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Blitzscaling SMEs

A Bottom-Up approach to Scaling Private Enterprise, Mining and the urgent need for diversification.

Executive Summary

This paper looks at industrialisation efforts from 1889 - 2020, how that Top-Down approaches have not developed the SME sector in Zambia. The paper provides a fresh perspective on Bottom-Up SME Strategies that can rapidly scale up private enterprise in the years ahead. It contains measures that will help create a clear, consistent and stable framework resulting in a competitive and successful SME sector. It has a focus on early-stage mining, local content development in the extractive sector, agriculture, manufacturing and high-tech industry. Four principles underpin the bottom-up approach: 1) People 2) Meritocracy 3) Pragmatism 4) Transparency. The paper draws insights and findings from authors such as Robert Liebenthal and Caesar Cheelo, Adam et al. 2014; Chan and Clancy 2000; IMF 2020; World Bank; Chamber of Mines Zambia; Kaunda 2002; Ndulo and Mudenda 2004, KPMG Global Energy Institute 2021 and Germany Federal Ministry for Economic Affairs and Energy 2019. In order to drive asset creation based FDI inflow it provides an example of a syndicated project finance backed by a guarantee from the World Bank, and further shows lessons on how Germany is supporting its SME sector. The paper gives a view of the history of mining and industrialisation in Zambia. These findings are intended to inform future dialogue on how to develop a very competitive SME sector.

Overview and history of mining

- From 1964 to 1973, the economy grew on average by 6% pa as mining output and copper prices rose.
- From 1973 to 2000, the economy stagnated, due to low copper prices and high oil prices as well as economic mismanagement.
- Copper output, fell from 750,000 tons in 1970, to 250,000 tons in 2000.
- From 2000, economic growth recovered, averaging more than 6 per cent until 2009
- The Central African Copperbelt (CACB) is one of the most important copper-producing regions of the world, 7.2% of global production in 2011.
- According to a USGS report it is estimated that 8.4 million tons of undiscovered copper lies in the Roan arenite tract. Lubambe extension with its own at circa 10m tons.
- North-Western Province, in 2017 accounted for 70 per cent of Zambia's production of 797,000 tons, with three of the largest mines, Kansanshi, Lumwana, and Kalumbila. How this is the new Copperbelt. Zambia produced 882,061 tonnes of copper in 2020, up 10.8% from 2019.
- Managing the license application process, keeping the mining cadastre up to date and availability of geology data (only 60% mapping is done).
- 7NDP cautiously projects Zambia's future copper output, with a target of 1 million tons by the end of the plan period.

Mining Tax Regime in Zambia

- Zambia has changed its mineral tax regime 10 times in 16 years. Find out how and why.
- Development Agreements (DAs) allowed companies to carry forward losses for 15-20 years to allow a stability period.
- Non-deductibility of mineral royalty tax and why mines want it removed. Is this double taxation?
- Profit tax is seen as progressive as it targets profits, however challenges with the implementation of CIT was that most of the mining companies declared losses or marginal profits, hence very little was recovered.
- Mineral Royalty Tax: less USD* 4,500 per tonne 5.5%; between $ 4,500 - $6,000 at 6.5%; between $ 6,000 - $7,500 at 7.5%; between $ 7,500 - $9,000 8.5% and above USD 9,000 per tonne – 10% . Corporate Income Tax at 30% (2019 MRT regime)
- What is a conducive mining tax regime for Zambia?

Trade Misinvoicing in commodities

- Zambia recorded systematic export underinvoicing starting in 2005, with a cumulative $12 billion in export underinvoicing with its major trading partners over the 1995–2014 period, and $14.5 billion relative to the rest of the world (all the trading partners), (UNCTAD)
- Efforts to create transparency in the mining sector and make comfort on CIT on tax regime.
- The Mineral Value Chain Monitoring Project (MVCMP) & the Mineral Output Statistical Evaluation System (MOSES) and capacity strengthening.
- Zambia loses around 9 per cent of its GDP to Illicit Financial Flows (IFF) – The Mbeki Report

Fiscal Policy and managing a boom

- How that successive Zambian governments did not use copper revenues to accumulate productive assets, focusing instead on financing consumption subsidies and sustaining inefficient state-owned companies.
- Two savings rules i) A Sovereign Fund ii) A Private savings rule.
- How the Pula Sovereign Fund created in 1994 has created savings for Botswana. The fund has an estimated $5billion.

Five Pillars to achieving Net-Zero targets

- Increasingly stakeholders such as investors, customers, regulators, and employees are calling for decisive actions to address the full scope of ESG issues particularly move to a low carbon economy.
- The five pillars can help organisations meet their net-zero targets and become proactive regarding ESG to obtain competitive advantage.

Blitzscaling is what you do when you need to grow really, really quickly - Reid Hoffman

Executive Summary

Local content development

- The mining sector's low track record when it comes to leveraging its potential for industrial development and economic transformation.
- Harnessing mining to unlock industrial activities through more value addition; create business opportunities for the domestic private sector from local procurement to indirect employment.
- World Bank and Kaiser EDP outlines three distinct criteria that should be considered when defining "local," namely: (i) geography, (ii) value addition and (iii) ownership
- Demand Side Policy Options:
  - Requirements To Provide A Local Procurement Plan • Tax Preferences To Achieve A Prescribed Local Procurement Goal
- Supply Side Policy Options:
  - Supplier Development Programs • Providing Access To Finance • "Think Small First" principle.

Mittelstand

How the Mittelstand -Germany's small and medium-sized enterprises, account for over 99 per cent of all businesses, provide over 80 per cent of training places and roughly 60 per cent all jobs. We draw key lessons from their SME strategy.

Top-Down policies - 131 years of failed private sector development

- In 1889 the British government granted a charter to Rhodes's British South Africa Company (BSAC), bestowing powers of administration and enabling it to stake claims to African territory at the expense of other European powers.
- By 1930 it was clear that copper was the country's most-promising resource mined by companies mostly financed from South Africa, through the Anglo American Corporation, and the United States, through the Rhodesian Selection Trust.
- The Rise and Fall of State Enterprise: ZIMCO, INDECO, MINDECO, FINDECO, ZCCM
- How the advent of a market economy has not delivered private sector development.
- share of manufacturing in GDP during the 1990's and early 2000's was 10 % on average, 8.7% in 2018 showing contraction over the period.
- There was a decline in the contribution of agriculture to GDP from 16% in 2000 to 2.6% in 2018.
- **Dutch Disease - A Paradox of our subterranean Capital.**
- 27% of Zambia's manufactured exports were considered to be medium and high-tech in 2018, lower than LMI average
- In 2017 Zambia had 12 **patent applications**, South Africa over 700 and Malaysia over 1,170.
- The 7th National Development Plan net FDI inflow was set to 3,554 million USD which is far from the 408 million USD observed in 2018.

Bottom-Up approach to developing SMEs and private sector development

- The Four Principles
  - 1. **People and Culture** – "If as one people speaking the same language they have begun to do this, then nothing they plan to do will be impossible for them." 2. **Meritocracy** 3. **Pragmatism** 4. **Transparency (Honesty)**
- Evidence based, think small first, bottom up approach to policy making.
- Local Content development policies * Government must undertake a detailed analysis of the capacity of local suppliers and get a good understanding of the needs of the mining industry, to assess what gaps need to be addressed and what potential can be scaled up * Establish clear enforcement mechanisms *Establishing partnerships based on trust between mining industries and local communities * Good governance practice and legal systems to prevent corruption * Sophisticated reporting and data collection systems on local procurement * Tax incentives to mining companies to encourage them to procure from local suppliers. * Supplier development programs (SDPs)
- **Stock Exchange was born to serve primary capital requirements * Monitor the Capital Markets Development Plan objectives for market growth***
- Access to public service contracts – VERY important, for SMEs Rules such as the requirement to divide contracts into batches that are suitable for SMEs, as well as the possibilities.
- Interests of SMEs at SADC & COMESA, AfCFTA level
- Developing and building strong, efficient infrastructures
- "GO!" Start-up Campaign * Women mean Business initiatives* Entrepreneurship in Schools initiatives.
- How the Benguela Rail before closure in August 1975 accounted for 50% of Zambia and Zaire's transit goods to Lobito and the sea. Could there be an opportunity here for the North-Western Hub?
- R&D to strengthening SME competitiveness and flow of research papers to SMEs.
- Ministry of Small and Medium Enterprises to track all government ministries procurement to the needs of the SMEs.
- Global value chain (GVC) participation can be measured as the sum of forward linkages (that is, the domestic value added that flows into other countries' exports) and backward linkages (the foreign value added in the exports of the country of interest).
- Drive competitiveness and innovation in the small-holder subsistence farmers who make up about 75% of agricultural population through evidence based policies and effective implementation.
- Embark on an agricultural-led industrialization trajectory given Zambia's natural endowments in order to exploit increased national and regional demands for agricultural products (as a result of a growing middle-class).
- To promote manufacturing sector and in manufacturing-related activities, developing labour-intensive manufacturing sectors such as food processing, textiles and leather products by developing clusters and increasing effectiveness of existing industrial parks and Multi-Facility Economic Zones
- Governments setting up special guarantee schemes for micro and small enterprises to reduce risks for financial institutions.
- Concessionary interest rates for smaller local suppliers provided by financial institutions.

Project Finance - Sankofa Gas Project

Partnering with multilaterals to build assets. This section provides an example of how multilaterals can reduce country risk and support major project. How The World Bank, the Government of Ghana, GNPC, and project investors collaborated on a multi-layer security package. What are the lessons for Zambia?

Blitzscaling is what you do when you need to grow really, really quickly - Reid Hoffman

Evolution of mining since 1964

Evolution of Mining in Zambia

1964 onwards

From 1964 to 1973

R. Liebenthal and Caesar Cheelo in their paper "Understanding the implications of the boom-bust cycle of global copper prices for natural resources, structural change, and industrial development in Zambia" explore how the mining industry has been managed, and wider economic management during boom periods. How that successive Zambian governments did not use copper revenues to accumulate productive assets, focusing instead on financing consumption subsidies and sustaining inefficient state-owned companies. The paper also shows that:

- From independence in 1964 to 1973, the economy grew on average by 6 per cent per annum as mining output and copper prices rose.
- In 1970, the mining industry was partially nationalized, as the state took majority ownership of the mines, followed in 1973 by full nationalization and the abrogation of management agreements with the former owners. Eventually, ownership of the mines was vested in Zambia Consolidated Copper Mines Ltd (ZCCM), a wholly government-owned corporation. ZCCM became the world's largest copper mine company.

From 1973 to 2000

- In 1973, Zambia became a one-party state following a socialist ideology, a situation reversed in 1991 when a multiparty dispensation was reintroduced (Chan and Clancy 2000).
- The Movement for Multi-Party Democracy (MMD), which was elected in that year, espoused a liberal, free-market agenda and started a process of economic liberalization and privatization, culminating in privatization of the mining industry in 2000.
- From 1973 to 2000, the economy stagnated and per capita incomes fell, due to low copper prices and adverse terms of trade (oil prices having increased dramatically in the 1970s) as well as economic mismanagement. Copper output, fell from 750,000 tons in 1970, to 250,000 tons in 2000.

From 2000 and onwards

- From 2000 onwards, economic growth recovered, averaging more than 6 per cent until 2009, when the international financial crisis hit and copper prices again dipped significantly. By 2009, copper output had again reached over 700,000 tons, following major investment in the sector by the new owners.

Source: (Adam et al. 2014; IMF 2017, Liebenthal and Cheelo 2018)

Extent of the mineral resource

- According to a **United States Geological Survey** of undiscovered copper resources in Africa it is estimated that **8.4 million tons of** undiscovered copper lies in the Roan arenite tract, which roughly covers Zambia's Copperbelt and Central Provinces (Zientek et al. 2014).
- The Lubambe extension had by 2018 matched this potential on its own at circa **10 million tons**. Recent exploration has also indicated an extension of the North-Western geology into western province as well (Chamber of mines, World Bank 2015).
- However, this does not include the North-Western Province, which in 2017 accounted for 70 per cent of Zambia's production of 797,000 tons, with three of the largest mines, Kansanshi, Lumwana, and Kalumbila.
- Nor does it include Northern Province, where at least one investor is seeking to start a major mine.

Extent of Mineral resource

..extent of mineral resource

- Mineral reserve quantification studies and reports are hard to come by.
- The Central African Copperbelt (CACB) is one of the most important copper-producing regions of the world. The majority of copper produced in Africa comes from this region defined by the Neoproterozoic Katanga sedimentary basin of the southern Democratic Republic of the Congo (DRC) and northern Zambia. Copper in the CACB is mined from sediment-hosted stratabound copper deposits associated with red beds and includes the giant deposits in the Kolwezi and Tenge-Fungurume districts in the DRC and the Konkola-Musoshi and Nchanga-Chingola districts in Zambia. In recent years, sediment-hosted structurally controlled replacement and vein (SCRV) copper deposits, such as the giant Kansanshi deposit in Zambia have become important exploration targets in the CACB region. (U.S Geological Survey).
- In 2011, the CACB accounted for 7.2 percent of the estimated global mine production of copper. Global production of copper is principally derived from porphyry and sediment-hosted copper deposits (57 and 23 percent, respectively). Almost 50 percent of the copper known to exist in sediment-hosted deposits (past production plus identified resources) is contained in the CACB, 25 percent is contained in the Zechstein Basin of northern Europe, and the remainder is contained in an additional 29 sedimentary basins distributed around the globe. (USGS)
- Mineral deposits must be clearly defined if they are going to be used for mineral resource modeling. For inclusion in a tonnage and grade model, a mineral deposit should: **(1) have economic potential (Cox and others, 1986); (2) form by the same genetic process and be the same deposit type as other sites used to construct the same model (Barton and others, 1995); and (3) be developed using similar mining and processing methods as other sites in the model** (Bliss and others, 1987). According to Singer (1995), sediment-hosted copper deposits account for more than 20 percent of all copper that has been discovered. Production has come from a few large districts in the Democratic Republic of the Congo, Germany, Kazakhstan, Poland, and Zambia. SSC deposits are mined using a variety of mining (open pit, underground room and pillar) and beneficiation (pyro- and hydrometallurgy) methods.

- The World Bank (2016) concluded that rules for licence allocations and geological data collection—that is, the de jure situation—are the highest-scoring aspects of Zambia's mining regime. In other words, the basic legal framework for Zambia's mining industry is reasonably sound. However, the World Bank also found issues relating to the awarding and retention of exploration and mining licences, which it said lacked transparency and consistency.
- It found weaknesses in three areas:
    - interview responses on allocating and managing licences raised concerns about the use of discretionary power, whether procedures are followed in practice, the application of procedural timeframes, the application of sanctions on non-performing companies, and poor resourcing of the unit managing licence monitoring
    - keeping the mining cadastre up to date
    - the state of mapping and geological exploration, which falls short due to a low proportion of licensed ground being serviced by active mapping and due to limited recent geologic mapping, and because the development of geological information, including geological mapping and databases, is not strong.

Evolution of mining since 1964

Evolution of Mining in Zambia

Extent of Mineral resource › Investment Perceptions › Forecasts ›

- **The same report stated that geological mapping of the country is only 60 per cent complete and that there is no large-scale reconnaissance licence in place. Thus, the full extent of Zambia's mineral resources is yet to be discovered, fully quantified through exploration, and exploited.**

- **The Fraser Institute**, which conducts annual surveys of investment perceptions among mining companies globally, ranked Zambia sixth out of fourteen African countries in 2017 for investment attractiveness, and seventy-first out of 104 globally—compared with forty-third in 2016 (Stedman and Green 2017). Respondents to that survey voiced increased concern over the taxation regime, the geological database, and political instability.
- Zambia scored 50 out of 100 points in the Natural Resource Governance Institute's resource governance index for 2017 (NRGI 2017), with an above-average score for value realization (58/100) and the enabling environment, but below average for revenue management (35/100).
- More recently, according to **MiningforZambia**, Zambia's position in the world's top 50 global mining countries has plummeted in the latest Fraser Index to 58, losing a massive 28 places from the country's previous 30" According to the Index, there were three main reasons for Zambia's decline, which included the 2019 mining fiscal regime, its taxation regime, the poor state of its geological database, and, rather worryingly, political instability at the time of the report. Recent democratic elections have increased confidence around the political atmosphere.
- However, the pipeline of new investment in mining is limited. Recent investments have included the Kalumbila mine, output from which is already scaling up significantly, the Synclinorium investment by Mopani mine in Kitwe, and the new smelter at Kansanshi in Solwezi.
- Zambia has taken steps recently to address its power deficit, most notably by eliminating power subsidies and thus making power investment more attractive. This was despite resistance from the mining industry, which was the major beneficiary from the power subsidies. Recently launched 750 MW Kafue Lower hydro power station. The current investment pipeline includes some 600 MW of solar installations, and 350 MW from the Maamba coal-fired facility.
- Finance is being sought, by both public and private operators, through public–private partnerships (PPPs), for major investments at Batoka and on the Luapula River. There is reason, therefore, to be cautiously optimistic about the country's ability to meet its power requirements. The Commonwealth Development Corporation (CDC) had also taken interest in the country's largest independent power producer, the Copperbelt Energy Corporation, with a view to expanding its access to private finance.
- As a result, the **Seventh National Development Plan (7NDP)** is cautious about projecting Zambia's future copper output, with a target of 1 million tons by the end of the plan period, compared with 797,266 tons in 2017 (Republic of Zambia 2017) based on current investment plans. At the same time, the 7NDP sets out strategies to address these issues, notably through better geological information generation and provision; improved mineral processing; development of market linkages; and promotion of mineral exploration. Petroleum exploration is being promoted, and a number of oil blocks are being explored, but it is too early to estimate any yield from these efforts. At the time of writing, a new mining policy is reported to be under preparation, but no details are currently available.

