# 2020

SEVENTH

## Integrated Report

Journey towards turnaround strategy

# About this Report

The information in this report has been selected to provide stakeholders with an overview of our strategy, business model, performance and governance practices, as well as our risks and opportunities.

The selection of matters to be covered in this report was determined based on whether the matter could substantially affect our ability to create value. It was informed by inputs from our stakeholders within and outside ZESCO Limited and was further refined through engagement with executive management and the Board of Directors.

## Report Approval

The Board acknowledges its responsibility to ensure the integrity of this report and confirm that this integrated annual report addresses all material matters and provides a balanced overview of the Company and its prospects. The Board has therefore approved the 2019 Integrated Report for publication.

**Mr. Chibwe D. Mwelwa**
Chairman

**Mr. Victor M Mundende**
Managing Director

**Mr. Emmanuel M Banda**
Finance Director

**Mr. McRobby V. Chiwale**
Company Secretary

## Integrated Reporting Team

**Mr. McRobby V. Chiwale**
Company Secretary

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Snr Manager Accounting Services

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**Saviour Mwila**
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**Kelvin Chilongu**
Senior Financial Analyst

**Dalitso Mwanza**
Public Relations Officer

**Lydia Lubono Mwape**
Expenditure Accountant

# Contents



## Our Vision

**'To be the hub of electricity trading in the region by 2025'**

## Our Mission

**Making it easy for people to live a better life.**

## Our Values

**Love:** We care and support one another, as well as our customers.

**Commitment:** We are passionate about what we exist to do for one another, and for our customers.

**Integrity:** We uphold fairness and truthfulness in our actions.

**Open to ideas:** We are open to ideas with deliberateness and spontaneity


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**Photo and editor:** Dalitso Mwanza

# Strategic Report

# Group Highlights

## Group Highlights

**K 18.5 bn** 79% ▲
**Group Revenue**
This is total Income recorded in the period. This includes Domestic, Mining and Export customers.

| 2019 | K10.3 bn |
|---|---|

**-86%** 60% ▼
**Net Profit Margin**
This is the ratio of net profits to revenues

| 2019 | -54% |
|---|---|

**K -5.9 bn** 0% ▼
**Operating Profit/ (Loss)**
This is profit from business operations before deducting interest and taxes.

| 2019 | -K5.9 bn |
|---|---|

**-16.4%** 128% ▲
**Return on Capital Employed**
This is a performance measure used to evaluate the efficiency or profitability of an investment

| 2019 | -7.2% |
|---|---|

**K 3.3 bn** -82% ▼
**Net Assets**
The value of the companies Assets less Liabiltities

| 2019 | K17.6bn |
|---|---|

**747 %** -21% ▼
**Interest Cover**
Interest as a percentage of PBIT

| 2019 | 943% |
|---|---|

**0.31 x** -12% ▼
**Current Ratio**
is a liquidity ratio that measures a company's ability to pay short-term obligations or those due within one year

| 2019 | 0.35 x |
|---|---|

**K46.7 bn** 56% ▲
**Debt Level**
is a measure of how much debt is outstanding

| 2019 | K30.0 bn |
|---|---|

**93%** 48% ▲
**Gearing**
Refers to the relationship, or ratio, of a company's debt-to-equity (D/E).

| 2019 | 63% |
|---|---|

**14%** 0% ▼
**EBITDA**
Measure of Netprofit after all operating expenses including non cash expenses

| 2019 | 14% |
|---|---|

## Operational

**10,430 GWh**
**Generation** 3% ▲
Measures business growth through the number of Giga Watt hours (GWh) produced.

| 2019 | 10, 078 GWh |
|---|---|

**1,071,682** 5% ▲
**Customer Base**
A measure of Customer growth

| 2019 | 1,017,314 |
|---|---|

**158** 5% ▲
**Customer Employee Ratio**
The total number of employees as a fraction of total number of customers during the year.

| 2019 | 150 |
|---|---|

**6, 744** 0% ▼
**Head Count (Annual Average)**
The average number of employees during the year.

| 2019 | 6, 771 |
|---|---|

# Chairman's Statement

**Mr. Chibwe D. Mwelwa**
Board Chairperson

## Dear Shareholder,

I am pleased to present the Chairman's report as the new chairman of your company, having worked under the leadership of the former chairman Dr. Mbita Chitala as a Board member am very acquainted to the challenges bedeviling our company.

The times we are living in are undeniably challenging and to survive as a company we will always be on full guard and offer necessary leadership to corporate management. It is practically impossible to predict the outcome with accuracy in these uncertain times however, it is within our reach as the Board to define the risk appetite that influences realities. It is admirable to witness the resilience, dedication and perseverance from our employees and suppliers of various services and products to our company during the on-going COVID 19 pandemic.

The COVID 19 measures that we implemented across the company helped in minimizing the impact of the scourge however, the dim-lights during the year were a number of deaths of our colleagues. We did not just lose our colleagues but relatives and friends, this has had an impact on productivity and general morale as a number of our staff were griped in fear and despair. Culturally we can not normalize death, it will always strike us with shock whenever it occurs. The pandemic has had devasting effect on the economy and ultimately distorting the livelihoods of so many customers.

As a corporate citizen we feel the pain that ordinary Zambians feel that has been impressed on us by the COVID 19 pandemic, we are therefore committed to the communities in which we operate and have provided both material and other intangible support such as the COVID relief tariff to our most affected customers.

### 2020 A Year in the Rear-View

2020 is a year that cements its legendary existence and the following are part of events and memories that will remain documented in the history of our company:

i. The company celebrated its 50th anniversary
ii. The expiry of the Bulk Supply Agreement ("BSA") that has been in place for more than 23 years between ZESCO and CEC plc "CEC", this undoubtedly gives the corporation an opportunity to reset for the betterment of the Electricity

Supply Industry (ESI) and its own sustainability.
iii. The Cabinet approved the resolution for ZESCO reforms.
iv. The Board approved ZESCO's Turnaround Strategy in December.
v. The enactment of new legislation that is meant to open up Zambia's power sector came into effect.
vi. ZESCO commissioned its 6th hydroelectric power plant (15 MW Lusiwasi Upper). By the end of 2020, ZESCO owned and operated 2.5 GW of generation assets, 99% of which related to clean energy sources
vii. Connecting and providing power to over 1 million households and businesses.

## Performance Analysis

Focusing on the 2020 performance, your company did not manage to deliver a profit (2020: K12 billion). Whilst this is undesirable it is justified by the challenges your company has faced, including the Independent Power Producers' high tariffs compared to your company's selling tariffs, provision for doubtful debts mainly due to disputed mining debt and the foreign exchange losses on account of the depreciation of the local currency against the major convertibles. If nothing is to be done from my Board on areas of influencing the change in the Electricity Supply Industry, your company shall continue recording losses. It is with this reason that the Board approved the Turnaround strategy in December 2020 that will see the company lifting its self from the current loss making to a profitable and sustainable company.

## Leadership Changes

During the year, Dr. Mbita Chitala stepped down as Board Chairman and i was subsequently appointed to replace Dr. Chitala.

My Board shall always respect the boundaries created by the good principles of corporate governance between corporate management and the Board, ours is to offer strategic guidance, set the tone at the top and continuously serving management with the optimal risk appetite in which they can assume accountability for operations.

## Strategic Analysis

Despite having in effect, the 2018-2023 strategic plan the company's value has been regressing over the years and the Board acknowledges the undesirable financial performance which have been impacted by a number of factors such as:

i. The sharp fall of the kwacha from 2017 to 2020: the kwacha depreciated by 113% during the period hence recording over K9 billion in foreign exchange (fx) losses with a K6.8 billion posted in 2020. This is a major worry of my Board and remains a systematic risk. The fx losses are exacerbated mainly by the ZESCO borrowings which is over 95% in US dollars and over 70% of the revenues is in Dollars.
ii. In adequate rainfall: this has led to the procurement of expensive power from either outside the country or weakened our negotiating power with the Independent Power Producers.
iii. Inability to pass on cost reflective tariffs to customers
iv. Inability to collect revenues leading to provisions for doubtful debts, in 2020, the company provisioned 43% (K8 billion) of its revenue.

The Board is a steward for corporate governance and has the fiduciary duty which makes it responsible for ZESCO's performance. The expectations from the shareholder to the Board is to see to it that ZESCO's financial and operational performance meets the set targets. The survival and prosperity of the company is the responsibility of my Board and the following are the actions and expectations from the Turnaround strategy:

i. Reset the relationship with its mining customers ("MineCos") and CEC - which account for 60% of its revenues - such that ZESCO is able to charge cost reflective tariffs.
ii. Rebase relationship with independent power producers ("IPPs") and agree long-term sustainable offtake tariffs.
iii. Reduce operating expenses over the period 2021-2025
iv. Focus on self-financing capital investments that generate hurdle returns and are aligned with ZESCO's long-term strategy to become the region's electricity regional trading hub.
v. Partnership approach to funding new projects and to restructuring and addressing legacy borrowings.

My Board will focus on the following Key strategic areas:

i. Debt restructuring
ii. Optimization of CAPEX
iii. Optimization of OPEX
iv. Tariff adjustments and revenue efficiency
v. Asset optimization
vi. Stakeholder and change management

## Going Concern Question

I often hear so many people questioning ZESCO's going concern and these are necessary concerns, which am often confronted with from a diverse of stakeholders. My Board's opinion, is clear on this question, ZESCO is a going concern but requires the support from the Government and Regulator on a number of issues highlighted in the Turnaround's key strategic areas. As a Board we are happy with the support we are receiving from the shareholder in the implementation of the Turnaround strategy.

## Conclusion

We appreciate the support we are receiving from IDC our shareholder, the Government, lending institutions and the suppliers of electricity in ensuring that the Turnaround strategy bears fruits of a sustainable ZESCO.

**Mr. Chibwe D. Mwelwa**

Board Chairperson

# Managing Director's Statement

**Mr Victor M. Mundende**
Managing Director

## Dear Stakeholders,

I first write to thank employees who have worked tirelessly during the COVID 19 pandemic, with their efforts as a company we continued to meet our mandate that of supplying stable and quality electricity. Our company is the economic heart pulse of the economy and its role in the economic growth of the country is paramount.

ZESCO's challenges in the last 7 years have both been operational and financial, in 2015 the country faced acute drought and this dry spell meant that the company had to import expensive power and also effect power cuts. The prolonged power cuts effected in the years starting from 2015 destabilized economic growth, affected small to medium enterprises, stalled job creation and subsequently dampened the efforts to combat poverty. In the pursuit of providing sustainable flow of electricity, the country saw a birth of a number of independent power producers (IPPs) and there was an urgent need in investing in new power projects. This was the beginning of the erosion of our financial books and trade payables started rising exponentially, in 2017 there was a trade payables and revenue crossover. By the end of the year, trade payables stood at K34 billion surpassing revenue of K18 billion. The company has continued facing financial challenges necessitated by debt servicing, electricity suppliers and capital expenditure.

### Rebuilding Hope

The levels of trade payables are sadly a sign that the company is facing liquidity challenges and this has an effect on how our stakeholders rate us, credibility in business is gold. Unfortunately, in business, a loss in credibility diminishes the hope of employees and subsequently affects productivity.

Designing and implementing rescue solutions requires concerted efforts from the Government, Industrial Development Corporation, Energy Regulation Board, Lenders, IPPs, customers, the Board, Management and employees. We believe that our collective wisdom will help in building a more sustainable ZESCO that will uninterruptedly deliver value for the country.

### 5-year Turnaround Strategy

At the tail end of 2020, the Board approved a Turnaround strategy for the company that covers the full cycle for a clean bill of health:

a) **Stabilise:** This phase is more conservative in nature and aims at maintaining the targeted change.

- In order for the company to operate efficiently, improved system processes is a must and this has been prioritized in the turnaround strategy.
- Currently, the EBITDA margins is at levels that cannot both sustain debt service and fund investments, the turnaround strategy aims at least a 30% EBITDA margins.
- The introduction of IPPs on the market and the amortization of the local currency against the major convertibles has partly caused the non-cost reflective tariffs.
- In ensuring improved electricity reliability, the strategy aims to have a defined cost reflective tariff path mechanism.
- Interest bearing debt is about 34% of the balance sheet value therefore debt restricting is a priority.
- At the stabilization phase, improved receivables especially from the mining customers is key and this cannot be over-emphasized considering that in 2020 we provisioned doubtful debts amounting to K8 billion, representing 43% of revenue.

b) **Recover:** This phase aims to reset ZESCO and ready to embark on growth.

- Improved technical efficiencies are a must and the turnaround strategy aims at reduced technical losses to acceptable levels as guided by the Regulator. In 2020, the technical losses in distribution stood at 14.1% compared to the ERB loss limit of 11%.
- It is important to identify the residence of the inefficiencies in the value chain, therefore, a clear transfer pricing between Strategic Business Units (SBUs) is of utmost importance in our strategy plan.
- In 2020, we approved the procurement of consultancy services for the restructuring of the company and this feeds into our strategy of a lean and efficient ZESCO.
- During the recovery phase, we aim to create critical interconnectors with neighbouring countries and this will help in acquiring more foreign exchange (FX) customers, therefore,

hedging against the adverse FX movements.

c) **Grow:** At this phase the company aims to generate sufficient cash flows to meet its obligations as and when is required, invest for the future with confidence and create value for the shareholder.

- Our strategic plan focuses on the diversification of the energy mix, we have learnt our lessons with bad experiences relying on a single source of energy. In 2015 when we were hit by droughts and experienced low water inflows in our reservoirs which subsequently caused low water levels in the dams.
- The plan focuses on cost pass through mechanisms which assures a sustainable economic growth. The current situation is that the cost of electricity purchases is higher than the average price and the company has to incur other costs such as distribution and supply.
- Investing in Smart metering in the future is the soul of the Turnaround Strategy, as a statement of truth, we have commenced Iskraemeco Smart Metering pilot Project.
- ZESCO's path to full deployment of Advanced Metering Infrastructure (AMI) such as Smart meters, HES, Meter Data Management System (MDMS) and integration of Back-End Systems (BES) to MDMS is on-going.
- The creation of interconnectors with our neighbouring countries will open up the new frontier markets and this will fully be achieved in the growth phase of our Turnaround Strategy. Increasing FX client base is part of our strategy and this can only be realized after investing in infrastructure.

The Turnaround Strategy has the following key focus areas:

1. Debt restructuring
2. CAPEX optimization
3. OPEX optimization
4. Tariff adjustments and revenue efficiency
5. Asset optimization
6. Stakeholder and change management:

Read more on our *Strategic Pillars on page 42*

### Flagship Projects

Considering low electricity penetration rate in Zambia and the role of ZESCO in the electricity supply industry (ESI), the company is investing in the following selected projects:

a) Kafue Gorge Lower 750 MW Hydro Power Project: The project is underway, however, at the start of 2020 the project briefly stalled due to COVID 19. The subcontractor commissioning teams were delayed for seven months after the intended date of arrival and over 1,000 local project staff deserted the project site at the end of March 2020. The overall construction progress is around 93% and the project is expected to be commissioned in the second quarter of 2021.

b) Batoka North Bank 1200 MW Hydro Power Project: The project is at its initial stage, however, some noted milestones in 2020 have been recorded:

- Engineering feasibility studies (100%)
- Review and feasibility studies by developer (80%)
- Procurement of technical advisor for Batoka (90%)
- ESIA studies (97%)
- ESIA public disclosure (90%)

c) Rehabilitation and uprating of small hydropower plants such as Musonda, Lusiwasi and Chishimba is on-going.

d) Kalumbila Trident Mine Supply Project: In the period under review this project was completed.

e) Kabwe – Pensulo 330kV Transmission line: this project involves the construction of approximately 300 km of 330kv single circuit transmission line from Kabwe Step-down substation to Pensulo substation in Serenje. The project is underway and expected to be completed in 2021.

f) Lusaka Transmission and Distribution Rehabilitation Project (LTDRP): this project is aimed at increasing capacity thereby improving reliability and security of supply in Lusaka and the surrounding areas.

g) Sustainable Electricity Supply Southern Division (SESSD): This is a project for rehabilitating and reinforcing the existing distribution in infrastructure in Central, Eastern, Southern and Western provinces. The project is expected to be completed in 2022.

### Human Capital

2020 has without doubt been one of the most difficult years for both the company and its employees, COVID 19 was at the centre of the challenges faced. The advent of the pandemic helped in the evolution of the work culture, beliefs and practices. Management had to institute a hybrid working system which meant that employees would sometimes work from home as a way to depopulate offices and provide the necessary social distancing as one of the golden rules to mitigating the spread of the pandemic. This meant that employees were trusted to self-supervise themselves while working from home.

ZESCO invested in all science backed methods in preventing COVID 19, however, we were not immune to its effects, during the year we lost 53 lives compared to 2019 where we recorded 19 representing about 174% increase. This year was not ordinary to us, we lost colleagues that we shared offices, attended meetings and interacted with. As management we wish the affect families God's healing and will always provide our support.

### Our Expectations

My management under the supervision of our Board, our focus is on resuscitating the company through the meticulous implementation of the Turnaround Strategy but this is not easy journey as it will require support and participation from employees, the shareholder, the Regulator, suppliers of electricity and lending institutions.

We will continue with the on-going projects that we believe will help in resetting the economy and thereby drive job creation and better lives for all. In the first few years of the Turnaround implementation we will face a bittersweet effect, we will have to endure pain along the turnaround process as some privileges we enjoy may be taken so as to help us come out of this problem.

### Conclusion

I wish to thank the Shareholder, the Board, the employees and other stakeholders for the support and contributions made to the company.

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**Mr Victor M. Mundende**

Managing Director

# Customer Focused

## Customers are an important part of our business and their feedback leads to continuous improvement which enhances customer experience.

In 2020, the Corporation embarked on a number of Demand Side initiatives to optimize power consumption without affecting customers' normal activities at the same time also try to cater for our growing customer base. The initiative dubbed "Energy Efficiency" involved the distribution of 1 million LED bulbs that resulted in power saving for the customers of about 80MW. Below are some of the areas of interventions intended to help reduce consumption of our customers;

- Lighting (1 million LEDs)
- Industrial Energy Management Opportunities - Energy Audits
- Power Factor correction 100MW

### COVID 19 relief

**Free 100 Units** – ZESCO effected the issuance of 100 units free of charge to its customers whose average monthly consumption was less than 200 units. This was to allow our customers some relief from the economic impact of the pandemic.

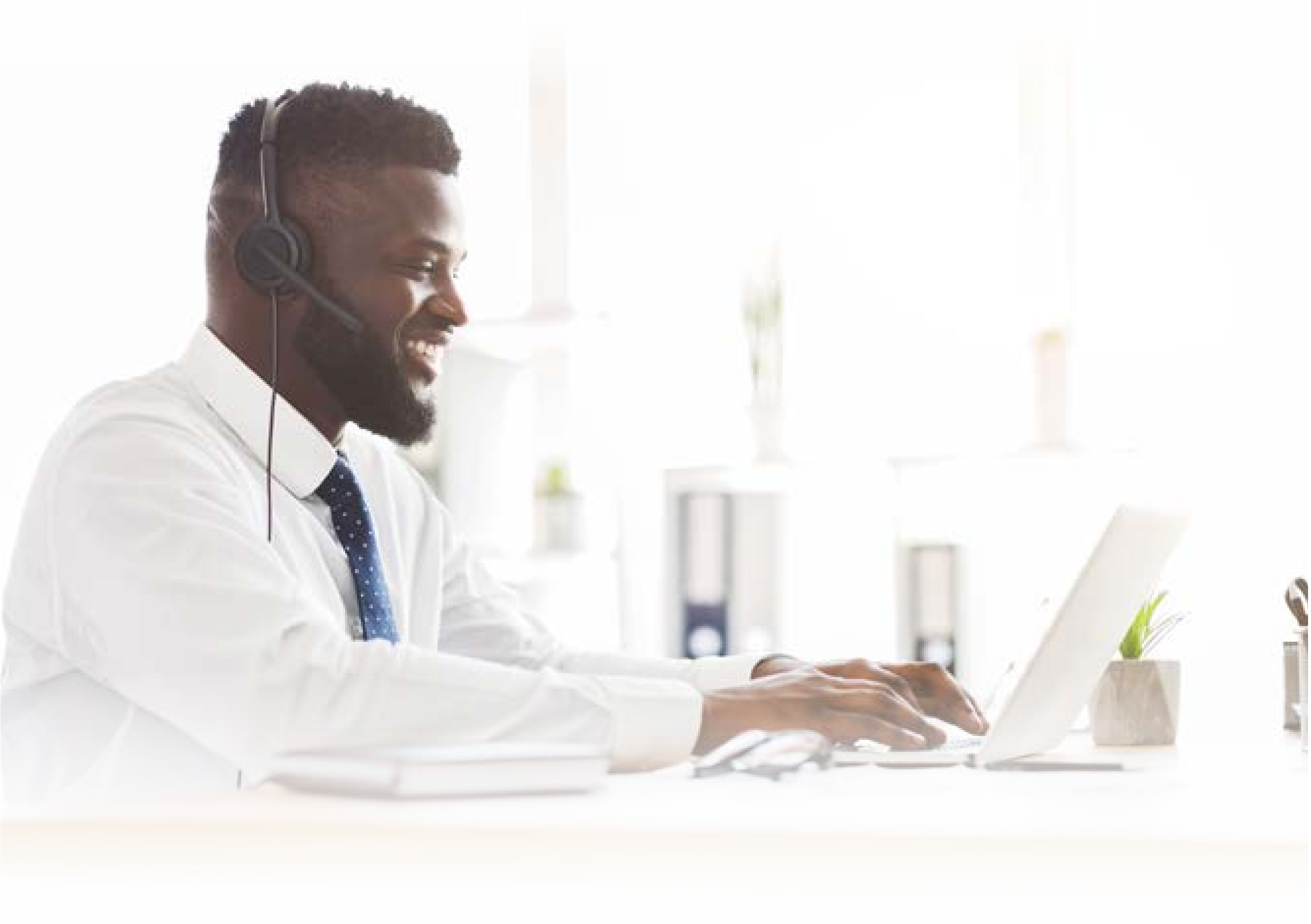
**Accumulated Fixed Charges** – ZESCO cancelled the accumulated fixed charges on prepaid residential and commercial customers. This was after a realisation that some customers could not still afford to vend due to the fixed charges accrued prior to the abolishment of fixed charges.

### Customer Compensation

During the financial year under review, we received and processed a total of one hundred and twenty five (125) compensation claims out of which only  seven (7) were compensated whilst the rest were declined as they did not link Zesco to their losses. Additionally, all the declined cases were advised accordingly on the importance of the provision of effective backup surge protection, good earthing systems and up to standard electrical house wiring at their premises beyond the metering point, as well as the careful handling of all ZESCO installations.

### Third Party and Super Vendors

To improve customer experience and ease of trading with us for our customers, Third party vendors are engaged to sale electricity on our behalf and are easily accessible and they are widely spread. Mobile Money companies and Banks all make it easier for customers to buy electricity at their convenience. To ensure vendors adhere to ZESCOs minimum customer service delivery standards, routine inspections were conducted throughout the year.



# Innovation & Development

The Corporation has embraced digital transformation to augment the turnaround recovery strategy through the adoption of technology and automation of manual processes. This is being done through internally developed and bespoke solutions.

## Digital Platforms

Our agenda is continued innovation in the provision of services to enhance efficiency, reliability and achieve our mission and vision. In response to Covid-19 pandemic, we deployed the second phase of technology. This enabled customers engage with us more virtually whilst employees worked through remote and virtual platforms. We continued to encourage our customers to use online platforms such as the Mobile App, Facebook and WhatsApp Chatbots, USSD, banks and mobile money platforms from the comfort of their homes.

The available features of our digital platforms are:

i. Fault Reporting; Customers can report a fault from the Mobile Devices and instantly receive an SMS with a complaint number;
ii. Fault Tracking; Customers will track the status of the fault using a complaint number i.e. pending or resolved;
iii. View of Prepaid Tokens purchased; Customers will view the last ten (10) prepaid tokens;
iv. New Connection Requirements; Customers will be able to check the power connection requirements online;
v. Customers will view the connection status using the reference number once they apply for power;
vi. Locate of Customer Service Center

Below are digital platforms that were developed:

**1.Unstructured Supplementary Service Data (USSD)**
The corporation launched an alternative to internet-based applications. This platform is known as the Unstructured Supplementary Service Data (USSD), which is a text driven technology that allows customers access to selected services directly by dialling the *3600# code from cell phones for free.

**2.Mobile App**
The App was launched in the second quarter of 2020 to the public and is available on both Apple iStore and Android platforms.

**3.Chatbots**
The chatbots are supported by Facebook Messenger and WhatsApp and facilitate live communication while providing seamless customer service round the clock. This puts more choice and control in the hands of our customers by enhancing our clientele's customer service experience.

**4.Website**
To enhance customer service experience, the website was remodelled into a virtual customer service centre.

## Internal processes

We are committed to automating manual processes using technological tools available. As a corporation, we remain highly committed to reinforcing our internal procedures and processes. This is being done to enhance efficiency in the operations and provision of services through the usage of digital channels that are developed inhouse.

Below are some of the initiatives that were implemented;

| No. | Objectives | Tool | Need Addressed | Benefit |
|---|---|---|---|---|
| 1. | Cost control<br>Improve operational Efficiency | eZesco Platform | • Automation of all forms used for staff claims<br>• Easier document tracking<br>• Improved data-based decisions<br>• Paperless environment | • cost reductions<br>• elimination of manual processes<br>• Reduction in possible fraud and duplication of transactions<br>• Provide system audit trail and enforcement of internal controls. |
| 2. | Enhance security and reduce work interruption | Visitor Management System | • Screening visitors<br>• Electronic visitor logs and time spent<br>• Capture visitor pictures. | • Establish headcount on the premises at any given time<br>• Restrict access<br>• Increase staff productivity |
| 3. | Capacity building | Learning Management System | • Automated in-house system-based training | • Cut down on training costs.<br>• Material is available for re-use |
| 4. | Operational efficiency | Clinic Invoice Management System | • Speedy submission of invoices from Health Service Providers<br>• Enhanced Record Keeping | • Realtime invoicing and excess recoveries<br>• Avoidance of settlement of bills for members not in service |
| 5. | Efficiency | Performance Appraisal System | • Automation of the appraisal process<br>• Paperless appraisal. | • Track corporate strategic objectives<br>• Measure organizations performance |

# Our Contribution to Sustainable Development Goals (SDGs)

The Sustainable Development Goals (SDGs), also known as the Global Goals, were adopted by the United Nations in 2015 as a universal call to action to end poverty, protect the planet, and ensure that by 2030 all people enjoy peace and prosperity. *(See www.undp.org)*

ZESCO's investment strategy balances Environmental, Social, and Governance (ESGs) recognising that action in one area will affect outcome in others. Championing sustainable development of the electricity industry in Zambia with a focus on clean energy is a key goal of ZESCO.

The Company consistently expands its electricity generation volumes by improving the efficiency of existing facilities and commissioning of new capacities, prioritizing generating facilities relying on renewables, such as hydroelectric power plants (including smaller HPPs) and solar farms.

ZESCO's strategy is aligned to supporting global sustainable development initiatives by consistently integrating the applicable UN SDGs in our operations.

## Adapting to the SDGs

| SDGS | Targets | SDG implementation |
|---|---|---|
| 1 NO POVERTY | 1.2 | On average, the entry level wage is equal to the minimum wage, |
| 3 GOOD HEALTH AND WELL-BEING | 3.8 | • Free ART treatment for employees and spouse<br>• Offering medical services through ZESCO owned clinics<br>• Medical expenses K 17 million |
| 4 QUALITY EDUCATION | 4.3 | Total spent on training K 12 million on 29% of the employees |
| | 4.4 | ZESCO Training Centre provides training at subsidised cost at K0.8 million in 2020 |
| 5 GENDER EQUALITY | 5.5 | • Achieved 31% participation of women in senior management and decision-making roles and continues to strive to increase the number of women in these positions<br>• Has policies and practices that support the representation of women in areas in which they have been previously underrepresented such as Engineering. In the year 2020,544 women held roles previously dominated by their male counterparts such as Engineers, Technologists, Technicians and Electricians compared to only 525 the previous year.<br>• An equal opportunity employer as prescribed by the Equal Employment Opportunity Commission (EEOC), whose main aim is to eliminate employment discrimination based on factors such as sex or religion<br>• has policies on remuneration that promote equal pay for work of equal value regardless of gender<br>• The company has a zero-tolerance policy on gender discrimination and violence against women and harassment (integrity ) |
| 6 CLEAN WATER AND SANITATION | 6.4 | No water is withdrawn in water-scarce areas |
| | 6.6 | • Compliance with water allocation with Zambezi River Authority and Water Resource Management Authority<br>• Fish restocking Luwongo river<br>• Water used for power generation is discharged into the river to support biodiversity |

| SDGS | Targets | SDG implementation |
|---|---|---|
| 7 AFFORDABLE AND CLEAN ENERGY | 7.1 | • The company is promoting private partnerships in developing solar power plants<br>• Achieved the milestone of connecting 1 million customers to the national grid in the company's push to increase access to electricity<br>• Investing in renewable energy such as Solar Power Plants, to supplement current hydro generation<br>• Providing technical support to would-be investors in the Renewable Energy sector to encourage private sector investment in renewable energy.<br>• Implementation of Energy Efficiency interventions that primarily focused on low-cost interventions to help customers on their consumption |
| 8 DECENT WORK AND ECONOMIC GROWTH | 8.5 | • No pay discrimination |
| 9 INDUSTRY, INNOVATION AND INFRASTRUCTURE | 9.1, | • Infrastructure investment K17.2 billion |
| | 9.4 | • Upgraded Musonda Falls power station from 5MW to 10MW |
| 11 SUSTAINABLE CITIES AND COMMUNITIES | | • Charity spending in 2020: K3.4 million |

| SDGS | Targets | SDG implementation |
|---|---|---|
| 12 RESPONSIBLE CONSUMPTION AND PRODUCTION | 12.2 | • Water consumption 2020 in line with allocations by the Water Bodies |
| | 12.7 | • Adherence to the Public Procurement Act 2020 |
| 15 LIFE ON LAND | 15.1 | Partnership with the Forest Department in tree planting exercises in locations such as Ikelenge and Lunzua River catchment area as a campaign against deforestation |
| | | the fish restocking exercise at the Luongo Dam in collaboration with the Fisheries Department in Mansa following the upgrade of Musonda hydro power station |
| 16 PEACE, JUSTICE AND STRONG INSTITUTIONS | 16.5 | Establishment of Integrity Committee department to help reinforce:<br>• Code of Conduct;<br>• Whistle Blower;<br>• Conflict of interest; and<br>• Code of Ethics |

# Our Business Model

## How we create long-term value

### Capitals Employed to Create Value

**Financial Capital**
- Equity Funding
- Debt Funding
- Grants
- Cash funding from operations

**Human and Intellectual Capital**
- 6, 771 Employees
- Internally developed and bespoke solutions
- Re-skilling & Training

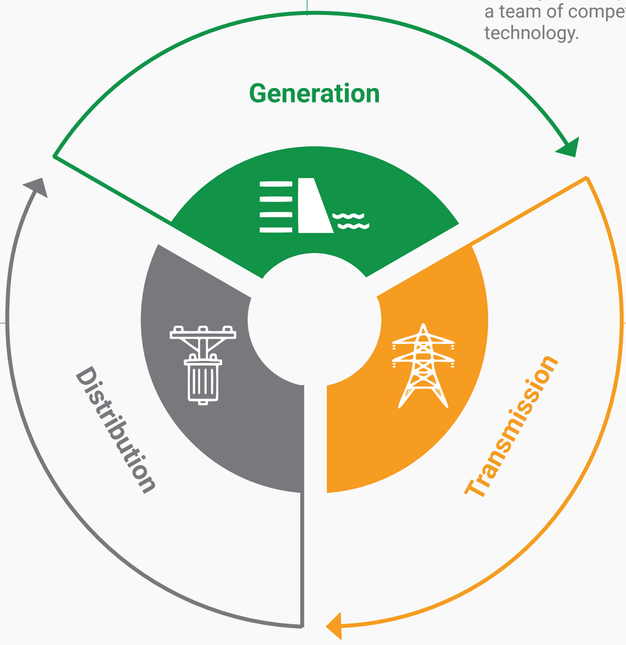
**Manufactured Capital**
- Power stations,
- Transmission infrastructure
- Distribution system network
- Information technology equipment and Fibrecom network.

**Social and Relationship Capital**
- Commitment to maintaining our integrity and reputation among stakeholders,
- Buy-in/support into the Company's strategic objectives from our stakeholders

**Natural Capital**
- Water used

### Our Business Activities

Being a 98% hydro-based power generator, our major inputs are the water bodies around the country with the major hydro plants in the Southern part of the country. All our generation plants are managed by a team of competent staff using state of the art technology.




Involves supply of reliable and safe electricity to our retail customers. This done through our expansive Low Voltage distribution infrastructure, managed by competent workforce

Involves evacuation of electricity from own generation, IPPs and imports to wholesale and retail customers in our quest to be the hub for electricity trading in the region. Additionally, transmission provides grid management services through the National Control Centre.

### Our Risks

Read more on *Our Key Risks and Uncertainties on page 44*

Strategic Risk

Financial Risk

## Output From Our Business Activities

Using our inputs, we ensure that safe and reliable electricity is generated, transmitted and distributed. This is done with utmost care to the environment and in compliance with regulatory requirements.

### Generation

**14,169 GWh**

**Total own generation fed into the National Grid**

### Transmission

#### Sources

**71%** Own Generation
KGUPS, KNBPS, VFPS, Small Hydros

**28%** IPPs
KNBEP, ITTPC MCL, NECL, LHPC

**1%** Imports
SAPP

#### Dispatch

**47%** Mines
- CEC, Kalumbila, Kansanshi,
- ZCCZ, Lumwana and others

**44%** Retail
- Lusaka, Southern, Northern and Copperbelt Division

**9%** Exports
SAPP

### Distribution

**44%**

**Distribution, Supply and Customer & Commercial Services**

## Value Created

**K 2.5 mil** 70% ▲

### Employees

| | |
|---|---|
| Salaries & wages | 2,525,000 |
| Training | 15,560 |
| 2019 | K1,491,205 |

**K 345,301** 1.5% ▼

### Government

| | |
|---|---|
| ERB fees | 123,931 |
| Employee taxes (PAYE) | 188,561 |
| Other subscriptions/licences | 32,810 |
| 2019 | K350,503 |

**K 5,844** 0.5% ▲

### Community

| | |
|---|---|
| Donations | 5,844 |
| 2019 | K5,816 |

**K 25 mil** 6% ▲

### Suppliers & Contractors

| | |
|---|---|
| Operational expenditure | 14,876,675 |
| Capex expenditure (KGL inclusive) | 10,475,113 |
| 2019 | K23,773,082 |

**K 629,857** 13% ▲

### Investors & Lenders

| | |
|---|---|
| Interest | 629,857 |
| 2019 | K554,735 |

Operational Risk | Safety, Health and Environment | Regulatory Risk

# Stakeholder Engagement

The engagement and management of our interactions with various stakeholders are critical at every stage of our business activities and ensure the success of business strategy. It is an inclusive two-way process that is aligned with our core values and guided by the Code of Ethics.

We nurture constructive relationships as a way to remain a responsible corporate citizen and operate the business sustainably.  As we engage with stakeholders, we strive to operate ethically.

Our relationships to stakeholders are categorized into;

- Collaborate
- Involve
- Consult

The following tables outline stakeholder groups who have a substantive impact on our ability to create value, outlining their contribution to value creation, our means of engaging with them, and the stakeholders' primary interests relating to our business activities. We have also provided our internal assessment of the quality of our current approach to engaging with the different stakeholder groups.

## Government and Shareholders

**Capital(s) contributed or Impacted**

**Frequency and Engagement Methods**

**REGULAR**

Engagement is regular and ad hoc, depending on matters arising or company developments, industry-related changes and opportunities for dialogue specific forums like industry conferences and government-organised events.

In person, virtual, direct, or indirect, at company level or through industry partners which lobby on behalf of the energy industry.

- By email, telephone and meetings
- Website, Annual reports, Interim and annual results presentations
- Media Interviews
- Expo and Investor conferences
- Site visits and commissionings
- Consultation
- Participation in parliamentary processes and public forums

**Expected Output and Outcome**

- Buy-in/support into the Company's strategic objectives
- No interference in day-to-day running of company affairs
- Government financial Guarantees
- Support through policy enactment & implementation
- Less resistance and facilitation of new policy implementation
- Be advocates/lobbyists for positive policy changes
- Arms length relationship

**What are their interests?**

- Organizational Strategy that is aligned to shareholder & GRZ goals
- Good Organizational Performance (KPIs)
- Return on Investment (ROI)
- Dividends
- Institutional Governance
- Improve access to electricity
- Infrastructure development
- Improvement of social wellbeing of citizens
- Complying to rules & regulations
- Low cost of services to citizens
- Wealth creation for citizens; and
- Contribution to the tax base;
- Impact and management of COVID-19

**Our response**

- Carried out site visits to strategic projects
- Held an AGM
- Partnered and collaborated on various social programmes

**Value to stakeholder**

- Return on Investment (ROI)

## Investors & Lenders

This category of stakeholders provide financial capital.

**Capital(s) contributed or Impacted**

**Frequency and Engagement Methods**

**SELDOM**

Engagement is Monthly and quarterly basis.

- conferences
- Annual and quarterly reports
- Projects and Investment page on our website

**Expected Output and Outcome**

- Project Financing and Support
- Cooperation

**What are their interests?**

- Institutional Governance
- Financial Performance
- Liquidity
- Strategy to ensure sustained financial growth;
- Responsible allocation of capital;

**Our response**

- Continued direct engagement with shareholders, analysts and media
- Consistent reporting of company performance,
- Dedicated relationship management team

**Value to stakeholder**

- Return on Investment (ROI)

## Suppliers

This category of stakeholders impact our ability to cost-effectively provide products and services.

**Capital(s) contributed or Impacted**

**Frequency and Engagement Methods**

**REGULAR**

Meetings/ Workshops, One on one meetings, Written notes and our procurement page on the website.

**Expected Output and Outcome**

- Credible/Trustworthy partners in supply chain management & project implementation
- Speed of delivery
- Quality of products/ services

**What are their interests?**

- More business/ supply contracts
- Timely payment and fair terms;
- Continuity of contracts and sustainability of business, especially with the COVID-19 challenges

**Our response**

- Increased focus on procurement with local suppliers
- Well-developed and implemented policies relating to suppliers,

**Value to stakeholder**

- Business trade

## Stakeholder Engagement Continued

### Employees

This category of stakeholders represents our human capital that provides the manpower, knowledge, skills, experience and expertise necessary in delivering our mission and strategy. Constructive employee engagement promotes stable employee relations, enhances productivity, and ensures alignment in delivering on our strategic objectives

**Capital(s) contributed or Impacted**

**Frequency and Engagement Methods**

**REGULAR**

Electronic Communication, Internal Bulletins, Publications, Safety Meetings, Staff Broadcasts, Meetings & Workshops

Staff integrity awareness engagements – In response to unethical conduct of employees, weaknesses in systems and processes, conflict of interest, gifts whistleblowing,

**Expected Output and Outcome**

- Cordial industrial relations,
- Increased productivity and maintaining a focus on our strategic objectives.
- Staff retention

**What are their interests?**

- Personal development
- Re-skilling & Training
- Fairness and equity
- Better conditions of service, employee welfare and medical schemes

**Our response**

- Management and employees meetings
- Employee Sensitizations
- Workshops and trainings
- Occupational health
- Safe working conditions
- Industrial relations meetings

**Value to stakeholder**

- Job security
- Reward and recognition
- Education and training
- Talent management and career planning

*Read more about our Stakeholder Engagement Methods on page 26*

## Regulators

This category of stakeholder is the key regulator in the energy sector. Apart from regulatory compliance, they also issue the utility and other players in the sector with generation, distribution, transmission and supply licenses. Regulation is done via agreed on Key Performance Indicator Framework (KPI) that gets reviewed every three years.

**Capital(s) contributed or Impacted**

**Frequency and Engagement Methods**

**REGULAR**

Electronic communication, letters, reports, publications, meetings, summoned hearings & workshops, Meetings, Reports, Hearings

**Expected Output and Outcome**

- Licenses issuance
- Cost reflective tariffs
- Review of projects & activities
- Fair decisions/ arbitration

**What are their interests?**

- Institutional Governance
- Financial and Technical Performance
- Equitable electricity tariffs
- Environmental sustainability
- Transparency
- Compliance with all applicable laws and regulations

**Our response**

- The Company maintains a strong focus on ensuring that it complies with all applicable regulatory requirements. This features extensively in its risk management framework.

**Value to stakeholder**

- Compliance

## Customers and Clients

This category of stakeholders purchase our products and services, providing the basis for revenue growth.

**Capital(s) contributed or Impacted**

**Frequency and Engagement Methods**

**FREQUENT**

Digital & printed Media, Town Hall Meetings, Customer Engagements, Sensitisation Campaigns, information displays, Customer Day engagements

- Customer service centres, online and call centres
- The website, digital platforms and social media interaction

**Expected Output and Outcome**

- Support
- Good image/perceptions
- Mutual trust

**What are their interests?**

- Make it easier for them to live better lives
- Transparency in decisions & activities that concern them
- Information
- Service delivery

**Our response**

**Value to stakeholder**

- Safe and reliable electricity

## Communities

Includes: Those communities in the vicinity of our operations on whose goodwill we depend, and who are directly impacted by our operations led by Local Government Authorities, Traditional Chiefs & other Authorities

We are accountable to our host communities to be a responsible corporate citizen. Communities can directly affect our social license to operate. In line with our values, we aim to leave them better off for our having been there during and after project implementation.

We aim to manage expectations, uphold human rights and ensure community and asset security. Mutually beneficial partnerships with host communities enhance shared value creation, which help in retaining our social licence to operate.

**Capital(s) contributed or Impacted**

**Frequency and Engagement Methods**

**REGULAR**

- Group Meetings, One-on –one Meetings, reports, Commissioning of significant Projects, Social Media, road shows, town hall meetings
- Corporate Social Investment (CSI), Traditional Ceremonies, Charitable Donations and Sponsorships,
- Community interaction in projects relating to education, health, sport, cultural and financial inclusion
- Public participation on radio and television programmes

**Expected Output and Outcome**

- Strengthen the socioeconomic context in which we operate, inform our reputation.
- Buy-in into ZESCO's processes and projects
- Public support
- Help to stop Vandalism
- Appreciation of Safety rules & Practices
- Afford Land Rights for Wayleaves & servitudes or infrastructure developments

**What are their interests?**

- Connection to Electricity
- Affordable electricity tariffs
- Operations/Activities that empower the community
- Improved local economy and social wellbeing
- Compensation of displaced settlers
- Delivery of national development goals;
- Responsible investment in infrastructure;
- Transparency on our performance;
- Electrification of communities
- Way Leaves & Land use rights
- Lobbying for Electricity infrastructure of Constituencies/ communities and towns

**Our response**

- To meet the growing power demand, we have continued to increase the available generation by:
  - rehabilitating and uprating small hydropower plants to strengthen our power security and create jobs in the process; and
  - investing in solar power projects as well as next-generation renewable energy production.
- To mitigate the risks associated with extended load-shedding, we have invested in
- In response to COVID-19, our approach is to assist in combating and managing the spread of the pandemic by providing

The COVID-19 pandemic has enhanced the importance of community health work; we have reacted by engaging more closely with governments and communities and providing medical and protective equipment, donations and delivered awareness and educational campaigns.

**Value to stakeholder**

- Investment in community socio-economic development projects
- Local employment opportunities
- A stimulus for local economic growth
- Community health and safety

## Media

Include: Radio Stations, Television Stations, Bloggers, Vloggers

This category of stakeholders increase visibility of the Corporation by informing the public and other stakeholders about its activities. They are involved in most of the companys activities because they are fundamental in promoting the corporate image.

**Capital(s) contributed or Impacted**

**Frequency and Engagement Methods**

**REGULAR**

- nterviews: Radio and TV interviews, Radio and TV discussion programmes,
- Facility Tours,
- Face-to-face and telephonic engagement
- Media briefings
- Media releases
- Product-related publicity
- Product launches
- Media Workshops,
- Distribution of printed handouts

**Expected Output and Outcome**

- Accurate understanding and factual reporting of the corporation's projects, operations, products and services.
- The media are also key in fostering constructive relationships with other stakeholders

**What are their interests?**

- Being informed on projects and key activities
- Transparency on performance.
- Stories on ZESCO that sell
- Stories of significance to the public

**Our response**

- 170 Radio and TV discussion programs were facilitated in 58 different media houses aimed at updating customers on the power generation status, clarification on the electricity tariffs, Load Management and ZESCO projects. This provided an opportunity to respond to queries raised by our stakeholders and the public.
- 30 Media Releases were distributed and captured in the media
- 48 articles were published in the print media. The articles are aimed at informing and educate stakeholders about various customer initiatives being implemented to ease the lives of customers. This will in turn promote our corporate image.
- Some of the media briefings and product launches that were organised include:
  - The Kariba North Bank Power Station media briefing were ZESCO Director for Generation addressed journalists on Power situation in the country: and
  - Launch of the Weather Induced Power Deficit – 2019 (WIPOD-19)
  - ZESCO Mobile App and USSD launch
- Facility Visits were carried to help the media to help familiarize themselves with the operations and to equip them with factual information for transmission to the public.

**Value to stakeholder**

- Stories on ZESCO that sell
- Stories of significance to the public

In 2020, Covid-19 restricted the corporations stakeholder engagement options, as large events in which stakeholders could be physically present were not possible. However, engagement activities did continue in smaller groups and through digital meetings for large groups.

# Finance Director's Statement

" the management team and staff remain committed to the success of the initiatives employed and the achievement of financial and operational sustainability thereby assuring that value is realized."

**Mr Emmanuel M. Banda**
Director Finance

The year was favorable and saw a significant increase in turnover due to the tariff adjustment for domestic customers. Further, the depreciation of the local currency increased reported revenue from Mining and Export customers. However, ZESCO is still grappling with liquidity challenges coupled with escalating indebtedness.

The situation has been compounded by a number of factors including:

- The lack of cost reflective tariffs leading to depressed revenues.
- Accumulation of mining receivables due to delayed settlement of mainly and disputed tariffs resulting in high bad and doubtful debt provisions thereby eroding profitability.
- The high average cost of power purchases from Independent Power Producers (IPPs) which exceeds the average selling price thereby considerably narrowing the Gross Profit margin.
- The continued depreciation of the local currency which has resulted in exchange losses on foreign denominated liabilities and finance obligations.
- Operational and network challenges due to aged infrastructure which have seen the raising of debt finance for rehabilitation and expansion works to support the ever-increasing demand for electricity.

