LSP
CONSTRUCTION

BUILDING LESOTHO

NEWS LETTER
ISSUE 5

Note from the Editor

I am thrilled to present the fifth edition of Building Lesotho, an LSP Construction publication that shares stories and material on the construction industry and Lesotho's development. We explore industry related challenges, policies, strategies, plans and projects; sharing LSP's accomplishments, stories of internal pride, on our people; to inspire and construct.

You will agree that one of the biggest developmental challenges and most obvious inequalities facing Lesotho as most African country is the general lack of access to electricity. You would know, as I do, that across the Mountain Kingdom, thousands of Basotho live in lasting darkness due to lack of access to electricity.

The lack of electricity has broad implications on social and economic development of any country. Without electricity, it is unlikely that projects such as built infrastructure, public investments such as schools and banks, public health and safety can achieve their intended goals.

It is for this reason that this edition is themed on energy. As you flip through the contents of this edition, you will see interesting articles around the subject. You will find reports, ideas and views on electricity generation and supply, on benefits of investment in energy; national policies and strategies reviews, and LSP's participation in national electricity projects.

We also feature articles on solar power and learnings on the potential for environmentally cleaner renewable sources of energy in the country.

To you, our clients, stakeholders, staff, and general readers, thank you for your unwavering support to LSP, as it continues to participate in building Lesotho.

Khotso e ate!

Mpho Sefali

Note from the

Managing Director

Louis Fourie

Food, water, and shelter have, for as long as I can remember, been defined as the minimum resources necessary for the survival or well-being of humans. The provision of these "basic needs", therefore being the overriding objective for national and international rulers. In their distinctive forms and functions, social leaders have all carried the same obligations and mandate - meeting the citizen's needs and necessities of life.

With the passing of age and time was the advent of other equally pressing human needs, requirements, or rights. Effective health care, national security, clean water supply, food production, infrastructural development, education, electricity supply, added to the list, requiring better policies, strategies, and actions by governments, organisations, and social leaders.

In trying to satisfy these, we also realised how the successful provision of some is dependent on the availability of others. Electricity, for example is one of the very vital resources on which others depend, to fully develop. I might, in fact, be right to believe that power is needed to satisfy all of them.

For any country or state, investment in energy leads to socio economic growth. This investment creates jobs, builds, and maintains infrastructure, eases household activities, contributes to healthcare and water management. These all involve power-supplied technology applications. It is important therefore, that stakeholders support governments in ensuring that access to electricity is prioritised in national development plans.

In 2015 the Ministry of Energy launched the 2015-2025 Energy Policy Framework for the Kingdom of Lesotho, to be used as a guiding document towards successfully supplying electricity to all Basotho. Also, in November 2021 the Lesotho Electricity Company (LEC) launched its 2021/22 – 2023/4 Strategy, a document articulating their vision and providing a pathway to fulfilling the company's objectives.
Lesotho also boasts having entities such as the Petroleum Fund (PF), Lesotho and Water Authority (LEWA and the Lesotho Electricity Generating Company to mention a few.

It is perhaps fair to believe that our concern as Basotho should no longer be that we do not have adequate, policies or strategies, but whether or not the public and private stakeholders will take on their responsibilities of running with the government's vision and meeting every Mosotho's need for electricity.

We, at LSP, understand that strategies and objectives only succeed through excellent service delivery by those entrusted to work. We, therefore, continue to commit, comply, and construct and care.

Visions, Goals and Value statements

THE GOAL

To defeat poverty and save the planet, we can, and must achieve sustainable energy for all by the year 2030.
- **Ban Ki-moon**, Secretary-General of the United Nations

THE POLICY

Energy shall be universally accessible and affordable in a sustainable manner, with minimal negative impact on the environment.
- **Energy Policy Framework** for the Kingdom of Lesotho

THE VISION

To provide reliable, safe, environmentally friendly and quality electricity for sustainable economic growth and improved quality of life for the people of the kingdom of Lesotho
- **Lesotho Electricity Company (LEC)**

THE MISSION

To regulate the electricity, urban water, and sewerage services in the interests of all stakeholders and support their growing and ever-changing needs.
- Lesotho Electricity and Water Authority (LEWA)

QUOTED

We are determined to remain Lesotho's most trusted and leading electrical contractor.
- Sam Ntene

LSP CONSTRUCTION

LEC Strategic plan

The Lesotho Electricity Company (LEC) has embarked on a massive drive to revamp its operations through its comprehensive 2021-2023 strategy.