- **Zambia produced 882,061 tonnes of copper in 2020**, up 10.8% from 796,430 tonnes produced in 2019, a "historical high" for Africa's second-largest copper producer . Zambia aims to produce more than 900,000 tonnes of copper in 2021 and has a long-term goal of exceeding 1 million tonnes in annual production. (Chamber of mines, R. Musukwa). Projections are now been made at 3m tonnes over the next 10 years (2022 – 2032, Musokotwane).
- Zambia's cobalt production, however, fell 21.8% in 2020, to 287 tonnes from the 367 tonnes produced in 2019. Musukwa put that drop down to reduced cobalt mineralisation and operational challenges at Konkola Copper Mine.
- Gold production fell to 3,579 kg in 2020 from 3,913 kg in 2019 as ore grades at the Kansanshi mine fell.
- State-owned **Zambia Gold Company,** which buys and processes gold from artisanal and small-scale miners, sold 47.9 kg of gold to the Bank of Zambia at the end of 2020 as part of efforts to build the country's gold reserves. The company started producing gold in May 2020.

How large are the resource revenues likely to be?

- A World Bank projection in 2015—based on the mining tax regime in place then (subsequently revised)— projected public revenues at US$1.5 billion by 2020, tapering off to US$1.2 billion by 2013 (World Bank 2015b). However, a much more optimistic scenario from the same United Nations Development Programme (UNDP) source has revenues reaching US$4 billion per annum, based on the expiration of capital allowances, significantly higher levels of production and exports, and higher prices. The conclusion is that the range of possible public revenue outcomes is large and uncertain.

Forecasts

- According to Liebenthal and Cheelo (2018) the future trajectory of mining revenues will depend on the extent of the resource (discussed above) and new investment. New investment in turn will depend in part on a range of government policies in the mining sector, notably support for exploration, licensing, and taxation.
- As noted earlier, mining already accounts for a significant share of exports (over 70 per cent), government revenue (28 per cent), and GDP (10 per cent) (ZEITI).
- In addition, mining investment over the period 2004–16 totalled US$12.3 billion, about 70 per cent of the total foreign direct investment (FDI) stock in Zambia (BOZ 2017).
- It accounts for about 21 per cent of formal sector employment (World Bank 2015b).
- As noted above, copper output had fallen from a peak of 700,000 tons in 1970 to 250,000 tons in 2000, partly because of low copper prices but also because of limited investment and high operating costs, leading to the mines losing some US$20 million per month by the late 1990s.
- Under pressure from international donors, but also recognizing concerns about the performance of the mines, the mines were privatized, with the government holding a residual golden share of about 10 per cent on average in the privatized companies through ZCCM-IH.
- The privatization process has been criticized and remains controversial. In particular, the Development Agreements (DAs) between the government and the new owners (which have never been officially published, but have been leaked) locked in taxation and other provisions for 15 to 20 years (depending on the particular DAs) in a way that prevented the Zambian government from benefiting from any price or profit windfall.

- (Source:
- *Lombe and Mwakacheya 2017; Manley 2017,Liebenthal and Cheelo 2018, ZEITI 2019*).

Tax regime and mining revenues

Mining Tax Regime in Zambia from 1998 -2019

Mining Tax Regime changes

Development Agreements negotiated with individual mines (DAs)

• These agreements allowed companies to carry forward losses for 15-20 years to allow a stability period. A loss carry-forward refers to an accounting technique that applies the current year's net operating loss (NOL) to future years' net operating income to reduce tax liability. This results in lower taxable income in positive income years, reducing the amount the company owes the government in taxes.

• The agreements were meant to take care of legacy issues, environmental obligations, and the general status of each particular mine.

• **Mineral royalty was set at 0.6 per cent of gross sales value, less the cost of transporting, insuring, and processing/refining the products; company income tax (CIT) was set at 25 per cent of gross profits, less depreciation, price participation payments to ZCCM-IH, capital expenditure incurred during the year (100 per cent depreciation), and accumulated losses carried forward** (Lombe and Mwakacheya 2017; Manley 2017, Liebenthal and Cheelo).

• The DAs also included provisions for subsidized electricity—a significant distortion as the mines came to consume more than 50 per cent of Zambia's power output. (Liebenthal and Cheelo).

The Mineral Royalty Tax and CIT of 2008

- Mineral Royalty Tax taxes are typically low – between 1 and 6 per cent – and are levied on production.
- Corporate income tax was increased from 25 to 30 per cent, mining royalty increased from 0.6 to 3 per cent of gross sales value, and a windfall tax was to be triggered at different price levels for different base metals.
- In addition, the depreciation allowance was reduced from 100 to 25 per cent; the loss carry-forward was reduced to a maximum of ten years; hedging operations were to be taxed separately, (Manley 2017).
- An IMF assessment suggested that the result of these changes was to increase the average effective rate on mining in Zambia from around 31 per cent to 47 per cent (Adam et al. 2014), taking Zambia from being one of the lowest to one of the highest tax regimes among developing countries.
- Mineral royalties are (in principle) payments made to the government to compensate for the right to extract a non-renewable natural resource such as copper. Mineral royalty was considered to have key administrative advantages relative to other taxes**. It is assumed that the tax base is easier to implement and administer with very little avoidance pressures as it is simply based on a percentage of the value of the output (ad valorem).** It was expected that mineral royalty would mean more revenue stability and less volatility compared to taxes on profit.

Mining Tax Regime changes

Corporate Income Tax (between April 2009 and March 2012)

- **Profit tax is seen as progressive as it targets profits. The problem in the implementation of CIT was that most of the mining companies declared losses or marginal profits, so very little was recovered**.
- Following criticism from the mining companies, the tax regime was again changed in 2009. The windfall tax was withdrawn and the 100 per cent capital allowance was restored, but the royalty was increased to 6 per cent in the 2012 budget, sufficient—according to IMF estimates—to generate an additional 1.5 per cent of GDP (Adam et al. 2014).
- However, the government of Zambia abolished CIT in the 2014/15 Budget, deciding to increase the royalty rates substantially. A few months later the new tax regime was reversed, the CIT was reintroduced, and royalty rates reduced. There were a lot of complaints about the instability of the mining tax regime. As stated earlier, the problem in the implementation of CIT was that most of the mining companies (apart from Kansanshi and Chibuluma) declared losses or marginal profits. That was the main reason that led government to abolish the CIT and substantially increase the royalty.
- It is expected that profit-related taxes such as CIT will deliver a significant income for government from resource production and export. However, government did not manage to reap the rewards of implementing the CIT; royalties contributed 21 per cent of the total revenues from the mining sector in 2013, compared to only 16 per cent for corporate income tax, which is even less than the personal income taxes paid by the employees of the mining companies in the form of PAYE (17 per cent).

The 2012 regime

Following the change of government in 2011, the first budget of the new government introduced further tax reforms in 2012, increasing the mineral royalty tax from 3 to 6 per cent, effective April 2012, and hedging and operating income were again to be treated separately for income tax purposes.

- In 2013, the government decreased the rate of capital allowances from 100 per cent per annum to 25 per cent per annum, reduced the export duty on copper from 15 per cent to 10 per cent, and set the tax on hedging income at 35 per cent (KPMG 2013).

The 2014 - 2015 tax regime

- MRT: Open-cast mining increased from 6% to 20%. Underground mining to 8%. Reinstatement of corporate tax to 30%.
- In the October 2014 Budget Speech, the Patriotic Front minister of finance announced that mineral royalties on the norm value of base metals produced would increase from 6 to 20 per cent for open-cast mining, and to 8 per cent for underground mining. Ad valorem royalty rates for copper vary between countries, generally ranging between 0 and 8 per cent. **From 1 January 2015, the corporate tax rate in Zambia was reduced to 0 per cent and the revenue-based mineral royalty rate was increased from 6 to 20 per cent for open-pit mines**. **On August 14, 2015, the Zambian government passed into law further changes to the taxation and royalty regime that became effective from 1 July 2015. These changes included the reinstatement of corporate tax to 30 per cent with variable profits tax of up to 15 per cent, while the mineral royalty was set at 9 per cent for all mines.**

Sources: Marriot Nyangu 2020, Liebenthal and Cheelo 2018, Adam et al. 2014

Tax regime and mining revenues

Mining Tax Regime in Zambia from 1998 -2019

Mining Tax Regime changes

2016 tax regime

- In 2016, the government implemented additional changes to the corporate tax and mining royalty regime which became effective on 1 June 2016 and included the repeal of the variable profits tax of up to 15 per cent applicable to profits from mining. Corporate tax on profits from mining was retained at 30 per cent. Mining royalty rates were reduced from 9 per cent to a sliding scale of 4 to 6 per cent (the commodity prices on the London Metal Exchange (LME)): 4 per cent when the LME price is below US$4,500 per ton, 5 per cent when it is between US$4,500 and US$6,000, and 6 per cent when it is above US$6,000 (Liebenthal and Cheelo). The 10 per cent export duty was suspended on ores and concentrates for which there are no processing facilities in Zambia (e.g., nickel).
- Manley also estimates that the effect of the new tax regime will be to reduce the effective tax rate for low-cost mines from about 58 per cent to about 43 per cent, and for high-cost mines from about 90 per cent to about 68 per cent. Most mines in Zambia, especially the underground mines, are relatively high-cost, (See Liebenthal and Cheelo 2018).
- However, an increasing share of mining output is coming from lower-cost mines, mainly open-pit, in the North-Western Province (Liebenthal and Cheelo).

- **Ideally, the tax regime would capture rents through profit taxes, which take account of costs**. But mining costs are notoriously hard for the tax authorities to verify and are widely suspected of being inflated specifically to avoid taxation.
- While there are challenges in verifying output and sales too, these are somewhat less difficult than those on the cost side and may be easier for the tax authorities to overcome.
- In general, lack of quality data on mining companies in Zambia has fuelled perceptions of large-scale tax evasion (World Bank 2016). Efforts to improve data quality and availability are proceeding.
- In addition, the government, with support from co-operating partners, started implementing two projects aimed at addressing the data issue. **The Mineral Value Chain Monitoring Project (MVCMP, www.mvc.org.zm),** which is based at the Zambia Revenue Authority (ZRA), monitors the mineral value chain from exploration to export, one of its aims being to improve tax collection.
- In addition, it is initiated the **Mineral Output Statistical Evaluation System (MOSES),** which will produce comprehensive audited data on mining production and exports and the **Mineral Production Monitoring Support Project (MPMSP)**, based at the **Ministry of Mines and Mineral Development (MMMD**), also aims to support tax collection through effective regulation and monitoring of mineral production, particularly through capacity development at the MMMD.
- It aims to improve the issuance of mineral export permits and the analysis of mineral content through spot tests. Since early 2016, new monthly reporting systems for mineral production are being used to compare mines' production reports with their export permits and royalty reporting.

- For obvious reasons, the extent of tax evasion and avoidance is hard to estimate and is the subject of controversy. The report of the High-Level Panel on **Illicit Financial Flows (IFFs)** from Africa—also called the **Mbeki Report**—stated **that Zambia loses around 9 per cent of its GDP to IFFs** (AU/ECA Conference of Ministers 2014: 55).

Mining Tax Regime changes

2019 sales tax on the mining sector

- The sales tax proposals for 2019 were intended to deal with the challenge of value-added tax (VAT) refunds accrued mostly to mining and exporting firms. VAT refunds have been contentious, and government has been failing to meet the obligation of payments, which have reached approximately K1.4 billion per month. Refunds have been a drain on public coffers and the most daunting public treasury management challenge of our time. The government said it was difficult to maintain the VAT refunds because the system was prone to too many fraud cases as mining companies inflated the cost of goods and services and made double claims on one receipt. It was, therefore, essential to find a solution through the proposed changes. Refunds would mostly accrue to the mines and exporting firms because the neutrality principal in tax dictates that taxes should be charged where they are consumed. The new sales tax which was proposed to start in July 2019 is set at 9 per cent, which mining companies felt was too high was subsequently dropped.

2019 MRT and CIT

- Mineral Royalty Tax: On the norm value when the norm price of copper is less than USD* 4,500 per tonne 5.5%; between $ 4,500 - $6,000 at 6.5%; between $ 6,000 - $7,500 at 7.5%; between $ 7,500 - $9,000 8.5% and above USD 9,000 per tonne – 10% . Corporate Income Tax at 30%.

Mineral Royalty Tax and ICT changes

- The imposition of new tax regimes to replace the Development Agreements was opposed by the mining companies, who deemed the act illegal. Many mining companies sought legal redress locally and through the International Centre for Settlement of Investment Disputes

“The report of the High-Level Panel on Illicit Financial Flows (IFFs) from Africa—also called the Mbeki Report—stated that Zambia loses around 9 per cent of its GDP to IFFs (AU/ECA Conference of Ministers 2014: 55).”

Sources: Marriot Nyangu 2020, Liebenthal and Cheelo 2018, Adam et al. 2014

Trade Misinvoicing in Primary Commodities in Developing Countries – a UNCTAD report

Copper export Misinvoicing - Zambia

Fiscal policy, conducive tax regime

Under-invoicing

• According to a 2016 report by the United Nations Conference on Trade and Development UNCTAD Copper exports to Switzerland present a strikingly peculiar case, where no copper imports are recorded in Switzerland at all. Excluding Switzerland, Zambia recorded systematic export underinvoicing starting in 2005, with a cumulative $12 billion in export underinvoicing with its major trading partners over the 1995−2014 period, and $14.5 billion relative to the rest of the world (all the trading partners). **The peculiar feature of trade with Switzerland deserves to be explored further, especially at a more disaggregated, company level. It is possible that exports are recorded as destined to an importer in Switzerland when the ultimate importer does not reside there, as would be the case with transit trade**. Therefore, it would be important to investigate the effective destination of Zambian copper marked as exported to Switzerland that is not recorded in this country

- For China, the second leading trading partner, the results indicate export underinvoicing with a total of $5.6 billion, representing 61 percent of total exports to this partner. The results for trade with Italy show $2 billion of copper export underinvoicing compared to only $16 million of exports reported in Zambia's data. The respective values for trade with the Republic of Korea are $3.9 billion in export underinvoicing and $358 million of declared exports. It appears that a large fraction of the copper exports to these countries are not recorded in Zambia's official statistics. This raises the important question of why Zambia would record a transit destination rather than the final destination. The other question is why the actual destination of the products is not registered in Zambia's records, and if such a practice generates any gains to the buyer who is on the books in Zambia's records. Knowing the full information on the transactions at all the nodes of trade from Zambia to the final destination is essential for asserting whether Zambia is getting the fair share of the value of its copper exports. There was a notable switch in destinations of copper exports in 2004. Up to that year, South Africa and the United Kingdom were the two most important trading partners. However, from 2005 to 2006, their combined share of Zambia's total copper exports fell from 44.9 per cent to 8.7 per cent. Since then, China has taken over as the dominant trading partner, with its share rising from 9.4 per cent in 2003 to 55 per cent in 2006, and peaking at 63 per cent in 2011. Switzerland's dominance has since re-emerged in recent years.
- The UNCTAD (2016) study Trade Misinvoicing in Primary Commodities in Developing Countries found that over the period 1995–2014, 67.7 per cent of Zambia's copper exports went to China and Switzerland, both countries with high levels of export misinvoicing. In the case of Switzerland, no such exports are recorded by the recipient country, probably because the exports are effectively in transit to another destination (Readhead 2016). UNCTAD (2016: 16) found copper under-invoicing of US$5.6 billion, equal to 10 per cent of Zambia's copper exports over the period. Global Financial Integrity, the Washington-based think tank, at one point stated that Zambia lost US$8.8 billion in IFFs between 2001–10 (Kar and Freitas 2012) and that the country was losing US$2–3 billion per year to the mining industry, but then modified the claim, maintaining that the problem clearly exists but withdrawing the specific estimate (Forstater 2017a).

