIGNE

Acting CEO, African Trade Insurance Agency

Close cooperation between African and European partners is key to successfully reducing the unprecedented impact of COVID-19 and tackle the negative economic impact of the virus both globally, and in more vulnerable economies."

AMBROISE FAYOLLE

Vice President, European Investment Bank

The COVID-19 pandemic has drastically disrupted people's lives, livelihoods, and economic conditions in Egypt. The global shock has resulted in a tourism standstill, significant capital flight, and a slowdown in remittances, resulting in an urgent balance of payments need."

GEOFFREY OKAMOTO

First deputy managing director and acting chair, International Monetary Fund.

As we ready ourselves to manage the economic fallout from the coronavirus, African governments are focused on mitigating the short and long-term impacts. Insurance capacity is an important aspect of our ability to rebuild and to ensure that critical projects receive the funding and guarantee support they require."

SANI YAYA

Minister of Economy and Finance of the Republic of Togo.

Lockdown to control coronavirus is going to hit most casual and daily workers very hard. Therefore, the Merck Foundation has decided to support African governments' strategy to save the livelihoods [of these people]."



DR RASHA KELEJ
CEO, Merck Foundation

Remittances are a vital source of income for developing countries. The ongoing economic recession caused by COVID-19 is taking a severe toll on the ability to send money home and makes it all the more vital that we shorten the time to recovery for advanced economies."

DAVID MALPASS

President, World Bank Group

Our work has indicated that the pandemic will affect the South African economy in very deep and significant ways. The estimates of the impact vary. The work is still being done as we see the extent to which different parts of the economy are affected."

EBRAHIM PATEL

Minister of Trade, Industry and Competition, South Africa

NAS is a global company with a strong local presence in Uganda. Finding RDT (rapid diagnostic test) kits for local testing was going slow due to the logistical challenges under the current lockdown. As a ground handling company, we procured the kits in Kuwait and utilised our experience and expertise to facilitate the process. Working with our partner DHL, we had the kits flown to Uganda within three weeks."

NOUAMANE ZAHOUANI

General manager, NAS Uganda

We are all aligned, we want Africa to develop and grow, so let us work together on concrete solutions. Time is of the essence."

TIDJANE THIAM

Côte d'Ivoire minister and African Union Special Envoy

African countries are committed to meeting all their obligations to commercial creditors in a timely manner and want to maintain access to international debt markets for the build-back period ... Most African countries were on a successful reform track prior to the crisis, that is why they had access to the capital markets."

VERA SONGWE

Executive Secretary, ECA

Finterra looks forward to working closely with the Islamic Corpotation for the Development of the Private Sector (ICD) in sharing our expertise and know-how with regards to technologies, such as blockchain, to efficiently mobilise funds in the realm of Islamic digital economy in both Saudi Arabia and ICD's member countries."

HAMID RASHID

Founder, Finterra

The current situation in global and African energy markets is giving tremendous opportunities for Africans to take a strong position on economic diversification. In that aspect, Nigeria is the country that could take the lead position in becoming the African gas-producing platform the continent needs."



KOLA KARIM

CEO & managing director, Shoreline Natural Resources

The World Bank is quickly mobilising to help Egypt strengthen its pandemic response and healthcare systems. This phase of our support aims to protect the poorest and most vulnerable households and help the country implement emergency health operations and strengthen economic resilience."

MARINA WES

World Bank country director for Egypt, Yemen and Djibouti

We're excited to be collaborating with our 2Africa partners on the most comprehensive subsea cable that will serve the continent. 2Africa is a major element of our ongoing investment in Africa to bring more people online to a faster internet. We've seen firsthand the positive impact that increased connectivity has on communities, from education to healthcare. We know that economies flourish when there is widely accessible internet for businesses. 2Africa is a key pillar supporting this tremendous internet expansion as part of Africa's surging digital economy."

NAJAM AHMAD

Vice President, Network Infrastructure, Facebook.

This exceptional [AA-] rating [by Fitch] is a sign of confidence and trust in Africa Guarantee Fund's operational excellence, particularly now that financial institutions are in need of cushioning to continue lending to SMEs, who hold the key to the economic recovery of their respective countries."

FELIX BIKPO

CEO, African Guarantee Fund

The greatest wealth of any company is the people who work there; our people are the reason behind all the results we are accomplishing. "

BACHIR BATEL

General manager, Boehringer Ingelheim Algeria

The independence and wellbeing of persons with disabilities is critical. Assistive technologies are central to ensuring that persons with disabilities can continue to thrive. It is my desire to see innovations supported by Innovate Now turn into big businesses that will not only make mobility easy, but create employment for our people."

SENATOR ISAAC MWAURA

Chair, Innovate Now board, a Kenya-based assistive technology accelerator, the first for Africa



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

MASTERCARD COMMITS TO **CONNECT 50MN SMALL BUSINESSES TO DIGITAL ECONOMY BY 2025**



Around 25mn women entrepreneurs will be provided with solutions that can help them grow their businesses

Mastercard has expanded its worldwide commitment to financial inclusion, pledging to bring a total of one billion people and 50mn micro and small businesses into the digital economy by 2025.

As part of this effort, there will be a direct focus on providing 25mn women entrepreneurs with solutions that can help them grow their businesses.

The extended commitment builds on Mastercard's ongoing efforts to address the COVID-19 related health and economic challenges facing individuals all over the world, including in sub-Saharan Africa.

"Financial inclusion remains crucial to unlocking the potential of sub-Saharan Africa, and will become crucial as we support Governments in driving long-term, sustainable economic recovery. Digital transactions are both safe and efficient and giving access to these for as many people as possible, is an important part of supporting the most vulnerable parts of the population through the current situation," said Raghav Prasad, Mastercard's division president for sub-Saharan Africa.

SCHNEIDER ELECTRIC AND AVEVA EXTEND

Schneider Electric and AVEVA have announced expanded partnership to deliver innovative solutions for the data centre market.

As hyperscale providers build data centres with an expanding fleet to meet worldwide demand, the complexities to operate and maintain these facilities are creating an unprecedented set of challenges. Operating at this scale requires a different approach for mission critical facilities powering the globe's digital infrastructure. The combination of AVEVA Unified Operations Centre. scalable industrial software with Schneider Electric's EcoStruxure for Data Centres control and monitoring capabilities enables deep and expansive visibility to day-to-day operations.

The joint solutions provide a homogenous view of engineering, operations, and performance across a heterogenous, legacy installed base. Hyperscale data centre providers will benefit from this partnership by connecting platforms and data sets that previously existed in disparate systems. They will be able to scale regardless of number of sites or global location.



Craig Hayman is the CEO of AVEVA.

"At a time when the world's digital infrastructure is being pushed to its limits, Schneider and AVEVA are delivering a comprehensive solution for hyperscale data centres to operate and maintain their critical environments," said Pankaj Sharma, executive vice-president of the Secure Power Division at Schneider Electric.

TECHNOLOGY CAN ELIMINATE ROAD CONSTRUCTION EMISSIONS BY 2045

Researchers from Chalmers University of Technology and the University of Gothenburg have studied the construction of an 8km stretch of road

and calculated how much emissions can be reduced now and until 2045. The study 'Reaching net-zero



for reducing emissions in an eight kilometre stretch of the Swedish highway 44 between Lidköping and Källby, which was finished in 2019.

carbon emissions in construction supply chains - Analysis of a Swedish road construction project' was published earlier this year in the journal Renewable and Sustainable Energy Reviews, and was written by Ida Karlsson together with colleague Filip Johnsson of Chalmers and Johan Rootzén, at the Gothenburg School of Business. Economics and Law.

The researchers evaluated opportunities for reducing emissions in an 8km stretch of the Swedish highway 44 between Lidköping and Källby, which was finished in 2019. It was one of the Swedish Transport Agency's first projects in which a complete climate calculation was made. All the materials and activities involved in its construction were calculated for their total climate impact - energy and materials used in the construction and what emissions these contribute to.

The climate calculation showed that the contractor was able to reduce emissions by 20 per cent compared to the Swedish Transport Agency's reference values. However, the researchers demonstrated that emissions could be halved with technology already available today and completely eliminated by the year

Ida Karlsson's research is part of the project Mistra Carbon Exit, which focuses on what are termed transformative solutions. These

require time and large investments and include, for example, production of steel, cement, concrete and asphalt without carbon dioxide emissions, as well as fossil-free or electric vehicles. Solutions are being developed and implemented, but climate-saving technologies and choices exist already today.

Ida Karlsson wants to highlight four of these such as transport optimisation; recycling and reuse of excavation masses, asphalt and steel; material efficiency and design optimisation and replacement of cement clinker as a binder in concrete.

NIGERIA APPROVES US\$120MN TO COMPLETE A DAM



The multipurpose dam will supply 60,000 cu/m of water to around 400,000 neonle.

The Nigerian government has approved a loan of US\$120mn to complete Kashimbila dam to boost power supply in the country and contribute additional 40MW to the national grid.

Started in 2007, the dam was initially designed with an installed capacity to generate 18MW but later upgraded to 40 MW.

The multipurpose dam, located in Taraba state, North Eastern part of Nigeria, will supply 60,000 cu/m of water to around 400,000 people. Additionally, it is set to provide irrigation facility, particularly in the dry season, for 3,000 ha.

The dam will supply power to the states in the North Eastern part of Nigeria and Benue in the North Central.

Sule Mamman, Nigeria's minister of power, said that the Nigerian government has approved the ministry's memo for the revised

PARTNERSHIP

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

estimated total cost for the augmentation of the subsisting contract to provide additional 40MW to the national grid.

SMALL TOWNS AND VILLAGES BECOME THE FOCUS FOR SA TOURISM POST-LOCKDOWN



South Africa's Tourism Incentive Programme will help small businesses, community projects and local markets.

Mamaloko Kubayi-Ngubane, the South African tourism minister, has told a parliamentary committee meeting that the country's Department of Tourism and South African Tourism, the tourism board, have been more severely affected by the COVID-19 pandemic than any other government department.

To boost tourism, the minister announced a revised performance plan which includes a Tourism Incentive Programme to help small and medium-sized businesses, community projects and markets which have been affected by the sharp downturn in visitor numbers. A plan was launched earlier this year but the minister said the new version takes into account the current conditions, with a view to taking the tourism industry forward.

A particular focus of the plan is urging the tourism bodies to seriously consider incorporating villages, townships, and small towns into South African tourism promotion, incentive and development plans. At a committee meeting it was suggested that the plans should be biased towards these lesser-visited and oftenneglected areas, and that tourism plans should address overcoming

poverty, inequality and unemployment through tourism initiatives

EQUATORIAL GUINEA SIGNS MINING DEAL WITH THREE COMPANIES

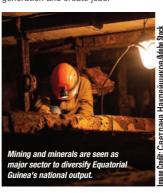
Equatorial Guinea's Ministry of Mines and Hydrocarbons has signed five mining contracts with three different companies, following the conclusion of the country's first mining bidding round last year, EG Ronda 2019.

The agreements include:

One gold exploration contract in Block (I) with Manhattan Mining Investment Co. Three prospecting contracts with Blue Magnolia Ltd in Block (B) for bauxite and precious metals, Block (K) for gold, and Block (H) for gold, uranium, iron, bauxite, basic metals and rare earth minerals.

One prospecting contract with Shefagold in Blocks (N) and (O) for platinum, palladium, silver, chrome, copper, magnesium, phosphorus, iron ore and related minerals.

The move aligns with Equatorial Guinea's Economic Diversification Policy designed by the government following its Second National Economic Conference, and follows the successful approval of the Mining Law by the National Bicameral Parliament. Given Equatorial Guinea's heavy reliance on hydrocarbons to support its economy, mining and minerals are seen as major sector to diversify national output, increase revenue generation and create jobs.





Zambia's economic response to COVID-19

Will structural constraints limit the effectiveness of Zambia's economic response to the COVID-19 pandemic? Twivwe Siwale, policy economist, International Growth Centre (IGC), shares her analysis.



ealth pandemics, like other calamities, are great revealers. Not only do they come at a colossal cost to human life, but often expose and lay bare the structural problems riddling an economy. The COVID-19 pandemic is emblematic of this. It has affected 184 countries around the world with preliminary estimates indicating that it will cost the global economy at least US\$1tn in 2020 alone. The International Monetary Fund (IMF) has already warned that the economic fallout will be worse than the great financial recession of 2008. The IMF has projected that the Zambian economy will experience negative growth this year, shrinking by at least 2.6 per cent. The last time Zambia registered negative GDP growth was more than 20 years ago. The Zambian government is also forecasting a revenue shortfall of 19.7 per cent in 2020. The most harrowing cost will, of course, be the loss of human life.

Infections have only just begun to accelerate on the African continent. At the time of writing, Zambia has recorded 146 confirmed cases and four deaths. What makes this pandemic particularly difficult for countries like Zambia are the structural constraints that already exist in their economies. This analysis explores four of these constraints, and how they are limiting the Zambian government's response to COVID-19 as well as what can be done to relax them.

1. Public debt: One of Zambia's biggest structural problems is a heavy reliance on unsustainable debt. From 2010 to 2018, Zambia's debt increased from a debt-to-GDP ratio of 20 per cent to 78 per cent of GDP (IMF 2019). Even before the COVID-19 crisis, the country was teetering on the brink. The signs of debt distress were already beginning to show with the burden of servicing debt payments exerting pressure on the currency, which from March

2019 to March 2020, lost 24 per cent of its value against the dollar in nominal terms. In the month following the onset of the pandemic, the currency lost another 26 per cent (author's calculations). The onset of the coronavirus, therefore, caught Zambia on the back foot. Not only has the high debt burden limited the options available to the country to respond to the health crisis, but has put Zambia at an even higher risk of debt default. However, there are still options on the table.

Zambia has already started restructuring its debt. Negotiations to defer debt payments are an important option. The China Africa Research Initiative (CARI) estimates that Chinese loans account for about 44 per cent of Zambia's debt, so the negotiating of Chinese infrastructure loans will be particularly important.

The other is to try to access emergency funds that have been made available to poor countries through multilaterals such as the World Bank and the IMF. The longterm solution, though, should be to limit debt contraction and borrow on a sustainable level so as to withstand unexpected crisis such as the COVID-19 pandemic.

2. Poverty and inequality: One in every two Zambians lives below the poverty line, with a substantial percentage living just above it and at risk of slipping into poverty (IMF 2019). Even amidst a period of high economic growth, poverty in Zambia remained high and inequality worsened, revealing a deeply structural problem. Given the policy responses needed to quell the spread of COVID-19 - lockdowns and restrictions on movement - or the pandemic will undoubtedly worsen conditions for the poor.

Social cash transfer schemes have proven to be the most effective tool for poverty alleviation for countries such as Zambia. Of the 8mn Zambians living in poverty, only

700,000 are on a social cash transfer programme. Zambia runs other programmes which have been found to be less effective such as the Farmer Input Support Programme, which in 2020 was allocated 5 per cent of the budget. During periods of disaster, it is often the most vulnerable that are hardest hit and find it the most difficult to recover. What the COIVD-19 pandemic has exposed is the inadequacies of social protection programmes and the urgent need to restructure them. Having a social protection programme that is effective, is vital because of unexpected calamities such as COVID-19.

In the short term, donors who were responsible for financing the initial round of social cash transfers could potentially step in to assist. They have the advantage of already having systems in place. There has also been a call for them to redirect other non-essential funding (to other programmes) to the COVID-19 response. It would be good to focus on such an area. However, in the long run, social protection programmes need to be restructured so that they work for the most vulnerable Zambians.

3. A large informal sector: In Zambia, 90 per cent of the workforce is estimated to work in the informal sector, with the

majority in subsistence agriculture. An IGC census of firms in Lusaka -Zambia's capital – found that 52 per cent of Lusaka's 47,428 firms are informal. This is only counting businesses with a fixed location and excluding traders who operate from makeshift stalls or no stalls at all. Yet, informality is one of the biggest challenges that compounds the response to the COVID-19 pandemic. For the 90% of Zambians working in the informal sector, most of their income is earned on a daily basis. This makes stay-at-home orders and lockdowns difficult to comply with. The IGC firm census reports that these businesses largely fall into the categories of retail, accommodation and food industries, as well as services such as hairdressers - all client-facing enterprises.

