

KOM COAL LIMITED

BUSINESS PLAN

FOR

ESTABLISHMENT OF PLANT

FOR COAL PROCESSING

1.0. **EXECUTIVE SUMMARY.**

KOM COAL LIMITED is a company registered in Tanzania under Certificate of Incorporation **No. 142028190** issued on 1st July 2020. The project promoters have sufficient knowledge and experience in mineral exploration, exploitation, and financing, KOM COAL LIMITED board of directors has agreed to venture into coal processing facilities at Muhukuru village, Songea District Ruvuma region, The promoters of the project are a well-established business in Tanzania carrying out various businesses but majoring in mining, manufacturing, Import, cotton ginning, etc. businesses. Having been in the business for over 15 years the directors are now well-prepared to establish a coal-processing

The business plan has been prepared for **KOM COAL LIMITED** for the coal processing project. The implementation of this project will include the following activities:

- Registration of project to TIC
- Obtaining various permits and license
- Ordering machines and other project equipment
- Installation of machines
- Recruiting

The proposed project is estimated to cost about US\$ **30m** to be sourced partially from foreign financial institutions and shareholders' equity

1.1 **THE PROJECT PROMOTERS**

The shareholders of this project are individuals with diverse professional and International business backgrounds. The company is owned by four shareholders, namely:-

Share Holders	% of Share	Nationality
Mhoja Nkwabi Kabalo	85	Tanzania
Joyce Mhoja Nkwabi	5	Tanzania
Jesca Mhoja Nkwabi	5	Tanzania
Jenifer Mhoja Nkwabi	5	Tanzania

1.2 **LOCATION.**

The project head office will be located at Muhukuru village, Songea District Ruvuma

1.3 **OBJECTIVE OF STUDY**

The purpose of this study is to work out the technical and commercial details and financial viability of a plant for mineral processing.

1.4 **MARKET AND MARKETING ASPECTS**

Coal 2023 sees global demand for coal rising by 1.4% in 2023, surpassing 8.5 billion tonnes for the first time. The global increase masks stark differences among regions. Consumption is on course to decline sharply in most advanced economies in 2023, including record drops in the European Union and the United States of around 20% each. Demand in emerging and developing economies, meanwhile, remains very strong, increasing by 8% in India and by 5% in China in 2023 due to rising demand for electricity and weak hydropower output.

The market survey carried out reveals that the current demand for coal products in the global market is higher. Business opportunities exist for setting up a coal processing by having such a plant in Tanzania , Tanzania is going to save a huge number of jobs exported to foreign countries when the country exports raw minerals

2.0. **PROJECT DETAILS**

2.1. **INTRODUCTION**

Tanzania is endowed with a variety of minerals such as gemstones, industrial minerals, metals, and non-metals. Because of the above-mentioned factor, the country's mineral processing facilities have a

great potential in contributing to the economic growth of Tanzania Economy.

The sector plays a critical role in the social and economic development of a country.

It is quite gratifying to note that the Government of Tanzania realizes the role of minerals value additions for its economic and social development, and as a result has developed fiscal and non-fiscal incentives which are very instrumental in improving the business and investment environment in the minerals sector.

The project has major objectives as follows:-

- To promote minerals value addition in Tanzania
- To bring new technology and technical know-how in the country in the course of its business transactions.
- To provide extra employment to **20** people in the sector.

3.0 PROJECT MANAGEMENT

KOM COAL LIMITED will be under the Management Director who has experience in managing various businesses.

Under this management, **KOM COAL LIMITED** is expected to grow steadily from small to medium company

The company will have a team of qualified and experienced functional managers in different areas. Other senior and middle-level staff will be available for the start-up and subsequent

operations of the company, and the total number of employees is expected to be **80**

3.2 PROJECT MANAGEMENT POLICY

The day-to-day operations will be managed by the Managing Director, to be assisted by the Production and Technical Director of Production who will be overall in charge of production, the Business Development and Logistics Director, and the financing and administration Director who will take care of all matters related to finance resources and human resources of the company