Tax evasion, avoidance and ESG

Tax evasion and avoidance

- The existence and extent of tax evasion and avoidance and IFFs related to the mining sector are inevitably the subject of political debate and pressure. For example, in March 2018 the ZRA announced that it had uncovered tax irregularities by a prominent mining company of ZMK76.5 billion (about US$7.6 billion) resulting from the misclassification of consumables and spare parts at importation for the previous five years; the company subsequently identified itself as Kalumbila mine, owned by First Quantum Minerals, Zambia's largest mining company and largest tax-payer. Similarly, a dispute is ongoing between ZCCM-IH and First Quantum over the application of profits from Zambian mines to development expenditures at a South American mine. Such disputes are almost inevitable and no judgement as to their validity can be made here. However, they can increase the perceived risks of new investment if they are not handled within a rules-based framework which reflects consultation.
- As Manley writes:

> **The government faces two trade-offs when designing the tax regime. One is the desire for a progressive regime that captures rent and increases the overall stability of tax policy against the disinclination to expose the treasury to the risk of low mining revenue if prices fall. The other is the desire for a progressive tax regime on the one hand, and a regime that is simple enough to collect revenues and combat tax avoidance on the other. (Manley 2017: 17)**

ESG

- The state-owned mining company ZCCM until privatisation, provided a range of social services, (hospitals, schools, local infrastructure) in nearly all mining areas. After privatization, these responsibilities went to local authorities, which were ill equipped, both financially and structurally, to carry them out to the level that had been delivered under ZCCM. As stated in the MinGov report**, 'a key shortcoming is the absence of a legislated requirement for sharing resource revenue between central and local governments' (World Bank 2016).**
- The ICMM (2014) found that 'in 2012, the four mining companies (Mopani, KCM, Lumwana and First Quantum) spent just under US$70 million on social investments', equivalent to 0.3 per cent of Zambia's GDP.
- In the 'New Copperbelt', North-Western Province, where community expectations of services were lower, much attention has been paid to basic infrastructure and community services. At Kalumbila, a new township has been developed by the mining company. ICMM (2014) concluded that consultation and engagement around the services being provided by the mining companies was to be recommended; that a holistic approach to providing community services had been quite successful; and that alignment and partnership with local government and non-governmental organizations (NGOs) had been quite effective.
- In addition, copper smelters in several Copperbelt municipalities have been responsible for sulphur dioxide (SO_2) emissions, potentially causing acid rain, soil erosion, crop damage, and air and water pollution. The Kafue River has been affected, which has given rise to some international activism by environmental NGOs. **In addition, new (post-privatization) environmental liabilities are often inseparably mixed with the old ones, so that the responsibility for clean-up is unclear.**

(Source: Liebenthal and Cheelo 2018)

What is a conducive tax regime for Zambia

Managing copper booms and a conducive Tax Regime ›

Fiscal policy, conducive tax regime ›

Copper Booms and Conducive tax regime

Fiscal policy and managing copper booms

- In Adam et al. (2014), Paul Collier argues that three rules need to be instituted to govern depleting (or exhaustible) resources, apart from managing volatility. These are:

i) A savings rule, which governs the share of resource revenues that should be set aside to offset the depletion of the resource;
ii) a process for managing investment of the savings;
iii) and a debt strategy which governs recourse to borrowing.

• In 1994, the Pula Fund was established under the Bank of Botswana Act, as a sovereign wealth fund to hold a long-term investment and form part of the country's foreign exchange reserves. The Pula Fund's goal is to preserve a portion of the income from diamond exports for future generations. Dixon (2016) reports that the Pula Fund is Africa's oldest and third-largest fund, and that it stood at US$5.4 billion in 2016. Sovereign wealth funds are special government agencies that manage sovereign wealth separate from traditional foreign exchange reserves.

What is a "conducive mining tax regime"?

- Zambia's current mineral tax regime is broadly in line with good international practice and is capturing in the region of 40–70 per cent of pre-tax profits, depending on the cost structure of the mines. In addition, since ZCCM-IH holds between 10–20 per cent of the shares in the operating mines, except Lumwana, it can be claimed that there is additional benefit to the Zambian state, although this has typically taken the form of increases in asset values, since dividends have to date rarely been declared. However, these calculations do not take account of possible profit shifting, transfer pricing, etc., which are denied by the mining companies (Liebenthal and Cheelo 2018).

At a recent mining Indaba stakeholder meeting. Stakeholders including the Chamber of Mines in Zambia have given the following insights into a suitable tax mining regime;

- The cost of capital is pivotal in the mining industry, given its capital-intensive nature. It is imperative that mining companies have capital to reinvest in order to sustain operations, without which growth is impossible. This is especially true in an industry where both assets and equipment deteriorate with time, leading to compromised safety and efficiency.
- For several years, members of the Chamber of Mines have been unable to afford the international cost of capital, instead relying on cash injections from shareholders to keep operations running, which is unsustainable.
- Only with increased investment in exploration, mining and mineral processing, can Zambia's Government and its people benefit from an increased contribution from the mining industry. 'Mining's economic multiplier effects are entirely dependent on the sector's growth and sustainability.
- But, in order to attract investment capital, Zambia has to compete with other resource rich countries, and provide investors with a fiscal regime that's responsive to the market — and, naturally, predictable too.
- A conducive regime encourages investment
- According to these experts, now is a crucial moment to remove the barriers standing in the way of Zambia's acquisition of investment capital. The odious non-deductibility of mineral royalty tax is one of the mining tax regime's two biggest bottlenecks. The current mineral royalty non-deductibility policy prevents mineral royalties from being deductible against corporate income tax, which disincentivizes investment.

Conducive tax regime ›

- According to one expert "You pay mineral royalty on your top line (which is your revenue), and then you are also hit on the profit side because the expense is not allowed as a deduction, so you're effectively taxed on the same income twice." Doing away with this system of double taxation immediately makes us competitive
- Namibia recently entertained the idea of introducing a policy of mineral royalty non-deductibility just like the one in place in Zambia, but a series of public-private sector stakeholder engagements lead to its abandonment late last year. In the six months since then, the country has attracted hundreds of millions of dollars and over five new mining projects.
- **According to the Chamber of Mines in Zambia, two game-changing investments hang in the balance. Kansanshi Copper Mines is awaiting a better fiscal environment in order to begin a $1 billion expansion project which includes a new smelter, and Lubambe Copper Mine intends to expand its operations in Chililabombwe in a move that would add increase copper production by 150,000 tonnes per annum for the next 45 years** .
- A "conducive regime" is one that works for all stakeholders
- The current mineral royalty regime has a "fundamental structural issue," in that royalty rates jump up at certain price thresholds, removing predictability for mining companies, which have no way of knowing when the higher mineral royalty tax band will next be triggered. The panellists shared several Zambian experts' views in proposing a sliding scale which mirrors how Pay As You Earn (PAYE) tax operates, which will create more predictability.

(*Source: Liebenthal and Cheelo 2018; Chamber of Mines September 2021; mining Indaba 2021*)

- According to ZIMEC's panellists policy needs to be flexible enough to handle low and high prices. Once we do away with investor uncertainty, the industry can focus on the business of mobilising capital to increase production. If you strategically ring-fence mining growth, all other growth in the economy will be corollary to that and, if you get that right, the overall economy will grow (Chamber of Mines).
- The common ground reached at the indaba can pave the way for Zambia's economic recovery. Government wants to maximise revenue and the mining companies want to maximise returns. It's the middle ground somewhere in between that the mining indaba sought to identify. Experts see that "a climb down" may be necessary in the short-term while the regime is being changed, but a commensurate return to Government revenues will follow in the long run (Chamber of Mines, Mining Indaba).
- Overhauling the mining tax regime in Zambia requires a holistic approach that ensures we incentivise exploration expenditure and increase production to take full advantage of the commodity supercycle.
- During the Indaba mines minister said it is for this reason that the focus of the Indaba is to come up with fiscal outcomes for the mining sector that achieve a fair, consistent and predictable mining tax regime. While , Acting Finance Minister said while the Mining sector contributes around 10 percent to the Gross Domestic Product and more than 70 percent to forex earnings, it has not translated into economic fortunes
- At the mining Indaba; the Ministry of Mines and Minerals Development's Chief Mining Engineer, Mr Brighton Kateka, offered his closing remarks:

"The mining indaba was held specifically to discuss these very things, so that we can have a very, very stable regime. We need to be sincere, we need to be transparent, we need to trust each other, and there must be confidence developed between industry and Government. I hope these discussions yield something very fruitful at the end of the day."

(Source:
- *https://miningforzambia.com/seeing-eye-to-eye/*
- *https://ctpd.org.zm/the-2021-zambia-mining-indaba-officially-opens/)*

Local Content Development in the mining sector

Local Content Policies: Stimulating direct local procurement

Creating opportunities for SMEs

Think tank research on local content development

- The **International Institute for Sustainable Development (IISD)** a Canadian think tank did a paper in 2019 for the Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development (IGF). The paper reviews policies and strategies as part of a broader set of inputs that can be used to enhancing local content in the mining sector. The following is what we learn from the research:
- In a large number of resource-rich countries, the mining sector is an important driver of growth, in particular during commodity boom periods. This is a result of large investment inflows and revenue generation essentially driven by exports. But in developing countries, the mining sector generally does not have a good track record when it comes to leveraging its potential for industrial development and economic transformation. Yet the potential is significant: if harnessed well, mining can unlock industrial activities through more value addition; create business opportunities for the domestic private sector from local procurement, in particular close to mine sites; generate indirect jobs along the supply chain; and provide wider opportunities for the economy, notably through the use of infrastructure and mining-related capabilities for other economic sectors.

Defining Local Procurement

For instance, World Bank and Kaiser EDP (2015) outlines three distinct criteria that should be considered
when defining "local," namely:

- (i) geography,
- (ii) value addition and
- (iii) ownership:

Definition of 'Local' by Geographical location

- **Community and Regional levels** - Through the implementation of Impact Benefit Agreements in Canada, as well as community development agreements (CDAs) in Mongolia and Australia, procurement benefits are prioritized
- National Level: Local procurement in Zambia has a national focus: "local" refers to Zambian citizens or citizen owned companies.
- Local – Local: In Ghana, some companies distinguish between "local" suppliers, meaning businesses registered in the country, and **"local-local"** businesses, meaning mining communities. Although the local content regulation does not make express reference to the obligation to procure from specific geographic locations, it is nonetheless good practice for some mining companies to give preference to suppliers originating from their local communities when goods and services are available.

Reporting requirements

- Provide for disclosure requirements for the reporting organization shall report the following information:
    - a. Percentage of the procurement budget used for significant locations of operation that is spent on suppliers local to that operation (such as percentage of products and services purchased locally).
    - b. The organization's geographical definition of "local."
    - c. The definition used for "significant locations of operation." Governments occupy a unique position in being able to influence both the supply and demand sides of local employment in the mining sector.

Local Content Policies: Stimulating direct local procurement

Scaling up local procurement

Defining "Local" based on value addition

- Value addition refers to a process by which the monetary worth of a good or service increases as it goes through different stages of processing. When using value addition as the criteria, goods and services are considered "local" when a certain proportion of value addition is performed in-country, as opposed to being performed outside the country. This policy is expected to promote the domestic manufacturing industry and support the growth of local suppliers to those firms.
- For example, purchasing a good that is imported directly to the mine site would not qualify as "local" procurement, while a good that is manufactured in-country, in particular from inputs sourced locally, would be considered "local" as it would have a certain level of value addition.

Examples of procurement policies based on local sourcing

- In Kazakhstan, to qualify as a manufacturer of goods locally, a certificate of origin must be presented. Such certificate is issued with regard to goods totally manufactured or which passed substantial processing on the Republic of Kazakhstan territory (i.e., which passed the last substantial processing of the goods sufficient for making the good have its characteristic features). The criterion of "substantial processing" is based on rules of origin defined by the authorities, so that progress can be measured over time.
- Ghana has chosen to identify a targeted list of inputs that must be purchased in-country as a way to stimulate local procurement. Twenty-nine products have thus been listed, to be phased in over time. In 2014 companies were required to source a first list of eight products from local industries. These products included lime, grinding media, high-density polyethylene (HDPE) and polyvinyl chloride (PVC) pipes, cement and cement products, tire retreading, general and special lubricants, explosives and caustic soda. In 2016 the list was extended to 19 products. While Ghana specifies which products must be sourced locally, it does not specify how much value should be added for those inputs to qualify as locally procured. It is therefore difficult to assess to what extent this policy has helped to deepen manufacturing processes in the country.
- In Botswana, goods and services are to be procured to the "maximum extent possible consistent with safety, efficiency, and economy." Again, there is no set level regarding the value-added criteria and therefore the impact of the policy on industrial development is difficult to measure.

(*Sources: IGF, 2018b, 2018c; United Nations Economic Commission for Africa [UNECA], 2018.*)

Defining "Local" based on ownership criterion

"Local" ownership focuses on the participation of nationals or citizens in the supply of goods and services. It can take many forms, including:

- (i) Capital or equity participation, that is, a minimum percentage of the capital or shares of the supplying firm must be held by nationals or citizens of a country.

1. (ii) An obligation for a supplying firm to employ a maximum amount of local staff (e.g., local citizens).

- (iii) Management control by nationals, whereby procurement firms would qualify as local when citizens of the country have senior management positions.
- (iv) An obligation for a foreign supplier to enter into joint ventures or partnerships with local firms.
- (v) An obligation to list a minimum percentage of shares on the national stock exchange, to encourage nationals and citizens to acquire stakes in the foreign company.

> "Local ownership focuses on the participation of nationals or citizens in the supply of goods and services"

Source: Canadian International Resources and Development Institute, 2018; IGF, 2018, 2018e; Natural Resource Governance Institute, 2017.

Local Content Development in the mining sector

Local Content Policies: Stimulating direct local procurement

Creating opportunities for SMEs

Defining "Local" based on ownership criterion examples

- In Zambia, the criterion focuses both on equity owned by Zambian citizens and a proportion of local management. According to the law, "citizen-owned company means "a company where at least fifty point one per cent of its equity is owned by Zambian citizens and in which the Zambian citizens have significant control of the management of the company" (Law 7/08, Art. 2 (1)) (Columbia Center on Sustainable Development, 2014, p. 5).
- In South Africa, ownership criteria for local procurement are aimed at addressing historical inequalities. The 2018 Mining Charter requires a minimum of 70 per cent of total mining goods procurement spending on South African manufactured goods. The 70 per cent shall be allocated as follows: (i) 21 per cent spent on goods produced by companies owned and controlled by historically disadvantaged persons; (ii) 44 per cent spent on goods produced by Broad-Based Black Economic Empowerment7 (BEE) compliant companies 8; and (iii) 5 per cent spent on goods produced by women or youth-owned companies. Similarly, the Charter requires that 80 per cent of the total spent on services be sourced from South African firms, with the following allocation: (i) 50 per cent spent on services provided by companies owned and controlled by historically disadvantaged persons; (ii) 10 per cent spent on services supplied by BBBEE-compliant companies; (iii) 15 per cent of services supplied by women-controlled companies; and (iv) 5 per cent of services supplied by youth-controlled companies (Department of Mineral Resources, Republic of South Africa, 2018, p. 16).

Preconditions for Local Procurement

- **Governments must undertake a detailed analysis of the capacity of local suppliers and get a good understanding of the needs of the mining industry, to assess what gaps need to be addressed and what potential can be scaled up**
- Governments must address business climate constraints.
- Measures must be combined with investments in local business capacity.
- Measures should preferably be time bound
- Monitoring and evaluation on an ongoing basis
- Establish clear enforcement mechanisms.
- Establishing partnerships based on trust between mining industries and local communities.
- Good governance practice and legal systems to prevent corruption.
- Sophisticated reporting and data collection systems on local procurement.

DEMAND-SIDE POLICY OPTIONS

Mandated Percentages

- A specific percentage for local procurement of goods and services is included in policies, for example as part of mining policies or economic empowerment laws such as in South Africa.

Targeted Lists Of Goods And Services That Should Be Locally Sourced

- This policy option is meant to stimulate local production of specific types of goods and services produced or available locally. Ghana, for example, has chosen this policy instrument to promote local procurement. Following the enactment of the local content regulation LI 2173 in 2012, Ghana published a first list of eight goods and services categories in 2014, to be sourced through local suppliers (UNECA, 2018). The list was subsequently increased in 2016 to include 19 goods and services categories and is expected to further increase to 29 (OECD, 2017a, p. 64). Other countries reserve certain lines of business exclusively for locals. For instance, although Argentina does not have a specific local content regulation for mining in place, it does require that all transport services must be sourced locally (OECD, 2017a, p. 17).

