

NamPower

PUSHING NAMIBIA TOWARDS
ENERGY INDEPENDENCE





NAMPOWER

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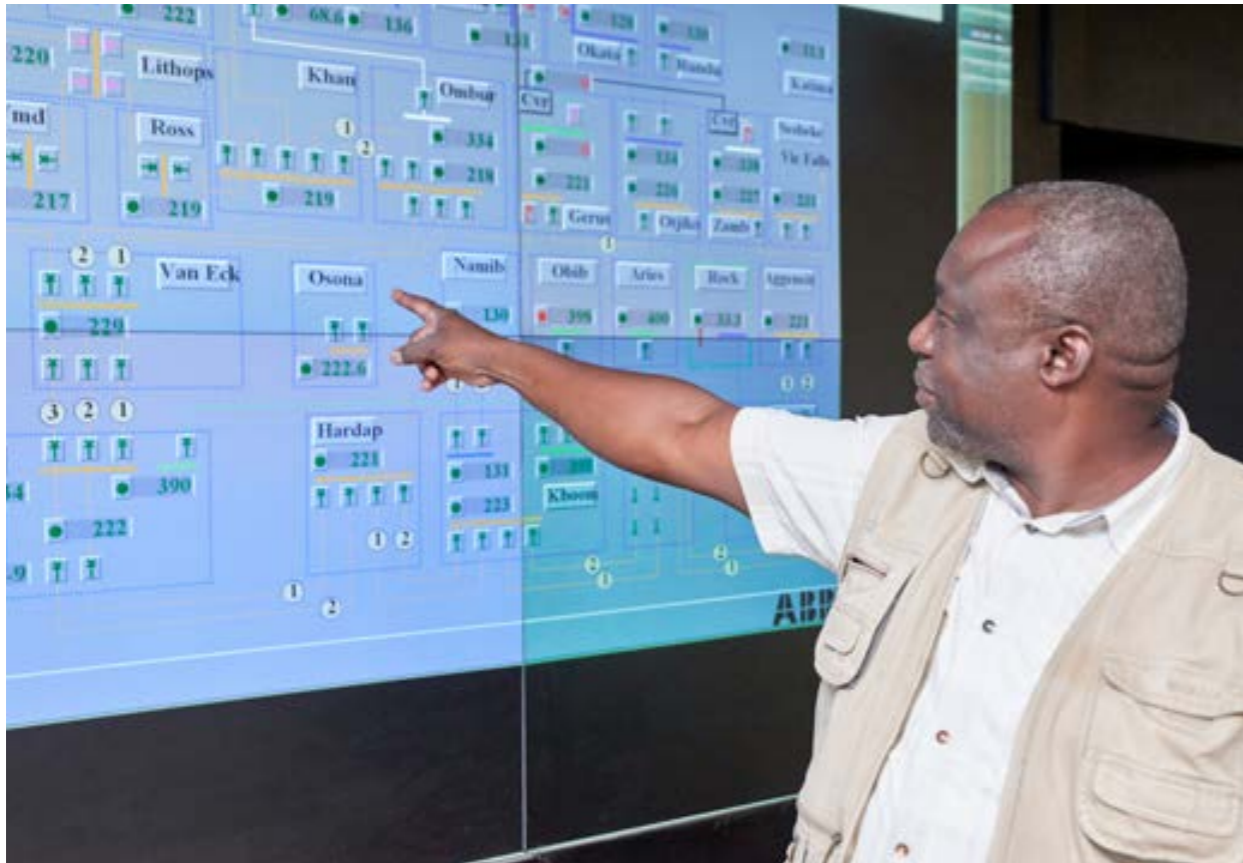
RESEARCH BY **ABI ABAGUN**



It has been over a decade since Business Excellence (BE) first ran a feature on Namibia Power (NamPower). At that time, the company was focused on delivering the Caprivi Link Interconnector (now known as the Zambezi Link Interconnector), a N\$3.2 billion project which would connect Namibia’s electricity network with its northern neighbours, enabling it to trade directly with them. Delivered in 2012, the company has now set its sights on more ambitious targets.

