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The economy faces "significant risk" as looming gas shortages hang over it

Despite the government's bold plans for the gas sector, the industry has to deal with huge hurdles and a catastrophic threat.



 $Saldanha\ Bay\ IDZ\ has\ yet\ to\ conclude\ a\ green\ hydrogen\ off take\ agreement.$

By Larry Claasen

OUTH Africa's efforts to foster the growth of liquefied natural gas (LNG) and the Green Hydrogen sectors are bold, but face significant hurdles and a worrying threat.

The government says it is committed to supporting the sectors, but a possible LNG shortage and hindrances at the projects it is backing have hampered it.

For example, it has backed high-profile Green Hydrogen projects, such as the 5000MW one at Boegoebaai in the Northern Cape and the 850MW project at the Saldanha Bay Industrial Development Zone (IDZ), but they have yet to reach significant milestones.

The idea behind Green Hydrogen is to create hydrogen to be used as a fuel for export. The hydrogen is considered green because it is created through the electrolysis process using renewable electricity as a power source.

Long lead times

Rystad Energy, an independent energy research company based in Norway that tracks energy projects worldwide says only two of the five green hydrogen projects it is tracking in South Africa are expected to start production before the end of the decede.

Rystad Energy said these projects have to overcome significant hurdles, such as the lack of offtake agreements, frequent blackouts, and underdeveloped infrastructure for hydrogen storage and transportation.

They were also at a very early stage of their development. "Most projects are in the nascent stages of development, with minimal progress, similar to other countries on the continent," it said.

Rystad Energy said South Africa also

Rystad Energy said South Africa also had to deal with intense competition from Namibia.

"The rise of Namibia's renewable energy sector and hydrogen ambitions presents a competitive threat to South Africa's hydrogen industry."

The projects' lack of offtake agreements questions their viability, as it essentially means they have not yet found offshore buyers to acquire their hydrogen. Concluding these agreements would cement their viability, as it would make it easier for producers to obtain financing.

Aside from the lack of offtake agreements, the viability of the projects are also hampered by the lack of government incentives, says Rystad Energy.

The coming shortage

The LNG sector is also facing difficulties despite the government's commitment to building gas import terminals and developing the local gas industry. There are now

concerns that there will be a gas shortage once Sasol's operations in Mozambique stop supplying the country in June 2026. Industrial Gas Users' Association Southern Africa (IGUA-SA) executive officer Jaco Human says the country only has about a year to conclude long-term off-take agreements to avoid a gas shortfall crisis.

"We've got to take and conclude longterm off-take agreements by May next year. Any time beyond that will result in significant risk in terms of gas availability to the country. That is absolutely key."

IGUA-SA is so concerned that the government has not implemented concrete plans to offset the fall-off in supply, it created a gas-aggregator company GasCo, which will act as a vehicle to drive long-term gas infrastructure development and secure supply.

This move, however, comes with some risk and is looking to state to help offset it.

"These initiatives include taking on significant risk, business risk, typically in areas where the government should be taking a risk in the national interest. So, what we're asking the government to do at this juncture, is to assume some of the underlying risks in these long-term transactions and infrastructure developments."

A looming crisis

IGUA-SA fears that the inability to secure supply would endanger South African industrial gas users, which directly employ 70 000 people and contribute between R300-billion and R500-billion annually to the economy.

"A cessation in the gas supply will result in multiple plant closures and a significant reduction in manufacturing output across KwaZulu-Natal, Gauteng, and Mpumalanga," IGUA-SA warns in its 2024 annual report.

Aside from the threat to the country's industrial heartland, the annual report notes that the Cape already lacks the capacity to provide adequate supply.

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Steenhuisen says decongesting the Port of Cape Town is "one of his top priorities"



The acquisition of two new boats forms part of the TNPA Marine Fleet Renewal programme.

By Larry Claasen

Tew Minister of Agriculture John Steenhuisen says he has made decongesting the Port of Cape Town "one of his top priorities."

The Port of Cape Town has come in for sharp criticism for its level of congestion in the past year. Exporters in the Western Cape have blamed Transnet's inability to provide adequate services for billions of rands of losses at the port, which handles the bulk of the country's agricultural ex-

For example, Capespan said in March that during this year's harvesting season, between 14 and 17-million cartons of grapes were stuck either in cold depots or in stack, waiting to be shipped.

"Due to a backlog created by wind delays and port inefficiencies in Cape Town, producers and exporters targeted a vessel that called on the Port Elizabeth port. The fruit was always destined to wait 10 to 14 days to load, but then that vessel got delayed by a further two weeks. These were the oldest grapes to have left South African shores for Europe this season," said Herman Redelinghuys, product manager: grapes at Capespan.

The problems at the port saw it rank last out of the 405 surveyed

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"The Western Cape region suffers from the largest gas supply shortfall."

Some encouragement

IGUA-SA's concern over energy supply comes despite the government publishing its Gas Master Plan in April, which is meant to chart the industry's future.

The plan acknowledges that the supply from Mozambique is coming to an end but also said development of gas terminals at Richards Bay,

Saldanha Bay and the Port of Ngqura will facilitate the importation of liquefied natural gas.

Human says the plan does not adequately address the supply issue in the short term.

The looming gas

shortfall comes as the government splits the Department of Mineral Resources and Energy into the Department of Energy and Electricity and the Department of Mineral and

Petroleum Resources.
This move sees

Kgosientsho Ramokgopa becoming the Energy and Electricity minister.

Though Ramokgopa has only recently taken over the gas portfolio, Human says the initial engagements with him have been "very encouraging."

Steenhuisen says decongesting the Port of Cape Town is "one of his top priorities"

Continued from P1

in the World Bank's Container Port Performance Index 2023. This performance is worse than its 2022 ranking, which saw it come 344 out of the 348. The World Bank's Container Port Performance Index measures the time container ships spend in port.

The government and Transnet have both said turning around the performance of the country's port was a priority, and is broadly seen as key to driving economic growth.

Steenhuisen has called on greater cooperation around the ports. In this regard he said he will engage with his cabinet colleague, the minister of transport, which covers the essential road and rail routes farmers require to get their goods to local and international markets.

He has been briefed by his department regarding the performance of the Port of Cape Town and will soon meet with industry role players to listen to their concerns.

The department said exports were critical for the growth of the economy and the minister has made this one of his top priorities.

Transnet said it was

making progress when it came to decongesting the Port of Cape Town. It has not only reduced wait times but has also invested in upgrading its facilities.

Transnet National Ports Authority (TNPA) for example launched two new boats destined for the Port of Cape Town built by the Sandock Austral Shipyards (SAS) in Durban.

This acquisition forms part of the TNPA Marine Fleet Renewal programme, which aims to improve shipping efficiencies at the South African ports by increasing marine craft availability.

The TNPA Marine Fleet Renewal programme is one of TN-PA's strategic deliverables in the Transnet Recovery Plan.

This milestone follows a building period that began after TNPA awarded SAS a contract of approximately R58-million in November 2022, to construct and deliver two new launch boats destined for the Port of Cape Town.

"The arrival of these new crafts comes at an opportune time when TNPA is executing the Transnet Recovery Plan, through the acquisition of fit-forpurpose marine fleet to improve operational efficiencies. This also aligns with our commitment to meeting industry demands in the western region," said TNPA Acting Port Manager for Cape Town, Ophelia Shabane.

The department of agriculture says there has been movement regarding congestion at the Port of Cape Town, and that the minister would do everything possible, working hand in hand with other government departments and the industry role players to improve the situation at the ports.

Local EV market gets a boost with first dedicated charging stations for trucks to be set up - Zero Carbon Logistics

By Larry Claasen

SOUTH Africa's transition to off-grid electric trucks reached a major milestone with the announcement by Zero Carbon Logistics that it had signed a Memorandum of Understanding (MOU) with Chinese multinational SANY to develop a charging network.

The network could see six solar-powered charging stations placed between Johannesburg and Durban on the N3 highway.

Placing charging stations on the N3 is just the beginning as Zero Carbon Logistics have plans to set up charging networks on the busiest national roads in South Africa. Its ultimate vision is to have electric powered trucks travelling along the N1, N2, N3,

N4, N5, N6, N7, N8, N9, N10, N11, N12, N14, and N17 without fear of running out of power.

The announcement by Zero Carbon Logistics comes just as the growth of Electric Vehicles (EVs) has grown in momentum. According to the National Association of Automobile Manufacturers of South Africa (Naamsa) 3 042 new EVs were bought in the first quarter of 2024. This is up 82.7% from the 1 665 sold in the same period last year.

This EV market has also gotten a boost with the Finance Minister announcement in February, the introduction of an incentive to drive investment in local EV pro-

Under the scheme, the makers of electric and hydrogen vehicles can claim up to 150% of "qualifying investment spending."

A new market

Up until now, EV sales were driven by car sales, but the announcement by Zero Carbon Logistics and SANY has opened up this market to trucks, as the partnership includes the introduction of overseas-manufactured electric trucks and battery technology to South Africa.

"We are thrilled to partner with SANY, a global leader in electromobility, to develop and operate six ultra-fast, green charging facilities on the N3 highway," said Joubert Roux, co-founder of Zero Carbon Logistics.

"These stations will feature advanced technology, enabling trucks to charge within 20 minutes or swap batteries in under five minutes, ensuring minimal downtime for drivers."

Zero Carbon Logistics says that by getting businesses to switch to electric trucks on a high traffic volume route - over 8 576 trucks travel a day between Johannesburg, the country's economic capital and Durban, which is home to the busiest port - it will make a significant reduction in carbon emissions.

It says that electric trucks travelling the length of the N3 will save 670kg in CO₂ emissions. Roux highlighted the need for government incentives to support the transition to electric vehicles. "Achieving net-zero transport by 2050 requires real incentives, such as a six-year tax holiday on EV imports, to encourage widespread adoption of electric trucks. This will also create a favourable environment for local EV and battery manufacturing."

Roux also noted the potential

strain on the national grid from a mass transition to electric trucks. Charging the trucks on the N3 route alone would add an estimated 2,3 billion kWh per year to the grid. To mitigate this, the charging infrastructure will rely on renewable energy to prevent increased CO₂ emissions from coal-dependent Eskom.

The company has secured agreements for 90 of the planned 120 off-grid charging sites and has begun the permitting process for the initial six N3 sites, aiming for completion by November 2027.

Roux called for a regulatory framework to expedite the establishment of solar-powered charging stations. "Simplifying land use and environmental application processes is crucial for developing these green charging sites," he said.



Monitor Engineering celebrates 75 years of excellence in industrial spraying solutions



IN the world of industrial engineering, longevity and trustworthiness are marks of excellence and reliability. Monitor Engineering, the sole agent for Spraying Systems Co. in South Africa, epitomises these qualities as it celebrates 75 years in business.

"Monitor Engineering's partnership with Spraying Systems Co., a global leader in spray technology, has been instrumental in its success'

This milestone is not just a testament to the company's resilience and adaptability but also a reflection of its unwavering commitment to innovation, quality, and customer satisfaction in the field of spray nozzles, spraying systems and fluid handling technologies.

The genesis and growth

Founded in 1949, Monitor Engineering has establishment into a key player in the industrial spraying solutions market. The company's journey began with a simple, yet profound, mission: to provide cutting-edge spray technology and unmatched customer service to industries across South Africa.

This mission has remained the cornerstone of its operations for over seven decades.

"Monitor Engineering's partnership with Spraying Systems Co., a global leader in spray technology, has been instrumental in its success," says Monitor Engineering MD, Grant Orsmond.

'This collaboration has enabled Monitor to offer a wide range of high-quality products and solutions, from precision spray nozzles and automated spray systems to advanced spray analysis and control technologies. These products are essential in various industries, including agriculture, food processing, pharmaceuticals, mining and manufacturing."

Commitment to innovation

been at the heart of Spraying Systems Co.'s ethos. The company continually invests in research and development to ensure that it stays at the forefront of technological advancements in spray technology. This commitment to innovation is evident in its comprehensive product portfolio, which includes the latest in spray nozzles, spray guns, tank cleaning equipment, and custom-engineered

spray solutions. One of the key factors that sets Monitor Engineering apart is its ability to provide tailored solutions to meet the specific needs of its customers. By leveraging the cuttingedge technology from Spraying Systems Co., Monitor Engineering can design and implement bespoke spraying systems that optimise performance, reduce waste, and enhance efficiency.

Customer-centric approach

Monitor's success is also attributed to customer-centric approach, priding itself on building strong, long-lasting ships with its customers. By understanding the unique challenges and requirements of

each customer, Monitor can provide solutions that not only meet but exceed expectations. This dedication to customer satisfaction has earned the company a reputation for reliability and excellence.

The company's team of highly skilled engineers and technicians plays a crucial role in maintaining this reputation. Their expertise, coupled with ongoing training and development, ensures that Monitor Engineering can deliver the highest standards of service and support. Whether it's providing technical advice, conducting on-site assessments, or offering after-sales service, Monitor is committed to delivering value at every stage of the customer journey.

Looking to the future

"As Monitor Engineering celebrates its 75th anniversary," says Orsmond, "it does so with an eve firmly on the future. The company recognises that the industrial landscape is constantly evolving, and we are prepared to adapt and innovate to meet new challenges opportunities. Sustainability is a key focus: we are actively working on developing eco-friendly spraying solutions that minienvironmental impact while maximising efficiency and productivity.'

The company's vision for the future includes expanding its reach within South Africa and beyond, continuing to build on its legacy of excellence. By staying true to its core values of innovation, quality, and customer satisfaction, Monitor Engineering is well-positioned to remain a leader in the industrial spraying solutions market for many years to come.

For more information: www.spray.co.za grant@monitorspray.

AGOA: The renewal signs are positive

By Chris Hattingh

THE recent trip by Trade, Industry and Competition Minister Parks Tau, and Deputy Minister Andrew Whitfield to the Africa Growth and Opportunity Act (AGOA) Forum in the US, has turned out quite well.

The trade agreement is set to be renewed in 2025 but there is growing talk among some US politicians about excluding South Africa from it, as they are unhappy with the country's close ties to nations like Russia and China.

The stakes are high for South Africa. It is one of the 35 sub-Saharan African countries that benefit from the duty-free access AGOA provides to the US market. According to the Financial Mail's Claire Bisseker, in 2023 SA exports to the US measured at more than \$14-billion; about a third of those entered dutyfree, as part of AGOA.

There are two risks to SA's continued participation in AGOA. The first is proposed legislation that, if adopted, would require the given administration to undertake a comprehensive review of US-SA relations.

The second is the US presidential elections. The review-containing legislation has passed the US House of Rep-



resentatives but still needs to pass the Senate or be signed by the US president – at present, Joe Biden.

The concern is who will be president after Biden. If the Democratic nominee, vice president Kamala Harris wins, while not guaranteed, AGOA renewal is more likely.

But if the Republican candidate, former president Donald Trump wins, the possibility of not including South Africa in AGOA, can not be ruled out.

Tau and Whitfield, however, were confident South Africa would continue to participate in the program after its possible renewal.

Upon their return from the US minister Tau stated:' "We received bipartisan support for the reauthorisation of AGOA... We're confident that AGOA would continue and that South Africa would stay in AGOA.3

Though nothing has been officially confirmed by the US, Whitfield said there was a feeling amongst the South African delegation that nothing was going to change regarding the country's relationship with AGOA.

If so, it would be good news for some industries.

The automobile base metals, agriculture, and chemical sectors benefit the most from AGOA: should South Africa's status as a participant not be renewed, they will be the hardest hit; but they will survive.

South Africa's continued participation in AGOA would send the right - and necessary for economic growth reasons - signal to things such as capital flows and investment, foreign direct investment, and the country's general reliability as an investment- and tradepartner and highly desired destination.



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VEGAPULS level sensor: taming titanium dioxide production challenges



VEGAPULS level sensor with an 80-GHz transmission frequency.

CERTAIN applications often have trouble with consistent performance, which requires extra monitoring by operators and maintenance personnel.

"The sensor's narrow measuring beam allowed for easy installation in an existing socket, reducing engineering and preparation time."

A well-known French titanium dioxide manufacturer had been looking for a reliable level measurement solution for a specific process. Previous devices had given unreliable readings despite significant investments in service and maintenance.

frequency.

The breakthrough came when the company started using a VEGAPULS level sensor with an 80GHz transmission fre-

Titanium dioxide is a crucial white pigment ingredient that enhances the protective properties of varnishes and paints used in various industries such as automotive, food, textile, and paper.

End users demand the highest standards of purity and quality, making the production of titanium dioxide complex and hazardous. As a result, the manufacturing process requires high levels of automation.

The maintenance staff often face challenges due to sensor buildup and corrosion. The titanium diox-

ide plant in Thann, France, experiences extreme stresses on sensor materials, particularly during the initial production phase following the sulphating procedure.

This phase involves adding weak sulph-uric acid to a premix of ores and sulphuric acid, resulting in a violent, exothermic reaction that produces aggressive and adhesive vapours. Once the mixture is dissolved and stabilized, the containers are emptied to remove natural impurities like iron compounds, which could discolour the pure white titanium dioxide.

Two different level measurement technologies were used in this stage, but neither delivered satisfactory results. Initially, an older radar measuring device with a coneshaped Teflon-coated antenna and an operating voltage of 230 V AC was utilised.

