CAPE Business News

FOUNDED 1980 National Distribution MAY 2024

Titan Cargo's R140-million 100 000m² Belcon warehouse has direct rail link to the Port of Cape Town

The new facility's train offering takes 80 trucks off the road a day, reducing congestion on the roads and in the port.

By Larry Claasen

WHEN Titan Cargo CEO founder Sugan Naidoo first saw the massive derelict 100 000m² warehouse at Transnet's Belcon inland port in Belville in 2020, he immediately understood its potential.

Although the warehouse. was not in a great state, it had a 20km rail link directly to the Port of Cape Town, and Naidoo reasoned that there was an opportunity to move containers off the city's gridlocked roads and rapidly through the congested port via its rail connection.

"Instead of running trucks into and out of the port, you can run trains with large amounts of containers."

"This will decongest the port and the port precinct - Paarden Island - as a train would take 80 containers at a time. This means one train would take 80 trucks off the road."

Knock on failure

Transnet's inability to provide adequate services is one of the reasons there are so many trucks on the road and has compounded congestion at the ports and on the roads.

"The road infrastructure is not designed to handle articulated vehicle capacity, which hurts our road infrastructure. Our ports also are not designed to handle such large volumes of truck traffic."

Taking over warehouse also fits into Titan Cargo's move to diversify its revenue stream. It started out about 20-years ago as a line-haul transporter, but in 2018, it opened its first warehouse facility and started offering end-to-end container logistics and handling.

Through the Belcon facility, it can offer a one-stop service for importers and exports from freight forwarding to container handling.

A long wait

With this in mind, Naidoo made an unsolicited bid in 2021 to lease the facility. Transnet said it liked the idea but said it needed to go through a formal competitive tender process. Later, it put out two tenders, one for leasing the facility and another for setting up a greenfield warehouse at the inland port.

In July 2022, Transnet announced Titan Cargo as the winner of one tender. Danish shipping and logistic group A.P. Moller – Maersk won the bid to set up a 10 000m² warehouse.

Though Titan Cargo had won the tender, it only took control of the facility on 1 March 2023 as it had to negotiate the terms of the 15-year lease with Transnet. After the negotiations were completed, it then spent R140-Million on making the warehouse fit for purpose.

Already full

The substantial investment in time and money has paid off for Naidoo because, in less than a year, the facility is 75% full. The only thing preventing it from operating at full capacity is work still being done at the warehouse.

He says once this work is done, the warehouse will be able to handle 3 000 containers a month, and the total cost of redeveloping the warehouse will probably be about R200-million.

The facility currently transports 600 containers a month by rail. Titan Cargo has enough customer demand lined up to reach its 3 000 containers a month target within the next three to six months.

Aside from the convenience of getting their goods quickly to the port, Naidoo says the group's customers also benefit from the "preferential terms" negotiated with Transnet.

Titan Cargo's customers also gain by reducing their carbon emissions. This helps them when it comes to selling their goods in markets like the European Union, where strict environmental regulations require them to keep track of their carbon emissions.

The success of the group's Belcon facility has already led Titan Cargo to consider expanding its operations there.

"We are already in discussions about that. We are looking at expansion. There is some real estate available to us in the same precinct. It's part of the transaction, but it needs development. We will be developing that to increase our footprint."

DBSA encourages nature-positive investments

By Diane Silcock

The Development Bank of Southern Africa (DBSA) has released a groundbreaking report that addresses the challenge of reducing its impact on nature and biodiversity. Entitled "a case study on nature data", it was commissioned by the African Natural Capital Alliance (ANCA) and co-published by the DBSA and Oliver Wyman.

The DBSA was inspired by the Taskforce on Nature-related Financial Disclosures (TNFD) and is leading the way on how it can advance integrating nature and climate finance into its decision-making process.

DBSA's head of ESG, Siloshini Naidoo emphasises the commitment to sustainable development in Africa, saying, "Our collaboration with ANCA and Oliver Wyman underlines our dedication to promoting long-term prosperity for the continent through environmentally-conscious investments."

Some key recommendations for the financial sector that have emerged from the report include that African banks should consider embedding clauses into loan agreements that actively guide projects away from areas where biodiversity is under threat.

Tony Goldner, executive director of the TNFD, welcomed the report saying, "The case study will serve as a useful reference guide for financial institutions and corporates on how to assess nature risks in sensitive locations, and to

Continued on P23

IN THIS ISSUE

Transport department keeps rail devolution in limbo - City of Cape Town

By Larry Claasen

THE City of Cape Town says the National Department of Transport's lack of urgency when it comes to developing the National Rail Devolution Strategy (NRDS) is hampering its plans for talking over the rail system in the mother city.

The city says its ongoing rail feasibility study has found that efficient passenger rail will add R11-billion to the local economy each year, and save lower income families hundreds of millions in transport costs.

To facilitate these savings, it wants to take over the running of the rail system from the Passenger Rail Agency of South Africa is a South African (PRASA).

Rob Quintas, the city's mayoral committee member for urban mobility argues that it is better suited to running the system, which has reduced the number of trains it runs in the metro.

"There is no doubt that we can operate an efficient, reliable, safe and affordable passenger rail service. However, it will take time to restore the damage done by years of neglect and under expenditure by PRASA. There are very competent and efficient employees at PRASA who, unfortunately, have been unable to execute their mandate due to failures of the national government."

For the city to take over, it needs the NRDS to be released. Without it, it will have no understanding of the responsibility of the institutional relationship between the different parties.

It also has no idea of what the sequence of events that needs to happen before the city can take control of the rail service.

Without the NRDS the city cannot budget for take over and running of the rail service.

Key to integrated transport

Running the rail services is seen as a key objective when it comes to running an integrated transport system.

"The city is the planning authority in terms of all transport matters. It only makes sense to devolve this function to the authority that is best placed to see how/where passenger rail should fit in with other modes to create an integrated, responsive, accessible, well-functioning, reliable and safe public transport network," says Quintas.

"This inter-connectivity with other modes such as buses, e-hailing services, minibus-taxis, and non-motorised transport is crucial to ensure the one complements the other, and that commuters can easily transfer from one mode to the next. Ultimately, we need to reduce the cost of commuting – be it in money spent on travelling, or the time it takes to get from A to B. Also, the impact of carbon emissions on our natural environment by road based transport is a huge concern."

Silence on the part of the state

Even though the city has threatened to declare an intergovernmental dispute with the National Department of Transport over the matter, it has yet to engage with the city, since it provided input into the NRDS in November 2023.

The cabinet's own National Rail Policy White Paper 2022 first promised the delivery of a Devolution Strategy by 2023.

Although President Cyril Ramaphosa said on 5 September 2023 that the NRDS will be delivered in 2024, Quintas points out that with the national elections happening on 29 May 2024, will likely delay the release of the strategy.

The National Department of Transport did not respond to questions from CBN on what is behind the delay of the NRDS and when it planned to release it.

Beware of the fire risk posed by lithium-ion batteries

AS renewable energy systems, including solar panels and battery energy storage systems (BESS), gain increasing popularity, experts caution about the potential fire risks posed by lithium-ion batteries. Commonly used in energy storage systems, lithium-ion batteries pose unique fire hazards due to their flammable electrolytes, highlights ASP Fire CEO Michael van Niekerk.

Unlike traditional lead-acid batteries, lithium-ion batteries can undergo thermal runaway, leading to intense fires that are difficult to extinguish. The risk is compounded by the emission of flammable gases during thermal runaway that can result in explosions if ignited.

Van Niekerk stresses the importance of adequate safety measures, recommending the construction of two-hour fire-rated rooms to house lithium-ion batteries. Proper ventilation and gas detection systems are essential to manage the off-gassing phenomenon associated with these batteries. In addition, fire dampers are recommended to contain potential fires within designated areas, minimising the risk of it spreading to larger structures.

While large-scale energy storage systems, such as those installed by electricity utilities, may adopt different risk management strategies, van Niekerk underscores the importance of considering safety precautions in all installations. "The risks associated with improperly installed solar panels and batteries are significant in residential settings where DIY installations are common," he cautions.

ASP Fire CEO Michael van Niekerk.

In light of these concerns, ASP Fire stresses the need to consult a professional for the design, installation and certification of renewable energy systems. Proper integration and monitoring of components, along with adherence to safety standards, significantly reduce the risk of fire incidents.

The growing interest in renewable energy solutions has prompted ASP Fire to collaborate with solar panel engineering firms, offering its expertise in fire safety design. "At a recent project in Sea Point, Cape Town, improper installation of batteries in a block of flats raised serious safety concerns. Our intervention as a fire safety professional helped rectify the situation, stressing the importance of seeking expert advice," concludes van Niekerk.

ASP Fire operates across the entire African continent from its Gauteng base, providing professional, accredited fire risk management and support to its clients. ASP Fire designs, installs, and maintains a full range of fire detection and suppression equipment suited to clients' needs. ASP Fire provides a holistic, proactive, and preventative fire solution based on integrated fire risk assessment, training, and consulting, with the installation and maintenance of fire detection and suppression systems that meet SABS, NFPA, FPASA, and SAQCC standards.

For more information contact: www.aspfire.co.za

Transnet says it has made progress at the Port of Cape Town

But its customers and Western Cape Government says more can be done.

By Larry Claasen

TRANSNET says it has made progress in improving the performance of the Port of Cape Town.

This is according to a report by the Western Cape Parliament's standing committee on finance, economic opportunities and tourism, which has held several engagements with Transnet over the past five years, focusing on the challenges experienced at the Port of Cape Town and the remedial steps taken to address the Port's inefficiencies.

The report said the average waiting time for the berths - at the time of this engagement on 22 February 2024 - was 144 hours, which was an improvement on the average waiting time for a berth of 215 hours in January 2024.

"The average truck turnaround time was 68 minutes, but this has since been reduced to 51 minutes. The throughput at the Port has increased in general. The average vessel turnaround time was 82 hours; however, this has improved to 57 hours. This was a progressive improvement, although the turnaround time still was not ideal," Transnet told the committee.

This was not the only positive indicator.

"In terms of volume and vessel performance tracking, there was a sign of improvement in line with the budget. To address the impact on imports and exports, Transnet focused on the number of containers that they were able to move, which was a good indicator of whether importers and exporters were being serviced."

Though there were indications of improvement, some of its customers and Western Cape Government told the committee more could be done.

The Department of Economic Development and Tourism recommended that Transnet consider developing "a viable digital technology platform to facilitate cargo planning along the entire container logistics chain."

It also wanted better planning and communication between the terminal and cold stores about the cargo that is coming in. Doing this would remove inefficiencies in the load plans and the vessel readiness to berth.

"When a port brings in a ship that is not ready to berth, it takes double the amount of time to turn it around, which is what you want to avoid," said the report.

Exporters Western Cape wanted Transnet to improve the marketing of its night shift operations. Getting the industry to understand that they can use the port at night would ease traffic flow or truck flow into the container terminals.

It also said a better job could be done when it comes to marketing the Port of Cape Town. It pointed out that the Port of Walvis Bay is marketed very well, and it is a direct competition for the Port of Cape Town.

The South African Ship Operators and Agents wanted Transnet to increase its partnership with the private sector.

For its part, the Mediterranean Shipping Company wanted a range of equipment upgrades and acquisitions. Though Transnet has received the seven second-hand Rubber-Tyred Gantries (RTGs), it wanted RTGs that had a gantry cutoff speed of 85-90 km/hr. It said this would extend operational hours during adverse wind conditions, ensuring smoother port operations and mitigating delay.

It also wanted Transnet to by a helicopter to supplement the pilot boat, especially during adverse sea conditions. It said its addition would enhance safety measures and ensure uninterrupted maritime operations.

UNIQ clothing by Checkers opens 20th store

THE Shoprite Group's standalone apparel brand UNIQ clothing by Checkers opened two new stores in Gauteng this week – one in Sandton City Shopping Centre, and another at the brand-new Linton's Mall in Pretoria East – making it the 20th store opened since UNIQ launched in 2023.

Known for its timeless designs and premium fabrics, the brand offers unparalleled quality and fashion that transcends trends. Stores offer an elevated shopping experience with well-trained employees and quick self-service checkout.

Customers can create the perfect capsule wardrobe with pieces from the new Autumn/Winter '24 collection that's just landed in all stores. Every item of clothing is thoughtfully designed and made to last, ultimately giving customers more value for their money.

UNIQ clothing by Checkers was the first local retailer to introduce the superior-quality Pima cotton, SUPIMA, to the mass market. This season, the brand adds another superb material to its collection - 100% Merino wool - which is softer and more refined than regular wool. Its fine fibres are gentle to the touch, lightweight but warm, and will not irritate the skin.

The new collection consists of comfy knitwear, durable outerwear and an extensive range of tees that can be layered with wardrobe favourites to create stunning chilly-weather outfits for the entire family.

What will result from South Africa's pivotal elections?

By Chris Hattingh

MAY is election month in South Africa. Given the ongoing high-unemployment, low-growth malaise afflicting the country (resulting largely from the current governing party's ideological and policy choices), the consensus is that the ANC's support will decline from previous cycles – possibly below 50%. Whether voters will move to parties such as the DA, EFF, and others en masse remains to be seen. Indeed, the rising trend of voters staying away from the polls might increase, or at least remain at the same high level as the previous elections.

> "Should the ANC drop below drop below 50%, a new era of national coalition politics will be upon the country"

A new survey conducted by Ipsos, released on 26 April, states that the governing African National Congress (ANC) is 'struggling to impress voters.' 2 545 registered voters were surveyed; the survey took place from March 9 to April 15, across all provinces, was conducted in the homes and home languages of those surveyed. Of those surveyed, 38% are of the view that the ANC will live up to its election promises. Only 23% feel that the country is moving in the right direction.

As to party support, the ANC polled at 40.2%. The Democratic Alliance delivers 21.9%. The Economic Freedom Fighters (EFF) sits at 11.5%.

The newly formed uMkhonto weSizwe (MK) Party (polled for the first time here in an Ipsos survey) comes in fourth with 8.4%, more than the Inkatha Freedom Party (4.4%), ActionSA (3.4%), and the Freedom Front Plus (1.8%). MK's emergence appears to be hurting the EFF the most, 'particularly in KwaZulu-Natal (KZN).'

MK is the card in the deck with the most disruptive potential, especially in KZN.

The ANC, EFF, and IFP appear to be those who will be most hurt by MK, but its impact doesn't appear to be as nationwide as initially thought.

MK party spokesperson Nhlamulo Ndhlela indicated Jabulani Khumalo (who registered the party) and four others had been axed for 'attempting to destabilise the party.' Internal ructions and tensions, especially given the makeup of most of its leadership and the character of its most famous supporter and image-generator (former president Jacob Zuma). Should it emerge as the country's fourth largest party (and possibly one of the largest in KZN) those tensions could come into sharper relief. Longevity is not guaranteed, neither for the party itself nor for any potential coalitions of which it may be a part.

KZN and Gauteng look set to be the most hotly contested provinces. Should these be governed by some make-up of opposition coalition, the three most economically important provinces (GP, KZN, along with the Western Cape) will be lost to the ANC.

At the time of writing the DA will likely maintain its majority in the WC, but its support is being slightly chipped away at by the Patriotic Alliance.

Should the ANC drop below 50%, a new era of national coalition politics will be upon the country. This could mean more uncertainty around power-sharing and policies, with gridlock and stalled progress around structural reforms. But there will also be new opportunities for change on a provincial and municipal level, with those provinces and cities with better management, planning, and transparency setting themselves up well over the next five to ten years.

In April South Africa celebrated 30 years of democracy. The next year (never mind the next 30) looks set to be one of increased change, in both positive and negative (and expected and unexpected) ways. Business, community organisations, religious institutions, and others can fill those gaps that are to come in a positive manner; if not, destructive actors such as mafias and populist politicians will attempt to take advantage, ultimately only for their own benefit.

RGM Cranes extends footprint into Western Cape

AS Africa's premier overhead crane service provider and the continent's largest manufacturer, RGM Cranes is advancing its commitment to excellence by expanding its operations into Cape Town.

"Our move to open a branch in Cape Town comes from a customer-centric perspective, serving our clients where they operate," says Alex Dowling, MD at RGM Cranes.

"Our new branch marks an exciting chapter for RGM Cranes in the Western Cape," shares branch manager Colin Crawford. "This venture not only expands our reach but also reinforces our dedication to providing the complete range of our superior products and services to the region's diverse industries."

As the official distributor of Surelift, Guralp, Planeta, and ARC, RGM Cranes brings an unparalleled range of high-quality lifting solutions to the Western Cape's dynamic industrial sectors.

Boasting a skilled team of Lifting Machinery Inspector (LMI) certified technicians and access to various calibrated load weights, the Cape Town branch is fully equipped to offer the indispensable services and legally required load testing, ensuring that local industries' equipment remains compliant and safe.

"With the aim of widening our market share, we are keen on delving into sectors that are flourishing in the Cape Town region, including the renewable energy, construction, oil and gas, as well as the maritime sector. Our in-depth knowledge in catering to the materials handling demands plays a pivotal role in the region's vibrant economy," Dowling asserts.

The Cape Town branch is poised to enhance operational capabilities with service inspections that ensure crane performance, comprehensive load testing and certifications for safety and compliance, and cost-effective crane upgrades.

The branch also offers around-the-clock breakdown services for any emergency and provides custom-designed cranes, manufacturing, and installation processes that epitomise efficiency and precision.

For more information about how RGM Cranes can support your business in Cape Town, please contact us at +27 82 060 9598 or send an email to colin@rgm.co.za.

SEZs can unlock economic potential - Infrastructure Africa

Infrastructure Africa Business Forum Explores the Role of Special Economic Zones and Industrial Development Zones in Driving Continental Growth.

THE Infrastructure Africa Business Forum is set to delve into a critical topic shaping the continent's economic landscape: the role of Special Economic Zones (SEZs) and Industrial Development Zones (IDZs) in propelling growth and development across Africa.

As stakeholders convene to discuss infrastructure investment and economic advancement, the forum will spotlight SEZs and IDZs as catalysts for sustainable development and inclusive growth.

SEZs and IDZs represent strategic enclaves designed to attract investment, stimulate industrialisation, and enhance competitiveness.

By offering a range of incentives, streamlined regulatory frameworks, and world-class infrastructure, these zones create conducive environments for businesses to thrive and contribute to economic transformation.

"SEZs and IDZs are integral components of Africa's development strategy, serving as engines of growth, innovation, and job creation," remarked Liz Hart, MD of the Infrastructure Africa Business Forum.

"By leveraging these zones effectively, we can unlock new opportunities, foster industrialisation, and drive sustainable development across the continent."

