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# euroasia industry

INNOVATION FOCUS | MEASURING UP – BIOMETRIC AUTHENTICATION | SALTWATER GETS SWEETER  
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# BIGEN<sup>®</sup> AND BETTER

Bigen Africa – a leading African infrastructure development company with a diverse array of interests, assets and projects across Africa – is helping to bring much needed development to the continent. Euroasia Industry speaks to Chief Executive Officer, Mr Anton Boshoff, about Bigen Africa's wide-ranging operations and flagship projects.

**A recent World Bank study** found that the poor state of infrastructure in many parts of Africa reduced national economic growth by two percentage points every year and cut business productivity by as much as 40 per cent, making Africa – in spite of its enormous mineral and other natural resources – the region with the lowest productivity levels in the world. One business working to address this situation is Bigen Africa, a solutions-driven infrastructure development company with a firm foothold in southern Africa and a fast-growing African footprint.

Established in 1971, Bigen Africa now employs 400 full-time professionals located in 17 offices around Africa, with the majority located in the company's native South Africa. "The Bigen Africa Group has humble beginnings as a one-man South African engineering firm. Since then, the

business has successfully repositioned itself as a solution-focused multinational infrastructure development group operating in Africa, with core capabilities in financial, technical, environmental, and socio-economic and institutional services," states Mr Boshoff. "We embrace economic challenges in Africa through an aggressive growth strategy. As an innovative leader in the industry, the Group has successfully fielded global economic pressures over the years and remained at the forefront of the industry by adopting a series of ambitious five-year 'Vision' growth strategies." Bigen Africa has recently launched Vision2021, with a view to becoming one of the top five African firms by 2021, as well as helping the continent to achieve its Sustainable Development Goals by 2030, as set out by the UN.

#### **Innovative conservation principles**

Bigen Africa has a remarkable track record of 46 years of service delivery to a diverse client base located across several geographical areas and market sectors, and has completed projects in more than 19 African countries including South Africa, Namibia, Botswana, Zambia, Malawi, Angola, Nigeria, Kenya, Congo, Lesotho, Tanzania and Ghana.

A flagship project for the Group was the Wallacedene taxi rank in Cape Town. Completed in 2014, the project cost 25 million rand – approximately US\$1.9 million – to realise. "The Wallacedene taxi rank project – South Africa's first green taxi rank – is a milestone in environmentally friendly infrastructure development," explains Mr Boshoff. "We were responsible for the design and engineering services, and the Group







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**OVER 45 YEARS OF EXCELLENT SERVICE**

ACON, We have societal values .....Building the nation is our priority....We love to give back to the society

utilised innovative conservation principles to ensure that the facility is largely self-sufficient in terms of energy and water use. Green Star South Africa has awarded the facility a four-star rating," he advises, adding that all the water used at this facility, besides drinking water, is provided for via rooftop rain-water harvesting and recycling, and the taxi rank uses a rooftop solar photovoltaic (PV) panel system, arrayed at optimum orientation to the sun, for its electricity generation.

Nor is the Wallacedene project the only South African project that has won Bigen Africa awards. The Group's North South Carrier Water Transfer Project in Botswana was bestowed with the CESA AON Engineering Excellence Award for Best International Project in 2015. Bigen Africa was appointed by the Botswana Ministry of Minerals, Energy and Water Resources as its Employer's Representative for the conceptual design development, EPC tender documents and construction supervision of the 360km regional water transfer system. This approximately US\$450-million project demonstrated the Group's engineering excellence, and resulted in enhanced regional economic

growth and significantly improved the quality of life of the Botswana people.