Later, a bubbler back-pressure level system was attempted. Both methods failed to provide reliable measurements during certain decomposition phases, even with regular, time-consuming, and hazardous preventive maintenance.

The manufacturer aimed to achieve reliable level measurement while reducing high maintenance costs. As a VEGA customer for over 30 years, the manufacturer valued the trusted relationship and VEGA's prompt service response.

At first, the client

was uncertain whether the VEGAPULS sensors could endure the harsh conditions of decomposition process. However, the first trial, conducted under real production conditions, was promising. The sensor's narrow measuring beam allowed for easy installation in an existing socket, reducing engineering and preparation time. Setup and commissioning were straightforward, as the false signal suppression procedure was largely unnecessary.

The VEGAPULS level sensor provided precise and dependable measurements, resulting in its permanent installation in the reaction vessel. Its performance was so impressive that the company replaced the previous level sensors in other production vessels with VEGAPULS instruments as well.

Thelo Group ushers in a new era of growth for African railways

By Larry Claasen

RONNIE Ntuli, the founder and chairman of the Thelo Group of companies, has ambitious goals.

The Thelo Group, which owns 40 locomotives and 200 wagons in five countries in sub-Saharan Africa, is expanding out of leasing its rolling stock to rail operators, into developing, running and maintaining five transport corridors on the continent.

the continent.

This change will see it raise \$250-million (R4,6-billion), and broaden its offering into providing integrated transport and logistics infrastructure solutions - in partnership with German rail group Deutsche Bahn.

Ntuli said the idea is to improve rail infrastructure, such as signalling equipment and rail switching, in partnership with Deutsche Bahn.

"The infrastructure [in the countries it operated in] was generally in a state of disrepair, and the capacity really was not up to standard in terms of operational efficiency," he said.

Ntuli said the par-

ticipation of Deutsche Bahn could not be underestimated, as it brought almost unmatched technical expertise to the partnership.

"Deutsche Bahn is the German national railway company, but arguably the number one fully integrated rail group globally."

Ntuli said developing the corridors is part of a more ambitious vision. The overall goal is to develop the five corridors into an integrated transcontinental transport system.

The corridor that has progressed the furthest is the \$3,2-billion, 300km Western Railway Line in Ghana, which will transport freight and other bulk commodities from Obuasi to Takoradi Harbour.

Thelo has also been shortlisted for the development of the 1 500km long Trans-Kalahari Corridor between Mmamabula, Botswana and the port of Walvis Bay in Namibia.

It is also part of one of the consortiums shortlisted by Transnet to develop a deep-water port and transport corridor at the mooted green hydrogen project at Boegoebaai in the Northern Cape.

Ntuli said more deals were being negotiated.

"We are in bilateral discussions with other governments on the continent where there are tangible freight volumes today. I can't mention the countries, but they are very strategic jurisdictions we're trying to integrate."

Ntuli's vision, however, is broader than ensuring that commodities are more easily brought to ports from mostly landlocked countries. Instead, he sees it as a step toward increasing the pace of industrialisation in Africa.

"We don't have sufficient industrial capacity. And you can't have industrial capacity if you don't have infrastructure."

Ntuli, however, admits that fulfilling this vision is not easy.

To have an integrated transcontinental transport system in sub-Saharan Africa, the various rail licensing and safety authorities, operators, and governments must develop a unified approach to running such a network.

"We need to start standardising the infrastructure, the signalling, and train operating systems and rolling stock."

When this happens, rail operators from different countries will not only be able to run their trains more efficiently in foreign markets, but also enable the track owners to recognise whose trains are running on their tracks and charge them accordingly.

Ntuli said Deutsche Bahn's participation can be especially helpful here, as it has extensive experience operating in Europe's integrated rail network.

Despite the difficulty of implementing this type of integration, Ntuli noted that it aligned with the goal of the Africa Continental Free Trade Area (AfCFTA), which is to create a single market on the continent.

A World Bank report has found that the African trade pact could boost regional income 7% (\$450-billion) and lift 30-million people out of extreme poverty by 2035.



Growing interest in SA for steam turbine self-generation

STEAM turbines provide a valuable opportunity for many industries in South Africa to self-generate more of their own power requirements - and often from alternative fuels produced as a by-product of their processes.

According to Rudolf van Pype, steam turbine manager energy systems at WEG, this technology offers benefits including energy cost reductions, more stable supply of power and a lower carbon footprint.

A leading South African firm taking advantage of these opportunities is Sappi Saiccor.

Its mill at Umkomaas in KwaZulu-Natal is one of the world's largest producers of dissolving pulp for viscose staple fibre - used mainly in the production of textiles but also in other household, industrial and pharmaceutical applications. Gas produced from this process represents a fuel source which generates steam for electricity production.

"A 45 MW extraction backpressure steam turbine from WEG will be adding to Sappi Saiccor's energy generating capacity at its MgO3 plant," says van Pype. "The power generated will be used for internal consumption."

Steam turbine technology is also becoming increasingly versatile, to accommodate the specific requirements of the facilities they serve, he explains. At the Sappi Saiccor mill, for instance, there is the need to have 15 different load points served by the turbine - where in the past it was usual to have just two or three load points.

"It is now possible to provide many more load points - each one with its own inlet steam flow conditions," he says.

"The steam turbine esion can cater for a steam flow range that varies considerably. For the new unit at Sappi Saiccor, this range will be from 75 t/h to 300 t/h.'

As the leading manufacturer of steam turbines in Brazil, WEG has supplied a number of units of this turbine model to customers in the market there, he says.

The company's factory in Brazil will design and manufacture the new unit bound for South Africa, and WEG will conduct the installation, commissioning and ongoing maintenance next year.

Van Pype highlights that there is significant interest in steam turbine technology among South African companies who produce steam as part of

their industrial processes - especially those who have alternative fuel sources. He notes that load shedding has limited the productivity of many firms, who are now looking for longer term solutions.

"We receive regu-

enquiries from companies who operate boilers for their operations, looking for opportunities to reduce their operating costs while raising their production levels through a more reliable supply of electricity," he says.



Steam turbine technology from WEG offers benefits including energy cost reductions, more stable supply of power and a lower carbon footprint.



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Left: Mike Maziya, Warren Sachs, Senzo Masengemu

Beier Group welcomes new **CEO Warren Sachs**

THE Beier Group, a manufacturer of technical textiles, personal protective equipment, and advanced wound care products, has announced Warren Sachs as Group CEO.

Sachs is a seasoned

three decades of experience in the manufacturing industry across various technical and leadership roles.

"The foundation laid by Wolfgang Beier and the vision established by the Beier family

for the future. The manufacturing industry is a key driver of economic growth and job creation, which our country needs now more than ever. I aim to make manufacturing an industry of

and attract, develop and retain talent to ensure the future prosperity of not only the Beier Group, but South Africa as a whole," says Sachs.

Sachs is a professional engineer who completed recently his MBA with distinction from the Gordon Institute of Business Science.

" The foundation laid by Wolfgang Beier and the vision established by the Beier family have positioned us well for the future."

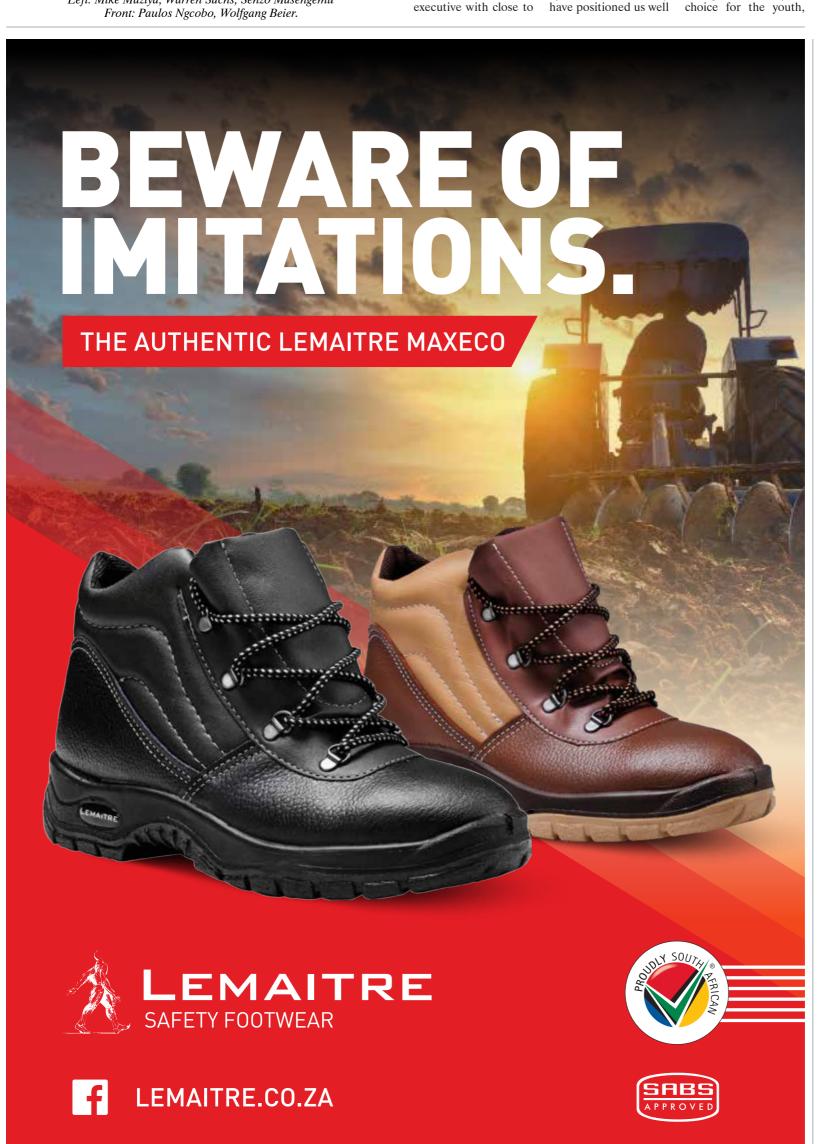
"I am committed to driving growth and innovation while upholding the values of the Beier Group. Under my leadership, we will focus on several strategic priorities, including continuing digital transformation to ensure that our company remains at the forefront of technological advancements in the manufacturing

sector," says Sachs.
Sachs' personal mission to "leave it better than I found it" serves as a guiding principle for his leadership and business stewardship. His philosophy reflects his commitment to continuous improvement and development in both people and processes, aiming to foster an environment that supports sustainable growth and operational excellence.

In addition to his role as Group CEO, Sachs serves on several company boards, the Toyota Wessels Institute of Manufacturing Studies Alumni Board, the UKZN Mechanical Engineering Advisory Board and is also involved with a notfor-profit organisation aimed at teacher training and leadership development of School Management Teams.

Commenting on Sachs's appointment, now Beier Board chairman, Wolfgang Beier, said: "Warren is perfectly poised to lead the Beier Group to new heights and drive our corporate agenda focused on industrialisation, transformation and development. The Board and I are confident that Warren will ensure that the Beier family legacy will continue to live on and deliver even greater shareholder value."

For more information about Beier Group, please visit www.beier.



Clean-Up & Recycle SA Week 2024: Join the movement to make a difference

AS the calendar turns to September, South gear-Africans are ing up for the annual Clean-Up & Recycle SA Week, scheduled to take place from 16-21 September 2024.

This year marks the 28th consecutive year that Plastics SA will coordinate South Africa's participation in the International Coastal Clean-Up, the world's largest volunteer effort dedicated to ocean health.

According to Douw Steyn, sustainability director at Plastics SA, the entire month of September will be a testament to environmental stewardship, with a focus on cleaning up our surroundings and promoting recycling.

"The theme for this year's event is 'Making a Difference,' and we call on South Africans from all walks of life to contribute to the beautification and health of our environment. Whether at work, home, or play, everyone is encouraged to actively participate in eliminating visible litter and promoting a culture of recycling".

Highlights of Clean-Up & Recycle SA Week include:

- Clean-Up and Recycle Week SA: 16 – 21 September
- National River Clean-up Day: 18 September
- National Recycling Day: 20 September
- World Clean-Up Day: 20 September
- International Coastal Clean-Up Day: 21 September

"Clean-Up & Recycle SA Week is a powerful reminder of the impact we can make when we come together for a common cause. Each piece of litter removed and every recycling effort contributes to the greater goal of preserving our environment for future generations. This year, we aim to inspire even more volunteers to join us in this vital endeavour," Steyn says.

In conjunction with the clean-up activities, Plastics SA is also excited to announce the launch of a nationwide competition.

Open to individuals, groups, and organisations, the competition encourages participants to submit before and after pictures of their clean-ups, along with details on the number of participants and bags of litter collected.

Additionally, there is a special category www.plasticsinfo.co.za

to honour and reward those who establish effective recycling systems at home, school, or at their workplace. The competition features generous prizes totalling R9 000 per section, with R5 000 for first place, R3 000 for second place, and R1 000 for third place.

"We look forward to making this our most successful event yet, with the largest number of volunteers participating," added Steyn.

"Whether you're joining a beach or river clean-up, organising a neighbourhood effort, or committing to recycling, every contribu-

tion counts. Together, we can make a significant difference and a lasting impact on our environment, one piece of litter at a time,"

Steyn concludes.

For further details, visit www.cleanupandrecycle.co.za or www. plasticsinfo.co.za.

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New products, innovations and world-class technologies at Electra Mining Africa

AN exhibition viewed by industry as one of the most important events on the calendar, Electra Mining Africa provides a unique platform where exhibitors can launch new products and showcase their latest innovations and technologies.

"We knew it was going to be one of the biggest shows we've ever had, but we can now say that this year's Electra Mining Africa is the biggest show in its history"

Taking place at the Expo Centre in Nas-Johannesburg, from 2-6 September, visitors to Electra Mining Africa will have the opportunity to connect with over 850 exhibitors and explore thousands of new products, ground-breaking machinery, latest innovations and world-class technologies at what will be the biggest show ever in its history. Hundreds of demonstrations will give visitors an opportunity to see



products and machinery in action during the five days of the exhibition

"We knew it was going to be one of the biggest shows we've ever had, but we can now say that this year's Electra Mining Africa is the biggest show in its history!" says Charlene Hefer, portfolio director at specialised exhibitions a division of Montgomery Group, the organisers of the show. "That means more top brands, products and innovations at this year's show with a much bigger footprint of exhibition space. It's very exciting to have reached this milestone."

Electra Mining Africa is the biggest mining, electrical, automation, manufacturing, power and transport trade exhibition in Southern Africa.. cated hall for the Local

Manufacturing Expo,'

"Local manufactur-

ing spans across all the

sectors that Electra

Mining Africa repre-

sents and so it makes

more sense for the

local manufacturing

exhibitors to be incor-

porated throughout

the show. We have cre-

ated various packages

African

Southern

explains Hefer.

Local manufacturing will play a prominent role at this year's Electra Mining Africa, and, for the first time, the Local Southern African Manufacturing Expo will be incorporated within this year's show.

"There is not a dedi-

that have made exhibiting more affordable for the smaller local manufacturers, providing benefit to these companies and to the visitors who will have an opportunity to see them at the show."

"We loosely group

"We loosely group the industry sectors in the various halls so as to showcase the innovation and technological advancements within these sectors, making it easier for visitors to find," notes Hefer.

"Halls 5 and 6 generally host heavy mining equipment, engineering support services - across all areas of engineering, machine tooling. Hall 7 is mainly focused on Automation, whilst Hall 8 is where many of our international exhibitors can be seen. Hall 9 spotlights power generation, and Hall 10 is a general hall with additional local manufacturing exhibitors. The outside areas are popular for pump and valve exhibitors which utilise the water areas for their demonstrations, and also for materials handling and transport, alongside other large equipment demonstrations."

"In addition to the exhibits, we are delighted to have some excellent speakers at our free-to-attend seminars who will be sharing their expertise on many topics mostly aligned with our theme days. These include sustainability, skills, safety and innovation. The seminars will take place in Hall 9 and no booking is required."

The Southern African Institute of Mining and Metallurgy (SAIMM) will be hosting a Mine Planning and Design Colloquium alongside the show, the Lifting Equipment Engineering Association of SA (LEEASA) will be hosting a conference, and Women in Mining South Africa (WiMSA) will be hosting a half-day women in mining workshop.





B.E.D. Burgersfort celebrates successful collaboration with WADA Group at platinum mine



Bolt Engineering and Distributors (B.E.D.) is synonymous with safety and quality.

BOLT and Engineering Distributors (B.E.D.) Burgersfort is pleased to announce its successful collaboration with WADA Group, in the supply of pump spares to a nearby platinum mine, marking a significant milestone in enhancing operational efficiency for the cus-

"The success of this collaboration has extended to other mining sector customers in our region, which we are now also supplying."

In November and December WADA group branch manager Ryno Alberts entered into discussions with Christo Viljoen and Lucky Mgiba, area sales managers at B.E.D. Burgersfort, to address the Group's requirements for high-pressure pumps and tailings pump spares.

"We were excited to convey the excellent benefits of the products we planned to supply - not to mention the substantial potential cost-saving to the mine," Viljoen explains.

Engaging with Ryno Alberts, Viljoen and Mgiba soon developed a comprehensive understanding of the mine's specific spares requirements - and supply challenges - securing their confidence in B.E.D.'s ability to deliver the required spares.

