



THE TURBINE

ZESCO Internal News

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FOREWORD

Welcome to the September issue of The Turbine, ZESCO Limited's internal newsletter, where we highlight key moments, inspiring stories, and the strides we continue to make in our mission to power Zambia's progress.

As we navigate both challenges and opportunities, it's heartening to reflect on the incredible dedication within our team. This month, we celebrate Mr. Ernest Chewe, ZESCO's longest-serving driver, who has traveled nearly every corner of Zambia in his 28 years with the company. His journey reminds us of the commitment and pride that define our work here at ZESCO and how each one of us contributes to illuminating the nation.

In response to the pressing challenges of infrastructure vandalism, the Youth Action Against Vandalism initiative took center stage, with the support of our partners and community stakeholders. This project is a powerful reminder of the collective responsibility we share in protecting Zambia's energy assets and securing uninterrupted service for all.

Meanwhile, our efforts to bolster business resilience amidst power rationing are in full swing, with diesel gensets powering essential services across busy markets in Lusaka. These installations are a testament to ZESCO's commitment to supporting local commerce and ensuring continuity for small businesses that form the backbone of our communities.

In line with our vision for a sustainable future, we continue on the road to implementing Zambia's energy mix. Through Kiyona Energy Limited, our subsidiary, we are diversifying energy sources with the innovative use of Virtual Power Plants. This approach not only enhances grid stability but also represents our commitment to forward-thinking solutions in the face of a growing national demand.

This issue also celebrates community milestones, such as the opening of Chasunta Secondary School Library, a testament to the impact of our community partnerships. In sports, ZESCO United has taken an impressive lead in the league, and with the appointment of Ponga Liwewe as CEO, the future looks bright for our team.

Let's take pride in these stories, for they reflect the heart of ZESCO Limited—resilience, innovation, and service to Zambia. Here's to another month of powering progress together.

Warm regards,
Editor, The Turbine





GOVERNMENT MOVES TO ADDRESS POWER SUPPLY GAP IN MARKETS

AS ZESCO INSTALL DIESEL GENSETS TO POWER BUSINESS CONTINUITY

It is a sweltering Friday afternoon in Zambia's Capital City, Lusaka. At Chilenje Market, one of the busiest trading centers in the City, the anticipated noise from traders and customers going about their business is suddenly swallowed up by the humming sound of individually owned small diesel-powered generators supplying power to a few shops within the market.

This scenario is in the midst of a power supply shortfall that has necessitated power rationing owing to the drought induced hydropower generation deficit declared a national emergency and crisis.

Today, Friday, 13 September 2024 the situation for the traders in the market has changed for the better as a 250KVa generator been procured, installed and switched on by national power utility, ZESCO Limited to serve the electricity needs of all traders in the designated trading places. The generator is among the four that have been powered up on this day, the other three being at Munyale, Chelstone and Nyumba Yanga markets.

This is an immediate short-term measure and response by the Government of the Republic of Zambia to minimize the impact of the drought induced power deficit on the citizenry, in this case

the support business continuity for Small and Medium Enterprises, the main source of livelihoods of the majority of the country's population.

Charlie Mapepo, a Shopkeeper at Chilenje Market could not hide his excitement when lights in his shop went on signaling the availability of stable power supply and business continuity, going forward.

Mapepo says businesses such as saloons, barbershops and welders were affected by the rationed hours of electricity supply.

We are very happy and grateful to the Government for what they have done for us." Mapepo remarked.

To Ireen Mwambansa the installed generator will save her the financial burden of having to budget for diesel to power a small generator which has been keeping her tailoring business afloat for the past two months.

"It is a very good initiative as it will save us from buying fuel because we would spend K200 plus in day to run small gensets. But with this genset installed by ZESCO, things will be much better and we are grateful."

Zambia is navigating the harsh effects of a drought induced emergency which has affected hydropower generation, water supply and agricultural activity among key economic sectors.

Historically, Zambia has relied heavily on hydropower, which currently accounts slightly over 85 percent of our installed power generation capacity with a general capacity factor of over generally 63 percent when the rains are within normal to above normal range, said ZESCO Managing Director, Victor Mapani at the signing ceremony of a Memorandum of Understanding (MoU) between China Datang Overseas Investment company and ZESCO Limited in China this month.

“This reliance has been severely challenged two-fold, through the ever-declining hydrology accompanied by droughts and the ever-rising power demand in the country, which have exposed the inherent risks and limitations of high dependency on hydro power generation,” Mapani added.

The nation’s installed electricity generation capacity sits at 3600 Megawatts (MWs) and peak demand at approximately 2600MWs. However, the after-shocks of the drought have left the country with an energy deficit of approximately 1,019 Megawatts while peak demand has remained at 2,400 Megawatts, resulting in a deficit of 1,381 Megawatts.