What is even more concerning visà-vis the spread of COVID-19, is the high level of firm clustering in the city. While Zambia hasn't gone into a full lockdown, the high level of clustering means stay-at-home orders will be particularly important in containing the spread of the disease. However, these containment measures will mean many individuals' livelihoods will be threatened. At the time of writing, the government had not announced any specific measures targeted at informal sector workers. The tax

measures that have been announced are targeted at VATregistered suppliers and exporters who tend to be larger and more formal firms. Because in Zambia poverty is concentrated in rural areas, this group will most likely not benefit from social cash transfer schemes should they be ramped up. Which means informal sector workers will likely fall through the cracks. Specific measures, therefore, need to be taken to target this group. Offering of food relief in urban centres is one potential option that would limit the need for informal traders to continue operating during this period.

4. Continued reliance on a single commodity prone to global shocks: In many ways, Zambia remains a mono-economy still heavily reliant on copper mining. The mining sector is responsible for 70 per cent of exports, accounts for 70 per cent of foreign currency earnings and 26 per cent of the treasury's revenues. It provides some of the best-paying jobs that support Zambia's emerging middle class. The COVID-19 pandemic has hit commodity prices for base metals such as copper. The price of copper has already fallen by 9.6 per cent this year. This continued dependency on the base metal will exacerbate the crisis in multiple ways. The reduction in

payment of taxes will reduce the revenue available to the government to respond to the crisis. The revenue shortfall risks widening the budget deficit with revenues falling far below the projections in the budget. As a primary source of foreign exchange, the slump in prices has also contributed to the sharp depreciation of the Kwacha. This is, in turn, making it more expensive for the Zambian government to meet its debt obligations.

The mining sector, through the influential mining lobby (the Zambia Chamber of Mines), has already requested for a stimulus package to help cushion the effects of the crisis. But given the multiple challenges the government is facing, there will be more important items on the Zambian government's list of priorities. In the short term, the sector will be one of the primary beneficiaries of the measures the Zambian government has taken to free up liquidity, including the dismantling of arears owed to the private sector. In the long term, this crisis emphasises the importance of diversification from dependency on copper, a stated but often elusive policy goal. Diversification will ensure a multiplicity of sources of foreign currency and revenue. COVID-19 will affect all sections of the economy, but the crisis has accentuated why it is important to take the diversification agenda from paper to practice.

It is important to recognise that the COVID-19 pandemic is first and foremost a health crisis. The focus of the Zambian government is and should continue to be on limiting the effects of the public health crisis, especially the loss of life. The great hope following the COVID-19 pandemic is that Zambia will not default back to the status quo once it is over but will work on relaxing these structural constraints. This will enable the country to better withstand future crisis and deal with them effectively.

Reprinted with kind permission from the IGC. www.theigc.org



Economic health checks for DRC

After an ebola epidemic was declared last year, the Democratic Republic of Congo is making economic adjustments to cope with the added pressure of COVID-19 and a measles vaccination programme. Georgia Lewis reports.



he Democratic Republic of Congo has been dealing with the challenges of containing an ongoing ebola epidemic while simultaneously working to mitigate the spread of COVID-19 and implement a widespread measles vaccination programme. Against this backdrop of multiple public health challenges, the DRC government has taken a range of measures to try and protect the economy.

The challenges, however, are not insignificant. In a blog post for the Institut Montaigne, Eric Ntumba, a corporate and investment banker said the "extroverted nature of the Congolese economy" will affect "precarious balances", and this will be exacerbated by the country importing most consumer products while exporting many raw materials without local processing. Reduced trade with China, in line with reduced demand for Congolese minerals, will also have an effect, Mr Ntumba wrote.

A raft of economic stimulus measures have been introduced, such as decreasing the official interest rate from 9 per cent to 7.5 per cent; offering finance to companies from the Fund for the Promotion of Industry (FPI) at a zero interest rate; granting a grace period on loan repayments; and suspension of the application of late payment penalties on overdue receivables during the COVID-19 pandemic.

To keep supply chains moving, the government has removed police checkpoints and barriers within the

country's borders. Additionally the World Bank approved US\$11.3mn in financing from the International **Development Association to help** DRC meet public health emergencies related to COVID-19; and the International Monetary Fund (IMF)has approved a US\$363.27mn disbursement to help the country meet urgent balance of payments stemming from the pandemic.

"To limit the pandemic's human and economic impact, the authorities have adopted strong measures to contain its spread," said Mitsuhiro Furusawa, deputy

managing director and chair, IMF. "They have also prepared a COVID-19 national response plan aimed at strengthening the medical response. In addition, the central bank has announced some liquidity support measures to mitigate the economic impact of the pandemic."

As well as the economic stimulus measures and assistance from bodies such as the World Bank and IMF, Mr Ntumba recommends pushing the African Union's agenda on the African Continental Free Trade Area (AfCFTA) to make DRC and other African countries less vulnerable to economic shocks in the future.

The mining industry remains vital to the DRC economy and companies have taken measures to deal with the impact of COVID-19. Katanga Mining released its Q1 2020 figures along with a statement about COVID-19. As well as introducing health precautions, such as travel history controls for international



To limit the pandemic's human and economic impact, the DRC authorities have adopted strong measures"

> MITSUHIRO FURUSAWA, DEPUTY MANAGING DIRECTOR AND CHAIR, INTERNATIONAL MONETARY FUND



The 'extroverted' nature of the DRC economy will affect precarious balances, exacerbated by importing many consumer products"

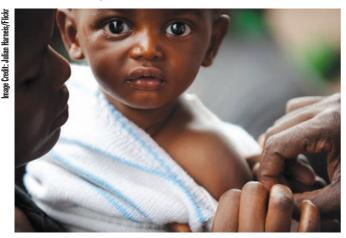
ERIC NTUMBA, CORPORATE AND INVESTMENT BANKER

arrivals and temperature monitoring at its mine site entry points, Katanga demobilised non-essential work towards the end of the first quarter. While an essential cost-saving measure, this will affect the timing of capital expenditure projects. The commissioning of an acid plant has been delayed because commissioning experts have not been able to travel to the site – this is now slated to be commissioned later this year. Cobalt contained in hydroxide production decreased to 5,296 tonnes in Q1 2020 from 6,173 tonnes in Q4 2019.

However, copper cathode production increased to 67,298 tonnes in Q1 2020 from 65,402 tonnes in Q4 2019. Additionally, Katanga has been able to complete permanent modifications to a dryer at a cobalt plant and is expected to complete the modifications to a second dryer this year.

While industries such as mining, oil and agriculture are feeling the impact of COVID-19 in the DRC, there are newer industries which could not only survive but thrive as the country deals with COVID-19 and ebola. For example, the digital money sector has received a boost across multiple African markets as financial institutions urge personal and business customers to use online transactions wherever possible.

In the DRC, Flash, a locally based fintech company, has launched a mobile app along with a prepaid Visa card to assist with improved financial inclusion as well as providing another way for companies to receive payments. Currently, only six per cent of the population use banking services so it is hoped that greater penetration of these sort of products in the DRC market will help unbanked people as well as being a safe, contactless way to conduct transactions.



Health authorities are determined to continue the measles vaccination programme.

Time will tell if these newer parts of the economy, such as the digital money sector, will play an increasingly important role in challenged markets such as the DRC. Such pivots may be essential for economic survival, particularly if the world has to adjust to a "new normal" if the COVID-19 threat remains a constant presence. ■



A dependable supply chain, based on highest quality and maximum efficiency, is a key ingredient for success. We are your dependable partner for transport and logistics solutions.

Spedag Interfreight Ltd. 4132 Muttenz / Basel Switzerland

+41 58 677 77 77

Worldwide Network. Skilled Professionals. Logistics connecting continents. www.spedaginterfreight.com

Infrastructure projects calmly carrying on

The COVID-19 pandemic may have slowed down major projects across the globe, but within the African continent, there are plenty of infrastructure projects continuing apace across multiple sectors. Georgia Lewis reports.



t was inevitable that the COVID-19 pandemic was going to have an impact on the progress of major infrastructure projects around the world, but there is still plenty of good news coming out of Africa in regard to project financing and the progress being made.

Cameroon and Chad are set to receive a major boost to their crossborder infrastructure with financing for a bridge project. The Board of Directors of the African Development Bank Group has approved grants worth €40.94mn for the construction of a bridge to connect Cameroon and Chad across the Logone river. The grants, comprising a €20.785 million tranche for Cameroon and $\varepsilon 19.215$ million for Chad is from the Investment Facility for Africa under a framework agreement between the Bank Group and the European Commission. The funds will cofinance the costs of construction of

the bridge between Yagoua in Cameroon and Bongor in Chad, access roads, as well as seasibility studies. The bridge, once completed, is expected to bolster bilateral and sub-regional integration and facilitate cross-border trade.

Renewable energy projects across Africa have been energised through shared risk financing. Wessel Wessels, head of sales, alternative energy, at NEC XON, explained: "The new model sees solution providers lead with their own equity. essentially willing to put their money where their mouths are. So it

makes sense to create robust maintenance and operations agreements with customers to look after the investment. Customers then procure customer agreements of their own. Add the fact that reinsurers are providing exceptionally good yield cover and the recipe is one that banks and other institutions are very

Mr Wessels added that yield cover for these projects is a "game changer", saying that plant designs that promise a number of kilowatt hours per month but fail to deliver

for reasons such as inclement weather, see shortfalls covered.

"Yield cover is typically charged at 1 per cent of revenues so this really is a no-brainer," he said.

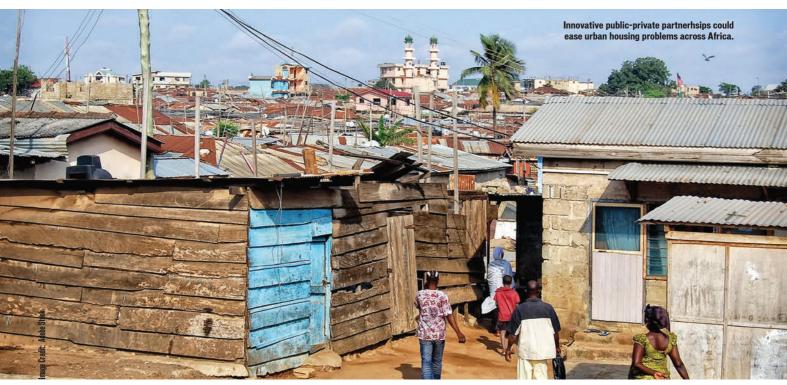
In Equatorial Guinea, the mining industry is in the government's sights as a target for infrastructure investment. With the government earmarking 2020 as the "Year of Investment", the ambitions have not been dimmed by the COVID-19 pandemic. The Ministry of Mines and Hydrocarbons is aggressively promoting major projects in the mining and minerals sectors, including an industrial mining area with a gold refinery. In March this year, the ministry revealed the companies shortlisted for the execution of its landmark projects. South African company Grindstone Resources and Omani company MSS LLC are have been shortlisted for the gold refinery project and the Minerals Industrial Zone. ■

Solution providers who lead with their own equity are essentially willing to put their money where their mouths are."

WESSEL WESSELS. HEAD OF SALES. ALTERNATIVE ENERGY. **NEC XON**

Public-private partnerships as a force for good

Business leaders are playing an increasing role in African projects through public-private partnerships, many of which have social as well as economic benefits, such as projects that can improve urban housing supplies.



he COVID-19 pandemic has brought into sharp focus the need for private companies to be part of the solution to a global crisis. While many African countries have, so far, not suffered the high rate of infections and deaths experienced elsewhere, the economic impact, and resulting social impact, cannot be denied.

Many private companies have responded to the call from governments to offer their assistance during the pandemic, the most prominent perhaps being the work of the Aliko Dangote Foundation on projects such as setting up COVID-19 testing facilities. But beyond the urgent altruistic work, public-private partnerships have the potential to be a win for all stakeholders as good business decisions, examples of prudent government spending - and a benefit to citizens

Victor Oladokun, former communications director at the African Development Bank, shared his ideas on improving housing in Africa's most overcrowded cities in an article in which he makes a strong case for private sector involvement. He said the COVID-19 pandemic has brought the issue of people living in overcrowded, unsanitary housing into sharp focus.

His article calls for "urgent engagement with public, private sector and non-governmental partners to address and resolve

immediate challenges" in the wake of the pandemic. He urges the private sector to work in conjunction with agencies and organisations such as Africa Investment Forum, USAID, DFID, Germany's KfW, the Japan **International Cooperation Agency** (JAICA), and Agence Française de Développement's Proparco.

Mr Oladokun suggested converting low-level agricultural spaces and brownfield sites into residential areas, as well as abandoned or underused commercial buildings,

to create opportunities in the residential construction sector for private companies. He also called for governments to introduce incentives to attract private sector players into housing construction.

"Africa and its diaspora are not lacking in skills, imagination, creativity or talent. What is required are resources, partnerships, and cutting the red tape of bureaucracy and corruption," he wrote. "Ultimately, a re-arrangement of national space, a reimagining of dwellings, a boom in the construction of housing, and the use of sustainable building materials, will have ripple multiplier effects. It will create jobs, enhance skills, improve qualities of life, reinvigorate local economies and incentivise the private sector."

See page 32 for news of a Zambian public-private partnership in the power sector.

Africa and its diaspora are not lacking in skills, imagination, creativity or talent. What is required is partnerships."

> VICTOR OLADOKUN, FORMER COMMUNICATIONS DIRECTOR, AFRICAN DEVELOPMENT BANK

IoT applications set to boom in post-COVID era

With applications across a range of industries, and for use by businesses, government and in the home, Africa has the potential to be at the forefront of IoT use. Georgia Lewis looks at some of the possibilities for the continent.



he Internet of Things (IoT) revolution has improved lives on a global scale. Now Africa has the potential to develop and utilise IoT across a diverse range of sectors, including water management, mining, and accessibility for disabled people.

Smart meters have become an invaluable piece of IoT technology, especially in water-imperilled areas. In South Africa, Jojo, a water tank manufacturer has linked smart meters to its products to help residents, businesses and municipalities monitor consumption and detect leaks. The meters can be checked via a mobile app by Lesira-Teq and users can receive notifications to their phones woth information such as when a tank is full or water levels are running low.

"These smart meters transmit their consumption information. which a user can then be able to access through a mobile app on their smartphone ... It is both a monitoring and management device, placing the power of consumption in the hands of the end-user," says Edwin Sibiya, Lesira-Teq's CEO.

In the mining industry, there is plenty of scope for growth. Research conducted by Inmarsat found geographical variance in IoT adoption across the mining industry in different regions, with 98 per cent of North American respondents having deployed IoT projects, compared with 50 per cent in Africa and 38 per cent in South America.

There are many challenges to overcome if the mining industry is particularly in regard to using it as driver for organisational change. A cybersecurity processes and

to fully realise the potential of IoT, lack of skills, investment and cultural challenges, as well as unreliable connectivity, patchy underdeveloped data management processes were highlighted in the report and will all need to be remedied in the coming years. Despite the challenges being faced, the study found mining companies

Joe Carr, global mining Ddrector at Inmarsat said: "Two years on from our last research, Inmarsat wanted to get a measure of what had changed in the mining industry ... What we discovered was an industry that,

are looking to increase their

deliver in the future.

investment in IoT and are positive

about the value IoT can bring and

the benefits it is delivering or will

historically slow to adopt radical ideas, is now beginning to embrace the use of IoT, but still working out how to make the most of it."

