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SERVING BUSINESS IN AFRICA SINCE 1964

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Editor's Note

Welcome to our July issue. We have many features this month to grab your attention. As it is a special annual genset review, OEMs will be heartened by the news that demand for gensets on the continent remains solid, especially in regard to big generators with power ranges above 750kVA that support large power projects (page 30). Nigeria, surprisingly, is no longer the biggest African generator market, however West Africa as a whole continues to be a core business territory for power companies (page 34).

Our cover story is on air cargo. Despite volumes dipping over the first quarter in 2018, Africa still reported the fastest growth of all regions over the last 18 months, and with significant investments in the airports themselves, especially in South Africa, the air cargo market is definitely one to watch over the remaining months this year.

Elsewhere in the issue, we speak to Jun Qi, chairman of the Chinese Construction Machinery Association (CCMA) on his views on Chinese manufacturers selling equipment into Africa (page 46) and how Cameroon is making its mark as a tourist and business capital, with the development of the US$52mn Douala Grand Mall alongside a five-star hotel and residential complex, (page 50).

Samantha Payne, *Editor*

Contents

Uber-style tractors are transforming agricultural sector

Uber-style tractor services are transforming the agricultural sector in Nigeria and Kenya, said World Bank Group expert, Panos Varangis.

Speaking at the Agroinvestment Summit on 4-5 June in London, about the opportunities and challenges facing the sector, Varangis said tech-savvy farmers were taking advantage of app-type solutions such as Hello Tractor to plough their fields.

Image Credit: Adobe Stock

Uber-style tractors open up opportunities for farmers to plough their fields.

He said, "If you are a small entrepreneur it doesn't make sense to buy a tractor because it is expensive and most of the time it will sit idle. You only need it for a few hours or few days a year. The best way is to have an Uber-style service for tractors and this is actually happening now in Nigeria and Kenya, and is spreading throughout Africa. The technology enables people to have access to tractors, whereas before it was an impossibility."

Varangis stated in sub-Saharan Africa it has the largest level of mobile money account owners, compared to the rest of the world, according to the Findex-database 2017. He said a large number of farmers used their mobile phones to get paid and receive insurance payments as well as pay for solar panels to enhance their quality of life.

"After a certain number of years you own the panel," he continued. "You can have refrigeration in the village and operate water pumps using solar panels. Technology will bring more and more of these types of solutions. There is a large revolution in the digital economy that is happening in Africa and that is creating tremendous opportunities. I think we are just seeing the beginning of it."

He said there were a large number of players involved with leasing agricultural equipment too across Africa, especially in Ethiopia, Tanzania, Mozambique and Kenya.

"The availability of long-term finance for leasing companies so that they can purchase equipment is quite important. There are a couple of interesting schemes, one of which includes international cocoa buyers who want to help cocoa operatives in Côte d'Ivoire to purchase trucks so that they can improve their harvest. The repayment of leasing the trucks is achieved through the delivery of the cocoa to these big buyers," he added.

RECRUITING FOR AFRICA'S AGRICULTURAL SECTOR

CA Global Africa Recruitment group MD Bradley Barr spoke to sister publication African Farming at the Agroinvestment Summit in London about what sets them apart from other recruitment companies.

"We are Africa specialists, there is nobody else really that does what we do," Barr said. "What is different from other recruitment agencies, is yes you look at your locals and you talk to your local recruitment agencies but we are the next stage. We are looking at it from a global perspective and don't want to compete with the locals. So the local companies do what they can do to identify the talent, then when they talk to us we are the headhunters that go and identify where that skillset is outside the country."

Barr added that it thinks the recruitment sector is exploding. "I think it's more about localisation and empowering the locals. You see that happen in the first world, and I do think education is the biggest part of it all. You see a massive investment going into the education sector across Africa."

THE CHALLENGE IS ACCESS TO LAND, NOT FINANCE

African governments need to identify areas of farmland and put the right infrastructure in place to encourage investment in bankable agricultural projects, it has been claimed.

"I don't see the challenge as access to finance, the first challenge is access to land," said Dr Teddy Ngu, GB Foods Strategy and Integration Director, Africa and Middle East to delegates at the Agroinvestment Summit in London on 5 June.

"Most of the people who succeed in agriculture do so on large land masses, not on smallholder farms. Industrial farmers are the ones who need to be encouraged to do successful farming. Look at what's happened in Thailand. They have built canals and dams. In the same way, African governments need to identify areas and put the right infrastructure in place; dams, roads, power facilities, and then invite people to invest. Let's not focus on exporting products when there is enough local demand."

He cited Nestle as one of the most successful Nigerian companies on the Nigerian Stock Exchange, adding that "it does not export most of what it produces in Nigeria."

"A businessman makes more money trading ginger within Nigeria than trying to export it, which can take 200 days to ship to Europe. This is too long."

Emmanuel Doni-Kwame, Secretary General of ICC Ghana, who said earlier in the summit about Burkina Faso being a success story with its tomato farms, agreed, "We have to get it right to satisfy the demand at home before we start thinking internationally."

Ngu said GB Foods has been in the process of identifying 1,000 ha of land for more than a year, but it cannot find it. "We want to do industrial farming in Africa but it is impossible to find adequate land. Often you have to negotiate with many people who have ownership rights over the land."

BRIEFS

New tractor design highlights

Image Credit: CNH Industrial

The New Holland tractor features a reimagined tractor design.

David Wilke, industrial design director at CNH Industrial, discussed innovation across areas such as power ranges, sugar harvesting, and design components at the Agroinvestment Summit in London on 4 June.

Wilke give a presentation on his experience working on tractor design concepts. "We designed the New Holland methane-powered concept tractor; that was great fun because we went through the tractor looking at every element."

Call for Africa to join e-commerce agreement

Image Credit: Adobe Stock

Africa will bring the scale necessary for the ICC's e-commerce trade agreement.

"We have to act now." That was the call from Chris Southworth, Secretary General of the International Chamber of Commerce (ICC) during the Agroinvestment Summit in London on 4 June.

He was urging investors to make contact with their African government representatives to be a part of the ICC's e-commerce trade agreement which will cover at least 70 countries by 2020. "We will have the scale if we get 71 countries to agree, but we'll only do it if Africa comes on side," he said.

East African countries continue to offer highest rewards for investors

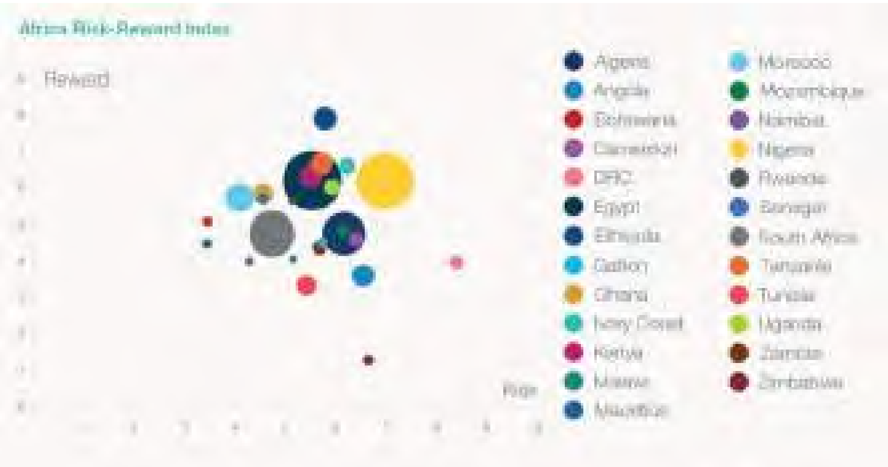

Image Credit: Control Risks and Oxford Economics

Ethiopia and Tanzania are among the top rewarding economies.

Ethiopia, Tanzania, Kenya and Uganda offer investors a reward score above the African continent's average, according to the 2018 Africa Risk-Reward Index from Control Risks and Oxford Economics.

Ethiopia and Tanzania lead the list of the top rewarding economies for the second time, with Kenya following in fourth position after Côte d'Ivoire. Strong improvements on both the reward and the risk side make Uganda one of the strongest performers of the June 2018 edition of the Africa Risk-Reward Index.

Daniel Heal, senior partner for East Africa at Control Risks, said, "Ethiopia with its impressive reward score of 7.94 out of 10 offers opportunities for investors specifically in the agriculture and manufacturing sectors which continue to demonstrate high levels of growth. The government's new privatisation push in the energy, telecoms and logistics sectors also offer new and exciting opportunities for investors. However, its risk score of 5.79 is also above the continent's average of 5.54 due to the ongoing political transition under new Prime Minister Abiy Ahmed, who will need to delicately balance the interests of the political elite with opposition demands for the opening of political space.

With great economic potential across sectors from energy to agro-processing, Tanzania remains an interesting but volatile target for potential investors. However, the country's continuously high reward score is overshadowed by a high risk score of 5.72. After Kenya's protracted 2017 election period and consequently reduced investment levels, 2018 is an exciting year for investment opportunities in Kenya. Kenya's reward score remains one of the highest in sub-Saharan Africa and the ruling Jubilee Party of Kenya continues its pro-business policies. However, improving relations between the government and the opposition will be instrumental in ensuring that political tensions do not undermine economic growth, and more prudent fiscal and macroeconomic policies are needed to maintain positive economic prospects. Uganda ranks among the top economies in the 2018 Africa Risk-Reward Index when it comes to positively changing its scores. Relative political stability under President Yoweri Museveni means that priority national projects such as oil production or infrastructure projects face few policy or bureaucratic delays.

EAST AFRICA WINS BIG AT AFRICAN BANKER AWARDS

East Africa dominated the African Banker Awards this year.

The awards, held annually on the fringes of the annual meetings of the African Development Bank, celebrate excellence in banking and finance on the African continent. The announcements were made during a gala dinner in Busan, South Korea.

The CEO of Equity Group Holdings in Kenya, James Mwangi, won Banker of the Year. His bank has seen impressive growth through a series of innovations and diversified investment channels away from consumer loans. Kenya's Equity Group also beat off strong competition from four other shortlisted nominees to win the coveted 'African Bank of the Year Award'. Tanzania's Dr Benno Ndulu, former central bank governor who finished his second term last year, won Central Bank Governor of the year for his work in pushing for financial inclusion as well as for sound macroeconomic management. CRDB, also from Tanzania was named the 'Regional Bank in East Africa'.

South African banks dominated the investment banking and deals of the year categories. Standard Bank Group scooped three awards, including the one for 'Investment Bank of the Year'. Standard Bank and Rand Merchant Bank in South Africa took the 'Infrastructure Deal of the Year' for the US$5bn Nacala corridor rail and port project in Mozambique and Malawi, one of Africa's largest private sector funded infrastructure projects.

BGFI Bank in Gabon has won the award 'Regional Bank of the Year' in Central Africa.

Le Crédit Agricole du Maroc won the award for financial inclusion. Ecobank won two awards   one for Innovation in Banking and one for Retail Bank of the year, largely for the way it has integrated technology to considerably widen its products and reach.

BRIEFS

Image Credit: Adobe Stock

Digital Trade in Africa: Implications for Inclusion and Human Rights conference was held in Addis Ababa.

Exploring digital trade

Digital trade within the context of the African Continental Free Trade Area (AfCFTA) was at the centre of discussions during a conference dubbed "Digital Trade in Africa: Implications for Inclusion and Human Rights", held at the UN Conference Centre in Addis Ababa from 31 May to 1 June. It was organised by ATPC in partnership with the Office of the High Commissioner for Human Rights East Africa Regional Office, and the Friedrich-Ebert-Stiftung Geneva Office.

Investments not affected, says President

Image Credit: Présidence de la République de Djibouti

The DCT was nationalised in February after Djibouti was unable to renegotiate a contract with DP World

The President's office of Djibouti said in a statement that investments in infrastructure projects had not been affected by its decision to terminate a contract for the Doraleh Container Terminal (DCT). Djibouti nationalised the terminal after a failure to renegotiate a contract with the Dubai-based shipping firm DP World. The country has secured major investments and international partners for the Djibouti-Addis Ababa railway line, Tadjourah mineral port and Goubet port.

African leaders call for transparency, good governance to speed up infra development

Africa investor (Ai), the international investment and communications group, and Africa50, the pan-African infrastructure investment platform, co-hosted the fourth Ai CEO Infrastructure Project Developers Summit on June 18 in Mauritius.

The Summit was opened by Paramasivum Pillay Vyapoory, acting President of Mauritius, and closed by Aziz Rebbah, the minister of energy, mines and development of Morocco, who both emphasised the need for good governance, transparency and committed political leadership to speed up the process of approving and implementing infrastructure projects.

It is in everyone's interest to bring infrastructure projects to a financial close as quickly as possible.

"We need effective public-private collaboration to prioritise reaching rapid financial close on projects. This will demonstrate to private capital that early stage commercial project development in Africa is an attractive investment opportunity," Ai CEO Hubert Danso said.

Africa50 CEO Alain Ebobisse said, "the game changer will be when enough public and private sector stakeholders realise that the opportunity cost of delayed project implementation is too high. We must reach a consensus that it is in everyone's interest to bring projects to financial close and operations more quickly and at a larger scale."

This was echoed by African Development Bank's vice president for power, energy, climate and green growth, Amadou Hott, who emphasised the Bank's growing focus on the private sector and rapid project implementation.

The summit made a plea to the governments to show the political will to fasttrack projects and act with transparency and create stable institutions and a positive regulatory framework. As highlighted by the Mauritian President and the Moroccan minister, countries that have been successful, including their own, have master plans for infrastructure that they have implemented consistently over the long term, coupled with transparent, fair prices that reflect risks at every stage of a project. Overall, this year's summit helped cement the consensus that it is in everyone's interest to bring infrastructure projects to financial close and operation as quickly as possible.

FRESHWORKS BETS BIG ON SOUTH AFRICA

Freshworks Inc, a leading provider of cloud-based business software, has announced an aggressive growth strategy to propel the ambitious expansion of its evolving South African footprint.

"Our growth plan for South Africa completely leverages the company's product strengths, financial capabilities, and technology innovation to drive industry-leading returns," said Arihant Jain, business head, Middle East & Africa, Freshworks.

Freshworks serves select customers such as Berkshire Hathaway, DHL, Naspers, Hi-Sense, Web Africa and partners such as Teleforge, Freshtech Africa and Stridesmart in South Africa, but this base is expected to grow exponentially with the company's new growth strategy for emerging markets such as this. As part of this growth plan, the company is inclined to make accelerated investments in hosting tailored customer events, marketing meets and roundtable conferences to build its network of brand loyalists in the region.

AGCO SETS UP SHOP IN JOHANNESBURG

"Africa's role is pivotal to feeding the world's growing population and repairing the problem of global food security," says Martin Richenhagen, CEO of AGCO, a worldwide manufacturer and distributor of agricultural equipment. Richenhagen has outlined AGCO's vision and strategy for advancing African agricultural prosperity, at the official opening of the company's new Africa headquarters in Johannesburg.

"With global sales of US$8.3bn, AGCO is making major investments in Africa to engineer food security and support sustainable productivity through technology and innovation," said Richenhagen. "As a 'first mover' in innovation, we are meeting the challenge to grow more food with fewer resources head-on."

The company is poised to increase its involvement in the Agri-Parks project, the networked innovation system of agro-production, processing, logistics, marketing, training and extension services.

"With AGCO's wide-ranging products, services and expertise, we are perfectly placed to make a valuable contribution to this exciting initiative in agricultural production and rural economic transformation," said Nuradin Osman, AGCO vice president and general manager Africa. "The company's approach to 'serve Africa from Africa' is central to our strategy to accelerate and deepen agricultural growth on the continent. Africa – your time is now," said Gary Collar, AGCO senior vice president and general manager, Asia-Pacific and Africa.

"Meeting key stakeholders in Africa's agricultural advancement was a great opportunity for me, and as a business we are committed to Africa and will be available to add towards initiatives that ensure that agriculture is done differently, in order to contribute towards economic growth and job creation," said Richenhagen.

BRIEFS

Namibia government intervenes in illegal sand mining

Image Credit: Adobe Stock

The decision came at a meeting between ministry and Uukwambi district heads.

Namibia's Ministry of Environment and Tourism (MET) has asked the leaders of the Uukwambi Traditional Authority to stop illegal sand mining taking place within their tribal jurisdiction. The Authority should ensure all sand miners in the area stop mining operations and apply for environmental clearance certificates from the MET to mine sand, the ministry said. Allegations are rife that sand miners offer bribes to traditional leaders to illegally mine the sand.

South Africa all set to improve its business climate

Image Credit: Adobe Stock

China has been South Africa's top trading partner since 2009.

The South African government has prioritised the enhancement of business confidence and investor interest to create an enabling environment for businesses, said Bulelani Magwanishe, deputy minister of trade and industry. He was addressing the business delegation from Zhenjiang Province at the Chinese Embassy in Pretoria. South Africa and China have been engaged in a fast growing economic relationship, and China has been South Africa's top trading partner since 2009, he said.

Emir of Kano underlines the need for regional co-operation and structural reforms


Image Credit: African Development Bank

Muhammadu Sanusi II, the Emir of Kano

Africa's development agenda must focus on the socio-cultural and commercial interests of Africans and the improvement of Africa's trade and economic ecosystem, said Muhammadu Sanusi II, the Emir of Kano and a former governor of Nigeria's Central Bank, during his address at the 2018 Annual Meetings of the African Development Bank Group in Busan, Korea in May.

"Africa's economic transformation will be best achieved through fast-tracking regional cooperation and the execution of hard-nosed structural reforms that focus on the development of the continent's human capital and material resources," said Emir Sanusi II.

He traced Africa's post-colonial economic woes to the continent's fiscal indiscipline and endemic disregard for its competitive advantages. For these reasons, he asserted, Africa's development was stunted and its global trade ties skewed in favour of offshore trading partners.

"Nine out of every 10 countries in Africa have huge trade deficits with China, but Asia developed mostly on domestic investments and resources," he noted, underscoring the need for African governments to invest in and promote creativity and indigenous enterprise.

The Emir advocated a series of structural reforms, including strategic investments in key sectors including agriculture, infrastructure, education, and small and medium enterprises, as well as industrial diversification.

African Governments also need to eradicate constitutional provisions and structures that increase the cost of governance at national and sub-national levels, manage demographic growth, and revamp and harmonise moribund and ineffective customs and excise duties that promote cross-border smuggling and revenue losses to governments, he said. He also called for improved transparency, a crack down on corruption and the creation of job opportunities.

On trade, the Emir called for a regional and pan-African approach to trade negotiations, a tactical model which should be led by the Bank.

AGILITY LEASES WAREHOUSE SPACE TO CUMMINS

Agility, a leading global logistics provider, has leased warehouse space in the Agility Warehouse Park in Ghana to engine and generator manufacturer Cummins for a new West African Distribution Center.