The Government of the Republic of Zambia, through ZESCO, continues to pursue and implement both short-medium-and-long-term measures to cushion the impact of the power deficit.

The power deficit has seen ZESCO negotiate and effect power claw on long term export contracts, steadily increase power imports from the Southern African Power Pool, in particular Mozambique and South Africa, as immediate mitigating measures. The power rationing is a necessary measure to manage the limited available supply in the face of drastically suppressed power generation. In this space of a very tight power balance, ZESCO seeks to prioritize essential services such as water pumping, health, security, agricultural and industrial activities.

The strategic steps taken by the government to arrest the impact of the energy crisis on the national economy and citizenry include .

Installation of Twenty-Six Diesel Powered Gensets to Support Business Continuity

In a bid to serve small scale businesses which support livelihoods for majority Zambians, the Government through the Ministry of Energy announced in August, the procurement of Twenty-Six Diesel Powered gensets to be installed in Markets.

So far, all the twenty-three (23) diesel generators have been delivered and installation and commissioning is underway with completion set for 30 September 2024.

“The nine (9) diesel generators that have been received so far, will be installed this week beginning with two (2) at Chilenje and Nyumba Yanga markets and another two (2) to be installed at Soweto Market. Therefore, the installation of all the 23 diesel generators will be completed by 30th September 2024,” Ministry of Energy Permanent Secretary Peter Mumba, told the media at the Weekly National Energy Brief last month.

Safeguarding the Generators for business continuity

The installation of diesel-powered generators in markets across Lusaka by ZESCO is testament of Governments resolve to save small-medium and large-scale business, keep the economy running and ultimately protect peoples livelihoods.

The onus now remains on traders, marketeers and the communities in which these generators have been installed to protect these assets against vandals who are now taking advantage of long hours of power rationing to vandalise ZESCO installations.





VANDALISM AN EMERGING NATIONAL CRISIS AMIDST POWER RATIONING

Phanwell Mondoma humbly takes to the podium before addressing a sizable crowd comprising government officials, ZESCO Limited Management, Media, Arts Associations and students that have gathered at the Olympic Youth Development Centre in Lusaka to witness the launch of the Youth Action Against Vandalism.

Mondoma is an ex-convict who a few years ago almost lost his life while being pursued by the Zambia Police Service for vandalising ZESCO property. On this day, Thursday, November 10, 2023, a reformed Mondoma was calling on youths to desist from Vandalising ZESCO installations.

“I was fortunate to survive and to serve a five-year suspended sentence. That experience was enough for me to change because I almost lost my life for nothing. Destroying ZESCO property is not good because when one steals electricity cables, power supply to markets and communities is affected. I am happy to have been given this opportunity to speak to you because I have seen the bad side of vandalism.”

Zambia is currently experiencing a power supply shortfall that has necessitated power rationing owing to the drought induced hydropower generation deficit declared a national emergency and crisis.

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“The challenge that is before us is a national challenge. Energy security is national security. We try our level best to ensure that this is not compromised. You the Zambian people out there, we request that you are a bit patient with ZESCO as we navigate through the most difficult depth.

Our message to you is let us work together abash vandalism and support the network for your own support today and tomorrow,” said ZESCO Managing Director, Eng. Víctor Mapani at a public forum organized by News diggers.

Swelling Cases of Vandalism

As the country navigates through the current energy crisis, Vandals have also made it their ultimate goal to maximize on vandalizing power installations during hours of power rationing.

“Security reports show that in 2023, from January to September, the recorded number of incidences was 1,058 cases to a loss value of 17.1 million Kwacha compared to the same period this year 2024 in which 1,583 cases have been recorded so far with a value of 30.1 million Kwacha. The incidences have increased by 49 % and value loss has increased by 75.6%,” Ben Mwanamakwa, ZESCO Senior Manager Security said.

The National Power Utility is currently recording close to 200 cases of vandalism and an average net loss of K5 million monthly. Vandals are often targeting ZESCO transformers and armoured cables which are believed to fetch substantial amounts of money on the black market.

“There has been a significant rise in the number of youths involved in vandalism of ZESCO installations as it provides quick income for the underprivileged and those who perceive this vice as an income generation opportunity. More than 90 percent of arrests made relating to vandalism involve young people between the ages of 12 and 35 years. This is an indication that the youth are the main target of the unscrupulous dealers who run this illegal sector,” ZESCO Deputy Director, Corporate Support Services, Shezzi pie Nzovu disclosed during the National Arts Associations Orientation Workshop.