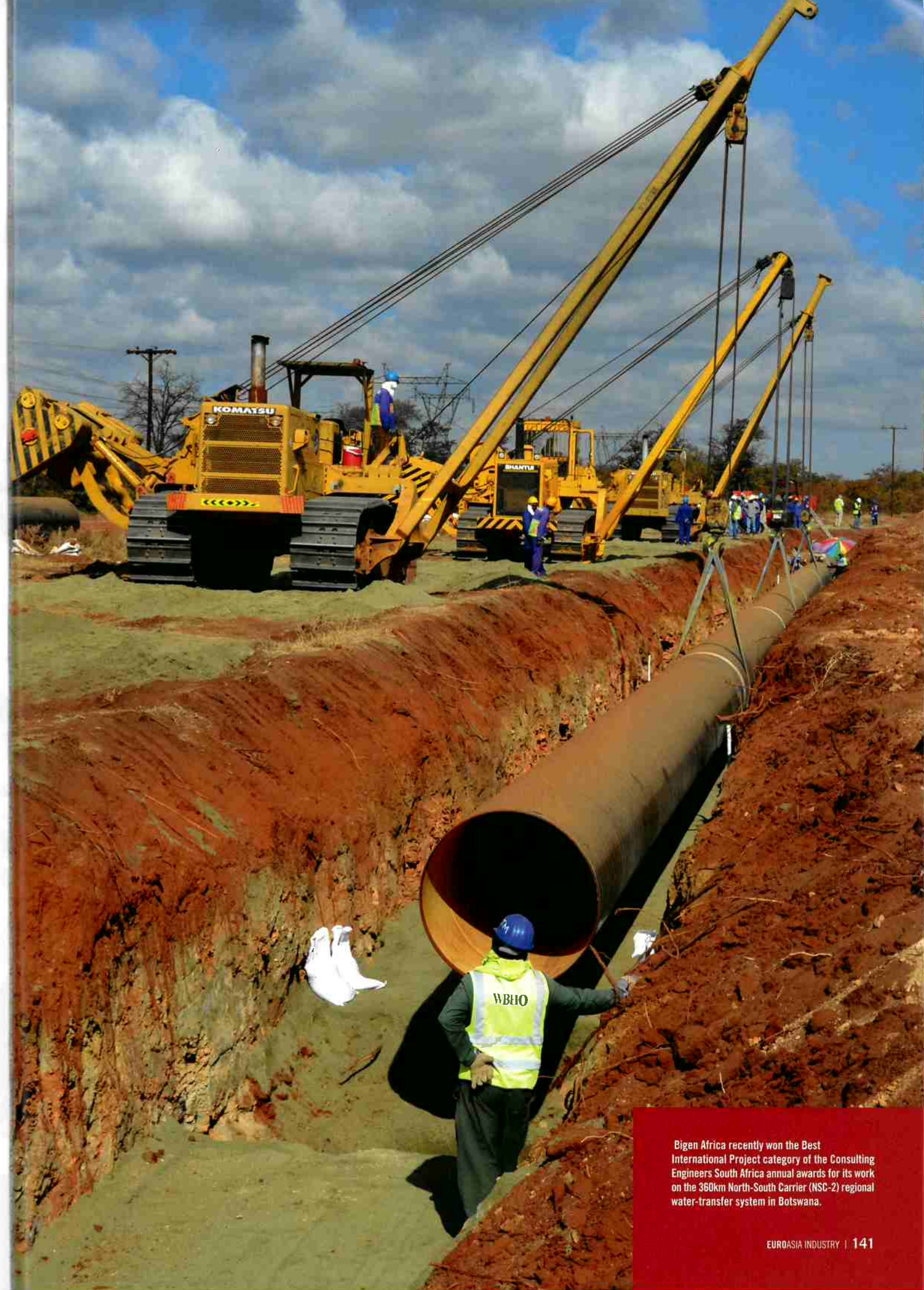
The Group also twice won the Govan Mbeki Housing Award for Best Priority Project – firstly in 2013 for the Klarinet integrated human settlement development project in Mpumalanga, and again in 2015 for the Second Creek integrated development project situated in the Buffalo City Metropolitan Municipality, in the Eastern Cape. Following on from those, Bigen Africa has taken on other housing projects. "Bigen Africa has been appointed to provide civil engineering services to the next phases of the Luthereng housing project of Gauteng Provincial Department of Human Settlements, west of Soweto," informs Mr Boshoff. "At Steyn City, located just outside Sandton in Johannesburg, we provided civil services for the construction of a massive, unique residential estate comprising 10,000 residential units and amenities. Outside of South Africa, Bigen Africa has successfully raised the required funding and completed the bankable feasibility study for the construction of 30,000 household units for the Ghanaian security forces at an estimated value of US\$1.3bn.

Further projects under development in the greater Accra region will deliver in excess of 5,000 affordable housing units to the growing middle class in Ghana.

#### Partnership excellence

Bigen Africa works alongside various key players in the industry both domestically and regionally, including partnering with Dihlase Consulting on a rural electrification project in Ethiopia, valued at US\$15 million and benefiting 100,000 villagers. The Group also partnered with CalgroM3 and Afrideka as joint project managers for the Otjomuise Extension 10 project in Namibia. The project is a greenfield development in a low-income area of the capital, Windhoek, and is expected to house around 1,100 families once completed.