Cummins will use the facility to stock and distribute a range of over 10,000 spare parts for its operations across West Africa. The Agility park is eight kilometres from Ghana's main seaport and is adjacent to the Aflao highway connecting Ghana to Ivory Coast, Togo, Benin, and Nigeria.

Felix Bani, Cummins operations manager - Central Supply Chain Operations (CSCO), said, "Product distribution can be fast-tracked, either by road, sea or air. By choosing the Agility Warehouse Park, Cummins has addressed one of the biggest constraints to companies doing business in West Africa - the lack of quality infrastructure." He added that Cummins was also attracted to the facility because it meets international environmental standards and features eco-friendly construction materials.

GOOD AGRI PROSPECTS IN COTE D'IVOIRE

Côte d'Ivoire is becoming the bread basket of West Africa, according to GTAI Germany Trade & Invest. Agriculture and the food industry, especially in Abidjan, are thriving, both in production and processing, with further investments to follow. Both sectors enjoy a prominent regional position, supplying other francophone countries of the region, such as Burkina Faso, Mali, Guinea, Niger, Togo and Benin.

The increasing demand for food throughout the French-speaking West African market of 110mn inhabitants and the good general economic situation in Côte d'Ivoire continue to offer positive prospects for suppliers of agrofood and plastics, printing and packaging technology.

For this reason fairtrade Messe is moving the 5th Agrofood & Plastprintpack West Africa from Accra to Abidjan, the capital of Ivory Coast. The event is due to take place from 20-22 November 2018 at the Radisson Blu Hotel, Abidjan Airport.

"In the future, Agrofood & Plastprintpack West Africa could take place alternately, in Abidjan and in Accra, Ghana," said Martin März, founder & managing partner at fairtrade. "Agrofood West Africa covers the entire value chain – from field to fork with the three dedicated events; agro & AgroTech West Africa, food + bev tec West Africa and food + hospitality West Africa. The partner event Plastprintpack West Africa covers all relevant industries in the plastics, printing and packaging sector."

According to VDMA, the German Engineering Federation, West Africa imported EUR187.2mn of agricultural equipment in 2016 and food processing and packaging technology at a value of EUR557mn, a rise of 10 per cent compared to 2015.

For further information see www.agrofood-WestAfrica.net and www.ppp-WestAfrica.net.

BRIEFS

New ground station for search and rescue

Togo and Thales Alenia Space have announced that they have signed a contract for a ground station to be installed in Lomé, Togo, to be used for the search and rescue (SAR) of persons in distress, mainly using the Galileo satellite positioning system. Based on Thales Alenia Space's MEOLUT Next (Medium Orbit Local User Terminal), the latest-generation MEOSAR (Medium Orbit Search and Rescue) technology, this system will enable the instantaneous location, with accuracy of a distress call issued by a beacon operating through the COSPAS-SARSAT system.

"Thales Alenia Space's MEOLUT Next station reflects the Togolese government's aim of guaranteeing maritime safety in the Gulf of Guinea, while also fostering a climate of security," said Ninsao Gnofam, Minister of Infrastructures and Transports.

Improved risk-reward scores for West African economies

Increased political stability, improved commodity prices and effective public economic reforms led to an improvement of the risk-reward score in several West African economies, according to the 2018 Africa Risk-Reward Index from Control Risks (www.ControlRisks.com) and Oxford Economics. Ghana leads these positive developments for West Africa, recording the strongest improvement in its risk-reward score in Africa, after Zimbabwe and Egypt. Both Nigeria and Senegal benefit from a greatly improved risk score.

Tom Griffin, senior partner for West Africa at Control Risks, comments: "In 2017 many West African governments have embarked on an impressive journey to implement the right reforms for economic growth and improvement of investors' confidence."


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JULY

4 - 6

KENYA MANUFACTURING & EQUIPMENT
Nairobi, Kenya
www.kenyamachineryexpo.com

9 - 11

AFRICA PETROLEUM EQUIPMENT SHOW
Nairobi, Kenya
www.afripetequipment.com

17 - 19

POWER-GEN & DISTRIBUTECH AFRICA
Johannesburg, South Africa
www.powergenafrica.com

AUGUST

3 - 5

WERA WORLD CONGRESS 2018
Cape Town, South Africa
www.wera2018.co.za

29 - 31

MINESAFE
Johannesburg, South Africa
www.minesafe.co.za

SEPTEMBER

10 - 14

POWER WEEK AFRICA
Johannesburg, South Africa
www.power-week.com

13 - 14

FUTURE ENERGY UGANDA
Kampala, Uganda
www.future-energy-uganda.com

16 - 18

GHANA TRADE SHOW
Accra, Ghana
www.growexh.com

20-21

AFRICA PROPERTY SUMMIT
Johannesburg, South Africa
www.apisummit.co.za

25-27

POWER NIGERIA
Lagos, Nigeria
www.power-nigeria.com

OCTOBER

3 - 4

EAST AFRICA ALTERNATIVE INVESTMENT CONFERENCE
Nairobi, Kenya
www.aidembs.com

9-10

INFRASTRUCTURE AFRICA
Johannesburg, South Africa
www.infrastructure-africa.com

NOVEMBER

6 - 9

ECOMONDO
Rimini, Italy
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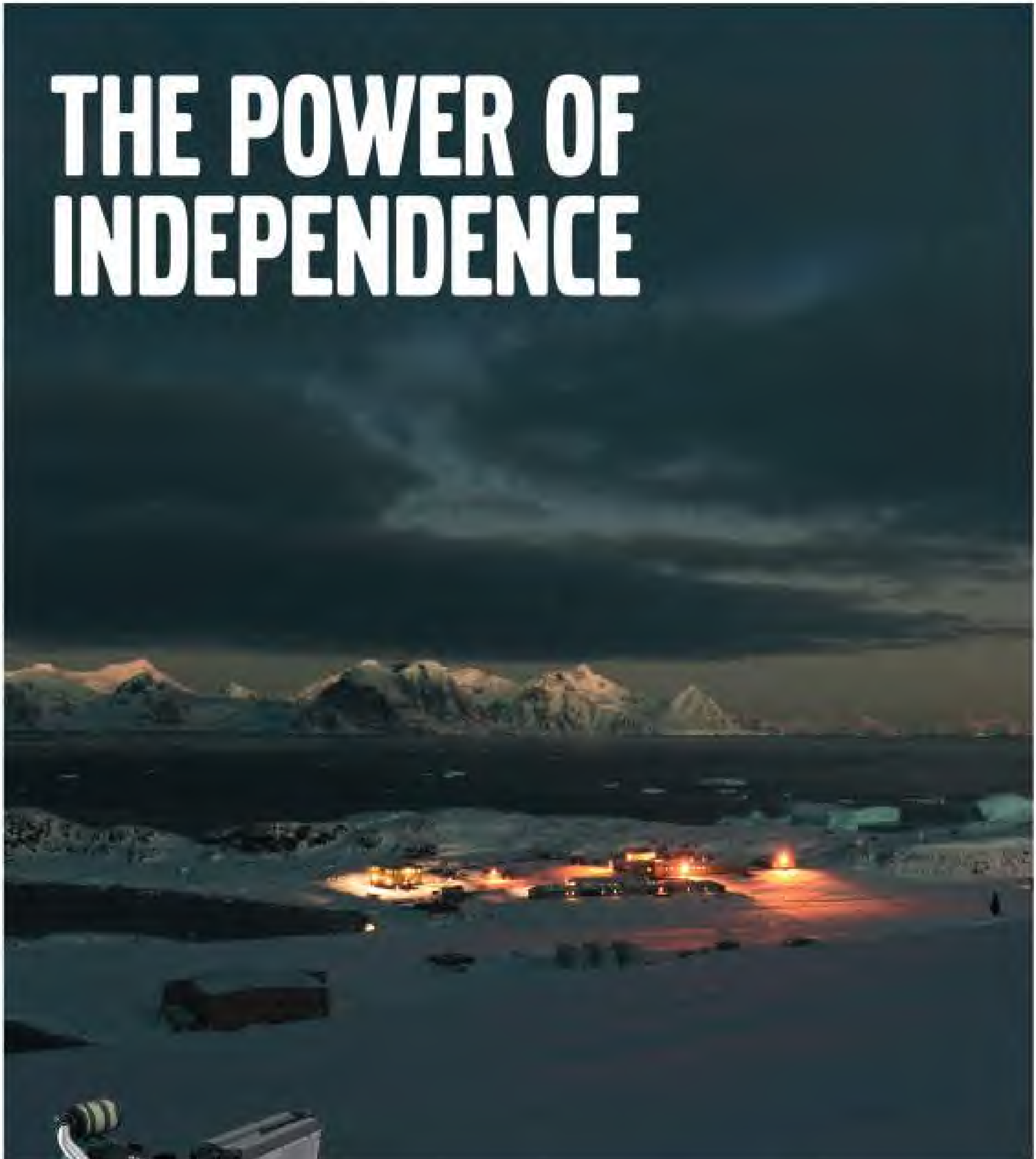
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ADFD GRANTS US$10.89MN FOR A RURAL ELECTRIFICATION PROJECT IN UGANDA

Image Credit: Oran Viriyincy/Flickr

The project, once completed, seeks to meet growing electricity demand in rural Uganda.

Abu Dhabi Fund for Development (ADFD) has approved a US$10.89mn concessionary loan to develop a 33kV rural electrification project at Kalongo in northern Uganda.

Mohammed Saif Al Suwaidi, director general of ADFD, Ajedra Gabriel Gadison Aridru, minister of state for finance planning and economic development in Uganda, signed the loan agreement at the ADFD headquarters in Abu Dhabi. Aimed at electrifying homes, schools, healthcare centres, government offices and commercial, industrial and agricultural establishments, the project seeks to help the government achieve its objective to meet electricity demand in rural Uganda, increasing electricity output from less than seven per cent to 26 per cent by 2022.

MOODY'S DOWNGRADES GABON ON DEBT REPAYMENT WORRIES

Image Credit: Scott/Flickr

Low oil prices have hurt Gabon's economy.

Moody's has downgraded Gabon's sovereign debt rating for the second time in 12 months to Caa1, citing liquidity pressures which are making debt repayment tougher.

However, the ratings agency changed its outlook to "stable" from "negative" on the expectation that the IMF is likely to support the country, as its debt levels will remain "sustainable" according to the IMF's framework.

Moody's also cut Gabon's local currency and foreign currency long-term bond and deposit ceilings to B1 from Ba3 and expects its debt woes to remain in 2018.

GHANA COMMITTED TO STRENGTHENING NEW BUSINESS OPPORTUNITIES

The government of Ghana is committed to strengthening business opportunities for private sector enterprises to accelerate economic growth and development across the region.

During the launch of "Indutech Trade Fair 2018" in Kumasi, southern

Image Credit: jbdodane/Flickr

Ghana is new destination for international companies to accelerate business.

Ghana, Osei Assibey-Antwi, CEO of Kumasi Metropolitan Assembly, reaffirmed the government's agenda to implement effective business policies to create sustainable business environment for local as well as international companies.

According to Assibey-Antwi, the "Ghana beyond aid" strategy focuses on attracting private sector companies that are crucial for the country's business growth and ensuring regional boost.

Ecomondo 2018: Debating the new European Strategy on plastic

The European Strategy on plastic and its development is one of the main themes at the centre of the high profile events of the forthcoming edition (the 22nd) of Ecomondo, organised by Italian Exhibition Group, from 6 to 9 November 2018 at Fiera di Rimini, Italy.

The high-profile international events will involve a large body of both Italian and foreign speakers, among the most qualified in the various environments. The panel was designed by the technical-scientific committee to ensure links to the most contemporary issues in the various evolving sectors of the green and circular economy. It is therefore fundamental for the Ecomondo committee to immediately establish a development of the guidelines concerning the European strategy

Image Credit: Italian Exhibition Group

The 22nd edition of Ecomondo will be taking place from 6-9 November.

on plastic for the visitors to the exhibition. The theme of plastic waste is at the heart of the extensive programme of meetings and conferences organised by Ecomondo's technical-scientific committee, which each year involves Italian and foreign high-level bodies (academic, associations, institutions).

On Wednesday, 7 November, the conference entitled How to Implement the European Strategy for Plastics in a Circular Economy will set itself the goal of boosting the European Strategy on Plastic launched by the European Commission this February, and which already has seen its first developments with a Brussels directive which bans straws, cotton buds and other plastic products.

The conference will address the audience of the biobased and biodegradable plastic industry, as well as the traditional plastic industry, who are called to the new challenges of the market.

25.8 million tonnes of plastic are produced in Europe every year, while plastic waste weighs 49 million tonnes: less than 40 per cent is recycled.

At Ecomondo, the eCircular project promoted by Climate-Kic with the University of Bologna at its head will indicate the potential measures for drastically reducing the effect of plastic on the environment.

'BLUE IS THE NEW GREEN': AFRICA BLUE ECONOMY FORUM DEBUT HITS THE MARK


Image Credit: Andrey Kuzmin/Adobe Stock

The first Africa Blue Economy Forum was launched on 8 June in London.

The African continent needs to work together on a country and regional level to put in place and, more crucially, implement a sustainable maritime governance system that will benefit the whole continent, concluded delegates at the first Africa Blue Economy Forum (ABEF).

ABEF 2018 took place in London on 8 June to coincide with World Oceans Day. The forum attracted international experts and African government ministers to debate the economic contribution of oceans in the context of the African Union's Agenda 2063 and the UN Sustainable Development Goals (SDGs).

Paul Holthus, CEO of the World Ocean Council and keynote speaker at ABEF 2018, remarked, "Africa presents major blue economy investment opportunities and also sustainable development challenges. We are working to bring together ocean business community leadership and collaboration in Africa to address both these opportunities and challenges."

FROST & SULLIVAN HOST AUTOMOTIVE INDUSTRY MEETING IN MOROCCO

Frost & Sullivan, in association with Aivam, hosted its Automotive Meeting on June 28 at Hotel Hyatt Regency, Casablanca, Morocco.

The automotive industry is undergoing major changes and 2018 is expected to significantly accelerate transformation of the way automotive companies do business globally and in Morocco. As Morocco is on the way to becoming one of the top 10 world manufacturers with the goal of manufacturing one million highly localised vehicles by 2025, these changes will most likely redefine the Moroccan automotive landscape.

"Our interactive workshop is designed to help industry leaders identify the top Mega Trends impacting the market, and build innovative business models in the areas of Mobility, Vehicle Technology, Autonomous Driving and Connected Cars, Car Retailing, Aftermarket and Commercial Vehicles," noted Franck Leveque, partner, Vice President Automotive & Transportation EIA, Frost & Sullivan. The Frost & Sullivan Mobility practice provides global market intelligence and thought leadership to execute major growth opportunities and navigate within the transforming automotive business environment.

GHANA'S ECONOMIC INITIATIVES WILL DO LITTLE TO REDUCE POVERTY, SAYS UN

Ghana's flagship policies might well stimulate the country's economy but they won't do much to get rid of poverty, even though that is their stated aim, says a UN human rights expert.

"The government claims that the economic stimulus provided by these programmes will automatically cut the country's high rates of poverty and growing rates of urbanisation, but the main beneficiaries will be people with capital, and those who are politically well-connected," said the UN Special Rapporteur on extreme poverty and human rights, Philip Alston. His comments mark the presentation of his report to the UN Human Rights Council in Geneva on 21 June, on his 10-day fact-finding visit to Ghana in April 2018 during which he examined the country's policies including "one factory, one district", "one village, one dam", and "one constituency, one million dollars".

There is nothing in the design of the schemes to suggest they are capable of generating the sort of large-scale employment opportunities, or training for unskilled workers that would be needed to make a significant contribution either to eliminating extreme poverty or relieving urban crowding," Alston explained.

AFRICA'S ECONOMIC GROWTH ON THE RISE, DESPITE DEBT INCREASE


Image Credit: Adobe Stock

East Africa is set to grow by 6.1 per cent.

Several African countries have reported a rise in their GDP despite fears over increased debt according to ICAEW's (Institute of Chartered Accountants in England and Wales) latest report. In Economic Insight: Africa Q2 2018 launched on 19 June, the accountancy body provides GDP growth forecasts for various regions including East Africa which is set to grow by 6.1 per cent, Southern Africa by 2.3 per cent, Central and West Africa at 3.6 per cent and Franc Zone at 4.5 per cent. According to the report; East Africa's GDP growth is mainly thanks to Ethiopia whose real GDP growth of 8.1 per cent, is forecast to result from continued public investment. The same kind of capital spending in Egypt, made possible by compliance with reforms proposed by the International Monetary Fund (IMF), will boost growth to 5.0 per cent, making this the key driver behind the 3.9 per cent growth in North Africa's GDP this year.

In Central and West Africa, growth is forecast to increase substantially to 3.6 per cent, up from 2.3 per cent in 2017. The standout economy in that region will be Ghana, where real GDP growth of 7.2 per cent in 2018 is forecast to come partly from increased public investment, and the resulting boost to the construction and manufacturing sectors.

GLOBELEQ PARTNERS WITH EDM FOR MILESTONE MOZAMBIQUE ELECTRICITY PROJECT

Image Credit: Adobe Stock

The 400MW gas-fired power project will be located in Temane in Inhambane Province in Mozambique.

Globeleq, lead partner in the Temane Energy Consortium, and Electricidade de Moçambique E.P. (EDM) have reached a significant milestone in the development of Mozambique's electricity sector. On the sidelines of the 2018 Africa Energy Forum in Mauritius from 19-22 June, the team gathered to sign a joint development agreement which will progress the 400MW gas-fired power project located at Temane in Inhambane Province. To date, Temane has been developed by EDM and Sasol New Energy Holdings (Sasol), with EDM holding 51 per cent and Sasol 49 per cent in the project. TEC will take a 60 per cent stake in EDM's shareholding of the local SPV company, with EDM holding the remaining 40 per cent. The project will supply low-cost, reliable power to EDM through a 25-year tolling agreement using natural gas supplied from the Pande-Temane fields operated by Sasol and ENH, the state-owned hydrocarbon company.

Building sustainable cities of the future

Experts from WSP in Africa share their insights on leveraging the transformative power of urbanisation to seize opportunities and build an impactful legacy for the future of Africa's cities.

Rapid population growth and urbanisation of African cities will see nearly 350 million new city-dwellers by 2030, and a billion more by 2063. In response to meeting the expected demand of the future populace – and the standards for sustainable urbanisation set out in the United Nations' New Urban Agenda, Habitat III – The African Union (AU) developed Agenda 2063. But, how will we get from the current state to that envisioned in the Agenda 2063 for a united and prosperous Africa?

Alison Groves, regional director, WSP, Building Services, Africa, said there was a lot of room for improvement in Africa towards the growth towards technologically 'smart cities'. "I believe that in the African context, and knowing the challenges faced in African cities with infrastructure deficit to support the population growth we are seeing, we need to take a different approach."