Although vandalism has since time immemorial been identified as a major eyesore in ZESCO’s quest to provide reliable and stable electricity supply, the rapidly escalating cases pose a serious threat to security of power supply countrywide.

Government on Wednesday, 2 October 2024 assured the nation of three-hour power supply stability following the completion of maintenance works at Maamba Energy Power Company and normalization of power imports.

The expectation is that this stability of power supply will help retail customers and businesses to at least normalize their operations as more solutions are being sought.

Of major concern to ZESCO and government however are the rising cases of vandalism which threaten power supply stability and ZESCO’s financial position, leading to increased maintenance costs and frustrate network expansion.

Strengthening collaboration in the fight against Vandalism

It’s evident that vandalism has become a lucrative source of income for many vandals making it a hard to be erased in a blink of an eye.

ZESCO has also realised that curbing the vice requires support from the community and their leaders, policy makers coupled with a robust awareness campaign involving strategic institutions with the ability to connect with the public and communities such as the Arts Associations.

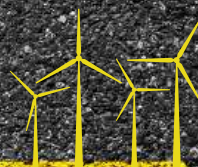
The National power utility in collaboration with the National Arts Council last year unveiled the Youth Action Against Vandalism Initiative(YAAV). This initiative seeks to tap into the ingenuity of young people to develop innovative community-based solutions to curb vandalism and theft of electrical installations.

The YAAV initiative which kicks off this year has already gained traction with the recent successful hosting of a one day orientation workshop by ZESCO and NAC targeting National Arts Associations.

Philip Kaluba, the chairperson of Zambia Popular Theatre Alliance said:” We have received a physical picture of what is happening in the communities. We can envision how we will enter communities and see the type of social structures that we can enhance. There are structures at community level that we will need to utilize for us to be successful.”

Vandalism is a serious offence committed by a person who destroys, damages, defaces, disables, disrupts or impairs the functioning of ZESCO limited installations willfully or maliciously as defined section 341(a) and 341 (d) of the penal code (Amendment) Act. The Act n0.17 of 2007. The Act provides for a minimum sentence 10 year imprisonment and a maximum of 25 years imprisonment when convicted, and life imprisonment when the act of vandalism leads to death.

The impact of vandalism on the security of the power supply is severe, therefore it will not be a bad idea to declare the vice an emerging national crisis in the midst of the existing energy crisis.



THE ROAD TO IMPLEMENTING THE ENERGY MIX: HOW ZAMBIA IS MOVING FORWARD

At a glance:

- Government has been swift and deliberate in implementing major reforms in the energy sector in response to the power crisis
- ZESCO Limited has received overwhelming backing from government to invest in alternative energy sources
- The energy mix will be a success with greater public support at domestic and national level.

Zambia is navigating the harsh effects of a drought induced emergency which has affected hydropower generation, water supply and agricultural activity among key economic sectors.

“Historically, Zambia has relied heavily on hydropower, which currently accounts slightly over 85 percent of our installed power generation capacity with a general capacity factor of over generally 63 percent when the rains are within normal to above normal range, said ZESCO Managing Director, Victor Mapani at the signing ceremony of a Memorandum of Understanding (MoU) between China Datang Overseas Investment company and ZESCO Limited in China this month.

And in his national address to Parliament to mark the opening of the 4th session of the 13th National Assembly, President Hakainde Hichilema acknowledged the devastating impact the drought has had on electricity generation and economic growth and further highlighted governments ambition to promote an energy mix.

“In a bid to enhance resilience and reduce over-dependence on hydroelectric power, we are promoting alternative sources of electricity generation. To this end, we commissioned the construction of the 300 megawatts thermal power plant in Maamba. This power plant is expected to come on stream by mid-2026,” he said.

Implementing the Energy Mix

Zambia is taking solid and radical steps towards shifting its over reliance on drought prone hydropower with the government supporting the National power utility, ZESCO to diversify the energy mix by spearheading the development of several solar electricity projects and address the country's current power deficit.

“This reliance has been severely challenged two-fold, through the ever-declining hydrology accompanied by droughts and the ever-rising power demand in the country, which have exposed the inherent risks and limitations of high dependency on hydro power generation,” Mapani said.

The aftermath of the energy crisis has seen swelling interest in solar project investments from both local and international organizations.

Kariba North Bank Extension Power Corporation, a subsidiary of ZESCO Limited is currently implementing a 100 Megawatts Chisamba Solar project which is steadily progressing.

The ZESCO funded project located in Kafungalubala village, Chisamba district in Chief Chaamuka's area is among the country's medium-term measures to diversify the country's power generation mix, dominated by hydro, and build a climate resilient power system.