3.4 COAL PROCESSING

RPM Solutions brings a deep wealth of mining and machining experience to every coal processing project. When it comes to coal processing, our operators at RPM Solutions bring a deep wealth of mining and machining experience to every project. Coal processing is where raw coal from the mine is cleared using different physical processes, with or without any chemical reagents, to get a product that can be sold in the market or can be used for different purposes such as power generation. Once the coal has been mined it needs to be processed. First, the coal goes to a preparation plant where it is washed or cleaned to remove contaminants. The cleaning removes impurities like rock, ash, sulfur, and other substances. A high

amount of rock and clay particles reduces the quality and heating value of coal and usually means a lower coal price. Some coal is crushed and mixed with water and transported through pipelines.

Coal processing involves crushing, screening, and beneficiation. Processing is where coal is converted from run-of-mine (ROM) coal to a product that meets the customer's requirements. Mined coal can include lumps. Crushing to a manageable size is required. Coal crushing can include a two-stage process, dependent on deposit size. Coal is crushed in a feeder breaker, a chain conveyor that breaks the biggest lumps. Coal size is further reduced through a sizer. Screening is used to separate different sizes of crushed coal. In this process, coarse and fine coal is separated to accommodate specific markets and industrial usage. Screened coal is ideal for burning in horizontal kilns. Coarser coal is required by customers who burn coal in grate-fired applications. During beneficiation, coal is processed to remove impurities, reducing ash and Sulphur, thereby improving the market value of the coal. Beneficiation can improve the quality of contaminated coal that would otherwise be wasted. Most cleaning processes involve washing coal to separate coal particles from stone particles. Coal can be charred, a process wherein hydrogen and oxygen are removed from coal to make it a purer form of carbon.

Typical steps in coal preparation include:

- Crushing
- Screening into different size fractions
- Physical, chemical, or mechanical processes to remove undesired impurities
- Dewatering
- Thermal drying
- Blending
- Agglomeration

The reasons for cleaning coal are:

- Remove inorganic material (ash) – thus reducing ash handling in coal plants
- Increase the heating value of coal
- Reduce the transportation cost per unit weight of coal
- Meet customers' specifications

Why coal processing is important:

- Remove extraneous, non-combustible material
- Ash reduction
- Lower particulates
- Reduced ash handling at the power station
- Sulfur reduction
- Carbon emission reduction
- Reduced transportation costs per unit of heat
- Guaranteed consistent heat value

- Improved plant efficiency

RPM Solutions, based in Lexington, Kentucky, can provide superior solutions through our vast knowledge of the coal industry combined with our strength and expertise in the minerals processing industry. We aim to deliver superior coal process solutions for our clients, big or small, regardless of the location. We differentiate ourselves through our advanced skills and preparation. RPM Solutions' commitment to detail is the most important component of our success. For more information about putting the services of RPM Solutions to work regarding effective coal processing, contact us at www.RPMSolve.com

4.0 FINANCIAL ASPECTS

KOM COAL LIMITED COST STRUCTURE

Land and Buildings	4,000,000.00
Machinery & Equipment	9,000,000.00
Motor Vehicles	2,000,000.00
Furniture & Fixtures	90,000.00
Pre expenses	20,000.00
Others	15,000.00
Working Capital	5,000,000.00
TOTAL	20,125,000.00

For the project to be a reality a total investment amounting to US \$ **20,125,000** is needed

5.0 **FINANCING PATTERN**

The project will be financed by equity constituting US\$ 10,125,000 and loan being US \$10,000,000

5.1 **COAL PRICE**

The average price of Coal USD 100 per Ton

5.2 **PROCESSING CAPACITY**

The company plans to process 500 tons per day

6.0 **FINANCIAL ANALYSIS**

6.1 **Considerations and Assumptions:**

The corporate tax charged is 30% of the profits. The capital investment allowance is 50%. The capital assets are exempted from customs duty and Value Added Tax. The straight-line method to depreciate the project's capital items has been applied.