Local Content Policies: Stimulating direct local procurement

Scaling up local procurement

Requirements To Provide A Local Procurement Plan

- **In Ghana, a five-year local procurement plan is mandatory**. The plan includes commitments for companies for local procurement covering at least the items specified in the local procurement list; and "specific support to providers or suppliers as well as other measures to develop the supply of local goods and services, including broadening access to opportunities and technical and financial assistance" (Ghana Minerals Commission, 2012, p. 4).
- In South Africa, a Social and Labour Plan must be submitted with an application for a mining or production right together with an annual compliance report. The plan must include commitments for local procurement from local communities (*Department of Mineral Resources, Republic of South Africa, 2010*).

Tax Preferences To Achieve A Prescribed Local Procurement Goal

This policy option provides:

- Tax incentives to mining companies to encourage them to procure from local suppliers. In Senegal, exploration permit holders are exempted from value-added tax on locally purchased goods and services within the first three years (Norton Rose Fulbright, n.d., p. 7).
- Tax incentives (e.g., value-added tax rebates or refunds for sales to mining companies; duty exemptions on imports of machinery for domestic production) specifically for investors (domestic or foreign) engaged in local supply chains.

Provision That Local Goods And Services Will Be Given Preferential Treatment Or Will Be Purchased, "To The Extent Feasible"

- This policy option requires "best efforts" on the part of mining companies, putting the burden of proof of competence/capacity on local suppliers. With such requirements, mining companies are the ones to "assess" whether suppliers are able to supply them. Despite being less constraining, regulations often set certain parameters for mining companies to assess "the extent feasible." This includes competitiveness with foreign suppliers on the basis of economic and technical efficiency and safety requirements.
- In Botswana, the Mines and Minerals Act of 1999 mandates that Botswana goods and services shall be procured to the "maximum extent possible consistent with safety, efficiency, and economy" (Government of Botswana, 1999).
- In Namibia, according to the Minerals Act of 1992, any mineral licence holder shall "with due regard to the need to ensure technical and economic efficiency, make use of products or equipment manufactured or produced, and services available, within Namibia" (Republic of Namibia, 1992, p. 74).

Community Development Agreements With Provisions On Local Procurement

- This type of policy measure includes a requirement for a mining company to negotiate an agreement with host communities, with specific provisions on local procurement. Such types of agreements can range from statements of general principles in a Memorandum of Understanding to legally binding agreements that include grievance mechanisms.
- Such CDAs are regular practice in countries such as Canada, Australia, Mongolia and Brazil. They require mining companies to consult with host communities as a means to negotiate their social licence to operate.

"Governments must undertake a detailed analysis of the capacity of local suppliers and get a good understanding of the needs of the mining industry, to assess what gaps need to be addressed and what potential can be scaled up"

Source: Canadian International Resources and Development Institute, 2018; IGF, 2018, 2018e; Natural Resource Governance Institute, 2017.

Local Content Development in the mining sector

Local Content Policies: Stimulating direct local procurement	Demand Side and Supply Side Government Led initiatives
Creating opportunities for SMEs	Scaling up local procurement

SUPPLY-SIDE POLICY OPTIONS

Technology Transfer Requirements

- This policy option requires foreign investors to transfer technology to local stakeholders in the host country as part of the conditions of investment.
- Such measures are more common in the petroleum sector, where companies may be requested to submit technology transfer plans, in accordance with the national plan on transfer of technology (e.g., in Nigeria and Ghana).

Requirements For R&D Spending

This policy option is meant to improve the competencies of domestic firms through innovation and R&D. Governments may:

- (i) Require foreign investors to conduct R&D activities or submit plans to do so in the host country. In the petroleum sector in Norway, foreign operators have an obligation to enter into R&D agreements with government, with at least 50 per cent of R&D activities to be conducted in-country. Similarly, in Ghana, petroleum companies must submit a plan of R&D initiatives to be undertaken in-country.
- (ii) Provide incentives for companies willing to invest and conduct R&D activities in the host country.
- (iii) Provide incentives for research institutions who partner with suppliers: In Sweden, the government provides significant financial support to its world-class research institutions specializing in mining-related activities and who have developed strong partnerships to connect businesses with R&D. Similarly, Finland provides loans and grants to its public institutions to support domestic companies in becoming global leaders in specific sections of the mineral value chain.
- (iv) Require mining companies to contribute to a national R&D fund aimed at supporting the development of mining technology. In many cases, a dedicated share of mining companies' operating costs is specified in the regulation.

Supplier Development Programs

- Supplier development programs (SDPs) are meant to develop the capacity of local suppliers, primarily through skills development, mentorship, training, access to finance and access to mining procurement markets (IFC, 2011, pp. 36–37). In many countries, such as Chile and Peru, SDPs are often driven by mining companies and sometimes in partnership with international organizations like the IFC, which supported mining companies in Ghana to put in place their suppliers' development program (IGF, 2018c; Korinek, 2013).
- When SDPs are initiated by governments, companies can be required to submit local procurement plans and implementation plans detailing how they will train and support local suppliers in meeting the requirements. In South Africa, companies must describe income-generating projects that the mine would undertake (Department of Mineral Resources, Republic of South Africa, 2010, pp. 18–22). SDPs are sometimes developed by governments in partnership with international organizations. **In Botswana, UN Development helped the government launch the Business Suppliers Development Program to support the Botswana private sector (IGF, 2018b). The program is expected to support small and medium-sized enterprises (SMEs) in different value chains to become efficient and competitive suppliers. Mining is one of the sectors supported by the SDP.**

Providing Access To Finance

- Suppliers, particularly in developing countries, are often faced with difficulties in upgrading their operations to meet the quality and reliability standards of international mining clients, due to the difficulty in accessing finance at reasonable interest rates.

This policy option is aimed at supporting local businesses in getting access to finance. Measures can take the following forms:

- (i) Measures administered by governments directly to support lending to local firms. In 2015 the provincial government of Ontario, Canada, invested CAD 15 million in six Indigenous financial institutions that provided lending to Indigenous-owned businesses
- (Government of Ontario, 2015). This investment program provided "financing and loan guarantees to companies to encourage supplier development" (Ramdoo, 2016).
- (ii) Governments setting up special guarantee schemes for micro and small enterprises to reduce risks for financial institutions.
- (iii) Concessionary interest rates for smaller local suppliers provided by financial institutions.
- (iv) Requirements for mining firms to provide expedited payment procedures that take into account the tight cash flow situation of SME suppliers, including provisions for upfront payments.
- (v) Encouraging banks to extend credit to suppliers when they have been awarded contracts by mining companies.
- (vi) Provision of training programs in bookkeeping and accounting for SMEs and in the development of solid and fundable business plans (these can also be a training requirement for mining companies).

Supplier Portals And Networks

Mining companies may face challenges in purchasing local goods and services due to a lack of knowledge about local suppliers, and suppliers for their part often face difficulties getting information about opportunities for tendering. Suppliers' portals are mechanisms to connect mining companies and local suppliers while addressing information and knowledge gaps about business opportunities. They can be government initiatives or led by the Chamber of Mines as a service to members. Suppliers' portals can also involve pre-qualification systems that collect key information on suppliers. Prequalification systems can declare suppliers compliant with such relevant standards as occupational health and safety requirements and other technical specifications.

This policy option is aimed at connecting procurement demands and suppliers. Measures to that effect can include:

- (i) Requirements to create online databases for contracts and tenders.
- (ii) **Some governments may require companies to unbundle contracts so that smaller suppliers can bid on portions of larger contracts, grant longer time frames for SME bidding or give scoring preferences to local suppliers in the bidding process. (iii) Mandatory requirements to post-procurement opportunities on suppliers' portals.**
- (iv) Requirements that mining companies provide training for suppliers to use such portals. If suppliers cannot meet pre-qualification standards, LCPs can also require companies to provide training to upgrade suppliers' capabilities.

"Government is about setting the rules and boundaries but also reminding us about the nobleness of the game… Thomas Jefferson."

"Think Small First"

Source: https://www.bmwi.de/Redaktion/EN/Publikationen/Mittelstand/german-sme-strategy.pdf?__blob=publicationFile&v=3
The Federal Ministry of Economic Affairs and Energy

SME Strategy – lessons from the Mittelstand

Mittelstand

Creating opportunities and easing the burden for SMEs

Mittelstand

Creating opportunities and easing the burden for SMEs

Mittelstand

- **Germany is a country of small and medium-sized enterprises called Germany's Mittelstand. SMEs account for over 99 per cent of all businesses. They provide over 80 per cent of training places and roughly 60 per cent of all jobs subject to compulsory social security contributions.** Germany's SME sector is extremely diverse, running the gamut from large family-run businesses established generations ago in rural areas, crafts and trades businesses, liberal professions and self-employed persons to start-ups and a disproportionately high number of "hidden champions" – largely unknown global leaders in niche markets. **A strong SME sector also means a strong economy.**
- **The Federal Ministry for Economic Affairs and Energy wants Germany's SMEs** to embrace new challenges and remain vibrant, strong, and innovative. **This is why the ministry is working on many levels to strengthen the Mittelstand's competitiveness, its capacity to innovate, and its ability to create jobs.**
- The success of German business is driven by its SMEs, a group to which more than 99 per cent of all firms in Germany belong. These companies account for more than half of our economic output and almost 60 per cent of jobs. Approx. 82 per cent of apprentices in Germany do their vocational training in an SME.
- With the SME Strategy, their aim is to support SMEs in overcoming the economic challenges in a changing world, and in maintaining and consolidating their strong position in the face of national and international competition now and in the years ahead. The Strategy is to help ensure that the SME sector remains resilient even during weak economic periods and continues to be the mainstay of the economy it has always been. The focus here is primarily on creating a clear, consistent and stable framework, complemented by suitable forms of assistance. **One of the fundamental principles of the Social Market Economy is that the state should define the framework but interfere in the market as little as possible.** This will give businesses the flexibility, freedom and certainty they need to be equipped to face the challenges of the future and develop their innovative talent to the full.
- The SME Strategy aims to ensure the German Mittelstand continues to be successful in the years ahead. For this reason, the measures for the Strategy are not only geared towards the current political constellation. Rather, the decisive factor is what is good, important and right for the SME sector in Germany.
- Commitment to reducing the tax, contribution and bureaucratic burden on the SME sector. Furthermore, to make employment laws more flexible, develop powerful and efficient infrastructures, and guarantee a secure and affordable supply of energy. Of equal importance is the need to create an investment- and innovation-friendly environment that enables flexibility, rewards research and encourages broad-scale digitisation in the SME sector.

I. Improving the policy environment

- 1. **Improving the tax policy** - to safeguard the country's attractiveness from a tax perspective and in doing so guarantee the future competitiveness of the economy in the international arena. This calls for stronger tax incentives for private investment, growth and employment. To ensure greater planning certainty the taxation policy principle of "no tax increases" must apply: with the introduction of a "tax cap" to make sure that the tax burden on partnerships cannot exceed 45 per cent. Reject non-earnings-related taxation, particularly the reintroduction of the wealth tax.

2. Continuing to reduce bureaucracy

This policy option provides:

- Unnecessary bureaucracy places a particularly heavy burden on small and medium-sized enterprises. The reduction of the bureaucratic burden is a long-term task which requires the commitment of the entire Federal Government.
- Third Act to Reduce Bureaucracy - With the government bill for a Third Act to Reduce Bureaucracy –an additional step towards cutting red tape and delivered on a measure set down in the key points of the SME Strategy.
- The Third Act to Reduce Bureaucracy contains a package of measures to relieve the burden both on the business community and on private citizens. This includes measures to raise the turnover tax threshold for small business from €17,500 to €22,000,

4. Interests of SMEs at EU level

- **At EU level,** calling for the creation of a new political framework for SMEs, building on the 2008 Small Business Act and the lessons learned since then. Welcoming the fact that the new EU Commission has announced an "EU SME Strategy"
- **"Think Small First"** principle in all EU legislative proposals.
- "one in, one out" principle - . Specifically this means that if new regulations result in additional, ongoing compliance costs for business, a corresponding amount of relief must be generated elsewhere by removing unnecessary ongoing compliance costs, without impacting existing standards. We will also ensure that European law is transposed exactly into German law.

5. Developing and building strong, efficient infrastructures

- The entire economy needs reliable, efficient infrastructures in order to remain competitive.
- Transport routes - The main concern is to eliminate bottlenecks on main routes and in important transport hubs.
- Broadband and mobile communications - Efficient, high-speed broadband and mobile coverage are of paramount importance for the SME sector. The infrastructure framework must be quickly put in place to ensure that small and medium-sized enterprises in all regions of the country can equally benefit from the opportunities of digitisation.
- Data infrastructure - Supporting the development of a secure, independent data infrastructure in the country and region which is also to involve cloud service providers from the SME sector.

5. Energy and climate policy

- A secure and affordable supply of energy is a central prerequisite for our economy to run smoothly and remain competitive in the international arena. As the SME sector particularly feels the impact of high energy costs, to continue to take the particular concerns of small and medium-sized enterprises into consideration in all future energy and climate policy measures.

"Commitment to reducing the tax, cost and bureaucratic burden on the SME sector."

Sources: Canadian International Resources and Development Institute, 2018; IGF, 2018, 2018e; Natural Resource Governance Institute, 2017.

Source: https://www.bmwi.de/Redaktion/EN/Publikationen/Mittelstand/german-sme-strategy.pdf?__blob=publicationFile&v=3
The Federal Ministry of Economic Affairs and Energy

SME Strategy – lessons from the Mittelstand

SME Strategy - Strengthening opportunities for SMEs

Creating opportunities for SMEs

SME Strategy - Easing the burden for SMEs

Creating opportunities for SMEs

7. Financing for the SME sector

- **Small and medium-sized enterprises will** continue to need a sufficient supply of credit at reasonable terms and conditions in the future. In this context, SMEs benefit from the well-established triad of private banks, public credit institutions and cooperative banks. Added to this are offerings from the **Kreditanstalt für Wiederaufbau (KfW) – Germany's development bank – and guarantee banks. T**o ensure that SMEs can avail of an effective range of financing options even in times of persistently low interest rates. Closely following discussions at European and national level on sustainable finance, with the aim of ensuring these discussions can work to the advantage of the German Mittelstand.
- **Maintaining the SME Supporting Factor in Basel IV** - To ensure that SMEs continue to have access to loan financing even with the implementation of Basel IV, it is essential to maintain the SME Supporting Factor, which enables easier access for SMEs to loans through capital requirements under Basel III that adequately reflect risk. **To prevent more restrictive lending by banks**, we will press for the continuation of the SME Supporting Factor at national and European level.
- **Continued development and strengthening of financial instruments** - Germany is in a good position with regard to the early-stage financing of innovative start-ups. Continue successful instruments that are designed to help finance business start-ups – such as the **High-tech Start-up Fund, EXIST and INVEST**. Under the **EXIST programme**, we will provide further impetus for the creation of universitybased start-ups with effect from 2020.
- **Our financing models need to be developed further**, particularly with regard to the business growth phase, as businesses often lack sufficient capital when they want to scale up the business quickly in order to be able to compete internationally.
- We are examining the development of **a suitable incentive model** so that institutional investors – such as **insurance companies or foundations** – can play a bigger role in the German venture capital market. Furthermore, to involve long-term private investors in the financing of future-oriented deep-tech projects, which are often very capital intensive.
- The new **KfW funding programme is to offer low-interest loans and "climate grants"** of up to €100 million per year in order to mobilise an investment volume of up to €10 billion in the German SME sector alone over an investment period of three years.
- **Improving the tax framework for venture capital** - To make Germany attractive again at international level for venture capital funds by improving the tax framework for venture capital investments. The exemption of administrative services provided under venture capital funds from turnover tax can make an important contribution towards this goal. Furthermore, it is imperative that Germany maintain the exemption from taxation of gains from the sale of free-float shares. This is crucial to safeguard the financing of future-oriented, innovative businesses and strengthen Germany's position as a centre for venture capital and business angels, as private investors, particularly business angels, give innovative start-ups important early-stage financing, but often only have very limited stakes in the newly established business.