The potential of SEZs and IDZs to propel economic growth and development across Africa is multi-faceted:

- Attracting Investment: SEZs and IDZs offer investors a range of incentives, including tax breaks, customs exemptions, and streamlined regulatory processes, making them attractive destinations for domestic and foreign investment.
- Simulating Industrialisation: By clustering industries and providing access to shared infrastructure and services, SEZs and IDZs facilitate the development of vibrant manufacturing ecosystems, driving industrialisation and value addition.
- Promoting Trade and Exports: SEZs and IDZs serve as hubs for export-oriented industries, facilitating trade and access to international markets, thereby boosting exports and foreign exchange earnings.
- Fostering Innovation and Skills Development: SEZs and IDZs promote innovation through technology transfer, research collaboration, and skills development initiatives, positioning Africa as a hub for knowledge-intensive industries and fostering entrepreneurship.

As Africa seeks to harness its economic potential and achieve sustainable development, maximising the impact of SEZs and IDZs is paramount. This requires concerted efforts to enhance infrastructure, streamline regulatory processes, and strengthen institutional capacity.

"As we gather at the Infrastructure Africa Business Forum, scheduled for 16 – 17 July 2024 at the CTICC in Cape Town, let us explore innovative strategies to harness the transformative power of SEZs and IDZs in driving continental growth and prosperity," added Hart.

The Infrastructure Africa Business Forum is a premier platform dedicated to advancing infrastructure investment and economic development in Africa. Through dialogue, collaboration, and investment promotion, the forum aims to drive sustainable infrastructure development and unlock Africa's growth potential.

Website : https://www.infrastructure-africa.com

SINGLE-POINT LUBRICATORS HELP SUSTAIN A FIVE-YEAR STREAK WITHOUT BREAKDOWNS

After a food manufacturing plant suffered frequent breakdowns of its electrical motors, Lubrication Engineers (LE) South Africa recommended the use of single-point lubricators to automate the accurate dispensing of lubrication to all the bearings around the plant. As a result of the automated lubricators being installed, over five years later the client hasn't had a single mechanical breakdown.

Before the single-point system was installed, each of the 150 lubrication points at the facility had to be manually lubricated. This was an enormous task for the maintenance team and many of the lubrication points were located in hard-to-reach places. The magnitude of the work and the accessibility challenges inevitably led to some bearings being over lubricated or under lubricated, resulting in misalignment, trapped dirt forming grooves in the bearing components, metal fatigue or localised rapid wear.

Sam Kekana, the Technical Sales Representative from LE South Africa who worked on the switchover to single-point lubricators with the client, says that in addition to the cost benefits, the overall performance of equipment has improved. "The benefits of single-point lubrication definitely justify the investment," he adds.

LE's team has been working with this client for over a decade, and identified the single-point lubrication option as an important solution for its needs because single-point lubricators are versatile and can be used on almost every application imaginable.

EXTENDING BEARING LIFE

Managing the switchover was a large undertaking, and the LE team had to set up each lubricator according to the different bearings' specifications. Once this is done, however, the lubricant is dispensed at the appropriate intervals and quantities for each bearing. This means that the clients' maintenance team's time is no longer dominated by having to manage lubrication schedules and bearings are automatically lubricated according to their required levels so they can perform well.

The automated dispensing of the lubricant also means that the bearings don't have to be stopped in order to be lubricated and maintenance takes place while they continue running, which helps the plant run optimally and saves the client from losing money through downtime. The lubricators are battery operated, so they are not affected by power outages, which is important in light of South Africa's current energy crisis.

The single-point lubricators LE installed at the facility dispense LE's Almagard® Vari-Purpose Lubricant, which is an extremely tacky product that is recommended for extended service applications. It is a long-lasting product that helps to eliminate bearing failures, can extend bearing life spans and does not harden with age.

LE South Africa also supplies this client with oil-site glasses and lubrication containers, which are useful for lubrication monitoring and safe storage, and this also reduces the risk of contamination. These are particularly important concerns for this client as they deal with the food industry.

The long-term relationship LE South Africa has had with this client, and the proven track record of success with LE's products and tools like the single-point lubricators, have saved the client time, money and helped its operations function well.

THE ENZYME THAT CAN HELP OIL SPILLS DISAPPEAR

A report published last year by a group of local and international researchers found that an average of 90% of the waters around South Africa's Exclusive Economic Zone are under lease for oil and gas exploration or extraction. This increases the risk of oil spills and their subsequent effect on marine biodiversity, natural resources, fisheries and communities all along South Africa's coastal regions.

Lubrication Engineers (LE) South Africa is helping to combat this problem by supplying a unique enzyme to the local market that can help to clean up hazardous waste spills. The Oil Spill Eater II (OSE II) was developed in 1989 in the USA and has been used to clean up more than 44 000 spills since. Approved by the US Environmental Protection Agency (and featured on the National Contingency Plan List) and the UK Marine Management Organisation, it is an environmentally safe and cost-effective bioremediation process for mitigating hazardous waste, spills and contamination.

Gavin Ford, National Marketing Manager for LE South Africa explains that OSE II uses a biological enzyme to convert spill waste into a natural food source for bacteria found in aquatic environments. The product has nutrients in it that appeal to indigenous bacteria, which then rapidly multiply and break down the oil. It is an excellent solution for managing oil spills because it doesn't introduce any alien bacteria and the final byproducts from the process are just carbon dioxide and water.

OSE II is also a very helpful solution for cleaning off oiled wildlife and marine life because it works so quickly and is non-toxic, which means the oil can easily slough off once it's been sprayed on. This is less traumatic for animals that are being cleaned and is much faster and easier than alternative options.

"It essentially accelerates the natural spill remediation process because in nature, bacteria release enzymes and biosurfactants that attack the spill. The biosurfactants emulsify the spill, breaking it down to be used as a food source for the bacteria. OSE II allows this natural effect to still happen, but at a much faster rate," says Ford. The process cleaning time duration varies from a few hours to several weeks, depending on the kind of hydrocarbon and type of spill.

The application of the product is also relatively simple. It is mixed using a ratio of 1 part OSE II with 50 parts non-chlorinated water and is then applied using a surface sprayer. Non-chlorinated water will contain bacteria, which is important to activate the process for cleaning up an oil spill. A higher concentration of OSE II can be used for older or heavier spills.

LE South Africa supplies the OSE II in ready-to-use kits that includes a backpack sprayer for applying the product. OSE II can bioremediate most organic-based compounds and almost all hydrogen-based compounds. In addition to oil spills on oceans and lakes, OSE II can be used to help clean underground spills, airport tarmacs, ship decks, asphalt and concrete spills, fuel tanks, ballast water tanks, bilge tanks, and clean-ups of all kinds of oil leakages.

info@lubricationengineers.co.za +27 11 464 1735 www.lubricationengineers.co.za

ifm Multifunction display for various measured values DX1063

A measured value high up in the “cloud” increases the global – but not always the local – visibility of information. For this purpose, the new multifunction display with a universal measurement input is the right choice in almost all applications. It can detect and convert analogue standard signals, pulses, frequencies and temperature sensors and display the measured value in the required unit directly on site.

Clear representation

The TFT display offers various possibilities and colours to visualise the measured value. The unit of measurement also displayed, the signal name and the location tag clearly explain the meaning of the displayed value. The different font and background colours of the definable alarms help to evaluate the measured value. Via the two relay outputs, individual alarms can be transferred to higher-level systems, or simple controls can be realised.

The all-rounder among the displays

- Universal measurement input for various types of signals (current, voltage, frequency, pulses, PT100/PT1000 and thermocouples)
- Colour TFT display with extensive digital labelling
- Intuitive menu structure with help texts for easy parameter setting
- 8 adjustable alarms and 2 relay outputs
- Low installation depth with standard panel cut-out

National Tel: 0861 IFM RSA (436 772)
International Tel: +27 12 450 0400
Fax: (012) 450-0412
http://www.ifm.com
Contact: Customer Support – ifm ZA
E-mail: info.za@ifm.com

BMG has established a dedicated VSD workshop at the company’s Cape Town Engineering facility

“OUR new VSD facility - which commenced operations at the beginning of the year - is an approved warranty centre for BMG’s Danfoss/ Vacon and Synergy VSD products,” says David Dyce, business unit manager: electronics, BMG.

This ElectroMechanical facility is manned by a team of globally-trained experts offering specialist services to customers throughout the Western Cape. Services include repairs, maintenance, option fitment, pre-commissioning, software loading/upgrades and testing applications, as well as small panel manufacturing. The team also provides on-site technical assistance for trouble shooting, commissioning, maintenance and repairs.”

The conveniently situated engineering facility also stocks the full range of BMG VSDs to clients from all industries, including the marine sector. In addition, BMG’s branch network in the Western Cape area also stocks a wide range of VSD’s in various voltages and power sizes to suit the immediate needs of the market.

BMG was appointed by Danfoss Drives in 2019 as the first authorised Danfoss DrivePro® service partner in Africa and this official certification has been renewed each year. This prestigious appointment gives customers the assurance that BMG meets stringent requirements to offer customised support and technical assistance for Danfoss VLT® and VACON® frequency converters.

Danfoss DrivePro® services, which cover the entire lifecycle of Danfoss and VACON® AC drives, are designed to improve productivity and performance, minimising downtime and giving peace of mind to every user.

BMG has made a significant investment in distribution, engineering facilities and technical skills in strategic parts of Africa, that include electronic workshops and a technical resources centre for the repair, maintenance and commissioning of Danfoss VLT® and Vacon® products and services.

Michael Williams, BMG’s VSD sales specialist at the new VSD workshop in Cape Town.

Many clients insist on official OEM certifications before services can be conducted and with BMG’s extensive experience and specialised training, the team is well-positioned to meet these requirements.

BMG also offers specialised training to customers and shares expert knowledge about advanced VSD technology that enhances plant productivity.

BMG’s other dedicated VSD workshops are based in Gauteng and KwaZulu-Natal.

The company’s comprehensive range of equipment and components includes bearings, seals and gaskets; power transmission; hydraulics and pneumatics; fluid technology and filtration; drives, motors and controllers; materials handling; fasteners and tools.

For further information Dave Dyce, Business Unit Manager: Electronics, ElectroMechanical Division, BMG Mobile: +27 67 406 4618, Tel: +27 11 620 1546, Email: daviddy@bmgworld.net

Drone technology gives wildlife economy a boost while helping to reduce insurance risk

INNOVATIONS such as drone technology are making a significant difference in wildlife conservation – and the insurance industry is endorsing digital-led solutions with gusto, reducing risk for game farmers and hospitality establishments alike.

The theme for this year’s World Wildlife Day was Connecting People and Planet: Exploring Digital Innovation in Wildlife Conservation – underscoring how the human touch combined with cutting-edge technology can be a formidable force in protecting the environment.

According to Greg Dillon at iTOO Special Risks, leaders in drone insurance, the robust demand for commercial drone insurance is underpinned by the strong impact these unmanned aerial vehicles are making in certain sectors of the economy, including agriculture, events, tourism and hospitality.

Besides their applications in crop spraying, soil monitoring and data collection in commercial farming operations, drones are also revolutionising how game farms and nature conservation operations are run, says Andries Wiese, national business development manager at Hollard.

“Drones are being used to map game farms and their fixed property aerially, which is really helpful to us when it comes to the insurance underwriting process,” he says.

“They also help combat illegal wildlife trading by detecting body heat and tracking the movements of poachers and game in remote rural areas through sophisticated infrared, thermal imaging and movement sensing technology. Not only that – drones also aid in firefighting and disaster management efforts in wildlife reserves.”

Wiese says drones are one of the technological innovations currently being used to assist with risk management in the wildlife economy, primarily in game management. He believes that technology can form the foundation of a collaborative approach to minimising risks to tangible assets, livelihoods, the natural environment, and both human and animal life.

In the face of natural disasters and certain man-made incidents (including arson) in recent years in South Africa, Wiese says the insurance sector has played a major role in keeping the conservation and wildlife economy afloat and on its feet. He believes a joint effort is required to enable safari lodges and game farms to minimise liability and lower their insurance premiums through preventative measures, to ensure a safe environment – such as using electronic consent forms or digital signatures to signal guests’ acceptance of certain establishment safety rules.

He relates a recent incident of a family who left a bowl of fruit on a table at a unit in a private game reserve and forgot to close the window. A passing elephant decided to help himself – taking out the window, the frame and part of the wall in the process.

“That’s nobody’s fault, but we have to manage risk from an insurance point of view. The onus is on the owners to convey to their guests certain safety precautions – even the obvious ones – like ‘close all doors and windows’.”

Wiese says that when these risks in the wildlife economy are mitigated, including through the use of digital tools, establishments will pay less for their insurance because they have put measures in place to reduce the risk for the insurer – and, ultimately, the guests and the environment will benefit too.

“The most valuable contribution that an insurer can deliver within this space is to recognise that game parks and lodges are the vehicles through which people can protect land and encourage game to thrive,” notes Wiese.

ArcelorMittal South Africa to get an Electric Arc Furnace

By Larry Claasen

ARCELORMITTAL South Africa says it is still committed to its decarbonisation roadmap that will see it become net-zero producer of carbon by 2050.

As part of this plan, the steel maker wants to reduce its carbon intensity by 25% by 2030, from a 2018 baseline of 2,90 tons of CO_2 ton of crude steel to 2,16 CO_2 of crude steel according to its 2023 Decarbonisation Roadmap.

> "Though the group is committed to decarbonisation, it noted in the roadmap that circumstances might force it to change its plans.."

The 2030 goal is the group's immediate concern, says group manager, stakeholder engagement and communication, Tami Didiza.

"The main focus for ArcelorMittal South Africa at the moment is to achieve the 25% reduction by 2030. There is a lot that needs to develop beyond 2030 in terms of technology to achieve net zero by 2050."

One of its plans to achieve its decarbonisation goals is to replace one of its two blast furnaces at Vanderbijlpark, named C and D. These have annual production capacities of 1,3-million tons and 1,9-million tons respectively of molten iron, and account for a "significant amount" of carbon emissions.

The plan is to replace C with an Electric Arc Furnace (EAF) that uses natural gas and make changes to D and have it returned to service as a "low-carbon enabled furnace."

When it comes to replacing C, Didiza says it is making progress.

"ArcelorMittal South Africa has completed the studies on the EAF for Vanderbijlpark and is currently in the market for a quotation for the EAF. This is all part of the program to have it up and running in Q3 2028."

When it comes to the cost of the new EAF, Didiza says: "We have good estimates. We are currently in the market to firm up the prices for the specific design."

Aside from its plans at Vanderbijlpark, the roadmap also said it planned to produce direct reduced iron (DRI) at its Midrex plant in Saldanha using natural gas.

Didiza said the group was still looking into the feasibility of the Saldanha project.

"The initiative is currently in the pre-feasibility stage which should be finalised during the course of this year. Depending on the final outcome ArcelorMittal will take the decision whether or not to proceed to the feasibility stage."

In the roadmap, ArcelorMittal noted that green hydrogen DRI would "require significant public support."

Didiza says this project is not at the stage where it would need to make financing decisions. "There is much more work required to get this project to that stage."

One of the hurdles noted in the roadmap was the lack of clarity on energy pricing on the part of energy regulator Nersa and power utility Eskom. It warned that the financial viability of its renewables procurement will be influenced by Eskom/Nersa's pricing structures, as well as wheeling charges - the fee for transmitting electricity over the grid.

Didiza says the pricing issue remains unresolved.

"We are in the final stages of developing our 200MW embedded solution at our Vanderbijlpark facility. Eskom approval is delaying the project."

Though the group is committed to decarbonisation, it noted in the roadmap that circumstances might force it to change its plans.

"We caution that this roadmap is by no means cast in stone and, as stated above, how we eventually implement our energy transition will almost certainly differ, in both detail and substance, from that outlined here."

Sassda's involvement in Steel Master Plan drives several projects

By Sassda executive director Michel Basson

Pic source: CSIRO

THE Southern Africa Stainless Steel Development Association (Sassda) is one of the most active stainless steel industry associations in the world and has, since 1964, been involved in increasing the awareness and use of stainless steel in Southern Africa.

The association provides a platform for Sassda members and the South African stainless steel sector to collectively promote the sustainable growth and development of the industry with the main emphasis on stainless steel converted within the South African economy.

This year sees the 60th anniversary of the Association and the South African stainless steel industry. It is important to ensure that any initiative for growth will be sustainable in order to be of any future value. Stainless steel can be described for many reasons as a "green" engineering material.

It is 100% recyclable and has a global recycling rate of 96% - even higher than that of plastics. Using stainless steel can therefore contribute to a sustainable future for all. Complete sustainability can only be achieved if there is economic, social, and environmental sustainability.

It was therefore important for the South African stainless steel sector to become involved with the Steel Master Plan since the research into such a plan started.

Sassda supports this initiative, but also accepted that the plan would not be without stumbling blocks and problems since it would be the first time that industry would interact at such a broad front with the government on an industry growth program.

It was also accepted that industry and government would make mistakes as the process rolls out and that these mistakes should then be regarded as learning opportunities to be addressed in process.

Through Sassda's involvement in the Steel Master Plan as official voice of industry the following projects flowed from the plan:

- Beer kegs: The local production of stainless steel beer kegs is an opportunity to develop a new local industry to address the fact that all beer kegs used by the major as well as craft brewing industries are being imported. This will contribute to job creation and the increased used of locally produced material.
- Hollowware: Sassda is working with members and the retail sector to localise 10 000 tons of stainless steel hollowware such as pots, pans, cooking utensils and cutlery that is imported yearly into South Africa. The aim is to revive a local industry that has dwindled over the past 15 years due to the import of dumped product and sub-standard items.
- Structural profiles: It is strategised to get the utility grade stainless steel 3CR12 included in the national standards for electrical transmission towers and rural bridges. This and the requirement for government procurement from local suppliers can drive the requirement for general structural profiles in 3CR12. This will open further markets for structural profiles and possibly even exports. Whereas kegs and hollowware can be regarded as job creators, structural use will be tonnage generators.
- These initiatives are still moving forward albeit at a slow pace. Sassda believes that the resilience and tenacity of the industry will eventually see these projects to success and that stainless steel will in future continue to show itself to be simply brilliant.

Need for business grading system in South Africa - NEF

THERE is a great need for the Small, Medium and Micro Enterprises (SMMEs) Grading system in the South African market, says National Empowerment Fund (NEF), acting CEO, Mziwabantu Dayimani.

Dayimani said the SMME Grading system concept has been geared to not only improve the ability of SMMEs to access credit but to also increase their global competitiveness and boost exports.

According to Dayimani, such a tool would assist with due diligence purposes. A lot of businesses that the NEF supports do not have the necessary background information and intelligence on products that have been proposed that could be included in the tool.

Director of Economic Infrastructure and Logistics at the Department of Trade, Industry and Competition (DTIC), Thami Klassen said his department was excited about the opportunity to work with a team of experts and ensure that such a programme is implemented.

The DTIC is currently conducting a survey to determine whether there is a demand for the creation of an SMME grading system.

