

12/6/2023

**METACHEM  
INTERNATIONAL  
LIMITED**

**BUSINESS PLAN FOR TIC REGISTRATION  
OF A MANUFACTURING PROJECT**



**A Hybrid Project for Aluminium, Copper and Lead Scrap  
Recycling**

## **A. EXECUTIVE SUMMARY**

Metachem International Limited is a company registered under the Laws of the United Republic of Tanzania with effect from 4<sup>th</sup> May 2023. It is a foreign company that is wholly and exclusively owned by Indians. The company's authorized share capital is TShs. 20,000,000 divided into 1,000 shares of TShs. 20,000 each. The value of the share capital is equivalent to about **USD 8424.60**.

The company has resolved to establish a hybrid project that will include 3 different production lines for 3 different products. These products are aluminum, copper and lead. Planned investment capital for this project is **USD 523,000**. The investment capital is from foreign equity (**30%**) and a local loan (**70%**). At full capacity this project will employ a total of **111** people, **100** of whom are local.

Through analyses conducted the promoters (shareholders) of the project have realized feasibility of this project. The market analysis conducted has revealed that the products will penetrate the markets and the company can establish its niches. The financial analysis has shown that the investment will pay-off as it has been predicted to make profits.

The objective of this business plan is to present the business idea so that the TIC can provide incentives and immunities to the hybrid project presented. The incentives will help this project to develop and since this is a financially, socially and fiscally rational project the management believes that it deserves the incentives. Socio-economically this hybrid project will contribute to localization of the imported products thus, besides creating employment; it will develop locals' skills and reduce national spending of foreign currency on importations of the products.

Environmentally the project will get the area rid of aluminum, copper and lead scraps.

DRAFT

**B. TABLE OF CONTENTS**

EXECUTIVE SUMMARY .....	1
TABLE OF CONTENTS .....	3
1.0 PREAMBLE .....	4
1.1 Company Details.....	4
2.0 PROJECT SYNOPSIS .....	4
2.1 Investment Plan .....	5
2.2 Manning Plan .....	6
2.3 Supplies Plan .....	7
2.4 Production Plan.....	9
2.5 Project Roll-Out Plan .....	10
3.0 MARKET SCRUTINY .....	10
3.1 Status-Quo of the Market .....	11
3.2 SWOC Analysis.....	11
3.2.1 Strengths .....	11
3.2.2 Weaknesses.....	11
3.2.3 Opportunities .....	12
3.2.4 Challenges .....	12
3.3 Marketing Strategy.....	13
4.0 FINANCIAL ANALYSIS.....	14
4.1 Project Financing.....	15
4.1.1 Sources of Funding.....	15
4.1.2 Financing of Project Items .....	15
4.2 Financial Projections .....	16
4.2.1 Sales Projections .....	16
4.2.2 Income Projections .....	16
4.2.3 Projected Retained Earnings .....	17
4.2.4 Projected Cash Flows.....	18
5.0 PROJECT RATIONALE .....	19
5.1 Monetary Rationale .....	19
5.2 Fiscal Rationale.....	20
5.3 Social Rationale.....	20
6.0 POST SCRIPT .....	20
7.0 ANNEXES .....	22

## 1.0 PREAMBLE

### 1.1 Company Details

**METACHEM INTERNATIONAL LIMITED** is a company registered under the Laws of the United Republic of Tanzania on 4<sup>th</sup> May 2023 and granted Certificate of Incorporation No. 165373243. For tax purposes the company is also registered and its TIN is 165-373-243. The company has a wide range of activities that it can embark upon but for this specific plan its focus is on recycling of aluminum and copper.

Metachem International Limited is a foreign company owned by Indians by 100%. The shareholders of the company are all foreign as detailed under **Table 1** where key details are given. The company's authorized share capital is TShs. 20,000,000,000 divided into 1,000,000 shares of TShs. 20,000 each. The value of the share capital is equivalent to about USD 8,424.60.

