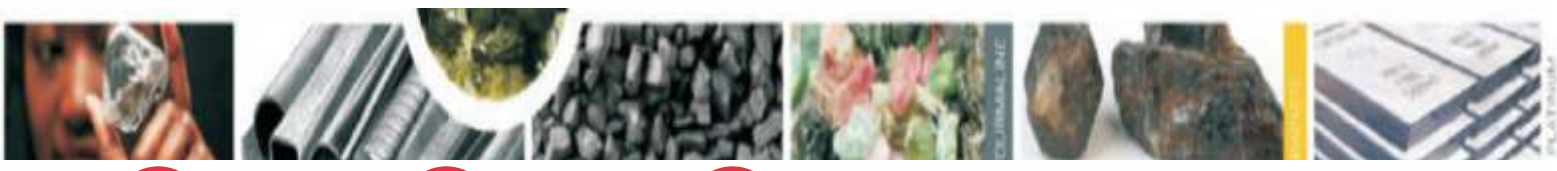
MINERALS MARKETING CORPORATION OF ZIMBABWE

MATOMBO QUARTERLY



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MINERALS MARKETING CORPORATION OF ZIMBABWE

Revealing Zimbabwe's Mineral Wealth & Heritage

FROM THE EDITOR'S DESK

Welcome to the third edition of the Matombo Quarterly.

The first half (H1) of the year saw the Corporation generating mineral revenue which was 2% higher at $780.56 million and tonnage of 922,108Mt which was 34% higher than that achieved during the same period in 2017. The Corporation bid farewell to its board during the month of May. On behalf of MMCZ management and staff, I would like to express heartfelt gratitude to the outgoing board for the immense contribution and directional insights. We anticipate the pronouncement of the new diamond policy in the latter half of the year.

Happy reading and we look forward to your invaluable feedback!

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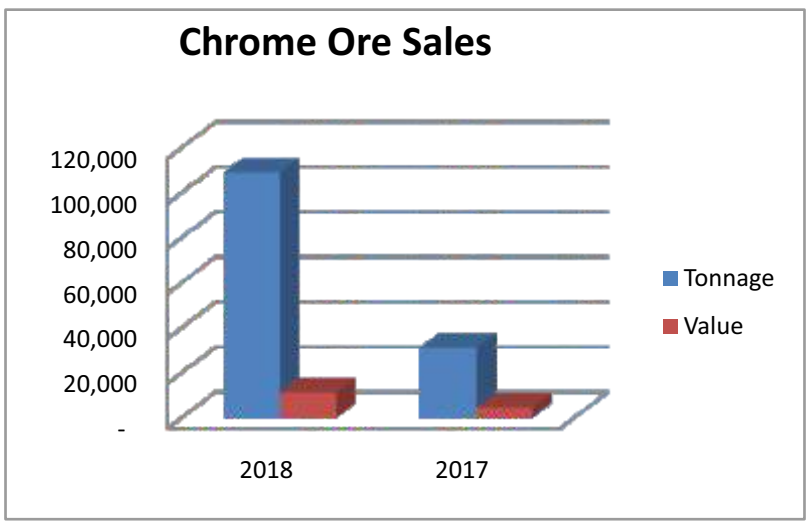
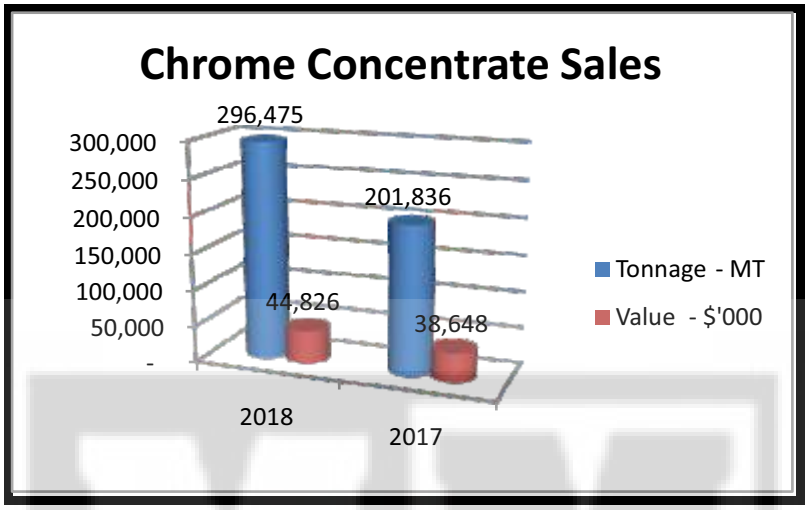
Pretty Musonza
PR & Communications