In a recent interview with NamPower’s Managing Director, Kahenge Haulofu, we had the opportunity to discuss the scope of these ambitions, against a backdrop of often challenging conditions. Mr. Haulofu was kind enough to talk us through the projects underway at NamPower and how they will continue to contribute to electricity access and stability in Namibia.





The Minister of Mines and Energy has set Namibia a target of adding 220MW of generation capacity between 2019 and 2023, and 150MW of this has been allocated to NamPower.

What emerges quite clearly is the central role that NamPower plays in Namibia's movement to prosperity.

A Changing Energy Mix in a Changing Environment

In the time since BE's last engagement with NamPower, its work has contributed to the country's electricity access evolving from around 45% of the total to approximately 50%. Despite the progress, Mr. Haulofu knows that the

company has its work cut out: "The Minister of Mines and Energy has set Namibia a target of adding 220MW of generation capacity between 2019 and 2023, and 150MW of this has been allocated to NamPower."

He continues: "Our intent is to develop six renewable energy generation projects under our strategic pillar of 'ensuring security of supply.' The introduction of these projects will significantly change NamPower's energy mix from traditional sources of energy, and over



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The Pretoria plant has a manufacturing capacity from 5 MVA 66kV up to and including 800 MVA 420 kV and incorporates power and furnace transformers, rectifier transformers, traction transformers, shunt reactors and related equipment. The production facility also includes a fully accredited transformer testing facility where all transformers manufactured are tested according to international standards (IEC 60076). This recently installed test equipment has been designed to handle the largest high voltage transformers capable of being produced within the factory. The test facility can also test transformers according to ANSI specifications. Special tests are also available on customer request. This in-house testing facility represents a significant strategic advantage and is currently the largest facility in Africa.

The factory in Cape Town, known as Distribution Transformers, manufactures distribution

transformers from 16 kVA to 5 MVA 66 kV; miniature substations; LNERs; NECRTs and other related equipment.

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time decrease the country's dependence on energy imports." This is of critical importance: About 60% of Namibia's electricity is still imported - down from about 80% a decade ago.

Mr. Haulofu outlines in some detail NamPower's intent to develop the six renewable energy generation projects under its strategic plan. Two of the six projects will be implemented by Independent Power Producers (IPPs), whereby NamPower will be off-taker, while the four projects will be owned and operated by the company, and primarily funded from NamPower's own balance sheet.

He says: "The IPPs are the Khan 20MW solar PV project, on which construction started in March 2022, and the commercial

Did you know?

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operation date is expected in the third quarter of 2023, while the 50MW Wind Project, is currently under evaluation. We're very close to awarding the contract to the successful bidder, after which we'll sign the project agreements. The financial close on this project is also expected in the third quarter of 2023."

The four projects, to be fully owned and operated by NamPower are the Omburu 20MW Solar PV Project (completed in March 2022), a 40MW Wind Power Project (planned for completion in October 2024), a 40MW Biomass Power Project (planned for completion in second quarter of 2025), and the 50MW Anixas II, Firm Power Project, where detailed engineering is already in progress, and the completion of the projected is expected in December 2023.

LET'S DO THE WORK.™

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MPAMOT

enhances access to affordable, reliable, sustainable, energy in Namibia

According to a recent report on the achievement of the United Nations Sustainable Development Goals, the world is making progress towards *Sustainable Development Goal 7: Affordable and clean energy*. Unfortunately, 789 million people in predominantly sub-Saharan Africa, are living without access to electricity and millions have limited or unreliable energy access.

One of the countries that has taken great strides to enhance energy access, energy efficiency, and renewable energy is Namibia. NamPower developed the flagship 20 MW photovoltaic (PV) plant in Omburu, Namibia. The plant was developed by the joint venture partners HopSol Africa and Tulive Private Equity.