**Table 1: Company Shareholding Details**

Shareholder	Nationality	Shares Taken	Shareholding
Puneet Sethi	Indian	500	50.00%
Nitin Khosla	Indian	170	17.00%
Vipin Kohli	Indian	170	17.00%
Amit Malik	Indian	160	16.00%
<b>TOTALS</b>		<b>1,000</b>	<b>100.00%</b>

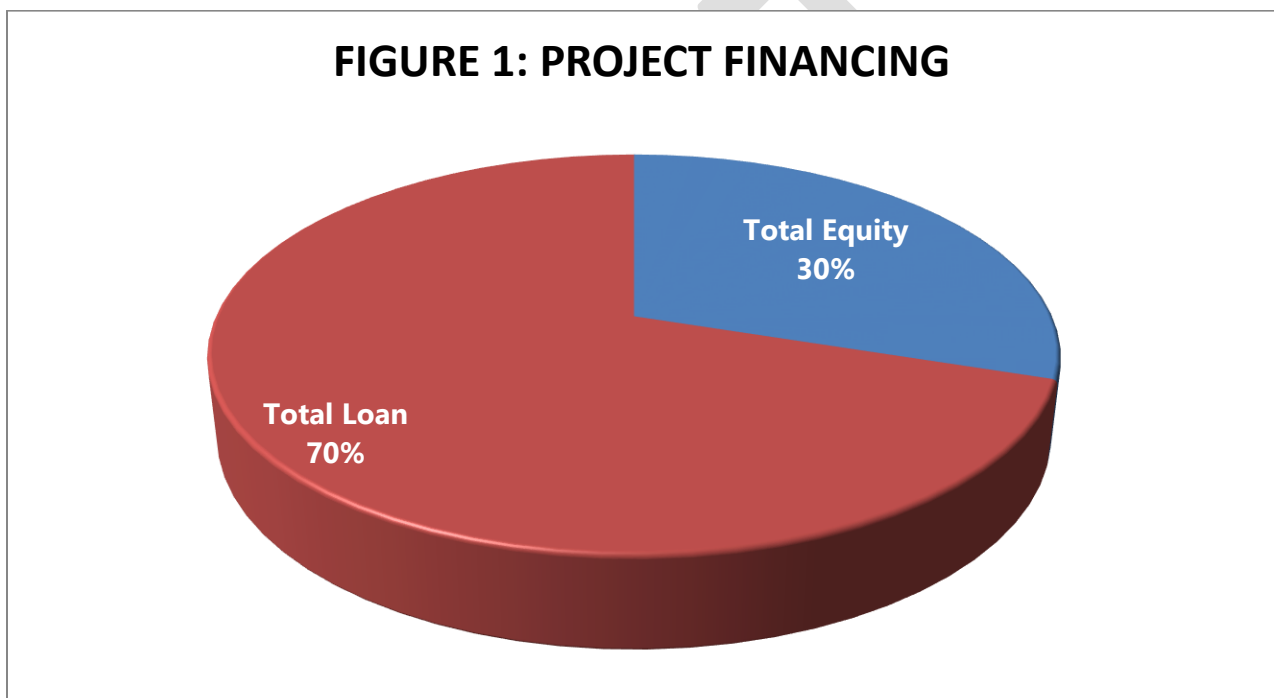
The company is located in Pwani Region, Mkuranga District, Mkuranga Ward. Its Postal Code is 61501 Kisemvule Street, Plot number 23.

## 2.0 PROJECT SYNOPSIS

This is a hybrid project aimed at recycling aluminum, copper and lead to produce pure aluminum, copper and lead for sale. At full swing this

plant will have three (3) production lines, one for aluminum scrap, another for copper scrap and lead recycling. The idea is to maximize space utilization and ensure maximal utility from the project in the form of costs of land, plant, utilities and others.

The company's Project is located in Kisenvule, Mkuranga District in Pwani region. This project, as shown in **figure 1** will be financed by equity (30%) and loan (70%).