Such a system would have the objective of decreasing the information asymmetry inherent with these businesses.

Energy drinks category continues its double-digit growth trajectory

Khathu Musingadi, research analyst at BMi Research.

THE ready-to-drink (RTD) energy drinks category continues to be the fastest growing segment within the non-alcoholic beverage industry in South Africa, according to a new BMi Research report on the drinks markets.

Khathu Musingadi, research analyst at BMi Research explains that this growth is driven by a consumer perception that RTD energy drinks offer both a refreshment benefit, as well as an energy boost, and as such provide a value-added benefit. Growth is also aided by aggressive pricing of value-brands and effective promotional activities which have contributed to the continued prominent performance of this category. Brand owners have advertised the potential of energy drinks to boost physical and mental performance, a message which has found a receptive market.

RTD energy drinks were initially all largely imported, premium priced products. Primarily locally produced value-added products were subsequently introduced to the category almost a decade ago.

BMi Research has been tracking the energy drinks market for more than 20 years. While overall beverage sales dropped in 2020 as a result of the COVID-19 pandemic, the RTD energy drinks market was the only non-alcoholic beverage category to record both volume and value growth in this period, albeit at a slower rate than pre-pandemic. Post the pandemic, its growth has recovered and in the last two years the RTD energy drinks category has recorded double digit growth in both volume and value.

However, as the RTD energy drinks market becomes increasingly saturated, Musingadi expects that category growth will start to slow. "In the last four years, the category has experienced a 17% year-on-year growth rate and this year we expect a growth rate of just over 18%. However, as the market becomes increasingly saturated from a volume perspective, it will become harder to achieve these high growth rates. We therefore expect growth to start slowing down in the medium to long term to around 15% from 2025. Locally produced value brands are expected to drive this continued growth due to their affordability and innovation," she says.

When it comes to distribution channels, the wholesale channel is currently the largest, having experienced the most growth between 2022 and 2023, followed by top end retail and garage forecourts. Bottom end retail, including spaza shops and street vendors, is also seeing growth, albeit off a lower base, with more affordable value-brands targeting the working class.

Persistently high inflation, a high unemployment rate and a sluggish economy are amongst the factors impacting growth in the category. While the price of value-added products remained static for many years, that is slowly starting to change with price increases beginning to be noted.

Energy drinks were initially primarily targeted at consumers interested in sports or with active lifestyles. Most energy drinks include the amino acid taurine and have a high caffeine content. Some also include other legal stimulants such as guarana and ginseng. They differ from sports drinks which are high in electrolytes and typically come in a plastic bottle with a lid. RTD energy drinks, on the other hand, are typically packaged in a can.

Daybreak Foods' news CEO is ushering in the changes at the chicken producer

By Larry Claasen

WHEN Richard Manzini took over what was then known as Daybreak Farms at the beginning of 2024 , he took charge of a troubled organisation.

The chicken producer, which has changed its name to Daybreak Foods, had to deal with the multimillion-rand irregularities prior to his appointment. The end result is that new appointments were made to its board and Manzini was made CEO.

South Africa is the biggest producer of chicken in Africa, producing close to 2-million tons of chicken a year. Daybreak holds approximately 7% of the South African chicken market, and steady growth is expected.

Though Manzini has only been in charge for a few months, he has been quick to usher in the changes at the group, which was bought out of Afgri by the government pension fund, the Public Investment Corporation (PIC) in 2015.

One of his key goals was to institute better governance controls at Daybreak.

"It was bought out of Afgri, but it was never really allowed to corporatise itself. We put in a lot of policies and standard operating procedures across the business, which were not there, or partly there, and not followed through."

This in effect also meant people were held to account for their actions.

"This was the start of a cultural change management process."

Manzini says people started to understand that things were going to be done the correct way, resulting in decisions being made a lot quicker.

"If you can't make a decision in 30 minutes, if something is wrong, it gets escalated to the CEO's office."

Manzini is confident about the path Daybreak Foods is on, despite the outbreak of bird flu and rising feed prices knocking the sector.

"The business has legs, it just has to be given the chance to run. We are slowly running the marathon now, and we will start sprinting in a couple of months."

Apart from better governance, Manzini also plans to improve Daybreak Foods' environmental performance, by investing in a water treatment facility.

"We use a lot of water and draining it, and not actually replenishing it."

A changing market

Aside from corporatising Daybreak Foods and dealing with bird flu and rising feed prices, Manzini is also adjusting the group to a changing market.

Daybreak Foods is best known for selling its 5kg mixed bag of frozen chicken pieces. This also means its abattoir facilities are designed around delivering this product.

Daybreak Foods CEO Richard Manzini.

The market, however, has shifted. People increasingly want ready to cook packs like chicken strips and deboned meat.

"We need to capture that market growth. Townships now have convenience stores, which means the old ladies don't have to plan for that one trip into town. And that's why they are buying fresh products."

Loads shedding is also playing a part in the market shift as the inconsistent power supply means chicken cannot be frozen for long, resulting in people wanting smaller and fresh packs of meat.

The problem for Daybreak Foods is that its abattoirs are largely designed for frozen products and not for fresh meat.

"The fresh meat market has grown by 52%, but we have only grown our revenue and volumes by 6%. So I'm missing out on all that growth."

To adapt to this changing market, is looking to raise capital to invest in abattoir facilities that can produce more fresh meat.

"We need about 18 months to sort out the balance sheet, starting with raising the R250-million in loans," says Manzini.

Enhancing beer brewing precision with VEGA

BREWING beer is a complex process that requires utmost precision in every step.

Even the slightest variation in ingredients or brewing techniques can significantly impact the final flavour and aroma of the beer. To ensure precision, it is crucial to measure and control the pressure and point levels in the wort kettle and hops dissolver. Using VEGA instrumentation can offer numerous benefits to breweries.

The process of brewing beer involves the use of hops, which give it a distinct flavour and aroma. Achieving the right balance of hops during the brewing process is crucial for producing a high-quality product. Precise measurements play a pivotal role in ensuring this balance.

In particular, when blending and cooking wort and hops in the wort kettle, it is essential to have reliable control of dosage and cooking. This is where integrated pressure and point-level measurements come in.

The measuring tasks in the wort kettle and hops dissolver encompass pressure and point-level measurements, which cover a range of up to 5m. These measurements must be taken under challenging conditions, including temperatures ranging from 10 degrees Celsius to well over 100 degrees, and pressures of 2 bar and beyond. These conditions introduce unique challenges such as foam, condensation, and the presence of solids in the liquid. However, with the right equipment and expertise, these challenges can be overcome, resulting in a superior product that beer lovers will enjoy.

VEGA's process instrumentation is designed to meet the rigorous demands of beer brewing applications. These sensors are not only reliable but also crafted with certified materials compliant with FDA and EC regulations. The benefits extend further with cost-effective, maintenance-free operation, ensuring durability and reliability throughout the brewing process.

Additionally, their user-friendly design simplifies setup and commissioning via a standardized VDMA-compliant interface.

The VEGAPOINT 23 stands out as a compact capacitive limit switch tailored for water-based liquid detection.

With optional universal connections for hygiene adapters, installation efforts are minimised, making it an ideal choice for hygienic processes in the food, beverage, and pharmaceutical industries. Its compatibility with IO-Link enables continuous digital data transmission, enhancing monitoring capabilities.

Similarly, the VEGABAR 39 serves as a universal pressure transmitter, equipped with a metallic measuring cell suitable for gases, vapours, and liquids up to 130°C.

Featuring a display with the on-site operation and a coloured 360° status display, it ensures easy monitoring and control.

For more information contact: https://www.vega.com/en-za

SKF showcases its robust product solutions at Nampo 2024

THE agricultural industry is pivotal to combatting food shortages and hunger around the world. Farmers are subsequently under increasing pressure to increase yields year-on-year while ensuring business profitability by keeping input and operational costs to a minimum. Exponential rises in costs, especially where diesel prices are concerned, present tremendous challenges, driving farmers to harness more from their machines and equipment.

Combine harvesters, tractors, balers, disc harrows, and planters, are subjected to punishing conditions where the ingress of contaminants such as dirt, dust, mud, water and crop residue cause component wear and damage. This can result in premature equipment failure. With limited window periods for every crop cycle, equipment breakdowns and subsequent unproductive downtime, repair costs and even with potential negative effects on yields, carve into profits.

Advancements in technology have transformed the agricultural sector, with farm equipment delivering increased performance, reliability and lifecycle, while being more efficient and producing fewer emissions. SKF ploughs the latest innovations and technologies into the design and engineering of its integrated and comprehensive range of agri-specific solutions. Products include radial and axial bearings, hub bearing units, bushings, seals, lubrication systems as well as chains and belts. These products undergo rigorous testing to ensure optimum performance and reliability in every stage of the crop cycle – from tillage, seeding, fertilising, and irrigation to harvesting, mowing and baling.

"Our bearings and seals are developed to provide reliable rotation by withstanding contaminant ingress, temperature extremes and corrosive chemicals that are present in the gruelling agricultural environment. The results are high machine and equipment availability, minimum maintenance and low operating costs for farmers," states Charl Engelbrecht, SKF key accounts manager - agriculture.

The company's range of radial ball and roller bearings as well as agricultural insert bearing units, incorporate a relubrication-free design and a high-performance sealing solution and are ideal for combine harvester applications, such as baling and mowing.

Engelbrecht stresses that, with 56% of bearing failures caused by inadequate lubrication and subsequent contamination, a proactive lubrication programme is essential. "Add to this, lubricants amount to only 2 to 3% of running costs in agricultural machines, but poor lubrication accounts for 40 to 60% of maintenance costs." A well-executed maintenance strategy that involves the systematic application and control of lubricants will reduce friction, heat and wear between moving parts, preventing breakdowns, maximising performance, reliability and efficiencies, extending equipment lifecycle, lowering maintenance costs, enhancing safety and meeting environmental compliance.

"The correct choice of lubricant carries as much importance as applying the correct lubrication methods," notes Engelbrecht. "With years of experience with bearings, lubricants and applications as well as through continuous research, field-testing and validation, we have developed lubricants specifically suited for agri equipment."

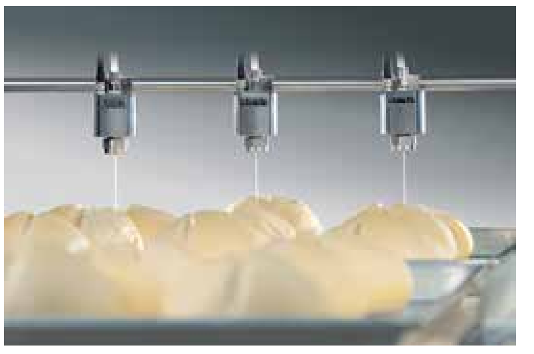
When it comes to power transmission solutions, SKF develops and designs agricultural chains in close collaboration with equipment manufacturers, distributors and end-users, ensuring that their solutions meet stringent demands and address farmers' real-life needs.

In collaboration with its brands PEER, Chicago Rawhide and Lincoln, SKF provides robust, world-class quality agri product solutions that add end-to-end value to equipment throughout the crop cycle, enabling farmers to sustainably achieve profitable yields and successful business outcomes. "Moreover, our products are specially designed to have a positive impact on the environment," concludes Engelbrecht.

SKF will showcase its comprehensive range of premium brand agri-specific products at Nampo 2024 (Nampo hall: stand #121), from 14-17 May in Bothaville in the Free State.

Spray technology gives bakeries the competitive edge

By Diane Silcock



THE baking industry, not unlike other manufacturing sectors, continually faces competitive pressures. In their ongoing efforts to improve quality, boost productivity and control costs, commercial bakeries are finding that spray technology can be a very effective tool in meeting a number of persistent challenges.

MD Grant Orsmond of Monitor Engineering – an expert in spraying technology – discusses how this technology is proving to be effective in solving problems in bakery operations, primarily related to consumables, where closely controlling application rate and location can reduce waste of costly ingredients and boost overall efficiency and effectiveness.

"The four primary concerns in baking, and in the food production industry as a whole," says Orsmond, "are food safety, employee health and safety, sustainability and doing more with less.

> "The new system resulted in improved product quality while reducing olive oil consumption by nearly 75%"

Major technological advances over the last decade are enabling us to play a significant role in helping bakeries address these concerns. This is especially true with regard to automation, the adoption of which has steadily enabled bakeries to do more with less while also improving product consistency. Automated spray systems provide bakeries with an array of options for reducing waste and increasing product quality and shelf life. Automation reduces waste of costly coatings, ensures uniform application to reduce quality problems and contributes to sustainability efforts through efficient use of resources."

He explains how their AutoJet® Precision Spray Control systems consisting of an AutoJet spray controller, work in concert with nozzles selected for each particular application.

Although there is great variation among systems, the underlying objective is the same: apply a precise amount of material at the proper time in the proper location.

He says that this approach addresses the cost of consumables head on, because many standard bakery operations result in over- or under-application, both of which drive up costs.

Choosing to spray improves quality and cuts waste

In addition to saving on consumables, the work environment is also improved through the frequent reduction of waste.

Eliminating the misty overspray that compromises air quality and causes slippery surfaces contributes to an overall safer working environment.

Gaining control over unwanted misting also reduces – and may well eliminate – the need for personnel to be permanently assigned to keep floors and equipment clean in the operating area.

Controlling material application by ensuring an optimal application of a release agent, for instance, results in less sticking and fewer rejections, thereby enhancing product quality.

Using only the amount of coating necessary extends the time between pan glazing and pan and conveyor cleaning.

Where coatings are being applied to food products, automatic control results in better product consistency, which may also mean better consumer appeal or more predictable shelf life.

Orsmond refers to a particular case study where a manufacturer wanting to apply a precise amount of extra virgin olive oil on each bread slice before toasting, replaced its old system of air atomizing nozzles with an AutoJet spray control panel and PulsaJet® automatic flat spray nozzles.

This eliminated the need for compressed air as well as misting and overspray problems. The new system resulted in improved product quality while reducing olive oil consumption by nearly 75%. The company's monthly oil savings were significant and paid for the system in just a little more than one month.

Monitor Engineering is the sole agent in southern Africa for Spraying Systems Co. and has been importing quality spray nozzles, automated spray systems, customised fabricated shower headers, spray lances and accessories for 75 years.

Learn more at: www.spray-nozzles.co.za

Food-grade lubricants: your complete, food manufacturing business maintenance solution

FOOD-grade lubricants have come into the spotlight as a very important issue in the operational maintenance of the food production and processing industry. Following two major events that have caused major disruptions in the continuity of functions for businesses, namely the listeriosis outbreak of 2017 and the COVID-19 crisis that started in late 2019, food safety, and the conditions in processing environments, as well as how they are maintained have never been more important for the continent.

But why food-grade lubricants?

While health and safety laws are seen as a priority for the food industry, hygiene and cleanliness standards are just as important on the workshop floor.

This is where lubricants have to perform their designated task of reducing wear, friction, and corrosion while having the added undertaking of being food safe.

The relentless environment of food processing environments is such that products need not only be able to endure the stresses and strains of machinery that are heavily used, but also provide optimal protection against oxidation, rust, bacteria, and any other form of contamination.

Engen FoodPure: The complete lubricant solution for your business

Engen's range of standard-quality, food-grade lubricants are designed to meet the specific needs of the bakery, butchery, packaging, beverage, pharmaceutical, sugar, cosmetic, and food processing industries. Not only do they ensure the lifespan of your equipment, but also have the highest certifications for safety and quality, giving you complete peace of mind in your business.

How FoodPure benefits your business:

- Certified for prestige quality range – Prestige, Premium, and High-quality products meeting or exceeding industry and/or OEM specifications
- The range is complete and caters to every part of your manufacturing processing operation
    - No need for you to secure multiple products for each category of equipment
    - Saves your business time and effort
- Non-contaminant
    - Reduces HSEQ risk – spoilt product, product recalls, etc.
    - Reputational assurance from a leading non- contaminant lubricants provider

For more information, contact your account manager or visit www.engen.co.za

New KHS aseptic block with bottle sterilisation

By Diane Silcock

WITH its new aseptic block for bottle sterilisation KHS is setting standards in safety and hygiene. Beverage bottlers don't have to compromise on performance here, however: thanks to its rotary filler, the block can produce triple the output of the linear filler. Where maximum safety is of prime concern when filling sensitive beverages into PET bottles, KHS' linear aseptic fillers have long proved themselves on the market.

It's thus only logical, then, that the German systems provider is now proud to also present a rotary aseptic filler for higher capacities whose hygienic properties are setting new standards.

Here, the machine and systems manufacturer is consciously focusing on bottle sterilisation that – unlike preform sterilisation – can also be combined with the KHS FreshSafe PET coating system that provides additional product protection for sensitive beverages. In this procedure all potential germs are removed from the containers directly prior to filling. This gives bottlers more flexibility and greater availability during format changeovers than with preform sterilisation, where changing the stretch blow molds disturbs the sterile state of the block. Bottle sterilisation also allows lightweight containers to be gently handled with ease.

New filler design

The new rotary Innofill PET ACF-R filler has been combined with the energy-efficient InnoPET Blomax Series V stretch blow moulder. The resulting InnoPET BloFill ACF-R aseptic block currently has a capacity of up to 36 000 1 0-litre bottles per hour as opposed to the linear fillers that work at a maximum rate of 14 000 bottles an hour. In the future the block will even be available with an output of up to 48 000 500-millilitre bottles every sixty minutes. In addition, the new plant engineering achieves a sterility of log 6 inside the bottles – which is equivalent to a reduction in germs of 99,9999%.

During development special attention was paid to the aseptic filler that was completely redesigned. One key feature was to limit the structure to a maximum of four smaller stars for the supply of hydrogen peroxide (H_2O_2) and activation and drying with sterile air.

The stars are used in place of the previous large carousel. The benefits of this simplified technology are lower consumption figures and lower costs for installation and maintenance thanks to the machinery's modular design and smaller footprint.

"The sterile zone must be completely encapsulated and kept separate from the bottling shop," says Manfred Härtel, filling product manager for KHS.

"Large carousels need a liquid lock to separate them from the ambient air. This isn't necessary on our version with the small stars, making the machine very much easier to configure and operate."

High standard of hygiene

The InnoPET BloFill ACF-R is spread out over two levels: at ground level are the stretch blow moulder, sterilisation module, filler carousel and two-way servocapper. The process technology with the service module, H_2O_2 preparation, sterile compressed air production, cap sterilisation unit and valve manifold are up on the platform.

The outsides and insides of the PET bottles are sterilised before they reach the filler's aseptic zone where the sensitive products are filled into the containers and then sealed on the servocapper.

For more information contact: https://www.khs.com/en/

Turnkey agriculture solutions from the ground up from Bearings International

"AS a trusted partner to South Africa's agricultural sector for some 66 years, Bearings International (BI) supplies integrated product and service solutions that ingrain the entire agriculture supply chain. "From soil preparation, fertilising, ploughing and planting to irrigation, harvesting, processing and packaging – we've got it covered," says Andrew Altree, BI agriculture segment lead.