All over the world, there is a notable drift towards clean energy. Instead of fossil fuels, there is now a drive towards more sustainable options like hydropower, wind energy, solar energy and geo-thermal sources. The United Nation's 2030 Agenda for Sustainable Development, a global compact to make the world more sustainable, equitable and livable, has been at the centre of the debate in the energy sector.

Lesotho's National Strategic Development Plan II (NSDP II) identifies investment in clean energy technologies as a key enabler for supporting inclusive and sustainable economic growth-driven through the private sector.

With the 2021-2023 strategy, LEC has developed a blueprint to align Lesotho with global trends in the energy sector while implementing the Government of Lesotho's policy aspirations which align with a cross section of other key stakeholders.

According to LEC management, the entity seeks to correct several weaknesses in its system in the strategic plan for the 2021/22 and 2023/24 financial years.

These include inconsistent accountability, unsustainable cost structure and weak financial position among others, all which fed perceptions of gross incompetence at the power utility.
"This legacy has to remain in the past," declared the Managing Director at the document launch.

In coming years, LEC wants to fix all these weaknesses while spearheading a green energy future with low energy emissions, efficient resource utilisation and social inclusivity for the Kingdom of Lesotho. According to the managing director, LEC's strategy is hinged on four key targets, which, in brief, are: (a) Security and reliability of supply and services; (b) Building a financially stable LEC; (c) Statutory and regulatory compliance; and (d) Sound corporate governance leadership. LEC service centres were visited to determine the problems, their causes, and the proposed solutions in order to inform the root cause analysis.

LEC management and strategists confronted service problems such as the June 24, 2020 employee strike to find the root of the problem. Roadshows were undertaken to solicit employee views prior to the diagnosis and all stakeholder inputs were taken into consideration.
To uncover the hidden elements that are at the core of the problem, LEC strategists used the metaphor of an onion whose layers are gradually peeled back, first those that are readily visible, then the hidden protected inner sections.

The overall plan is to build ethical leadership, a culture of collaboration and accountability, with a focus on sustainability and service delivery. This will be achieved through the following:
- Driving regulatory and statutory compliance
- Establishing an ethics and compliance unit
- Designing and implementing training packages on regulation (BoD and Management)
- Assess and ready LEC systems for time of use tariffs, and
- Ring-fencing LEC accounts.

LEC is set to implement time of use tariffs, continuously employ measures to improve regulatory and statutory compliance frameworks, carry out regulatory awareness campaigns, implement measures to improve on regulatory reporting, and implement multi-year tariff while implementing regulatory and statutory compliance.

Ring the bell!

Ringing the bell at LSP is a ritualistic celebration for a newly awarded project, whether we are involved as a sole contractor, or in the form of a joint venture with other companies. This celebration is a big deal to us because it reminds us of the multiple opportunities to continue thriving in our contribution to developing, shaping, and sustaining Lesotho's construction industry.

Recently, our Managing Director, Mr. L Fourie rang the bell after we were awarded the jobs below:

Construction of Polihali Village

- Client Name: Lesotho Highland Development Authority
- Footprint/Project Description: 96 Houses, Lodge, Recreation Centre, and School
- Country: Mokhotlong District, Lesotho
- Budget: LSL 454 million
- Commencement: Jan 2022
- Completed: October 2023

Construction of Polihali Operation Centre

- Client Name: Lesotho Highland Development Authority
- Footprint/Project Description: Operation Centre
- Country: Mokhotlong District, Lesotho
- Budget: LSL 97 million
- Commencement: March 2022
- Completed: October 2022