"We leveraged our longstanding relationships at the mine, and implemented cost-effective solutions to effectively address their requirements. Our ability to ensure prompt delivery and availability of spares through strategic stock management was also crucial in the success of this initiative," explains Viljoen.

Pumping production

Since the commencement of this collaboration, B.E.D. Burgersfort has supplied a range of wet-end pump spares including throat bushes, cover plates, frame plates, impellers, expeller rings, gland assemblies and shaft sleeves. As a result, substantial cost-savings, uninterrupted operations and production have been

"This collaboration supply project has been immensely rewarding. As a company, B.E.D. takes great pride in excellent service delivery, and we sincerely appreciate this new opportunity to service the customer with critical equipment spares," remarks Justin Pullinger, operations manager for B.E.D. Burgersfort.

Mgiba adds: "The success of this collaboration has extended to other mining sector customers in our region, which we are now also supplying. This further underscores our dedication to providing reliable solutions and enhancing operational efficiency.'

Alberts says that the collaboration with Burgersfort was natural and seamless: "Having our own

foundry - meticulously built by engineers who gave real thought to the design and the output of our products - has given us a tremendous advantage as suppliers. We understand the mining industry and that downtime is more costly than any part we might sup-

ply.
We therefore ensure that we always have substantial stock on hand so that no client experiences downtime. WADA Group rarely works with third parties, but with B.E.D. Burgersfort we knew that we were working with a team which takes customer service and quality as seriously as

Customer service: a mindset, not a department

"Maintaining regular communication and proactive follow-ups allowed us to support this customer's ongoing supply and operational requirements efficiently. It is all about upholding a culture of excellence, teamwork and continuous improvement: all integral to B.E.D.'s operational ethos.' Pullinger points out.

Emphasising importance of a customer-centric approach, he adds: "At B.E.D. Burgersfort, customer service is not a department - it is a mindset which permeates every aspect of our operations. We are committed to listening to our customers, anticipating their needs and delivering solutions which add demonstrable value to their oper-

Transnet seeks proposals for construction of 3MW renewable plant at the Port of **East London**

TRANSNET National Ports Authority (TNPA) has published a Request for Proposals (RFP) for the development of a 3MW solar-powered renewable plant at the Port of East London.

The state owned transport group says this move is part of its efforts to manage energy costs and reduce emissions by diversifying its energy mix through alternative energy sources and renewable energy.

It follows the announcement it made in July that it had issued three Requests for Proposals (RFPs) for the construction of two Solar-Powered Seawater Desalination Plants and a Renewable Energy Power System at its Nelson Mandela Bay Ports.

Back then, TNPA had issued two RFPs for the design, construction and operation of Solar-Powered Seawater Desalination plants which would have a daily production capacity of approximately 0,8ml (megalitres) and 0,5ml of potable water for the ports of Port Elizabeth and Ngqura, respectively. plants were set to improve the reliability of freshwater supply for port users.

The latest RFP it has issued aims to appoint a service provider to design, build, test, commission, operate and maintain the 3MW photovoltaic (PV) that has a battery energy storage system at the Port of

East London for a period of seven years.

The plant's construction will include a grid-tied carport solar PV and rooftop plant system to generate the required capacity.

The project is part of TNPA's Renewable Energy Purchase Programme to deploy approximately 100 MW across all eight South African commercial seaports.

TNPA's acting chief Executive, advocate Phyllis Difeto, stated, "The implementation of this programme within the port system entrenches TN-PA's contribution towards sustainable and cost-effective ports. The Ports Authority is actively working towards climate change

resilience, mitigation, and adaptation by deploying cleaner and cheaper energy solutions, in line with the Carbon Neutral Government Programme, which requires public entities to be carbon neutral by 2050, and the International Maritime Organisation (IMO) strategy which advances safer economies for net zero emissions."

Within this programme, the Port of Ngqura is currently in the process of appointing a service provider to develop a 7MW renewable plant, while the Amulet Group Consortium has been awarded the 20MW plant in the Port of Richards Bay, following its appointment in June 2024.



Rapid implementation of 'two pot" retirement system is putting the pressure on the financial sector - 10X **CEO Tobie van Heerden**

By Larry Claasen

SOUTH Africa's twopot retirement system comes into effect on 1 September 2024 is a good idea but the speed at which it needs to be implemented cause problems, says 10X Investments CEO Tobie van Heerden.

President Ramaphosa signed into law the two-pot retirement system on 1 June 2024, which enables people to make emergency withdrawals from pension funds once a year.

The Revenue Laws Amendment Act was specifically designed to alleviate financial distress by enabling individuals to access a portion of their retirement contributions, a key component of the twopot retirement system.

Under the changes to the law, people are allowed to withdraw 10% of their retirement savings, capped at R30 000, once a year.

Van Heerden says a mechanism to get funds out of pensions was needed, but he is concerned that the legislation was pushed through too fast, as it meant the financial services sector only had three months to enact the changes.

"The legislation was pushed through too quickly without thinking about the consequences of the operational impact."

Even so, the changes to the pension law is seen as a much-needed move, especially in light of the financial difficulty many South Afri-



10X Investments CEO Tobie van Heerden.

cans are dealing with.

This difficulty can be seen in the economy unexpectedly shrinking by 0,1% for the first three months of 2024, when compared against the corresponding period.

Stats SA said weaker manufacturing, mining and construction drove much of the downward momentum on the production side of the economy, while the expenditure side witnessed a decline across all components.

The sluggish economy has not alleviated unemployment, which now stands at 32,9%, and has seen consumers increasingly turn to debt to make ends meet.

DebtBusters said earlier this year that persistently high interest rates and inflation continued to erode consumers' disposable income, while a lack of any meaningful economic growth is constraining salaries.

Given the difficult economic environment, van Heerden still cautions people against treating their pension funds as a savings account.

"I have a simplistic view that retirement savings should be seen as a tax. It's money that

you are paying for something down the track."

Treating pension funds like a savings account compounds the difficulty of people not saving enough for their retirement.

For example, 10X Investments' 2023/24 Retirement Reality Report found that only 6% of people were making sufficient provisions for retirement.

Van Heerden says when it comes to planning for retirement, people should increase their contributions to their pension funds, as these extra payments over time will considerably increase the size of their nest eggs.

They should also examine the fees they are paying to the administrators of their pension funds. These fees add up and can easily reduce the size of the retirement fund.

Investing in conservative funds early in one's career could also be costly. Though highgrowth investments appear risky, they outperform conservative investments over time.

10X Investments is a financial service provider that offers low-fee retirement products.



Digital banks are eyeing the small and medium-sized business market

By Larry Claasen

SOUTH Africa's emerging digital banks are increasingly eyeing the business banking sector as a growth driver.

The digital banks have no bank branches and say that because they have no legacy costs, like the more established banks, they can undercut them on costs.

Discovery TymeBank and Bank Zero were initially launched with the idea of providing basic retail services for consumers but are now expanding their business offerings.

Bank Zero, for example, started offering a app-based completely commercial banking in October 2023. Through the app, business customers can set up business debit cards for staff, changed account details are flagged, and supporting documents can be added to payments for authorisation.

TymeBank, on the other hand, has not only ventured into commercial banking but has also made a strategic over of Retail Capital, a credit provider to small businesses, to further strengthen its business banking services.

Retail Capital, which has dispersed R10-billion since its inception 11 years ago, is key to TymeBank expanding its business banking ser-

"The plan was always to have the Retail Capital business form the corner of the TymeBank business offering, and that hasn't changed," says Miguel Da Silva, managing executive, Retail Capital. "We are integrating the B2B experience of the Retail Capital team into Tyme-Bank to create a business - not bank - first offering. We have run a successful trial of the Merchant Capital Advance product using the Retail Capital model as the base, and we plan to open it up to all TymeBank business customers in the coming months," he says.

Under serviced

Da Silva says there is space for a new entrant

like TymeBank in servicing the business sector as

parts of it are not really

catered for. "Funding small businesses continues to be a gap in the banking industry. The reason Retail Capital was created was to help bridge this gap that's experienced by SMEs. Traditional banks - and I don't include TymeBank in this bracket - have failed to understand the speed at which SME businesses need to move so they can carry on business as usual and drive growth."

Though digital banks believe they can be significant players in the business banking sector, unlike their traditional rivals, they don't offer credit products - yet.

Da Silva says this is on the cards for TymeBank. "We are currently working on enabling the Merchant Capital Advance product that Retail Capital offers, so watch the space for this. This will be offered on a pre-approved basis, so it's important that the business is TymeBank banked and uses the account so we can assess it for eligibility."

Though TymeBank and Bank Zero clearly see the business banking sector as a market they can find a niche in, it is not a priority for Discovery Bank.

Hylton Kallner, CEO of Discovery Bank, says, "While many of our clients who are sole proprietors are already using the Discovery Bank products across all aspects of their life... for us there are no firm timelines for entry into the business banking

IDC invests R140-million into Sheraton Textiles 'State-of-the-Art' production plant

By Larry Claasen

SHERATON Textiles, a bedding and linen manufacturer based in Cape Town, has launched a cutting-edge production facility in Diep River.

The new facility, backed by a R140-million investment from the Industrial Development Corporation (IDC) signalled a major investment aimed at boosting its competitiveness and production capacity.

Sheraton Textiles was founded in 1920 and now employs over 550 employees.

The investment, in conjunction with the plant's launch, Sheraton Textiles introduced a Worker's Trust, benefiting nearly 400 employ-

Funded by the IDC, the trust will acquire a 15% equity stake in Sheraton Textiles, marking a significant step in employee empowerment. Prior to its workers taking this stake in the business, Sheraton Textiles was 100% owned by the IDC.

The Department of Trade, Industry and Competition (DTIC), lauded this development, noting that employee stock ownership plans

(ESOPs) have expanded significantly, benefiting over half a million workers across various sectors since 2019.

Getting employees to own a stake in the companies they work for has been one of the key tools in transforming the econ-

The IDC has invested

R1,6-billion to support ESOPs and their related worker and community trusts, according to its Report Development 2018–2022. This has seen it establish 110 worker and 45 community trusts, which includes 24 community trusts funded under the Renewable Independent Energy Power Producer Procurement Programme.

"Established are supported through trustee training on corporate governance to ensure effective management. In recent times, the weak performance of the South African economy has affected business

performance and stalled the realisation of ESOP benefits," the report said.

The report, however, noted that though it was a useful transformational tool, ESOPs had a long lead time, which meant that many of those it was meant to benefit, did not grasp how long they had to wait to see the pay off.

"The vesting of many of these structures relies on the payment of dividends and many ESOPs are underwater. The perceived and actual delay in realising the benefits of ESOPs has led to understandable uncertainty and feelings of unmet expectations, which undermine the noble intention of ESOPs."

Even so, the government still held it in high regard, as an economic transformational tool.

"ESOPs are vital for transforming the economy, addressing inequality, and reducing unemployment," said outgoing DTIC minister Patel.

"Sheraton Textiles, supplying major retail and hospitality brands locally and in the SADC region, is a key player in this transformation."

The trust will also ensure worker resentation on Sheraton's board, granting employees a voice in the company's strategic decisions.

IDC interim CEO David Jarvis highlighted the corporation's commitment to financing more ESOPs. "We have played a meaningful role in empowering marginalised communities and enhancing productivity through employee own-ership," Jarvis noted. Sheraton Textiles, a 104-year-old company, now sees its employees becoming stakeholders, fostering a shared sense of ownership and motivation.

Sheraton CEO Saleem Mowzer expressed gratitude to the IDC for its support amid industry challenges, particularly competition from cheap imports. "The employee share scheme empowers our workers to influence the company's strategic direction and benefit from future dividends," Mowzer said, marking a significant milestone in the company's growth trajectory.

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Companies must increase salaries and offer remote work to attract women - RecruitMyMom report

By Larry Claasen

SOUTH African women are educated, ambitious and dissatisfied with their jobs. They also want to be paid more and have flexibility when it comes to remote work. These are some of the key findings in the RecruitMyMom's Working Women In South Africa Report 2024.

The goal of the report was to "research what women require to thrive in the evolving economy," so as to provide businesses and HR managers with insights on how to attract and retain female talent.

The report, which interviewed 2 468 women, found that 66% of respondents had a tertiary education. Aside from being educated, it found that 47% of those sampled occupied mid to senior level jobs.

Not women well educated,



they were outpacing their male counterparts when it came to educating themselves.

"In South Africa, a notable shift is underway as women outpace men in educational achievements.

Presently, of individuals with post-secondary education are women, signalling a significant presence in higher learning.'

Given that the women interviewed tend to be educated and occupy mid to senior jobs, it's almost unsurprising that they are ambitious, with 78% aspiring to grow in their careers.

The main reason

driving their ambition was financial independence.

"It is evident that women have varied perceptions of financial independence. For some, it is the freedom to spend their income as they choose; for others, it is the ability to retire comfortably, and for another group, it signifies the ability to meet monthly expenses.'

But despite their rising levels of educated and growing ambition, the report found that women were dissatisfied. It sighted lack of opportunities, mentorship and pay discrimination as the main reasons they

Many women also felt they were discriminated against because of their age. Inflexible work policies also added to their unhap-

The report found that: "45% of women are looking for another job, potentially due to lack of internal growth."

The research found that career advancement did not necessarily mean getting a promotion. It also meant "horizontal expansion" where high performers were fairly rewarded.

The report recommended that when it comes to attracting talent, businesses must consider offering a salary that enables them to be financially independent.

When it comes to remuneration, take home pay was not the only factor, as women ranked medical aid contribution, pension/ provident fund contribution, and bonus as

the top benefits they look for when considering a job.

Money was not the only deciding factor when it came to considering a job. Offering flexibility around remote work is also something women are looking for.

The report, however, noted that the concept of flexibility was often misunderstood.

"There is a whole array of types of flexibility, from micro-flexthat ibility women the freedom to 'run the odd errand' to fully remote with flexible hours, and a myriad of options in between. Empowering women to negotiate the type of flexibility that benefits both employers and employees holds significant potential for retaining high-calibre female talent."

With 80% of women dependants, having embracing flexible work arrangements align businesses with the realities of modern life, noted the report.

Adv Geraldine Pretorius - A Vanguard of Business Leadership and Entrepreneurial Excellence in Africa

t 32, Adv Geraldine Pretorius is a beacon of entrepreneurial spirit and business acumen in Africa. As a Director and Shareholder of New Venture Capital Management Pty Ltd, with subsidiaries AFMS International Pty Limited (AFMS) and Air and Lab Products Africa Pty Limited (ALPA), Geraldine drives innovative solutions across 48 African countries. These subsidiaries specialize in the design, construction, and maintenance of laboratory spaces, from basic BSL 1 labs to highly secure BSL 4 facilities, both permanent and mobile.

A distinguished Advocate of the Supreme Court of South Africa, Geraldine blends legal expertise and entrepreneurial vision. Her understanding of business law and hands-on experience positions her as a formidable leader in business and biosafety.

Championing Women's Involvement in Biosafety and Biosecurity

Geraldine's commitment to growth is evident in her involvement with the Global Partnership Women's Network to Mitigate Biological Threats in Africa, launched in December 2023. This initiative engages stakeholders to support women in the biorisk and health sectors, providing technical expertise, developing solutions, and advocating best practices.

Under Geraldine's guidance, the network empowers women through training and involvement in biosafety and biosecurity projects. The initiative includes developing educational materials, supporting advocacy efforts, and documenting best practices. Geraldine believes in women's power to transform the biosafety landscape in Africa for a safer future.

Promoting Education and Innovation in Biosafety

Geraldine's vision extends to societal impact. Her participation in the MMUST university initiative in Kenya highlights her dedication to education. Through AFMS's sponsorship of second-year students, she promotes hands-on training in areas such as Personal Protective & Safety Equipment, Aerobiology, Good Microbiological Practice, Facility Design & Biocontainment, and the use of Biosafety Cabinets.

This initiative enhances students' practical knowledge and aligns with Geraldine's goal of nurturing the next generation of biosafety experts. By investing in education, she ensures Africa remains at the forefront of scientific innovation and safety.

A Vision for Africa's Business Future

Geraldine is a visionary dedicated to Africa's entrepreneurial development. Her involvement in cutting-edge laboratory solutions addresses public health and safety needs. Her commitment to women's empowerment and education in biosafety exemplifies her holistic approach to business leadership.

Geraldine's journey is a testament to vision, dedication, and strategic thinking. Her work with AFMS and ALPA, and advocacy for women in biosafety, underscores her role as a catalyst for positive change in Africa. Geraldine Pretorius remains a shining example of a true business



www.afms.bz



Mitchells Plain-based RLabs – under the helm of **Christine Taphel - is helping women entrepreneurs** realise their full potential

By Diane Silcock

RECONSTRUCTED Living Labs (RLabs)'s philosophy is all about people and community and this comes across strongly when speaking to CEO Christine Taphel, a vibrant personality with an audathrive while positively impacting the community around them.

RLabs operates in 25 countries, and has had over 200 000 people access its skills training. They recently created a R100-million venture capital fund to support emerging innovative businesses.

"RLabs operates in 25 countries, and has had over 200 000 people access its skills training."

cious goal to impact two billion people by 2030.