### **2.1 Investment Plan**

The total investment for this hybrid project is USD 523,000 as detailed under **table 2** below. Of this amount, as shown by columns under investment breakdown, fixed capital is projected to be USD 443,000 while working capital is USD 80,000. As per the columns under investment schedule most of the investment will be done during the first

two years of operation and the figures will gradually go down as completion of the investment process keeps pace.

**Table 2: Projected Investment Plan**

INVESTMENT BREAKDOWN		INVESTMENT PLAN				
ITEMS	FINANCING IN USD	Y1	Y2	Y3	Y4	Y5
Land & Buildings	120,000	120,000				
Plant	220,000	150,000	70,000			
Vehicles	85,000	40,000	40,000	5,000		
Furniture & Fittings	13,000	5,000	8,000			
Pre Expenses	5,000	5,000				
Others	-					
Working Capital	80,000	40,000	40,000			
<b>TOTAL</b>	<b>523,000</b>	<b>360,000</b>	<b>158,000</b>	<b>5,000</b>	-	-
FIXED CAPITAL	443,000					
WORKING CAPITAL	80,000					
<b>CAPITAL ADDITIONS</b>		<b>360,000</b>	<b>158,000</b>	<b>5,000</b>	-	-

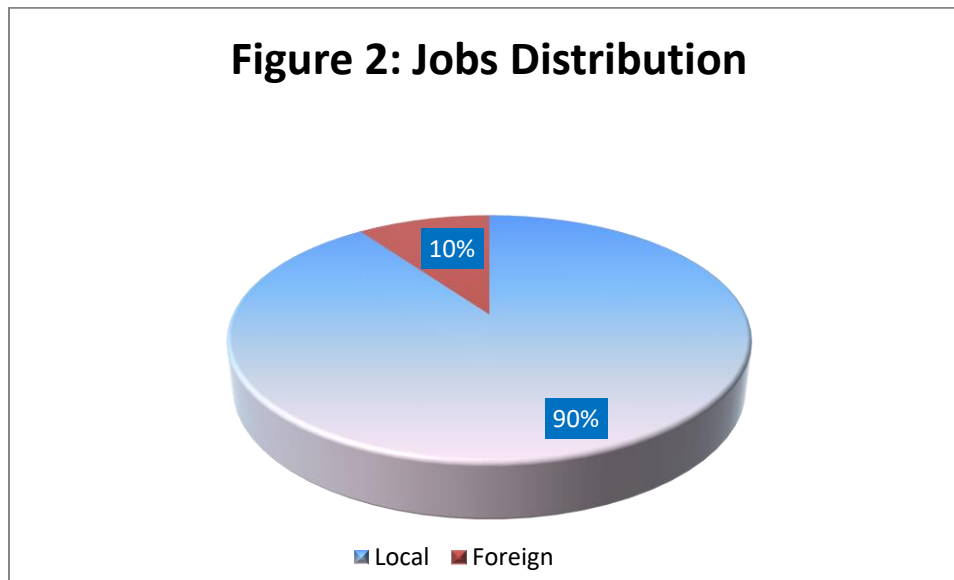
## 2.2 Manning Plan

At full capacity the project will directly employ a minimum of 111 people 100 of whom are locals and 11 foreigners. The foreigners are experts in the recycling of aluminum, copper and lead and are planned to mentor locals to their level of expertise. **Table 3** provides summarized details on the number of direct employees to be engaged in this project. **Annex 4**, on the other hand, gives a detailed distribution of the direct jobs. Besides the direct employment the project is expecting to produce at least 220 indirect jobs when at full capacity

**Table 3: Employment Plan**

CATEGORY	MALE	FEMALE	TOTAL
Local	77	23	<b>100</b>
Foreign	9	2	<b>11</b>
<b>TOTAL</b>	<b>86</b>	<b>25</b>	<b>111</b>

Of all the direct employees of the project at full capacity, the project will hire 11 foreigners amounting to 10% while locals will amount to 90% as shown in **figure 2** below.