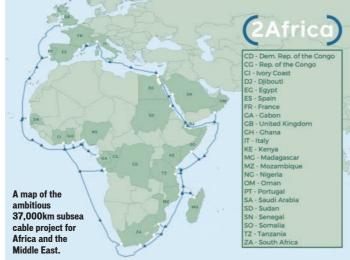
Innovate Now, Africa's first assistive technology accelerator, meanwhile, has launched Cohort 2.0 to fund technology for people with disabilities. One entry is from Toto SCI, a startup that has developed AlexCane. It is a smart stick that incorporates IoT technology to help blind people share their location, request help or connect with other users at the touch of a button.

Mining is an industry which was historically slow to adopt radical ideas. It is now beginning to embrace IoT but still working out how to make the most of it."

JOE CARR, GLOBAL MINING DIRECTOR, INMARSAT

Nine companies partner up on mega subsea cable project for Africa and the Middle East

China Mobile International, Facebook, MTN GlobalConnect, Orange, stc, Telecom Egypt, Vodafone and WIOCC will partner to build 2Africa, which is slated to be the most comprehensive subsea cable to serve the African continent and Middle East region. Alcatel **Submarine Networks** (ASN) has been appointed by the stakeholders to build



the cable in a fully funded project to enhance connectivity across Africa and the Middle East.

At 37,000km long, 2Africa will be one of the world's largest subsea cable projects and will interconnect Europe (eastward via Egypt), the Middle East (via Saudi Arabia), and have 21 landings in 16 countries in Africa. The system is planned to go live in 2023-24, delivering more than the total combined capacity of all subsea cables serving Africa today, with a design capacity of up to 180Tbps on strategic parts of the system.

2Africa is expected to deliver much needed internet capacity and reliability across large parts of Africa, supplement the fast-growing capacity demand in the Middle East and underpin the further growth of 4G, 5G and fixed broadband access for hundreds of millions of people.

In countries where the cable will land, service providers will obtain capacity in carrier-neutral data centres or open-access cable landing stations on a fair and equitable basis. The aim is to support healthy internet ecosystem development by facilitating accessibility for businesses and consumers.

DAT LAUNCHES ORDER AND DELIVERY APP

Digital Afrique Telecom (DAT) has launched an application aimed to streamline the order-taking and delivery process for businesses. This delivery application allows customers to place orders based on the available stock and select its date and place of delivery, with the option of controlling order status in real time. The app has been designed to help companies now save time and money when it comes to generating extra business with a delivery service. DAT has connected its application to a WhatsApp chatbot where customers can place an order following the steps dictated by the automated WhatsApp account. A QR code is generated at the end of the order and linked to the app automatically to trigger the order.

Simplice Anoh, founder and CEO of DAT, commented: "The Smart delivery app is bringing together customers and businesses on a whole new level of delivery service experience. Consumers can remain safe at home in these critical times and receive their order while businesses keep track of their sales objectives"

GENESYS AND ZOOM JOIN THE SAME ROOM

Genesys, the cloud customer experience and contact centre solutions company, will be joining forces with Zoom Video Communications to make it easier for teams to work together more efficiently.

New integrations for Genesys Cloud with Zoom Phone and Zoom Meetings will enable organisations to power their entire enterprise communications strategy and improve collaboration across the business. Genesys is the first partner to provide integrations to both Zoom solutions.

Genesys and Zoom customers, Company Nurse and Sentinel Benefits and Financial Group, have sppken about the benefits they expect from this collaboration.

Henry Svendblad, chief technology officer for Company Nurse, a triage and injury reporting service for workplace injuries, said, "Our employees already use both solutions today, and a closer integration means they'll be able to work together easier, such as initiating a Zoom video meeting from within their Genesys Cloud. As we expand our tele-triage capabilities, we are excited to be one of the first to take advantage of these new features."

Douglas Walker, vice president and director of Infrastructure Services at Sentinel, a provider of financial planning and investment products and solutions, said, "Our employees are constantly flipping from one application to another to communicate and collaborate. Integrating the solutions will give our call centre agents the ability to use all Genesys Cloudeatures while connecting more easily with the rest of the company that uses Zoom technology. We believe this will help us resolve customer issues faster and on the first contact."

To accelerate adoption, the companies have a joint go-to-market strategy. Full availability for the integrations is expected during the second quarter of 2020.

BRIEFS



The app will send contact alerts.

Virus-tracing app for Tunisia

Tunisia has launched a contact-tracing mobile phone app that identifies and alerts users who may have had contact with others infected with COVID-19. The application was developed by a Tunisian start-up specialising in digital marketing tools for foreign companies, the health ministry told AFP. If a user tests positive for COVID-19. Tunisia's Observatory of Emerging Diseases contacts other users whose phones have been detected close to the infected user's device.

Somalia: Data kit solution tracks COVID-19 cases

Somalian health workers who identify suspected COVID-19 cases are automatically



Data is helping Somalian regions.

relaying information on location to rapid response teams using open data kit - an open source software for collecting, managing and using data in resource-constrained environments. This has been used in Somalia ifor polio and cholera surveillance using mobile devices. The submission of data to a server is performed when internet connectivity is available so rapid action can be taken.

First phase of Tema Port Expansion Project completed ahead of schedule

On 30 April 2020, Meridian Port Services Limited (MPS) successfully completed the Phase 1 works of the Tema Port Expansion Project in Ghana (also known as Terminal 3 of Tema Port), designed to make it the leading trade and logistics hub in West Africa. The extension project, which is managed by MPS, will expand the capacity of the port almost fourfold to 3.7mn TEU, to enable it to cope with increased flows of maritime



traffic. MPS is a joint venture between Ghana Ports and Harbours Authority (30 per cent), APM Terminals (35 per cent) and Bolloré Transport and Logistics (35 per cent).

As per the terms of the concession, MPS Terminal 3 was expected to go live on 28 June 2019 on two berths, and the entire Phase 1 works were due to be completed on 28 June 2020. Both completion dates were successfully achieved and works were completed ahead of schedule. The combination of a great team work, solid project finance and determined shareholders were among the main contributors to the success in delivering the mega infrastructure ahead of the contractual date in three and a half years, according to the company.

The Phase 1 scope of works included building a 1,000m long wharf which consists of three berths and 98 ha terminal facility on land reclaimed from the sea with all drainage, sewage, water, fire, electrical and IT services, 45 million paving blocks laid down, a 12 MW back-up power station, major facilities including administration buildings, a maintenance workshop, a 60 bay unstuffing shed for Customs, six scanners, gate facilities, a fire plant, sewage treatment facilities and 1,400 reefer container plugs.

"Since the Go-Live of Terminal 3 in July 2019, we have witnessed a steady increase in productivity and flow of container traffic with the implementation of the highly efficient integrated systems and operational processes which has created huge benefits for freight forwarders, shipping lines, importers, exporters and most importantly creating the safe environment and providing sophisticated tools and technology in the hands of respective authorities to enable them to effectively safeguard the state revenue and ensure border security," said the company.

NIMASA EXTENDS TRADING CERTIFICATION FOR **ALL NIGERIAN REGISTERED VESSELS**

The Nigerian Maritime Administration and Safety Agency (NIMASA) has extended the validity of statutory and trading certificates for all Nigerian registered vessels

Director-general of NIMASA, Dr Bashir Jamoh said that it was necessary to ensure uninterrupted shipping, despite the COVID-19 pandemic, stressing that shipping is one of the major ways of moving medical aid across the globe.

He said, "One of our major priorities is to keep our seafarers in job while not jeopardising their safety in terms of contracting the deadly virus. We have, therefore, come up with a notice that would extend the validity of their certificates, for those of them that might be expiring soon. We have also issued guidelines that would regulate crew change during this pandemic."

ADDRESSING CROSS-BORDER CHALLENGES

Continued free movement of goods and the management of cross-border spread of COVID-19 were discussed at the meeting of the East African Community (EAC) Heads of State and Government in May.

In the virtual meeting convened by President Paul Kagame of Rwanda, the current EAC chairperson, the leaders agreed to prioritise the implementation of measures that will ensure uninterrupted cross-border movement of goods even as the region continues to battle COVID-19

The leaders, who included Presidents Uhuru Kenyatta (Kenya), Yoweri Museveni (Uganda) and Salva Kiir Mayardit (South Sudan), acknowledged the challenge posed by cross-border trade in the fight against coronavirus, especially the emergence of truck drivers as a high risk carrier population.

The heads of state tasked their respective agencies responsible for health, transport and EAC affairs to roll out border screening and testing measures especially for truck drivers that do not compromise cross-border movement of goods.

President Uhuru Kenyatta emphasised the need for collective EAC interventions against the global COVID-19 pandemic.

"A unified stand is what we need to combat this pandemic in the region," he said, adding that contact tracing had helped Kenya to isolate and treat those infected by the virus. "We continue to actively enforce contact tracing which has proved to be very effective in identifying those who have come into contact with infected persons," he added.

The heads of state expressed satisfaction with measures taken so far by regional governments in managing COVID-19 and thanked the EAC Secretariat as well as the Council of Ministers for ensuring the region is able to minimise cross-border spread of the virus while ensuring uninterrupted movement of goods.

BRIEFS

Morocco's port activity up

Morocco's port activity Increased by 6.3 per cent in the first four months of 2020,

Madi

port activity was up 6.3 p cent in the first four months of 2020.

according to a report in Morocco World News, despite the COVID-19 pandemic. Marked increases were recorded in imports of cereals (up 36 per cent) and exports of fertilisers (up 63 per cent).

"The port community has shown an unprecedented commitment to ensure the transit of goods and the continuity of foreign trade," said the National Port Agency (ANP).

Nigeria's airspace stays closed into June

The Nigerian Government has extended closure of airspace and airports across the country by four weeks. Secretary to the Federal Government, Boss Mustapha

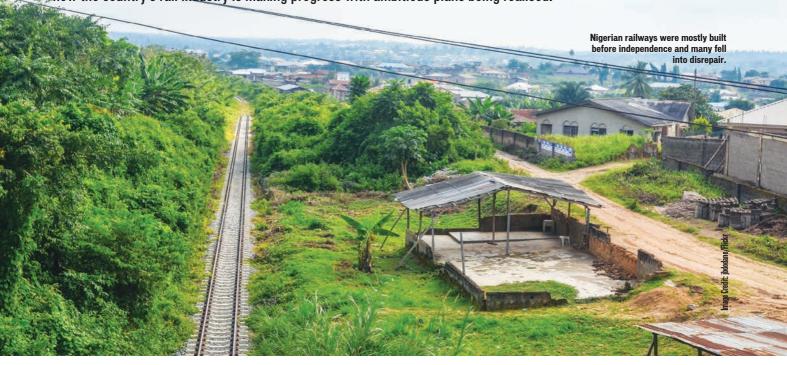


The ban on all flights has been extended for a further four weeks.

announced this on 6 May during the briefing of the Presidential Task Force on COVID-19. He said, "We have assessed the situation in the aviation industry and have come to the conclusion that given the facts available to us and based on the advice of experts, the ban on all flights will be extended for an additional four weeks."

Nigeria's railways back on track

Chinese contractors are keeping busy rolling out Nigeria's new railway infrastructure. Martin Clark takes a look at how the country's rail industry is making progress with ambitious plans being realised.



he railway sector has struggled like all others during the pandemic. It prompted the Nigerian Railway Corporation (NRC) to halt all passenger transport in March in a bid to curb the virus. A month later, it was sterilising railway compounds and stations, starting from its Lagos headquarters. The disinfection of stock is planned as the corporation gears up to resume operations. The development of the railways sector remains integral to Nigeria's longterm growth. Africa's most populous nation has long been hampered by its dilapidated rail network, built mainly by British colonial rulers before independence in 1960.

But the COVID-19 outbreak has not derailed ambitious rail construction plans, bankrolled by Chinese loans. Chinese contractors, notably China Civil Engineering Construction Corporation (CCECC). have taken a lead role in rolling out new infrastructure to modernise the sector. At the end of March, the company had completed track laying along the 156km stretch of new standard-gauge line between Lagos and Ibadan.

CCECC tweeted: "A stunning victory! The track-laying work on the main line for the Lagos-Ibadan railway has been completed at 12:08pm on 28 March. This marks the fact the railway is getting one step closer to opening to traffic."

It is quite an accomplishment given the difficult circumstances. As well as the outbreak in Nigeria.

engineers and workers from the Chinese companies had to face issues in China, where it is widely believed the virus originated.

The aim is to link the southern commercial hub and ports of Lagos with existing and planned industrial sites in in the interior, including a proposed Ibadan dry port. Work began on the line in 2017, with the first section, between Iju, on the northern outskirts of Lagos, and Abeokuta, unveiled early last year. Ultimately, it will form part of a longer route to Kaduna in the northcentral region. This will connect with CCECC's first Nigerian railroad project, between Kaduna and the capital Abuja, inaugurated in 2016.

But the projects have faced criticism as to their viability, with local media speculating that Chinese loans could take generations to repay, citing the 2016 opening of the Abuja to Kaduna line which is reportedly yet to turn a profit.

In the wake of the coronavirus spread, CCECC helped set up of a 300-bed treatment hospital in Abuja and the supply of equipment, including face masks. It is a move that will no doubt support its drive to consolidate its presence in Nigeria's railways sector. As well as modernising the network, it is building the country's first rolling stock assembly plant in the state of Ogun. The plant will be able to produce 500 wagons per year and undertake processes such as welding, assembly, painting, drying and testing.

The track-laying work on the main line for the Lagos-Ibadan railway has been completed ... the railway is getting one step closer to opening to traffic."

A TWEET FROM THE CCECC ACCOUNT IN MARCH 2020

Storage sector looking strong

The warehousing and storage sector may take a hit in the wake of the COVID-19 pandemic, but the good news is that it is set to rebound on the strength of Africa's underlying long-term potential. Martin Clark reports.



aking predictions in the midst of a global pandemic is always going to be fraught with difficulty. There is consensus, however, that the world's economy is going to take a big hit as a result of lockdowns and weak demand. The International Monetary Fund (IMF) reckons we are in for the worst recession since the Great Depression a century ago. In its April World Economic Outlook, the IMF projects global growth in 2020 will fall to minus 3 per cent; that's a downgrade of 6.3 percentage points since January 2020 - a pretty steep fall in just a few months.

"This is a crisis like no other," the IMF reported in an April 14 update.

Any knock-on effects arising from the COVID-19 pandemic will certainly hit Africa's warehousing and storage market too. Still, perhaps the industry is better placed than some other sectors, given its integral role in facilitating trade across all areas of the economy,

from oil and gas products through to consumer goods and home deliveries. This, remember, was an industry experiencing strong growth prior to the pandemic, driven by Africa's own long-term economic fundamentals and potential.

Experts still expect the logistics industry to enter a global recession this year, though not all markets will be equally affected, as illustrated by the 2020 Agility Emerging Markets Logistics Index.

"The fears of a recession are not to be taken lightly, especially

because of uncertainty about the impact of the Coronavirus outbreak," noted Essa Al-Saleh, chief executive of Agility Global Logistics. "A positive sign, however, is that a large number of emerging markets economies were able to weather an array of issues – political and social unrest, structural problems, even international sanctions for some without losing much ground in the

While there are no countries in its top 10 emerging markets list, it is strongly supportive of developments in Egypt's logistics sector, a country that has soared to number 20 in the rankings based on a range of factors.

"Structural reforms have addressed many entrenched issues and helped stabilise the economy, laying the groundwork for growth and robust private-sector participation," the report notes.

At the other end of the continent, the effects of the outbreak are being felt in South Africa. One report, Cargo Handling, Storage and Warehousing in South Africa 2020, which focuses predominantly on port operations and air cargo, identifies some of the challenges.

"South Africa's cargo sector is directly affected by the restrictions in place to contain the spread of coronavirus and it will feel the effect the pandemic will have on the economy," the report states. "Coronavirus has led to reduced transport services and port entries, although ports remained open during the lockdown and the

A large number of emerging markets were able to weather an array of issues, even international sanctions for some, without losing much ground in the past year."