Established by Marlon and Rene Parker 15 years ago, RLabs is an NGO with roots in Bridgetown, Athlone in Cape Town but now based in Mitchells Plain. The organisation provides funding to entrepreneurs along with the support that they need in order to grow and

Taphel who has worked across the organisation for 12 years, was handed the reins a year ago. "It's been a journey of learning and finding myself, and taking the organisation into a transition was really hard. But it's a good thing. It's when you feel uncomfortable that you learn.

"I have always been



CEO Christine Taphel.

passionate about people and was quite intentional with building relationships with people across our organisation. year, in particular, I focused on staff to take the organisation to the right level. Hard decisions and structural changes were made, and projects carefully considered to ensure that we had the best people to drive them.

"Even though the world is ever evolving – as is RLabs – at the end of the day, we shouldn't lose the essence of community. People approach us, not because of our good training programmes and business support, it's because of how embedded we are in community."

RLabs' services are not limited to the funding they source, they

also add to that, and this is very much prevalent in their RLabs Women component. When working with entrepreneurs, they focus on the person first, then the business. "We find that once people feel dignified and confident, they are able to solve problems within their community and that's where they can experiment with innovative ideas."

"It's been a journey of learning and finding myself, and taking the organisation into a transition was really hard. But it's a good thing. It's when you feel uncomfortable that you learn."

An inspiring example of a women-led business assisted by RLabs, is Neinci Ndiqala, a local, family-run recycling and waste management company. Trailblazer Wendy showcased Johnson her business in Lagos, Nigeria as part of the RevUp Women Initiative Business Showcase where she underwent rigorous entrepreneurship training. The programme is designed to accelerate female-led businesses into profitable and sustainable ventures that can stimulate the creation of jobs on the continent. She was a winner for her pitch presentation earning herself a substantial grant.

In addition to their global expansion plans, part of Taphel's vision is to be dominant across all provinces in South Africa.

Taphel's message to women as we celebrate women's month is: "Don't be an ostrich, be a lion. If we want long-term success in life, we have to accept uncomfortable truths as fast as possible because when we refuse to accept the truths, we are ultimately choosing to accept an uncomfortable future. We have to get to a point as women to normalise what's not right, what the red flags are and embrace these. We must strive to be better."

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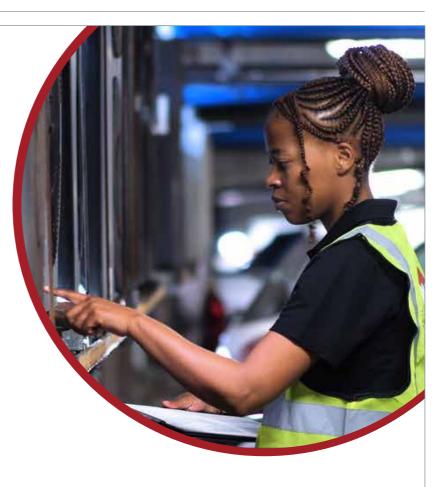


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Modernising for productivity – SEW-EURODRIVE debuts at NAMPO



MAKING its debut appearance NAMPO Cape Bredasdorp this year, geared motor special-SEW-EUROD-RIVE will show the farming community its solutions which drive productivity and efficiency.

From its firm footprint in the agricultural sector - through packhouses and bottling facilities countrywide - SEW-EURODRIVE now takes its offerings onto the lands, for instance, with its quality gear units for

centre pivots. Jonathan McKey, national sales and marketing manager at SEW-EUROD-RIVE, says this is part of its continuous innovation to give farmers more energy efficient solutions for streamlined and automated operations.

"Our classic 7 Series geared motors have for many years proudly served the farming industry - in various packhouse applications including conveyors, sorters and box packaging lines," says McKey. "These solu-

tions have long been fitted with premium efficiency IE3 motors - which are also available as non-integral units - delivering considerable savings in energy costs."

Variable speed drive technology allows for further efficiency and even the finetuning of production lines to suit the pace of demand.

"As part of modernising packhouse facilities, VSDs allow solutions to be tailored to a changing production pattern," he says.

tunity for greater efficiency is our ECDriveS® drive system for roller conveyors in light duty materials handling.

McKey emphasises the work SEW-EU-RODRIVE has done in 'closing the loop' to meet more of the drive requirements in farming. The company now supplies, installs and services the centre drive and wheel drives for pivot irrigation systems - as well as the drive technology to power them.

"These solutions have been popular on farms in Brazil since the 1980s," he explains.

"Similarities with South African conditions show that this offering will add value locally too."

Aligning to the shaft sizes and flange connections on existing centre pivot irrigation equipment, SEW-EU-RODIVE provides a 'plug and play' solution of gearing, casing and motor. The concept is also more cost effective and sustainable,

as the company will service and repair the drive systems – not just replace them.

Underpinning the performance customers demand, SEW-EU-RODRIVE's product quality and support means that the systems achieve the highest levels of uptime. The company's extensive national service footprint and decentralised stocking policy means that servicing and parts are quickly available to customers within a matter of hours.

"Every key agricultural region is well served by our comprehensively stocked Town, Nelspruit and Gqeberha for current products as well as for the pivot solution," he

"We appreciate that agricultural products are sensitive to time and delay, so we help ensure minimal downtime."

McKey says SEW-EURODRIVE recognises the importance of sustainability principles in agriculture, and builds this approach into its designs. The high performance ECO2 geared motor, for example, is made from uncoated aluminium, which forms a thin protective layer in contact with oxygen. With no coating or solvent on the surface, the result is more cost effective, environmentally friendly and easier to recycle.

The company has even developed its own premium lubricants, based on its decades of field experience. These boost operaperformance tional by reducing friction between gear wheels, and extend the life of sealing rings. These innovations are ideal for applications in the food and beverages industry as well.

For more, visit: www. sew-eurodrive.co.za

SA agriculture remains the backbone of economic growth

THE Overberg is and putting her best foot forward for NAMPO Cape, which this year will be presented by Grain SA and Bredasdorp Park NPC on Bredasdorp Park from 11-14 September 2024.

This marks the 5th presentation of NAMPO Cape and the 30th anniversary of the first Mechanisation Day which took place in 1994.

Since its inception, NAMPO Cape has taken the lead in the last 5 years to showcase the best agriculture has to offer in the Cape, and to offer producers and the community a platform that offers innovation, technology and networking opportunities.

The agricultural sector is a critical engine of economic growth. It not only feeds millions but also provides livelihood for a significant part of the population. advancements in agricultural technology, from precision farming to sustainable practices, the sector is experiencing a transformative phase, constability and resilience.

"The importance of agriculture extends beyond mere production. NAMPO Cape plays an important role in rural development and the promotion of social growth. By empowering producers with modern tools and knowledge, we can boost productivity and income, leading to a more vibrant and robust agricultural sector. In addition, agriculture's integration with other sectors, such as renewable energy

biotechnology, opens new avenues for economic diversification and innovation," said Dr Dirk Strydom, Grain SA's head of NAMPO, marketing and research coordination.

NAMPO Cape's success is visible in its continued growth and according to Henk Aggenbach, chairman of the Bredasdorp Park board, 38 additional 15x20m exhibition stands have been added next to the trial plots on site, to meet the demand for additional exhibition space.

New machinery and technology are introduced annually at NAMPO Cape, and thanks to the enlarged exhibition area, new exhibitors can accommodated ease.

Furthermore, tery-powered motorcycles, quads, and vehicles can be viewed on a dedicated demonstration track.

Sheepdog Expo

NAMPO Cape visitors can look forward to a year which will be presented from Wednesday, 11 to Friday 13 September in the BKB Livestock Centre. This programme, presented in collaboration with the South African Sheepdog Association, involves lectures, demonstrations and competitions. The final of the annual National Toyota Young Auctioneers competition will be held on Friday 13 September, and during this event the Sheepdog auction will take place.

Lipizzaners

world-famous South African Lipizzaners will once again deliver daily shows. These white stallions will mesmerize visitors with their breathtaking movements to the beat of famous music.

A Festival of Fynbos Visitors to NAMPO Cape are astounded every year with a festival of Fynbos. Marjolijn Malan's impressive flower arrangements in the Voermol hall will certainly not disappoint. The Neptun Fynbos exhibition in the Neptun Hall promises to once again, take your breath away this year, under the direction of Jan Hagen, with an exhibition that portrays the variety of plants endemic to the region, as closely as possible in their natural habitat. Different biomes will be depicted by, among other things, proteas, pincushions, various other fynbos species as well as aloe species found in the

The Youth is the future

The Western Cape Department of Agriculture's schools program aims to involve 500 learners from 30 schools that offer agriculture as a subject in the expo this year. Here the learners can supplement what they learn in the classroom with practical experiences that support the curriculum.

For more information about NAMPO Cape 2024, visit www.nampocape.co.za



AECI Food & Beverage's trend-setting fruit juice products give their customers the competitive edge

By Diane Silcock

THE beverage business of AECI has expanded globally. The 100-yearold group, which produces and distributes more than 25 million litres of juice concentrates, has grown its geographic reach.

It is now supplying products to over 26 countries primarily within Africa, but as far afield as Chile and Japan, and counts major and global brand owners as its cus-

AECI Food & Beverage (F&B)'s manufacturing facilities, located in Cape Town, include a tank farm with a cooling capability and capacity in excess of 2000 tons of concentrate, as well as a formulating plant comprising multiple modern blend tanks, homogenisers, and filling lines. It also operates a pasteurising plant, and their colour treatment plant is where juice concentrates are physically treated using activated charcoal - not a chemical treatment process

Ron Richardson, AECI F&B's head of commercial, says, "Meeting customer's demands in the beverage sector requires the understanding of consumer preferences, lifestyle, and values, and then matching products accordingly. As a business-to-business manufacturer, F&B assures a thorough awareness of target consumers' needs, emphasising health and wellness, innovation and diversity, ethical practices, and quality and consistency."

The company develops bespoke product solutions, delivering fruit juice concentrates, compounds, blends and beverage emulsions to exact customer specifications. The end result, once the customer has reconstituted and blended the product, is a ready-todrink juice beverage that is non-alcoholic or alcoholic, still, carbonated or isotonic.

In today's world, consumer preferences constantly shift due to health concerns, cultural shifts, social media influences, or consumers merely want to have the same experiences as their peers in other regions of the world.

Richardson attended the world's biggest annual F&B event held in Dubai earlier this year. What stood out for him was the increasing demand for healthier, functional beverages, such as those with lower sugar, and fewer calories. He says products made with natural components with clear health benefits and

nutritional highlights, as well as the desire for beverages functional with perceived consumer benefits, continue to be a primary focus across all generations.

"When formulating fruit juice beverages for health-conscious customers, the goal is to provide a product that is as close to nature as possible, with little processing and high nutritional content. Transparency in labelling and providing information about the sourcing and production process, enriches con-

fidence in the products formulated."

The internationalisation of taste profiling is also becoming more visible, owing to consumer behaviour influences via social media and IoT, as well as cross-cultural variations and demography. AECI F&B's priority is understanding consumer requirements and preferences while remaining current with market trends, discovering new beverage ideas, as well as keeping up with technological advancements. This gives their

customers a competitive advantage by providing them with access to new. innovative, trend-setting products, underpinned by an infrastructure that taps into the most recent international research.

"We adopt an international sourcing strategy to ensure security of consistent supply amidst the many seasonal and crop challenges. However, our mandate is to support and grow local suppliers as far as possible in line with resource scarcity." concludes Richardson.

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WE ARE ONE AECI, FOR A BETTER WORLD



Xylem Africa provides food relief to Western **Cape storm victims**



HEAVY rains and floods have battered the Western Cape province affecting 160 000 people and leaving thousands of structures flooded or damaged. Yet, during these crisis moments, we witness South Africans coming out to help their neighbours and alleviate their suffering.

Xylem Africa, in coordination with the GrowZA Social Investment Agency, donated foodstuffs and food relief support to affected communities, aiding those efforts.

The donations, distributed by GrowZA and Xylem's corporate social responsibility programme, Watermark, will be directed to the communities of New Rest and Carterville in Wellington, as well as Sandhills and De

Xylem staff visited the New Rest settlement in Wellington on 22 July 2024, volunteering at the NorSA Community Care feeding scheme and helping to distribute the donated foodstuffs and support the local community.

"The huge amount of rain has caused flooding in the informal settlements that we work in and water damage is a huge challenge at the moment. Thank you very much to Xylem Africa and Watermark for contributing goods and time to NorSA, helping relieve the suffering of our staff and beneficiaries after the extreme cold and wet weather conditions in Wellington and across the geographic areas that NorSA provide services in," says Louise de Wet, NorSA's operations manager.

Helping communities recover from disaster

The Western Cape was declared a disaster zone after intense storms hit large parts of the province, some reaching level six in scale—indicating rainfall exceeding 100 millimetres in a short period, coastal waves of six metres and higher, and severe thunderstorms.

The extreme weather caused power cuts, uprooting trees, destroying homes, and leaving thousands without food or shelter. It has created a natural and humanitarian disaster of historic proportions, prompting organisations such as GrowZA and Xylem Africa to help with relief efforts.

Thank you for Xylem Africa's swift and generous support in response to the recent storms in the Western Cape. commitment Their to aiding the affected communities is deeply appreciated. This support is crucial for providing immediate relief to those who have been severely impacted," says Craig Kensley, Grow-ZA's executive director.

Cooperative Governance and Traditional Affairs (Cogta) Minister Velenkosini Hlabisa and Western Cape Premier Alan Winde have called for support, urging companies and individuals to do what they can to help.

"I want to, again, thank all stakeholders for everything they do in the service of our citizens, particularly the most vulnerable," said Winde in a statement.

"Water gives but it also takes away. It's startling to see how much extreme weather can change our world in the blink of an eye. We have to be prepared for all eventualities, protecting water and enhancing its delivery to mitigate shortages, and repair the damage caused to people and property when storms turn into floods. Thank you to our Watermark volunteers, the people at GrowZA, and the many unseen individuals who are making a difference on the ground," says Chetan Mistry, Xylem Africa's strategy and marketing manager.

For more information and ways to help affected communities, contact GrowZA at grow@

Testo temperature measurement solutions play a critical role in ensuring food safety

By Diane Silcock

ACCORDING the South African Department of Health, between 1 January 2024 and 4 June 2024, 70 foodborne disease (FBD) outbreaks occurred across eight provinces with Kwa-Zulu-Natal having the highest number. For the same period last year, 48 FBD's were reported across the eight provinces. That's a startling 45,8% increase. Globally, every year, an estimated 600 million people worldwide suffer from foodborne illnesses, according to the World Health Organisation.

A company that understands the gravity of these statistics, is Testo, a world leader in measurement technology and inventor of the first electronic thermometer. They are committed to providing innovative measuring solutions to mitigate the risks associated with foodborne illnesses.

Testo South Africa MD, Christian Tomanek, says: "It is important to maintain the cold chain, because when it comes to food safety, temperature is one of the most critical parameters." He gives a simple example of milk being left out of the fridge on a hot day. "For every hour it's left out, a day's shelf life is lost because bacteria grow much faster between 25 and 65 degrees Celsius."

Testo's high-precision hand-held measuring instruments enable their customers, along the entire cold chain, from farm to fork, to conduct quick temperature checks, thereby avoiding temperature fluctuations that are often the cause of spoiling or impaired food quality.

portable These

thermometers can either be inserted directly into food via penetrating temperature probes or they can read the surface temperature via infrared. Testo also offers a cooking oil tester that when inserted into hot oil can determine the optimal point at which oil needs to be changed, offering 20% to 30% savings on oil, as it is often changed too early.

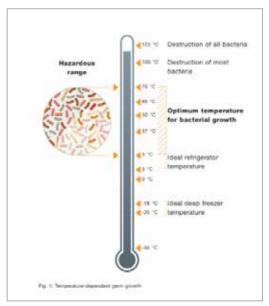
With most products passing through many different hands on their way to the end consumer - in transport, temporary storage facilities and distribution centres - there are multiple points where food quality and safety can be compromised.

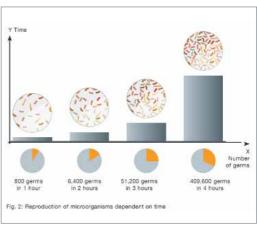
In the food industry, raw materials are often delivered late at night and stored overnight for distribution the following morning. Should a significant change in temperature occur, food could be spoiled, or shelf life diminished, within a matter of hours, should a customer not be alerted. Testo's WiFi data loggers are stationary sensors that work proactively, detecting when limit values are violated, by sending an alarm alert to the customer via SMS or email, enabling them to take action and avoid a potential catastrophic revenue loss.

Tomanek stresses the importance of verifying equipment to ensure accurate readings as it would be unwise for companies to make decisions based on false readings. Testo therefore has SANASaccredited calibration laboratories in both Johannesburg Cape Town primarily for the food and pharmaceutical industries, where customers calibrate their equipment yearly.



Testo 103 food thermometer with folding mechanism





Moreover, Testo has a digital quality management system which is ideal for restaurant chains, as well as retail stores. Head office managers can determine at any time, via a dashboard, if quality checks are being fulfilled at their multiple restaurants/stores. Compliance can be checked and the need for corrective action easily identified. This helps to ensure foods are prepared more safely, and staff are guided step by step through the quality checks.

"While accurate measuring should be a given, the companies likely to be most successful, will be the ones that present the relevant data in the best possible way to the customer," concludes Tomanek.