A World Bank report highlighted that there are three main and reoccurring challenges with Africa's rapid urbanisation; the cities are too crowded, not integrated, and it is expensive to live in African cities. To meet the standards set in the New Urban Agenda, cities must become far more reasonable for people to thrive and more environmentally friendly. "In Africa, if we are going to achieve the aspirations laid out in the Agenda 2063, there needs to be more focus on infrastructure development that will support sustainable cities that are totally integrated – and cities that are 'people' focused. This will mean reviewing all infrastructure plans and projects to understand what is the socioeconomic and environmental impact of these," added Groves.

Herbert Phahlane, director: traffic and transportation, WSP, Commercial Civils, Africa, agrees, "If we consider the current state of prioritisation of infrastructure projects by African nations, in many respects, this needs to be readjusted. The Agenda 2063 provides a long-term vision and set of seven aspirations. What we need now is an integrated actionable plan that takes into consideration the development priorities of each region and provides a step-by-step implementable roadmap that also encapsulates how people will live, work and play – towards and well beyond 2063."

Phahlane recognises there are infrastructure projects and plans being implemented, or are in

Herbert Phahlane, director: traffic and transportation, WSP, Commercial Civils, Africa.

the pipeline, however he believes that the effective implementation of infrastructure projects should be considered in earnest – in a way that will benefit people, communities, trade and industry.

"We should be undertaking an economic impact assessment process to understand the 'real potential' socio-economic impact and, if based on this, the projects currently being fast-tracked are in fact the right projects to allow us to potentially leapfrog current implementation constraints and get ahead of the demand curve that will support sustainable development and growth going forward," said Phahlane.

Interlinking cities

"Part of the integration challenge is that the cities and urban nodes are spread out across far-reaching spaces and are fragmented. This also adds to the expense for people who live outside of cities, but need to travel into the cities to pursue employment opportunities," continued Phahlane.

The New Urban Agenda has placed significant focus on how people will move within and between cities. Futureproof planning therefore means that the bigger picture must involve the integration of major transportation infrastructure projects with provincial and municipal development. It must also consider planning for and the development of the critical mass of support infrastructure that feeds into and from the primary infrastructure.

Groves says, "Part of focusing on people is also looking at how technology can be introduced and used to improve access to services and the quality of life city dwellers. Technology must be considered a social and growth enabler, but in context of the bigger vision."

Citing Kigali as a keen example, Groves says, "Rwanda has come out of a very war-torn situation from the early nineties, and today Kigali is one of the flourishing cities in Africa – largely because of the opportunities offered by a strong technology-based backbone."

"We cannot escape that we are living in a world that is increasingly being transformed and driven by advances in technology. To ensure we are not left behind in the latest revolution, we must embrace technology and ensure that our cities are technologically enabled and powered. This will drive immense opportunities for people living in our cities to have access to services, but also information. More connected and informed city dwellers will help make our cities smarter," says Phahlane.

Futureproof approach to sustainability

Climate change and extreme weather events present inevitable risks that African nations will be faced with.

"Given the scarcity of access to resources, many current basic services infrastructure plans are reliant on one solution. For example, one water solution, or one energy solution. However, this poses eventual risks to a city's supply services," says Groves.

Groves explains that the city of Cape Town is a prime recent example. The city has always been very reliant on the Twee Water dam. In responding to the water crisis, the city had to look at alternative sources and solutions for water supply in the region.

"We need to understand that without intervention the urban form of the city will not rapidly and materially transform itself towards being more efficient and sustainable. Going forward and as we look to adapt our cities to be more low carbon cities, we need to look at diverse solutions – things that network with each other, but can operate independently – and that promote resilience, particularly considering climate change to come," added Grove. ■

Banking with a difference

Charles Kie, managing director of Ecobank Nigeria, largest affiliate of Ecobank Transnational, talks about the recent partnership with MTN and how fintech is disrupting the banking industry.

Where are you originally from and what's your background in banking?
I'm from Côte d'Ivoire and have over 20 years' banking experience. I have been managing director of Ecobank Nigeria since January 2016. I first joined the company in 2011 when I was chief operating officer of Ecobank Capital, the investment banking arm of the Ecobank group. Before moving to Nigeria, I was the group executive of Corporate and Investment Banking of Ecobank and held the position of group chief executive officer of Banque Atlantique, a banking group in West and Central Africa. I was also regional chief executive officer of Citigroup in Côte d'Ivoire and then later in Senegal.

Congratulations on your recent partnership between MTN and Ecobank. What impact do you think that this will have on your digital offering as a bank?
Obviously, the framework of the partnership the Ecobank group got into with MTN is going to essentially deepen financial inclusion, which is about increasing the provision of financial services to people via their mobile phones. As a group we could have reached a certain level of market penetration by using our own products, but the partnership with MTN allows us to access another pool of customers. Ecobank's objective of having 100 million customers in five years becomes even more attainable with such a partnership.

What is Ecobank's contribution to the economy?
The key is getting people banked. We need to make sure that financial inclusion is effectively demonstrated and that it materialises. That is why, beyond just keeping branches, Ecobank has brought many innovations to the market: we're making payments easy and taking the cost of handling cash out of the system at the lowest level possible. We are now focusing more on cash management solutions to our customers for their transactional operations. The Ecobank Mobile App is an example of one of our innovations. It has already been downloaded by more than five million people and serves 33 African countries. It enables 24/7 banking services and transactions in 18 different currencies and in four major languages: English, French, Portuguese and


Image Credit: Ecobank

Charles Kie, managing director of Ecobank Nigeria.

Spanish. Another innovative service is Ecobank Xpress Cash, a cardless withdrawal solution that allows people to generate e-tokens to obtain cash and make inter-regional transfers seamlessly. We also make sure that people can open accounts easily via our Xpress account without requiring them to provide any identification documents.

What financial services does Ecobank Nigeria offer to large Nigerian diasporas abroad?
People can send money via their phones, so they don't have to go to the traditional money transfer companies. They can scan any money card, link it to the platform and make remittances it has become that easy.

In your opinion, how do you see fintech shaping the banking industry in the years to come?
Fintech is disrupting the banking industry, which will not remain the way it is today. Banks will not be able to lead by themselves and will need partnerships to harness the benefits that fintech innovations are bringing to the industry. For example, most African countries are still using 2G for their phones and do not have access to data. However, a fintech company in Nigeria has already developed a solution to enable people to have the same level of experience on a normal phone as on a 3G device or tablet. We don't have to do it ourselves. We can adopt innovations already out there in the market to improve the customer experience. It's all about building the right partnerships.

How do you think the economy is performing this year following the downturn in 2016-2017?
Obviously, I'm always very careful when I talk about the recovery in Nigeria for one simple reason: one needs to understand why the country went into crisis. There was a sharp decline of oil prices in 2015, combined with reduction in oil output due to the insurgency in the Nigerian Delta, as well as the situation where more than 90 per cent of foreign exchange reserves depended on one commodity. The combination of these three factors translated into one of the worst crises the country went through in the last 20 years. The only reason why things are becoming positive is because the oil price has increased to US$75 per barrel and oil production has resumed to pre-crisis levels. But this does not fundamentally address the issue of diversifying the economy. You can't just depend on one commodity or one industry. Nigeria must diversify and take major adjustment steps and continue along the path of structural reforms. We have seen an improvement in Nigeria's ease of doing business ranking, and we must continue to make sure that we have a (foreign and local) investor- friendly environment which is vital for the development of the country's infrastructure. More than any other country on the continent, Nigeria needs investment in its infrastructure: power, railways, roads, logistics in order to move goods and people from one part of the country to another, as well as dealing with Nigeria's fast population growth. Currently, there are 194 million people in the country, but by 2050, Nigeria is forecast to have a population of 400 million. Massive investment is needed, and improving access to finance is critical for Nigeria to cope effectively with this huge rise in population. ■

What is the future of the trade finance gap?

With unmet demand for trade finance estimated to be between US$110bn and US$120bn in Africa, we need to understand the drivers behind this gap, says Doina Buruiana, project manager, ICC Banking Commission.

The African Development Bank places the unmet demand for bank-intermediated trade finance in Africa at between US$110bn and US$120bn (it is around US$1.5 trillion globally). Given that 80 per cent of trade is financed by some form of credit, guarantee or insurance, persistent gaps can mean exclusion from international trade for companies – and in some cases, whole countries – resulting in major trade, development and growth opportunities being missed. The shortage of trade finance hurts SMEs the most.

How can we expect this gap to change over the coming years? What impact is global banking regulation having, and how can developments such as digitalisation and new financing methods help? The ICC's latest Global Survey on Trade Finance – which garnered responses from more than 250 banks in more than 90 countries – provides in-depth analysis on how trade finance trends are evolving over time, seeking to answer some of these pressing questions and offering clear areas for improvement.

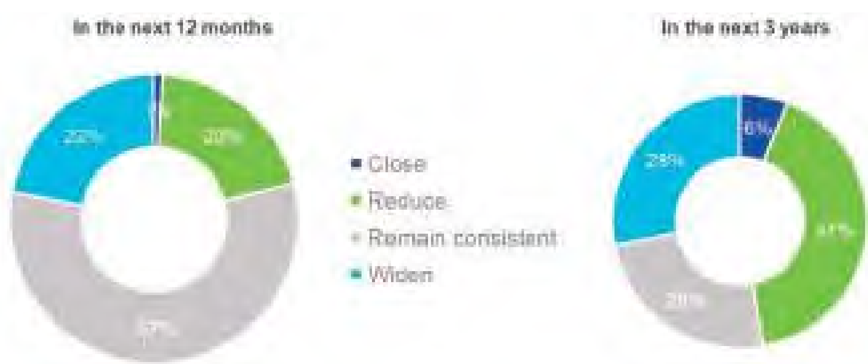
Doina Buruiana, project manager, ICC Banking Commission.

Rise in trade finance – yet pessimism remains in Africa

It is promising that a total of 57 per cent of African bank respondents (this was 66 per cent when assessed globally) said that the amount of traditional trade finance they provided in 2017 was higher than the previous year, while 61 per cent of respondents (46 per cent globally) noted an increase in supply chain finance (SCF). As many as 89 per cent of banks in Africa expect trade finance growth to improve over the next year.

Despite this, it is worrying that a total of 44 per cent of banks headquartered in Africa expect the trade finance gap to widen in the next year. Globally, about 22 per cent said the same, while 57 per cent believe it will be largely unchanged (see figure one). These responses together suggest advocacy to address the trade finance gap must be stepped up. In 2017, following ICC engagement with the United Nations (UN) and national governments, the UN officially recognised the estimated US$1.5 trillion trade finance gap and pledged to carry out an official review of its underlying causes.

The outlook is more positive for the trade finance gap over three years on a global level, with over 41 per cent of respondents expecting the US$1.5 trillion in unmet demand to shrink. Given the attention paid to trade financing today in policy circles worldwide, and the broader appreciation for the linkages between trade financing, trade conduct, trade-based development and economic value creation, this outlook is positive and meaningful. That said, African respondents were less optimistic, with 48 per cent still predicting a widening, suggesting that further work is still required.



Regulation puts brakes on growth

Clearly, some financial regulations have had the unintended consequence of widening the trade finance gap, making it more difficult for smaller companies and traders, especially in regions such as Africa, to access much-needed financing. Indeed, nearly 90 per cent of bank respondents to the survey highlighted regulatory and compliance requirements, including those linked to international sanctions and terrorism financing as major obstacles to the growth of trade finance. Banks based in Africa were clearly concerned about regulatory and compliance issues; almost two-thirds of respondents raised this subject.

While we fully recognise the need for such regulation and compliance, there are concerns about the amount of resources in terms of time, people and money that banks must invest to ensure compliance with a wide range of often inconsistent regulatory requirements and expectations across jurisdictions. Certainly, the ICC Banking Commission has continuously advocated for banking regulation that avoids aggravating geographical disparities in trade finance coverage, specifically across poorer regions in Africa and South Asia.

There are of course other factors influencing the supply of trade finance (see figure two for rejection rates by region). When asked about main reasons for rejecting trade finance transactions, 27 per cent of banks said limitations on credit line availability (country, bank, or company), while for 23 per cent it was unacceptable risk profile. In Africa, banks reported that they rejected 38 per cent of trade finance requests in Africa and 16 per cent in Central and Eastern Europe, with SMEs the most likely to be affected. Insufficient collateral was noted as a major reason for rejections.

The opportunity for growth in trade finance will come in part from fulfilling the huge unmet demand for SCF. Over the next year, 72 per cent of African respondents say they expect revenues to increase in traditional trade finance while 76 per cent expect SCF revenues to grow.

Digitalisation of trade finance also offers significant potential to make trade more inclusive.

On a global basis, more than 60 per cent of banks surveyed reported to have implemented, or to be in the process of implementing, technology solutions to digitalise their trade finance operations. However, only nine per cent of banks reported that the solutions implemented have so far led to a reduction of time and costs in trade finance transactions. On the positive side, 13 per cent of Africa-based banks reported experiencing benefits, higher than the global average. Undoubtedly, adapting global trade finance rules to the digital era will play a pivotal role in enabling banks to capitalise on new technologies.

Looking further ahead, global respondents identified three focus areas for three-to-five years' time: 48 per cent see an opportunity in attracting non-bank capital to create net new financing capacity, while 46 per cent believe in focusing on emerging technologies such as distributed ledger technology, and 42 per cent indicate they see a change in geographic coverage.

This suggests there is a potentially large development in redefining the landscape for trade financing, including the kinds of capital available to support cross-border commerce. Indeed, some 43 per cent of banks based in Africa say attracting non-bank capital to trade financing is a strategic priority.

All of these areas of focus should help shrink the gap. Yet we must also bring a greater number and diversity of companies into the international trading system – and this relies on an inclusive and evidence-based policy process, which can drive global economic growth and further development. The results from the ICC Global Survey should help to inform this ongoing debate between industry and policy makers. ■

For more information visit www.iccwbo.org/global-survey-report

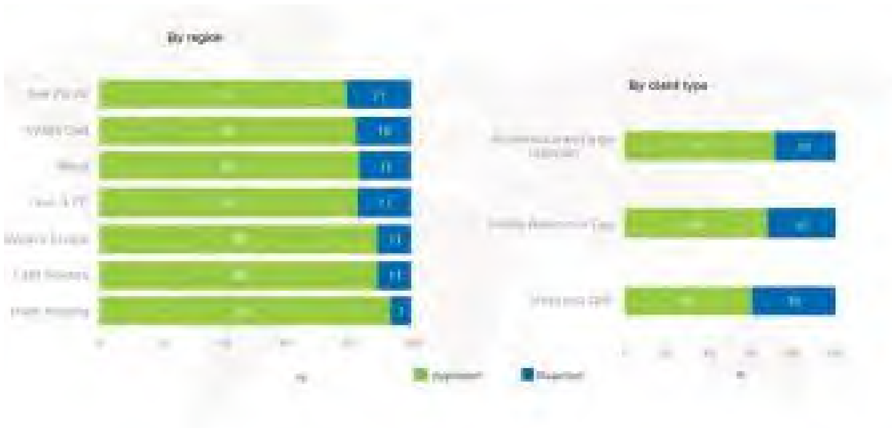


Image Credit: Adobe Stock

Air cargo market set to take off further

Throughout Africa, air cargo facilities have received significant investment over the last few years, strengthening the air cargo market for the whole continent. Samantha Payne finds out more.

Despite Africa's air cargo market dipping slightly in the first quarter of 2018, it still reported the fastest growth of all regions over the last 18 months, according to the latest IATA analysis.

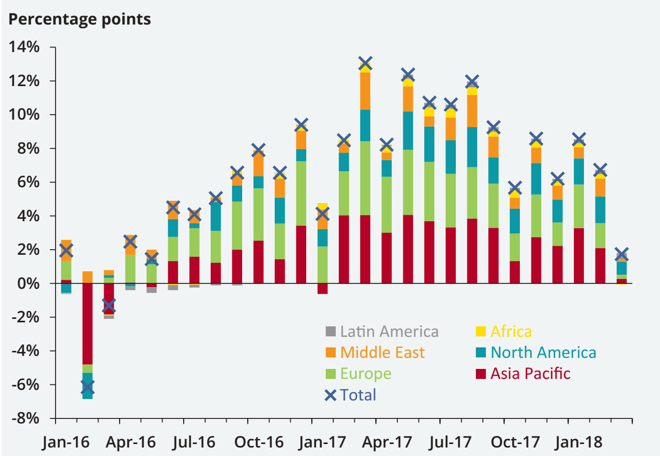
The level of international freight tonne kilometres (FTKs) for the region's carriers are now 3.7 per cent lower than a year ago.

But IATA analysts are optimistic the negative growth rate in Africa is attributable to an 'outsized' increase in freight volumes from a year ago rather than a decline in recent performance.

The annual growth rate in industry-wide FTKs slowed to just 1.7 per cent year-on-year in March, down from a robust 6.7 per cent in February.

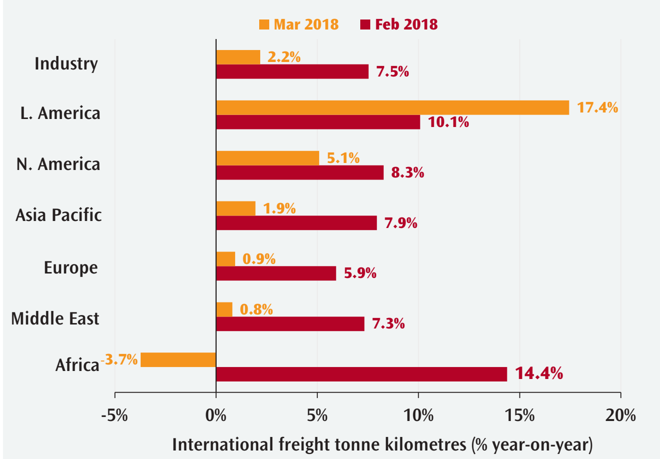
In the Air Freight Market Analysis, it remained upbeat for the future outlook. It stated, "We would caution against reading too much into these latest months' data as yet. Given the typical volatility inherent in the monthly data, such events are not unprecedented. Moreover, the underlying global trade backdrop remains supportive. Indeed, while noting some clear near-term downside risks, the IMF modestly upgraded its forecasts for international trade growth in 2018 and 2019 in its latest World Economic Outlook. The slowdown in

FTK growth and regional contributions



Sources: IATA Economics, IATA Monthly Statistics

International FTK growth



Sources: IATA Economics, IATA Monthly Statistics

growth is consistent with the latest signs from the global manufacturing PMI, which saw a 'softening in new export orders in recent months' especially from manufacturers in Germany, Japan and the US."