## Performance Overview

### Revenues

Group Revenue increased to K18.5 billion largely on account of increases across all categories. The increase was mainly due to the depreciation of the local currency against the US$; thereby increasing reported revenues from Mining and Exports which are mainly foreign denominated. Further, reduced load management following favorable rainfall during the 2019/20 season and a tariff increase ramped up domestic revenues

| Revenue Category (K 'million) | 2020 | 2019 | 2018 | +/- | %^ |
|---|---|---|---|---|---|
| Mining | 10,962,907 | 6,203,138 | 5,324,388 | 4,759,769 | 77 |
| Residential | 2,440,240 | 1,386,252 | 1,596,638 | 1,053,988 | 76 |
| Industrial and Agricultural | 2,327,551 | 1,277,497 | 1,239,429 | 1,050,054 | 82 |
| Exports | 2,169,100 | 1,150,969 | 1,063,366 | 1,018,131 | 88 |
| Commercial | 576,730 | 308,538 | 311,114 | 268,192 | 87 |
| Total | 18,476,529 | 10,326,394 | 9,534,935 | 8,150,135 | 79 |

## Cost of Sales

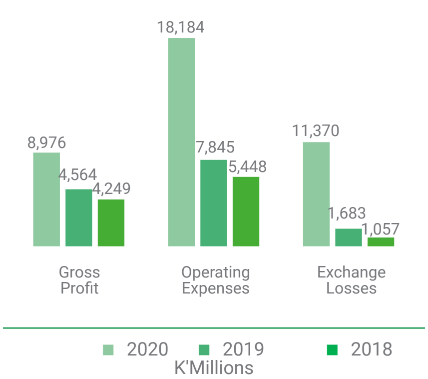
The cost of sales in the period increased by K3.7 billion, a 65% increase over 2019 mainly due to IPP Purchases. The IPP purchases contributed 80% towards the increase of cost of sales. This was further compounded by the increase in maintenance costs, generation water usage costs, direct labour costs, power imports and wheeling charges. The major driver was the exchange rate as most of the costs are foreign currency denominated.

| | 2020 | 2019 | 2018 | +/- | +/- |
|---|---|---|---|---|---|
| | K'000 | K'000 | K'000 | | |
| Local purchases | 7,160,479.00 | 4,164,568.00 | 3,609,806.00 | 72% | 2,995,911.00 |
| Direct labour costs | 976,688.51 | 875,945.00 | 854,873.33 | 12% | 100,743.51 |
| Maintenance costs | 246,373.00 | 341,223.00 | 319,948.00 | -28% | (94,850.00) |
| Power imports | 313,068.24 | 178,180.00 | 10,049.62 | 76% | 134,888.24 |
| Generation water usage costs | 138,247.00 | 89,865.00 | 80,027.00 | 54% | 48,382.00 |
| Local wheeling charges | 661,034.00 | 110,396.00 | 94,418.05 | 499% | 550,638.00 |
| Export wheeling charges | 5,060.76 | 1,825.00 | 9,276.25 | 177% | 3,235.76 |
| Emergency power imports | - | - | 307,231.58 | 0% | - |
| Total | 9,500,950.50 | 5,762,002.00 | 5,285,629.83 | 65% | 3,738,948.50 |

## Gross Profit Margin

The net effect of the 79% and 65% increase in turnover and cost of sales respectively resulted in a 10% increase in the groups Gross Profit Margin. As I provide an overview of our turnaround strategy, I will outline how overall group net profitability is expected to be restored over the foreseeable future.

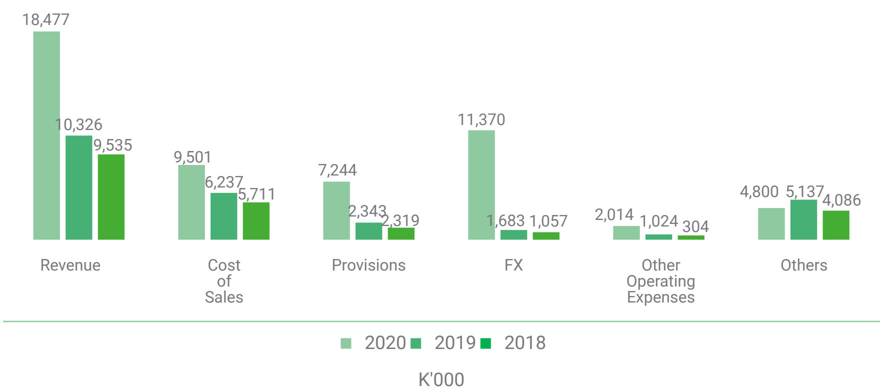
**Key Financial Elements**




## Operating Expenses and Profitability

Group profitability was mainly impacted by exchange losses on foreign denominated obligations comprising of amounts owed to the IPPs, Lenders and other suppliers. This was further compounded by high cost of electricity purchases, which far exceeds the average tariff at which ZESCO sells to its customers. The performance continued to be adversely impacted by the huge provisioning expenses, a spin-off of mostly disputed trade receivables with mining customers and penalties for delayed settlement of invoices.

**Expenses**

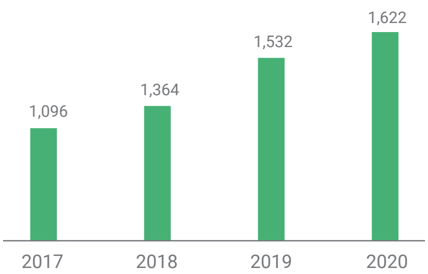



Earnings Before Interest, Depreciation, tax and amortization (EBIDTA) has continued to deteriorate and is expected tobe restored to a positive measure following the implementation of revenue management, cost optimization and operational stabilization as initiatives under the turnaround strategy

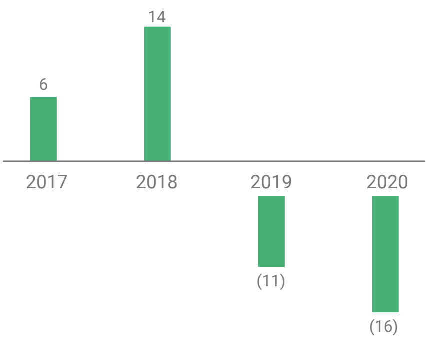
| EBITDA Margin | 2020 | 2019 | 2018 |
|---|---|---|---|
| | K'000 | K'000 | K'000 |
| Loss/ Profit before tax | -16,701,595 | (5,932,417) | -2,722,381 |
| Add back: | | | |
| Finance Costs | 795,096 | (629,857) | 554,735 |
| Depreci-ation and Amorti-sation Expense | 1,957,183 | 1,940,433 | 1,974,326 |
| Amorti-sation of Capital Grants and Contribu-tions | (187,031) | (174,380) | (151,425) |
| Exchange Losses | 11,371,151 | 2,341,584 | 1,652,336 |
| | | | |
| EBITDA | (2,765,196) | (2,454,637) | 1,307,591 |
| | | | |
| Revenue | 18,476,529 | 10,326,394 | 9,534,935 |
| EBITDA Margin | -15% | -24% | 14% |

## Group Financial Overview

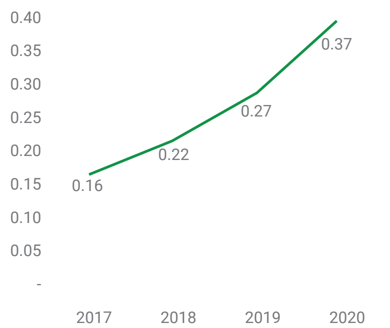
Revenue Per FTE (K '000)



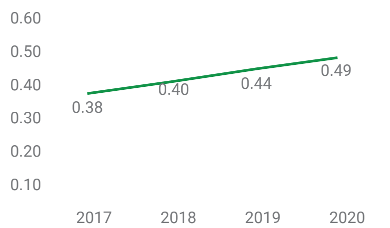

EBITDA Margin




Asset Turnover




Gross Profit Margin

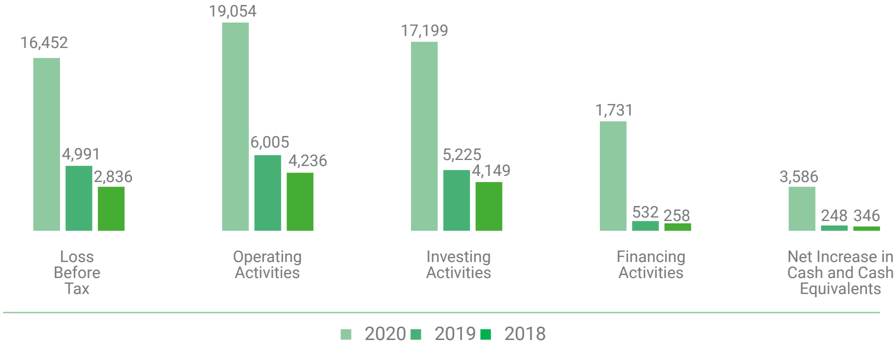



### Group Cash flow, Net Debt and Balance Sheet

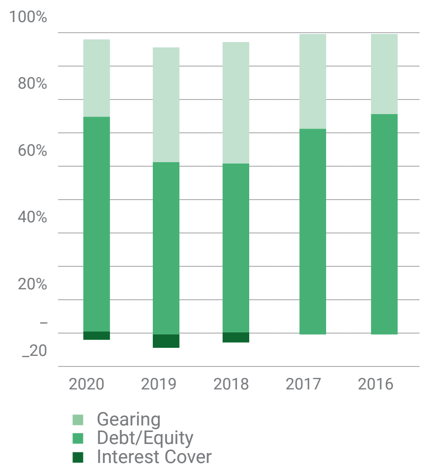
The group recorded a 28% drop in the net increase of cash and cash equivalents mainly due to continued investment in the Kafue Gorge Lower Power Station and other capital investments, while the cash generated from operating activities increased by 42% over the two years to K6million on account of movements in trade receivables, trade payables, deferred liabilities and amounts due to related parties.

**Operating Cashflow**

(Cashflow source K'000)




The group Net Debt increased by 31% due to foreign denominated obligations and the continued depreciation of the Kwacha over the period. The cash and cash equivalents on the other hand increased by 7% compared to 25% and 31% increments in Long and short-term liabilities respectively.

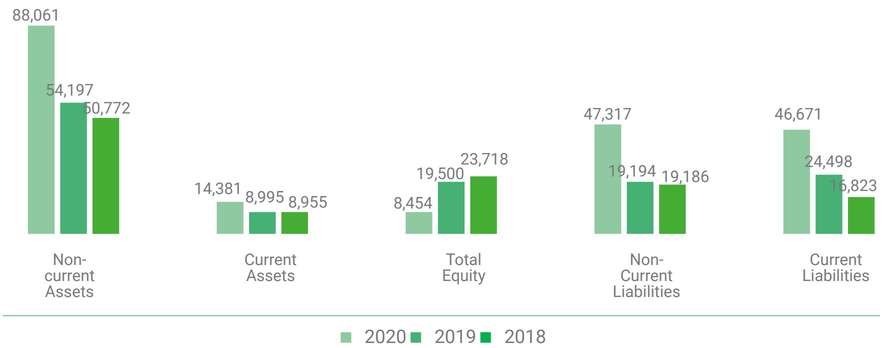



which accounted for over 80% of the total. Non-current assets on the other hand only increased by 7% while Net Assets dropped by 18% to K19.5billion mainly on account of the loss for the year.

Current Liabilities increased by by 46% from 2019 due to the accumulation of trade payables for power purchases,

**Assets and Liabilities**

(K'Million)



## Our View on Taxation and Our Economic Contribution to the Nation

We understand our responsibility to the ultimate success of the nation that taxes are most often the largest source of government revenue. ZESCO being a corporate citizen, paying taxes is one of its uncompromised duty. We view paying taxes as a blessing and not a burden. We have contributed to the nation through meeting our tax obligations in the following ways:

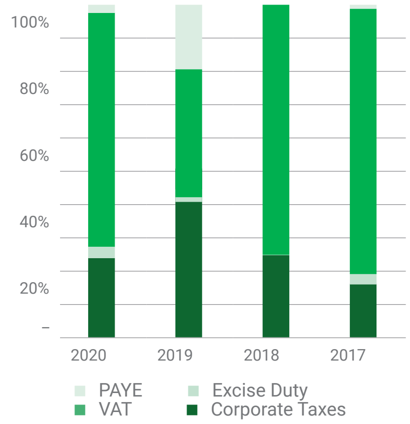
1. Nation building: The success of every nation is partly dependent on the tax-consciousness of its citizens. As a corporate citizen, we understand that running a country requires resources and it is the responsibility of every productive citizen to contribute. This is done through paying a portion of the income or profits to the national treasury for government to provide public goods and services.

2. Social welfare: The taxes we contribute help most of our vulnerable citizens through the government allocating funding to social welfare programs that uplift the lives of the people. It is our firm belief that a well-off community is better placed to sustain our business.

3. Improved services: We appreciate the role of taxes in improving and sustaining the citizens through provision of education, healthcare and security. As ZESCO we remain of the considered view that paying taxes is an investment rather than a burden.

The organization has also come up with the draft taxation policy which is awaiting approval. This will result in fairness, adequacy, simplicity, transparency, and administrative ease of taxes.

We remain committed to acting with integrity, honesty and transparency in the creation and execution of our tax strategy, policies and practices.




## Turnaround Strategy

The last seven years have seen ZESCO strive to maneuver one of the most turbulent and challenging periods since its inception. In 2014, the southern African region experienced low rainfall which compromised the corporation's ability to generate electricity. This threatened Zambia's economic outlook as electricity is the major driver for industries such as mining which contribute significantly to the nation's gross domestic product (GDP).To avert economic crisis the Government in partnership with ZESCO Limited procured power from numerous entities within the Region  albeit at a premium.

Further, agreements were entered into to purchase power locally from Independent Power Producers (IPPS) such as Maamba to supplement the power imports. However, the prevailing tariff review framework meant the domestic sales tariffs remained lower than the tariffs for both the power imports and purchases. This led to a liquidity gap and the accumulation of trade payables for power purchases and other liabilities, and the contracting of debt to finance working capital and other capital projects.

Additionally,, reduced economic output due to a number of factors including low copper prices and the COVID 19 pandemic saw the local currency depreciate over the seven year period. As a result, the corporation has suffered tremendous exchange losses on account of its cost structure being predominantly foreign denominated. The exchange losses further eroded the already non-cost reflective domestic tariff.

To address this situation, the Board of Directors approved a five-year turnaround strategy that will see the corporation implementing initiatives intended to restore profitability and improve commercial viability by addressing the following key challenges:

**Debt**
Engaging lenders with a view to restructure existing loan obligations and IPPs for tariff renegotiations.

**Revenue**
Strive to broaden the revenue base through means such as increasing foreign denominated inflows.

**Costs**
Optimizing the cost structure by leveraging on technology and ensuring all capital projects meet the acceptable Rate of Return while all non-critical projects will be deferred.

**Operations**
Improving service delivery and security of supply.

**ESI Structure/Regulation**
Support the completion of the Cost of service study and exploiting the sector reforms through suspension of non-economic electricity purchases and instead realizing wheeling income from such IPPs.

### Future Prospects

The management team and staff remain committed to the success of the initiatives employed and the achievement of financial and operational sustainability thereby assuring that value is realized for the shareholder and the broader public.

# Corporate Governance



"Corporate Governance aims to protect the rights and interests of shareholders. This includes building and maintaining cordial relationships between the company and the lenders with the objective to grow shareholder value."

# Chairperson Governance Report and Corporate Governance Statement

"Despite the challenging and changing external environment, the Board remained informed on strategic issues and engaged with stakeholders and continued to commit to high standards of corporate governance in line with provisions of the Board Charter".

As a Board Chairman, I am responsible for the company's governance arrangements and the effective operation of the Board. I am also responsible for ensuring that the Board sets the right tone from the top of the organisation and monitors the performance of the company. Given the unique challenges faced during 2020 as a result of the Covid-19 epidemic, it was important that the Board was properly informed on a regular basis on all key issues and priorities affecting the company.

To achieve this, we increased our Board communication and met more frequently during 2020, although meetings were held on-line. This allowed us to share insights and receive updates on key developments from Management. While the Board and its committees have operated well in a virtual environment, I do not underestimate the value of in-person meetings.

### Board Changes

During the year, the Board's mandate expired on 10 June 2020. The Shareholder Industrial Development Corporation Limited (IDC) re-appointed the Board for the next two years effective from 16 June 2020.

I would like to pay glowing tribute to Dr. Mbita Chintundya Chitala our former Board Chairperson, who resigned from the Board and his position as Chairperson for his positive contributions made during his tenure. The Board benefited from his immense public and private sector experience in providing clear strategic direction of the Company. We wish him success in his future endeavors.

I welcome Mr. David Chipasha who was appointed to the Board during the year. He brings with him experience the Private sector, with proven record of a successful entrepreneur.

The Board comprised of the Chairperson, One Executive Director, Three non-Executive Directors, and Permanent Secretary under Ministry of Energy.

The Board of Directors both old and new underwent a successful non-executive Director induction programme and Corporate governance training.

### Board Evaluation Performance

The Board signs Performance Contract with Shareholder - IDC on an annual basis. The Board performance is assessed on a quarterly and annual basis by Shareholder internal assessment process.

The performance of the Board was impacted by the Covid-19 pandemic and resulted in deferring the Board Evaluation conducted by the external consultant to 2021.

### Purpose and Values

The Board was fully involved in the process of formulating the Turnaround strategy. The role of the Board is to engage the key stakeholders on a number of key assumptions underpinning the Turnaround strategy of the company. Their input will be important and likely to influence the outcome of the Turnaround strategy.

The Board has set a tone at the top by adopting the core values in the Turnaround strategy, which inform the Board's engagement practices and help facilitate an open and collaborative relationship with its stakeholders.

### Conclusion

The Board will continue to adhere to Corporate Good Governance in line with the Board Charter of the company.

# Corporate Governance System

ZESCO's corporate governance seeks to make sure that the rights and interests of its shareholders are protected and its creditor relations are based on mutual trust. The corporate governance is the key driver behind building of trust of stakeholders and growth of the company's value.

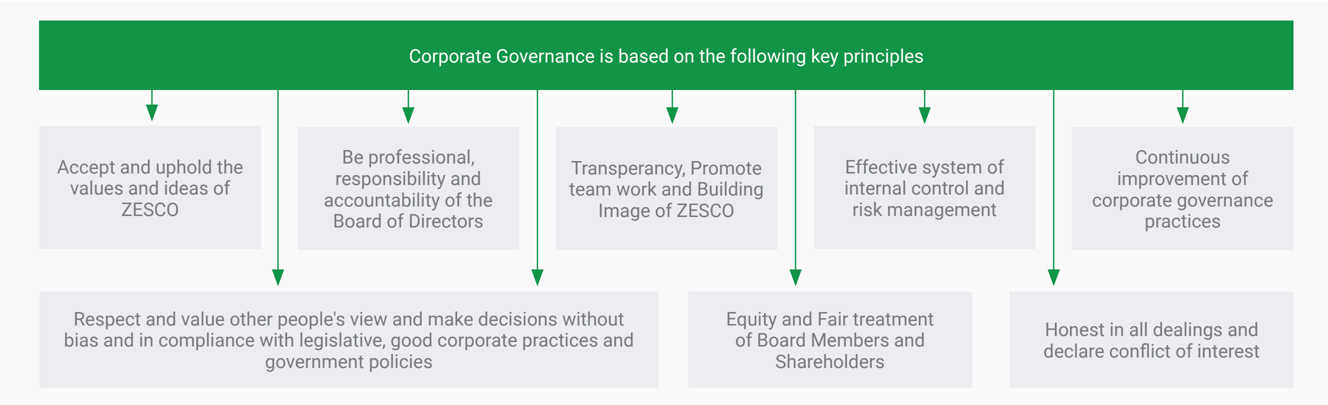
ZESCO's Corporate Governance Systems is founded on the following;

- Builds on compliance with the Local Applicable Laws such as Company's Act, Public Finance, and Zambian Procurement Laws;
- Seeks to incorporate best global and Local Practices;
- Takes into consideration the Company's Act recommendations;

Having the Industry Development Corporation Limited (IDC) as the Company's controlling shareholder exert significant influence on the corporate governance processes is a key distinctive feature of the Company's governance framework.

## Corporate Governance Principles

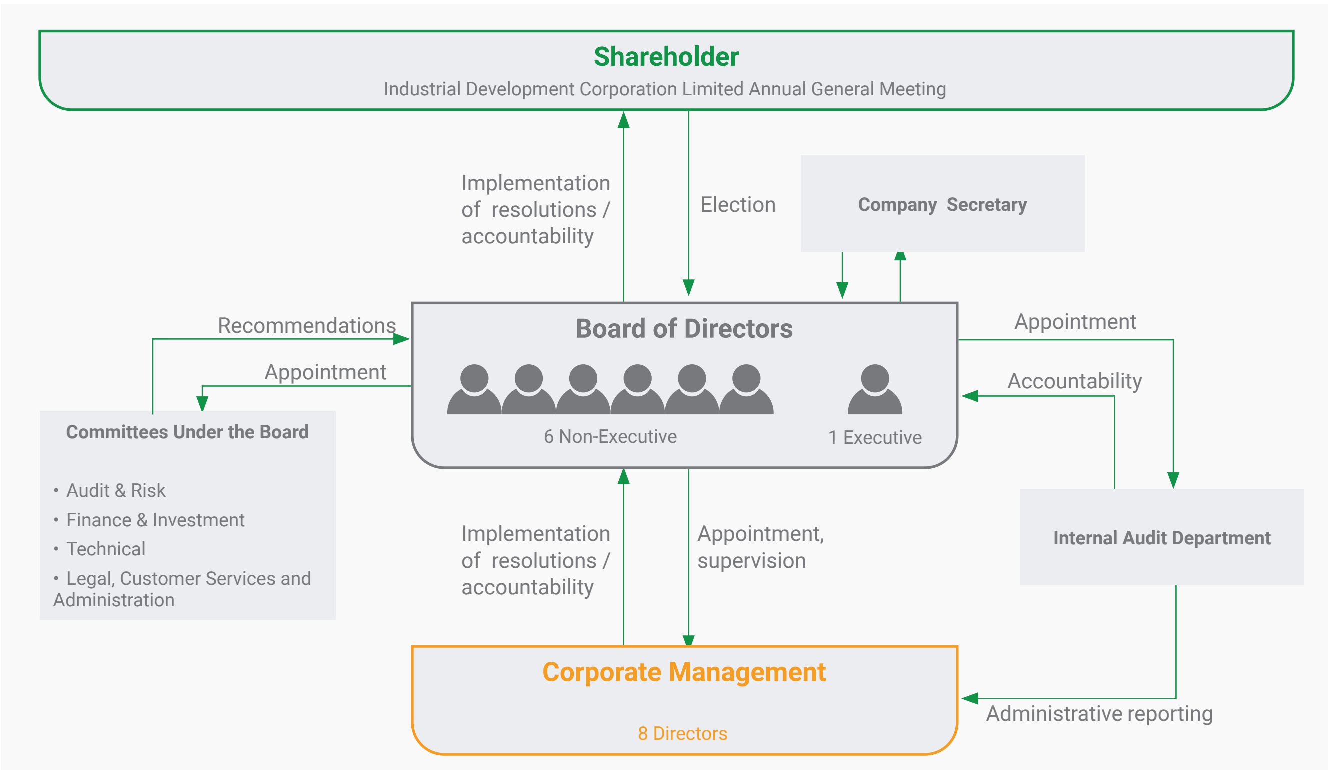
The Company's Corporate Governance Principles and Practices are laid out in the Board Charter. The Corporate Governance principles include;




## Compliance with the Corporate Governance Principles

During the year the company did not undertake any external evaluation to adherence to the Corporate Governance Principles. This was on account of Board members mandate ended mid-way through the way and were re-appointed later in the same year. However, measures have been planned to undertake Board assessments in 2021.

## Corporate Governance Structure



## Board Assessment

During the year, Performance of the Company's Board of Directors was assessed collectively using Key Performance Indicators (KPIs) set by the Shareholder - Industrial Development Corporation Limited. The KPIs was focused on the following areas and scoring.

| No | KPIs | Target | Score |
|---|---|---|---|
| 1 | Financial | 70% | 33% |
| 2 | Corporate Governance | 5% | 5% |
| 3 | Improve internal processes | 5% | 4.5% |
| 4 | Stakeholders | 5% | 5% |
| 5 | Learning & Growth | 5% | 5% |
| 6 | Innovations | 5% | 5% |
| 7 | Intra-group business | 5% | 5% |
| | | 100% | 63% |

The Board's performance in relation to the KPIs set by IDC was 63%, below the set target acceptable by the Shareholder of 75%. The financial component comprises 70% of the KPIs and the Board scored less than 50% on this section due to a number of external factors that impacted adversely the implementation of strategy.

## Board Composition

The Board of Directors is the governing body responsible for overall management of the Company.

The Board of Directors is comprised 7 members of 1 Executive Director and 6 Non-executive Directors with an average age of 55 years.

When selecting candidates for the Board of Directors, the Company is committed to promoting gender diversity - includes Ms. Kavumba and many who sit on various Sub-committees.

The balance of the Board of Directors is achieved through a high level of professional knowledge and expertise, sufficient time for performing the duties of members of the Board of Directors, and absence of a conflict of interest, all of which contribute to effective decision-making.

## Composition of Board of Directors

| | | | Board Committees | | | |
|---|---|---|---|---|---|---|
| Full name | Year of Appointment | Director status | Audit & Risk | Finance & Investments | Legal, Customer & Commercial Services and Administration | Technical |
| Dr. Mbita C. Chitala | Resigned on 03 Dec-2020 | Independent | ● | ● | ● | ● |
| Mr. Chibwe D. Mwelwa | Appointed board chairperson on 3-Dec-2020 replacing Dr. M. Chitala | Independent | ● | ● | ● | ● |
| Mr .Trevor Kaunda | 20-Sep-19 | Non-Executive | | | ● | |
| Mr. Victor M. Mundende | 16-Jun-20 | Executive - Managing Director | ● | ● | ● | ● |
| Mr. George M. Kanja | 16-Jun-20 | Independent | | | ● | ● |
| Ms. Kavumbu Hakachima | 16-Jun-20 | Independent | | | ● | ● |
| Mr. Pythias Mulenga | 16-Jun-20 | Independent | ● | ● | | |
| Mr. David Chipasha | 3-Dec-2020 | Independent | | | | |

# Corporate Governance System Continued

## Board Members and Biography

**Mr. Chibwe D. Mwelwa**

Board Chairperson - Independent non executive

A F L T

Education, academic Degree, academic rank:

- Graduated from Edinburgh School of Business, Herriot-Watt University, Scotland with a Master's in Business Administration (MBA),
- Graduated from the University of Glamorgan, Cardiff, United Kingdom with Masters of Science in Procurement (MSc),
- Graduated from the Copperbelt University, Zambia with a Bachelor of Science (BSc) Degree in Production and Operations Management (Industrial Engineering),

Experience over the last 5 years:

- August 2012 to present - Procurement Director at Millennium Challenge Account Zambia
- February 2008 to August, 2012: Business Unit Purchasing and Stores Manager at Lafarge Cement Zambia Plc

Memberships and Accreditation

- Fellow of the Zambia Institute of Purchasing and Supply (ZIPS)
- Fellow of the Chartered Institute of Purchasing and Supply (CIPS)
- Member of MIACCM (International Association for Contracts and Commercial Management)
- Member of the Engineering Institute of Zambia

**Dr Mbita C Chitala**

Independent non executive

A F L T

Education, academic Degree, academic rank:

- Graduated from the Zambia Open University with a Bachelor of Laws (LLB) degree
- He holds a PHD degree in Public Administration from the University of Zambia.
- He also holds a Master's Degree in Public Administration
- Graduated from the University of Zambia with a Bachelor's Degree in Education

**Mr Trevor K Kaunda**

Non Executive Board Member

L

Education, academic Degree, academic rank:

- Graduated from the University of Zambia with a Bachelor of Science Degree in Mathematics/Computer Science
- Acquired a National Advanced Certificate in Insurance (NAC) under the Zambia Insurance Business College Trust (ZIBCT), Lusaka
- Acquired a Basic Stockbrokers and Investment Advisors Certificate under the Zambia Insurance Business College trust (ZIBCT)
- Graduated from the University of Lusaka with an Executive master of business administration (EMBA) in Leadership and Wealth Creation.

Experience over the last 5 years:

- Sep 2019 - present: Permanent Secretary – Ministry of Energy
- Jan 2019 - Sep 2019: Permanent Secretary – Management Development Division (MDD) at Cabinet Office
- 2016 to 2019: Permanent Secretary – Ministry of Lands and Natural Resources

Memberships and Accreditation

- Mr Kaunda also sits on a number of Government boards and committees such as TAZAMA Pipeline Limited, Zambezi River Authority, CEC Plc and Indeni Refinery Co Ltd.

**Mr Victor M Mundende**

Managing Director

A F L T

Education, academic Degree, academic rank:

- Graduated from the University of Zambia in 1991 with a Bachelor's Degree in Engineering
- Trained in Advanced Strategic Management, IMD, Laussanne Switzerland
- Trained in Management of Hydropower Development from Vattenfall Power Consultants in Stockholm, Sweden

Experience over the last 5 years:

- 2017 – present: Managing Director, ZESCO Limited
- 2013 – 2017: Chief Operating Officer (COO), ZESCO Limited

Memberships and Accreditation

- A member of the Institute of Directors (IOD)
- A fellow of the Engineering Institution of Zambia (EIZ)
- Member of the Institute of Electrical and Electronics Engineers (IEEE)
- Chairman of the Board of Directors at Fibrecom,
- Chairman of the Board of Directors at Kariba North Hydroelectric Power Station (KNBE),
- Chairman of the Board of Directors at Kafue Gorge Lower (KGL) Power Station,
- Chairman of the Board of Directors at Batoka Gorge Hydropower Station,
- Patron of the ZESCO United Football Club

**Mr George M Kanja**

Non Executive Board Member

L T

Education, academic Degree, academic rank:

- Graduated from Queen Mary & Westfield College University of London with a Master of Laws Degree (LLM),
- Graduated from the University of Zambia, School of Law with the Bachelor of Laws Degree (LLB)
- Graduated from the University of Turin, Italy (2001) with a Post Graduate Diploma in Intellectual Property Law, School of Law,
- Graduated from the University of Lund, Sweden with a Post Graduate Diploma in Human Rights, Raoul Wallenberg Institute of Human Rights and Humanitarian Law

Experience over the last 5 years:

- Principal Legal Consultant to conduct a comprehensive review of the National Registration Act of Zambia, Cap 126 of the Laws of Zambia,
- Consultant to the Patents and Companies Registry Office (PACRO), Ministry of Commerce, Trade and Industry to review of the Industrial Property Laws and the Companies Act and proposed Insolvency Law.
- On July 14 to 16, 2016, George was a Resource Person facilitating the module on Intellectual Property Rights to the Association of African Universities on Training Workshop on University-Industry Linkages for African Universities held in Lusaka, Zambia.

Memberships and Accreditation

- Member of Law Association of Zambia
- Member of the Institute of Directors of Zambia
- Member of Rotary Club of Maluba & Paul Harris Fellow
- Member of Lusaka Golf Club
- Vice-Chairperson, Patents and Companies Registry Agency (PACRA) Board
- Board Member, University of Lusaka
- Member on the Football Association of Zambia (FAZ) Appeals Committee
- Formerly, Commissioner at Law Development Commission, and Council Member of the Law Association of Zambia.

# Corporate Governance System Continued

## Board Members and Biography

### Ms. Kavumbu Hakachima

Non Executive Board Member

T L

Education, academic Degree, academic rank:

- Graduated from University of Zambia with a Bachelor of Arts Degree in Education
- Obtained a Certificate in Community Mobilization and Advocacy – CARE International
- Obtained a Certificate in Psycho-Social Rehabilitation of Commercial Sexual exploitation of Children (CSEC) by ECPAT – East African Region.
- Obtained a Certificate in training of Street Educators by Children in need network.

Experience over the last 5 years:

- 2015: Chikankata District Commissioner
- 2016: Adopted as Parliamentary Patriotic Front Candidate for Chikankata Constituency

### Mr. Pythias Mulenga

Non Executive Board Member

A F

Education, academic Degree, academic rank:

- Graduated from the University of Zambia, Lusaka, Zambia with a PhD in Public Administration
- Graduated from the University of Zambia, Lusaka, Zambia with a Masters Public Administration
- Graduated from the University of Zambia, Lusaka, Zambia with a Bachelor of Arts Degree with Education (B.A.)

### Mr. David Chipasha

Non Executive Board Member

Education, academic Degree, academic rank:

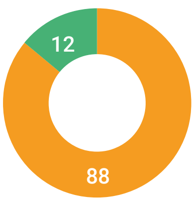
- Graduated from Chreso University with a Masters Business Finance
- Graduated from Northrise University with a Bachelor of Arts Degre in Business Administration

Experience over the last 5 years:

- Managing Director/Proprietor of Evergreen Lodges

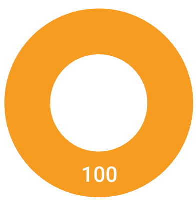
## Our Board Diversity

### By Gender



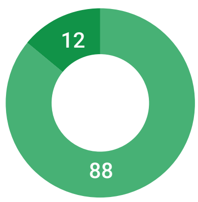

- Male 86%
- Female 12%

### By Nationality




- Zambian

### By Tenure




- < 1 years
- 1-3 years

### Committee Membership Key:

- A Audit & Risk Committee
- F Finance & Investment Committee
- L Legal, Customer & Commercial Services & Administration Committee
- T Technical Committee
- Chair of the Committee

Read more about the *Board committees on page 36*

**Board Decisions**

During the year, the Board had 4 ordinary meetings and 5 special Board meetings at which the following matters and decisions where discussed.

| Key areas of activity | Matters considered |
|---|---|
| Developing a successful Turnarnound Strategy | • Attended company's turnaround strategy session with members of the Corporate Management team and other senior executives to consider key strategic priorities and challenges faced by the business.<br>• Approved the company's Turnaround Strategy<br>• Visited construction site to check on progress on Kafue Gorge Lower Power Station Corporation and other strategic investments.<br>• Received and reviewed performance reports on both technical and financial performance of the company.<br>• Received reports on technical relating to industry developments and renewable energy |
| Ensuring appropriate financial management | • Received and reviewed financial performance reports of company.<br>• Approved NAPSA bridging financing for completion of Kafue Gorge Lower Hydro Power Project.<br>• Approved the annual budget and procurement plan.<br>• Reviewed and approved credity facility extensions. |
| Implementing governance and ethics and monitoring risks | • Approved Enterprise Risk Management Framework<br>• Reviewed regular reports on legal and compliance matters from the Company Secretary, including from the company's whistle blowing arrangemnts |
| Stakeholder engagement | • Reviewed reports on Commercial & Customer Service and Administration.<br>• Approved Covid-19 response package for customers and employees<br>• Considered and approved engagement of engagement of WARMA on water rights on Luapual River. |

## Board Committees and Composition

The Board delegates its authority to committees to deal with matters which are specialized in nature. The committees are advisory bodies assisting the Board of Directors to effectively perform its general management duties. The committee membership is drawn from within the Board members and also from Professional Bodies and the Public.

The committees include the following;

- Audit and Risk;
- Finance and Investment;
- Legal, Customer & Commercial Services and Administration Committee;
- Technical Committee;

## Corporate Governance System Continued

### Audit and Risk Committee

The Committee assists the Board of Directors in exercising control over the Company’s financial and business operations.

| Members of the Committee | Attendance | Competence | Key performance results and recommendations issued to the Board of Directors |
|---|---|---|---|
| Chibwe Mulenga | 4/4 | The Committee assists the Board of Directors in exercising control over the Company's financial and business operations. The key responsibilities include:<br>• To provide oversight of the financial statements;<br>• To evaluate the effectiveness of internal control;<br>• To review risk management framewrok;<br>• To assess the performance of external auditors and recommend the appointment of external auditors; and<br>• To review the internal audit charter and independence of Internal audit department. | • Reviewed the Financial reporting Control environement.<br>• Reviewed and recommended to the Board the 2019 the audited Financial Statements for approval.<br>• Considered and recommended the audit matters arising from year end audit to the Board.<br>• Reviewed and recommended for approval the Risk Management Framework.<br>• Reviewed the effectiveness of internal controls and recommended to the Board for approval.<br>• Reviewed and considered the Tax Policy of the company. |
| Emmanuel Banda | 4/4 | | |
| Alice Simbaya | 4/4 | | |
| Chibwe D. Mwelwa | 4/4 | | |
| Dr. Mbita C. Chitala | 4/4 | | |
| Victor M. Mundende | 4/4 | | |

### Finance and Investments Committee

The Committee is comprised of Board members, Executive Directors and Independent member from Public sector under Ministry of Finance.

| Members of the Committee | Attendance | Competence | Key areas of activity |
|---|---|---|---|
| Chibwe D. Mwelwa | 4/4 | • The Committee is charged with responsibility to review Investment policy.<br>• To evaluate investments in new projects.<br>• To evaluate available financing options for future new investments.<br>• To assess and monitor company’s financial and business performance.<br>• To review the key performance indicators set by Shareholder - Industrial Development Corporation. | • Reviewed and considered hedging measures management is considering to implement to hedge against foreign exchange losses.<br>• Reviewed Company Performance through Management Accounts and recommended to the Board for approval.<br>• Reviewed Revenue enhancement strategies and recommended to the Board.<br>• Considered Turnaround strategy and approved key assumptions.<br>• Reviewed and recommended the 2021 Budget for approval to the Board.<br>• Reviewed and recommended the 2021 Budget for approval to the Board. |
| Chibwe Mulenga | 4/4 | | |
| Dr. Mbita C. Chitala | 4/4 | | |
| Victor M. Mundende | 4/4 | | |
| Emmanuel Banda | 4/4 | | |
| Patrick Mwila | 4/4 | | |
| Mwila Kasase Zulu | 4/4 | | |
| Brian Kambole | 4/4 | | |

### Legal, Customer & Commercial Services and Administration Committee

The Committee is responsible for providing oversight on Legal, Customer & Commercial, Human Resources and Marketing/Publicity. It's comprised of Board members, Executive Directors and Independent members

| Members of the Committee | Attendance | Competence | Key areas of activity |
|---|---|---|---|
| George M. Kanja | 4/4 | • To review various Legal cases and make recommendations on the most cost effective manner of disposal.<br>• To review Human Resources, Plans, Polices and Procedures.<br>• To review Customer Service and Commercial Charter.<br>• To review Marketing and Public Relation strategies Plans. | • Reviewed the staff organogram and establishment;<br>• Reviewed strategies to reduce Labour costs and improve labour productivity;<br>• Discussed matters relating to industrial relations and recommendations on how to improve the relationship. Matters discussed include revision of condition of service, training needs of employees and discliplinery related cases.<br>• Reviewed Occupational Helathy strategies in combating Covid-19 and impact on the Organisation.<br>• Reviewed legal cases involving ZESCO versus Mining customers and recommended to find quick ways of concluding the legal matters.<br>• Reviewed and recommended for approval policies relating to anti-corruption and whistle blower policy.<br>• Reviewed policies relating to land acquisition and recommended for approval new land acquisitions during the year<br>• Reviewed strategies of customer expansions and considered proposed measures to grow customer base by focussing on dismantling the backlog<br>• Reviwed strategies of revenue collections and considered proposed measures to enhance revenue collections |
| Kavumbu Hakachima | 4/4 | | |
| Dr.Mbita C. Chitala | 4/4 | | |
| Victor M. Mundende | 4/4 | | |
| Rhoda K. Mwale | 4/4 | | |
| Chiti Mataka | 4/4 | | |
| McRobby V. Chiwale | 4/4 | | |
| John Kunda | 4/4 | | |
| Nancy Sikazwe | 4/4 | | |

### Technical

The Committee comprises of Board members, a representative from the Professional Body Engineering Institute of Zambia and Executive Directors with technical background.

| Members of the Committee | Attendance | Competence | Matters considered |
|---|---|---|---|
| Ms. Kavumbu Hakachima | 3/3 | • To assess and review Technical performance of assets involved in Generation, Transmission and Distribution.<br>• To design the system of internal project identification, appraisal and reporting.<br>• To design the process of approval leading to implementation and recommend to the Board.<br>• To supervise and monitor compliance with Regulatory laws, Engineering Institute of Zambia and Engineering code of practice. | • Reviewed water allocations and water levels at Kariba North Bank Dams and ITEZHI TEZHI Dams.<br>• Reviewed the powerful outages at Kariba North Bank Power Station under Generation, Transmission and Distribution and cosidered the matters recommended for enhancement of system performance.<br>• Reviewed progress of construction of Kafue Gorge Lower Hydro Power project due to financing gap and recommded to the Board on options to be considered to fast track the completion of the Project. |
| Dr. Mbita C. Chitala | 3/3 | | |
| Mr. Chibwe D. Mwelwa | 3/3 | | |
| Mr. Boyd Simposya | 3/3 | | |
| Mr. Victor M. Mundende | 3/3 | | |
| Mr. Fidelis Mubiana | 3/3 | | |
| Mr. Webster Musonda | 3/3 | | |
| Mr. Yona Sichalwe | 3/3 | | |

## Corporate Governance System Continued

### Internal Audit
The Group Internal Audit is an independent department, which provides assurance in the internal control environment of the Company and Group. The Senior Manager Internal Audit reports functionally to the Audit and Risk Committee and administratively to the Managing Director.

The Audit & Risk Committee reviewed and approved internal audit charter and is satisfied that the internal audit function is independent and appropriately resourced.

The following key matters were undertaken;

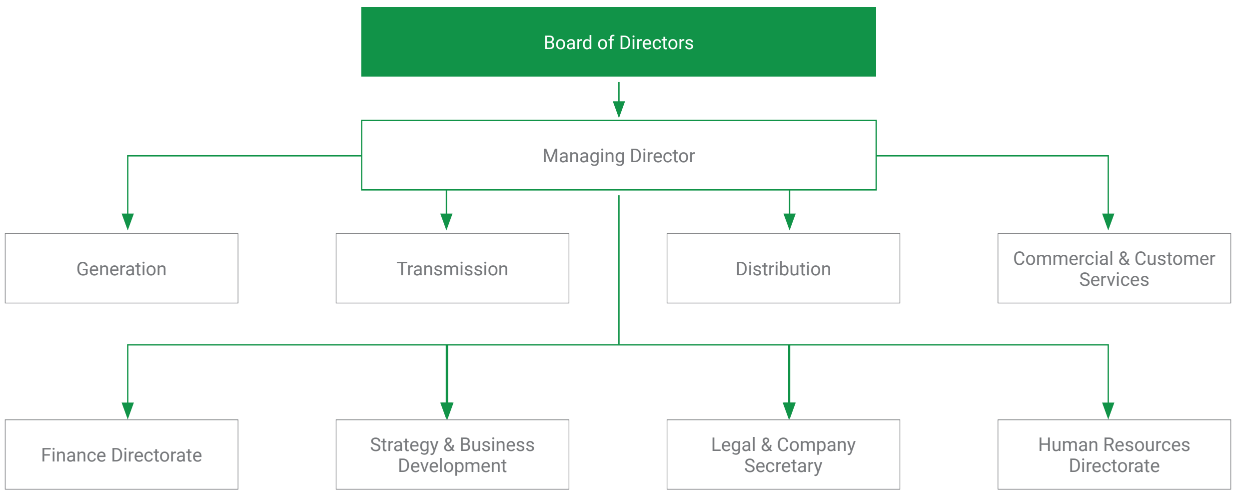
- Evaluating the effectiveness of internal controls over financial reporting and internal controls in general;
- Assessing the governance of risk within the Company;
- Reviewing the governance of Information Technology within the Company;
- Assessing compliance with laws, rules, codes and standards within Company;
- Reporting findings to management and the Audit and Risk Committee and monitoring the remediation of all significant deficiencies reported;
- Implementing a combined assurance Framework;

Internal Audit will continue to fulfil the obligations charged by the Audit & Risk committee by providing oversight on the control environment of the Group.

## Corporate Management Team

Corporate Management is a collective executive body responsible for day to day management of the Company.

### Composition of Corporate Management Team
The composition of Management team is determined by Board.




The appointment of Executive Directors is done by the Managing Director and the Board of Directors approves the appointments to Corporate Management.

During the year, the following contracts of employment were extended;
- Mr. Chiti Mataka - Director Commercial and Customer Services;
- Mr. McRobby V. Chiwale - Director Legal & Company Secretary;
- Mrs. Rhoda K. Mwale - Director Human Resources;

**Mr Fidelis Mubiana**

Director Generation

T

Education, academic Degree, academic rank:

- Graduated from the University of Zambia with a Bachelor of Engineering Degree in Mechanical Engineering
- Graduated from the Manchester University with a Master's Degree in Business Administration

Experience over the last 5 years:

- 2015 – Present: Director Generation

Memberships and Accreditation

- A fellow of the Engineering Institution of Zambia (EIZ)
- A member of the Institute of Directors (IOD)
- Member of the Board of Directors of Kafue Gorge Lower (KGL) Power Station
- Member of the Board of Directors of Kariba North Hydroelectric Power Station (KNBE),
- Member of the Board of Directors of Kafue Gorge Regional Training Centre (KGRTC),
- Member of the Board of Directors of Itezhi Tezhi Power Corporation (ITPC)

**Mr Webster Musonda**

Director Transmission

T

Education, academic Degree, academic rank:

- Graduated from the University of Zambia with a Bachelor of Engineering Degree in Electrical Engineering

Experience over the last 5 years:

- 2015 – Present: Director Transmission

Memberships and Accreditation

- A fellow of the Engineering Institution of Zambia (EIZ)
- A member of the Institute of Directors (IOD)

**Mr Yona Sichalwe**

Director Transmission

T

Education, academic Degree, academic rank:

- Graduated from the University of Manchester with a Masters Degree in Business Administration
- Graduated from the Copperbelt University with a Bachelor of Engineering Degree in Electrical/Electronics Engineering
- Obtained a Diploma in Electrical Engineering at the Copperbelt University

Experience over the last 5 years:

- 2019 - present: Director Distribution – Distribution Network Policy Driver
- 2016 – 2019: Divisional Manager

Memberships and Accreditation

- A member of the Institute of Directors (IOD)
- February 2019 to date – Board Member of Elsewedy Electrical Zambia Limited
- February 2019 to date – Board Member of Zambia Electro Meter (ZEM)
- February 2019 to date – Board Member of ZESCO TRAINING CENTER (ZTC)
- December 2016 to 2019 – Board Member ZESCO United Football Club
- A fellow of the Engineering Institution of Zambia (EIZ)
- Member of the Institute of Electrical and Electronics Engineers (IEEE)

# Corporate Governance System Continued

**Mr Emmanuel M. Banda**

Director Finance

F

Education, academic Degree, academic rank:

- Graduated from Copperbelt University (Zambia) with a Bachelor Degree in Accountancy.