Replacement of Old 11KV Panels at Highway and Old 33KV Panel at Pioneer Highway & Mabote Substation

- Client Name: Lesotho Electricity Company
- Footprint/Project Description: Replacement of 11KV and 33KV Panels
- Country: Maseru District, Lesotho
- Budget: LSL 54 million
- Commencement: May 2022
- Completed: May 2023

Up-close and personal with J. Steenkamp

Among developmental challenges facing our country is poor electricity access. LSP Construction's co- founding partner, Mr. Danny Bothma, reveals that it was for reason that in addition to the expansion into Building and Civil Works in the 1990's, LSP also extended its skills and knowledge base to include the construction of Electrical Powerlines and Sub-Stations in 1995.

"Our ground-breaking electrical project was a sub-contract work offered by a Norwegians company called ABB, where we would repair a powerline from Mohale's Hoek to Quthing, which had been blown down by strong winds that year", Mr. Bothma states, adding that the company has since that year become instrumental in improving the living conditions of Basotho by electrifying households under various electrification projects.

Today LSP has not only the capacity and expertise to manage electrification of households, but also the construction of High Voltage Power Lines and Sub-Stations up to 132 kV.

We had an opportunity to sit down with Johannes Steenkamp, LSP Construction's Electrical Manager, who is described as one of LSP's pillars due to his verifiable track record of completing multi-million maloti electrical projects.

We find out more about his daily work, the challenges he faces in the department's operations, among others. Below are excerpts from a one-on-one interview with him.

Take us through when and how you joined LSP Construction.
Answer: I have been working with LSP on projects since 2001 when I was working for consulting engineers. I joined LSP permanently in 2009.

How and when did you end up heading the Electrical Department?
Answer: From 2009 to 2013 I was only involved with the power lines and substations but in 2013 I also started managing the electrical building services.

Tell us about your career and family background.
Answer: I started my electrical career in 1989 with Telkom in South Africa. From there I joined an Electrical Construction Company. I later joined Consulting Engineers before joining LSP Construction (Lesotho Steel Products). I was born in Zimbabwe and I have three older sisters. I completed high school in South Africa, got married in 1996 and I have two boys.

What are the most common challenges or dangers you face in your line of duty and how do you surmount them?
Answer: Not getting through my work or getting a job done is what I dislike but my colleagues in theelectrical department always help me pull through. I say thanks to all of them.

What motivates you to do your work?
Answer: I can't wait to see the end-product. To me it is something like building a puzzle or reading an interesting book.

What do you enjoy the most about your work?
Answer: I am privileged to be able to be part of all electrical projects, even the electrical side of building projects. I enjoy being part of a project from the tender stage to the end.

What areas would you say you can do better and how do you plan to do it?
Answer: To have more time with my family. I hope I can make up for it when I go on pension.

How did the two years of Covid-19 lockdowns, i.e.., 2020 and 2021 impact your work?
Answer: The period made us wiser and stronger.

Where do you see yourself after retiring from LSP; how do you intend to spend your time after the career?
Answer: I will still do some odd jobs. I want to do what I don't have time to do now, like reading my books that I am collecting, and I also look forward to spending quality time with my family and going fishing.

Are you training any younger persons to succeed you and what sort of qualities would you look for in people you are grooming?
Answer: I train everybody that wants to be trained. I believe anybody that is committed and self-motivated can be trained and is a potential replacement. The problem is the electrical field is very wide and it needs many people to train.

Is there any other comment you think is important for our readers to know about your work or about LSP in general?
Answer: The electrical department plays a very important role in the survival of LSP, and it played an important role in the success of LSP today.

Power Safety Tips

01. Prevent all potential contact with live electrical current
02. De-energize equipment and use lockout/tagout
03. Ensure safe use of electrical equipment
04. Install proper physical barriers around electrical hazards
05. Beware of conductive tools and cleaning materials
06. When working overhead, look above for electrical lines
07. Use extreme caution with flammable materials
08. Only qualified personnel should work on live electrical wires
09. Always follow your company's electrical safety work practices
10. Electrical shock can be deadly

Solar energy is increasingly one of the most sought-after forms of energy in developed countries. But that already is a problem because developing countries like Lesotho, have over the years shown little appetite to invest in solar energy.While there are several plausible reasons why less developed countries often shy away from renewable energy initiatives; including the high cost of setting up such projects, it is clear that solar energy is the future for many countries. This is especially so for countries like Lesotho that have abundant sun throughout the year.