Airports Company South Africa (ACSA) said it has experienced lower air cargo volumes in the first quarter in 2018, compared with the same period a year ago.

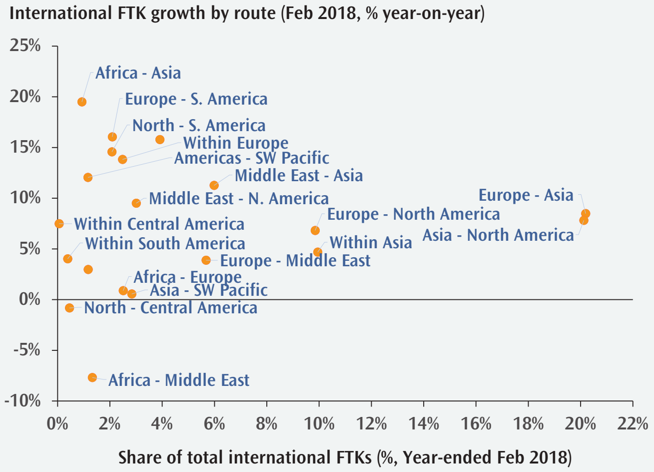
Christa Soltau, manager, cargo, OR Tambo International Airport said, "The air cargo volumes at our airports increased significantly in 2017 — almost 20 per cent — which exceeded forecasts, but we have seen a normalisation of the volumes over the first four months of this year, which is very much in line with the African, and global, trends. We have not recorded major gains in dedicated freighter movements over the last year, with the existing 14 international and local freighter carriers having kept much of their schedules and frequencies the same."

Freight rise on passenger flights

But the ACSA said the portion of freight being carried on passenger flights increased over the same period.

"ACSA has seen several additional passenger routes and frequencies at some of our international airports, which creates faster and more

International FTK growth by route (% year-on-year)



Sources: IATA Economics, IATA Monthly Statistics by Route

efficient ways for the goods to reach and depart from our shores to and from the global markets, and continues to have further interest in passenger connections. As the country focuses on moving towards a more stable and stronger economic outlook, we expect the interest in the freighter market to grow further.

"Throughout Africa, air cargo infrastructure has seen several investments and developments at African airports over the last few years. This has strengthened the cargo market for Africa as a whole. Johannesburg is still the largest cargo hub in Africa, handling just short of 415,000 tonnes in 2017 alone. South Africa still plays a major role within the African air cargo market, contributing almost 30 per cent of the total volumes moving to or from our continent. As a country, South Africa has a broad offering of products to be exported as well as a fairly stable consumer market, and as such it has a unique mix of commodities being traded. South Africa also still has a very strong position to support the movement of products being shipped to and from other countries in Africa, and intra-Africa trade is a large portion of the major airfreight movements to and through our airports. As Africa continues to be an exciting and developing economy, it is a market which the ACSA airports hope to continue to serve and grow further."

Airport Company South Africa operates the nine principal South African airports, including the three main international gateways of O.R. Tambo, Cape Town and King Shaka International Airports. In 2013, the nine airports facilitated nearly 39.5 million passengers.

Soltau continued, "The air cargo facilities found at the ACSA airports are efficient and cater for all types of commodities. There are dedicated pharmaceutical, perishable and animal facilities, as well as options for handling all types of dangerous goods, valuable cargo and the majority of general cargo that moves through the airports. We are also excited to be undergoing several smaller, shorter term improvement programmes to address current and short-term future demand. ACSA also will be securing services for the design of brand new facilities at the hub — OR Tambo International Airport — which will address growth in volumes up to 750,000 tonnes annually, and long-term planning cycles to address strong growth in Cape Town, happening later this year. All of these investments are aimed at improving efficiencies, providing best-in-class facilities and addressing the demands for air cargo movement into the future." ■

Image Credit: IVECO

Only way is Stralis

African Review talks to IVECO about the brand's presence in Africa for 50 years and the up and coming launch of the Stralis X-Way.

How important is it that IVECO takes advantage of emerging markets such as Africa? And furthermore, what is the company doing specifically to enter these low-cost markets?

Today, Africa is already one of the most important regions for IVECO truck sales. The company has been doing business on the continent for 50 years and has played a significant part in the industrialisation of many countries. This has been shown by our continuous sales and investments in service points all over the region. Today, IVECO is present in almost all markets. Africa continues to be fundamental for the achievement of forecasted results in terms of sales and profitability. For example, we will launch our new Stralis X-Way in Tunisia as it is one of the most important countries in terms of sale volumes for IVECO.

IVECO is a premium brand and is recognised by the client as the go-to European brand in all market segments. Focused investments on sales and service are the main factors for entering these particular markets. In Africa, in general, there is a growing demand for quality, and IVECO is ready to satisfy this request in terms of product and service.

Which African markets are most important to IVECO and why? Which product models sell well and in which sectors?

Of course each market is important to us. As mentioned previously, IVECO is present in most of Africa and invests continuously to improve business in the region. If we had to make a choice, the Maghreb area is fundamental to us and of course Ethiopia, where we have a direct presence, followed by West Africa and Angola. But we are recently reinvesting in two major markets, Egypt and Nigeria.

Our sales in Africa are represented like this: 60 per cent for heavy trucks, in particular the Trakker, 40 per cent for light trucks with the Daily and 10 per cent for medium commercial vehicles with the Eurocargo, which is sold mostly to municipalities. With the Stralis X-Way, we will be able to improve our long-haulage range with a vehicle which is capable of on- and off-road use.

With the exciting launch of the Stralis X-Way IVECO in Tunis, was it a deliberate move to make the vehicle adaptable to the African markets where emission controls are less rigid than in Europe? Does IVECO envisage this new natural-gas powered model being a 'true workhorse' in Africa?

The same IVECO range is sold in all African countries as in Europe with the exception of the engine type, which does not need to meet the European standard because of the poorer fuel quality in these markets.

Natural gas is a major alternative fuel for IVECO, in fact, all the IVECO range, including the Daily, Eurocargo and now the Stralis X-Way which is available with a gas engine power configuration. We are willing to cooperate with countries to develop this opportunity in Africa and in the Middle East because the quality of natural gas is the same across the world, providing a quick solution to improving pollution levels. The first results are already encouraging, but there is still a lot to do.

How many local assembly plants does IVECO have in Africa? Is it part of the company's long-term strategy for success in Africa? Can you cite the output of vehicles made per day as an example of one of your plants on the continent? What other areas, such as sales or after-sales, are being invested in to bring IVECO long-term success there?

In this period, the automotive sector in Africa is changing import regulations to favour industrialisation. For this reason, we are developing in many countries Complete Knocked Down "CKD" units, assembling our trucks and components locally. Through selected partners and IVECO quality certification, we are able to guarantee IVECO standards and produce models such as the Daily and the Trakker. Of course, the Stralis X-Way will also be available to assemble as a CKD unit.

At the moment, we have six plants across the Africa and the Middle East, and other projects will be introduced by 2019. Our plants are capable of producing around 600 to 1,000 units per year, depending on the number of shifts and level of assembling of parts required.

What would the company say are its main challenges in 2018 and beyond? How does it balance the need for low-budget trucks in Africa with incorporating innovative features?

Currently, the situation in Africa has been subject to economic and social factors, which have slowed down the commercial vehicles market growth, but there are signs of recovery. We try to develop specific plans to adapt to each country in order to satisfy our customers with tailor-made solutions.

We are not concerned with low-budget trucks sales in the market since this is not really our competition, we focus on clients which have a Total Life Cycle approach to the business and are ready to invest in a truck which is reliable, safe, has low-fuel consumption and keeps a good resale value.

What has been IVECO's key to success on the continent?

First of all, with the IVECO brand we cover all sectors of the commercial vehicles market: Light, Medium and Heavy on-road and off-road. We offer: strong and resistant vehicles for every load and every mission, reliable quality that won't let you down when you have to complete a job, modern and powerful engines for a safe and rewarding drive, consumption and operating costs that support your profitability, European technology recognised around the world, long-lasting value, a professional assistance network and specific financial solutions.

Is there anything else you would like to add that our readers would be interested in?

The focus of the second half of 2018 is the launch of the new Stralis X-Way, a brand new vehicle that will satisfy on-road and off-road missions and combines fuel-efficiency and safety technologies with the legendary off-road robustness. It is a vehicle that will be available in Tractor versions 4x2 and 6x4 and rigid 6x4, capable of covering haulage missions for on-road and off-road applications. We have developed a truck with an off-road 7,7 mm chassis and off-road ground clearance but with an on-road comfort cabin, low fuel consumption and top level safety features such as the European derived EBS System, ideally suited for the transportation of material to construction sites. ■


STRALIS X-WAY
PERFECT CROSSING
IVECO
X-WAY
BEST PAYLOAD IN THE INDUSTRY
Payload up to 20 ton on a 6x4 chassis with Large "C" section chassis
CONTINUOUS OPERATION
Higher autonomy thanks to the Cursor engine that allow to reduce fuel consumption
OUTSTANDING TCO
Thanks to 11.2% fuel saving tested by TÜV on the New Stralis, optimised driveline and disk brakes
MODULAR AND MISSION-ORIENTED RANGE
New front axle (off road) that guarantee an higher ground clearance
Robust chassis for light off-road missions
ON-ROAD EXCELLENCE.
OFF-ROAD ENDURANCE.
IVECO
Your partner for sustainable transport

Making a smarter world

Creativity and innovation have driven human development throughout history. From agriculture to industry to the information age, innovations in technology have marked major leaps forward in the development of our societies.

Image Credit: michaeljung/AdobeStock

ITU Telecom World 2018 will take place in Durban, South Africa in September.

As the pace of technological innovation increases, the gaps between those revolutions reduce, so that today, just ten years after the arrival of the smart phone, we are already on the cusp of the next major leap: the smart revolution.

Two aspects of the smart revolution stand out as significantly different. It provides the possibility for less developed markets and nations to leapfrog in developmental terms, not just to leap forward. And the creativity and innovation driving it will not only be human.

Artificial intelligence (AI) is one of the great enablers of smart society. AI is a blend of advanced analytical and machine learning applications which can perform processes or actions that would traditionally require human intelligence – and at an often greatly accelerated pace.

The use cases and benefits of AI are multiple, varied and developing rapidly, with tremendous potential to serve purposes and provide solutions to problems we are not yet aware of, in ways we cannot yet imagine.

One major aspect is AI's ability to swiftly and effectively analyse the ever-increasing wealth of sensor data available as the growing power and falling costs of computing provides for much faster and richer data analysis. Practical outcomes include identifying and treating disease, accelerating financial and machine to machine transactions, enhancing public safety, and improving city services, from provision of utilities to driverless public transport and city management. The aim is to save energy, time and lives through AI-enabled smart solutions.

Internet of Things

AI will not be working alone, however. The data it feeds from is set to grow exponentially in volume as the Internet of Things continues to connect billions of sensors and devices to each other, to the internet and to humans. As the IoT develops and refines, it opens the door to innovation across all vertical sectors, including health, media, transport and energy – and manufacturing, as the paradox of personalised mass production increasingly becomes a reality.

Innovation needs new tools to thrive, and 5G software-defined networks promise a rich playing field for creative minds. The exponential increases in bandwidth, speed, reliability and flexibility offered by 5G will create a powerful critical infrastructure capable of providing solutions to the economic, social and environmental needs of an expanding and increasingly urbanised global population.

Access to health professionals

Our smarter world will be enabled by these three vital technological developments, in parallel and in overlap: AI, IoT and 5G. Three acronyms driving innovation, with the potential to drive human development at a greater speed and with greater impact than ever before. In developing markets and nations in particular, smart can power the leapfrog effect, bypassing earlier stages of development, taking villages in Asia or Africa straight from no connectivity to 3G or 4G networks, from no access to education or health to world-class professionals available online, providing entry to the knowledge economy for the millions of digitally disenfranchised.

But for innovation to flourish, it needs to work in a supportive and positive environment. And for innovation to be fair, it – and the services, applications and products it ultimately produces – must be open to all.

Providing modern and fit-for-purpose regulatory frameworks as far as possible throughout the world of tech is critical to the success of smart innovation. Taking ideas to scale and maximising impact can only happen with international standardisation. Privacy, security, trust and reliability are all huge issues when discussing or dealing with data as the life blood of innovative products and services. And the debate on ethical and regulatory frameworks for AI has only just begun.

> "Our smarter world will be enabled by three vital developments, in parallel and in overlap: AI, IoT and 5G"
>
> **ITU TELECOM**

Making a smarter world for all, not just for the elite minority, is an even greater, multi-faceted challenge. It starts, of course, with connectivity for all as a basic human right. Just providing access to the internet and the benefits of the services, applications and knowledge it offers, is not enough, however — even if this can be done at affordable prices, with available devices. There is an urgent need to create awareness of, and demand for, the internet; to provide apps and services in local languages, with local contexts and the needs of local communities at the forefront; and to train, educate and develop the skills to use the Internet and bring whole new populations and generations online, releasing untapped human potential for innovation across the world.

Exploring the innovations in technology, policy, and strategy that are driving a smarter world — and the challenges we face in getting there — is at the heart of ITU Telecom World 2018. The leading tech event for governments, large businesses and SMEs, it is organised each year by ITU, the UN's major agency for ICT matters. This year's event will be held at the Durban International Conference Centre, Durban, South Africa, from 10–13 September.

The event features an international exhibition of tech solutions and projects, a world-class forum of interactive, expert-led debates, a networking programme connecting organisations, individuals and ideas, and an acclaimed awards programme recognising innovative ICT-based solutions with real social impact.

As an important regional commercial hub with a diverse, multicultural outlook and a dynamic, growing economy, Durban offers an invaluable perspective as a venue for experts and leaders from public and private sectors around the world. And given ITU's main role in allocating spectrum and establishing international consensus on industry standards, as well as supporting the critical role of ICTs and smart technologies in meeting the UN's Sustainable Development Goals, the event is certain to provide informed, interesting and valuable input on the power of innovation to drive a smarter world.

ITU's authority and expertise enable it to convene a unique and influential global audience. Heads of state and government will come together with ministers, regulators, leading industry CEOs from major players and SMEs, organisations, associations and consultants. As a UN event, it delivers a truly international perspective on innovation in technology, policy and regulation from emerging and developed markets from all around the world.

Visit telecomworld.itu.int to find out more about ITU Telecom World 2018 and how to take part this September. ■

Image Credit: Adobe Stock

BBOXX expands Africa off-grid footprint in DRC and southern Africa


Image Credit: BBOXX

BBOXX hopes to bring renewable electricity to an estimated 2.5 million people by 2020.

Renewable energy and technology specialist BBOXX is making moves across Africa, signing new partnerships in southern Africa and the Democratic Republic of Congo (DRC).

In the DRC, the company has signed a deal with the government under its 'Energie pour Tous' initiative to bring renewable electricity to an estimated 2.5 million people by 2020, providing smart solar home systems that are remotely monitored using cloud-based technology.

Customers are able to pay for the set up through mobile money and from around US$15 per month for a basic lighting, radio and phone system.

On June 19, BBOXX also announced a separate partnership with Pulse to DC Go to access the off-grid energy markets in Lesotho, South Africa and Swaziland.

"Both companies believe that there is a significant opportunity to serve the estimated 4.6 million people without access to reliable electricity in the three countries," a BBOXX statement read.

The deal will see the UK-based company supply its solar home systems and tech platform Pulse to DC Go which will distribute the products via a pay-as-you-go model.

In the DRC, the micro systems will be distributed through BBOXX's network as well as with its Kinshasa distribution partner, Orange Energie, it announced in a June 7 statement. The new agreement could help create 10,000 more jobs, it said.

BBOXX is already operating in the DRC through its partnership with Victron Energy to provide pay-as-you-go solar power to the urban region of Goma in the east of the country.

The company is also active elsewhere in Africa, signing a deal with Togo last December to roll out 300,000 solar home systems to off-grid communities by 2022.

According to BBOXX co-founder, Laurent Van Houcke, there are around 62 million people in the DRC alone still living off-grid, roughly 10 per cent of Africa's un-electrified population.

"The government has provided the right regulatory framework and tariff policies that have allowed private companies like BBOXX to work effectively in the country's energy industry for the benefit of its citizens," he commented.

ENGINE SELECTION VITAL, SAYS ZEST WEG GROUP

Africa genset specialist Zest WEG Group has flagged the importance of engine selection when choosing the right power generation system.

Louis Kotze, chief operating officer at Zest WEG Group Generator Set Division, said with the increasing call for gensets for standby power applications it is essential to understand the operational requirement of the unit and to apply this knowledge to engine selection.

"An area where cost savings can be achieved without impacting on the reliability or operation of a standby genset is the engine," he said. "An engine in a standby power application will run for limited duration during power outages, yet we often see tenders requesting top-of-the-range premium brand engines that are completely over-specified for this function. Not only is this a waste of capital expenditure but it could also affect the operating costs."

FRESH IMPETUS FOR SA'S RENEWABLES JOURNEY

The signing in April of 27 Power Purchase Agreements (PPAs) worth R56bn (US$4.2bn) has finally resolved the lengthy renewable energy impasse in South Africa and demonstrates renewed impetus in the country's renewable energy journey.

This is according to Herman Kriel, group managing director for Brand Engineering SA, a specialist electrical engineering contractor.

He said April's move is the initial step of the Department of Energy's new, clear renewables roadmap, which has brought greater certainty to national energy policy and boosted investor confidence.

An integral element, he added, is the generation of local employment opportunities. "The new, clear renewable energy roadmap will help leverage a key objective of the National Development Plan which is to grow an inclusive economy."

Brand Engineering, together with its BBBEE (Broad-Based Black Economic Empowerment) company, Besamandla, operates across Africa and is responsible for the generation of 472MW of power for the Renewable Energy Independent Power Producer Procurement Programme (REIPPPP) projects and related renewable energy initiatives.

The majority of projects are expected to reach financial close in the coming few months, Kriel said, with some having closed shortly after the PPAs were signed.

"Brand Engineering is the only South African contractor with experience and exposure to all types of renewable energy technologies for commercial and utility scale," said Kriel.

This includes a number of battery storage initiatives. One recently completed battery storage project is an off-grid system at the Kruger National Park, which is one of the largest energy storage systems in the southern hemisphere. It is able to store 1780kWh worth of electricity and supply 410kW worth of peak power.

BRIEFS

Eritrea mine solar-thermal project

Battery storage integrator Younicos and parent firm Aggreko have launched a new microgrids-as-a-service offer. The new modular and mobile approach combines low-cost renewables (especially solar) with thermal generation and battery storage in one single contract with flexible conditions. A copper and zinc mine in Eritrea is now being equipped with a PV-plus-diesel hybrid system. The combination will reduce fuel costs by more than 10 per cent.


Image Credit: Adobe Stock

A copper and zinc mine in Eritrea is now being equipped with a solar-diesel system.

