Company: Copperbelt Energy Corporation
Business: Energy
Founded: 1997
Listed: 2008
Country: Zambia

Sector Report
Equity research

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Pangaea Securities

Adapting to Change

Company Overview: Copperbelt Energy Corporation ("CEC" or the "Company"), established in 1953, is Zambia's oldest private utility which deals in the generation, transmission, distribution and supply of electricity primarily to mining and residential customers on the Copperbelt and mining companies in the DRC. The Company operates an extensive power transmission and distribution network spread across Copperbelt province and co-owns and operates the transmission interconnection to the Democratic Republic of Congo ("DRC") through which it provides international wheeling services. CEC also owns and operates a 1-Megawatt ("1MW") grid connected solar PV plant.

Three Fundamental Drivers: During the FY2019 the Company's main source of revenue was the supply of electricity to mining companies on the Copperbelt based on Long Term Power Purchase Agreements ("PPAs") which accounted for 74% of revenues. The Company also sources power from the Southern African Power Pool ("SAPP") and the day-ahead-market through bilateral medium to long term arrangements to sell primarily to mining companies in the Katanga region of the DRC. Lastly, the Company transports power on behalf of regional utilities through the Zambia – DRC transmission interconnector which is the only link between the DRC and Southern Africa. The Company has been consistent in providing domestic and international wheeling services through its vast infrastructure network currently valued at USD457 million.

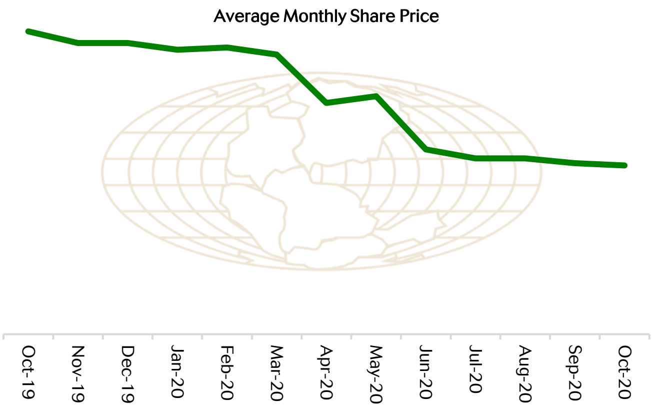
The Bulk Supply Agreement ("BSA") between CEC and ZESCO, the state utility, expired on 31 March 2020. The BSA between ZESCO and the Company was entered into on 21 November 1997 and it supplied the market power under (i) the provision of wheeling services on behalf of ZESCO for its non-mining customers on the Copperbelt, and (ii) the off taking of power sourced from ZESCO for onward selling to the mining companies on the Copperbelt. Under the BSA, the power purchased from ZESCO is only paid once the CEC off-takers have paid for the power they in turn have purchased from CEC. The proceeds are remitted to ZESCO by CEC whilst CEC retains the portion of the payment that is due to it. Despite the non-renewal of the BSA, the parties – Government, ZESCO and CEC – have continued to provide an efficient and economic supply of power to the consumers on the Copperbelt without a formal contract in place.

Regulatory Changes: Zambia's power sector is dominated by ZESCO. Under the BSA, CEC was the single biggest off taker of power from ZESCO requiring the Company to exclusively purchase power from ZESCO and distribute it to its mining and residential customers through its network on the Copperbelt. In 2020, the Government of Zambia implemented various legislative and regulatory reforms to transform the power sector and shift the market from a single buyer model to a multiple buyer model. The Electricity Act No 11 of 2019 and the Energy Regulation Act No 12 of 2019 provide for the generation, transmission, distribution, and supply of electricity. Under the Electricity Act No 11 of 2019, statutory instrument no. 57 of 2020 was issued which deemed CEC's transmission and distribution lines as a common carrier. The implication of this statutory instrument was that CEC would be required by law to transmit electricity on behalf of other players on agreed terms and conditions set by the parties. If the parties fail to reach agreement, then the wheeling tariff is set by the ERB. When Zesco and CEC failed to reach agreement earlier this year, the ERB set a wheeling tariff equivalent to about 30% of CEC's current network tariff for the transportation of power using CEC's infrastructure. The regulatory changes have caused concern on the viability of CEC's local supply trading segment. However, it should be noted that CEC continues to supply power to a majority of mines on the Copperbelt through its long term PPAs.

Financial Summary 2019: CEC recorded a profit after tax of USD 12.24 million for the FY2019 which was 78% lower from the previous FY2018. The earnings were impacted by higher net impairment expenses that increased by 124% from the previous FY2018. This was primarily due to Konkola Copper Mines Plc ('KCM") outstanding payment amounting to USD 132.00 million at the FY2019 that consequently had an impact on the cash flow of the Company. Operating profit decreased by 82% from the previous year end due to the increase in impairment expenses. Cash flow from operations decreased by 36% from the previous year end due to the delayed VAT returns from Zambia Revenue Authority ("ZRA") and the delayed payment of invoices by KCM. Revenue from the FY2019 decreased by 3% compared to the previous FY2018 due to an 8% reduction in demand for power supply from the mines and a 7% decrease in demand for wheeling services from non-mining customers. However, power trading revenue from regional customers increased significantly by 25% due to increased demand from the DRC market.

LuSE Ticker	CECZ
LuSE Price, In ZMW	0.70
LuSE Price in USD	0.03
Issued Shares	1,625,000,597
Fully Diluted Shares	1,625,000,597
LuSE Market Cap, in ZMW [Fully Diluted]	1,137,500,418
Market Cap in USD [Fully Diluted]	55,218,466.89
52-Week High In ZMW	1.25
52-Week Low In ZMW	0.70
Exchange Rate USD to ZMW [6th June 2020)	20.6
Sector	Energy
Website	cecinvestorszambia.com
Share performance over:	
3 Months	-4.00%
6 Months	-27.00%
12 Months	-44.27%

(Source: Annual Report, Pangaea Research)



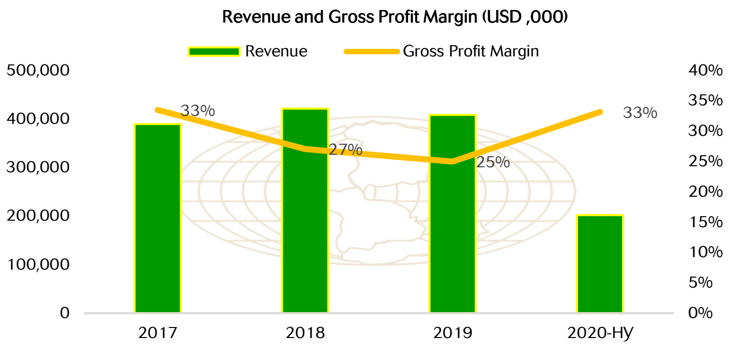
Equity Performance: The CEC share price has fallen by 44.7% in the last twelve months, consequently, the market capitalisation of the Company dropped by 46%. CEC faced several challenges during the FY2019 that caused uncertainty and lack of confidence in the future operations of the Company. Return on equity ("ROE") decreased from 15% to 3% due to the decrease in profit after tax of the Company. CEC has consistently paid out dividends for the past five years and paid out a dividend of USD 30.875 million on February 2019 for the FY2018. The P/E ratio stood at 1.5X at the end of the FY2019. We expect the valuation of the stock to continue to be impacted at the end of the FY2020 due to the residual risks associated with the Company.

Macro-Economic Factors 2019: Economic growth slowed to 1.4% for the FY2019 compared to 4% in the FY2018 due to a decline in mining activity, a further slowdown of cement production and consumer spending, and the impact of drought on hydro power production and agriculture production. Agriculture growth contracted by 16% and maize production reached its lowest at two (2) million tonnes for the FY 2019.The mining sector remains the largest source of foreign exchange with copper accounting for 75% of total export earnings. However, mining activities declined during the FY2019 due to a change in fiscal policies coupled with lower power supply resulting in low grades of ore at some mines. As a result, output reduced from 857,847Mt in the FY2018 to 750,000Mt in the FY2019. Copper prices remained volatile with prices averaging US$ 5,700 per metric tonne for the FY2019, hence affecting production and resulting in lower export income. This has had an impact on demand for power in the sector, adversely impacting CEC revenues. According to the Economist, however, the global demand for copper is projected to reach 7 million mt by 2030. Copper sales are expected to increase from China which accounted for 22.6% of Zambia's export earnings during the FY 2019.