"We essentially have products for all seasons."

The primary differentiating factors of BI's agriculture offering are quality of products, competitiveness of pricing, standard of service and expanse of footprint. BI's comprehensive agriculture product solutions include bearings, hubs and units, coulter discs, planting and fertilising coulters, plumber and pillow blocks, sprockets, belts, motors, gearboxes, chain, lubricants, PTO's, accessories, parts and spares.

These products operate on a wide variety of farming machinery, equipment, and irrigation systems as well as in agriculture product processing and packaging environments.

Agriculture is fundamental to cultivating economic growth and food security and, on these grounds, it is one of BI's primary segments.

"In order to meet our objective of optimising our customers' operations through the provision of customised, quality product and service solutions, it's imperative that we, first and foremost, have a good understanding of their respective segments, giving rise to our segment approach," states Christian Chipamaunga, GM end-user markets at BI.

"In line with this strategy, we place a deliberate focus on key industries to gain in-depth knowledge and insights that enable us to deliver on-point solutions to our customers."

For agriculture, like any industry, sustainability hinges on achieving maximum yields with minimum input costs.

Modern farmers must balance the exactness of science with the unpredictability of the weather. Added to this, they have limited planting and harvesting window periods. Downtime caused by machine and equipment breakdowns in the field can potentially lead to poor yields or even crop failures.

"With our more than six decades of experience, we are deeply rooted in Southern Africa's agriculture space. This, combined with the insights that we have garnered in this segment, enable us to tailor our solutions so that we give the farmers exactly what they want, when they want it," states Chipamaunga.

Issued on behalf of: Bearings International (BI) https://www.bearings.co.za/

Goodyear and ZF collaborate to improve vehicle motion control with tyre intelligence

THE Goodyear Tire & Rubber Company, a global leader in connected mobility, and ZF, a global leader in vehicle systems and industrial technology, announced successful integration of tire intelligence technologies with vehicle motion control software.

The collaboration delivers Goodyear SightLine,* a suite of tire intelligence technologies, into the ZF cubiX®** ecosystem, a scalable vehicle motion control software that coordinates all dimensions of vehicle dynamics. This provides further tire and road data into the chassis system and enables an improved driving experience with better comfort, control and efficiency.

"Goodyear SightLine will deepen our connection to the road and expand the scope and value of cubiX® by supporting the era of software-defined vehicles," said Martin Fischer, member of the board of management responsible for the ZF Chassis Solution division.

"By joining our ecosystems, our customers will unlock a range of possibilities to customise and optimise their solutions in both vehicle motion and tire intelligence."

Through research, virtual simulation and real-world testing, Goodyear and ZF have identified the potential of an integrated solution in improving vehicle performance and safety.

Reducing the risk of hydroplaning, the Goodyear SightLine solution is capable of detecting partial hydroplaning early and offers recommendations for optimal speed to enhance vehicle control. Moreover, when heightened hydroplaning severity is detected, equipped with tire intelligence data, the cubiX software is designed to instruct the chassis actuators to apply corrective measures, stabilising the vehicle.

Additionally, the synergy between Goodyear SightLine and cubiX capabilities can provide enhanced vehicle responsiveness, more direct and linear steering, improved turn-in response, increased stability, reduced controller workload and minimised intrusive interventions.

"Tires are the only part of the vehicle that touch the road and by digitising this connection and equipping vehicle control actuators with critical insights, we can help optimise vehicle performance and safety," said Chris Helsel, senior vice president, global operations and chief technology officer, Goodyear.

"This collaboration with ZF is a great way to demonstrate what tire intelligence, actionable insights and elite software applications can do for mobility."

Showcasing innovative design and engineering features, the integration of cubiX® and SightLine was recently named a CES 2024 Innovation Award Honoree within the vehicle technology and advanced mobility category.

The silent threat in the workplace: Is your business safe from electrical hazards?

Dr Andrew Dickson, engineering executive at CBI-electric: low voltage.

EVERY year, R7-billion is paid out by the Compensation Fund and Rand Mutual Assurance to address occupational injuries and diseases in South Africa. This statistic highlights the pressing need for improved health and safety practices in workplaces across the country. This is because unfortunately, many of these accidents are caused by overlooked hazards.

According to Dr Andrew Dickson, engineering executive at CBI-electric: low voltage, almost all businesses in South Africa rely heavily on electrical equipment, yet exposure to it is one of the leading causes of death in the country. With this in mind, and in light of World Day for Safety and Health at Work, he urges employers to consider this and ensure that protective measures are in place.

He outlines the most common causes of electrical accidents in the workplace and how they could be mitigated:

1. Ground-faults: Under normal conditions, electricity flows in a closed circuit, travelling from the live to the neutral conductor. A ground fault occurs when this current escapes the circuit and travels to the ground instead. In these instances, the alternate electrical path to ground may be through the user, resulting in serious injuries or death. To prevent these, workplaces must ensure that all necessary circuits are protected by an earth leakage device, also known as ground fault circuit interrupters (GFCIs).

2. Overloaded Circuits: When too many appliances or machines are plugged into a single circuit, it can become overloaded. This can also happen when appliances or machines with high electrical current demands, like industrial heaters, laser cutters, or copiers, are plugged into circuits not designed for such loads, exceeding the circuit's capacity.

3. **Voltage spikes**: Electrical devices are designed to handle specific voltages but can be subjected to higher voltages than they are designed to handle, which can damage the equipment. Typical causes include damaged wiring, lightning, and switching, such as when electricity returns after load shedding. Businessowners should ensure that they have adequate surge protection devices (SPDs) in place.

4. Counterfeit electrical products: Employers must ensure that the electrical products they install are the genuine article as most counterfeit lookalikes are unsafe and can even cost lives since they are typically made from inferior materials and do not meet the necessary conformance standards for public health and safety as well as for the protection of the operating environment.

5. Lack of proper training on electrical safety procedures: When employees are aware of the risks around working with electricity and the safety measures that must be taken, it can go a long way towards ensuring that accidents are avoided. It could even mean the difference between life and death.

Aberdare Cables shines at the China Job Fair 2024

ABERDARE Cables represented itself at the prestigious China Job Fair 2024, held at the Gallagher Convention Centre in Midrand on April 16th.

The Job Fair 2024 of Chinese-Invested Enterprises in South Africa organised by the South Africa-China Economic and Trade Association (SACETA). Around 2 800 job seekers attended the fair, with many securing placements.

As a beacon of innovation and excellence in the cable manufacturing industry, Aberdare sought to recruit promising young talent to join its esteemed team.

The event provided an exceptional platform for Aberdare Cables to showcase its commitment to nurturing talent and fostering growth opportunities within the organisation.

With a focus on attracting individuals with diverse skill sets and a passion for innovation, Aberdare's booth stood out amidst the bustling fairground.

The company's representatives engaged with aspiring professionals, sharing insights into Aberdare's rich heritage, cutting-edge technologies, and dynamic work culture.

Through interactive presentations and one-on-one discussions, attendees gained a deeper understanding of the exciting career prospects awaiting them at Aberdare Cables

By actively participating in the China Job Fair 2024, Aberdare reaffirmed its dedication to building a talented and motivated workforce capable of driving the company's continued success. As the event drew to a close, Aberdare expressed gratitude to all those who visited its booth and expressed interest in joining the company's journey of innovation and excellence.

Opening the fair, Chargé d'affaires Li Zhigang said the job fair was an important step towards implementing the consensus reached by South African President Cyril Ramaphosa and his Chinese counterpart, President Xi Jinping in their State meeting in South Africa in 2023.

"China is ready to work with South Africa to help create jobs and promote development, so that the bilateral relations will bear more golden fruits in the golden era," he said.

South African Minister of Social Development Lindiwe Zulu and Minister in the Presidency for Planning, Monitoring and Evaluation Maropene Ramokgopa thanked SACETA for meticulously planning the event, and expressed their readiness to deepen exchanges and cooperation between China and South Africa in fields such as the economy, trade and social development.

Head of SACETA Zhang Chaoyang, and representatives of Chinese-invested enterprises in South Africa and local employees also addressed the audience.

For more information on available vacancies and employment opportunities, kindly visit the Aberdare Cables website, www.aberdare.co.za. Alternatively you can forward your CV and qualifications to HO Vacancies@aberdare.co.za

R3,8-million Kensington underground electricity cable project under way

THE City's R3,8-million underground electricity cable project in Kensington is under way as one of the City's interventions to tackle the crisis-levels of load-shedding-driven vandalism across the metro.

The project will be completed by April 2024, if all goes as planned.

More than 5 500m of overhead electricity conductors as well as 42 transmission poles are being removed and will be replaced with 5 315m underground cable.

The City's mayoral committee member for energy, Councillor Beverley van Reenen and senior energy officials visited Kensington to have a look at the project's progress.

"The Kensington underground cable project aims to reduce the incidence and the risk associated with vandalism. The upgrades in the area will also assist with greater electricity efficiency. The project roll out is making excellent progress and we thank residents for their patience while we complete the work."

Moving to underground electricity cabling from overhead infrastructure has a number of benefits for the community.

It is important to note that an overhead to underground blanket roll out may not be immediately feasible in all areas at this stage and it is currently being rolled out where it is possible and feasible to do so.

"Once the project in Kensington is completed, it will greatly improve the infrastructure reliability, area aesthetics and safety. The City continues to invest in communities and deliver top-notch service in all areas in the city. The Energy Directorate also continues with its upgrading and maintenance programme of critical electricity infrastructure in the city and in the last financial year achieved a record breaking 96,86% of its R1-billion Capital Budget Spend for the year, which is a clear indication of our performance and service delivery," said Councillor Van Reenen.

Councillor Beverley Van Reenen at the project site in Kensington.

Benefits of underground power infrastructure

Improved reliability: Underground cable infrastructure is less susceptible to weather related faults such as storms and falling trees.

Visually appealing: Underground cable eliminates the need for poles and overhead power lines in an area, which greatly improves the visual appeal of an urban area.

Safety: Underground cabling reduces the risk of electrical accidents from people, cars and animals coming into contact with the power lines. It also holds potential to reduce the risk of vandalism.

The city asks residence to report all suspicious activities at or near electricity infrastructure to the City's law enforcement agencies or the City's Fraud Hotline on 0800 1100 77 or to the SAPS. The SAPS remains the lead authority in crime prevention.

Diesel vs Electric: which is better for pump systems?

Diesel is often the preferred energy for pump systems, particularly temporary sites. But electrical pumps can be a superior alternative.

FEW people question the wisdom of using diesel-powered pumps, particularly for temporary sites or rental arrangements.

Their faith is well-placed: diesel-powered portable pumps have been the standard for decades, supported by diesel's high and reliable power output and low energy costs.

Yet, while diesel remains a strong option, electric pumps have become a viable alternative, even for temporary and rental use cases. In terms of overall cost and value, electrical pumps are a compelling alternative, and where projects consider environmental and carbon-reduction factors, it's a leading choice, says Chetan Mistry, strategy and marketing manager at Xylem Africa.

"Diesel pumps used to be the obvious choice for most conditions, but the picture has shifted enough that electric pumps are now viable alternatives to a wider range of scenarios. It's not replacing diesel systems but provides sites with more choices. In some cases, electric pumps make more sense than diesel."

The benefits of electricity

The most common evaluation factor is overall pump costs. Diesel pump systems can have lower upfront capital costs than electric alternatives. However, those pump systems require frequent maintenance and refuelling. Electric pump systems have a much lower maintenance threshold and no refuelling, often offsetting their capital investment costs.

"The low maintenance and manual intervention requirements of electric systems make them less expensive over longer periods. Xylem's research indicates that when you run pumps for longer than three months, the economics start to favour electric pumps. But even in shorter timelines, electric pumps are starting to match diesel systems due to rising fuel prices."

Chetan Mistry, strategy and marketing manager at Xylem Africa

Energy costs are a significant motivator for using electric systems. Over the past ten years, diesel prices in South Africa have risen by over ten rands per litre. Local electricity prices have also risen sharply from 65,51c/kWh in 2013 to around R2/kWh in 2024.

However, electric motors offset much of that additional cost through higher efficiency levels, especially when using variable-speed motors that adjust to flow conditions. The question of energy cost is mitigated almost entirely when using solar-powered pumps.

Electric pumps' lower maintenance and service requirements also offset many of diesel's hidden costs, and the added advantages of lower carbon generation and quieter pumping conditions add to the case for using electric pumps.

Yet, they are not suited for all conditions. Notably, you need electricity to run such pumps, which can mean more outlay at the start to establish an electrical feed on a site if one isn't available. Solar systems address this problem, but they also have upfront infrastructure needs. Still, under most conditions—and especially for rental or sites that aim to evolve from temporary to permanent pumping systems—there is a strong case to consider electric pumps.

Making the best choice

Diesel pumps are not on their way out. Diesel systems have earned a reputation for resilience in harsh conditions, and diesel pumps are better suited for some conditions, such as pumping fluids with many heavy and large solids. They are also the preferred choice for remote and rural sites where access to electricity supply is unavailable or expensive. In very short-term scenarios, diesel's performance can give it the edge over electric systems. Diesel's portability also facilitates easy deployment, whereas electric systems are more likely to suit permanent installations.

For more information contact: https://www.xylem.com/en-za/

Red Rocket achieves financial close and starts construction of the largest grid-connected solar farm in Africa

RED Rocket has announced the successful financial close for the 275 MWp Virginia Solar Park, marking a significant achievement for the integrated Independent Power Producer (IPP).

Since launching in South Africa, Red Rocket has won in each of the bid rounds of the Renewable Energy Independent Power Producers' Procurement Programme (REIPPPP).

Located in the Free State about 140km north-east of Bloemfontein, Virginia Solar Park is the biggest solar farm under the REIPPPP and has a contracted capacity of 240MW, for which Red Rocket was awarded under Bid Window 6.

Altogether, the company secured the most megawatts awarded during this round, at 440MW, representing a monumental victory of 44% of the MWs awarded in Round 6.

> "Virginia Solar Park will be enough to provide power for up to 240 000 homes, making a significant difference in the country."

CEO of Red Rocket, Matteo Brambilla, has welcomed the latest milestone by the company, which has boldly and consistently held its own against large multinationals to become the most successful IPP in South Africa.

"Red Rocket has been highly successful in REIPPPP bid windows as well as in the increasing C&I market. We are proud to be the driving force behind REIPPPP's largest solar project to date, but not only that, we can proudly say the largest grid-connected solar farm on the continent is now in South Africa."

The announcement follows Red Rocket's reaching financial close and commencing construction on its three wind projects – Wolf Wind Farm in the Eastern Cape, Brandvalley and Rietkloof wind farms in the Western Cape – awarded in Round 5 of the REIPPPP, and the Witberg Wind Farm with a private off-taker. With the addition of Virginia, the Cape Town-based IPP has 750 MW projects under construction expected to reach commercial operation starting from the fourth quartet of this year.

Once construction is completed, the electricity generated from Virginia Solar Park will be enough to provide power for up to 240 000 homes, making a significant difference in the country. The project also stands to contribute over 331 full-time equivalent jobs during construction and operations.

Virginia Solar Park joins other successful projects in the IPP's portfolio – powered by its relentless mission to add crucial capacity to the grid – and is set to go a long way in helping South Africa address its immediate and future energy needs. The project is the culmination of a partnership between Red Rocket, investment holding company Reatile, equity partners, Jade-Sky Energy, and the Red Rocket Opportunity Trust. It will be financed by Rand Merchant Bank (RMB).

A joint venture between PowerChina and Green Whistle will build the Virginia Solar Park under a turnkey EPC contract.

The Cape Town based IPP got a $160-million (about R3-billion) cash injection last year from from Bill Kilgore Investments, a management shareholders vehicle, and a consortium of international clean energy investors that includes the Evolution II and III Funds managed by Inspired Evolution, STOA – an impact energy and infrastructure fund dedicated to emerging markets, and FMO, the Dutch entrepreneurial development bank.

It said at the time the money would be used to invest in REIPPPP projects and also in Commercial & Industrial (C&I) projects

For more information on Red Rocket visit: www.redrocket.energy

Africa Data Centres and DPA SA breaks ground on solar farm in Free State

AFRICA Data Centres, a business of the Cassava Technologies group, has broken ground on the construction of a solar farm in the Free State in collaboration with DPA Southern Africa. This announcement forms a crucial component of the 20-year Power Purchase Agreement (PPA) inked in March 2023 with DPA Southern Africa, a joint company of the French utility, EDF. The objective of the Free State farm is to furnish renewable energy to Africa Data Centres sites, commencing with its cutting-edge, carrier-neutral data centre in Cape Town, the CPT1 facility.

According to Cassava Technologies' President and Group CEO, Hardy Pemhiwa, "This initiative positions Africa Data Centres as a trailblazer in the data centre industry in responding to South Africa's energy crisis through sustainable technology solutions. This is in line with a broader industry shift towards innovative, eco-friendly practices. The strategic use of solar power showcases technology's role in pioneering solutions for energy challenges and environmental sustainability".

Tesh Durvasula, CEO of Africa Data Centres, underscores the commitment to powering all data centres with clean, renewable energy sources.

"Today's announcement represents a significant stride in our initiative to energise South African data centres sustainably, advancing our objective of achieving carbon neutrality. The first phase involves constructing the 12MW solar infrastructure to power our Cape Town data centre, with subsequent phases extending to our Johannesburg data centres."

Nawfal El Fadil, the CEO of DPA SA, states, "Africa Data Centres, as a pioneer in the data centre industry, has consistently demonstrated a strong commitment to sustainability, aligning seamlessly with our company's values. We are thrilled and honoured to contribute to Africa Data Centres' mission of achieving carbon neutrality, beginning with the establishment of this solar power plant in the Free State to serve their data centre in Cape Town. At the heart of our collaboration lies a shared understanding that the path to carbon neutrality extends beyond infrastructure—it demands innovation, expertise, and collective determination to overcome challenges. DPA SA, backed by EDF's legacy, brings a wealth of experience and a proven track record in delivering high-quality, sustainable energy solutions to this partnership."

> "Data centres worldwide face scrutiny for their reliance on grid power and renewables, and Africa is no exception"

"We take immense pride in supporting Africa Data Centres on this journey, being among the pioneers in launching a wheeling solar plant, thereby paving the way for a greener, more sustainable future in South Africa," adds Nawfal El Fadil.

This project is a key element of Africa Data Centres' ambitious plans to emerge as the most sustainable colocation provider on the continent.

"Beyond procuring renewable energy, our commitment to an efficiency strategy has earned us the internationally recognised ISO50001 certification for the effective operation of our data centres," Durvasula elaborates.