### **2.3 Supplies Plan**

The company will import from India or China all the machineries that cannot be sourced within Tanzania. The imported machineries include the production lines for the different products that are going to be manufactured by the project. Vehicles and lorries (including small lorries - Kirikou) will be sourced from local suppliers in order to hedge against any unnecessary freight and delivery risks. As for the raw materials, these will be sourced from Tanzania or a neighboring country for any materials that cannot be sourced from within the country.

For the two production lines raw materials will be sourced from Tanzania and the neighboring countries.



***Aluminium Shredding Machine***



***Copper Scrap Processing Machine***



### ***Lead Scrap Processing Plant***

For the three products we expect to source raw materials (scraps) from within Tanzania and if need be from within neighboring EAC countries.

### **2.4 Production Plan**

At full capacity the factory, through all its three production lines, is estimated to be producing items generating an annual turnover of USD 315,340. Quantity-wise each production line is projected to produce different quantities per annum as portrayed in **table 4**. Production is project to grow over the years of operation of the project.

**Table 4: Production Projections**

Details	Years				
	Y1	Y2	Y3	Y4	Y5
Aluminium Recycling Plant - PL1 (Tons)	15	40	100	250	350
Copper Recycling Plant - PL2 (Tons)	15	40	100	250	350
Lead Recycling Plant - PL3 (Tons)	15	40	100	250	350
<b>Total Production (Tons)</b>	45	120	300	750	1,050

## 2.5 Project Roll-Out Plan

Production is planned to commence within the month of June 2023 and full capacity to be attained by 2028. The project's life is expected to be 5 years as shown on **figure 3**.

**Figure 3: Implementation Schedule**

No.	Activity	Time																
		2023												2024	2025	2026	2027	2028
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec					
1	Registrations	■	■	■	■	■												
2	Market Analysis	■	■	■	■	■												
3	Installation of Production Line 1						■	■	■	■								
4	Staff Recruitment	■	■	■	■	■	■	■	■	■	■	■	■					
5	Installation of Production Line 2						■	■	■	■								
6	Operation of Line 1									■	■	■	■	■	■	■	■	■
7	Operation of Line 2									■	■	■	■	■	■	■	■	■
8	Installation of Production Line 3									■	■	■	■	■	■	■	■	■
9	Operation of Line 3									■	■	■	■	■	■	■	■	■
10	Promotion and Advertisement Campaigns	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
11	Business Expansion Analyses															■	■	■

## 3.0 MARKET SCRUTINY

This section reviews the market status for the envisaged products. It covers the status-quo of the market, SWOC analysis, market worthiness and market strategy for the planned products.

### **3.1 Status-Quo of the Market**

During the year 2022 Tanzania imported USD143.21 million worth of aluminum, USD53.59 million worth of copper and US\$111.4 thousand worth of lead and related products.

In the year 2021 Tanzania exported 92.5 tons of scrap aluminum (HS 760200) worth USD 153.19 thousand. For copper Tanzania exported USD 224m worth of the product.

### **3.2 SWOC Analysis**

Since all the products involve manufacturing, this sub-section covers the analysis of the overall manufacturing business in the country, and where necessary it covers the analysis for a specific product.

#### **3.2.1 Strengths**

The promoters of the company owning the project have enough muscle to fund the project as their equity amounts to 30% of the financing. The company also can be lent funds from a local commercial bank to the tune of USD 366,100. As such the company's liquidity in respect of the production of these products is assured.

The company also has got staffs who are experienced in the trade of manufacturing of aluminum, copper and lead from scraps of these minerals.

The management engaged for the project is well acquainted with the general Tanzanian market and has developed insight into the specific targeted products.

#### **3.2.2 Weaknesses**

The company is not a giant in the industry. As such it might be lacking some levels of experience in the market. However, through consulting

experts in the business arena it is expected to take off and pick its niche in the market.

### **3.2.3 Opportunities**

There is assurance of availability of raw materials for the planned products within Tanzania. These products are aluminum, copper and lead.

With a population of 62 million people Tanzania provides assurance of a large local market.

Tanzania being a member of the EAC has duty-free-quota-free market access to Burundi, DRC, Kenya, Rwanda, South Sudan and Uganda. Upon advanced stages of production the company expects to be exporting to these neighboring countries.