New mini-grids set for Zambia

Image Credit: Adobe Stock

ENGIE plans to sell solar home systems in Côte d'Ivoire.

Global utility ENGIE has confirmed its focus on off-grid energy provision in Africa, with plans to continue expanding their solar home system (SHS) and mini-grid activities. ENGIE has launched new mini-grid projects in Zambia with ENGIE PowerCorner and is starting commercial sales of SHS in Côte d'Ivoire with its subsidiary Fenix. This is part of ENGIE's aim to provide 20 million people with access to decarbonised and decentralised energy provision by 2020.

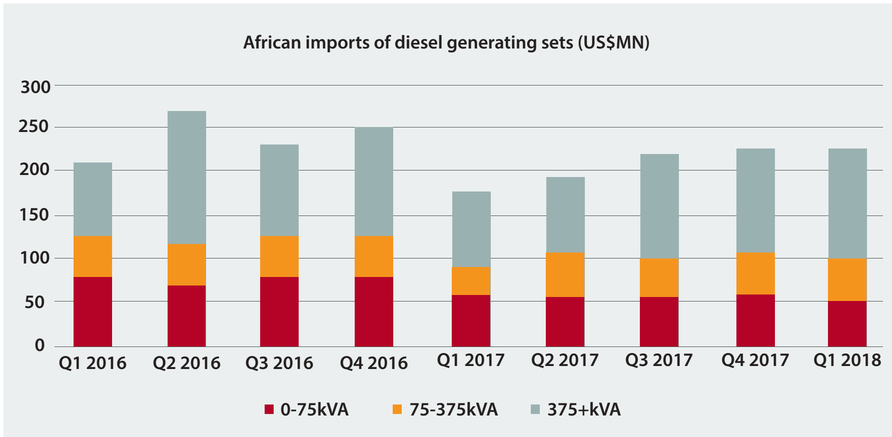
Generator sales rise by 25 per cent in Q1

Algeria beats Nigeria as the biggest African market for genset imports in the first quarter of 2018.

The African imports of diesel generating sets have been flat in the first quarter 2018 compared to Q4 2017, confirming that the market drop of the last few years could be over. With US$220mn imports in Q1 2018, it is actually 25 per cent higher than the same period last year (Q1 2017). The growth is particularly significant for the big generators (>750 kVA), as some large power projects have been delivered in Gambia and Guinea for example.

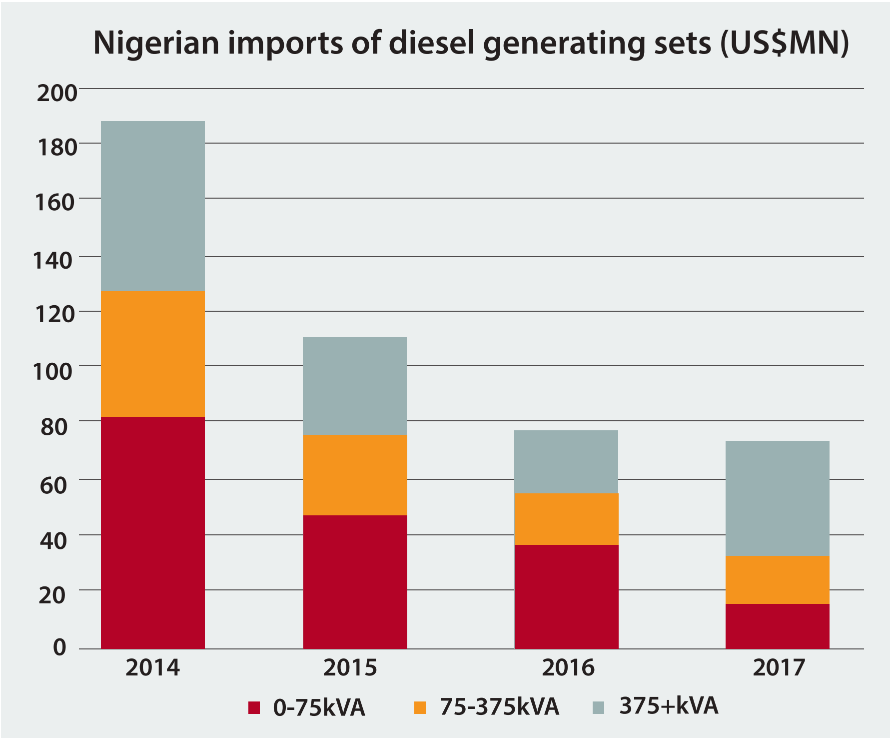
Top market: Algeria

Algeria remains the biggest African market in the first quarter of 2018 with nearly US$25mn and 1,300 units sold, which represent a 40 per cent increase. This growth has been significant in the 750-2,000 kVA band, with large imports from China and Spain.



Focus on Nigeria

Whereas Nigeria was by far the biggest African market of diesel generators few years ago, it has now become the fifth or sixth market. The



reasons behind this decline is related to low oil prices, which the Nigerian economy largely depends on. The Nigerian GDP has also decreased in the last few years, slowing down investment and construction projects. Consequently, it has impacted the sales of large generators (<500 kVA).

However, power access has improved in Nigeria over the last few years despite more than 50 per cent of the population still lacking access to electricity. Furthermore, the government has started a plan to decrease the share of electricity generated by generators. This new policy started in 2015 and has had an impact on the sales of generators below 75 kVA (US$80mn imports in 2014, and US$15mn in 2017).

So today Nigeria is not the biggest African generator market anymore, but it still remains one of the major markets with nearly 10,000 units imported last year. With 90 million people having no access to electricity despite new government power plans, the generator market could experience renewed growth if the economy recovers in the future. ■

Source: www.powergen-statistics.com

JMG Limited delivered 12 FG Wilson gensets for MTN Nigerian Communications.

Image Credit: Adobe Stock

Nigeria: genset specialists adapt to market changes

As West Africa's biggest economy, Nigeria continues to provide opportunities for genset providers as it has done for years, with companies like JMG Limited supporting the telecoms industry. Martin Clark reports.

Nigeria's inadequate electricity supply network means millions of households remain without access to any grid-based power, while businesses are still dependent on additional standby units to underpin manufacturing and operations.

The oil and gas industry has long been a vital customer for imported gensets and equipment from Europe and elsewhere to ensure integrity of production.

That includes the mighty offshore platforms in the Gulf of Guinea, where space is at a premium, and where downtime from power outages could potentially result in billions of dollars in lost revenue.

While this market for gensets remains intact, there is much changing on a wider level.

This includes reforms and privatisation of the state power sector, with the creation of generation and distribution entities formed out of the old National Electric Power Authority (NEPA).

While this may yet yield system-wide improvements in the decades to come, it does not materially affect supply and demand dynamics now, highlighting the enduring requirement for genset capacity.

Indeed, there is little immediate hope of any big turnaround in the mainstream sector: in 2013, Nigeria began selling parts of its moribund state electric firm that was meant to improve energy supplies and attract billions of dollars in new investments neither of which happened.

The emergence of new technologies and renewable energy, plus environmental pressures, mark other notable shifts.

It means players that have traditionally helped meet genset demand in Nigeria are likewise adjusting their game to new market realities. A quick look through the exhibitors and participants at leading trade shows like Power Nigeria which runs in Lagos this September shows how things have evolved.

As well as traditional power companies, private generators and genset makers, the list now includes off-grid solar specialists and technology firms, among many others.

Shifting market

Established Nigerian power firm, JMG Limited, is a good example of how these trends are being felt throughout the industry.

It has long played a role supporting the industry with genset electricity, working closely with brand-leading manufacturers and suppliers such as FG Wilson.

In one notable project, JMG Limited was tasked with delivering 12 high-spec FG Wilson gensets as part of a modernisation of Nigeria's mobile phone network on behalf of MTN Nigeria Communications Ltd.

The installation of units (six 2,000 kVA, three 1,500 kVA and three 1,250 kVA gensets) at MTN locations in Asaba, Lagos, Kano and Ibadan is now helping to boost Nigeria's mobile communications capacity for the future.

But in a recent interview JMG Limited managing director Mazen Jubaili explained his company's diversification attempts and efforts to become an independent power producer (IPP) in its own right, as the market adjusts.

The company has diversified into electrical and home appliances, for example, and created a lighting business in conjunction with GE.

"By the end of 2017, we had also invested in some renewable energy products such as solar panels and inverters," he was quoted as saying in an interview with The Business Year.

JMG Limited is starting to explore IPPs across the country, ranging from around 5MW and upwards, though this is a challenging market too, Jubaili said, because of gas prices, exchange rate uncertainties, and gas pipeline disruption.

"We have done 6-10MW projects with several multinationals and sell them power," Jubaili added. "We are also into the re-sale of generators as the aim is to sell by kilowatt hour."

> "We have done 6-10MW projects with several multinationals and sell them power"
>
> **MAZEN JUBAILI, JMG LIMITED MANAGING DIRECTOR**

Off-grid solar

At the same time, new energy technologies are grabbing the attention of investors and project sponsors as a potential mass solution to supplying power to off-grid communities.

In Nigeria, this includes the Jigawa 1-GW Independent Power Producer solar procurement programme, which recently secured an additional tranche of financing from the African Development Bank.

At full capacity, the Jigawa initiative will assist the Nigerian government to achieve its national goals of reaching 75 per cent electricity access by 2020, and electrifying unserved or underserved areas, particularly in northern Nigeria where access rates are the lowest.

It would also increase the share of renewable energy in the power mix to 30 per cent by 2030.

And it has been argued by some analysts that this evolution might one day spell the end for thermal-based gensets in Nigeria and elsewhere.

But with up to an estimated 100 million diesel generators in use in Nigeria (the country represents the second largest diesel genset network in Africa) this transition is not likely to come anytime soon.

Though there are signs of a market disruption taking place, brought about by new technology especially when it comes to rural and remote power supply major oil companies and other main industry players will continue to turn to traditional thermal gensets for their critical power needs for years to come.

Nonetheless, it remains an evolving market, and one in which genset players must respond to with resilience and skill if they are to thrive going forward. ■

The genset market in West Africa remains strong because of the region's weak grid infrastructure.

West Africa: genset demand powers new business

While new technologies, renewable energy and environmental pressures continue to shape Africa's emerging power sector, the market for traditional thermal genset equipment is alive and well.

West Africa remains a core business territory for leading industry players, in part, because of the region's weak mainstream grid electrical infrastructure.

The demand for reliable power in these areas means continued interest in dependable genset-based power from industry leading players.

YorPower, the UK-based genset specialist, recently announced a flurry of new business in the region, for a batch of generators of various sizes and capacities.

Its international business development manager, Jonathan Brown, unveiled an order for 16 Perkins powered diesel generators for an undisclosed customer in West Africa.

The order for the generators — six x 45kVA, six x 60kVA, two x 100kVA and two x 150kVA genset units — was won through the firm's ability and willingness to provide out of hours support in order to secure the order, he said.

It underlines the importance of customer service in West African markets, in addition to high spec equipment.

Another YorPower executive, Ben Whitmarsh, international sales director, said of the deal: "We are always prepared to go the extra mile for our customers and if that means continuing to answer questions well into the night then that is what we do."

Critical infrastructure

Another leading player in the market, Cummins, announced a significant project in Ghana in June, supplying a responsive and reliable standby power solution for the headquarters of Standard Chartered Bank in Accra.

The company has supplied a power solution based around four of its 630 kVA gensets to the bank to provide standby power in the event of interruptions to grid supply.

The four gensets have been installed in a purpose-built room on the ground floor of the bank building.

The units have been synchronised to come online within three seconds of utility failure.

Cummins said in a statement that it was selected for the work "thanks to a combination of pricing and established brand reputation".

The Cummins generator sets supplied are open C700D5 units equipped with VTA28 diesel engines, designed for reliable power with low emissions and fast response to load changes.

The installed system features synchronising and ATS panels, louvres, a fully clad stainless steel exhaust system, a 20,000 litre tank with piping and cleaning systems, and four 1,000 litre per day tanks with piping and pumps, float switches and other accessories to connect to the bulk tank.

CKR Consulting Engineers, the electrical consultant to the project, has been a Cummins customer since 2015, while the main contractor for the project was WBHO/MBS of South Africa.

> "We are always prepared to go the extra mile for our customers"
>
> BEN WHITMARSH, YORPOWER EXECUTIVE

Competitive market

While West Africa remains a prime market for many genset suppliers and distributors, the rest of the continent holds plenty of appeal too.

As well as the financial sector, and the region's vast extractive industries, major customers range from hotels to hospitals, and anyone else with a need for uninterruptible power.

The region continues to attract strong competition from international providers, keen to showcase the very latest technology and innovations.

Hatz Diesel, the South African branch of the German based engine manufacturer Motorenfabrik Hatz, recently displayed a variety of small to mid-sized power generators, engines and water pumps at the bauma Africa trade show.

The products on display, all driven by diesel engines made in Germany, included a 400V generator with 15kVA max power.

Hatz Diesel S.A. generators boast power ratings ranging from 5 kVA to 500 kVA. It underscores the

Image Credit: Adobe Stock

Demand for reliable power in West Africa makes gensets an alternative source of power.

sustained interest levels right across Africa's genset market.

And that includes North Africa too, at the other end of the continent, where the challenges facing businesses and consumers may be just as great.

Italy's Visa SpA recently supplied 20 power generators to a number of public, specialist and village hospitals and health centres in Libya ranging from 250-500 up to 1,000 kVA, through its local distributor.

The provision of medical services in Libya has been affected in most health clinics and hospitals due to the long and acute power cuts that have been occurring since the 2011 revolution.

The distribution of the Onis Visa generators to Libyan hospitals comes as part of a wide reform plan for the health sector announced by the Presidency Council.

"These kinds of gensets have been designed to be the main source of supply in areas where there is no mains electricity grid or where power supply is intermittent, where the ambient conditions tend to be very challenging and hence a quality product operation in such an environment is critical," a Visa SpA statement read. ■

Hatz presented its new engine series in a range of machinery applications.

Meet the applicationizer

Hatz presented its seven-strong H-series engines close to its headquarters in Ruhstorf, Germany, on 7 June. Three of these engines — the 3H50T, 3H50TI and 4H50TI — are specifically suited to the African markets.

Hatz is known as one of the most successful and innovative diesel engine manufacturers in the world. This year marks a new era for the company with the launch of its extended product range of H-series diesel engines.

This new class of engine presented in Ruhstorf, Germany in June boasts impressive features such as higher power output, efficiency and torque with smaller engine capacity.

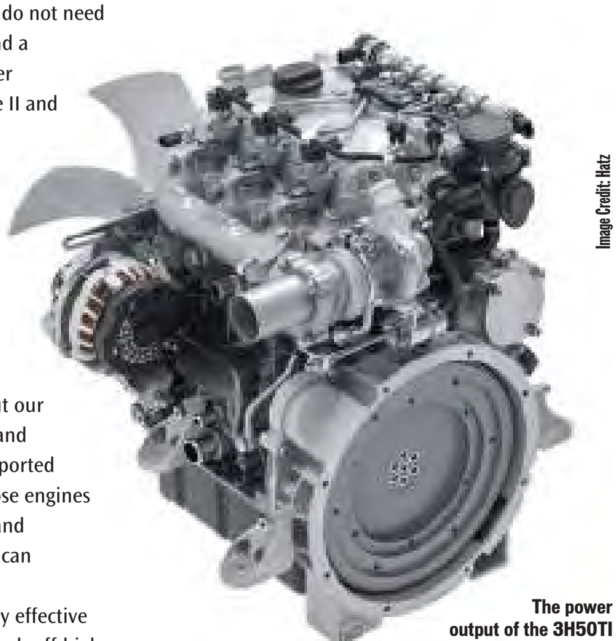
"The H-series is our venture into liquid-cooled engines which is exciting for us. It will open up new customers from across the world," said Joe Wilmer, branch manager UK/South Africa.

> "We've taken off the EGR valve, DOC and DPF so the engines are simpler for the African markets"
>
> **JOE WILMER, BRANCH MANAGER, UK/SOUTH AFRICA**

The 3H50T, 3H50TI and 4H50TI are part of the seven-strong H-series industrial diesel engines that are available for the African markets where there are poorer-quality fuels and less stringent emissions regulations. These engines, which produce 18.4 to 62 kW, therefore do not need exhaust gas recirculation (EGR) and a diesel oxidation catalytic converter (DOC) to meet the European Stage II and IIIa (TI models) as well as Stage V (T model).

"We have taken off the EGR valve, DOC and DPF (diesel particulate filter), so there is more power and the engines are simpler for the African markets and non-emission compliance countries," continued Wilmer. "Another good selling point about our engine is that if we get second-hand machines that are going to be exported into Africa we can down-spec those engines by taking these components off and reprogramming them for the African marketplace."

The components include highly effective turbochargers and the special Bosch off-highway common-rail fuel injection system. Other high quality components have been supplied from Mann+Hummel, Mahle, Behr and Kolbenschmidt/Pierburg to round off the Hatz engine design.



The power output of the 3H50TI ranges up to 47 kilowatts.

Overview of H-series engines

Model H-series	3H50T*	3H50TI*	3H50TIC	3H50TICD
		4H50TI*	4H50TIC	4H50TICD
Power output (kW)	18.4	46.5 / 62	42 / 55	42 / 55
Torque (Nm)	130	200 / 265	185 / 240	185 / 240
Combustion and exhaust technologies	CR,T	CR,T, IC	CR,T, IC, cEGR,	CR,T, IC, cEGR,
			DOC only	DOC/DPF

Suitable for African markets

CR: common-rail, T: turbocharger, IC: intercooler, cEGR: cooled exhaust gas recirculation, DOC: diesel oxidation catalytic converter, DPF: diesel particulate filter

Hatz has been in Africa for more than 40 years and opened a state-of-the-art modern subsidiary in Johannesburg three years ago.

"Out of our Johannesburg branch, we support all sub-Saharan Africa with distributors in Namibia, Mozambique and Botswana. We are always looking to expand in southern Africa," explained Wilmer.

"We've already seen OEMs shipping the new engines on European equipment into the marketplace, so we are having to make sure that we have our service team, trained up to be able to support the product when it comes into a country.

"We supply local compaction equipment manufacturers with our range of engines and have a very high stock holding within the branch. I'm a strong believer that you need to have stock in the country. Hatz has always had a healthy stock of engines and spare parts within the country, which are shipped in on a weekly basis.

Image Credit: Hatz

The 4H50TI has a power output of up to 62 kilowatts.

Image Credit: Hatz

The 3H50T with 18.4 kW meets EU Stage V rule without diesel particulate filter or any other exhaust aftertreatment.

"We try to support our local OEMs by trying to offer varied equipment as well, such as generators, water pumps and pressure washer systems. There is a large logistics company, World Net Logistics, which distributes Samsung throughout South Africa and we have installed a 500kVa generator to two of their depots to provide 24hr support for them," he said.