H1, 2018 MINERAL SALES AND MARKET OVERVIEW

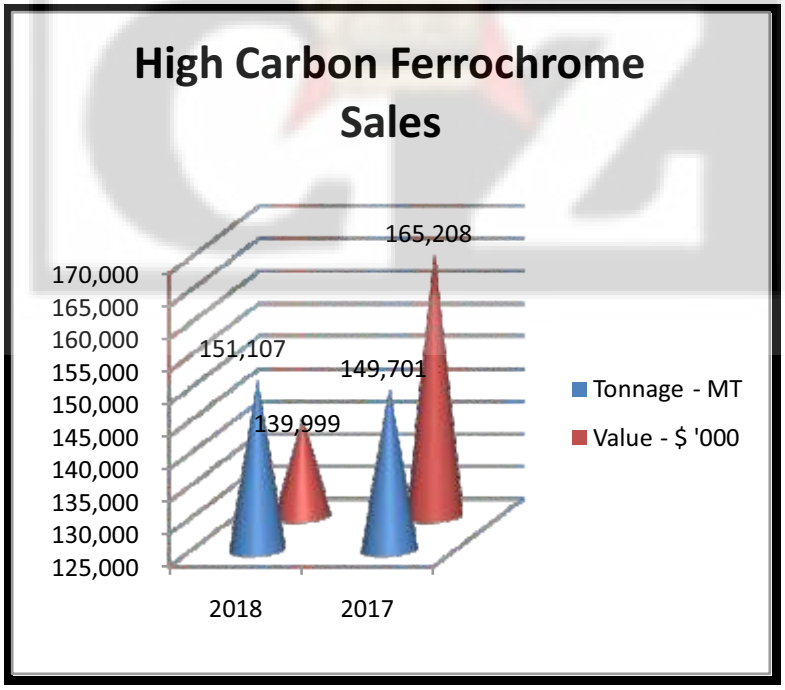
Cumulatively, a total of 922,108Mt valued at $780.56 million was sold during H1 2018, compared to the same period last year when a total of 688,443Mt valued at $763.34 million was sold. Therefore sales increased in both volume and value terms by 34% and 2% respectively.



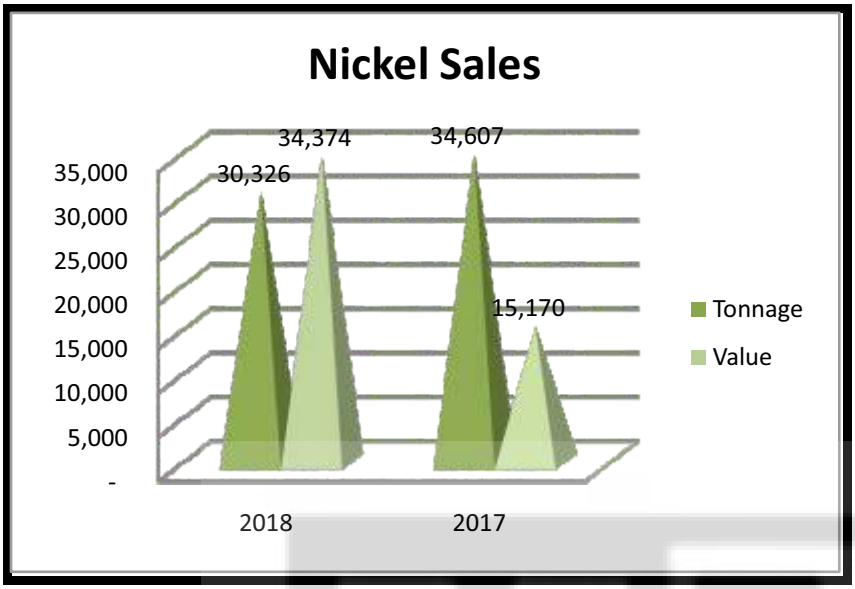
Cumulatively to June 2018, a total of 108,802Mt of Chrome Ore Lumpy valued at $11 million was sold compared to the same period last year when 31,032Mt valued at $4.4 million were sold, giving an increase of 251% and 153% respectively. The increase was a result of significant production improvement.