In terms of power utilities Tanzania has got relatively lower tariffs and has less power cuts. Tanzania is expecting to be exporting electricity which will be generated from the Julius Nyerere Hydro Electric Power plant.

In governance Tanzania is characterized by peace and tranquility for there has been no havoc in the country. This is strength as it provides our business with assurance that we will operate smoothly resting assured that the promoters' property is secured. With good investment act Promoters of the company are guaranteed of freedom from nationalization of their stake in the company.

### **3.2.4 Challenges**

The procedures in the country are many and relatively complex. The company engages experienced business consultants to overcome this impediment.

There is somehow stiff competition in the industry as Tanzania has some factories manufacturing the same products. The company has taken this into account via the marketing strategy.

The open doors for Tanzania into the rest of EAC member countries imply the same for the other EAC members into Tanzania. This implies stiffer intra-regional competition where there is duty-free quota-free market access intra-regionally.

From the SWOC analysis conducted of the company and of the operating environment the promoters are confident that the project will be a success. Following the analysis we have developed a market strategy for our products.

### **3.3 Marketing Strategy**

As part of our marketing strategy, we will engage both penetrative (entry) and persistence strategies. The penetrative strategy will employ digital technology in conducting a social awareness teaser campaign. This will be done using social media and an excellent website. It will push the way for our products into the market.

As for the persistence strategy, considering the fact of many importers of the products of ours the company has developed a special focus on the 4Ps mix in order to have a good share of the market. This strategy will enable the company stay in the market and develop a niche of its own. Here is the company's view on the 4Ps promotional mix:-

**Product:** The hybrid project will produce best quality products namely aluminum, copper and lead. This will make the products unique in the market by being compliant to the standards and thus very appealing. Through R&D the company will know more about the changing needs of

the consumers and adjust the products accordingly in order to capture more market and retain its share of the same.

**Price:** Through the Marketing and Production Departments the company will develop a pricing mix that will make the products price-competitive in order to gain entry into the market, acquire a larger share of the market and develop a niche to be retained starting with Tanzanian market and in the neighboring countries' markets.

**Place:** The project is strategically located in the vicinity of the seaport city of Dar es Salaam which is the commercial capital of Tanzania. In this regard the distribution channels are designed to ensure that delivery of the products is effective and appealing to customers. In the initial stage we will deal with wholesalers. In the course of operations we can move on to have our own outlets.

**Promotion:** Through the qualified marketing personnel the company will design excellent promotion campaigns that will pull consumer toward the products. We will use social awareness teaser campaigns by leveraging on information communication technology.

#### **4.0 FINANCIAL ANALYSIS**

This section covers project financing and financial projections. Project financing includes source of funding and financing of items in the project. Financial projections, on the other hand, cover sales projections, income projections, projected retained earnings and projected cash flow.

## 4.1 Project Financing

### 4.1.1 Sources of Funding

The project will be financed by foreign equity (30%) amounting to **USD 156,900** and by a local loan (70%) which will total to **USD 366,100** as shown on **Table 5**.

**Table 5: Project Financing**

Details	Amount	Percentage
<b>Local</b>		
Equity	-	0.00%
Loan	366,100	70.00%
<b>Sub-total</b>	<b>366,100</b>	<b>70.00%</b>
<b>Foreign</b>		
Equity	156,900	30.00%
Loan	-	0.00%
<b>Sub-total</b>	<b>156,900</b>	<b>30.00%</b>
<b>GRAND TOTAL</b>	<b>523,000</b>	
<b>Total Equity</b>	156,900	30.00%
<b>Total Loan</b>	366,100	70.00%

### 4.1.2 Financing of Project Items

The invested capital of USD 523,000 will fund various items in the project. These include plant, vehicles and other items as shown on **Table 6** below.