"Predominantly in Africa, the engines are for water pumps, power generation and construction equipment as well as for drilling and mining machines. There are smaller, niche OEMs building low volume machines for mining and as a company, we have supported the bauma Africa show and will probably be exhibiting at the Electra Mining Africa show next year."

There are 15 staff based in Johannesburg, which is made up of engineers, sales and after-sales teams.

"Our engineering teams fly across the world to carry out application testing and to support our customers in order to give them bespoke solutions." ■

Lighting an energy-rich continent

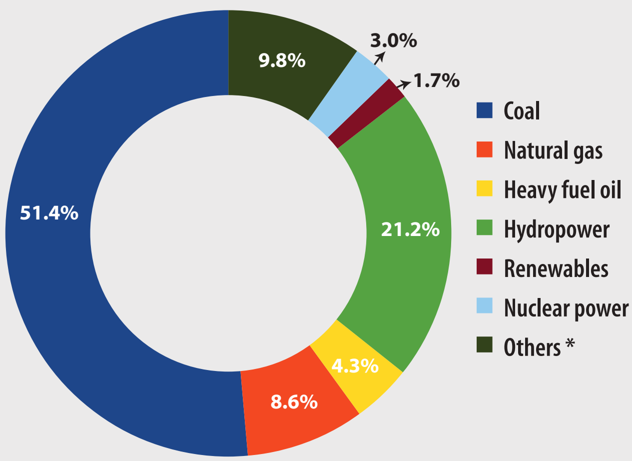
Moin Siddiqi examines the potential of mini-grids to electrify rural areas instead of through traditional diesel and hydropower generation facilities.

Today, nearly half the globe's population without electricity lives in sub-Saharan Africa (SSA) compared to one-third in South Asia. Chronic electricity shortages reduce SSA's annual GDP growth between one and three percentage points. The International Energy Agency (IEA) projects that investment of around US$52bn per year until 2030 is needed to achieve electricity access for all, of which 95 per cent of funding should be in SSA. It warns that without a major initiative, 670mn-plus people would still lack electricity access by 2030 (600mn in SSA).

In 2015, SSA's total installed power capacity was about 96GW compared with 325GW and 1,519GW, respectively, in India and China, according to US Energy Information Administration (EIA). SSA's capacity (excluding South Africa) is approximately one third of the installed generation capacity in Brazil. The most populous country (Nigeria) has a quarter of South Africa's current installed capacity, while other smaller countries have below 1GW.

The utilisation rate of SSA's installed generating capacity averaged 40 per cent in 2015 (United Nations data), reflecting ageing plants, poor maintenance and inefficiencies. Moreover, service reliability from the national grid is often low, with frequent and sometimes lengthy outages, which affect firms' performance and trade competitiveness. Data indicate that firms facing daily blackouts rely on electricity self-generation that raises the overall cost of production. On average, generator power is four times the price of grid electricity. In fact, commercial and industrial tariffs in SSA are among the world's highest.

Sources of power generation as (%) of SSA.



**Includes biomass, waste/bagasse & geothermal.*
Source: World Development Indicators, 2017, World Bank.

Overall, SSA has the globe's lowest electrification rate averaging 37.4 per cent in 2016 compared to 80.1 per cent in South Asia (World Bank data). There are also marked gaps in electricity access between rural and urban areas of SSA; access rates among the latter are about 71 per cent, against 22 per cent in the former. Several countries (Burundi, Chad, Malawi, Congo DRC, Niger and Tanzania) reported electrification rate of just 15 per cent. Only Gabon, Mauritius, Seychelles and South Africa reported grid access.

Electricity consumption (excluding South Africa) falls well below other developing regions, reflecting low level of industrialisation. Over 2010–14, average annual consumption per capita in SSA was 15 and 21 per cent of that in China and Brazil, respectively.

Ethiopia with 100mn-plus population consumes just one-third of the total electricity consumption of Washington, DC, which has a population of about 700,000 (World Bank data).

Africa, despite the clear deficit, boasts tremendous power-generating capacity in each energy-supply source. McKinsey (US consultancy) estimates the region's potential capacity at over 12-terawatts. For example:
*Gas-resources could provide 400GW of power with Mozambique, Nigeria and Tanzania representing two thirds of gas-fired capacity.

*Hydro-electricity potential of SSA is about 350GW (World Energy Council data), of which Congo DRC comprises one-half, followed by Cameroon, mostly in the Sanaga basin, representing some 115bn Kilowatt-hours (kWh). Angola, Ethiopia and Gabon also hold considerable exploitable resource potential.

*Coal resources are dominated by South Africa, Mozambique and Botswana with reserves totalling 33bn; 23bn; and 21bn tonnes, respectively.

*Solar Photovoltaic (PV) has endless potential in SSA with a total estimated capacity of 10 terawatts according to McKinsey. The large desert countries (Chad, Congo DRC, Mali, Niger and Sudan) hold about two fifths of productive capacity.

*Wind-energy capacity across Africa is estimated at 109GW mostly around southern and eastern coasts and along the Rift Valley.

*Geothermal proven resource potential is 15GW according to Geothermal Energy Association – dominated by Kenya (7GW) and Ethiopia (5GW). Both countries have the highest sub-surface temperatures in the region.

Rural electrification

Over the decades, SSA's electrification plans have focused on expanding the national power grid, with large fossil fuel and hydropower generation facilities and, more recently, some investment in grid-scale solar and wind energy principally in South Africa. Extending national power grid to rural Africa is more costly while having minor development impact because few people can afford electricity charges. Thus, micro/mini-grids offer a practical way forward to extend badly needed power in areas where the national grid is unavailable.

Across the world, mini-grids have taken a variety of forms and performed diverse functions. However, their penetration in SSA is relatively low. Mini-grids may supply as little as 1kW up to several hundred kW. The International Finance Corp (IFC) noted, "These systems can range from small solar PV systems with batteries that provide enough electricity for basic lighting and other household needs in a small settlement, to larger-scale electricity service able to power a number of commercial and small industrial applications, with quality comparable to the national grid." Mini-grids can run on wind, solar, very small hydro, diesel, and biomass.

Solar mini-grids with battery storage have benefited from falling PV costs triggered by rapid technological innovation. Multinationals, notably ASEA Brown Boveri, General Electric and Siemens, are reportedly investing in mini-grids in some of SSA's rural areas. Before making the investment, operators need clear national rules that provide legal/regulatory contracts between purchasers and project developers. Mini-grid companies also need assurance of a reliable customer base paying for significant quantity of power.

More recently, some countries have revised their regulations to reduce barriers to mini-grid development. A notable example is Tanzania, which has implemented a national-scale micro-grid electrification scheme, with 16 small (< 100kW) solar PV or solar-diesel hybrid micro-grids deployed since 2009 (average size is over 25kW). Tanzania's 'Standardised Power Purchase' rules exempt projects (<100kW) from licensing requirements but must be registered with the regulator. Such projects are also exempted from tariff approval – with the freedom to recoup costs by setting their tariffs.

Besides Tanzania, Nigeria, Rwanda, Uganda, and Kenya have, too, undertaken regulatory reforms to support mini-grids. Electricity regulatory commissions in these countries have specified that mini-grid retail tariffs need not be the same as the retail tariffs charged by the state-owned national utility.

Moner-Girona in "Adaptation of Feed-In Tariff for Remote Mini-Grids: Tanzania as an Illustrative Case" (2016) explained that tariff methodology for small power projects is technology neutral and based on avoided generation costs. For grid-connected systems, the feed-in tariffs are derived from an assumed seasonal mix of hydro and thermal generation; whereas those for isolated systems reflect "islanded" diesel generation costs.

In sum, the path to 'universal' electrification lies in larger and smaller scale generation facilities. In areas of high potential energy-intensive productive uses, new industrial zones require grid connections to foster economic development, while mini-grid assets could better serve more lightly populated remote areas. Over time, rural quality of life in 'off-grid' areas can be enhanced at relatively low cost through the provision of basic electricity services.

Africa's electricity sector entails both challenges and opportunities for private sector investment in different parts of the value chain: power-generation, transmission and distribution infrastructure. Mckinsey put it, "The stakes are enormous. Indeed, fulfilling the economic and social promise of the region, depends on the ability of government and investors to develop the continent's huge electricity capacity." Without adequate electricity, SSA will continue lagging behind peer developing regions, less endowed with energy resource. ■

Utility data on selected sub-Saharan African countries

	Electricity production Kilowatt-hours Bn 2015	Population Mn 2017	Access to electricity (% of total) pop. 2016	Capacity (%) utilisation in power generation 2015 //	Net revenue per unit (2014) US$ per KWh billed #	Getting electricity Cost (%) of income per capita 2017
Angola	9.5	28.81	32.0	44.0	n/a*	990.1
Cameroon	6.9	23.43	56.8	30.0	-0.05	1776.9
Congo, DRC	8.8	78.73	13.5	39.0	n/a*	14885.8
Cote d'Ivoire	8.3	23.69	61.9	52.0	-0.1	2280.8
Ethiopia	9.6	102.40	27.2	49.0	-0.13	1027.9
Ghana	13.0	28.20	78.3	34.0	-0.03	1080.5
Kenya	9.3	48.46	36.0	48.0	-0.06	724.7
Mozambique	17.7	28.82	21.2	89.0	-0.04	2817.3
Nigeria	30.4	185.98	57.7	35.0	-0.16	336.7
South Africa *	249.5	55.90	86.0	55.0	-0.06	146.6
Sudan	11.4	39.57	45.0	46.0	-0.1	2311.2
Tanzania	6.2	55.57	15.5	52.0	-0.03	843.8
Zambia	14.5	16.59	28.0	64.0	-0.03	588.5
Zimbabwe	10.0	16.15	32.3	55.0	-0.08	2602.6

**South Africa accounts for nearly half of the region's generating capacity.*

// Capacity utilisation in power-generation across SSA averaged about 40%.

 # The average electricity tariff in SSA is reported at US$0.17 per (kWh).

The prevailing tariff structures do not cover costs in most countries.

**n/a - not available*

Sources: World Development Indicators, 2017; United Nations, Doing Business 2018 Rating, and Trimble et al.

Morocco will fully switch on the Noor Ouarzazate complex, the world's largest solar power plant in October 2018.

Image Credit: Masen

North Africa rises and shines

Recent reports are rife with the increasing number of solar projects in Egypt, Morocco, Tunisia and Algeria. Besides, each country is competing with the other to build the biggest solar park in the world.

There is great potential for solar in North Africa to account for a large share of new capacity in the region, as fossil fuels are becoming finite and the cost of financing projects has been falling. These developments, as well as advances in technology, have resulted in favourable economics for solar photovoltaic (PV) in the region. Gurmeet Kaur, marketing & communication director at Middle East Solar Industry Association (MESIA), tells *African Review* more.

How would you describe North Africa's current solar industry?

In relation to North Africa, there have been a number of developments. Egypt launched the Round 1 and then Round II Feed-in-Tariff (FiT) scheme in the Benban region. Egypt's peak demand is expected to grow annually. This increase in demand and declining oil and gas production mean that Egypt will need to diversify energy production to fill the gap, and as a result has turned to solar and other forms of renewable energy. Morocco also has a healthy programme and is one of the pioneers in northern Africa. As Morocco gets ready to open the world's largest solar park, the government has, on its part, set defined targets to fulfil its renewable goals. While most of the Middle East countries started with PV projects, Morocco kickstarted its renewable energy initiative with concentrated solar power (CSP) and today they have a mix of both in the construction phase.

Tunisia has recently joined the bandwagon and again the government has set defined targets and it is one of the countries to note in the North African region. These augur well and show that the region is making the right strides to realising its solar ambitions.

Which North African nations have the brightest future?

Egypt, Morocco and Tunisia are perhaps the most advanced in the region now. When Morocco started, it had a high local content requirement for their renewable programme, but was successful in attracting international developers, such as ACWA Power, Engie and others. This has resulted in building the local supply chain and boosting the development of the local content. The projects there are already in the construction phase. Egypt is more recent in its development – Round II of the FiT programme closed in 2017 and it aims to reach between 1.6-2GW of solar power by mid-2019. However, the construction for Round II projects are yet to begin as a number of developers are in the process of reaching full financing. Unlike in Round I, where developers were guaranteed a high fixed tariff, in Round II of the FiT programme, the tariff was reduced.

In contrast the Round II documents were revised, to make it more aligned and acceptable to international lenders. This has led to some delays. Nevertheless, it has still managed to attract developers and successfully close projects.

What about the grid infrastructure that will support solar projects?

This is one area that has to be looked into because the grid infrastructure may need upgrading in these countries and it may be a challenge in the future for the large programmes if this is not addressed.

Let's look at Jordan for instance. Jordan started the renewable energy trend in the Middle East and North Africa (MENA) region and was very successful in Rounds 1 and 2 of its programme. But the grid infrastructure in the country required upgrading in order for Round 3 of the programme to be launched and these led to some delays in the programme.

Solar is a huge advantage. however, what challenges do you foresee in fulfilling the goals?

Solar is an important part of the energy mix and offers an alternative to fossil fuel.

One of the challenges in developing solar in new markets is the lack of a robust regulatory framework. When solar projects were first announced in Egypt, there were concerns about the political and regulatory risks, and this led to delays and challenges in closing the Round I projects. With some of the contractual issues resolved for Round II, this facilitated some of the projects to proceed. Another factor is the need for government's clear determination to see through the programme. If you look at the countries that have been successful in their renewable programmes, a large factor is because of the government's strong will in setting out targets and following through with a programme. For rooftop solar projects, there has to be clear legislation put in place to enable private parties/individuals to export power back to the grid.

Can you talk about Mesia's role in North africa?

Our members include developers, suppliers, consultants and government entities. Our role is to facilitate discussions among these players to encourage solar projects in the region by hosting industry trade missions in new markets as well as dialogue between governments and financial institutions. We conduct workshops and seminars, besides supporting other sister organisations across the globe who would be interested in this region. We also have plans to work with schools to educate children on solar energy and its benefits.

Finally, do you believe in a solar-powered future?

Certainly, solar energy has a vital role to play in the energy mix in the future. However, a fully solar future is not realistic at the moment. Solar (PV) power is an intermittent source of power as without storage capabilities it is not possible to generate power 24/7. Therefore, other forms of power generation are still required – wind, hydro as well as conventional fossil fuels. But I do believe that solar and renewable energy will certainly be a large part of the energy mix in the future. ■

METKA West Africa : Providing energy for Nigerian universities

Mytilineos and its subsidiary METKA Power West Africa have signed an agreement with the Federal Government of Nigeria to provide uninterrupted power for a number of universities and hospitals in Nigeria.

Technology and innovation meet education and in the case of Nigeria, they power universities. MYTILINEOS and its subsidiary METKA Power West Africa have signed an agreement with the Federal Government of Nigeria for the first phase of the Energizing Education program, an initiative developed by the Federal Ministry of Poenabling reliable power supply for the universities totally autonomously from the grid. In total, 7.5MW of off-grid hybrid power will be installed, incorporating the award winning EXERON technology and the latest developments in mini-grid design.

EXERON is an all-in-one modular power conversion system that provides intelligent utilisation of alternative power sources (solar PV, diesel generating sets, grid connection) and advanced battery management to ensure the optimal use of available resources.

Image Credit: Metzka

From left to right: Christos Takoulas - METKA sales manager Off-Grid/Hybrid Solutions, Emmanuel Elegbe - operations manager, METKA West Africa, Dimitrios Triantafyllopoulos - METKA projects' director, Anita Otubu - head of special projects, Rural Electrification Agency (REA), Vangelis Kamaris - METKA business administration & international operations director.

The agreement for the full EPC services for four universities, includes power generation plants, street lighting and training centres, as well as operation and maintenance services. The outcome will help numerous students to have a quality academic life and opportunities for the future. METKA Power West Africa is proud to provide energy solutions to countries and institutions with substantial energy needs.

> "We are committed to continuously supporting the energy needs of Nigeria and its people"
>
> **VANGELIS KAMARIS, CEO OF METKA POWER WEST AFRICA**

As Vangelis Kamaris, CEO of METKA Power West Africa stated, "We are very pleased to be able to support Rural Electrification Agency in their Energizing Education initiative and we are committed to continuously supporting the energy needs of Nigeria and its people."

Apart from that, METKA, the EPC Business Unit of MYTILINEOS has been awarded the construction of the Afam III Power Plant, with capacity of 240MW, in Nigeria. An EPC project that has created 310 direct and indirect jobs in the country.

MYTILINEOS is making a collective effort to identify needs in all areas that the company operates, to aid, complement, support and promote the respective initiatives and actions. Therefore, METKA Power West Africa has undertook the construction of a secondary school in the area of Okoloma Ndoki in Nigeria. ■

Image Credit: Metzka

Nigerian school under construction.

COPPER OR ALUMINIUM FOR DRY-TYPE TRANSFORMERS?

While many experts argue the pros and cons of using copper or aluminium in dry-type transformers, innovations in transformer design have ensured that either of these two materials can today be applied with equal effect in most applications, according to David Claassen, managing director of Trafo Power Solutions.

Dry-type transformer specialists Hammond Power Solutions (HPS) – whose products are distributed in Africa by Trafo Power Solutions – has been using both copper and aluminium in the manufacture of conductors and bus bars in its low voltage and medium voltage transformers.

HPS has been a global leader in dry-type transformers for more than a century, and both materials have been used by HPS Europe in its production process for more than 40 years. The company has found no significant difference in the transformer lifespan delivered when using either copper or aluminium; from a technical point of view, the two materials are equivalent.

Image Credit: Trafo Power Solutions

A 3D cross section of a transformer.

There is clearly a cost advantage to selecting aluminium as a conductor, as the commodity's price tends to be significantly less expensive than copper, and more stable over time. It is therefore not surprising that more than 80 per cent of HPS Europe's transformer production over the past 40 years – across all markets and applications – incorporates aluminium windings.

However, the argument is sometimes made that aluminium is inferior in terms of conductivity as it has only 61 per cent of the conductivity of copper leading to higher energy losses, says Claassen.

Winding temperature is, of course, a concern, but designers at HPS have been able to maintain temperatures below the insulation rating by designing aluminium winding transformers with conductors with larger cross-sectional areas than those made of copper.

EXPERTISE SEE ACTOM TURBO MACHINES EXPAND

The drive by end-users to achieve longer lifespans from rotating equipment and reduce their total cost of ownership has seen many customers implement component refurbishment programmes instead of replacing parts. This has placed ACTOM Turbo Machines in an ideal position to provide specialist services across a broad range of industries.

Chris Bezuidenhout, managing director of ACTOM Turbo Machines, says that it has a solid reputation for its depth of experience and expertise, and can point to an extensive list of completed projects. ACTOM Turbo Machines is a subsidiary of ACTOM (Pty) Ltd and, with Marthinusen & Coutts, a division of ACTOM, offers a complete electro-mechanical solution to the market.