ESSA AL-SALEH, CHIEF EXECUTIVE, AGILITY GLOBAL LOGISTICS

transportation of essential and nonessential air cargo was allowed."

About 80 per cent of South Africa's international trade is moved by sea through state operator Transnet's ports in the form of containers, dry bulk, liquid bulk, break-bulk and automotives. Airfreight accounts for just a small percentage of total freight moved.

Before COVID-19

Prior to the pandemic, as economic momentum gathered steam, there were plenty of reasons for optimism. In February, Bolloré Logistics launched from Djibouti the first unimodal train fully loaded with 102 TEUs (tonne equivalent units) bound for Indode Station in Ethiopia. The cargo was the first containerised consignment to be transported exclusively on rail from Djibouti to Ethiopia.

It marked a new era for the regional supply chain, arising out of improved transport links. The Ethio-Djibouti Railway (EDR) is an electronically powered standard gauge railway which cuts transit time between the two countries to 15 hours compared with road transport which can take around three days.

Before the crisis, Bolloré Logistics was proposing a weekly departure from Djibouti to Indode to provide customers with a faster service through an agreement with EDR.

East Africa was generally scoring well all round in terms of improved transport links and logistics infrastructure, sparking fresh investment in warehousing, storage and supply solutions.

In September last year, another research report, Kenya Logistics and Warehousing Market Outlook to 2023, suggested this market would be worth some US\$5bn in three years time, growing annually at about 11.7 per cent.

The report highlighted new international trade agreements boosting intra-African trade notably the African Continental Free Trade Agreement – plus a booming horticulture industry, and advances in technology such as GPS tracking,



as major drivers responsible for the growth.

Some of these technologies, though standard in many Western companies, still have untapped potential in Kenya, it noted.

Other upcoming technologies include real-time cargomanagement systems and communication and information systems such as EDI, which can be used to reduce paperwork and minimise the time taken for compliance procedures. The report expects the recent growth of industrial parks and modern warehousing complexes in Kenya to drive take up for these and other technologies, including the use of drones, robots and cloud technology.

On the other side of the continent, Nigeria too has been rolling out new warehousing and storage facilities in response to the demands of a thriving economy. A separate report last year predicted that the country could expand its manufacturing sector – a major strategic directive of the government - by building more industrial parks in and around Lagos.

Huge investment is already going into new facilities, including solarpowered cold storage centres in Kano state, in the north, to boost output and revenues from the agricultural sector. The potential is there for more, though the pandemic casts a long shadow over

how things will pan out not just in 2020, but for the foreseeable future.

Business activity

And yet it is not hard to find evidence of companies hungry to expand even in the current unsettled climate.

Among them is South African freight management group, Imperial Logistics, listed on the Johannesburg Stock Exchange, which – albeit before the pandemic took hold - raised its stake in MDS Logistics, a subsidiary of UAC of Nigeria, a measure of its confidence in the West African country's enduring potential.

Through its network of warehousing and distribution assets, MDS links manufacturers with customers in more than 400 cities and villages across Nigeria. It is a vital supply chain partner to some of the country's leading corporates. "We consider Nigeria to be a strategically important market," commented Johan Truter of Imperial Logistics.

MDS Logistics also plays a critical role in the nation's healthcare storage service, with a deal to provided medical warehouse facilities in Abuja and Lagos on behalf of the government.

Among the international players advancing in Africa is Agility, which has a strong presence in Nigeria and is expanding its position in many other markets.

Agility Africa's chief executive Geoffrey White said at the World **Economic Forum in Cape Town last** September that his company is building a network that will allow customers to move goods from one country to another - but it is a longterm project.

"Africa isn't a quick-win investment scenario. It's a 10-, 20year sustainable roll-out of significant funds, building real infrastructure that's aligned with the growth of the continent."

Behind this vision are landmark developments such as the May 2019 launch of the AfCFTA, creating a single market of 1.3 billion people. This is forecast to grow to an estimated 2.5 billion by 2050, the majority under 25, and with an appetite for fast-moving consumer goods. This alone is expected to massively drive intra-regional trade and the underlying demand for more warehousing space.

Even in the face of the pandemic, efforts are ongoing to bolster storage infrastructure to ready markets for this anticipated wave of growth. Africa Logistics Properties (ALP) is continuing construction work on-site at its new Tilisi logistical park in Kenya, near Nairobi. The company has put in place safety measures to ensure that work continues on the development, despite the outbreak. It expects to complete work next year, providing a state-of-the-art warehousing and logistics facility, with more than half of all space already taken by clients.

Concerns raised about transformation plans for South African air transport sector

The Portfolio Committee on Transport met via video conferencing with the Airports Company of South Africa (Acsa) and the South African Civil Aviation Authority (SACAA), for the two entities to present their strategic and annual performance plans. During the meeting, the deputy minister of transport, Dikeledi Magadz told the committee that the entities' plans were outdated, as they were prepared before the COVID-19



outbreak, which has since brought the South African aviation industry to a standstill.

She said the department and its entities were in the process of reviewing the plans to respond to the global pandemic and map a "way forward which should get back the industry to its glorious days and ensure that it contributes to rebuilding the South African economy".

The portfolio committee welcomed the presentations but raised a few concerns, especially in the area of supply-chain management, and urged the entities to tighten their systems to avoid unauthorised and irregular expenditure. Members of the committees were particularly concerned about what they termed "lack of transformation" in the aviation industry, where the majority of pilots and cabin crew were white.

Some members called this situation a worrying factor and called for action to address this. One suggestion was to reduce the fees for pilot training, which would make it more accessible.

"Continue to bring hope to our people, bring hegemony by empowering those who have not been empowered. We understand the challenges of COVID-19, but the issue of transformation needs to be addressed urgently," said committee chairperson Mosebenzi Zwane.

The committee welcomed reports from Acsa that the company's airports were ready for level 3 of the lockdown, where limited domestic flights will be allowed to operate as part of South Africa's plans to gradually reopen the economy.

VIRUS IMPACT FELT ACROSS GLOBAL LOGISTICS

The global logistics industry had a turbulent 2019, registering 1.2 per cent in merchandise trade volume growth due to the stagnant global economy, trade disputes, geopolitical uncertainties, and environmental regulations, according to research by Frost & Sullivan. In Q1, 2020, the COVID-19 outbreak flipped the growth switch in every area of the economy, and the global supply chain is no exception. The container movement in the trans-Atlantic and trans-Pacific trade lanes has contracted due to the COVID-19 crisis with China's manufacturing shutdown and sudden recession conditions in North America and Europe. The backlog of orders, port calls, and blank sailings have escalated volume pressures on the containerised supply chain. The pandemic has created a supply shock across the markets worldwide, causing severe supply chain disruption. Factors such as closed borders, workforce shortages, and a slowdown in global manufacturing have contributed to the impact on the logistics industry, the report found.

ASECNA MAKES STEPS FORWARD IN SAFETY

In a project that has the potential to transform air transport safety and efficiency in Africa and beyond, a study by the Agency for Air Navigation Safety in Africa and Madagascar (ASECNA) on satellite navigation services provision in the Africa and Indian Ocean region has made major progress.

The definition study for the satellite-based augmentation system "SBAS for Africa and Indian Ocean" has reached the stage of validation for the system's architecture and geographic coverage.

The ASECNA programme, which is being run in conjunction with Thales Alenia Space with funding from the European Union, is based on the European EGNOS programme. In line with the ASECNA's strategic plan, this programme aims to enhance navigation and surveillance operations for all phases of flight, to achieve sustainable improvement in flight safety and efficiency over Africa.

Planned from 2022, these services will be used to augment the positioning accuracy provided by current satellite navigation constellations, including GPS and Galileo.

The new system will improve accuracy to within a metre, while boosting the integrity, availability and continuity of safety-related applications. In addition to aviation, the programme will benefit land, sea and rail transport in a changing environment, as a means of supporting user safety, costeffectiveness and sustainable development.

In addition to defining the system's architecture to support these SBAS services, the study will provide ASECNA and its member states a clear view of the development, deployment and operation of the SBAS for Africa and the Indian Ocean.

The study is slated for completion by the end of the year, with the provision of a preoperational service, along with field demonstrations of how to use the service in conjunction with partner airlines.

BRIEFS



Cargo is the focus for aviation.

IATA: Slow air recovery tipped

The International Air Transport Association (IATA) has released analysis indicating the extent to which the air travel sector has been affected by the coronavirus, which has extended into the medium term with long and international flights significantly affected, while quarantine restrictions may damage passengers' confidence. The analysis suggests that a unified, multi-level global approach based on risk assessment in biosecurity is a major factor in the re-employment of the sector.



Roadside towns can be protected.

Bolloré's Uganda rail plan

Bolloré Transport & Logistics has launched a rail service for export cargo from Mombasa to Uganda n a bid to reduce the spread of COVID-19. The first train loaded with 64 TEUs of cargo consigned to clients of Bolloré Transport & Logistics was received at Naivasha in early May. By using rail to transport cargo to Naivasha, the company hopes to limit exposure of long-distance drivers to the virus, and protect residents in towns along the A104 highway between Mombasa and Naivasha.

MYTILINEOS has proven its commitment to clean energy and innovative technologies for sustainability. Looking up to a green future for all, the company invested in solar solutions from photovoltaic panels to storage systems.

ith the full acquisition of subsidiary METKA EGN, MYTILINEOS, true to its long-term strategy, expanded its core business and created a new business unit, International Renewables and Storage Development (RSD). That was a major step towards the strategic focus of MYTILINEOS in the global solar and storage market. Capitalising on the vast expertise of METKA EGN which is already established as one of the largest Solar PV and energy storage developers, EPC and O&M contractors worldwide, the new BU is expected to become a strong pillar of growth while providing inherent synergies for the company.

With the full acquisition of subsidiary METKA EGN, MYTILINEOS, true to its long-term strategy, expanded its core business and created a new business unit, International Renewables and Storage Development (RSD). That was a major step towards the strategic focus of MYTILINEOS in the global Solar and Storage market. Capitalising on the vast expertise of METKA EGN which is already established as one of the largest Solar PV and energy storage developers, EPC and O&M contractors worldwide, the new BU



is expected to become a strong pillar of growth while providing inherent synergies for the Company.

Specifically, on storage development, opportunities arise to those who are bold enough to catch them. As technological developments take place every day, the RSD Business Unit is developing a number of storage projects worldwide, both on the grid and offthe-grid. Through the years, the company managed to be considered as a pioneer in the implementation of battery storage technology, either integrated with solar systems or applied independently aiming grid control applications.

The company provides large-scale battery-based energy storage solutions, both integrated with solar PV plant and stand-alone.

Apart from the ability to store and deliver energy on demand, the responsiveness of battery systems makes them ideal to provide network operators with innovative solutions for frequency response which help to stabilise electricity grids.

One of its exceptional projects is nonetheless the one at the ADAM oil concession in the Tataouine governorate of Tunisia. It is a 5,5MW Hybrid project that METKA EGN undertook on behalf of ENI Tunisia BV in partnership with the national company, Entreprise Tunisienne d'Activités Pétrolières (ETAP).

This complex project includes design and implementation of an off grid operational configuration of a PV and storage system, Fixed Hybrid plant with associated underground



MYTILINEOS

line infrastructure to inject produced power directly into the Client's Grid. The energy produced has a maximum capacity of 5MW of solar power combined with a 2.2 MWp/1.5MWh storage battery system.

Construction of the project commenced in Q3 2019 and on 13 February 2020, it was connected to the existing grid of ENI's Tunisia premises in the Oued Zar concession in the south of Tataouine Governorship via a new 2,5KM underground line.

The battery storage system that consists of the battery controller/rectifier and the battery banks, integrated with existing gas turbines in an off-grid set-up. The energy produced will be consumed on-site, enabling the upstream operations to significantly reduce gas consumption and therefore avoiding 6,500 tonnes/year of CO2 equivalent emissions.

As installed Solar PV capacity globally is expected to significantly grow in the years to come, **MYTILINEOS** with solid capabilities across the Solar projects lifecycle coupled with the required liquidity is well positioned to capitalise in this growing market for both third party construction as well as through its own solar development platform (BOT).



Clean Technology Fund extends loan for Ethiopia geothermal power plant

The Clean Technology Fund (CTF), one of two funds within the Climate Investment Funds (CIF), for which the African Development Bank (AfDB) is an implementing agency, has approved a US\$10mn concessional senior loan for development of the 50 MW Tulu Moyo geothermal power plant project in Ethiopia.

The project is seen as a critical step to the East African country's drive to harness sustainable and



resilient energy resources to support its economy and livelihoods. With this investment, CTF becomes the first progressive geothermal Independent Power Producer (IPP) in Ethiopia.

"We welcome the participation of CTF in this project. This concessional resource will be instrumental in helping the country to diversify its energy mix by facilitating the deployment of renewable energy technologies while supporting Ethiopia in meeting the targets under its National Electrification Plan 2.0," said Anthony Nyong, director of climate change and green growth at the AfDB.

The project entails the design, construction, commissioning and operation of a 50 MW geothermal power plant under a build, own, operate and transfer (BOOT) scheme, and marks the first phase of the Ethiopian government's plan to build cumulative generation capacity of 150 MW by 2024. The project will include a sub-station and an 11 km transmission line.

Antony Karembu, principal investment officer and renewable energy specialist at the AfDB, said the project is expected to curb greenhouse gas emissions by more than 10mn tonnes CO2 equivalent over its lifetime, and will create around 600 jobs.

CTF will catalyse the deployment of renewable energy technologies in Ethiopia and will underpin future investments into the sector as first-mover risks are reduced and compliance requirements are better understood to all market participants, Leandro Azevedo, principal climate finance officer and CIF coordinator at the AfDB, stated.

The CTF funds will be drawn from the Dedicated Private Sector Program III designed to provide riskappropriate financing for high-impact, large-scale private sector projects in clean technologies.

ZAMBIA HEADS FOR POWER SURPLUS

Zambia's Itezhi-Tezhi hydropower dam has increased the country's power generation capacity by 7.5 per cent, according to a report in Africa Oil & Power, resulting in 50,000 more residents having access to electricity.

According to the African Development Bank (AfDB), the 120-megawatt plant became operational in 2016 and cost US\$375mn. The plant is the first public-private partnership project in the Zambian energy sector and initially provided electricity to 17 million people.

The AfDB contributed US\$55mn to the plant, which is part of the bank's Light Up and Power Africa initiative. Additional funding for the plant was received from international donors including the Netherlands Development Finance Company, the Development Bank of South Africa and Proparco France.

Zambia is self-sufficient in power and is on course to record an energy surplus by 2022.

RENEWABLE GROWTH GOES ON DESPITE COVID-19

In 2020, the world is set to add 167GW of renewable power capacity this year, 13 per cent less than in 2019, according to the IEA's Renewable Market Update report.

However, growth is expected to resume next year as most delayed projects come online, assuming a continuation of supportive policies. Despite the slowdown in new additions, overall global renewable power capacity still grows by six per cent in 2020, surpassing the total power capacity of North America and Europe combined.

In 2021, renewable additions are forecast to rebound to the level reached in 2019, with significant support coming from the partial commissioning of two mega hydropower projects in China. But despite the rebound, growth for 2020 and 2021 combined is expected to be 10 per cent lower than the IEA had previously forecast before the pandemic. Almost all mature markets are affected by downward revisions, except the USA where investors are rushing to finish projects before tax credits expire. After exceptional growth last year, Europe's new additions are set to fall by one-third in 2020. A partial recovery is expected next year.

"The resilience of renewable electricity to the impacts of the COVID-19 crisis is good news but cannot be taken for granted," said Dr Fatih Birol, IEA's executive director. "Countries are continuing to build new wind turbines and solar plants, but at a much slower pace. Even before the COVID-19 pandemic struck, the world needed to significantly accelerate the deployment of renewables to have a chance of meeting its energy and climate goals. Amid today's extraordinary health and economic challenges, governments must not lose sight of the essential task of stepping up clean energy transitions to enable us to emerge from the crisis on a secure and sustainable path."