**Table 6: Financing of Items**

ITEMS	FINANCING IN USD
Land & Buildings	120,000
Plant	220,000
Vehicles	85,000
Furniture & Fittings	13,000
Pre Expenses	5,000
Others	-
Working Capital	80,000
<b>TOTAL</b>	<b>523,000</b>

FIXED CAPITAL	443,000
WORKING CAPITAL	80,000

## 4.2 Financial Projections

### 4.2.1 Sales Projections

The company has projections of steadily growing sales over the first five years of operation of the project. From year 1 to year 5 the company expects to sell sales amounting to USD 191,865; 211,517; 237,021; 270,598 and 315,340 respectively. The costs of sale are projected to be USD 40,000; 43,000; 55,300; 56,510 and 57,841 for the first respective five years of operation of the project. **Table 7** below gives the details, including those of projected gross profit for the first five years.

**Table 7: Gross Profit Projections**

Details	Years				
	Y1	Y2	Y3	Y4	Y5
Sales	191,865	211,517	237,021	270,598	315,340
Cost of Sales	40,000	43,000	55,300	56,510	57,841
<b>Gross Profit/ (Loss)</b>	<b>151,865</b>	<b>168,517</b>	<b>181,721</b>	<b>214,088</b>	<b>257,499</b>

The project promises to yield gross profit throughout the first five years of operation. In Year 1 the profit is expected to be the lowest as it is the year of investment – even in promotion campaigns - which implies much spending while the products are relatively new in the market and thus sales are picking up the pace.

### 4.2.2 Income Projections

Through the first five years of operation the project is expected to be making profits. In year 1 the profits will be the lowest because of the

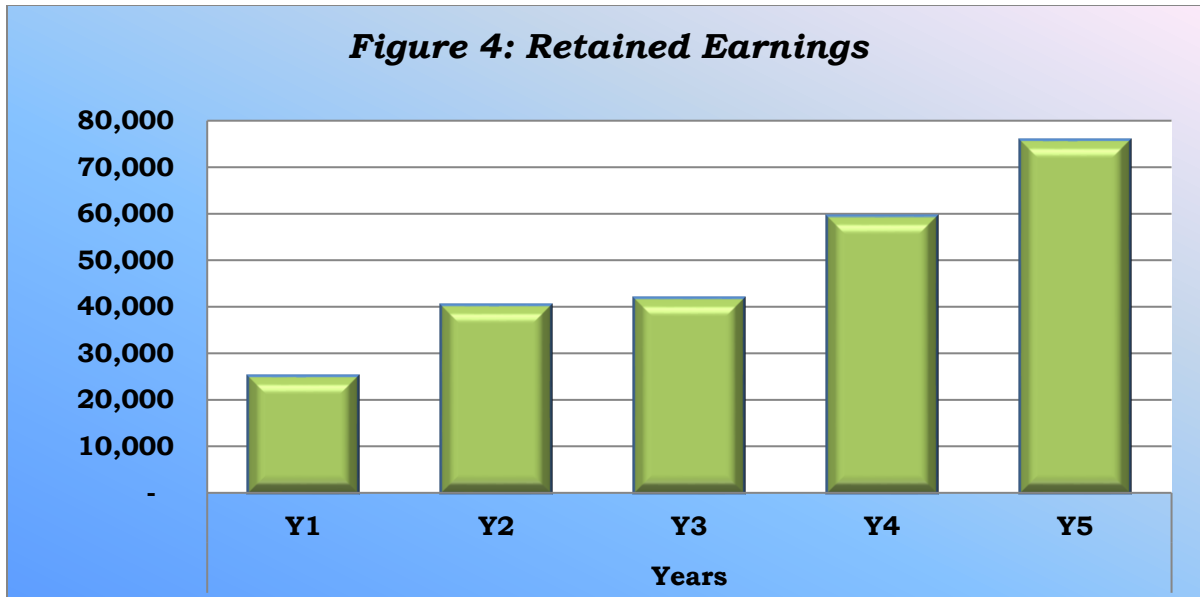
heavy spending in investment in this year of operation. The projected profits, as shown on **Table 8**, are USD 25,135; 40,288; 41,797; 59,434 and 75,852 for the first respective five years.

