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Sabine Dall'Omo,
Chief executive of Siemens southern and eastern Africa

"Only when there is energy will Africa be able to industrialise"

52 YEARS

SERVING BUSINESS IN AFRICA SINCE 1964


CRITICAL SITES,
UNLIMITED POWER
KOHLER
SDMO
EMERGENCY

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Editor's Note

Welcome to our July issue. In our cover story (page 38), demand in Africa for trucks continues at a healthy pace with a six per cent annual growth forecast until 2025. It follows our exclusive interview with Adel Lünz, vice president and managing director from MAN Center Importer NWC Africa (on pages 40 and 41), on how MAN Truck & Bus is supporting economic development in many African countries through setting up factories and passing on technical know-how to the local workforce.

We provide once again an illustrated guide on the genset market. Nigeria and Egypt are leading the way in Africa – importing US$51m and US$49m respectively in gensets to meet their growing energy needs.

On page 22, Moin Siddiqi, an economist, explores the important role that China continues to play in developing the continent, despite declining commodity prices and lower FDI in recent years. His insightful findings are based on the IMF Working Paper (April 2017) – *A Rebalancing Act for China and Africa.*

As always, we'll keep you updated in the print edition and online at www.africanreview.com, for news as it happens.

Samantha Payne, *Editor*

Contents

Africa Energy Forum becomes major platform in Africa's power sector

With more than 2000 attendees, the 19th Africa Energy Forum in Copenhagen, was once again heralded a success for Africa's main energy stakeholders.

InfraCo Africa and USTDA commit funding to support Standard Microgrid's distributed energy services in Zambia. (Source: EnergyNet)

InfraCo Africa and USTDA announced their commitment at the 19th Africa Energy Forum (AEF). to providing more than US$4mn in funding for Standard Microgrid's distributed energy services in Zambia.

The deal means Standard Microgrid will initially build six solar photovoltaic (PV) micro-grids in rural and peri-urban areas before deploying a further 100 units to expand its distributed power service across the country.

Each 10kW PV micro-grid will be backed up by batteries and managed by smart metering technology to meet supply and demand.

The AEF, attended by more than 2,000 power industry stakeholders, 300 speakers and saw sixty four per cent of the African continent represented, took place on 6-9 June in Copenhagen.

It also provided a strong platform for companies to exhibit their latest power solutions.

David Raison, KOHLER-SDMO sales director for Africa, said, "It was very interesting to hear the quality of the speakers and their high-level presentations. It helped us to have a long-term vision of the evolution of the energy sector in Africa."

The KOHLER-SDMO stand was positioned alongside Clarke Energy, which was acquired by the Kohler company in February 2017.

Raison added, "The location of KOHLER-SDMO and Clarke Energy stands was very sensible. We have a real synergy now when it comes to our gas and diesel generation engine products, so it made sense to be close durng the conference.

"Thanks to our presence at AEF, we made good contacts in the short and medium term to do business in different parts of Africa."

Vangelis Kamaris, Africa development director, Metka SA, said, "I found the event excellent and the conference provided a sound platform to discuss and debate Africa's energy investment opportunities and challenges."

> "The conference provided a sound platform to debate Africa's energy investment opportunities"
>
> **NAVANGELIS KAMARIS**
> **AFRICA DEVELOPMENT DIRECTOR, METKA SA**

The event coincided with the release of a new World Bank report; 'Linking up: Public-Private Partnerships in Power Transmission in Africa' calling on increased private sector investment in transmission infrastructure.

Riccardo Puliti, senior Director and head of Energy and Extractives Industries at the World Bank, said, "Private finance has supported the expansion of electricity transmission infrastructure in many regions of the world and the same can happen in Africa. To attract private sector investment, however, governments need to adopt policies supportive of this strategy and establish the right business, regulatory and legal environment to sustain investor interest." ■


GREAT INDIVIDUALLY.
SUPERIOR TOGETHER.
VOLVO

South Sudan to push ahead with comprehensive petroleum audit

The South Sudanese Ministry of Petroleum has launched a public tender to perform an audit and produce a report on the country's petroleum sector.

Despite ongoing civil unrest, the Government of National Unity in South Sudan plans to move ahead with development plans for the country's emerging oil and gas industry. The audit and report is part of this plan, with transparency and efficiency as the major aims.

As South Sudan attempts to forge peace and unity, plans continue apace for oil and gas development. (Source: Jiri Flogel/Shutterstock)

Earlier this year, it was announced that South Sudan aimed to increase its oil production to 290,000 barrels per day in the 2017/2018 fiscal year, up from the output of around 130,000 barrels per day at the start of 2017.

China National Petroleum Company (CNPC), Malaysia's state oil and gas company Petronas, and India's oil and gas company Videsh are the three main companies currently involved in South Sudanese oil production.

The audit has multiple objectives including completing an accurate assessment of oil, condensate and gas reserves, reporting on revenue and investment flows, and making recommendations to the government on the technical, fiscal and regulatory issues faced by all players in the petroleum sector. As well as providing the government with a clear overview of the country's hydrocarbons industry, the report will be used by South Sudan as an important step towards Extractive Industries Transparency Initiative (EITI) membership.

Companies can bid on the open tender until 14 July 2017.

RWANDAIR CELEBRATES FIRST DIRECT FLIGHT TO UK WITH TRADE COMPETITION

RwandAir has announced a new trade competition to celebrate the launch of the first direct flight between the UK and Rwanda. Any bookings made on the RwandAir London Gatwick-to-Kigali service between 1 June 2017 and 14 July 2017 for outbound travel between 1 June 2017 and 14 July 2017 can be entered into the prize draw. Agents who make a booking during this period will have the chance to win a trip for two to Rwanda in business class. The second prize consists of two return economy flights from London Gatwick to Nairobi via Kigali, and the third prize is a US$254 voucher redeemable against a RwandAir flight.

The London Gatwick-to-Kigali route is served by a new Airbus A330-200 offering travellers Business, Premium Economy and Economy Class travel. Flights depart London Gatwick on Tuesdays, Thursdays and Fridays with a flight time of just eight hours 40 minutes and return fares starting from US$467.

TIGO RWANDA PARTNERS WITH ERICSSON FOR BSS OVERHAUL

Tigo Rwanda has partnered with Ericsson to overhaul its business support systems (BSS) ecosystem. Tigo Rwanda is the first operator across the Millicom group that has transformed its BSS operations and gone live with Ericsson's 'as a service' model for its complete BSS needs. The solution covers the full spectrum of charging, billing, provisioning, mediation and roaming functionality combined with advanced customer care and self-care solutions for management and ordering of services.

According to the company, the partnership enables Tigo to better serve its customers with new offerings, combined with shorter time to market, improved customer experience and increased operational efficiency.

Commenting on the partnership, Xavier Rocoplan, chief technical and IT officer at Millicom, said, "This is another major step in our IT transformation and process improvement journey. The 'as a service' operating model is a very important component of our long term strategy. This new way of looking at BSS activities is a cornerstone in Millicom's operational excellence program that strives at always delivering a better experience for our customers in a more efficient manner. The partnership with Ericsson has enabled us to quickly meet our strategic needs and provide a solid foundation for future development. We have already begun to see improvements in the experience for our consumers and employees in Rwanda."

Rafiah Ibrahim, SVP and head of market area Middle East and Africa, Ericsson, said, "Our partnership with Tigo Rwanda and the implementation of Ericsson's innovative BSS 'as a service' model signifies an important first step towards future collaboration across the Millicom group."

BRIEFS

flydubai increases flight frequency to Tanzania

flydubai began operations to Tanzania in 2014. (Source: flydubai)

Dubai-based flydubai has announced the start of flights to Kilimanjaro from 29 October. The re-launched service to the carrier's third point in Tanzania, along with Dar es Salaam and Zanzibar, will see flydubai's network in Africa expand to 12 destinations. Kilimanjaro will be served with six flights a week, three of which are via a stop in the capital, Dar es Salaam. In addition, the carrier will increase direct flights to Zanzibar from three to eight flights a week.

Kenya becomes AFC's 15th member

Kenya is the latest country to become a member of Africa Finance Corporation (AFC), a leading pan-African multilateral development finance institution and project developer. Kenya is AFC's 15th member and third East African member after Rwanda and Uganda. AFC's other members are: Cape Verde; Chad; Côte d'Ivoire; Djibouti; Gabon; the Gambia; Ghana; Guinea-Bissau; Guinea; Liberia; Nigeria and Sierra-Leone.

The announcement comes one month after AFC Live, Africa's premier infrastructure summit, at which AFC celebrated 10 years of activity in the field. The summit welcomed more than 600 leading thinkers from government, academia, business and finance to debate the opportunities and the challenges of investing in infrastructure and development in Africa.

USTDA supports geothermal project development in Zambia


The project will add new renewable energy capacity to the Zambian grid. (Source: N.Minton/Shutterstock)

The US Trade and Development Agency (USTDA) has signed a US$1.5mn grant with Kalahari GeoEnergy Limited, a Zambian geothermal development company, for a feasibility study supporting the development of a 10-20 MW geothermal power plant.

The grant was signed by US Ambassador to Zambia, Eric Schultz, on behalf of USTDA, at a ceremony at the US Embassy in Lusaka, along with Peter Vivian-Neal, CEO of Kalahari GeoEnergy.

Kalahari GeoEnergy selected California-based Geologica Geothermal Group to carry out the study, which will provide technical and environmental analysis needed to advance the project.

The plant, which is expected to be the first geothermal generation facility in Zambia, will add new renewable energy capacity to the Zambian grid and will expand access to reliable electricity.

"This grant is an endorsement of the work Kalahari GeoEnergy has conducted to date, and of the Bwengwa River geothermal resource, which we can now validate as a source of stable sustainable power," said Peter Vivian-Neal, chief executive officer of Kalahari GeoEnergy. "This type of power source is essential for economic development."

"USTDA is excited to support this new project, which will expand access to reliable electricity in Zambia," said Lida Fitts, USTDA's regional director for Sub-Saharan Africa. "This project represents an excellent opportunity for U.S. businesses to export technologies and services in support of Zambia's infrastructure goals."

SAGE REPORT CUSTOMERS WANT PAYMENT CHOICE

Sage Payments Landscape Report reveals that 90 per cent of respondents are more likely to shop somewhere that offers numerous ways to pay.

"Though around two-thirds of transactions in South Africa are still conducted using cash, according to other research, we're seeing a steady rise in adoption of credit cards, debit cards and mobile payments," said Charles Pittaway, managing director of Sage Pay, a division of Sage.

The report highlights that security remains the number one issue for consumers and that fraud prevention can still be stepped up by businesses. Payment methods are still a major factor for small businesses, with 50 per cent of companies surveyed agreeing that South African businesses need to introduce new ways to pay. "More and more South African small businesses are beginning to appreciate that digital payments are safer than carrying money around," added Pittaway.

"SHALE GAS WILL BE A GAME-CHANGER FOR SOUTH AFRICA"

Thembisile Majola, deputy minister of energy, South Africa, heralded natural gas as the new resource for generating power.

Speaking at the 19th Africa Energy Forum in Copenhagen on 7 June, the minister said energy resources, such as shale gas have "enormous potential to add to the growth stimulus" of South Africa. "We hope shale gas development will be a game-changer in South Africa," she said. "We are trying to develop and exploit this resource in an ecological sustainable manner while promoting justifiable social and economical development."

Exploiting natural gas is part of South Africa's Integrated Resource Plan (IRP) to meet electricity demand.

"We are talking about excess power compared to 2008 when we were having load-shed," she continued.

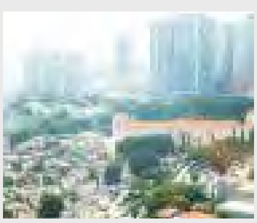
The minister highlighted the importance of the Integrated Energy Plan (IEP).

She said, "It focuses on all energy forms across the economic sector at a very high level and detailed analysis of demand growth, which is divided into energy sectors from electricity generation to gas and liquid fuels."

But she mentioned there were challenges moving from a coal-dominated generated sector. "Coal mining jobs are being threatened on the promise that renewable energy technology will create more jobs," she said. "Since the Paris agreement, we have been confronted with the cost of this transition to a low carbon economy."
To date, the renewable energy independent power producer programme has procured 6,000MW, half of which has been integrated into the grid, offsetting around 13.3 megatonnes of carbon emissions, she added.

BRIEFS

Angola construction firms urged to improve performance


Construction firms are being urged to join an accreditation system. (Photo: Ayotograph/shutterstock)

António Teixeira Flor, secretary of state for construction in Angola, has urged construction firms in Angola to join an accreditation system to become more competitive, contribute to better living standards, and improve security of the population.
At the opening ceremony of a workshop on Angola's construction sector, Flor highlighted that states have been designing initiatives to define policies and create management tools.

ZAMI discusses challenges in mining sector


ZAMI will take place in Lusaka. (Photo: Shutterstock)

More than 220 local and foreign delegates are expected to take part at the 6th Zambia Alternative Mining Indaba (ZAMI).
The forum will discuss practical solutions to challenges faced by the extractive industries.
According to Jesuit Centre for Theological Reflection (JCTR), executive director, Leonard Chiti, says the conference was an opportunity to discuss how stakeholders can contribute to the sustainable development of the country.

Joint agreement signed for Ghana wind power project

The project is due to start operations in early 2019. (Source: Pla2na/Shutterstock)

ENGIE and eleQtra, a developer of power and transportation projects in sub-Saharan Africa, have signed a Joint Development Agreement that sets the terms and the schedule for the development and construction of the 50 MW Ada Wind power project in the Greater Accra Region in Ghana. The project is expected to require an investment of approximately US$120mn and to start operations early 2019. ENGIE will enter as a 40 per cent partner in the project, which was initiated by eleQtra. Initial studies have already been completed and demonstrate the project's viability.

The Ada Wind power project is located in the eastern part of the Greater Accra region, which benefits from strong wind resources, availability of open land and good access to transmission infrastructure. It will contribute to the Ghanaian Government's objective of generating 10 per cent of its electricity from renewable resources, as well as its ambition to become a power generation hub in West Africa with the benefit of exporting power to its neighbours in the West African Power Pool.

eleQtra partner Ebbe Hamilton said,"eleQtra is delighted to have ENGIE joining the development of what we believe will be the first wind energy project in Ghana. We will now start the next phase of the development in order to bring the project as soon as possible into operation."

Philippe Miquel, regional manager Western & Central Africa for ENGIE said,"The Ghanaian Government is looking to strengthen its renewable energy industry and is putting in place a regulatory framework that should encourage the electrification of the country in an affordable and sustainable manner. The Ada Wind Project will be instrumental in the diversification of Ghana's energy portfolio. Our partnership will bring the technical experience, the local knowledge and the funding required to develop, construct and deliver this competitive 50 MW wind project."

GUARANTCO SUPPORTS MALI'S FIRST IPP

GuarantCo, part of the Private Infrastructure Development Group, has provided a 13-year Debt Service Reserve Account guarantee (DSRA) for US$ 4.06mn on behalf of Albatros Energy Mali SA (AEM), for various lenders and regional development funds.

The guarantee will facilitate the construction of a 90MW Heavy Fuel Oil-fired power plant in the Kayes region of Mali, an important industrial area. AEM holds a concession agreement with the Government of Mali to build, operate and transfer the power plant, which will cost an estimated US$124.7mn.

Access to energy is an ongoing issue for households and businesses in Mali, and new sources of energy are urgently required. The minimum offtake by Energi du Mali will represent approximately eight per cent of 2019's projected generation capacity for the country.

Energi du Mali has added the AEM project to its 2016 - 2018 list of "Priority Projects" for Mali.

MAINONE HIGHLIGHTS DATA CENTRE OPPORTUNITIES

MainOne, West Africa's leading connectivity and data centre solutions company, highlighted its commitment to building up West Africa's data centre capacity at the Data Center Africa Summit which took place at the DataCloud Europe 2017 conference in Monaco in June.

Gbenga Adegbiji, general manager of MainOne's MDXi Data Centers, joined a panel to discuss strategies for achieving improved data centre and Cloud penetration across the continent. It highlighted low demand as the biggest constraint, due to offshore data hosting of content. With improved access to Internet services on the continent, leading content providers have started establishing beachheads for content in data centres on the continent.

Adegbiji asserted that despite the limitations, the opportunities for data centre growth are enormous given the upsurge in the use of ICT services and mobile broadband, the migration towards a digital economy with Internet underpinning services across the region, better adoption of e-governance, e-health and e-commerce initiatives and businesses looking to host their growing digital information locally. He added that MainOne has started building its second Tier III+ data center in Sagamu, a flourishing industrial cluster in South-West Nigeria.

Adegbiji also highlighted MainOne's efforts at improving transit traffic in Nigeria with its partnership with the Internet Exchange Point of Nigeria (IXPN), and its new interconnection service OpenConnect, which facilitates increased interconnection, collaboration and peering for telecom operators, ISPs and content providers within its data centre. He said that this service would enhance local internet performance, lower costs and minimise traffic bottlenecks for Internet traffic in Nigeria.

BRIEFS

NetPlus and Mastercard provides e-commerce solution

Mastercard and NetPlus join as partners. (Source: Shutterstock)

Mastercard has partnered with Nigerian tech start-up, NetPlus to develop an e-commerce solution for e-retailers and consumers alike. The simple and secure digital solution allows consumers to pre-authorise the payment when placing their order online, and the e-retailer dispatches the goods via a delivery service who uses the Mastercard app to authorise the release of the payment once the consumer approves, ensuring the merchant is paid immediately.

ITC Global delivers communications to FPSO fleets

ITC Global recently deployed services to four FPSOs in West Africa. (Source: Shutterstock)

ITC Global, a leading provider of satellite communications to remote environments, has initiated installations to deliver communications services to seven floating production, storage and offloading (FPSO) vessels located offshore in Brazil for a leading oil and gas service company. This follows the successful deployment of services to four vessels in West Africa and represents the second of three deployment phases for the company's globally dispersed FPSOs.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Upcoming Events Calendar 2017

JULY

4 - 7
EDUWEEK AFRICAN EDUCATION WEEK
Johannesburg, South Africa
www.educationweek.co.za

11 - 12
GSMA MOBILE 360 SERIES: AFRICA
Dar es Salaam, Tanzania
www.mobile360series.com/africa

11 - 13
OIL & GAS AFRICA
Cape Town, South Africa
www.africaogp.com

12 - 14
WEST AFRICA POWER SUMMIT
Dakar, Senegal
www.wafpower.com

14 - 16
BUILDINT TANZANIA EXPO
Dar es Salaam, Tanzania
www.buildinttanzania.com

18 - 19
PORTS & INTERMODAL WEST AFRICA
Accra, Ghana
www.portswestafrica.iqpc.com

18 - 20
POWER-GEN & DISTRIBUTECH AFRICA
Johannesburg, South Africa
www.powergenafrica.com

AUGUST

22 - 24
CALL CENTRE CONFERENCE AFRICA
Nairobi, Kenya
www.callcentreafrica.iqpc.ae

24 - 25
AFRICA PROPERTY SUMMIT 2017
Johannesburg, South Africa
www.apisummit.co.za

SEPTEMBER

5 - 6
AFRICAN PORTS EVOLUTION
Accra, Ghana
www.west.portsevolution.com

5 - 7
POWER NIGERIA 2017
Lagos, Nigeria
www.power-nigeria.com

13 - 14
FUTURE ENERGY UGANDA
Kampala, Uganda
www.future-energy-uganda.com

26 - 28
KENYA MANUFACTURING & EQUIPMENT
Nairobi, Kenya
www.kenyamachineryexpo.com

Ecomondo returns to highlight latest green technology solutions

Ecomondo will be taking place from 7 to 10 November. (Source: Italian Exhibition Group SpA)

Ecomondo is the first European-Mediterranean exhibition on the circular economy with more than 1,200 companies exhibiting their products and processes and 105,000 delegates from more than 40 countries.