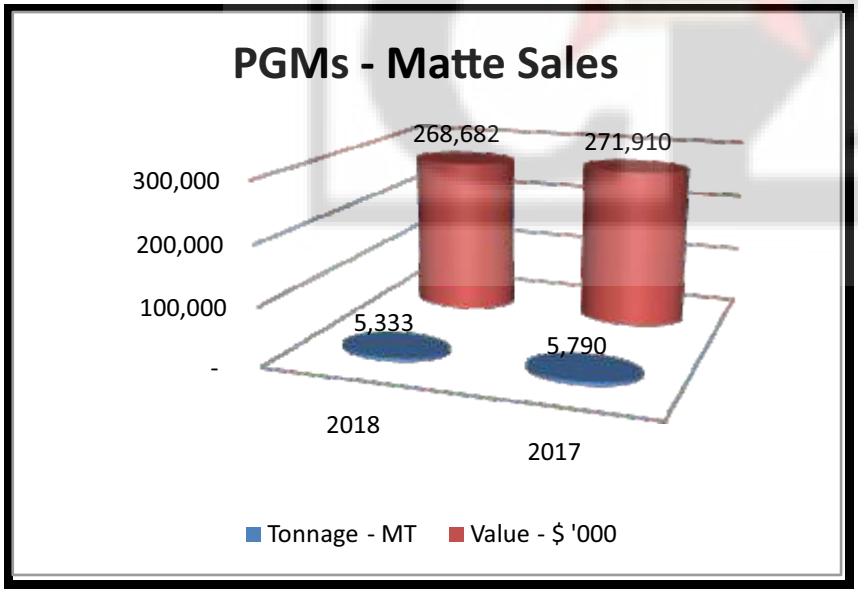
A total of 296,475Mt of Chrome Concentrates valued at $44.8 million was sold during the period January to June 2018 compared to the same period last year when 201,836 Mt valued at $38.6 million were sold, giving an increase of 47% and 16% respectively. The increase in volume and value was a result of increased production.



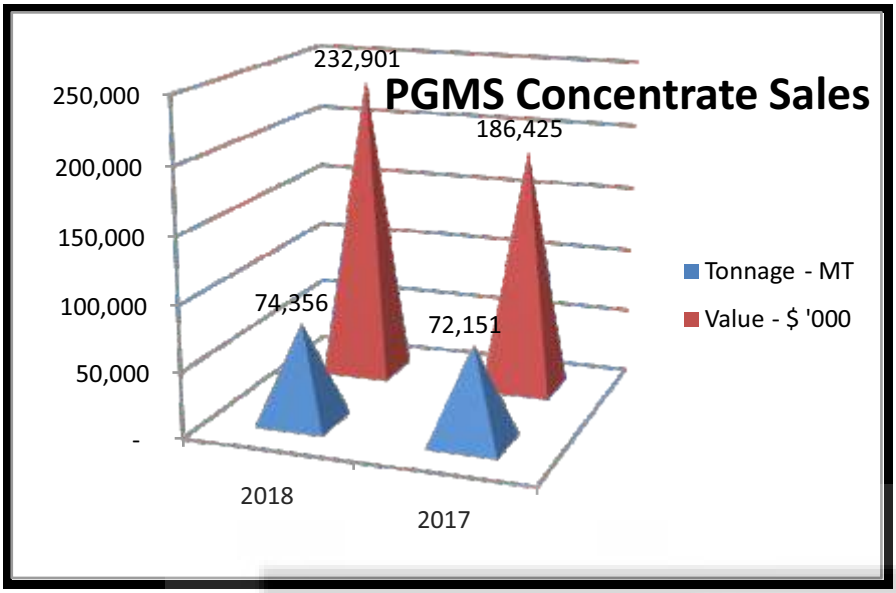
The June, 2018 sales of high carbon ferrochrome (HCFC) totalled $23 million from a tonnage of 27,198.80Mt compared to the same period last year when 18,818.45Mt valued at $19.22 million were sold. This represents an increase of 45% and 20% in volume and value terms respectively. Cumulative sales for H1, 2018 were 1% higher in volume with 151,107Mt having been exported compared to 149,701Mt sold in H1 2018. In value terms, $139.999 million achieved during H1 2018 sales were 15% lower than H1 2017 sales which totalled $165.208 million.