**Table 8: Projected Income Statement**

Details	Years				
	Y1	Y2	Y3	Y4	Y5
Total Sales	191,865	211,517	237,021	270,598	315,340
Less: Cost of Sales	40,000	43,000	55,300	56,510	57,841
Gross Profit	151,865	168,517	181,721	214,088	257,499
Less: Operating Expenses	59,387	48,980	59,490	60,362	74,457
EBIT	92,478	119,536	122,231	153,726	183,043
Less: Loan Interest	47,593	47,593	47,593	47,593	47,593
EBT	44,885	71,943	74,638	106,133	135,450
Less :Taxes (30%)	13,465	21,583	22,391	31,840	40,635
Net Profit/(Loss)	31,419	50,360	52,247	74,293	94,815
Dividend (20%)	6,284	10,072	10,449	14,859	18,963
<b>Retained Earnings</b>	<b>25,135</b>	<b>40,288</b>	<b>41,797</b>	<b>59,434</b>	<b>75,852</b>

#### 4.2.3 Projected Retained Earnings

Retained earnings projections show a positive trend for the project. This will give the company an edge in the market as it can re-adjust the price mix in order to keep more competitive. **Figure 4** gives the picture.



#### 4.2.4 Projected Cash Flows

The project is a promising venture as projections show a positive cash flow as shown on **Table 9**. This is a muscle giving the company an edge in the market as cash flow implies liquidity which helps the project operate smoothly.

**Table 9: Projected Cash Flow**

Details	Years				
	Y1	Y2	Y3	Y4	Y5
<b><i>Cash from Operations</i></b>					
Profit Before Tax	200	71,943	74,638	106,133	135,450
<b><i>Adjustment for Non-cash Items:</i></b>					
Change in Working Capital:					
Receivables (-ve)	- 45,000	- 45,000	- 43,000	- 38,000	- 17,000
Trade Payables and Accruals	10,000	13,000	15,000	19,000	23,000
Capital Additions	360,000	158,000	5,000	-	-
Total	325,000	126,000	23,000	19,000	6,000

	325,000	126,000	- 23,000	- 19,000	6,000
Tax Payments	13,465	21,583	22,391	31,840	40,635
Total Cash Inflow from Operating Activities	338,465	147,583	- 609	12,840	46,635
Cash from Investing Activities:					
Land Rent and development of Property	168,406	168,406	168,406	168,406	168,406
Net Cash Outflow from Investing Activities	30,000	30,000	30,000	30,000	30,000
	140,059	- 50,823	- 199,015	- 185,566	- 151,771
Cash from Financing Activities:					
Dividends	6,284	10,072	10,449	14,859	18,963
Change in Cash and Cash Equivalents	133,776	- 60,895	- 209,464	- 200,425	- 170,734

## 5.0 PROJECT RATIONALE

This project's rationale can be viewed in monetary, fiscal and social aspects. From the financial analysis conducted this project is worth a green light in the Tanzanian economy. Monetarily it will create income for supplier and distributor SMEs, fiscally it will pay taxes (both Income Tax and VAT on sales), and socially it will contribute to social development as detailed under subsequent items.

### 5.1 Monetary Rationale

The project is expected to incur a total of **USD 302,677** on production and operating expenses through its first five years of operation. This money will go to supplier SMEs and other companies that will be supplying raw materials to the plant. **Annex 1** gives the details.

## **5.2 Fiscal Rationale**

Fiscally, should everything go as planned, the project projects to pay a total of **USD 375,183** as taxes to the government in its first five years of operation. Of this amount income tax is projected to be **USD 129,914** while VAT is projected to total to **USD 245,268**. The VAT projections are for the sales at the company's level only and will multiply as the products change hands. The same applies for the income tax. **Annex 1** gives the details.

## **5.3 Social Rationale**

Socially the project will participate in various engagements as part of its CSR program. Over the first five years it is expected to incur a total amount of **USD 485** on CSR as shown on **Annex 1**. In addition, the project will directly employ a total of at least 100 locals. Other locals amounting to at least 220 will enjoy indirect employment via the project. The indirect jobs will be for those supplying raw materials, and to service providers.