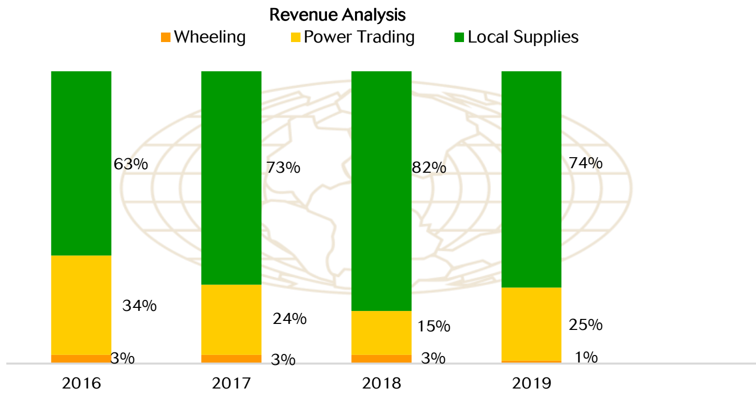
Financial Overview

Revenue Analysis

Marginal Decline in Revenue and Gross Profit: CEC continues to generate USD revenues and expose investors to USD yields. The topline of the Company decreased marginally by 3% during the FY2019 due to reduced demand from mining Companies on the Copperbelt and the load shedding program implemented by ZESCO that affected the wheeling segment of the Company's business. The decrease in revenue pushed the gross profit margin down slightly by 2% during the FY2019.

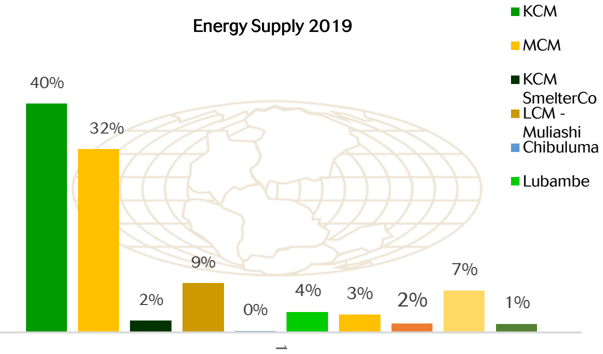


Revenue by Segment: Historically, the Company has seen a 16% increase in revenue growth since 2016. Local supply trading accounted for a majority of the Company's revenue during the FY2019 with 75% of revenue distributed to ZESCO under the conditions pertaining to the BSA. The Company has seen a decrease in the composition of revenue by 8% from local supply during the FY2019 and increased revenue growth by 15% in the power trading segment during the FY2019 due to an increase in demand from the DRC.



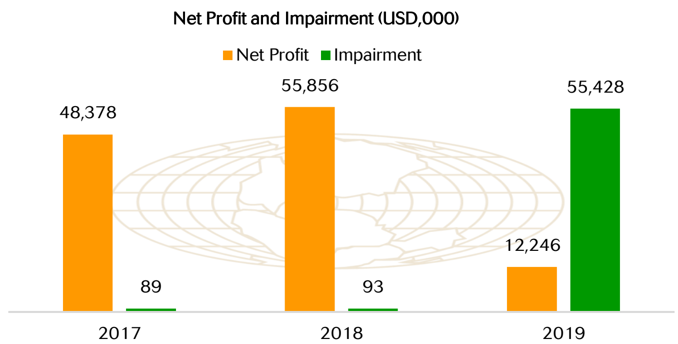
Challenges in the Mining Industry: The Company's revenue has been impacted by the challenges in the mining industry. The shutting down of the smelter operations at Mopani Copper Mines Plc ("MCM"), for purposes of effecting plant overhaul during the FY2019 led to a reduction in power demand at the mine by about 35%. Further, the placing of Chambishi mines under care and maintenance during the year was also a key driver of a reduction in revenue. On the upside, demand is expected to rebound as MCM reopens its smelter to commercial operation and projects such as the Mopani Synclinorium Project and Mindola Expansion Project are expected to ramp up demand in the medium term.

Operational Challenges at KCM: According to The Lusaka Daily Mail, KCM, CEC's largest customer for the FY2019, decreased energy consumption to 160 Megawatts for the FY2019. For the FY2019, KCM generated 40% of CEC's revenues. KCM experienced operational challenges for the FY2019 partly due to the effects of the winding up of KCM by its minority shareholder, ZCCM Investments Holding Plc ("ZCCM-IH"). This impacted the operations of the business and its ability to meet its obligations. CEC continued to supply power to its mining and residential customers on the Copperbelt during the FY2019.



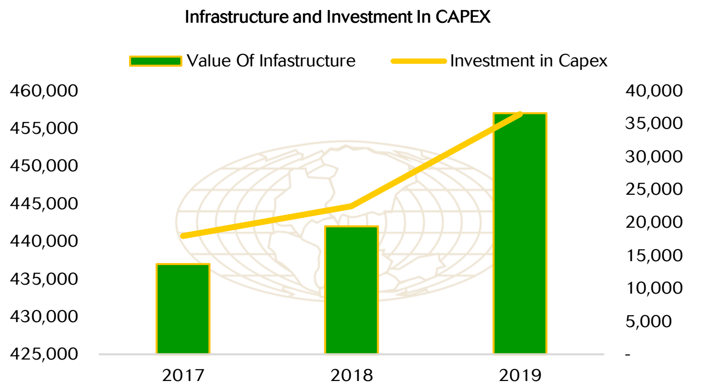
Net Profit Analysis

Impairment: The Company's bottom line has been adversely impacted by the significant increase of impairments from the FY2017-FY2019. The change in accounting policy by the International Accounting Standards Board (IASB) from IAS 39 to the adoption of IFRS 9 contributed to the significant increase from 2018-2019. According to the graph below, impairment increased to USD 55 million for the FY2019 from USD 0.93 million for the FY2018. The increase in impairment was due to the unpaid debt by KCM amounting to USD 133 million as of December 2019. The 59400% increase in impairments has pushed net profit down by 78% for the FY2019 compared to the FY2018. CEC continues to engage with KCM and ZESCO to recover the unpaid debt, of which 75% is currently owed to ZESCO. We expect a reversal on impairment in the long term once the debt is paid hence restoring normalised earnings.



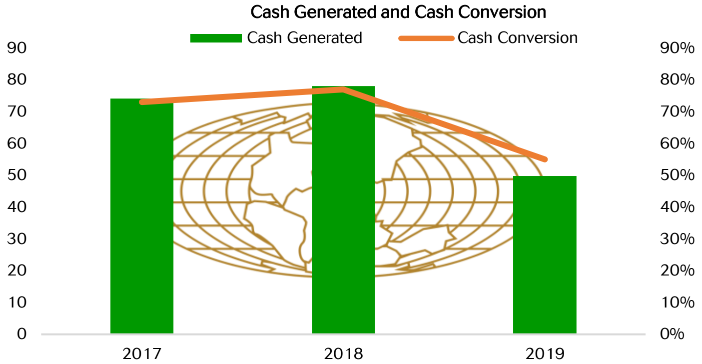
Balance Sheet

Net Asset Value (NAV): CEC's assets are the core driver of revenue generation hence the need of the Company to continuously invest in capex to maintain its infrastructure. CEC has consistently invested in capital expenditure YOY in order to increase the value of its infrastructure and ensure an efficient and reliable supply of electricity to its customers.



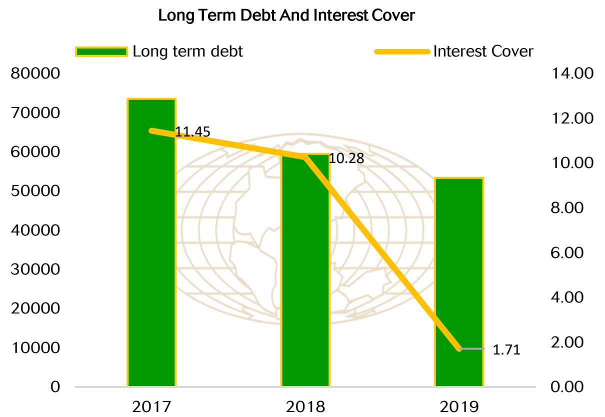
The net asset value stood at USD 353 million for the FY2019 compared to a net asset value of USD 371 million during the FY2018. This was due to the increased impairment that had an impact on the retained earnings of the Company. Retained earnings decreased by 4% for the FY2019 compared to the prior FY2018.The KCM credit risk continues to pose a threat to the strength of the balance sheet of the Company. CEC will continue to ensure it implements all measures to recover the debt from KCM to safeguard the viability of the Company.