"Data centres worldwide face scrutiny for their reliance on grid power and renewables, and Africa is no exception. Africa Data Centres is actively addressing this issue by generating renewable energy, alleviating strain on the local grid. Additionally, our sustainability objectives encompass achieving net-zero status at all facilities, making this project another significant stride towards reaching that goal," concludes Durvasula.

For more information contact: https://www.africadatacentres.com/

Condra delivers optimal solutions for crane and hoist challenges

Condra's overhead crane engineering solution.

LOCAL overhead crane and hoist manufacturer Condra is adept at delivering optimal solutions for their customers. Their engineering expertise, along with the flexibility offered by their in-house design facilities and wide range of standard products, has placed them among the world's leading crane manufacturers.

Double bogeys on overhead crane save the day

Fitting double bogeys to the end-carriages of an overhead crane for a customer in Johannesburg, represented the key to the puzzle: how to meet customer specifications while still being able to install the completed crane in a factory with no roof access and limited headroom.

Usually, installation of a crane of this type involves lifting the disconnected end-carriages onto the gantry first, then attaching the girders to form the frame of the crane, and finally lowering the crab and hoist into position from above. In this case, however, there was not enough factory headroom to achieve that, even though Condra had designed the crane with a lowered profile to achieve maximum lifting height.

Condra's solution was to fit both 12m-span steel girders with bogeys at each end, four in all, and develop a different installation sequence. Fitting the girders with bogeys freed up an additional 20mm of headroom through reduced wheel loading and smaller-diameter wheels on the end-carriages.

Integral bogeys also allowed placement of the girders on the factory gantry as the first step. Moving the girders apart, delivered space to allow lifting of the hoist into position between them, instead of lowering it into position from above.

Closing up the girders, then linking and fixing their bogeys resulted in a completed crane with two double-bogey end-carriages. The installation was carried out at their customer's factory.

Solution for hoist with unusually large rope drum

An unusually large rope drum on a hoist nearing completion at Condra's Germiston factory, has been designed to hold and manage nearly 700m of rope, winding and unwinding it at high speed during very high lifts of 150m within a narrower-than-normal mineshaft. Careful calculation of rope drum dimensions and winding sequence was the focus of the drum's design. Drum PCD (pitch-circle-diameter) is 1 600mm and a 4:2 centre-lift reeving arrangement will avoid snagging the mineshaft sides.

The drum will carry 676m of 18mm rope, lifting and lowering loads at 30 m per minute, which is almost ten times faster than lifts in standard overhead crane workshop applications.

These are just some of the many engineering solutions that Condra has assisted their customers with.

To learn more visit: https:// www.condra.co.za

ENERGY MIX

RENEWABLE & ALTERNATIVE SOLUTIONS

Pioneering energy independence - Livoltek

IN an era where sustainable energy solutions are not just valued but required, our company has taken a significant leap forward with an ambitious project at one of our factories.

This initiative not only underscores our commitment to innovation and sustainability but also cements our standard for industrial energy independence.

The project was conceived to address the substantial energy demands of our factory which, at peak start-up, reaches 80 kW and stabilises at 40 kW during normal operations. The challenge was considerable, given the unpredictability of grid electricity and solar power integration in the initial phase. Our goal was clear: ensure uninterrupted production for 8 hours, solely relying on a self-sufficient power system. The solution: a sophisticated setup comprising a 100 kW Hybrid Inverter paired with a 310 kWh Battery Bank, capable of sustaining the factory's operations in the absence of conventional power sources.

A standout feature of our project is the 120 kWp Solar PV array, which consists of 220 high-efficiency Tongwei Monocrystalline panels.

This installation not only harnesses solar power but also reduces our carbon footprint, aligning with global environmental goals and demonstrating our leadership in ecological responsibility. The design and integration of these panels ensure maximum energy capture and conversion, providing a reliable and renewable energy source throughout the day.

One of the critical components of this system is the Hybrid Inverter, which seamlessly integrates energy storage and solar power, managing fluctuating demands efficiently.

This flexibility is vital for maintaining continuous factory operations without any interruptions, thus avoiding the costly downtimes associated with power outages.

Furthermore, to ensure we remain at the forefront of technology and operational efficiency, we have implemented the My Livoltek Online Monitoring & Energy Management software.

This platform is instrumental in providing real-time data and analytics on power usage, system performance, and efficiency metrics.

The software, offered free of charge, is not just a tool for monitoring; it's an integral part of our strategic approach to energy management, allowing us to make informed decisions and optimise our energy consumption proactively.

The benefits of this project extend beyond mere operational efficiencies. Economically, the reduction in energy costs is substantial, allowing funds to be allocated to other critical areas of development. Socially, by adopting green technologies, we are contributing positively to the community by reducing emissions and setting an example of environmental stewardship.

In conclusion, this project is not just a testament to our company's innovative capabilities but also a beacon of sustainable industrial practice. We've not only addressed our energy needs but have also laid down a blueprint that others in the industry might follow. Our commitment to sustainability and innovation continues to drive us forward, making us a pioneer in not just our field, but also in building a greener planet.

For more information contact: https://www.livoltek.co.za/

Steel Strong: B.E.D. Klerksdorp and Consulmet Construction: building on a firm foundation of reliable supply and customer service

IN the bustling heart of the North West province town of Klerksdorp, a partnership of innovation and reliability has flourished between Bolt and Engineering Distributors (B.E.D.) and Consulmet Construction, demonstrating a commitment to excellence in cutting and welding solutions.

Consulmet Construction, a leading name in the steel fabrication sector, has entrusted B.E.D. Klerksdorp with their cutting and welding equipment requirements, opting for their expertise and quality solutions, over those of other potential vendors.

The natural choice

Ian Lloyd, operations manager at B.E.D. Klerksdorp sheds light on the customer's choice: "Our partnership with Consulmet Construction has flourished as the company has grown.

We initially introduced Consulmet Construction's MD Martin Rautenbach to the latest GYS CO2/MIG/MAG welding machines two years ago, and the company made its first purchase shortly thereafter. With our local presence in Klerksdorp, Martin gained confidence in our ability to provide timeous supply and exceptional customer service – as well as the all-important after-sales support."

Consulmet Construction's specific requirements were meticulously addressed by B.E.D. Klerksdorp, taking factors such as reliability, performance, and sector-specific suitability into account, Lloyd explains.

"We tailor our solutions based on the applications and desired outcomes of our customers. Our range of equipment, including the MAGYS 400, PROMIG 400, and GYSMI 200 inverters and Hypertherm XPR 170 plasma cutting unit, offer unparalleled reliability and performance – which are all ideal for Consulmet Construction's steel fabrication requirements."

B.E.D. Klerksdorp recommended this equipment to Consulmet Construction based on a thorough assessment of their particular requirements, challenges and operational environment.

"We recognised that this customer could certainly not afford lengthy interruptions to their workflow due to equipment failures," he points out.

For all skills levels

User-friendliness and accessibility of the equipment, to cater to varying degrees of welding skill, also played a significant role in the product recommendation and selection process.

Considering the challenging working conditions in steel construction - including dust and unreliable, erratic power supply due to load shedding - B.E.D. Klerksdorp prioritised welding machines with robust features, recommending transformer-based equipment with built-in surge protection to withstand fluctuations in power supply without risking damage.

This advanced technology incorporates features such as microprocessors, semi-synergic operation and dynamic arc control, all of which provide precise and efficient welding performance. The machines' ability to adjust settings automatically based on material thickness, coupled with user-friendly interfaces, enhances productivity and minimises setup time.

Furthermore, the partnership between B.E.D. Klerksdorp and Consulmet Construction is also not just about meeting expectations – it is about exceeding them. B.E.D. welding and cutting specialist, Sean Christian recounts a particular instance where B.E.D. demonstrated exceptional responsiveness.

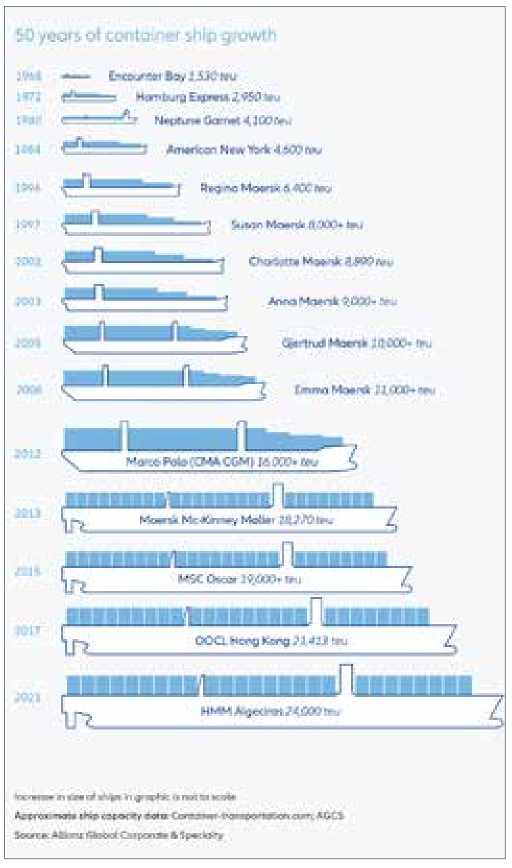
"Welding consumables wastage had become challenging at one point. We were able to effectively address this through the ingenious Hypertherm cartridge system."

Clever cartridge

The cartridge system is an innovative technology developed by Hypertherm, a leading manufacturer of plasma cutting systems and another of B.E.D.'s quality global suppliers.

The innovative Hypertherm cartridge system consolidates the multiple consumable parts into a single cartridge, so that when a consumable part needs to be replaced, instead of manually handling and aligning individual components, the entire cartridge is swapped out, reducing downtime and the risk of errors.

An in-depth look at the Baltimore Bridge collapse: Examining the safety of commercial shipping and implications for supply chains



By Larry Claasen

THE tragic collapse of Baltimore's Francis Scott Key Bridge in the US after it was hit by a container ship, the Dali, has made headlines around the world. In this Q&A, Allianz Commercial Global Head of Marine Risk Consulting, Captain Rahul Khanna, who sailed on oil tankers and bulk carriers for 14 years, explains that while such incidents are thankfully rare, the fact that ships are getting bigger can make a number of different events more complicated when they do occur.

How often do events such as ships hitting bridges and other port infrastructure occur?

First and foremost, this event is obviously a human tragedy, and our sympathies are with those who lost their lives or have been impacted by it.

Thankfully, such incidents of this magnitude are rare.

It is important to note that the majority of accidents involving vessels and bridges cause damage that varies from minor to significant but does not necessarily result in collapse of the structure or loss of life.

After this tragedy, how safe would you say commercial shipping is?

The shipping industry has made significant improvements when it comes to maritime safety over the past decade.

Annual shipping losses have declined by 65% over the past decade, reflecting the positive effect of an increased focus on safety measures over time.

Nevertheless, while total losses have declined, the number of shipping incidents reported around the world overall every year has remained consistent. There were 3 032 during 2022 compared to 3 000 a year earlier.

Container ships in particular have grown significantly in recent decades. What impact is this having on safety?

Container ship capacity has grown in size by around 1 500% in the last 50 years (see infographic) but it is important to note that the Dali isn't anywhere near as large as the biggest vessels now hauling goods around the world.

Nevertheless, it is still almost 1 000 feet long, the length of three football fields.

Ultimately, larger ships are not resulting in a higher frequency of accidents but when something does go wrong, the scale of the damage is likely to be much more severe because of their size and the fact that surrounding civil infrastructure did not anticipate such behemoths.

What are some of the typical risks associated with larger vessels?

While the number of serious shipping accidents worldwide has declined over the long-term, incidents involving large vessels – namely container ships and roll-on roll-off (Ro-ro) car carriers – are resulting in disproportionately high losses from events such as fires, container and carrier losses, hazardous cargo, more complex salvage operations and expensive repair costs, and issues with ports of refuge.

Across the industry, there are ongoing discussions about whether infrastructure and regulation have kept pace with increasing vessel sizes.

What are some of the potential implications of this incident for supply chains?

At this stage it is still too early to tell with any certainty.

The collapse of the bridge led to the suspension of vessel traffic at the Port of Baltimore, which is one of the largest US ports but is smaller than the nation's largest container terminals.

Outside of the implications from any tragic loss of life, however, insured losses could include a wide range of claims such as property damage, business interruption from the port closure, debris removal, cargo loss and clean-up, and damage to the vessel.

R1-billion investment to boost Transnet's tugboat availability

TRANSNET National Ports Authority (TNPA) is injecting a R1-billion investment in its marine fleet renewal programme through the acquisition of seven tugboats aimed at enhancing marine operations at its commercial seaports.

"The seven tugboats will replace marine craft that has reached its operational lifespan at the ports of Durban [in KwaZulu-Natal] and East London [in the Eastern Cape]. TNPA has awarded two contracts to a shipbuilding company, Damen Shipyards Cape Town, to deliver the seven tugboats from April to August 2024," Transnet said.

From this procured tug fleet, the Port of Durban has been allocated five tugboats and two will go to the Port of East London.

"This investment demonstrates TNPA's ongoing commitment in providing reliable marine craft at our South African ports, which will enable us to effectively service the marine industry and respond to global shipping demands," TNPA chief harbour master, Captain Rufus Lekala said.

The procured tugboats boast the latest hull design and propulsion, as well as a 60 ton bollard pull, which is a much-needed improvement from the bollard pull of the existing tugboats that will be replaced that ranges between 32 and 40 ton bollard pull.

"The 60 ton bollard pull meets international standards and makes the craft highly manoeuvrable while guiding larger and newer vessels safely in and out of the ports.

"TNPA's marine fleet programme demonstrates a reimagined focus in ensuring that the Ports Authority delivers on its mandate of providing a competitive port system in its role as an enabler of economic growth," Transnet said.

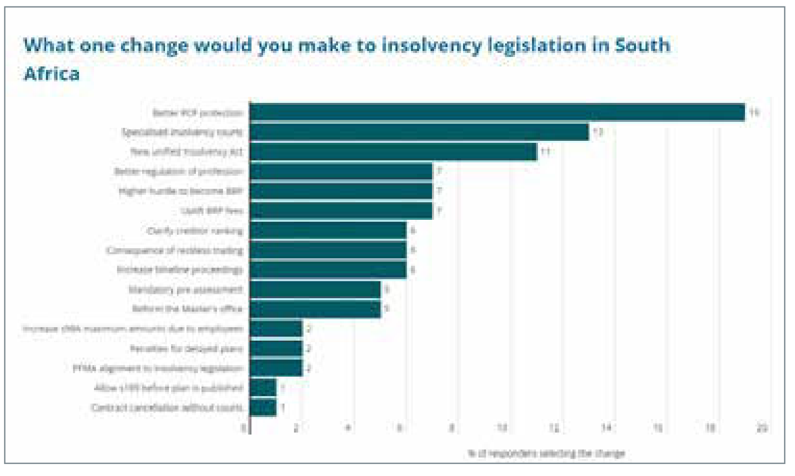
The acquisition of the tugs are part of Transnet's efforts to improve the performance of its port operations.

This latest deal follows Damen delivering the state-of-the-art plough tug, Mohoma to TNPA in May 2023.

"We are honoured to deliver this state-of-the-art plough tug to TNPA. This vessel has 45 tons of bollard pull, is 32m long and 9m wide, and can plough up to 25m deep. With a spacious working deck, this versatile workboat will serve as an asset for TNPA's ports and dredging operations. It showcases the Damen Group's design knowledge, the skill of our South African Shipbuilding team and our first-class local equipment manufacturers and co-makers," Sefale Montsi, director of Damen Shipyards Cape Town said at the time.

Dr Popo Molefe, chairperson of the Transnet board of directors said of Mohoma: "The demand for dredging services has increased in the region, and the addition of this plough tug will increase the berth capacity of the ports. Managing the demand is part of TNPA's growth plan, which will see the continuous improvement of port infrastructure.

Deloitte Africa Restructuring Survey reinforces the importance of effective governance and robust financial controls



THE annual Deloitte Africa Restructuring Survey reinforces the importance of effective governance and robust financial controls to ensure business distress is detected early enough to take the necessary steps to protect or salvage the organisation.

These governance and financial controls become increasingly important in the context of the recent Statistics South Africa Statistics data, which indicated a rise in company closures, with liquidations increasing by 34,6% (or 109 businesses) in January 2024, as compared to the same period the previous year. Industries impacted included financing, insurance, real estate, and hospitality sectors.

Jo Mitchell-Marais, Africa turnaround and restructuring leader for Deloitte Africa noted that, "The development of skilled and qualified directors will go a long way in assisting to improve the board's ability to both identify early warning signs of distress and take appropriate, timely, and corrective action. It is crucial that they have their finger on the pulse of the business, and broader socio-political and economic activity."

She continued by highlighting the elevated responsibility of the board, and specifically the board chair. In the Deloitte Chair of the Future report it was noted that chairs today play a critical role in the success or failure of their organisation; they serve as a trusted sounding board and guiding hand for the chief financial officer, and the broader executive team.

This C-suite, together with restructuring professional bodies, play a critical role in shaping legislation and regulation, for example with the planned Companies Act reform, pressure from business leaders should be the norm.

Mitchell-Marais noted her disappointment that three top considerations were not included in the recent draft bill, which would provide better protection of post-commencement financing (PCF), specialised insolvency courts, and a new unified Insolvency Act. Each would provide significant efficiency for companies, creditors, and all stakeholders.

With this context coupled with the additional complexities of the South African, and global, economy – the Deloitte Africa Restructuring Survey 2024 highlighted that respondents believed that the local economy would take up to three years to reach pre-pandemic levels.

Responses from business leaders surveyed in the Deloitte Africa Restructuring Survey indicate that 'pessimism' has fallen from 81% in 2023 to 75% in 2024.

Mitchell-Marais contextualises this new rating by saying that respondents don't necessarily feel optimistic, but they have 'accepted' the current economic situation and are demonstrating resilience in the face of uncertainty.

In the report this is seen as the 'new normal' – that being an elevated electricity crisis, soaring interest rates, ineffective ports and ongoing political uncertainty - brought about by the election in May.

"Companies are trying to operate in spite of these challenges", says Mitchell-Marais, "but we are far from being 'optimistic' given the Fitch Ratings forecast of real GDP growth only increasing by 0,9% in 2024 and 1.3% in 2025."

Against this backdrop of the 'new normal', organisations in South Africa face real challenges and therefore business distress can be expected.

The Deloitte Restructuring Survey highlights that informal operational restructuring will take centre-stage with business rescue seen as a last resort.

DBSA encourages nature-positive investments

Continued from P1

deliver sustainable infrastructure development alongside environmental stewardship."

Dorothy Maseke, head of secretariat at the ANCA, said, "At ANCA we recognise the immense potential of the continent's natural capital. However, unlocking this potential requires robust methodologies to assess and manage nature-related risks and opportunities. This white paper showcases a carefully crafted approach that leverages data, partnerships, and innovative tools to ensure nature-positive investments. It also demonstrates the commitment and capability of African institutions to drive sustainable development."