Anticipated to come online sometime next year, the project is progressing well with 120 hectares of land successfully cleared, fence installed, main road to the plant constructed while the drainage is under construction. Further, the photovoltaic field transformer foundation excavation has been completed, while concrete pouring of the transformer foundation column has been completed. The project has thus far created 230 jobs.

ZESCO is further constructing a 7.5 Megawatts Solar project in Lusaka's Kasupe area, and a 2.5 megawatts in Shangombo. The Corporation is also pursuing the 180MW Kalungwishi hydropower project to be situated in the northern part of the country.

In addition to these, Government recently commissioned the 111kwp Chunga Solar Mini Grid project to power 90 households as part of an effort to enhance off-grid energy mix solutions, boost access to electricity in rural communities and provide short-term measures to the current energy.

The 111kwp Chunga Solar Mini Grid power project driven and implemented by the Rural Electrification Authority (REA) will see 90 households in the Kafue National Park get access to electricity for the very first time ever.

Regional Inter-connectivity Expanding Eastwards

The current energy insecurity threatens Governments economic agenda of realising 10 million metric tonnes of maize, driving irrigation agriculture, and meeting the 3 million tonnes of copper by 2031.

"Because energy is not sufficient in the quantities, we need it to drive factories, to drive value addition, to drive more investment; It is basically creating a situation where we are not creating as many jobs as we would have loved for our youthful population in our country, SADC region and the continent as a whole. So, I think this context is why we should work in a different way, not business as usual," President Hichilema noted at the official opening of the Energy Forum for Africa.

The unavailability of substantial amount of energy in the country and region to support governments economic agenda has led ZESCO to look further afield by exploring opportunities in the Eastern Africa Power Pool.

Recently ZESCO completed construction of a second critical 330kV transmission line connecting Kabwe Step Down Substation in Kabwe district to Pensulo Substation in Serenje district.

The new transmission line serves as a key component of the planned Zambia-Tanzania-Kenya interconnector project. Upon completion, this project will connect the Southern African Power Pool (SAPP) to the East African Power Pool (EAPP), marking a significant milestone that will open up new opportunities for power trading between the two power markets.

ZESCO is also actively pursuing energy opportunities in Mozambique and Angola. The expansion of hydropower generation in the north of the country – starting with rehabilitation and expansion of existing small hydros remains crucial to the energy mix.

ZESCO is currently upgrading the Chishimba Hydropower Scheme from 6 Megawatts to 15 Megawatts, which is intended to help increase power generation capacity, improve supply towards the agricultural, commercial, industrial as well as mining sectors.

Strategic partnerships

The government has taken emphatic steps to promote and actualize strategic partnerships in a bid to address Zambia's ongoing energy crisis.

President Hakainde Hichilema's recent visit to the People's Republic of China has resulted in the signing of a Memorandum of Understanding (MoU) between ZESCO and China Datang Corporation Limited, one of the largest energy suppliers in the Asian country.

This partnership underscores Zambia's commitment to enhancing its energy infrastructure and diversifying its energy sources. With this strategic partnership, Zambia is taking a significant step toward ensuring a reliable energy supply that will support economic growth and improve the quality of life for its citizens.

ABOUT KIYONA ENERGY LIMITED

The word Kiyona meaning “The One” in the Bantu language spoken by the Lozi people of western Zambia.

Kiyona Energy Limited (KEL), a wholly owned subsidiary of ZESCO Limited, ventures in businesses outside regular power generation of ZESCO Limited as a response to mitigating power deficits and complimenting efforts of the mother company in reaching sufficiency and security of supply of energy. The subsidiary blooms on the creation of Virtual Power Plants (VPPs). “VPPs are networks of small energy-producing or storage devices, like solar panels and batteries, that are pooled together to serve the electricity grid”. VPPs work by freeing grid capacity by use of alternative sources or addition to generation capacity. Business ventures for Kiyona Energy limited include but not limited to:

- Off-grid and grid connected Solar Roof top for home and commercial use, including supply, retrofitting, manufacture and assembly.
- Project financing, resource mobilisation and development of renewable energy power plants (solar, wind, hydro, biomass, geothermal) of less than and equal to 10MW.
- Alternative cooking solutions such as Liquid Petroleum Gas (LPG), use of pellets; this solution includes retrofitting, manufacture and assembly.
- Solar Water Heating solutions which include supply, retrofitting, manufacture and assembly.
- Dedicated Agriculture Energy Systems Solutions (include supply, retrofitting, manufacture and assembly).



STATUS OF INDEPENDENT POWER PRODUCERS DEBT AS AT 30 SEPTEMBER 2024

ZESCO Limited was owing Independent Power Producers (IPPs) **US\$1.8 billion** as at 31 December 2021. Management made considerable efforts in reducing this debt by **79%** to its current status of **US\$379 million**. Furthermore, growth of this debt has been arrested through monthly settlement of power purchase invoices including implementation of various initiatives.