Monitor Engineering's spray technology meets cleaning, coating, cooling and sanitising needs of food industry



Monitor Engineering's antimicrobial spray system for meat applications.

75-YEAR-OLD Monitor Engineering, sole distributor for Spraying Systems Co. in southern Africa, provides a comprehensive array of products specifically designed for the food industry.

Addressing critical needs in areas such as cleaning, coating, cooling, and sanitising, their products are engineered to enhance efficiency, ensure product quality, and maintain stringent hygiene standards.

Cleaning

The company's Tank-Jet® tank cleaning nozzles are pivotal in maintaining the cleanliness of tanks, vessels, and other processing equipment in the food industry. These nozzles deliver highimpact cleaning with reduced water and chemical consumption, making them both efficient and environmentally friendly. They are available in various configurations, including rotary and static nozzles, to cater to different cleaning requirements.

Coating solutions

The PulsaJet® automatic spray nozzles are designed to apply a wide range of coatings, such as oils, flavourings, glazes, and preservatives, with precision and uniformity. These nozzles are often integrated with AutoJet® spray controllers, which provide automated control over the spray process, ensuring consistent application and reducing the risk of over- or under-application.

Cooling applications

In cooling applications, air atomizing nozzles are used to effectively cool products and machinery, maintaining optimal temperatures throughout the processing stages. The ability to finely atomize fluids allows for rapid and uniform cooling, which is essential in preventing product spoilage and ensuring the stability of temperature-sensitive items.

Sanitising

Sanitisation is a paramount concern in the food industry. Monitor Engineering's AutoJet® spray systems are designed to apply sanitisers and disinfectants consistently and automatically, enhancing food safety by reducing contamination risks. The automated nature of these systems

ensures thorough coverage and adherence to safety protocols, thereby helping to maintain a hygienic processing environment.

Spray control

The advanced spray controllers offer precise control over spray parameters, including flow rate, spray angle, and droplet size. This level of control is crucial in optimizing the use of resources, minimising waste, and ensuring that the application meets the specific requirements of each

Additional products and applications

Beyond the primary applications of cleaning, coating, cooling, and sanitising, Monitor Engineering additionally offers products for other critical operations such as lubrication. humidification. and blow/drying using WindJet nozzles and blower packages. Their extensive product line includes a variety of nozzle designs, materials, and configurations to suit the diverse needs of the food industry.

For more information: www.spray.co.za E-mail: grant@monitorspray.co.za

Tru-Cape is striving to make sustainability strides

TRU-CAPE Fruit Marketing is making significant progress towards its ambitious goal of reducing carbon emissions by 50% by 2030 and reaching net zero by 2050.

"These objectives will help us, as an agricultural company, to minimise our environmental footprint, which is the responsible course of action and the right thing to do," states Roelf Pienaar, MDof Tru-Cape, a leading apple and pear exporter.

The company is working on its Emission Reduction Strategy, an initiative increasingly valued by clients in Europe and the UK.

"The movement towards environmental responsibility is gaining momentum, and Tru-Cape is committed to contributing to this cause. We are responsible for adhering to current climate science and prepare for regulation in the future.

"We should also support our farmers and producers in this regard."

The scope of Tru-Cape's carbon reduction strategy encom-

passes all aspects of the business, from electricity usage to the distribution of fruit globally. According to Tru-Cape's 2020 baseline carbon footprint, which serves as a reference for the initiative, most of the fruit exporter's emissions result from refrigeration systems, stationary fuel combustion, and the reliance on grid-sourced power to power offices and warehouses.

Solar energy

"With our solar projects in Cape Town and Johannesburg coming online by the end of the year, we estimate a production of 573,114 kWh, leading to a projected reduction of 573 metric tons of CO₂e. Our solar projects can potentially reduce our scope one and two emissions by approximately 28%, and additional energy-saving practices could further lower this number," says Stephen Jordaan, coordinator of Tru-Cape's sustainability committee.

Roelf explains that in addition to the environmental advantages, the adoption of solar

energy offers financial benefits, ultimately benefiting their producers and clients.

"We are exploring all possible avenues to minimise energy consumption expenses. One option is to turn off cooling systems at specific times during transport. Research has shown this will not compromise the cold chain or the quality of our fruit but will result in decreased energy consumption."

Reducing refrigerant emissions

Another major step, as part of tackling scope one emissions, will be to reduce fugitive refrigerant emissions in their cooling systems for fruit storage by switching from a hydrofluorocarbon blend (R507) to a system with less global warming potential.

"R507 has been identified as a major source of emissions due to its high global warming potential (GWP).

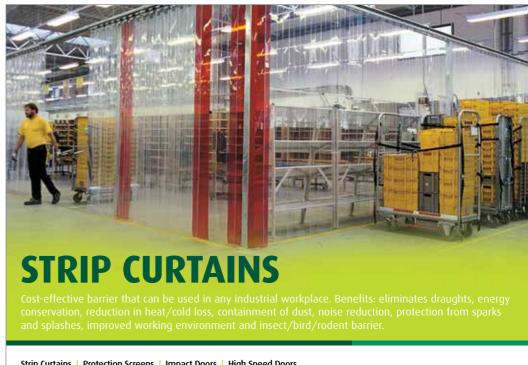
To meet our 2030 targets, we must explore alternatives. We are investigating ammonia-based system with zero GWP and emissions, which seems promising," Stephen said.

Furthermore, Tru-Cape is considering implementing a sensor-based refrigerant leak detection system. The early detection of leaks can prevent excessive loss of refrigerant and reduce the frequency of refills needed, thereby significantly lowering their carbon footprint.

Preparing for the future

The company has also set other sustainability targets, including completing the carbon footprint reports for the 2021-2023 seasons, implementing an efficient employee engagement and training system, and applying a waste management and circular economy system by the end of the current season.

"Our major markets are already on a green journey. In the future, we expect these to be compulsory requirements and measures. It takes time to implement sustainability measures; therefore, we believe it is better to lead than be led," elaborates Stephen.



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CSIR's water use app enables optimal use of water in farming

By Diane Silcock

WITH the recent heavy rainfall experienced in the Western Cape, it's easy to lose sight of the drought that plagued the province in 2018. However, it remains fresh in the minds of fruit farmers in particular, with South Africa being one of the five biggest exporters of apples globally.

South Africa being a water-scarce country, the 30th driest in the world, and having 98% of its available freshwater resource already allocated, and with over 60% of this water used in agriculture, the Water Research Commission (WRC) commissioned the Council for Scientific and Industrial Research (CSIR) to develop a tool that guides apple farmers to use water more efficiently," says

Dr Luxon Nhamo, research manager at WRC.

CSIR senior researcher, Dr Mpumi Mobe, says that the WRC's mandate was for the CSIR to develop a smartphone app that forecasts the water requirements of apple orchards from one to seven days in advance. Farmers want to know that if they reduce the amount of water they apply, that it will not affect production. The app ensures that they do not under-irrigate or over-irrigate their crops, thus saving water, without affecting production.

Dr Nhamo expressed that with apple cultivation you have huge water losses through virtual water. The app guides farmers on when to/not to irrigate and with how much water. "This water use efficiency app



Dr Mpumi Mobe, senior researcher at the CSIR using a handheld Hydro-Sense II system to measure volumetric water content of soil.

has become an integral part of irrigation scheduling in apple production, besides being critical for saving nutrients and energy."

Dr Sebinasi Dzikiti, now senior lecturer in the department of

horticultural science at Stellenbosch University, was involved in the developmental phase of the pilot project where he worked with Riverside Farm in Villiersdorp and Oak Valley farm in Grabouw.

"Over the years, researchers from the CSIR in collaboration with fruit industry partners have conducted research aimed at measuring the actual water use of orchards using state-of-the-art ler, who participated

techniques. This app is a culmination of those efforts as it pulls this data together to develop a tool that is both accurate and simple. Currently the app is designed to forecast the water requirements in apple orchards only. Other crops will be added in future."

Dr Dzikiti says that the number of tools available to farmers to optimise their irrigation is growing, mostly by harnessing modern technologies, therefore the CSIR water use app adds to the existing products.

Dr Mobe confirms the CSIR's plans to commercialise the app, and that research is currently under way to assist vegetable smallholder farmers, in a similar way, especially in Limpopo province.

Western farmer, Shawn Spinnin the pilot project on Riverside Farm in Villiersdorp, gives insight into the benefits of the app. "In apple orchard farming, determining our irrigation schedule is very important. The roots need to stay in contact with the soil through the water. If there's too much water, there's no oxygen.

"The CSIR water app is helping us to accurately determine a reference statistic with water per day scheduling based on climatic responses. Measuring radiation, temperature and wind, and taking all those crop factors into the equation, gives you more or less a baseline of what the tree will require waterwise per day, in order to keep the functions active within the tree. It's much easier having it all on a one simple app rather than in multiple spreadsheets."



PepsiCo South Africa partners with Standard Bank on key initiatives with a sustainability-linked working capital facility

has provided PepsiCo South Africa with a sustainability-linked working capital facility to support its renewable energy commitments and its broader localisation aspirations in relation to their procurement spend in South

PepsiCo is one of the world's leading food and beverage companies. Its brands in South Africa Weet-Bix, include Simba, Lay's, Doritos, Liqui Fruit, SASKO, White Star and Spekko amongst others.

sustainabili-The ty-linked working capital facility aligns with PepsiCo South Africa's funding needs and the company's commitment to sustainability through its PepsiCo Positive agenda, which has the adaptation of energy efficient manufacturing processes through the greater use of renewable electricity as a key focus.

Transitioning renewable energy is an important part of achieving greenhouse gas reduction goals by 2030. PepsiCo strives to reach net-zero emissions by 2040 with 100% renewable elec-

Bank tricity in its own operations by 2030 and in all their franchise and third-party operations by 2040.

To achieve 100% renewable electricity consumption in its manufacturing operations, PepsiCo has targeted a range of solutions to meet this commitment.

In addition to its on-site renewable energy capacity generation, PepsiCo is also partnering with Independent Power Producers to wheel electricity through various renewable sources such as wind and/or solar plants with the additional use of renewable energy certificates to offset its non-renewable consumption.

Apart from these initiatives, PepsiCo South Africa has 15 sites generating onsite solar capacity amounting to 11,5MW.

It's in the process of constructing an anaerobic digester plant at their Isando manufacturing

facility. This plant will consume organic solid waste generated at the site, via a biological process, to release biogas that will be used to produce electricity for use at the

Alongside reducing energy use and transitioning to renewable energy to create a low-carbon value chain, PepsiCo South Africa works to advance equity and inclusion in its business partnerships and in communities. Standard Bank's partnership with PepsiCo South Africa supports its broad ambitions to invest in the South African economy through its procurement spend and drive the localisation of their value chain.

A subset of its preferential procurement targeted spend towards the participation of local SMMEs, black owned and women owned suppliers that drive the development of socio-economic growth of marginalised groups and support job creation in the country.

"Creating a sustainable value chain is not easy, but with the right approach, it is a powerful means to meet our sustainability goals, create a more resilient organisation and fuel improved business performance," says PepsiCo South Africa CEO Riaan Heyl.

'Unscientific' Sandveld water restrictions will make potatoes unaffordable -**Potatoes SA**

SKY rocketing potato prices seen at the end of 2023 could become the new reality if water usage restrictions are imposed on farmers in the Western Cape's Sandveld region.

The Department of Water and Sanitation (DWS) has proposed a water reserve determination for the F60 and G30 catchments in the Berg-Olifants water management area in the Western Cape.

Water reserves serve as a baseline of water availability in the region, which is then used to decide how much water can be extracted by all users.

The DWS published the draft reserve determination in the government gazette in May.

Based on the DWS's figures on water availability, they propose that water extraction by farmers be reduced by 30% to ensure that the area has sufficient water to sustain its population and environment.

This would result in 30% of the hectares under potatoes in the Sandveld taken out of production, resulting in the quadrupling of potato prices.

"South Africa got a first-hand look late last year of what happens when potato production is drastically reduced. Due to load shedding, farmers planted 1 600 hectares of potatoes last year, which resulted in a 173% increase in prices when market supply consequently dipped. This took the long-term average of R42,87 per 10kg bag to R72,92 per 10kg bag.

"Should the planned restrictions to reduce agricultural water usage by 30% be impleproduction mented, would decrease by 2 100 hectares, resulting in a catastrophic increase in prices," said FP Coetzee, Potatoes SA's manager of information and regional services.

Potatoes SA supports all efforts to preserve water resources and concurs with the Department on the importance of managing water in the designated catchments. The concern however is around imposing a water reserve beyond what is necessary to ecological achieve stability. "The consequences are far reaching. Potatoes will become unaffordable to those who depend on it for food security. This, and the consequences of decimating the local economy would result in job losses, social unrest, migration and economic disparity," said Potatoes SA CEO Willie Jacobs.

Potatoes SA's statistics show that around 57 farmers planting just under 6 000 hectares and employing over 6000 people would be affected by the reserve determination. The Sandveld region is one of the few areas producing potatoes year-round, contributing significantly to a stable supply across the country throughout the year. Production in neighbouring provinces is approximately 700km away, making Western Cape fresh produce markets largely dependent on locally produced potatoes from the Sandveld region.

Local government is also set to lose out as tax and VAT revenue could drop by around R300-million annum.

Farming activity in the Sandveld has come under pressure since the 2015 drought, with unfounded allegations that water used

for agriculture was the reason the Verlorenvlei, a Ramsar site, ran Hydrogeologists drv. within the DWS however showed that it was a natural consequence of the drought.

At the crux of the concern over the reserve is that figures used to determine water levels are not grounded in scientific data.

"By the DWS's own admission, there are catchments where no water level monitoring is done. The Verlorenvlei's metre itself has been broken since 2017. An assumption over water levels is dangerous because it puts everyone at risk - farmers, people and the environment," said Jacobs.

Monique Vlok, chairperson of the Sandveld Potato Producers Association, said that the outcry over the Verlorenvlei running dry was borne out of a prevailing, incorrect perception that farmers mine the earth and its resources. "Farmers of course need water to grow crops and much water within the catchment is used to do so. But it puts food on the table and water is not used irresponsibly."

Verder Pumps meeting customer demand for ecofriendly products

Darryl MacDougall, MD, Verder Pumps **South Africa**

GIVEN increasing consumer demand for eco-friendly food products, both locally and internationally, it is worth noting that South Africa outscores 16 of the countries ranked above it in the Global Food Security Index (GFSI) report in the area of Sustainability and Adaption - which assesses a country's exposure to the impacts of climate change; its susceptibility to natural resource risks; and how it is adapting to these risks.

An IDC industry report also indicates that almost 30% of food and beverage decision-makers cited this trend in consumer demand as their top factor for striving toward greater sustainability.

As such, a focus Environmental, Social and Governance (ESG) initiatives could represent an opportunity in the food and beverage industry and enable manufacturers and exporters to build on the momentum achieved over the last vear.



Investing in innovative pump technology solutions can support this drive by reducing waste produced during processing, improving efficiency in the use of water and energy resources, and even combating food waste.

For example, processing food waste by removing solids and water allows manufacturers to extract value from organic matter that would otherwise have been sent to landfill. Innovative pump solutions can instead be used to move the chopped slurry from holding tanks, through a heat exchanger to raise the temperature, and then into an anaerobic digestion facility.

This hot organic material must then be dosed reliably and accurately with an inorganic pH buffer to accelerate and maximise the breakdown

of the material. The results of the anaerobic digestion process are digestate and wastewater that can be further used (or sold) as fertiliser, and biogas - a recognised source of renewable energy with enormous potential, according to a 2022 study published by SANEDI.

Hygienic, precision pump solutions could also enable upcycling. Upcycling involves using food waste to create a new product, such as turning leftover fruit pulp from juicing into fruit leather or jam - creating a new revenue stream while also ensuring more environmentally friendly operations.

The right pump solution will be able to manage diverse and abrasive products making them ideal for multi-product such as those required for upcycling food.

Additionally, innovative hygienic pumps will also improve energy and water efficiencies in manufacoperations, ensuring more sustainable use of critical resources.

Food and beverage manufacturers who are looking for a competitive advantage in an increasingly ESG-sensitive consumer environment know that processes must be not only reliable, repeatable and error-free - but sustainable as well. Integrating the right equipment is critical to achieving this.

We understand that navigating the technical obstacles of selecting the right pumping solutions for specific applications, and for adapting operations towards improved sustainability, can be complex.

Food and beverage processors therefore need to look to a trusted and reputable brand that can offer not only a wide range of pumping solutions, but solutions that are long-lasting, cost-effective and efficient because they are 100%fit-for-purpose for the application.



VERDER PUMPS SOUTH AFRICA (PTY) LTD TEL +27 (0)11 704 7500 MAIL info@verder.co.za WEB www.verderliquids.co.za

Serco unveils ultra lite refrigerated trailer



SERCO continues to break new ground in vehicle weight reduction with its expanded of refrigerated

introducing cutting-edge innovations which empower customers to tailor their transport solutions, setting a new standard for efficiency and customisation.

"Our injected panel technology, which we have offered for several years, provides customers with enhanced durability and thermal performance," said Serco CEO Clinton Holcroft.

"Our refrigerated bodies are now available with heavy-duty GRP composite skins or high strength coated steel facings, offering a wide range of options to meet diverse transport needs."