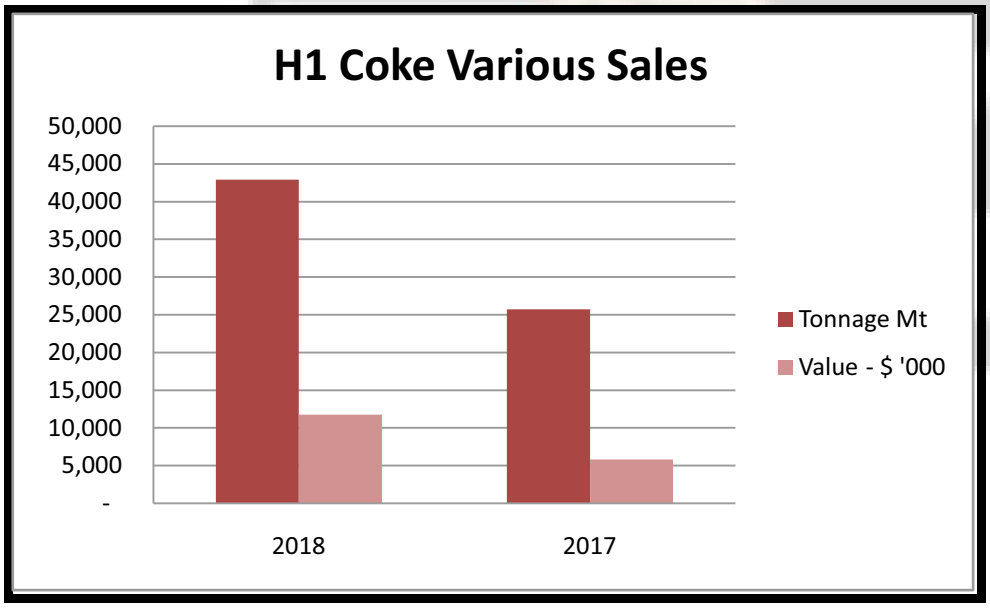
A total of 30,326Mt of nickel valued at $34.37 million was sold during the period under review compared to the same period last year when 34,607Mt valued at US$15.17 million sold, being a decrease of 12% in volume yet an increase of 20% in value terms. This increase in revenue for H1 2018 is attributable to the firming up of prices during that period, where the average price was $1,133.38 compared to the $438.26 achieved in H1 2017.



A total of 5,333Mt of white matte valued at $268.68 million was traded during the period under review compared to the same period last year when 5,790Mt valued at $271.91 million were sold. This translates to a decrease 14% volume and 1% in value. The drop in matte export is attributable to the smelter shutdown during the end of 2017. However, the firming up of prices since Q4 2017 contributed to the higher average price per tonne of all the elements in the PGMs basket, hence the disproportionate decrease in value.



A total of 74,356Mt of PGMs Concentrates valued at $232.90 million was sold during the period under review compared to 72,151Mt valued at $186.43 million recorded during the same period in 2017. This represents a growth of 3% in volume and 25 % and value terms. The increase in volume can be imputed to the export of concentrates by Zimplats during the period when the smelter was under scheduled maintenance.



Cumulatively, a total of 42,911Mt of various coke products valued at $11.74 million was sold in H1 2018. This represents positive variance of 67% and 102% in volume and value respectively from the sales of the same period last year. Average prices achieved H1 2018 were higher than those of the same period last year by 21%.

Iron and Steel in the Minerals Value Addition Matrix and the Prospects for Economic Revival in Zimbabwe

Introduction

The economic revival agenda is anchored on infrastructural development (Transport & Housing), agricultural productivity, tourism, mining, **beneficiation and value addition** . This paper explores the beneficiation and value addition sequence that has the potential to create tangible results and realise the ultimate objective of industrial growth and economic turn-around. However, beneficiation and Value addition are two terms that mean two different terms, however, for this paper they shall be treated as one. In the next issue, the two terms shall be explored extensively.