"Our services cover a wide sector of industries that use similar equipment; however, turbo machinery is used differently in the varying applications and therefore requires technical and application related expert knowledge when it comes to maintenance, servicing, repair and most importantly, refurbishment," he says.

"A mechanical drive turbine in a petrochemical plant driving a process compressor via a gearbox will need a vastly different approach to a turbine running a generator directly in a power plant."

Recognised as the largest privately owned non-OEM mechanical rotating machinery specialist in Africa, ACTOM Turbo Machines operates a facility in Sasolburg. Bezuidenhout says that engineering work through to specialised repair and refurbishment work including the manufacture of components is done on the continent.

Engineering optimal energy solutions

Zest WEG Group combines its local manufacturing capability with WEG's range of world class products to engineer energy solutions for customers around Africa, according to the group's integrated solutions executive, Alastair Gerrard.

Gerrard emphasises Zest WEG Group's extensive network of agents and distributors across the continent, who provide vital insights into local conditions, needs and constraints.

"Our solutions are not off-the-shelf, and are tailor-made for individual application requirements," he says. "Our team spends time gaining an in-depth understanding of what the customer really needs, and what the operational constraints are. In this process, we collaborate with reliable, in-country partners who have local knowledge and experience. This local presence also facilitates quick response times and 24/7 after-sales support."

Gerrard highlights the use of parent company, WEG's range of motors, variable speed drives and soft starters, as well as its low voltage and medium voltage switchgear. These products are an integral part of the fit-for-purpose solutions, as is Zest WEG Group's South African manufacturing capability in terms of generator sets, transformers, substations and other mobile energy solutions.

"Operating a local genset manufacturing facility staffed by experienced engineers allows us the flexibility to package this offering with an engine and alternator combination to suit the customer preference," he says. Zest WEG Group also offers a standard off-the-shelf range of gensets.

Forming part of Zest WEG Group's manufacturing operations in South Africa is WEG Transformers Africa which has two facilities capable of producing transformers up to 45 MVA/132 kV and a range of mini substations up to 33 kV. Also, part of the group is Shaw Controls which is a leading local manufacturer of custom electrical panels, motor control centres (MCCs), containerised electrical solutions and E-houses. He says that E-houses have become popular in Africa as these are pre-assembled and tested in a factory prior to being transported to site by truck.

Zest WEG Group can supply an outdoor substation solution such as this one pictured with a large capacity power transformer.

Image Credit: Zest WEG Group

Major building and construction event to launch in Nigeria

dmg events will launch The Big 5 Construct Nigeria next year. The event will take place on 10-12 September 2019 at the Landmark Centre in Lagos, Nigeria.

The Big 5 Construct Nigeria introduces the successful Big 5 international construction brand to Lagos, and significant demand from international construction suppliers has already shown that they will welcome this new channel into a valuable regional market.

Image Credit: dmg events

The Big 5 in Dubai is the largest construction event in the Middle East.

"The opportunity to adapt The Big 5 brand to this new region was ripe for development," said Andy White, Senior Vice President - Construction "Over the last three years dmg events has expanded into Southern, East and North Africa through a combination of new launches and strategic acquisitions. Bringing our most successful construction brand, which is thriving in other locations, to Lagos is a logical and exciting next step."

With the largest population in Africa, Nigeria is an economic powerhouse for the region and the continent. In April, the International Monetary Fund forecast the country's economy would grow by 2.1 per cent this year, while the World Bank suggests that the country's growth will strengthen in the medium term, helping it to reach 2.8 per cent by 2019. This outlook has already encouraged foreign investment into the country via government debt instruments. By the end of the first quarter this year the country attracted US$16bn, up 300 per cent year-on-year.

Funds have been earmarked for the country's development, with the Federal Executive Council approving US$190mn for the construction of roads. A host of other large scale infrastructure and construction projects, including rail, retail, new trade zones and cities, are also on the way.

"These development plans are creating huge demand for international suppliers to bring their products and technologies into the country, where there is a real thirst for the knowledge and innovation our exhibitors can offer," said White.

Exhibitors and visitors will find features familiar from The Big 5 throughout The Big 5 Construct Nigeria. The event will include free-to-attend CPD workshops and seminars to update attendees on the latest industry innovations, best practices and practical ideas.

COEGA A CATALYST FOR JOB CREATION

The Coega Development Corporation (CDC) has marked a significant milestone since the inception of the organisation with over 100,000 jobs created in the Coega project.

"It gives us great pleasure to have realised this milestone. Equally, it serves as a motivator for us to push even further towards our vision to become the leading catalyst for the championing of socio-economic development," said Dr Ayanda Vilakazi, CDC head of marketing, brand and communications.

The Coega SEZ currently has three projects under construction creating more than 1,800 jobs, since construction started. The R600mn Osho Cement plant has created 150 jobs, the R11bn BAIC automotive manufacturing plant has created 1,500 jobs and the R36mn Customs Control Warehouse has created 150 jobs. "It's not about the bricks and mortar, it's about what the investment can translate into the lives of ordinary citizens of the Eastern Cape," added Dr Vilakazi.

BELT AND ROAD INITIATIVE TO MEET NEEDS OF AFRICA

Africa is an important partner in the development of the Belt and Road Initiative (BRI), said Ma Zhaoxu, China's permanent representative to the United Nations at the high-level symposium on the Chinese initiative and 2030 Agenda for Sustainable Development at UN Headquarters.

Speaking to delegates on 13 June, Zhaoxu said the initiative would meet the needs of Africa and pursue mutual benefits without imposing political conditions.

The BRI involves more than 20 African countries, including Egypt, Kenya, Uganda, Nigeria, Cameroon and South Africa. Cooperation agreement has been reached on 39 major projects, covering 17 areas such as railway, highway, port and power generation. With strong support from the Chinese government and companies, Ethiopia's first national industrial park Hawassa Industrial Park entered into operation in 2017 and created 60,000 jobs and an annual revenue of US$1bn for Ethiopia. New infrastructure has been built in Africa, including industrial zones, railways, motorways, airports and power plants, giving a strong boost to the development of the African continent.

He told delegates, "The BRI has five priorities: First, policy connectivity. The goal is to build an inter-governmental, multi-tiered mechanism of macro policy communication to synergise development strategies of the countries. Second, infrastructure connectivity. It is about building a network of infrastructure to upgrade transportation, energy and communication infrastructure. Third, trade connectivity. We want to promote trade liberalisation to realise coordinated industrial development. Fourth, financial connectivity. Efforts will be made to build a framework of investment. Fifth, people-to-people connectivity."

BRIEFS

Image Credit: Adobe Stock

The two new wind farms will be in operation in 2020.

New windfarms for construction

Concor Infrastructure has been appointed in a consortium with Conco, by global wind and solar company Mainstream Renewable Power as the construction contractor for two large scale wind farms, in the Northern and Western Cape, representing an investment of approximately R6.6bn and construction will begin in June 2018. The 140MW Kangas wind farm and 110MW Perdekraal East wind farm are expected to begin commercial operation in 2020.

Image Credit: Adobe Stock

The building work of two dams in Kenya will begin in the next six to eight months.

Kenya's dams get go ahead

The construction of the Sh63bn (US$625mn) multi-purpose dams in Kenya's Elgeyo-Marakwet county is underway, according to local media reports. "The designers and planners are already on the ground and the construction is expected to take a shorter time than anticipated," said Kerio Valley Development Authority (KVDA) Managing Director David Kimosop. "The construction work is expected to begin in the next six to eight months after the design plan is carried out," he added.

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The Chinese government is investing around US$10bn on development projects in more than 50 countries.

Image Credit: 1jaimages/Adobe Stock

China's expanding machinery footprint in Africa

Jun Qi, chairman of the China Construction Machinery Association (CCMA), speaks to *African Review* about the ever-increasing role Chinese OEMs are playing in shaping the continent.

Can you share some background about the China Construction Machinery Association (CCMA) ?
The CCMA is a non-profit national construction association. There are 2,100 members, which are made up of Chinese construction and mining manufacturers. We work with the manufacturers to expand their presence in overseas markets by attending exhibitions which are a good platform for them to display their latest equipment models.

Our main responsibility is helping these members take part in exhibitions, such as the China Beijing International Construction Machinery, Building Material Machines and Mining Machines Exhibition & Seminar (BICES), which is our main construction and mining event. The aim of the exhibition is to help us promote Chinese products into the global markets and bring international customers to the Chinese markets. We also take part in other international exhibitions such as Intermat Paris and bauma Shanghai.

China is having a massive influence on the development of Africa. Which CCMA members are the biggest exporters of Chinese machinery to Africa?
That's right. The Chinese government is investing around US$10bn on development projects in more than 50 African countries. The CCMA acts as a guarantee network by providing information about manufacturers to buyers. For example, CMEC and China railway will often win a tender, then rely on the CCMA to source the equipment. Xu Gong (XCMG), LiuGong Dressta Machinery, our biggest members, export massive machinery to Africa.

Could you give us a breakdown of equipment exports over the last three years?
In 2017, China exported US$2bn in construction equipment to Africa, an 18 per cent increase on the previous year. In comparison, in 2016 and in 2015, the export sales were US$1.7bn and US$2.1bn, respectively.

Which African countries are the main importers of Chinese construction machinery?
There are five main African countries which import more than US$1bn in construction equipment. South Africa is the number one importer, bringing in US$300mn of equipment, with an uptick of sales expected in the mining sector following changes to the new Mining Charter. When the price of steel dropped in 2015-2016, there was low demand for machinery as companies had to stop mining. But since last year, the price has returned to normal levels. Ghana is our second biggest importer at US$200mn, followed by Algeria and Nigeria on US$190mn and US$160mn respectively, and lastly, Kenya imported US$140mn worth of machinery. In total in 2017, Chinese manufacturers exported US$2bn in construction equipment to Africa.

Why do some African countries prefer to buy Chinese machinery?
Manufacturers are confident selling in the global markets because the quality of Chinese machinery has improved immensely. The cost of the products is cheaper as well, which makes them very competitive. Chinese national companies win tenders to build huge infrastructure projects in Africa, such as highways, railways and hospitals and prefer to use their own OEMs.

Image Credit: CCMA

Jun Qi, chairman of the CCMA.

How important is the African market to the CCMA?
It is very important to help small Chinese construction manufacturers to expand their exports in Africa. This is why CCMA helps them to enter international markets by arranging vital overseas exhibitions. ■


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Next generation of excavator expertise

Laurent Sarignac, excavator product marketing specialist from Caterpillar, speaks to African Review about the roll-out of the Next Generation excavators in Africa.

The next generation Cat excavators.

Image Credit: Caterpillar

What are the Cat Next Generation excavators?

The Next Generation 20-ton-size class excavators 320 GC, 320 and 323 represent the first major excavator redesign at Caterpillar in 25 years. We want to follow our customers whether small or large in their different applications and so we are proposing a dual offering: standard and GC versions. With this structured choice, we are able to offer customers the best solutions to their needs.

These entirely new excavators reduce fuel consumption by up to 25 per cent and maintenance costs by up to 15 per cent and, for 320 and 323, increase operating efficiency by up to 45 per cent through new technology features. All models also offer substantial improvement to operator comfort and safety compared to previous models.

What do you call "GC" models?

The Cat GC models, whether they are excavators, wheel loaders, or other types of equipment, are designed for applications where our customers will make more profit by lowering their operating costs than by producing more tons per hour. The new Cat 320 GC combines a balance of productivity features with reduced fuel consumption and maintenance costs. The result is high reliability and low cost-per-hour performance.

> "The standard technology feature in the Next Generation excavators will help a good operator become a great operator"
>
> LAURENT SARIGNAC, EXCAVATOR PRODUCT MARKETING SPECIALIST, CATERPILLAR

What is Cat Connect Technology?

Caterpillar is using technology to help customers be more successful whether through improved efficiency, safety or data collection and analysis. The new Cat 320 and 323 excavators have the highest level of standard factory-equipped technology in the industry:

Cat Grade provides the operator with real time guidance for depth, slope and horizontal distance to grade to reach desired grade quickly and accurately.

Grade Assist automates boom, stick and bucket movements. Operators stay on grade with single-lever digging, the machine electrohydraulic valve managing cylinders movement thanks to sensors and advanced software and hardware. This ensures significant efficiency increase over traditional grading operations while requiring less effort and idle time for grade checking.

Cat Payload on-board weighing, delivers precise load targets and increased loading efficiency with on-the-go weighing and real-time payload estimates to prevent truck over/under-loading.

Cat LINK™ hardware and software connect jobsites to the office and provide customers with machine-critical operating information.

Technology also enables safer machine operation. 320 GC, 320 and 323 are all equipped with an 8-inch monitor and a rear-view camera. This system can be upgraded on 320 and 323 to a 10-inch monitor with 360 degrees "bird eye" view.

320 and 323 also feature E-Fence, which enables the machine to work safely under structures or near traffic by preventing any part of the excavator from moving outside operator-defined set points.

When will those Next Generation excavators be available in Africa?

The 320 GC, 320 and 323 will be available from the second half of 2018 across Africa and the Middle East. Many Cat dealers will organise local events over the coming months where those models will be presented and can be tested.

Will you introduce further "Next Generation" excavator models?

Yes, and in fact, we are announcing the new 336 and 336 GC excavators for construction and quarrying applications. The first units will arrive in the showrooms during the first quarter of 2019.

What after-sales support can customers access?

Our customers in Africa, as in the rest of the world, are supported by our well-established local dealer network. This network is capable and reliable and provides a wide range of services and solutions throughout the life of the equipment.

How will these new excavators impact operators?

Attracting, training and retaining good operators is a challenge seen all over Africa. The standard technology features in the Next Generation excavators will help an already good operator become a great operator. Our best-in-class cab offers a safe and comfortable operator environment that reduces operator fatigue and will be enjoyed by all. In addition, with a shortage of skilled operators across many countries, these features could help attract new operators to the industry. ■

Lauren Sarignac, excavator product marketing specialist from Caterpillar.

Image Credit: Caterpillar

Earthworks began at Douala Grand Mall in January 2018.

Image Credit: ACTIS

Central Africa's largest mall begins to take shape

The US$52mn Douala Grand Mall will be the region's biggest mall when it is completed by 2019.

A modern shopping mall, complete with convention centre and cinemas, will grace Cameroon's financial capital city of Douala by the end of 2019 – and South African turnkey specialist Raubex Renovo is making it happen. The US$52mn Douala Grand Mall is part of a larger development that will include a five-star hotel, offices and residential apartments scheduled for construction in the near future.

"The mall and convention centre signals to the world that Cameroon is on the move, and is attracting more visitors for business and leisure," says Matthys Serfontein, development manager at Raubex Renovo. "Our modern construction planning and methods combine with an energy efficient design to make the mall stand out dramatically from its local competitors."

Its size, for a start, is significant; it will reportedly be Central Africa's largest mall when complete with a built floor area of 25,600m² including 18,732m² of lettable retail on its two levels. Importantly the mall is in the immediate vicinity of the international airport with a primary catchment of 1,5 million people.

The ground floor of the complex will have 14,160 m² of retail space while the first floor will house 11,520 m² including a modern conference centre, cinemas, food court and retail space. There will also be underground parking in the basement.

Environmental standards have been followed in the design and construction, complying with the EDGE green building certification system developed by the International Finance Corporation. Using insulated cladded panels for the outside walls and the roof, including double glazing on skylights and shopfronts that allow for optimal use of natural light, the building will be the first climate-controlled mall in Cameroon.

Focusing on large hospitality and retail projects, Raubex Renovo's team has 20 years' experience of construction projects throughout Africa. The company's capabilities encompass full project development including professional engineering, architectural and design services all managed by a professional construction and development team.

> "The project is an example of our team's capacity to plan construction programmes across the continent"
>
> **BEN PRETORIUS, MANAGING DIRECTOR, RAUBEX RENOVO**

Preparation of the ground floor slab during phase one.

Image Credit: Raubex Renovo

Health and safety is a core focus of the Raubex Group, with attention paid to all aspects of health and safety as well as environmental and social impacts on Raubex Renovo's projects site. A zero harm approach forms an integral part of the company's operating strategy with solid safety programmes implemented to ensure the wellbeing of all stakeholders.

"The efficiency and reliability of our work is enhanced by our use of Building Information Modelling (BIM), allowing us to optimise our design, construction and operations activity," says Ben Pretorius, managing director of Raubex Renovo. "BIM also ensures that up-to-date information on project progress can be easily shared with all stakeholders and contractors."

Earthworks began at Douala Grand Mall in January 2018, and handover is scheduled for November next year.

"The project is another example of our team's capacity to plan and implement accelerated construction programmes across the continent," he says. "The Raubex Group has a solid reference base of completed projects in South Africa as well as in the SADC region in countries, such as Botswana, Namibia, Mozambique, Zambia, Gabon, Togo, Malawi, Zimbabwe and the Democratic Republic of Congo."

Pretorius emphasises the importance of the support of Raubex Group, an infrastructure development group with 40 years in the business and a listing on the Johannesburg Stock Exchange. ■

PNEUMATIC COMPACTOR FEATURES TWO-WHEEL CONFIGURATION AND BALLAST CHOICES

Designed for use on granular materials and all types of asphalt-mix designs, the new Cat CW16 pneumatic (rubber-tire) roller is available as a standard nine-wheel model with a 69-inch (1,754mm) compaction width or as an optional 11-wheel model with an 84-inch (2,132mm) compaction width. The CW16 is designed for efficient performance on highways, city streets, county roads, lane additions, industrial sites, overlays, or other mid-size jobs.

Depending on ballast used (including water, sand, steel, or combinations), operating weight of the CW16 varies from an 11,464-pound (5,200kg) base configuration to an approximate maximum weight of 33,000-pounds (15,000kg) for the nine-wheel configuration and 32,850-pounds (14,900kg) for the 11-wheel configuration. Operating weight can be adjusted to suit job requirements. Per-wheel weight can be varied from 1,280-pounds (580kg) to 3,680-pounds (1,670kg) for the nine-wheel model and from 1,060-pounds (480 kg) to 2,975-pounds (1 350 kg) for the 11-wheel model.

Oscillating front wheels assist in compacting soft voids across the entire machine width, and the 11-wheel configuration increases efficiency in chip-and-seal applications. A tire overlap of 1.25-inches (32mm) ensures even compaction across the surface. Each wheel is equipped with self-adjusting scrapers, and a water-spray system deters material from adhering to the wheel surface. Standard cocoa mats help retain water to keep wheels wet, and heat-retention aprons are available.