"Our partnership approach is crucial to our growth strategy of expanding our Africa footprint and to be more competitive in a challenging external environment – as well as in achieving success in technical excellence and innovation. The Group supplements its internal capabilities with external capabilities offered by our strategic partners and specialist sub-contractors," states Mr Boshoff. "Bigen



Bigen Africa recently won the Best International Project category of the Consulting Engineers South Africa annual awards for its work on the 360km North-South Carrier (NSC-2) regional water-transfer system in Botswana.





Africa has set up successful partnerships with strategically selected companies. This places the Group in an ideal position to present optimum capability combinations through an established regional footprint, in order to enhance the development objectives of our clients as well as growing the business of Bigen Africa and that of our partners. Our Vision 2021 strategy provides us with a platform to offer a combination of international, regional and local capabilities to clients, and to develop a pipeline of bankable projects with relevant partners to identified delivery channels."

The crucial importance of Bigen Africa's partnerships to its growth strategy is clear, and to support this, the business holds an annual Partnership Conference. "The Conference is aimed at building new capabilities through strategic partnerships and mergers, and at pursuing international partnerships in the infrastructure development sector. Stakeholders and potential partners from across the globe attend it," advises Mr Boshoff. At the heart of Bigen Africa's growth strategy is the idea of offering a one-stop 'African Supermarket' of infrastructure development services. "The 'African Supermarket' structure will ensure mutual commitment to projects to fast-track all forms of individual or integrated project objectives and incubate strategic partnerships, sector-specific interventions and project opportunities," notes the CEO. "This one-stop-supermarket approach will result in tailor-made projects in the Real Estate, Energy, Water, Health and Transport sectors, honed to customer and regional requirements, and will provide a regional and local delivery platform for multinational and international companies seeking to do work in Africa."

### Doing good while doing business

Bigen Africa's belief in 'doing good while doing business' is a golden thread running through all its projects and proposals to clients and partners. "Bigen Africa takes environmental and social concerns seriously and believes that all development must have some benefit to local communities beyond the commercial value or demand," states Mr Boshoff. "For instance, a project that requires the raising of a dam wall and the construction of a hydro-power station, as is the case with our Clan William Dam project, may as well become a multi-purpose facility when it includes an irrigation pipeline to assist downstream farmers; the on-site health clinic erected during the project phase may become of permanent benefit to the surrounding communities, and a water and sanitation plant could be built to not only stimulate further local economic participation through job creation and capacity building, but also to provide potable water to communities," he adds.

"Infrastructure development is critical to achieving socio-economic growth, but it cannot be addressed without acknowledging our environmental responsibility,"

explains Mr Boshoff. "We are keenly aware of not only social and business imperatives, but also environmental factors impacting the industry and the communities where projects are initiated. As we expand our activities into southern, West and East Africa, we will continue to promote the economic and environmental benefits of green industry practices."

Such commitment to its environmental and social responsibilities has proved attractive to Bigen Africa's clients. "Our creed of 'Doing good while doing business' resonates with the global trend of 'conscious capitalism', placing as much emphasis on doing social good and development impact as on generating revenue. This philosophy strengthens client loyalty and brand affinity as clients embrace the opportunity to be part of the bigger picture of making a real difference to the lives of thousands," enthuses Mr Boshoff. "A social conscience is an integral aspect of our corporate culture. Our team of 'engineers with a conscience' believe that infrastructure should provide access to services, reduce poverty, build capacity and generate opportunities for increased economic participation and employment."