Solar energy, although costly at initiation, is extremely cost effective in the long run. The cost incurred is only at initiation and is not recurrent unlike many other sources of energy. This means that when one sets up a solar energy system, they no longer have to continue paying for electricity if they are an independent domestic user.

If models are well thought-out; for communities, this means that the councils, residents or companies can save more and can use the funds for other needs while also saving the environment by using with cleaner energy as opposed to fossil fuels.

Other benefits of using solar energy for Lesotho are vast. The Renewables Accelerator, a key United States (US) resource for cities already leading on renewable energy and those kickstarting their clean energy programmes, says the first renewable energy project that a city (or community) undertakes is often based in its own community. "This might be an on-site solar project, which is installed at the same location where the electricity is consumed. Or it could be a community solar programme, which allows residents to subscribe to a shared solar project within the community.

"These kinds of projects visibly demonstrate a local government's dedication to climate action. The clean electricity they provide to municipal facilities and residents can reduce community-wide greenhouse gas emissions.

"...But fewer emissions and cleaner air aren't the only reasons that cities want to go renewable. Many are using local solar projects to achieve broader community benefits and align with other priorities. These include saving money, creating local jobs, expanding renewables access to low-income residents, and advancing local resilience," Renewables Accelerator says.

Solar energy is cheaper than other forms of energy. In the US, physical power purchase agreements (PPAs) can help cities or communities manage their costs through financial contracts in which developers can own or maintain solar photovoltaic systems. The electricity is then sold at discounted prices.

According to Renewable Accelerator, a 2018 PPA in Washington DC is expected to save $25 million over 20 years. In 2018 alone, the US reportedly created "110 000 new clean energy jobs outnumbering jobs from fossil fuels by about three to one". This means that Lesotho too could create more jobs by embarking onto robust clean energy projects implementation.

"To bring clean electricity to renters and low-income communities, cities are launching innovative community solar programmes, which allow residents to purchase a share of a solar installation and reap the benefits of clean energy (including cost savings) without having to physically install panels on their property," Renewables Accelerator says.

Lastly, Renewables Accelerator also opines that using renewable energy like solar can increase communities' resilience.

"In addition to cost savings, renewable energy projects can also increase community resilience. Pairing renewable energy with storage or microgrids can reduce dependence on the grid in times of natural disaster," Renewables Accelerator says.

While these are the learnings from the US, Lesotho too can draw inspiration from these models. The terrain and dynamics are obviously different. So too are the levels of resources. But that simply means that Lesotho should tailor its own solar energy solutions. Additional information from https://www.wri.org/insights

Ha Ramarothole Solar Power Project

The photovoltaic solar power plant is currently under construction in Ha-Ramarothole, Mafeteng and will occupy a 220-hectare plot. The work is being implemented by a consortium of Sinoma Energy Conservation Limited and TBEA Cooperation Limited. LSP Construction is a sub-contractor in the 70-Megawatt (MW) project.

The project will help Lesotho optimise its energy structure by cultivating solar power expertise to improve the economy and Basotho's livelihoods. The first phase of the project, which is expected to cost US$70M, will supply the national power grid with 30MWp of electricity; while the second phase, which is expected to cost US$77M, will have a capacity of 40MWp.

One on One with Lucy Mohasi

CONSTRUCTION OF THE KATSE INTAKE SUBSTATION

"Feed your faith so your fears starve to death".

This is Lucy Hlompho Mohasi's personal motto. The fearless and spirited 25-year-old woman is a University of Pretoria graduate who holds a BSc Hons degree in Quantity Surveying, and has been with LSP Construction since 2019, working as a Quantity Surveyor. Lucy has proven herself as one of the company's distinct talents.