"The tare weight of the new trailer has been reduced to below 7900kg – excluding the customer's choice of fridge. This is achieved by incorporating new heavy duty GRP composite skins and our state-of-the-art technology injected foam insulation, giving an impressive payload and a superior durable solution," said Holcroft.

expressed He confidence in the advancements: new achieving unmatched lightweight

and durable trailer, we are giving our customers the tools they need to maximise their operational efficiency and reduce costs. This innovation reaffirms our commitment to delivering state-of-theart solutions that meet the evolving demands of the transport indus-

Serco's dedication to continuous improvement and customer satisfaction, said Holcroft, positions the company as a leader in the truck and trailer

manufacturing industry in Southern Africa. "With these innovative solutions, Serco is set to drive the future of refrigerated transport, helping businesses enhance their logistics efficiency and sustainability."

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 dayold chicks, from beef to bread - safely and hygienically.

Serco's success as a market leader can be attributed to its design, innovation and the quality of products and services. extensive experience in specialised fields as well as in-house design capabilities, our clients have no doubt they have selected the right partner to 'give them the edge' in a compet-

Munters' solutions enables smooth operation in KLM Logistic's fully automated cold store



Munters dehumidification systems enable smooth operation in KLM Logistic's fully automated cold store.

GERMANY'S first advanced automated cold store was built by

KLM Logistic in the city of Rheine. Munters provided the dehumidification systems required to secure optimal distribution performance by eliminating ice, mist and condensation.

Globally recognised as a refrigerated logistics leader due to their advanced automated case picking solution, the site holds a total of 68 000 pallets in the warehouse which contains frozen products such as ready-mademeals, ice cream, cakes and fish products.

KLM distributes the products to distribution centres in Germany, Benelux, Southern Europe, the UK and Poland with more facilities planned.

Every day about 200

trucks leave KLM's facilities in Rheine. In the summer season no fewer than 60 trucks are loaded daily with ice cream that KLM repacks into assorted boxes before redistributing.

The large number of loadings every day means the doors to the cold stores are frequently opening. This allows moist and warm air to enter the loading dock and further into the cold store where it will cause snow, frost and ice formations. Ice can then build up on the packed goods, disturb reading of bar-

codes, soften and damage the packing mate-

Traditional problems in cold stores

Ice and frost on the walls, ceilings and floors is a well-known problem that leads to costly man hours spent on manual removal of ice and frost, and it also causes dangerous conditions for forklift drivers. The efficiency of freezing equipment including evaporators will be reduced due to ice build-ups, and lengthy defrosting cycles are needed to remove

The solution at KLM

When KLM opened the facility, they contacted Munters after receiving a recommendation from another logistics centre. KLM was aware that the fully automated picking and loading system in the huge cold store that operates at a temperature of -24°C, could not function without a solution that would effectively control the humidity. In the air locks at all loading docks, KLM decided to install Munters desiccant dehumidifiers run continuously.

Dehumidification tackles the root of the many cold store problems by removing moisture from the warmer, humid outside air that enters the loading dock. By reducing the humidity in the air in the loading docks, the water content in the air that penetrates further into the cold store is so dry that condensation of the air is prevented. Thereby the formation of snow, ice and frost is no longer a risk.

KLM's automated cold store would not be able to operate without using dehumidification. The many sensors and conveyor bands for the automatic picking and loading of goods would be problematic due to ice build-ups the humidity must be kept low and constant throughout the year.

With Munters dehumidification, the automated picking and loading system runs continuously without unplanned stops.

The Munters dehumidification division is represented within the Southern Africa region by SMAC Enterprises, their sole distributor and business partner.

Go to www.airtreatment.co.za for more info.



installations, Munters IceDry™ dehumdifies incoming air from inside the cold storage and removes high moisture levels that cause condensation, which can quickly turn into mist, frost and ice.

Featuring automatic defrosting, the IceDry™ system ensures worker safety since slippery floors are no longer an issue.

This Food Tec and Health & Safety awardwinning system's exceptional performance is recognised by industry experts world-wide.





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Plastics manufacturer develops first recyclable plastic bicycle frame



E-bike manufacturer Advanced Bikes is relying on igus for future frame production. As agreed by Helge von Fugler, founder and MD of Advanced with Jan Philipp Hollmann, head of bike components at igus.

INDUSTRIAL ymer developer and manufacturer, igus, unveiled the first injection-moulded polymer bicycle frame designed for advanced bikes, marking a major milestone in sustainable mobility.

igus has collaborated with the German e-bike manufacturer Advanced Bikes to create a bicycle frame made entirely of recyclable plastic material using injection moulding technology. e-bikes are becoming increasingly popular driven by increased environmental awareness.

Traditional bicycle frames, predominantly made from steel, aluminium, or carbon fibre. are produced through energy-intensive processes and often end up in landfills.

Advanced Bikes has partnered with igus to develop a sustainable composite plastic bicycle frame for their new Reco Urban trekking e-bike. Leveraging decades of expertise in plastics

manufacturing and experience from its previously developed 50% recycled RCYL bike, igus has designed a frame that is both eco-friendly and efficient.

The new frame boasts impressive strength, rigidity, and lightweight properties, thanks to a composite material made from high-performance plastics and carbon fibres. igus utilised a multi-part injection moulding tool to create the complex geometry of the bicycle frame, resulting in a 3,3kg lightweight, single-piece frame that corrosion-resistant, durable, and free from weld seams.

The company envisions extending this recyclable approach to other bicycle components like pannier racks, rims, handlebars, and seat posts, aiming to realise a fully recyclable e-bike.

innovation extends beyond bicycle frames to various components from lubrication-free high-performance plastics. The technology is being applied to develop new bicycle components such as wheels, cranks and handlebars. These components are lighter, corrosion-resistant, and can withstand high-pressure washing without the risk of lubricant loss or rust.

igus offers a comprehensive solution to the bicycle industry, providing everything from design to the finished product. By utilising high-performance plastic components, igus presents a new technology that allows for innovative design and geometry.

SAIW to Revolutionise local manufacturing sector with laser welding training

THE Southern African Institute of Welding (SAIW) is set to revolutionise the local manufacturing sector by offering laser welding training.

SAIW technical and practical welding manager Confidence Lekoane explains, "This initiative is in response

to the growing interest in laser welding technology amongst our members, particularly to avoid the costs associated with distortion when welding thin material gauge using conventional welding

"The market needs qualified laser welders. We are therefore planning to run the laser welding course to enable both employed and unemployed individuals to become qualified laser welders.'

To ensure it provides the latest laser equipment, the SAIW is in talks with various industry experts and

suppliers. Key accounts manager John-Owen Welgemoed outlines the advantages of this emerging technology: "Laser welding technology has the potential to revolutionise engineering applications as it is an inexpensive alternative to conventional welding techniques."

Grinding Techniques



Choosing abrasive

sanding sheets with

woodworking or any DIY project involving surface preparation, the choice of abrasives is crucial. Among the myriad options available, waterpaper and cabinet paper abrasive sanding sheets stand out for their exceptional versatility and effectiveness.

"Grit sizes range from coarse to fine, with each grit serving a specific purpose.'

Indispensable for achieving smooth finishes, removing imperfections, and preparing surfaces for painting or staining, both waterpaper and cabinet paper have their own characteristics, uses, and advantages contributing to their popularity by craftsmen and hobbyists alike.

Although water - and cabinet paper consist of a flexible material backing coated with either Aluminum oxide or Silicon carbide, abrasive waterpaper has a waterproof backing, allowing for applica-

tions with water or other lubricants suited for wet sanding applications.

Grit sizes range from coarse to fine, with each grit serving a specific purpose. Coarse grits categorised by the lower numbers, are ideal for removing material quickly or smoothing rough surfaces, while finer grits categorised by higher numbers, excel at refining surfaces and achieving a polished finish. Whether it's heavy material removal or delicate surface refinement, there's a waterpaper or cabinet paper grit suitable for the task at hand.

The uniform distribution of abrasive particles ensure consistent results with minimal effort on a wide range of materials, including wood, metal, plastic, and composites.

From smoothing rough lumber, removing old finishes, or preparing wood for staining or painting in the woodworking industry, to smoothing body panels, removing paint and rust, or preparing surfaces for priming and painting in the automotive industry, their versatility is evident in their wide range of applications.

Also used to refine metal surfaces, remove burrs, and achieve smooth finishes on fabricated metal parts, whether it's shaping, deburring, or polishing, both waterpaper and cabinet paper sheets offer precision and efficiency in metalworking applications.

Due to their flexible cloth backing, they are designed to withstand rigorous use, making them ideal for contour sanding, ensuring uniformity and consistency across curved surfaces enabling users to tackle intricate shapes and curved surfaces with ease whilst providing long-lasting performance even in demanding environments.

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Steel company chooses BB Cranes



Typical single-girder overhead crane under test in Condra's Johannesburg factory

BB Cranes is to manufacture six overhead cranes for steel distributor D&E Group, for installation in new warehouses being built in Cape Town and George.

The additional warehouses will meet increasing demand by engineering firms, concompanies struction and general industry for D&E Group's product ranges in mild steel, aluminium and stainless steel.

D&E's warehouse cranes will be a mix of 8 and 5-tonners designed as single-girder electric overhead travelling machines.

Condra will manufacture them to FEM class 2M standard, the classification for medium to heavy-duty service.

The cranes will incorporate larger diameter wheels and miscellaneous other components on the hoists and end-carriages to ensure durability under conditions of intensive usage. Lifting heights will be around 6,5 m. Girder spans will range between 12 and 20 m.

Stephen Brink Jnr, senior sales executive at BB Cranes, explained that local manufacture helped win the D&E order.

"Because we manufacture in Cape Town, customers get a short lead time on a new crane. They also gain access to readily available spare parts for maximum crane uptime. We deliver spares within 24

hours," he said. "If a crane is to be cost effective, downtime has to be minimised," he expanded.

"But users who buy foreign cranes sometimes don't take into consideration how much downtime will cost them if the crane is idle for long periods while spares are imported from abroad. Our spares are made locally, so delivery is almost immediate.'

Commenting manufacturing capacity, Brink claimed that BB Cranes can deliver a new crane between eight and twelve weeks from date of order.

"Our competitors deliver can rarely in less than sixteen weeks," said Brink. "So, because crane users often leave their lifting equipment orders until the last minute, having the shortest lead time gives us significant competitive advantage."

Asked about expansion plans at BB Cranes, Brink announced that the company has recently added 400m² of factory floor space to its Rivergate premises.

"This extra space is allowing smoother production of an order book that continues to grow," said Brink.

'We have employed an additional fabricator, and we have ongoing training programmes in place for factory staff."

BB Cranes was founded in 1992 to marry Cape Town-manufactured crane girders electrification and systems to technically complex hoists, crabs, end-carriages and other crane components supplied by Johannesburg-based Condra, saving customers the cost of transporting a complete crane between Gauteng and the Mother City.

BB Cranes became majority-owned Condra in 2016, and wholly owned in 2022. The company is currently working towards ISO 9001:2015 certification to match that held by Condra.

Visit Condra's website: www.condra.co.za

School of excellence set to bolster South Africa's nuclear skills



The recent announcement that South Africa's Energy Minister Kgosientsho Ramokgopa will unveil details of a new 2 500MW nuclear power plant, means skills and safety standards around South Africa's nuclear industry are more important than ever.

In line with this, the Southern African Institute of Welding (SAIW) is powering ahead with its collaboration with the International Energy Agency (IAEA), and the Nuclear Energy Council of South Africa (Necsa).

Facilitated by the Department of Energy, this initiative is in the process of establishing a Nuclear School of Excellence, within the Necsa Learning Academy, and introducing advanced training techniques to bolster the continent's nuclear sector.

The School of Excellence is scheduled to commence in the first half of 2025 and will offer a range of specialised courses focusing on welding and non-destructive testing within the nuclear sector, nuclear safety, precision measurement, and consultancy services.

personnel SAIW qualification certification manager Harold Jansen explains, "Precision in the nuclear field is a non-negotiable and accuracy down to microns is crucial for safety and operational efficiency since minor inaccuracies can lead to significant issues. Our goal is to ensure that professionals are equipped with the necessary skills to maintain the highest safety standards."

Advanced techniques

Necsa Learning Academy manager Clive Mokoena also emphasises the strategic importance of the School of Excellence, as it will ensure a continuous supply and development of the much need Nuclear Skills for the 2,5GW nuclear power plant and the multipurpose research reactor being planned for South Africa.

One of the key training techniques to be introduced is Time of Flight Diffraction (TOFD), an ultrasonic method that provides exceptional accuracy for inspecting plate and pipe welds. This technique, along with phased array training, will be formally introduced in South Africa, with Level 1 and 2 courses led by industry specialists such as Colin Bird, Ray Turner and Neil Harrap.

"We are committed to making these advanced training techniques accessible and the IAEA sponsored national project allows these courses to be presented at no cost to the students (apart from logistical expenses related to travel and accommodation). Since space is limited, only the ten best applicants shall be accommodated during 2024 for either the Level 1 UT PA and / or ToFD or the Level 2 UT PA and / or ToFD courses," explains Jansen.

collaboration between NECSA and SAIW will also target female participants holding UT Level 1 or Level 2 ISO 9712 certification in ultrasonic testing with the opportunity for unsuccessful applicants to consider a second intake scheduled for 2025.

Continental shift

This style of collaborative effort also extends beyond South Africa. As the Regional Designated Centre for the IAEA in Anglophone Africa, the SAIW is spreading nuclear expertise across the continent. Training programs have already been implemented in Kenya, Cameroon, and Sudan, with plans to establish at least one training and examination centre in all 54 African countries.



For decades, Steinmüller Africa has been providing comprehensive Crane and Equipment solutions for the Power Generation, Petrochemical, Mining and Construction Industries. Steinmüller Africa's Plant and Equipment hire division boasts a comprehensive pool of equipment consisting of over 24 000 items, the fleet of equipment, stored at the Company's Middelburg Depot, has expanded to include a number of cranes that range from 5 to 400 Tons. Not only do we supply you with the best equipment your project requires, we also provide support by way of expert advice. We're committed to giving you only the best quality customer service and ensuring that our high standards are upheld in all that we offer. Our team will assess your project and its intended outcomes in order to provide you with a comprehensive solution. All equipment complies with nationally recognised safety standards and is issued with safety certificates. The Company has a devoted Lifting Machine Inspector (LMI), who is responsible for all machines and lifting equipment which leaves the depot.

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Empowering agriculture with solar energy - a Livoltek project

GREENFIELDS Farms, an agricultural operation located in Western Cape, South Africa, faces increasing challenges with energy supply and costs.

The farm, spanning over 196ha, specialises in producing high-value crops such as fruits, vegetables, and wine grapes, all requiring intensive irrigation and temperature-controlled storage facilities.

Frequent outages and escalating electricity prices have put significant pressure on the farm's operational efficiency and profitability.

The challenges

Power Outages: Regular load shedding disrupts irrigation schedules, affecting crop yields and quality.

High Electricity Costs: Rising electricity tariffs increase operational reducing the farm's competitiveness.

Sustainability Goals: GreenFields Farms aims to reduce its carbon footprint and adopt more sustainable farming practices.

The Solutions

To address these challenges, GreenFields Farms partnered with Livoltek to implement a tailored solar energy solution. After comprehensive energy audit, Livoltek designed a robust system that meets the farm's specific needs:

100kW Solar PV System: Installed across available rooftops and open land, the PV system generates an average of 530kWh per day. This setup powers irrigation systems, refrigeration units, and other essential equipment, ensuring consistent energy supply.

450kWh Battery Storage: The battery storage system provides backup power during load shedding and nighttime, maintaining uninterrupted operations.

Hybrid Inverter System: Integrating solar power with the existing grid and diesel generators, the hybrid inverter system optimises energy use and efficiency.

The financial and environmental impact

Significant Cost Savings: By switching to solar power, Green-Fields Farms reduces its electricity costs from R3,00/kW to R0.90/kW. saving approximately R25 500 per month. These savings can be reinvested into the farm to improve infrastructure and expand operations.

Tax Incentives: Utilising Section 12B of the Income Tax Act, GreenFields Farms benefits from a 125% tax deduction on their solar investment, further enhancing the

financial viability of the project.

Carbon Reduced Footprint: The solar PV system reduces the farm's reliance on diesel, which usually comes to a purchase of 500 - 10001 per month, cutting greenhouse gas emissions significantly. This move aligns with the sustainability farm's

goals and improves its reputation among environmentally conscious consumers and partners.

The operational benefits:

Enhanced Reliability: The solar system ensures a reliable power supply, minimising disruptions to irrigation and storage systems.

Increased Productivity: Consistent energy availability allows for optimal irrigation schedules and storage conditions, leading to higher crop yields and quality.

Sustainability Leadership: By adopting solar energy, Green-Fields Farms positions itself as a leader in sustainable agriculture, attracting potential investors and partners interested in green initiatives.

The outcome

GreenFields not only achieve substantial monthly savings but also secures a reliable and sustainable energy source.

The environmental benefits and cost savings strengthen the farm's market position and pave the way for future expansions. GreenFields Farms becomes a model for other agricultural operations looking to embrace renewable energy and sustainable practices.