Table showing status of Independent Power Producers debt

INDEPENDENT POWER PRODUCER	DEBT AS AT 31 DEC 2021	DEBT SWAP	TARIFF RE-NEGOTIATIONS	CAPACITY CHARGE	PAID	BALANCE AS AT 30 SEPT 2024
	US\$'MILLION	US\$'MILLION	US\$'MILLION	US\$'MILLION	US\$'MILLION	US\$'MILLION
MAAMBA COLLIERIES LIMITED	607	70	90	0	242	205
NDOLA ENERGY COMPANY LIMITED	275	0	0	169	64	42
ITEZHI TEZHI HYDRO POWER CORPORATION LIMITED	784	0	453	0	280	51
KARPOWER INTERNATIONAL	128	0	0	0	47	81
ELECTRICIDADE DE MOZAMBIQUE (EDM)	24	0	0	0	24	-
TOTAL	1,818	70	543	169	657	379

Initiatives undertaken to reduce IPP debt:

1. Debt Swap - US\$70million: A debt swap of US\$70million was effected between Maamba Collieries Limited (MCL), ZESCO and the Zambia Revenue Authority against MCL's Value Added Tax (VAT) liabilities.

2. Tariff re-negotiations - US\$543 million: Tariff re-negotiations with Maamba Collieries Limited and Itezhi Tezhi Hydropower Corporation Limited resulted in US\$543 million debt.

3. Capacity Charge - US\$169 million: The Ndola Energy Company Limited US\$169 million Capacity Charge component of the debt will be settled by the Government of the Republic of Zambia in accordance with the Implementation Agreement between Ndola Energy Company Limited and GRZ.

4. Payments made - US\$657 million: Total payments of US\$657 million have been made to IPPs through operational cash flows, restructuring the balance sheet and through local banks.



I“I feel very privileged and excited to be the first Head Teacher at this school. This school is 100 percent perfect and conducive for learning for pupils of this community, especially since it is a boarding school,” Chasunta Secondary School Head Teacher, Mrs. Hildah Mweemba said at the official opening of the school.

In the spirit of partnership and recognizing the support ZESCO Limited receives from the community and all its stakeholders, the Corporation, through its subsidiary Kafue Gorge Lower Power Development Corporation, on 28 November 2023 officially presented to the community of Chikankata district a new secondary school.

On September 25, 2024, ZESCO in partnership with Absa Bank officially opened the Chasunta Secondary School Library and donated a wide selection of books to the facility.

Speaking on behalf of the school, Ms. Mweemba, expressed gratitude for the gesture shown by both ZESCO and Absa Bank.

And Kafue Gorge Lower Chief Executive Officer, Malozo Sichone said the library will go a long way in fostering excellency as well as intellectual growth among the learners.

ZESCO Senior Manager Corporate Affairs Caristo Chitamfya said the library will enhance learning opportunities for learners.

The library project is a testament to ZESCO and Absa’s commitment to supporting education and the development of local communities.





ZESCO'S LONGEST SERVING DRIVER REFLECTS ON 28-YEARS OF SERVICE

I feel like a tourist especially when I look at the number of towns and provinces I have covered since joining ZESCO Limited. I have been extremely fortunate to work for this company,” Ernest Chewe, ZESCO Limited’s longest serving driver tells the Turbine Newsletter.

As a young man, Chewe knew exactly what his career calling was having spent most of his precious time supporting his role model and father’s mechanical business.

“My interest in vehicles and driving started quite early in life largely owing to the workshop that my father owned. Life was hard when he passed away, but I survived through the skills he left me with which were mechanics and driving,” he said.

Following the death of his father, Chewe’s life took a huge turn which eventually landed him a job at ZESCO Limited, marking the start of a life-long journey with the National Power Utility.

“There was an option for me to continue with my father’s business. But that was difficult. I found myself working as a truck driver for Sable and Goods Carriers. Thereafter, I joined ZESCO Limited as a driver,” he recalls.

Life at ZESCO Limited

Joining ZESCO opened a ray of opportunities and an adventurous journey for a youthful Chewe. However, it was the work ethics and values learn ’t while working with his father that has been at the heart of his success at the Corporation.

“The desire to drive different types of vehicles in various parts of the country intrigued me so much. I have been able to serve the institution diligently for this long and managed to work in five departments namely, Transport, Chishimba Falls Power Station, National Control Centre, Special Projects under Construction, and Stores departments.”