### Clear vision for growth

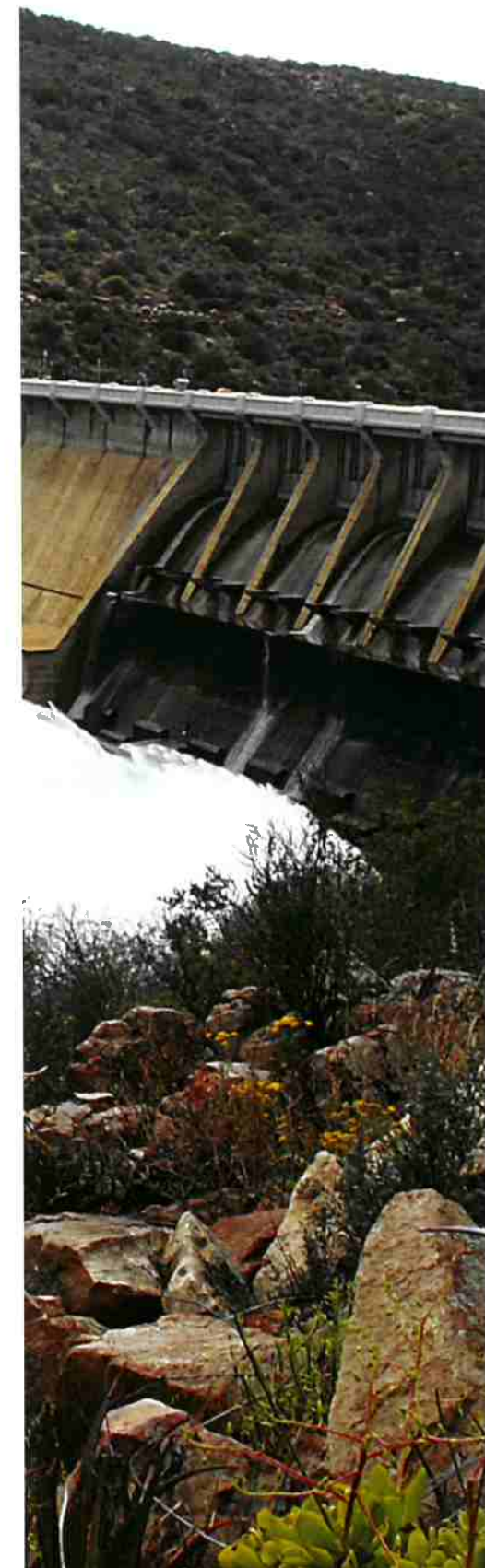
Over the past five years, Bigen Africa has received more than 20 business awards for achievements in sustained growth, business excellence, transformation, gender empowerment and social upliftment, with several awards bestowed on the Group last year, including the Top

500: Best South African Companies Award, AON CESA Business Excellence Award and the Best South African Multi-disciplinary Infrastructure Development Company Award. This year, the Group has also been awarded the African Business and Social Responsibility Award for Corporate Innovative Societal Action. Such awards clearly demonstrate the quality at the core of Bigen Africa's operations, and its continued excellence nearly five decades since inception. "Excellence, quality and professionalism are key to service delivery at Bigen Africa. As per Vision 2021, we continuously implement best practice and comply with internationally accepted standards. Vision 2021 also highlights the achievement of efficiencies through using technology and continuously improving in-house processes and productivity," explains Mr Boshoff, adding that Bigen Africa uses the ISO 31000 standard to create a robust risk management framework, and is the first known infrastructure development consultant in Africa to achieve independent verification to ISO 31000.

Looking ahead, Bigen Africa has very clear plans for the coming years to uphold its reputation as an African leader in infrastructure development, as laid out in the business's Vision 2021 strategy. "The Bigen Group is now set to increase value for investors and stakeholders, as Vision 2021 will not only enhance our growth strategy to ultimately become a Top 5 African firm by 2021, but will also provide multiple investment opportunities for Group members, investors and business owners through innovative capital-raising. This, in turn, is expected to result in aggressive business growth against quantifiable targets, which dovetails with our strong partnership focus," advises Mr Boshoff. "The need for Bigen Africa to continue with its expansion and inorganic growth strategy into Africa, as well as expansion of its service offering, is key to unlocking opportunity. Vision 2021 emphasises these strategies, including expansion into southern, West and East Africa, the facilitation of access to donor funding, and securing work from multinational clients." Given Bigen Africa's strong performance over nearly five decades, there is every reason to believe that this star player will continue to expand and hit the goals laid out in its ambitious Vision 2021 strategy. □



**First Steel-Cipla Distribution Hub:** Bigen Africa was responsible for the planning of layouts, structural systems, and the construction sequence on the R185 million Cipla Medpro distribution hub in the Western Cape. The hub will serve as the main pharmaceutical distribution point for Cipla Pharmaceuticals into southern Africa.



Bigen Africa was appointed site supervision and contract management service provider during the extension of the Clanwilliam dam structure in the Cederberg Local Municipality, which includes raising the wall from its current height of 43m to 56m. Raising the dam wall by another 13m will result in an additional 70 million cubic metres of water a year flowing to farmers downstream.