Revolutionise your approach to motor protection with **NewElec**

THE NewElec KG/KH 3 Phase Motor/Feeder Protection, Control, and Power Quality Monitoring Relay is a game-changing innovation that's set to redefine the standards of industrial protection being the link between wind turbines or solar energy and the grid.

With a special focus on Bluetooth connectivity, the KG/KH propels a business's motor protection into the future.

"Imagine configuring and monitoring your motors from a distance of up to 10m through closed flameproof steel enclosures"

A Leap into Industry 4.0 Integration Experience unparalleled convenience with the KG/ KH's Bluetooth Low Energy (LE) connectivity.

Imagine configuring and monitoring your motors from a distance of up to 10m through closed flameproof steel enclosures.

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This standard feature not only enhances accessibility but also positions the KG/KH Relay as an ideal candidate for seamless integration into Industrial 4.0 environments. Embrace the power of wireless communication for a smarter, safer, more connected industrial landscape.

Key Protection Features: Safeguarding a business's motor with precision is at the heart of the KG/KH Relay. It has a plethora of protection features designed to ensure the longevity and optimal performance of the motors.

It offers individual configurable trip settings, versatile operating modes, harmonic protection, Bluetooth LE and Modbus-RTU connectivity, power quality monitoring, feeder protection and a rugged design for high vibration applications.

Seamless Integration and Quick Field Connection: The KG/ KH Relay simplifies field connections with integral Modbus-RTU configured as multiconfiguration using dual RJ11 sockets. No crimping tools or specialised skill sets required - just plug and play, assisting system integrators with a hassle-free parametrization task.

Stay Connected: With a smartphone app available on the Android Playstore, free, for closed cubical monitoring and analysis, the KG/KH Relay ensures that managers are always connected and in control.

It allows business decision makers to monitor, analyse, and make informed decisions right from the palm of their hands.

Elevate Your Motor Protection Strategy with KG/KH: The KG/ KH 3 Phase Motor Protection Relay isn't just a product; it's a commitment to excellence.

Elevate your motor protection strategy, embrace the future of wireless connectivity, and ensure the longevity and performance of your motors with the KG/KH Relay.

For more information call Newelec, +27 12 327 1729 or visit www.newelec.co.za

Siemens Energy - The energy transition partner

By Larry Claasen

SIEMENS Energy Southern & Eastern Africa CEO Thabo Molekoa has a very clear understanding of his company's mission, which is to help companies make the energy transition.

"Our mission is anchored around supporting customers to transition."

The South African energy market is liberalising, meaning businesses are increasingly less dependent on power utility Eskom for power. With the market opening up, it means they can either generate their own electricity, or buy it from a company other than Eskom.

Molekoa says as the energy sector and its customers adapt to this changing environment, Siemens' role is to provide them with the technology to help them make this transi-

"We have technologies that can generate electricity, transmit electricity and distribute it, even all the way to green hydrogen."

For example, its control systems technology has helped Eskom reduce carbon emissions. "We are helping Eskom to decarbonise specifically the coal fleet."

Siemens also has an extensive wind generation division, which is servicing turbines that generate over a gigawatt of wind power in South Africa.

Surprisingly, one area it is not in is solar power. Molekoa says the group used to play in that space, but the growing number of players in it, saw it exit.

"If you look at all the renewable bid windows, this just becomes such a competitive space. I mean, typically, if you pick up a phone and want to do rooftop solar, you'll find a number of players and so on. So, the market is mature to that extent. So, therefore, there wasn't any substantial value add we could bring. So, that's why we moved out of that."

An area of the

in newelecpretoriaptyltd

energy market that Molekoa is excites Green Hydrogen.

Green Hydrogen is the creation of hydrogen to be used as a fuel. The hydrogen is created through the electrolysis process using renewable electricity as a power

Molekoa is optimistic about Green Hydrogen in South Africa, despite the long timelines for getting these projects off the ground and the lack of offtake agreements for many of these projects.

The way he sees it, it should be looked at in the same way how solar power got its start under the Independent Power Producer Procurement Programme over a decade ago. Solar power eventually took off because the government provided guarantees to the power producers.

'You know, no one wanted to take a risk. The state had to come in and give some guarantees around that. And from there, that's when it picked up."

He thinks with the same kind of backing Green Hydrogen can take off in South Africa.

Some of South Africa's most notable Green Hydrogen projects like Boegoebaai in the Northern Cape and the one at the Saldanha Bay Indus-Development Zone (IDZ) will produce hydrogen for the export market.

Molekoa thinks more should be done to grow the domestic Green Hydrogen mar-

"South Africa must focus on local demand. That's an easier one. You have no dependency on another country to offtake and so on."

Aside from developing a domestic Green Hydrogen market, Molekoa says the government must look at the whole energy infrastructure value chain.

The government, for example, would want to award a tender to a company that makes the cheapest bid, but if that company wanted to use locally made equipment, its cost would increase.

Molekoa wants to see government programmes that port the energy sector holistically, as incentives could be offered along the whole value chain. Doing this would develop the entire energy sector.

"Don't look at a bid window or a generation project or a transmission project, look at the value chain. If you generate electricity, you have to transmit it and distribute it. If you sit with the whole scheme, then it's easier to try and figure out what we could do for the energy sector."



KG/KH Power Quality Monitoring Motor/Feeder Protection Relay

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Discover how NSK motion control solutions deliver better machining results

NSK Europe, a global leader in motion control technologies, will use the forthcoming AMB 2024 international exhibition for metalworking in Stuttgart, Germany, 10-14 September 2024, to shine the spotlight on its latest solutions for machine tools.

Innovative NSK bearings, ball screws and linear guides can deliver significant gains for both machine users and builders. Bearings are central to the premise of using machine tools to produce precision-machined components.

Key among the latest NSK products at AMB 2024 will be the ROBUSTDYNA angular contact ball bearing for machine tool spindles. This ultra-high speed, high-load capacity bearing delivers highly versatile machining via its outstanding performance during both roughing and finishing operations.

The use of larger balls ROBUSTDYNA bearings elevates the maximum load capacity of this innovative product by up to 15% compared with the previous-generation solution. Users subsequently enjoy easier machining of challenging materials such as Inconel, titanium and composites.

With up to three times more fatigue life, ROBUSTDYNA supports both heavyduty and high-speed machining.

Another highlight on NSK's AMB booth will be the SURSAVE (TSR) bearing cage for angular contact ball bearings, found typically on the main spindle of machine tools. The outer-ringguided, PPS resin SUR-SAVE cage generates 20% less friction than conventional bearings.

Machine shops can therefore tap into energy savings and greater workpiece precision due to less thermal expansion of the spindle.

For AMB visitors seeking the latest ballscrew innovations, recent additions to the NSK portfolio include the company's next-generation offer for high-accuracy machine tools.

Thanks to fewer motion errors and no 'second glitch' phenomenon, this ball screw boosts throughput by reducing or eradicating the requirement for secondary operations like polishing/burnishing in high-accuracy mould and die machining, for example. In addition, lower drive torque delivers savings in energy consumption.

NSK will also display its recently developed low-temperature screw. The friction loss/ heat generation of this innovative product is some 45% lower than conventional ball screws at the same rigidity, helping users to maintain positional accuracy.

Furthermore, low-temperature ball screw helps to reduce the energy consumption of machine tools by lowering or even eliminating cooling requirements.

Other components central to the success of many new machine tools are linear guides. The centrepiece of the NSK offer at AMB will be the

recently introduced DH/ DS long-life series.

With its class-leading dynamic load rating, the DH/DS linear guide provides over double the running distance of the company's conventional NH/NS series.

This advanced product

also facilitates downsizing by allowing the use of smaller linear guides, reducing both machine weight and energy consumption.

Among further innovative NSK solutions at the exhibition will be the proven RA series

roller guide. With its highly dust-resistant seals to prevent contaminants from entering via the underside of the slider, machine tools featuring RA series roller guides achieve high reliability

in demanding operat-

ing environments.

A team of NSK experts will be present on Booth C44 in Hall throughout AMB 2024, introducing visitors to the innovation and quality of the company's motion control solutions.



Materials Handling Electrification Equipment. Vahle's agent in South Africa



MATERIALS Han-Electrificadling Equipment, also known as MHE Equipment, are the South African agents for Vahle.

With over 30 years of experience in the field of electrification, MHE Equipment has an intimate working knowledge of electriequipment fication which means that they can offer up-close and personal support to clients who need their assistance in finding what system best suits their needs.

MHE Equipment systems are suited for many kinds of environments and function in different kinds of industries. The systems are built to last for

years and to function as optimally as possi-

There are Vahle systems in place that have been operating for over 20 years and still function as if they were newly installed, bar some slight wear and tear that comes from years of continuous use.

MHE Equipment is backed by their principal supplier Vahle who has over 111 years of knowledge in the application and production of electrification equipment. This means that MHE Equipment can offer a variety of systems that are built to last and to run smoothly such as insulated unipole systems, enclosed conductor

systems, copperhead conductor systems, festoon systems, spring loaded and motorised cable reeling drums.

All of our insulated conductor systems are UV stabilised making them suitable for most environments some of them come equipped with an optimal positioning system (these systems are accurate up to 1mm).

MHE Equipment keeps stock of most of the accessories and rails relevant to the systems that are available in the market, but should they not have stock of what you need they can order from their parent company thereby ensuring a reasonably quick turnaround time.

ACTOM Distribution Transformers builds first 66kV transformer as it eyes expansion into more African markets



ACTOM Distribution Transformers has comnleted the manufacture of its first 66kV transformer and says it is ready to become the dominant force in the supply of HV small power transformers on the African continent.

says Mbenge.

"Historically, industry lead times for the manufacturing of these transformers is about six months to a year. We can complete these units in about 14 to 16 weeks. This is what customers want to take

" Historically, industry lead times for the manufacturing of these transformers is about six months to a year. We can complete these units in about 14 to 16 weeks"

Having previously manufactured a range of transformers up to 44kV voltage, the company was prompted to expand its manufacturing capabilities to 66kV transformers by customer demand, explains Lee Mbenge, divisional CEO of ACTOM Distribution Transformers.

"Customers were aware of ACTOM's exceptionally short lead times, based on our ability to push out our smaller power transformers up to 10MVA fairly quickly. So, we started getting requests for the design and manufacture of 66kV transformers," advantage of."

However, he warns that ACTOM Distribution Transformers' lead times are being impacted to some extent by the current market conditions in Europe where the company sources some of the material for its 66kV transformers. Major original equipment manufacturers (OEMs) in Europe cite material, equipment and skilled labour constraints as the main issues causing supply constraints and consequent increased lead times.

Lee explains that higher-voltage transformers are typically

used in the electricity transmission and generation sector, whereas lower-voltage units are mainly used on the distribution side. He says that ACTOM Distribution Transformers' 44kV and 66kV units can be classified as either small power transformers or large distribution transform-

Clean environment and top-quality materials

Commenting on the development and production of the 66kV transformer, he notes manufacturing that the higher voltage unit required a meticulously clean environment and top-quality materials.

"Quality control must be of the highest standard. Not only did we have to ensure that the environment was meticulously clean, but we also had to ensure that the coil-winding tension was adequate and sufficient," adds Mbenge.

"We also had to ensure that material used in the manufacturing process was inspected regularly to ensure that it conformed with standards and requirements."

says ACTOM Distribution Transformers did not have to upgrade or acquire any new equipment to manufacture the 66kV transformers, but it had to carefully check and maintain its machinery to ensure it was in the right condition to be able to manufacture the unit.

"We had to perform a lot of servicing of our equipment beforehand, but we were able to use our existing facilities to manufacture the 66kV transformers. We are looking at upgrading our testing facilities as we are currently reliant on our sister companies to do type and special testing of the new units, We would like to conduct these tests in-house in future," says Mbenge.

Training test technicians

He adds that the company's current workforce possessed the necessary skills and expertise to manufacture the 66kV unit, and capabilities of test technicians were enhanced by providing training on the new test requirements, ensuring adherence to the safest test protocols possible.

Lee points out that the introduction of the 66kV transformer provides ACTOM Distribution Transformers with exposure to customers who are not aware of the company's manufacturing capabilities of this voltage range in transformers. This will ultimately pave the way for new projects and contracts in the energy sector.

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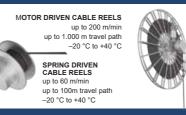
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BRIGHT FUTURE BEGINS WITH MANURE: BIOGAS TO BRIDGE SOUTH AFRICA'S POWER GAP

Switching to manure-based energy could very well be one of the answers to South Africa's energy crisis. So says Andrey Belousenko, director of business development at R Schmitt Enertec GmbH, a worldrenowned manufacturer of gas engines, generator sets, and cogeneration units from Germany. Belousenko answered some questions on the matter with Cape Business News.

Let's go through the basics: what is biogas, how is it produced, and why is it more beneficial than natural gas?

I'll tell you more. In some ways, it's even more beneficial than solar and wind. It is a 100% eco-friendly fuel produced by the natural fermentation of biomass.

It is a case of taking something completely useless and turning it into vital necessities - electricity and heat. Biogas can be produced from crop residues, manure and sewage, food production waste, and even our breakfast leftovers.

We once supplied combined heat and power (CHP) units to the city of Lünen, Germany, and now all 90 000 residents can use electricity and heat produced from cow and horse manure and other organic materials from local farms.

Do you have other biogas projects?

We've delivered about 20 biogas-powered generators and cogeneration units to customers in 10 countries. That's just for biogas.

In total, Enertec's reach is much wider - about 40 countries. We've been in the market for a long time and what sets us apart from competitors is our flexibility. The same products can run on almost any type of gas: biogas, LPG, syngas, flare gas, and of course, natural gas.

So, if a customer buys our CHP for natural gas, they're not limited. They can always switch to biogas later.

We were talking about how to make it. What happens with the collected waste?

It's crushed, mixed with water, and sent to a special facility without oxygen, where it is left to bacteria. As they process the organic material, they release methane and carbon dioxide - a ready fuel that just needs to be collected and delivered to consumers.

But you have to clean the gas first, don't you?

can handle impurities and work efficiently on gas with a high methane content. This means that biogas doesn't need to be purified to the level of natural gas. This simplifies and reduces the cost of production, making it accessible and

That depends on the generator. Our units

attractive. For South Africa, this is exactly the technology that can help overcome the current crisis. Biogas plants produce energy

> continuously, providing homes, businesses, schools and hospitals with a renewable and reliable alternative that is not subject to international logistics challenges and gas price fluctuations. Unlike solar panels and wind turbines, biogas plants can operate 24 hours a day in any

Given that South Africa is one of the world's top 15 emitters of carbon dioxide, this is a powerful argument.

weather.

And the potential is huge! According to a study by the United Nations Industrial Development Organization (UNIDO), the potential for biogas in the agricultural sector in South Africa is estimated at 2 500 megawatts of

The study also found that there is potential for the development of approximately 8 000 biogas digesters in the livestock sector alone, which could generate significant amounts of electricity and organic fertiliser.

It is important to note that the agricultural sector is not the only source of organic waste that can be used to produce biogas. The waste sector in South Africa also produces significant amounts of organic waste, such as food waste and sewage sludge, that can be used for this purpose.

LOCAL SUPPORT IS KEY FOR RELIABILITY AND AFTER-**SALES SUPPORT ON GENSETS**

In South Africa, Enertec has partnered with local supplier Energas Technologies who has over 23 years' of experience in the oil and gas industry as an equipment supplier. The Energas maintenance team is trained to service and support the Enertec engines that are operational at a few sites in Gauteng area.





Green steel is the foundation of achieving net zero and needs to be a top priority for **South Africa**



By Viren Sookhun, MD at Oxyon

STEEL is one of the most commonly manufactured materials in the world, because it has such a wide variety of uses - steel is everywhere, from construction to vehicles, home goods to robotics.

production Steel is also hugely carbon intensive, representing a significant proportion of global manmade carbon emissions.

In the universal quest for Net Zero and carbon neutral, green steel production is critical. The entire value chain of many other 'green' products, like electric vehicles (EVs), hinges on the ability to ensure all components are carbon neutral. South Africa is well positioned to be a world leader in this space, as we have the natural resources and the capability, but production needs to be ramped up and the government should lead the way in driving this change.

Massive carbon intensity

The carbon footprint of steel is huge, and emissions can vary

method of production that is used, as well as the proportion of scrap steel versus virgin steel used in the production process. Blast furnaces, for example, produce significantly more emissions than, for example, an electric arc furnace, which also utilises far more scrap steel. Yet blast furnaces are by far the most common method of steel production around the world.

According to the World Steel Association, every tonne of steel produced in 2020, on average, created almost 2 tons of CO₂ emissions.

What can be done?

The demand for steel has not abated, and is more than likely to increase in future, which means that it is of the utmost importance that the carbon footprint of steel be reduced in line with Net Zero emissions targets. Prioritising the move toward the green steel manufacturing process will significantly reduce global carbon emissions.

Manufacturing green steel requires the use of electricity, generated using renewable sources rather

than fossil fuels, which drastically reduces the greenhouse gas emissions in the process. It is also possible to then offset the emissions that are created, moving the steel manufacturing process toward net zero.

A significant opportunity

South Africa is one of the world's top producers of iron ore, which is the base material of steel. We are also rich in renewable energy resources, including solar and wind power. These factors together mean that as a country we are uniquely positioned to become a leader in the green steel transition. While there have been some steps taken in the Saldana region, we need to up the pace of change, especially if we are to ramp up production of electric vehicles. The entire greening value chain starts with green steel.