Experience over the last 5 years:

- April 2016 to March 2019 - Executive Director & Head of Corporate & Institutional Banking, Zambia (CIB) at Standard Chartered Bank Group (SCB)
- August 2014 to March 2016 - Managing Director & Head of Commercial Clients at Standard Chartered Bank Kenya Head Commercial Clients, Kenya & East Africa

Memberships and Accreditation

- A member of the Institute of Directors (IOD)
- A fellow of the Chartered Institute of Management Accountants (CIMA-UK)
- A fellow of the Global Chartered Management Accountants (GCMA-UK)
- Member of Zambia Institute of Certified Accountants (ZICA) and a graduate of the Manchester Business School's MBA Program in Banking and Finance, UK.
- Board Chairman of the CIMA Zambia
- President of Lions Club of Manda Hill,
- Trustee on the Standard Chartered Bank Zambia Pension Fund,

**Mr. Chiti Kabwe Mataka**

Director Customer Services

L

Education, academic Degree, academic rank:

- Graduated from the University of Zambia with a Bachelor's Degree in Accounting and Finance
- Obtained an ACCA

Experience over the last 5 years:

- 2016 – Present: Director Customer Services
- 2011 – 2016: Senior Manager Budgets, ZESCO Limited

Memberships and Accreditation

- A member of the Zambia Institute of Chartered Accountants (ZICA)
- A fellow of the Association of Chartered Certified Accountants (ACC)
- A member of the Institute of Directors (IOD)

**Ms Rhoda K Mwale**

Director Human Resources and Administration

L

Education, academic Degree, academic rank:

- Graduated from the University of Zambia with a Bachelor of Arts Degree in Industrial Psychology major and a minor in Public Administration
- Obtained a Master's Degree in Administration

Experience over the last 5 years:

- 2016 – Present: Director Human Resources and Administration

Memberships and Accreditation

- A member of the Zambia Institute of Human Resource Management (ZIHRM)
- A member of the Institute of Directors (IOD)
- Member of the Board of Directors of Local Authorities Superannuation Fund (LASF)
- Member of the Board of Directors of Kafue Gorge Regional Training Centre (KGRTC)
- Member of the Board of Directors of ZESCO Training Center (ZTC)

**Mr Patrick Mwila**

Director Strategy & Corporate Services

F

Education, academic Degree, academic rank:

- He is a holder of a Bachelor of Engineering Degree in Electrical Engineering (with bias in Electronics & Telecommunications) obtained from the University of Zambia
- Diploma in Senior Management Development Program (SMDP) from the University of Stellenbosch (USB).

Experience over the last 5 years:

- 2019 – present: Director Strategy & Corporate Services
- 2017 – 2019: Senior Manager Corporate Affairs, ZESCO

Memberships and Accreditation

- A fellow of the Engineering Institution of Zambia (EIZ)
- Member of the Institute of Electrical and Electronics Engineers (IEEE)
- A member of the Institute of Directors (IOD)
- Member of the Board of Directors of Kariba North Bank Extension Power Corporation (KNBEPC)
- Member of the Board of Directors of Fibrecom

**Mr. McRobby V Chiwale**

Director Legal

L

Education, academic Degree, academic rank:

- Graduated from the University of Zambia with a Bachelor of Laws Degree
- Graduated from Birmingham University, UK, with a Master of Laws Degree in Commercial Law

Experience over the last 5 years:

- 2016 – Present: Director Legal
- 2015 – 2016: Senior Manager Legal Services

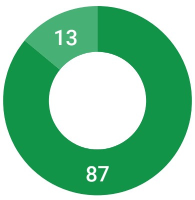
Memberships and Accreditation

- Director and Company Secretary of Merit Investments limited
- A member of the Institute of Directors (IOD)
- Associate member of the Chattered Institute of Arbitrators (CIArb)
- 1998 – present: Member of Law association of Zambia
- Company secretary for ZESCO and all the subsidiaries companies of ZESCO

**Committee Membership Key:**

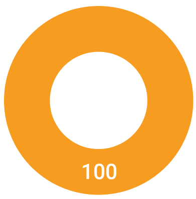
- A Audit & Risk Committee
- F Finance & Investment Committee
- L Legal, Customer & Commercial Services & Administration Committee
- T Technical Committee
- Chair of the Committee

**By Gender**



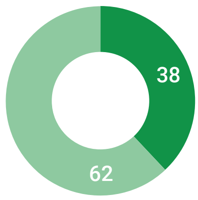

- Male 87%
- Female 13%

**By Nationality**




- Zambian

**By Tenure**




- < 1 years
- 1-3 years
- 3-6 years

# Corporate Governance System Continued

Corporate Management meets regularly at least twice a month. During the year the following decisions made;

| Classification | Nature of Decision | Impact of Decision |
|---|---|---|
| Financial Sustainability | • Approved the US$190 million from NAPSA to finance Kafue Gorge Lower Hydro Power Corporation.<br>• Approved a financing facility of US$10 million to be applied towards reduction of backlog connections. | • Expansion of Primary Infrastructure |
| Strategic Sustainability | • Formulated turnaround strategy and submitted to the Board.<br>• Reviewed quarterly performance of the company and recommended for approval to Board.<br>• Reviewed and recommended for approval 2021 budget. | • Turning around the financial and operational performance of the Company over a 5 years |
| Occupational Heathy Sustainability | • Approved supplementary budget for Occupational Health department to support the fight against Covid-19 in the Organisation.<br>• Approved Medical financial assistance for employees with special medical attention. | • To reduce the impact of Covid-19 on the Organisation.<br>• To assist employees with conditions that require specialized medical attention. |
| Asset Creation Sustainability | • Approved the maintenance plan for generation, transmission and generation systems for 2021.<br>• Approved acquisition of Motor Vehicles for operations and projects.<br>• Approved acquisition of land for projects across the Country.<br>• Approved deferral of some non-critical projects as a measure to reduce the Covid-19 impact on the Organisation; | • Expansion of Primary Infrastructure |

## Procurement and stores management

To support our activities, ZESCO operates a centralized procurement system.

The company has put in place a number of internal controls at each stage of the process to prevent unplanned procurements and wastage of materials.

The Public Procurement Act of 2008, as amended in 2011 and internal Procurement Policy govern the company's procurements. The Public Procurement Act established the Zambia Public Procurement Authority as a Regulator to all Public Procurement Entities. The Zambia Public Procurement Authority appoints the Procurement Committees in Public Entities.

The Company's Board of Directors oversees procurement management, approves the annual procurement plan and monitors its progress report on a quarterly basis.

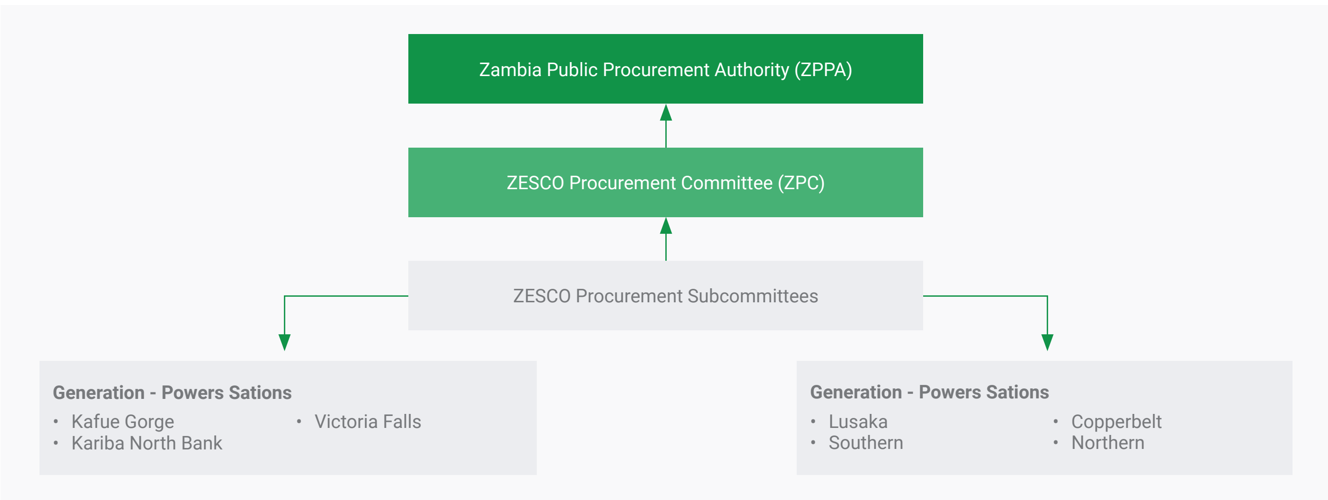
The ZESCO Procurement Committee (ZPC) is a collective body which shapes and carries out uniform procurement policy as well as exercises control and governs coordination of procurement activities. The ZPC Chairperson is responsible for procurement management across the Organization.

The ZPC delegates authority to Procurement Sub-Committees to procure goods, services or works of up to K500,000 and below.

The composition of the Procurement Committees includes;

- Managing Director
- Executive Directors
- Independent Members - Procurement Specialists

Below is the ZESCO Procurement Structure;



# Overview Our Strategy

"We have reviewed and redefined our strategy in response to significant shifts in the ESI, Environment and the Economy so as to align our purpose, values and ambition accordingly".

In response to shifts in the economy and ESI, we are updating our Strategy for 2021 – 2025 to turnaround the company's financial performance and thereby create value for its shareholders.

## Strategy at a Glance

Our turnaround strategic transformation involves the following elements:

### Strategic Context

**Strategy to a new ZESCO**

**Short Term Vision 2025**

To be a financially stable utility steering economic growth by delivering value to our customers

**Stabilise**

Improved System processes

Improved profitability - 30% EBITDA

Improve electricity reliability-

Cost reflective tariff path

Retain existing customers

Cumulative savings $5Bn

Debt Relief

Improved receivables

Reduces losses

**Recover**

Improve technical efficiencies

Clear transfer Pricing between SBUs

Lean and efficient ZESCO

Create critical Interconnectors with neighbouring countries (Vision 2025)

Acquire more FX customers

**Grow**

Diversification of the energy mix

Tariff adjustments to sustain growth

Smart metering

Increased private participation in the ESI

New frontier markets

Increasing FX client base

**Turnaround Plan**

Debt relief | Revenue Management | Cost initiatives | Business separation | Operational stability

Improve knowledge and skills

Improve use of technology

Advocacy and stakeholder engagement

## Strategic Pillars

**Strategic Pillars**

### Debt Restructuring

The initiatives under this strategy include;

- Conversion of on-lent loans to Equity: This involves converting on-lent loans given to the company by GRZ to equity thereby reducing the impact of debt exposure and improve gearing. The engagement process with the shareholder is in progress.
- Loan consolidation: This involves reviewing some of the expensive loans by renegotiating with Lenders on loan repayments and interest payments terms with a view to create free cashflows for reinvestment.

### Capex Optimisation

This initiative is aimed at prioritizing projects with confirmed financing from either internal or external sources

### Stakeholder & Change Management

- Identifying all key Stakeholders such as Shareholder - IDC/ MoF, Lenders, Independent Power Producers and Employees.
- The Change Management will ensure all employees adopt to new ways of doing business in line with the turnaround strategy.

### Opex Optimisation

The strategy focuses on the following initiatives;

- Tariff re-negotiations with IPPs with a view to agree a tariff that is below the company's average selling price.
- Automation of processes aimed at operational efficiency thereby reducing costs.
- Outsourcing some of the activities with a view to bring value addition and reduce costs.
- Labour optimization involves aligning the existing structures to the strategy and automation of processes.

### Asset Optimisation

- Asset Management system with a view to improve the maintenance of assets thereby enhancing the effectiveness and lifecycle of the assets.

### Tariff Adjustments and Revenue Enhancement

- Migration to cost reflective tariff
- Revenue enhancement

# Key Performance Indicators against Strategic Objectives

We have defined a number of KPIs and targets to measure our performance. We continually monitor our performance against these targets and when necessary, revise them to take into account changes in the strategic outlook. The KPIs consist of both financial and non-financial measures designed to gauge performance by the Board.

| | | Actual 2020 | Target 2020 | Actual 2019 | Rate of Achievement | Status |
|---|---|---|---|---|---|---|
| | Financial | | | | | |
| 1 | Debt/EBIDTA[1] | -0.49 | 6 | -0.12 | -8% | Not Achieved |
| 2 | Debt Service Cover Ratio[2] | -3.93 | 1.25 | -0.78 | -314% | Not Achieved |
| 3 | EBIDTA[3] | -12,755 | 4,709 | -2347 | -271% | Not Achieved |
| 4 | Average Selling Tariff/Average IPP tariff[4] | 0.82 | 1 | 0.55 | 0% | Not Achieved |
| 5 | Cash Conversion Rate - Domestic - ZMW[5] | 93% | 100% | 101% | 93% | Achieved |
| 6 | Cash Conversion Rate - Mining - US$[6] | 62% | 100% | 80% | 62% | Not Achieved |
| 7 | Cash Conversion Rate - Exports - US$[7] | 89% | 100% | 94% | 89% | Not Achieved |
| 8 | Liquidity[8] | 33% | 100% | 37% | 33% | Not Achieved |
| 9 | Revenue - ZMW[9] | 18,477 | 17,641 | 10,326 | 105% | Achieved |
| | | | | | | |
| | Non-Financial | | | | | |
| 1 | SAIDI[10] | 71.6 hrs | 27 hrs | 132.2 hrs | 2.65 | Not Achieved |
| 2 | SAIFI[11] | 8 | 5 | 12 | 150% | Not Achieved |
| 3 | Energy sold in volume[12] | 13,759 | 13,864 | 13,882 | 99% | Achieved |
| 4 | Labour Productivity[13] | 159 | 100 | 151 | 159% | Achieved |
| 5 | Growth in Customer Base[14] | 54,368 | 66,000 | 59,552 | 82% | Not Achieved |
| 6 | Number of fatal incidences (annual average)[15] | 1 | 0 | 0 | 95% | Not Achieved |
| 7 | Customer Complaint Resolution Rate[16] | 95% | 90% | 96% | 106% | Achieved |
| 8 | Customer Connection Average Rate (CCAR)[17] | 4% | 30 | 14 | 0% | Not Achieved |
| 9 | Distribution Losses[18] | 14% | 11% | 11% | 126% | Not Achieved |

1 The period it takes to amortise interest bearing Debt. The target is 6 times or below.
2 The company's ability to service principle loan repayments and interest as they fall due.
3 The company's ability to generate sufficient Earnings to cover Debt servicing and Interest. It's calculated as Earnings Before Interest, Tax and Amortisation.
4 It's a measure of selling tariff in relation to the purchase tariff from Independent Power Producers. The result below 1 indicates selling tarriffs are lower than buying tariff from IPPs.
5 The ability to convert the sales into cash generation. It's calculated as cash generated as a percentage of sales.
6 The ability to convert the sales into cash generation. It's calculated as cash generated as a percentage of sales.
7 The ability to convert the sales into cash generation. It's calculated as cash generated as a percentage of sales.
8 Measures the ability to meet current liabilities as they fall due. Its calculated as current assets/current liabilities. The target should be at least 100%.
9 The measure of sales in value terms during the year.
10 System average interruption duration index (SAIDI) measures the total amount of time that an average customer experiences service interruption during the measurement period.
11 The average number of interruptions that a customer would experience, and is calculated as where is the failure rate and is the number of customers for location.
12 Measures volume of energy sold in a particular period – GWh
13 This measures how many customers one employee is able to serve in a particular period.
14 The growth in the number of customers connected to the grid
15 This measures number of safety incidences occurred during the year.
16 The average age of resolved faults and complaints to the average age of the total faults and complaints in a particular period
17 The ratio of the average age of standard connected jobs in a specified period compared to the average age of pending paid up jobs
18 The is the measure of energy loss due to non-technical reasons

# Our Key Risks and Uncertainties

Our Enterprise Risk Management Framework (ERM) is a process driven by the Board of Directors, it anchors our ability to understand the risks that influence the execution of corporate strategy, and determine the acceptable level of risk appetite.

The following are key objectives of the framework:

- To outline ZESCO's approach to Risk Management,
- To improve decision-making, accountability, and outcomes through the effective use of Risk Management tools, and
- To integrate Risk Management into all the operations.
- To focus on minimizing, mitigating and avoiding risks.

Our ERM is segmented into four key components that support and sustain risk management throughout the organization as shown below:

1 **Risk Management Policy Direction**
- The Board sets a Risk Tone.

2 **Risk Management Systems**
- Developing a risk-aware environment,
- Reporting and Monitoring of Risk

3 **Risk Management Process**
- Compliance to ISO 31000

4 **Risk Management Governance Structure**
- compliance to best practice

### Risk Management Policy Direction.

The policy communicates ZESCO's risk management philosophy and allocates responsibility for managing risk. It ensures that all Business Units (BU) effectively manage risks that are appropriately identified, assessed and communicated.

### Risk Management System

This a critical component of an effective risk management framework with the following forming the system;

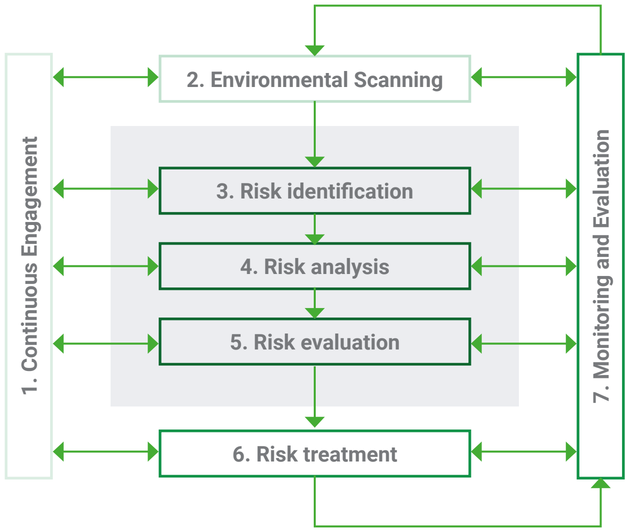
a) Risk Management Culture – refers to systems of values and behaviors that determine how an organisation addresses current and future risks.
b) Tools and Templates – are used in the implementation of ERM.
c) Risk Reporting – defines the framework for communicating risk information.
d) Risk Evaluation and Review –refers to a review of risk management capability and governance system.

### Risk Management Process.

The current approved ERM framework has been expanded to a seven step Risk Management Process by including two cross cutting components. These are

- communication and consultation, and
- monitoring and review.

Below is a Seven step risk management process, step 2 to 6 are sequentially implemented with step 1 and 7 components existing at each stage of the five stages in the risk management process .




### Risk Management Governance Structure

**The Board Committees**
The Board sets the risk tone for the organisation; It is responsible for developing a risk management policy and setting risk appetite.

**Corporate Mangement**
They are responsible and accountable for development and implementation of ERM Strategy.

**Operational Business Units**
These are responsible for the day-to-day risk management through policy implementation, supervision, and management of the Risk Management process.

### Six Major Risk Categories

| Category | Description |
|---|---|
| Strategic Risk | Political, Reputation, stakeholder Management risk and Strategy execution |
| Financial Risk | Financial Processing Risk, FX Risk |
| Safety, Health and Environment | Climate Change Risk, SHE Risks |
| Regulatory Risk | Regulatory Risk, legal, Regulatory and Ethical standards Compliance. |
| Operational Risk | Cyber Security and System Resilience, Asset Management Risk. |

## Our Key Risks

Our key risk includes risks and opportunities that have a direct potential impact on revenue, liquidity, asset, strategic objectives, near- to-medium-term business plans and stakeholders.

| Risk description | Risk | Potential Risk Impact | Risk mitigation |
|---|---|---|---|
| **1. Climate Change risks**<br>Changes in climatic conditions such as droughts, excessive temperatures, and flash floods are heavily impacting both the local and regional business landscape. | | The Corporation's electricity generation business is predominantly hydro and is susceptible to the effects of climate change. This can affect our overall operations at the various storage reservoirs, which impacts the generation of electricity. | ZESCO has implemented the cascaded generation strategy to mitigate the effects of climate change through the optimisation of water usage on the same river basin. The strategy entails the development of generating plants in different locations across the same river basin to increase generation capacity through optimisation of water usage.<br>The Kafue river basin which initially had 990MW now has the following additional investment:<br>• ITPC - 120MW<br>• KGLPS – 750MW<br>The corporation initiated memoranda of understanding to undertake studies for the development of different renewable energy sources. The diversification of the generation mix is key to the sustainability of ZESCO's business model. |
| **2. Cyber, Security and System Resilience**<br>Risk of IT system internal misuse, cyber-attack, security of IT systems resilience and business continuity. | | Some potential risks that can be associated with this risk type are;<br>• Information Breaches (hackers and viruses),<br>• Failure of the system to cope with peak customer demand<br>• Disaster disrupts the IT infrastructure. | Information System (IS) security underpins our ability to achieve various strategic objectives. Management has continued to invest in cybersecurity systems, to enhance the organisation's capability to intelligently monitor and react to cyber-threats. The following systems and tools have been deployed to mitigate the risk; - Endpoint Detection and Response (EDR), Mobile Device Management (MDM), Security Operations Centre (SOC), Data Loss Protection (DLP) and Network Access Control<br>Further, management continues to sustain its IT Infrastructure and Solutions through its consistent investments and maintenance programs<br>ZESCO's business continuity strategy is anchored on the comprehensive disaster recovery plans in compliance with ISO 27001. |
| **3. Safety, Health, Environment and Quality (SHEQ)**<br>Risk of harm to our customers, employees, third parties and failure to protect the environment in which we operate. | | Our operations have the potential to result in personal and environmental harm. Significant SHE events have regulatory, financial, and reputational repercussions for business | Management has embraced the SHEQ Management Systems as part of its corporate culture through its policies, standards, and procedures that ensure that employee, customers, and other third parties are protected. ZESCO has successfully maintained its ISO certification and is compliant to the following Management systems ISO9001, 14001, and 45001.<br>In 2020 Management continued to offer staff safety induction workshops and authorization programmes to enhance electrical system operational safety, and furthermore media engagements with customers were ramped up as a strategy to continue promoting the safety culture among stakeholders. In order to improve public safety, management started rolling out an innovative aerial bonded conductor that reduces the impact that our operation has on the environment and the overall risk of electrocution. |
| **4. Asset Management Risk**<br>Risk of failure to effectively undertake prudent group asset management function | | Failure to effectively undertake the asset management could lead to asset underperformance resulting in unplanned outages, network overload, shortened asset life, loss of revenue and customer dissatisfaction. | The Board through its Technical Sub Committee is responsible for ensuring that prudent asset management practices are employed that ensures asset optimisation and return on capital employed are maximised. The board reviews the following<br>• Operations and Maintenance<br>• Effective Implementation of Asset Management Policy<br>• Investment in CAPEX |

# Our Key Risks and Uncertainties Continued

| Risk description | Risk ▲ | Potential Risk Impact | Risk mitigation |
|---|---|---|---|
| **5. Digital Technology and Operation Technology**<br>Risk of reduced availability and reliability, data security, and business benefits optimisation for Operational Technology (OT) systems deployed to aid network operations. | ▼ | ZESCO's electricity network places significant reliance on OT infrastructure in managing the organisation's core operations whose failure will result in a huge financial and reputation impact. | • Ensuring OT Systems integrity by investing in solutions from renowned global industry leaders.<br>• Annual system audits, security reviews, and patching to ascertain and sustain operational integrity of our OT systems. |
| **6. Political and Legal Risk**<br>These risks arise from changes in the political and legal environment of the business such as change of laws and government policies. | ▲ | This year government assented into law the Energy Regulation and Electricity Act of 2019, which is expected to bring about Electricity Supply Industry (ESI) reforms that will increase competitiveness and empower the regulator to effectively manage the ESI by among other things:<br>• Regulating domestic and PPA tariff adjustments<br>• Introducing a Multi-year domestic tariff reviews<br>• Migrating the industry from single buyer to multi buyer model<br>• Introducing the open access regime in the ESI<br>There is a risk that these changes in the Legal and Policy framework have the potential to impact ZESCO when implemented. | ZESCO's strategic focus of being an electricity hub by 2025 will mitigate against risks arising from industry structural changes such as open access.<br>The Corporate management has set up committees to develop pricing models that will support the pricing strategy for our products in an open-access regime. |
| **7. Stakeholder Management Risk**<br>The risk of failure to manage and sustain healthy relationships with stakeholders can impede the achievement of business goals and objectives. | ▼ | Effective stakeholder management is critical for us to sustain various key strategic objectives such as:<br>• Capital Project Implementation – Government, Regulator, Communities (PAP), customers and employees.<br>• Actualisation of Cost Reflectiveness in the ESI – Stakeholder being Communities, Government Regulators, Consumers, IPPs and Legislators<br>• Health and Safety - Stakeholder being Community, Employees, Government | In 2020, corporate management undertook many stakeholder and customer engagements based on wide range of activities, such Customer interactions, Safety and Product awareness, sensitisation, Projects updates. Read more on *Stakeholder Engagement on page 16* |
| **8. Tariff Regulatory/ Market Risk**<br>The tariffs charged to both domestic and wholesale customers are subject to regulatory approval. | – | Currently, the electricity tariffs in the Zambian ESI are not cost-reflective, which implies that there is a disparity between the cost of power purchases from IPPs and the selling tariff to end-users. There is a risk that failure to grant approval to ZESCO annual tariff applications will derail the plan to migrate the tariff to cost-reflective and further constrain ZESCO's cash flow position. | • Supporting the completion of the ESI cost of service study which is expected to provide a migration path towards attaining cost-reflective tariffs.<br>• Engaging IPPs to review tariff.<br>• Continually engaging the stakeholder concerning tariff reviews. |
| **9. Strategy Delivery**<br>Risk that changes in the macro-environment may render our strategy ineffective | ▲ | Successful delivery of our strategy requires serving customer, managing and building infrastructure in a way that satisfies our stakeholder.<br>Therefore failure to invest in appropriate responses to changing markets and competitive business environments, and/or build the necessary infrastructure that enhance our capabilities to compete, have the potential to adversely impact our cash flow growth, survival and value goals. | The Board sets and reviews ZESCO's strategy, which determines the company's strategic objective and values anchoring the business. Regular reviews are conducted to take into account changes in the competitive business environment that may affect ZESCO's ability to achieve its strategy.<br>The investment and finance committee of the board ensures we have a clear financial strategy to finance our strategic initiatives and provides oversight on corporate management's external resource mobilisation initiatives. |

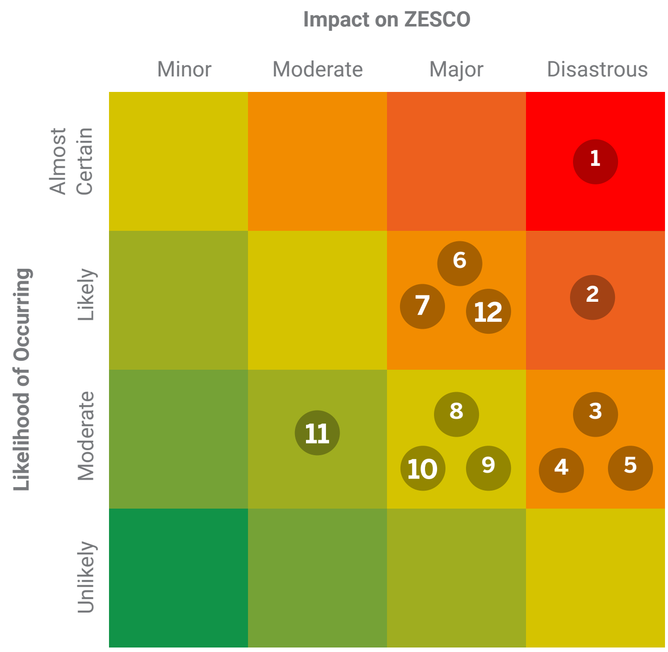
| Risk description | Risk | Potential Risk Impact | Risk mitigation |
|---|---|---|---|
| **10. Legal, Regulatory and Ethical Standards Compliance**<br>The risk that non-compliance to laws, regulation and ethics may adversely impact our Capitals. | Risk Neutral | Any failure to act ethically or comply with legal and regulatory obligations would undermine our stakeholder trust, leads to financial penalties and reputational damage. | As one of the measures to manage the reputation risk, the Board and Corporate Management have operationalized the Integrity Committee program as a corruption prevention strategy by engaging with our customers, communities and suppliers to sensitise them on ethical conduct.<br>Our Whistleblower policy outline the corporate culture and attitude towards malfeasance such as fraud and corruption to provide a consistent corporate-wide approach to report any unethical behavior without fear or victimisation. |
| **11. Foreign Exchange Risk**<br>Financial risk that exists when a financial transaction is denominated in a currency other than the domestic currency of the company. | Risk increase | Most of ZESCO's obligations and receipts are in foreign denominated currency. The kwacha to dollar exchange movements have the potential to affect Cashflow, Profitability and attainment of electricity cost reflective tariffs. | ZESCO has continued hedging against foreign exchange movements by matching its foreign denominated receipts with foreign denominated obligations. |
| **12. Major public health crisis and global pandemics**<br>Risk that occurrence of a global public health crisis, which will affect our ability to deliver a service, and operation of the organisation. | | Potential Risk Impact.<br>• Spread of infectious Diseases (Global pandemic e.g. Covid-19)<br>• Increased Default Risk for sensitive and Bulk Supply Agreement (BSA) customers<br>• Poor Contract management<br>• Inaccurate and or major changes of Budget assumptions<br>• Loss of Key staff | Management has set up a fully-fledged and staffed Occupation Health Management team consisting of a medical doctor, clinical officers, nurses and laboratories experts that can spearhead a response and mitigation plan should there be an outbreak of the pandemic.<br>Management continues to invest in various diagnostic equipment and outsourcing health surveillance initiatives for various disease from external practitioners. |

▲ Risk increase
▼ Risk decrease
– Risk Neutral

# Risk Heat Map

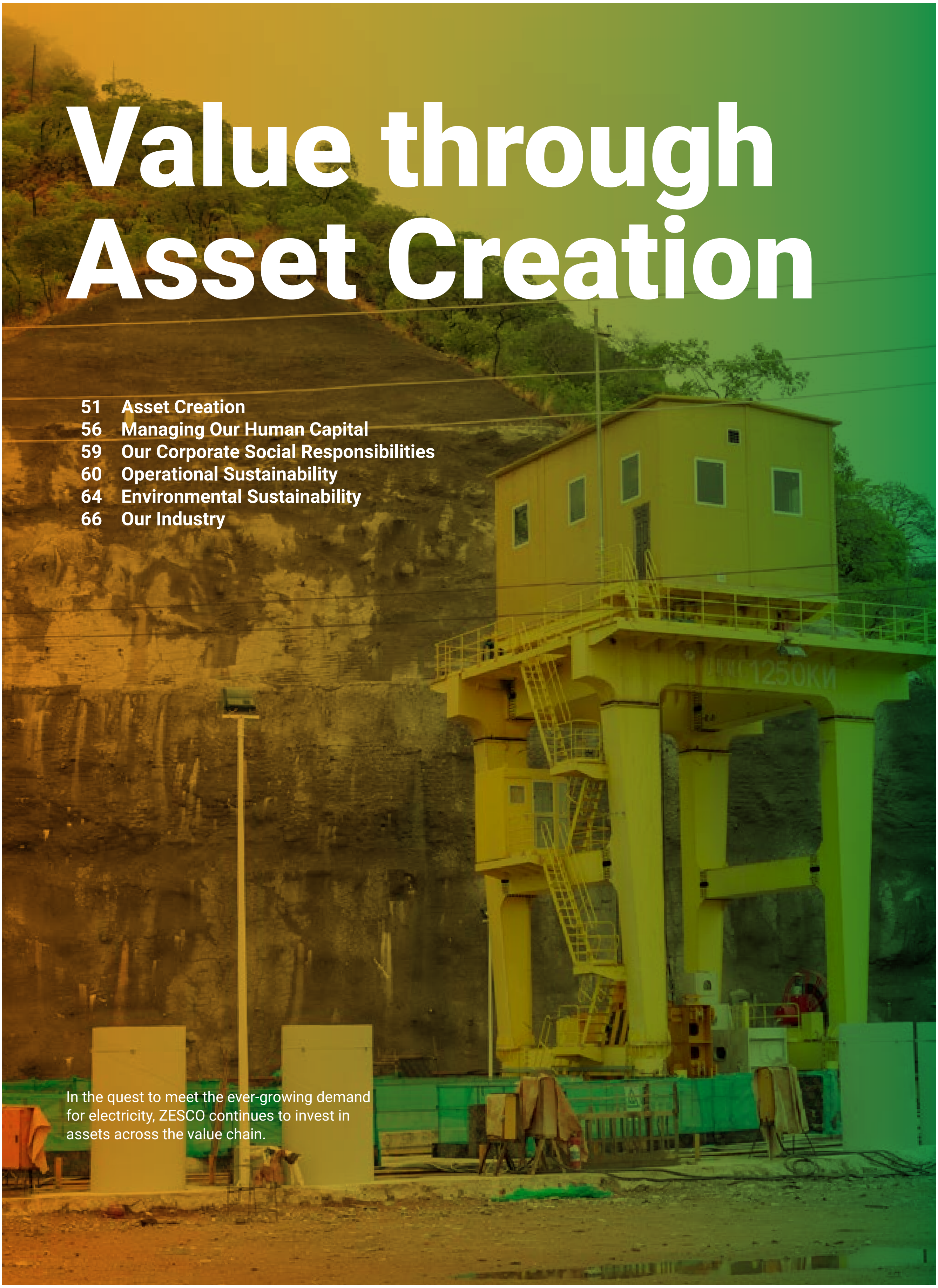
Our top risks include;

- Risks and Opportunities that have a direct potential impact on financial risk which relate to revenue, earnings and capital;
- Risks that can impact our achievement of longer-term strategic objectives;
- Risks that can impact our near-to-medium term business plans and our reputation;



# Value through Asset Creation





In the quest to meet the ever-growing demand for electricity, ZESCO continues to invest in assets across the value chain.

# Asset Creation

ZESCO has an Investment Policy that provides a clear criterion for evaluation, appraisal and selection of all its projects and investments. The Policy also provides concise and well-formulated guidelines on all major investment decisions that ZESCO undertakes.

Currently, across the value chain, ZESCO has over 2200 MW of installed Generation capacity and over 15,000 kms of Transmission and Distribution lines.

This is in addition to other Technological and support assets not directly linked to power generation.

In the period under review, the following Projects were undertaken across the value chain in the quest to meet the ever-growing demand for electricity.

## Generation

**1 Generation capacity increase: this involves only projects that will add to the installed generation capacity**
1.1 Kafue Gorge Lower 750 MW Hydropower Project

The project is located in the southern part of the country on the Kafue river basin, downstream of Kafue Gorge Upper Power Station.

The objective of the project is to increase installed capacity and optimise the water usage on the Kafue river basin by cascading the power plants. When the plant reaches commercial operation the installed capacity on this waterbody will be 1,860 MW. During the period under review, construction progress stood at 93% with commissioning expected in the first quarter of 2021.

## Asset Creation Continued

1.2 Lusiwasi Upper 15MW Hydropower Project

The objective of the project is to increase installed capacity and improve the quality of supply in the Northern circuit. The project is also aimed at achieving geographical diversification as most of ZESCO Plants are in the Southern part of the Country.

The project was completed during the year.

1.3 Lusiwasi Lower 86 MW Hydropower Project

This is an 86 MW project located in the northern part of the country on the Lusiwasi river basin.

The objective of the project is to increase installed capacity and improve the quality of supply in the Northern circuit. Besides geographical diversification objective, the project also hopes to optimize the water usage by cascading plants on the same waterbody. Initially, the Lusiwasi river basin only had 12MW installed capacity which will increase by over 88MW. The project is currently ongoing.

**2 Rehabilitation and Up-Rating; this involves projects whose maximum power level was increased**
2.1 Chishimba Falls Power Station (CFPS) Rehabilitation and Uprating to project

This is a 14.8 MW project located in the northern part of the country on the Luombe river basin. The project will rehabilitate and uprate the existing plant from 10MW to 14.8MW.

The objective of the project is to increase installed capacity and improve the quality of supply in the Northern circuit. The project is also aimed at achieving geographical diversification as most of ZESCO Plants are in the Southern part of the Country. The procurement of an EPC contractor is currently underway.

**3 Renewable energy**
In ZESCO's quest to diversify, some Renewable energy projects were under taken during the period under review. Below are the two:

3.1 Kanona 100 MW Solar Photovoltaic (PV) Project

The objective of this projects is to increase national electricity generation capacity by exploiting the Solar power potential on the proposed Kanona PV site area in Serenje and also to improve the energy mix of the country's electrical power supply.

Feasibility studies had not yet been concluded by the end of the period under review.

3.2 150 MW Wind Power Plant

The objective of this projects is increase national electricity generation capacity by exploiting the Wind power potential on the proposed Chanka site area in Nakonde.

ZESCO was yet to conclude the Survey works for power evacuation from Chanka to proposed Nakonde substation by end of 2020.

## Transmission System

The Transmission system comprises of infrastructure used to evacuate power across Zambia. ZESCO's transmission system is interconnected with other utilities Systems in the Southern African Power Pool (SAPP).

During the year under review ZESCO executed projects which were at different stages of Implementation categorized as:

1. System Reinforcement Projects to improve the power transfer capacity and system operational efficiency.
2. Grid Expansion Projects to expand the system to connect businesses and parts of the country that are not on the electricity Grid.

Listed are some of the projects that were at different stages of Implementation:

| Project | Description |
|---|---|
| System-Wide Reactive Power Compensation | This project is aimed at carrying out system studies to determine the number and types of reactive power compensation needed in the system.<br>In the period under review=, a business case proposal was submitted to ZESCO and an MOU for development intent was being finalised by close of the year. |
| Kasama – Nakonde | This project is part of Zambia Tanzania Kenya (ZTK) whose scope included the construction of 387 km of 330 kV line from Kasama to Mporokoso and Kasama to Nakonde and associated substations to be constructed in Mporokoso and Nakonde.<br>The objective of the ZTK Interconnector is to facilitate trading in electricity in the region and promote power systems stability by effectively connecting the Southern African Power Pool (SAPP) to the East African Power Pool (EAPP).<br>In the period under review, the contractor had carried out some preliminary works such as surveys of the transmission lines and geotechnical investigations. |
| Pensulo-Mansa Transmission | The project is aimed at improving transmission capacity to Luapula province that will support the planned mining and agricultural loads. The scope involves construction of 300km of 330kv transmission line from Serenje to Mansa with a 330/66 kv substation. This will also reinforce the local sub transmission network.<br>There was no progress on this project during the year as they were some technical clarifications being resolved. |
| Evacuation of Power from Ndola Energy Phase II | This project is aimed at power evacuation from the extended Ndola Energy HFO power plant. The scope includes construction 1.3km of 66kv transmission lines, rehabilitation and upgrading of Bwana Mkubwa 66/33kv substation.<br>This project was completed in the period under review. |
| Second Kabwe-Pensulo 330kv Transmission Line | The project is part of the Zambia Tanzania Kenya whose scope included the construction of a 300kM 330kV Transmission line from Kabwe Stepdown Substation to Pensulo Substation and associated Substation works. As at the yearend, 99% of the foundations and 83% of the tower erection were completed respectively. The project is expected to be completed in 2021. |
| Msoro And Kabwe Step Down Reactor | The objective of the project is to provide means of voltage control at Kabwe step down and Msoro substations.<br>The project was yet to commence during the period under review. |

## Asset Creation Continued

| Project | Description |
|---|---|
| Bulk Substation and Transmission Line at Simon Mwansa Kapwepwe International Airport | The objective of this project is to provide power supply to the newly constructed Simon Mwansa Kapwepwe International Airport. This is a government funded project with Zesco providing technical support. The project scope includes a 66kv transmission line and establishment of a greenfield 10MVA 66/11kv substation.<br>The project was commissioned during the year under review. |
| Kafulafuta Water Supply System | The objective of this project is to provide power supply to the newly constructed Kafulafuta Water Supply System (KWSC). The project scopes includes the construction of 15km of 66kv transmission line.<br>During the period under review, designs had been completed and some factory acceptance tests had been conducted. The project is still on going. |
| Nambala-Kalumbila Transmission Line 330kv Power Reactors | The project involves increasing the reactive power compensation provided on the Nambala-kalumbila 330kv double circuit transmission line to the extent of being able to allow energization of both 330 kv transmission lines at the same time. The project also involves construction of an 18km 33kv distribution line from Nambala to Mumbwa town substation.<br>During the period under review, primary equipment at Nambala and Kalumbila were at 90% and 80% complete respectively. |
| Connection of Luangwa to the Grid | The objective is to increase access to electricity by connecting Rufunsa, Luangwa and surrounding areas to the national electricity Grid and decommission a 5MW Diesel Generating Plant in Luangwa district.<br>During the period under review, the projected was completed. |
| Reinforcement of Supply to Sanje (Mumbwa Zaf) 33/11kv Substation | The objective is to increase the transmission line transfer capacity by operating the Nampundwe – Sanje Line at its design voltage of 88kV and subsequently increasing the overall access to electricity to Mumbwa and surrounding areas.<br>The project scope Involves uprating Sanje from 33/11kV to 132–88/33/11kV Substation and Establishing a 132 – 88kV bay at Nampundwe Substation. The scope will also include development of a 33kV distribution network to ensure continuity of supply to existing customers.<br>During the period under review, the project was yet to be commissioned. |
| Kafue Gorge Lower Power Evacuation | The objective is to provide evacuation passage for the 750MW KGL power and create a Grid Integration point for the KGL Scheme.<br>During the period under review, the project was complete. |
| Connection of Lundazi and Chama to the National Electricity Grid | The objective is to connect Lundazi and Chama to the National Grid. Currently, Lundazi and Chama are supplied by ESCOM Malawi and also supplemented by Diesel Generating Plants.<br>The main scope of the project is to construct substations and 132kV (325kM) Transmission Line from Chipata West Substation to Lundazi and Chama. The scope also includes developing a distribution network comprising of 185kM of distribution lines with various transformation points.<br>The completion progress status for the 325kM Transmission line is over 99% and the associated substation works are below 15%. |
| Lusaka South Multi Facility Economic Zone (LSMFEZ) | The objective is to provide reliable power to adequately meet the demand for Lusaka South Multi-Facility Economic Zone (LSMFEZ). Further the project will provide a bulk supply point to the Lusaka 132kV sub-transmission ring project (LTDRP). The Substation will be one of the evacuation points for 750MW KGLPS and two solar PV plants for Bangweulu and Ngonye Power Company.<br>The project involves the construction of (1) 330/132/33kV substation, (2) 330kV Transmission Lines from Leopard Hills Substation to LMSFEZ Substation, and (3) Kafue West Substation to LSMFEZ Substation.<br>During the period under review, the Lines were complete whilst substation works were still on going. |
| Kasompe Bulky Power Supply | The objective is to increase capacity and security of supply to Chingola district. The scope includes establishing a new 52MVA, 66/11kV kasompe substation complete with 11kV switchboard and construction of 25km of 132kV line.<br>During the year, the project status was at 83% complete. |
| Bulk Substation and Transmission Line at Kenneth Kaunda International Airport (KKIA) | The objective is to provide stable and reliable power supply to the Kenneth Kaunda International Airport (KKIA)<br>This project involves the construction of a 63MVA Greenfield substation at KKIA and related substations works at Chongwe and Avondale Substation. Additionally, construct a 7.5kM 132kV double circuit transmission line to the KKIA Substation.<br>The project was completed within the period under review. |

## Distribution Systems

The distribution system comprises infrastructure used to support the utilisation of electricity by the various end-users in ZESCO's domestic customer portfolio.

Our drive to increase access to electricity was reaffirmed when we achieved a one million customer mark. Distribution system asset creation strategy segments our projects into two categories i.e.

- Distribution System Reinforcement Projects - to improve the power transfer capacity and system operational efficiency.
- Distribution System expansion projects - to connect businesses and parts of the country that are not on the national electricity Grid.

**System expansion projects**
**Increased Access to Electricity Services (IAES) Project**
**JICA Distribution Lines Phase II Scope**
The objectives of this project are to increase the access to electricity, through expansion of the network in the rural distribution network, and to provide subsidies to low-income households in all the provinces to increase new electricity connections.

The IAES Project involves grid expansion in Northern and North Western provinces under the JICA distribution lines phase II. The project scope includes 652km of High Voltage and Low Voltage distribution lines and Sixty Six (66) transformation points.

### WB funded ESAP

The Project being implemented by implemented jointly by REA and ZESCO Limited seeks to improve access to electricity in the rural areas by subsidizing the cost of connection. The project a target of 34,000 Households and 2,000 SME connections.

As at end of the period under review, 28,879 customers were successfully connected under this project.

### LTDRP Last Mile

The project aims to Integrate the outcome of the LTDRP Project into the existing Lusaka Distribution Network and will contribute to the Government's objective to increase the national electrification rate from the current 25% to 66% by the year 2030.

High density area such as Mandevu, Ngwerere, Mtendere East, Nkoloma, Garden, Chawama, John Howard, and Chainda townships are the targets to increase their access to clean, reliable and affordable energy.

During the period under review, overall design works were 100% complete.

### Projects under LTDRP

| Contract | Progress |
|---|---|
| Construction of Waterworks Substation (IDA) | 99% |
| Replacement of 33kV Underground Cables (EIB) | 100% |
| Construction of 132kV Substations at Roma Substation, Leopards Hill Substation, Lusaka West Substation and Industrial Substation – Tender 4 (IDA) | 89% |
| Construction of 132kV Lines between LS MFEZZ - Water Works, Leopards Hill – Roma, Lusaka West – Industrial and Industrial – Coventry | 82% |
| Construction of 132/33/11kV Chilanga Substation and Switching Stations | 88.60% |
| Construction of 132kV Roma – Lusaka West Overhead Line | 92.42% |
| Construction of 132/33/11kV Avondale Substation and Switching Stations | TBA |
| Construction of 132kV Overhead Lines between LS MFEZ and Chilanga | 83.57% |
| Construction of 132/11kV Chawama Substation and Switching Stations | 82.77% |

### Government Assurance Projects

These are distribution projects executed by ZESCO on behalf of the Government of the Republic of Zambia. The projects are mainly undertaken in rural areas to electrify Schools, Rural Health Centres, Community Centre, Chiefdoms, and other rural development projects that may require electricity.