Among the many projects she has been involved in, the young woman was trusted to form part of the leading team at the construction of 132/33/11KV Substation at Polihali and Upgrade of Existing Substations along the A8.

We had a one-on-one with her on specifically the construction of the Katse Intake Tower Substation. The substation is situated along the renowned Katse Dam, Africa's highest dam in the Thaba Tseka district.

Lucy shares some very interesting information about this project.

1. Briefly describe this project
The project was a joint venture between LSP Construction and MOFOMO Construction. It entailed civils and electrical work; building 4 substations at Katse and Polihali along the A8 motorway and upgrading systems to 3 substations. The LSL348 031 467,63 budget project commenced on 11 February 2020 and was completed on 31 March 2022.

2. How was this project different from all others?
This project entailed construction of probably the highest gabion wall in Southern Africa at 14m.

3. Why was the wall built that high?
The platforms were configured in a way that the wall is their structural support.

4. What did the construction of the wall cost the company?
The building of the wall was labour-intensive, so the company had to source more labour than it normally would in order to yield production. Moreover, plant equipment was deployed to aid the stone and workers to reach areas which were challenging to work on.

5. Were there any exclusive or unique challenges in this project?
The challenge faced was getting the 14m-high wall to perfection because any errors in the compactions or alignment of the wall could have negatively affected the whole structure.

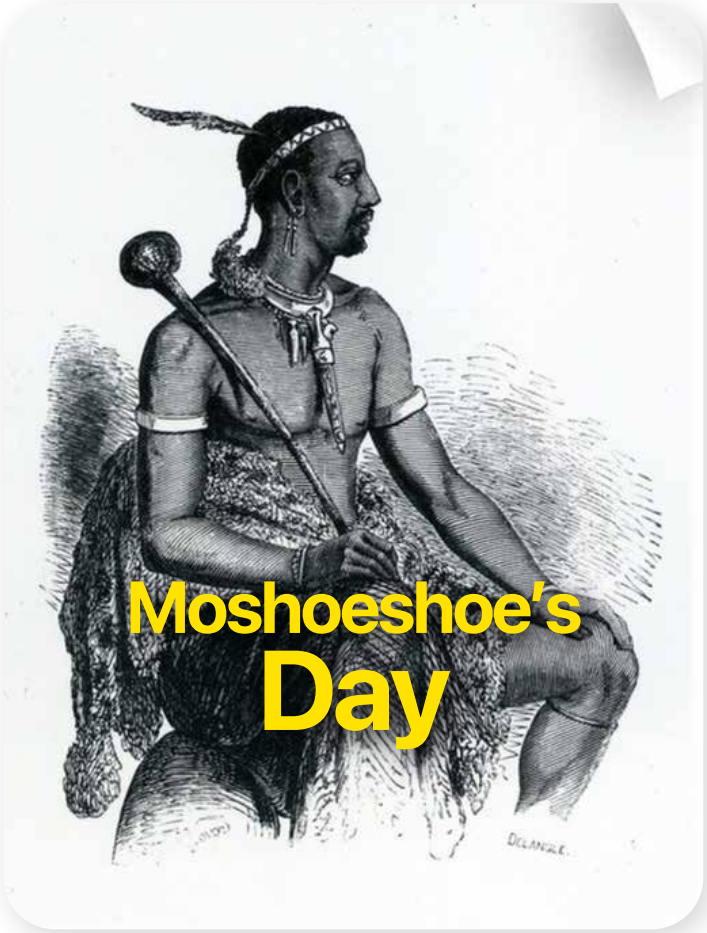
6. What does the completion of this project mean to and for LSP?
LSP has completed the project within schedule and handed over a well-executed job. This creates future opportunities for them from their potential clients.

7. Which of LSP 's core competencies were mostly witnessed here?
Firstly, their ability to provide their clients with the services and products that exceed expectations and, secondly, the knowledge and skill in electrical works which LSP pride themselves in.