Taking place in Rimini, Italy, from 7 to 10 November, Ecomondo enables all the major players to take part in the challenges and opportunities of the new era for sustainable global development.

It is part of the 'States General of the Green Economy' initiative, launched in 2012 in collaboration with the Italian ministries for the environment and economic development, to champion green and sustainable solutions. Supported by the Foundation for Sustainable Development, it involves more than 6,000 stakeholders and companies.

The two main issues to be discussed this year include cities and the green economy as well as the new political and economic powers; the USA, EU and China and their role in sustainable development. Sustainable transport and mobility will be one of the new projects highlighted by Key Energy, an expo on energy solutions.

Sal.Ve., the Biennial Waste Vehicle Expo, will also be back in partnership with ANFIA, displaying a range of industrial and special vehicles for solid and liquid waste collection.

The circular economy is the driver of the development of a planet that aims at redefining its ecological footprint, with Italy playing a prominent role at the European level. For this reason, Ecomondo is an important environmental and waste management event where professionals from every part of the world can discover the innovations and the leading companies of the sector.

Having reached the goal last year, at its 20th edition, with 105,574 visitors (11,000 from abroad) and 1,200 companies in 2017, Ecomondo will have at its disposal an even larger number of square metres of expo space. Record-breaking figures for the initiatives programmed: hundreds of seminars with a thousand speakers; 550 buyers participating in 4,500 business meetings; 520 journalists accredited in the press room and, to date, 163 million media contacts thanks to the great coverage by generalist and trade/specialist press; feedback amplified by the social networks, which doubled the overall impressions.

For more information about the event, visit www.ecomondo.com

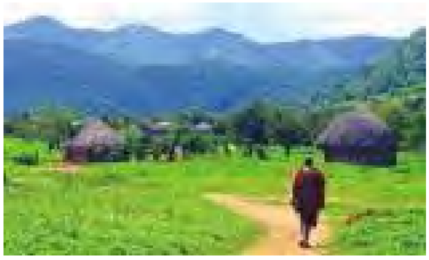
DANGOTE AWARDS DUPONT FOR NEW OIL REFINERY IN NIGERIA

DuPont Clean Technologies (DuPont) has been commissioned by Dangote Oil Refinery Company Ltd (Dangote) to supply a range of advanced proprietary equipment for the construction of a new refinery in Lekki, near Nigeria's capital, Lagos.

Construction of the new refinery is part of a strategy to boost national Nigerian refinery production and DuPont technology will help Dangote to maximise profitability while minimising its environmental impact. The new refinery will become the largest single-train refinery in the world. The complex will include a petrochemical plant and a subsea pipeline.

The new refinery is part of a strategy to boost national Nigerian refinery production. (Source: Shutterstock)

IMF COMPLETES SIXTH PSI REVIEW FOR TANZANIA'S



PSI program has been instrumental for Tanzania macroeconomic stability. (Source: Shutterstock)

The Executive Board of the International Monetary Fund has completed the sixth review of Tanzania's economic performance under the programme supported by the Policy Support Instrument (PSI).

The board approved the authorities' request for a six-month extension of the PSI arrangement and granted a waiver for the nonobservance of the end-December 2016 assessment criterion on tax revenues because the slippage was minor. The IMF said the PSI program has been instrumental for Tanzania in sustaining macroeconomic stability. It is against this background that the extension was approved from July 2017 to January 2018 to cover the period of negotiations for a successor PSI. Tao Zhang, deputy managing director and acting chair, said, "Tanzania's performance under the PSI has been satisfactory, macroeconomic performance is strong, and the medium-term outlook remains favourable."

MEA TO HAVE 40GW OF WIND POWER CAPACITY BY 2026

MAKE consulting has forecast the Middle East and Africa (MEA) region to install nearly 40GW of new wind-power capacity from 2017 to 2026.

The findings were described in MAKE's recent research report on the 'Middle East and Africa Wind Power Outlook,' published in June.

The report analyses the wind-power market in the MEA, providing updates on, economic trends and the potential advantages and disadvantages for new wind installations in the region.

Nearly 40GW of new wind-power capacity from 2017 to 2026. (Source: Shutterstock)

AFRICAN REVIEW / ON THE WEB

A selection of product innovations and recent service developments for African business

Full information can be found on www.africanreview.com

CONSTRUCTION IN PROGRESS FOR CAMEROON'S SPORTS COMPLEX

Olembe will be one of the leading sports amenities in the world. (Source: Ludwig Tröller/Flickr)

The Sports Ministry of Cameroon met with Egis Batiments International to review the construction work for the Olembe sports complex, which is expected to host the opening ceremony of the 32nd edition of the African Cup of Nations in 2019. With the Italian Piccini group, a leader in civil engineering works, being responsible for the designing and construction of Cameroon's sports complex, Egis is taking charge of the project management and has secured the work surveillance contract for 27 months.

The Olembe Sports Complex will be built as one of the leading sports amenities in the world, with a 60,000-seat covered stadium, two training centres, a lake, a gymnasium and an Olympic-sized swimming pool. In addition, the sports complex will have tennis, basketball and volleyball courts, hotels and several shopping areas, providing world-class service and facilities to the participating members in 2019.

AGGREKO'S BIO-DIESEL HELPED KEEP GLASTONBURY RUNNING

Organisers of Britain's best-known music festival, Glastonbury, chose

Aggreko had 230 generators onsite at Glastonbury. (Source: Aggreko)

Aggreko to help power the event.

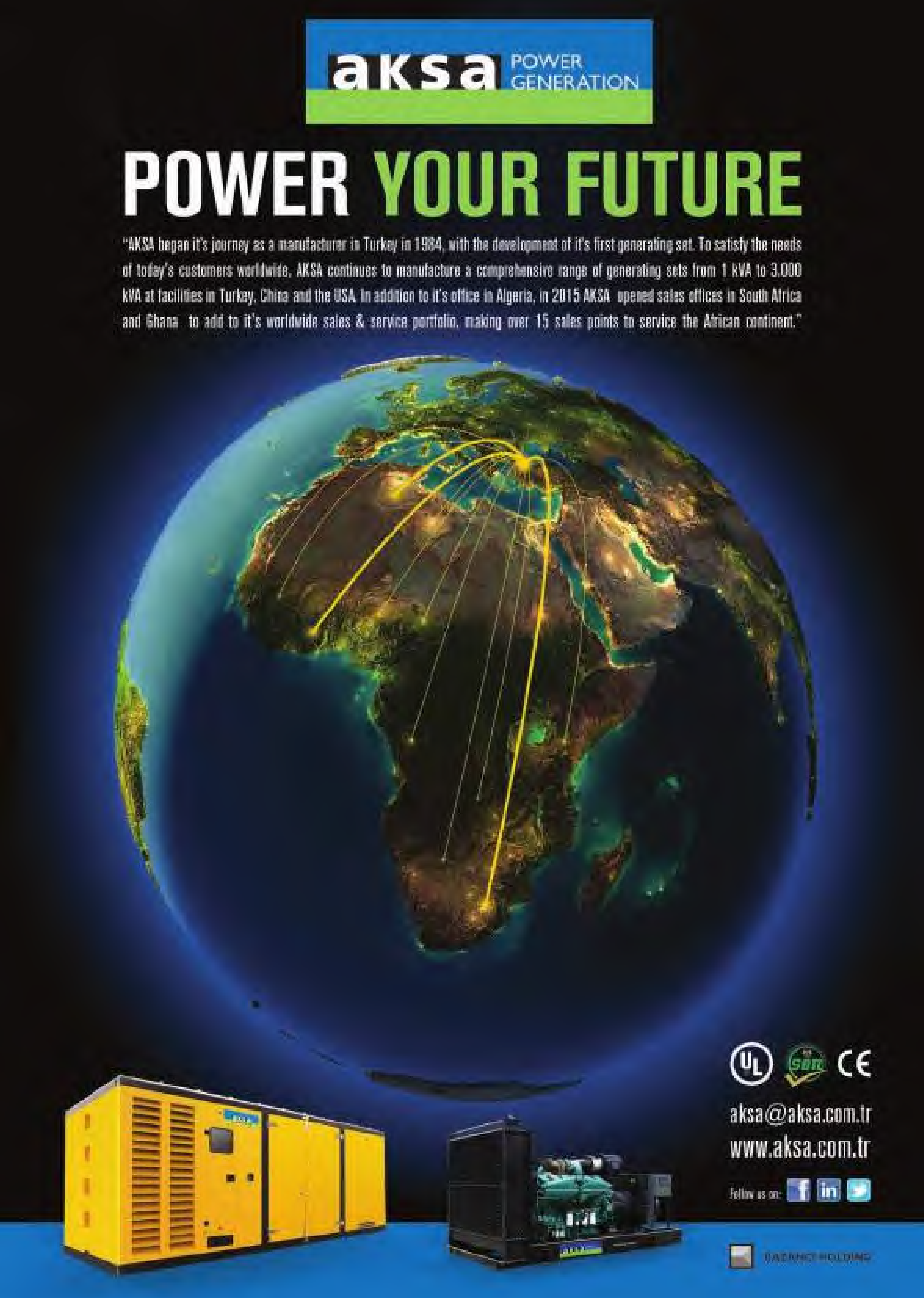
Aggreko has been supplying bio-diesel generators to Glastonbury since 2009, to meet demand for the use of renewable energy. Aggreko's 230 generator fleet onsite used more than 60,000 litres of hydrogenated vegetable oil (HVO) fuel to power the event. This year they provided 4 x 4 tankers of fuel.

KOMATSU INTRODUCES NEW OFF-HIGHWAY TRUCKS

Komatsu America Corp. has introduced HD325-8 and HD405-8 off-highway trucks, which feature an increased horsepower and Komatsu traction control system (KTCS) aimed to improve productivity in a cost-effective way.

The new models have high payload capabilities, with fuel consumption nine per cent lower for the HD325-8 and six per cent less for the HD405-8 respectively, compared to other earthmoving equipment.

Komatsu has introduced two new models HD325-8 and HD405-8. (Source: Komatsu)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"Africa's hotel sector has remained resilient in the face of strong economic headwinds. One of the positive outcomes for the hotel market in South Africa was the amendment of visa requirements that required foreign visitors from certain countries to provide biometric data in person. International visitor numbers to South Africa rebounded significantly in 2016 with a 12.8 per cent increase as compared to the 6.8 per cent decrease in 2015."

PIETRO CALICCHIO

Hospitality & Gaming Industry leader for PwC Southern Africa

"Unless action is taken, Africa is facing a shortfall of 50 million jobs by 2040. This should serve as a serious wake up call for all. This daunting figure will not only have profound consequences for the whole of Africa and its people, but the impact on the global economy could be catastrophic."

JIM MURPHY

Former Scottish labour leader, adviser from the Tony Blair Institute for Global Change

"On a continent where time and capital are both daunting barriers to closing the massive energy supply gap, fast-track mobile power is going to be vital. With it, Africa could begin to realise its potential as the world's next industrial powerhouse in weeks rather than years."

ERIC TOUMAYAN

Managing director of government affairs for APR Energy

SMEs are growing Kenya's economy

Small Medium Enterprises create jobs and boosts the country's GDP, but improved bank investment will underpin their sustainability. Mwangi Mumero reports.

While Kenya's small and medium enterprises (SMEs) continue to create jobs and boost the country's GDP, they face challenges that always hamper their growth.

Kenya's 2017 overall GDP growth is projected at 6.4 per cent, with SMEs contributing 3 per cent.

A National Economic Survey report by the Central Bank of Kenya (CBK) indicated that SMEs constitute 98 per cent of all business in Kenya, create 30 per cent of the jobs annually and contribute to 3 per cent of the GDP.

According to the 2014 survey, 80 per cent of the 800,000 jobs came from the informal sector by SMEs.

"Overall, these businesses help many Kenyans from suffering unemployment while boosting their incomes. There are challenges but we create jobs as well for others," said Sheila Njuki, an interior décor business owner in Jevanjee. She has an annual turnover of Ksh3mn (US$30,000).

Under the Micro and Small Enterprises Act of 2002, micro enterprises have a maximum annual turnover of Ksh500,000 (US$5,000) and employ less than 10 people.

Small enterprises have between US$5,000 to US$ 50,000 annual turnover and employ 10-49 people.

Medium enterprises, while not covered by the Act, have a turnover of between US$50,000 and US$8mn and employ 50-99 people.

The Jua Kali sector, where artisans make all types of merchandise, constitutes an integral part of the SMEs in Kenya. The artisans produce a variety of high-quality hard and soft wood furniture, and priceless pieces of art created from scrap metals and carpets. All items are fitted to meet the customers' needs.

Their products are mainly for local consumption or are exported to nations within the East African Community (EAC) and Common Market for Eastern and Southern Africa (COMESA) regions.

Fish vendors based in Nakuru are among small businesses playing a major role in creating employment opportunities in Kenya. (Source: Mwangi Mumero)

Regulatory challenges

Yet, even with its immense contribution to the economy, Kenya's SMEs are faced with numerous challenges.

According to a report Deloitte Kenya Economic Outlook 2016, SMEs are hindered by inadequate capital, limited market access, poor infrastructure, inadequate knowledge and skills and rapid changes in technology. Corruption and other unfavourable regulatory environments present other bottlenecks to this vital cog of the economy.

A survey by the Kenya National Bureau of Statistics released early this year indicated that approximately 400,000 micro, small and medium enterprises do not last longer than two years, leading to concerns of sustainability of this critical sector.

Although the World Bank's Doing Business Report 2017 lauds the country for making it easier to start a business, major issues remain in smoothing the process.

In Kenya, starting a business involves seven procedures, takes 22 days and costs 21.1 per cent of income per capita for men and women.

The World Bank notes that the ease with which businesses can be registered has a bearing on the number of entrepreneurs who start businesses and lead to jobs and more government revenue.

The government has formulated strategies to quicken the processes of starting a business in favour of small firms.

The government has addressed SME challenges by enforcing legislation and increasing access to funds, such as through the Uwezo Fund, a government financial tool to promote women and young people.

Experts, however, say some of the challenges with SMEs are beyond government bureaucracy.

"Most people prefer replicative businesses. Nobody does a market survey to see whether the business is viable," said Dr Bitange Ndemo, an associate professor at the University of Nairobi's School of Business and a former government official.

But finance remains the most critical challenge affecting SMEs in the country.

"The critical factor remains under-financing. Few banks are eager to finance SMEs, especially at the inception stage," added Njuki.

Bank collaboration

To alleviate the financing gaps, the Kenya government in collaboration with partners created the Financial Sector Deepening (FSD) programme to expand access to financial services among low income households and smaller enterprises. Funders include the UK's Department for International Development (DFID).

Two years ago, FSD, the World Bank and Central Bank of Kenya conducted a research project to understand the supply and demand side of the SME market. The report highlighted the difficulty in tracking the size of the SME and its need for financial services. According to the research, the evolution of the supply side of the SME between 2009 and 2013 resulted in rapid expansion of Kenya's financial sector. ■

Siemens sees wind power as a promising energy alternative in the future. (Source: Shutterstock)

Siemens: Committed to Africa

Attending the Africa Energy Forum in Copenhagen in June, Siemens chief executive of southern and eastern Africa Sabine Dall'Omo took time to speak to *African Review's* Stephen Williams.

Siemens is a multinational company, but you have a strong connection with Africa. Can you explain this?
We are known as a German engineering company with a very strong African heritage. In the past, there was a very strong consumer base, particularly with our cell phone business. Many people look up to our former presence in telecoms but see our impact in electrification, automation and digitalization now.

Is Siemens' focus on the gas to power sector in Africa, and what are the latest developments?
Yes, gas to power is a big focus for Siemens, because energy is the prerequisite for any development. Only when there is energy will Africa be able to industrialise.

Given the current situation in the global gas industry and the fall in prices of oil and gas, the sector is a bit more challenging. Many upstream projects are being rolled over and delayed because gas prices are so low; it is really not a commercially viable decision to explore for more resources at this point of time, but what we also see, is great economic momentum in the continent and a determination to develop an energy market.

You mentioned earlier that the current economic downturn is a bit challenging, so how has that impacted Siemens business in Africa, or in your region of Africa?
Well, we notice that various projects are being temporarily put on hold but not, I am happy to say, being cancelled. It is not necessarily that these governments don't want to execute those projects, and there is hardly any project being cancelled, so we remain very positive about Africa. We see a future in Africa to grow, and that is why we are opening additional offices in Ethiopia, Uganda and Sudan.

When you talk about Ethiopia, are you involved with that country's hydroelectric power projects?
On the hydroelectric side in Ethiopia, those projects have already been awarded, but we see huge opportunities within the renewable energy side. We see wind power as very promising; Ethiopia has a number of sites. Ethiopia's minister said during the Africa Energy Forum that there are at least five sites suitable for wind farms, and the country is very interested in developing wind power as a base load for its electricity grid.
In April, Siemens merged its wind business with Spanish company Gamesa, creating a global leader in the wind power industry.

What is the renewable energy picture in South Africa?
Well, right now we have 850MW installed renewable capacity in South Africa, which consists of wind and solar photovoltaic (PV).

Then there is concentrated solar power where we work with companies Abengoa and Acciona in South Africa. Siemens is promoting molten salt as a working fluid for concentrated solar power systems as it enables plants to work at higher temperatures. The company has been involved in a research project since 2015 at the University of Evora to build a test facility using molten salt as the transfer medium.

We continue to provide critical components from inverters, turbines, transmission and distribution tech to the solar power industry.

Some say that German technology is very good, but its excellence comes with a very high price premium.
If you incorporate highly rated products from companies like Siemens you will have a much higher efficiency and longer durability. This fact has been proven over many years and that, in the long run, is far more cost effective than cutting corners when it comes to procurement. ■

Spillovers from China's soft landing on developing Africa

China continues to play an integral part in the development of Africa's economy. Moin Siddiqi, economist, reports.

China, the world's second-largest economy, has assisted the African region through greater inflows of bilateral aid, trade and infrastructure spending, especially over the past two decades – thus helping to raise the continent's potential growth and business profile in external markets. China's ties with Africa pre-date its resource-hungry economic boom. African governments broadly see China as a healthy counterbalance to Western influence but, as ties mature, there are grounds for more balanced trade relations in coming years.

China's sustained robust growth until recently made it a pivotal country in driving global commodity markets. During 2010-2014, China accounted for more than 40, 10 and 20 per cent, respectively, of the world's metal, crude oil and agricultural crops consumption, plus one-fifth of primary energy demand according to the World Bank. Between 2010 and 2014, Sub-Saharan Africa (SSA) benefited from China's insatiable appetite for raw materials as prices of agricultural commodities, base metals/energy and precious metals sky-rocketed by 100, 160, and 300 per cent, respectively – referred to as the 'super-cycle' era.

China's stellar rise has turned it into a major commercial hub for Asian and SSA countries. One-tenth of South Africa's exports are shipped to China, while Angola remains its second-largest oil supplier since 2005 and Chinese buyers are the biggest customers of Zambia and Democratic Republic of the Congo for copper. Trade has boosted living standards of many people through wider availability of cheap Chinese consumer goods, from clothing, televisions to mopeds and mobiles.

China ranked among 'top-three' SSA foreign investors by value in 2003-15, with US$38bn reportedly invested, only behind United Arab Emirates (US$79bn) and India (US$45bn), reported London-based greenfield investment monitor fDi Markets. Besides the extractive sector, Chinese firms are also active in farming, construction, manufacturing, telecommunications and retail. More revealing is that about a quarter of all Chinese international engineering contracts were awarded in SSA in 2015 – mostly in transport (roads, railways, ports, aviation) and energy (hydropower), see bar-chart 1.