In the last twenty-eight years, Chewe has driven over fifty vehicles ferrying members of staff and at times carried heavy equipment on both long and short distances. His hard work and discipline have earned him a Labour Day Award and an opportunity to train abroad as a Crane Operator.

“Like any other job, it has been fun meeting different people, sharing knowledge and while at times it can be challenging. Nonetheless it’s been a humbling experience which has helped me to remain steadfast.”

As Chewe approaches almost three decades at ZESCO, he hasn’t forgotten to pass on the values that have kept him afloat all these years.

“I often take time to mentor young members of staff especially in the Transport Department. In my spare time I enjoy spending quality time with my family.”

MEDIA UPDATE ON VANDALISM: ANALYZING TRENDS AND CHALLENGES (2023 VS. 2024)



Since the beginning of 2024, ZESCO Limited has faced escalating incidents of vandalism, theft, and other criminal activities targeting its infrastructure.

These issues, while persistent in 2023, have taken a troubling upward turn in 2024. This report examines key trends from January to September 2024 and compares them with the situation in 2023, painting a detailed picture of the challenges ZESCO continues to grapple with.

Vandalism and Crime in 2023: A Baseline

In 2023, ZESCO recorded 3,968 cases of crimes against its infrastructure, leading to the loss of property valued at K 25.76 million. A significant portion of these cases—1,456 incidents—were related to vandalism. Theft, fraud, and other crimes like interference with ZESCO's supply were also prevalent, with the Corporation managing to recover property worth K 6.8 million.

Despite ZESCO's proactive efforts, including 384 arrests and 155 convictions, the year ended with substantial losses. These crimes affected the stability of the electricity grid, delayed service delivery, and imposed additional financial burdens on the Corporation.

2024: A Year of Rising Challenges

First Quarter (January to March 2024)

The first quarter of 2024 presented an alarming rise in crime. Vandalism cases alone rose to 450, marking a 12.7% increase compared to the last quarter of 2023, which had 399 cases.

In total, 1,668 cases of crime were recorded during this period, resulting in the loss of property valued at K 14.74 million, more than triple the loss reported in the last quarter of 2023.

This surge in crime was likely fueled by persistent load-shedding and power management challenges, which created more opportunities for thieves and vandals to target ZESCO's infrastructure, particularly service cables. This quarter saw 958 cases of service

cable theft, a growing trend that would continue to haunt the Corporation throughout the year.

However, the Corporation's security efforts were commendable, recovering property worth K2.26 million, arresting 97 suspects, and securing 41 convictions.

Second Quarter (April to June 2024)

The situation worsened in the second quarter. Vandalism cases surged by 29.8%, reaching 584 incidents compared to 450 in Q1. The total number of cases climbed slightly to 1,985, but what stood out was the ongoing theft of service cables, with 1,147 cases recorded.

This theft not only disrupted power supply to customers but also drained ZESCO's financial resources as it struggled to replace the stolen infrastructure.

Although there was a slight drop in the total value of lost property compared to Q1—down to K13.17 million from K 14.74 million—the rise in crime, especially vandalism, was a major concern.

Additionally, the Corporation recorded 101 arrests and 25 convictions in this quarter, showing some progress in bringing perpetrators to justice. Property worth K 2.14 million was recovered.

An interesting development during this quarter was a 25% reduction in the number of vandalized transformers, also known as PMTs [Pole Mounted Transformers] (from 70 in Q1 to 52 in Q2).

This reduction indicated that some of ZESCO's security measures, particularly around transformer protection, were beginning to bear fruit.

Third Quarter (July to September 2024)

The third quarter of 2024 saw the highest spike in criminal activity. Vandalism cases climbed further to 687, representing a 17.6% increase over the previous quarter. This surge was primarily driven by prolonged hours of load management during the dry season, which inadvertently gave criminals more opportunities to strike while power was down.

Total cases in Q3 skyrocketed to 3,120, a dramatic jump from the 1,985 cases in Q2. The theft of service cables remained rampant, with 2,217 cases recorded—nearly doubling the number from Q2. The loss of property reached a staggering K 15.07 million during this period.

In response, ZESCO intensified its efforts, recovering property worth K 2.03 million, arresting 121 individuals, and securing 22 convictions. While these figures showed the Corporation was actively tackling the problem, the sheer scale of the crime wave in Q3 highlighted the growing challenge.