### Corporate

**Civil Engineering**

CES Division provides a leading role in consultancy and supervision of projects for the expansion & reinforcement of power generation, transmission and distribution infrastructure to ensure compliance to technical specifications by Contractors.

The following are the major Corporate Projects managed under Civil Engineering Services completed or nearing completion in 2020.

- Construction of Standard ZESCO Branch Office Blocks in Chadiza, Luangwa, Mumbwa, Chitope, Mpanshya, Kaputa and Regional office in Choma
- Substation Control buildings at Chisekesi, Kalomo, Sinazongwe, Livingstone and Kalabo substations
- Civil Works for Construction of 66/33/11 kV Substation in Kalabo
- Construction of bonded warehouse and associated external works in Kasupe, Lusaka
- Construction, Supply, delivery and Installation of 60 Ton Weighbridges in Ndola and Livingstone
- Construction of an Office block, Stores building and Filling Station in Mporokoso
- Construction of additional Infrastructure for ZESCO UNITED FC Camp Site at Monkey Fountain in Ndola
- Construction of a Student and Staff Canteen, 1x2 and 1x3 classroom blocks at ZESCO Ndola Training Centre

**Fleet Management**

To sustain and support our operational capability the Fleet Management Unit added 44 new motor vehicles during the period under review which were distributed across the value chain.

# Managing Our Human Capital

Our team of competent and dedicated staff remains a focal point for the achievement of strategic objectives.

## Building and Retaining Strong Skills

### Future Focus

Our team remains a focal point for the achievement of strategic objectives. We therefore pay particular attention to matters of recruitment, continuous professional development and retention of a skilled workforce.

To guarantee this success the Board of Directors during the year considered among other issues:

- The engagement of a consultant to review the current staff structure with a view to making it more efficient and cost-effective.
- Authorised the commencement of a salary survey to benchmark conditions of services with leading institutions in the country.
- The review of the internal pension scheme with a view to ensuring that the fund is sustainable.

These and many other reviews and reforms are expected to improve productivity, efficiency and realize value for all stakeholders.

### The Workforce

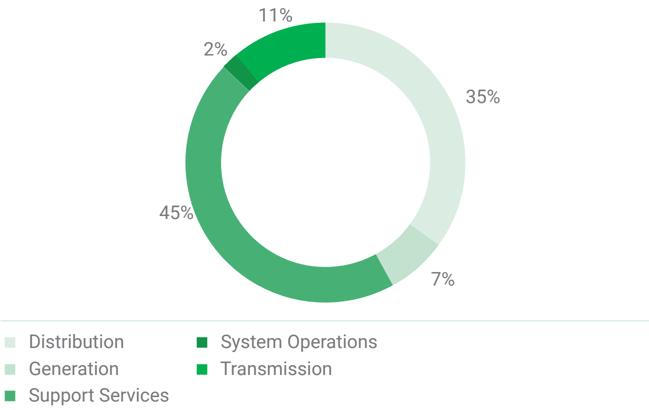
The Labour strength increased to 6,759 employees at the close of 2020 compared to 6,740 the previous year representing a marginal increase of 0.3%. This was due to recruitments and reinstatements made in the year. However, over 260 employees were lost through various modes of attrition such as death, resignations, dismissals and retirement. A summary of the movement in numbers of the two years is as follows:

| Staff Headcount | 2019 | 2020 | +/- |
|---|---|---|---|
| As at 1 January | 6,988 | 6,740 | -3.55% |
| Add: Recruitments | 119 | 263 | 121.01% |
| Reinstatements | 102 | 19 | -81.37% |
| Less: Resignations | -9 | -11 | 22.22% |
| Deaths | -23 | -52 | 126.09% |
| Dismissals | -80 | -28 | -65.00% |
| Retirements | -173 | -80 | -53.76% |
| Discharges Redundancies | -94 | -49 | -47.87% |
| Expired Contracts | -90 | -43 | -52.22% |
| As at 31 December | 6,740 | 6,759 | 0.28% |

### Human Capital Outline

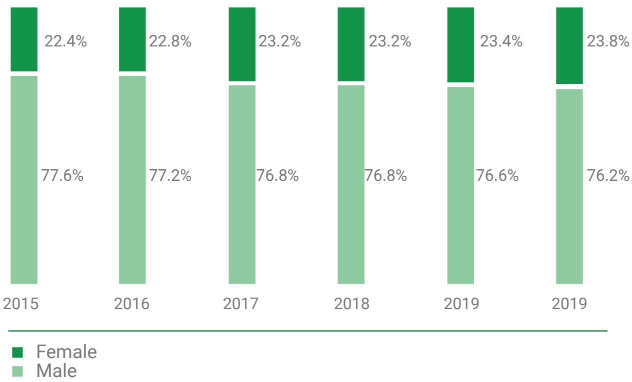
Almost half of the entire workforce consists of the 36-45 age bracket and another 27% below that age group. This leaves only less than 24% with a regular work life of between ten or twenty years. The structure of our workforce provides promise for the future and management support for staff development initiatives will continue as long as is reasonably possible. This will ensure a balance between a vibrant, skilled and experienced calibre of staff.

Only 31% of the staff compliment are non-represented, a sharp increase from 28% in 2019 as seen below:




Meanwhile the number of females in the workforce has continued to record steady improvements 23.8% of the workforce comprised females compared to the previous year's 23.4% in 2019. The annual ratio for the past few years is detailed below. The females are engaged in various core and non-core roles such as Engineering, Environment and Risk Management, Litigation, Customer Service, Finance and Human Resources. Further they are employed at all levels from Executive Management to the lowest levels in the corporation.

### Ratio of Male to Female Employees (%)




ZESCO has continued to embrace deliberate set of policies and practices that support the representation of women in areas in which they have been previously underrepresented such as Engineering. This as it strives to be an equal opportunity employer as prescribed by the Equal Employment Opportunity Commission (EEOC), whose main purpose is to eliminate employment discrimination based on factors such as sex or religion. At the end of the year, more than 544 women held roles previously dominated by their male counterparts such as Engineers, Technologists, Technicians and Electricians compared to only 525 the previous year.

| Staff Category | M | F | Proportion |
|---|---|---|---|
| Management | 1408 | 668 | 47$ |
| Represented | 3745 | 938 | 25% |
| Total | 5153 | 1606 | |

Due to the COVID 19 pandemic, the corporation could not offer support for industrial attachments and requests to conduct physical academic research. Industrial attachment extends an opportunity for students to gain required work experience prior to any form of employment while research is for students to carry out workplace-based research that allows them to obtain their qualification.

### Graduate Assessment Program (GAP)

The GAP continued during the year and a total of 80 graduates underwent Assessment. This initiative allows graduates to be inducted into ZESCO while also applying their theory within the Industry.

### ZESCO Training Centre (ZTC)

The Training Centre is a strategic partner in providing required staff development through generic as well as tailored trainings to both ZESCO and non-ZESCO staff.

During the year, 84 students were enrolled compared to 125 students the previous year under the ZESCO sponsorship program for long term courses such as Overhead Lines Construction, Cable Jointing and Electrical Fitting. A total of K0.8million was provided in support to the training center during the period compared to K1.5million in 2019, a 100% decrease compared to the previous year. The reduction was mainly on account of reduced activity due to COVID restrictions and on-going maintenance works. The Training Centre also conducted short intensive courses for 316 employees under the TEVETA Skills Development Fund (SDF).

### Kafue Gorge Regional Training Centre (KGRTC)

ZESCO also has a strategic partnership with the KGRTC to develop skills and competencies in energy technologies for the sub-Saharan region. The Centre was established in 1989 with its core business being hydropower training, conferences and accommodation by ZESCO Limited and was eventually ceded to a Board of Trustees between 1997 and 2000.ZESCO retains the chairmanship of the Board as a key stakeholder and provides a grant to cater for over half of the Centre's budget through hiring of the facility and grants for staff emoluments.

During the year, a number of trainings were conducted for ZESCO staff by the Centre and these ranged from On-Campus courses, demand driven and catalogue courses. The courses offered range from core trainings such as hydropower plant operations, control room operations and reliability centered maintenance. Other non-core courses are also provided including AutoCAD techniques, skills for green jobs, contracts management, and procurement and contracts management. During the year, a special course was also run for ZESCO in Financial Modelling and Bank Financing for renewable energy IPPs in Africa. A summary of courses offered to ZESCO in the year and comparatives for the previous year was as follows:

A total of K24.9million was also provided in grants to the Centre compared to K24million the previous year.

The partnership has resulted in the development of key skills in ZESCO staff across the values chain in core and support functions and is therefore expected continue for the foreseeable future.

## Staff Development

During the year 1,966 employees benefited from staff trainings, a 37% reduction over the previous year with a total of K11.6million spent, representing a reduction of 25% from 2019. The reduction was mainly on account of COVID 19 restrictions resulting in a significant reduction in number of systems based in-house training, conferences, seminars and workshops. Further, fewer permission to study and sponsorships of staff to the ZESCO Training Centre were also reduced. This staff development initiatives have continued to result in a drop in the proportion of unskilled staff with a 2% over the period.

The corporation also supports staff through initiatives such as full sponsorship ,paid study leave, and facilitating short courses.

A total of 105 employees were sponsored to undertake studies in core and non-core fields during the year representing a 28% increase over the previous year. Below the distribution of training undertaken during the year under review:

- 352  on long term training;
- 684 on  short term training;
- 249 attended conferences/workshops/ awareness; and
- 445 attended in – House System Based training

## Occupational Health

To achieve maximum productivity and efficiency, ZESCO continued to invest in the occupational health of its workforce through partnerships with private and public health institutions.

Below is a summary of some of the related key metrics over the past few years.

| Occupational Health Statistics | 2016 | 2017 | 2018 | 2019 | 2020 | (-/+) | % |
|---|---|---|---|---|---|---|---|
| Average Daily Attendance | 79 | 76 | 70 | 70 | 64 | -6 | -8 |
| Man hours lost (Sick off) | 38,715 | 33,365 | 29,575 | 33,353 | 26,248 | -7,105 | -21 |
| Medical Check-ups | 130 | 699 | 127 | 1,328 | | -1,328 | -190 |
| No of Deaths | 33 | 25 | 20 | 15 | 45 | 30 | 120 |

The department also successfully conducted the following outreach activities:

- The Occupational and Community Health awareness campaigns which were commenced on the reticulation network project in Sikoongo District, Western Province in December 2019 are ongoing.
- The Occupational and Community Health awareness campaigns which were commenced in Serenje on the Preddyreddy Laxma Reddy (PLR) Substation (66/11KV) upgrade Transmission line project are ongoing.
- The Occupational and Community Health awareness campaigns on the Kafue town – Muzuma – Livingstone 220/330KV upgrade Transmission Line project and the induction of Construction workers and follow ups on the Lundazi - Chama project have been suspended, we are waiting for the activities to resume.
- The Occupational Health Department (OHD) in conjunction with Transmission Directorate embarked on the preparations0 for the bush clearing exercise. The orientation program of the linesmen on the use of the contents for the First Aid Box was successfully conducted under Transmission South.
- The departmental was involved in sensitizing the would-be Bush cutter on the need to prepare themselves for the exercise, considering that most of them were drawn from rural areas. The topics that were presented were ranging from importance of carrying warm clothing and beddings, enough food to cover a whole month, prevention of Diarrhoea diseases, Malaria and Sexually Transmitted Infections (STIs), carrying enough medicines for those people that have chronic diseases, hygiene and sanitation etc.
- The Bush clearing exercise was successfully held despite the Covid-19 pandemic with no covid-19 related infections or fatalities. The exercise commenced on 01 May 2020 with Occupational Health Department staff providing clinical outreach services to the bush cutters under Transmission Directorate and continued sensitization
- teachings on the Corona Virus outbreak and prevention strategies in the camps. These activities were ongoing throughout the Wayleave maintenance period.

## COVID 19 Response

Surveillance and treatment of health conditions continue to be conducted by Occupational Health members of staff.

The Wellness and Occupational Health Division has continued facilitating the disinfection exercise of ZESCO Plant and Offices throughout the country, in an effort to prevent Covid-19.

Further, the division in conjunction with the Enterprise Risk Management Division has continued monitoring staff adherence to health guidelines on the prevention of COVID-19 infection at the workplace by employees as the pandemic is still very active.

## Future Focus

The corporation is cognizant of the changing needs of the workforce, customers and the environment. ZESCO will continue to pursue initiatives that enhance staff productivity, develop skills and  keep the workforce abreast with technological trends.

Employee wellbeing remains a priority for management and so partnerships that safeguard it shall continue for the foreseeable future.

Additionally, the harmonious industrial relationship is expected to continue as management  supports employees in the execution of their duties, while ensuring they are protected from exploitation and harm.

The corporation recognizes the changes that have been brought about by COVID 19 locally and globally. To this end innovations such as virtual meetings and remote working were embraced during the year and ensured minimum disruption to service provision.

The focus for the corporation remains achieving our  strategy and depends on the skills and well-being of our staff. We are therefore intent on supporting our team to acquire relevant and up to date qualifications, certifications and skills to be employed across the value chain.

Further we have invested a significant amount of resources in the upskilling and staffing of our Occupational Health team, procured modern equipment to protect the health of our staff and continue to promote wellness activities for ZESCO staff. A healthy staff is key to the achievement of our strategic goals.

# Our Corporate Social Responsibilities

As a public utility company, our pride is being one of the leading contributors to the betterment of the community in which we operate, in addition to providing reliable electricity. We consider the greater needs of society whilst balancing those of other stakeholders.

## Community support

As we create value through our business operations, we strive to ensure that our operations are ethical; by not infringing on human rights, embracing diversity, contributing to local communities and managing our environmental impact.

Despite the challenges resulting from the Covid-19 pandemic, we continued to support charity, social amenities, education, health, sport, and community initiatives. Our contributions to society are aimed at bettering society by way of promoting business accountability within the environment and community.

In 2020, a total of K4.14 million was contributed towards the various initiatives and activities which include the following:

### Health and our response to Covid-19

The corporation joined government's effort in combating the deadly coronavirus to equip health facilities and build prevention measures across the country. We donated assorted cleaning materials and utensils including dispensing buckets, bottles of liquid soap and personal protective equipment worth over K0.250 million.

Moreover, we sponsored radio talk show programs at a total cost of K0.20 million on various commercial and community radio stations with the aim of disseminating information on Covid-19 prevention. The interactive programs provided a platform to respond to questions, quash rumours, and address misconceptions about Covid-19. The shows also offered an effective way to establish community dialogues, and to provide answers to common questions using trusted experts and influencers.

Further, through ZESCO Women at work, we donated various items to the Sickle Cell Ward at the University Teaching Hospital (UTH). The donation included a Suction Machine, two 32-inch television sets, bed linen and various food stuffs. Subsequently, fifty (50) complete bed sets were procured and donated to the ENT ward 21 at UTH at a total cost of K0.350 million.

### Promoting Education

As a responsible corporate citizen, ZESCO Limited believes in making a difference in the lives of young people where we operate by funding education projects in rural and vulnerable communities. During this period, we constructed a 1 by 3 Classroom Block complete with furniture in Lusiwasi. The corporation further refurbished classrooms and computer lab at the Hillside basic school in Matero as a way of promoting a conducive environment for learners.

In 2020, we contributed over K1.94 million towards promoting education.

### Promoting our cultural heritage

Our corporate culture relies on our shared values of love, integrity, commitment and open to ideas. The corporation operates in a culturally diverse environment where festivals celebrated by indigenous groups remain a vital part of our country's heritage. We support traditional ceremonies in all the 10 provinces in financial and material form. These initiatives assist in promoting cultural values through traditional ceremonies and provide a platform to engage with the community.

In 2020, we contributed over K1.4 million towards traditional ceremonies.

## Community empowerment

In addition, we have contributed over K80 million to empower local communities with seasonal jobs through wayleave clearing using the following models:

i. Transmission Network Wayleave Clearing - targets to recruit seasonal unskilled labour, mainly unemployed youths from rural communities where our assets are located. In 2020, over K52 million was spent through this initiative; and

ii. Distribution Network Wayleave Clearing - has a deliberate strategy of engaging royal establishments (or Chiefdoms), retired ZESCO employees and Women's Cooperatives as a way of empowering and sustaining local communities. We offer contracts to these groups in charge of recruitment who in turn engage the local community. In 2020, over K28 million was disbursed through this initiative.

**K 4.14 mil** 3% ▲

**Community support**

| | |
|---|---|
| Health and our response to Covid-19: | K0.80 mil |
| Promoting Education: | K1.94 mil |
| Promoting our cultural heritage: | K1.40 mil |
| 2019 | K4.0 bn |

# Operational Sustainability

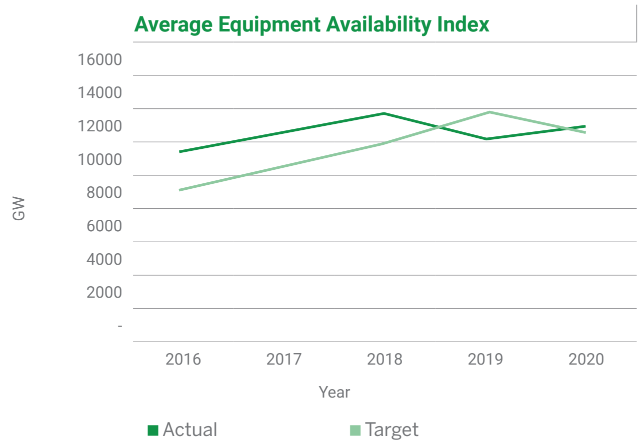
As a business, we employ numerous methods of evaluating whether we can maintain existing practices without risking future potential resources. We understand Sustainable Operations to mean meeting present needs through our operations without compromising on the ability to meet future needs.

We place great value on resources such as water, marine and the general ecology around our power stations. Operating with minimal or no harm to the environment where we operate remains one of our major objectives.

## Generation System Performance

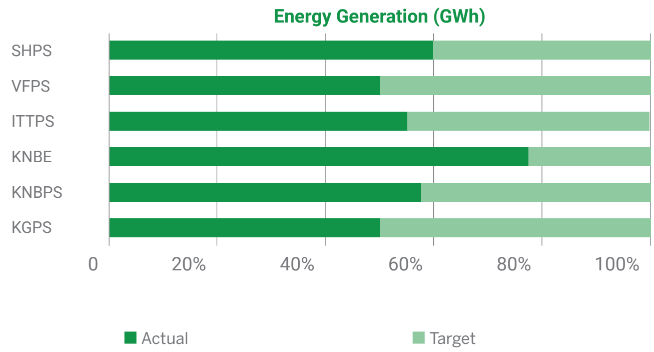
Generation performance for the year was favorable at a total of 12,752 GWh generated from the Power Stations which exceeded the budgeted 12,201 GWh by 5%. This is an improvement from the 9% deficit recorded in 2019.

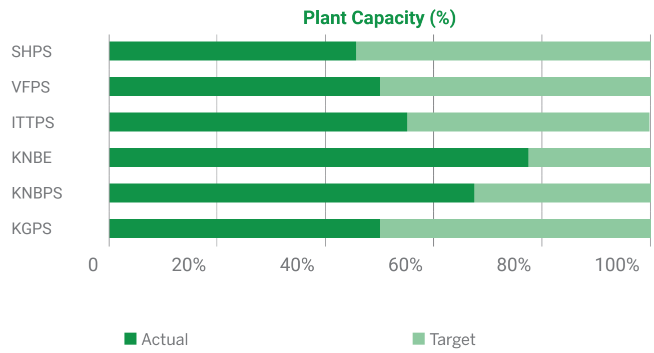
Similarly, average availability of generating plant improved to 85%, better than the 72% the previous year, with an average Capacity Factor of 55% (2019: 50%). In general, there was sufficient water to generate firm power and minimal quantities for the generation of secondary power at Kafue Gorge Power Station. Water utilization at the Kariba North Bank Power Stations, exceeded the annual allocation from the Zambezi River Authority closing at 157% of the allocation. Adequate water for all-out power generation was available at Victoria Falls power station and the Small Hydro power stations during the year.

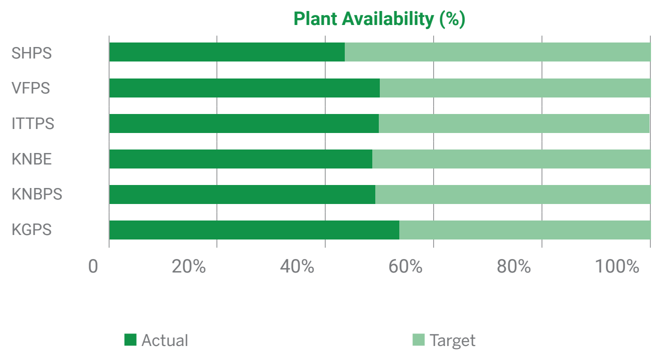



## Maintenance Activities

During the year, all the power stations experienced periodic shutdowns to facilitate maintenance. The works conducted include routine annual and quarterly maintenance.



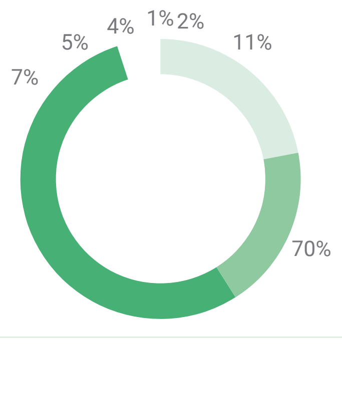




Only the Small Hydro Power Stations (SHPS) failed to exceed their targeted plant availability as only Shiwang'andu and Lunzua exceeded the targeted availability. This mainly due to disruptions to allow for maintenance works at most of the other small hydro stations.

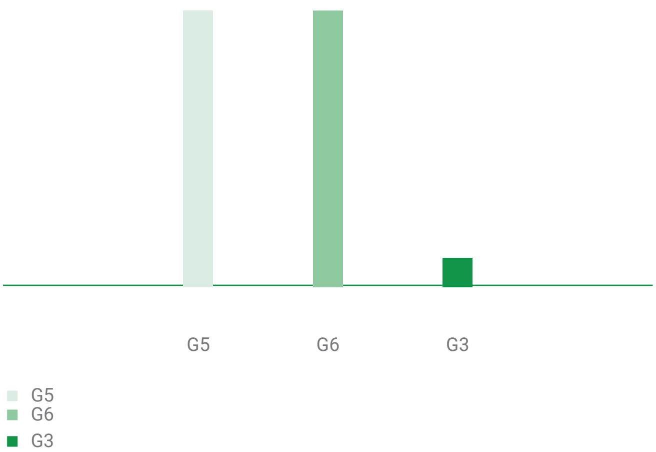
### Planned Outages by Power Station

Planned outages are mainly effected to carry out among other things, scheduled maintenance, replacement and installation of parts, control system upgrades, facilitating desilting of water ways and allow for tests such as commissioning tests, reliability, inspection and guarantee tests. Below are the graphical representations of the planned outage hours in the major stations as a percentage of the total planned outage and by machines measured in hours.

**ZESCO Planned Outage Hrs (%)**




**KGPS Outage Hours (%)**




At Kafue Gorge Power Station both machines G5 and G6 had 93% of the planned outage hours equally distributed between them and the remaining having been for G3. The planned outages were mainly to cater for annual maintenance and low water management. No unplanned outage hours were recorded at the station.

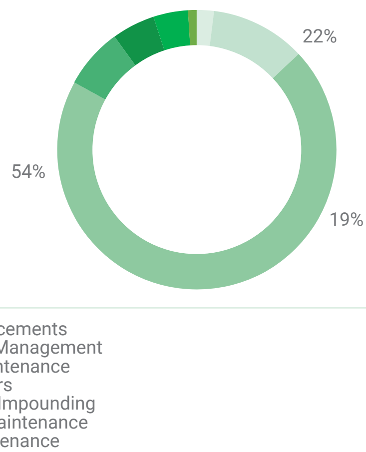
At the Kariba North Bank Complex 97% of the outages affected G1 while the remaining 3% was between G2 and G3 for mainly annual maintenance. Further, machines G5 and G6 equally shared the proportion of outage hours. 140 hours were lost due to unplanned outages.

At Itezhi tezhi Power Station close to 570 hours were lost with G1 accounting for 41% and the remaining being attributed to G2.

At Victoria Falls Power Station 60% of the outage hours were accumulated on A3 and these relate to a tripping during tests conducted as part of annual maintenance. The same machine accounted for 73% of the outage hours lost due to unplanned outages. This mainly for emergency bearings inspections and repairs.

At the small hydro power stations planned outages were mainly at Musonda, Chishimba and Shiwang'andu Power Stations.

**Major Stns Planned Outages**




## Transmission System Operational Performance

ZESCO's transmission system consists of infrastructure used for the evacuation of electricity to bulk supply points that deliver power to large industrial and mining customers as well as ZESCO's distribution system for subsequent supply to various domestic customers. It is also interconnected to the Southern African Power Pool (SAPP).

The asset base stood at over 10,000 km of High Voltage overhead transmission lines in the voltage class 66-330 kV and 147 substations with a combined transformation capacity of over 8,200 MVA.

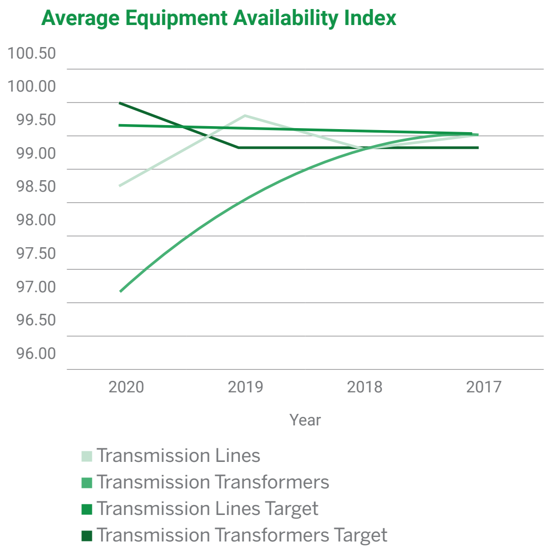
### System Stability and Security

The performance of the transmission system was generally stable for most of the year with intermittent outages resulting from internal and external system disturbances. A few equipment trip-outs were also experienced during the year.

The Average Equipment Availability Index (AEAI) for transmission lines was 99.5% a drop from 99.62 % the previous year whilst that for power transformers was 98.6%, also a drop from 99.33 %. The deviation was mainly as a result of scheduled annual maintenance for the transformers and lines which intensified in the last quarter.

The Grid did not experience any total blackout of the system during the period under review. Load management was also implemented to mitigate reduced generation due to low water levels, with an average deficit of 810MW.

The AEAI per quarter for both transmission lines as well as power transformers is as shown below:




| Voltage Level / Fault Type | No of Faults |
|---|---|
| 88kV | 4 |
| 66kV | 118 |
| 33kV | 3,080 |
| 11kV | 13,089 |
| MV Faults | 19,085 |
| Service Faults | 344,154 |
| Transformer Faults | 848 |
| Transformer Vandalised | 25 |
| Switchgear | 64 |
| HT Cable Faults | 538 |

## System Demand, Operations and Maintenance

The total power from the transmission grid was 15,259.60 GW a 2% increase over 2019. The maximum demand for the year was 1,977MW which occurred on 23 December 2020, recorded at 19:29 hours. The transmission losses recorded in the year stood at 795,494 MWh or 5 % which is below the ERB performance index threshold of 6 %.

The annual time based maintenance of plant and equipment commenced during the second quarter of the year but had to be rescheduled due to the outbreak of COVID-19 global pandemic and the subsequent guidelines from the Ministry of Healthy on measures to contain the spread of the disease. Internally, business operations were streamlined with some employees being required to work on rotational basis. However, other maintenance activities of preventive and corrective nature were executed by specialized teams.

The performance of the protection, control and metering infrastructure was also satisfactory during the year under review. The National Control Center (NCC) was also functional and available.

During the year, scheduled maintenance of transmission plant and equipment was conducted with an average compliance of 96.7 % of the annual planned schedule. Other maintenance activities undertaken were of the preventive, corrective and condition-based type which are expected to improve power supply security and reliability.

## Distribution System Performance

The system performance was negatively impacted by load management and none of the four performance indices were achieved.

### Demand Side Initiatives

The corporation has continued with initiatives to promote energy efficiency, monitor power quality with a view to achieving ZS387 compliance requirements, deploy advanced metering infrastructure including smart meters, meter data management system (MDMS), and integrate back end systems (BES) to MDMS on the distribution network.

### Diesel Generation Performance

Electricity supply to some remote districts continued to be supported by diesel power stations. The number of such stations has reduced to only three and two of these being supplemented by power imports from Malawi. The total number of customers supplied by Diesel as at the end of the year stood at over 6,500. The ratio of sales relative to cost of running the stations reduced during the year due to reduced sales (a drop of 60% while the operating costs increased by 22%).

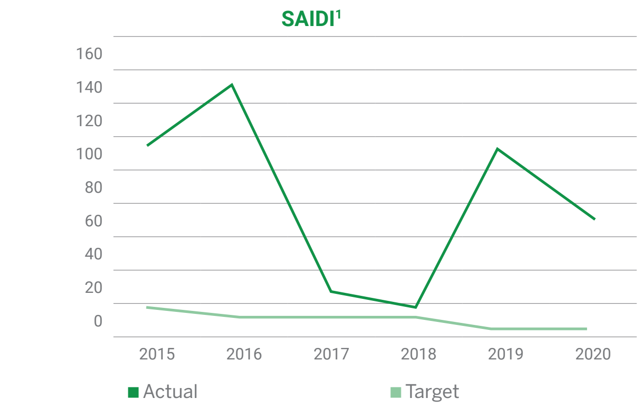
| Diesel Generation Performance | 2020 | 2019 | 2018 | 2017 | 2016 |
|---|---|---|---|---|---|
| Litres Consumed | 832,084 | 1,577,641 | 1,588,298 | 2,389,889 | 5,670,453 |
| Generation (GWh) | 3.07 | 5.91 | 5.831 | 8.364 | 19.249 |
| Cost (K millions) | 11.55 | 20.6 | 16.91 | 21.277 | 48.687 |
| Sales (K millions) | 3.3 | 1.2 | 3.0 | 2.2 | 7.7 |
| Sales as a % of Cost | 28.4 | 5.8 | 17.7 | 10.3 | 15.9 |

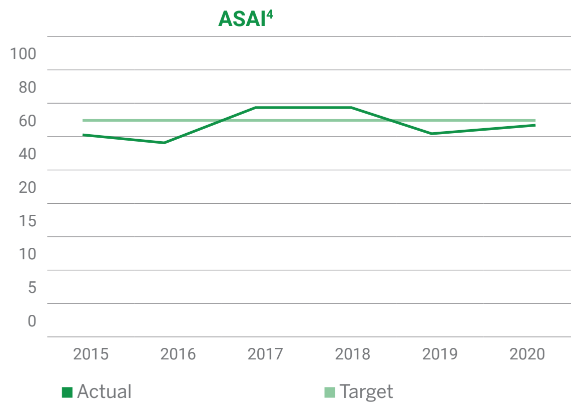
### Distribution System Reliability Indices

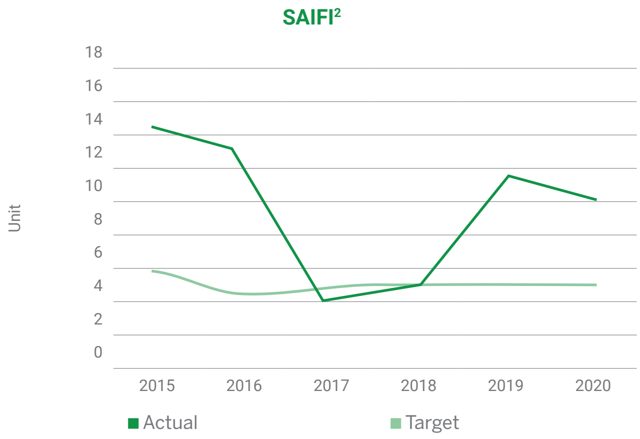
The targets set by the Regulator Energy Regulation Board (ERB) for system reliability in Distribution could not be achieved.

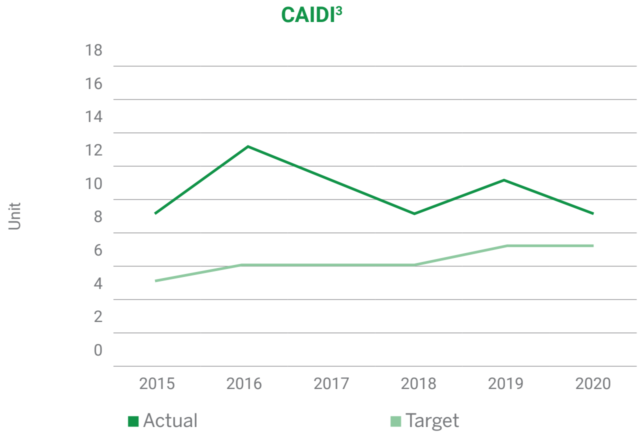
To improve reliability of supply, there is need to focus on solutions that would reduce the duration and frequency of supply interruptions

A summary of the performance is detailed in the following charts:




Major Internal Activities to Improve Distribution System Operations

Enhancements to the operational performance of the distribution system through maintenance works continued in the year. These involved rehabilitation of switchgear and transformers, and network reinforcement and expansion.

Some of the notable works carried out to improve performance of the system and extend the life of equipment include the following:

| Location | Objective | Details |
|---|---|---|
| The Lusaka Transmission & Distribution Rehabilitation Project (LTDRP) | Lusaka Area whose overall objective is to increase capacity and improve reliability of the electricity transmission and distribution system | includes upgrading of the existing 88kV to 132kV transmission networks, constructing new 132kV transmission lines, constructing/upgrading of various 132/33/11kV substations, constructing new 33kV lines, replacing/ upgrading of 33kV and 11kV cables and constructing new 11kV switching stations. |
| Bauleni Substation | Refurbishment of equipment | The replacement of 11kV switchgear |
| Itawa Water Works Substation | Refurbishment of equipment | replacement of switchgear and control panels in progress. |
| | | |
| Converter 66/11 kV substation | Expansion of capacity | Through the introduction of a 33/11kV 10MVA Transformer |

We have also continued building capacity to maintain distribution transformers internally at the Lusaka and Ndola Transformer Workshops thereby making maintenance cheaper and reducing transformer faults lead time . A total of 416 distribution transformers were received at the Lusaka and Ndola Transformer Workshops compared to 530 received in 2019.244 distribution and power transformers were repaired compared to 290 the previous year. 311 Transformers were tested for external clients in the period under review compared to 571 in 2019

1 System Average Interruption Duration Index
2 System Average Interruption Frequency Index.
3 Customer Average Interruption Duration Index.
4 Average System Availability Index

# Environmental Sustainability

Our business is highly dependent on natural resources such as water, land and trees and has an unavoidable impact on biodiversity. The generation, transmission and distribution infrastructure collectively traverses across the country affecting national heritage sites, game reserves, and plant diversity.

Therefore, ZESCO remains committed to continuous improvement of its processes to minimize the impact of our operations on the environment by:

- Reviewing and modernizing of dam designs for new generation projects' reservoirs to ensure that they support aquatic life in areas where river diversion is necessary for electricity generation.
- Ensuring that during the annual wayleave clearance, we only cut trees and vegetation within the hectarage provided for by law,
- Modernisation of substation design to ensure that the transformer bays in new substations and substations undergoing refurbishment have sufficient oil containment (Bund Walls).
- Embracing Demand Side Management strategies that promote energy efficiency.
- Ensuring that all Greenfield projects are compliant with environmental regulations as required by ZEMA.
- Engaging contractors specialised in the disposal of hazardous waste, carrying out water testing for contamination and testing of oil samples from transformers suspected to be contaminated with Polychlorinated Biphenyls (PCBs).
- Ensuring compliance with water management regulations set by the Zambezi River Authority and Water Resource Management Authority.

## Our Environmental Management System

### Framework

The Environmental Management System (EMS) is paramount to ensuring environmental sustainability by providing a unified system of technical expertise that ensures projects, operations and other activities are within our environmental policy. The unit is responsible for ensuring compliance with environmental laws and regulations that apply in environmental management, water management, biodiversity, waste management and air pollution.


### Management Systems

ZESCO holds ISO 14001 certification (Environmental Management Systems) which was attained in January 2020. The certificate is subject to a surveillance audit which confirms compliance to ISO standards is a pre requisite to annual recertification.

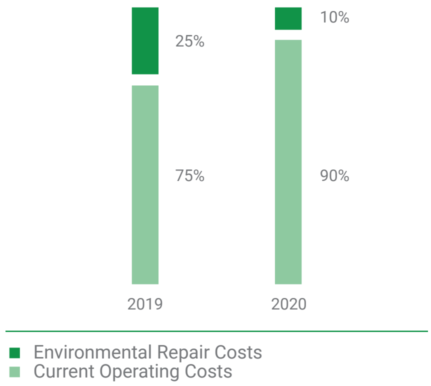
Additionally, our environmental policy is a governing document that directs our stance on environmental sustainability, and sets out the key performance indicators that we strive to meet as a group. These are some of the KPIs:

- Ensuring minimisation of waste in general and the prevention of land, water and air pollution.
- Ensuring continuous improvement of the Safety, Health, Environment and Quality (SHEQ) Management system.

### Investments in environmental protection

During the year environmental management costs increased to K18.1million, (up 24% year on year), driven by compensations costs to PAPs.

**ZESCO Group's Environmental expenditure by type**




### Annual Tree Planting Initiative

- Planting and monitoring of trees planted in Ikelenge District within the source of the Zambezi River Catchment Area.
- Carrying out sensitisation on the dangers of deforestation in corroboration with the communities in various Chiefdoms.

### Compensation of Project Affected People (PAPs) and Regulatory Review.

We ensure that we undertake impact assessment for PAPs by engaging independent professional evaluators to assess and cost the impact of displacing PAPs when implementing projects. In 2020, over K17.7 Million was spent on compensation claims.

### Fish Restocking Project

As part of the project implementation for Musonda Falls 10MW hydro power station upgrade, we undertook the fish-restocking project in Luongo River in collaboration with the Department of Fisheries in Mansa.

### Energy consumption and efficiency

We continue to promote energy efficiency initiatives, such as distribution of energy saving bulbs and development of investments in renewable energy such as solar power plant.

### Emergency Solar Systems at ZESCO and Parliament

ZESCO has installed Solar panels at its Head Office and National Parliament as part of its emergency lighting system.

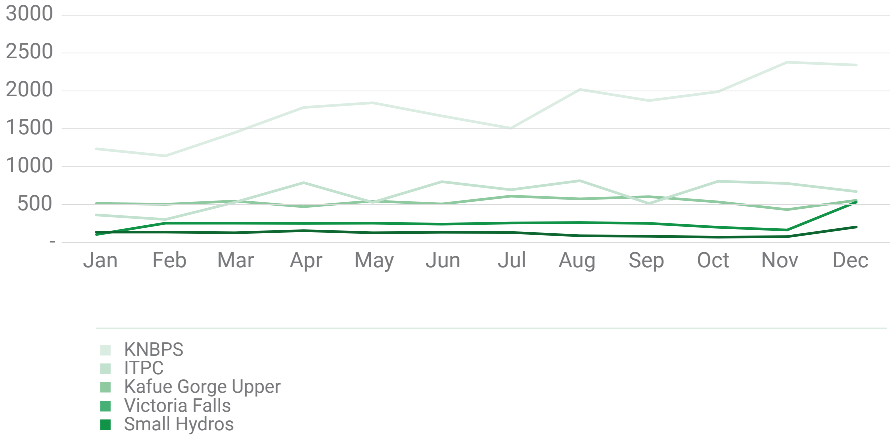
### Energy Savings Bulbs and Motion Sensors for Street Lighting

We have replaced all non-efficient lighting system (Incandescent) to more energy efficient LED lighting system and installed motion sensor for all street lighting to optimize power usage at Head Office.

### Water Usage and Discharge

ZESCO Limited Generates about 99% of its electricity through Hydro making it a major user of national water resources.

**2020 Hydropower Plant Water Use**




Water utilization based on turbine discharge
Units: Million Cubic Meters (MCM)

# Our Industry

## Key Institutions in the Zambian ESI

The Ministry of Energy (MoE) has a supervisory role and is responsible for policy development, direction and management of the energy sector. The following statutory bodies support the Electricity Supply Industry (ESI);

- Energy Regulation Board (ERB)
- Zambezi River Authority (ZRA)
- Rural Electrification Authority(REA)
- Water Resources Management Authority (WARMA)

**Industry Legal Framework.**

The main statutes governing the ESI are;

i. Electricity Act 2019.
ii. Energy Regulation Board Act 2019.
iii. Rural Electrification Act 2019.

The following are the key highlights in the Acts:

i. It gives mandate to the ERB to determine, regulate and review charges and tariffs in the sector.
ii. Prescription of minimum contents of bilateral agreements such as PPA and PSA.
iii. Migrate the Zambian ESI from single buyer model to market model by providing a framework for setting up a spot market through the introduction of licensing framework for intermediary power trader.
iv. Regulators' Power to declare a transmission and distribution network Service Provider as common carrier.
v. Operate open access transmission regime on set terms and conditions and upon payment of user fee.
vi. Deregulation of importation and exportation of power in cases of emergency.
vii. Introduce multiyear tariff framework
viii. Direct dealing between suppliers and off takers

## ESI Sector Players and Statistics.

| In Grid Players | MW | % |
|---|---|---|
| **Hydro Space** | | |
| ZESCO Ltd | 1,876.80 | |
| KNBE Power Corporation Ltd | 360.00 | |
| Itezhi Tezhi Power Company Ltd | 120.00 | |
| Lunsemfwa Hydro Power Company | 56.00 | |
| Total | 2,412.80 | 81% |
| **Thermal ( Coal) Space** | | |
| Maamba Collieries | 300.00 | |
| Total | 300.00 | 10% |
| **Solar Space** | | |
| Bangweulu Power Company | 54.30 | |
| Ngonye Power Company | 34.00 | |
| Total | 88.30 | 3% |
| **HFO, Diesel and Gas Space** | | |
| Ndola Energy Company Ltd | 105.00 | |
| Copperbelt Energy Corporation Plc | 80.00 | |
| Total | 185.00 | 6% |
| Total ESI In Grid Installed Capacity | 2,986.10 | 100% |

| Off Grid Players | MW | % |
|---|---|---|
| **Hydro Space** | | |
| Zengamina | 0.75 | |
| Total | 0.75 | 2% |
| **Thermal ( Coal) Space** | | |
| REA | 30.00 | |
| Total | 30.00 | 65% |
| **Solar Space** | | |
| REA | 0.06 | |
| Other Player | - | |
| Total | 0.06 | 0% |
| **HFO, Diesel and Gas Space** | | |
| ZESCO | 15.00 | |
| Total | 15.00 | 33% |
| Total ESI Off Grid Installed Capacity | 45.81 | 100% |

Kafue Gorge Lower Hydro currently under construction, once completed will increase the installed capacity by 750MW.

Download the 2019 National Energy Policy for more details on Key Institutions in the Zambian ESI and the Industry Legal Framework

You can also read more online at www.moe.gov.zm

### Transmission Sector

The key players in the transmission sector remained unchanged in 2020. ZESCO is still the dominant player in the industry controlling over 90% of the Industry transmission infrastructure, followed by CEC with 9%. Maamba Collieries Ltd and Lunsemfwa hydro Power Company Limited share the remaining 1%

In 2020, the transmission sector saw two key projects commissioned

1. Connection of Rufunsa and Luangwa to the National Grid.
2. Grid Integration of Dangote Embedded Power Plant.

### Distribution Sector

The Distribution Sector is a fully regulated market with two distribution companies providing electricity supply to retail customers. The players are:

i. ZESCO Limited – with the largest share of the customer base around 99.8%.
ii. North Western Energy Corporation (NWEC) - accounts for the remaining 0.2%.

## Sector Overview

The ESI has potential for growth in all sectors of the value chain. Highlighted below are some of the opportunities for growth:

### Generation

The sector has potential to expand the current industry's installed capacity.

i. Hydro Generation – The country has a hydro generation potential of about 6,000 MW with less than 50% developed. Currently there is a major project that will add 750 MW in the next 24 months.

ii. Renewable Energy – Zambia has approximately 68% of sunshine hours annually with an average irradiation of 5.5kWh/m²/day. These are ideal conditions for development of solar photovoltaic (PV) projects. In 2020, two projects were completed in the Lusaka Multi Facility Economic Zone (LMFEZ).

### Transmission

The sector is taking advantage of being land linked to eight countries by developing robust transmission corridors and interconnection capacities. The developing transmission infrastructure will act as a link between the Southern Africa Power Pool and the Eastern Power Pool.

### Distribution

The country has only 31% electricity penetration with extensive potential for growth.

## Strategic Direction

The Ministry of Energy is undertaking the following key projects to strengthen the Zambian ESI:

1. Integrated Resource Planning (IRP) in the Power Sector.

### Overview

The IRP is a 30 year plan intended to transform the sector to a diverse, climate resilient, financially sustainable and capable of providing universal access to quality power supply. An IRP outlines a country's resource requirements to meet the energy demand in line with United Nations Sustainable Development Goals (SDGs)

### Key ESI Challenges.

The following are the challenges of the Energy Sector that IRP intends to address

i. ESI Dependency on Hydropower Generation
ii. Climate Risk
iii. Financial Sustainability
iv. Grid Readiness.

### IRP Work streams

i. Demand Forecast

This will review the demographic trends to ascertain load forecast against available generation.

ii. Generation Resource Assessment and Planning.

This will identify factors that impact the ESI sustainable diversification of its generation sources.

iii. Transmission Infrastructure Planning

This focuses on factors affecting current transmission infrastructure and capacity, future network requirements through substation based demand modelling.

iv. Distribution and Demand Side Management.

This focuses on factors affecting current distribution infrastructure and capacity, future network requirements through substation based demand modelling.

v. Power Procurement, Financial Mobilisation and Market Structure.