8. Strengthening entrepreneurship

- **Germany needs a stronger entrepreneurial spirit** so that we will continue to drive the German economy in the future on the basis of new businesses with innovative products or services. Furthermore, we must facilitate the access of **SMEs – including start-ups – to public service contracts**.
- **Start-up Campaign** - With the launch of **the "GO!" Start-up Campaign** , working together with the business community to encourage people to enter self-employment and start their own business. Our aim is to reverse the downward trend of new business start-ups. One key aspect of our Start-up Campaign is to increase the appreciation for the contribution that successful business entrepreneurs and their staff make on a daily basis. To make it easier for people to start their own business, we are committed to further reducing the barriers and bureaucratic obstacles to be overcome on the path to self-employment. For this reason, we want to press ahead with digital business establishment and digital start-up financing through channels such as the Business Entrepreneur Platform, for example.
- Women still tend to set up their own business far less frequently than men. With the nationwide **"WOMEN Mean Business" initiative**, to present role models of women-led start-ups to encourage girls and young women to enter self-employment. And with project partners across the country participating in the **"Entrepreneurship in Schools" initiative**, in order to raise entrepreneurial awareness among young people at an early stage.
- **Access to public service contracts** – to put a number of different procurement-related instruments in place that are designed to make it easier for small and medium-sized enterprises – some of which are highly specialised and innovative – to gain access to public service contracts. **Rules such as the requirement to divide contracts into batches that are suitable for SMEs, as well as the possibilities** to take innovative, social or environmental criteria into consideration in the award decision support this objective. To ensure that these possibilities are even better exploited in practice in the future.

II. Attracting, training and skilling specialised workers

- More than six out of ten businesses consider the shortage of skilled labour to be their biggest business risk, with small and medium-sized enterprises particularly feeling the brunt. It is absolutely crucial to support the SME sector in recruiting, training and skilling staff.
- **Skilled Immigration Act** - We need more skilled professionals, **also from abroad**. This not only applies to university graduates but also to skilled workers with a vocational qualification. The Skilled Immigration Act (Fachkräfteeinwanderungsgesetz) is a milestone in skilled labour policy in this legislative term and will make Germany more attractive for international skilled workers. As a result of this Act, it will be easier for international skilled workers with a vocational qualification to gain access to the labour market.
- **Active recruitment of skilled workers** - **"Make it in Germany"** umbrella initiative. This is a task for the Federal Government as a whole, involving actions such as more streamlined visa procedures, faster and more efficient procedures for the recognition of professional qualifications obtained abroad. Further opening up our Market Entry Programme for the recruitment of skilled workers from abroad.
- **Modernising regulations surrounding initial and further training** – The objective is to tap the domestic pool of skilled labour to an even greater extent, make the system of dual vocational training and education more appealing, and underline the equivalence of this qualification to university-based training. Working together with the business community – and with the involvement of the social partners – continuously adapting the training regulations in over 300 professions to the specific needs of business. Modernisation efforts are currently under way, inter alia, for the 19 professions in the construction trade and the four professions in the electrical trade. The same applies for the modernisation and re-adoption of examination regulations to obtain a master-level qualification in a trade/craft, and regulations relating to further training.
- **Reinforcing compulsory master-level qualification** - To strengthen skilled crafts and trades with regard to their ability to innovate, their performance capacity and their importance for the system of dual vocational education and training, we are preparing draft legislation that makes provisions for the reintroduction of compulsory master-level qualification for twelve professions. The reintroduction of compulsory master-level qualification pursues the following objectives: to protect life and health in crafts and trades involving particular risks; to protect cultural assets and intangible cultural heritage; and to guarantee knowledge transfer and knowledge preservation in the crafts and trades concerned.
- Flexible pension - To enable older workers to stay in employment for longer, work to further improve the transition from working life to retirement with the flexible pension.

"Need for a stronger entrepreneurial spirit"

Source: https://www.bmwi.de/Redaktion/EN/Publikationen/Mittelstand/german-sme-strategy.pdf?__blob=publicationFile&v=3
Federal Ministry of Economic Affairs and Energy - Germany

SME Strategy – lessons from the Mittelstand

SME Strategy – Strengthening opportunities for SMEs

Creating opportunities for SMEs

- **Employee equity participation** - Employee equity participation schemes are an important instrument – particularly for businesses in the SME sector – to recruit skilled workers and strengthen their commitment to the company.

III. Supporting SMEs in the areas of innovation and digitisation.

Transfer Initiative –

- Based on the concept of **"from an idea to market success",** this Initiative offers tailored support to SMEs in all stages of the innovation process
- The Central Innovation Programme for SMEs (ZIM) and Cooperative Industrial Research (IGF) – both successful programmes for the promotion of innovation . In the IGF programme, for example innovation could be stimulated further with the targeted involvement of young businesses and even better dissemination of research results.
- **Agency for Break-through Innovations** - bringing revolutionary new ideas to the market. With its innovative approach and freedom to act quickly and flexibly.
- **Tax credit for research and development** - The aim is to generate more research and innovation, and therefore greater competitiveness, particularly in the SME sector.
- **Mittelstand 4.0 Centres of Excellence** - With the nationwide network of 26 Mittelstand 4.0 Centres of Excellence, we are helping SMEs move into the digital age. The Centres of Excellence provide a free, scientifically based range of services that are specifically tailored to SMEs and the skilled crafts and trades sector.
- **"Digital Agency"** - To forge ahead with the networking and digitisation process in all business sectors and regions and to accelerate local broadband roll-out, to concentrate digital expertise within public administration in a "**Digital Agency**".

- **IT security** - IT security is a concern for every business organisation. The "IT Security in Business" initiative supports projects that develop concrete, practical and free support, awareness-building and skills development services for small and medium-sized enterprises.
- **Investment grant programme** - This programme is designed the help SMEs and businesses in the skilled crafts and trades sector with between 3 and 499 employees in two specific modules*: (i) investment in digital technologies, particularly hardware and software, and (ii) investment in the training and skilling of staff in digitisation-related issues.*
- **AI technologies -** Our aim is to make the country and region a leading centre for the development and application of AI technologies.
- **Data economy and the competitive framework** - to strengthen the position of small and medium-sized enterprises competing with larger digital companies and platforms and greatly facilitate collaboration, particularly in the digital field.
- **Quality infrastructure, norms and standards** - We will take action to strengthen and improve our quality infrastructure with regard to innovations and new digital technologies and processes.
- **Regulatory Sandbox Initiative** - strengthening the exchange of information between businesses and the scientific community and administrative bodies in the Regulatory Sandbox Network,

SME Strategy – Easing the burden for SMEs

Creating opportunities for SMEs

IV. Supporting SMEs in the regions

This policy option provides:

- National funding system for structurally weak regions

V. Developing new markets in Germany and abroad

- Helping SMEs to tap into new markets both in Germany and abroad.
- **Industrial Strategy in country and region** - The central action areas of the Strategy concentrate on improving the policy environment, strengthening key enabling technologies and maintaining technological sovereignty. The focus includes efficient network and cluster structures and the faster transfer of research findings to small and medium-sized enterprises.
- **A level playing field** – Together with the regional bodies (EU) to advocate global rules to create a level playing field for all exporting nations. At regional level (EU), our goal is to improve the actual use of preferential trade agreements among small and medium-sized enterprises (e.g AfCFTA), and increase the rate of utilisation by the SME sector to at least 85 per cent over the medium term. Create with the regional Market Access Partnerships.
- **Promotion of foreign trade** – Continuously adapt our institutions and instruments for the promotion of foreign trade.
- **Business networks** – With the Africa Business Network, we will be providing a new package of measures to deliver targeted support to German businesses expanding into up-and-coming African markets. In order to specifically support the internationalisation activities of start-ups and young businesses, we intend to expand the country Accelerator Programme further, particularly in Asia.

VI. Committee of State Secretaries for the SME Sector

- SME policy is a cross-cutting issue that requires a concerted effort from the entire Government. For this reason, to set up a "Committee of State Secretaries for the SME Sector," which will examine the plans and initiatives of all government departments for their compatibility with the needs of the SME sector. The improvement of the competitiveness of country's small and medium-sized enterprises must serve as the guiding principle for economic policy decisions within the Federal Government.

"From an idea to market success"

"Centres of Excellence"

Source: https://www.bmwi.de/Redaktion/EN/Publikationen/Mittelstand/german-sme-strategy.pdf?__blob=publicationFile&v=3
Federal Ministry of Economic Affairs and Energy - Germany

Zambia: Top-Down Vs Bottom-Up SME Strategy

Top Down - Why State Enterprise has been failing

The early years

TOP-DOWN SME strategies

- **This sections interrogates state efforts to try and grow the small to medium sized enterprises in Zambia. It would have been expected that from these efforts and SOEs a number of entrepreneurs would have emerged to scale up the SME sector. As you will see these efforts primarily failed due to the Top – Down approach successive governments have used, spoon feeding SMEs rather than stimulating growth from the ground, effects of policies pre 1964, effects of Humanism and labour code on stifling SME development. A paradigm shift from top-down to bottom-up is urgently needed to rapidly scale up SMEs in Zambia.**

Pre 1964 events that impacted SME scaling in Zambia

- In 1889 the British government granted a charter to Rhodes's **British South Africa Company (BSAC)**, bestowing powers of administration and enabling it to stake claims to African territory at the expense of other European powers.
- **The unique butterfly shape of Zambia resulted from agreements in the 1890s between Britain and Germany, Portugal, and the Belgian king Leopold II**, and these in turn rested on treaties, mostly stereotyped in form, between Rhodes's agents and African chiefs.
- At first the BSAC administered its territory north of the Zambezi in two parts, North-Eastern and North-Western Rhodesia.
- In 1911 these were united to form Northern Rhodesia, with its capital at Livingstone, near Victoria Falls.
- The BSAC regarded the country chiefly as a source of labour for gold and coal mines in Southern Rhodesia and for the copper mines in Katanga, in the Belgian Congo, which in 1910 were linked by rail to Southern Rhodesia and the east-coast port of Beira, Mozambique.
- World War I broke out and boosted the demand for base metals from Northern Rhodesia as well as Katanga.
- The Bwana Mkubwa mine exported copper from 1916 to 1918, and from 1917 to 1925 the country's main export was lead from Broken Hill (now Kabwe).
- BSAC gave up the increasingly costly burden of administering Northern Rhodesia and in 1924 handed over this responsibility to the Colonial Office in London.
- By 1930 it was clear that copper was the country's most-promising resource. Huge deposits had been located far beneath the headwaters of the Kafue and were mined by companies mostly financed from South Africa, through the **Anglo American Corporation**, and the **United States**, through the **Rhodesian Selection Trust**.
- In 1930–31 prices for copper collapsed, partly as a result of the worldwide depression. However, the new mines enjoyed a comparative advantage, since they worked high-grade ores at relatively low cost.
- From 1935 copper prices rose sharply, and by 1938 Northern Rhodesia contributed a substantial amount to the world's total output of copper. Yet copper exports did not confer much prosperity.
- The **mineral rights** were owned by the **BSAC,** which duly exacted royalties. Taxation was levied on what profits remained, but half was retained by the British government, which made only tiny grants for economic development.
- **When World War II broke out in 1939**, Britain contracted to buy the whole output of the Copperbelt. British dependence on undisturbed copper production meant that white mine workers were allowed to maintain an industrial colour bar.
- Copper prices had risen steeply following **sterling devaluation in 1949** and the outbreak of **war in Korea in 1950.** The mining companies finally began to pay regular dividends, while the Northern Rhodesian government received a share of royalties.

For 75 years from 1889 – 1964 saw blocked paths and stifling of opportunities for growth of SMEs in Zambia

Top Down - Why State Enterprise has been failing

Role of State Enterprises in stimulating private sector development

- In 1956, however, the copper boom came to an end. Whites in Northern Rhodesia became increasingly aware of how far the **federal tax system channelled copper profits into Southern Rhodesia**.
- The manufacturing industry was poorly developed before independence, as most investment in this sector during the federal period was made in what is now Zimbabwe.
- To the north the line was linked with the Benguela Railway in 1931, giving access to the Angolan port of Lobito. Benguela was an essential, cheaper route for Zambian copper exports and machinery imports, which after closure suffered long and often expensive rail and road routes from South Africa through Zimbabwe or Botswana. The strategic Benguela Railroad, which began in Zaire's mineral-rich Shaba Province and ended in the Angolan port of Lobito on the Atlantic Ocean has been shut down since August 1975. After UDI much of the traffic was diverted to the Benguela Railway before civil war in Angola closed that route. Before closure, Zambia and Zaire used the line for about 50 percent of their trade. Today the rail line could service chiefly the Kansanshi and Lumwana copper, cobalt and gold mines in Zambia's North Western Province..

State Enterprise interventions in stimulating SMEs in Zambia and why this strategy failed

1. Industrial Development Corporation: INDECO

- In 1964 the government acquired the mineral rights of the BSAC, and thereafter it also increased mining taxation.
- Public investment in Zambia can be traced from its independence in 1964. Having inherited a market economy, public investment was limited to a few State-owned companies and statutory bodies. These included utility industries, such as in agricultural finance, railway, electricity, an Industrial Development Corporation (INDECO), and marketing boards (Republic of Zambia, 1966a).
- Through INDECO, the growth in public investment was mainly in those sectors, which were basic to the economy, and which constituted the domestic monopolies, or which demanded higher investment of resources than the private sector could afford (Republic of Zambia, 1966b).
- The rise to economic dominance of public investment has mainly occurred through the takeover of foreign-owned firms that happened between 1968 and 1970. These takeovers took place in two parts: **the 1968 Mulungushi; and the 1969 Matero reforms**.
- Through the Mulungushi reforms, the government nationalised the privately owned enterprises involved in different activities. These included: brewing, wholesaling and retailing, as well as the supply and manufacture of building materials (Kaunda, 1968).
- The Matero reforms that followed in1969 were more far-reaching than those of the Mulungushi. Here, privately owned enterprises in the mining sector were nationalised. The State took a controlling stake in the mining sector, which was dominated by foreign private enterprises.
- The nationalisation programme in the agricultural sector was, however, somewhat less successful. The privately owned farms were still dominant – even in the aftermath of the nationalisation of some farms. The government still continued to depend on the expatriate privately owned commercial farms for the much-needed national food security (Republic of Zambia, 1979).

Sub-Holding Company	Share of Aggregate Group Net Assets before Consolidation in percentages
INDECO	19.7
MINDECO	78
FINDECO	0.5
National Transport Corporation	1.3
National Hotel Corporation	0.5

Zambia: Top-Down Vs Bottom-Up SME Strategy

Top Down - Why State Enterprise has been failing

Performance of State Enterprises: ZIMCO

- By 1970s, the parastatal sector was dominant in all the economic activities. INDECO's assets, the government SOE holding corporation, grew from K49.9 million in 1966 to K 1 billion by 1979. INDECO helped generate new ventures, including plants for manufacturing vehicles, chemical fertilizer, glass bottles, and copper wire. It later launched a K300 million (US$6.5 million) expansion of its fertilizer plant, Nitrogen Chemicals of Zambia, the largest project undertaken by ZIMCO outside of the mining arena.
- Between 1973 and 1979, the parastatal sector contributed more than 50 per cent of growth; and it employed a third of the formal labour market (ZIMCO, 1985).

2. Zambian Industrial and Mining Corporation (ZIMCO)

- To oversee the growing parastatal sector, the Zambian Industrial and Mining Corporation (ZIMCO) was formed in 1970, taking over from INDECO. This meant that ZIMCO became a holding corporation with sub-holding companies, namely: INDECO; the Mining-Development Corporation (MINDECO); and the Financial-Development Corporation (FINDECO). Each sub-holding company was responsible for the portfolios in any given sector. The focus of MINDECO was on the group's mining assets.
- INDECO's role was expanded into wholesaling and retailing. FINDECO held assets in the financial sector. ZIMCO became the biggest corporation in Zambia (ZIMCO, 1985).
- As seen MINDECO had the largest share of all ZIMCO assets. **This mirrored the centrality of copper mines to the Zambian economy. And this also implied that more than 75% of ZIMCO's assets were formed through takeovers, rather than through the creation of new enterprises** (ZIMCO, various issues).
- **A look at the financial performance of ZIMCO over from 1971 to 1989**

Period	Average Profit Margin After Tax (in percentage)
1971-74	16.37
1975-78	2.83
1979-82	2.03
1983-86	-1.68
1987-89	2.1

Source: calculated from ZIMCO Annual reports (various issues); The Republic of Zambia (Report of the Auditor-General on the accounts of parastatal bodies, 1988).