Companies' shift towards ESG compliance is becoming essential

With global concerns around climate change, social justice and ethical governance practices, ESG compliance and sustainability are topics of discussion that are becoming increasingly commonplace around boardroom tables. This report serves as an encouragement to companies to rethink their value propositions as investors and stakeholders scrutinise their commitment towards sustainability.

In the report, DBSA's CEO, Boitumelo Mosako says, "Financial institutions are well placed to address global biodiversity loss at scale. Business as usual is not an appropriate scenario. We need to follow a transformative and a whole society/economy approach that can help countries balance their obligations."

Naidoo explains that the DBSA through working with the GCF (Green Climate Fund) and GEF (Global Environmental Facility), enables it to tap into concessional finance ring-fenced to sustainable/green use of proceeds to promote and catalyse more responsible investment from the greater financial sector. With nature-based solutions, DBSA therefore aims to use these opportunities to scale up implementation and bring in funding through blended financing structures.

Naidoo believes the DBSA has a niche advantage through their project preparation facilities, which allows for involvement in infrastructure projects at an early stage when feasibility studies are conducted, thereby enabling them to integrate principles of sustainability from the start.

"In the development of our ESG roadmap," she says, "we define what ESG materiality means to DBSA at an operational and a transactional level."

She adds, "Sustainability is at the very centre of what we do, which ensures that we enable longer term resilience in every investment we make."

Standard Bank Group has been named as the Best Bank in Africa

STANDARD Bank Group has been named as the Best Bank in Africa in Global Finance's 31st World's Best Banks 2024 Awards.

The bank was also named as the best bank in Malawi and South Africa.

"Receiving the highest recognition on the continent from an authoritative source such as Global Finance is a great honour and an affirmation of our Africa-led strategy," says Sim Tshabalala, chief executive of Standard Bank Group.

Standard Bank was recognised for its strong business performance, driven by underlying economic recovery in its countries of operation, as well as offering the broadest range of services, long-term reliability, and technological innovation. The Group operates in 20 countries in Africa and six international centres.

Global Finance's selections were made by the publication's editors in consultation with corporate financial executives, bankers and banking consultants and analysts. In selecting these top banks, Global Finance considered factors that ranged from the quantitative objective to the informed subjective.

Objective criteria considered included: growth in assets, profitability, geographic reach, strategic relationships, new business development and innovation in products. Subjective criteria included the opinions of equity analysts, credit rating analysts, banking consultants and others involved in the industry.

Sim Tshabalala, chief executive of Standard Bank Group.

Tshabalala says: "We had a particularly good year in 2023. Thanks to the strength of our portfolio, the breadth of our network, and the depth of our capacities, we deliver on our strategic commitments and we are able grow very steadily over the long term.

"The group is also on track to deliver against its ambitious sustainable finance and renewable energy targets. By 2030, Standard Bank aims for net-zero carbon emissions from its newly built facilities, and by 2040 Standard Bank plans to achieve net-zero carbon emissions from its existing operations. By 2050, the bank aims to achieve net-zero carbon emissions from its portfolio of financed emissions."

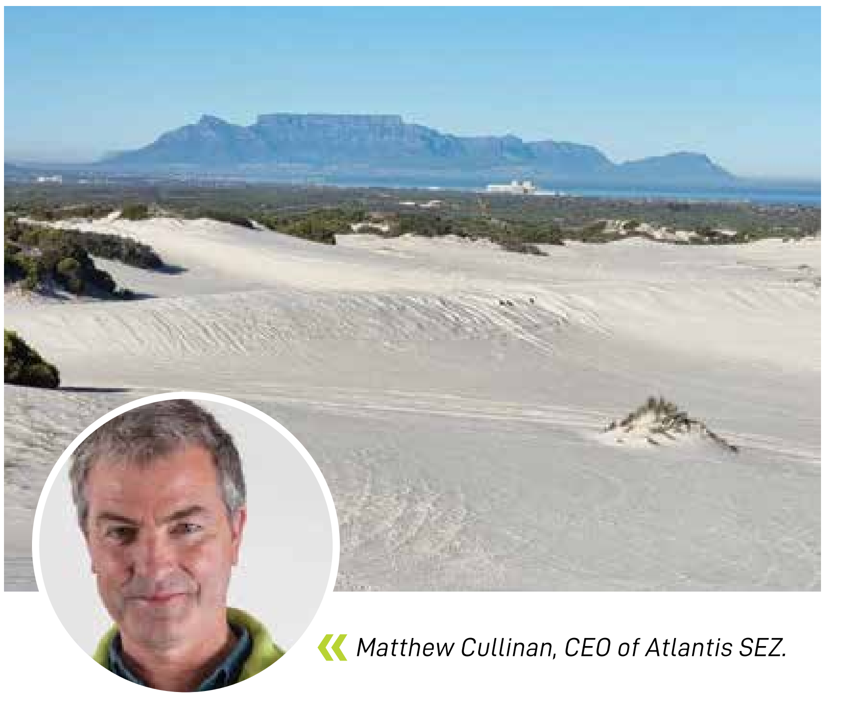
"In 2024, we will continue to support our clients, develop our employees, and deliver sustainable growth and value to our shareholders and other stakeholders. In addition, as a leading financial institution on the continent, we recognise our responsibility to have a positive impact in our regions of operation. We do so by delivering against our purpose of driving Africa's growth," he added.

THE ATLANTIS SPECIAL ECONOMIC ZONE FOR GREEN TECHNOLOGIES

If we are going to have a future that is sustainable (and perhaps even regenerative), then that future will need manufacturing processes and systems that are sustainable. Technology undoubtedly has a pivotal role to play in that transition and future. What is becoming increasingly apparent and significant in that our whole approach towards production and products, and the culture that underpins such production, also has to undergo a major shift as well. Some of this ambition is already being codified in various ways. This includes the recent promulgation of legislation in the EU around the right to repair, the protection of conservation areas, codification of ESG reporting and targets and things like the carbon border adjustment mechanism (CBAM). There is growing interest and attention to circular design and processes, as well a carbon-zero manufacturing. Far from being daunting or negative, a sustainable future is looking increasingly possible and achievable, along with the exciting ways in which this is possible. In fact, it is opening a whole new world of opportunities and potentials and prompting us think and work in new and exciting ways. We are daily growing our global understanding and commitment to this transformation. There is every reason to believe that this future is in our hands and is imminently achievable. It needs to be embraced and welcomed.

The Atlantis Special Economic Zone for Green Technologies is founded precisely on this premise. Whilst we target manufacturers whose products and processes support the transition to sustainability (such as solar panels, wind towers and batteries), we are also set-up to ensure that the production process supports sustainability goals. In this sense we have embraced a sustainable future being underpinned by sustainable manufacturing. To support this we have identified five goals. These goals are:

1) **Net-zero carbon** – this will be achieved through including rooftop solar on all buildings, supported by battery storage. Depending on energy demand this may need to be supplemented by a dispatchable source. This could one of a range of options depending on the price points at the time which they are required (for example, hydrogen vs battery).
2) **Net-zero water** – this will be achieved through designing the civils and layout to maximise on-site infiltration of rainwater into the Atlantis aquifer, and then to move production processes that utilise water into cyclical systems where used water to cleaned and re-used.
3) **Net-zero waste to landfill** – this will be achieved by working with our tenants and manufacturers to find uses for the by-products of their production processes and/or to improve their production processes to minimise waste. This is not something that can easily be defined or quantified up-front due to the variable nature of industrial production processes.
4) **Working with nature** – this is achieved through active search and rescue of rare and endangered species prior to clearing sites for factories. These plants are relocated to a bio-diversity off-set space purchased for the purpose. After construction, the sites are landscaped using indigenous vegetation.
5) **Inclusion** – this is the most important from a sustainability perspective. We actively work to explore how the impact of investment into the zone can be maximised through various skills, enterprise development and community programmes. The ideal of a Just Energy Transition, or indeed a Just Transition to a sustainable future rests on the ability to create meaningful work and opportunities in the future green economy. For many companies Environmental, Social and Governance (ESG) reporting is becoming increasingly important (along with their associated programmes). The Atlantis SEZ has active Social development programmes. Companies in the zone can tap into and contribute to these in ways that build the community and that also contribute to skills and opportunities in the green economy.



Matthew Cullinan, CEO of Atlantis SEZ.

We see exciting opportunities for new industries and grow and are actively working with our tenants and partners to tap into these. We offer high-quality infrastructure and services to investors wanting to manufacture, supported by a future proofed approached to production.

atlantis
special economic zone
where green tech grows

Office: +27 021 495 4400
Email: info@atlantissez.co.za
Website: www.atlantissez.com

Clean energy jobs outpacing employment in the fossil fuel sector

PMI is the global authority in project management, committed to advancing the project management profession.

THE transition to clean energy is an environmental imperative and an economic juggernaut, now employing more people globally than fossil fuels, according to the 2023 World Energy Employment Report.

Clean energy jobs have risen to 35-million, a growth of 4,7-million, while fossil fuel employment has lagged, remaining 1,3-million jobs below the pre-pandemic level of 32-million. New jobs in construction and manufacturing now account for over half of all energy employment.

Africa's abundant solar, wind, and hydroelectric resources present unique opportunities for sustainable development.

Project Management Institute's (PMI) Job Trends 2024 report suggests that investments in infrastructure and energy will spark demand for project management talent that can deliver next-gen infrastructure on time and within budget.

> "Amid the many positive trends emerging for clean energy employment, skilled labour shortages are already plaguing the sector"

With a growing trend toward project-based approaches in many industries, a rising demand for skilled project managers is expected to increase significantly over the next decade.

However, this demand is contrasted by a shrinking workforce in many countries due to ageing populations and falling birth rates.

"As more countries and corporates in the region commit to lowering emissions, the transition to clean energy is poised to boost employment opportunities significantly. Turning the vision into reality means lots of projects and lots of jobs. There's abundant potential in Africa, which is home to 60% of the top solar sites globally — yet contains just 1% of solar PV capacity," says George Asamani, MD, sub-Saharan Africa, PMI.

Several countries are leading the renewable charge in Africa. Senegal, an unlikely renewable energy hotspot, with oil and gas driving its forecasted 8,8% GDP growth in 2024, is aiming to generate as much as 40% clean energy by 2030. Ghana's $2-billion Ada Foah project is set to produce 1 000 megawatts of power by capturing tidal wave energy in the Gulf of Guinea. Even oil-rich Nigeria is calling for renewables to meet 60% of the country's energy demands by 2050. In South Africa, some 66GW of wind and solar projects are at various stages of development, with 18GW at an advanced stage.

Amid the many positive trends emerging for clean energy employment, skilled labour shortages are already plaguing the sector.

The sector needs higher-skilled workers than most industries; 36% of energy jobs are within high-skilled occupations by International Labour Organisation definitions, compared with 27% in the broader economy.

"The number of Africans pursuing certifications relevant to project management is not keeping pace with the growing demand. Last year, China certified over 100 000 individuals, North America had 33 000, while Africa only managed 3 000. Meanwhile, the global economy needs 25-million project professionals by 2030. To meet this demand, the biggest coming from sub-Saharan Africa, an estimated 2,3-million individuals must enter project management-oriented employment annually," adds Asamani.

"Cultivating a certified pool of project professionals should be a strategic priority for the region looking to be energy sufficient. Project management plays a key role in driving development outcomes and is one of the factors that contribute to competitiveness."

Large renewable energy projects are complex, capital-intensive, and involve extensive development periods and multiple stakeholders.

These projects, whether they employ mature technologies like hydropower, solar, and wind or emerging technologies like green hydrogen, without effective project management, will likely not meet the troika of demands placed on projects - budget, scope, and timelines.

Private sector and EU regulations will drive decarbonisation in South Africa - KPMG

SOUTH Africa's greatest opportunities to move towards net zero at present come from the private sector, according to KPMG's Net-Zero Readiness Report 2023.

The report, which examines steps taken by 24 countries as well as key economic sectors to reduce the greenhouse gas emissions that cause climate change, said that the private sector will be the driver of decarbonisation.

It noted that foreign-listed multinationals and companies with international investors will in many cases have to increase their reporting on climate change risks and develop plans to decarbonise.

It pointed out, however, that there are financial pressures to delay such work.

"There is not a big drive for companies in South Africa that are trying to make ends meet in a very slow economy to embrace additional measures linked to net zero," says Pieter Scholtz, partner and Africa ESG lead, KPMG in South Africa.

Companies are likely to lead decarbonisation work but the state of the economy, slow pace of regulatory change and unreliability of electricity supply are hindering progress, while heavy-emitting industries could be affected by the European Union's (EU) Carbon Border Adjustment Mechanism.

The EU introduced its Carbon Border Adjustment Mechanism from October 2023, which will eventually require those importing some goods to pay an equivalent price for their emissions to manufacturers based in the bloc.

Australia and the UK, which both have emissions trading, are considering similar mechanisms. India may challenge the EU mechanism and South Africa is considering how it should respond, but over time border adjustments look likely to reinforce the importance of low carbon production as a source of competitive advantage.

For its part, the government is doing little to help or force companies to decarbonise, whether through legislation or other measures, says KPMG.

A June 2021 speech by President Cyril Ramaphosa discussed an expansion of renewable energy, which at present provides only a small proportion of the country's electricity, but this has not been sustained.

"The slow pace of regulatory change is a challenge," says Poogendri Reddy, associate director, Sustainability Services, KPMG in South Africa.

Plans from 2019 to break up the government-owned and coal-dependent power group Eskom are progressing slowly, although in July the country's energy regulator licensed its plans to set up a separate transmission operator.

Eskom frequently imposed load shedding — planned power cuts — on customers, given a chronic lack of capacity resulting from severe financial, plant and labour problems with cuts occurring on 288 days in 2022.

In February 2023, President Ramaphosa declared a state of disaster because of what he called "the electricity crisis". As part of its response, in March 2023, the government created a new minister of electricity post, initially held by Kgosientsho Ramokgopa, previously the head of the Presidency's Investment and Infrastructure Unit.

The government has also allowed Eskom to bypass sulphur dioxide pollution controls at its Kusile coal power station so the company could resume production from generation units providing 2GW of electricity, despite this risking severe health problems for those living nearby, said KPMG.

"Stability of supply right now outweighs current emissions concerns," says Reddy, although this has an impact on the uptake of levers for decarbonisation adopted in other countries.

One example is the slow adoption of electric vehicles if access to power needed for charging them is unreliable and such power is still generated from coal, said KPMG.

It's time for timber

How engineered wood can decarbonise the South African built environment.

By Roy Southey, executive director, Sawmilling South Africa

OUR planet is faced with both an environmental crisis and housing crisis. There is, however, a sector that is overlooked as a viable, renewable and long-term solution to climate change and urbanisation.

At the mention of wood, your mind's eye might only be able to conjure an image of a log cabin or "wendy house", or perhaps a roof truss or timber flooring. It's unlikely that you imagined a multi-storey building made from cross laminated timber (CLT), a type of engineered wood for mass timber construction.

You're forgiven, considering that less than 1% of new South African houses use timber as the primary construction material. By comparison, some 90% of new houses in New Zealand are made of timber.

As a sector trying to promote the adoption of mass timber, we are faced with a long-held belief that brick-and-mortar is the only way to build homes, schools and clinics. There are many misconceptions, not least of which being strength, durability, fire safety, and cost. Many people view wood as rudimentary or weak.

Mass timber uses technological advancements to engineer wood to have a stronger strength-to-weight ratio. In the case of CLT, thin layers of timber are laid crossways before being bonded and compressed together.

It's been said that wood isn't manufactured, it grows. From a South African perspective, the wood is sourced from sustainably managed tree plantations.

The forest products sector is the only one to have the trifecta of green solutions when it comes to the carbon sequestration by trees in managed forests, carbon storage in its products and the substitution of carbon-intensive materials with wood-based products.

The construction sector accounts for 35%-40% of global energy related CO_2 emissions, with a large proportion attributable to the extraction, processing and energy-intensive manufacturing of building products. The other main source is operational emissions from heating, cooling and power generation.

Timber boasts a significantly lower carbon footprint compared to traditional building materials like concrete and steel. Timber also maintains a carbon-negative status throughout its lifecycle, from initial production to disposal, and it sequesters more carbon than it emits during processing and installation.

As our population and economic migration increases, there is an urgent need to change how we build high density and single family housing, quickly, cost-effectively and sustainably.

There is a climate, economic and even social case for timber, and a significant opportunity for innovation, localisation and employment creation. Several industry players, architects, construction engineers and producers are focused on making engineered wood more accessible to the local market. With this comes the need for upskilling or reskilling, business growth and employment opportunities.

Wood lends itself well to modern, modular and off-site methods of construction, with improved efficiency and performance. Single and multi-storey buildings are prefabricated off-site, allowing for quicker on-site assembly, less journeys to and from site (and the associated carbon emissions), and minimised disruption, dust and noise.

Through initiatives such as the Forestry Master Plan, partnerships with the Department of Trade, Industry and Competition and forward-thinking academia, we want to shift the needle in favour of using locally grown and processed timber.

The uptake of timber represents a massive opportunity for our country and our planet. It's time to trust in timber.

Renewable energy component market will be worth R468-billion by 2030 - GreenCape report

By Larry Claasen

SOUTH Africa's energy crisis, along with the global move to environmental sustainability has the potential to be a big economic drive, says GreenCape, in its Large-scale Renewable Energy Market Intelligence Report 2024.

> "The mining sector is especially active in growing the renewable energy market and many mining companies are also investing in project development and ownership."

The report, which was written for foreign and local investors looking to invest directly in the South African renewable energy market, said the total potential large-scale renewable energy, energy storage, and component manufacturing market size would be worth R468-billion by 2030 or R78-billion per year.

It said the local manufacturing of components for large-scale renewable energy was a huge opportunity. The government's efforts to foster the sector with various incentives, along with growing demand from the private sector could boost local component manufacturing.

One of the drivers for local manufacturing is the South African Renewable Energy Masterplan (SAREM), created by the Department of Mineral Resources and Energy.

"The aim of SAREM is to foster the industrial and inclusive development of renewable energy value chains in South Africa. Stakeholder engagements for SAREM concluded in 2023, with final ministerial approval expected in 2024," said the report.

The report pointed out that local manufacturing was already a well established practice when it came to public procurement of renewable energy.

"The local content spent reported for IPPs [Independent Power Producers] that have started construction amounts to R64,5-billion against a corresponding project value (as realised by the end of 2022) of R130.2-billion."

The private sector steps in

Aside from boosting the South African industrial sector, the renewable energy market has also been supported by the rapid growth in private sector procurement.

The report noted that in 2023, the private sector was quick to take advantage of South Africa's rapidly liberating energy market and were quick to close deals directly with IPPs.