Beneficiation: Removal of inherent or intrinsic gangue or chemical substances from a mineral or group of minerals to achieve a high value substance through physical or chemical separation processes (mineral processing). Beneficiation process is usually completed at the mine and its purpose is to yield a product that has a much higher value e.g. concentrates.

Value addition: entails the addition of other metal and non-metal/s to a starting metal/non-metal constituency in order to achieve desired physical and chemical characteristics as prescribed from the application requirements in everyday domestic and industrial use.

The significance of mineral value addition

A well-structured value addition program will also help in developing an organized industrialization programme that minimises the risk of haphazard populist paradigm where hi-tech (high technology) value addition initiatives are pursued preceding some very rudimentary foundations missing. It should therefore be noted that value addition requires extensive interrogation from relevant stakeholders in which the government comes in mainly as a regulator than a player in eventual decision making.

Sustainable value addition should be premised on crucial marketing information derived from the market that inform on the risk of over reliance on high value minerals such as precious stones, precious metals (PGMs) and base metals. The Low Value Minerals and Materials (LVMM) such as limestone, gypsum, phosphate, vermiculite, dolomite, magnesite, coal, sand and clay due to their low value as a

function of their weight, and their relatively low value in international commodity markets should feature prominently on the value addition matrix.

Marketing data indicates that these Neglected Development Minerals provide crucial inputs for domestic economic development (infrastructure, manufacturing, construction and agriculture) and have the potential to stimulate economic development since they already have domestic demand unlike high value ornamental items such as diamond rings and neck laces but lacking in local demand.

Iron and steel for industrial and economic revival

It is important to note that the local economy in its current status have created a lot of domestic demand that can stimulate the need for value addition in the steel industry. Raw materials required to kick start the turn-around effort in the following sectors are tabulated below:

Table 1: Sector Specific Requirements

Sector	Requirements	Availability of local Capacity
Agriculture/ Farming	Farm buildings, shades, irrigation, machinery/implements and tools	Limited to basic Agristructures
Infrastructure (Road, Rail, Housing)	Steel structures (wires, ropes, rolling stock, tracks, etc.) for structural work, housing, malls required country wide	Limited, need for new local capacity in steel industry making use of Cr, Mn, Fe, Coal, Ni
Mining	Capitalisation in plant and equipment to boost raw material extraction	Very limited, most steel structures and components are imported
Manufacturing	Capitalisation in plant and equipment to restore dilapidated and antiquated industry	Very limited

Major reforms should be focused on value addition that will revive the major heavy industries in the Iron and Steel industries, licencing new or capacitate existing foundries and alloy manufacturers from which the foundations of any major functioning economy are derived. It is these major industries that stimulates the economy and generate massive industrial linkage both forward and backward that ensures that the Foreign Direct Investment (FDI) promises which now stands nearly at

US$1 billion (The Sunday Mail, 15/04/2018) is retained in the local economy unlike a situation where ordinary steel structures are imported from China or South Africa.

Role of Sequencing

There is need to understand which area should be given prominence in terms of value addition implementation. If iron and steel industry revival lags behind, there is a possibility that our economy will remain a consumer economy in perpetuity. Developing the value chain of the local steel industry has an immediate advantage since the industrial and economic revival agenda offers with it consequent benefits of a huge and immediate domestic demand (Market) in all sectors that need revival as shown in Table 1.

The revival of infrastructure, transportation and mining industry as in Table 1 will represent a huge domestic demand for steel products that are currently being sourced from South Africa and China. It is therefore critical at this precipitous time not to lose sight of the significance of the steel industry which in itself is an ordinary industry with minimum high technology requirements unlike the revival or development of new (hi-tech) high technology sectors for electric cars, platinum refining, etc.

The country still hosts most important raw materials that are required in the steel industry such as iron ore, chrome ore, manganese ore, nickel ore, limestone, coal and silica. It is therefore important to develop the local steel industry and ensure that foreign direct investment for the country is again not exported to foreign destinations to import capital goods which could have easily have been made locally should the country have a well-functioning iron and steel industry.