- More like todays economic performance, the financial performance of ZIMCO reflected copper mining business performance, largest portfolio in ZIMCO.
- Due to booming copper prices ZIMCO recorded the highest profit of 16.37% during the 1971-74 periods. The profits made in the mining sector were re-invested in various non-mining sector SOEs.
- With the burst of the world copper price bubble in the mid-1970s copper mines' profits dived to negative yields in the 1980s, which resulted in the Zambian economic crisis that followed (ZIMCO, 1990).
- The dissatisfaction with the public investment leadership economic model, following the 1980s ZIMCO financial losses obliged the State to revert to the market-economy model.
- The latter part of the 1980s brought other encouraging signs for ZIMCO. In mid-1987, copper prices began to rise again and hit a record high of £2,000 (US$1,052) a ton on the London Metal Exchange in 1988. For the first time since it was formed, ZCCM in mid-1989 announced a dividend for that financial year. In the following year, the company showed a record net profit of K2.6 billion (US$56.5 million). Copper prices took a further downward turn in 1991, once again underscoring the unpredictability of the market. Yet even if prices were to stabilize at a high rate, an economic recovery seemed unlikely.

1991-2001 Economic Reforms:

- Economic progress was limited and hampered by a variety of factors.

Top Down - Why State Enterprise has been failing

Dutch Disease, Humanism, leadership Code, Hand outs

Private Investment Enhancement Policies in Zambia: 2000-2011

- Following privatisation of the SOEs, the Zambian government implemented the Private Sector Development Reform Programme (PSDRP) in 2004, in order to accelerate private sector-led economic growth (Republic of Zambia, 2004).
- The principal aim of the PSDRP was to establish a favourable and competitive climate that would enable the private enterprises to flourish. Its goal was to create an impetus for a faster sustainable economic growth, led by the private sector through establishing an 'easy-to-do' business environment in Zambia. It was anchored on six reform pillars, which were: (a) To improve the policy environment and institutions that serve the private sector; (b) to implement regulations and legal policies; (c) business facilitation and economic diversification; (d) trade expansion; (e) citizens' economic empowerment; and (f) infrastructural development (The Republic of Zambia, 2006).
- **While Zambia has moved from state led economic model to private sector economic model, SME growth is still constrained.**

Hand Outs

- **An expectation that the government will provide everything is one outcome of this top-down approach. An expectation of government intervention as opposed to enterprising. What is perceived by others as spoon feeding SMEs rather than cultivating them for scale.**
- **There is need to investigate our approach to social cash transfers and farmer input support programs whether we have been achieving the objectives. These mechanisms applied wrongly particularly during electioneering periods provide wrong expectations.**
- **There should be very high expectation felt by individuals to start a business rather than to get employed or wait for the government to create infrastructures.**

Dutch Disease

- Dutch disease is an economic term for the negative consequences that can arise from a spike in the value of a nation's currency primarily associated with the new discovery or exploitation of a valuable natural resource and the unexpected repercussions that such a discovery can have on the overall economy of a nation. It is too easy to get FX from the mining sector. This negatively affects development in agriculture and other sector. Paradox of our subterranean capital (copper). This has limited diversification into other areas.
- It is too easy to get revenue from the mines, too easy. Most of the FDI has been directed towards the mines.
- From nationalisation in the 1960s agriculture has not been successful.
- There is urgent need to practically diversify into other industries. Diversification is in all policy documents except progress has never been made.
- Zambia the world's single most copper-export dependent country in the world. (UNIDO).

"57 years of Top – Down approach to developing SMEs and private enterprise in Zambia, 1964 - 2020"

"Dutch Disease – a paradox of our subterranean capital"

Top-Down Vs Bottom-Up SME Strategy: Industrialisation

The State of Industrialisation in Zambia	Industrialisation status
Key sectors	Performance of the industry

INDUSTRIALISATION IN ZAMBIA

- **A 2020 Industrial diagnostic study done by the United Nations Industrial Development Organisation (UNIDO) study gives a comprehensive but succinct report on the state of industrialisation in Zambia. The study received input from the following institutions: Ministry of Commerce, Trade and Industry (MCTI), the Zambia Statistics Agency (ZamStats), the Zambia Micro and Small Traders Foundation (ZAMAST), the Zambia Chamber of Commerce and Industry (ZACCI), the Zambia Association of Manufacturers (ZAM), the Zambia Institute for Policy Analysis and Research (ZIPAR), the Zambia Development Agency, the Ministry of National Development Planning and the UNECA South Africa regional office. We look at the key take aways from the study.**
- As the analysis is based on the country's industrialization objectives and priorities, the diagnostic framework was developed following the scrutiny of key development strategies and policies, including but not limited to the National Industrial Policy (2018), the 7th National Development Plan and the Vision 2030.

Vision 2030

- Zambia's ambition is to transition from being a lower middle-income (LMI) country to an industrialized middle-income nation by 2030.
- The findings of this study confirm that Zambia, being a heavily resource-based economy, would benefit from further development of value chains to effectively transform raw materials into processed goods.

Performance

- Zambia's average GDP and MVA growth rates between 2010 and 2018 were 4.6% and 5.5% respectively . While GDP growth was on par with that of LMI countries' average, its manufacturing sector production grew significantly faster.
- The Vision 2030 aimed at having economic growth rates of between 6% and 10% on average, while the 7th National Development Plan had a target growth rate of 10.6% for MVA to be met by 2021 and the industrial policy aimed at an MVA growth rate of 20% on average by 2027.
- While economic growth since 2010 has led to a reduction of poverty (the share of population living with less than 1.9 USD PPP per day declined from 64.4% to 57.5% between 2010 and 2015), the poverty rate is higher than the 2002 level (49.4%) and exceeds by far LMI countries' average of 12.3%.
- In addition to issues around copper dependency, climate change resulted in lower crop harvest in the recent years hurting agriculture and agro-processing and in electricity shortages (World Bank, 2018).
- Efforts have been limited by fiscal challenges (revenue is strongly dependent on copper) and large external debts (ZIPAR, 2020).
- Zambia's manufacturing sector accounted for 8.1% of GDP in 2018. This is half the LMI average of 16%. While there was a slight increase from the 7.6% in 2010, this was a result of minor waves of change, with no systematic increase in manufacturing contribution to the economy over the last decade. In fact, the share of manufacturing in GDP during the 1990's and early 2000's was 10 % on average, indicating that there has been a contraction over the longer period.
- There was an evident decline in the contribution of agriculture to GDP from 16% in 2000 to 2.6% in 2018. This decline was mostly absorbed by the non-manufacturing industrial sector which includes mining (where the share to GDP almost doubled),5 and to a lesser extent by the service sector (+5%).

Mining

- The industrial sector excluding manufacturing – that is, mining and quarrying, construction and utilities – made up 28% of GDP in the last year reported, which is more than three times the extent of manufacturing.
- The country the world's single most copper-export dependent country in the world.
- Large foreign investments into the sector have resulted in concentrated economic activity
- While copper and cobalt account for roughly 70-80% of Zambia's exports, it only contributes to 8.3% of formal employment, therefore paving a non-inclusive growth path for the country.
- The nationalisation programme in the agricultural sector was, however, somewhat less successful. The privately owned farms were still dominant – even in the aftermath of the nationalisation of some farms. The government still continued to depend on the expatriate

Agriculture

- Although the agricultural sector only contributes to a small share of the economy's output, it employs 54% of all persons employed.
- Zambia increased its spending on agricultural development from under 2% of its total budget in 2000 to 10% in 2010, in line with its commitment to the Malabo declaration of 2015 (African Union, 2018).
- The country offers very favorable conditions for agricultural production, with large areas of (untapped) fertile land, conducive weather and large water resources. Regardless, agricultural production has declined over the years.
- The sector has a dualistic structure, with relatively efficient medium-sized commercial farmers on the one hand and small-holder subsistence farmers making about 75% of agricultural population on the other hand.
- The commercial farmers experienced improvements in their incomes since the early 2000's while the small-holder farmers struggled.
- Commercial farmers were unable to meet their export potentials due to an overvalued Kwacha and the high cost of doing business (World Bank, 2018). Additionally, the erratic rainfalls and other climatic volatilities negatively affected yields in the sector.
- As discussed earlier, Kaunda targeted agriculture early on as one of the primary areas in which ZIMCO was to expand. ZIMCO ventures into agriculture had yielded poor results. The government still continued to depend on the expatriate privately owned commercial farms for the much-needed national food security (Republic of Zambia, 1979).
- There has been lack of success despite the government's commitment to develop the sector.

Service sector

- The service sector accounts for just over half of GDP and has had a very mild increase in its share since the start of the 2000's.
- The main economic activities within the sector are wholesale and retail, tourism, real estate and information/communication.

> **"Zambia the world's single most copper-export dependent country in the world." (UNIDO)**

Source: Industrial Diagnostic Study Zambia 2020
https://www.unido.org/sites/default/files/files/2020-10/PCP%20Zambia_Industrial%20Diagnostic%20Study%202020.pdf

Top-Down Vs Bottom-Up SME Strategy: Industrialisation

The State of Industrialisation in Zambia	Industrialisation status
Key sectors	Performance of the industry

Labour productivity in manufacturing

- Labour productivity in manufacturing, that is the value added produced per worker, stood at roughly 10,500 constant USD in 2017, which is significantly below that of Egypt, Thailand, South Africa and Malaysia.
- There has been a 5.4% annual growth since 2012, which allowed Zambia to surpass the average of LMI countries, which remained rather constant throughout the years at roughly 9,600 USD.
- Zambia's labour productivity in manufacturing is higher than that in agriculture (624 USD) and the service sector (6,830 USD) although lower than the industrial sector in total (i.e. including mining, construction and utilities), which was 12,890 USD in 2017.
- Labour productivity in both agriculture and services has declined since 2012 illustrating their lack of competitiveness.

Export competitiveness

- Zambia embarked on an export-oriented industrialization strategy at the beginning of the 2000's, making use of the fact that it shares a border with eight countries.
- Total exports have been increasing significantly since the early 2000s, on average at around 16 % per annum, despite a sharp drop between 2013 and 2016.
- In 2018 a mere 16% of exports stem from the manufacturing sector, in contrast to 59% for the average LMI country group.
- The manufactured export values of Zambia in 2010 and 2018 were almost equal to one another, although the country experienced a sharp increase until 2013 followed by a drop back to 2008-2010 values in 2015, with little change afterwards.
- The lack of growth of manufactured exports in a period where total exports did increase resulted in the share of manufactured exports in total exports to decline. This indicates a loss of competitiveness of the country's manufactured goods in global trade.
- The country's objective of diversifying away from copper into the export of value-added products is highlighted in all current related development plans. The Vision 2030, for example, states that it aims to "Increase manufactures exports as a share of merchandise exports to 71 percent by 2030." The vision of Zambia's Trade Policy is to "Make Zambia a net exporter of value added goods and services through competitiveness at the domestic, regional and global level."
- The National Export Strategy (NEST) 2018 has a vision of "A structurally transformed, diversified and competitive export sector anchoring Zambia's socio-economic development." (NEST, 2018, p. 2) and has corresponding objectives.

Diversification

- Zambia relies heavily on a very small number of export products, with the top five products contributing to 82% of total exports in 2018 . Copper (both refined and unrefined) makes up for 70% - 80% of total exports and copper ores for another 3%.
- Manufactured exports are only somewhat more diversified. The top five most exported manufactured goods by Zambia (Elementes/oxides/hal salt, base metal mnf., other mineral manufactures, lime/cement and sugar/mollasses) jointly account for 49% of all manufactured exports.

Sophistication and innovation

- Zambia is still largely focusing on developing light manufacturing sectors such as food processing and textiles which are of paramount importance for job creation and inclusive growth.
- Its long-term competitiveness will also depend on the extent to which it can develop more sophisticated sectors and be competitive in exporting them.

- About 27% of Zambia's manufactured exports were considered to be medium and high-tech in 2018. This is a very similar level to LMI (Low to medium Income countries) average. In terms of production, however, 9% of MVA (Manufactured Value Added) derived from such technology-intensive products, which is half the share LMI countries had on average. It indicates that some of the exports of this type were likely to be re-exports or that little Zambian value addition went into the exports of these products.
- Malaysia can be seen as a role model, not only for having had the highest shares of medium and high-tech but also for having continued to enlarge these over the years.
- **The number of patent applications made by residents in Zambia and its comparator countries. While the numbers in Zambia were still low, the country had 12 applications in 2017 compared to three applications six years earlier. In comparison, Botswana reported 3 in 2017, Nigeria 100, South Africa over 700 and Malaysia roughly 1,170.**

Participation in global value chains

- **Global value chain (GVC) participation can be measured as the sum of forward linkages (that is, the domestic value added that flows into other countries' exports) and backward linkages (the foreign value added in the exports of the country of interest).**
- 34% of Zambia's exports were value added created in Zambia that flowed into the exports of other countries. This was more than in Malaysia and not far from the forward linkages that South Africa and Egypt have. However, the majority of this were derived from either non-manufacturing or low-tech manufacturing sectors, as was found in UNIDO (2015). This is in line with previous findings in this study, particularly considering 75% of exports were copper (both refined and unrefined). 12% of Zambia's exports stemmed from value added created abroad (foreign value added).
- The low share of foreign value added combined with a higher share of domestic value added in other countries' exports further indicates that Zambia still operated in the upstream segment of global value chains, which is common among countries that rely on their extractive sectors or commodity exports (Banga, 2013).

Regional markets for exports

- The Government of Zambia has identified both SADC and COMESA as important trading partners and markets to expand to. Both markets are indeed increasingly important for the country, with COMESA receiving 15% of Zambia's exports in 2018, while SADC received 20%.
- While the share of manufactured goods in total exports for Zambia was 16% in general , the share was 62% when considering Zambia's exports to SADC only and 78% of its exports to COMESA only. Zambia's market shares in both regional economic communities have in fact been slightly contracting.

Investment - FDI

- Foreign direct investment net inflows have been strongly fluctuating in Zambia. The target stated in the 7th National Development Plan, where this is a Key Performance Indicator, was set to 3,554 million USD which is far from the 408 million USD observed in 2018. Zambia's FDI net inflows as a share of GDP were 8.5% in 2010 and dropping to 1.5% in 2018. Although a number of countries have also seen inward investments decline in recent years, the average share of FDI inflows for LMI countries was 3.8% of GDP which is more than twice the Zambian share.
- Foreign investments into Zambia are concentrated in the mining and particularly copper industry and the global copper prices strongly affect the trends of inward investments into the country. The decline in FDI in 2017/2018 is due to a sharp drop in investment into mining as a result of a lack of new projects in the sector

Source: Industrial Diagnostic Study Zambia 2020

Bottom-Up SME strategies

Why we need a Bottom-Up approach to SME development	Bottom Up -People, Meritocracy, Pragmatism and Transparency (Honesty) ›
Role of private Enterprises in stimulating private sector development ›	Building from the ground up ›

BOTTOM-UP SME strategies

- **This approach requires going to the ground where the success stories are as well as the failure stories are happening. Investigating the constraints, challenges, bottlenecks being faced on the ground for different cases. Why certain things failed and why other things succeeded. It will take scale, sustained efforts and considerable time to bring the sector where it needs to be. With the above lessons we have put together measures that need to be pursued. There are 4 principles that anchor these bottom-up policies and measures. The pillars underpin all other interventions:**

The Four Principles

- **1. People and Culture** – "If as one people speaking the same language they have begun to do this, then nothing they plan to do will be impossible for them." The people's deep desire to achieve and build solutions coupled with a strong expectation to start companies rather than 'get a job'. All other measures depend on this one principle.
- **2. Meritocracy –** people thrive on the basis of talent, effort, and achievement, rather than social class.
- **3. Pragmatism –** people must do things rather than theorise
- **4. Honesty –** fairness, freedom from deceit and fraud.

I. The policy environment

1. Very quality policy implementation (effectiveness of the interventions and quality of the coordination process) will be crucial to steer the industrialization process towards the desired direction.
2. Evidence based industrial policy process to ensure it drives the country's industrialization trajectory.
3. Stronger tax incentives for private investment, growth and employment
4. Reduce bureaucracy for businesses.
5. Local Content development policies - procurement

- Any planned Local Content development regulation or mining procurement policy must include key specifics discussed earlier.
- Using mining as a springboard for broader industrial development.

6. Interests of SMEs at SADC & COMESA level

- At **SADC** and **COMESA** level advocate for the creation of a new political framework for SMEs and utilisation of the Africa Continental Free Trade Area (**AfCFTA**)
- Drive **"Think Small First"** principle in all **SADC** and **COMESA** initiatives.
- "One in, One Out" principle – Additional regulations should not impose an administrative burden on SMEs.