6.2 **Financial Statements:**

6.3 **Projected Profit and Loss Statement**

The Income and Expenditure Statement shows the projected income for the 10 years. The position depicted is that the project earns profit throughout its life. Accumulated after-tax profits grow from first year to the 10year

6.4 Projected Cash Flows

This is shown in the financial statements. The project has a positive end-of-year cash flow from year 1 to 10th year

6.5 Projected Balance Sheet

The projected Balance Sheet of the projected is shown in the financial statements under the same heading. The net worth of the project increases from the first year of operation to the 10th year.

7.0 ECONOMIC ASPECTS OF THE PROJECTS

Besides the financial/monetary returns to the owners, there are other benefits to be derived for the whole country viz.

(i) Employment Opportunities

Employment and poverty reduction are among the major concerns of the Central and Local Government authorities. It is gratifying to note that the project is going to employ **80** people. This is a significant contribution coming from investors.

(ii) Revenue to the Government

The Project is expected to pay a substantial annual amount in the form of corporation tax and other taxes will be paid directly to the government during the project's 10 years covered under our project review.

(iii) Foreign Exchange Earning

Since the project's final products will be exported, the project will thus earn foreign currency for the United Republic of Tanzania.

8.0 CONCLUSION AND RECOMMENDATION

8.1 CONCLUSION

- (i) The project is profitable and contributes to government revenue by way of taxes.
- (ii) The project employs 80 people all of whom are national Tanzanians.
- (iii) The project is an encouraging sign to prove that we have minerals value addition that could be done in Tanzania.

9.0 RECOMMENDATION

After the foregoing economic and financial evaluation of the project, we strongly recommend that this project be implemented and be given all the support required by all the concerned Government Ministries and Agencies, including the Tanzania Revenue Authority (TRA) and the Tanzania Investment Centre – (TIC)

The project deserves this support because of its viability, since it is technically feasible, economically viable and socially acceptable.

KOM COAL LIMITED COST STRUCTURE

Land and Buildings	4,000,000.00
Machinery & Equipment	9,000,000.00
Motor Vehicles	2,000,000.00
Furniture & Fixtures	90,000.00
Pre expenses	20,000.00
Others	15,000.00
Working Capital	5,000,000.00
TOTAL	20,125,000.00

KOM COAL LIMITED PROJECTED INCOME & EXPENDITURE STATEMENT (US\$)

	1	2	3	4	5	6	7	8	9	10
Revenue	13,750,000	14,437,500	15,159,375	15,917,344	16,713,211	17,548,871	18,426,315	19,347,631	20,315,012	21,330,763
Operating Expenses:	8,937,500	9,384,375	9,853,594	10,346,273	10,863,587	11,406,766	11,977,105	12,575,960	13,204,758	13,864,996
Profit before Depreciation &Interest	4,812,500	5,053,125	5,305,781	5,571,070	5,849,624	6,142,105	6,449,210	6,771,671	7,110,254	7,465,767
Interest	800,000	700,000	600,000	500,000	400,000	300000	200000	100000	0	0
Depreciation	460,000	460,000	460,000	460,000	460,000	460,000	460,000	460,000	460,000	460,000
Gross Profit	3,552,500	3,893,125	4,245,781	4,611,070	4,989,624	5,382,105	5,789,210	6,211,671	6,650,254	7,005,767
Tax (30%)	1,065,750	1,167,938	1,273,734	1,383,321	1,496,887	1,614,632	1,736,763	1,863,501	1,995,076	2,101,730
Profit After Tax	2,486,750	2,725,188	2,972,047	3,227,749	3,492,737	3,767,474	4,052,447	4,348,170	4,655,178	4,904,037
Accumulated Profit	2,486,750	5,211,938	8,183,984	11,411,734	14,904,470	18,671,944	22,724,391	27,072,561	31,727,739	36,631,775