Furthermore, soft loans to Africa provided through the China Export-Import Bank have funded essential public capital projects. Such infrastructure investment helps countries to better connect with global supply chains. In Uganda, China is financing two large hydroelectric plants, Isimba and Karuma and the toll highway between Entebbe International Airport and Kampala.

Growth cooling down

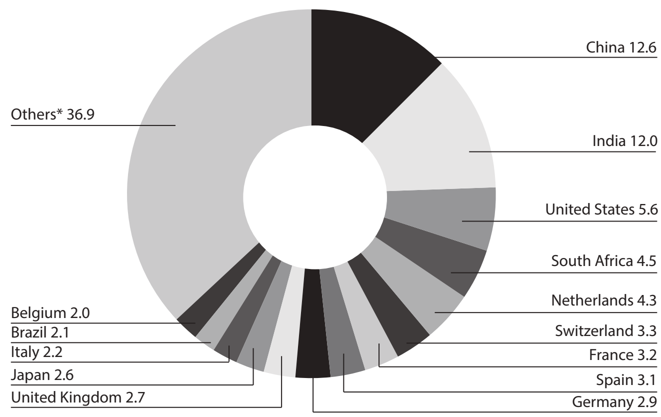
A gradual 're-balancing' of China's uninterrupted growth from investment and export-led to domestic consumption affects the global economy, but spillovers upon African commodity exporters are more acute compared to other regions. Although still robust by global standards, the economy is projected to grow at 6.6 and 6.2 per cent, respectively this year and next, the slowest expansion since 1990, according to the International Monetary Fund (IMF). Moody's Investors Service recently cut China's credit rating by one-notch to A1 from Aa3 due to subdued economic outlook and soaring domestic debt. The other two main agencies left their evaluations unchanged so far: Standard & Poor's AA- with a negative outlook, while Fitch Ratings A+ with a stable outlook.

Overall, China's prosperity matters more for Africa than in the Organisation for Economic Co-operation and Development (OECD) regions. The IMF staff analysis shows that one per cent hike in trading partners' growth boosts SSA's growth by 0.6 per cent. By contrast, a similar hike in China's growth can uplift SSA's growth by more than one per cent. But now, with flagging commodity prices and lower investment in China, the outlook for SSA exports is not bullish.

Since the mid-1990s, Africa witnessed a shift in trade patterns.

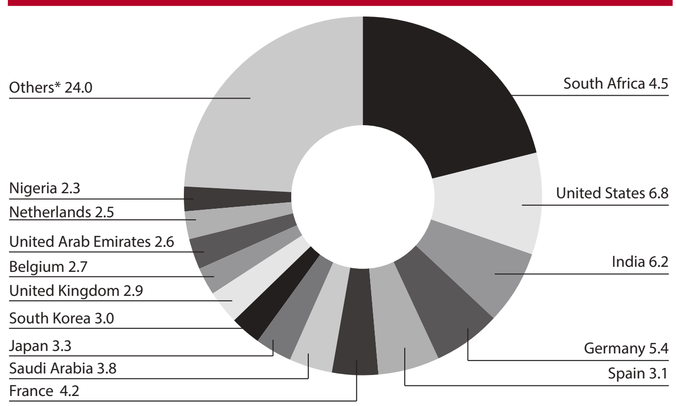
Advanced countries took 90 per cent of SSA's exports in 1995, but by 2015, emerging economies (led by China and India) accounted for more than half of them. The trend is similar on the import-side (see pie-charts 1&2). This new trade relationship has reduced the volatility of SSA exports – dominated

Pie-chart 1. Sub-Saharan Africa: Total Exports by Partner (per cent of 2015 total)



*Include Canada, South Korea, United Arab Emirates, Botswana, Namibia, Zamibia, Mozambique, Congo (DRC), Indonesia and Zimbabwe, South Africa accounts for the bulk of intra-Africa trade - on both import side (dominated by oil imports from Nigeria and Angola) and exports of manufactured goods, machinery/equipment to other SSA countries.
Source: IMF, Direction of Trade Statistics

Pie-chart 2. Sub-Saharan Africa: Total Imports by Partner (per cent of 2015 total)



*Include Brazil, Thailand, Turkey, Italy, Portugal, Spain, Singapore, Indonesia, Malaysia, and Sweden.
Source: IMF, Direction of Trade Statistics

by fuel and metal/mineral products. That, in turn, helped cushion the impact of the 2008-09 financial crisis, when advanced economies suffered a severe recession that curbed import demand. China, in fact, proved resilient by increasing imports from SSA – enabling the region to sustain healthy growth during global downturn.

Spillovers from China

Many African countries have suffered 'terms-of-trade' losses and reported a trade deficit with China in 2015-16, putting pressures on forex reserves and exchange rates. Downturns in larger economies – South Africa, Nigeria and Angola (heavily reliant on China) – will also impact intra-African trade. For example, member states of the Southern African Currency Union (South Africa, Botswana, Lesotho, Swaziland and Namibia) depend on Pretoria because they share tariff revenues. Growth in SA – which narrowly avoided a recession last year – is expected to reach barely one per cent in 2017 (IMF data).

China's outward foreign direct investment (FDI) to Africa has declined in recent years, according to the Ministry of Commerce – with the number of approved projects falling since 2014 (see line-chart1). Weak commodity prices led to closures of more high-cost Chinese copper and iron ore mines in Zambia and South Africa and the cancellation of the huge Mbalam-Nabeba iron ore project in Cameroon by Sundance Resources. FDI flows are driven by medium-term expectations. Future markets indicate little recovery in mineral prices by 2020.

There is a strong 'correlation' between the commodity sector and the real economy. As noted, China's demand for many raw materials fell in tandem with muted growth in construction and heavy industries. Concurrently, the share of private consumption relative to gross domestic product (GDP) is slowly rising according to official data. This emerging trend should affect Africa differently because there are two distinct groups of exporters – ie, producers of investment-driven commodities or consumption-driven commodities.

Therefore, oil and ores/metals exporters, notably Nigeria, Angola, Equatorial Guinea, Congo, Gabon, South Africa and Zambia, reported lower exports and sluggish growth rates in 2015-16. These countries' exports are linked to capital and investment-type expenditures. China's impact on Angola is visible as oil-price slump depleted about half of the revenue base, with a loss of one-fifth of GDP, due to depleted spending in both the public and private sectors. By contrast, consumption-driven commodity exporters led by Kenya, Ethiopia and Uganda have benefited from stable prices of agricultural raw materials and foods, plus increased Chinese import demand.

Seeking new opportunities

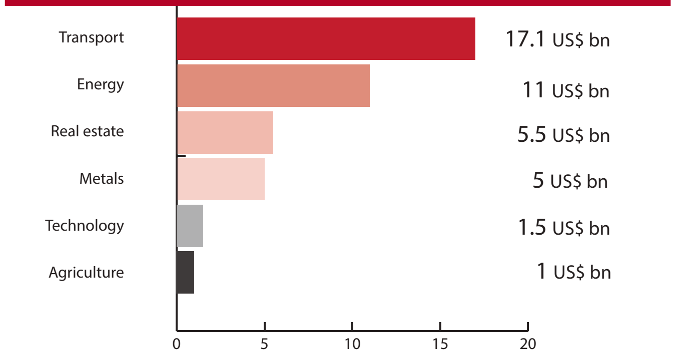
Sino-Africa trade is dominated by natural resource deals, triggering criticism from some observers that Beijing is only interested in the continent's mineral and energy wealth. There are, however, other trade/investment possibilities (outside extractive sector) driven by China's new consumption-led growth strategy coupled with shifts in production patterns and global demographic trends, which Africa can and should monetise. As China climbs to higher value-added supply chains, more SSA countries need to integrate into global garment/textile trade and light-manufacturing activities. According to the World Bank, over the next decade, Chinese manufacturing jobs could slowly shift to Africa, driven by companies' pursuit of cheaper labour as wages/costs increase in China.

Rising wage pressures in southeast Asia could force Chinese manufacturers to relocate to low-cost SSA region in the medium-term.

As the second-biggest importer of both goods and services after the US, what happens in China impacts the rest of the world. Beijing engagement with African partners will be strengthened by its ambitious global trading strategy, known as, the Belt and Road Initiative that has potential, particularly in East Africa where major infrastructure and defence projects are being built, such as the US$4bn Djibouti-Ethiopia railways.

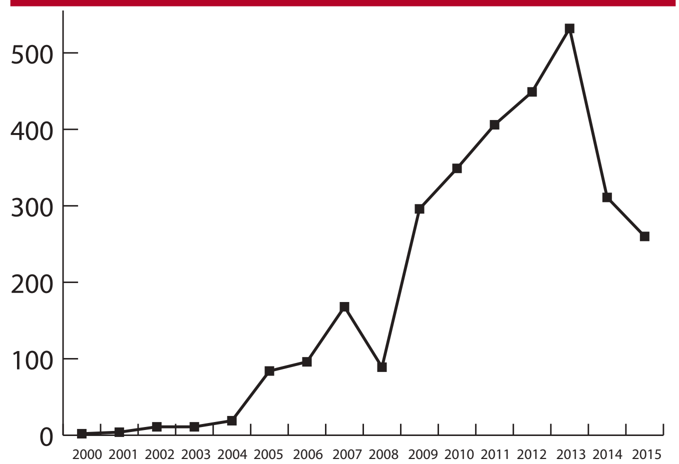
"The Belt and Road Initiative aims to connect economies, communities, and people. It holds great potential to bring benefits in terms of high-quality infrastructure, inclusiveness, and economic co-operation," said Christine Lagarde, managing director of IMF. Some 65 countries have signed up to the US$900bn Silk Road scheme, of which China has pledged US$124bn. ■

Bar-chart 1. Chinese Investments in SSA by Sector, 2015 (Billions of US dollars)



Source: The Heritage Foundation's China Global Investment Tracker.

Line-chart 1. Number of Chinese FDI Projects in SSA



Source: Ministry of Commerce, China

Liquid Telecom's partnership with GlobalReach Technology aims to help African businesses manage Wi-Fi for their customers. (Source: Shutterstock)

The rising popularity of Wi-Fi across Africa

Wi-Fi is the connectivity solution of choice for so many of today's devices. Liquid Telecom examines why the network technology is growing in importance to businesses and consumers across Africa.

There are a number of reasons why Wi-Fi has established a central role for itself in the modern communications ecosystem. It is the default wireless communication protocol used by laptops, tablets and smartphones.

At the end of most broadband connections there is a Wi-Fi access point, as it is the cheapest and most ubiquitous way to connect non-wired devices to the internet. As such it is the primary method of connection to the internet in offices and homes around the world.

In public venues, Wi-Fi acts as a complementary network technology and Wi-Fi offloading – the migration of data from mobile to Wi-Fi networks – is becoming a popular way to help quench the insatiable thirst for mobile data worldwide. In fact, more traffic was offloaded from mobile networks on to Wi-Fi than remained on mobile networks in 2016, according to the latest Cisco Visual Networking Index.

The importance for guest Wi-Fi is growing to the business world, where it is a recognised way of driving value and brand loyalty. In the case of Africa, public Wi-Fi hotspots have also proved to be an effective way to improve internet access to underserved communities.

Wi-Fi hub for Africa

Behind the scenes, network operators such as Liquid Telecom are discovering ways to work with mobile operators and ISPs to maximise the benefits of Wi-Fi networks.

For example, Liquid Telecom offers a service called Africa Wi-Fi Hub. This allows Liquid Telecom's wholesale customers to access its public Wi-Fi hotspots, enabling their subscribers to connect to hundreds of locations across some of Africa's fastest-growing economies. It also allows operators to make their public Wi-Fi hotspots available to some of Liquid Telecom's roaming partners, joining a global network of public Wi-Fi hotspots quickly and easily.

The hub will help to encourage Wi-Fi roaming across the region, enabling mobile operators to offer international coverage at far lower costs than mobile roaming and providing connectivity for international travellers.

As more local ISPs and operators join Africa Wi-Fi Hub, Wi-Fi roaming is set to accelerate across the region, enabling more subscribers to easily and securely connect to public Wi-Fi hotspots and avoid costly data roaming charges.

The mutual benefits of free Wi-Fi

Reliable free Wi-Fi is becoming an expectation of visitors to many venues, but the benefits of providing this service are mutual for both business and customer.

Wi-Fi can be used as a platform for personalised and location-based communication either through a Wi-Fi portal webpage or through the customer's own app, which can be triggered based on the presence of the user in a given location.

Combined with insights into customer behaviour, Wi-Fi can drive additional sales and enable new revenue streams through proximity marketing.

Earlier this year, Liquid Telecom entered into a partnership with GlobalReach Technology that is helping African businesses deploy and manage Wi-Fi for their customers. The managed service enables the smallest cafes to the largest shopping malls and hotels to offer Wi-Fi securely to their customers.

It is also being used by governments and municipalities to offer free Wi-Fi to citizens in a reliable, cost-effective manner, providing a platform to deliver e-government services.

A hotbed of hotspots

Improving broadband access is widely recognised as stimulating economic and social growth. The transition to a knowledge-based economy brings with it new business models and industries, while at the same time transforming how public services, education and healthcare can operate.

For this reason, a growing number of African governments are introducing free Wi-Fi initiatives to underserved areas.

In Kenya, Liquid Telecom has been working alongside the Kenyan government to introduce Wi-Fi networks to underserved towns up and down the nation. The first such initiative of its kind in the country was launched in Nakuru County, which attracts up to 30,000 unique users a day. It was recognised as Best Wi-Fi Deployment to Connect the Unconnected in a Rural Environment at the World Wi-Fi Day Awards in June 2016.

The rollout of more public hotspots across Africa looks set to boost economic activity and education further over the coming years. ■

For more information on Liquid Telecom's Wi-Fi offering, visit www.liquidtelecom.com

Konnect Africa to reshape the satellite broadband industry

Konnect Africa has announced new-generation services, including packaged offers inspired by 'pay as you go' models and Wi-Fi hotspots schemes, across sub-Saharan Africa.

With products, aligned with the preferences of end-users, it is making a strong push to be a partner of choice on the continent and to demonstrate how satellite technology is today the most relevant solution for unlocking access to the Internet in Africa.

As part of its initiative, Konnect Africa has partners with a wide range of operators, each with its specific DNA. In East Africa, these include: Bentley Walker, known for designing efficient solutions for government and military customers with a pan-African footprint; China Telecom, which is establishing communications links between the African continent and the Asia-Pacific region, and Ubora Systems, which focuses on IT solutions for government administrations and business automation in Kenya.

Satellite broadband is seen as the best approach to provide access to internet solutions in remote locations. (Source: zhu difeng/Shutterstock)

Leveraging expertise and knowledge, these partnerships reflect Konnect Africa's approach to adapt to each market to reach a vast audience. The company is working towards making Wi-Fi hotspot access available for a few cents, optimising family offers and proposing high-grade corporate services that enable videoconferencing, storage, audio-visual content development and safe and reliable communication.

"Connecting Africa means changing the way people live, study, perform business, and transforming daily life. We aim to take broadband closer to development sectors such as the healthcare system, education, agriculture or SMEs," explained Laurent Grimaldi, chief executive officer of Konnect Africa.

Satellite connectivity is enabling the mining industry's digital innovation strategies

Leading global consultancies and the mining sector itself have highlighted a shift to digital innovation as a major industry trend for 2017. With lower commodity pricing, it is no surprise that this sector is reinventing its future by using technology to unlock productivity today.

The quest for improved productivity as well as safety is driving the industry to implement more automated systems and greater IT integration including real-time monitoring, health and safety systems, security services, online customs clearance and access to ERP applications.

Ali Bofulo, managing director, iWayAfrica

iWayAfrica in association with its parent company Gondwana International Networks has established a satellite communications hub in South Africa for a new pan-regional Ku-band satellite service, Jola, that provides lower latency for intra-Africa traffic, enabling and improving ERP applications.

Leveraging Intelsat 28 Ku-Band coverage and utilising efficient, state-of-the-art technology on the ground, Jola offers the widest coverage access across sub-Saharan Africa with the most flexible service offering for the end-user to combine optimal speed requirement to a monthly data usage to fit their usage pattern and budget. Jola is available across sub-Saharan Africa via authorised partners of iWayAfrica.

"Reliable, adaptable and ubiquitous connectivity is a critical enabler for this digital innovation roadmap for the mining sector where connectivity requirements are more than just linking a remote site to a regional or global head office," said Ali Bofulo, managing director of iWayAfrica (Mauritius).

Satellite is a popular mode of establishing communications in remote areas. (Source: Shutterstock)

An integral and integrated part of the iWayAfrica service portfolio, satellite last mile connectivity is seamlessly incorporated into existing fibre MPLS networks to provide remote site connectivity to regional head offices for a multitude of applications.

iWayAfrica also offers a backup and low-cost business continuity service, Jola SOS, which provides an always-on 10Mbps VSAT link, with fixed data allowances that can be topped up as and when required. Provisioned with automated switchover to and from satellite, Jola SOS is designed to complement existing fibre or wireless networks.

Satellite has long been used as an access technology by mining and exploration companies in establishing communications in remote sites. Now these same companies can leverage off enhancements in the satellite industry to implement their own digital innovation strategies in the same remote locations.

New and untapped satellite communications

Playing a major role in reaching the unconnected millions of Africans are new and existing satellites and satcoms solutions. Tim Guest reports.

Intelsat 33e will deliver new communications capacity over Africa. (Source: Tim Guest)

Thousands of remote communities in developing countries have long been unconnected from any kind of telecoms networks, fixed or mobile, due to their isolation and often inaccessible geography, making extending terrestrial fixed and mobile networks to these regions impractical and too costly. In recent years, however, viable voice and data communications satellite solutions have increasingly been able to bridge this 'digital divide' using satellite connectivity to meet the ever increasing broadband demands of not only isolated communities, but also remote enterprise users, such as mining, oil exploration and logging companies. And those increasing demands for higher speed data and wireless/satellite broadband services have thrown down the gauntlet to a satellite industry whose bandwidth has always been seen as too expensive. The sector must introduce new, cost-effective satellite broadband technologies, as well as offering more satellite capacity at more affordable prices.

Launching new satellites with fresh capacity is one way of helping this situation; the interesting thing is that most communications satellites already in orbit have unused capacity already onboard. Made available and combined with innovative new technologies, this spare capacity can help bring prices down.

A launch over African skies

With the aim of delivering mobile content and other services to new subscribers in remote parts of sub-Saharan Africa from 2017 onwards, a new Intelsat EpicNG high-throughput satellite (HTS), the Intelsat 33e, became operational on 29 January having been launched in August last year. The 33e is the newest EpicNG platform delivering HTS aimed at providing customers with a fibre-like experience from orbit, and stakeholders hope it will lead to increased data usage by new and existing users to help ensure a viable ongoing business model for service providers and mobile operators leading to overall market expansion.

A previous project between Intelsat and Vodacom in the DRC supports this projection. The two companies partnered in the design, management and installation of 800 rural, solar-powered mobile cell sites connected to the Intelsat 28 satellite for backhaul*. With reduced capital costs the average revenue per user, while low, still made these new sites viable almost from the start. Now, with Intelsat's new 33e satellite the costs of communications traffic will fall even further with new services this year.

More than 50 of Africa's mobile operators, including 10 of the largest, currently utilise Intelsat satellite services, providing connectivity that can be used by over 80 per cent of the region's wireless users.

Shortly after the 33e satellite became operational, Intelsat and Quantis Global, one of the leading broadband service providers in Europe and northern Africa, signed an agreement to enhance and expand the Quantis network using services provided by Intelsat EpicNG and IntelsatOne Flex services in order to deliver higher performing broadband services across the region. Intelsat teleports will be used to support the expansion, which will benefit NGOs, remote enterprises, embassies, oil & gas operations and maritime customers in Africa and other regions. Quantis will incorporate services from two Intelsat EpicNG satellites – Intelsat 33e and Intelsat 37e – and use the IntelsatOne Flex for Enterprise managed services offering, which delivers a high-quality and global and wholesale service.