7. Developing and building strong, efficient infrastructures

- Create accessibility to historical and geological information for junior mining for exploration.
- Create a clear rule of sovereign law and the prospecting licence application process which has clear rules and regulations,
- Create more awareness on how to conduct bankable feasibility studies and streamline the process.
- **Joint Ventures** – promote joint venture approach to mining and exploration
- Develop and fully integrate the mineral sector development plan into national development plans. If it is there fully articulate and monitor progress.
- **Develop both the market for raising the capital and the junior minerals sector itself**. The **Stock Exchange was born to serve the primary capital requirements** of the mining, manufacturing and other industries. The industries are decoupled from our public markets (Stock Exchange). There is need to complement efforts in the Capital Markets Development plan. We need to relook the value of a stock exchange to a society, which should be the raising primary capital for economy, primarily the priority sectors.
- Ask foreign listed mining company with operations to apply for a low-cost, fast-tracked, secondary listing on a local markets resulting some level of interest and excitement in the short term and positive momentum going.
- **Explore ways of encouraging retail participation on the local markets**. One quick way, without incurring the cost is to allow individual investors to manage their own tax-free savings accounts, and perhaps a capped portion of their own retirement annuity, in a ring-fenced stock broking account. In a similar way to which Australians can self-manage a portion of their Superannuation Funds (a Retirement Annuity equivalent).
- Build capacity, strengthen skills at **Mineral Value Chain Monitoring Project (MVCMP) and Mineral Output Statistical Evaluation System (MOSES),** the **Mineral Production Monitoring Support Project (MPMSP),** based at the Ministry of Mines and Mineral Development (MMMD), which aims to support tax collection through effective regulation and monitoring of mineral production.
- **Establish a standalone small scale mining policy**
- Investing heavily in agricultural infrastructure and support services, connecting farmers to domestic or regional value chains, investing in **research and development (R&D**).
- To reduce cause for serious concern for investors and positively impacting investments in the country by simplifying Environmental Impact Assessments and other processes and costs to attract FDI.
- **Transport routes** – At regional level drive the linkage for example of our rail network to Benguela Rail in Angola to open up new markets and cheaper routes for North-Western hub to the Angolan port of Lobito on the Atlantic ocean. Before closure, Zambia and Zaire used the line for about 50 percent of their trade. Objective is to eliminate bottlenecks on main routes and in important transport hubs.
- Broadband and mobile communications - Efficient, high-speed broadband and mobile coverage for SMEs in all regions of the country and education places.
- Data infrastructure - We support the development of a cheap, secure, independent data infrastructure in Zambia.

8. Energy and climate policy

- Affordable supply of energy to the SME sector with consideration for climate policy measures.
- The energy sector can benefit from further support to diversify energy sources, to guarantee a more consistent energy supply required for an effective industrialization process and to encourage an efficient consumption of energy

"WOMEN Mean Business"

9. Financing for the SME sector

- Create a Sovereign fund to keep a portion of the revenue from the mines.
- Institute a private savings rule so that a portion of revenue from mines is saved internally for reinvestment.
- Work to reduce geopolitical risks in Zambia to attract, early-stage investors may come to the country.
- A sufficient supply of credit at reasonable terms and conditions having low interest rates.
- To prevent restrictive lending by banks, we will press for the continuation of the SME. Drive this agenda at SADC and COMESA level.
- Development and strengthening of financial instruments that are designed to help finance business start-ups .
- Provide scale up capital.
- Developing a suitable incentive model so that institutional investors – such as pension funds, insurance companies or foundations – can play a bigger role in the venture capital market.
- Involve long-term private investors in the financing of future-oriented projects, which are often very capital intensive.
- Mobilise low-interest loans and "climate grants" for SMEs.
- Improving the tax framework for VCs - To make Zambia attractive for venture capital investments. This is very important to safeguard the financing of future-oriented, innovative businesses.

10. Strengthening entrepreneurship –

- Create a climate that as a Zambian you are expected to start a business. Right now expectation is to get a job in formal employment. Zambia needs a stronger entrepreneurial spirit in order to grow the economy. Provide access for SMEs – including start-ups – to public service contracts.
- **Start-up Campaign –** As discussed above very little progress has been made in the SME sector and hence few examples. With the launch of the **"GO!" Start-up Campaign** for example to encourage people to enter self-employment and start their own business. Increase the appreciation for the contribution that successful business entrepreneurs and their staff make on a daily basis. Right now expectation is to get a job in formal employment. Zambia needs a stronger entrepreneurial spirit in order to grow the economy. Provide access for SMEs – including start-ups – **to public service contracts**.
- To promote manufacturing sector and in manufacturing-related activities, with a particular focus on developing **labour-intensive manufacturing sectors** such as food processing, textiles and leather products by developing clusters and increasing effectiveness of existing industrial parks and Multi-Facility Economic Zones.
- Encourage women to set up businesses with initiatives such as **"WOMEN Mean Business".**
- **"Entrepreneurship in Schools" initiatives,** we want to raise entrepreneurial awareness among young people at an early stage.
- Drive initiatives such as "Business Succession – Lessons from Practice for Application in Practice", such as discussions on best practice, successor facilitators or coaches and networks of commerce-related organizations.
- Access to public service contracts – VERY important, for SMEs Rules such as the requirement to divide contracts into batches that are suitable for SMEs, as well as the possibilities. To ensure these possibilities are even better exploited in practice in the future.

II. Attracting, training and skilling specialised workers

- Drive structural transformation towards more sophisticated and technological intensive sectors will be necessary for long-term industrial competitiveness. This will be made possible, in part, by upgrading the current labour skills.
- For skills development, focus on: 1) Skills for entrepreneurship and employment, and more importantly 2) Industrial skills for innovation.
- Value Addition on primary commodities with an emphasis on skills (technology) development.
- The 7th National Development Plan points to diversification within the mining sector, such as into gold and minerals including gemstones, value addition of these and the development of mining value chains would be viable means to achieve more stable and inclusive economic growth. Providing skilling to enable and support small companies in this sector.
- Drive competitiveness and innovation in the small-holder subsistence farmers making about 75% of agricultural population through evidence based policies and effective implementation. Embark on an agricultural-led industrialization trajectory given Zambia's natural endowments in order to exploit increased national and regional demands for agricultural products (as a result of a growing middle-class).
- Drive higher productivity in the agricultural sector and value addition of the agricultural products to increase incomes and reduce the risks of undesired shocks, such as price and climatic changes.
- it is absolutely crucial to support the SME sector in recruiting, training and skilling staff.
- Skilled Immigration Act - We need more skilled professionals, also from abroad to transfer critical skills into the local SME sector.
- Promoting and modernising regulations surrounding initial and further training – make dual vocational training and education more appealing.
- Consider reinforcing to an extent compulsory master-level qualification - To strengthen skilled crafts and trades with regard to their ability to innovate. This pursues the following objectives: to protect life and health in crafts and trades involving particular risks; to protect cultural assets and intangible cultural heritage; and to guarantee knowledge transfer and knowledge preservation in the crafts and trades concerned. The Act is due to enter into force at the start of 2020.
- Support employee equity participation initiatives - Employee equity participation schemes are an important instrument – particularly for businesses in the SME sector – to recruit skilled workers and strengthen their commitment to the company
-

"The Stock Exchange was born to serve primary industry capital requirements"

Bottom-Up SME strategies

Why we need a Bottom-Up approach to SME development ›	People, Meritocracy, Pragmatism and Transparency ›
Building from the ground up ›	Building from the ground up ›

III. Supporting SMEs in the areas of innovation and digitisation

- **To improve the competitiveness of the SME sector by driving innovation and digitisation. The development of new products, processes and services on the basis of innovative cross-cutting and game-changing technologies, such as advanced industrial processes, biotech, as well as other digital innovations that require investment in technological and organisational know-how and a high level of capital**
- **Developing SMEs that are fit for future challenges and adapt quickly to new market conditions and opportunities.**

1. Centres of Excellence

- As global competition continues to increase, industries are becoming increasingly competitive.
- The Centres of Excellence should be founded by separate consortiums such as Universities, research institutions, frontier institutions and transfer partners such as Zambia Chamber of Commerce Trade and Industry (ZACCI), Zambia Association of Manufacturers (ZAM), Zambia Development Agency (ZDA) to be cross-sector and cross-thematic industrialisation ecosystems supporting knowledge and technology transfer to SMEs.
- The Centres of Excellence should provide free demonstration plants and networks with representatives of the complete value chain, practically supporting SMEs to view, test and develop their own Industry solutions, available free of charge.
- The main objective of the centres of excellence is not to do research and innovation but to transfer knowledge on innovations to small and medium enterprises.
- The Centres of Excellence should have access to the latest innovations on the one hand and know-howto address the special needs of SME on the other hand.
- This will provide a mix between frontier research and technology transfer expertise
- Create project incubators, which explores areas including funding. Junior incubators or junior mining clubs. Accessible to early-stage greenfield project developers
- Increase support given to smaller Minerals companies. In instances were geological, operational and other input is required.
- The Supply Chain Development (SCD) programmes that seeks to improve the competitiveness of local SMEs operating in the oil and gas sector. The programme develops capacities of SMEs in the areas of procurement best practices, information technology, and quality management.
- boosting investment promotion will fortify growth in the manufacturing and related sectors, which is particularly salient with the declining share of FDI in GDP between 2010 and 2018.
- Focus on the four intervention areas under the value addition: 1) Value chain development; 2) Investment promotion for economic diversification; 3) Sustainable production processes; and 4) Clean and affordable energy.
- Support SMEs to eliminate key bottlenecks to manufacturing firms' operations as shown through the analysis of micro-data from the World Bank Enterprise Surveys (2019 and 2013) and the World Bank Innovation Surveys (2013) for Zambia and comparator countries.
- "Digital Agency" - strengthen its digital expertise at an institutional level.
- IT security - The "IT Security in Business" initiative to support projects that develop concrete, practical and free support, awareness-building and skills development services for small and medium-sized enterprises.
- Investment grant programme - This programme is designed the help SMEs and businesses in the skilled crafts and trades sector to: (i) investment in digital technologies, particularly hardware and software, and (ii) investment in the training and skilling of staff in digitisation-related issues.
- competitive framework - strengthen the position of small and medium-sized enterprises competing with larger digital companies and platforms and greatly facilitate collaboration.
- Regulatory Sandbox Initiative - helping SMEs to test and implement their innovative business models and technologies. The Securities and Exchange Commission has been spearheading this agenda. This has to be complemented with efforts from other institutions for maximum SME impact. To strengthen the exchange of information between businesses and the scientific community and administrative bodies in the Regulatory Sandbox Network, and provide practical information and best practice examples.

IV. Supporting SMEs in the regions

- In order to create equal living conditions across all parts of Zambia there's need for a strong SME sector with deep regional ties that safeguards and creates income and jobs in the local area.
- Zambia ambition to become the next ICT hub of the region (7th NDP, 2007) still experiences limitations with broadband infrastructure. There is need to improve on crucial services that will not only support the large manufacturing firms and create jobs in the service sector but will also ensure rural populations are better connected and will be able to participate more substantially in the economy.
- For Zambia's economy to fully benefit from participating in mining (or other) GVCs, there is need to engage in further value addition of goods before exporting in an economic sense. Creating a system in which SMEs act as key suppliers to the mining (and other) industry can be key in changing this situation. Support SMEs overcome the strict requirements for participating directly in GVCs. These include complying to quality standards and ensuring consistency in quantity and quality, which require sound managerial competencies, sufficient market information and adequate infrastructure, to name a few (Kanyinji & Tembo, 2019a). Supporting SMEs in obtaining such capabilities and reaching such standards will allow them to participate more substantially to economic growth.
- Building the Improvement of Regional Economic Structures, the national funding system for structurally weak regions.
- Provide appropriate structures to grow SMEs in regions with very high potential such as North-Western province and other regions.

V. Developing new markets in Zambia and abroad

- Helping SMEs to tap into new markets both locally and abroad through the interaction of successful SMEs and large corporations in highly efficient, precisely coordinated global value chains. Zambia Development Agency has made some strides on this front with initiatives such as CACHA: Connecting Zambian Small and Medium-Sized Agricultural Centres to Global Value Chains, Zambia Egypt Business Linkages forum, Zambia China Cross-Border E-Commerce Industrial Park. However the scale, impact and extent of these efforts need to be assessed and increased.
- **The National Export Strategy (NEST) 2018** has a vision of "A structurally transformed, diversified and competitive export sector anchoring Zambia's socio-economic development." (NEST, 2018, p. 2). Supporting SMEs by making exported products more competitive, such as by reducing production costs and increasing the quality of goods.
- **Engineering products and pharmaceuticals** are listed as two of the priority sectors. Evidence suggests that investing in research and development (R&D) and innovation will increase the competitiveness of manufactured exports, which is also highlighted in UNIDO's research (UNIDO, 2002).

"A structurally transformed, diversified and competitive export sector anchoring Zambia's socio-economic development." (NEST, 2018, p. 2)."

Bottom-Up SME strategies

Why we need a Bottom-Up approach to SME development ›	People, Meritocracy, Pragmatism and Transparency ›
Building from the ground up ›	Competitiveness ›

- The **National Local Content Strategy** aims to increase the use of locally produced goods and services, encourage business linkages with MSMEs, increase local ownership of firms, ensure a certain extent of local employment at all levels and encourage the transfer of skills and technology from foreign investors to Zambians. However, there is need to provide support to increase the low business relations with mines (Kanyinji & Tembo, 2019b).
- Through the **African Continental Free Trade Area (AfCFTA)** agreement increase export market share within regional economic communities and across the African continent. In order for Zambia to benefit from this FTA, the SMEs will need support to strengthen their export competitiveness as they face the competition from more advanced economies in the region such as South Africa, Cote d'Ivoire and Kenya, who held, respectively, 55%, 6% and 3% of Sub-Saharan African market share of manufactured goods in 2018, versus Zambia's 2%.
- To create efficient network and cluster structures and the faster transfer of research findings to small and medium-sized enterprises.
- A level playing field – At SADC and COMESA level advocate global rules to create a level playing field for all exporting nations.
  - At SADC and COMESA, and Africa region level, to improve the actual use of preferential trade agreements such as AfCFTA among small and medium-sized enterprises, and increase the rate of utilisation by the SME sector to at least 80 per cent over the medium term.
  - improving information on free trade agreements in the SME market.
- Promotion of foreign trade – adapt our institutions and instruments for the promotion of foreign trade to the needs of the SME sector. Provide small and medium-sized enterprises with tailored information to help them set up in foreign markets.
- Help start-ups gain a foothold in the export market.
- Business networks –specifically support the internationalisation activities of start-ups and young businesses start-ups during their stint abroad.
- **Ministry of Small to Medium Enterprises must examine the plans and initiatives of all government departments and ministries for their compatibility with the needs of the SME sector.**

Patent applications by residents: Comparator countries 2011 and 2017

Patent applications, residents		
	2011	2017
Malaysia	1,076	1,166
Egypt, Arab Rep.	618	1,025
Thailand	927	979
South Africa	656	728
Nigeria	64	100
Zambia	3	12
Botswana	1	3

Data source: World Development Indicators (The World Bank, 2020)

- The number of patent applications for Zambia was 23 in 2019, while Kenya had 294, South Africa 567 and Egypt 1,027.
- High-technology exports as a share of exports for Zambia 1.4% (2020), 4.6% for Kenya (2019), 5.6% for South Africa (2020).
- The number of scientific journal articles for Zambia was 213 in 2018, while Kenya had 1,247, South Africa had 13,009 and Egypt 13,327.
- **The extent to which Zambia will benefit from the Africa Continental Free Trade Area (AfCFTA) will depend on it long-term export competitiveness, development of technological sophistication and move to high-tech products in production and exports.**

"Ministry of Small to Medium Enterprises must examine the plans and initiatives of all government departments and ministries for their compatibility with the needs of the SME sector."