The focus areas for this work stream will include.

- Identifying project financing sources and financial appraisal of projects to be prioritised through IRP.
- Migration from the single off taker model to a market based approach with bilateral contracts and energy traders
- Actualise the operation of a liberalised electricity market
- Establishing of an independent System Operator and economically efficient system planning.

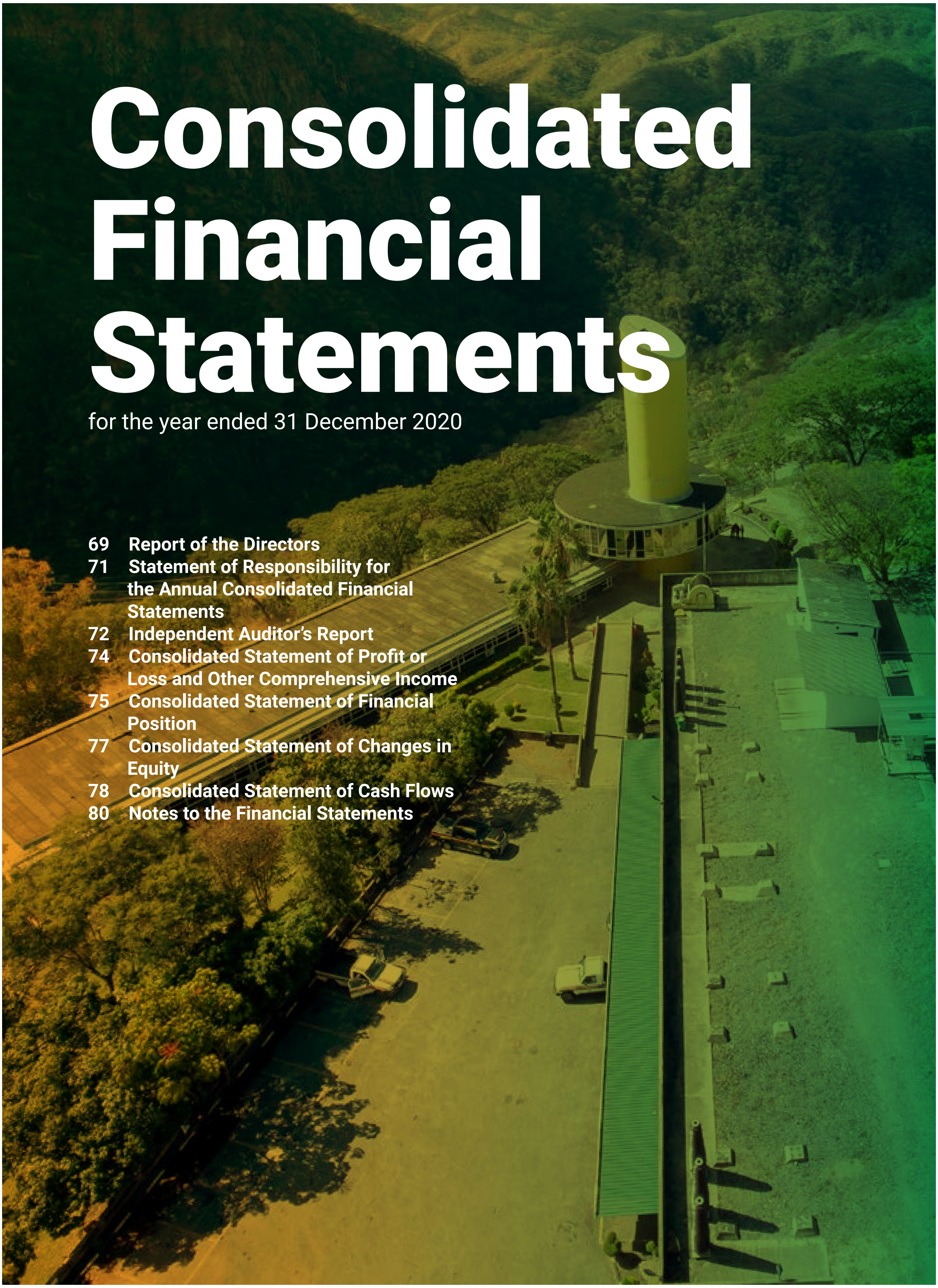
The development of the IRP is been undertaken by CIG Zambia and funded by the UKaid. The IRP will be completed in the first quarter of 2022.

2. Scaling-up Renewable Energy Programme.

This is a World Bank funded program targeting private sector participation with the intention to help low-income countries increase access to electricity using renewable energy sources.

3. Scaling-Up Solar Program

This is a World Bank funded program intended to address weather induced power shortages by scaling up solar initiatives. The program has already delivered two solar projects, Bangweulu and Ngonye.



# Consolidated Financial Statements

for the year ended 31 December 2020

# Report of the Directors

The Directors present their report and audited consolidated financial statements for the year ended 31 December 2020.

## Principal Activity

The principal activities of the ZESCO Limited ("Company") and its subsidiaries, Kafue Gorge Lower Power Development Corporation Limited, Batoka North Bank Power Corporation Limited and Kariba North Bank Extension Power Corporation Limited, together the "Group" continued to be the generation, transmission, distribution and supply of electricity, locally and in the region. The Group through its joint venture Itezhi tezhi Power Corporation Limited and associates Zambia Electrometer Limited and El Sewedy Electric Zambia Limited also manufactures electricity meters, compact fluorescent lights and distribution transformers ranging from 25KV to a maximum of 5,000KV (5mva).

## Registered Office And Principal Place Of Business

Stand 6949, Great East Road

Lusaka

## Results And Dividends

The loss for the year amounted to K15,958 million (2019: profit: K5,567 million). The Directors do not recommend payment of a dividend in respect of the year ended 31 December 2020.

## Directors

The Directors who held office during the year were:

| | |
|---|---|
| Mr. Chibwe D. Mwelwa | Board Chairperson (Appointed on 4 December 2020) |
| Dr. Mbita Chintundya Chitala | Resigned on 3rd December 2020 |
| Mr. Victor M. Mundende | |
| Mr. Trevor Kaunda | |
| Mr. George Mpundu Kanja | |
| Mr. Pythias Mulenga | |
| Ms. Kavumbu Hakachima | |

## Corporate Governance

The Board continues to be committed to high standards of corporate governance, which is fundamental to discharging their leadership responsibilities. The Board applies integrity, principles of good governance and accountability throughout its activities.

## Property, Plant And Equipment

There was a change in the Group's property, plant and equipment during the year resulting from investments made in capital and operating projects. The Group invested a total of **K17,216 million** (2019: K10,475 million).

## Intangible Assets

During the year the Group acquired software amounting to K0.4 million (2019: K0.9 million).

## Exports

The value of electricity exports by the Group were K2,440 million (2019: K1,151 million).

## Donations

The Group made donations during the year amounting to **K3.5 million** (2019: K5.8 million).

## Research And Development

The Group's research and development activities during the year amounted to K12.4 million (2019: K4.9 million).

## Share Capital

The Group's authorised share capital remained unchanged during the year.

## Employees

The average number of employees during each month of the year was as follows:

| | 2020 | 2019 |
|---|---|---|
| January | 6,719 | 6,836 |
| February | 6,760 | 6,808 |
| March | 6,756 | 6,799 |
| April | 6,740 | 6,785 |
| May | 6,720 | 6,773 |
| June | 6,707 | 6,769 |
| July | 6,759 | 6,752 |
| August | 6,668 | 6,754 |
| September | 6,774 | 6,724 |
| October | 6,794 | 6,752 |
| November | 6,769 | 6,756 |
| December | 6,759 | 6,740 |

The total remuneration and other related staff costs paid to the employees during the year was **K3,544 million** (2019: K2,525 million).

## Key Developments During The Year

- The construction of the 750 MW Kafue Gorge Lower Project reached 92% completion at the end of the year under review. The total project cost is US$1.5 billion financed through 85% debt and 15% through equity. The project is being financed by senior debt facility from China Exim Bank and International Commercial Bank of China (ICBC) at a project cost of US$1.5 billion. The project once completed will reduce the load management being experienced due to low water inflows at Kariba Dam. The Contractor Sino Hydro Corporation Limited expects to complete the project in the second quarter of 2021.
- During the year, the Group was adversely impacted by the Covid-19, which resulted in significant depreciation of the Kwacha against the major trading currencies such as the US dollar by 50%. This affected the revaluation of foreign denominated liabilities and assets and increased net exchange losses in the year under review.
- During the year, the Energy Regulation Board (ERB) approved tariff increase of domestic customers by an average of 113% effective 01 January 2020.

## Health and Safety of Employees

The Group operates an integrated Safety, Health, Environment and Quality system called SHEQ, Management System based on but not limited to the requirements of ISO 9001, ISO 14001, ISO 45001 and ISO 27001 international standards:

ZESCO's commitment to safety, health, environment and quality and information security is achieved through:

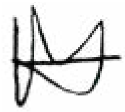
Ensuring that ZESCO's operations are safe by minimising risk and eliminating harm to employees, contractors, visitors and customers;

- Ensuring sustainable infrastructure development and operating with minimum environmental impact;
- Ensuring minimisation of waste in general, and prevention of land, water and air pollution;
- Ensuring a secure and robust cyberspace in the Corporation;
- Ensuring increased access to reliable and safe supply of electricity that sustains business continuity;
- Ensuring effective and efficient communication with all stakeholders on matters relating to service provision;
- Ensuring consistent provision of resources, training, equipment and other support systems to enable fulfilment of this policy;
- Ensuring compliance to legal, regulatory and other requirements;
- Ensuring consultation and participation of workers and its representatives; and
- Ensuring continual improvement of SHEQ management systems;
- It is the duty of each ZESCO employee and contractors to comply with this policy to enable the Group to achieve its strategic objectives and establish and entrench a SHEQ driven culture within the Group.

### Auditors

Messrs Deloitte & Touches' term of office comes to an end at the next Annual General Meeting. A resolution proposing their re-appointment as auditors and authorising the Directors to determine their remuneration will be put to the Annual General Meeting.

By order of the Board.



**Mr. McRobby Chiwale**

**GROUP SECRETARY**

**Lusaka**

# Statement of Responsibility for the Annual Consolidated Financial Statements

The Companies Act, 2017 requires the Directors to prepare financial statements for each financial year that give a true and fair view of the state of affairs of the Group as at the end of the financial year and of its financial performance. It also requires the Directors to ensure that the Group keeps proper accounting records that disclose, with reasonable accuracy, the financial position of the Group. They are also responsible for safeguarding the assets of the Group. The Directors are further required to ensure the Group adheres to the corporate governance principles or practices contained in Part VII Sections 82 to 122 of the Companies Act, 2017.

The Directors accept responsibility for the annual consolidated financial statements, which have been prepared using appropriate accounting policies supported by reasonable estimates, in conformity with International Financial Reporting Standards and the requirements of the Companies Act, 2017.

The Directors further accept responsibility for the maintenance of accounting records that may be relied upon in the preparation of financial statements, and for such internal controls as the directors determine necessary to enable the preparation of consolidated financial statements that are free from material misstatement whether due to fraud or error. In addition, the Directors are responsible for preparing the Directors' report.

The Directors are of the opinion that the financial statements set out on pages 7 to 67 give a true and fair view of the state of the financial affairs of the Group and of its financial performance in accordance with International Financial Reporting Standards and the Companies Act, 2017. The Directors further report that they have implemented and further adhered to the corporate governance principles or practices contained in Part VII, Sections 82 to 122 of the Companies Act, 2017.

The Directors have made an assessment of the ability of the Group to continue as a going concern and have no reason to believe that the business will not be a going concern for at least twelve (12) months from the date of this statement, except as disclosed out under note 3.2.2

The auditor is responsible for reporting on whether the consolidated financial statements are fairly presented in accordance with the applicable financial reporting framework described above.

**Approval of the consolidated financial statements**

The consolidated financial statements of ZESCO Limited and its subsidiaries, set out on pages 8 to 67, were approved by the Board of Directors on **NOVEMBER 2021** and signed on its behalf by:

**Chairman**

**Managing Director**

# Independent Auditor's Report

Deloitte.

**PO Box 30030**
**Lusaka**
**Zambia**

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www.deloitte.com

**To the members of**

**ZESCO Limited**

## Report on the Audit of the Consolidated Financial Statements

### Disclaimer of Opinion

We were engaged to audit the financial statements of ZESCO Limited and its subsidiaries, set out on pages 7 to 67, which comprise the statement of financial position as at the year ended 31 December 2020, and the statement of profit or loss and other comprehensive income, the statement of changes in equity and the statement of cash flows for the year then ended, and the notes to the financial statements, including a summary of significant accounting policies.

We do not express an opinion on the accompanying financial statements of the Group. Because of the significance of the matters described in the Basis for Disclaimer of Opinion section of our report, we have not been able to obtain sufficient appropriate audit evidence to provide a basis for an audit opinion on these financial statements.

### Basis for Disclaimer of Opinion

As indicated in notes 3.2.2 and 30 to the financial statements, the Group incurred a net loss of K15.6 billion for the year ended 31 December 2020 (2019: K5.6 billion) and as of that date, the Group's current liabilities exceeded its current assets by K32.3 billion (2019: K17.1 billion). The notes states that the Group will continue to receive financial support from the Government of the Republic of Zambia, however, the Directors were not able to obtain a legally enforceable letter of support. In addition, the Directors under the turnaround plan have made assumptions that they will renegotiate tariffs with Independent Power Producers, defer payments to major suppliers and also proposed to convert the loan from the Government to equity, however, there are no formal agreements supporting these assumptions. Consequently, we were unable to confirm or dispel whether it is appropriate to prepare the financial statements using the going concern basis of accounting.

Furthermore, as indicated in note 14, Property, Plant and Equipment has not been impaired in the current year. However, the impairment assessment performed by management also relies on the above key assumptions. Consequently, we were also unable to confirm or dispel whether the valuation of the Property Plant and Equipment is accurate and whether the impairment expense is complete.

### Other Information

The Directors are responsible for the other information. The other information comprises the Directors' Report as required by the Companies Act, 2017, and the five-year financial record and detailed operating statement shown in the appendices, which we obtained prior to the date of this auditor's report. The other information does not include the financial statements and our auditor's report thereon.

In connection with our audit of the financial statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained on the audit, or otherwise appears to be materially misstated.

If, based on the work we have performed on the other information that we obtained prior to the date of this auditor's report, we conclude that there is a material misstatement of this other information, we

are required to report that fact. However, due to the disclaimer of opinion in terms of the International Standard on Auditing (ISA) 705 (Revised), Modifications to the Opinion in the Independent Auditor's Report, we are unable to report further on this other information.

### Responsibilities of the Directors for the Financial Statements

The Directors are responsible for the preparation and fair presentation of the financial statements in accordance with International Financial Reporting Standards and in the manner required by the Companies Act, 2017 and for such internal control as the Directors determine is necessary to enable the preparation of the financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, the Directors, as highlighted above, are responsible for assessing the Group's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the Directors either intend to liquidate the Group or to cease operations, or have no realistic alternative but to do so.

**Auditor's Responsibilities for the Audit of the Financial Statements**

Our responsibility is to conduct an audit of ZESCO Limited consolidated financial statements in accordance with International Standards on Auditing and to issue an auditor's report. However, because of the matters described in the Basis for Disclaimer of Opinion section of our report, we were not able to obtain sufficient appropriate audit evidence to provide a basis for an audit opinion on these financial statements.

We are independent of the Group in accordance with the ethical requirements that are relevant to our audit of the financial statements in Zambia, and we have fulfilled our other ethical responsibilities in accordance with these requirements.

**Report on other legal and regulatory requirements**

The Companies Act, 2017 requires that in carrying out our audit of ZESCO Limited and its subsidiaries, we report on whether:

- There is a relationship, interest or debt which we as the Group's auditors have in the Group;
- There are serious breaches by the Group's Directors of the corporate governance principles or practices contained in Part VII sections 82 to 112 of the Companies Act, 2017; and
- There is an omission in the financial statements as regards particulars of loans made to a Group officer (a director, Group secretary or executive officer of a Group) during the year, and if reasonably possible, disclose such information in our opinion.

In respect of the foregoing requirements, we have no matters to report.

Deloitte & Touche

**DELOITTE & TOUCHE**

**ANDREW NJOVU**

**PARTNER**

**AUD/F000802**

# Consolidated Statement of Profit or Loss and Other Comprehensive Income

## for the year ended 31 December 2020

| | NOTES | 2020<br>K'000 | 2019<br>K'000 |
|---|---|---|---|
| REVENUE | 5 | 18,476,528 | 10,326,394 |
| Cost of sales | 6 | (9,500,952) | (5,762,002) |
| GROSS PROFIT | | 8,975,576 | 4,564,392 |
| Other operating income | 7 | 638,009 | 1,612,226 |
| Other losses | 8 | (11,373,026) | (2,342,722) |
| Marketing expenses | | (12,811) | (17,695) |
| Administration expenses | | (4,412,257) | (4,368,407) |
| Other expenses | 9 | (9,675,646) | (4,095,474) |
| Finance costs | 10 | (795,096) | (629,857) |
| Share of profit of associates | 17.1 | 8,557 | 8,071 |
| Share of loss of a joint venture | 17.1 | (54,902) | (662,951) |
| LOSS BEFORE TAX | | (16,701,596) | (5,932,417) |
| Income tax credit | 12 | 743,947 | 365,907 |
| LOSS FOR THE YEAR | | (15,957,649) | (5,566,510) |
| OTHER COMPREHENSIVE INCOME | | | |
| Items that will not be reclassified | | | |
| subsequently to profit or loss: | | | |
| Change in defined benefit obligation | 23 | 1,379,304 | 601,540 |
| Gain on revaluation of Property, plant and Equipment | | - | 249,584 |
| Income tax relating to items that will not be reclassified | | | |
| subsequently to profit or loss | | - | (225,195) |
| Other comprehensive income for the year, net of | | | |
| income tax | | 1,379,304 | 625,929 |
| TOTAL COMPREHENSIVE LOSS FOR THE YEAR | | (14,578,345) | (4,940,581) |

# Consolidated Statement of Financial Position

## at 31 December 2020

| | NOTES | 2020<br>K'000 | 2019<br>K'000 |
|---|---|---|---|
| ASSETS | | | |
| Non current assets | | | |
| Property, plant and equipment | 14 | 82,331,267 | 67,092,012 |
| Intangible assets | 15 | 84,673 | 68,033 |
| Right of use assets | 16 | 8,010 | 17,133 |
| Investments in associates | 17.1 | 75,827 | 67,270 |
| Investments in a joint venture | 17.1 | - | 308,810 |
| Deferred tax asset | | 356,341 | 429,199 |
| | | | |
| Total non current assets | | 82,856,118 | 67,982,457 |
| | | | |
| Current assets | | | |
| Inventories | 18 | 773,898 | 592,065 |
| Trade and other receivables | 19 | 4,249,152 | 2,743,299 |
| Amounts due from related parties | 21 | 4,977,870 | 3,310,786 |
| Cash and bank balances | | 4,379,936 | 2,644,081 |
| | | | |
| Total current assets | | 14,380,856 | 9,290,231 |
| | | | |
| TOTAL ASSETS | | 97,236,974 | 77,272,688 |
| | | | |
| EQUITY AND RESERVES | | | |
| Capital and reserves | | | |
| Issued capital | 20 | 2,825,118 | 2,825,118 |
| Revaluation reserve | | 12,550,273 | 12,992,382 |
| Retained earnings | | (12,120,269) | 1,785,359 |
| | | | |
| Total equity | | 3,255,122 | 17,602,859 |
| | | | |
| Non current liabilities | | | |
| Borrowings | 22 | 42,706,962 | 27,367,698 |
| Retirement benefit obligation | 23 | 1,836,787 | 2,020,827 |
| Capital grants and contributions | 24 | 2,756,877 | 2,708,961 |
| Deferred tax liability | 13 | - | 1,142,030 |
| Lease liabilities | 28 | 10,017 | 13,138 |
| | | | |
| Total non current liabilities | | 47,310,643 | 33,252,654 |
| | | | |
| Current liabilities | | | |
| Trade and other payables | 25 | 30,929,068 | 16,454,085 |
| Amounts due to related parties | 21 | 9,674,319 | 4,570,031 |
| Borrowings | 22 | 3,974,751 | 2,646,569 |
| Retirement benefit obligation | 23 | 253,251 | 833,748 |

# Consolidated Statement of Financial Position Continued

for the year ended 31 December 2020

| | | 2020 | 2019 |
|---|---|---|---|
| Capital grants and contributions | 24 | 123,228 | 118,151 |
| Current tax liabilities | 12 | 1,672,953 | 1,740,422 |
| Lease liabilities | 28 | 6,435 | 11,599 |
| Bank overdraft | 26 | 37,205 | 42,570 |
| Total current liabilities | | 46,671,210 | 26,417,175 |
| Total liabilities | | 93,981,853 | 59,669,829 |
| TOTAL EQUITY AND LIABILITIES | | 97,236,974 | 77,272,688 |

The responsibilities of the Group's Directors with regard to the preparation of the consolidated financial statements are set out on page 4.
The consolidated financial statements on pages 8 to 67 were approved by the Board of Directors and authorised for issue on .......................... ...... and were signed on its behalf by:

**Chairman** **Managing Director**

# Consolidated Statement of Changes in Equity

## for the year ended 31 December 2020

| | Share capital K'000 | Amount pending allotment of shares K'000 | Revaluation reserve K'000 | Retained earnings K'000 | Total K'000 |
|---|---|---|---|---|---|
| Balance at 1 January 2019 | 2,825,118 | - | 13,999,659 | 6,067,060 | 22,891,837 |
| | | | | | |
| Issue of shares | - | - | - | - | - |
| Loss for the year | - | - | - | (5,566,510) | (5,566,510) |
| Other comprehensive income for year | - | - | - | 625,929 | 625,929 |
| Deferred tax on revaluation | - | - | 230,608 | - | 230,608 |
| *Adjustments on revaluation | - | - | (579,005) | - | (579,005) |
| Amortisation of revaluation reserve | - | - | (658,880) | 658,880 | - |
| "Balance at 31 December 2019 | 2,825,118 | - | 12,992,382 | 1,785,359 | 17,602,859 |
| | | | | | |
| Issue of shares | - | | - | - | - |
| Loss for the year | - | - | - | (15,957,649) | (15,957,649) |
| Other comprehensive income for year | | | | 1,379,304 | 1,379,304 |
| Deferred tax on revaluation | - | - | 230,608 | - | 230,608 |
| *Adjustments on revaluation | - | - | - | - | - |
| Amortisation of revaluation reserve | - | - | (672,717) | 672,717 | - |
| | | | | | |
| Balance at 31 December 2020 | 2,825,118 | - | 12,550,273 | (12,120,269) | 3,255,122 |

*Adjustments arise from the fixed assets which were captured under revaluation of assets and yet they were still captured under Capital Works in Progress.

# Consolidated Statement of Cash Flows

## for the year ended 31 December 2020

| | NOTES | 2020<br>K'000 | 2019<br>K'000 |
|---|---|---|---|
| CASH FLOWS FROM OPERATING ACTIVITIES | | | |
| Loss for the year | | (16,701,596) | (5,932,417) |
| Adjustments for: | | | |
| - Share of profit of associates | 17.1 | (8,557) | (8,071) |
| - Share of loss of joint venture | 17.1 | 54,902 | 662,951 |
| - Interest income | 7 | (10,433) | (13,361) |
| - Finance costs recognised in profit or loss | 10 | 795,096 | 629,857 |
| - Net exchange losses recognised on borrowings | 22 | 15,164,029 | 4,939,617 |
| - Elimination of depreciation on revaluation | 14 | - | (127,895) |
| - Loss on disposal of property, plant and equipment | | 1,875 | 1,138 |
| - Depreciation of non-current assets | 14 | 1,948,536 | 1,931,786 |
| - Capitalised depreciation | 14 | (772) | (609) |
| - Gain on revaluation of assets | 14 | - | 24,877 |
| - Amortisation of intangible assets | 15 | 7,608 | 8,647 |
| - Depreciation on right of use assets | 16 | 9,321 | 10,519 |
| - ERB Strategic Reserve Fund write off | 17 | - | 25,227 |
| - Impairment of investments | 17 | 253,908 | 6,130 |
| - Amortisation of capital grants and contributions | 24 | (187,031) | (174,380) |
| - Impairment loss recognised on trade receivables | 19 | 7,383,037 | 2,204,759 |
| - Impairment loss recognised on amounts due from related | | | |
| parties | | 108,174 | 520,367 |
| - Impairment reversal recognised on trade receivables | 19 | - | (224,304) |
| - Impairment loss recognised on other receivables | 19 | 196,489 | 500,457 |
| - Impairment reversal recognised on other receivables | 19 | (695,324) | (143,850) |
| -Unrealised exchange gains | | (949,340) | (322,666) |
| | | | |
| | | 7,369,922 | 4,518,779 |
| Movements in working capital: | | | |
| (Increase) decrease in inventory | | (181,833) | 277,526 |
| Increase in trade and other receivables | | (8,390,055) | (2,408,868) |
| Increase in amounts due from related parties | | (1,775,258) | (698,065) |
| Increase in trade and other payables | | 14,474,983 | 2,947,049 |
| Increase in deferred liabilities | | 614,767 | 1,180,619 |
| Increase in amounts due to related parties | | 5,104,288 | 2,142,351 |
| | | | |
| Cash generated from operations | | 17,216,814 | 7,959,391 |
| | | | |
| Interest paid | 10 | (795,096) | (629,857) |
| Strategic reserve fund payments | | - | (5,647) |
| Income taxes paid | 12 | (162,087) | (48,859) |
| | | | |
| Net cash generated by operating activities | | 16,259,631 | 7,275,028 |
| | | | |
| CASH FLOWS FROM INVESTING ACTIVITIES | | | |

| | | 2020 | 2019 |
|---|---|---|---|
| Proceeds from disposal of property, plant and equipment | | 2,894 | 782 |
| Payments for property, plant and equipment | 14 | (17,212,061) | (10,475,113) |
| Payments for intangible assets | 15 | (381) | (858) |
| Interest received | 7 | 10,433 | 13,361 |
| | | | |
| Net cash used in investing activities | | (17,199,115) | (10,461,828) |
| | | | |
| CASH FLOWS FROM FINANCING ACTIVITIES | | | |
| Repayment of borrowings | 22 | (2,648,253) | (3,146,274) |
| Repayment of lease liabilities | 28 | (12,078) | (7,960) |
| Proceeds from capital grants and contributions | 24 | 240,025 | 222,034 |
| Proceeds from borrowings | 22 | 4,151,670 | 5,992,125 |
| | | | |
| Net cash generated from financing activities | | 1,731,364 | 3,059,925 |
| | | | |
| Net increase ( decrease) in cash and cash equivalents | | 791,880 | (126,875) |
| | | | |
| Cash and cash equivalents at the beginning of the year | | 2,601,511 | 2,405,720 |
| Effect of foreign exchange rate changes | | 949,340 | 322,666 |
| | | | |
| Cash and cash equivalents at the end of the year | | 4,342,731 | 2,601,511 |
| | | | |
| COMPRISING OF: | | | |
| Bank and cash balances* | | 4,379,936 | 2,602,081 |
| Short term deposits | | - | 42,000 |
| | | | |
| | | 4,379,936 | 2,644,081 |
| Bank overdraft | 26 | (37,205) | (42,570) |
| | | | |
| | | 4,342,731 | 2,601,511 |

*Included in bank and cash balances are restricted funds amounting to K2.4 billion. The cash is held as part of Debt Security Reserves.

# Notes to the Financial Statements

## 1. Corporate Information

ZESCO Limited ("the Group") and its subsidiaries, Kafue Gorge Lower Power Development Corporation Limited, Batoka North Power Corporation Limited and Kariba North Bank Extension Power Corporation Limited are together the "Group" are incorporated and domiciled in Zambia. Its parent and ultimate holding Group is Industrial Development Corporation Zambia Limited, a Group incorporated in Zambia. The address of its registered office, principal place of business and principal activities are disclosed in the Directors' report on page 1.

## 2. Adoption of new and revised standards

### 2.1. New and amended IFRS Standards that are effective for the current year

#### 2.1.1. Impact of the initial application of Covid-19-Related Rent Concessions Amendment to IFRS 16

In May 2020, the IASB issued Covid-19-Related Rent Concessions (Amendment to IFRS 16) that provides practical relief to lessees in accounting for rent concessions occurring as a direct consequence of COVID-19, by introducing a practical expedient to IFRS 16. The practical expedient permits a lessee to elect not to assess whether a COVID- 19-related rent concession is a lease modification. A lessee that makes this election shall account for any change in lease payments resulting from the COVID-19-related rent concession the same way it would account for the change applying IFRS 16 if the change were not a lease modification.

The practical expedient applies only to rent concessions occurring as a direct consequence of COVID-19 and only if all of the following conditions are met:

a) The change in lease payments results in revised consideration for the lease that is substantially the same as, or less than, the consideration for the lease immediately preceding the change;

b) Any reduction in lease payments affects only payments originally due on or before 30 June 2021 (a rent

concession meets this condition if it results in reduced lease payments on or before 30 June 2021 and increased lease payments that extend beyond 30 June 2021); and

c) There is no substantive change to other terms and conditions of the lease.

In the current financial year, the Group has not been impacted by the amendment to IFRS 16 (as issued by the IASB in May 2020) in advance of its effective date.

In the current year, the Group has applied the below amendments to IFRS Standards and Interpretations issued by the Board that are effective for an annual period that begins on or after 1 January 2020. Their adoption has not had any material impact on the disclosures or on the amounts reported in these financial statements.

| | |
|---|---|
| Amendments to References to the Conceptual Framework in IFRS Standards | The Group has adopted the amendments included in Amendments to References to the Conceptual Framework in IFRS Standards for the first time in the current year. The amendments include consequential amendments to affected Standards so that they refer to the new Framework. Not all amendments, however, update those pronouncements with regard to references to and quotes from the Framework so that they refer to the revised Conceptual Framework. Some pronouncements are only updated to indicate which version of the Framework they are referencing to (the IASC Framework adopted by the IASB in 2001, the IASB Framework of 2010, or the new revised Framework of 2018) or to indicate that definitions in the Standard have not been updated with the new definitions developed in the revised Conceptual Framework. |
| Amendments to IFRS 3 Definition of a business | The Group has adopted the amendments to IFRS 3 for the first time in the current year. The amendments clarify that while businesses usually have outputs, outputs are not required for an integrated set of activities and assets to qualify as a business. To be considered a business an acquired set of activities and assets must include, at a minimum, an input and a substantive process that together significantly contribute to the ability to create outputs. |
| Amendments to IFRS 3 Definition of a business | The amendments remove the assessment of whether market participants are capable of replacing any missing inputs or processes and continuing to produce outputs. The amendments also introduce additional guidance that helps to determine whether a substantive process has been acquired.<br>The amendments introduce an optional concentration test that permits a simplified assessment of whether an acquired set of activities and assets is not a business. Under the optional concentration test, the acquired set of activities and assets is not a business if substantially all of the fair value of the gross assets acquired is concentrated in a single identifiable asset or group of similar assets. The amendments are applied prospectively to all business combinations and asset acquisitions for which the acquisition date is on or after 1 January 2020. |
| Amendments to IAS 1 and IAS 8 Definition of material | The Group has adopted the amendments to IAS 1 and IAS 8 for the first time in the current year. The amendments make the definition of material in IAS 1 easier to understand and are not intended to alter the underlying concept of materiality in IFRS Standards. The concept of 'obscuring' material information with immaterial information has been included as part of the new definition. The threshold for materiality influencing users has been changed from 'could influence' to 'could reasonably be expected to influence'. The definition of material in IAS 8 has been replaced by a reference to the definition of material in IAS 1. In addition, the IASB amended other Standards and the Conceptual Framework that contain a definition of 'material' or refer to the term 'material' to ensure consistency. |

2.1.2 New and revised Standards in issue but not yet effective

At the date of authorisation of these financial statements, the Group has not applied the following new and revised IFRS Standards that have been issued but are not yet effective.

| | |
|---|---|
| IFRS 10 and IAS 28 (amendments) | Sale or Contribution of Assets between an Investor and its Associate or Joint Venture |
| Amendments to IAS 1 | Classification of Liabilities as Current or Non-current |
| Amendments to IFRS 3 | Reference to the Conceptual Framework |
| Amendments to IAS 16 | Property, Plant and Equipment—Proceeds before Intended Use |
| Amendments to IAS 37 | Onerous Contracts – Cost of Fulfilling a Contract |
| Annual Improvements to IFRS Standards 2018-2020 Cycle | Amendments to IFRS 1 First-time Adoption of International Financial Reporting Standards, IFRS 9 Financial Instruments, and IFRS 16 Leases. |

The directors do not expect that the adoption of the Standards listed above will have a material impact on the financial statements of the Group in future periods, except as noted below:

**Amendments to IFRS 10 and IAS 28 – Sale or Contribution of Assets between an Investor and its Associate or Joint Venture**
The amendments to IFRS 10 and IAS 28 deal with situations where there is a sale or contribution of assets between an investor and its associate or joint venture. Specifically, the amendments state that gains or losses resulting from the loss of control of a subsidiary that does not contain a business in a transaction with an associate or a joint venture that is accounted for using the equity method, are recognised in the parent's profit or loss only to the extent of the unrelated investors' interests in that associate or joint venture. Similarly, gains and losses resulting from the remeasurement of investments retained in any former subsidiary (that has become an associate or a joint venture that is accounted for using the equity method) to fair value are recognised in the former parent's profit or loss only to the extent of the unrelated investors' interests in the new associate or joint venture.

The effective date of the amendments has yet to be set by the Board; however, earlier application of the amendments is permitted. The directors of the Company anticipate that the application of these amendments may have an impact on the Group's consolidated financial statements in future periods should such transactions arise.

**Amendments to IAS 1 – Classification of Liabilities as Current or Non-current**
The amendments to IAS 1 affect only the presentation of liabilities as current or non-current in the statement of financial position and not the amount or timing of recognition of any asset, liability, income or expenses, or the information disclosed about those items.

The amendments clarify that the classification of liabilities as current or non-current is based on rights that are in existence at the end of the reporting period, specify that classification is unaffected by expectations about whether an entity will exercise its right to defer settlement of a liability, explain that rights are in existence if covenants are complied with at the end of the reporting period, and introduce a definition of 'settlement' to make clear that settlement refers to the transfer to the counterparty of cash, equity instruments, other assets or services.

The amendments are applied retrospectively for annual periods beginning on or after 1 January 2023, with early application permitted.

**Amendments to IFRS 3 – Reference to the Conceptual Framework**
The amendments update IFRS 3 so that it refers to the 2018 Conceptual Framework instead of the 1989 Framework. They also add to IFRS 3 a requirement that, for obligations within the scope of IAS 37, an acquirer applies IAS 37 to determine whether at the acquisition date a present obligation exists as a result of past events. For a levy that would be within the scope of IFRIC 21 Levies, the acquirer applies IFRIC 21 to determine whether the obligating event that gives rise to a liability to pay the levy has occurred by the acquisition date.

Finally, the amendments add an explicit statement that an acquirer does not recognise contingent assets acquired in a business combination.

The amendments are effective for business combinations for which the date of acquisition is on or after the beginning of the first annual period beginning on or after 1 January 2022. Early application is permitted if an entity also applies all other updated references (published together with the updated Conceptual Framework) at the same time or earlier.

**Amendments to IAS 16 – Property, Plant and Equipment—Proceeds before Intended Use**
The amendments prohibit deducting from the cost of an item of property, plant and equipment any proceeds from selling items produced before that asset is available for use, i.e. proceeds while bringing the asset to the and condition necessary for it to be capable of operating in the manner intended by management. Consequently, an entity recognises such sales proceeds and related costs in profit or loss. The entity measures the cost of those items in accordance with IAS 2 Inventories.

The amendments also clarify the meaning of 'testing whether an asset is functioning properly'. IAS 16 now specifies this as assessing whether the technical and physical performance of the asset is such that it is capable of being used in the production or supply of goods or services, for rental to others, or for administrative purposes.

If not presented separately in the statement of comprehensive income, the financial statements shall disclose the amounts of proceeds and cost included in profit or loss that relate to items produced that are not an output of the entity's ordinary activities, and which line item(s) in the statement of comprehensive income include(s) such proceeds and cost.

The amendments are applied retrospectively, but only to items of property, plant and equipment that are brought to the location and condition necessary for them to be capable of operating in the manner intended by management on or after the beginning of the earliest period presented in the financial statements in which the entity first applies the amendments.

The entity shall recognise the cumulative effect of initially applying the amendments as an adjustment to the opening balance of retained earnings (or other component of equity, as appropriate) at the beginning of that earliest period presented.

The amendments are effective for annual periods beginning on or after 1 January 2022, with early application permitted.

**Amendments to IAS 37 – Onerous Contracts—Cost of Fulfilling a Contract**

The amendments specify that the 'cost of fulfilling' a contract comprises the 'costs that relate directly to the contract'. Costs that relate directly to a contract consist of both the incremental costs of fulfilling that contract (examples would be direct labour or materials) and an allocation of other costs that relate directly to fulfilling contracts (an example would be the allocation of the depreciation charge for an item of property, plant and equipment used in fulfilling the contract).

The amendments apply to contracts for which the entity has not yet fulfilled all its obligations at the beginning of the annual reporting period in which the entity first applies the amendments. Comparatives are not restated. Instead, the entity shall recognise the cumulative effect of initially applying the amendments as an adjustment to the opening balance of retained earnings or other component of equity, as appropriate, at the date of initial application.

The amendments are effective for annual periods beginning on or after 1 January 2022, with early application permitted.

**Annual Improvements to IFRS Standards 2018-2020 Cycle**
**IFRS 9 Financial Instruments**

The amendment clarifies that in applying the '10 per cent' test to assess whether to derecognise a financial liability, an entity includes only fees paid or received between the entity (the borrower) and the lender, including fees paid or received by either the entity or the lender on the other's behalf.

The amendment is applied prospectively to modifications and exchanges that occur on or after the date the entity first applies the amendment.

The amendment is effective for annual periods beginning on or after 1 January 2022, with early application permitted.

**IFRS 16 Leases**

The amendment removes the illustration of the reimbursement of leasehold improvements.

As the amendment to IFRS 16 only regards an illustrative example, no effective date is stated.

## 3. Significant Accounting Policies

### 3.1. Statement of compliance

The consolidated financial statements have been prepared in accordance with International Financial Reporting StandardS.

### 3.2. Basis of preparation

The Directors have, at the time of approving the consolidated financial statements, a reasonable expectation that the Group has adequate resources to continue in operational existence for the foreseeable future. Thus they continue to adopt the going concern basis of accounting in preparing the financial statements.

The consolidated financial statements have been prepared on the historical cost basis except for certain properties and financial instruments that are measured at revalued amounts or fair values at the end of each reporting period, as explained in the accounting policies below.

Historical cost is generally based on the fair value of the consideration given in exchange for goods and services.

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date, regardless of whether that price is directly observable or estimated using another valuation technique. In estimating the fair value of an asset or a liability, the Group takes into account the characteristics of the asset or liability if market participants would take those characteristics into account when pricing the asset or liability at the measurement date. Fair value for measurement and/or disclosure purposes in these financial statements is determined on such a basis, except for share-based payment transactions that are within the scope of IFRS 2, leasing transactions that are within the scope of IAS 17, and measurements that have some similarities to fair value but are not fair value, such as realisable value in IAS 2 or value in use in IAS 36.

In addition, for financial reporting purposes, fair value measurements are categorised into Level 1, 2 or 3 based on the degree to which the inputs to the fair value measurements are observable and the significance of the inputs to the fair value measurement in its entirety, which are described as follows:

- Level 1 inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities that the entity can access at the measurement date;
- Level 2 inputs are inputs, other than quoted prices included within Level 1, that are observable for the asset or liability, either directly or indirectly; and
- Level 3 inputs are unobservable inputs for the asset or liability.

Items included in the consolidated financial statements are measured using the currency of the primary economic environment in which the entity operates ('the functional currency'). The consolidated financial statements are presented in Zambian Kwacha (K).

#### 3.2.1. Basis of consolidation

The consolidated financial statements incorporate the financial statements of the Group and its subsidiaries. Group is achieved where the Group has the power to govern the financial and operating policies of an entity so as to obtain benefits from its activities.

- has power over the investee;

- is exposed, or has rights, to variable returns from its involvement with the investee; and
- has the ability to use its power to affect its returns.

Consolidation of subsidiaries begins when the Group obtains control over the subsidiary and ceases when the Group loses control of the investments. Specifically, income and expenses of a subsidiary acquired or disposed of during the year are included in the consolidated statement of profit or loss and other comprehensive income from the date the Group gains control until the date when the Group ceases to control the subsidiary.

Profit or loss and each component of other comprehensive income are attributed to the owners of the Group and to the non-controlling interests. Total comprehensive income of subsidiaries is attributed to the owners of the Group and to the non-controlling interests even if this results in the non-controlling interests having a deficit balance.

When necessary, adjustments are made to the financial statements of subsidiaries to bring their accounting policies into line with the Group's accounting policies.

All intra-group transactions, balances, income and expenses are eliminated in full on consolidation.

The Group continues to use the equity method when an investment in an associate becomes an investment in a joint venture or an investment in a joint venture becomes an investment in an associate. There is no re-measurement to fair value upon such changes in ownership interests.

When a group entity transacts with an associate or a joint venture of the Group, profits and losses resulting from the transactions with the associate or joint venture are recognised in the Group's consolidated financial statements only to the extent of interests in the associate or joint venture that are not related to the Group.

### 3.2.2. Going concern

The Group ended the year 2020 with strong underlying operational performance with revenue growth of 78%.

However, on account of weakening of the Zambian Kwacha against the US Dollar during the year, there was an adverse impact of exchange losses amounting to K11.4 billion (2019: K2.3 billion) hence the Group incurred a net loss of K15.96 billion (2019: K5.6 billion). As at 31 December 2020, the Group was in a net current liability position of K32.3 billion (2019: K17.1 billion).

The Directors are of the opinion that the Group is a going concern on the basis that the Group:

- Will generate cash inflows from operations of at least the amount projected in the management's business turnaround plan. The generation of sufficient cash flows from operations is driven by and is dependent on stability of the Kwacha/US Dollar exchange rate, management achieving revenue growth targets. In their assessment, the Directors have assumed that the Kwacha will not depreciate significantly against the US Dollar (between 23.04 and 26.3 per dollar over the next 5 years) and that the Group will achieve a revenue growth rates of 15% and 40 % in 2021 and 2022 respectively.
- Obtain sufficient funding from the Government of the Republic of Zambia through its holding company to meet its obligations as and when they fall due.

Accordingly, the Directors are of the opinion that the preparation of the financial statements on the going concern basis is appropriate.

**1 Financial position**

- The Group's current liabilities of K46.7 billion (2019: K 26.4 billion) exceeds the current assets of K14.4 billion as at 31 December 2020 (2019: K9.3 billion). However, the carrying amounts of total assets of the entity of K102.4 billion (2019: K77.3 billion) exceeded their total liabilities of K94 billion (59.7 billion) in the year under review.
- The increase in current liabilities by 77% was mainly due to depreciation of the Kwacha against the US dollar, as 85% of liabilities in terms of trade payables owed to Independent Power Producers whose invoicing is US dollar, while our reporting currency is the local currency Kwacha, which significantly depreciated by the end of 2020. Further, this was compounded by the tariff disparity between IPPs average selling tariff of US$11 cents/kwh compared to buying averaging US$7.5 cents/Kwh.
- The Group has been posting operating losses in the last 5 years on account of high IPPs tariff than the selling tariffs and the impact of increased expected credit default rates from our major customers arising from poor payment patterns and also due to on-going tariff disputes with some major customers under Bulky Supply Agreements.
- The depreciation of the local currency against the major currencies such as the US dollar, has adverse impact on our operations given that our major raw materials are imported. This has resulted in increase in current liabilities upon revaluation translating into local reporting currency and high exchange losses impacting negatively our profitability.

**2. Turnaround Initiatives**

The Directors' have put in place a turnaround strategy with focus on the three strategic pillars to overcome the current challenges:

**a. Debt Restructuring**

The current long-term debt stands at about K43 billion or US$2 billion, borrowed for capital infrastructure investment.

The long-term debt is split into the following categories;

- Government guaranteed loans
- Government on-lent concessional loans
- Commercial loans

As part of the debt restructuring the Group is engaging the Government of Zambia through the Ministry of Finance to convert the Government guaranteed and on-lent concessional loans to equity. The engagement process has commenced and expected to be concluded before end of 2021. Once the loans have been converted, it is expected to reduce the levels of gearing and improve the equity.

Further, the Group is re-negotiating the terms of the existing long-term debt under the commercial loans' category. The process of engagement with various lenders is still on going. The strategy being employed is to engage individual lenders with the agenda to restructure the existing debt by reviewing the repayment terms and interest rates and possible deferment of the repayment of loans as they fall due.

The debt restructuring also includes re-negotiating with Lenders to reduce the Debt Reserve account, which holds cash cover for the debt repayment for certain loans. This will free up cash to assist in liquidating the long outstanding arrears for IPPs and other Suppliers of goods and services.

**b. Cost Management**
Part of the Cost Management initiative is to re-negotiate with Independent Power Producers the cost of power purchases whose tariff is significantly above the selling tariff to the customers. The power purchase tariff from IPPs is averages 11 cents/Kwh against the selling average tariff of about US$ 7.5 cents/Kwh.

The re-negotiations are progressing well, with outstanding Conditional Precedent (CPs) yet to be met by Group. The Shareholder has been engaged with a view to assist in meeting the CPs in order to reach closure with the Independent Power Producers tariff re-negotiations. The IPPs re-negotiations include the repayment plan of the outstanding arrears with Independent Power Suppliers.

In order to reduce the operating costs, the Group is utilizing online platforms to increase easy access of services provided by physical Customer Service Centres. This has resulted in closure of some of the rented properties in preference to on-line services.

**c. Revenue Enhancement**
This includes engagement with Mining customers with long outstanding invoices with a view to agree payment plans. Further, the option to settle long outstanding disputed tariff issues through arbitration is considered rather than the lengthy and costly litigation process.

In addition, management is engaging with Government of Zambia and Water Utilities to conclude debt swap with long outstanding electricity bills.

The Cost of Service Study expected to be completed by end of the September of 2021, will provide the basis for tariff migration to Cost Reflective levels.