Cash: Cash from operations decreased by 36% for the FY2019 due to the non-payment of VAT returns by ZRA and the unpaid invoiced by KCM. However, an article by the Zambian Chamber of Mines stated that ZMW 6 billion of VAT returns where paid out to mining firms in the first six months of 2020 to mitigate the effects of Covid-19 in the mining sector. It is expected that ZRA will continue to pay refunds monthly and this will increase the working capital of the Company in the medium term. Free Cash Flow to the firm decreased from USD 55.6 million during the FY2018 to USD 29.6 million during the FY2019. Despite the challenges faced by the Company, CEC maintained sufficient cash to sustain its working capital with a cash conversion rate of 55% for the FY2019.



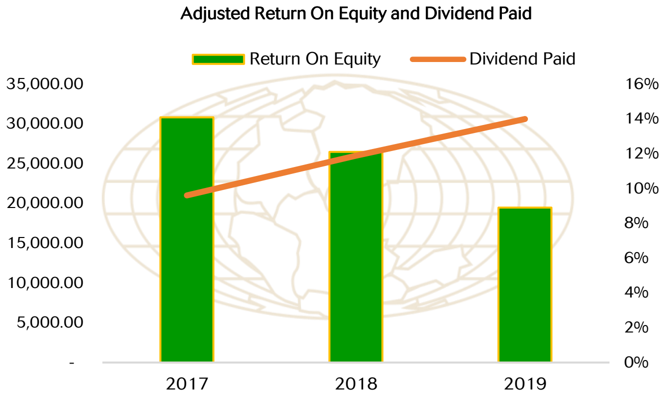
Gearing: CEC's interest bearing debt stood at USD 53 million at the end of the FY2019 which was a 12% reduction from the previous year. Interest payments increased slightly from 8.71% in the FY2018 to 8.84% in the FY2019. The Company strategically placed an interest rate hedge on the current debt which covers 60% of interest. The net debt / equity ratio decreased to 15% during the FY2019 compared to a net debt /equity ratio of 16% in the FY2018 indicating low gearing levels in the Company. The Company is a capital-intensive business and requires to make heavy investments to maintain its capital and finance expansion projects hence the ability to raise finance is a critical one to CEC. That said, the KCM credit risk may be a deterrent for raising finance hence it is critical for the Company and its stakeholders to continue to carry on negotiations and legal interventions to settle the outstanding debt.

Long Term Borrowings and Interest Cover: The Company has been consistent in servicing its debt, however, interest cover decreased to 1.70 during the FY2019 from 11.45 during the FY2018 due to a reduction in operating profit by 82%. Finance costs increased by 44% due to the increased floating interest rates associated with the facility. We expect finance costs to increase due to higher interest expensed pushed by a depreciating currency.



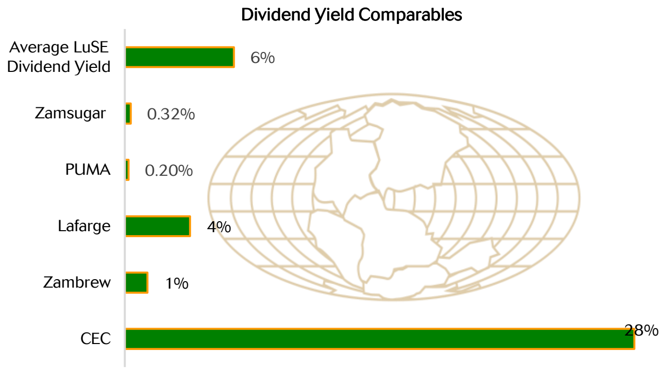
Returns

Return on Equity: Adjusted ROE decreased from 12% in the FY2018 to 8% in the FY2019 due to a reduction in earnings. Historically, ROE has been healthy providing shareholders an average of 11%, which is above the LuSE average of 5%. The impairment of KCM remains the main cause for the reduction in shareholder value. In the long-term ROE is expected to normalise once the KCM issue has been resolved.

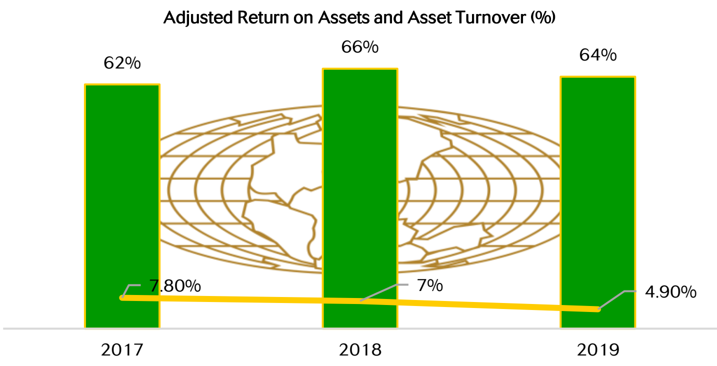


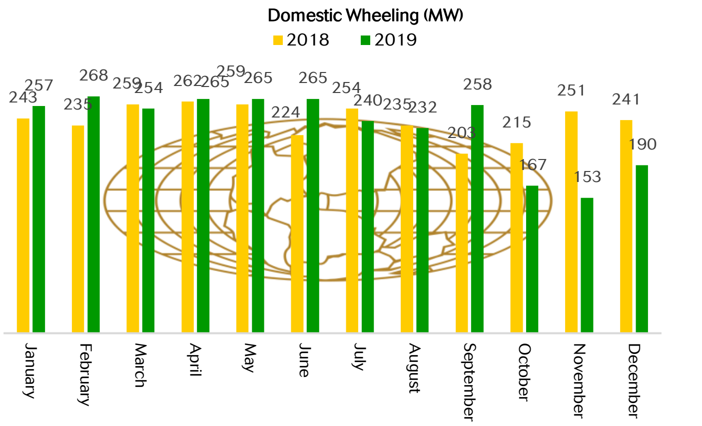
CEC has consistently paid out dividends for the past five years recording the highest dividend pay-out among the Companies listed on the LuSE. Dividend pay-out ratio of 59% for the FY2018. With the outstanding receivables, the impact of Covid-19 on operations, and the liquidity risk in the Company, it is expected that dividends will not be paid out in the FY2019.

Dividend Yield: The Company has been consistent in providing favourable USD returns to investors. The Dividend Yield of CEC stood at 28% for the FY2018. This was the highest dividend yield recorded among the Companies listed on the LuSE.



Adjusted Return On Assets ("ROA") and Asset Turnover: CEC's infrastructure is the main driver of revenue and the consistent healthy asset turnover for the FY2019 of 64% indicates the efficiency of its vast infrastructure to generate revenue. Adjusted ROA decreased by 2.1% during the FY2019 indicating an underutilisation of assets to produce profit. This was 2% below the average of a comparable group of companies on the LuSE. It is worthy to note that impairment of the income statement had a significant impact on the bottom line hence affecting the ROA metric.