Conclusion & Recommendations

It is my humble submission that the iron and steel industry revival should be at the backbone of the recovery process and be treated with utmost urgency so that the much sought after FDI will come and be absorbed in the local iron and steel industry chain and stimulate other downstream economic activities. Every effort at the present moment should be on the revival of the steel giant leading the way and all other programs following. It should also be noted that value addition should not be restricted to mining companies, but for the manufacturing industrial sector, where useful synergies with mining industry and other players in the agriculture, chemical manufacturing and power generation are created.

If the iron and steel industry revival fails to take off now, there is a real risk later that it shall lag behind or the revival failing to get traction altogether due to profitability and competitiveness issues. It will be a challenge for the local steel industry to be revived at a much later stage and have its products penetrate the local market which might at that time have contracted and to let alone penetrate the regional and international market owing to competitive issues.

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MINERAL ON FOCUS

RUBY

A ruby is a gem of the mineral corundum. It is a mineral form of aluminium oxide (Al_2O_3). Red is one of the many colours found in gem corundum. Trace amounts of other elements can produce brilliant yellow, orange, green, and purple gems.

Rubies have a dominant red color which can range from orangey red to purplish red or brownish red. The most desirable color range is a pure vibrant red to a slightly purplish red. The red colour of rubies is produced by the presence of chromium in the gem. To be considered a ruby, there must be enough chromium to give the gem a distinctly red colour. The red colour arises from the replacement of a small number of aluminum atoms by chromium atoms (1 in 5,000). High refractivity is characteristic; when cut and polished, ruby is a brilliant stone, but, because it has weak dispersion, it lacks fire. On exposure to high temperature, ruby becomes green but regains its original colour upon cooling. When subjected to radiant discharge, ruby emits light or phosphoresces with a vivid red glow.

There are very few specimens of corundum that have a natural colour within the range required to qualify for a ruby. Furthermore, very few have the clarity required to produce a fine faceted stone. Workers of this gemstone have now started experimenting with ways to improve their colour and clarity through heating.

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WAYS IN WHICH MINERAL LEAKAGES MAY OCCUR

1. **False declaration of mineral weights/ mineral product** . The Vehicle Inspection Department allows 5% overloading tolerance and charges 50 cents per kilogram for any extra weight thereafter. Ideally, after payment for the excess weight, the transporter should offload excess weight, if the vehicle is to proceed. Currently, outgoing trucks are weighed at all other exit points except for the Beitbridge border post due to congestion at the border. As such only incoming trucks are weighed and this can open up mineral leakage opportunities. To this end, it would be prudent to have a statutory instrument that makes it compulsory for all mineral ferrying trucks to be weighed at every exit point.

   On mineral product declaration, ZIMRA currently uses intrusive scans to establish cargo material density. In cases where there are varying densities reflecting on the scans, physical inspections are carried out to verify cargo. However, in instances where one declares that they are carrying a mineral product different to what they are actually carrying, ZIMRA's current system is found wanting as it only focuses on uniformity in density. While one can assign density to a mineral product, one cannot assign a mineral product to a given density. As such it becomes imperative for ZIMRA to work closely with experts in mineral identification, such as MMCZ inspectors, to ensure that there are no instances of false declaration of mineral products.

2. **Transfer Pricing** - the transfer of goods and services from one company to a related company outside the country at prices that are not at arms-length. This can also be found in instances where a buyer places an order for mineral products when the prices are low and only enforces fulfilment of the contract when prices will have gone up.

3. **Connivance -** between parties involved in the export value chain e.g. between producers, clearing agents and ZIMRA officials. This is when parties agree or collude to do something illegal, for example under-declaration or use of fake documentation.

4. **Use of forged export documents -** Forging export documents can be easily done if there is nothing distinct and unique about the type of paper used for export documentation, or if the system for checking documentation in not watertight.

5. **Selling of minerals below market prices –** This can be due to lack of up to date market information or collusion between MMCZ officials and the producers. When officials responsible for pricing lack adequate information on markets and market fundamentals, this can result in mineral products being either overpriced or underpriced. In the sale of minerals, underpricing has more detrimental effects since minerals are finite resources. Under-pricing in turn negatively impacts revenue collected from royalties, commissions and other taxes.

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MMCZ STAKEHOLDER ENGAGEMENT IN PICTURES