BRIEFS



Silk Road Fund will be a partner in **ACWA Power Renewable Energy**

New partnership launched

ACWA Power has announced the completion of the transaction to introduce Silk Road Fund as a partner and a 49 per cent shareholder in ACWA Power Renewable Energy Holding Ltd (ACWA Power RenewCo). ACWA Power RenewCo is ACWA Power's renewable energy platform which owns ACWA Power's concentrated solar power. photovoltaic solar, and wind assets across the UAE, South Africa, Jordan, Egypt and Morocco, yielding an aggregate power capacity of 1668 MW.



The commission will make recommendations on advancing energy efficiency

Advancing energy efficiency

The Global Commission for Urgent Action on Energy Efficiency held a virtual meeting in April to discuss the vital role that energy efficiency can play in improving the effectiveness of stimulus packages that governments are developing in response to the COVID-19 crisis while ensuring long-term improvements in energy systems. The Commission will publish its recommendations in late June on how governments can accelerate energy efficiency progress through policy action.

Shifting the focus to renewable energy

Louise Waters reports on how the global pandemic could catalyse renewable energy development in southern Africa.



he southern Africa region has abundant renewable energy potential, with some of the highest solar radiation levels in the world. Advances in renewable energy technologies and accompanying cost reductions mean that the large-scale development of renewable energy now offers Africa a cost-effective path to sustainable and equitable growth, says the International Energy Agency (IEA).

A number of factors have hampered the region in realising its renewable potential, such as limited access to finance, underdeveloped grids and infrastructure, unstable off-taker financial arrangements and, in many countries, an uncertain policy environment.

These factors have been compounded by the impact of the COVID-19 pandemic, which according to the International Energy Agency (IEA), is 'hurting but not halting' global growth in renewable power capacity, although it forecasts a recovery in 2021. The agency highlights delays in construction activity due to supply chain disruptions, lockdown measures and social distancing guidelines, as well as emerging financial challenges. In southern Africa, it has had a particularly damaging financial impact on small-

scale operators of minigrids, microgrids and companies that sell pay-as-you-go solar home systems, which are playing an increasing role in bringing electricity to isolated communities, facilitated by digital technologies and payment tools.

However, there are hopes that the pandemic could catalyse renewable energy development in the longer term, as policymakers are urged to put renewables at the heart of post-COVID-19 stimulus packages.

"Expanding access to electricity through a bold expansion of 'ongrid' and 'off-grid' renewable energy is a major opportunity in the context of national stimulus and recovery programmes," said UNDP administrator Achim Steiner. "They are economic, fast, shovel-ready options to address energy poverty and accelerate Africa's transition towards a clean energy economy of the 21st century."

He was speaking at a virtual meeting hosted by the Africa Union Commission and IRENA to discuss Africa's needs in response to COVID-19 and energy transition as part of the post-pandemic recovery.

Country developments

South Africa continues to lead the field in southern Africa's renewable energy development, with its enabling environment being a significant factor. Through its Renewable Energy Independent **Power Producer Procurement** Programme (REIPPPP), involving competitive tendering, more than 6.4 GW of capacity were awarded to more than 90 projects between 2011 and 2018. It is a model that other countries in the region are looking

The country is home to some of the largest solar plants in Africa, such as the Xina Solar 100 MW solar plant

near Pofadder, Northern Cape province, the first commercially operated solar thermal electricity power plant in South Africa; and the 100MW Kathu solar CSP project in Kathu, Northern Cape, which started operations in early 2019. The project integrates parabolic trough and molten salt storage technology, ensuring 4.5 hours of thermal energy storage. While in the wind sector, notable projects include the Loeiresfotein and Khobab Wind farms, both 140MW, which were commissioned in 2017.

Before COVID-19 hit, renewable energy development was set to accelerate with the launch in October 2019 of the Integrated Resource Plan 2019 (IRP) which, while acknowledging the significant role coal will continue to play in the energy mix, envisages a pronounced shift towards wind and solar. It aims for the installation of 6GW of solar and a whopping 14.4GW of wind as well as 2,500MW from hydropower up to 2030.

The plan envisages the expansion of the nuclear programme and the extension of the life of the Koeberg nuclear power station, due to expire in 2024. A Roadmap is now being prepared which will consider various options, including small modular reactor (SMR) projects led

Expanding access to electricity through a bold expansion of renewable energy is a major opportunity in the context of national recovery programmes."

ACHIM STEINER, UNDP

by private companies and consortia.

"Solar PV, Wind and CSP with storage present an opportunity to diversify the electricity mix, to produce distributed generation and provide off-grid electricity. In addition to its sun and wind resources. South Africa has some of the world's largest high-grade resources in at least six key commodities that play a critical role in the global energy storage sector. These resources present a huge potential for the creation of new industries and localisation across the value chain," said Gwede Mantashe, South Africa's minister of mineral resources and energy at the Plan's launch.

There is already a growing industry in PV panel assembly and the manufacture of solar water heaters.

The country is looking to add three Renewable Energy Development Zones (REDZs) to the existing eight, two for solar at Emalhani and Klerksdorp and one for wind at Beaufort West, which offer the fast-tracking of renewable energy projects. These are based in areas where mining operations are or have been located, an aim being to contribute to job creation and the rehabilitation of previously mined areas.

South Africa's renewable energy industry has added its voice to international calls to invest in renewables as a clean and affordable form of energy, particularly in view of the power outages that nearly brought the country to the brink of recession last year, as well as the potential contribution to job creation to offset losses experienced as a result of the lockdown.

"It is expected that the energy demand will start ramping up as the country eases lockdown conditions, and additional energy capacity will be required," said the South African Wind Energy Association (SAWEA), which is pushing for a 'green recovery plan', with renewable energy as one of the main components.

"Renewable energy is well positioned to play an important role in the country's economic recovery post COVID-19, since it is

infrastructure investment that government does not have to put capital investment into," said the association in a statement.

"The procurement of new capacity should be fast-tracked in order to deliver energy to the grid by 2022 in line with the IRP 2019 stipulations. Wind energy can deliver new electricity infrastructure with private investments, and help South Africa achieve sustainable economic recovery.'

SAWEA CEO, Ntombifuthi Ntuli called for "regulations that are fit for purpose, including market designs that provide long term price visibility and streamlined permitting that enables rapid ramp up of the deployment of renewables."

In other renewable energy developments in South Africa, the World Bank's Multilaterial Investment Guarantee Agency (MIGA)

Shifting the emphasis

Elsewhere in southern Africa, Zimbabwe, which has been plagued by vandalism to the electricity network and power cuts due to the Karibe dam operating at below capacity, is shifting the emphasis from hydro and thermal power sources to solar. The country launched its National Renewable Energy & Biofuels Policy in March, providing incentives for investors and allowing for net metering.

Zimbabwe is issuing a tender for the deployment of 500 MW of solar photovoltaic (PV) capacity across the country, in a bid to expand the use of renewable energy and limit load shedding during the day. The Zimbabwe Electricity Transmission and Distribution Company (ZETDC) has announced that bidding documents will be available from June 2020



Renewable energy is well positioned to play an important role in the country's economic recovery post COVID-19

SOUTH AFRICAN WIND ENERGY ASSOCIATION

has issued guarantees for the construction, ownership and operation of the 40MW Aggeneys Solar PV. 75MW Konkoonsies II Solar PV, 117.7MW Golden Valley Wind and 32.5MW Excelsior Wind projects. They will cover 90 per cent of developer BioTherm's equity investment.

While in the wind sector, UK Climate Investments agreed last year to invest around US\$17mn to fund developer H1 Holdings, a majority black-owned-and-managed clean energy company, to build the 140MW Kangnas wind farm in Northern Cape province and 110MW Perdekraal East wind farm in Western Cape.

And Swedish floating offshore wind technology developer Hexicon is working with South Africa's Genesis Eco-Energy Developments to explore opportunities for floating offshore wind projects.

While German renewable energy developer Holt Holding Group has announced plans to build a 10MWp solar power plant at a site near Harare, according to African Energy. The plant is expected to operate on a PPA basis with ZESA, with power to be fed into the national grid.

Nambia's state-run utility Namibia Power Corp announced in mid-2019 that it would build four plants powered by renewable energy at a cost of US\$338mn, with construction due to start later this year. Namibia currently imports around 60 per cent of its power requirement from South Africa. In October 2019, it launched a tender to select the EPC services contractor for the 20mw Omburu solar project in Usakos, Erong region, for which bidding closed in March.

Mozambique's energy fund Funae is reported to be inviting bids from consultants for feasibility studies for

11 solar PV and battery mini-grids, being developed on a private-public basis. The country has just one large solar pv plant under construction, the 40MW Mocuba solar IPP being developed by Norway's Scatec Solar, the first large-scale solar plant in the country.

And Eswatini, which is heavily reliant on imported energy from Mozambique and South Africa, has issued a long-awaited request for the qualification and development of a 40MW solar PV plant and a 40MW biomass-to-energy plant.

In Zambia, the US Trade & Development Agency has awarded a grant to Upepo Energy Zambia Ltd, a Zambian energy solutions company, to fund a feasibility study for a 150MW wind, solar and energy storage hybrid power plant project in northern Zambia. The study will evaluate the optimal mix of on-site wind, solar and battery storage technologies to provide energy generation and services to the Zambian grid. It will be one of the first hybrid renewable energy projects in the country and will provide much-needed generation and grid support in northern Zambia.

With access to finance a major constraint in the development of renewable energy projects in the region, organisations such as the African Development Bank (AFdB) and World Bank are playing a major role. An example is The AfDBmanaged Sustainable Energy Fund for Africa (SEFA), which has approved a grant of US\$760,000 to Empower New Energy (EmNEW) to develop small renewable energy projects across sub-Saharan Africa. These will produce 585GWh of clean electricity and create 20,000 jobs. and aim to bridge the gap in competitive funding.

"Accelerated deployment of distributed solar power and small hydropower is one of the fastest and most cost-efficient ways to bridge the energy access gap, fight climate change and promote sustainable development in sub-Saharan Africa," said Wale Shonibre, AfBD's acting VP for power, energy, climate and green growth.



Fully Financed Power Solutions for Industries

We are the pioneers in introducing the BOOT (Build-Own-Operate-Transfer) model to medium- and short-term power projects



Through BOOT with an O&M contract, we assume the financial and technical risks associated with power projects



The ownership of the power plant will be transferred to the client at the end of the contract, requiring no balloon payments



Clients will enjoy levelized costs and convenient monthly payments throughout the contract



The power plants comprise the latest and most efficient equipment from global manufacturers

Get in touch

Altaaqa Global Energy Services (Sub-Saharan Africa) Johannesburg, South Africa | Dakar, Senegal

+971 56 474 62 45 | +221 77 638 55 43 | +971 56 174 95 11 nkuhn@altaaqaglobal.com | asow@altaaqaglobal.com info@altaaqaglobal.com | www.altaaqaglobal.com



Fast track BOOT: We are able to deliver projects with significantly shorter lead times since we have the equipment and the manpower ready for deployment

A powerful backup power plant

A major project to create a leading maritime hub in West Africa is powered by a KOHLER-SDMO backup power plant.



he Tema Port in Ghana welcomes significant volumes of container traffic, particularly from neighbouring landlocked countries such as Burkina Faso and Mali. A project to extend the port was launched in 2014 with a view to reducing congestion at the harbour and enabling it to manage ever greater volumes of maritime traffic. This has involved building a larger port terminal.

Meridian Port Services (MPS), a joint venture between APM Terminals, Bolloré Africa Logistics and the Ghana Port & Harbours Authority (GPHA), is managing the Tema Port Expansion Project, which will expand the capacity of the port almost fourfold to 3.7mn TEU. It will also extend the port's current docks from 574 m to 1400 m, and will double the number of berthing spaces for container carriers from two to four.

On 30 April 2020, Meridian Port Services Limited successfully completed the entire Phase 1 works. The scope of works included building a 1,000 m long wharf which consists of three berths and 98 ha terminal facility on land reclaimed from the sea with all drainage, sewage, water, fire, electrical and IT services, a 12 MW back-up power station and other major facilities.

The project includes a backup power plant to provide the new port with a secure electrical power supply. This power plant must supply power to the entire port; the gantry cranes, container handling equipment, workshops, lighting, administrative buildings etc.

KOHLER-SDMO partnered with RMT, which is working on the electrical part of the port, to offer the backup power plant.

This includes four KD SERIES 3100-kVA fuel efficient diesel generating sets, exclusively equipped with Kohler engines, which may be extended to 10 in the future, if necessary. The 20,000 V power plant is housed in a purpose-built installation divided

into several areas: generator hall, fuel oil processing plantroom, medium voltage switchroom, and low voltage switchroom, which includes the generators' control-synchronising panels.

The installation is completed with bus ducts, electrical transformers on a retention container and medium-voltage switchgear. The motors are cooled by vertical dry-coolers installed in the building. Sound trap enclosures reduce the sound level of the power plant to 85 dB(A) at 7 m.

As regards fuel delivery, two external tanks, with a capacity of 150 cubic metres each, have been built on site. The installation is completed with a fuel transfer station, featuring a volumetric meter. This station can empty a fuel tanker in one hour. The external tanks are connected to a 4000-litre daily service tank. The diesel is then processed by two single centrifugal pump skids.

The fuel processing room also houses two 1000-litre tanks, one for fresh oil and one for used oil, with a

pump for topping-up and draining operations. A third tank, with a capacity of 1500 litres, is dedicated to coolant

The power plant includes processes and equipment specially designed for coastal operations. The alternators have been tropicalised and the generating sets feature anticondensation pre-heating elements. In terms of ventilation, the drycoolers have undergone special treatment to protect the wiring harnesses, and the ventilation grilles for the air inlets and outlets are made from stainless steel, as is the external exhaust piping. Finally, the two external fuel tanks are coated in category C5M paint.

The generator power plant was installed by RMT under the supervision of KOHLER-SDMO. Ghanaian operators, supervisors and managers received and benefited from training provided by the KOHLER-SDMO teams on how to run, operate, monitor and maintain the power plant.

KOHLER-SDMO LAUNCHES FOUR NEW GENSET MODELS

KOHLER-SDMO has expanded its KD series of generators with the rollout of four new models ranging up to 4500kVA (@50Hz) / 4000kWe (@60Hz), its most powerful systems on the market.

These generators are powered by the company's most powerful K175 engine, the KD103V20, expanding the limits of standby generators. They are designed to deliver extreme durability and reliability in a variety of emergency and prime applications. The modular design of the KD103V20 powered generator sets deliver unprecedented power density and unrivalled performance. Matched turbochargers are engineered for maximum power and response. High ambient cooling systems ensure performance is maintained in the most extreme environments.

Fuel-mapping options for optimised

consumption and emissions compliance enable the generators to be deployed globally. Users will find cost savings because the line delivers the best fuel consumption at more nodes than any other competitor, says the

company. KOHLER's proprietary advanced control and communication system ties the entire system together for a seamless customer

When paired with KOHLER's global sales and support network, the KD Series line-up provides leading performance for mission critical and industrial applications. Data centres, healthcare facilities, water utilities and critical facilities such

The KD 4500 genset.

as airports can rest assured with a KD Series generator set backed by KOHLER's worldwide support network. And when service is needed, KOHLER has a global dealer and distribution infrastructure consisting of more than 800 facilities offering 24/7 parts availability.

The new KD Series products will be available for sale in June.

Cooled charging cable system for EVs

HUBER+SUHNER, one of the leading global suppliers of electrical and optical connectivity solutions, has launched the RADOX HPC500, a new addition to the RADOX high power charging portfolio. It is the world's first cooled charging cable system that allows continuous charging at 500 Amperes even in high-temperature environments, according to the company.