Tapping into dormant capacity

A group of industry players have together devised a way to unlock vast amounts of unused capacity and related lost revenues across the satellite industry. Together with satellite consultancy SatConsultant (as project lead), satellite broadband equipment manufacturer, Forsway, field engineering specialist, Next World Network Services (NWNS) and satellite service provider Belinter Media, have devised a fully-managed, data-service business model. This not only enables unused capacity aboard the Belintersat-1 telecommunications satellite over Africa to be used and monetised, but can also be applied to other telecommunications satellites operating anywhere.

Belinter Media is the service provider that makes use of the Belintersat-1 capacity, and provides telecommunication and broadcast services across satellites over Africa. It launched the Belintersat-1 satellite in January 2016, with its beams providing African coverage, and access 'to' Europe and Asia. The satellite services provided over the new platform include: VSAT and broadband Internet, telephony, data trunking, cellular backhaul, direct-to-home (DTH) TV and video distribution. However, the service provided from Europe to Africa had previously only been video uplink services, for a variety of involved technical reasons. This is where SatConsultant saw the opportunity of using Forsway's Hybrid Router solution to provide Belinter Media with a two-way communications capability and fresh capacity, in turn, making it easier for the service provider to sell that capacity and services, unlocking new revenues from a wide range of end-user segments, including aerospace, enterprise and marine.

Forsway's Hybrid Router is a high-capacity, low-cost, Internet-over-satellite solution, combining satellite and terrestrial technologies. Travis Mooney, SatConsultant's principal consultant, said, "There is a huge amount of undersold capacity in the industry. Our innovative approach and in-depth industry understanding, combining Forsway's product strengths, including its Odin™ Hybrid Router with the global reach of NWNS field force, have created a formidable partnership and found a solution to the problem." He said that NWNS has expertise in implementing VSAT and large earth stations, as well as point-to-point microwave and wireless broadband installations in extreme and hard-to-reach locations in emerging markets in Africa and other regions; it is handling full field engineering management responsibilities for the Belinter Media project.

The NWNS field force has installation and satellite systems integration experience in countries across Africa, including Botswana, Cameroon and many others, as well as worldwide. (Source: Tim Guest)

"The managed service we have put together with Forsway offers insight to the rest of the industry as to what can be done to solve the problem of unused capacity. With most satellite operators in this position, including many with footprints over Africa, there is no reason why they cannot do the same," Mooney added. ■

**Satellite backhaul when connecting remote and rural locations, satellite is a primary means for providing backhaul – sending communications back into the wider radio network – because the distance between the remote cellular base station equipment and the core of the network is too large for towers and microwave to be deployed economically.*

Africa's metal sector eyes downstream component growth

Despite competition from cheap Chinese steel imports, Africa's metals sector is making progress. Nnamdi Anyadike reports.

The downturn in global demand for steel and other metal products, combined with a surge in cheap Chinese imports, has placed Africa's metals processing sector under an enormous strain.

In November last year, Wim de Klerk, chief executive of ArcelorMittal South Africa (AMSA), the country's biggest steel maker, warned that if South Africa's sizeable steel industry did not get tariff protection from the flood of Chinese cheaper steel imports, it is likely to become extinct.

The gloom was replicated across sub-Saharan Africa in 2016. The Nigerian Society of Engineers warned that the country spent an unsustainable amount of money, US$3.3bn, on the importation of steel products.

Metals sector comeback

But despite the disappointing macro outlook last year, the situation in 2017 is more promising. Indeed, Africa's metals sector is making some progress in a number of major areas. To counter Nigeria's overreliance on steel imports, the government in March signalled its determination to once again kickstart the Ajaokuta steel plant. It intends to do this with the help of an agreement with Global Infrastructure Limited of India.

The modified concession agreement comes after much legal wrangling at the International Chamber of Commerce (ICC) in London, which followed the termination in 2008 of Global Infrastructure's 10-year concession agreement to manage Ajaokuta. Under the new accord, Ajaokuta is freed of its ties to Global, while the Indian concessionaires are to take over Nigeria's National Iron Ore Mining Company (NIOMCO) – which provides Ajaokuta with its feedstock – and operate it for seven years.

Following the announcement of the accord, several investors are said to have expressed interest in the completion and running of the plant. These include Russian and Ukrainian companies; a Chinese consortium and some indigenous steel companies who have lined up to acquire Ajaokuta. If work does resume at Ajaokuta, it will bring to a close a long, drawn out chapter of delays and false starts at the steel plant dating back to the 1980s.

Zimbabwe interest

The Zimbabwean government is also looking to resurrect its moribund steel industry with private investor help. The strategy is in line with Zim-Asset, its economic blueprint. This places the resumption of operations at Ziscosteel, Zimchem and Lancashire Steel at the heart of its industrial resuscitation. The government is now conducting due diligence on potential investors from China, India and Africa.

Elsewhere in Africa, there are similar signs of hope. Last year, Angola launched a steel industry based on steel scrap feedstock. The 1.5mn tonnes per year (tpy) US$300mn plant will supply the domestic market, thereby reducing imports. It will also supply markets in the wider region, including DR Congo and Zambia. The plentiful reserves of scrap are expected to provide three years worth of feedstock for the plant. In two years, local sources of iron ore will provide additional feedstock to the plant.

Components manufacturing

More encouraging are moves from various African countries to align their steel industries to components manufacturing. In March, Dangote Group, announced the establishment of a US$100mn truck assembly plant in Lagos, Nigeria, which should benefit the local metals sector. The plant is a 60-40 joint venture between Dangote Industries Limited (DIL) and China National Heavy Duty Truck Company (SINOTRUK).

Meanwhile, in Kenya, the partnership with Honda is to start manufacturing some motorcycle parts to meet local demand. Honda and Megh Cushion Industries Ltd, Kenya's manufacturer of automotive products, will source and manufacture five component motorcycle parts. Eventually, the aim is to manufacture locally 290 component parts of a Honda motorbike that are normally imported. It is expected to add to 200,000 jobs, with the materials being procured locally. ■

A step towards food sufficiency in Senegal

Kirloskar Brothers Limited's optimum pumps help improve irrigation standards to yield up to one million tonnes of rice in the west African country.

Since the completion of Phase I, around 50 per cent of the rice demand has been met. (Source: Kirloskar Brothers Limited)

Kirloskar Brothers Limited (KBL), a world-class pump manufacturing company with proficiency in engineering and manufacture of systems for fluid management, has partnered for food sufficiency with the government of Senegal.

Before 2005, Senegal's irrigation infrastructure was under-developed. The government was not able to meet the expected food sufficiency levels of the country because of the haphazard irrigation techniques.

For achieving better means of livelihood, the government felt the urge to resolve the issue of unemployment among the rural youth and stop their exodus to the cities.

The major challenge faced by Senegal was the need for skilled labour. In north Senegal, the lack of proper irrigation equipment was identified as the foremost problem. Even though there was abundant water available in the Senegal River, there was no system to direct it to the fields in sufficient quantities required to irrigate rice. Plus, south Senegal was grieving over the existence of excessive saline surface water for irrigation purposes. The feasible alternative was to tap ground water in order to receive a supply fit for the yield.

In 2005, the Confederation of Indian Industries organised a conclave on India-Africa Projects Partnership. In this event, KBL presented its range of pumpsets and capabilities to ministers from more than 25 African nations that came for the confederation. Subsequently, KBL was approached by delegates from Senegal for seeking expertise required for implementing affordable, adaptable and appropriate irrigation systems in order to increase rice production.

In the conference, KBL presented a proposal to the President of Senegal and to all the major stakeholders from the rice production sector in the country. The proposal was comprehensive with recommendations for the irrigation equipment required to double rice yields in two phases. In Phase I, from less than 10,000 tonnes to 500,000 tonnes of rice was achieved by improving irrigation standards in existing farmlands. In Phase II, more land was brought under cultivation to further increase the yield up to one million tonnes.

KBL also signed a contract with the Ministry of Agriculture in Senegal for 2,394 diesel engine driven pumpsets, 20 drip irrigation systems and various accessories, including pipes, trolleys, hoses, pontoons, valves, etc., along with installation and commissioning on a turnkey basis.

Proper planning and follow-up led to the completion of Phase I on schedule. 1,600 pumps were shipped from India to Senegal. Phase II involved the engagement of 250 submersible pumps driven by 20-62 kVA gensets and large vertical turbine end-suction pumpsets, along with agricultural equipment comprising rice mills, vibro-destoners, groundnut decorticators, chippers, shredders and grinding mills.

After incorporating the advanced KBL technology and strategy, an implausible growth was witnessed in Senegal. Since the completion of Phase I, around 50 per cent of the rice demand has been met. Earlier, only 19 per cent of the total demand for rice was fulfilled. Completion of Phase II resulted in irrigation of more than 150,000 hectares of farmland, thereby leading to further increase in food sufficiency levels in the country. ■

Mobilitas-AGS inaugurates new Gauteng logistics hub

Mobilitas-AGS has extended its logistics infrastructure in South Africa to better serve its growing Africa-wide business.

It recently opened its biggest multimodal logistics hub on the continent, in Gauteng, in a bid to improve services to clients, boost competitiveness and support the growth of its activities across Africa.

The US$20mn facility is built on a 90,000 sq m site near the OR Tambo International Airport, the largest airport on the continent.

"The inauguration of the logistics complex is an important step for the continuing development of Mobilitas-AGS activities in Africa," said Alain Taïeb, chairman of Mobilitas-AGS' supervisory board.

"Moreover, because of its ultra-modern and complex design, such as the one we have just inaugurated, improves the competitiveness of our businesses in southern Africa."

The new Gauteng site is a major international platform for the operations of each Mobilitas-AGS brand, including the Laser Transport Group, a leading logistics player in the South African market.

The group's Africa footprint now extends across all 54 African countries.

The US$20mn is built on a 90,000 sq m site near OR Tambo International Airport. (Source: Mobilitas-AGS)

The new Gauteng site comprises four warehouses devoted to archive storage and document digitisation, with 150km of archiving capacity, fine art storage and management and a bonded warehouse. It is also equipped with two special storage areas one to house wine and another for sensitive products.

The new logistics complex is in line with the Mobilitas-AGS global strategy of building multimodal logistics infrastructure, and follows similar projects in Europe. Others are planned for Africa in response to calls and demand from local businesses.

According to Mobilitas-AGS, companies can see their competitiveness reduced significantly by inadequate logistics infrastructure; it says this can increase the cost of goods by up to 40 per cent when they are traded in Africa.

Ethiopian Airlines to inaugurate new cargo terminal

Africa's largest cargo operator, Ethiopian Airlines, has announced the inauguration of its Terminal-II during the Second ICAO Global Air Cargo Development Forum.

Covering a total area of 150,000 sq m area of land, the new cargo terminal includes facilities, such as a dry cargo terminal warehouse, perishable cargo terminal with cool chain storage, fully automated with latest Elevating Transport Vehicle technology, G+2 office building, apron area, which accommodates five additional big freighter aircraft, a truck parking apron and employees' canteen and wash rooms.

The new cargo terminal is also fitted with different climate chambers for storage and handling of temperature sensitive products such as fresh agricultural products and pharmaceuticals.

Group CEO Ethiopian Airlines, Tewolde GebreMariam, said, "With infrastructure development being one of the four pillars of our fast, profitable and sustainable growth strategic roadmap, Vision 2025, we have been making massive investments in infrastructure projects to modernise and expand our cargo facilities at a total cost of US$150mn.

"The new cargo Terminal-II combined with our existing Terminal-I will give us a total tonnage capacity of around one million per annum which is the largest in the continent of Africa. Moreover, upon completion of the second phase, which adds 600,000 tonnes annual uplift capacity, Ethiopian Cargo and Logistics Services will have one of the world's largest cargo terminals – a capability equivalent to cargo terminals in Amsterdam Schiphol, Singapore Changi, or Hong Kong. This investment and the resulting massive cargo facilities along with the six modern B-777F fleet and 2 B-757F will create adequate air cargo transporting capacity for the fast-growing export and import demand of the continent which is critically essential in the socio-economic development of the African countries."

Ethiopian Airlines operates eight dedicated freighters in 39 destinations in Africa. (Source: Ethiopian Airlines)

Ethiopian Cargo and Logistics Services operate eight dedicated freighters to 39 global freighter destinations in Africa, the Gulf, the Middle East, Asia and Europe, with an average daily uplift of 650 tonnes on top of the belly hold capacity, 150 tonnes, to over 95 destinations globally.

Ethiopian Airlines commands the lion's share of the pan-African passenger and cargo network operating the youngest and most modern fleet across five continents.

The Ethiopian fleet includes ultra-modern and environmentally friendly aircraft such as Airbus A350, Boeing 787, Boeing 777-300ER, Boeing 777-200LR, Boeing 777-200 Freighter, Bombardier Q-400 double cabin with an average fleet age of five years. In fact, Ethiopian is the first airline in Africa to own and operate these aircraft.

Ethiopian is implementing Vision 2025, a 15-year strategic plan, that will become the leading aviation group in Africa with seven centres: Ethiopian Domestic and Regional Airline; Ethiopian International Passenger Airline; Ethiopian Cargo; Ethiopian MRO; Ethiopian Aviation Academy; Ethiopian In-flight Catering Services and Ethiopian Ground Service.

Digital technologies are disrupting global supply chains. (Source: Shutterstock)

Online marketplaces will disrupt 'status quo' in logistics

Kamogelo Mmutlana, chief executive of South Africa's Barloworld Logistics, talks about digital innovation driving global supply chains

Across every sphere of business and manufacturing, new digital tools, systems and platforms are upending traditional strategies and approaches. Fuelled by powerful software systems and smart apps, the digital era is forcing business leaders to adapt and embrace more agile ways of operating. Within global supply chains, digitisation is already disrupting businesses. To identify where and how this impact is being felt, Barloworld Logistics explored two specific digital trends as part of its 2017 supplychainforesight report; namely big data and online marketplaces. These two trends are already forcing stakeholders within supply chain management to rethink their strategies, and to integrate digital innovation into daily operations.

Shaping Decisions, Shaping Supply Chains

While it may be a now overused phrase, data is evidently the new oil – and it is streaming into every type of business at a rapid pace. This data comes from smart devices, social media, online interfaces and many more digitised forums and functions.

According to research from Frost & Sullivan, as more unstructured data becomes integrated into daily analysis and evolves into structured data, it will undoubtedly lead to enhanced efficiencies and quicker, calculated decision-making within the supply chain. The research firm also notes that growing access to data will mean that analytics will move from reactive to pre-emptive to anticipatory.

The United States tech powerhouse Amazon, for example, through its anticipatory shipping model, will know what you want even before you know you want it.

For logistics and supply chain stakeholders, predictive and prescriptive analytics are already presenting a number of smart applications. The key is to find efficient ways of integrating such applications and using them to mitigate the risks that new technologies inevitably bring with them.

Such applications include route optimisation in real time; 'control-on-the-go' as mobile devices are used to increase enterprise visibility; faster reaction times to supply chain challenges (for example, natural disasters); and product tracking data to understand customer purchasing behaviour and support requirements.

Embracing Online Marketplaces

The second major digital trend will undoubtedly impact brokerage related services within the supply chain. Indeed, it is predicted that two main platforms will disrupt the status quo within logistics: mobile based and online marketplaces.

Notably, the emergence of online marketplaces within the supply chain will involve the closer integration of all stakeholders – namely sellers, buyers, freight forwarders and financial institutions, all connected to each other through an open, online platform.

As data is leveraged ever more effectively, mobile based services and platforms will soon be able to aggregate a network of local couriers, matching individual deliveries in real time to the optimum carrier according to who is the nearest, available, quickest and best suited to fulfil that specific job.

With big data and the emergence of online platforms to better utilise resources within the supply chain, there will soon be very clear winners and losers in the equation. As always, the winners will be those who have the vision, commitment and skills to harness this ongoing digital transformation. ■

Barloworld Logistics is South Africa's leading integrated logistics and supply chain management company. For more information www.barloworld-logistics.com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Getting closer to the market

After spotting long-term growth potential, the world's premium truck builders are now actively extending their footprint across Africa. Martin Clark reports.

(Source: Volvo Truck Corporation)

It may well be true that the developed regions of Europe, North America and parts of Asia have long been the focus for key truck makers and other transport and logistics providers.

That may not have changed radically, but with the more mature markets now slowing, and the prospect of more dramatic, higher growth to be found in emerging territories such as Africa, there is no doubt companies are rethinking their strategy.

According to a recent research report, African Commercial Vehicles Market, Forecast to 2025, the continent's demand for trucks and related vehicles will grow at more than six per cent annually over the next eight years.

South Africa, the biggest economy, accounts for almost half of all demand, although the fastest growing markets identified are Nigeria, Kenya, Tanzania and Morocco.

These, and other markets continue to pull in new investment from overseas.

Volvo assembly

It has prompted manufacturers to look with fresh eyes at servicing the market.

Volvo Trucks, for instance, said in May that it would open an assembly line in Kenya's port city of Mombasa, clearly targeting one of Africa's high growth areas.

It is part of a series of investments aimed at boosting the company's presence across the eastern Africa region.

"There is a significant potential for the premium truck business as regional economies grow, infrastructure investments expand and the business environment remains investment friendly," said Claes Nilsson, president of Volvo Trucks.

The Swedish company will also open an office in Kenya to serve the regional market, open a parts warehouse, as well as 20 workshops across the sub-region.

It is partnering with local firm NECST in the plan, which is expected to create about 300 jobs.

But Volvo is only the latest commercial vehicle company to announce plans to start assembling locally, following moves by Volkswagen, PSA Peugeot and CNH Industrial's Iveco.

Indeed, Kenya is looking to restore its assembly industry after the introduction of policies in the 1990s that undermined output and encouraged cheap second-hand imports.

New vehicles in Africa are predominantly imported as knocked-down kits and assembled in local facilities, whereas used vehicles are imported as fully built units.

Isuzu steps forward

Not all are so enthralled by Africa's potential though.

US auto giant GM recently announced its intention to stop building Chevrolet vehicles in South Africa and sell its factory there to Isuzu, along with the 30 per cent stake it owns in a truck venture with the Japanese firm.

The company argues that continued investment in manufacturing in South Africa cannot match the expected returns of other global investment opportunities, notably in China.

Still, it is positive news for Isuzu, which also agreed earlier this year to buy out GM's majority stake in another joint venture in Kenya, which assembles trucks and buses.

The Japanese company now sees huge potential in expanding its Africa business.

"The integration of our light commercial and medium- and heavy-duty commercial business will strengthen our base to grow here," said Haruyasu Tanishige, senior executive officer for Isuzu's sales division.

He promised a stronger focus on after-sales support and close customer relationships to differentiate the company in a competitive market.

"Isuzu is building a strong base to grow on the African continent in the long term," he added.

Nigeria market

While Nigeria's economy has faced a setback in recent times, with growth stalling amid low oil prices, the size of the market still presents enormous opportunity.

China's heavy duty truck group Sinotruck has set up a US$100mn plant to assemble trucks and cars with the local Dangote group.

The vehicles will assemble components and knocked down parts imported from Sinotruck for local use and for export across the West Africa region.

In Nigeria, the plant aims to feed demand for transport services as the government seeks to boost agriculture and farmers move their goods across the country.

The plant has launched with the capacity to assemble 16 trucks a day but will be expanded to include vehicle manufacturing.

Last year, Dangote bid for a majority stake in Peugeot Automobile Nigeria.

The powerful Dangote group – Nigeria's largest homegrown conglomerate – itself has a fleet size of around 12,000 trucks.

However, one of the biggest challenges facing hauliers in the market today is logistics because of the frailties of Nigeria's road transport network.