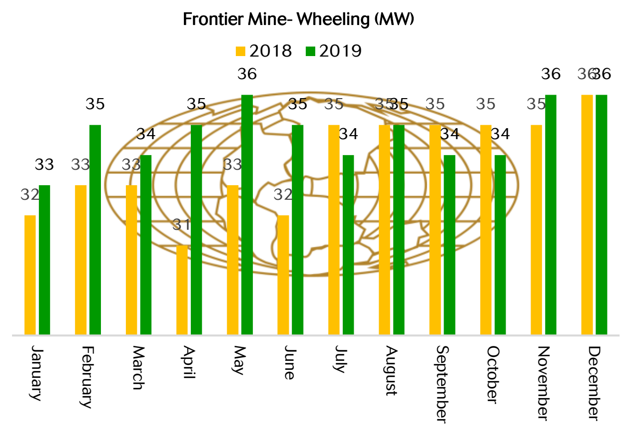




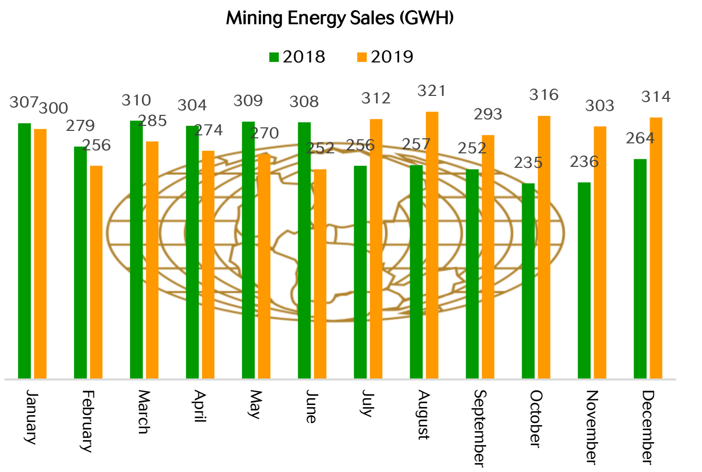
Business Model and Projections

Mining Energy Sales: Power energy sales to local mining customers during the FY2019 totalled 3,137GWh which was a 14% decrease from the FY2018. All energy requirements for local mining customers where off taken from ZESCO under the BSA agreement. Despite the load shedding regime implemented by ZESCO, the mines received full power requirements. Total energy imported during the FY2019 declined by 12% to 4,594GWh compared to the previous FY2018. It is worthy to note that 3,206GWh was purchased for the mines and 1,388GWh wheeled for ZESCO under the domestic wheeling segment of the business pertaining to the conditions under the BSA. The difference between the energy imported into the network and the energy sold to the mines was due to network losses in the power system and power used for CEC's own operational requirements.

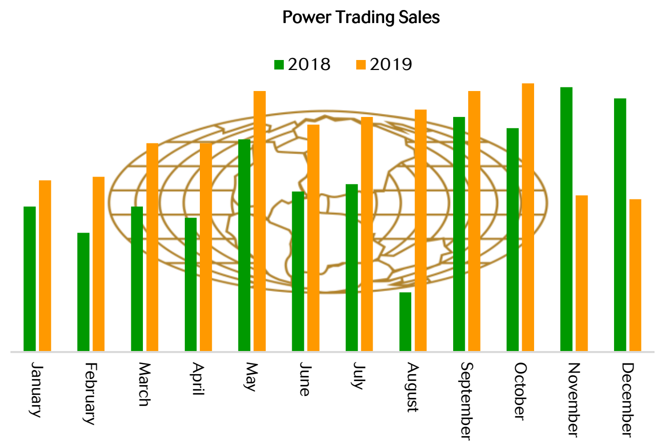
Frontier Mine Wheeling: Power wheeled for Frontier Mine during the FY2019 was 34MW which was a marginal decrease from 35MW during the FY2018. The operations in the mines in the DRC remained stable during the FY2019 hence power requirements remained consistent. It is expected that this segment of the Company will remain stable and generate positive returns at the end of the FY2020.



Mining Sales Expectations: We expect the power sales from the mining segment to decrease marginally in the FY2020 due to reduced demand from the mining sector due to the disruption in mining activity partly due to the Covid-19 pandemic and the shift in the KCM supply segment to domestic wheeling. On the upside, according to Zambia's Ministry of Mines and Mineral Development, copper output rose 3.9 per cent from the previous five months of 2019 to 342,734 tonnes in the first five months of 2020 despite the closure of mines during the COVID-19 lock-downs. It is expected that mining production will remain steady for the H22020.



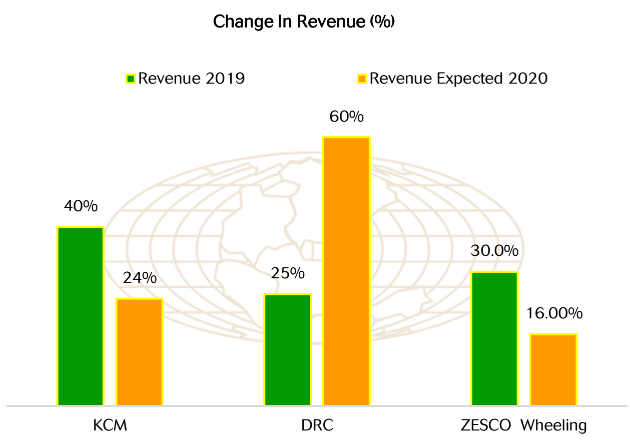
Power Trading: During the FY2019 energy sales to the DRC increased by 45% to 744GWh from 511GWh during the FY2018. This was due to the signing of new agreements with power consumers in the DRC and increased demand from existing customers. One of the agreements included a PPA for a period of ten years with Metalkol SA a major cobalt and copper tailings reprocessing project and a low-cost hydro-metallurgical facility owned by Eurasian Resources Group. The agreement included 62MW of power supplied until Q22019 followed by an increase in power supply to 78MW per year during the second phase and remainder of the contract. We expect continued growth in the power trading segment.



Domestic Wheeling: CEC undertakes domestic wheeling on behalf of other companies utilising its vast infrastructure. The largest portion of the business is transportation of power on behalf of ZESCO to the Copperbelt. Frontier Mine, located in the DRC, is connected exclusively to the CEC power network and all its power requirements are wheeled through the CEC network. Demand for wheeled power for ZESCO was 226MW during the FY2019, representing a 9% decrease compared to 248MW during the FY2018. This was primarily due to load shedding by ZESCO. We expect increased growth in the domestic wheeling segment due to the KCM load transfer to the wheeling segment and an improvement in load shedding on the back of the completion of the Kafue Gorge Lower hydro project that is expected to add 300 mega-watts the end of the FY2020 before peaking at 750 mega-watts May 2021.

Projected Income Statement

USD'mn	2019	2020 – Projected
Revenue	408.2	403.7
Cost of sales	-306.3	-269
Gross profit	**101.9**	**134.7**
Other income	7.414	6.26
Operating costs	-36.5	-60.1
impairment of receivables	-55.4	-120
Operating Profit	17.41	-39.14
Profit after taxation	**12.24**	**-55**
EPS	**0.8**	**-0.03**



Valuation Metrics

USD	2019	2020-e
Price at year-end (ZMW)	0.10	0.04
P/E	9	9.2
P/B	0.45	0.09
P/EBITDA	0.23	0.28
EV per share (USD)	0.71	0.84
EV/Sales	2.83	3.39
EV/EBITDA	1.32	1

Events Post FY2019

Non- Renewal of the BSA – The BSA, under which CEC offtakes power from ZESCO, and supplies it to the majority of Zambian mining operations and residential customers on the Copperbelt, expired on 31st March 2020. Despite ongoing negotiations and discussions, ZESCO and CEC failed to reach a mutual agreement on its extension. The parties have continued to trade in disputed terms until a formal agreement is put in place. CEC will continue to engage with ZESCO for a binding agreement that will guide the commercial relationship between CEC and ZESCO.

Expiry of the KCM PSA – Despite an agreed one-off arrangement to pay the debt by the end of the FY2019, KCM had unpaid invoices due to CEC, amounting to USD 144 Million as of 31st May 2020. This led to the non-renewal of the power supply agreement between KCM and CEC. KCM signed a one year term sheet with ZESCO and would continue to receive power requirements from ZESCO through the use of CEC's infrastructure. According to KCM the agreement with Zesco was suitable for KCM's operations since the power sourced from Zesco was cheaper than CEC's power. The implications of this to the Company is a shift of the KCM load from the supply segment to the wheeling segment which on the upside mitigates the KCM credit risk and the revenue concentration risk. Due to the change, it is expected that revenue from the KCM load will drop significantly to 24% at the end of the FY2020 and will be mitigated by an increase in revenue growth from the DRC.

Despite the non-renewal of the KCM contract, KCM remains an important customer for CEC under a new connection agreement that allows CEC to wheel power through its infrastructure at a wheeling charge which the ERB set at 30% of what CEC normally charges. It is expected that this will have a marginal impact on mining energy supply revenues as CEC continues to maintain its PPA with the other customers on the Copperbelt.

Litigation Measures against CEC: According to KCM in the media, CEC initiated a notice to restrict power to KCM, given with two days advance notice instead of the contractual 14 days' notice. This restriction notice was issued during the failed negotiations to pay the outstanding invoices in instalments. According to KCM ,the parties agreed that the accrued CEC invoices would be paid upon the sale of KCM and the CEC debt would be given priority. CEC temporarily restricted power for a few hours on 1st June 2020. This led to ZESCO and KCM sueing CEC and applying to the Lusaka High Court for an interim injuction to restrain CEC from interupting in a power supply arrangement between ZESCO and KCM by restricting power to KCM. It is noted that under the PSA, CEC was allowed to restrict power by giving 14 days notice of its intention to suspend power supply in the event that any debt remains unpaid for an excess of 45 days. The Lusaka High Court dismissed the joint ZESCO and KCM Interim injuction. CEC will continue to engage the parties in order to resolve the outstanding matters.