The CW16's pressurised water-spray system is designed with dedicated spray nozzles for each wheel. The system includes a single water pump, triple filtration, and adjustable intermittent operation. Triple filtration (with filters at the fill point), in conjunction with the design of the water pump and spray nozzles, provides protection against clogs. The adjustable intermittent-spray mode conserves water and reduces the number of refills required, adding to the CW16's efficiency.

Two engines are available for the CW16 to meet emissions regulations.

Two engines are available for the CW16 to meet regional emissions requirements. The Cat C3.4B ACERT engine meets US EPA Tier 4 Final/EU Stage IV standards, and the Cat C4.4 meets the equivalent of US EPA Tier 3/EU Stage IIIA/China NR III standards. An Eco-mode, in combination with an exclusive automatic speed-control system, is designed to save fuel, lower sound levels, and deliver smooth transitions for optimum mat quality. Both engines are rated at 101.9 horsepower (75 kW).

COMPACT, FLEXIBLE, AND EFFICIENT: THE NEW BAUER BG 15 H VALUELINE

With the completely redesigned BAUER BG 15 H, Bauer Maschinen GmbH is breaking new ground for the ValueLine drill rig model. It specifically fulfills the requirements of a highly functional and cost-effective machine in the small drilling rig segment and scores with extremely compact transport dimensions. The BAUER BG 15 H is a statement of functionality and, at the same time, offers all the advantages needed to face the challenges of small construction sites.

With the new generation of drilling rigs, Bauer continues to rely on the 186 kW Caterpillar diesel engines for strong performance and low fuel consumption. The optimally adjusted hydraulic system has already proved itself in practical deployment with its "big-sister-rig" BAUER BG 26 and has a direct impact on fuel consumption.

This provides the BG 15 H with high levels of efficiency during daily drilling operations. A potential drilling depth of up to 21 metres in a single-layer winch operation significantly reduces wear. And even with up to four metre long drill strings during cased Kelly drilling, the innovation makes a giant leap forward in terms of efficiency.

Image Credit: BAUER GROUP

The new BAUER BG 15 H fulfills the requirements of a cost-effective machine in the small drilling rig segment.

The BAUER BG 15 H is available in two different configurations and is, therefore, extremely flexible and versatile. The standard model, for example, not only offers a drilling depth of 32 meters but also the option of "drilling under the mast." In addition, the "upgraded version" provides customers with the option of a drilling depth of up to 44 meters and the CFA drilling process.

A highlight is the BT 50 base carrier, completely redesigned and re-manufacture, which now offers a range of benefits even for small machines. The integrated service platform allows easy access to all maintenance points in the upper carriage and meets the highest standards in terms of occupational safety.

NIGERIA ANNOUNCES NEW NATIONAL BUILDING CODE

Image Credit: Adobe Stock

Caption: Nigeria's new building code will help safeguard lives.

Nigeria has announced a new national building code which aims to monitor construction works and safeguard lives across the country.

Babatunde Fashola, minister of power, works and housing, announced the new building code during the inauguration of members of the Architect Registration Council of Nigeria (ARCON). As there have been incidents where wrong construction plans led to deaths in the country, the Nigerian government is adopting conscious measures to protect the citizens and loss of life and property, said Fashola.

According to the minister, the new code will determine the standard of educational qualification of members and regulate the activities of architects in Nigeria's construction industry. He added that the Federal government of Nigeria is committed to the infrastructural development and ensuring safety of the workers. According to him, buildings will now be designed in such a way that public safety cannot be compromised.

Musselli expands Grove fleet with new GMK5150L

Rental company Musselli has taken delivery of a new Grove GMK5150L, just months after purchasing a GMK5250L.

Musselli chose the GMK5150L due to its application flexibility. Managing partner Fabrizio Musselli said: "The GMK5150L offers a fantastic return on investment. The set-up and rigging procedures are very fast, which allows the crane to operate on several jobsites on the same day."

Musselli benefitted from Manitowoc Finance to purchase the crane.

Managing partner Ileana Musselli said, "Manitowoc offered us a very competitive financial solution that was well-supported by a professional local team in Italy. We're happy to have a partner such as Manitowoc to support us through the entire lifecycle of the crane."

In addition to the GMK5250L, the company also owns a GMK4100L-1, delivered in December 2016. All three cranes are fitted with Manitowoc's Crane Control System (CCS), enabling operators to swap between the machines with ease.

Image Credit: Manitowoc

A new Grove GMK5150L is adaptable on many job sites.

AFRISAM IN CAPE N1 UPGRADE TO CUT TRAFFIC CONGESTION

As Cape Town's highways strain under ever-increasing traffic volumes, AfriSam is working with Cape contractor Martin & East and asphalt giant Much Asphalt to add an extra driving lane to one of the N1's busiest sections through Bellville.

The project, commissioned by the Western Cape Department of Transport and Public Works in early 2016 and worth R514 million, hopes to make commuting quicker and safer for the 120,000 vehicles that use the route daily. The contract is one of the largest road projects yet undertaken by Martin & East, according to contracts manager Eitner Truter.

From left, Bradley Thomas, AfriSam territory sales manager and Eitner Truter, Martin & East contract manager at the N1 road works as the existing road is milled by Martin & East subsidiary company Zebra Surfacing.

For the 8 kilometres from the Plattekloof Interchange to the R300 interchange, the contractor is surfacing the new lanes mainly with an ultra-thin friction course design (UTFC). This is being produced by Much Asphalt at its Contermanskloof Plant using a 9 mm and 13 mm cubical roadstone quarried, crushed and screened at AfriSam's Rheebok Quarry.

This open graded mix allows water to drain off the road more effectively through the interconnected voids between the stones, says Truter, making for better tyre grip, less water spray and lower road noise. As well as supplying aggregate to Much Asphalt for the road works, AfriSam is also providing Martin & East with readymix for a range of concrete applications. This includes in-situ median barrier units, 10 retaining structures on the outer edges of the highway, overhead gantry base structures, concrete lined v-drains and the rebuilding of the 60 year old bridge taking traffic over the N1 on Old Oak Road. The old bridge had to be demolished as the centre piers did not allow for widening of the highway into the median area. Modern highway regulations also required the bridge to be raised by almost a metre.

Traffic intensity on this route presents a number of logistical challenges for the contractor and suppliers, says Truter, who has to coordinate seven construction teams while ensuring that suppliers deliver on time and plant utilisation remains high.

AfriSam territory sales manager Bradley Thomas explains that traffic-related restrictions mean that strict timeframes apply to all deliveries, and makes it especially onerous for readymix supply.

"Our systems must ensure that our trucks arrive punctually and discharge the readymix within the strict time restrictions, despite the traffic," he says. "There is no room for error, as any delay on our part could delay the entire construction process."

Junior miners still struggle with regulations in South Africa

Many junior mining companies feel marginalised according to SRK Consulting (SA).

Despite South Africa's stated intention of nurturing a junior mining sector as a major strategy in revitalising and transforming the sector, voices at Junior Mining Indaba in Johannesburg, South Africa, were clear that this was not happening.

"There is a strong sentiment among junior mining companies that they are marginalised and excluded from the action," said Mark Wanless, principal geologist and partner at SRK Consulting (SA).

Wanless said the message from speakers was that they were strongly opposed to Mining Charter 3, and had not seen any benefit from Mining Charter 1 or 2.

"They would like smaller firms and start-ups to be exempt from BEE requirements, as having a large BEE shareholder with limited funding capacity is a big hurdle when seeking capital funding from investors," he said.

There was also a sense that government and the Department of Mineral Resources have stifled business by over-regulating the sector, and by setting unrealistic hurdles for mining and exploration companies to acquire prospecting licenses.

"The DMR has no usable portal where explorers or investors can find out who requires which prospecting licenses, and what licences are available," he said. "The application process is quite opaque, time-consuming and expensive; previously, it was possible to get a prospecting license for a nominal fee on the same day."

Geological information should be easily available to explorers, but is not – as there is no proper geological survey; while the Council for Geoscience holds valuable information, it has no efficient and accessible way to share it.

He noted that many junior miners felt that the way the DMR works has led investors to believe South Africa is a risky place to invest money in exploration; they also alleged that corruption within the DMR was a major headache, as bribing of officials is apparently common to ensure an application was processed. "Factors like these have made fundraising on the Johannesburg Stock Exchange for mining projects within South Africa very difficult."

BME IMPROVES ITS SAFETY RATING TO BEST YET

Blasting and explosives leader BME has again improved its safety performance, reaching a recordable case rate (RCR) of just 0.22 for its last financial year, well below the rate of 0.6 to 0.7 commonly achieved by the mining sector as a whole.

According the Ramesh Dhoorgapersadh, strategic safety, health, environment, risk and quality (SHERQ) manager at BME, being an effective partner to mining customers today demands ongoing support for customers in achieving zero harm on mine sites and elsewhere.

"As the mining industry works towards creating a safer working environment, BME has supported these efforts by designing and implementing its own safety initiatives," said Dhoorgapersadh. "These aim not just at people working on the mine, but at the community around the mine, the natural environment and the business assets."

AURY CENTRE TARGETS MPUMALANGA COALFIELDS

Screening and vibrating equipment solutions and services provider Aury Africa has opened a new office near eMalahleni to extend its presence in the Mpumalanga coalfields. The new office will serve as a Centre of Excellence for the region.

The company has made inroads into several important mines in the area, clinching supply contracts with a range of significant players, according to Aury Africa Business Development George Sturgeon.

In order to bolster its presence, the company has entered into a partnership with Tony Weatherby from WMP Consultants, a former Metallurgical Manager at Anglo Coal South Africa, with 37 years' experience in the industry.

Located at the Smokey Mountain Office Village in Route N4 Business Park, the new regional Aury Africa office is fully staffed, and also includes a showroom for its extensive product range. This includes high-quality vibrating screens for the coal, gold, and minerals-processing sectors, comprising banana, horizontal, circular, high-frequency, and flip-flop vibrating screens.

Aury Africa also supplies a range of exciters to fit most OEM screen types. Consumable products available include centrifuge baskets, polyurethane (PU) wedge wire panels, intertank/interstage cylinder screens for classification, sieve bends, and static panels for separation.

"We are also working with potential distributors in order to get the Aury Africa name out there," director Sydney Parkhouse explained. The aim is to entrench the company's reputation as a leading manufacturer and supplier of high-performance mineral-processing equipment to the African mining industry. "Our mission is to provide our clients with solutions to their challenges, supported by professional aftersales service teams," Parkhouse said.

BRIEFS

The Sector door from Apex Strip Curtains is suited to smaller openings.

Roll-up doors keep traffic moving

Two high-speed, roll-up Sector doors have been installed by Apex Strip Curtains & Doors at a Gauteng gold refinery, following a detailed assessment of application requirements by the expert Apex team. Operations manager at Apex Strip Curtains and Doors, James Candy, says the doors were installed inside the refinery to form an airlock measuring about six metres in distance between the processing and storage areas. "The door is a compact solution," adds Candy.

Miners reported a 23 per cent rise in revenue.

Commodity price rise helps miners

PricewaterhouseCoopers said in a report that the 40 largest miners would continue to benefit from the rise in commodity prices in 2018.

PwC said that revenue at the 40 largest miners rose 23 per cent to US$600bn, marking a turnabout for the sector after years of low commodity prices. Globally, miners held back spending on projects and focussed on asset disposals to bulk up their cash positions so as to service debt.

Improved alternative to conventional chute systems

Weba Chute Systems should not be compared to conventional chute systems as these locally manufactured systems adopt a completely different approach to the control and handling of bulk materials, according to Mark Baller, managing director of Weba Chute Systems. He says these transfer points are an improved alternative to traditional chute systems.

The Weba Chute System is based on the lined 'super tube' or cascade system, whereby much of the material runs on material at all times. The bottom layer of particles in the product stream moves in a tumbling motion and subsequently does not slide down the chute. This not only reduces the wear significantly, but in many cases the lip remains completely covered by material and never needs replacement.

Weba Chute Systems takes this means of controlling material movement a step further by designing the internal angle of the transfer chute to match the product discharge velocity with the belt speed, which eliminates or greatly reduces spillage. Extensive experience and technical expertise, coupled with applications knowledge, has positioned Weba Chute Systems as the leader in its field, Baller notes.

Image Credit: Weba Chute Systems

Control of material from the transfer point is critical to optimise belt life.

Each Weba Chute System is custom designed for a specific application, considering factors such as belt width, belt speed, material size and shape, as well as throughput. When applied to a Greenfield project, this locally designed transfer system achieves the optimum design configuration for a specific application.

Both retrofit and Greenfield projects using Weba Chute Systems and Solutions can realise an 80 per cent reduction in material degradation as well as greatly reduced dust and noise levels. Other benefits include reduced production losses due to less blockages, significantly reduced spillage and vastly improved safety levels. Inspection and maintenance are facilitated by easy access, while the Weba Chute System does not require ongoing supervision, which translates into reduced labour and related costs.

Mobile energy solutions favoured in mining

Zest WEG Group has experience of providing solutions to mines for many years. Alastair Gerrard, group integrated solutions executive, speaks on how the company is increasingly moving towards renewable energy generation.

A 40 MVA mobile substation solution provided to a power utility by Zest WEG Group.

Image Credit: Zest WEG Group

Leveraging its extensive South African manufacturing capability and WEG product ranges, the Zest WEG Group is working closely with its local agents, distributors and other stakeholders in Africa to provide customers with energy solutions.

Zest WEG Group integrated solutions executive, Alastair Gerrard highlights the importance of collaboration with reliable in-country partners who have local knowledge and experience, facilitating a more in-depth understanding of customers' challenges and allowing a quick response time with 24/7 after-sales support.

He explains that the focus is on providing fully integrated solutions in four main areas power generation, electrical infrastructure, mobile energy solutions and group product packages.

On the power generation side, the focus is across diesel, gas, steam, hydro and renewable energy generation. In addition to this, the Zest WEG Group's work in electrical infrastructure ranges from the design and supply of outdoor and indoor substations to the refurbishment of substations and the provision of overhead lines.

Mining sector

"Our mobile solutions are the third pillar of our offering and are highly engineered to meet an individual customer's application needs," he says. "These solutions have been favoured by the mining sector for a number of years but are just as relevant for any application where operations need flexibility in terms of where their electrical systems are deployed. These could be gensets, substations, skid type solutions or circuit breakers."

The Zest WEG Group's South African manufacturing capability includes its genset packaging facility in Cape Town where diesel gensets up to 3,350 kVA are produced.

"Our genset manufacturing capability is underpinned by our design and engineering expertise which provides us with the flexibility required to package the solution to meet a customer's specific requirements," Gerrard says. "This allows the selection of specific engine and alternator combinations for customers, but at the same time we do manufacture standard sets for the market."

Forming part of Zest WEG Group's manufacturing operations in South Africa is WEG Transformers Africa which has two facilities capable of producing transformers up to 45 MVA/32 kV and a range of mini substations up to 33 kV. Also, part of the group is Shaw Controls which is a leading local manufacturer of custom electrical panels, motor control centres (MCCs), medium voltage (MV) switchgear, containerised electrical solutions and E-houses.

"There has been considerable uptake of containerised electrical solutions around Africa, as these units can be pre-assembled and tested under factory conditions, and then transported to site by truck," he says. "Much of the site-related work, where risk is escalated as delays could be experienced or costs raised unduly, are largely eliminated by choosing the containerised option."

> "These solutions have been favoured by the mining sector for a number of years"
>
> **ALASTAIR GERRARD, ZEST WEG GROUP INTEGRATED SOLUTIONS EXECUTIVE**

Remote areas

Zest WEG Group has plenty of experience in Africa, working in remote areas on a range of projects. In terms of diesel power generation, successfully completed projects include a full continuous supply plant for a mine in Mozambique, and an emergency generation system for a mining project in Zambia, which made use of dry-type transformers installed in the power house due to space constraints.

"We have moved increasingly into the field of renewable energy generation and have supplied hydro-alternators to a mine in the Democratic Republic of Congo (DRC)," Gerrard says. "We also provided solutions for bio-gas plants in South Africa, as well as a steam power generation system guaranteeing 98 per cent availability throughout the warranty period."

Zest WEG Group has supplied outdoor substations to mines in countries including DRC and South Africa and conducted substation refurbishments for a mining operation in the DRC.

Growing interest in the group's mobile solutions has seen it supply a South African gold mine with 2,5MW mobile generators, as well as a mobile substation to a DRC copper mine. It has also provided a Namibian mine with four robust skid-mounted substations and four mobile circuit breakers.

Gerrard highlights that every project has a set of dynamics and constraints that the group is required to accommodate, ensuring the most effective solution is rolled out to guarantee value for investors.

"Significantly, the mining market presents a challenging environment to any supplier, but the lessons we learn there can valuably be applied to a range of other markets," he says. "Our customers across Africa therefore include utilities, and operators in renewable energy, agriculture, and pulp and paper." ■

Powering up the continent

The leading power sector stakeholders will be attending this year's POWER-GEN & DistribuTECH Africa in Johannesburg on 17-19 July.


More than 3,000 power industry stakeholders, utilities and sub-Saharan government officials are expected to attend POWER-GEN & DistribuTECH Africa.

Image Credit: PennWell Corporation

POWER-GEN & DistribuTECH Africa is the premier electricity industry forum that brings together international business leaders and technical experts committed to powering up a continent. Taking place at the Sandton Convention Centre, Johannesburg on 17-19 July.

Featuring a comprehensive conference programme and extensive exhibit floor, the event spans all aspects of centralised and distributed power generation along with leading technologies in power transmission and distribution. Put simply, it's where the industry meets to do business.

Expect high-level debate and analysis on topics such as Electricity Industry Strategy, Thermal Power Generation, Renewable Energy, and Power Delivery and Customers.

Africa's leading power sector stakeholders will convene in Johannesburg for POWER-GEN & DistribuTECH Africa, which is attended by more than 3,000 power industry stakeholders, utilities and sub-Saharan government officials, and has become the power sector's major hub for information-sharing.

In addition to presenting industry-leading conference tracks, exhibition space showcasing international solutions and extensive networking opportunities, POWER-GEN & DistribuTECH Africa 2018 facilitate a sub-Saharan African VIP programme which brings main buyers from across Africa to the event as part of the SSA VIP Delegation.

Exhibitors and delegates also benefit from a free B2B matchmaking service, which will pre-organise meetings with main industry decision makers based on each business's marketing objectives. In 2017, more than 300 meetings and 80 per cent of attendees said the service was successful in meeting their objectives.

The exhibition is free to attend, so make sure you visit more than 75 international exhibitors and take part in our networking receptions and functions as part of the 2018 event schedule.

The POWER-GEN & DistribuTECH Africa 2018 Preliminary Event Guide can be downloaded to find out how an organisation can benefit from attending Africa's largest gathering of international power industry professionals. ■

For more information on POWER-GEN & DistribuTECH Africa Conference & Exhibition 2018 visit www.powergenafrica.com

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