Expanding networks

Of course, there are other ways of getting closer to the market without assembly operations, which has been evident in recent months in Morocco.

Germany's MAN Trucks announced last year the opening of a series of new dealerships and workshops across the country, in Agadir, Nador and Tangier.

The goal is to strengthen support for customers, through SEFAMAR, the Munich-based manufacturer's local importer. Working alongside local partners is another key step as foreign firms raise their profile across Africa's diverse markets.

MAN's new Agadir facility boasts five repair bays, a sales showroom and a parts shop across 10,000 square metres.

It is a show of intent by the company to demonstrate its products, their reliability and robustness, as well as after-sales service and expertise.

Sales of its trucks in Morocco have risen sharply in the past two years, making SEFAMAR the country's market leader in the heavy truck segment.

While the light-duty trucks segment in Africa remains dominated by Japanese auto-builders, such as Toyota, Isuzu, and Mitsubishi – which together account for an estimated two-thirds of the market – the heavy trucks sector is far more fragmented and highly competitive. ■

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The MAN TGS WW is a popular truck in Africa. (Source: MAN Truck & Bus)

Driving economic growth in Africa

Adel Lünz, vice president and managing director of MAN Center Importer NWC Africa, speaks to *African Review* on how MAN Truck & Bus is supporting economic development in Africa.

What does your role as head of MAN Center Importer NWC Africa involve?

I lead and manage a big team based in Munich that is responsible for the sale of trucks and buses and oversees the after-sales and parts distribution and thus steering our network of private capital dealers "importers" throughout north, west, central and east Africa.

Which countries does MAN Truck & Bus support?

We focus all of our energy on the 35 countries where we have a presence. But we are seeing different development levels within the industry. Our strongest markets are in the northern African region; Algeria, Morocco, Tunisia and Egypt. In West Africa; Nigeria, Côte d'Ivoire, Ghana and Cameroon all represent a big part of our business too. In the East African region, we see economies that are steadily growing and showing good growth rates, such as Ethiopia and Rwanda.

Which are the main sectors that you are supporting in Africa?

The MAN Truck & Bus product offer in Africa is very much diversified. We provide long-haul and distribution as well as construction, mining and oil and gas industries transportation solutions. Our two main products – MAN TGS WW and MAN Cargo Line A (CLA) – are specifically designed to work in harsh and hot conditions in African markets even if they are from two different origins: the TG-family comes from Europe (Germany, Poland) and the CLA family from our factory in India. We also provide environmentally friendly and safe transportation solutions for our bus business in many African cities.

Since MAN Truck & Bus became really active in North Africa, West Africa and Central Africa five years ago, is demand for your heavy goods vehicles still growing in the these regions?

Yes, definitely. First of all, what we have observed over the last five years is that the commercial vehicle business is growing due to increasing demand of transportation solutions and, secondly, we are seeing a lot of positive economic development throughout the different countries in various sectors. The population and the demand for goods are growing today at a fast rate in Africa and need to be transported. At MAN Truck & Bus, we offer efficient transport solutions for the customers and their growing demand for a reliable, cost-effective and environmental friendly transportation.

Do African countries still opt for cheaper engine models?

No, it's not the case of choosing cheaper engine models, but rather using adequate engine models adapted to the fuel quality and high content levels of sulphur today. It is quite clear that due to the difference in fuel quality, an engine with Euro 5 and 6 standards exhaust emissions, used in European Countries, cannot work in Africa. We, therefore, cannot introduce the engine generation with the aforesaid Euro exhaust norm until the fuel quality changes have become effective while introducing new depollution norms throughout Africa. We are quite convinced that the future will go in this direction.

Adel Lünz, head of MAN Center Importer NWC Africa, manages team at the company's headquarters in Munich. (Source: MAN Truck & Bus)

What are the group's goals for 2017/2018 in terms of sales in Africa?

We had a fantastic year in Africa in the countries in which we are present. Sale growth has been steady for the last five years. Africa is a very fast growing continent, not only in terms of population growth, but also economically. We see a lot of economies, which are growing within the world benchmark annual growth rate levels. It means our commercial vehicles and bus business, of course, will continue growing at same pace.

What percentage does Africa make up in terms of the group's global sales last year?

Africa represented four per cent (€554mn) of the total MAN group sales in 2016.

How has MAN Truck & Bus made a difference to local economies in Africa?

It is well-known that many African economies are accelerating their industrial development and revamping their automotive industry. A lot of countries are turning from being purely importers of goods to industrial hubs in Africa. We see a lot of initiatives in countries like Algeria, Morocco, Ethiopia, Nigeria and Egypt. MAN Truck & Bus is helping through various industrial CKD projects, whether these countries need support in technical expertise, setting up a factory or providing regular technical trainings for people inside and outside their countries as a way to contribute to a country's industrial and economic development. Our ethos is not to just increase sales in these markets, but to create jobs and to enhance the knowledge level of the people working within the commercial vehicle industry or using the end product, "the trucks and buses in Africa", at its optimum as part of our Total Cost of Ownership (TCO) strategy and leadership.

We definitely want to be part of the African economical and industrial success story in promoting local manufacturing.

What is your strategy in Africa?

Our strategy is very clear. Within the next few years, our network and customer proximity needs to grow as the market and our customers requires. We as MAN need to continue offering state-of-the-art transportation and logistical complete solutions. We need to continue developing our products and solutions to fit to our customers needs, we need to make the business of our customers easy and efficient.

Africa is the upcoming continent in the next decade; a lot of economies are growing, even higher than in China, which means there is even greater potential for our business to expand its footprint. We want of course, to offer the best product solution on the African continent.

What challenges does the group face? In light of low commodity prices, particularly, could this have a long-term effect on your business?

The challenges are very clear and should be realistic. The many economies on the African continent remain very volatile for whatever reason (economical down-turn, commodity prices, currency devaluations, political situation). The big picture is nevertheless showing a positive development and a lot of countries took the right steps for economical and industrial development. We believe in a bright African future. ■

The CLA product is designed to operate in hot climatic conditions. (Source: MAN Truck & Bus)

THREE RENEWABLE ENERGY PROJECT WINNERS

Access Power in partnership with EREN Renewable Energy are delighted to announce the three winners of the 2017 US$7mn Access Co-Development Facility (ACF) - an innovative funding and support platform for renewable energy projects in Africa.

The three winning projects, from Tanzania, Rwanda and Ghana, were selected from a technologically and geographically diverse pool of 82 entrants from 23 countries after having presented to a live panel of industry expert judges.

The panel based their final selection on the commercial, technical and environmental merits of the projects presented, and the local regulatory environment and capability of the project teams. The winners will share the US$7mn pot provided by the Access Co-Development Facility as well as technical support and expertise. The 2017 winners are Tanzania: 30MW, Kondoa, solar PV project; Rwanda: 9.7MW, Rukarara, hydropower project; Ghana: 48MW, Winneba, wind project.

Reda El Chaar, executive chairman of Access Power said: “We are excited to begin working with the winners alongside EREN and help bring their projects to fruition. Each of the projects has the power to dramatically improve the lives of the communities around these renewable energy facilities.”

BP Energy Outlook offers a mixed outlook for Africa

The latest edition of the BP Energy Outlook outlines the role of Africa in driving energy demand, including oil, gas and renewables. Access to energy remains a major challenge for Africa. More than a billion people worldwide do not have access to electricity, mainly in Africa, India, and developing countries in Asia, according to the report.

Looking ahead to 2035, the 2017 edition of BP’s annual barometer of world energy markets forecasts GDP to double over the next 18 years. However, for Africa, this means the continent will account for almost half the projected increase in the global population but will contribute less than 10 per cent of the expected increase in GDP. This population increase is fuelling growing energy demand across Africa. Growth in worldwide energy demand is projected to slow towards 2035, which is attributable to the stimulus from China and India fading. This implies that growth in global energy demand could slow to around 0.9 per cent per year in 2035-2050, compared with 1.3 per cent over the period covered by the report. But the report writers are cautious, noting that these figures assume continued relatively slow growth in Africa.

Africa’s economy and energy demands will grow more rapidly if African productivity increases to come into line with India’s over the past 10 years.

Oil demand for Africa is at around 110Mb/d. There has been a growth in gas supply, fuelled largely by the shale gas revolution in the US, with countries across Africa actively involved in exploration and, in production activities for the cleanest-burning of the fossil fuels. LNG supplies from Africa are also increasing. By 2035, it is expected that Africa will export 7Bcf/d of LNG.

As the world looks to move away from fossil fuels, there is a growing market for hydropower generation in Africa. Globally, hydropower is expected to grow at a rate of 1.8 per cent per year until 2035. In terms of renewables in general, it is the EU and China leading the way. China is forecasting it will add more renewables to the energy mix than the US and EU combined over the next 20 years. Renewables are becoming more attractive as costs fall and the efficiency of wind power improves.


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5th Power-Gen & DistribuTECH to donate R30,000 to SolarAid

POWER-GEN & DistribuTECH Africa will once again attract thousands of international, pan-African and local power sector stakeholders to its annual event this month.

Africa's premier power sector conference, arranged by PennWell Corporation, will be taking place on 18-20 July, at the Sandton Convention Centre in Johannesburg. The event is attended by more than 3,000 power industry stakeholders, utilities and sub-Saharan government officials from pan-Africa and abroad. The event spans all aspects of centralised and distributed power generation along with leading technologies in power transmission and distribution.

POWER-GEN & DistribuTECH Africa will host a 40-strong sub-Saharan African delegation, whose members will engage in B2B matchmaking meetings with the event's delegates and exhibitors, and exchange knowledge and best practice in Africa.

This year the conference will donate R30,000 (US$ 2,320) to SolarAid – a charity combating poverty and climate change – to mark Nelson Mandela Day. The organisation gives people access to low-cost solar lights across the world's most remote regions, including in Malawi, Uganda and Zambia. SolarAid has played a major role in catalysing Africa's first solar markets in Tanzania and Kenya.

"With up to 600 million people across Africa still without access to electricity, we believe solar offers the fastest, cleanest access to lighting that enables children to study after dark, and small businesses to extend their trading hours, which has an immediate and measurable impact on rural communities," says Feraye Gurel, event director. "In the longer term, new baseload power generation and distribution models and technologies will come into play to

More than 3,000 stakeholders will attend the Power-Gen & DistribuTech conference. (Source: PennWell Corporation)

DECENTRALISE, FIND OPTIMAL MIX: THE ANSWERS TO AFRICA'S POWER CHALLENGES

Decentralisation of generation and determining the optimal energy mix for available resources and needs are crucial for addressing Africa's energy challenges.

This is according to experts on the advisory board of the POWER-GEN & DistribuTECH Africa exhibition on 18-20 July at the Sandton Convention Centre in Johannesburg.

Nuclear Industry Association of South Africa (NIASA) MD and POWER-GEN advisory board member Knox Msebenzi says: "The single biggest issue in Africa is that we as a continent have ample energy resources but very little power. It is tempting to hold up a particular energy technology, such as nuclear or renewables, as the solution; but to do so would be to over-simplify the matter. We need to be asking how much of each is appropriate; and identify the optimal energy mix based on needs and available resources."

Msebenzi says, "If you look at a country that must drive industrial growth and has ample coal reserves, it does not make sense for it to just sit on coal and not invest in clean coal generation. In massive cities like Lagos, for example, powering development needs with renewables would be unthinkable – they need baseload. This why we advocate a comprehensive energy mix on a country by country basis."

Renewables are not the answer for providing baseload power in cities, such Lagos according to Knox Msebenzi. (Source: Shutterstock)

Bertha Dlamini, industry expert and brand ambassador for POWER-GEN Africa 2017, says energy leaders on the continent do not have sufficient energy capacity to fuel growth targets.

Energy mix solution

Dlamini says, "In South Africa, for example, we do not yet have the right energy mix. Most electricity distributing municipalities are only considering their integrated energy mix strategies now, and are yet to fully implement same. The recent undertaking by Eskom to sign more PPAs is a good propellant for increased energy source diversification."

She adds, "One of Africa's top challenges is addressing the scourge of energy poverty. Decentralised energy generation is the answer to eradicating energy poverty, community by community. Generating electricity with small, modular, renewable energy solutions makes sense."

But to be successful, decentralisation efforts demand collaboration, she says. "Collaboration is required between public sector, private sector and civil society to create project ownership structures that will ensure the success of decentralised energy generation and distribution projects, in particular, such structures should attract investors."

Nigel Blackaby, director of conferences at event organisers PennWell International Power Group, says stepped up power generation, nuclear and renewable energy are issues among stakeholders across Africa. "As part of our fact-finding ahead of POWER-GEN & DistribuTECH Africa 2017, the PennWell team undertook visits to stakeholders in various African countries, where we found that the nuclear question, optimal use of renewables and funding for IPP programmes were major issues across the continent. These are among the topics that will come under discussion at POWER-GEN & DistribuTECH Africa 2017."


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Standby power producers benefit from Africa's energy gap

Genset market set for sustained growth as Africa's power needs soar, while technology delivers new options for buyers. Martin Clark reports.

With more people on the ground and with more economies moving in a forward direction, there is little doubt that Africa will require a huge amount of energy to power its future growth.

The continent's population currently stands at about 1.2 billion, up from just 477 million in 1980; by 2050, forecasts show it could double to 2.4 billion.

That means plenty of investment in large-scale electricity generation and other infrastructure but, even down at the micro-level, it is anticipated that there will be an ongoing demand for smaller-scale generating units, or gensets, too in support of national grids.

These are routinely deployed to support critical sites and facilities, ranging from manufacturing operations to serving remote installations such as mobile telecom towers where no power source is readily available.

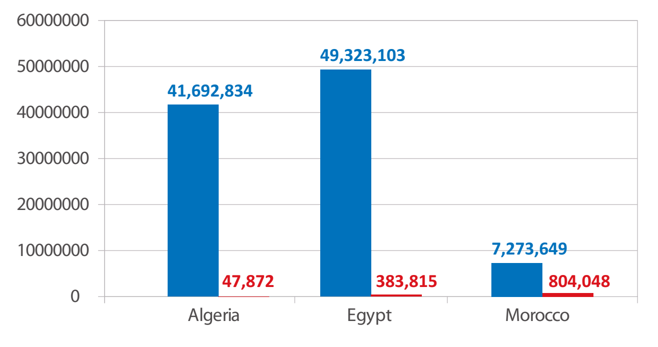
Demand for such genset units, of all shapes and sizes, is poised to grow markedly on the back of Africa's economic and population surge.

While new technologies continue to shape this market – notably the emergence of gas-driven turbines, small-scale solar and other renewable units and micro-grids – the traditional diesel genset remains prominent across much of the continent.

One research report estimates that Africa's diesel genset market will grow at a rate of 4.6 per cent each year between now and 2023.

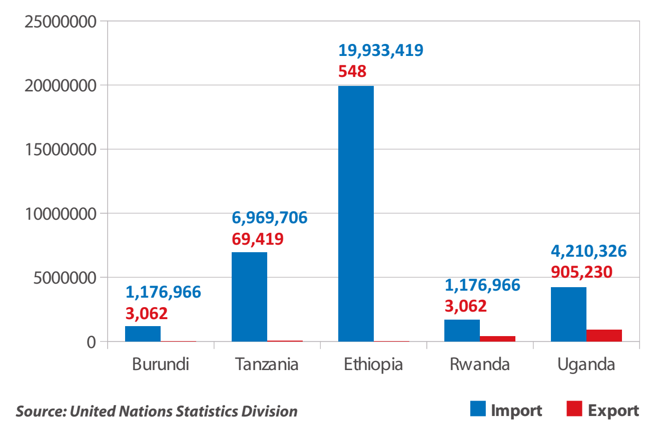
This is a sector dominated by gensets with a rating of 5KVA-75KVA, a market driven by low electrification rates, plus the growing residential and construction sectors.

Gensets Import/Export Trade (US$) 2015 (unless stated) - North Africa
Generating sets, diesel, output 75-375 kVA



Source: United Nations Statistics Division

Gensets Import/Export Trade (US$) 2015 (unless stated) - East Africa
Generating sets, diesel, output 75-375 kVA



Source: United Nations Statistics Division

And the report suggests that 5KVA-75KVA rating gensets are expected to maintain their dominance throughout the forecast period in terms of market share.

It says growth in mining activities, plus oil and gas exploration in newer territories, such as Tanzania and Ghana, as well as established ones like Nigeria, is likely to spur demand.

Manufacturing, retail, commercial offices, hotels and hospitals are among the other major users of gensets, as well as government-led infrastructure projects including the emergence of new tech cities and the expansion of the railways and highways.

Import/export trade

This is no better illustrated than by recent import data for Africa, charting sales of gensets and equipment into the region in recent years.

According to the most recent data from the United Nations Statistics Division, trade in gensets with a rating from 75-375 kVA continues to be strong. This is especially so in territories and markets that have an unreliable electricity supply, plus a fast developing economy where energy is urgently needed.

Nigeria, for instance - by far Africa's most populous country, and with a vast oil and gas sector - easily outstrips other territories, importing more than US$51m in gensets (between 75-375 kVA) in 2014.

The only others to come close to this level of imports are Egypt, which brought in over US$49m worth of gensets and Algeria with US$42m; both are among Africa's more advanced economies and likewise with large oil and gas industries.

Even South Africa, the continent's biggest economy, with a strong national power network, imported almost US$7m worth of gensets (in 2016). Significantly, though, it is also an important exporter and re-seller of gensets to the rest of the region; its exports were worth a similar figure (just under US$7m) last year.

In this respect, though, South Africa stands alone, with all other countries showing a huge trade deficit in the 75-375kVA outfit range, importing far more than they export. As an example, Algeria's US$42m in imports stood against a mere US$48,000 worth of exports. Again, while Ethiopia imported almost US$20m worth of gensets (in 2015), its exports were worth virtually nothing US$548).

Other major genset importers are scattered liberally across the continent: Zimbabwe (US$5.5m); Mozambique (US$4.4m); Tanzania (US$7m); Côte d'Ivoire (US$4.6m); and the Republic of Congo (US$6.9m).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Major projects

All will drive the need for more energy throughout Africa, a place where, by and large, the state electric grid system is – for now, at least – poorly equipped to cope.

Indeed, the low electrification rates in many parts of the continent – sometimes less than 30 per cent – itself creates opportunity for local and international genset suppliers in the region.

State utilities have often turned to the major international providers of mobile power plants – the likes of Aggreko, GE Power and Cummins Power Generation – to shore up grid-based supply.

There is a price to pay, however, with the cost of fuelling gensets potentially several times that of buying power from a conventional grid system.

That is a scenario that has long been blamed for holding back business in large but under-served markets such as Nigeria, where the state grid is woefully unable to meet the demand of the country's vast and rapidly growing population.

A 2015 study by NOIPolls showed that Nigerians are spending almost three times the cost of direct power supply from the grid on alternative sources of power, such as diesel gensets.

However, private power in support of standard grid-based systems can be a lucrative business too for the largest players in this field.

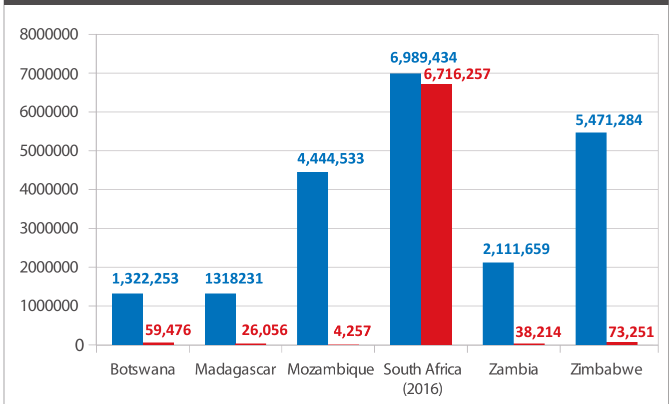
GE Power earlier this year signed a deal worth US$3bn with Algeria's state-owned electricity utility, Sonelgaz, for services and support to the energy sector under a 20-year contract.