Regulatory Changes-Statutory Instrument No. 57: On 29th May 2020, the Minister of Energy declared CEC distribution lines a common carrier. The implication of this statutory instrument was that CEC would be required by law to transmit electricity on behalf of other players on agreed terms and conditions set by ERB. According to a statement released by CEC, the ERB has set a wheeling tariff equivalent to about 30% of CEC's current network tariff. The transmission charges set by the ERB may not be sufficient to ensure the viability of the Company. Historically domestic wheeling has accounted for below 5% of revenue and approximately 8% of gross profit margins in 2019, partly due to the subsidized tariff for some of these services. The reduction of the wheeling charge by 70% set by the ERB will erode revenues further and leave the Company in a financially distressed position. According to a statement released by CEC, the actions taken by the Government are a threat to the going concern of the Company.

Covid-19 Pandemic: The Covid-19 pandemic has had a negative impact on economies worldwide due to major disruptions in global supply chains and enforced lockdowns which have resulted in a decline in economic activity. According to the World Bank, global growth is expected to contract by -4.9% in 2020 but rebound to 5.8% in 2021. The economy has seen the Kwacha depreciate by over 52% to K20/US Dollar 1.00 year to date while inflation peaked to 15.7% in May 2020. While restrictons began to ease in Zambia on 8th May 2020, the pandemic continues to impact CEC'S mining customers, contractors and suppliers. The Company continues to monitor and assess the impact of the Covid-19 pandemic and implement ways to mitigate the effects caused by the pandemic.

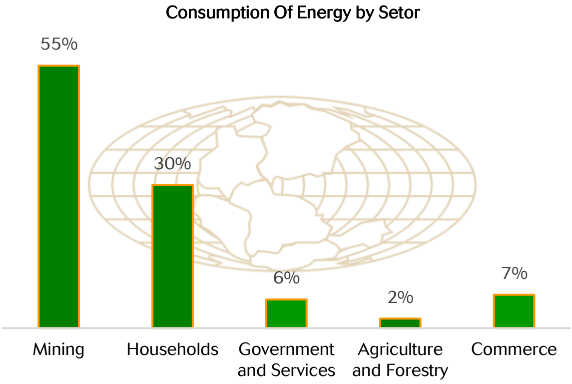
Electricity Sector Overview

Dependency on Hydrology: The Zambian electricity sector is dominated by hydrology which accounts for 83% of the national installed capacity. The dependency on hydrology has resulted in the poor climatic conditions impacting water levels in the Kariba dam and leading to insufficient generation at the hydro power plants. The national installed electricity capacity increased from 2,892.94MW during the FY2018 to 2,979.95MW during the FY2019 following the addition of two solar plants, namely Bangweulu (54MW) and Ngonye (34MW). Generation from independent power producers increased from 245.74GW during the FY2018 to 333.75GW during the FY2019.

Energy Deficit: During the FY2019, the total energy deficit amounted to 750 Megawatts due to severe drought. This resulted in load shedding of 10-12 hours a day which had an effect on CEC's wheeling segment due to strict load shedding measures across its wheeling customer base. According to Reuters Africa news, the load shedding further persisted during the FY2019 due to the lapse of the power importation deal with South African power utility, Eskom, on February 29, 2019. During the H12020 the power deficit stands at 810 megawatts with a continued load shedding program of 10 hours per day for different categories of customers.

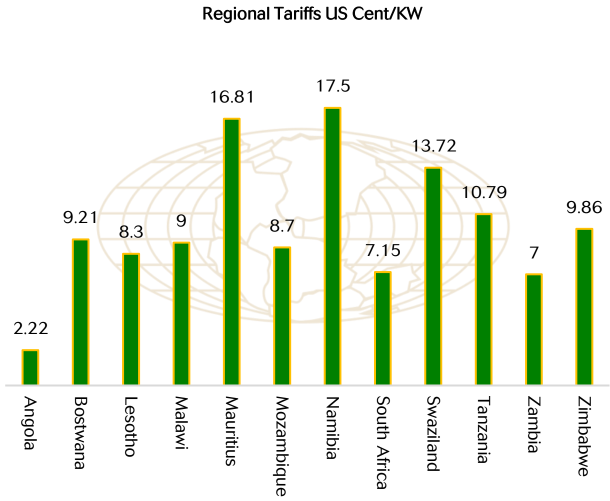
Positive Prospects: On the upside, water levels in Kariba Dam, which constitutes 37% of Zambia's installed power capacity, improved in the H12020 due to an improvement in rainfall in early 2020 and the Kafue Gorge is scheduled to be completed by December 2020 and begin to generate 750MW of electricity to the national grid, 2020 hence significantly reducing load shedding hours across the country.

Energy Consumption by Sector: The mining sector consumes 55% of power in Zambia and generates approximately 70% of Zambia's export earnings. CEC provides power to a majority of mines in Zambia and expects demand in power capacity to increase by more than 20% over the next four years. This is due to completion and commissioning of expansion projects by CEC customers such as the rehabilitation of the smelter at Mopani mines and growth projects that include Mopani Synclinorium, Mindola Expansion, NFCA South East Ore Body and Macrolink Resources.



CEC aims to diversify its sources of energy and break away from depending on ZESCO. Currently, the Company has progressed the development stage of the two solar projects awarded under the GET FiT Zambia solar tender to the consortium with Innovent SAS. According to CEC, the program has been slowed down due to challenges resolving funding required to make the program bankable. Further, the Company continues to pursue the development of the Kabompo hydropower project to construction phase. According to CEC management, the project is currently being assessed on feasibility and bankability. We expect the completion of these expansion projects to expand the Company's generation capacity in the medium term. On the downside, the regulatory environment in Zambia is subject to change and may have an impact on the advancement of CEC's pending projects.

Challenges in the Power Sector: The distressed economic environment coupled with uncompetitive tariffs and ZESCO's high debt position have been a deterrent for investment in this sector.

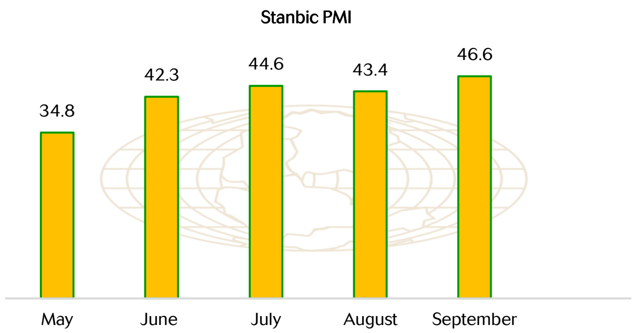


Independent Power Producers ("IPPs") such as Lunsemfwa Hydro are not operating at full capacity due to arrears owed by ZESCO, and lack of water in its reservoir. According to an article by the Business Telegraph, Lunsemfwa Hydro was distributing 10MW when it has the capacity to produce up to 56MW. North Western Energy has the capacity to produce 20MW and is only distributing 10MW as of July 2020 due to debt owed by ZESCO. According to Lusaka TIMES, the largest IPP, Maamba Collieries, provides 300 MW coal-based electricity that has proved to be independent of changes in rainfall feeding net of 265 megawatts of electricity onto the ZESCO grid and providing diversity to the energy mix. The continued growth of IPPs is dependent on ZESCO meeting its obligations to pay for power off take from IPPs, and for IPPs to be able to expand and seek funding from International investors

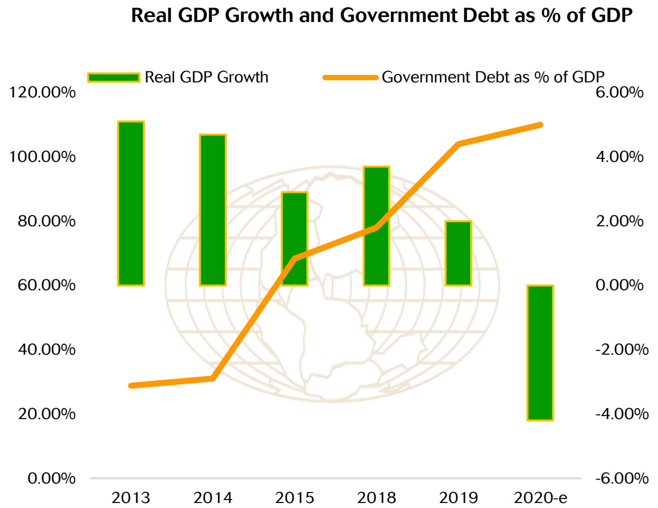
Investment Opportunities: Opportunity to diversify and produce alternative forms of energy such as off grid and on grid solar solutions, exist in the market with pressure from a growing population and an expanding retail space. According to Policy Monitoring Research Centre Zambia, demand for energy is expected to triple by 2030. The Government of Zambia implemented various legislative and regulatory reforms to transform the power sector and shift the market from a single buyer model to a multiple buyer model and encourage domestic and foreign participation in the market. The Electricity Act No 11 of 2019 and the Energy Regulation Act No 12 of 2019 provide for the generation, transmission, distribution, and supply of electricity. CEC has continued to participate in renewable power projects such as the GET Fit Hydro project and hybrid renewable projects that are currently under feasibility studies. The assessment of these projects are expected to be completed by Q1 2021.