It said South Africa's large-scale renewable energy sector has historically been driven by the Renewable Energy Independent Power Producer Procurement Programme (REIPPPP), a government programme managed through the Independent Power Producers Office (IPPO).

But in 2023, a change happened. Off take agreements grew "at a rapid pace" and are expected to be a large driver of future renewable energy projects.

Mining houses in particular were not slow when it came to buying renewable energy.

"Mining companies in South Africa are currently planning approximately 43MW of combined solar PV and battery energy systems and over 1,2GW of solar PV systems, making it a key player in the private energy space."

It added: "The mining sector is especially active in growing the renewable energy market and many mining companies are also investing in project development and ownership."

Aside from the mining sector, the report also said the opening up of the energy market would also allow small private energy players and low-energy users to get a foothold, which would diversify the energy mix.

The growing demand by regulators in key overseas markets to have companies keep track of how much carbon dioxide it generates when it comes to making their products is also driving demand for renewable energy.

All of these factors means the private sector is becoming a huge growth drive.

The report projects private procurement market sizes to grow to 6GW for solar Photovoltaics (PV) and 4 GW for wind power by 2030, with corresponding investment values of R116-billion and R98-billion, respectively. The average growth rate is expected to be R36-billion per year.

The public sector is also expected to give the sector a boost.

Though the public procurement market is expected to be smaller, it is still forecast to make a sizable contribution to the South African energy market and the broader economy.

The public procurement market is estimated at 2,6GW of solar PV, 3,2GW of wind power and 3,7GW of battery energy storage systems by 2030.

"The investment value is estimated to be R50-billion for solar PV, R79-billion for wind power and R83-billion for battery energy storage systems. The total investment value is R212-billion by 2030 or ~R35-billion per year."

Some huge barriers

Though the renewable energy sector appears to have a bright future, the report pointed out that the sector had to deal with some huge hurdles.

The grid capacity was insufficient, the carbon tax was still too low to drive businesses to consider renewable energy and the skills to develop the sector were in short supply.

Policy uncertainty is also an issue and the poor financial standing of many municipalities means they are might not be able to procure renewable energy.

Enhancing cold chain efficiency: ebm-papst fans

IN the interconnected world of cold storage facilities, supermarkets, and warehouse buildings, maintaining precise temperature control is paramount.

At ebm-papst, we understand the critical role that our fans play in optimising the efficiency and performance of these essential environments.

Our Axicool range stands as a testament to our commitment to delivering cutting-edge solutions for evaporative cooling in cold rooms and storage facilities.

Designed with precision engineering and advanced technology, these fans ensure uniform air distribution, facilitating efficient cooling and preserving the quality of perishable goods. Whether it's fresh produce, pharmaceuticals, or other temperature-sensitive products, our Axicool fans provide reliable and consistent performance, safeguarding the integrity of stored items.

In addition to cold storage facilities, our W1G Energy-saving fans play a pivotal role in transport cooling and refrigerated display cases, extending our reach into the realm of supermarkets and warehouse buildings.

These energy-efficient fans are meticulously engineered to minimize power consumption while maximising airflow, making them ideal for applications where energy conservation is paramount.

From refrigerated trucks transporting goods across long distances to display cases showcasing perishable items in supermarkets, our W1G fans ensure optimal cooling performance while reducing operational costs and environmental impact.

The versatility of our fan range extends beyond their application in cold rooms and storage facilities.

They are also integral components in warehouse cooling solutions, where maintaining stable temperatures is essential for preserving the quality and shelf life of stored products.

By harnessing the power of our fans, warehouse operators can create optimal working conditions for employees and protect inventory from temperature fluctuations for employees and protect inventory from temperature fluctuations.

At ebm-papst, we pride ourselves on our ability to deliver tailored solutions that meet the unique needs of our customers across diverse industries.

Our fans are not just products; they are the result of years of research, innovation, and expertise, aimed at addressing the evolving challenges of the cold chain industry.

From improving energy efficiency to enhancing product quality and safety, our fans are at the forefront of driving innovation and sustainability in cold chain management.

info@za.ebmpapst.com: +27 11 794 3434| infokzn@za.ebmpapst.com: +27 31 569 1963|infoct@za.ebmpapst.com

MSC South Africa inaugurates MEDLOG cold store facility, revolutionising trade dynamics in the region

THE MSC Group, has opened a state-of-the-art 15 000m cold storage facility, in Durban. The enormous cold store, part of MSC's logistics division, promises to catalyse advancements in the handling of perishable goods in South Africa and beyond, and will open up the country's trade landscape.

The MSC Group, operates various entities including Mediterranean Shipping Company, Mediterranean Shipping Depot, MSC Logistics (MEDLOG), MSC Technical and Shosholoza Operations.

The breadth of MSC's presence is reflected in its extensive network here, with six offices strategically located in Durban, Cape Town, East London, Johannesburg, Port Elizabeth and Pretoria.

Catalysing trade dynamics

An inaugural event for the cold storage facility took place on 7 March, 2024, attended by MSC CEO, Soren Toft, with the presence of government officials, industry partners, clients and MSC personnel.

Toft gave a keynote address highlighting the impact of the new facility as part of South Africa's bright economic trajectory.

"This investment marks an exciting new milestone for exporters and importers of fresh produce across South Africa," Toft said.

"It exemplifies our ongoing efforts to provide value-added services to our customers, while contributing to the development of the local economy. We want to help South Africa achieve its vision to become sustainable, economically prosperous and self-reliant."

Toft underscored MSC's unwavering dedication to realising President Cyril Ramaphosa's vision of fostering investment and job creation in the country, citing investments exceeding R1-billion in infrastructure and employment-generating projects.

Supporting imports and exports

The cold storage facility epitomises excellence in infrastructure, and has a capacity of 8 000 to 10 000 pallets. Strategically located as a hub for both imports and exports, the facility represents a paradigm shift in storage and logistics capabilities for South Africa.

Import commodities that can now be expanded include goods such as chicken sourced from Brazil, the US and Poland, while exports primarily comprise citrus destined for markets in Europe, the Middle East and Far East/Asia.

Captain Salvatore Sarno, Chairman of MSC South Africa, expressed pride in the facility, saying, "We are proud to unveil this state-of-the-art cold storage facility, which not only reinforces our dedication to supporting the South African economy but also underscores our commitment to job creation and economic growth."

"The construction is of the highest quality," explained Jose Carlos Garcia, MEDLOG warehousing and distribution manager.

"The building features convertible rooms to accommodate both chilled and frozen cargo, as well as mobile racks to optimise space. The warehouse management system is fully integrated with the PPECB (Perishable Produce Export Control Board) database to ensure regulatory compliance and full traceability."

The inauguration of the MEDLOG cold store facility symbolises MSC's enduring partnership and investment plan for South Africa. With a vision for further expansion and development, MSC reaffirms its commitment to supporting South Africa's journey towards sustainability, self-reliance and an exciting, prosperous future.

For more information: https://www.msc.com/en/local-information/africa/south-africa

Unlocking innovation through collaboration Universal Plywoods and Serco

UNIVERSAL Plywoods (UP) has added four Serco-built curtainsider trucks to its fleet after testing a prototype and being highly impressed with the results.

UP and Serco enjoy a fruitful 12-year partnership which started following product testing and collaborative design consultations between the companies' technical teams which resulted in Serco's selection of UPM's WISA-coated birch plywood for flooring in its vehicles.

CEO of Serco Clinton Holcroft said the coated birch floor in the 5,4m-long curtainsiders (or tautliners) offered a weight reduction of 242kg in each of the vehicles compared to a conventional steel deck.

Both Serco and UP place a high value on quality workmanship and professional service. Says Holcroft: Using quality and state-of-the-art materials are vital to ensuring the longevity of our truck bodies and trailers.

"Our core purpose is giving transporters the edge in their fields. We do that through innovation, leading in quality and service as well as relying on partners such as UP to make it happen," he said.

"Using reliable and durable materials are key to providing the lowest possible life cycle costs for the vehicles, even if it means a higher upfront investment," he added.

Serco and UP have developed a healthy business relationship over the past 12 years with the collaboration allowing Serco to deliver differentiated and durable transport solutions built on their principles of quality, sustainability and innovation. Universal is a bulk stockist and distributor of plywood and other types of engineered wood products for the construction, transport, marine and furniture industries, among others.

Serco-built truck and trailer bodies – a common sight on South African roads - range from small delivery vehicles to large semi-trailers used for shipping refrigerated and dry goods.

The company has manufacturing and after sales repair facilities in Durban, Cape Town, Johannesburg and Gqeberha. Patrick Hansen of Universal Plywoods said they were proud to be in partnership with Serco. "Over the years the partnership has progressed into a mutually beneficial relationship where trust and communication play an important role."

A tautliner is a generic name for a curtain-sided type of truck or trailer used to carry a variety of dry goods. The easy access for loading from the side and even from the rear make this a versatile and distribution vehicle. Serco Industries specialise in the design and manufacturing of insulated and dry freight truck bodies and trailers. These trailers are relied upon by Southern Africa's leading transporters and long-distance hauliers to carry everything from ice cream to day-old chicks, from beef to bread.

Copeland to showcase its Vilter Industrial CO_2 compression portfolio at IIAR Natural Refrigeration Expo

Production is underway for the company's transcritical and subcritical CO^2 compressor units.

COPELAND, a global provider of sustainable climate solutions, has launched the company's first industrial transcritical CO_2 compressor unit that is now in production.

Purpose-built for the rigors of high-pressure industrial CO_2 refrigeration, the new Vilter transcritical CO_2 compressor was developed in response to increasing industry demands for sustainable, safe and reliable CO_2 refrigeration technologies.

It will complement the Vilter subcritical CO_2 compressor, to comprise a full transcritical CO_2 compression solution.

Both the Vilter industrial transcritical and subcritical CO_2 compressors are now available in the North American market and was highlighted at the International Institute of All-Natural Refrigeration (IIAR) 2024 Expo in Orlando, Florida on 24 to 27 March.

Large-capacity transcritical CO_2 compressors reduce the complexity of industrial refrigeration operations by reducing the number of components required for larger systems. The Vilter transcritical CO_2 compressor offers one of the most rugged compression solutions for sustainable industrial refrigeration needs.

Built around the durable Vilter single-screw compressor model, the CO_2 systems enable designers, builders and operators of cold storage, food and beverage, recreation, utility and power, pharmaceutical, chemical, petrochemical and industrial processing to meet their sustainability goals with a simple design and cost-effective system.

The Vilter transcritical CO_2 compressor line is available in seven displacements to suit most large industrial refrigeration systems.

The products are designed for high-side CO_2 transcritical systems and have a power range from 100 to 900 horsepower per compressor.

The subcritical CO_2 compressor line, designed for the low side of a CO_2 transcritical or cascade system, is available in 11 displacements, with a power range of 100 to 900 horsepower per compressor.

"Copeland's commercial CO_2 expertise provides unmatched experience needed to meet the rigors of high-pressure industrial CO_2 compression," said Michael Gersmeyer, senior product manager, Vilter for Copeland.

"The unique Vilter single-screw compressor design is ideal for handling the high pressures seen in CO_2 transcritical operation."

For more information, visit Copeland.com

Capetonians will soon enjoy the ultra-convenience of vending machines dispensing LPGas!

GAZ2GO outlets will be manufactured in South Africa creating much needed jobs…

SOON the endless days spent hunting Cape Town for LPGas to keep the family warm, put hot food on the table and provide lighting to see by will be a frustration of the past. Handigas has long since been the go-to gas for many a braai master and homeowner to combat load shedding.

Now, Afrox has partnered with SLI Investments to bring the first LPGas vending machines to the South African market.

"Today's customers are looking for quick and convenient accessibility to whatever product they are purchasing, and LPGas is no exception," said Afrox's Trevor Boshoff, business manager, LPG Handigas.

Operating under the brand name GAZ2GO, the fully automated vending machines will offer convenient and safe access to LPGas 24/7, 365 days a year.

"Afrox is excited to extend this initiative from SLI Investments to offer customers a more accessible and modern way of obtaining LPGas for heating, cooking, and outdoor leisure purposes," said Boshoff.

"The process will be as simple as swiping your card to make payment, then placing your empty cylinder, if you have one, in one of the lockers, and taking a full cylinder from another locker. The entire process should take no longer than a minute."

> "Retailers will have the advantage of offering their customers a more convenient, easier and quicker way of buying their LPGas, even outside of their operating hours"

GAZ2GO intends to position the vending machines at malls, shopping centres and garage forecourts. At the core of the vending machines is sophisticated software that will facilitate live monitoring to ensure restocking as required. Each vending machine is fully compliant with LPgas regulations and can hold up to 27 full cylinders.

Boshoff says that SLI Investments approached Afrox in 2022 after seeing similar vending machines in Europe, with the objective of developing a unit that would be suitable for the African market.

Over the last year and a half, Afrox has been providing SLI Investments with guidance regarding storage, transportation, and safe usage of LPGas, ensuring that the vending machines meet with LPGSA's gas safety standards. Once in service, Afrox will supply the LPGas for the vending machines in the form of 9kg Handigas cylinders.

Wayne Barr, director SLI Investments, said the demand for alternative energy sources in the country is at an all-time high, and GAZ2GO vending machines will give retailers the opportunity to sell LPGas to their customers as part of their overall offering.

"Retailers will have the advantage of offering their customers a more convenient, easier and quicker way of buying their LPGas, even outside of their operating hours," said Barr.

"The vending machines will be positioned at retailers' premises and can be easily linked into their existing energy and security infrastructure, as the plug-and-play units only require an electric outlet and a one-car parking space."

Stock levels will be monitored via the software which will be co-ordinated by GAZ2GO back offices.. "These offices will be managed by graduates as part of a graduate programme to create employment opportunities for the youth."

The GAZ2GO vending machines will be manufactured in South Africa with a delivery time of approximately 60 days. The first units will be available in the Western Cape before being rolled out in Gauteng and the rest of the country.

For more information contact: Trevor Boshoff at Afrox on trevor.boshoff@afrox.linde.com

Gas Master Plan commits South Africa to growing local production and facilitating imports

By Larry Claasen

THE publishing of the Gas Master Plan by the Department of Mineral Resources and Energy in April provides a framework for expanding gas consumption and production in South Africa.

The government says the plan is not only meant to increase the country's energy security, it will also reduce its "heavy reliance on unabated coal," which will have the added benefit of reducing greenhouse emissions.

Though the government has ambitions of increasing gas usage in South Africa, the plan points out that the gas fields in Mozambique, which has been one of the main suppliers of gas to the country for the past 20 years, are coming to their end and will result in substantial shortages from 2026.

It is, however, foreseen from 2027 that local gas from the Block 11B/12B off the east coast near Mossel Bay will offset the decline in gas coming from Mozambique.

Terminal investment

Aside from exploiting local gas deposits, the development of gas terminals at Richards Bay in northern KwaZulu-Natal, Saldanha Bay near Cape Town and the Port of Ngqura in the Eastern Cape, will facilitate the large-scale importing of liquefied natural gas (LNG).

The master plan foresees LNG imports to dominate the gas supply market over the next few decades. LNG imports are expected to make up 30% of total supply, but are expected to grow to 87% by 2050.

Richards Bay is expected to be the main import hub with the development of the LNG terminal to be developed and run by Dutch based Vopak. The Richards Bay LNG terminal gas is expected to increase imports from 165 PJ/a in 2030 to more than double to 387 PJ/a in 2038.

For its part, the Strategic Fuel Fund (SFF), a subsidiary of the Central Energy Fund, took a 60% holding in assets of Avedia Energy, which includes the LPG terminal in Saldanha in January 2024.

The Central Energy Fund said this move would promote competitiveness in the downstream liquid petroleum gas (LPG) market by enabling the importation of cheaper LPG.

The Department of Trade, Industry and Competition also announced Kili Energy will be setting up a R500-million LPG cylinder manufacturing plant in the Coega Special Economic Zone (SEZ) in Gqeberha in the first quarter of 2024.

Investment needed

Prior to the publishing of the Gas Master Plan, Mineral Resources and Energy Minister Gwede Mantashe spoke on the issue in a speech in September 2023.

He said SA was still committed to expanding the use of LPG but pointed out that there was "limited LPG infrastructure" in the country and there was an urgent need to invest in refinery capacity.

In this regard he noted that the, "Strategic Fuel Fund and PetroSA are working to partner with companies willing to invest in this infrastructure."

The master plan, however, points out that this type of investment will not happen quickly.

"Large-scale indigenous natural gas production could substantially improve in the near future, but currently remains a distant goal. The country should therefore drive massive additional exploration projects, while simultaneously enabling potential developments of other forms of gas available to South Africa."

Though scaling up the local gas industry will take time and capital, the department notes in the plan that would benefit the country's economy.

"The availability of gas for the domestic market would facilitate industrialisation and the development of the gas industry, including LNG, gas processing and gas pipeline infrastructure."

Spark+ Africa Fund to catalyse clean cooking investment at Invest in African Energy (IAE) 2024

The $64-million blended finance fund tackles clean cooking solutions across sub-Saharan Africa and will participate at the upcoming Invest in African Energy forum in Paris

SPARK+ Africa Fund Partner Peter George will speak on opportunities in financing clean cooking solutions in sub-Saharan Africa at the upcoming Invest in African Energy (IAE) 2024 forum.

The $64-million impact investment fund finances companies that provide next-generation, scalable and distributed cooking energy solutions utilising a range of fuel types, such as biomass, biogas, ethanol, electricity and LPG.

With around 940-million people in sub-Saharan Africa without access to clean cooking fuels and technologies, the fund aims to address this critical need and transform clean cooking into a commercial, private sector-led industry.

Spark+ Africa Fund is also expected to discuss the role of carbon credits in making the business models it finances both viable and more affordable for consumers.

Organised by Energy Capital & Power, IAE 2024 is an exclusive forum designed to facilitate investment between African energy markets and global investors.

Taking place May 14-15, 2024 in Paris, the event offers delegates two days of intensive engagement with industry experts, project developers, investors and policymakers.

For more information, please visit www.Invest-Africa-Energy.com. To sponsor or participate as a delegate, please contact sales@energycapitalpower.com.

Support for the fund has come from the African Development Bank, European Commission, Denmark's Investment Fund for Developing Countries and the Belgian Investment Company for Developing Countries, along with a range of private capital partners.

Uniting DFIs, multilateral banks, private equity firms, pension funds and other financial partners, IAE 2024 serves to catalyse new financing tools, business models and technologies to bridge Africa's energy investment gap and meet its long-term electrification and clean cooking access targets.

Groundbreaking study to accelerate green hydrogen international production and export infrastructure

A consortium led by Nelson Mandela University and Ikigai Group has won a UK Government grant under the South Africa-UK PACT programme to deliver an innovative feasibility study to explore the viability of Green Hydrogen Production and Export Infrastructure from South Africa's Eastern Cape region to global markets, including the UK, Europe, and Japan.