This follows a US$2.7bn deal with the utility in 2013 to supply dozens of gas and steam turbines and related technology to nine power plants in the country.

The turbines can generate eight gigawatts of electricity, the equivalent of powering roughly eight million average Algerian homes; it increased Algeria's generating capacity by 70 per cent.

Others have similarly been called in to help boost inadequate national power systems when there is insufficient supply to meet local demand.

Gensets Import/Export Trade (US$) 2015 (unless stated) - Southern Africa
Generating sets, diesel, output 75-375 kVA



Source: United Nations Statistics Division

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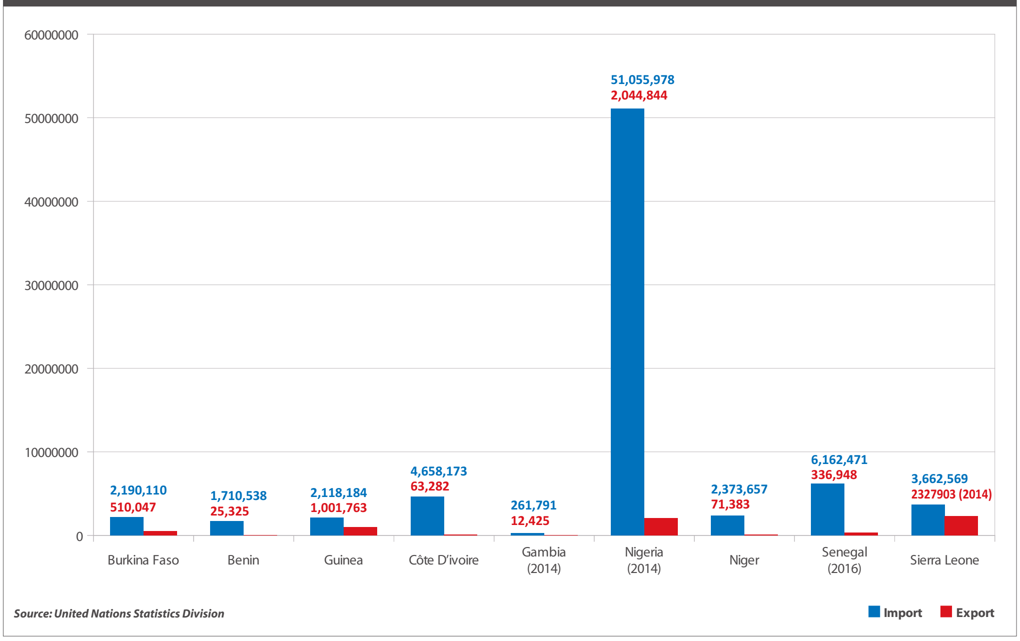
As well as GE Power, other major players in the large generator market include Cummins Power Generation, Ingersoll Rand, Kirloskar and Atlas Copco.

Like the GE example in Algeria, some of the projects that these and other companies work on can be truly immense in scale.

In one major project, Himoinsa helped support Angola's power grid with a 25MW plant commissioned in Cassaque, Luanda.

The system offers typical genset flexibility, with 'plug & play' capabilities, including the ability to dismantle and install power modules anywhere in the country.

Gensets Import/Export Trade (US$) 2015 (unless stated) - West Africa
Generating sets, diesel, output 75-375 kVA



Source: United Nations Statistics Division

Oil & gas

Africa's extractive industries, of course, have long depended on the supply of large dedicated gensets and other power solutions in support of critical operations – and this is not expected to change.

Total's Moho Nord oil and gas project launched earlier this year off the Republic of Congo, with a production capacity of 100mbl and gas per day.

Located 80km off the coast, it marks the African nation's largest ever upstream project and consists of 45 subsea wells tied back to floating production units, and a new tension leg platform.

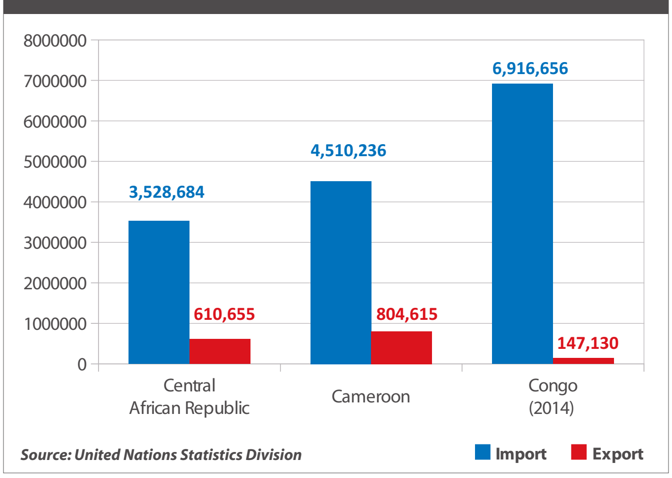
Providing back-up power on this platform is a specially designed diesel generator set featuring a Cat engine, one that meets stringent European Union standards for safe operation.

It was a highly sensitive project in an extremely hazardous environment.

"For Total, the biggest issue is to optimise the extraction of crude oil without process interruption in hazardous areas," said Vincent Reynal, global petroleum manager at Eneria, the Cat dealer that provided the custom solution.

"They needed a certified ATEX back-up diesel generator to reduce explosion risks."

Gensets Import/Export Trade (US$) 2015 (unless stated) - Central Africa
Generating sets, diesel, output 75-375 kVA



Source: United Nations Statistics Division

ATEX is the European regulatory framework for the manufacture, installation and use of equipment in explosive atmospheres.

Because the Moho Nord field is designated an ATEX Zone 2 hazardous area, any ignition source requires a high level of protection to prevent contact between hot sources and leaked gases.

To ensure Total could meet these strict requirements, Eneria's engineering team paired a Cat C32 engine with an IP 23 alternator to supply the necessary power of 500kW.

The dealer then packaged the two units inside a soundproof enclosure featuring a fire-extinguishing water mist system and black-start capability; the enclosure is removable, allowing for easy maintenance access.

The resulting stand-alone package, which has since been installed onboard the tension leg platform, was certified by an ATEX notified body, and holds DNV GL marine certification as well.

"This unique ATEX package is the result of hundreds of hours of engineering and documentation management," said Reynal. "This emergency diesel generator solution is not only helping Total reduce the risk of shutdown due to power outage, but also enabling the company to operate more safely."

But even in this strategically-important industry, one that remains vital for Africa's economic prospects for the foreseeable future, there are more options now available for operators.

Power generation in upstream oil and gas, traditionally led by diesel gensets, is transitioning to new energy sources, according to analysts Navigate Research.

It says while the arguments for diesel – including broad fuel availability and ease of transport and storage – have not changed, technological advances, regulations, and macroeconomics are expanding the options available to exploration and production companies.

"Natural gas gensets are forecast to capture more market share from diesel as oil and gas producers utilise more wellhead gas for power generation," it says.

Technology advances

Indeed, while diesel gensets continue to dominate Africa's landscape, this is an area where new technology and innovation is steadily pushing forward, to deliver greater economy or reliability for users.

There has been a notable uptake in gas-powered units in recent years, as an alternative to using liquid fuels, an attractive option especially where local gas supplies are available.

Expanding its footprint this year, GE Power announced Clarke Energy as a distributor for its Jenbacher gas engines for an additional six countries in Africa - Côte d'Ivoire, Democratic Republic of Congo, Ghana, Kenya, Morocco and Rwanda – a reflection of its long-term belief in the market.

It means Clarke Energy is now a distributor for GE Power's Jenbacher gas engines in 25 countries across the world.

"Energy generation in Africa is being caught between two opposing pressures: power demand, particularly from industry, and chronic power shortages and service interruptions," said Didier Lartigue, managing director of Clarke Energy.

He said GE Power offers gas engine technologies and renewables solutions to help bridge the supply-and-demand gap, creating more energy self-sufficiency for African companies and reducing the industrial carbon footprint.

"In response to Africa's energy situation, Clarke Energy is installing GE Power's advanced gas-fuelled Jenbacher gas engines to provide dependable on-site power for African companies."

Home solar systems in Africa are becoming a much cheaper way to provide electricity for households. (Source: Shutterstock)

Reflecting the diversity of that industrial customer base, one of its recent projects was to provide power for Tunisia's Carthage Grains, a leading Maghreb processor of soya beans.

Across Africa, industry is looking for ways to relieve the demand on the grid's strained resources by providing as much of its own energy as possible.

This does not always have to entail enormous power plants for the multinationals though.

The emergence of solar power has opened doors for countless households across Africa that are not served by the national grid.

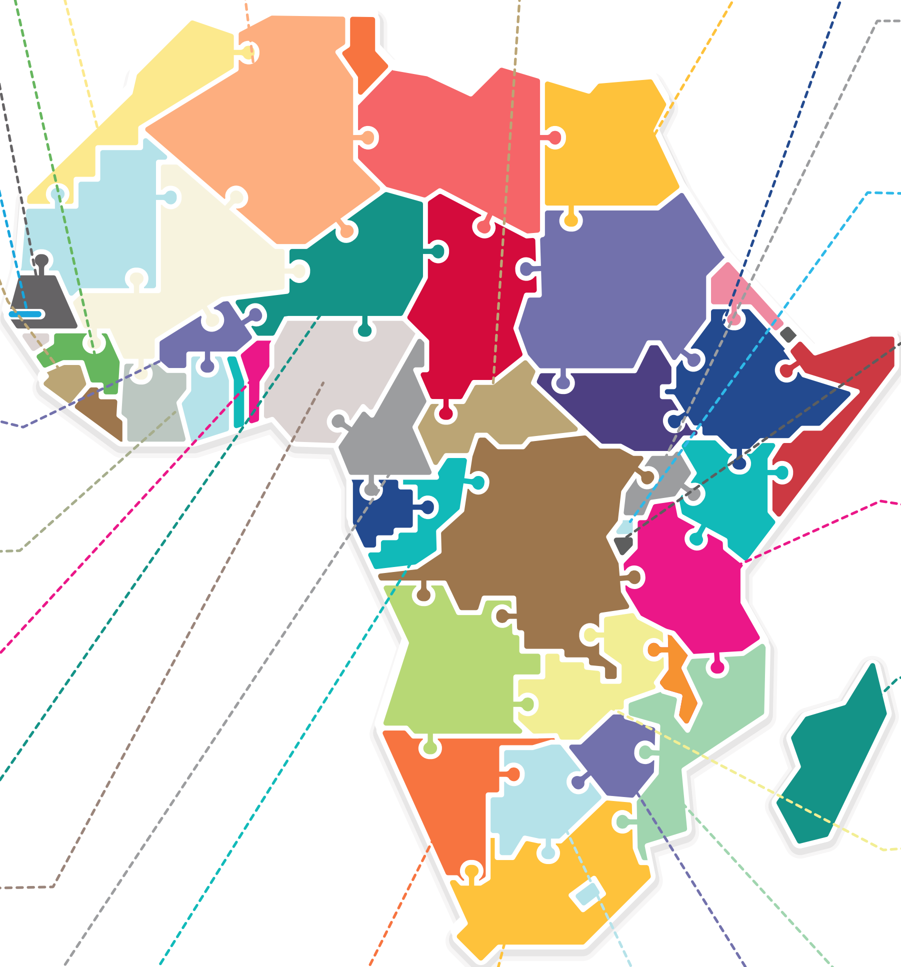
Small local financing schemes are enabling homeowners to purchase a solar unit that provides enough electricity to power lights and televisions.

According to the International Renewable Energy Agency, home solar systems in Africa can now provide electricity for households for as little as US$56 a year, a cost lower than getting energy from diesel or kerosene.

The market for gensets and small off-grid power solutions in Africa is changing rapidly, but one thing we know for sure is that demand for energy – in all its forms – is set to rise fast. ■

Genset Import/Export Trade (US$) 2015 (unless stated differently)

(Generating sets, diesel, output 75-375 kVA)



Country	IMPORT	EXPORT
MOROCCO	7,273,649	804,048
GUINEA	2,118,184	1,001,763
SÉNÉGAL (2016)	6,162,471	336,948
GAMBIA (2014)	261,791	12,425
SIERRA LEONE	3,662,569	2,327,903 (2014)
BURKINA FASO	2,190,110	510,047
CÔTE D'IVOIRE	4,658,173	63,282
BENIN	1,710,538	25,325
NIGER	2,373,657	71,383
NIGERIA (2014)	51,055,978	2,044,844
CAMEROON	4,510,236	804,615
REPUBLIC OF THE CONGO	6,916,656	147,130
ALGERIA	41,692,834	47,872
CENTRAL AFRICAN REP	3,528,684	610,655
EGYPT	49,323,103	383,815
ETHIOPIA	19,933,419	548
UGANDA	4,210,326	905,230
RWANDA	1,708,549	389,405
BURUNDI	1,176,966	3,062
TANZANIA	6,969,706	69,419
MADAGASCAR	1,318,231	26,056
ZAMBIA	2,111,659	38,214
MOZAMBIQUE	4,444,533	4,257
NAMIBIA	2,520,380	777,005
SOUTH AFRICA (2016)	6,989,434	6,716,257
BOTSWANA	1,322,253	59,476
ZIMBABWE	5,471,284	73,251

Source: United Nations Statistics Division

Presenting a new powerful range of gensets for the continent

KOHLER-SDMO's management team visit distributors across Africa to unveil the latest KD series.

KOHLER-SDMO's team presenting the new KD series. (Source: KOHLER-SDMO)

The KOHLER-SDMO management team has been busy meeting with its distributors across Africa to present its revolutionary range of new power gensets.

David Raison, sales director for Africa, joined his sales team to unveil the latest KD line series to local dealers, consultants and engineers. It also was an opportunity to highlight the advantages of the company's power solutions and main turnkey projects.

Staff have already visited 10 African countries: Ghana, Nigeria, Congo, Cote d'Ivoire, Reunion Island, Mauritius, Kenya, Djibouti, Madagascar and Algeria. In total this year, 60 meetings dedicated to the end-user will have taken place in co-operation with their distributor network to launch the new power range.

"We've had very productive meetings so far in Africa and the feedback from distributors is very positive on the new KD series," Raison said. "Forty five people from all areas of the business gathered in Accra, Ghana, thanks to our local distributor. The turnout of people has been the same for our other meetings across Africa. It has allowed us to show the benefits of our products, major turnkey projects and answer any technical or practical questions from our key SDMO staff."

> "Feedback from distributors is very positive on the new KD series"
>
> **DAVID RAISON, SALES DIRECTOR FOR AFRICA**

The K135 and K175 series is the largest power range on the market from 800 kVA to 4200 kVA.

"It's a very important strategy step for us because we manufacture our own engines now," said Patrick Le Guen, Vice President Export Sales for KOHLER-SDMO. "It is the latest engine on the market, which has the most modern technology in terms of fuel injection with very low fuel consumption, and an excellent footprint compared to our main competitors."

All these new KOHLER engines, which are used in this range, have been co-developed by KOHLER and its strategic partner Liebherr. The generators are available under KOHLER and KOHLER-SDMO brands. The targeted industries are mining construction, data centres as well as water treatment, oil and gas, telecommunications and healthcare.

"The big difference is that by having our own engine we can really drive our own sales and service policy," said Le Guen. "We don't have to rely on any supplier; it is ours. During this year and next year, we are providing important service training for all of our African distributors."

Raison said, "One of the important differences between SDMO Industries and our competitors is that we are connected directly to our end users through our distributors, which gives customers more confidence in our products."

The new engines are characterised by low fuel consumption, extended service intervals and compact design for a variety of stand by and prime applications worldwide. Other notable features include a KOHLER APM802 digital controller with a 12-inch touchscreen and a highambient cooling system.

"It is a very important investment for the company from a long-term perspective as we are able to compete with all main competitors, which we are very excited about," said Le Guen.

"One important thing, especially for Africa, these engines have been designed to run in harsh conditions. As Africa is mainly the prime power market, we have developed a very strong engine. For markets, such as mining, the engine fits perfectly to the customer needs as well as for big industrial applications to support dams or data centres."

Long history with Africa

SDMO Industries, which was bought by KOHLER Group in 2005 – making it one of the world's largest manufacturers of industrial generators – has more than 30 years experience working in Africa. "SDMO has a very long history with Africa because this is the continent where we started our export business in the 1980s. So, it was easier for us to start doing business with the French speaking African countries first. Since that time, we have continued to invest in the continent, which is second in terms of value for SDMO after Europe. Globally, we are second in the market place."

> "Globally, we are second in the market place"
>
> **PATRICK LE GUEN, VICE PRESIDENT EXPORT SALES FOR KOHLER-SDMO**

Le Guen remains confident about business opportunities across EMEA despite economic challenges in the Middle East.

"We are quite optimistic for the Middle East business. But the issue is Saudi Arabia where the market is very weak," he explained. "It was the case last year, but despite this, we had a very good year in terms of our big projects. In the Middle East, SDMO Industries is quite strong in the telecom business, supporting companies and banks.

"But for the oil and gas we are in the early stages of discussions to increase our presence in this sector. This will be helped with the launch of the new KD line. We do very well in Egypt, too. In Qatar, Oman and Dubai, we offer solutions in the standby market.

"Similarly to Africa, we will continue to deploy the same strategy in the Middle East to be as close as we can to the end user by focusing on our distributors. We also are looking forward to taking part in the Expo 2020 in Dubai to help grow our business further." ■

KD SERIES RANGE

- Six years of research and development and hundreds of meetings
- 800-4200 kVA
- Two engine series K135, K175
- Six engine blocks V12, V16, V20
- Latest technology common rail injection system
- Highest power density in the market


More than 2,500 Onis Visa electricity generators have been supplied in different African countries. (Source: Visa SpA)

Powering Africa's growth

Italian genset manufacturer, Visa SpA, is committed to supporting Africa's long-term economic growth.

Visa SpA is an Italian genset manufacturer that has been present in the market for more than 55 years.

It combines global experience and engineering expertise to provide customers with total support, supplying the most profitable and appropriate genset solutions, in accordance to any customer's specific needs.

Visa SpA has long made a determined effort to underpin Africa's economic growth, supporting projects in areas such as mining and energy, telecommunications and infrastructure developments.

In the last two years, it has supplied more than 2,500 Onis Visa electricity generators across many African countries, ranging in scale from 13.0 kVA to 2,500.0 kVA.

These gensets have also been deployed across multiple sectors: government ministries, public organisations, telecommunication companies, telephone and internet services, data centres and water pumping stations.

Its genset units have been put to work right across the continent, from the more developed markets of North Africa down to Zambia in southern Africa; from Kenya in the east, to Cameroon in the west. Its customer base is equally diverse, reflecting the nature of the genset market in Africa.

The applications and uses of its gensets in these countries range from small micro applications supporting remote telecoms towers and other installations, to critical power for heavy duty demand or even grid support.

All its gensets are customised or special versions, in accordance to the specific destinations and the harsh environmental conditions to be faced.

Durable and robust, all gensets feature high corrosion and impact resistance and have been designed to withstand rough handling.

That is a pre-requisite for the challenging Africa market, where demanding applications require frequent handling of the units or are located in particularly hostile climatic conditions.

Visa SpA has notably played a role in the advance of Africa's telecoms industry.

It has designed specific projects for the telecommunications sector, with literally hundreds of smaller-sized power machines (13.0 kVA to 20.0 kVA) supplied.

Many of these have oversized fuel tanks on board, to increase working autonomy and safety and therefore suitable to operate for long periods of time.

Their compact size and reliability are two main aspects that have always distinguished Onis Visa products.