Macro- Economic Indicators

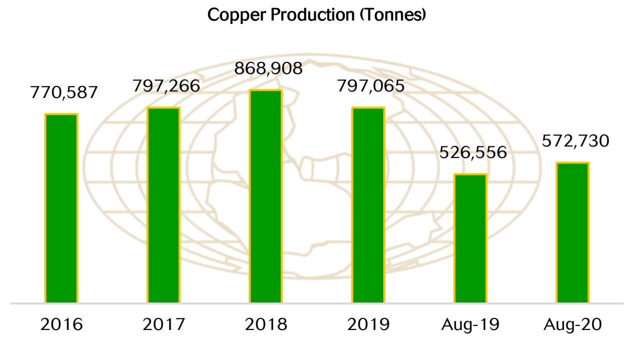
Distressed Economy: According to the Minister of Finance economic growth is expected to decline by 4.2% ultimately putting the economy in a recession for the first time in 22 years due to a reduction in Government revenues that are projected to close the year at ZMW 65.9 billion compared to the targeted ZMW 75 billion in the 2020 budget and an increase in Covid-19 related expenditure. As a result of interruption in supply chains due to the Covid-19 pandemic and increased load shedding there has been a decrease in economic productivity for businesses. The Stanbic Purchasing Index, which portrays performance in business activity, increased to 46.6 in September 2020 from 43.4 in August 2020 but was still below the 50.0 targeted stability level which indicates deterioration in business activity. This was primarily due to a decline in demand for new orders and the weakening of the Zambian Kwacha (ZMW) against the US Dollar (USD) leading to an increase in purchase costs.



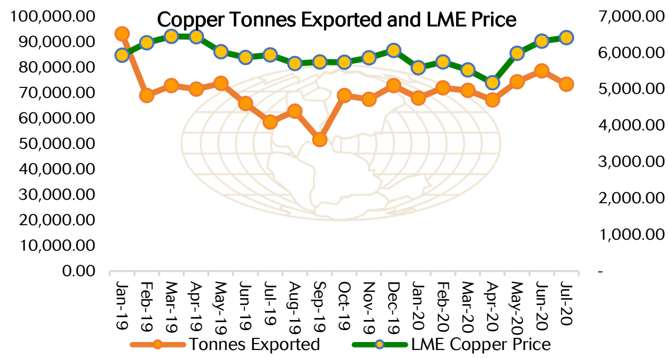
The reduction in economic growth is also due to the high debt servicing costs estimated at USD 1.5 billion in 2020 coupled with the depreciation of the Zambian Kwacha against the United States Dollar which ended the month of September down by 41.98% from the exchange rate at the end of the FY2019.



Copper: Real GDP growth has been further constrained by a decline in export earnings from copper which accounts for 75% of Zambia's export earnings. According to the Minister of Finance, despite an increase in copper production to 572,730 metric tonnes during the H1 2020 compared to 449,000 metric tonnes in the H1 2019, export earnings from copper were lower at USD 2.3 billion in H1 2020 compared to USD 2.7 billion in H1 2019. This was partly due to a drop in copper prices that averaged USD 5,500 per metric tonne in H1 2020 compared to USD 6,200 per metric tonne in the prior H1 2019.



On the upside, copper prices have risen by 40% since March 2020, peaking to an average of USD 6,840 per metric tonne in September 2020. This is due to recovery in copper demand from China, global disruptions to mine supply, an increase in the demand for electric vehicles coupled with a stronger than expected recovery in global construction and manufacturing sectors since June 2020. We expect copper prices to continue to rise in Q3 2020 due to increased demand as economies and industries continue to recover from the Covid-19 pandemic . We have seen a continued increase in copper production and expect the value of export earnings from copper to increase in Q3-Q4 2020 and increase the forex in Zambia which is the main source of revenue for foreign debt repayment . According to an article by Lusaka Times, Zambia copper export earnings increased by 20.8 percent in September 2020 to ZMW12.7 billion from ZMW10.8 billion in August 2020 due to increased prices in the international market.

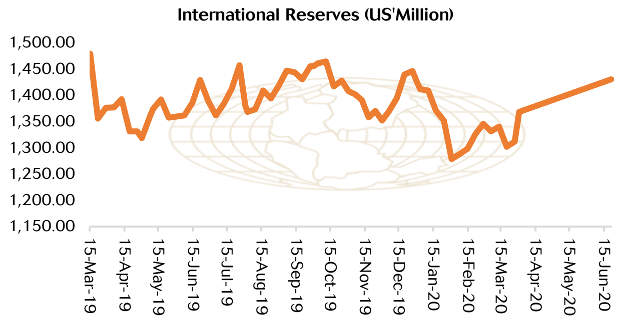


Instability in the Mining Industry: Despite the increase in copper prices , the mining industry still faces the challenge of attracting foreign direct investment. Investors hold funding due to the unpredictable changes in the mining policies, a possible increase in the tax rate for mining minerals, and the fiscal image of Zambia. According to Bloomberg Africa, copper mines have postponed USD 2 billion of planned investments due to royalty taxes introduced in 2019 that have made planned projects unviable.

The royalty taxes increase from a minimum of 5.5% to 7.5% when copper trades at USD 6,000 to USD 7,500 per metric tonne, with a further increase to 10% when prices exceed USD 9,000 per metric tonne. With the increase of copper prices above USD 6,000 since the end of June 2020 royalties have increased and imposed pressure on mining firms, stalling projects such as extending the life of the Kansanshi operation and the EMR Capital-backed Lubambe Copper Mine's project.

Taxes such as the tax on the importation of copper concentrates and the import duty has slowed operations of mines such as MCM which are an important client of CEC. According to Bloomberg, Glencore is in talks to sell its 73.1% stake in Zambia's Mopani Copper Mines to ZCCM-IH. Glencore reported that Mopani's total liabilities exceeded its total assets by USD 2.562 billion in 2019. These headwinds and the challenging macro environment make it challenging for mining firms in Zambia to raise the capital needed to meet their expansion targets. This has a direct impact on CEC and its mining sector revenue segment .

Foreign Reserves: The Country's Gross International Reserves declined to USD 1.38 billion in July 2020 from USD 1.45 billion at the end of FY2019. This level of reserves represents 2.3 months of import cover. The decrease in reserves was due to pressure to service external debt payments. According to the 2021 national budget a decline in mining tax receipts amounting to USD 203.5 million and net direct purchases of foreign exchange from the market by the Bank of Zambia of USD 126.6 million moderated the decline in reserves. The mining sector is the sole forex earner of the country hence it is critical the industry remains operational.

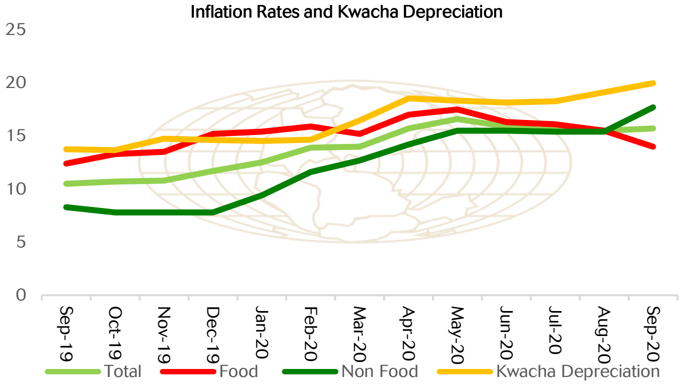


Debt Burden: According to the Minister of Finance, Zambia's total public debt stood at USD 17.4 billion as of December 2019 which was approximately 104% of GDP. USD 11.2 billion is external debt with China being the largest single creditor and USD 6.2 billion is domestic debt. According to RMB Global Markets, Zambia's debt is estimated to rise to 119% of GDP by the end of the FY2021, while the budget deficit is estimated to reach 14.6% at the end of 2020. The unsustainable debt has deterred the International Monetary Fund ("IMF") from granting the request for support under the Rapid Credit Facility Arrangement and G20 debt service suspension.