The conclusion of Cost-of-Service Study scheduled to be concluded by 31 August 2021 is expected to create a conducive environment for tariff migration to cost reflective levels in the Energy Sector Industry. "

**3 Macro- Economic conditions and impact of COVID-19**
The successful implementation of the turnaround strategy will depend on the stability of macro-economic factors which are sensitive to the assumptions made on the forecasting future cash flows.

- The forecasting of Exchange rate of Kwacha to US$ dollar is depended on the pessimistic position that the Kwacha will continue to depreciate at average of 10% to 2022. The exchange rate movement of Kwacha against the US dollar is sensitive and has an impact in the outcome of the financial performance of the Group in the next 12 months and thereafter.
- The ability of the Government of Zambia to conclude the country's debt restructuring efforts with its lender of Euro-Bond and other Creditors will have an impact on the Group's debt structure.
- The Country's ability to conclude negotiations with International Monetary Fund (IMF) on the re-financing package as an economic stimulus package, which will assist in re-finance the exiting Country's debt.
- The impact of Credit Ratings for the country will have direct impact on the cost of future borrowings and on the local and international market. This will further have an impact on the Turnaround strategy and capital structure in determining the weighted average capital cost to determine the present value of future cash flows for use in computing recoverable amounts.
- Inflation rate fluctuations normally impact on the cost of living of the country.

The emergency of Covid-19 has had adverse impact on the Economic of the Country, resulting in negative growth of the Gross Domestic Product (GDP). This is further expected to contract the local economy in 2021, as trade within the region has declined due to restrictions in the movements between neighbouring countries in a bid to control the spread of the Coronavirus.

**4. Progress on Implementation of Turnaround Strategy**
**Liquidity**
In assessing the Group's liquidity, management prepared a 12month cash flow forecast and a five-year Turnaround Strategy up-to 2025. A number of assumptions and estimates have been made in preparing the forecast. The forecast takes into consideration various scenarios relating to the economic and Covid-19 impact on its various operations, including the following:

**a. Completion of Kafue Gorge Lower Hydropower Project - 750 MW**
The commissioning of the Generators at Kafue Gorge Hydropower Plant is expected to commence in the second half of 2021 with commissioning of the first 150 MW Generator. The Generator Units are scheduled to come on board on a monthly basis starting at the end of the second quarter with the first 150 MW Generation already commissioned in June 2021, thereafter on a monthly basis a Generator will be commissioned in line with the plan by Management when preparing the 12 months cash flow forecasting.

**b. IPPs Tariff Re-negotiations**
The IPPs tariff re-negotiations has reached advanced stage with parties agreeing a tariff, with only Conditional Precedent (CPs) to be agreed by parties.

**c. Tariff Adjustments**
The Group expects the Cost of Service Study to be completed in the third quarter of 2021. This is expected to provide the basis for tariff migration path to cost reflective levels. In preparation of 12-month cash flow forecasting, the Group has not planned for any tariff increase in 2021 due to ongoing Cost of Service Study on a based on base case scenario. However, in 2022 the Group has included a 35% tariff application and intends to apply for a multiple tariff increase for the next 3 years in line with the Energy Regulatory Board Act.

**d Debt Restructuring**
Includes conversion of GRZ On-lent loans to Equity and re-negotiations of existing loans with lenders. The process is on - going with other lenders yet to respond to ZESCO's request for re-negotiations of the tariff. This is aimed at strengthening the balance sheet and de-gearing the debt levels of the Group, currently standing above the acceptable Debt service ratio. The Directors are aware of the pending defaults on some of the existing facilities, hence they have engaged the lenders to defer the payment of interest and loan repayments to 2022, to allow the Group to restructure its debt profile in line with the shareholder efforts.

The restructuring of the debt will entail consolidating the existing debt by re-negotiating the interest terms and tenure of the loans. This will include re-packaging the existing loans and possible buying off some of the loans into a single consolidated debt

**5. Funding confirmation from Lenders**
During the year under review, the Group concluded the following Financing agreements;

- The financing of US$ 190 million debt with through Industrial Development Corporation Limited as Shareholder loan into Kafue Gorge Lower Hydro Power Project, expected to be commissioned in the second quarter of 2021.
- Completed a deal worth US$20 million to procure prepaid meters aimed at enhancement of collections and aimed at reducing backlog of customer connection.
- Completed a deal worth US$10 million as Project financing for construction of 20MVA 132-88/33/11kV at Sanje, Mumbwa and new commissioning of three phase 315MVA 330/220/11kV 50Hz auto transformer, protection, metering and control equipment for the New Mumbwa Substation. The investments are aimed at providing reliable supply of electricity to Nampundwe Copper mine and intended investments around Mumbwa.
- Completed a deal worth K100 million for asset finance with ABSA. This is intended to finance the purchase of motor vehicles to reduce the backlog of customer connection and also enhance revenue collections on post-paid metering customers.
- Further, the Group has signed Bulky Supply Agreements with Botswana power to supply 100 MW effective 01 May 2021 at an average tariff of US$9/cents for 6 months and 50 MW of power to NamPower on a five year agreement.
- On a long-term basis, the Group is negotiating with ESKOM of South Africa to supply 200 MW of power at average tariff of US$9 cents.

The above measures are aimed at improving the working capital of the Group in the next 12 months as support for going concern.

### 3.2.3. Investments in associates and joint ventures

An associate is an entity over which the Group has significant influence. Significant influence is the power to participate in the financial and operating policy decisions of the investee but is not control or joint control over those policies. A joint venture is a joint arrangement whereby the parties that have joint control of the arrangement have rights to the net assets of the joint arrangement. Joint control is the contractually agreed sharing of control of an arrangement, which exists only when decisions about the relevant activities require unanimous consent of the parties sharing control.

The results and assets and liabilities of associates or joint ventures are incorporated in these consolidated financial statements using the equity method of accounting, except when the investment, or a portion thereof, is classified as held for sale, in which case it is accounted for in accordance with IFRS 5. Under the equity method, an investment in an associate or a joint venture is initially recognised in the consolidated statement of financial position at cost and adjusted thereafter to recognise the Group's share of the profit or loss and other comprehensive income of the associate or joint venture. When the Group's share of losses of an associate or a joint venture exceeds the Group's interest in that associate or joint venture (which includes any long-term interests that, in substance, form part of the Group's net investment in the associate or joint venture), the Group discontinues recognising its share of further losses. Additional losses are recognised only to the extent that the Group has incurred legal or constructive obligations or made payments on behalf of the associate or joint venture.

An investment in an associate or a joint venture is accounted for using the equity method from the date on which the investee becomes an associate or a joint venture. On acquisition of the investment in an associate or a joint venture, any excess of the cost of the investment over the Group's share of the net fair value of the identifiable assets and liabilities of the investee is recognised as goodwill, which is included within the carrying amount of the investment. Any excess of the Group's share of the net fair value of the identifiable assets and liabilities over the cost of the investment, after reassessment, is recognised immediately in profit or loss in the period in which the investment is acquired.

The requirements of IAS 39 are applied to determine whether it is necessary to recognise any impairment loss with respect to the Group's investment in an associate or a joint venture. When necessary, the entire carrying amount of the investment (including goodwill) is tested for impairment in accordance with IAS 36 Impairment of Assets as a single asset by comparing its recoverable amount (higher of value in use and fair value less costs of disposal) with its carrying amount, Any impairment loss recognised forms part of the carrying amount of the investment. Any reversal of that impairment loss is recognised in accordance with IAS 36 to the extent that the recoverable amount of the investment subsequently increases.

The Group discontinues the use of the equity method from the date when the investment ceases to be an associate or a joint venture, or when the investment is classified as held for sale. When the Group retains an interest in the former associate or joint venture and the retained interest is a financial asset, the Group measures the retained interest at fair value at that date and the fair value is regarded as its fair value on initial recognition in accordance with IAS 39. The difference between the carrying amount of the associate or joint venture at the date the equity method was discontinued, and the fair value of any retained interest and any proceeds from disposing of a part interest in the associate or joint venture is included in the determination of the gain or loss on disposal of the associate or joint venture. In addition, the Group accounts for all amounts previously recognised in other comprehensive income in relation to that associate or joint venture on the same basis as would be required if that associate or joint venture had directly disposed of the related assets or liabilities. Therefore, if a gain or loss previously recognised in other comprehensive income by that associate or joint venture would be reclassified to profit or loss on the disposal of the related assets or liabilities, the Group reclassifies the gain or loss from equity to profit or loss (as a reclassification adjustment) when the equity method is discontinued.

## 3.3. Revenue recognition

Revenue is measured at the fair value of the consideration received or receivable for the sale/provision of goods and services in the ordinary course of the Group's activities. Revenue is shown net of value-added tax (VAT), excise duties, discounts and rebates.

Revenue arises mainly from the distribution and supply of electricity to customers being Mines, exports, domestic and commercial customers.

To determine whether to recognise revenue, the Group follows a 5-step process:

1. Identifying the contract with a customer;
2. Identifying the performance obligations;
3. Determining the transaction price;
4. Allocating the transaction price to the performance obligations;

and
5. Recognising revenue when/as performance obligation(s) are satisfied."

The Group enters into transactions involving a range of the Group's products and services. These include wheeling of electricity, supply of electricity.

In all cases, the total transaction price for a contract is allocated amongst the various performance obligations based on their relative stand-alone selling prices. The transaction price for a contract excludes any amounts collected on behalf of third parties.

Revenue is recognised either at a point in time or over time, when (or as) the Group satisfies performance obligations by transferring the promised goods or services to its customers.

The Group recognises contract liabilities for consideration received in respect of unsatisfied performance obligations and reports these amounts as customer financed long term payables in the statement of financial position. Similarly, if the Group satisfies a performance obligation before it receives the consideration, the Group recognises either a contract asset or a receivable in its statement of financial position, depending on whether something other than the passage of time is required before the consideration is due.

**Sale of electricity**
Revenue from the sale of electricity for an agreed tariff is recognised when or as the Group transfers electricity to the customer. Invoices for goods or services transferred are due upon receipt by the customer. Prepaid Sales are recognised at the point when the electricity tokens are issued to the customers.

For stand-alone sales of energy and capacity that are neither customised by the Group nor subject to significant integration services, control transfers at the point in time that the customer takes undisputed delivery of the goods. When such items are either customised or sold together with significant integration, they represent a single combined performance obligation over which control is considered to transfer over time. This is because the combined product is unique to each customer (has no alternative use) and the Group has an enforceable right to payment for the power delivered to date.

The sale of energy to customers in the foreign countries and Zambia bought from utilities in the SAPP is known as power trading.

### 3.4. Interest income

Interest revenue is accrued on a time basis, by reference to the principal outstanding and at the effective interest rate applicable, which is the rate that exactly discounts estimated future cash receipts through the expected life of the financial asset to that asset's net carrying amount.

### 3.5. Rental income

Rental income from operating leases is recognised on a straight-line basis over the term of the relevant lease.

### 3.6. Fibrecom income

Fibre income is recognised on the accrual basis in accordance with the substance of the agreement. Connection fees are recognised on the date of activation of the service. Access charges are recognised in the period to which it relates.

### 3.7. Inventories

All Inventories are stated at the lower of cost and net realisable value. Cost is calculated on a weighted average basis and includes all expenditure incurred in bringing the inventories to their present location and condition. Net realisable value is the price at which inventory can be realised in the normal course of business and takes into account all directly related costs to be incurred in marketing, selling and distribution. Provision is made for obsolete, slow moving and defective inventories.

### 3.8. Foreign currencies

In preparing the consolidated financial statements of the entity, transactions in currencies other than the entity's functional currency (foreign currencies) are recognised at the rates of exchange prevailing at the dates of the transactions. At the end of each reporting period, monetary items denominated in foreign currencies are retranslated at the rates prevailing at that date. Non-monetary items carried at fair value that are denominated in foreign currencies are retranslated at the rates prevailing at the date when the fair value was determined. Non-monetary items that are measured in terms of historical cost in a foreign currency are not retranslated.

Exchange differences on monetary items are recognised in profit or loss in the period in which they arise except for exchange differences:

on foreign currency borrowings relating to assets under construction for future productive use, which are included in the cost of those assets when they are regarded as an adjustment to interest costs on those foreign currency borrowings; and

arising on foreign currency transactions are posted to the profit and loss in the period they arise; and

### 3.9. Borrowing costs

Borrowing costs directly attributable to the acquisition, construction or production of qualifying assets, which are assets that necessarily take a substantial period of time to get ready for their intended use or sale, are added to the cost of those assets, until such time as the assets are substantially ready for their intended use or sale.

Investment income earned on the temporary investment of specific borrowings pending their expenditure on qualifying assets is deducted from the borrowing costs eligible for capitalisation. All other borrowing costs are recognised in profit or loss in the period in which they are incurred.

All other borrowing costs are recognised in profit or loss in the financial period in which they are incurred.

### 3.10. Capital grants and contributions

Capital grants are not recognised until there is reasonable assurance that the Group will comply with the conditions attached to them and that the grants will be received.

Capital grants are recognised in profit or loss on a systematic basis over the periods in which the Group recognises as expenses the related costs for which the grants are intended to compensate. Specifically, government grants whose primary condition is that the Group should purchase, construct or otherwise acquire non-current assets are recognised as deferred revenue in the statement of financial position and transferred to profit or loss on a systematic and rational basis over the useful lives of the related assets.

Capital contributions represent money received from electricity consumers towards the capital cost of connections. Capital contributions are deferred and credited to profit or loss in equal annual instalments over the expected useful lives of the related assets.

### 3.11. Taxation

Income tax expense represents the sum of the tax currently payable and deferred tax.

(i) Current tax
The tax currently payable is based on taxable profit for the financial period. Taxable profit differs from profit as reported in profit or loss because of items of income or expense that are taxable or deductible in other financial periods and items that are never taxable or deductible. The Group's liability for current tax is calculated using tax rates that have been enacted or substantively enacted by the end of the reporting period.

(ii) Deferred tax
Deferred tax is recognised on differences between the carrying amounts of assets and liabilities in the financial statements and the corresponding tax bases used in the computation of taxable profit. Deferred tax liabilities are generally recognised for all taxable temporary differences. Deferred tax assets are generally recognised for all deductible temporary differences to the extent that it is probable that taxable profits will be available against which those deductible temporary differences can be utilised.

The carrying amount of deferred tax assets is reviewed at each reporting date and reduced to the extent that it is no longer probable that sufficient taxable profits will be available to allow all or part of the asset to be recovered.

Deferred tax assets and liabilities are measured at the tax rates that are expected to apply in the period in which the liability is settled or the asset realised, based on tax rates (and tax laws) that have been enacted or substantively enacted by the end of the reporting period. The measurement of deferred tax liabilities and assets reflects the tax consequences that would follow from the manner in which the Group expects, at the end of the reporting period, to recover or settle the carrying amount of its assets and liabilities.

Deferred tax assets and liabilities are offset when there is a legally enforceable right to set off current tax assets against current tax liabilities and when they relate to income taxes levied by the same taxation authority and the Group intends to settle its current tax assets and liabilities on a net basis.

(iii) Current and deferred tax for the financial period

Current and deferred tax are recognised in profit or loss, except when they relate to items that are recognised in other comprehensive income or directly in equity, in which case, the current and deferred tax are also recognised in profit or loss or directly in equity respectively.

### 3.12. Property, plant and equipment

Property, plant and equipment are stated in the statement of consolidated financial position at their cost or revalued amounts, being the fair value at the date of revaluation, less any subsequent accumulated depreciation and subsequent impairment losses.

Depreciation is charged to write off the cost or revalued amounts of property, plant and equipment over their estimated useful lives, on a straight-line basis, over the following number of years:

| | |
|---|---|
| Generation, Transmission and Distribution Systems: | |
| Dams, tunnels, power houses and other civil structures | 60 years |
| Generators, Turbines, Transformers and Towers | 40 years |
| Transmission and distribution systems | 25-50 years |
| Other assets: | |
| Buildings - Roads, Workshops, Office and Houses | 30 - 50 years |
| Furniture, Vehicles and IT | 3 - 15 years |

**Capital work in progress is not depreciated.**
Depreciation is recognised so as to write off the cost or revalued amounts of assets less their residual values over their useful lives, using the straight-line method. The estimated useful lives, residual values and depreciation method are reviewed at the end of each reporting period, with the effect of any changes in estimate accounted for on a prospective basis.

Properties in the course of construction for production, supply or administrative purposes are carried at cost, less any recognised impairment loss. Cost includes professional fees and, for qualifying assets, borrowing costs capitalised in accordance with the Group's accounting policy. Such properties are classified to the appropriate categories of property and equipment when completed and ready for intended use. Depreciation of these assets, on the same basis as other property assets, commences when the assets are ready for their intended use.

Management has estimated the residual values of the property, plant and equipment at 31 December 2017 to be insignificant and for purpose of the financial statements have been assigned a nil value.

Repairs and maintenance expenses are charged to profit or loss during the period in which they are incurred. The cost of major renovations is included in the carrying amount of the asset when it is probable that future economic benefits in excess of the originally assessed standard of performance of the existing asset will flow to the Group.

An item of property and equipment is derecognised upon disposal or when no future economic benefits are expected to arise from the continued use of the asset. Any gain or loss arising on the disposal or retirement of an item of property, plant and equipment is determined as the difference between the sales proceeds and the carrying amount of the asset and is recognised in profit or loss.

The surplus arising on revaluation of tangible assets is credited to a non-distributable reserve. Decreases that offset previous revaluations of the same asset are charged against the revaluation reserve. All other decreases are charged to the statement of comprehensive income. Each year the difference between depreciation based on the revalued carrying amount of the asset (the depreciation charged to the statement of comprehensive income) and depreciation based on the asset's original cost is transferred from the revaluation reserve to revenue reserves. On disposal of revalued assets, amounts in the revaluation reserve relating to that asset are transferred to revenue reserves.

Assets held under right-of-use are depreciated over their useful lives on the same basis as owned assets. However, when there is no reasonable certainty that ownership will be obtained by the end of the lease term, assets are depreciated over the shorter of the lease term and their useful lives.

### 3.13. Leases

At inception of a contract, the Group assesses a contract as, or containing, a lease if the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration. To assess whether a contract conveys the right to control the use of an identified asset, the Group assesses whether the contract involves the use of an identified asset, the Group has the right to obtain substantially all of the economic benefits from use of the asset throughout the period of use; and the Group has the right to direct the use of the asset.

#### 3.13.1. Leases

On initial application of IFRS 16, the Group recognised a lease liability measured at the present value of all the remaining lease payments, discounted using the lessee's incremental borrowing rate at 1 January 2019 whereas the Group has elected to measure right-of-use asset at its carrying amount as if IFRS 16 had been applied since the lease commencement date, but discounted using the lessee's incremental borrowing rate at 1 January 2019. The Group has elected not to recognise a lease liability and a right-of-use asset for leases for which the lease term ends within twelve months of 1 January 2019 and has accounted for these leases as short-term leases.

For new lease contracts, the Group recognises a right-of-use asset and a corresponding lease liability with respect to all lease agreements in which it is the lessee in the statement of financial position. The lease liability is initially measured at the present value of the lease payments that are not paid at the commencement date, discounted by using the rate implicit in the lease. If this rate cannot be readily determined, the Group uses its incremental borrowing rate. Lease liabilities include the net present value of fixed payments (including in-substance fixed payments), variable lease payments that are based on consumer price index ('CPI'), the exercise price of a purchase option if the lessee is reasonably certain to exercise that option, and payments of penalties for terminating the lease, if the lease term reflects the lessee exercising that option.

The lease payments are discounted using the interest rate implicit in the lease or, if that rate cannot be readily determined, the Group's incremental borrowing rate.

Subsequently, the lease liability is measured at amortised cost using the effective interest method. It is re-measured when there is a change in future lease payments including due to changes in CPI or if the Group changes its assessment of whether it will exercise a purchase, extension or termination option or when the lease contract is modified and the lease modification is not accounted for as a separate lease. The corresponding adjustment is made to the carrying amount of the right-of-use asset, or is recorded in profit or loss if the carrying amount of the related right-of-use asset has been reduced to zero.

Right-of-use assets are measured at cost comprising the amount of the initial measurement of lease liability, any lease payments made at or before the commencement date less any lease incentives received, any initial direct costs, and restoration costs.

Subsequent to initial recognition, right-of-use asset are stated at cost less accumulated depreciation and any impairment losses and adjusted for certain re-measurements of the lease liability. Depreciation is computed using the straight-line method from the commencement date to the end of the useful life of the underlying asset or the end of the lease term, whichever is shorter. The estimated useful lives of right-of-use assets are determined on the same basis as those of the underlying property and equipment.

In the statement of financial position, the right-of-use assets and lease liabilities are presented separately.

When a contract includes lease and non-lease components, the Group allocates the consideration in the contract on the basis of the relative stand-alone prices of each lease component and the aggregate stand-alone price of the non-lease components.

The Group has elected not to recognise right-of-use assets and lease liabilities for short term leases of machinery that have a lease term of 12 months or less and leases of low value assets. The Group recognises the lease payments associated with these leases as an expense on a straight-line basis over the lease term.

#### 3.13.2. Group as a lessor

Whenever the terms of the lease transfer substantially all the risks and rewards of ownership to the lessee, the contract is classified as a finance lease. All other leases are classified as operating leases.

Amounts due from lessees under a finance lease are recognised as receivables at an amount equal to the net investment in the leased assets. Finance lease income is allocated to the periods so as to reflect a constant periodic rate of return on the net investment outstanding in respect of the finance lease.

Rental income from operating leases is recognised on a straight-line basis over the term of the relevant lease. Initial direct costs incurred in negotiating and arranging an operating lease are added to the carrying amount of the leased asset and recognised on a straight-line basis over the lease term.

When a contract includes lease and non-lease components, the Group applies IFRS 15 to allocate the consideration under the contract to each component.

### 3.14. Intangible assets

Intangible assets with finite useful lives that are acquired separately are carried at cost less accumulated amortisation and accumulated impairment losses. Amortisation is recognised on a straight-line basis over their estimated useful live. The estimated useful life and amortisation method are reviewed at the end of each reporting period, with the effect of any changes in estimate being accounted for on a prospective basis.

An intangible asset is de-recognised on disposal, or when no future economic benefits are expected from use or disposal. Gains or losses arising from de-recognition of an intangible asset, measured as the difference between the net disposal proceeds and the carrying amount of the asset, are recognised in profit or loss when the asset is de-recognised.

### 3.15. Impairment of tangible and intangible assets

At the end of each reporting period the Group reviews the carrying amounts of its tangible and intangible assets to determine whether there is any indication that those assets have suffered an impairment loss. If any such indication exists the recoverable amount of the asset is estimated in order to determine the extent of the impairment loss (if any). Where it is not possible to estimate the recoverable amount of an individual asset the Group estimates the recoverable amount of the cash-generating unit to which the asset belongs.

Recoverable amount is the higher of fair value less costs to sell and value in use. In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset for which the estimates of future cash flows have not been adjusted.

If the recoverable amount of an asset (or cash-generating unit) is estimated to be less than its carrying amount the carrying amount of the asset (cash-generating unit) is reduced to its recoverable amount. An impairment loss is recognised immediately in profit or loss unless the relevant asset is carried at a revalued amount, in which case the impairment loss is treated as a revaluation decrease.

When an impairment loss subsequently reverses, the carrying amount of the asset (cash-generating unit) is increased to the revised estimate of its recoverable amount, but so that the increased carrying amount does not exceed the carrying amount that would have been determined had no impairment loss been recognised for the asset (cash-generating unit) in prior financial periods. A reversal of an impairment loss is recognised immediately in profit or loss unless the relevant asset is carried at a revalued amount, in which case the reversal of the impairment loss is treated as a revaluation increase.

### 3.16. Financial instruments

Financial assets and financial liabilities are recognised in the Group's statement of financial position when the Group becomes a party to the contractual provisions of the instrument.

Financial assets and financial liabilities are initially measured at fair value. Transaction costs that are directly attributable to the acquisition or issue of financial assets and financial liabilities (other than financial assets and financial liabilities at fair value through profit or loss) are added to or deducted from the fair value of the financial assets or financial liabilities, as appropriate, on initial recognition. Transaction costs directly attributable to the acquisition of financial assets or financial liabilities at fair value through profit or loss are recognised immediately in profit or loss.

**Financial assets**
All regular way purchases or sales of financial assets are recognised and derecognised on a trade date basis. Regular way purchases or sales are purchases or sales of financial assets that require delivery of assets within the time frame established by regulation or convention in the marketplace.

All recognised financial assets are measured subsequently in their entirety at either amortised cost or fair value, depending on the classification of the financial assets.

**Classification of financial assets**
Debt instruments that meet the following conditions are measured subsequently at amortised cost:

- the financial asset is held within a business model whose objective is to hold financial assets in order to collect contractual cash flows; and
- the contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

Debt instruments that meet the following conditions are measured subsequently at fair value through other comprehensive income (FVTOCI):

- the financial asset is held within a business model whose objective is achieved by both collecting contractual cash flows and selling the financial assets; and
- the contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

Despite the foregoing, the Group may make the following irrevocable election/designation at initial recognition of a financial asset:

- the Group may irrevocably elect to present subsequent changes in fair value of an equity investment in other comprehensive income if certain criteria are met; and
- the Group may irrevocably designate a debt investment that meets the amortised cost or FVTOCI criteria as measured at FVTPL if doing so eliminates or significantly reduces an accounting mismatch.

**(i) Amortised cost and effective interest method**
The effective interest method is a method of calculating the amortised cost of a debt instrument and of allocating interest income over the relevant period.

For financial assets other than purchased or originated credit-impaired financial assets (i.e. assets that are credit-impaired on initial recognition), the effective interest rate is the rate that exactly discounts estimated future cash receipts (including all fees and points paid or received that form an integral part of the effective interest rate, transaction costs and other premiums or discounts) excluding expected credit losses, through the expected life of the debt instrument, or, where appropriate, a shorter period, to the gross carrying amount of the debt instrument on initial recognition. For purchased or originated credit-impaired financial assets, a credit-adjusted effective interest rate is calculated by discounting the estimated future cash flows, including expected credit losses, to the amortised cost of the debt instrument on initial recognition.

The amortised cost of a financial asset is the amount at which the financial asset is measured at initial recognition minus the principal repayments, plus the cumulative amortisation using the effective interest method of any difference between that initial amount and the maturity amount, adjusted for any loss allowance. The gross carrying amount of a financial asset is the amortised cost of a financial asset before adjusting for any loss allowance.

The amortised cost of a financial asset is the amount at which the financial asset is measured at initial recognition minus the principal repayments, plus the cumulative amortisation using the effective interest method of any difference between that initial amount and the maturity amount, adjusted for any loss allowance. The gross carrying amount of a financial asset is the amortised cost of a financial asset before adjusting for any loss allowance.

For purchased or originated credit-impaired financial assets, the Group recognises interest income by applying the credit-adjusted effective interest rate to the amortised cost of the financial asset from initial recognition.

The calculation does not revert to the gross basis even if the credit risk of the financial asset subsequently improves so that the financial asset is no longer credit-impaired. Interest income is recognised in profit or loss.

**Foreign exchange gains and losses**
The carrying amount of financial assets that are denominated in a foreign currency is determined in that foreign currency and translated at the spot rate at the end of each reporting period. Specifically;

- for financial assets measured at amortised cost that are not part of a designated hedging relationship, exchange differences are recognised in profit or loss;
- for debt instruments measured at FVTOCI that are not part of a designated hedging relationship, exchange differences on the amortised cost of the debt instrument are recognised in profit or loss. Other exchange differences are recognised in other comprehensive income in the investments revaluation reserve;
- for equity instruments measured at FVTOCI, exchange differences are recognised in other comprehensive income in the investments revaluation reserve.

**Impairment of financial assets**
The Group recognises a loss allowance for expected credit losses on investments in debt instruments that are measured at amortised cost or at FVTOCI, lease receivables, trade receivables and contract assets, as well as on financial guarantee contracts. The amount of expected credit losses is updated at each reporting date to reflect changes in credit risk since initial recognition of the respective financial instrument.

The Group always recognises lifetime ECL for trade receivables, contract assets and lease receivables. The expected credit losses on these financial assets are estimated using a provision matrix based on the Group's historical credit loss experience, adjusted for factors that are specific to the debtors, general economic conditions and an assessment of both the current as well as the forecast direction of conditions at the reporting date, including time value of money where appropriate.

For all other financial instruments, the Group recognises lifetime ECL when there has been a significant increase in credit risk since initial recognition. However, if the credit risk on the financial instrument has not increased significantly since initial recognition, the Group measures the loss allowance for that financial instrument at an amount equal to 12-month ECL.

Lifetime ECL represents the expected credit losses that will result from all possible default events over the expected life of a financial instrument. In contrast, 12-month ECL represents the portion of lifetime ECL that is expected to result from default events on a financial instrument that are possible within 12 months after the reporting date.

**(i) Significant increase in credit risk**
In assessing whether the credit risk on a financial instrument has increased significantly since initial recognition, the Group compares the risk of a default occurring on the financial instrument at the reporting date with the risk of a default occurring on the financial instrument at the date of initial recognition. In making this assessment, the Group considers both quantitative and qualitative information that is reasonable and supportable, including historical experience and forward-looking information that is available without undue cost or effort. Forward-looking information considered includes the future prospects of the industries in which the Group's debtors operate, obtained from economic expert reports, financial analysts, governmental bodies, relevant think-tanks and other similar organisations, as well as consideration of various external sources of actual and forecast economic information that relate to the Group's core operations.

In particular, the following information is taken into account when assessing whether credit risk has increased significantly since initial recognition:

- an actual or expected significant deterioration in the financial instrument's external (if available) or internal credit rating;
- significant deterioration in external market indicators of credit risk for a particular financial instrument, e.g. a significant increase in the credit spread, the credit default swap prices for the debtor, or the length of time or the extent to which the fair value of a financial asset has been less than its amortised cost;
- existing or forecast adverse changes in business, financial or economic conditions that are expected to cause a significant decrease in the debtor's ability to meet its debt obligations;
- an actual or expected significant deterioration in the operating results of the debtor;

- significant increases in credit risk on other financial instruments of the same debtor;
- an actual or expected significant adverse change in the regulatory, economic, or technological environment of the debtor that results in a significant decrease in the debtor's ability to meet its debt obligation

Irrespective of the outcome of the above assessment, the Group presumes that the credit risk on a financial asset has increased significantly since initial recognition when contractual payments are more than 30 days past due, unless the Group has reasonable and supportable information that demonstrates otherwise.

Despite the foregoing, the Group assumes that the credit risk on a financial instrument has not increased significantly since initial recognition if the financial instrument is determined to have low credit risk at the reporting date. A financial instrument is determined to have low credit risk if:

1. The financial instrument has a low risk of default,

2. The debtor has a strong capacity to meet its contractual cash flow obligations in the near term, and

3. Adverse changes in economic and business conditions in the longer term may, but will not necessarily, reduce the ability of the borrower to fulfil its contractual cash flow obligations.

**(ii) Definition of default**
The Group considers the following as constituting an event of default for internal credit risk management purposes as historical experience indicates that financial assets that meet either of the following criteria are generally not recoverable:

- when there is a breach of financial covenants by the debtor; or
- information developed internally or obtained from external sources indicates that the debtor is unlikely to pay its creditors, including the Group, in full (without taking into account any collateral held by the Group.

Irrespective of the above analysis, the Group considers that default has occurred when a financial asset is more than 90 days past due unless the Group has reasonable and supportable information to demonstrate that a more lagging default criterion is more appropriate.

**(iii) Credit-impaired financial assets**
A financial asset is credit-impaired when one or more events that have a detrimental impact on the estimated future cash flows of that financial asset have occurred. Evidence that a financial asset is credit-impaired includes observable data about the following events:

a) significant financial difficulty of the issuer or the borrower;
b) a breach of contract, such as a default or past due event;
c) the lender(s) of the borrower, for economic or contractual reasons relating to the borrower's financial difficulty, having granted to the borrower a concession(s) that the lender(s) would not otherwise consider;
d) it is becoming probable that the borrower will enter bankruptcy or other financial reorganisation; or
e) the disappearance of an active market for that financial asset because of financial difficulties.

**(iv) Write-off policy**

The Group writes off a financial asset when there is information indicating that the debtor is in severe financial difficulty and there is no realistic prospect of recovery, e.g. when the debtor has been placed under liquidation or has entered into bankruptcy proceedings, or in the case of trade receivables, when the amounts are over law of limitation period past due, whichever occurs sooner. Financial assets written off may still be subject to enforcement activities under the Group's recovery procedures, taking into account legal advice where appropriate. Any recoveries made are recognised in profit or loss.

**(v) Measurement and recognition of expected credit losses**

The measurement of expected credit losses is a function of the probability of default, loss given default (i.e. the magnitude of the loss if there is a default) and the exposure at default. The assessment of the probability of default and loss given default is based on historical data adjusted by forward-looking information as described above.

As for the exposure at default, for financial assets, this is represented by the assets' gross carrying amount at the reporting date; for financial guarantee contracts, the exposure includes the amount drawn down as at the reporting date, together with any additional amounts expected to be drawn down in the future by default date determined based on historical trend, the Group's understanding of the specific future financing needs of the debtors, and other relevant forward-looking information.

For financial assets, the expected credit loss is estimated as the difference between all contractual cash flows that are due to the Group in accordance with the contract and all the cash flows that the Group expects to receive, discounted at the original effective interest rate.

The Group recognises an impairment gain or loss in profit or loss for all financial instruments with a corresponding adjustment to their carrying amount through a loss allowance account.

**De-recognition of financial assets**
The Group derecognises a financial asset only when the contractual rights to the cash flows from the asset expire, or when it transfers the financial asset and substantially all the risks and rewards of ownership of the asset to another entity. If the Group neither transfers nor retains substantially all the risks and rewards of ownership and continues to control the transferred asset, the Group recognises its retained interest in the asset and an associated liability for amounts it may have to pay. If the Group retains substantially all the risks and rewards of ownership of a transferred financial asset, the Group continues to recognise the financial asset and also recognises a collateralised borrowing for the proceeds received.

On de-recognition of a financial asset measured at amortised cost, the difference between the asset's carrying amount and the sum of the consideration received and receivable is recognised in profit or loss. In addition, on de-recognition of an investment in a debt instrument classified as at FVTOCI, the cumulative gain or loss previously accumulated in the investments revaluation reserve is reclassified to profit or loss. In contrast, on de-recognition of an investment in equity instrument which the Group has elected on initial recognition to measure at FVTOCI, the cumulative gain or loss previously accumulated in the investments revaluation reserve is not reclassified to profit or loss, but is transferred to retained earnings.

**Financial liabilities and equity**
Classification as debt or equity
Debt and equity instruments are classified as either financial liabilities or as equity in accordance with the substance of the contractual arrangements and the definitions of a financial liability and an equity instrument.

Equity instruments

An equity instrument is any contract that evidences a residual interest in the assets of an entity after deducting all of its liabilities. Equity instruments issued by the Group are recognised at the proceeds received, net of direct issue costs.

Repurchase of the Group's own equity instruments is recognised and deducted directly in equity. No gain or loss is recognised in profit or loss on the purchase, sale, issue or cancellation of the Group's own equity instruments.

Financial liabilities

All financial liabilities are measured subsequently at amortised cost using the effective interest method or at FVTPL.

The effective interest method is a method of calculating the amortised cost of a financial liability and of allocating interest expense over the relevant period. The effective interest rate is the rate that exactly discounts estimated future cash payments (including all fees and points paid or received that form an integral part of the effective interest rate, transaction costs and other premiums or discounts) through the expected life of the financial liability, or (where appropriate) a shorter period, to the amortised cost of a financial liability.

Foreign exchange gains and losses

For financial liabilities that are denominated in a foreign currency and are measured at amortised cost at the end of each reporting period, the foreign exchange gains and losses are determined based on the amortised cost of the instruments. These foreign exchange gains and losses are recognised in the 'other gains and losses' line item in profit or loss.

The fair value of financial liabilities denominated in a foreign currency is determined in that foreign currency and translated at the spot rate at the end of the reporting period.

De-recognition of financial liabilities

The Group derecognises financial liabilities when, and only when, the Group's obligations are discharged, cancelled or have expired. The difference between the carrying amount of the financial liability derecognised and the consideration paid and payable is recognised in profit or loss.

### 3.17. Provisions

Provisions are recognised when the Group has a present obligation (legal or constructive) as a result of a past event, it is probable that the Group will be required to settle the obligation, and which a reliable estimate can be made of the amount of the obligation.

The amount recognised as a provision is the best estimate of the consideration required to settle the present obligation at the statement of comprehensive income date, taking into account the risks and uncertainties surrounding the obligation. Where a provision is measured using the cash flows estimated to settle the present obligation, its carrying amount is the present value of those cash flows.

When some or all of the economic benefits required to settle a provision are expected to be recovered from a third party, the receivable is recognised as an asset if it is virtually certain that reimbursement will be received and the amount of the receivable can be measured reliably.

### 3.18. Retirement benefits and other employee benefits

(i) Defined benefit plan

For defined benefit retirement plans, the cost of providing benefits is determined using the projected unit credit method, with actuarial valuations being carried out at the end of each annual reporting period. Re-measurement, comprising actuarial gains and losses, the effect of the changes to the asset ceiling (if applicable) and the return on plan assets (excluding interest), is reflected immediately in the statement of financial position with a charge or credit recognised in other comprehensive income in the period in which they occur. Re-measurement recognised in other comprehensive income is reflected immediately in accumulated funds and will not be reclassified to income or expenditure. Past service cost is recognised in income or expenditure in the period of a plan amendment. Net interest is calculated by applying the discount rate at the beginning of the period to the net defined benefit liability or asset. Defined benefit costs are categorised as follows:

- Service cost (including current service cost, past service cost, as well as gains and losses on curtailments and settlements)
- Net interest expense or income.
- Re-measurement.

The retirement benefit obligation recognised in the statement of financial position represents the actual deficit or surplus in the Group's defined benefit plans. Any surplus resulting from this calculation is limited to the present value of any economic benefits available in the form of refunds from the plans or reductions in future contributions to the plans.

**(ii) Defined contribution plan**
The Group and all its employees contribute to the National Pension Scheme, which is a defined contribution scheme. A defined contribution plan is a retirement benefit plan under which the Group pays fixed contributions into a separate entity. The Group has no legal or constructive obligations to pay further contributions if the fund does not hold sufficient assets to pay all employees the benefits relating to employee service in the current and prior periods.

**(iii) Termination benefits**
Employees on non-fixed term contract of employment (commonly known as "Permanent and Pensionable" employment) are entitled also to long service termination benefits. The benefits are computed in accordance with accrued service period and the terminal pay. Provision is raised in profit or loss on a monthly basis.

A liability for a termination benefit is recognised at the earlier of when the entity can no longer withdraw the offer of the termination benefit and when the entity recognises any related restructuring costs.

**(iv) Other entitlements**
Employee entitlements to annual leave and contract gratuity are recognised when they accrue to employees. Accrued leave pay and gratuity is accounted for in income or expenditure as it arises.

## 4. Critical Accounting Judgements and Key Sources of Estimation Uncertainty

The preparation of the consolidated financial statements in conformity with the Group's accounting policies which are described in note 3, the Directors are required to make judgements, estimates and assumptions about the carrying amount of assets and liabilities that are readily apparent from other sources. Estimates and judgements are continually evaluated and are based on historical experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances. Actual results may differ from these estimates.

Revisions to accounting estimates are recognised in the period in which the estimate is revised if the revision affects only that period, or in the period of the revision and future periods if the revision affects both current and future periods.

### 4.1. Critical judgments in applying accounting policies

**a) Income taxes**
There are many transactions and calculations for which the ultimate tax determination is uncertain during the ordinary course of business. The Group recognises liabilities for anticipated tax based on estimates of whether additional taxes will be due. Where the final tax outcome of these matters is different from the amounts that were initially recorded, such differences will impact on the income tax and deferred tax provisions in the period in which such determination is made.

**b) Calculation of loss allowance**
When measuring ECL the Group uses reasonable and supportable forward-looking information, which is based on assumptions for the future movement of different economic drivers and how these drivers will affect each other.

Loss given default is an estimate of the loss arising on default. It is based on the difference between the contractual cash flows due and those that the lender would expect to receive, taking into account cash flows from collateral and integral credit enhancements.

Probability of default constitutes a key input in measuring ECL. Probability of default is an estimate of the likelihood of default over a given time horizon, the calculation of which includes historical data, assumptions and expectations of future conditions.

**(c) Significant increase in credit risk**
As explained in note 3, ECL are measured as an allowance equal to 12-month ECL for stage 1 assets, or lifetime ECL for stage 2 or stage 3 assets. An asset moves to stage 2 when its credit risk has increased significantly since initial recognition. IFRS 9 does not define what constitutes a significant increase in credit risk. In assessing whether the credit risk of an asset has significantly increased the Group takes into account qualitative and quantitative reasonable and supportable forward-looking information.

**(d) Provision for obsolete inventory**

The Group reviews is inventory to assess loss on account of obsolescence on a regular basis. In determining whether provision for obsolescence should be recorded in profit or loss, the Group makes judgements as to whether there is any observable data indicating that there is any future saleability of the product and the net realizable value for such product. Accordingly, provision for obsolescence is made where the net realizable value is less than cost based on best estimates by the management, ageing of inventories and historical movement of the inventory.

**(e) Capitalisation of borrowing costs**
The Group capitalises borrowing costs directly attributable to the acquisition, construction or production of qualifying assets. Capitalisation of the borrowing costs relating to construction is suspended when the development is delayed as management reconsiders its detailed plans. Capitalisation of borrowing costs is recommenced at the resumption of the activities necessary to prepare the asset for its intended use.

**f) Judgement in identifying whether a contract includes a lease**
The directors of the Group assess whether or not the Group has contracted for the rights to use the identified assets and whether the contract conveys the right to control the use of the identified assets for a period of time in exchange for consideration. The directors concluded that the Group has contracted for the rights to use the identified assets and that the contract conveys the right to control the use of the identified assets for a period of time in exchange for consideration, therefore the contracts do a contain lease.

### 4.2. 4Key sources of estimation uncertainty

The following are the key assumptions concerning the future, and other key sources of estimation uncertainty at the end of the reporting period, that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial period. The following are the key assumptions concerning the future, and other key sources of estimation uncertainty at the end of the reporting period, that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial period.

**(a) Estimated useful lives and residual values of property, plant and equipment**
The Group's management determines the estimated useful lives and related depreciation charge for its items of property, plant and equipment on an annual basis. The Group has carried out a review of the residual values and useful lives of property, plant and equipment as at 31 December 2017 and the management has not highlighted any requirement for an adjustment to the residual lives and remaining useful lives if the assets for the current or future periods.

**(b) Contingencies**
Appropriate recognition and disclosure of contingent liabilities is made regarding litigation, tax matters and environmental issues. Accounting for contingencies requires significant judgement by management regarding the estimated probabilities and ranges of exposure to potential loss. The evaluation of these contingencies is performed by various specialists inside and outside of the Group. The Group's assessment of the Group's exposure to contingencies could change as new developments occur or more information.

**(c) Impairment of investments in joint ventures and associates**
Investments in joint ventures and associates are reviewed for impairment at the reporting date. Determining whether an investment balance is impaired requires an estimation of the value in use of the joint venture or associate. The value in use calculation requires an estimate to be made of the timing and amount of future cash flows expected to arise from the joint venture or associate and the application of a suitable discount rate in order to calculate the present value. The discount rates used are based on the Group's weighted average cost of capital adjusted to reflect the specific economic environment of the joint venture or associate.

**(d) Actuarial valuation assumptions**
The Group has a defined benefit pension scheme, the valuation of the net assets or liabilities involves accounting estimates arising from actuarial valuation based on assumptions. Actuarial assumptions made in determining the present obligation of retirement benefits.

**(e) Lease IFRS 16**

In determining the right-of-use assets and lease liabilities a number of assumptions were made. The key assumptions include determining the Incremental Borrowing Rate which was used as discounting factor to determine the lease liability and interest expense.

## 5. Revenue

| | 2020 | 2,019 |
|---|---|---|
| | K'000 | K'000 |
| Arose from customers in the following sections: | | |
| Mining | 10,962,907 | 6,203,138 |
| Exports | 2,440,240 | 1,150,969 |
| Residential | 2,327,551 | 1,386,252 |
| Industrial and agricultural | 2,169,100 | 1,277,497 |
| Commercial (retail outlets) | 576,730 | 308,538 |
| | 18,476,528 | 10,326,394 |

## 6. Cost of Sales

| | | |
|---|---|---|
| Local purchases of power | 7,160,479 | 4,164,568 |
| Direct labour costs | 976,689 | 875,945 |
| Local wheeling charges | 661,034 | 110,396 |
| Power imports (internally financed) | 313,068 | 178,180 |
| Maintenance costs | 246,373 | 341,223 |
| Generation water usage & fuel costs | 138,247 | 89,865 |
| Export wheeling charges | 5,061 | 1,825 |
| | 9,500,951 | 5,762,002 |

The Group continued to buy power from Independent Power Producers (IPPs) to supplement the internal power generation, which was reduced due to low water levels. The cost of IPPs was partially financed by the Government of the Republic of Zambia due to higher tariff of about US$11/Kwh, compared to the average selling price of US$7.5/Kwh. The increase in the cost of power purchases was attributed to the depreciation of the Kwacha against US Dollar. The IPPs include Maamba Collieries Limited, Ndola Energy Company Limited and Itezhi Tezhi Power Corporation Limited whose average cost of power exceeds ZESCO's selling price to customers. During the year total disbursements from the Government of the Republic of Zambia was K160 million (2018: K740 million) towards power purchases.

## 7. Other Operating Income

| | 2020 | 2,019 |
|---|---|---|
| | K'000 | K'000 |
| Wheeling income | 195,247 | 11,145 |
| Amortisation of capital grants and contributions (Note 24) | 187,031 | 174,380 |
| Interest on late payments | 136,317 | 51,088 |
| Fibrecom income | 105,031 | 92,866 |
| Interest income | 10,433 | 13,361 |
| Rental income | 2,129 | 2,182 |
| Sundry income | 1,821 | 1,267,204 |
| | 638,009 | 1,612,226 |

## 8. Other Losses

| | | |
|---|---|---|
| Net exchange losses | (11,371,151) | (2,341,584) |
| (Loss) gain on disposal of property, plant and equipment | (1,875) | (1,138) |
| | (11,373,026) | (2,342,722) |

The Zambian Kwacha appreciated against the US Dollar and other major convertible foreign currencies during the year.

The impact of the appreciation of the Zambian Kwacha during the year is that the Group recorded significant exchange gains on its foreign currency denominated liabilities.