"Gensets for the African markets are highly customised, underlining the need for customers to ally with a high-quality partner, with proven reputation and supplying a high-quality product," the company stated.

"The main reasons why Onis Visa gensets have been selected are the long experience on many other projects and, last but not least, the fact that Visa SpA can guarantee a local service through the company's regional dealers and agents."

One ongoing challenge is always to build trust and nurture client relationships.

While cost and price competitiveness is always essential, companies and end-users also tend to prioritise after-sales services and support in the decision-making process.

Among other things, Visa SpA has built its success on customer service with clients naturally loyal to a brand they know well, with a presence in the global market dating back more than half a century.

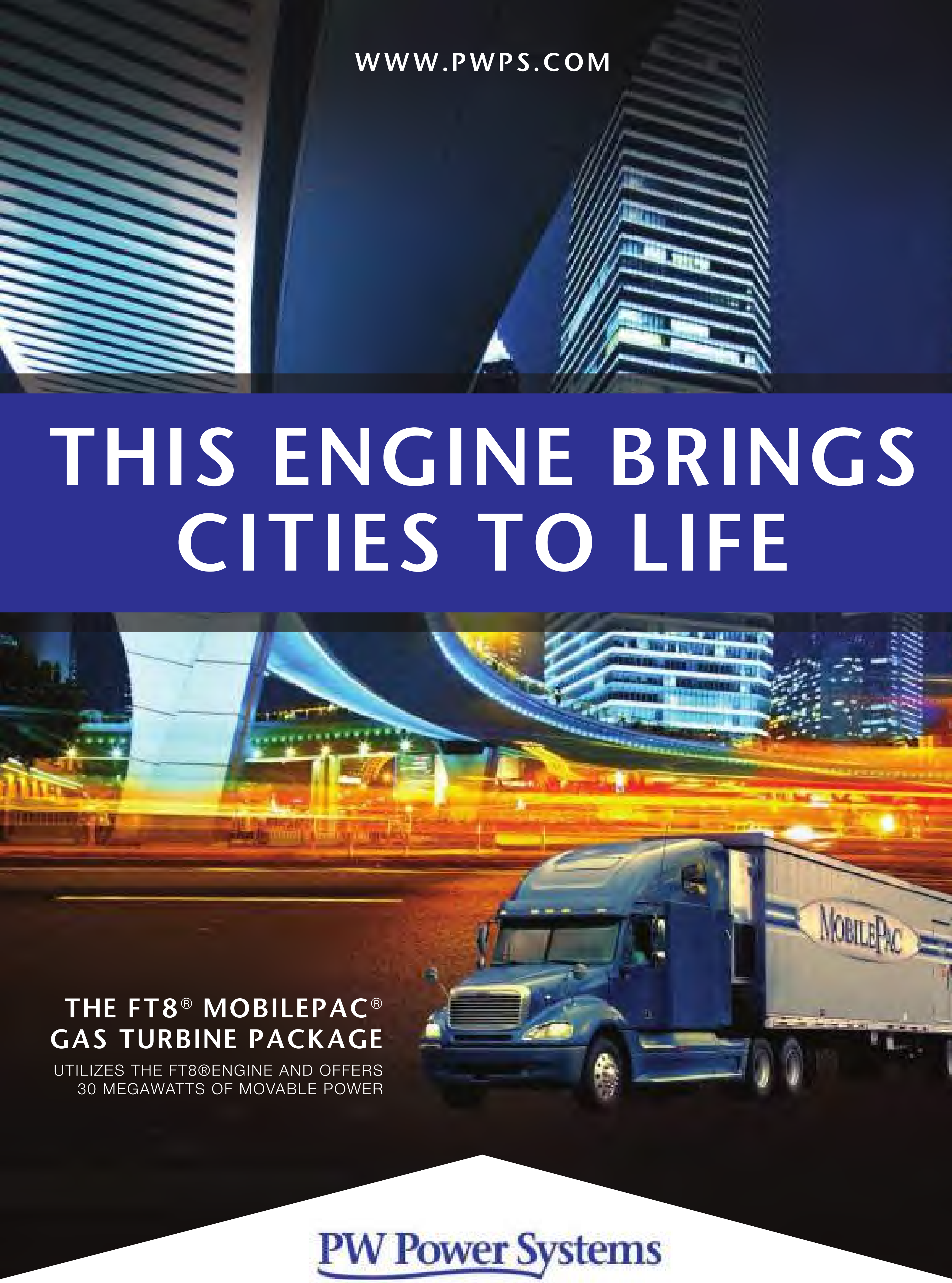
A dynamic team of engineers dedicate efforts to designing tailor-made solutions and developing specific technologies for more complex applications, working hard to offer the most suitable machines.

And all are well aware that continuing economic growth and population rises across Africa will only increase the demand of power long-term.

"The global diesel genset market in Africa is expected to grow, due also to the rapid rise of the telecommunications sector, as well as the manufacturing, construction industries," the company added.

However, competition remains strong in the whole region. The market is flooded with gensets of varying quality and cost, in part, a direct result of the lack of quality control regulations in many African countries.

Reputation, continual innovation and constant searching for ways to better support customers with solutions and new products are the ways Visa SpA adopts to differentiate itself from the competition. ■


MOBILEPAC

Delivering power to the mines

Renting fuel efficient power can help mines to stay competitive, says Jordan Armstrong, mining sector manager, Aggreko.

The markets witnessed a small rise in global commodity prices in the first half of last year. It ended a long running slump and allowed miners, and their creditors, a small sigh of relief. Gold had its best year in decades; silver saw a nearly 50 per cent surge; and, in July, platinum had its best monthly performance since 2012.

However, miners cannot rely on these surges for profits, and realise that improving efficiencies, cutting operational costs and reducing debt continue to provide far more certainty. Operating costs are what drive investors, and minimising these has a positive impact on growth across the industry. The global decline in recent years has seen a culture shift, with profit margins at the forefront of any buyer's mind during every purchase or sale. Every dollar counts.

We have seen this within our own relationships with mining companies. Outsourcing mine power or HVAC equipment was traditionally based on an executive's personal preferences and a five to 10 per cent saving didn't matter. Now that procurement principles have precedence, amid a strong cost-cutting agenda, reassessing a mine site's energy and temperature control strategy to seek efficiencies should be an ongoing process.

Flexible solutions

Flexibility is becoming increasingly vital to an operation and is an essential factor in improving efficiency and productivity. A rise in risk-averse investors who are unwilling to commit to long-term operations means more and more projects are likely to be five years or less. In these cases, investing time and money in establishing permanent infrastructure is no longer justifiable. For example, more mines are adopting 'virtual pipelines', where trucks have replaced pipelines; and many are depending on on-site power plants, which have long been a more economical option compared to permanent grid connection, particularly in remote locations.

The flexibility of mobile power means that generators can be mobilised quickly and transported by sea, road and air to the most remote and extreme locations. This enables miners to widen their search for new, lucrative locations and thereby appease demanding investors.

Flexibility also allows for greater scalability, creating an opportunity to capitalise on increased production when demand requires it and save on energy costs when it falls – future proofing a mine against commodity price and other variables.

There is also value in the increased reliability of onsite power. Unplanned disruptions jeopardise health and safety, the ability to meet customer deadlines and decreases efficiency, which are all key factors in cost saving.

Operational challenges

As an energy partner, power providers not only help miners achieve optimal energy efficiency and reduce operational costs, but ultimately help them avoid a halt in production or complete closure. As demand slows, the price to function becomes too high. In fact, in August 2015, mining giant Glencore urged miners to shut down production to avoid underselling materials until returns were higher.

But even this approach (which has similarities to 'cold stacking' in the oil and gas industry whereby rigs are kept dormant when demand is low) can have a long-term financial impact. It can jeopardise customer relationships and access to a skilled workforce, while still requiring investment to maintain and protect the integrity of any equipment. An absence like this can create added expense and delayed reactivation.

To reduce debt, particularly during a shutdown, companies typically sell assets to competitors at a lower cost. While this achieves the cost-saving objective in the short term, this equipment will need to be replaced and most likely at a higher cost. More importantly however, it can impact power reliability and efficiency across the industry as a whole particularly if regular, sufficient maintenance is not available.

This is an added benefit of rental power. Remote monitoring recognises any risk of disruption or signs of inefficiencies and engineers are on hand to prevent these risks becoming a reality. Poor fuel efficiency has a massive impact on operational expenditure and without the correct maintenance, this is often not picked up in time.

Fuel efficiencies

Similarly, onsite power plants consisting of a fleet of smaller engines, compared to those with fewer larger engines, reduces the impact of derating and uneconomical redundancy. With customer savings in mind, Aggreko retrofitted the G3+ reciprocating engine, which derates at higher temperatures and as a result, has industry leading fuel efficiency.

Fuel, alongside staff, is a mine's biggest expense. New innovations that enable the use of cheaper, clean, alternative sources of energy, such as solar-diesel hybrids or using waste product are becoming more popular as a result. One example of this was Aggreko's work with Beatrix Gold for its Sibanye operation. We developed new technology that allowed for waste methane gas to be used in the generators – creating 2MW of power from a free fuel source, improving health and safety, and reducing the mine's carbon footprint by avoiding the need to flare gas.

And Aggreko is currently installing a solar-diesel hybrid package into a copper and zinc mine in Eritrea. It will run for 10 years and provide 22MW of diesel and 7.5MW of solar powered energy.

This brings down the overall cost of energy and is a perfect option for mines that operate in the sun-belt and have the space for solar.

Heavy fuel oil (HFO) is another option that enables mines to make significant cost savings.

Commodity prices will always fluctuate but the cost saving challenge will be a constant. Miners have learned from the downturn and are taking steps to reduce overheads and protect profit margins.

Improving fuel efficiency is a common challenge that should be addressed if a company is to remain competitive, profitable and open for business. ■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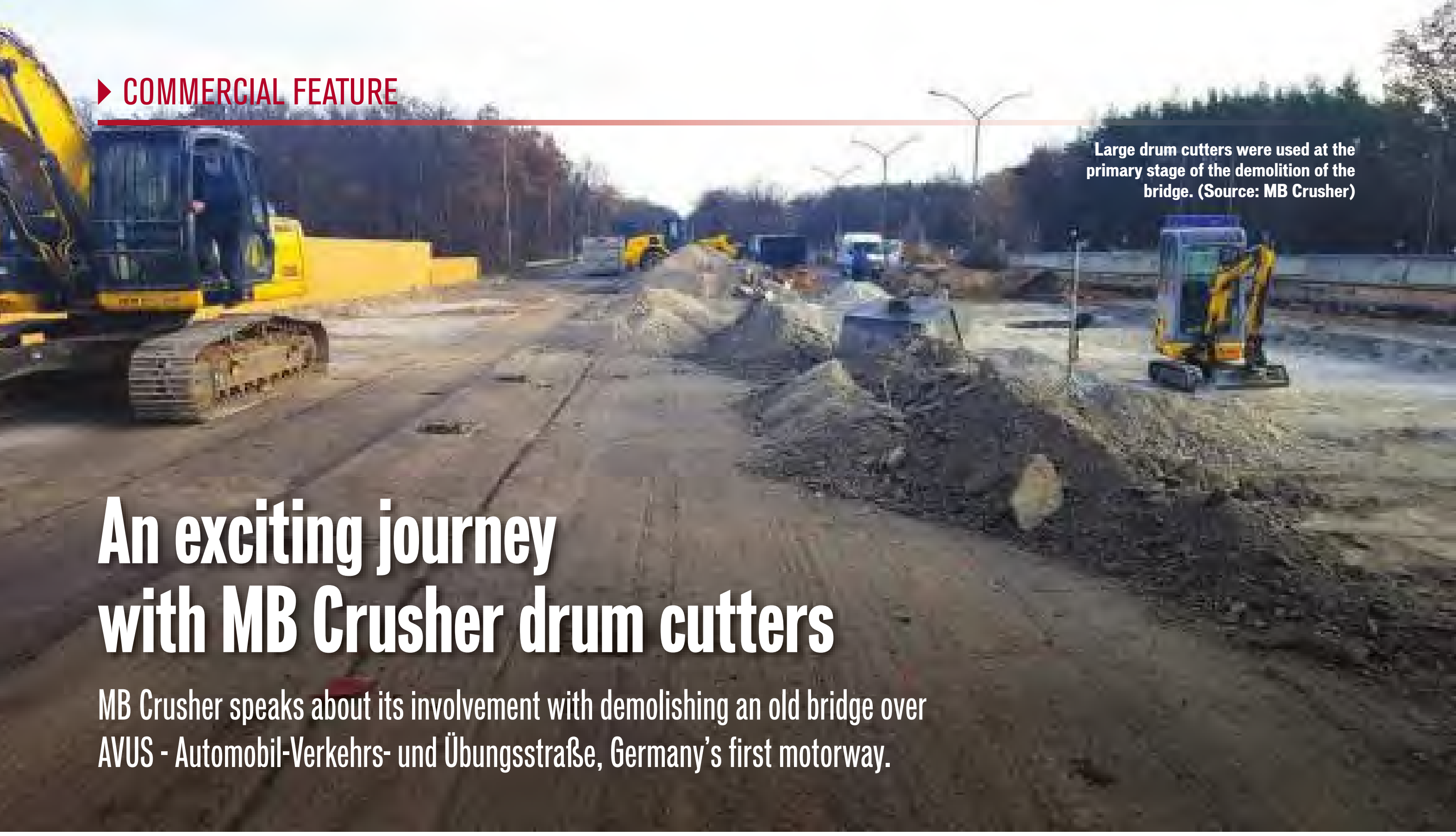


Large drum cutters were used at the primary stage of the demolition of the bridge. (Source: MB Crusher)

An exciting journey with MB Crusher drum cutters

MB Crusher speaks about its involvement with demolishing an old bridge over AVUS - Automobil-Verkehrs- und Übungsstraße, Germany's first motorway.

From 1921 to 1998 it was, for many, one of the most prestigious and exciting racing circuits in the world. We are talking about the AVUS – Automobil-Verkehrs-und Übungsstraße – the first motorway to be opened to traffic, now part of the German A115 motorway, which for years was periodically closed to allow racing competitions to take place.

We are in Berlin, Germany, and it is here that the company ERA GmbH made use of the range of MB Crusher drum cutters to complete demolition works on an old bridge, which had loomed over the motorway for years.

Opened in 1938, the old bridge had reached the end of its life, and had, in fact, been superseded by a new, recently-completed structure. As often happens, the demolition of a bridge leads to numerous logistic problems relating, above all, to the interruption of traffic along the road it spans.

One of the aims of the contractor was, in fact, to not block traffic during the demolition of the old bridge. Following an initial phase, in which large drum cutters were used, it was the turn of smaller models from MB – specifically, the models MB-R800 (applicable to excavators of between 10 and 22 tonnes in weight) and MB-R900 (for excavators of between 19 and 35 tonnes) – to complete the work.

The large drum cutters were used at the beginning for the primary demolition of the layers which made up the bridge. After this, in order to avoid too much stress on the structure, it was decided to use the MB Crusher drum cutters, the only cutters in the world fitted with the special patented system – direct drive twin motor system – which allows the differentiated distribution of power to the two cutting heads. In the case of operations on materials of varying hardness, the MB drum cutters adapt, applying power in proportion to the hardness of the material in question: this results in improved stability and a reduction in stress on the excavator arm.

The work was carried out in two steps: the first led to the removal of a 36 cm-thick layer of cement, later used for filling operations as it was recycled without being contaminated with other materials; and a second step was for the demolition of a further layer of tar, destined for dumping, as it was contaminated material. This was therefore a working method, which resulted in significant benefits, also from a point of view of respect for the environment.

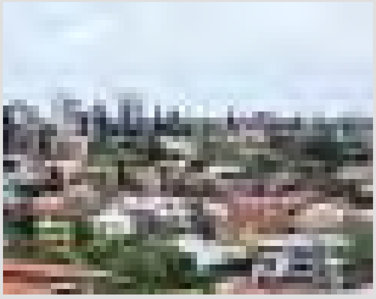
And that's not all: despite the eight days of intense work, it was not necessary to interrupt traffic, an essential factor for the successful completion of the operation: the particular manoeuvrability, precision and compact size of the MB drum cutters were determining factors in the optimisation of every step of the process, systematically demolishing the various layers that made up the bridge.

MB Crusher proved successful from a logistic and environmental point of view. ■

The MB drum cutters adapt to the hardness of the material in question (Source: MB Crusher)

CAPITAL PROJECTS TO INVEST US$780 FOR ROAD CONSTRUCTION IN MOZAMBIQUE

South African firm, Capital Projects, has announced plans to invest US$780mn to fund the construction of a highway linking Mozambique and South Africa as part of a strategic bid to boost tourism and trade between the two countries.



The construction of the Mapinhane-Pafuri road will be completed in 2021. (Source: Shutterstock)

The construction of the Mapinhane-Pafuri regional road (N222), which covers Inhambane, Gaza, and Maputo, in southern Mozambique, is expected to begin in May 2018 and be completed in three years.

The representative of Capital Projects said the company had US$780mn available to build the 500km road, which connects Vilanculos to the border between Mozambique and South Africa.

This funding was obtained through a partnership between Capital Projects and China Harbor Engineering Company Ltd (CHEC).

The project for the construction of the road was launched a decade ago, and before this period, a US$500,000 was raised for a feasibility study.

“We have managed to raise this amount and we will be working with the CHEC and construction work should start as early as 2018”, said Modise Khoza, a Capital Projects representative.

Berth upgrade to make Dar es Salaam port more competitive

The China Harbour Engineering Company (CHEC) and the Tanzanian Port Authority have agreed to upgrade berths at the Dar es Salaam port.

Makame Mbarawa, Tanzania minister of transport and Deusdedit Kakoko, director of the Port Authority, attended the signing ceremony on 10 June.

“Deepening and strengthening of the berths will allow big container ships to dock in Dar es Salaam. All these efforts are being done in order to increase competitiveness of the port,” Mbarawa said at the signing of the contract.

The project is being financed by the World Bank for three years. The contract includes the creation of a new 30,000-tonnes ro-ro berth to upgrade the existing one to seven berths of the port to enhance the overall capacity and service level of the port to enhance the port of Dar es Salaam as an important port in the East African region overall competitiveness.

CHEC and the Tanzanian Port Authority agree to upgrade the berths at Dar es Salaam Port. (Source: CHEC)

It is a significant step forward for the Chinese Harbour Engineering Company as it takes on the first World Bank project in the last decade.

The signing of the contract enhances the level of operations of Chinese companies in East Africa.

SIERRA LEONE ROAD SIGN-OFF

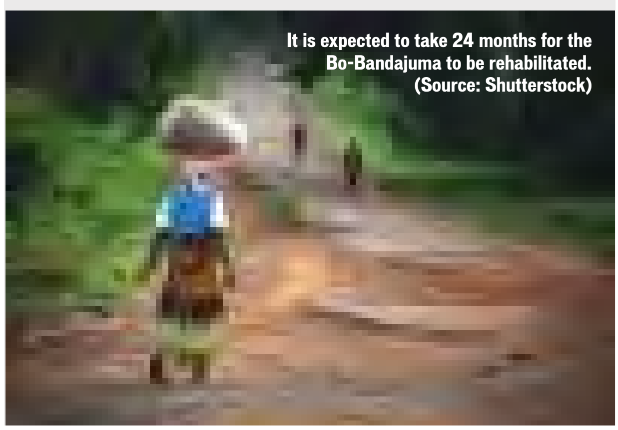
The Sierra Leone government has signed a US$17m road construction project according to the Sierra Leone Roads Authority (SLRA).

The 46km road is the final stage of the Sierra Leone stretch of the Trans-Africa road project and will run from Bo to Bandajuma linking Sierra Leone and Liberia.