A Comparative Analysis: 2023 vs. 2024

- **Vandalism Trends:** In 2023, ZESCO reported 1,456 cases of vandalism. By the end of Q3 2024, this number had already soared to 1,721 cases, surpassing the total number from the previous year. The steady quarterly increases in 2024—particularly the sharp rise in Q3—suggest that vandalism remains one of the most pressing issues ZESCO faces.
- **Total Criminal Cases:** In 2023, ZESCO recorded 3,968 total cases of crime. By September 2024, the total number of cases had already reached 6,773, indicating a sharp rise in criminal activity targeting the Corporation. This represents a 70.7% increase in cases year-on-year, a trend that is alarming for the Corporation's financial health and operational efficiency.
- **Property Loss:** In 2023, the total loss of property due to crime was valued at K 25.76 million. By Q3 2024, this figure had already ballooned to K 42.99 million, highlighting the increasing financial strain on ZESCO. Theft of service cables, in particular, has been a major contributor to this loss.
- **Arrests and Convictions:** In 2023, ZESCO secured 384 arrests and 155 convictions. In the first nine months of 2024, the Corporation had recorded 319 arrests and 88 convictions, showing a consistent effort to prosecute offenders despite the rising crime numbers.

The Path Forward



In 2024, the surge in vandalism and theft, particularly of service cables, has severely impacted ZESCO's ability to maintain reliable power supply, with power outages often linked to criminal activity. The financial burden of replacing stolen infrastructure is immense, straining the Corporation's resources. However, community vigilance and cooperation with security personnel have been crucial in preventing vandalism, leading to several arrests.



In response, ZESCO launched the Youth Action Against Vandalism (YAAV) initiative, mobilizing young volunteers to raise awareness and support infrastructure protection efforts through door-to-door engagement and increased security patrols.

ZESCO UNITED DOMINATE LEAGUE EARLY DAYS

Emmanuel Siwale's appointment as ZESCO United interim head coach has continued to yield positive results with the Ndola based league giants sitting atop the league table at the end of week eight.

On Sunday, 20 October 2024 ZESCO United overcame a stubborn Indeni side by a 1-0 scoreline in a week eight fixture held at the Levy Mwanawasa stadium in Ndola.

ZESCO United needed a win after losing 2-0 to current league champions, Red Arrows.

In the last six games, ZESCO United has won four games lost one and drawn one.

At week eight the nine times league champions sit at the summit of the table with 19 points followed by Mutondo Stars who have 15 points while Power Dynamos occupy third position with 13 points.

Meanwhile Siwale's charges will face arguably their sternest test on Saturday 26, October when they face City rivals Forest Rangers in the Ndola derby.

Victory over Rangers will give ZESCO United more breathing space at the helm of the table.



PONGA LIWEWE APPOINTED AS NEW CEO FOR ZESCO UNITED

ZESCO United has appointed Ponga Liwewe as its new Chief Executive Officer.

"Liwewe comes with a wealth of football knowledge both at domestic and international level coupled with commercial expertise in the corporate world. He has a successful proven leadership record in the football fraternity circles," ZESCO United Chairman Maxwell Saya said.

Saya added: "His passion to bring positive change across the football spectrum has seen him serve in various strategic roles in some of the leading clubs in the country and continues to play an advisory role on football management in Zambia. It is this background that has given us the confidence to entrust him with leading this great football club."

The ZESCO United Chairman further disclosed that club management is determined to return to the summit of the domestic game and re-establish the country's formidable position at continental level.



ZESCO ENERGY

August Quiz Winners Announced!

The Turbine editors extend their heartfelt gratitude to all participants of the August Quiz. We are excited to recognize the top participants who included their contact details with their submission. The winners will receive a ZESCO Limited branded mugs. Prizes not collected within 30 days from publication will be withdrawn.

Congratulations to:

Mutuna Kapasa

Email: MKapansa@zesco.co.zm

Musonda Chibulu

Email: MUChibulu@zesco.co.zm

Winners, please get in touch with the PR Unit to claim your prizes.

Engage and stay informed with The Turbine!

August 2024 Turbine Quiz Answers

- 1.Power
- 2.Net metering
- 3.Generate
- 4.Grid
- 5.Solar panels
- 6.Prosumers
- 7.Distributed energy
- 8.Current
- 9.Voltage
10. Smart meters
11. Electricity
12. Substations
13. Transformers
14. Microgrids
15. Imports
16. Tariffs
17. Infrastructure
18. Metering
19. Load management
20. Load shedding
21. Sustainable