The table below illustrates the movements in the US Dollar exchange rates during the period:

| Currency | Mid – market exchange rate as at 1 January 2020 | Mid – market exchange rate as at 31 December 2020 | Average depreciation during the year |
|---|---|---|---|
| US Dollar (1 US$ = ) | K14.125 | K21.165 | 50% |

## 9. Other Expenses

| | | |
|---|---|---|
| Provision for bad debts | 7,243,931 | 2,337,062 |
| Other expenses | 2,177,807 | 1,758,412 |
| Impairment provision during the year (Note 17.1) | 253,908 | - |
| | 9,675,7646 | 4,095,474 |

## 10. Finance Costs

| | | |
|---|---|---|
| Interest paid on borrowings | 783,653 | 610,909 |
| Interest paid on overdraft | 6,251 | 13,902 |
| Interest on lease liabilities | 5,192 | 5,046 |
| | 795,096 | 629,857 |

## 11. Loss Before Tax

| | 2020 | 2019 |
|---|---|---|
| Loss before tax is stated after crediting: | K'000 | K'000 |
| Amortisation of capital grants and capital contributions | 187,031 | 174,380 |
| Interest income | 10,433 | 13,361 |
| and after charging: | | |
| Net exchange losses (note 8) | 11,371,151 | 2,341,584 |
| Employee benefits | 3,544,414 | 2,525,299 |
| Depreciation and amortisation (note 14 and 15) | 1,957,183 | 1,940,433 |
| Finance costs (Note 10) | 795,096 | 629,857 |
| Pension costs | 102,207 | 1,395,314 |
| Directors' fees | | |
| - in connection with the management | 18,289 | 19,619 |
| - as Directors | 4,652 | 4,903 |
| Secondment fees | | |
| Donations | 3,487 | 5,844 |
| Loss on disposal of property, plant and equipment | 1,875 | 1,138 |

## 12. Current Tax

| Income tax charge at 35% | 2020 | 2019 |
|---|---|---|
| | K'000 | K'000 |
| Deferred taxation (note 13) | (5,794,161) | (837,987) |
| Deferred tax asset de-recognised during the year | 4,996,408 | |
| Current tax | 94,618 | 472,080 |
| Income tax credit | (743,947) | (365,907) |
| | | |
| Subject to agreement with the Zambia Revenue Authority, the Group had estimated tax losses of K52.3 billion (2019: K24.612 billion) which are available for carry forward for a period of 10 years from the year in which they arose and for set off against future taxable profits. The cumulative tax losses comprise: | (51,282,378) | (23,407,270) |

## Statement of Losses

| | | | | | 2020 | 2019 |
|---|---|---|---|---|---|---|
| | | | | | K'000 | K'000 |
| Tax year | Tax year expiry | Tax loss b/f amount | Utilised | Expired | | Tax loss c/f |
| 2013 | 2023 | (140,459) | - | - | | (140,459) |
| 2014 | 2024 | (277,648) | - | - | | (277,648) |
| 2015 | 2025 | (1,849,669) | - | - | | (1,849,669) |
| 2016 | 2026 | (3,084,293) | - | - | | (3,084,293) |
| 2017 | 2027 | (9,249,287) | - | - | | (9,249,287) |
| 2018 | 2028 | (9,584,100) | - | - | | (9,584,100) |
| 2019 | 2029 | (3,133,334) | - | - | | (3,133,334) |
| 2020 | 2030 | - | | | | |
| | | (27,318,789) | | | | (51,282,378) |
| | | | | | | |
| Included under current liabilities: | | | | | | |
| Arising during the year | | | | | 94,618 | 472,080 |
| Payable in respect of prior year | | | | | 1,740,422 | 1,317,201 |
| | | | | | 1,835,040 | 1,789,281 |
| Paid during the year | | | | | (162,087) | (48,859) |
| Payable at end of year | | | | | 1,672,953 | 1,740,422 |
| | | | | | | |
| Reconciliation of tax charge | | | | | | |
| The total income tax expense for the year can be reconciled to the accounting profit as follows: | | | | | | |
| Loss before tax | | | | | (16,701,596) | (5,932,417) |
| Applicable tax rate of 35% | | | | | (5,845,559) | (2,076,346) |
| | | | | | | |
| Permanent differences: | | | | | | |
| - Capital exchange gains | | | | | (3,125,144) | (793,955) |
| - Other disallowable items | | | | | 1,527,226 | 1,766,062 |
| - Deferred tax asset de-recognised during the year | | | | | 4,996,408 | |
| - *Tax rate adjustment | | | | | 1,703,121 | 740,479 |
| | | | | | (743,947) | (363,761) |

The subsidiary, Kariba North Bank Extension Power Corporation Limited qualifies for the general investments incentives under the Zambia Development Agency Act No.11 of 2006 (the "Act"). The Act offers a wide range of incentives in the form of allowances, exemptions and concessions for companies. The Act provides for investment thresholds that investors have to meet to qualify for fiscal and non-fiscal incentives.

The tax rate adjustment of K Nil (2019:  K740,479,000) relates to the effects of the tax payable/receivable in the future periods, as the subsidiary will be subject to tax at different rates in the future periods based on the investment incentives under the Zambia Development Agency (ZDA).

## 13. Deferred Tax

| | 2020 | 2019 |
|---|---|---|
| | K'000 | K'000 |
| At beginning of year | 712,831 | 1,556,231 |
| Charge to equity | (230,608) | (5,413) |
| Credit to profit or loss for the year (Note 12) | (5,834,1973) | (837,987) |
| Deferred tax asset de-recognised during the year | 4,996,408 | - |
| At end of year | (356,341) | 712,831 |

Deferred tax asset arising on temporary differences of ZESCO Limited has been derecognised in the current year as directors of the Group believe the asset is not recoverable.

The following are the major deferred tax liabilities (assets) recognised by the Group and their movements in the year:

| | Net unutilised tax losses | Accelerated capital allowances | Revaluation surplus | Provisions and other | Total |
|---|---|---|---|---|---|
| 2019 | K'000 | K'000 | K'000 | K'000 | K'000 |
| "At beginning of year restated" | (8,242,297) | 2,600,616 | 8,830,337 | (1,632,425) | 1,556,231 |
| "(Credit) charge to profit or loss" | (1,284,334) | 1,891,174 | - | (1,444,827) | (837,987) |
| Charge to equity | - | - | (5,413) | - | (5,413) |
| At end of year | (9,526,631) | 4,491,790 | 8,824,924 | (3,077,252) | 712,831 |
| 2020 | | | | | |
| At beginning of year | (9,526,631) | 4,491,790 | 8,824,924 | (3,077,252) | 712,831 |
| "(Credit) charge to profit or loss" | (8,093,764) | (268,580) | - | 2,527,371 | (5,834,973) |
| Charge to equity | - | - | (230,608) | - | (230,608) |
| At end of year | (17,620,395) | 4,223,210 | 8,594,316 | (549,881) | (5,352,750) |
| Total deferred tax balances recorded on the statement of financial position: | | | | | |
| Deferred tax asset | | | | 5,352,750 | 429,199 |
| Deferred tax liability | | | | - | (1,142,030) |
| As at year end | | | | 5,352,750 | (712,831) |

## 14. Property, Plant and Equipment

| | Generation systems | Transmission systems | Distribution systems | Civil works & Buildings | Vehicle, furniture & fittings & equipment | Capital work in progress | Total |
|---|---|---|---|---|---|---|---|
| Cost or valuation | K'000 | K'000 | K'000 | K'000 | K'000 | K'000 | K'000 |
| | | | | | | | |
| At 1 January 2019 | 4,903,150 | 11,410,296 | 12,764,146 | 9,379,308 | 4,169,225 | 18,591,307 | 61,217,432 |
| Additions | 6,948 | 49 | 58 | 1,101 | 61,668 | 10,405,289 | 10,475,113 |
| Revaluation of assets | 85,384 | | | (24,877) | | | 60,507 |
| Depreciation Capitalised | - | - | - | - | - | 609 | 609 |
| Disposals | - | - | - | - | (3,602) | - | (3,602) |
| REA Transfers In | - | - | 47,409 | - | - | - | 47,409 |
| Transfers from Capital Works In Progress | - | 831,455 | 103,921 | 198,971 | 104,490 | (1,238,837) | - |
| Reclassification to intangible assets | | (7,190) | - | - | - | - | (7,190) |
| *Adjustments on assets | - | - | - | - | - | (579,005) | (579,005) |
| | | | | | | | |
| At 31 December 2019 | 4,995,482 | 12,234,610 | 12,915,534 | 9,554,503 | 4,331,781 | 27,179,363 | 71,211,273 |
| | | | | | | | |
| | Generation systems | Transmission systems | Distribution systems | Civil works & Buildings | Vehicle, furniture & fittings & equipment | Capital work in progress | Total |
| Cost or valuation | K'000 | K'000 | K'000 | K'000 | K'000 | K'000 | K'000 |
| Additions | 3,715 | - | 257 | 223 | 80,313 | 17,127,553 | 17,212,061 |
| Revaluation of assets | - | | | - | | | - |
| Depreciation Capitalised | - | - | - | - | - | 772 | 772 |
| Disposals | (245) | (2,551) | - | (1,497) | (10,535) | - | (14,828) |
| REA Transfers In | - | - | - | - | - | - | - |
| Transfers from Capital Works In Progress | 422,395 | 1,038,645 | 272,172 | 393,757 | 728,862 | (2,855,831) | - |
| Reclassification to intangible assets | | (23,867) | - | - | - | - | (23,867) |
| Prior year adjustment | - | - | - | - | - | 4,214 | 4,214 |
| | | | | | | | |
| At 31 December 2020 | 5,421,347 | 13,246,837 | 13,187,963 | 9,946,986 | 5,130,421 | 41,456,071 | 88,389,625 |
| | | | | | | | |
| Depreciation | | | | | | | |
| At 1 January 2019 | 333,324 | 552,588 | 664,535 | 432,844 | 497,961 | - | 2,481,252 |
| Charge for year | 205,565 | 573,715 | 670,202 | 324,788 | 157,516 | - | 1,931,786 |
| Eliminated on revaluation | (164,200) | - | - | (127,895) | - | - | (292,095) |
| Eliminated on disposal | - | - | - | - | (1,682) | - | (1,682) |
| | | | | | | | |
| At 31 December 2019 | 374,689 | 1,126,303 | 1,334,737 | 629,737 | 653,795 | - | 4,119,261 |
| Charge for year | 206,521 | 580,823 | 678,556 | 328,274 | 154,362 | - | 1,948,536 |
| Eliminated on revaluation | - | | | - | | | - |
| Eliminated on disposal | (41) | (416) | (110) | (695) | (8,177) | - | (9,439) |
| | | | | | | | |
| At 31 December 2020 | 581,169 | 1,706,710 | 2,013,183 | 957,316 | 799,980 | - | 6,058,358 |

| | Generation systems | Transmission systems | Distribution systems | Civil works & Buildings | Vehicle, furniture & fittings & equipment | Capital work in progress | Total |
|---|---|---|---|---|---|---|---|
| Carrying Amount | | | | | | | |
| At 31 December 2020 | 4,840,178 | 11,540,127 | 11,174,780 | 8,989,670 | 4,330,441 | 41,456,071 | 82,331,267 |
| At 31 December 2019 | 4,620,793 | 11,108,307 | 11,580,797 | 8,924,766 | 3,677,986 | 27,179,363 | 67,092,012 |

*Adjustments arise from the fixed assets which were captured under revaluation of assets and yet they were still captured under Capital Works in Progress.

The Group's Civil engineering works, generation plants and transmission and distribution systems and leasehold buildings are stated at their revalued amounts, being their fair value at the date of revaluation, less any subsequent accumulated depreciation. The fair value measurement of the Group's civil engineering works and buildings and generation plants and transmission and distribution systems as at 31 December 2017 were performed by Messrs Multiconsult United Kingdom and Upmarket Property Consultants respectively, independent valuers not related to the Group.

At year end, the subsidiary, Kariba North Bank Extension Power Corporation Limited's directors passed the adjustment to reflect the revaluation that was performed as at 31 December 2017 by Messrs Multiconsult United Kingdom and Upmarket Property Consultants. The net revaluation gain that was recognised amounted to K61 million.

The information below shows the valuation techniques used as well as the significant inputs used.

| Property, plant and equipment | Valuation technique | Description of valuation technique | Observable inputs |
|---|---|---|---|
| Freehold land and buildings | Market based approach - Direct Comparable Method (DCM) and Depreciated Replacement Cost (DRC) | Direct Comparable method renders an estimate of value through comparison with other similar available properties which have recently transacted in the vicinity in an attempt to discern the actions of buyers and sellers active in the market place. The current market value is built up from the Land and improvement values of the buildings derived from comparable transactions. Considerations were made with reference to; Location factor, time of sale, accessibility, quality, prevailing economic property trends.<br><br>The Depreciated Replacement Cost method determines the present market value of the subject property by estimating the present cost of replacing the building(s) by estimating the total amount of accrued depreciation from all causes, namely physical deterioration, functional obsolescence and external obsolescence, subtracting the accrued depreciation from the present replacement costs, estimating the value of minor improvements and adding the site value to the depreciated cost of the building(s).This method was used where there was no market-based evidence of fair value because of the specialised nature of the item of property, plant and equipment and the item is rarely sold, except as part of a continuing business. | Not applicable |
| Civil engineering works and generation plants (Hydro stations, diesel stations and HV stations) | Depreciated Current Replacement Value (DCRV) | The Depreciated Current Replacement Cost (DRCV) method requires that, for each asset under consideration, a value be obtained for a modern equivalent asset (MEA), that being an asset that can reasonably provide like-for-like benefits of the asset under consideration. The current replacement value (CRV) of electrical and mechanical equipment was established using ZESCO data for recent projects. For the civil work structures, a bill of quantities was prepared covering the major work items for each hydro scheme section (e.g. embankments, power intakes, canals, fore bays, power tunnels, pressure shafts, powerhouses etc.). The DCRV has been calculated in the Asset Register on a linear basis, a minimum value of 10% CRV was allocated if the asset is still in service. A scrap value has also been allocated where it is ZESCO's current practice to sell scrap materials. | Market prices, exchange rates, discounted rate |

| Property, plant and equipment | Valuation technique | Description of valuation technique | Observable inputs |
|---|---|---|---|
| Transmission and distribution systems | Depreciated Current Replacement Value (DCRV) | The DRC method requires that, for each asset under consideration, a value be obtained for a modern equivalent asset (MEA), that being an asset that can reasonably provide like-for-like benefits of the asset under consideration.<br><br>Transmission line asset prices were obtained from recent ZESCO transmission line projects pricing schedules. An additional 3% on-costs was added to account for the Owner's costs. Line costs were priced per unit length and according to terrain type (flat, hilly and swampy).<br><br>Distribution equipment pricing data was obtained from recent ZESCO in-house pricing data. Unit installed prices (material and labour) per length of overhead line and underground cable was calculated from these data and a further 100% on-costs were added. | Market prices, exchange rates, discounted rate |

Details of the Group's civil engineering works and buildings, generation plants and transmission and distribution systems and information about the fair value hierarchy as at the end of the reporting period are as follows:

| | Level 1 | Level 2 | Level 3 | Fair value as at 31 December 2020 |
|---|---|---|---|---|
| | K'000 | K'000 | K'000 | K'000 |
| Civil Engineering works and buildings | | - | 3,243,898 | 3,243,898 |
| Generation plants | - | 11,084,229 | - | 11,084,229 |
| Transmission and distribution systems | - | 7,579,727 | - | 7,579,727 |
| Civil Engineering works and buildings | - | - | 4,647,095 | 4,647,095 |
| Generation plants | - | 12,796,509 | - | 12,796,509 |
| Transmission and distribution systems | - | 7,682,752 | - | 7,682,752 |

There were no transfers between fair value levels during the year.

Had the Group's civil engineering works and buildings, generation plants and transmission and distribution systems been measured on a historical cost basis, their carrying amounts wold have been as follows:

| | 2020 | 2019 |
|---|---|---|
| | K'000 | K'000 |
| Civil Engineering works and buildings | 334,011 | 1,489,603 |
| Generation plants | 550,876 | 1,542,536 |
| Transmission and distribution systems | 11,397,499 | 11,552,415 |

The significant inputs include the estimated construction costs and other ancillary expenditure. A slight increase in the depreciated factor would result in a significant decrease in the fair value of the buildings and civil engineering works, and a slight increase in the estimated construction costs would result in a significant increase in the fair value of the buildings, and vice versa.

In the opinion of the Directors there are no major components of Property, Plant and Equipment which have different useful lives that would require to be depreciated separately and allocated separate residual values.

In accordance with Section 248 of the Companies Act, 2017, the register of Land and Buildings is available for inspection by members and their duly authorised agents at the Registered records office of the Group.

**Assets Held as Security**

There were no assets that were placed as Security for any loan obtained during the year under review.

## 15. Intangible Asset

| | 2020 | 2019 |
|---|---|---|
| | K'000 | K'000 |
| At beginning of year | 84,553 | 76,505 |
| Additions | 381 | 858 |
| Reclassification of intangible assets from PPE (note 14) | 23,867 | 7,190 |
| At end of year | 108,801 | 84,553 |
| Accumulated amortisation | | |
| At beginning of year | (16,520) | (7,873) |
| Amortisation expense | (7,608) | (8,647) |
| | | |
| At end of year | (24,128) | (16,520) |
| Carrying amounts: | | |
| At end of year | 84,673 | 68,033 |

The following useful lives are used in the calculation of amortisation:

| | |
|---|---|
| Oracle software | 4 years |
| Business information system | 20 years |

**Significant intangible assets**
The intangible assets consists of oracle software and the business information systems.

The Group's intangible assets are stated at their revalued amounts, being their fair value at the date of revaluation, less any subsequent accumulated amortisation. The fair value measurement of the Group's intangible assets as at 31 December 2017 were performed by Messrs Multiconsult United Kingdom, independent valuers not related to the Group.

The information below shows the valuation techniques used as well as the significant inputs used.

| Intangible assets | Valuation technique | Description of valuation technique | Observable inputs |
|---|---|---|---|
| Oracle software and other related software | Current Replacement cost | The method determines the amount that ZESCO Limited would have to pay to replace an asset at the present time, according to its current worth of the software on the market. | Not applicable |

| | Level 1 | Level 2 | Level 3 | Fair value at |
|---|---|---|---|---|
| | | | | 31 December |
| | | | | 2019 |
| | K'000 | K'000 | K'000 | K'000 |
| Intangible assets | - | - | 84,673 | 84,673 |

The fair value measurements for intangible asset have been categorised as Level 3 fair values based on the inputs to the valuation technique used.

There were no transfers between fair value levels during the year.

## 16. Right of use assets

| | 2020 | 2019 |
|---|---|---|
| | K'000 | K'000 |
| Cost | | |
| At beginning of year | 27,652 | - |
| Additions | 2,673 | 27,652 |
| Termination of lease | (4,072) | - |
| At end of year | 26,252 | 27,652 |
| Accumulated depreciation | | |
| At beginning of year | (10,519) | - |
| Charge for the year | (9,321) | (10,519) |
| Termination of Lease | 1,597 | - |
| At end of year | (18,243) | (10,519) |
| | | |
| Carry amounts: | | |
| At end of year | 8,010 | 17,133 |

The Group leases mainly building assets with an average lease term of 5 years. The Group has an option to purchase certain buildings it currently occupies at market value.

Most of the lease agreements which run for one year are renewed on an annual basis for the same period.

## 17. Investments In Subsidiaries

| Name of subsidiary | Principle activity | Place of Incorporation and principle place of business | Proportion of ownership interest/ Voting rights held by the Group |
|---|---|---|---|
| Kariba North Bank Extension Power Corporation Limited | Generation and supply of electricity | Zambia, Lusaka | 100% |
| Kafue Gorge Lower Power Development Corporation Limited | Manufacturing of distribution transformers ranging from 25kv to a maximum of 5,000kv (5mva) | Zambia, Lusaka | 100% |
| Batoka North Bank Power Corporation Limited | Manufacture of electricity meters and compact fluorescent lights. | Zambia, Lusaka | 100% |

### 17.1. Investments In Associates And A Joint Venture

| Name and nature of investment | Principle activity | Place of Incorporation and principle place of business | Proportion of ownership interest/ Voting rights held by the Group |
|---|---|---|---|
| Itezhi Itezhi Power Corporation Limited (Joint Venture) | Generation and supply of electricity | Zambia, Lusaka | 50% |
| El Sewedy Electric Zambia Limited (Associate) | Manufacturing of distribution transformers ranging from 25kv to a maximum of 5,000kv (5mva) | Zambia, Ndola | 40% |
| Zambia Electrometer Limited (Associate) | Manufacture of electricity meters and compact fluorescent lights. | Zambia, Ndola | 40% |

All the above associates and joint venture are accounted for using the equity method in these consolidated financial statements.

Summarised financial information in respect of each of the Group's material associates is set out below. The summarised financial information below represents amounts shown in the associate's financial statements prepared in accordance with the IFRS's adjusted by the Group for equity accounting purposes.

**I. Itezhi Tezhi Power Corporation Limited (Joint Venture)**

| | 2020 | 2019 |
|---|---|---|
| | K'000 | K'000 |
| | | |
| At the beginning of the year | 308,810 | 971,761 |
| Share of loss for the year | (54,902) | (662,951) |
| | | |
| | 253,908 | 308,810 |
| Impairement provision during the year | (253,908) | - |
| At end of year | - | 308,810 |
| | | |
| | | |
| Statement of financial position: | | |
| | | |
| Current assets | 3,110,860 | 1,750,898 |
| Non-current assets | 1,676,156 | 1,746,000 |
| Current liabilities | 1,448,086 | 851,704 |
| Non- current liabilities | 3,657,045 | 2,026,428 |
| | | |
| Net ( liabilities) assets of the joint venture | (318,115) | 618,766 |
| Proportion of the Group's ownership | 50% | 50% |
| Group share of net (liabilities) assets | (159,057) | 309,383 |

| | 2020 | 2019 |
|---|---|---|
| | | |
| Statement of comprehensive income: | | |
| Revenue | 1,828,315 | 1,253,618 |
| Net exchange gains | 1,336,300 | 238,807 |
| Total comprehensive loss for the year | (109,804) | (1,325,901) |
| | (109,804) | (1,325,901) |
| | | |
| Proportion of the Group's ownership | 50% | 50% |
| Group share of joint venture's loss for the year | (54,902) | (662,951) |

**I. El Sewedy Electric Zambia Limited (Associate)**

| | | |
|---|---|---|
| At the beginning of the year | 51,525 | 43,433 |
| Share of profit for the year | 8,744 | 8,092 |
| | 60,269 | 51,525 |
| | | |
| Statement of financial position: | | |
| Current assets | 319,583 | 249,394 |
| Non-current assets | 187,689 | 131,749 |
| | | |
| Current liabilities | 172,125 | 181,393 |
| | | |
| Non- current liabilities | 25,417 | 10,433 |
| | | |
| Net assets of the joint venture | 309,731 | 189,317 |
| Proportion of the Group's ownership | 40% | 40% |
| | | |
| [ii] El Sewedy Electric Zambia Limited (Associate) (continued) | | |
| | | |
| Group share of net assets | 123,892 | 75,727 |
| | | |
| Statement of comprehensive income: | | |
| Revenue | 250,781 | 92,670 |
| Profit for the year | 24,888 | (2,998) |
| Total comprehensive income for the year | 21,860 | 20,229 |
| | | |
| Proportion of the Group's ownership | 40% | 40% |
| Group share of associate's profit for the year | 8,744 | 8,092 |

## I. Zambia Electrometer Limited (Associate)

| | 2020 | 2019 |
|---|---|---|
| | K'000 | K'000 |
| | | |
| At the beginning of the year | 26,490 | 26,511 |
| Share of loss for the year | (187) | (21) |
| | 26,303 | 26,490 |
| | | |
| Statement of financial position | | |
| Current assets | 8,740 | 11,700 |
| Non-current assets | 6,207 | 6,684 |
| Current liabilities | 111,456 | 98,227 |
| Non- current liabilities | 3,181 | 2,219 |
| | | |
| Net liabilities of the associate | (99,691) | (82,062) |
| Proportion of the Group's ownership | 40% | 40% |
| Group share of net liabilities | (39,876) | (32,825) |
| | | |
| Statement of comprehensive income: | | |
| Revenue | 301 | - |
| Total comprehensive loss for the year | (467) | (53) |
| | | |
| Proportion of the Group's ownership | 40% | 40% |
| Group share of associate's loss for the year | (187) | (21) |
| | | |
| Summary of associates position: | | |
| At the beginning of the year | 67,270 | 59,199 |
| | | |
| Share of profit and loss for the year: | | |
| ElSewedy Electric Zambia Limited | 8,744 | 8,092 |
| Zambia Electrometer Limited | (187) | (21) |
| | | |
| | 8,557 | 8,071 |
| | | |
| Total closing position for both associates | 75,827 | 67,270 |

## 18. Inventories

| | 2020 | 2019 |
|---|---|---|
| | K'000 | K'000 |
| | | |
| Materials | 845,980 | 606,411 |
| Fuel and lubricants | 15,199 | 10,508 |
| Spares | 14,687 | 10,866 |
| Goods in transit | - | 37,884 |
| | | |
| | 875,866 | 665,669 |
| | | |
| Allowance for obsolescence | (101,968) | (73,604) |

| | 2020 | 2019 |
|---|---|---|
| | | |
| | 773,898 | 592,065 |

"The cost of inventories recognised as an expense during the year was  K278 million (2019: K387 million).

Inventories are disclosed net of provision for obsolete stock amounting to K102 million (2019: K73.6 million).

## 19. Trade and Other Receivables

| | 2020 | 2019 |
|---|---|---|
| | K'000 | K'000 |
| The balance comprises: | | |
| Gross trade receivables | 17,168,239 | 7,828,447 |
| Impairment allowance | (13,806,721) | (6,423,684) |
| | | |
| | 3,361,518 | 1,404,763 |
| | | |
| Other receivables | | |
| Other receivables | 962,177 | 1,917,575 |
| Staff receivables | 36,882 | - |
| Prepayments | - | 31,221 |
| Allowance for doubtful debts | (111,425) | (610,260) |
| | | |
| | 887,634 | 1,338,536 |
| | | |
| Total trade and other receivables | 4,249,152 | 2,743,299 |
| | | |
| The movement in allowance for doubtful trade receivables is as follows: | | |
| Balance at beginning of year | 6,423,684 | 4,963,596 |
| Reversal of impairment losses recognised on trade | | |
| | - | (224,304) |
| Charge for the year | 7,383,037 | 1,684,392 |
| | | |
| At end of the year | 13,806,721 | 6,423,684 |
| | | |
| The movement in allowance for doubtful debts for other receivables is as follows: | | |
| Balance at beginning of year | 610,260 | 253,653 |
| Impairment losses recognised on other receivables | 196,489 | 500,457 |
| Reversal of impairment losses recognised on other receivables | (695,324) | (143,850) |
| | | |
| At end of the year | 111,425 | 610,260 |

The following tables detail the risk profile of trade receivables based on the Group provision matrix. As the Groups' historical credit loss experience shows significantly different loss patterns for different customer segments, the provision for loss allowance based on past due status is not further distinguished between the companies different customer bases.

| | Not past due | 0-30 past due | 31-60 past due | 61-90 past due | More than 90 days past due | Total |
|---|---|---|---|---|---|---|
| | K'000 | K'000 | K'000 | K'000 | K'000 | K'000 |
| Expected credit loss rate | 0% | 40% | 55% | 84% | 87% | 80% |
| Estimated total gross carrying Amount at default | - | 1,523,627 | 1,037,994 | 760,021 | 13,846,598 | 17,168,239 |
| Lifetime ECL | 0 | 609,451 | 570,896 | 638,418 | 11,987,956 | 13,806,721 |
| | - | 914,176 | 467,098 | 121,603 | 1,858,642 | 3,361,518 |

| 31 December 2019 | | | | | | |
|---|---|---|---|---|---|---|
| | Not past due | 0-30 past due | 31-60 past due | 61-90 past due | More than 90 days past due | Total |
| | K'000 | K'000 | K'000 | K'000 | K'000 | K'000 |
| Expected credit loss rate | 0% | 0% | 0% | 1% | 100% | 82% |
| Estimated total gross carrying Amount at default | - | 773,547 | 409,168 | 225,681 | 6,420,050 | 7,828,446 |
| Lifetime ECL | - | 846 | 1,623 | 1,164 | 6,420,050 | 6,423,683 |
| | - | 772,701 | 407,545 | 224,517 | - | 1,404,763 |

The average credit period on sales of goods is 60 days. Penalties are charged for late payment on mining customers.

The Group measures the loss allowance for trade receivables at an amount equal to lifetime ECL. The expected credit losses on trade receivables are estimated using a provision matrix by reference to past default experience of the debtor and an analysis of the debtor's current financial position, adjusted for factors that are specific to the debtors, general economic conditions of the industry in which the debtors operate and an assessment of both the current as well as the forecast direction of conditions at the reporting date. The Group has recognised a loss allowance of 100% against all receivables over 120 days past due because historical experience has indicated that these receivables are generally not recoverable.

The Group writes off a trade receivable when there is information indicating that the debtor is in severe financial difficulty and there is no realistic prospect of recovery, e.g. when the debtor has been placed under liquidation or has entered into bankruptcy proceedings, or when the trade receivables are over two years past due, whichever occurs earlier. None of the trade receivables that have been written off is subject to enforcement activities.

**Trade Receivables placed as Security**
Part of Copperbelt Energy receivables have been assigned as security for China Exim Bank Loan which was procured to finance the construction Kariba North Power Extension Corporation Limited. The Kalumbila Minerals Limited receivables have been assigned 100% towards the Power Purchases from Maamba Collieries Limited.

## 20. Share Capital

| | 2020 | 2019 |
|---|---|---|
| | K'000 | K'000 |
| Authorised | | |
| 2,500,000,000 ordinary shares of K2 each | 5,000,000 | 5,000,000 |
| "Issued and fully paid" | | |
| 1,412,559,015 ordinary shares of K2 each | 2,825,118 | 2,825,118 |
| There was no change to Group's share capital during the year | | |

## 21. Related Party Transactions

(i) **Trading transactions**

| | 2020 | 2019 |
|---|---|---|
| | K'000 | K'000 |
| Rendering of services | 37,268 | 14,215 |
| Purchases of services | 24,797 | 175,320 |

The Group's immediate and ultimate holding Group is Industrial Development Corporation Zambia Limited incorporated in Zambia.

a) **Amounts due from related parties**

| | | |
|---|---|---|
| Government of the Republic of Zambia | 4,654,514 | 3,241,728 |
| "Itezhi tezhi Power Corporation Limited (ITTPC) incorporated in Zambia" | 910,621 | 579,046 |
| Zambia Electrometer Limited, incorporated in Zambia | 27,491 | 2,675 |
| Rural Electrification Authority | 13,785 | 7,704 |
| Allowance for doubtful debts | (628,541) | (520,367) |
| | | |
| | 4,977,870 | 3,310,786 |

(i) **Year end balances**

| | | |
|---|---|---|
| The movement in allowance for doubtful debts in respect of the amounts due from related parties is as follows: | | |
| Balance at beginning of year | (520,367) | 187,682 |
| Charge for the year | (108,174) | (708,049) |
| | | |
| At end of the year | (628,541) | (520,367) |
| | | |

The amounts outstanding are unsecured and will be settled in cash. No guarantees have been given or received. A provision for doubtful debts in respect of amounts due from related parties amounting to K628 million (2019: 520 million) was made during the year.

The amounts outstanding are unsecured and will be settled in cash. No guarantees have been given or received. No expense has been recognised in the year for bad or doubtful debts in respect of the amounts due from related parties. However, in the prior year the entire balance due from Government had been provided for. These amounts are as a result of the trading activities of the Group.

b) **Amounts due to related parties**

| | | |
|---|---|---|
| "Itezhi Tezhi Power Corporation Limited (ITTPC) | | |
| incorporated in Zambia | 9,139,726 | 4,283,184 |
| Elsewedy Electric Zambia Limited | 181,009 | 123,000 |
| Kariba North Bank Extension Power Corporation incorporated in Zambia | 353,584 | 163,847 |
| | 9,674,319 | 4,570,031 |

Itezhi Tezhi Power Corporation is a joint venture investment with 50% shareholding. Elsewedy Electric Zambia Limited and Zambia Electrometer Limited are associates.

c) **Key management personnel remuneration**

| | | |
|---|---|---|
| Key management remuneration | 18,289 | 19,619 |
| Directors fees | 4,652 | 4,903 |
| | 22,941 | 24,522 |

## 22. Borrowings

The movement on loan is as follows:

| | 2020 | 2021 |
|---|---|---|
| | K'000 | K'000 |
| At beginning of year | 30,014,267 | 22,228,799 |
| Borrowings arising during the year | 4,151,670 | 5,992,125 |
| Net exchange losses | 15,164,029 | 4,939,617 |
| Repayments made during the year | (2,648,253) | (3,146,274) |
| | | |
| Balance at end of the year | 46,681,713 | 30,014,267 |
| | | |
| The borrowings are repayable as follows: | | |
| | | |
| On demand or within one year | 3,974,751 | 2,646,569 |
| | | |
| Loans payable within 1 to 2 years | 3,032,653 | 2,078,159 |
| Loans payable within 3-5 years | 7,724,047 | 4,709,898 |
| Loans payable over 5 years | 31,950,262 | 20,579,641 |
| | | |
| Due after one year | 42,706,962 | 27,367,698 |
| | | |
| | 46,681,713 | 30,014,267 |

| | | 2020 | 2019 |
|---|---|---|---|
| The borrowings are due to the following: | | K'000 | K'000 |
| i | Industrial Commercial Bank of China and the Export Import Bank of China | 19,527,114 | 12,324,823 |
| ii | Industrial Commercial Bank of China | 4,520,010 | 3,217,555 |
| iii | China Exim Bank | 2,832,993 | 2,268,740 |
| iv | Industrial Development Corporation Shareholder Loan | 2,612,070 | - |
| v | Nordea Stanbic Bank | 2,208,227 | 1,566,105 |
| vi | DBSA - Kafue George Hydro Power Station | 1,791,825 | 1,317,009 |
| vii | GRZ/International Development Agency | 1,438,098 | 753,807 |
| viii | Standard Chartered Bank | 1,032,881 | 1,033,950 |
| ix | China Exim | 953,820 | 636,538 |
| x | DBSA - Kariba North Bank Extension Power Corporation Limited | 898,652 | 713,110 |
| xi | GRZ/International Development Association- Kafue Muzuma | 880,304 | 587,476 |
| xii | European Investment Bank | 875,289 | 584,130 |
| xiii | African Development Bank | 755,465 | 447,926 |
| xiv | GRZ/Agency Francaise De Development | 728,097 | 485,900 |
| xvii | European Investment Bank - LTDRP loan facility | 660,240 | 440,616 |
| xvi | Industrial Commercial Bank of China Facility -Mpika Transmission | 586,509 | 391,410 |
| xv | Industrial Commercial Bank of China Facility Loan - Musonda Falls | 585,052 | 403,825 |
| xxii | Industrial Commercial Bank of China Facility-Chipta-Lundazi | 567,716 | 410,441 |
| xx | India Exim Bank Loan 2 | 393,164 | 200,590 |
| xxxi | GRZ/Japan International Cooperation Agency | 386,817 | 217,956 |
| xxi | Zanaco $20 Million Short Term Facility | 335,758 | 70,060 |
| xxiii | China Machinery Engineering Corporation Limited | 312,852 | 208,784 |
| xviii | European Investment Bank | 298,386 | 199,130 |

| | | 2020 | 2019 |
|---|---|---|---|
| xxiv | India Exim Bank | 286,228 | 382,032 |
| xxvi | Geria International Investments Llc ii | 190,490 | - |
| xxviii | Geria International Investments Llc | 190,490 | 96,495 |
| xxxii | China Exim Bank-Ii Kabwe-Pensulo | 161,690 | 107,905 |
| xxvii | Nigeria Trust Fund | 128,191 | 84,713 |
| xxxiii | GRZ/World Bank | 93,398 | 62,330 |
| xxxv | Mpande Limestone Limited - Bridging Finance | 88,009 | 91,251 |
| xxx | Agency Francaise de Development | 78,015 | 47,591 |
| xxiv | GRZ/World Bank Facility 2 | 68,528 | 45,733 |
| xxxvi | Development Bank of Southern Africa Bank 1 | 67,208 | 70,420 |
| xxxvii | Standard Bank | 62,583 | 125,295 |
| xxxiv | CNMC Industrial Zone Development | 47,072 | 41,885 |
| xxxviii | European Investment Bank 2 | 38,472 | 32,857 |
| xxxviv | ATLASMARA (Z) Bank Limited | - | 47,083 |
| xxxvv | Stanbic Bank | - | 23,882 |
| xxxvvii | China Jiangxi Bridge Finance | - | 14,950 |
| xxxvviii | Escom Malawi Bridging Loan | - | 733 |
| xxxvvix | ZANACO - Short Term Facility | - | - |
| xxxv | Bank of China | - | - |
| xxxvvi | Stanbic Bank | - | - |
| xxxv | ATLASMARA (Z) Bank Limited | - | - |
| xxxv | Mpande Limestone Limited | - | - |
| xix | Barclays Bank Zambia Plc | - | - |
| xxix | Industrial Development Corporation Limited DC-Shareholder Loan | - | - |
| xxxix | ZTE Short Term Loan | | 259,231 |
| | | 46,681,713 | 30,014,267 |

i. Industrial Commercial Bank of China and the Export Import Bank of China
On 13 November 2017, a facility agreement of up to USD 1, 530, 576, 039 was signed between Kafue Gorge Lower Power Development Corporation Limited, Industrial and Commercial Bank of China Limited and The Export-Import Bank of China. Drawdowns had only begun after the financial close was achieved in June 2018. As at 31 December 2020 KGL had drawn down a total of $932,015,102 (2019: $887,520,697).

ii. Industrial Commercial Bank of China
This is a US$285 million loan facility obtained from Industrial and Commercial Bank of China on 30 May 2011 to finance the Pensulo-Msoro-Chipata West 330 KV and Pensulo-Kasama 330 kV Transmission lines. Interest is 2.5% Margin plus LIBOR (Screen Rate), the Loan will be repaid over 10 years. The loan is denominated in United States Dollar and the balance at the reporting date was US$213.55 million or K4.520 billion.

iii. China Exim Bank
This is a US$315.6 million loan facility was obtained from China Exim Bank in October 2008 with tenure of 15 years. Interest is computed at LIBOR plus 2% per annum. The facility is secured by receivables from Copperbelt Energy Corporation Plc and Chambeshi Copper Mining Company. The loan is denominated in United States Dollar and as at reporting date, the loan balance was US$133.848 million or K2.832 billion.

iv. Industrial Development Corporation Shareholder Loan
This is a US$190 million loan facility obtained from the Industrial Development Corporation (IDC) and Zambia Power Corporation (ZPC) by ZESCO Limited on 19 May 2020. The loan facility was obtained to finance ZESCO Limited Equity into Kafue Gorge Lower Hydro Power Corporation (KGL). The interest is at 10% fixed paid semi-annually with a grace period of three years. The loan facility is denominated in United States Dollars and will be repaid within 23 years including the grace period of Three years. The balance at the reporting date was US$120.49 million or K2.55 billion.

v. Nordea Stanbic Bank
This is a US$133 million loan facility obtained from Nordea bank on 14 August 2014. The loan was obtained to finance the connection of North western Province to the National Grid. The loan shall be repaid over a 14-year period including a grace period of 2 years. The interest rate is 3.69% per annum payable semi-annual. The loan facility is in United States Dollar and the balance at the reporting date was US$104.33 million or K2.21 billion.

vi. DBSA - Kafue George Hydro Power Station
This is a US$100 million loan facility obtained from Development Bank of South Africa (DBSA) on 4 May 2016 to finance the Kafue Gorge Lower Hydro Power Project. Interest is charged at 9.4% plus 6-month Libor, semi-annum and the loan (principal plus interest) will be repaid over 15 years including 2 years grace period. The loan is denominated in United States Dollar. The loan balance at the reporting date was US$84.66 million or K1.792 billion.

vii. GRZ/International Development Agency
This is a US$105 million loan facility obtained from the International Development Association on 3 October 2013 by the Government of Republic of Zambia and on lent to ZESCO to finance the Lusaka Transmission and Distribution Rehabilitation Project. Interest is charged at 1.5% semi-annum and the loan (principal plus interest) will be repaid over 30 years including 10 years grace period. The loan is denominated in United States Dollar. The loan balance at the reporting date was US$67.95 million or K1.44 Billion.

viii. Standard Chartered Bank ($122m)
This is a US$122 million loan facility obtained from Standard Chartered Bank in February 2016 to refinance the $40 million bridge facility and other general corporate purposes relating to capital projects but not limited to the upgrading of Musonda falls power station, new Lusiwasi Upper 15 MW plant, construction of Chama Lundazi Transmission Line. Interest is charged at an average of 5.75% plus 6-month Libor, semi-annum and the loan (principal plus interest) will be repaid over 7 years including 2 years grace period. The loan is denominated in United States Dollar. The loan balance at the reporting date was US$48.80 million or K1.033 billion.

ix. China Exim
This is a US$45 million facility obtained from China Exim bank through the Ministry of Finance on 13 October 2014. The loan was obtained to Finance the Kariba North Bank- Kafue west 330KV transmission project. The interest rate is 2%. The facility is in United States Dollar and the balance as at the reporting was US$45.07 million or K953.82 million.

x. Development Bank of South Africa (DBSA) (KNBEPC)
The borrowing is a term loan facility of US$105.5 million from the Development Bank of Southern Africa Limited. The loan is used to finance the Kariba North Bank Extension Power Corporation project. The loan is repaid in equal instalments semi-annually each year. The amount of repayments during the year was US$11,326,778.

xi. GRZ/International Development Association-Kafue Muzuma
This is a US$60 million loan facility obtained from the International Development Association on 6 December 2012 by the Government of the Republic of Zambia and on lent to ZESCO to finance the Kafue Muzuma Transmission Project. Interest shall be computed at 2% per annum and the loan (principal plus interest) will be repaid over 20 years including 5 years grace period. The loan is denominated in United States Dollar. The loan balance at the reporting date was US$41.59 million or K880.30 million.

xii. European Investment Bank
This is a EUR 50 million loan facility from the European Investment Bank (EIB) by the Government of the Republic of Zambia on the 10 December 2012. The facility was obtained for the purpose of financing the Itezhi-Tezhi Hydro Power plant, Mumbwa Substation and Lusaka West - Mumbwa Transmission Line Project. The facility shall be settled over a period of twenty-five (25) years including a grace period of five (5) years. The interest is charged at 1.2% per cent per annum. The balance at the reporting date was US$41.35 million or K875.29 million.

xiii. African Development Bank
This is a US$30 million loan facility obtained from the African Development Bank (ADB) by the Government of the Republic of Zambia on 19 December 2012. The loan was obtained to finance the transmission line for the Itezhi-Tezhi Hydro Power and Transmission Line Project at semi-annual interest of 2.5%. The loan facility is in United States Dollars and the balance at the reporting date was US$35.69 million or K755.47 million.

xiv. GRZ/Agency Francaise De Development
This is a US$34.4 million loan facility obtained from the International Development Association on 18 December,2012 by the Government of the Republic of Zambia and on lent to ZESCO to finance the construction of Itezhi Tezhi Power Station. Interest is computed at 1.5% semi annum and the loan (principal plus interest) will be repaid over 25 years including 5 years of grace period. The loan is denominated in United States Dollar. The balance at reporting date was US$34.4 million or K728.10 million.

xvii. GRZ/European Investment Bank - LTDRP Loan Facility
This is a US$106 million loan facility obtained from the European Investment Bank on 3 October 2013 by the Government of Republic of Zambia and on lent to ZESCO to finance the Lusaka Transmission and Distribution Rehabilitation Project. Interest is charged at 1.2% semi-annum and the loan (principal plus interest) will be repaid over 30 years including 10 years grace period. The loan is denominated in United States Dollar. The loan balance at the reporting date was US$31.19 million or K660.24 million.

xv. Industrial and Commercial Bank of China Facility Loan - Musonda Falls
This is a US$35.25 million loan facility obtained from Industrial and Commercial Bank of China by ZESCO Limited on the 26 January 2017. The loan facility was obtained to finance the rehabilitation and upgrading of Musonda Falls Hydro Power Plant. The loan shall be repaid over a 15-year period including a grace period of 3 years. The interest is LIBOR plus 3.35% per annum. The loan facility is in United States Dollar and the balance at the reporting date was US$27.64 million or K585.05 million.

xvi. Industrial and Commercial Bank of China
This is a US$29.6 million loan facility obtained from Industrial and Commercial Bank of China by ZESCO Limited on the 13 July 2016. The loan facility was obtained to finance the improvement of power supply in Mpika. The loan shall be repaid over a 15-year period including a grace period of 3 years. The interest is LIBOR plus 3.35% per annum. The loan facility is in United States Dollar and the balance at the reporting date was US$27.71 million or K586.51 million.

xxii. Industrial and Commercial Bank of China - Chipata-Lundazi-Chama 132KV Transmission Line
This is a US$36.84 million loan facility obtained from Industrial and Commercial Bank of China by ZESCO Limited on the 10 August 2017. The loan facility was obtained to finance the Connection of Lundazi and Chama to the National Grid. The loan shall be repaid over a 15-year period including a grace period of 3 years. The interest is LIBOR plus 3.35% per annum. The loan facility is in United States Dollar and the balance at the reporting date was US$26.82 million or K567.72 million.

xx. India Exim Bank 2
This is a US$20.35 million facility obtained from India Exim bank on 11 April 2018 to finance the construction of 142km 132kV transmission line from Leopards Hill to Chitope along with the 33kV distribution network. The interest rate is LIBOR plus 3.0%. The facility is in United States Dollar and the balance as at the reporting was US$18.58 million or K393.16 million.
xxxi. GRZ/Japan International Cooperation Agency

This is a Yens 5.5 billion loan facility obtained from JICA by Government of Republic of Zambia on 1 November 2010. There were additional drawdowns amounting to Yens 149 million during the year. The loan was lent to ZESCO to finance the Increased Access to Electricity Project. The loan shall be repaid over a 15-year period including a grace period of 5 years. The interest is charged at 0.05% per annum. The loan facility is in Japanese Yen and the balance at the reporting date was Yens 1.885 billion or K386.82 million.