The new road, 44km of which will be rehabilitated and 2km to be constructed, is being funded by the OPEC Fund for International Development, the African Development Bank and the government of Sierra Leone.

The China Hen International Company (CHICO) will be constructing the road which is aimed at promoting trade and alleviating poverty in the area. It is expected to take 24 months to complete.

Memuna Kumba Jalloh, the director general of the SLRA and Kong Weigong, the head of CHICO presented the signing agreement to His Excellency Ernest Bai Koroma on 9 June. 473967115



It is expected to take 24 months for the Bo-Bandajuma to be rehabilitated. (Source: Shutterstock)

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New Cat dozer increases cooling capability

This new Caterpillar D8R Dozer is now available in Africa with a desert option in the regions that require it such as North Africa and the Middle East.

Offering eight per cent more engine power and 18 per cent more dozing efficiency, the bulldozer's powertrain, hydraulic fan and new radiator configuration increases ambient capability by up to 20 per cent.

The new D8R finishes the job more quickly. The new powertrain and new cooling system allow the operator to keep pushing sand or other similar materials in second gear, even under hot desert conditions. Equipped with the largest standard blade in its class at 10.3 cu m, the dozer moves up to 13 per cent more material per pass. The blade features high tensile strength steel construction and a strong box-section designed to stand up to the most extreme applications. Field-proven features such as elevated sprocket, differential steering and planetary power shift transmission with high efficiency torque divider, deliver a powerful, durable and reliable operation to increase machine uptime and productivity.

New D8R increases ambient capability for working in hot desert conditions. (Source: Caterpillar)

The quiet, air-conditioned cab with integrated Roll Over Protection Structure (ROPS) provides operators greater all-around visibility to enhance safety and productivity. Standard pilot hydraulic controls deliver precise dozer movements.

In addition to monitoring machine operation, diagnostic events and modes of operation, the D8R's upgraded primary display offers quick viewing and simple operator inputs to help increase efficiency.

Beyond higher ambient capability, the D8R dozer can be equipped with multiple options designed specifically to boost machine performance and increase service life when working in extremely sandy or abrasive applications. These include:

- Precleaner turbine air intake system – delivers longer air filter life
- Engine enclosure doors – reduce sand entering the engine
- Fan and radiator core
- Protection sealed bottom guard – stops penetration of fine abrasive particles to reduce wear
- Replaceable wear plates
- Cab-mounted air conditioning condenser

JOHNSON LIFTS BIG AND SMALL AT WORLD'S LARGEST AIR SEP PLANT

Johnson Crane Hire has been providing heavy lift services and smaller lifts at Sasol's Secunda complex during the construction of the largest air separation train.

This milestone plant under construction for Air Liquide, which is the 17th train to be built at this site, will have a total capacity 5,000 tonnes of oxygen per day.

The contract for the project's heavy lift scope was won by Johnson Crane Hire's Heavy Lifts Project Division on a fixed value basis, according to Peter Yaman, executive – sales, while the smaller crane work was serviced through the company's Trichardt branch near the Sasol Secunda site.

At the heart of the plant is the argon column, which presented Johnson Crane Hire with its heaviest lifts. According to Grant Parker, project manager – Heavy Lifts Projects Division, the lower section of this column weighed 287 tonnes, and was lifted by the company's main lift crane, a Liebherr LR1750. This 750 ton lattice boom crawler crane was configured initially with a 84 metre boom length, which was later re-configured at 112 metres.

An interesting aspect of the contract was that most of the large components – such as the columns – were lifted in an almost fully assembled state," says Parker. "The upper sections would then have to be accurately positioned on the lower sections, with tolerances less than one millimetre per metre. For the large argon column, this meant a tolerance of less than 10 millimetres."

The tall structures meant that verticality had to be carefully addressed in the lift planning, with the use of tailing cranes – the Liebherr LTM1500-8.1, a 550 ton telescopic mobile unit.

Close attention to planning and safety procedures is always essential to the smooth implementation of lifting projects undertaken by the company, says Yaman, so Johnson Crane Hire placed a CAD technician permanently on site to create two-dimensional and three-dimensional plans for all lifts more than five tonnes, which the customer would also sign off before execution.

"This planning allows us to position the cranes in the right locations to facilitate the coordination between the main crane and the tailing crane, and to ensure the cranes don't work against each other," says Parker. "As the column nears the vertical, the weight transfer between the one crane and the other can occur very quickly. With the HP/LP column, another of our heavier loads, this transfer took place over an angle of just two degrees."

Close attention to planning and safety procedures were key to the smooth implementation of the lifting project

A 400 ton lattice boom crawler crane was brought to site for additional tailing capacity in the big package lifts, as well as a support crane in the form of a 100 ton Liebherr LTR1100 telescopic boom crawler crane.

TRAFO BRINGS ADVANTAGES OF DRY-TYPE TRANSFORMERS TO AFRICA

The high safety rating of dry-type transformers allows them to be installed indoors. (Source: Trafo)

Modern manufacturing efficiencies and greater market demand have narrowed the price gap between dry-type transformers and traditional oil-filled units, giving customers around Africa the opportunity to benefit from the many advantages of tried and tested dry-type technology.

According to Trafo Power Solutions managing director David Claassen, these transformers are safer and more efficient than their oil-filled equivalents, factors making them a cost-effective and versatile choice in a range of applications and sectors.

"The high safety rating of dry-type transformers allows them to be installed indoors, avoiding the cost and inconvenience of the structures normally required to accommodate the safety and environmental hazards related to oil-filled units," says Claassen.

The rise in awareness of safety at work has led to greater utilisation of safer technologies.

First manufacturing cement plant in Lesotho

Supplier AfriSam has opened a cement manufacturing facility in Maseru, the capital of Lesotho – the first of its kind in the country.

The capacity of the plan – more than 200,000 tonnes a year of bagged cement – will meet the local cement demand, while being capable of producing specialised products for large infrastructure projects like the Lesotho Highlands Water scheme.

Lesotho's Prime Minister Dr Pakalitha Mosisili, speaking at the official opening, hailed the plant as a 'significant milestone' for the region and a boost for local socio-economic development.

Dr Mosisili highlighted in developed countries one job in the cement industry creates ten times more upstream and downstream jobs. "This figure may be four to five times higher in developing countries," he said.

The main raw material for the plant – milled clinker – is transported by rail to Maseru in bulk wagons from AfriSam's Ulco facility near Kimberley. This is treated with pulverised fuel ash (PFA) from Lethabo power station near Vereeniging in the Free State province.

The plant has been designed to produce the standard range of products most commonly used by local customers, including AfriSam High Strength Cement (52,5 N) for specialist concrete applications; AfriSam All Purpose Cement (42,5 N) for concrete work, block-making, plaster work and other applications; AfriSam Roadstab Cement (32,5 N) for road stabilisation; and AfriSam Starbuild (32,5 N) for applications not requiring high early-strength development.

"However, the plant can easily and quickly accommodate other blends specified by customers who have particular requirements," says AfriSam's manager - strategic projects, Gavin Venter.

A 60 tonne per hour packer uses a robotic arm palletiser to pack and stack the cement bags. (Source: AfriSam)

Solar power to ensure a genset's start-up

A genset must be prepared to start and work, no matter its application or use.

With this in mind, the battery, among other factors, has a very important role, as it is responsible for starting the engine of the generator set to make it to work.

Who is responsible for keeping the gensets' batteries sufficiently charged to ensure the correct start-up of the engine? This task is performed by the battery chargers.

So that these devices can work as intended, they must be connected to a power source, usually the mains.

When this option is not available, there is a very economical and effective solution: The use of solar panels to power the chargers that will keep the batteries with enough charge to ensure that there are no start-up failures.

Inmesol finds again an alternative that increases the operational versatility of generator sets from any range, although it is very useful in gensets that are specially intended for the rental sector, where the service may be required in the most unpredictable conditions: Construction sites, mines, telecommunications systems normally located in remote places where there are no mains, etc. ■

By Inmesol power generators

Inmesol offers a range of rental, industrial and portable power options. (Source: Inmesol)

Nexus Gold begins drilling at Burkina Faso gold concession

Nexus Gold Corp. has reported that drilling has begun at its 38-sq km Bouboulou gold concession.

Nexus Gold Corp. has reported that drilling has commenced at its 38 sq km Bouboulou gold concession.

Bouboulou is located approximately 75km northwest of the capital Ouagadougou, on the Boromo-Goren greenstone belt, and is bisected by the Sabce shear zone.

The 2,000m phase one diamond drill program at Bouboulou will target previously identified mineralised zones at the property, namely Bouboulou 2, Pelatanga, and Rawema.

In addition, the company will test the Koala zone, where recent samples ran as high as 66 grams-per-tonne gold, and the newly identified Rawema West zone.

As reported on 6 June, Nexus Gold geologists have now determined the presence of a new mineralised zone at Bouboulou through the observance of increased artisanal activity, and the result of rock sampling taken from the newly observed area.

Bouboulou is located 75km northwest of the capital Ouagadougou. (Source: Nexus Gold Corp.)

The new zone, named Rawema West, occurs approximately 1,000m west of the main workings at the previously identified Rawema site. The artisanal workings extend some 150m in length and appear by observation to extend to depths of greater than 20m.

Company geologists collected seven select rock samples of dump material from the Rawema West workings. Of the seven samples collected, four returned values bigger than 1 g/t Au, including BBL-004, which returned 9.49 g/t Au.

The map of the three gold trends. (Source: Nexus Gold Corp.)

The trend of the workings at Rawema West runs roughly parallel to the Pelatanga-Rawema (PR) [see map] trend that the company intends to test with its upcoming diamond drill program.

In 2011, Roxgold Inc completed reverse circulation (RC) and diamond drilling (DD) programs to test the four previously identified mineralised zones.

Nexus Gold has subsequently identified three distinct 5km long anomalous gold trends at the Bouboulou concession. Each of the three trends displays strong coincidental geochemical and geophysical gold anomalies, and extend from the four previously drill-identified mineralised zones, namely Rawema, Pelatanga, Bouboulou 2 and Koala. They are identified by gold washing and geochemical samples of greater than 1 g/t Au. All three of the Bouboulou trends display similar coincidental anomalies. Each trend has substantial artisanal workings either directly on them or along the trend.

Burkina Faso, a landlocked country in West Africa, is the fastest growing gold producer in Africa, and was the fourth largest gold producer in Africa in 2012. Eight new mines have been commissioned there over the past six years. ■

BOOYCO YA BATHO ENABLES MINES TO COMMUNICATE

Communication within a mining operation is critical to the safety of the people and underpins the mining operation; however, in underground mining, this is seldom a case of one-system-fits-all.

Don du Plessis, general manager of Booyco Ya Batho, says that for this type of communications network to be effective and reliable, it has to be configured to the site specific requirements.

Historically, complete imported communications systems have not met the legislated requirements and, in many instances, while not performing as anticipated these were also expensive.

Du Plessis says that an in-depth understanding of how communications systems can be configured in a challenging operating environment is what sets Booyco Ya Batho apart in the mining industry.

"We believe that for the local mining industry, it is a major advantage to be able to leverage off local expertise and have access to communications systems and products that are capable of meeting the challenges within the underground mining environment," he says.

An access point with a small form factor, which can be integrated into vehicles and equipment to extend an underground wireless network. (Source: Booyco Ya Batho)

"It can be confusing when confronted with the technology and jargon used by communications network configuration companies, and it is not always easy to make an informed decision. We work very closely with our customers to assist them in understanding what technology is available and what exactly it can do for an operation."

The first step would be for Booyco Ya Batho to conduct an in-depth survey of the area in which the communications system would need to function. This, according to du Plessis, would allow for the network to be configured in such a manner so as to eliminate those areas where communication is not necessary, such as mined out areas.

"By doing an in-depth survey of the communications requirements, it is possible to optimise the RF propagation without sacrificing on the reliability or performance of the network. And this will eliminate the situation where the communications network has been over-engineered for the need at hand," he says.

Du Plessis says that recent test work has proved that effective communications is possible wirelessly over a distance of 1km underground next to a conveyor belt. The tests were recently conducted by the company in an operating coal mine.

"It is all about understanding what the signal is doing. This is essential," du Plessis adds. "It is this thinking out of the box that enables us to tick the boxes when it comes to compliance with the requisite standards."

Advertiser's Index

Ghana and India: A contrasting tale of two emerging economies

Emmanuel Yartey takes a look at the important partnership between India and Africa and what this means for Ghana.

The emergence of India on the global stage as one of the fastest developing nations with the certainty of becoming a developed country in the not too distant future lies in the enterprise culture of the citizenry.

The sacred preference for indigenous Indian products over foreign products by its people over the years has contributed significantly to its current booming economy.

However, the same cannot be said of Ghana. A 2012 study by KNUST School of Business found that 66 per cent of Ghanaian consumers were not ready to buy locally made products if they thought foreign substitutes were superior; a great disincentive to local manufacturers which translates into low productivity and moribund local industries.

The age-old belief by policymakers of Ghana and majority of the citizenry, that the country's accelerated development hinges greatly on the benevolence and soft loans from their development partners is a canker eating away at the very heart of the nation.

As a forward-looking country wanting to achieve greatness on the global stage, India has opened up avenues to further entrench itself as a giant economic partner of Africa through the Confederation of Indian Industries (CII) Eximbank Conclave. From 2005 up to now, the CII, in partnership with Eximbank of India, and with the support of the Ministry of External Affairs and the Ministry of Commerce and Industry and the government of India, has emerged as the pioneer event in fostering partnerships and enhancing the economic engagement between the two regions.

Pranab Mukherjee, President of India, said, "The Conclave has become a prestigious event for Indian and African governments and industry to meet and explore new avenues of partnerships. The annual gathering enables the Indian and African leadership to take stock of the progress of the partnership and address future needs in this regard."

Small, medium-sized enterprises

Ghana's Minister for Business Development, Ibrahim Mohammed Awal appealed to the Indian government to support the country in the development of small medium-sized enterprises (SME) sector to ensure its sustainability.

The minister did not mince words when he urged the Indian government to make available funds to Ghana which would be used to train the youth with employable skills, provide them with soft loans to establish their own businesses and make it possible to transfer the India technology and innovation to Ghana to accelerate the growth of the SME sector. "The SME sector in Ghana constituted 90 per cent of jobs in the country and contributed 70 per cent of GDP," he said.

What Ghana needs to appreciate is that the time for the country to be great and wealthy is now. It has no luxury of time to be dependent on emerging economies, such as India and China, as well as developed nations like the United States of America, Britain, France, Germany to be solving her socio-economic challenges. As a lower middle-income country, such an elevation of status must spur her on, to be more innovative in addressing challenges with minimum assistance from economic giants.

Over the years, India has developed her film, digital and automobile industries to world standard, and other sectors of the economy continue to contribute significantly to the country's growth.So, India can afford to announce the extension of a US$10mn concessionary facility to Africa which will be disbursed in five years time.

Data from the Indian government and the African Development Bank painted in graphic terms how bilateral trade between India and Africa had increased from US$1bn in 1995 to US$75bn in 2015, with India's exports to Africa up by 93 per cent from 2010 and its imports rising to about 28 per cent in 2015.

The people of Ghana

The above data clearly shows a great disparity in revenue generation between the two regions.

India is not interested in charity in terms of sharing resources with Africa without reciprocity. As such, India continues to explore African markets. National interest is the driving force behind this enterprise.

What the managers of Ghana's economy need to appreciate is that no foreign country can advance the economy to the level of a developed one without the people of Ghana. And with this fact, there is the need to work out a plan towards indigenising the entirety of the nation's economy, mindful of churning out quality products as well as using quality packaging for exports to meet international standards.

If there is no deliberate effort to work towards such a goal, but rather resorting to temporary attempts at such an indigenous process, and terminating it.

It will come as no surprise if Ghana continues to beg for handouts from developing and developed countries in order to tackle some of its social and economic challenges.

Ghana's sovereignty is sacred and must be protected for the good of future generations. ■

Keeping the competitive edge in Southern Africa and beyond

Last year, Himoinsa Southern Africa opened its offices in Port Elizabeth, South Africa, *African Review* talks to Matt Bell, director of business development for Himoinsa Southern Africa on the company's strategy.

Matt Bell, director of business development for Himoinsa Southern Africa (Source: Himoinsa)

What does your role as business development director involve?
My role at Himoinsa Southern Africa is to drive business development through our distributor network, direct sales for end-user customers, where more complex and bespoke technical designs are required for certain industry applications such as mining and telecom, and to support project development companies with multi-megawatt applications.

Which countries does Himoinsa Southern Africa support?
Himoinsa Southern Africa looks after eight countries: South Africa, Namibia, Zimbabwe, Zambia, Botswana, Malawi, Swaziland and Lesotho. In 2015, the import of gensets in South Africa was worth US$150mn, one of the biggest genset markets in Africa, but I think there is more need at the moment for cost-effective captive power outside of the country.

Why did Himoinsa Southern Africa open a subsidiary office in Port Elizabeth last year?
Being local is very important. We have facilities in Port Elizabeth and in Johannesburg and can supply generators, spares, filters and after-sales and service kits, as well as offer technical expertise on demand. Himoinsa is a vertical manufacturer of a wide range of generator capacities, from 3kVA to 3,000kVA, and we hold stock of many of these sizes in our warehouse facilities in South Africa, so that we have equipment readily available to support the local market. One of the biggest challenges facing Africa is speed of service. People want European quality and they want it tomorrow, and sometimes that is not always easy to do. The fact we are holding generators, ancillary equipment such as transformers, distribution boards and control panels in South Africa, all backed-up by dedicated service teams, means that we can quickly support our customers with a quality, cost-effective and local solution.

What type of products does Himoinsa provide?
We provide critical prime power, standby applications and off-grid solutions. We launched hybrid technology solutions in 2015 – the integration of solar, battery storage and a generator – which are having a lot of positive feedback in the telecom industry in Africa due to the massive fuel and operational cost savings.

Micro-grid applications are a game changer in Africa because they are able to supply power to entire villages, not just to a few people. It is frightening that 625 million people still do not have any access to electricity on the continent.

Himoinsa has built a reputation for supporting a wide range of sectors? Please explain the projects that Himoinsa Southern Africa has been involved with?
Since January, we have been supporting the utility and renewable sectors. We won a substantial contract in the pre-commissioning of a wind farm in South Africa. We have worked in the hospitality sector, providing standby power for a game farm which needed power to provide lighting to an airstrip. A few years ago, we were awarded by the Angolan government to construct a 25MW power plant to supply Cassanque pumping station on the Kwanza river. Our standby generators provide security of supply to many datacentres and process manufacturing plants, in addition to the retail sector where we are supporting a number of shopping malls in Botswana. It's great to see confidence returning to the mining sector and we have just completed a mining contract for one of the leading EPCM companies in the region with a bespoke engineered solution including fire suppression systems. Himoinsa has just been voted in the top six of technology providers in the telecoms sector globally. There is a lot of interest with big telecom providers in Southern Africa at the moment. By providing European quality equipment at a very competitive price, we fit well within any sector.

What gives Himoinsa Southern Africa the edge over its competitors?
Himoinsa Southern Africa doesn't want to be a dump and run generator provider, we have 35 years of experience globally and we want to make sure that when we sell a generator to a customer we can back it up with either training or skills development of the local team, which we can do over a three-to-four-month period, or even years, as was the case with the Angola power plant.

We also offer a best-in-class warranty; 4,000 hours or two years on a prime or continuous operation, which is double the market standard. We believe in giving customers high-quality equipment not just in Africa, but across the world. Another difference is that we offer longer service intervals of 500 or 1,000 hours, even up to 10,000 hours for some gas genset models, compared to the standard 250 hours. So, we are not only cost-effective in the pricing of our parts being an OEM manufacturer, but customers don't need to change them so often, which is a double saving for them. We, therefore, believe Himoinsa offers a superior project to other players out there in the market. ■