Source:

Gas Project

A Crisis

Project Description

Know-How

1,000 Megawatts

$7.7 Bn Financing

World Bank Support Benefits

$500m joint HSBC, Stanchart L/C

Economic growth

SANKOFA GAS PROJECT - GHANA

Project financing details

Context

- In 2014, Ghana was facing a severe macroeconomic crisis, in part due to high electricity costs. Constraints on hydropower generation and delays in developing domestic natural gas resources were making Ghana increasingly dependent on expensive and imported liquid fuels for power generation.
- To keep electricity tariffs affordable, the government provided more than $500 million in fuel subsidies to the power sector in recent years (2.5 percent of Ghana's GDP). Those subsidies were putting significant pressure on already constrained public finances. A long-term solution was needed to provide Ghana with a stable and cost-competitive source of fuel for its power sector.
- The Sankofa Gas Project is part of the Offshore Cape Three Points (OCTP) project, a wider undertaking that encompasses two major oil fields holding an estimated 131 million barrels and Ghana's first non-associated gas fields (Sankofa and Gye Nyame). The gas part (Sankofa Gas Project) has the potential to produce up to 1 trillion cubic feet (Tcf) of non-associated gas. The commercial agreements under the project provide for a long-term natural gas sale arrangement from the private sector led joint venture to the Ghana National Petroleum Company (GNPC) over the next 15-20 years.
- In addition to the macroeconomic challenges, the financial health of Ghana's electricity sector was also suffering from significant technical and operational inefficiencies, especially in the electricity distribution sub-sector. The Electricity Company of Ghana (ECG) – the main distributor and accounting for 90 percent of power sales – struggled to reliably deliver power and collect payments from customers.
- In 2013, Ghana started implementing several reforms to improve commercial and operational efficiency of the power sector, increase tariffs, and attract private financing. But the full effect of these reforms was yet to be felt.
- The development of Ghana's first "non-associated " gas resource was an essential part of Ghana's energy challenges. **A partnership between the Government of Ghana and a joint venture of two international investors had been formed. The joint venture had the daunting task of raising $7.7 billion** of commercial debt and equity. The collapse of oil prices in 2014 only compounded matters. Negotiation of key terms between the Government of Ghana and the developers stalled.
- **At the request of the Government of Ghana, the World Bank helped design an innovative payment security structure involving World Bank guarantees (IBRD and IDA) amounting to $700 million**. The **security structure reduced investors' requirements for direct sovereign support and paved the way for the investors to commit to the project's investment**. **The World Bank's involvement mobilized financing of $7.7 billion including subsequent participation by international commercial banks, export credit agencies (ECAs) as well as the International Finance Corporation (IFC) and the Multilateral Investment Guarantee Agency (MIGA).**

Project Description

- The project encompasses: (i) the drilling of wells in deep sea offshore waters 65 km off the Western Coast of Ghana; (ii) construction of a Fuel Production, Storage, and Offloading (FPSO) vessel; (iii) a submarine gas pipeline to the coastline; and (iv) onshore gas receiving facilities interconnecting with Ghana's natural gas pipeline system. The capital expenditures for this project require total lifetime project investments of $7.7 billion. This is a massive project for Ghana, whose GDP amounted to $32 billion in 2014.
- When the sponsors of the Sankofa project reduced their revenue expectations to reflect the significant **declines in oil prices, the rationale for making the $7.7 billion investment weakened. The increased dependence on gas revenues, and hence on flows from Ghana's electricity sector, raised the project risk substantially. In addition, GNPC lacked a track record of honoring such large long- term commitments and Ghana's sovereign credit rating was also low (S&P B-**). In that context, a credit enhancement mechanism became necessary.

Knowhow And Instruments Used

- The World Bank, the Government of Ghana, GNPC, and the private investors worked together on a security package that accommodated the requirements and constraints of all parties.
- The first layer of the security package was a payment mechanism that ensured all the receipts from the on-sale of the Sankofa gas to the power sector in Ghana flowed to a single designated account from which the private sponsors would be paid in priority for their share of the gas. Should there be any payment shortfall under the Gas Sales Agreement, the sponsors would be able to access an escrow account funded by GNPC with the equivalent of 4.5 months of gas sales ($205 million).
- If the escrow account is depleted the project company may draw under a $500 million Letter of Credit jointly provided by HSBC and Standard Chartered Bank and fully backstopped by a World Bank (International Development Association–IDA) Payment Guarantee.

"At a time when the global price of oil had fallen dramatically and oil companies had shelved $200 billion of projects around the world, the intervention of the World Bank Group made possible this $7.7 billion project ."

- Source:
- worldbank.org/guarantees
- https://www.worldbank.org/en/country/ghana/brief/what-is-the-sankofa-gas-project

Project Finance – How The World Bank, the Government of Ghana, GNPC, and project investors collaborated on a multi-layer security package.Lessons on how multilateral organisations can reduce country risk.

SANKOFA GAS PROJECT - GHANA	Partnerships, Reduced Country risk, Shared expertise,
Project details	Investors ›

- Following a drawing under the Letter of Credit, GNPC has 12 months to repay HSBC and Standard Chartered Bank before the two banks can request the World Bank to reimburse them. If drawings on the Letter of Credit reduce the facility's available balance to $100 million, the investors may access a limited sovereign guarantee of $100 million. Such a back-ended structure with access to the sovereign was key to limit immediate recourse to the Government of Ghana and therefore accommodate its fiscal constraints.
- Finally, a World Bank (International Bank for Reconstruction and Development–IBRD) Loan Guarantee of up to $200 million provides long-term coverage to Eni's shareholder loans if the security package has been fully depleted and not replenished.

Financing

- In 2014, when the two **private investors—Eni and Vitol**— took their final investment decision, the project was 100 percent financed by equity and shareholder loans. The brokering by the World Bank of an improved security structure allowed **Vitol, with the help of IFC and Standard Chartered Bank as Lead Arrangers,** to refinance part of their equity through an international commercial banking consortium. This replaced part of the Vitol equity with commercial debt in an amount of $1.35 billion.
- The commercial debt package also included a $400 million export credit debt facility from the UK's export credit agency (UKEF) supporting the investments into UK manufactured equipment for the project. In addition, commercial banks partially benefited from $217 million in political risk guarantees from MIGA.
- Through the World Bank Group's engagement and under the initial leadership by the World Bank, a total of $7.7 billion in commercial financing was mobilized with a final total support of $1.35 billion.

BENEFITS OF WORLD BANK GROUP SUPPORT

- The **investors took sufficient comfort from the World Bank's presence in Ghana's energy sector** as well as its longstanding country support program to invest in the project. The World Bank, acting as an honest broker, liaised between the private investors and government stakeholders to facilitate an innovative financial structuring with limited sovereign support.
- The gas from the project **will fuel up to 1,000 MW of domestic power generation**, or about 40 percent of Ghana's currently-installed generation capacity. This will help improve the reliability of power services in Ghana, replacing the current use of expensive, polluting fuels (imported light crude oil) with cleaner and more affordable gas resources.
- Close to **90 percent of the net economic benefits of the project are expected to be captured directly or indirectly by Ghana through revenues** for the government and GNPC ($2.3 billion) and through fuel cost savings ($1.2 billion). **Additional indirect economic benefits of the Sankofa gas field include economic growth**—as energy services improve due to increased stability of gas supply and reduced carbon emissions. At a time when the global price of oil had fallen dramatically and oil companies had shelved $200 billion of projects around the world, the intervention of the World Bank Group made possible this $7.7 billion project in Ghana. This project is expected to have a transformational effect on the country, its economy, and the power sector for the next two decades.

"In 2014, when the two **private investors—Eni and Vitol**— took their final investment decision, the project was 100 percent financed by equity and shareholder loans. The brokering by the World Bank of an improved security structure allowed **Vitol, with the help of IFC and Standard Chartered Bank as Lead Arrangers,** to refinance part of their equity through an international commercial banking consortium. This replaced part of the Vitol equity with commercial debt in an amount of $1.35 billion"

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ESG- Environmental, Social and Governance

ESG transition

The Five Pillars of Net Zero

- Zambia is party to the United Nations Framework Convention on Climate Change (UNFCCC) and the Paris agreement, under the Paris agreement countries are required to submit (NDCs) every five years.
- Zambia submitted its first NDC on 9th December, 2016 and consisted of both mitigation and adaptation components based on the country's national circumstances
- The NDC was submitted with a conditional pledge of reducing Greenhouse Gas (GHG) emissions by 25% by 2030 against a base year of 2010 under the Business As Usual (BAU) scenario with limited international support or by 47% with substantial international support.
- With consultations from various stakeholders ranging from line Ministries, Civil society Organisations, Private Sector, Provincial stakeholders and Cooperating Partners, Zambia finalized and submitted its revised and updated NDC to the UNFCCC secretariat on 30th July, 2021. By this submission Zambia enhances its NDC by broadening the scope of sectors under mitigation and by elaborating the adaptation component of the NDC by developing indicators that will enable the country track progress on building resilience in both the human and physical systems and on adaptation actions. (*Ministry of Lands and Natural Resources 2021*).
- **Business leaders across sectors have to address several competing objectives such as recovering from COVID-19 crisis, transition to high-tech production, automation, grow to new markets while achieving net-zero pledges.**
- Carbon neutrality is a state of net-zero carbon dioxide emissions. This can be achieved by balancing emissions of carbon dioxide with its removal (often through carbon offsetting) or by eliminating emissions from society (the transition to the "post-carbon economy").
- Getting to net zero means we can still produce some emissions, as long as they are offset by processes that reduce greenhouse gases already in the atmosphere. For example, these could be things like planting new forests, or drawdown technologies like direct air capture. The more emissions that are produced, the more carbon dioxide we need to remove from the atmosphere (this is called sequestration) to reach net zero.

The Five Pillars of Net Zero

At the center of the net-zero imperative are five pillars of action:

1. Decarbonize with strategic foresight
2. Operationalise sustainable behavior
3. Gain regulatory agility
4. Accelerate climate-focused partnerships
5. Digitise data and processes to build trust and prove results

1. Decarbonize with strategic foresight

- As discussed above, business leaders have to address competing strategies and these strategies rely on a number of levers that include accelerating the shift to renewables, developing new product offerings, re-locating facilities, investing in carbon capture, and optimising tax credits.
- Key steps toward low-carbon and net-zero operations include:
  - Ensure decarbonisation aligns with your overall business strategy
  - Define the reporting strategy for internal and external stakeholders including public disclosures
  - Shift your capital structure to account for the increasing role of climate in finance

The Five Pillars of Net Zero ›

  - Demonstrate provable progress through targeted emissions- broader business goals.
- There is no right way to set a decarbonisation goal. Meeting your stakeholders's growth, profitability, reporting, and disclosure expectations and emission targets may be enough.(KPMG GEI)
- Increasingly there is evidence that an effective net-zero transformation can unlock new business potential – new markets, products and value propositions
- Use a mix of renewables, avoidance, carbon capture, and carbon credit. (KPMG GEI)

2. Operationalize sustainable behavior

- The fundamental shift that needs to happen when an organisation seeks to decarbonize can only be achieved if the people and cultural psychology of that organisation have fundamentally shifted as well. This is not something that can be easily compartmentalised. It has to infiltrate every part of the organisation so that climate risk and opportunity become instinctive parts of business thinking at every level.
- There are a number of ways to operationalise decarbonisation, whether its by pursuing energy efficiency and renewable energy or leveraging the expansion of green-finance and carbon-pricing mechanisms.
- Become energy efficient and transition to renewables. –
- There are three primary vehicles for making the switch:
  - Onsight deployment, such as installing solar panels on a building or in a parking lot.
  - Off-site consumption through a power-purchase agreement (PPA) that can take either physical possession and management of the energy (Physical PPA) or a financial position (Virtual PPA) of a solar array or wind turbine.
  - Renewable Energy Credits (RECs) procured through your utility or another 3rd party where 1 REC is equivalent to 1MWh of clean energy.
- **Access green-finance** – Governments and the financial sector see the need for capital to flow toward solutions – and hence toward organisations -that will enable decarbonisation, creating an exceptionally strong market for green and social bonds.
- **Accessing carbon markets and pricing** – . Carbon offsets enable entities that are physically restricted from fully transitioning to renewable energy to fund initiatives that remove carbon from the atmosphere.
- Incorporate carbon pricing into long-term planning and day-to-day decisions. There are two primary mechanisms for doing so:
  - Shadow Pricing, where a theoretical price on carbon (at $20-$50/ton) is incorporated into the ROI and cashflow analyses of the major investments
  - Internal Carbon Fees, where individual business units are levied $10/ton (or similar) on certain operational purchases, such as company travel, while leveraging existing travel management systems. These funds may then be redistributed for local carbonisation offset programs, employee engagement on ESG topics, and/or other strategic initiatives that further organisational ESG objectives.
- Monetize mitigation efforts and use insights to gain efficiencies

3. Gain regulatory agility

- complying with environmental standards and staying vigilant to potential regulatory changes will help companies maintain or achieve competitive advantage in an ESG-aware marketplace. Organisations that are proactive instead of reactive can reduce costs across complex operations and supply chains and set themselves up for innovation while deploying strategies that ensure long-term viability in an increasing climate-conscious market.
- companies will need to be prepared with strategies to reliably manage these evolving and potentially expanding reporting requirements.
- Become more nimble in a shifting regulatory landscape.

KPMG GEI 2021

- Source: KPMG GEI 2021
- https://assets.kpmg/content/dam/kpmg/ie/pdf/2021/05/ie-decarbonisation-journey%20-pillars.pdf
- Ministry of Lands and Natural Resources Zambia

ESG- Environmental, Social and Governance

ESG	Net Zero Strategies
The Five Pillars of Net Zero	References ›

4. Accelerate Climate-focused partnerships

- By looking outward for partners and alliances across sectors, organisations can collaborate on actions, spark innovation and accelerate broader progress toward larger societal goals.
- Coordinate and align overall efforts with a range of partners and alliances.

5. Build trust and prove results

- With precise data across emission footprints, companies can begin to assess where and how to act. Organisations can better understand their environmental impact and their progress, satisfy customers and investors
- Collect, analyze and disseminate data to gain the trust of stakeholders.

(KPMG Global Energy Institute GEI, 2021)

"Creating a low-carbon economy over the next 30 years is going to be one of the greatest challenges ever faced by the human race – we will not succeed unless there s a total and complete focus on decarbonisation across all economic sectors. ***Mike Hayes KPMG IMPACT, Global Climate Change and Decarbonisation Leader."***

- *Robert Liebenthal and Caesar Cheelo: The Boom–Bust Cycle of Global Copper Prices, Structural Change, and Industrial Development in Zambia; https://oxford.universitypressscholarship.com/view/10.1093/oso/9780198851172.001.0001/oso-9780198851172-chapter-17*
- *Mining for Change: Natural Resources and Industry in Africa; John Page and Finn Tarp*
- *Adam, C. S., P. Collier, and M. Gondwe (eds) (2014). Zambia: Building Prosperity from Resource Wealth. Oxford: Oxford University Press.*
- *Francis Kaunda. Selling the Family Silver: The Zambian Copper Mines Story (2002).*
- *ICMM (2014). Enhancing Mining's Contribution to the Zambian Economy and Society. London: International Council on Mining and Minerals.*
- *Marriot Nyangu; The Rise and Fall of Mining Tax Regime in Zambia. Southern Africa Research Watch SARW (2020).*
- *Lombe, W., and B. Mwakacheya (2017). Experience of Mining Fiscal Reform and Renegotiation of Mining Contracts: The Case of Zambia. Accra: Third World Network—Africa.*
- *Manley, D. (2017). 'Ninth Time Lucky: Is Zambia's Mining Tax the Best Approach to an Uncertain Future?' NRGI Briefing October 2017. New York: National Centre for Development Studies.*
- *MOF (2017a). The 2018–2020 Medium-Term Expenditure Framework & The 2018 Budget. Lusaka: Ministry of Finance.*
- *Republic of Zambia (2017). Seventh National Development Plan 2017–2021. Lusaka: Ministry of National Development Planning.*
- *Chamber of Mines Zambia; Zambia Chamber of Mines Newsletter September Edition 2021.*
- *UNCTAD (2016). Trade Misinvoicing in Primary Commodities in Developing Countries: The Cases of Chile, Côte d'Ivoire, Nigeria, South Africa and Zambia. New York and Geneva: UNCTAD.*
- *World Bank (2016). Mining and Investment Governance Review: Final Report April 2016. MinGov Report. Washington, DC: World Bank.*
- *Zambia Business Times (2016). 'Zambia's Copper Reserves Estimated at $228 billion'. 26 March.*
- *World Bank; Open Knowledge Repository.*
- *ZEITI (Zambia Extractive Industry Transparency Initiative). 'A Short Guide for Our Stakeholders on Revenue from Mining in Zambia.*
- *Ndulo, M., and D. Mudenda (2004). 'Trade Policy Reform and Adjustment in Zambia'. Paper prepared for United Nations Conference on Trade and Development (UNCTAD). Geneva: UNCTAD.*
- *Bank of Zambia.*
- *Source: Industrial Diagnostic Study Zambia 2020 https://www.unido.org/sites/default/files/files/2020-10/PCP%20Zambia_Industrial%20Diagnostic%20Study%202020.pdf*
- *OECD*
- *KPMG Global Energy Institute GEI 2021 - https://assets.kpmg/content/dam/kpmg/ie/pdf/2021/05/ie-decarbonisation-journey%20-pillars.pdf*
- *Ministry of Lands and Natural Resources Zambia*

- Source: KPMG 2021
- https://assets.kpmg/content/dam/kpmg/ie/pdf/2021/05/ie-decarbonisation-journey%20-pillars.pdf
- Ministry of Lands and Natural Resources Zambia

Information

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Objective

The objective of the paper is to guide future dialogue regarding the right interventions that need to be made in the SME sector. To contend that the number one factor needed to drive growth in the sector are its people. The paper recommends a bottom-up approach rather than a top-down approach we have seen in the last 131 years.

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