The HPC500 cable and connecter builds on the proven performance and design of the HPC400 family, as well as the extensive field experience and continuous innovation in cooled cable solutions for EV charging stations. These enhancements include continuous 500 A charging, an IP67 connector protection rating, the option of a ready-to-use metering system and replaceable contacts for longer service life.

Alongside the cooled cable system, HUBER+SUHNER has developed a new 24 V cooling unit to increase cooling capacity and reduce operational temperatures of the power lines, enabling

continuous 500 A charging at environmental temperatures of up to 50oC. The new plug-and-play cooling unit, which is pre-filled with coolant, fits into existing charging stations, significantly reducing installation time. The speed of the ventilators on the heat exchanger and the coolant pump is automatically adjusted to HUBER + SUHNER achieve the most efficient performance, with normal operating levels requiring lower speed, significantly reducing noise level. The features and cost-effective quality of the The system allows continuous charging at HPC500 make it a convenient, future-proof 500 A, even in highsolution for operators. The 20 per cent reduction in temperature the connector weight and improved cable flexibility, compared to the previous model of the HPC system,

UPRATED CAT C18 GENSET GOES ON THE MARKET

The Cat C18 diesel generator set, which is set to meet power needs and emission targets with greater precision for operators across Africa, is now available.

Engineered to maximise power output and reliability, the C18 ratings are 706 to 850 kVA at 50 Hz. It features a smaller footprint of up to 37 per cent and offers excellent power density.

The main benefits of the genset include reduced installation costs and low fuel consumption, compared to past models.

With a focus on saving customers on running costs, Cat has developed an advanced fuel system and improved combustion system for this new model.

Additionally, it has better thermal management than past models, high spec core components and a next-generation air system, all with the aim of maximising the return on investment for operators, while offering a proven power solution.

The generator set meets NFPA 110 loading requirements and ISO 8528-5 transient response requirements.

The EMCP4 scalable control platform ensures reliable generator set operation, providing extensive information about power output and engine operation. Customers can customise the EMCP4 systems to meet their needs through programming and expansion modules.

Other highlights of this model include higher flow rate injectors with improved fuel delivery control and pressure, new high-efficiency parallel turbo, and Improved combustion chamber design allowing fuel to burn more efficiently.

offers easier handling for end-users.

Malawi's water and sanitation project wins **Prince Talal International Prize**

The Integrated Urban Water and Sanitation Project for Mzimba Town, financed and supervised by the African Development Bank, has won the Prince Talal International Prize for Human Development in the 'governments and social foundations' category.

"This prestigious award is especially relevant to current global efforts to contain the COVID-19 pandemic and the urgent need for enhanced hygiene



practices," said Dr Akinwumi A. Adesina, President of the African Development Bank Group.

"I applaud the recognition of this project by the Prize Committee of the Prince Talal International Prize for Human Development. The recognition is timely given that the project is rapidly expanding access to water supply and sanitation to communities, while promoting good hygiene practices such as hand-washing with soap. Hand washing is one of the most effective ways to reduce the spread of COVID-19." Dr. Adesina said.

The Arab Gulf Programme for Development's Prize Committee announced the winners in the water and sanitation services category for 2019 at a virtual meeting. The prize money of \$200,000 will go to a project implemented by government agencies, public institutions or social businesses approved by the Mzimba Town scheme. The African Development Bank co-financed and supervised the Mzimba Town project, with significant funding from the OPEC Fund. Malawi's Northern Region Water Board implemented the project. It has increased the community's access to potable water from 65 per cent to 95 per cent, raised access to improved sanitation from 45 per cent to 97 per cent and created around 1,000 jobs. It has also safeguarded the education and security of young girls who no longer need to fetch water before school. The construction of school sanitation facilities, including secured toilets as part of the project, has provided privacy and comfort to the pupils, especially girls. At Mzimba Prison, authorities have reported a reduction in skin diseases, as well as improved hygiene practices.

"We had a system that was on its knees ... now we provide access to potable water to 95 per cent of our customers, 22 hours a day," said Engineer Tutus Mtegha, CEO of the Northern Region Water Board.

DIGITAL DATA TO BOOST WATER MANAGEMENT

A partnership with the International Water Management Institute (IWMI) and Digital Earth Africa (DEA) will leverage state of the art remote-sensing and data management technologies to enhance the ability of African Governments, communities and companies to better manage their water. The Digital Earth Africa partnership organizes decades of satellite data - updated daily - into an analysis-ready 'Open Data Cube', and IWMI will work with them to develop tools to translate this data into decision-ready information for water resource management. Through WASA, IWMI will work with the DEA Program to develop applications for the Open Data Cube (ODC) that can generate timely and quality information to better understand water use and availability, water risks, water quality, and water values and efficiency. These applications will be entirely open and free to use. This project, part of IWMI's Water Secure Africa Initiative (WASA), is being funded by the The Leona M. and Harry B. Helmsley Charitable Trust.

WATER CRITICAL FOR **RURAL AREAS IN PANDEMIC**

The Food & Agriculture Organization (FAO) has warned that rural communities need reliable access to water to be able to survive the COVID-19 pandemic.

In a statement regarding the critical action required for safeguarding livelihoods in rural areas of Africa, the UN body said that livestock movements for pasture and water, as well as harvesting activities, cannot be put on hold as countries tackle the virus.

In Kenya, the European Union, along with the governments of Belgium, Denmark, Germany, the Netherlands and Sweden, are bolstering the country's food and water security with funding of more than Ksh16bn for farmers and agricultural entrepreneurs.

The support for food and nutrition security covers financial and logistical support to farmers and small and medium enterprises, including to get seeds and fodder for their livestock.

The purpose of the support is to strengthen value chains in the horticulture, dryland crops and dairy sectors. The integration of food security and water programmes is crucial to this effort, with the aim being to build resilience and ensure longer-term food and water security.

In the Sahel region, the COVID-19 pandemic comes on top of a refugee crisis and trade, particularly of agricultural goods coming to a standstill with border closures to try and contain the virus.

To this end, the International Organization for Migration is assisting with water provision for refugee camps, while an EU project has funded solar powered water pumps to help rural populations in Burkina Faso, Cape Verde, Guinea Bissau, Mauritania, Senegal, Mali, Chad, Niger and Gambia. Additionally, the EU provided a further 194 million to support the security, stability and resilience in the Sahel, with a strong focus on rural areas and water security.

BRIEFS



An example of the new stations.

Hi-tech hand-washing stations

Nigeria's Federal Ministry for Health has procured five innovative hand-washing stations for its office staff in Abuja. The stations which were designed and constructed by students of Federal Polytechnic. To minimise contact with hands on possibly contaminated surfaces, the stations are manually operated by foot pedals which pump out water for washing hands. A ministry statement said the stations are an example of how the government is flattening the COVID-19 curve.

Algeria plans desal plants



An artist's impression of a plant,

Algeria is planning to construct three seawater desalination plants in the Algiers, Annaba and Skikda provinces to increase the supply and access of drinking water to the residents. The plants will be iconstructed on three sites in Annaba, a town situated in the north-east of the country, 536 kilometres. east of the capital Algiers, and in Skikda, a commune situated on the shores of the Mediterranean Sea, 471 km east of Algiers.

Sub-Saharan African construction sector highly vulnerable to **COVID-19 crisis but Ghana shows signs of optimism**

Data and analytics company GlobalData has revised its construction output growth forecast for sub-Saharan Africa (SSA) in 2020 to 3.6 per cent, down from the previous projection of six per cent from the Q4 2019 update.

According to the "Global Construction Outlook to 2024 (COVID-19 Impact)" report, the revision reflects the impact on the region's economic activity and investment growth stemming from the wider global slowdown and the outbreak of the coronavirus in the region. GlobalData has further revised down its forecast for South Africa's construction output in 2020 to -4.1 per cent. The negative impact from COVID-19 will compound other challenges, notably high national debt, labour shortages and little infrastructure spending amid a depressed economy.

The South African government launched an economic response with several packages to COVID-19, including a US\$166.9mn package for industrial funding to help businesses combat the negative economic impact resulting from the virus outbreak.

GlobalData has cut its growth rate for Nigeria to 1.3 per cent in 2020. There is a risk that the country will enter recession in 2020 in light of the COVID-19 outbreak and plunging oil prices. Government revenues will drop by around 40-45 per cent, which will push the government to prioritise spending, and that will impact on construction with many projects expected to delayed or cancelled. Construction will depend on the pace of economic recovery and growth plan, which has been jeopardised by low oil prices. Moreover, high debt-servicing costs and smaller tax take will leave little scope for fiscal spending; growth in the economy will depend on monetary easing but that will be restrained by high inflation.



The revision reflects the impact on the region's economic activity and investment growth stemming from the wider global slowdown and COVID-19 outbreak.

According to GlobalData, Kenyan fiscal policy is constricted so the government will push for PPP and private investment. Only priority projects will now be eligible for risk-sharing incentives. Several advanced PPPs in transport and energy will go ahead, to boost the infrastructure and energy construction sectors in the medium term, albeit at a slower pace.

Ghana's construction is supported by infrastructure investment, industrialisation projects, as well as developments in the oil and gas sector, with an expectation of oil price rebound, such as expansion of oil and gas production from the TEN and Sankofa fields and the Pecan oilfield which is expected to be operational in late 2021 or early 2022.



CARMIX MOBILE BATCHING PLANTS, **BEST PERFORMANCE** ON THE TOUGHEST JOBSITES



(f) (in) #BeACarmixMan #BeACarmixWoman Metalgalante s.p.A. Noventa di Piave (Venice) ITALY - T. +39 0421 65191 - info@carmix.com



Going electric

Leading heavy equipment manufacturers are increasingly embracing battery-powered and electric mini-excavators, striving to promote sustainability while adhering to regulations associated with low emissions.

n response to the global shift towards electric vehicles (EVs), many governments and original equipment manufacturers (OEMs) are focusing on developing zero- or low-emission vehicles.

According to a report of Technavio, the decreasing battery prices and the enhanced performance capabilities of EVs have boosted their adoption among consumers, which is one of the vital mini excavators market trends.

Going forward, Komatsu has launched sales of the PC30E-5 electric mini-excavator in Japan. This electric model, based on Komatsu's accumulated technological expertise of hybrid construction equipment and electric forklift trucks, offers excavation performance on par with the internal combustion model of the same power output.

Thanks to zero exhaust gas, the PC30E-5 can achieve a clean work environment. It can be deployed to a diverse range of workplaces, such as indoors, piping work, urban construction, and landscaping. As its power source is an electric motor, this model doesn't generate loud noise like internal combustion models. Even while the machine is in use, it's easy for the operator to communicate with workers near the machine, which improves workplace safety.

Additionally, as routine check-up and high voltage areas are completely separated, users can safely engage in routine checkups without worrying about high-voltage danger.

Volvo ECR25 Electric

Following the unveiling of the first

electric Volvo compact excavator, the ECR25 Electric, at Bauma 2019, the machine has now been delivered to Spac for customer testing.

Spac, part of the Colas group, is using the 2.5-tonne excavator to dig trenches at the Saint-Nom-la Bretèche golf course, just outside of Paris, France.

With zero exhaust emissions and almost silent operation, the Volvo ECR25 Electric is suitable for such environments.

Benjamin Silvent, site manager for Spac says, "For residents and cities in general, it makes our worksites more acceptable because it limits carbon emissions and noise disturbance.'

The Volvo ECR25 Electric replaces a combustion engine with 48-volt lithium-ion batteries and an electric motor that powers the hydraulics to move the machine and attachments. The batteries store enough energy to power the machine for 8 hours in typical applications, such as utility work. An onboard charger enables overnight charging via a regular household plug socket. A fast charging option, requiring more powerful grid access, will be available. The Volvo ECR25 Electric will be available in selected markets from mid-2020.

Kubota's prototype

Kubota has unveiled the prototype of electric compact construction machinery (mini-excavators), which is under development, at a new product exhibition in Kyoto City.



Kubota said that it will proceed with the continuous development by conducting demonstration experiments and analysing the needs of local users.

The company is planning to launch the electrical compact construction machinery soon after conducting a series of experiments and evaluations

CAT 315 SMALL EXCAVATOR DESIGNED FOR HIGH PERFORMANCE

Offering superior performance in a compact design, the new Cat 315 next-gen excavator features a new powertrain, technology and simplified maintenance to boost performance, efficiency and productivity.

Built with a spacious new cab design, the new excavator delivers a more comfortable working environment than the 315F L and 314F L (Japan) models it replaces.

A host of standard

technologies now available on this new small excavator boosts productivity gains by up to 45 per cent compared to traditional grading, making it a productive Cat excavator in the 15-tonne size class.

The new Cat App, compatible with the 315, helps contractors to better manage the excavator's location and maintenance schedules. Standard Product Link automatically collects excavator data to help improve fleet management.



LIEBHERR PRESENTS ALL-ROUND WHEEL LOADERS L 526, L 538 AND L 546

Liebherr has launched three mid-range wheel loaders with modifications on drive train and lift arms deliver increased performance.

The strengths of the new wheel loaders - L 526, L 538 and L 546 - include a redesigned operator's cab with assistance systems for convenience and safety.

During development, Liebherr engineers optimised the proven hydrostatic travel drive on all three models to reduce fuel costs and CO₂ emissions. This has given the L 538 and L 546 models significantly more engine power and the L 546 now comes with an impressive new,



powerful, six-cylinder engine.

The reliable exhaust gas treatment means all three models comply with the emission stage V/tier 4f guidelines.

For the first time, the innovative assistance systems and new joystick steering from the XPower large wheel loaders are available for the mid-range wheel loader series.



CAT 6060 HYDRAULIC MINING SHOVEL FOR **GREATER PERFORMANCE**

The next generation Cat 6060 hydraulic mining shovel features multiple design enhancements and new components that advance machine performance, durability, serviceability and operator comfort. The 6060 features updated engines, optimised hydraulics, heavy duty structures and undercarriage, Cat electronics and a well designed cab.

The 600-tonne class mining shovel has a bucket payload of about 61 tonnes per pass in face shovel and backhoe configurations. The 6060 is an efficient 4-pass match with the Cat 793 mining truck and 5-pass match with the Cat 794 AC mining truck.

The new shovel is fully integrated into Caterpillar product support systems for efficient Cat dealer services. The first of several features within the available Operator Assist suite,



Enhanced Motion Control is standard on the shovel. Enhanced Motion Control improves machine controllability and loading efficiency while reducing linkage and cylinder mechanical contact. The machine's five-circuit hydraulics design allows simultaneous control over two cylinder motions, two travel motions and swing to boost digging and loading efficiency.

YANMAR LAUNCHES B75W-5 COMPACT WHEELED LOADER

Yanmar Compact Equipment EMEA has unveiled the next generation of its class-leading B75W wheeled excavator.

Efficient, precise and dependable, the B75W-5 is suitable for urban jobsites, highway construction and landscaping projects.

Powered by the latest 73hp Yanmar 4TNV98CT turbocharged diesel engine with DPF as standard, the B75W-5 is fuel efficient, environmentally friendly and fully-compliant with EU Stage V emissions legislation. Delivering 295.5Nm torque at 1,365rpm, the new model is powerful (despite its compact dimensions) and can reach travel speeds of up to 36km/h.

Designed to deliver better performance, the B75W offers a digging depth of 3,500mm (TPA boom), digging force of 38,000N (at bucket edge), max reach of 6,990mm (TPA boom) and max dumping height of 5,050mm (TPA boom). An LUDV hydraulic system with four independent circuits offers total flexibility, meaning the driver can simultaneously operate a tilt rotator with a hydraulic quick-hitch system and a hydraulically-driven tool, such as a sorting grab, asphalt cutter or cutting unit.

A host of new attachments have also been developed for the excavator, including a bucket and fork carrier, mechanical/hydraulic quick couplers, standard/grading/swivel buckets and DMS breakers.



New Yanmar engine with Diesel Particle Filter meets the new Stage V emissions regulation.