The project delivered by the consortium will be working with the Industrial Development Corporation (IDC) of South Africa in support of South Africa's wider development and just energy transition plans.

The consortium comprises several industry leaders and experts in the energy transition, including University College London, DNV, National Gas, University of Kent, and the Thames Estuary Growth Board. The consortium is also supported by key delivery partners, including Hive Energy, Hive Hydrogen, the Nedbank Group, the Development Bank of Southern Africa, and Advantage Partners, who will provide fund management services to the Japan Hydrogen Association's new fund dedicated to hydrogen related investments.

Green hydrogen, produced through electrolysis using renewable energy sources, offers a clean and versatile alternative to conventional fossil fuels.

The feasibility study will evaluate the potential for establishing green hydrogen production facilities in South Africa's Eastern Cape region and developing the necessary infrastructure for export, including port facilities and transportation networks.

Stakeholder engagement will be integral to the process, to ensure alignment with local communities, government agencies, and industry partners.

The export focus of the project is key not only to maximise the valorisation of abundant renewable energy resources in the Eastern Cape and surrounding provinces, but also to provide a diversification of revenue streams via the sale of green hydrogen and green ammonia to international markets, which is critical to ensure the bankability and ultimately the delivery of the overall project.

By fostering innovation, job creation, community participation and sustainable development, the project aims to contribute to a greener, more resilient future for South Africa and beyond.

Prof Sibongile Muthwa, vice chancellor at Nelson Mandela University stated that "South Africa generally and the Province of the Eastern Cape in particular experience high levels of poverty, inequality, and unemployment. South Africa is committed to deliver economic growth through a just transition from, inter alia, dependence on fossil fuel-based energy production. This feasibility study aims to inform strategic decisions for the production and export of green hydrogen from the Eastern Cape, potentially reshaping South Africa's economy for inclusive growth."

Helena Anderson, co-founder and COO at Ikigai commented that: "The missing links in hydrogen moving from an inter-regional to an international commodity are import and export ports receiving, converting, and onwards distributing infrastructure and the hydrogen carriers from a HSE and total lifecycle cost perspective. This green hydrogen corridor project is looking at all these aspects. It's focusing on a large-scale green hydrogen project in South Africa, comparing it with ammonia as a counterfactual carrier, and exploring how we can deliver hydrogen to places like Japan, Europe, and the UK. The goal is to show that exporting hydrogen can also boost local demand."

Antony Phillipson, British high commissioner to South Africa stated: "I am delighted to see the launch of this exciting new project under the South Africa-UK PACT Country Fund. This project strengthens the UK's support to South Africa as part of the Just Energy Transition Partnership. We are excited by the potential impact of the outputs of this study, which will play a key role in accelerating efforts to advance the green hydrogen export agenda in the Eastern Cape and the green hydrogen economy across the country."

Catherine Koffman, group executive: Project Preparation at the Development Bank of Southern Africa confirmed that "The funding for the study demonstrates the catalytic impact of collaboration between private sector and development capital. The partnership will facilitate the creation of a new asset class in the energy sector with a profound and positive economic, social, and environmental impact in the province and the country. This feasibility study will also, through import and export infrastructure assessments, address regional integration of sustainable green hydrogen projects and contribute to Africa's prosperity."

Colin Loubser, CEO of Hive Energy Africa and GM of Hive Hydrogen South Africa added: "We are delighted that our team based in Nelson Mandela Bay, South Africa are able to support this initiative and its wider impact on the country and beyond."

"Hive Hydrogen's development work over the past three years on the Coega Green Ammonia Project in the Eastern Cape, South Africa has produced many insights into how these projects should be developed within the existing and evolving government frameworks, country legislation and bankability challenges and what is required for success both commercially and for the communities these projects impact. It is a pleasure to work with and share our experience with the South Africa-UK PACT programme."

For more information contact: https://www.hiveenergy.co.uk/green-energy/

Tanzania to showcase $40-billion Liquefied Natural Gas (LNG) project, gas prospects at Invest in African Energy (IAE) 2024

The Invest in African Energy forum in Paris will explore Tanzania's potential to develop and export LNG and petroleum by-products to the wider East African region.

WITH estimated recoverable gas resources of around 57 trillion cubic feet (tcf), Tanzania will feature as part of an East African regional spotlight at Invest in African Energy (IAE) 2024, as the country seeks partners across various exploration, development and processing activities.

Since discovering large volumes of offshore gas, Tanzania has initiated plans to become a major LNG exporter. The country's flagship Tanzania LNG project – set to process gas from fields operated by Equinor, Shell and ExxonMobil, producing 10-million metric tons per year – is awaiting the signing of a host government agreement that would enable the start of development.

Shell's Blocks 1 and 4 have an estimated 16 tcf of gas in place, while Equinor's Block 2 has yielded nine discoveries with more than 20 tcf of estimated reserves. Last November, the governments of Tanzania and Uganda signed an agreement to undertake a feasibility study for the construction of a pipeline linking Tazania's gas fields to Uganda.

Organised by Energy Capital & Power, IAE 2024 is an exclusive forum designed to facilitate investment between African energy markets and global investors.

Taking place May 14-15, 2024 in Paris, the event offers delegates two days of intensive engagement with industry experts, project developers, investors and policymakers.

Tanzania has emerged as a regional leader in LPG distribution, owing to its strategic location on the Indian Ocean and flagship Kigamboni LPG Terminal, which imports LPG from the Middle East and delivers it by truck to the wider region.

Tanzania's Taifa Gas is currently leading construction of a $100-million LPG facility in northern Zambia, in partnership with Zambia's Delta Marimba. Last November, the country also launched its first compressed natural gas filling station and conversion centre in Dar es Salaam, developed by TAQA Dalbit – a joint venture between TAQA Arabia and JCG Oil & Gas.

Tanzania is expected to launch its fifth oil and gas licensing round by June 2024, with licences to be awarded by December of the same year. While the details have yet to be disclosed, 26 oil and gas blocks have been initially allocated for tender, including 15 onshore and 11 offshore blocks.

Representing the country's first bid round in over a decade, the licensing round aims to accelerate foreign investment in the country's upstream sector and showcase its highly prospective acreage.

So far, Chinese national oil company CNOOC is leading exploration in the country – in collaboration with Tanzania Petroleum Development Corporation – and is conducting seismic surveys in deepwater blocks located nearby gas discoveries made by Shell, Equinor and ExxonMobil.

For more information, visit www.Invest-Africa-Energy.com

THE NEXT GENERATION

Internships, Skills & Development Programmes

Clothing industry graduates stitch new opportunities with City-funded leadership programme

MAYORAL committee member for economic growth, Alderman James Vos joined the Cape Clothing and Textile Cluster (CCTC), the City's partner in the industry, for a graduation ceremony to celebrate 66 young learners who took part in a City-funded leadership programme.

The programme came on the back of a research report by the CCTC which highlighted the industry's low youth participation, especially within leadership roles.

"The training responds directly to the needs of the industry and aims to empower participants with lean manufacturing fundamentals and problem-solving skills that are crucial for enhancing competitiveness and efficiency within the sector."

"I'm happy to share that the graduates have already put their learnings to use within participating companies, demonstrating the direct impact of skills development on operational success. These 66 individuals have already saved a collective R6,9 million through the projects initiated in their training," said Vos.

Cape Town is home to a colourful patchwork of clothing and textile companies.

From small and medium-sized enterprises to large retailers with global footprints, the local industry makes up around 14% of manufacturing employment in the country, meaning that it facilitates an estimated 60 000 to 80 000 jobs. Of this, 23 800 people work in Cape Town.

'In 2023, 371-million clothing and textile units were sourced from South African manufacturers. An estimated 100 million of these were sourced from Cape Town. It is further worth noting that the clothing and textile manufacturing industry contributes R3,1-billion to Cape Town's economy.

"The local industry is aiming to place 8 000 people into jobs over the next two years. By upskilling young employees to fill management roles, the City, via the CCTC is helping to create a sustainable succession and economic growth plan for the sector for years to come," said Vos.

Cape Town puts R5,5-million into recruiting youth for jobs

THE City of Cape Town is putting a R5,5-million budget behind Jobs Connect – a recruitment platform to link young people with employers, which also includes work readiness training opportunities.

The allocation forms part of the City's proposed Building For Jobs Budget 2024/25.

To date, over 100 000 Capetonians have signed up to the Jobs Connect platform, which offers an easy-to-use, accessible way to connect work-seekers with employers.

"Jobs Connect offers Capetonians an opportunity to find work and training opportunities in our high-growth sectors, including call centres, hospitality, manufacturing, retail and more. Importantly, these sectors have low-barriers to entry especially for young people hoping to experience the life-changing transformative power of earning an income for the first time," said Mayor Geordin Hill-Lewis.

"The Jobs Connect platform is just one of the many ways the City is ensuring that Cape Town maintains the lowest broad unemployment rate of all SA metros, with 363 000 new jobs created in our metro since the current local government term of office began in November 2021, said Hill-Lewis.

The Jobs Connect platform can be accessed via mobile phone or desktop, and is data-free for MTN and Vodacom users.

Users create an online profile that serves as their digital CV. Thereafter they complete a digital numeracy and literacy assessment. Both the CV and the assessment certificates are downloadable.

Once registered and assessed, people can go through the platform to see what training and learnership opportunities are available. Job-seekers are also able to drill down to opportunities by area. Individuals who are selected for an interview are automatically notified via SMS or WhatsApp.

'Looking for work can be time-consuming and stressful, and can cost work-seekers up to R1 500 per month according to studies. Jobs Connect eliminates many of these issues by offering a streamlined, user-friendly, and cost-effective online system. 'With over 100 000 Capetonians registered on this platform, we are seeing promising results for both work-seekers and employers. 'Recently, Jobs Connect, which is managed by Leelyn Management, collaborated with Smile FM in securing 12 914 job opportunities for Capetonians in just a few weeks before Christmas 2023. This was well above the campaign's target of 10 000 jobs,' said Alderman James Vos, Mayoral committee member for economic growth.

How to get started on Jobs Connect

To get onto Jobs Connect, work-seekers need to register their details on the website, https://jobsconnect.leelyn.co.za/ and complete a literacy and numeracy assessment.

Business owners looking for talent can also register as an employer by contacting Leelyn Management at info@leelyn.co.za or phone 021 558 1552.

IN THE NEXT ISSUE:

- Building & Construction
- Capital Equipment: Plant, Machinery & Construction Equipment
- Civil Engineering infrastructure & development
- Corrosion Control: Prevention, Abrasion & Protection
- Engineering Services: Manufacturing | Design
- Fishing Industry
- Flooring, Handrailing & Walkway Solutons
- Heavy Lifting: Lifting & Rigging Equipment
- Injection Moldings
- Packaging Materials: Plastics, Metal, Glass, Cardboard, Sustainability
- Petrochemicals Oil & Gas Resources: Production, Processing, Engineering Solutions & Value Chain
- Property Development
- Recycling & Waste Management: Circular Economy – Zero to Landfill
- Surface Mining Quarries & Minerals Processing

To secure your marketing campaign -
Email: sales@cbn.co.za
Booking Deadline: 24 May 2024
To enquire about press release submission -
Email: editor@cbn.co.za
Submission Deadline: 29 May 2024

CAPE
Business News

Chairman:
Rudi Leitner
rudi.leitner@hypenica.com
Publisher:
Robin Dunbar
robin.dunbar@cbn.co.za
Editor:
Larry Claasen
Production Manager:
Elise Jacobs
elise.jacobs@cbn.co.za
Sales & Marketing Director:
Robin Dunbar
robin.dunbar@cbn.co.za
Sales Team:
Heather Ferreira
heather.ferreira@cbn.co.za
Shaun Austin
shaun.austin@cbn.co.za
Client Liaison Officer:
nyameka@cbn.co.za
Cape Business News Enquiries
sales@cbn.co.za

Election time: don't complain if you don't vote

OPINION

ON THE CONTRARY

The columnist is a journalist and editor based in Onrusrivier. His awards for journalistic excellence include the Mondi and the Sanlam Awards.

Pieter Schoombee

The usual circle of concerned conversationalists congregating at the local Pub & Grill was talking politics despite The Governor's ban. 29 May is election day, after all. The issue was coalition governments and The Prof had the floor:

"My colleague Prof Anthony Turton, the water crisis guru we have met from time to time on this page, has well-considered views on President Cyril Ramaphosa taking the ANC into a governing coalition with two of its offshoots – Julius Malema's EFF and Jacob Zuma's MK Party: It won't work; it has a design fault.

"I agree. Dr Turton uses the metaphor of lions hunting their prey. When they've got it down, the alpha lion takes his cut and the others grab as much as they can (provided by us, fellow taxpayers).

"Soon the hyenas will join in for 'their share', followed by the vultures and jackals claiming their turn to eat.

"Let's replace the lions with our coalition parties and the prey with that pie economists always want people to share. The solution, of course, is to bake a bigger pie with more to go around. How, Miss Lily? By establishing an enabling environment for the private sector to start and build businesses. And why? To create the jobs and profits that will grow our economy. And voila: a bigger pie.

"The sad part is that our coalition won't spend any time in the kitchen. We see it for ourselves and we read the gruesome details from Judge Zondo's probe into state capture. And we know what was done about that."

"Indeed," conceded Bill the Beard, "with the fortunate exception of the Western Cape and we all know why. The people moving here from all over tell us why. And when even a jewel of the Garden Route like Knysna is turned into a rubbish dump, we don't have to ask what happened."

"Whoa!" interrupted Luke the Dude, are we all struck by political correctness here? Careful not to hurt Big Ben's ANC feelings? Sorry Ben, but I'll change that by summarising John Steenhuisen, the leader of the DA. Speaking in the Free State recently, he was frank about our reality. In his words:

'Harrismith was once the jewel of the Free State. But the ANC has collapsed everything from refuse removal to the most basic infrastructure there.

'According to the ANC's own national department of water and sanitation, the Free State has the highest rate of water losses in the entire country. A staggering 61% of water is lost between the time it moves from a bulk reservoir to the time it is supposed to arrive in your taps. The water is there. It is just lost and wasted because … the money meant for maintaining the pipes and pumps that should get the water into your home, was stolen.

'The Free State does not have a water crisis. It has an ANC governance and corruption crisis.' "His words," concluded Luke the Dude.

Looking on the bright side, Miss Lily had the last word though: "Election day is a public holiday, so I have volunteered to work at our voting station. Hope to see you all there!"

Email:: noag@maxitec.co.za

The JSE's new ESG reporting standards. What you should know

Mili Soni, Knowledge and Learning Lawyer, Corporate, Bowmans South Africa.

THE Task Force for Climate-Related Financial Disclosures (TCFD) released recommendations around four focus areas that represent key operational elements of an organisation that can have climate-related impact: governance; strategy; risk management; and metrics, targets and performance.

In providing disclosure detail, issuers should ensure that they follow the JSE Sustainability Disclosure Guidance's key principles to produce a useful ESG report with high-quality and clear disclosures that enable a decision-maker to understand the relevant organisation's stance on climate change.

The information provided must be in line with IFRS S2 Climate-Related Disclosures, as informed by TCFD recommendations and enhanced by the JSE.

Detailed disclosure is required about the following:

- **Governance** – This refers to the board's oversight of climate-related impacts, risks and opportunities, and the required process for integrating sustainability issues into the organisation's governance approach around climate-relate risks and opportunities.

  This is informative in assessing the extent to which such matters are receiving an adequate level of board and management attention. Good governance should include climate-related governance. Boards should ensure that people with the relevant expertise and skills are employed for involvement with this function to competently oversee climate-related strategies.

  In doing so, the board should describe how it sets the direction and tone for considering climate-related impacts, risks and opportunities and it should set out the methods and how often the board and/ or committees consider climate-related reporting and how these considerations are integrated into the organisation's strategic plans, funds allocation and remuneration policies and incentive programmes.

- **Strategy** – The disclosures must detail how climate-related issues play a role in an organisation's business model, strategy and financial spend in the near future and in the long term. Such information is useful to apprise the reader about the future impact of the organisation. As a result, an organisation should describe its 'impact materiality' and 'financial materiality' on people, the environment and the economy. In particular, it should set out the organisation's targets, bearing in mind that climate-related issues usually manifest at a much later point, if not sufficiently addressed upfront. In doing so, it should also detail the potential use of carbon offsets, as well as qualitative and quantitative information regarding the progress of plans disclosed in prior reporting periods.

  An organisation should also detail how its cash flows are impacted and if there is any risk of material adjustments expected in the next financial year.

- **Management approach** – This refers to a description of how climate-related impacts, risks and opportunities are identified, and addressed by an organisation's management. It is recommended that an organisation describes the way in which it considers the qualitative and quantitative thresholds applicable and indicates how it prioritises climate-related risks and opportunities against other types of risks and opportunities.

- **Metrics and targets** – These disclosures depict the performance metrics and targets used by the organisation to measure and manage its sustainability impact and its success in performing against such metrics and targets. In this regard, it is useful to consider current information against historical information to identify trends. Details around greenhouse gas emissions should be expressed, including detail of Scope 1 and Scope 2 emissions and greenhouse gas emissions intensity for Scope 1, 2 and 3. Detail should also be provided on capital expenditure and financing deployed towards climate-related risks and opportunities.

This is a developing field in which further guidance on disclosure can be expected in the short to medium-term.

The JSE Listing Requirements require listed companies to annually report, on an 'apply and explain' basis, the extent to which they have complied with King IV. King IV emphasises the importance of considering other stakeholder interests and requires company directors to have regard to wide-ranging social, economic and environmental concerns to ensure that the company can 'create value in a sustainable manner'.

The JSE's Sustainability Disclosure Guidance and Climate Disclosure Guidance were issued in 2022 to assist issuers on a voluntary basis. These have been prepared to guide South African companies navigating the global position applicable to sustainability and ESG. Although these papers have been issued by the JSE, they do not constitute mandatory reporting or disclosure obligations for JSE-listed companies.

While South African statutes impose a range of obligations regarding the environment which could extend a specific duty of care to directors of a company, there is no strict liability applicable to decisions impacting the environment. However, it is recommended that directors (and the relevant company) are able to demonstrate that in taking a decision they acted within the law and gave reasonable consideration to the relevant environmental issues, with due regard to globally or internationally recognised standards.

South African companies face potential reputational risks for failing to follow appropriate environmental practices in terms of existing environmental legislation, if this leads to litigation. The last few years have seen the rise of climate change litigation, globally, especially cases involving greenwashing/ green claims; challenging governments or corporations (including financial institutions) for failure to take climate risks into account in decision-making; and challenging the flow of finance to projects and activities that are not aligned with global commitments to reduce carbon emissions.

Directors have a duty to act with due care, skill and diligence and in the best interests of the company, which includes incorporating ESG into the company's strategic plans.