8. Did you have to introduce any special skills or technologies or innovative ideas in this project?
We had trainings that included, "Gabion and Terramesh-Basic Assemble Training" for the gabion erectors and "basic fall arrest" for the electricians.

9. Anything that you personally learned/took from this project?
More than anything I have learned that "teamwork, makes the dream work". This project needed all stakeholders to work as a team, from the procurement to the production and all the way to the top management team. As a candidate from the commercial team, I have acquired knowledge on the technicality that comes with building a gabion wall as well a substation, the interesting facts on transformers and the power they carry to bring power to the country at large.

King Moshoeshoe I is regarded both as a great diplomat and a great leader in Lesotho, being the founder of the nation who also worked for the preservation of the country's resources, land, language, art, and culture.



Moshoeshoe's Day

March 11th is Moshoeshoe's Day, an annual public holiday in Lesotho to commemorate the life of the founder of the Basotho nation and the first King of Lesotho, Moshoeshoe I. The date was set to coincide with the anniversary of his death in 1870.

Made in Lesotho day!

In the spirit of honouring King Moshoeshoe I and embracing Sesotho in style, LSP Construction this year observed the day as a "Made in Lesotho Day", where staff came dressed in clothing made in Lesotho.

Ladies showed up in their Lishoeshoe, while gentlemen wore other locally made items, among them Lishoeshoe shirts!

The MUST have Qualities for an Electrical Engineer.

According to the U.S. Bureau of Labor Statistics, one in 10 electrical engineers are employed by organisations specialising in electric power generation, transmission and distribution, where they;

- Design power delivery systems for efficient and reliable operation
- Improve power generation and distribution
- Use electronics for power conversion
- Maintain and secure power systems

Technical knowhow is indispensable for anyone striving to build an engineering career. To reach your full potential, however, you must back up your knowledge with strong set of soft skills. These qualities can make all the difference in consistently fulfilling your project objectives and achieving your long-term goals.

Creative Problem-Solving

Electrical engineers routinely tackle complex challenges and devise inventive solutions. To achieve the best results, it's important that these experts are prepared to keep up with changes in technology and experiment with various approaches to problem-solving. With each project, an engineer may face new challenges, such as constraints on available resources or a novel interaction between multiple systems.

Clear Communication

Professionals can maximise their impact within an organisation by developing their skills in both written and oral communication. Engineers should be able to explain their ideas with precision to fellow experts and non-technical audiences alike. Clients and executive leadership must be able to understand an engineer's recommendations or needs for additional resources.

Leadership

Engineers' projects succeed because of their collaboration with multidisciplinary teams. To lead effectively, an electrical engineer must be able to calculate the demands of each project, make strategic choices about using resources and optimizing each phase of operations. Engineering leaders understand how their work fits into the larger mission of their organisation. In turn, they can guide other professionals in setting and achieving their goals. – https://engineeringmasters.online.gwu.edu/

Top Performer

Teboho Phate

Store Manager

Teboho Phate is a Diploma in Office Administration graduate from Lerotholi Polytechnic. After graduating from the institution in 2009, he joined the public service, working as an office administrator at the Ministry of Home Affairs.

In 2011 he joined LSP Construction, where he worked eight years as a Site Administrator at various LSP projects. Throughout his engagement at LSP, Phate stands out for exhibiting humility, dedication and commitment. This is what propelled growth of his career and subsequently leading to him becoming LSP's Stores Manager in 2019.

"Teboho knows how to adjust himself to new environments, he is willing to learn new things." - HRM

"For your selflessness, remarkable team spirit, late nights, early mornings, weekends and all the hours in between, you would certainly not go unnoticed!" ***- LSP Construction Management***

LSP
CONSTRUCTION

Lesotho's leading electrical contractor!

Our core competency:
- Experience across various types of electrical projects.
- Delivering projects under extreme conditions.
- Innovative solutions to electrical challenges.

LSP CONSTRUCTION

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Lack of electricity supply impedes efforts to improve any country's development.

– Sam Ntene

Chief Operating Officer,
LSP Construction Ltd)

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