The Belt and Road Initiative during a pandemic

With 38 countries in Sub-Saharan Africa included in China's ambitious Belt and Road Initiative (BRI), how will the COVID-19 pandemic affect the flagship project's progress? The Oxford Business Group reports.



he BRI is a far-reaching plan for transnational infrastructure development, linking five continents through land and sea corridors and industrial clusters. Launched in 2013, it was initially planned to revive ancient Silk Road trade routes between Eurasia and China, but the scope of the BRI has since extended to cover 138 countries, including 38 in Sub-Saharan Africa and 18 in Latin America and the Caribbean.

Prior to the pandemic, the Asian Development Bank estimated that the infrastructure financing needs of emerging Asia alone would amount to \$26trn through 2030. It is thus unsurprising that many low- and middle-income countries came to see the BRI as a vehicle for catalysing much-needed investment in capital projects. By early January 2020, 2951 BRI-linked projects valued at \$3.87tn were planned or

under way across the world.

Although the criteria for what actually constitutes a BRI project are not formally defined, linking a project to the BRI through a memorandum of understanding (MoU) or another agreement provides access to finance from Chinese policy banks and specialist funds, as well as connections to Chinese contractors and suppliers eager to make use of their excess capacity. However, as borders began to close in response to the pandemic, and governments shuttered non-essential industries and asked citizens to stay at home, progress stalled on a number of major BRI developments.

Restrictions on the flow of Chinese workers and construction supplies have been cited as factors for project suspensions or slowdowns in Pakistan, Cambodia, Indonesia, Myanmar and Malaysia.

Taking into account that Covid-19 originated in Wuhan, China, late last year, the use of large numbers of Chinese construction workers on BRI projects has become a contentious issue in some nations, even though China has been relatively successful at containing the spread of the coronavirus within its borders.

In many of the markets that constitute the "yellow slice" of the global economic pie - those dynamic emerging economies that form part of the OBG portfolio - bigticket BRI projects have been a major driver of infrastructure development in recent years.

For example, Egypt is ranked in the Refinitiv BRI Database as the country with the second-highest number of BRI-linked projects by volume after Russia, with 109 under construction or in the pipeline. It also has the seventh-highest cumulative value of BRI-linked

projects (almost \$100bn). Saudi Arabia has emerged as the country with the fourth-highest number of BRI-linked projects by volume (106) and second-highest by value (\$195.7bn). Malaysia, Indonesia and the UAE make the top 10 rankings for project volume and value.

Major BRI-linked projects under way or in the pipeline in those countries include the 950-MW Noor Energy 1 solar power plant in Dubai; the \$6bn high-speed rail line between Jakarta and Bandung in Indonesia; and the China-Egypt **TEDA Suez Economic and Trade** Cooperation Zone. Elsewhere, BRI projects underpin the major infrastructure pipeline for some developing states. Projects planned as part of the CMEC include rail links and a deepwater port at Kyaukpyu, which will provide a strategic connection between China's southwest and the Indian Ocean.

One criticism sometimes levelled at the BRI is that developing economies risk unsustainable debt for projects that are not necessarily in their national interest. For example, in 2017 Sri Lanka ceded 70% control of Hambantota Port to a Chinese state-owned firm on a 99year lease after it was unable to service loans on the \$1.3bn gateway on the Indian Ocean.

However, as the coronavirusinduced economic slowdown threatens to increase the debt burdens on developing economies, and places China itself under added fiscal pressure, Chinese loans linked to BRI projects are once again in the spotlight. Bilateral loans made by Chinese state-owned institutions to foreign partners have increased in tandem with the proliferation of BRI projects across the world. According to a March 2020 report in the Wall Street Journal, some \$200bn in emerging market debt owed to China has not been reported in official figures. Much of this undisclosed debt was traced by researchers to BRI projects.

Meanwhile, a 2019 study by Germany's Kiel Institute for the World Economy found China was the world's largest bilateral creditor, and that the combined debt owed to China by 50 developing countries



had grown from an average of 1 per cent of their GDP in 2015 to 15 per cent by 2017.

Unlike multilateral institutions. direct loans from China's policy banks are often extended at commercial rates and secured against collateral such as oil or other commodities.

With many emerging economies now appealing to bilateral creditors and multilateral finance institutions for debt relief and restructuring, it remains to be seen how China will respond. In the past, China has preferred to conduct debt renegotiations on a private, government-to-government basis. However, it was seemingly included in a G20 agreement for a temporary moratorium on debt repayments from the world's least developed

countries to bilateral creditors. which was announced on April 15.

The example of Myanmar's Kyaukpyu port – as well as the 2019 renegotiation of Malaysia's East Coast Rail Link, which reduced the cost by one-third - should provide further hope to countries signed up to the BRI that may now be reevaluating costs and benefits.

With China's economy contracting in the first quarter of 2020 for the first time in decades amid rising unemployment claims at home. Chinese capital is likely to be mobilised to meet domestic needs in the short term, which could translate into reduced investment in the BRI's more peripheral markets over the next 12-24 months. Combined with the fact that many of the countries signed up to BRI

projects face escalating foreign debt pressures, the stage may be set for a long-term reorientation towards more strategic and cost-efficient infrastructure projects, which meet clearly defined domestic or regional demand, and rely less on opaque loans from Chinese policy banks.

BRI projects in the pipeline could be made more open to varied financing options involving multiple stakeholders, such as multilateral institutions, foreign banks, private equity and green bonds. This could help to spread financial risks and promote greater levels of transparency, efficiency and innovation. Some of China's neighbours and financing institutions active in Asia are well positioned to play a greater role in BRI projects. Efforts have been to adopt formal lending rules similar to those of multilateral development banks (MDBs), and in March 2019 China's Ministry of Finance signed an MoU with several MDBs to establish a Multilateral Cooperation Centre for Development Finance.

As of December, 31 project financing was the main source of funds for 676 out of 1015 projects analysed in the Refinitiv BRI Database. Private sector finance accounted for 20.5 per cent of the total funding for all projects, while



publicly listed firms contributed 6.8 per cent. However, these totals are still significantly less than the 46.1 per cent of finance attributed to government institutions.

"China was increasingly open to the multilateralisation of the BRI prior to the pandemic and that will no doubt continue, with capital from multilateral institutions and private sources needed for certain projects to be sustainable," Parag Khanna, founder and managing partner of FutureMap, told OBG.

However, Khanna, author of the book *The Future is Asian*, does not believe China's domestic obligations will detract attention from the BRI.

"The BRI will not lose importance for China, because it is a significant portion of its grand strategy. Much as we see China continuing its military doctrine of probing for opportunities, it will still seek to use BRI as an umbrella for increasing its



geographic connectivity, supply chain efficiency and commercial leverage with key states in Asia, the Middle East, and beyond," he added.

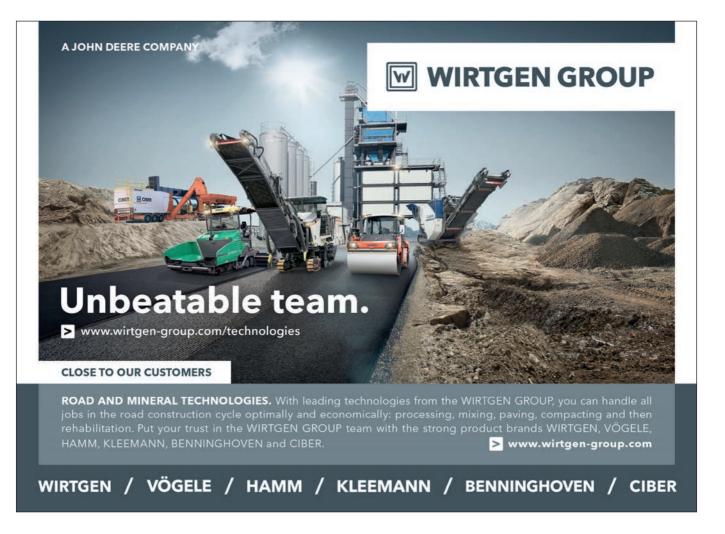
Beyond the BRI, the infrastructure industry in general is grappling with severe challenges as a result of the Covid-19 pandemic.

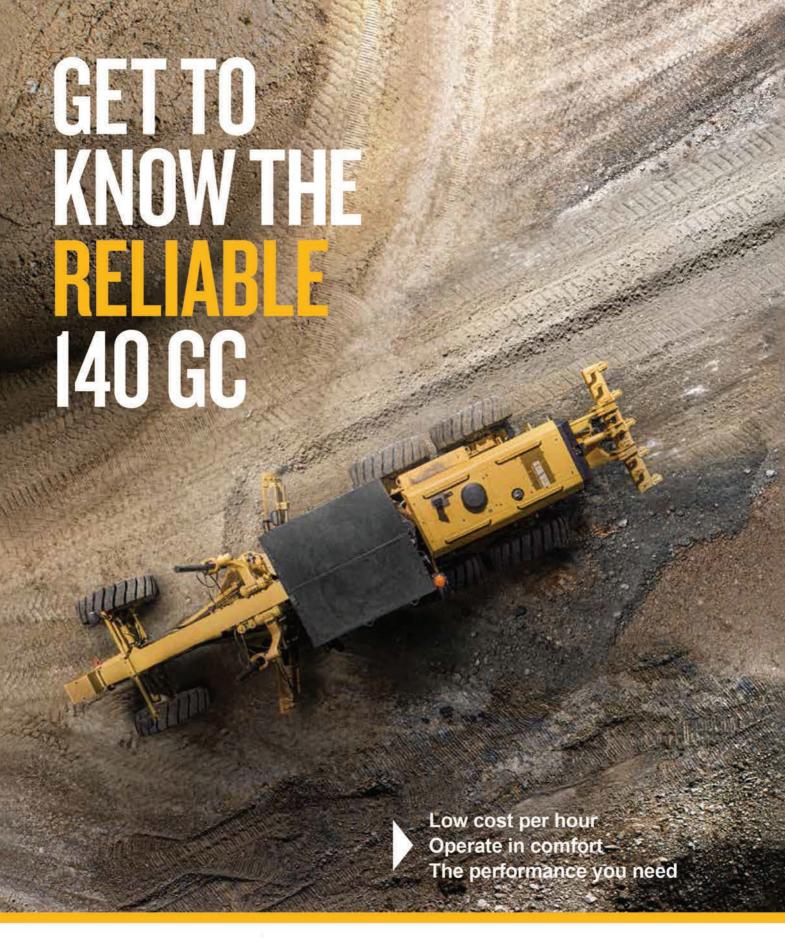
These include external financing

bottlenecks, difficulties in mobilising consultants and contractors, delays in government approvals and permissions, and slowdowns in productivity related to remote working, according to Allard Nooy, CEO of InfraCo Asia, a donorfunded, commercially managed infrastructure development firm. Due to constraints on the movement of construction equipment and materials, the crisis is also highlighting the need for logistics and supply chain diversification for better crisis management. There are indications that many Chinese manufacturers serving the construction industry have begun to cultivate alternative supply chains in South-east Asia.

Notwithstanding physical disruption to the infrastructure sector, much preparation work can still be performed online, allowing some progress to be made on certain projects. Promisingly, such projects include many that form part of the so-called green economy, which could emerge as a sustainable, high-growth segment as policymakers seek long-term recovery strategies.

www.oxfordbusinessgroup.com







Simply Reliable, Durable, Fuel Competitive & Economical

We call it the GC-effect

www.cat.com



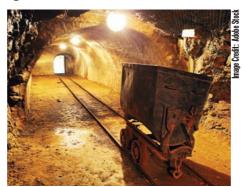
© 2019 Caterpillar. All Rights Reserved. CAT, CATERPILLAR, LET'S DO THE WORK, their respective logos 'Caterpillar Yellow,' the "Power Edge" & Cat 'Modern Hex' trade dress as well as corporate & product identity us herein, are trademarks of Caterpillar & may not be used without permission.

Gold Fields Ghana assists COVID-19 fight with US\$830,000 to help the vulnerable

Gold Fields Ghana has committed more than US\$830,000 to fight the COVID-19 pandemic in its operating areas in the Western region and other parts of Ghana.

The company, through the Ghana Chamber of Mines, has contributed US\$433,891 to support the efforts by the Ghana government to reduce the spread of the coronavirus and assist the most vulnerable section of the country's population.

Alfred Baku, executive vice-president and head of West Africa region, said, "This contribution represents our timely response to the call by the government of Ghana to support in the fight against COVID-19, which has been spreading since Ghana reported its first case on 12 March 2020."



Gold Fields has sponsored radio programmes to educate and sensitise host communities about the pandemic.

He said the region was spending approximately US\$400,000 directly to support employees and host communities. This amount covers the purchase of hand-held thermometers, sanitisers, goggles, face masks, protective gowns and other COVID-19 prevention equipment.

Prior to Ghana recording its first case, the mine sites introduced strict measures to screen employees, community members, contractors, and visitors to the sites. These measures are still being enforced. The Company developed and sponsored radio programmes to educate and sensitise host communities about COVID-19.

Gold Fields Ghana is working closely with local and national health authorities to keep the operating areas safe and to strengthen its COVID-19 protocols. The dynamic and evolving nature of the coronavirus requires its employees and community members to be on high alert and observe basic hygiene protocols at all times.

"As a Company which prioritises the health and safety of its employees, we have a duty to support the needy and vulnerable in our society in these challenging times. We believe our contribution will go a long way to flattening the curve and help us return to normal lives soon," Baku said.

ENDEAVOUR EMPLOYEES RECOVER FROM COVID-19

Endeavour Mining has provided an update on its COVID-19 response to safeguard the health and wellbeing of its employees, contractors and local communities, while ensuring business continuity.

Endeavour has reported that its few employees who previously tested positive for COVID-19 have successfully recovered, and it has not had any new reported cases.

Endeavour's efforts leverage its global supply chain, health and safety systems, community relations and communication teams, and notably include the provision of medical equipment and supplies to local communities, such as masks, gloves and cleaning equipment, training dozens of local health workers and running COVID-19 awareness campaigns.

Since the onset of the pandemic, the company has been supporting the national response in close collaboration with the health authorities in its host countries.

KUMBA IRON ORE SUPPORTS COMMUNITIES AMID LOCKDOWN

Kumba Iron Ore's Northern Cape operations in collaboration with the local municipalities and the department of health continue to prioritise the essential needs of communities during the COVID-19 lockdown period.

Sishen mine and Gamagara municipality and other stakeholders such as Booysens Bore delivered two filled JoJo tanks with tap stations to Mapoteng informal settlement in Kathu, after the community raised concerns of not having access to running water during the 21-day lockdown period. Kolomela mine made two water bowsers available to the informal settlements in their host communities, to supply water.

One of the vital precautions against the spread of COVID-19 is to improve on hygiene through washing hands with soap.

"Kolomela stepped in and donated 2,000 bars of soap to the local community for distribution to vulnerable households, these are currently being distributed by the Joint Operations Centre (JOC), which was established in Postmasburg in conjunction with the Local Tsantsabane municipality. SAPS, SANDF, department of health and other local businesses," said George Benjamin, public affairs manager at Kolomela mine.

Lihle Sibiya, public affairs manager, for Sishen mine, explained the role the mines play to help mitigate the spread of the virus and the impact it has on communities.

Kumba has been providing food parcels, water for drinking, emergency services, support to health facilities, including FAMSA and enabling more effective screening in some areas within its host communities.

These initiatives form part of Anglo American Regional Community Response Plan for the coronavirus pandemic.

BRIEFS



Helen Clark, EITI Board Chair

EITI takes stock of global crisis

The Extractive Industries Transparency Initiative (EITI), a global standard for the good governance of oil, gas and mineral resources, has expressed support for all EITI-implementing countries affected by COVID-19 pandemic. Helen Clark, EITI board chairperson, said "Despite

commodity price falls, the extractives sector remains an engine for growth in many countries and a source of much-needed funding for countries in handling the current health crisis."