ZESCO ENERGY

Quiz Questions

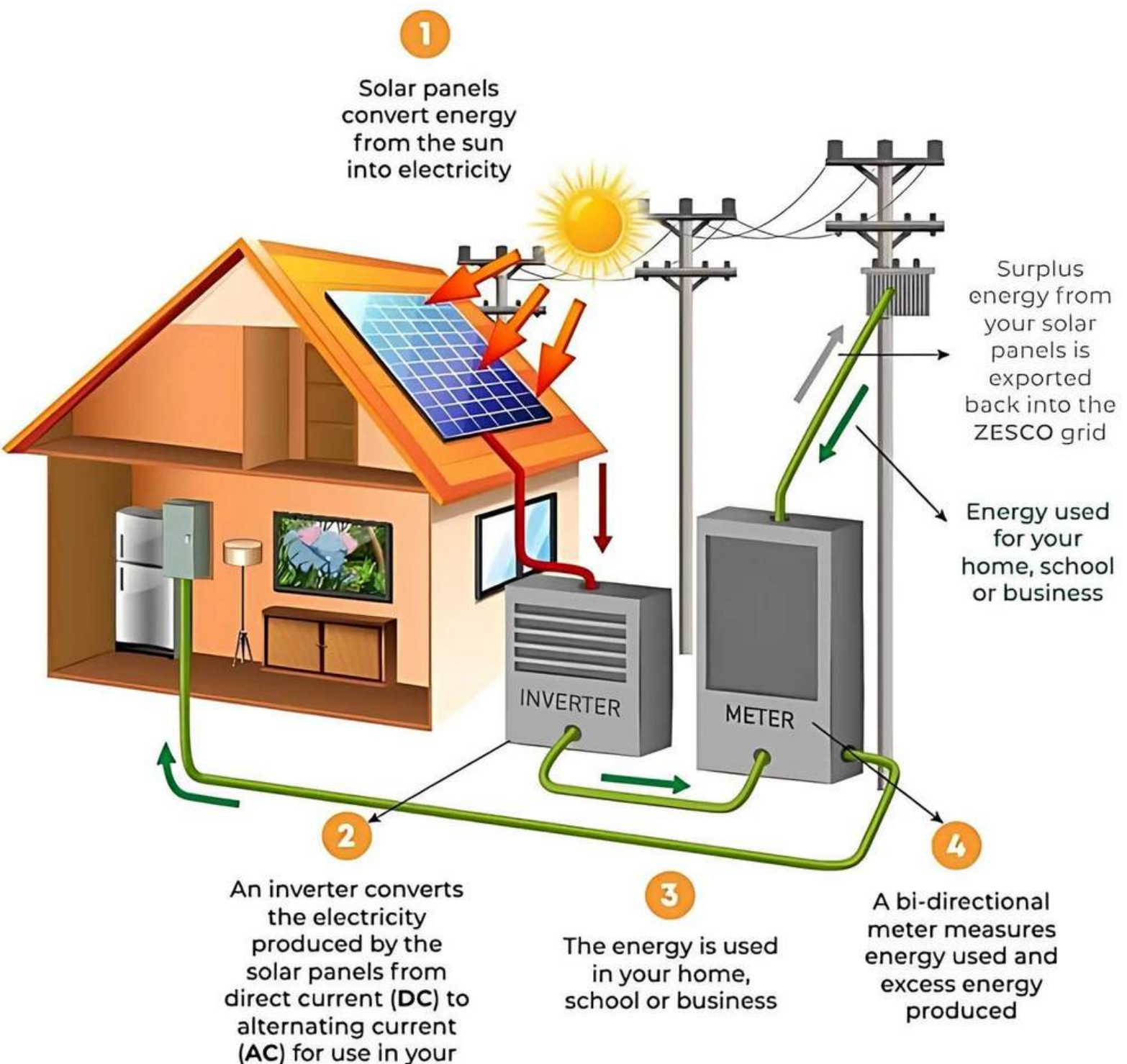


1. Who is ZESCO Limited's longest-serving driver, and how many years of service has he completed with the company?
2. What initiative, recently launched by ZESCO and community partners, aims to address the issue of infrastructure vandalism, and where was its first event held?
3. What purpose do the diesel gensets installed by ZESCO at Chilenje Market serve, and how do they impact local businesses?
4. What is a Virtual Power Plant (VPP), and how does Kiyona Energy Limited use VPPs to support Zambia's energy grid?
5. Which ZESCO subsidiary contributed to the construction of Chasunta Secondary School Library, and what is the broader community benefit of this facility?
6. Who was the first Managing Director of ZESCO during Zambia's Third Republic?
7. Name the first hydroelectric power station built in Zambia, and in which year it was commissioned.
8. In which year was ZESCO officially established as Zambia's primary power utility company?
9. When was the company name Zambia Electricity Supply Corporation changed to be just ZESCO Limited?
10. Name the oldest transmission line in Zambia and the regions it was originally built to connect.

How to Participate

Simply send your answers to publicrelations@zesco.co.zm with the subject line "September Turbine Quiz". Closing date is 11 November, 2024. Please include your contact number or extension in your email. The answers and winners will be announced in the next edition of "The Turbine," which goes out monthly. Good luck!

How NET METERING Works





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