xxi. Zanaco $20 Million Short Term Facility
This is a US$48.4 million loan facility obtained from Bank of China on 20 May 2011. The loan was obtained to finance the purchase of Smart Meters and Connection Materials. The facility is for a duration of Two years. The interest rate is at 10% fixed per annum. The loan facility is in United States Dollar and the balance at the reporting date was US$15.86 million or K335.76 million.

xxiii. China Machinery Engineering Corporation Limited
This is a US$15 million facility (Bridging finance) obtained from China Machinery Engineering Corporation (CMEC) by ZESCO Limited on the 31 May 2018. The facility was obtained for the construction of Lusiwasi Upper Hydropower Station. The tenure of the facility is 18 months from the date when the agreement came into effect to the date when the funds are available from the financial institutions. Funds and Interest shall be repaid at once after ZESCO Limited obtains financing or in Twelve equal instalments whichever comes earlier. The interest is charged at 6% fixed per annum. The balance at the reporting date was US$14.78 million or K312.85 million.

xviii. European Investment Bank
This is a EUR 22 million loan facility obtained from the European Investment Bank (EIB) by the Government of the Republic of Zambia on the 4 of December 2012. The Government agreed to on-lend to ZESCO Limited on the terms and conditions set forth in the finance contract. The purpose of the facility was to finance the Kafue-Livingstone transmission Line project. The loan facility shall be repaid to the Government in equal semi-annual instalments beginning five (5) years after the signature date of the on-lending loan and ending ten (10) years after the date of such agreement. The interest is charged at one and half percent (1.5%). The loan facility is in US$14.1 million or K298.39 million.

xxiv. India Exim Bank
This is a US$47.33 million facility obtained from India Exim bank on 9 June 2012. The loan was obtained to finance the connection of Luangwa to the national grid. The loan will be repaid in seven equal instalments. The interest rate is LIBOR plus 5.5%. The facility is in United States Dollar and the balance as at the reporting was US$13.52 million or K286.23 million.

xxvi. Geria International Investments Llc ii
This is a US$10 million loan facility obtained from Geria International Investments LLC on 02 April 2019. The loan was obtained to finance the Supply, Delivery and Commissioning of the Leopards Hill switchyard, Mpashya and Chitope 132/33kV substations and construction of staff houses and offices. The loan tenure is 6 years. The interest rate is 9.85% fixed. The facility is in United States Dollar and the balance as at the reporting was US$8.99million or K190.49 million.

xxiii. Geria International Investments LLC
This is a US$10 million loan facility obtained from Geria International Investments LLC on 30 May 2020. The loan was obtained to finance the Power reinforcement to New Mumbwa S/S, Coventry S/S and Kafue Town S/S. The loan tenure is 6 years. The interest rate is 9.85% fixed. The facility is in United States Dollar and the balance as at the reporting was US$9.00million or K190.49 million.

xxv. China Exim Bank ii - Kabwe - Pensulo
This is a US$114 million facility obtained from Export-Import Bank of China (Exim Bank China) by ZESCO Limited on 15 December 2017. The facility was obtained for the construction of the second Kabwe Stepdown-Pensulo 330 KV Transmission Line project. The tenure of the facility is 15 years. The principal and interest shall be repaid in 24 successive semi-annual instalments. The interest is charged at 3% margin plus LIBOR per annum. The balance at the reporting date was US$7.6 million or K161.7 million.

xxvi. GRZ/Nigeria Trust Fund
This is a US$6.4 million loan facility obtained from the Nigerian Trust Fund by the Government of the Republic of Zambia on the 19 December 2012. The loan was lent to ZESCO Limited for the purpose of financing the Itezhi-Tezhi Hydro Power and Transmission Line project. The loan shall be repaid over a period of twenty-five (25) years including a grace period of five (5) years. The interest is charged at zero point seventy-five (0.75%) per annum fixed interest rate. The loan facility is in United States Dollars and the balance at the reporting date was US$6.06 million or K128.19 million.

xxvii. GRZ/World Bank
This is a US$16 million loan facility obtained from World Bank by Government of Republic of Zambia on 9 February 2009. The loan was lent to ZESCO to finance the Increased Access to Electricity Project. The loan shall be repaid over a 20-year period including a grace period of 5 years. The loan will have a 2% interest charge per annum. The loan facility is in United States Dollar and the balance at the reporting date was US$4.41 million or K93.40 million.

xxviii. Mpande Limestone (Z) Limited
The facility was obtained (Bridging Finance) for the power connection to Mpande Limestone (Z) Limited on 23 March 2018. It is to be paid in 45 months. The interest on this facility is at 4.5%. The balance at the reporting date was US$4.16 million or K88.01 million.

xxix. GRZ/Agence Francaise de Development
This is a €40 million loan facility obtained from Agency Francaise de Development by GRZ and on lent to ZESCO Limited on the 23 June 2016 to finance the improvement of power supply in Southern

Division. The loan shall be repaid over a 20-year period including a grace period of 5 years. The interest rate 5.00% per annum Fixed. The loan facility is in Euros and the balance at the reporting date was €3.0 million or K78.02 million.

xxx. GRZ/World Bank Facility 2
This is a US$10 million loan facility obtained from World Bank by Government of Republic of Zambia on 21 March 2010. The loan was lent to ZESCO to finance the Increased Access to Electricity Project. The loan shall be repaid over a 20-year period including a grace period of 5 years. The loan will have a 2% interest charge per annum. The loan facility is in United States Dollar and the balance at the reporting date was US$3.24 million or K68.53 million.

xxxi. Development Bank of Southern Africa
This is a ZAR210.4 million loan facility obtained from Development Bank of South Africa Bank on 22 July 1998. The loan was obtained to finance the Power Rehabilitation Projects. The duration of the loan is 20 years including a grace period of 5 years. This is a related party Loan between the Parent Company and its subsidiary (ZESCO Limited). The loan facility has a fixed interest rate of 15.25% per annum. The balance as at the reporting date was ZAR46.45 million or K67.21 million.

xxxii. Standard Bank of South Africa
This is a US$29.5 million facility obtained from Standard Bank of South Africa. The loan was obtained to finance the connection of Northwestern Province to the National grid. The interest rate is LIBOR plus 5% per annum. The loan is to be repaid over a period of 7 years with a 2 years grace period. The facility is in United States Dollar and the amount as at the reporting date was US$2.96 million or K62.58 million.

xxxiii. CNMC Industrial Zone Development
The facility was obtained as capital contribution in 2009 on the Chambishi line from ZCCZ who contributed 40% of the total project costs of US$27.8 million (i.e. US$11.1 million). It is to be paid in 180 equal instalments of US$61,778 per month. There is no interest on this vendor finance and there is no security attached to the agreement. The balance at the reporting date was US$2.22 million or K47.07 million.

xxxiv. European Investment Bank 2
This is a EUR7.6 million loan facility obtained from European Investment Bank by ZESCO Limited on 12 July 2005 to finance the Kariba North Bank Power Station Rehabilitation and Uprating Works under Power Rehabilitation Projects. The interest rate is EURIBOR plus 2.954% per annum. The loan facility is in Euro and the balance at the reporting date was EUR2.07 million or K38.47 million.

xxxv. ZTE Vendor Finance
This is a US$27.53 million short term facility obtained from ZTE on 17 May 2019. The loan was obtained to finance the Supply, Delivery and Commissioning of the Metropolitan Area Networks for Lusaka and Copperbelt. The loan tenure is 18 months. The interest rate is LIBOR plus 2.5%. The facility is in United States Dollar and the balance as at the reporting was US$0.00 million or K0.00 million.

xxxvi. ATLASMARA (Z) Limited
This is a US$8 million Short Term Loan facility obtained from African Banking Corporation (Z) Limited on 8 October 2018 by Zesco Limited to enable the Borrower to procure Duplex Cable and other materials to reduce on the backlog of standard connections. Interest is charged at 9.5% and the loan (principal plus interest) will be repaid within 2 years. The loan is denominated in United States Dollar. The loan balance at the reporting date was US0.00 million or K00.00 million.

xxxvii. Stanbic Bank
This is a US$31 million Letter of Credit facility obtained from Stanbic Bank (Z) Limited meant to finance importation, mobilisation and installation of equipment by Elsewedy of Egypt. The Letter of Credit agreement was finalised on the 17 February 2014 for a period of 70 months, with a grace period of 15 (Fifteen) months. The repayment will be US$563,636 in equal instalments of 55 months. The Letter of Credit was secured against the Company's receivables. The facility is in United States Dollar and the balance at reporting date was US$00.00 million or K00.00 million.

xxxviii. China Jianxi International
This is a US$16.94 million facility (Vendor finance) obtained from China Jiangxi International Corporation (CJIC) by ZESCO Limited on the 20 August 2018. The facility was obtained for the construction of the second Kabwe Stepdown-Pensulo 330KV Transmission Line project. The tenure of the facility is 16 months. Funds and Interest shall be repaid in 16 successive instalments. The interest is charged at 10% fixed per annum. The balance at the reporting date was US$00.00 million or K00.00 million.

xxxix. ESCOM Malawi Financing
This is a US$270,454 interest free facility paid as capital contribution to finance the distribution line to from Chipata to Muchinji for power export to Malawi. The facility will be re-paid over 24 months through monthly billing deductions. The balance at the reporting date was US$00.00 or K0.00 million.

Breach of loan agreements

(i) European Investment Bank
The Company was non-compliant with some covenants because the current ratio was less than 1, the Debt Service Cover ratio was less than 1 and; the debt collection period was more than 45 days.

(ii) Development Bank of Southern Africa
The Company was non-compliant with the DBSA loan covenants. The Company was in breach of the leverage ratio, Debt Service Cover ratio and gearing ratio which was more than 72%.

(iii) Standard Chartered Bank
The company was non-compliant with the Gross Debt to EBITDA which was -54; and the Debt Service Cover Ratio was less than 1.25.

(iv) Stanbic Bank
The Company was non-compliant with the Debt to Equity percentage which was less than 140%. The company was non-compliant with the Debt Service Cover ratio which was less than 1.25 and the ratio of Gross Debt to EBITDA was more than 6.

(v) Bank of China
The Company was non-compliant as the EBITDA to Total Interest Cost was less than 2 and; we were compliant to the ratio of Total Liabilities to Total Assets was less than 70%.

(vi) ZANACO
The Company was compliant with the gearing ratio which was less than 1; and was non-compliant with the current ratio which was less than 1.

## 23. Retirement Benefit Obligation

(i) **Defined contribution plan – NAPSA**

Defined contribution plans are a pension plan under which the Group pays fixed contributions into the National Pension Scheme Authority, which is a defined contribution plan. The Group has no legal or constructive obligations to pay further contributions if the fund does not hold sufficient assets to pay all employees the benefits relating to employee service in the current and prior periods.

The Group's contributions to the defined contribution schemes are charged to profit or loss in the year to which they relate. The Group has no further obligation once contributions have been paid.

The total expense recognised in the profit or loss of K76.4 million (2019: 68.7 million) represents contributions payable to these plans by the Group.

As at 31 December 2020, contributions of K11.4 million (2019: K9.6 million) due in respect of the current reporting period had not been paid over to the plans.

(i) **LASF defined benefit plan**

Under the terms of employment, qualifying employees of Zesco Limited are members of a state-managed retirement benefit plan operated by the Local Authorities' Superannuation Fund ("LASF"). Zesco Limited is required to contribute a specified percentage of payroll costs to the retirement benefit plan to fund the benefits. The only obligation of Zesco Limited with respect to the retirement benefit plan is to make the specified contributions. The fund also administers the pension schemes of a number of organisations, including all local authorities. The last actuarial valuation of the entire fund for the five years period to 31 December 2017 was carried out and showed a deficit of K538 million. No provision has been made in these financial statements for any unfunded liability of the Fund as the directors are of the opinion that any liability will be met by the Government of the Republic of Zambia.

The Group's contributions to the plan are charged to profit or loss in the year to which they relate. The Group has no further obligation once contributions have been paid. The total cost of pension contributions during the year was K18.6 million (2019: K27.3million). As at 31 December 2020, contributions of K2.05 million (2019: K2.3 million) due in respect of the current reporting period had not been paid over to the plans.

(ii) **Long service retirement benefit**

Under the terms of employment, qualifying employees of the Group are entitled to post-employment benefits. The benefits are defined benefit in nature based on the members' length of service and their salary at the earlier of retirement or death or termination from employment. The defined benefit plan is administered and paid for by the Group. The Plan runs on an unfunded basis as Zesco Limited (the Employer) meets benefit costs as they fall due.

The most recent actuarial valuation of the present value of the defined benefit obligation was carried out on 31 December 2019 by African Actuarial Consultants. The present value of the defined benefit obligation, and the related current service cost and past service cost were measured using the projected unit credit method.

The plan typically exposes the Group to actuarial risks such as:  interest rate risk, salary risk and liquidity risk.

| | |
|---|---|
| Interest rate risk | The plan liabilities are calculated using a discount rate which is the long-term investment return which matches the yield on government bonds as reported in the IMF Report. A decrease in government bonds will increase the plan liabilities. |
| Salary risk | The present value of the defined benefit plan liability is calculated by reference to the future salaries of plan participants. As such, an increase in the salary of the plan participants will increase the plan's liability. |
| Liquidity risk | The plan is unfunded. There is a risk that resources might not be available when needed to pay the benefits that have become due. |

| | 2020 | 2019 |
|---|---|---|
| Actuarial assumptions: | K'000 | K'000 |
| Discounting rates | 34% | 30% |
| Salary increases | 27% | 27% |

Benefit cost to be recognized in profit and loss

| | | |
|---|---|---|
| Net interest | 846,807 | 543,764 |
| Current service cost | 224,443 | 249,392 |
| Prior year service cost | (838,079) | 575,525 |
| Profit and loss expense | 233,171 | 1,368,681 |
| | | |
| Remeasurements to be recognized in other comprehensive income | | |
| | | |
| Gain from change in financial assumptions | (19,661) | (35,363) |
| Experience gains | (521,564) | (566,177) |
| Actuarial Gains on economic assumptions | (838,079) | - |
| | (1,379,304) | (601,540) |
| | | |
| The amounts to be recognised in the statement of financial position | | |
| | | |
| At beginning of the year | 2,839,375 | 2,254,092 |
| Current service cost | 224,443 | 249,392 |
| Prior year service cost | (838,079) | 575,525 |
| Interest income | 846,807 | 543,764 |
| Gain from change in financial assumptions | (19,661) | (35,363) |
| Experience gains | (521,564) | (566,177) |
| Benefits paid during the year | (482,256) | (181,858) |
| At 31 December | 2,049,065 | 2,839,375 |
| | | |
| Disclosed in the financial statements as: | | |
| | | |
| Non-current | 1,824,622 | 2,014,458 |
| Current | 224,443 | 824,917 |
| | | |
| | 2,049,065 | 2,839,375 |
| | | |
| Sensitivity of defined benefit obligation to actuarial assumptions | | |
| | | |
| Current results | 2,049,065 | 2,839,375 |
| Discount rate | | |
| Increase by 1% | 175,132 | (3,030) |
| Decrease by 1% | (193,004) | 3,060 |
| Salary increase | | |
| Increase by 1% | 184,893 | 209,299 |
| Decrease by 1% | (201,562) | (187,312) |

The sensitivity of the defined benefit obligation to significant actuarial assumptions has been calculated using the same method (present value of the defined benefit obligation calculated with the projected unit credit method at the end of the reporting period) used when calculating the pension liability recognised within the statement of financial position.

The table above shows that assuming a long-term investment return that is 1% higher than the valuation assumption would yield a Defined Benefit Obligation that is K3.03 million lower than that reported. On the other hand, adopting a long-term investment rate that is 1% lower than assumed would yield a defined benefit obligation that is K3.06 million higher than reported.

Applying a long-term salary escalation rate that is 1% higher than assumed would yield a liability position that is K209.30 million higher than reported whereas a salary escalation that is 1% lower than expected would yield a liability value that is K187.31 million lower than reported.

(iii) **Gratuity benefits**

The Group accrues for short term gratuity benefits for employees on contracts between 1 to 3 years. The gratuity computations are based on the terms and conditions agreed with employees at the point of signing the contract;

| | 2020 | 2019 |
|---|---|---|
| | K'000 | K'000 |
| | | |
| At beginning of the year | 15,200 | 20,318 |
| Current service cost | 45,980 | 10,616 |
| Benefits paid during the year | (20 207) | (15 734) |
| At year end | 40,973 | 15,200 |
| | | |
| Disclosed in the financial statements as: | | |
| Non-current | 12,165 | 6,369 |
| Current | 28,808 | 8,831 |
| | 40,973 | 15,200 |
| | | |
| (iv) **Total retirement benefit obligation recorded on the statement of financial position** | | |
| Long service retirement benefit | 2,049,065 | 2,839,375 |
| Gratuity benefits | 40,973 | 15,200 |
| | 2,090,038 | 2,854,575 |
| Disclosed in the financial statements as: | | |
| Non-current | 1,836,787 | 2,020,827 |
| Current | 253,251 | 833,748 |
| | 2,090,038 | 2,854,575 |

## 24. Capital Grants And Capital Contributions

| | Capital grants | Capital contributions | Total |
|---|---|---|---|
| | K'000 | K'000 | K'000 |
| | | | |
| At 1 January 2019 | 313 783 | 2418 266 | 2732 049 |
| Additions during the year | 9 736 | 212 298 | 222 034 |
| Transfer of Assets from Rural Electrification Authority | 47 409 | - | 47 409 |
| Amortisation of capital grants and contributions | (23,990) | (150,390) | (174 380) |
| | | | |
| At 31 December 2019 | 346,938 | 2,480,174 | 2,827,112 |
| | | | |
| Additions during the year | 28 093 | 211,932 | 240 025 |
| Amortisation of capital grants and contributions | (26,271) | (160,760) | (187,031) |
| | | | |
| At 31 December 2020 | 348,760 | 2,531,346 | 2,880,106 |
| | | | |
| Non current | | 2,756,877 | 2,708,961 |
| Current | | 123,228 | 118,151 |
| | | | |
| Total | | 2,880,105 | 2,827,112 |

## 25. Trade And Other Payables

| | 2020 | 2019 |
|---|---|---|
| | K'000 | K'000 |
| Trade payables | 29,739,336 | 14,292,073 |
| Sundry payables and accrued expenses | 926,969 | 1,991,575 |
| Employee related accruals | 262,763 | 170,438 |
| | | |
| | 30,929,068 | 16,454,086 |

Trade and other payables principally comprise amounts outstanding in respect of trade purchases and ongoing costs, as well as amounts accrued in respect of operating costs.

## 26. Bank overdraft

| | | |
|---|---|---|
| Barclays Bank Zambia Plc | 26,721 | 15,066 |
| Zambia National Commercial Bank Plc | 10,484 | 27,504 |
| | 37,205 | 42,570 |

**Barclays Bank Zambia Plc**
An overdraft banking facility amounting to K50 million. The overdraft was agreed in January 2020 with a 12-month tenor with interest payable monthly at three-month LIBOR plus 12.0%. The facilities are repayable strictly on demand. The amount drawn as on 31 December 2020 under this facility was K8.5 million (2019: K11.9 million). The facility is secured against unlimited collections held in the bank accounts from time to time.

**Zambia National Commercial Bank Zambia Plc**
An overdraft banking facility amounting to K35 million. The overdraft was agreed in January 2020 with a 12-month tenor with interest payable monthly at three-month LIBOR plus 9.0%. The facilities are repayable strictly on demand. The amount drawn as on 31 December 2020 under this facility was K26.7 million (2019: K27.3 million). The facility is secured against unlimited collections held in the bank accounts from time to time.

**Standard Chartered Bank Plc**
An overdraft banking facility amounting to K25 million. The overdraft was agreed in April 2020 with a 12-month tenor with interest payable monthly at three-month LIBOR plus 5.5%. The facilities are repayable strictly on demand. There was no amount drawn as at 31 December 2020 under this facility was Nil (2019: Nil).

## 27. Financial Instruments

Capital risk management

The Group manages its capital to ensure that it will be able to continue as a going concern while maximising the return to stakeholders through the optimisation of the debt and equity balance. The Group's overall strategy remains unchanged from prior year.

The capital structure of the Group consists of cash and cash equivalents, interest bearing liabilities and equity attributable to equity holders of the Group, comprising issued capital, reserves and retained earnings.

Gearing ratio

The Group reviews the capital structure on an ongoing basis. As part of this review, the management considers the cost of capital and the risks associated with each class of capital. The Group has a gearing ratio of 83% (2019: 61%) determined as the proportion of net debt to equity.

The gearing ratio at the yearend was computed as follows:

| | | |
|---|---|---|
| Debt (i) | 42,706,962 | 27,367,698 |
| Equity (ii) | 8,464,626 | 17,602,859 |
| | 83% | 61% |

(i) Debt is defined as long- and short-term borrowings.

(ii) Equity includes all capital and reserves of the Group.

**Significant accounting policies**
Details of the significant accounting policies and methods adopted, including the criteria for recognition, the basis of measurement and the basis on which income and expenses are recognised, in respect of each class of financial asset, financial liability and equity instrument are disclosed in the accounting policies to the consolidated financial statements.

The Directors consider that the carrying amounts of financial assets and financial liabilities recognised in the financial statements approximate their fair values.

**Categories of financial instruments**

| | 2020 | 2019 |
|---|---|---|
| | K'000 | K'000 |
| Financial assets: | | |
| - Amounts due from related parties | 4,977,870 | 3,310,786 |
| - Trade and other receivables | 4,212,270 | 2,712,078 |
| - Bank and cash | 4,379,937 | 2,644,081 |
| Financial assets: | 13,570,077 | 8,666,945 |
| | | |
| Financial liabilities: | | |
| - Amounts due to related parties | 9,674,319 | 4,570,031 |
| - Trade and other payables | 30,666,306 | 16,283,648 |
| - Borrowings | 46,681,713 | 30,014,267 |
| - Bank overdraft | 37,205 | 42,570 |
| | 87,059,543 | 50,910,516 |

**Financial risk management objectives**
The Group's executive directors and management co-ordinates access to domestic markets and borrowings from related parties, monitors and manages the financial risks relating to the operations of the Group. These risks include market risk (including currency risk, fair value interest rate risk and price risk), credit risk, liquidity risk and cash flow interest rate risk.

The Group does not enter into or trade financial instruments, including derivative financial instruments, for speculative purposes.

**Market risk**
The Group's activities expose it primarily to the financial risks of changes in foreign currency exchange rates and interest rates. The Group does not enter into any derivative financial instruments to manage its exposure to interest rate and foreign currency risk, including forward foreign exchange contracts to hedge the exchange rate risk.

There has been no change to the Group's exposure to market risks or the manner in which it manages and measures the risk.

**Foreign currency risk management**
The Group undertakes certain transactions denominated in foreign currencies. Hence, exposures to exchange rate fluctuations arise. Exchange rate exposures are managed within approved policy parameters as approved by the Board of Directors.

The carrying amounts of the Group's foreign currency denominated monetary assets and monetary liabilities at the end of the reporting period are as follows:

| | Financial assets | | Financial liabilities | |
|---|---|---|---|---|
| | 2020 | 2019 | 2020 | 2019 |
| | K000 | K000 | K000 | K000 |
| | | | | |
| United States Dollar ($) | 26,235,943 | 16,599,832 | 86,277,110 | 53,056,258 |
| Japanese Yen (JPY) | | | 386,817 | 217,956 |
| South Africa Rand (ZAR) | | | 67,207 | 70,420 |
| Euro | | | 1,458,549 | 129,313 |
| GBP | | | | 750 |

**Interest rate sensitivity analysis**
The interest rate risks sensitivity analysis is based on the assumption that changes in the market interest rates affect the interest income or expenses of variable interest financial instruments:

The tables below sets out the impact on current profit before taxation of an incremental 5% parallel fall or rise in all yield curves during the year:

| | | Scenario 1 | Scenario 2 |
|---|---|---|---|
| | | 5% increase in variable interest rates | 5% decrease in variable interest rates |
| At 31 December 2020 | | | |
| Loss before tax | (16,447,688) | (17,270,072) | (15,625,304) |
| At 31 December 2019 | | | |
| Loss before tax | (5,932,417) | (6,229,038) | (5,635,796) |

**Interest rate risk management**
The Group, its subsidiaries, associates and joint venture are exposed to interest rate risk arising on shareholders loans and loans from the banks for its working capital requirements.

The exposure to interest rate risk is evaluated regularly by management to align with interest rate views and defined risk appetite, by either positioning the statement of financial position or protecting interest expense through different interest rate cycles.

**Interest rate sensitivity analysis**
The sensitivity has been determined based on the exposure to interest rates for non-derivative instruments at the end of the reporting period. For floating rate liabilities, the analysis is prepared assuming the amount of the liability outstanding at the end of the reporting period was outstanding for the whole year. A 5% increase or decrease is used when reporting interest rate risk internally to key management personnel and represents management's assessment of the reasonably possible change in interest rates.

The Group, its subsidiaries, associates and joint venture's sensitivity to interest rates has increased during the current period mainly due to the increase in variable rate debt instruments.

**Credit risk management**
Credit risk management refers to the risk that a counterparty will default on its contractual obligations resulting in financial loss to the Group. The Group is exposed to credit risk in respect of trade and other receivables. As at the financial period end the Group had trade receivables which were due from the Group's customers.

The Group's maximum exposure to credit risk is analysed below:

| | 2020 | 2019 |
|---|---|---|
| | K'000 | K'000 |
| Amounts due from related parties | 4,977,870 | 3,310,786 |
| Bank and cash balances | 4,379,937 | 2,644,081 |
| Trade and other receivables | 4,212,270 | 2,712,078 |
| | 13,570,077 | 8,666,945 |
| The maximum exposure to credit risk for trade receivables at the reporting date by key customer sector was | | |
| Mining | 15,094,296 | 6,752,434 |
| Exports | 954,344 | 430,548 |
| Industrial and related sectors | 425,199 | 15,817 |
| The Local authorities and water utilities | 333,041 | 306,578 |
| Government and relented entities | 253,407 | 188,813 |
| Domestic customers | 91,592 | 128,305 |
| Agriculture and related sectors | 16,359 | 5,952 |
| | 17,168,239 | 7,828,447 |

**Liquidity risk management**
The Group manages liquidity risk by maintaining adequate reserves and banking facilities and by continuously monitoring forecast and actual cash flows and matching the maturity profile of financial assets and liabilities.

The following table below details the Group's remaining contractual maturity for its non-derivate financial assets and liabilities. The table below has been drawn up based on the undiscounted contractual maturities of the financial assets and liabilities.

| | Payable on demand | 1 - 3 months | 3 months to 1 year | Above 1 year | Total |
|---|---|---|---|---|---|
| Financial liabilities | K'000 | K'000 | K'000 | K'000 | K'000 |
| | | | | | |
| - Trade and other payables | - | 30,666,305 | - | - | 30,666,305 |
| - Bank overdraft | 37,205 | - | - | - | 37,205 |
| - Borrowings | - | 3,974,751 | - | 42,706,962 | 46,681,713 |
| - Amounts due to related parties | - | 9,674,319 | - | - | 9,674,319 |
| | | | | | |
| | 37,205 | 44,315,375 | - | 42,706,962 | 87,059,542 |
| | | | | | |
| Financial assets | | | | | |
| | | | | | |
| - Amounts due from related parties | - | 4,977,870 | - | - | 4,977,870 |
| - Trade and other receivables | - | 4,212,270 | - | - | 4,212,270 |
| - Bank and cash balances | 4,379,936 | - | - | - | 4,379,936 |
| | | | | | |
| | 4,379,936 | 9,190,140 | - | - | 13,570,076 |
| | | | | | |
| Year ended 31 December 2019 | | | | | |
| | | | | | |
| Financial liabilities | | | | | |
| | | | | | |
| - Trade and other payables | - | 16,283,648 | - | - | 16,283,648 |
| - Bank overdraft | 42,570 | - | - | - | 42,570 |
| - Borrowings | - | 2,646,569 | - | 27,367,698 | 30,014,267 |
| - Amounts due to related parties | - | 4,570,031 | - | - | 4,570,031 |
| | 42,570 | 23,500,248 | - | 27,367,698 | 50,910,516 |
| | 8,876,852 | 130,511,278 | - | 112,781,622 | 252,169,752 |
| Financial assets | | | | | |
| | | | | | |
| - Amounts due from related parties | - | 3,310,786 | - | - | 3,310,786 |
| - Trade and other receivables | | 2,712,078 | - | - | 2,712,078 |
| - Bank and cash balances | 2,644,081 | - | - | - | 2,644,081 |
| | | | | | |
| | 2,644,081 | 6,022,864 | - | - | 8,666,945 |

## 28. Fair Value Measurements

The information set out below provides information about how the Company determines fair values of various financial assets and financial liabilities.

The following table provides an analysis of financial instruments that are measured subsequent to initial recognition at fair value, grouped into Levels 1 to 3 based on the degree to which the fair value is observable:

- Level 1 – Quoted prices (unadjusted) in active markets for identical assets or liabilities. This level includes listed equity securities and debt instruments on exchanges (for example, Lusaka Stock Exchange).
- Level 2 – Inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly (that is, as prices) or indirectly (that is, derived from prices).
- Level 3 – inputs for the asset or liability that are not based on observable market data (unobservable inputs). This level includes equity investments and debt instruments with significant unobservable components.

This hierarchy requires the use of observable market data when available. The Company considers relevant and observable market prices in its valuations where possible.

Fair value of the Company's financial assets and financial liabilities that are measured at fair value on a recurring basis

There were no financial assets and liabilities that are measured at fair value on a recurring basis during the period.

Fair value of financial assets and financial liabilities that are not measured at fair value on a recurring basis (but fair value disclosures are required)

Except as detailed in the following table, the directors consider that the carrying amounts of financial assets and financial liabilities recognised in the financial statements approximate their fair values.

| | 2020 | | 2019 | |
|---|---|---|---|---|
| | Carrying amount | Fair value | Carrying amount | Fair value |
| Financial assets | | | | |
| Loans and receivables: | | | | |
| - Amounts due from related parties | 4,977,870 | 4,977,870 | 3,310,786 | 3,310,786 |
| -Trade and other receivables | 4,212,270 | 4,212,270 | 2,712,078 | 2,712,078 |
| Total | 9,190,140 | 9,190,140 | 6,022,864 | 6,022,864 |
| Financial liabilities | | | | |
| - Borrowings | 46,681,713 | 46,681,713 | 30,014,267 | 30,014,267 |
| - Trade and other payables | 30,666,305 | 30,666,305 | 16,283,648 | 16,283,648 |
| - Amounts due to related parties | 9,674,319 | 9,674,319 | 4,570,031 | 4,570,031 |
| - Bank overdraft | 37,205 | 37,205 | 42,570 | 42,570 |
| Total | 87,059,542 | 87,059,542 | 50,910,516 | 50,910,516 |

| | Fair value hierarchy as at 31 December 2020 | | | |
|---|---|---|---|---|
| | Level 1 | Level 2 | Level 3 | Total |
| | K'000 | K'000 | K'000 | K'000 |
| Financial assets | | | | |
| Loans and receivables: | | | | |
| - Amounts due from related parties | - | - | 4,977,870 | 4,977,870 |
| - Bank and cash balances | - | - | 4,212,270 | 4,212,270 |
| -Trade and other receivables | - | - | 4,379,936 | 4,379,936 |
| | | | | |
| Total | - | - | 13,570,076 | 13,570,076 |

| | Fair value hierarchy as at 31 December 2020 | | | |
|---|---|---|---|---|
| | Level 1 | Level 2 | Level 3 | Total |
| | K'000 | K'000 | K'000 | K'000 |
| Financial liabilities: | | | | |
| Financial liabilities held at amortised cost: | | | | |
| - Amounts due to related parties | - | - | 9,674,319 | 9,674,319 |
| - Trade and other payables | - | - | 30,666,305 | 30,666,305 |
| - Borrowings | - | - | 46,681,713 | 46,681,713 |
| - Bank overdraft | - | - | 37,205 | 37,205 |
| | | | | |
| Total | - | - | 87,059,542 | 87,059,542 |

| | Fair value hierarchy as at 31 December 2019 | | | |
|---|---|---|---|---|
| | Level 1 | Level 2 | Level 3 | Total |
| | K'000 | K'000 | K'000 | K'000 |
| Financial assets | | | | |
| Loans and receivables: | | | | |
| - Amounts due from related parties | - | - | 3,310,786 | 3,310,786 |
| -Trade and other receivables | - | - | 2,712,078 | 2,712,078 |
| - Bank and cash | - | - | 2,644,081 | 2,644,081 |
| | | | | |
| Total | - | - | 8,666,945 | 8,666,945 |
| Financial liabilities: | | | | |
| Financial liabilities held at amortised cost: | | | | |
| - Amounts due to related parties | - | - | 4,570,031 | 4,570,031 |
| - Trade and other payables | - | - | 16,283,648 | 16,283,648 |
| - Borrowings | - | - | 30,014,267 | 30,014,267 |
| - Bank overdraft | - | - | 42,570 | 42,570 |
| | | | | |
| Total | - | - | 50,910,516 | 50,910,516 |

The fair values of the financial assets and financial liabilities included in the level 3 category above have been determined in accordance with generally accepted pricing models based on a discounted cash flow analysis, with the most significant inputs being the discount rate that reflects the credit risk of counterparties.

## 29. Lease Liabilities

| | 2020 | 2019 |
|---|---|---|
| | K'000 | K'000 |
| | | |
| At beginning of the year | 24,737 | - |
| At initial recognition | - | 27,651 |
| Addition | 2,673 | - |
| Finance costs | 5,192 | 5,046 |
| Termination on Lease | (4,072) | - |
| Repayments | (12,078) | (7,960) |
| | | |
| At year end | 16,452 | 24,737 |
| | | |
| Maturity analysis | | |
| | | |
| Year 1 | 14,033 | 21,099 |
| Year 2 | 6,300 | 9,473 |
| Year 3 | 1,282 | 1,927 |
| Year 4 | 462 | 695 |
| Year 5 | 33 | 49 |
| | | |
| | 22,110 | 33,243 |
| Less: Unearned interest | (5,657) | (8,506) |
| | | |
| | 16,452 | 24,737 |
| | | |
| Analysed as: | | |
| Non-current | 10,017 | 13,138 |
| Current | 6,435 | 11,599 |

## 30. Going Concern

**Introduction**
The IFRS Conceptual Framework states that going concern is an underlying assumption in the preparation of IFRS financial statements of the Group. Therefore, the financial statements presume that an entity will continue in operation in the foreseeable future or, if that presumption is not valid, disclosure and a different basis of reporting are required.

The Board of Directors ("Board") believes that, as of the date of this report, this presumption is still appropriate and accordingly the financial statements have been prepared on the going concern basis.

**Ability of the Group to continue as a going concern**
IAS 1 Preparation of Financial Statements requires management to perform an assessment of the Group's ability to continue as a going concern. If management is aware of material uncertainties related to events or conditions that may cast significant doubt upon the entities' ability to continue as a going concern, IAS 1 requires these uncertainties to be disclosed.

In conducting this assessment, the Board have taken into consideration the following factors;

**1. Financial position**

- The Group's current liabilities of K46.7 billion ( 2019 :K 26.4 billion) exceeds the current assets of K14.4 billion as at 31 December 2020 (2019 : K9.3 billion). However, the carrying amounts of total assets of the entity of K102.4 billion (2019: K77.3 billion) exceeded their total liabilities of K94 billion (59.7 billion) in the year under review.
- The increase in current liabilities by 77% was mainly due to depreciation of the Kwacha against the US dollar, as 85% of liabilities in terms of trade payables owed to Independent Power Producers whose invoicing is US dollar, while our reporting currency is the local currency Kwacha, which significantly depreciated by the end of 2020. Further, this was compounded by the tariff disparity between IPPs

average selling tariff of US$11 cents/kwh compared to buying averaging US$7.5 cents/Kwh.

- The Group has been posting operating losses in the last 5 years on account of high IPPs tariff than the selling tariffs and the impact of increased expected credit default rates from our major customers arising from poor payment patterns and also due to on-going tariff disputes with some major customers under Bulky Supply Agreements
- The depreciation of the local currency against the major currencies such as the US dollar, has adverse impact on our operations given that our major raw materials are imported. This has resulted in increase in current liabilities upon revaluation translating into local reporting currency and high exchange losses impacting negatively our profitability.

**2. Turnaround Initiatives**
The Directors' have put in place a turnaround strategy with focus on the three strategic pillars to overcome the current challenges:

**a. Debt Restructuring**
The current long term debt stands at about K43 billion or US$2 billion, borrowed for capital infrastructure investment.

The long-term debt is split into the following categories;

- Government guaranteed loans
- Government on-lent concessional loans
- Commercial loans

As part of the debt restructuring the Group is engaging the Government of Zambia through the Ministry of Finance to convert the Government guaranteed and on-lent concessional loans to equity. The engagement process has commenced and expected to be concluded before end of 2021. Once the loans have been converted, it is expected to reduce the levels of gearing and improve the equity.

Further, the Group is re-negotiating the terms of the existing long-term debt under the commercial loans category. The process of engagement with various lenders is still on going. The strategy being employed is to engage individual lenders with the agenda to restructure the existing debt by reviewing the repayment terms and interest rates and possible deferment of the repayment of loans as they fall due.

The debt restructuring also includes re-negotiating with Lenders to reduce the Debt Reserve account, which holds cash cover for the debt repayment for certain loans. This will free up cash to assist in liquidating the long outstanding arrears for IPPs and other Suppliers of goods and services.

**b. Cost Management**
Part of the Cost Management initiative is to re-negotiate with Independent Power Producers the cost of power purchases whose tariff is significantly above the selling tariff to the customers. The power purchase tariff from IPPs is averages 11 cents/Kwh against the selling average tariff of about US$ 7.5 cents/Kwh.

The re-negotiations are progressing well, with outstanding Conditional Precedent (CPs) yet to be met by Group. The Shareholder has been engaged with a view to assist in meeting the CPs in order to reach closure with the Independent Power Producers tariff re-negotiations. The IPPs re-negotiations include the repayment plan of the outstanding arrears with Independent Power Suppliers.

In order to reduce the operating costs, the Group is utilizing online platforms to increase easy access of services provided by physical Customer Service Centres. This has resulted in closure of some of the rented properties in preference to on-line services.

**c. Revenue Enhancement**
This includes engagement with Mining customers with long outstanding invoices with a view to agree payment plans. Further, the option to settle long outstanding disputed tariff issues through arbitration is considered rather than the lengthy and costly litigation process.

In addition, management is engaging with Government of Zambia and Water Utilities to conclude debt swap with long outstanding electricity bills.

The Cost of Service Study expected to be completed by end of the September of 2021, will provide the basis for tariff migration to Cost Reflective levels.

The conclusion of Cost-of-Service Study scheduled to be concluded by 31 August 2021 is expected to create a conducive environment for tariff migration to cost reflective levels in the Energy Sector Industry.

**3. Macro- Economic conditions and impact of COVID-19**
The successful implementation of the turnaround strategy will depend on the stability of macro-economic factors which are sensitive to the assumptions made on the forecasting future cash flows.

- The forecasting of Exchange rate of Kwacha to US$ dollar is depended on the pessimistic position that the Kwacha will continue to depreciate at average of 10% to 2022. The exchange rate movement of Kwacha against the US dollar is sensitive and has an impact in the outcome of the financial performance of the Group in the next 12 months and thereafter.
- The ability of the Government of Zambia to conclude the country's debt restructuring efforts with it's lender of Euro-Bond and other Creditors will have an impact on the Group's debt structure.
- The Country's ability to conclude negotiations with International Monetary Fund (IMF) on the re-financing package as an economic stimulus package, which will assist in re-finance the exiting Country's debt.
- The impact of Credit Ratings for the country will have direct impact on the cost of future borrowings and on the local and international market. This will further have an impact on the Turnaround strategy and capital structure in determining the weighted average capital cost to determine the present value of future cash flows for use in computing recoverable amounts.
- Inflation rate fluctuations normally impact on the cost of living of the country.

The emergency of Covid-19 has had adverse impact on the Economic of the Country, resulting in negative growth of the Gross Domestic Product (GDP). This is further expected to contract the local economy in 2021, as trade within the region has declined due to restrictions in the movements between neighbouring countries in a bid to control the spread of the Coronavirus.

**4. Progress on Implementation of Turnaround Strategy**

**Liquidity**
In assessing the Group's liquidity, management prepared a 12 month cash flow forecast and a five year Turnaround Strategy up-to 2025. A number of assumptions and estimates have been made in preparing the forecast. The forecast takes into consideration various scenarios relating to the economic and Covid-19 impact on its various operations, including the following:

**a. Completion of Kafue Gorge Lower Hydropower Project - 750 MW**
The commissioning of the Generators at Kafue Gorge Hydropower Plant is expected to commence in the second half of 2021 with commissioning of the first 150 MW Generator. The Generator Units are scheduled to come on board on a monthly basis starting at the end of the second quarter with the first 150 MW Generation already commissioned in June 2021, thereafter on a monthly basis a Generator will be commissioned in line with the plan by Management when preparing the 12 months cash flow forecasting.

**b. IPPs Tariff Re-negotiations**
The IPPs tariff re-negotiations has reached advanced stage with parties agreeing a tariff, with only Conditional Precedent (CPs) to be agreed by parties.

**c. Tariff Adjustments**
The Group expects the Cost of Service Study to be completed in the third quarter of 2021. This is expected to provide the basis for tariff migration path to cost reflective levels. In preparation of 12 month cash flow forecasting, the Group has not planned for any tariff increase in 2021 due to ongoing Cost of Service Study on a based on base case scenario. However, in 2022 the Group has included a 35% tariff application and intends to apply for a multiple tariff increase for the next 3 years in line with the Energy Regulatory Board Act.

**d. Debt Restructuring**
Includes conversion of GRZ On-lent loans to Equity and re-negotiations of existing loans with lenders. The process is on - going with other lenders yet to respond to ZESCO's request for re-negotiations of the tariff. This is aimed at strengthening the balance sheet and de-gearing the debt levels of the Group, currently standing above the acceptable Debt service ratio. The Directors are aware of the pending defaults on some of the existing facilities, hence they have engaged the lenders to defer the payment of interest and loan repayments to 2022, to allow the Group restructure its debt profile in line with the shareholder efforts.

The restructuring of the debt will entail consolidating the existing debt by re-negotiating the interest terms and tenure of the loans. This will include re-packaging the existing loans and possible buying off some of the loans into a single consolidated debt

**5. Funding confirmation from Lenders**
During the year under review, the Group concluded the following Financing agreements;

- The financing of US$ 190 million debt with through Industrial Development Corporation Limited as Shareholder loan into Kafue Gorge Lower Hydro Power Project, expected to be commissioned in the second quarter of 2021.
- Completed a deal worth US$20 million to procure prepaid meters aimed at enhancement of collections and aimed at reducing backlog of customer connection.
- Completed a deal worth US$10 million as Project financing for construction of 20MVA 132-88/33/11kV at Sanje, Mumbwa and new commissioning of three phase 315MVA 330/220/11kV 50Hz auto transformer, protection, metering and control equipment for the New Mumbwa Substation. The investments are aimed at providing reliable supply of electricity to Nampundwe Copper mine and intended investments around Mumbwa.
- Completed a deal worth K100 million for asset finance with ABSA. This is intended to finance the purchase of motor vehicles to reduce the backlog of customer connection and also enhance revenue collections on post-paid metering customers.
- Further, the Group has signed Bulky Supply Agreements with Botswana power to supply 100 MW effective 01 May 2021 at an average tariff of US$9/cents for 6 months and 50 MW of power to NPower on a five year agreement.
- On a long term basis, the Group is negotiating with ESKOM of South Africa to supply 200 MW of power at average tariff of US$9 cents.

The above measures are aimed at improving the working capital of the Group in the next 12 months as support for going concern.

**Conclusion**
The Directors have considered all of the above, including a detailed consideration of all financial plans and forecasts, the actions taken by the Group, and the actions that remain outstanding, and based on the information available to them, are of the opinion that the going concern assumption is appropriate in the preparation of the financial statements. The Directors have therefore prepared the Group financial statements on a going concern basis.

The ability of the entities to repay debt as it becomes due is dependent on the timing and quantum of cash flows from operations, the ability to realise cash through a combination of tariff increase and tariff renegotiation with IPPs and ability to meet the condition precedent set by IPPs.

The Directors remain focused on and committed to the turnaround strategy and the debt restricting plan, re-negotiation tariff with IPPs and tariff migration to cost reflective levels.

However, the conclusion of tariff re-negotiation with IPPs and debt restructuring in the current economic conditions creates a material uncertainty.

A material uncertainty is an event or condition that may cast significant doubt on the Group's ability to continue as a going concern, and therefore, that it may be unable to realise its assets and discharge its liabilities in the normal course of business.

The Directors after considering the proposed terms and mitigating actions described above, have concluded that the Group is able to discharge its liabilities in the normal course of business and are therefore of the opinion that the going concern assumption is appropriate in the preparation of the financial statements.

## 31. Budgeted Commitments

| | K'000 | K'000 |
|---|---|---|
| Authorised by the directors but not contracted for | 9,563,073 | 7,836,027 |

The funds required to meet the budgeted capital expenditure will be generated from borrowings and trading activities of the group.

## 32. Contingent Liabilities

There were no known material contingent liabilities at 31 December 2020 and 31 December 2019.

## 33. Events after the Reporting Date

The Group completed the Debt Swap between Government of Zambia, Zambia Revenue Authority and ZESCO amounting to K249 million. This was offset against the electricity trade receivables and taxes in the first quarter of 2021.

During the 2020/2021 rainfall seasons, the Group has received significant increased inflows of water in major reservoirs at Itezhi Tezhi and Kariba North Dams, which has reduced load management in 2021. This is expected to increase as inflows in Kariba Dam continues to receive water through Zambezi river streams by mid-year.

The Cost of Service Study which was launched in 2020, is expected to be completed in the third quarter of 2021. The Study is expected to provide a tariff migration path to cost reflective levels in the electricity sector.

In May 2021, Itezhi Tezhi Power Corporation Limited commenced arbitration process to recover monies ZESCO Limited owes them. The process is still on-going.

In June 2021, the first 150 MW Generator was commissioned with a resultant increase in the power output.

On 21 July 2021 the London Court in ruled in favour of ZESCO Limited, in case between ZESCO Limited and Copperbelt Energy Corporation Limited in a partial Judgement in which CEC where not able to settle full invoices due to non-payment by its clients.

No other matter or circumstance has occurred subsequent to year end that has significantly affected, or may significantly affect, the operations of the Group, the results of those operations or the state of affairs of the entity at the reporting date.


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