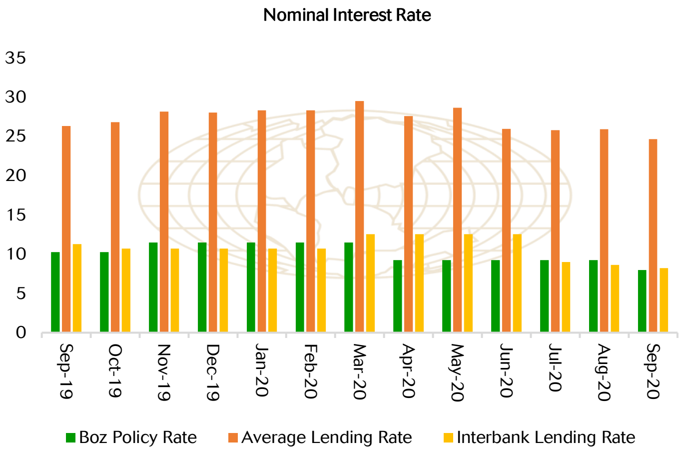
In a quest to restructure debt, Lazard Feres Gestion was contracted as financial advisor to manage Zambia's liabilities. According to Bloomberg Africa, Zambia initiated a bondholder engagement process through the issuance of a Consent Solicitation Memorandum ("CSM") on 22nd September 2020 in order to request for a deferment in Interest payments for a six month period starting from 14th October – 14th April 2021 amounting to USD 120 mlllion owed on its three Eurobonds that are valued at USD 3.0 billion. The bond holders are expected to vote on Zambia's request for a debt deferment by October 16th, after which meetings for the three series of bonds will be held to pass the resolutions that will be made. The suspension of debt service is expected to generate liquidity relief of up to USD 979 million.

Zambia has been awarded other relief packages during the FY2020, according to Reuters Africa. In the month of August the Paris Club confirmed that it provided Zambia "a time-bound suspension of debt service" until 31st December 2020. According to the Lusaka Times, Zambia has also requested relief from China that it owes up to USD 9.0 billion on project finance loans, some of which have not yet been disbursed.

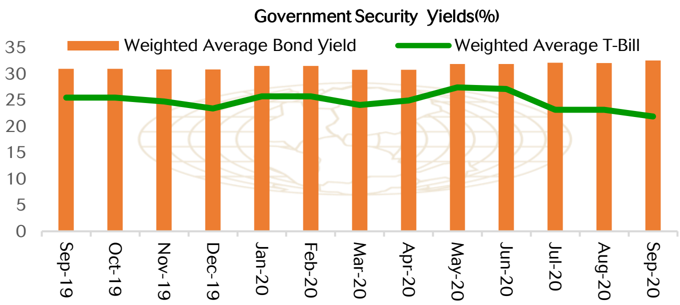
Monetary Operations: On 19th August 2020, the Monetary Policy Committee of the Central Bank lowered the policy rate further by 125 basis points to 8.0% due to the increased deterioration of economic conditions in Q2 2020 due to the Covid-19 pandemic. Annual inflation exceeded the target range of 6-8 percent, averaging 15.0 percent in Q2 2020. Inflation rose to 15.5 percent in August 2020 from 11.7 percent in December 2019 due to the increase in energy prices, higher food prices and the effects of the depreciation of the Kwacha. We expect inflation to remain steady towards the end of the FY2020 due to an improvement in food supply and stabilizing food prices.



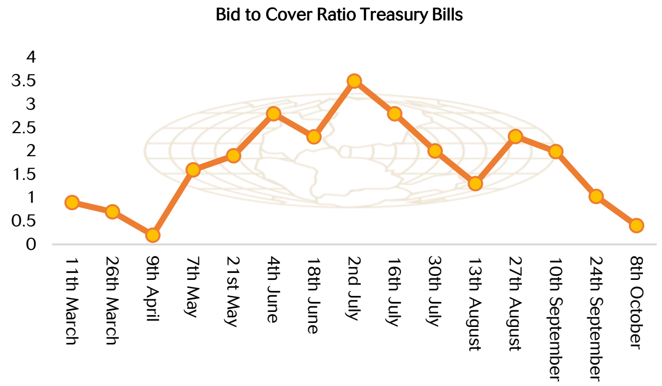
Average lending rates decreased to 24.6 percent in September 2020 from 28.0 percent in December 2019. This was mainly driven by the reduction in the Monetary Policy Rate to 8.0 percent in August 2020 from 11.5 percent in December 2019. Average lending interest rates continue to be high due to Government's pressure to borrow to service its debt and finance outstanding arrears owed to suppliers and contractors hence crowding out the private sector and further tightening an illiquid environment. According to the Central Bank, the ratio of non-performing loans to total loans rose to 12.6 percent in July 2020 from 8.9 percent in December 2019, exceeding the expect target of 10.0 percent. Despite a reduction in nominal interest rates we expect non-performing loans to increase due to the adverse effects of the Covid-19 pandemic.



Government Securities: The yields on government securities spiked in the H1 2020 due to the need to finance government securities. The increased yields have deterred investors from the equities market as returns on capital gains from equities have declined compared to the returns on government paper. According to the 2021 National Budget, the stock of Government securities increased to ZMW114.3 billion as at end August 2020 from ZMW 80.2 billion as at end of FY 2019 which includes the issuance of the COVID-19 Bond. The proceeds of the Covid-19 Bond were targeted to finance domestic expenditures as well as infuse liquidity in the market.



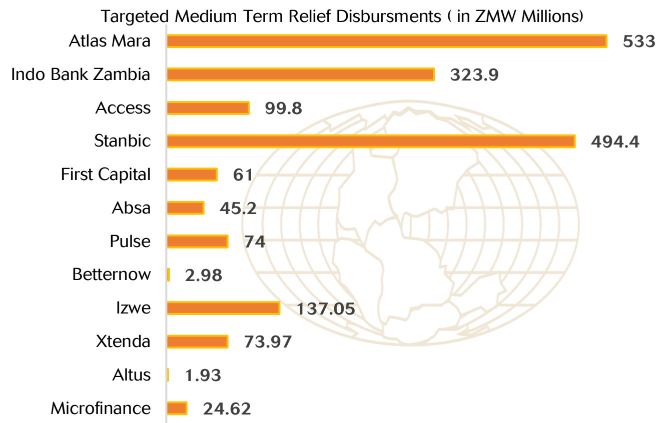
Appetite for short, dated government securities began to lag from August 2020 as seen in the last treasury bill auction held on October 8th, 2020. The Government aimed to borrow ZMW 1.3 billion, total bids received amounted to ZMW 531.96 million (at cost) leading to a subscription rate of 41% resulting in a bid-to-cover ratio of 0.4 compared to an all-time high bid to cover ratio of 3.5 in June 2020 and a subscription rate of 212%. It was noted that 50% of the amount was allocated to 1-year treasury bills.



In the last bond auction held on 18 September 2020, the Government aimed to borrow ZMW1.5 billion, and received total bids amounting to ZMW1.74 billion at face value resulting in a bid-to-cover ratio of 1.1 compared to 1.5 in June 2020. Investor appetite was not fully satisfied as only ZMW 992 million was allocated at cost with 91% of this allocation accounted for by the 2-year, 3-year and 5-year bonds.

We expect demand for longer dated securities to continue to lag due to the increased sovereign credit risk heightened by the effects of the Covid-19 pandemic. According to Bloomberg, S&P Global Ratings downgraded Zambia's long-term ratings to CCC- from CCC with a negative outlook.

Central Bank Covid-19 Measures Update: The targeted medium refinancing facility that the Central Bank provided in April 2020 with an initial amount of ZMW10 billion has been disbursed to both banking and non-banking Financial Institutions. The facility is available to eligible Financial Service Providers ("FSPs") to enable them to restructure, refinance or extend credit to businesses and individuals impacted by Covid-19 on more favorable terms. The graph below indicates the disbursements as of 9 October 2020.