Blanket Mine can continue producing and selling gold to Fidelity Printers and Refiners

Caledonia monitors situation

Caledonia and Blanket Mine are responding actively to the COVID-19 and in particular the threat it poses to Blanket Mine's employees, their families, the broader community and the continuity of its operations. The mine has adequate critical spares and consumables inventory to manage reduced supply chain deliveries during this period. The management continues to monitor the situation and conduct regular reviews to update its decisions in response to the disease.

Tanzanian Gold announces SGS-Lakefield metallurgical testing

Tanzanian Gold Corporation's has announced that SGS Canada (SGS) Lakefield will be starting comprehensive metallurgical testing on the primary or "sulphide" gold mineralisation in order to finalise a flow-sheet for the design of a large gold processing plant that will be the basis for the final feasibility study of the Buckreef Project.

The Company has shipped fresh core from three metallurgical test holes drilled last year to the SGS Lakefield site to confirm a conceptual flow-sheet that includes either gravity separation with gravity tailing cyanidation, or gravity separation, followed by sulphide flotation of the gravity tailing, with regrinding and cyanide leaching of reground sulphide concentrate along with possible leaching of flotation tailing. These flowsheets constitute low-cost and attractive alternatives for the Buckreef project.

The current round of testing is expected to take approximately five-to-six months, following which some additional sampling and variability testing may be required that would arise from the design of a new open pit which will be initiated shortly.

James MacDonald, senior metallurgist from SGS, has reviewed historical reports and recommends the flowsheet testing options based on that historical review.

NAMIBIA: DIAMOND, URANIUM MINING SECTORS PROJECTED **TO DECLINE IN 2020**

The diamond and uranium mining sector are projected to contract in 2020 before a solid recovery in 2021, according to the Bank of Namibia's Economic Outlook Update.

The diamond mining sector is forecasted to decline by 14.9 per cent in real terms during 2020 and to recover to a growth of 4.5 per cent in 2021.

"The projected contraction of 14.9 per cent for 2020 is a downward revision from a growth of 5.3 per cent projected during February 2020," the central bank said.



The diamond mining sector is forecasted to decline by 14.9 per cent in real terms during this year.

Meanwhile, the central bank stated that uranium mining is similarly projected to contract during 2020, followed by a mild recovery in 2021.

SOUTH AFRICAN MINISTER URGES MINES TO **COMPLY WITH REGULATIONS**

The government will shut down any mining operation found not complying with Level 4 regulations, said Gwede Mantashe, South Africa's mineral resources and energy minister.

"At the heart of our programmes is the protection of people's lives and livelihoods. When we agreed that mines should operate at reduced capacity, we highlighted the importance of protecting and saving the economic infrastructure beyond the lockdown period.

"It is in the interest of mining operations to comply with the lockdown regulations. We are not going to put people at risk for production," said the minister.

He was speaking at Sibanye-Stillwater's Bathopele Platinum Mine in Rustenburg, where he monitored compliance with the lockdown Level 4 regulations.

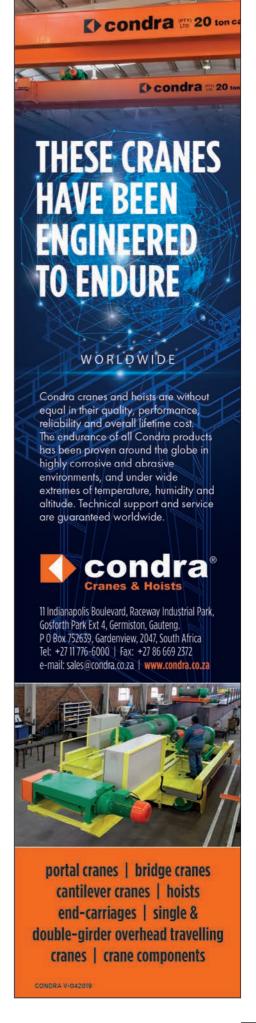
The visit to Rustenburg follows a number of unannounced visits to mining operations to monitor compliance with lockdown regulations.

Sibanye-Stillwater and Old Mutual donated an amount of US\$54, 257 (R1 million) for personal protective equipment (PPE).

The donation from Sibanye-Stillwater is part of the mining sector's support in containing the spread of COVID-19.

Mr Mantashe emphasised that mineworkers must be tested for COVID-19, warning that failure to do this will put the lives of miners at risk.

"The economy will never be the same again. Mining in South Africa will never be the same again. The current lockdown regulations will be applicable far beyond the lockdown period," the minister said. Additionally, he called for the implementation of a rigorous screening and testing programme as employees return to work.



SANDVIK DEVELOPS STAGE V COMPLIANT UNDERGROUND TRUCKS

To reduce particle emissions in the lower

TH551i trucks can be equipped with a DPF.

Based on studies conducted, the optional

Despite current global market uncertainty, Sandvik's flagship truck, the TH663i, equipped with new Stage V engine technology, is currently undergoing a field trial period at Boliden's Tara mine in Ireland.

The Stage V engine in the 63-tonne truck is expected to deliver lower emissions. contributing to reduced mine ventilation rates. Designed to fit seamlessly together with the truck and to perform specifically in underground use, the engine system includes built-in fire prevention solutions, increased wiring protection with shrink mesh wiring harness and electric hardware that is specifically designed for demanding conditions, with corrosion, heat and water resistance. The new Stage V, requiring ultra-low sulphur fuel and low-ash engine oil to operate, will be an optional engine for the TH663i.



Stages/Tiers, standard engines on in TH663i and sintered metal DPF can reduce particle mass by

approximately 99 per cent. From a reliability and maintenance viewpoint, the DPF is wellprotected and designed for easy cleaning to reduce downtime and operating costs, according to Sandvik. The DPF is available as retrofit kit.

IDS GEORADAR, WORLDSENSING UNVEIL MINING MONITORING SYSTEM

Two monitoring technology specialists, Worldsensing and IDS GeoRadar, a Hexagon company, have cooperated to launch comprehensive mine safety monitoring system.

"The integrated system will be the first in the world to offer surface, sub-surface and geospatial monitoring in a single package, greatly simplifying contracting and deployment," IDS GeoRadar said in a statement.

It can exploit the capabilities of Worldsensing's Loadsensing IoT-based wireless monitoring system to reduce the cost and delay associated with traditional wired or manually read sensor networks.

The joint solution is capable of simplifying data management using HxGN GeoMonitoring Hub integrated visualisation and analysis platform, delivered through IDS GeoRadar.

Mining companies can have a single interface to a monitoring system which now includes a wide range of wirelessly connected geotechnical and environmental sensors in addition to radar. total stations, GNSS, satellite InSAR.

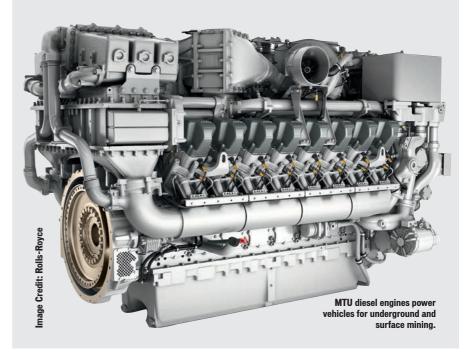
"As leaders in the IoT remote monitoring space, Worldsensing invests in making Loadsensing technology compatible not only with various sensors but also with third-party software, such as HxGN GeoMonitoring Hub by IDS GeoRadar," said Bernat Trias, Worldsensing's director of products.

Alberto Bicci, IDS GeoRadar president, commented, "IDS GeoRadar is committed to helping customers put their data to work."

Rolls-Royce and ASI Mining to optimise MTU engines for autonomous operations

Rolls-Royce and Autonomous Solutions Incorporated (ASI): ASI Mining have agreed to ensure compatibility of MTU engines and ASI's Mobius command and control software for autonomous vehicles. The two partners have signed a memorandum of understanding enabling Rolls-Royce to offer autonomous-compatible, Mobius-ready MTU engine solutions for equipment in a wide range of mining applications.

With its brand MTU, Rolls-Royce business unit Power Systems is a provider of advanced power solutions for a wide variety of applications, including mining equipment. ASI Mining is in the development and sales of high-tech autonomous solutions for mining equipment and other machinery in a wide range of applications. The companies plan to leverage their experience to offer customers engine solutions that are compatible with ASI's vehicle automation software to help optimise vehicle power performance and efficiency, thus enabling more environmentally friendly and safer mining operations.



VOLVO'S H-SERIES WHEEL LOADERS L150H UP TO L350H RECEIVE AN UPDATE

The H-Series wheel loaders have been consistently improved throughout their lifetime, and now they receive additional enhancements that help reduce total cost of ownership.

In 2014 Volvo Construction Equipment (Volvo CE) introduced the L150H-L220H wheel loaders and followed - in 2017 - by the big sisters, L260H and L350H. "Over the years we have built on experience and worked closely with customers to improve these machines," explains Lars Eriksson, product manager. "Now, in 2020, we have introduced new features that take these machines to a new level of efficiency.'

The rimpull control system now comes as standard on all H-Series models. This function allows operators to minimise wheel spin and optimise the balance between rimpull and



The rimpull control system now comes as standard on all H-Series models

helps reduce tyre wear and fuel consumption, for more efficient bucket filling.

Depending on markets, Volvo Co-Pilot monitor is now available on a wider range of machines - from L150H up to L350H. The 10inch in-cab touchscreen provides access to several Load Assist applications (depending on machine model) aimed at optimising

operator performance and site efficiency.

Designed to help loading the optimum amount of material, the On-Board Weighing app has been upgraded to include two new task modes - stockpiling and processing -, adapting on-screen layout and information displayed according to the task at hand.

For increased convenience and safety, the rearview camera and radar detector system are now displayed on the Volvo Co-Pilot display.

Volvo CE has introduced an Operator Coaching application to enhance operator performance, providing guidance to help get the most out of Volvo wheel loaders.

Tomra introduces virtual demonstration and test sessions for mining operations

Tomra Sorting Mining has developed virtual testing capabilities to help mining operations ensure their business and operational continuity. Tomra is leveraging digital technology to help them identify the suitable sorting solution for their mine by offering them remote access to its Test Centre in Wedel, Germany, which has capabilities for all applications.

Tomra's temporary Virtual Demonstration and Test Solution is set to enable mining companies to test the sorting solutions on their samples without leaving their office. They will need to book a session with their Tomra sales representative and ship a sample of their minerals to the Test Centre, which will conduct the test. Once it is completed, the client will receive a video of their material being sorted and discuss the results with a Tomra's sales person and the Test Centre's experts via video call. With their support, they will be able to make a decision on the following steps and take the project forward without delay.

Albert du Preez, senior vice-president and head of Tomra Sorting Mining, explained, "With this virtual solution, we are able to provide this support, taking our Test Centre to our customers' office so they can make an informed decision on an important investment. This means that they are able to take their business forward in the current situation."

Multi-channel laser sorting technology for quartz

Tomra's patented multi-channel laser sorting technology unlocks the full potential of quartz deposits with its structural approach to sorting, unique in the market. The scattering effect of the multiple laser beams can be used to separate a quartz rock from a similar-looking one containing no quartz: quartz or quartz veins will appear as a glowing crystals because quartz returns the laser light in a larger area, while others will remain dark with no visible scattering.

MICROMINE UPGRADES MINE PLANNING TOOLS

Micromine, a software specialist in mine design and production control, has expanded its suite of intuitive mine planning tools which will be available in a significant upgrade pack.

Paul Hooykaas, Micromine chief product strategy officer, said the MM2020.5 upgrade extended the tools available to help mine planners and designers prepare prospective regions more accurately.

"The new features in MM2020.5 give users greater power to capture, manage and interpret exploration and production data, so they can optimise their operations," he said.

The enhancements focus on the software's design tools offering greater flexibility, power and speed for mine designers, planners and engineers in both underground and surface mining contexts.

More than 12 new features give users faster and more intuitive control over underground ring drill and blast design. Planners can use ring design tools and run calculations on as-drilled (actual) holes, and compared them with planned holes.

Advertiser's Index

Altaaqa Alternative Solutions Global FZE35	Jessop & Associates (Pty) Ltd15
Balkrishna Industries Ltd51	Metalgalante S.p.A39
Cantoni Motor17	Mytilineos S.A31
Caterpillar SARL45	Societe Internationale des Moteurs Baudouin7
Clarke Energy Ltd2	Spedag Interfreight AG21
Condra Cranes and Hoists47	Volvo Construction Equipment AB5
Convergent Group SA52	Volvo Penta, AB9
Hamm AG43	Wirtgen GmbH44

Advantage Africa? How the continent can rebound

The director of regional integration and trade at the Economic Commission for Africa (ECA), Stephen Karingi talks about how Africa could emerge from the COVID-19 stronger thanks to increased free trade.

ith many African countries recording a lower rate of COVID-19 infections than many other continents and the prospect of further free trade, Africa has the potential to bounce back strongly from the global pandemic, according to the director of regional integration and trade at the **Economic Commission for Africa** (ECA), Stephen Karingi.

Speaking to journalists in an online forum, he said that boosting intra-African trade has the potential serve as an alternative stimulus for job creation, foreign exchange, industrial development and growth across a range of industries.

Mr Karingi said if Africa had implemented agreements and frameworks such as the AfCFTA. **Pharmaceutical Manufacturing Plan** for Africa, the Comprehensive Africa **Agriculture Development** Programme, and the Accelerated **Industrial Development for Africa** plan, "our economies would have been more diversified, stronger, and less affected by COVID19."

However, he was quick to point out that because of the adaptability of many African economies in response to the pandemic, there were plenty of signs of hope.

He cited, among others, the examples of South Africa where U- were 66,319 confirmed cases of COVID-19 and 2,344 deaths in Africa, compared to 1,259,115 cases and 148,623 deaths across Europe and the UK. With governments across the continent focused managing the pandemic, the 1 July 2020 start date

offers a

window of opportunity for creative thinking on how the AfCFTA can be reconfigured to reflect the new realities of the 21st century and better position the African economy in the face of future shocks.

He added that COVID-19 has highlighted the importance of digital technologies, saving that member states should "consider front-loading negotiations on e-commerce to coincide with the closely linked phase II negotiations of the AfCFTA."

David Luke, coordinator of the African Trade Policy Centre, reiterated the need for Africa to diversify its sources of supply chain, stating "even developed countries that depended on only one or two countries for critical parts of their supply chain are now talking about localising production."

He noted that COVID-19 has shed light on the underdeveloped status of African supply and value chains and that supply chain diversification fits well into Africa's industrialisation agenda.

writing, there

Member states should front-load negotiations on e-commerce to coincide with phase II AfCTA negotiations"

STEPHEN KARINGI, DIRECTOR OF REGIONAL INTEGRATION AND TRADE, ECONOMIC COMMISSION FOR AFRICA

Mask has redirected its production for trade under the AfCFTA has been from protective masks for mining moved to at least 1 January 2021. and agriculture to that for medical Mr Karingi views the delay as a respiratory masks, and Nigeria positive - he said it where the National Agency for Science and Engineering Infrastructure produced ventilators. At the time of

> Africa has a great opportunity to boost its digital economy for post-pandemic success.









CONVERGENT GROUP, advanced floor care solutions for industrial concrete surface treatment.

As a leading manufacturer of Nano-Lithium products such as Pentra-Sil® (NL), our Group provides high quality treatments for use as surface hardener, sealer and densifier and also for the preservation and maintenance of new or old concrete floors. CONVERGENT GROUP is also the manufacturer for LisoChem SA, a wide range of green surface waterproofing and maintenance solutions.



THE LITHIUM TECHNOLOGY









CONVERGENT GROUP S.A.

The Concrete Technologies

CONVERGENT GROUP S.A. • A Company Certified Iso 9001 & Iso 14001/EMAS

Rue des Mousquetaires Gris 35 • 5660 Mariembourg Belgium • Phone : +32 60 390 752 • RPM Dinant • VAT: BE 0479-433-386

info@convergent-group.com • www.convergent-group.com