MPAMOT Pty Ltd and Mott MacDonald Limited are the owner's engineers for the project, which will service nearly 20 000 homes.

Team members include Alberto Cuellar (project principal), Jose Munoz (project manager), Kader Johnson (civil manager), and Kevin Bowers (electrical manager).

Our renewable energy team enabled our clients and partners to overcome barriers, address risk, and unlock value. We managed the entire infrastructure cycle – from project inception, feasibility, implementation, and construction. Currently, we are monitoring operations.

We combine technical engineering expertise, with commercial, environmental, social and governance acuteness, and our in-depth knowledge of the energy sector.

Our services on the Omburu project included conceptual design, development of employer's requirements, development of specifications for the request for proposal for the procurement of an engineering, procurement and construction (EPC) contractor, evaluation of the bids submitted by prospective EPC contractors, support during EPC contract negotiations, review of detailed design done by the EPC contractor, construction and commissioning supervision including permanent site presence, management of the EPC contract, acting as employer's representative under the EPC contract, and monitoring of the initial operation phase during the defects notification period.

Over the past 25 years, MPAMOT has grown to become one of the largest black-women-owned engineering and infrastructure development consulting firms of its size, capacity, and capability in South Africa.

MPAMOT's portfolio includes energy, advisory, infrastructure and transport engineering solutions.

Whether you are a public entity that is looking to bridge an infrastructure gap through private investment, a lender or investor who wishes to assess risk prior to commitment, or a project sponsor/developer that is about to submit a bid or embark on the process of securing finance for a project, or planning the design and construction of infrastructure, MPAMOT can assist.

For more information, visit our website: www.mpamot.com



Photograph: Fred Bailey, project manager NamPower; Kevin Bowers, electrical manager; D Gertzen, chief operating officer, MPAMOT; Iyaloo Nangolo, HopSol Africa/Tulive Private Equity joint venture partner.

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Mr. Haulofu makes no secret of his enthusiasm for these projects. He notes: "All of these important projects are at an advanced stage. Furthermore, several transmission projects which were also approved as part of our corporate strategy and business plan will be delivered in the next five years to strengthen Namibia's national grid, and to dispatch the power generated from these six new generation projects to the end customer."

Dealing with COVID-19

NamPower continued to add to Namibia's electricity connectivity over the past two years, despite being in the midst of the COVID-19 pandemic. Mr. Haulofu says: "I believe that there is no business that has not been impacted by COVID-19. NamPower was not spared as it was compelled to adjust its way of doing business. The systematic impact of COVID-19 and the lockdown put severe pressure on the operations of the company and the national economy."

He adds: "For example, the country's already challenging economic situation combined with the impact of the COVID-19

pandemic on the economy, negatively impacted NamPower's debtors' collection days. Right now, it takes us an average of 81 days to collect revenue from customers, indicative of the existing challenging economic situation and the impact of the pandemic on businesses, as well as on individuals."





The Namibian Standards Institution (NSI) was established in terms of the Standards Act, 2005 (Act No. 18 of 2005). The primary role of the NSI is to promote Standardisation and Quality Assurance in industry, commerce and the public sector in Namibia, with the aim of improving product quality, industrial efficiency and productivity, and to promote trade, so as to achieve optimum benefits for Namibia.

Chie Wasserfall
Chief Executive Officer



STANDARD DEVELOPMENT

Products: The quality and safety of goods and services.

Processes: The conditions under which products and services are to be produced, refined and packaged.

Management Systems: Systems that help organisations to manage their operations are often used to create a framework within which an organisation consistently achieves the requirements as set out in product and process standards.

CERTIFICATION

The NSI Certification Body (CB) provides conformity assessment services that give organizations the assurance that their products and services consistently conforms to predefined International and/or Namibian standard, customer requirements and applicable legislation. The CB offers, Product Certification (Standard Mark) and Management System Certification to the Namibian business community in accordance with the requirements of ISO/IEC 17065 and ISO/IEC 17021-1 respectively.