KOM COAL LIMITED PROJECTED CASH FLOW US\$

SOURCES:		1	2	3	4	5	6	7	8	9	10
Profit before interest and depreciation	-	4,812,500	5,053,125	5,305,781	5,571,070	5,849,624	6,142,105	6,449,210	6,771,671	7,110,254	7,465,767
Equity	10,125,000										
Loan	10,000,000										
Total Sources	20,125,000	4,812,500	5,053,125	5,305,781	5,571,070	5,849,624	6,142,105	6,449,210	6,771,671	7,110,254	7,465,767
Applications:											
Capital expenditure	15,900,000	-	-	-	-	-					
working Capital & Others	4,225,000										
Cash	-	3,746,750	3,885,188	4,032,047	4,187,749	4,352,737	4,527,474	4,712,447	4,908,170	5,115,178	5,364,037
Tax	-	1,065,750	1,167,938	1,273,734	1,383,321	1,496,887	1,614,632	1,736,763	1,863,501	1,995,076	2,101,730
Subtotal	20,125,000	4,812,500	5,053,125	5,305,781	5,571,070	5,849,624	6,142,105	6,449,210	6,771,671	7,110,254	7,465,767
Total applications	20,125,000	4,812,500	5,053,125	5,305,781	5,571,070	5,849,624	6,142,105	6,449,210	6,771,671	7,110,254	7,465,767
Accumulated cash		3,746,750	7,631,938	11,663,984	15,851,734	20,204,470	24,731,944	29,444,391	34,352,561	39,467,739	44,831,775

KOM COAL LIMITED PROJECTED BALANCE SHEET US \$

Fixed Assets	-	1	2	3	4	5	6	7	8	9	10
Opening balance	-	15,900,000	15,440,000	14,980,000	14,520,000	14,060,000	13,600,000	13,140,000	12,680,000	12,220,000	11,760,000
Total Long-term Assets	-	15,900,000	15,440,000	14,980,000	14,520,000	14,060,000	13,600,000	13,140,000	12,680,000	12,220,000	11,760,000
Less depreciation	-	460,000	460,000	460,000	460,000	460,000	460,000	460,000	460,000	460,000	460,000
Closing balance	-	15,440,000	14,980,000	14,520,000	14,060,000	13,600,000	13,140,000	12,680,000	12,220,000	11,760,000	11,300,000
Working capital	4,225,000	4,225,000	4,225,000	4,225,000	4,225,000	4,225,000	4,225,000	4,225,000	4,225,000	4,225,000	4,225,000
Accumulated cash	-	3,746,750	3,885,188	4,032,047	4,187,749	4,352,737	4,527,474	4,712,447	4,908,170	5,115,178	5,364,037
Total assets	4,225,000	23,411,750	23,090,188	22,777,047	22,472,749	22,177,737	21,892,474	21,617,447	21,353,170	21,100,178	20,889,037
Financed by											
Equity	10,125,000	10,125,000	10,125,000	10,125,000	10,125,000	10,125,000	10,125,000	10,125,000	10,125,000	10,125,000	10,125,000
Accumulated profit	-	2,486,750	5,211,938	8,183,984	11,411,734	14,904,470	18,671,943.79	22,724,390.98	27,072,560.53	31,727,738.55	36,631,775.48
Total equity	10,125,000	12,611,750	15,336,938	18,308,984	21,536,734	25,029,470	28,796,944	32,849,391	37,197,561	41,852,739	46,756,775
Long term loan	1,000,000	8,750,000	7,500,000	6,250,000	5,000,000	3,750,000	2,500,000	1,250,000	-	0	0
Total debts	1,000,000	8,750,000	7,500,000	6,250,000	5,000,000	3,750,000	2,500,000	1,250,000	-	-	-
Total equity and debts	11,125,000	21,361,750	22,836,938	24,558,984	26,536,734	28,779,470	31,296,944	34,099,391	37,197,561	41,852,739	46,756,775

KOM COAL LIMITED PROJECTED LONG-TERM LOAN REPAYMENT

Year	principle	Loan Interest (6%)	Total Amount Paid	Loan Balance
1	1,250,000	800,000	2,050,000	10,000,000
2	1,250,000	700,000	1,950,000	8,750,000
3	1,250,000	600,000	1,850,000	7,500,000
4	1,250,000	500,000	1,750,000	6,250,000
5	1,250,000	400,000	1,650,000	5,000,000
6	1,250,000	300,000	1,550,000	3,750,000
7	1,250,000	200,000	1,450,000	2,500,000
8	1,250,000	100,000	1,350,000	1,250,000