To do this, green steel production needs to be further incentivised through all of South Africa's Special Economic Zones (SEZs). In addition, innovative ways of using excess carbon credits should be implemented, including tax incentives and carbon credit markets where the sale of these credits could be used to fund further investment.

If South Africa can move toward hydrogen-based and electric arc furnace manufacturing, powered 100% by renewable energy, we will not only reduce emissions significantly, but grid energy will be freed up for other applications, and our reliance on imported steel will be reduced.

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GiGi Investment Group partners with Fuelre4m to drive sustainable energy solutions in Africa

GIGI Investment Group has gone into partnership with the Dubai-headquartered Fuelre4m, marking a significant milestone as the first Fuelre4m partner in Africa.

This collaboration aligns perfectly with GiGi Investment Group's commitment to innovation and sustainability, enhancing environmentally friendly energy solutions while expanding its global market pres-

Fuelre4m MD Rob Mortimer, expressed his excitement about

the partnership. "We are thrilled to embark on this new chapter of growth and innovation in Africa. Our mission at Fuelre4m is to redefine the future of energy consumption whilst positively impacting the enormous global efforts that are underway to reduce associated greenhouse gases. This new partnership marks another significant step towards achieving that goal."

With a 10-year track record of building world-class industrial brands, GiGi Investment Group is well-positioned to manage

the anticipated rapid growth and benefits Fuelre4m which will bring to consumers of diesel, HFO, and other carbon-based fuels.

GiGi Investment's CEO, Graham Russell, stated: "Having engaged extensively with Rob and the world-class team at Fuelre4m, we are delighted to be their partner in the markets we understand so well. Given the significant reliance in many African countries on petroleum fuels for power generation, industrial microgrids such as mining operations, transport and mining fleets, we have been able to convince consumers of the significant cost savings and GHG reductions that can be achieved with Fuelre4m products. Our target markets include high-volume consumers in mining operations, the marine shipping industry, general road and rail freight industry."

In a world increasingly focused on clichange and mate reducing dependence on fossil fuels, Fuelre4m emerges as a game-changer. Recognising the necessity of



Fuelre4m MD Rob Mortimer.

continued fossil fuel use for the foreseeable future, the company's innovative approach ensures a cleaner. more efficient, and cost-effective process, aligning with global Corporate Social Responsibility (CSR), Environmental, Social, and Governance (ESG) strategies.

The partnership is a significant milestone for GiGi Investment Group leading in change towards a sustainable energy future whilst aiming to impact the energy landscape in Africa positively.

The GiGi Investment Group holds interests in numerous companies operating in the mining, industrial, marine and construction market segments across sub-Saharan Africa.

Fuelre4m is known for its groundbreaking fossil fuel reforming technology, utilising 100% organic nano-biotechnology to enhance the efficiency, affordability, and environmental friendliness of fossil fuel consump-

Sapia to be known as Fiasa. New name reflects changing energy solutions in the transport sector

By Larry Claasen

THE South African Petroleum Industry (Sania) going through a name change.

organisation, The which is a voluntary trade association that represents its members' companies on common interests issues in the petroleum industry in South Africa, will now be known as the Association of South Africa (Fiasa).

Fiasa executive director Avhapfani "Fani' Tshifularo told Energy News Africa Plus that the change was to better reflect the organisation's broad-

ening focus beyond Energy News Africa traditional petroleum, into a wider range of energy sources.

to Fiasa marks a critical evolution in our mission. It extends our reach across various types of energy solutions that will power both current and future mobility needs."

Fiasa was established in 1994 to represent the collective interests of the South African fuels industry. Its members include major fuel producers like BP, Shell and Sasol, as well as wholesales like Gulfstream and Easygas.

Tshifularo

Plus that the rebranding was a response to environmental imperatransition tives, such as the need to improve air quality and reduce greenhouse gas emissions from the transport sector.

Fiasa says it is supportive of the government's Just Energy Transition programme. This commitment sees it support the development of liquid fuel standards for fuel derived from fossil-fuels, sustainable carbon sources like biogenic sources and green hydrogen.

The energy transition was one of the major topics of discussion at the group's

Anniversary Conference held on 11 July 2024, in Sandton, Johannesburg.

Fiasa said the world undergoing energy transition. This has seen an increased focus on a low-carbon economy to promote sustainability and mitigate the impacts of pollution on climate change.

For the transport sector, the "near-complete dependency" on fossil fuels would pose significant challenges to suppliers of such transportation energy, as well as consumers in the form of technology, to meet the requirements of all forms of transport.

THE NEXT GENERATION

Internships, Skills & Development Programmes

Med-TechEngineers launches academy to address critical skills shortage



Dr Gift Mphefu, MD Med-TechEngineers.

GAUTENG-based consulting engineering firm Med-TechEngineers has officially launched the Engineering and Technology Academy to address the shortage of critical and unique skills needed in the engineering and technol-

For the past 15 years, Med-Tech-Engineers has been at the forefront of the engineering and technology sector, guided by a steadfast policy emphasising the importance of balancing fieldwork with academic rigour.

Dr Gift Mphefu, MD Med-Tech-Engineers explains: "Our track record includes the successful execution of complex infrastructure projects across various engineering disciplines. However, we recognise that each project presents unique challenges, often necessitating

specialised skill sets that are both highly technical and practical. We identified a gap in the market for training individuals to meet these specific needs, which led us to establish the Med-TechEngineers Academy."

Med-TechEngineers' team comprises seasoned Engineers, Technologists, Technicians, Artisans, and IT professionals actively engaged in the industry. Mphefu notes: "By leveraging this wealth of expertise, launching the Med-Tech-Engineers Academy was a natural progression. We aim to empower and capacitate individuals, ensuring they are well-equipped for the demands of the

Targeting professional individuals involved in the information and communications technologies, engineering, construction, and maintenance sectors, the academy will equip students with practical skills required for planning, design, construction, operation, maintenance and decommissioning of infrastructure projects across various sectors

Further, as South Africa continues to grapple with high unemployment rates, the academy is also dedicated to the non-professional labour force that is essential in the execution of infrastruc-

"Our goal is to develop their technical competence in line with their job profiles, as well as to ensure that these individuals receive relevant certifications that are usually the gatekeeper in many of the opportunities presented within the industry," Mphefu says.

Students who complete courses through the Med-TechEngineers Academy will gain industry certifications crucial for career advancement and employment retention, with an emphasis on real-world applicability. "Our approach has always been about bridging the gap between theory and practice," he adds.

What sets Med-TechEngineers Academy apart is its innovative competence development model, strategic partnerships with industry leaders and educational institutions, and training programmes and courses being designed in collaboration with experts from practitioners, manufacturers, academia, and other stakeholders.

Some of the courses on offer from the Med-TechEngineers Academy include a five-day Solar PV Greencard Training course endorsed by the South African Photovoltaic Association (SAPVIA), where candidates are trained in basic principles of Solar PV design and installations.

Participants will receive a certificate after the training is completed.

"We are also at an advanced stage of obtaining accreditation for other training programmes from the Quality Council for Trades and Occupations (QCTO) and the Department of Higher Education," Mphefu adds.

All courses will be undertaken at The Innovation Hub, in Pretoria. "Our partnership with The Innovation Hub made it possible to use their world-class conferencing facilities to enhance the learning experience of individuals," he says.

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Concor's training focus boosts vital skills for mining



Niel Fourie, group training manager at Concor.

THROUGH its continuous investment in formalised training that delivers recognised qualifications, Concor Mining Services is helping build mining's skills base from the ground up.

"The full qualifications, part qualifications and short courses are all vital to driving the minerals sector – which remains a key pillar of our economy."

Serving its blue chip mining customers with a range of contract mining services, the company leverages its recognised position for the benefit of the whole sector, according to Niel Fourie, group training manager at Concor. The company is accredited as a training organisation by both the Mining Qualifications Authority (MQA).

This allows us to deliver the quality and level of training that not only ensures our customers a highly productive offering, but also gives employees portable qualifications as they progress their careers through the mining sector," says Fourie.

"The full qualifications, part qualifications and short courses are all vital to driving the minerals sector - which remains a key pillar of our economy. They are also important stepping stones for our employees, who use them to progress and often to study further."

Among the roles on which the technical training is focused are dump truck operators, excavator and face shovel operators and support plant operators.

There is also a focus on developing blasting assistants and foremen with rock breaking qualifications. Offered through the MQA framework, the training includes theoretical and practical elements, and Concor Mining Services ensures new operators become comfortable with site operations by having them work under the supervision of an experienced operator for a period of time.

"The impact of the training can be clearly seen in our safety and performance indicators, which show employees really benefit from the skills development process," he says. "We can also confirm the quality of the learning outcomes by the number of our trainees who move on to work for other employers in the sector including our mining customers."

He emphasises that Concor Mining Services sees this movement of people as an inevitable aspect of their career development – and the company is proud to have contributed to building the industry's skills foundation. When a new employee joins the business, their competencies are analysed alongside the new roles they will be required to undertake - and a gap analysis is conducted. The necessary training interventions to fill those gaps are then defined and planned.

"On this basis, we can develop an individual development plan for that employee, which could look forward one to five years," he explains.

"These individual plans are then aggregated into our Workplace Skills Plan for the business as a whole – which keeps us on track with the demands of the fu-

He points to the significance of a full qualification like the certificate in rock breaking, which enables a person to become an opencast blaster. This, he argues, is as important as a university degree - as it is a requirement for anyone seeking to achieve a blasting ticket.

"The mining sector is highly regulated, especially in terms of health and safety, so there is no short cut to reach the required levels of awareness and expertise," he says.

"To comply with these regulations, the breadth and depth of knowledge that employees must learn and apply is both intensive and detailed."



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IRR makes a plan for a better SA

successful, growing economy - this is the goal set by the SA Institute of Race Relations (IRR) in a deep dive to identify the causes of problem areas and to think through the requirements for growth and its many rewards - from job creation to finally replacing pit latrines.

The IRR believes the election of a new government, one that differs from its immediate predecessors in that it has not one, but several political parties in a government of national unity (GNU), presents the ideal opportunity for such a reassessment, specifically in the first 100 days.

This is the honeymoon period a new government usually enjoys to get its ducks in a row, in this instance for pragmatic, pro-growth

A series of nine papers will be produced to show how this goal can be achieved. An early success will create political capital for the GNU - belief, therefore, in its ability to fix past failures and build on past successes.

The challenges are serious and 13 current crises are identified, including worsening

water shortages, the ineffective and politicised civil service, our inadequate police, high unemployment, the country's already small and still shrinking tax base, violent crime against vulnerable victims, failing infrastructure, and malnutrition, particularly as it affects children.

Also, corruption "is a key priority of South

Nevertheless, "a pragmatic and outcomes-focused program of government will ensure a drastic turnaround and the introduction of pro-growth policy consensus.'

Under the headline 'Public administration: Reward skills, deliver for citizens', the first interventions for the GNU are bringing in the private sector to improve services, depoliticising the civil service and introducing competitive entrance exams. Also, senior managers should keep the media informed regularly. The goal is to professionalise the service:

"Imagine a customer-facing government department that is clean and welcoming, whose staff are knowledgeable and able to deal with complicated problems, who treat the public with respect and helpfulness, and (treat) business as an asset?"

For business it will mean dealing with government departments smoothly and easily growing more so over time. The paper does warn, however, that this will progress slowly and that very influential vested interests will be pulling the other way.

For a government of national unity willing and eager to create a better life for its people, the strongest action would be to stop cadre deployment. In this scenario, the Public Service Act will be amended to limit politicians' free hand to employ civil servants. Instead, senior appointments will be decided in open interviews involving the Public Service Commission, independent experts and the relevant

Regarding public-private partnerships, managers could be seconded from the private sector, following agreements with firms willing to participate. The three key objectives would be better service to the public, customer service experience and financial management.

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



A quick win could be achieved with a pilot project in a strategic sector - introducing private-sector skills at the top level of national and provincial departments, and also in wellrun municipalities. A universally needed candidate is water provision for people and businesses - currently a major strategic challenge. Success would be hailed by all.

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Empathy - The secret source behind Cape Town's BPO success

The difficult background of many Capetonians makes them great problem solvers

By Larry Claasen

THE rise of the Business Process Outsourcing (BPO) sector has changed thousands of lives of young people in the Western Cape. The sector, which services outbound call centres, employs about 50 000 people in the province. This is up from about 4000 jobs 20 years ago.

CapeBPO CEO Clayton Williams says getting young people who might just have a matric employed has not only changed their lives but that of their families and that of the broader

'Very often they are the only breadwinner in the house," says Williams.

If they demonstrate some talent, they can easily work their way up the ladder, and get promoted into senior jobs.

Though the overall economy has been sluggish, the BPO sector has been growing from strength to strength. In the year to end March 2024 a record 10 000 new jobs were created in

What has enabled South Africa, and the Western Cape in particular to attract offshore BPO companies to set up shop in the region?

I feel your pain

A lot has been said about the "neutral" accents South Africans have, but for Williams the competitive advantage is something more innate empathy.

In South Africa, young people have to deal with a lot of difficult issues, which makes them sympathetic to people dealing with problems they can't solve.

"It's connecting with customers, which I think is giving us a global advantage. And I think that's got a lot to do with our history and, you know, the diversity that exists within South

You know, we've had a difficult past, and, you know, socioeconomic challenges that we face have allowed South Africans to be resil-

Williams says this empathy for the callers often sees call centre agents go off script and focus on how to best solve their problem.

"If there's anything I can kind of pick out as a golden thread, it's customer experience and our ability as South Africans and Capetonians to connect with customers, to make them feel valued. And irrespective of whether there's a resolution at the end of that engagement, the customer walks away saying that, you know, I've had a meaningful conversation with somebody that cares.'

Working together

Aside from this trait, the industry has also benefited from the support for the sector from local, provincial and national governments. He gives the example of all three spheres of government and the industry has supported training initiatives. CapeBPO's training budget is only about R1,2-million, but the collective support for skills development has boosted it to R800-million a year.

The US operators are on the way

The sector is enjoying a good run but the interest of US BPO companies could boost its prospects even more.

"So, we've seen a massive influx of US clients. And the primary difference between UK and US clients is that US clients' pilots are tenfold in terms of size compared to the UK. Now, UK clients will typically do pilots of, you know, 30 to 50, whereas US clients will do pilots of 300 to 500."

Williams says this could be a game changer for the sector.

"I think we're on the precipice of exponential growth because of US market penetration."

Demand from the US could actually see South Africa reach its ambitious targets for the

The government wants the BPO sector in South Africa to generate 500 000 jobs by 3030. The Western Cape is no less ambitious.

I think by 2030, the Western Cape should get to or could get to around 200 000 as a headcount contributor in terms of our market share and our size, our scale."

Economic importance of engaging BCCEI registered civil engineering companies and contractors

WHEN it comes to infrastructure and civil engineering projects, the importance of selecting companies registered with the Bargaining Council for the Civil Engineering Industry (BCCEI) cannot be overstated.

This registration signifies a commitment to adhering to established wage agreements, fostering fair labour practices and ensuring a stable and ethical industry. Prioritising these companies that are in good standing is crucial for the economy for several compelling reasons.

All civil engineering companies and contractors, including many of those working within the surface mining sector, are bound by the wage agreements set forth by the BCCEI, and are furnished with a Letter of Good Standing

This ensures that employees receive fair compensation, aligned with the legislated minimum wage standards. By maintaining these standards, companies that are in good standing help ensure fair compensation, enhance worker morale and productivity, and reduce income inequality.

'Fair wages contribute to higher job satisfaction, which in turn boosts productivity and overall project quality," says Lindie Fourie, operations manager at the BCCEI.

The adherence to wage agreements by registered and compliant companies ensures that contracts are not secured through unethical cost cutting measures, such as underpaying employees.

This is critical for creating a level playing field where companies compete based on the quality of their work and efficiency rather than exploiting labour costs.

"Ethical labour practices lead to sustainable

business models, which benefit the industry in the long run and help stabilise the market, ensuring that all players have an equal opportunity to succeed," she says.

When projects are awarded to companies that are in good standing with the BCCEI, it drives the entire industry towards higher standards. This encompasses not only fair wages but also compliance with safety regulations, investment in training and development and quality assurance. These companies are more likely to adhere to safety standards, reducing workplace accidents and promoting a culture of safety, and such compliant companies sig-

nificantly reduce the risk of job stoppages and unnecessary delays on a project.

Further, Fourie says, ensuring fair wages allows companies to invest in their workforce through training and development, leading to a more skilled labour force. Higher standards in labour practices often translate to higher quality in project execution, benefiting clients and the community at large.

The positive impact of engaging companies that are compliant extends beyond the industry itself. It contributes to broader economic growth by creating more job opportunities and reducing unemployment rates, especially at a time when South Africa needs this most. It also increases consumer spending as workers receiving fair wages have more disposable income, which stimulates demand for goods and services in the economy.

A stable, ethical industry is also more attractive to investors, leading to increased investment in infrastructure and development projects. "By prioritising companies that are registered with the BCCEI and adhere to BCCEI regulations, we not only support fair wages but also drive economic growth through job creation and increased consumer spending," Fourie emphasises.



Lindie Fourie, Operations Manager at the BCCEI.

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