TESTING & INSPECTION

The Testing Centre is based in Walvis Bay in the light industrial area. The laboratory renders services both to government and private institutions. Commercial customers include fishing industry, various food producers, local authorities, water bottling companies, mines, cleaning companies other private industry. Customers needing analysis are encouraged to approach the laboratory to engage on services on offer.

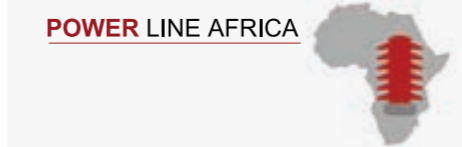
METROLOGY

Metrology is defined as the science of measurement. This science is divided into three categories that namely scientific metrology which deals with the organization, development and maintenance of measurement standards, Industrial metrology that deals with the assurance of the adequate functioning of measurement instruments used in industry, including production and testing processes, last but not least is Legal Metrology concerned with measurements where these influence the transparency of economic transactions human health and protection of the environment.

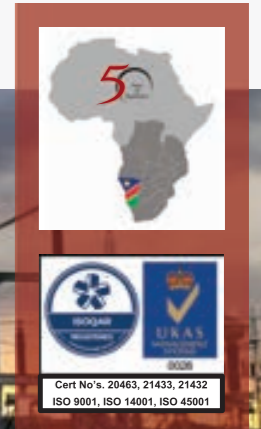


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NamPower was sensitive to these new demands, as it experienced the harsh toll of COVID-19 at first hand. Mr. Haulofu says: “we lost some cherished employees who served the company for many years and contributed to making NamPower the company it is today.” This brought home the reality of the virus to many, and the fact that “NamPower had to adapt to new ways of operating and realising that we couldn’t go about business as usual.”

The silver lining is that the team has come through the dark times, he says: “The period also compelled staff to come up with innovative alternative solutions, in cases of lengthy turnaround time of repairs on equipment that needed to be sent out of country. A case in point, is the solution for the ever-faulty Voltage

Regulating Relays that NamPower Engineers found in-house. The Protection, Telecommunication, Metering & Control (PTM&C) team had designed, tested, and successfully implemented a simple, but reliable Automatic Voltage Regulation (AVR) solution for the Walvis Bay Substation Transformers.”

The Future

When asked about NamPower’s priority over the next five to ten years, Mr. Haulofu is unflinching in his answer: “Ensuring security of supply. We want to achieve that through optimally expanding and upgrading the company’s generation and transmission capacity, while capitalising on the opportunities presented in the Southern African Power Pool (SAPP). In

Auditing is not our only passion, we are also driven by solving other important problems

Our purpose is to build trust in the Namibian society and to solve important problems for the Namibian business community. Over more than 40 years, we have built a team of specialists with experience and expertise with one goal in mind: helping you to work better while keeping your business at the competitive edge.

With the backup of our diverse international network, our Namibian team is geared with solutions for a wide range of business problems including:

- Auditing
- Skills development and training through the PwC Business School
- People and HR solutions
- IT systems, advice and controls
- Improving business process efficiencies
- Strategic planning
- Identifying and managing business risks
- Filings and consultations to help you comply with Namibian business laws
- Tax management covering VAT, Customs, Employee and Income Taxes
- Expatriate services (Immigration and Tax)
- Board of directors support: training, processes and advice
- Forensic investigations

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NamPower wants to ensure a least-cost electricity supply mix, by investing in a generation project mix and technologies that result in the least-cost electricity to customers.

the process NamPower wants to ensure a least-cost electricity supply mix, by investing in a generation project mix and technologies that result in the least-cost electricity to customers.”

He acknowledges too, that this needs to be achieved sustainably, saying: “the region as a whole needs to focus on adding new generation plants to the grid that is dispatchable, while using local energy sources that are economically and environmentally sustainable to meet future demand growth.” This is the kind of joined-up forward thinking that will see

NamPower deliver on its targets and push this small African nation towards energy independence.

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