Key Risks

KCM Credit Risk: The operational challenges at KCM remain a top concern for CEC due to the increased credit risk exposure. According to a press statement by KCM, operational costs have remained at a higher level compared with the company's annual turnover and there is a need for a strategic investor to invest working capital in KCM. According to ZCCM's 2019 annual report, KCM reported a loss after tax of USD 332.2 million for the FY2019 compared to 131.6 million for the FY2018. ZCCM has not received any dividend income from the associate company in the past five years. The insolvency proceedings initiated by ZCCM were a step in resolving the debt challenges at KCM and recovering capital invested in KCM. An article by Lusaka Times states that the Government is actively working toward finding a strategic investor to improve operations and production at Konkola Copper Mines. It is uncertain as to what time frame the KCM issues will take to be resolved and how long it will take for CEC to recover the debt owed.

KCM currently receives power from ZESCO using CEC's infrastructure which was declared as a common carrier by the Minister of Energy. The wheeling tariff for third party use is currently 30% of CEC's tariff. The reduced tariff has implications on the profitability of CEC. There is currently no wheeling agreement between ZESCO and CEC and no agreement for the supply of electricity by CEC to KCM. This has led to litigation measures that are currently still in progress. Although the nonpayment of debt is undergoing litigation processes, the credit risk towards KCM is the biggest challenge to the viability of CEC, exposing its income statement to large impairments that in turn erodes the bottom line of the Company.

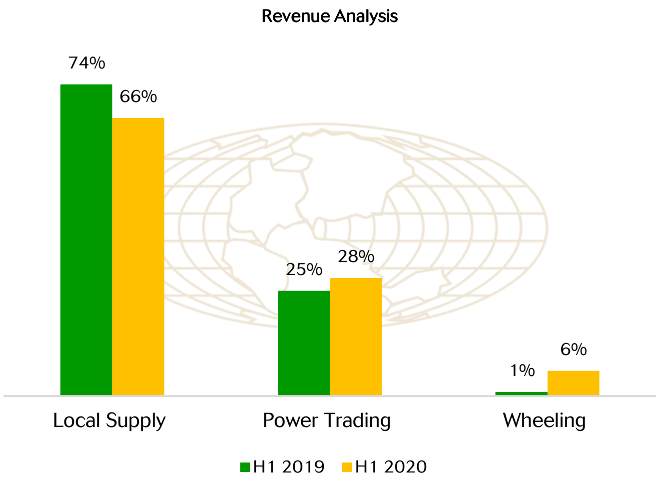
Trading Without a Contractual Agreement: CEC is exposed to the risk of trading without a contractual agreement in place. The Company has continued paying ZESCO the same price stated for power under the expired BSA and supplying it to the mines in the Copperbelt. It is worthy to note that under the BSA the power purchased from ZESCO is only paid once the CEC off-takers have paid for it. The proceeds are remitted to ZESCO by CEC whilst CEC retains the portion of the payment that is due to it. KCM's nonpayment to CEC left CEC owing ZESCO approximately USD 100 million in arrears, which ZESCO has taken litigation measures against. It is critical for a new contract to be put into place to solidify the relationship between the two parties and ensure the mining industry receives a reliable supply of power.

Conclusion: Amidst a distressed economy and changing regulatory policies, CEC continues to be resilient in ensuring the Company continues to provide USD returns through the supply of reliable and stable power to the mining industry which is the backbone of Zambia. The Company has potential to diversify its power generation capabilities to meet Zambia's growing demand. The Company is disrupted by the threats posed by the unpaid invoices by KCM, trading without a contract in place, instability in the mining industry, and fiscal imbalances. CEC continues to pursue all measures to ensure a formal agreement is put in place and the relationship between all parties is preserved for the viability of the Company.

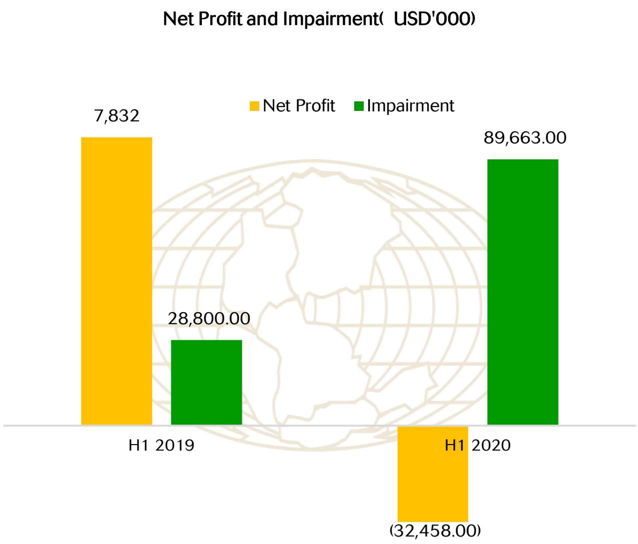
Interim Financial Overview - H12020

Topline: During the H12020, instability in the mining sector continued to impact the demand for power and the Company saw a slight decrease in revenue by 2% compared to the H12019. Despite the disruptions in the mining sector impacting power demand during the H12020 there have been notable improvements in revenue growth in the wheeling segment for the H12020. Despite continued load shedding in the H12020, revenue from the wheeling services increased by 25% compared to the previous H12019. Regional power supply had a marginal increase of 3% compared to the H12019.

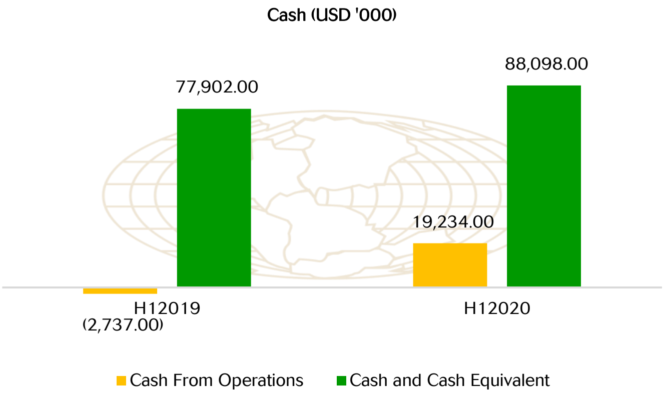
Expected Growth in the DRC: The upward trend in the power trading segment continued in H12020 as traded volumes increased from 328.199GWh during the H12019 to 333.421GWh during the H12020. The Company also extended the tenure of all its main PPAs and signed new contracts in the DRC during the H12020. We expect this growth in the DRC to continue for the FY2020



Net Profit and Impairments: The erosion of the bottom line due to increased impairments continued in the H12020, significantly decreasing net profit by 514%. We expect the unpaid KCM debt to significantly impact provisioning of the bottom line for the FY2020 .



Cash: Cash flow from operations increased to USD19.235 million during the FY2019 from USD -2.732 million for the FY2018 due to prudent working capital management and cost efficiencies implemented by management. Factors impacting cash included the challenges collecting cash from KCM and unpaid VAT returns aounting to USD 17 million .



Half Year Income Statement

USD'000	H1 2020	H1 2019
Revenue	201,857	206,437
Cost of sales	134,942	142,414
Gross profit	**66,915**	**64,023**
impairment of receivables	-89,663	-28,829
Net finance costs	-207	-534
Profit after taxation	**-32,458**	**7,832**
Earnings Per Share	-0.02	0.005

FY2020 Outlook: The Company continues to face hurdles in a challenging macro-economic environment. The key risk to the Company is the KCM credit risk. The Company will continue engagements with KCM and pursue legal interventions to recover the debt owed. We expect a reversal on impairment and earnings to normalise once this materialises. Despite the non-renewal of the KCM contract, CEC still continues to supply power to the mines on the Copperbelt. Without a contract in place, this may bring about disputes and legal costs incurred on litigation measures that will be undertaken to resolve these disputes. CEC will continue to negotiate for a suitable contract for both parties to be put in place. It is uncertain when this will be resolved. On the upside, revenue from power trading is expected to grow during the FY2020 and supplement the lost revenues from the reduction in power supply from KCM. Additional projects (such as the Dangote grid connection) are expected to be completed by the end of 2020 and facilitate power trading between the two companies and increase the Company's revenue.

Disclosures Appendix

Analyst certification and disclaimer

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