Economically manufacturing of these products i.e. aluminum, copper and lead will add to local production. The production will reduce national spending of foreign exchange on importation of the products. Environmentally the project will rid the surroundings of scrap aluminum, copper and lead.

## **6.0 POST SCRIPT**

This project is a hybrid in its design. It aims to produce aluminum, copper and lead from scraps of these minerals. The project is foreign-owned by 100%. The planned capital for this project is USD 523,000

30% of which is foreign equity and 70% is a local loan secured from a local commercial bank.

From our visceral assessment of our business idea we have come up with this business plan with confidence of success. This project is highly likely to be a success and it is rational socio-economically, fiscally and monetarily. If it gets a soft landing via the TIC the promoters of the project look forward to a successful hybrid project.

DRAFT

## 7.0 ANNEXES

### *Annex 1: Project Rationale*

Details	Years					
	Y1	Y2	Y3	Y4	Y5	TOTALS
Total Production Cost	40,000	43,000	55,300	56,510	57,841	<b>252,651</b>
Total Operating Expenses	59,387	48,980	59,490	60,362	74,457	<b>302,677</b>
Income Tax	13,465	21,583	22,391	31,840	40,635	<b>129,914</b>
VAT on Sales	38,373	42,303	47,404	54,120	63,068	<b>245,268</b>
Provision for CSR	50	81	84	119	152	<b>485</b>
<b>TOTALS</b>	<b>151,276</b>	<b>155,947</b>	<b>184,670</b>	<b>202,950</b>	<b>236,152</b>	<b>930,995</b>
<b>SUMMARIES</b>						
To the Government	51,838	63,886	69,796	85,959	103,703	<b>375,183</b>
To the Private Sector (SMEs)	99,387	91,980	114,790	116,872	132,298	<b>555,328</b>
To the Society (CSR)	50	81	84	119	152	<b>485</b>
<b>TOTALS</b>	<b>151,276</b>	<b>155,947</b>	<b>184,670</b>	<b>202,950</b>	<b>236,152</b>	<b>930,995</b>

### *Annex 2: Projected Operating Expenses*

Details	Years				
	Y1	Y2	Y3	Y4	Y5
Marketing Expenses	3,000	500	500	500	500
Bank Charges	450	450	450	450	450
Insurance	1,100	1,100	1,100	1,100	1,100
Office Expenses	2,700	2,700	2,700	2,700	2,700
Permits and Licences	3,500	200	200	1,200	200
Vehicle Expenses	6,800	6,800	6,800	7,000	7,200
Professionals Fees	37,000	32,000	42,000	41,000	55,000
Provision for Bad Debts	3,837	4,230	4,740	5,412	6,307

Miscellaneous Expenses	1,000	1,000	1,000	1,000	1,000
<b>TOTAL OPERATING EXPENSES</b>	<b>59,387</b>	<b>48,980</b>	<b>59,490</b>	<b>60,362</b>	<b>74,457</b>

DRAFT



**Annex 4: Detailed Job Information**

CATEGORIES	LOCAL		FOREIGN		NUMBER
	Male	Female	Male	Female	
<b>Senior Management Team:</b>					
Managing Director			1		1
Chief Plants Overseer			1		1
<b>Managers:</b>					
Accounts Manager				1	1
Plant Supervisors	1		2		3
Supervisors: PL 1 - PL 3	1	1	4		6
Operators: PL1 - PL3	4	2			6
Marketing Manager		1			1
R&D Manager				1	1
Logistics Manager			1		1
<b>Other Staff:</b>					
Drivers	5				5
Plant Workers - PL 1	24	6			30
Plant Workers - PL 2	22	8			30
Plant Workers - PL 3	20	4			24
Stores and Procurement		1			1
<b>TOTALS</b>	<b>77</b>	<b>23</b>	<b>9</b>	<b>2</b>	<b>111</b>