

**JIKOPOWER**

**Business Plan**

**For**

**Briquettes Manufacturing**

**BUSINESS NAME: JIKOPOWER**

LOCATION: SALASALA ROAD, WAZO STREE, KINONDONI

OBJECTIVE: TO ESTABLISH A BRIQUETTES MANUFACTURING PLANT

FINANCING: INVESTORS' EQUITY USD 84,000 AND LOAN OF USD 21,000

BENEFITS: PRODUCE CLEANER COOKING ENERGY FOR COOKING IN LINE  
WITH NATIONAL TRANSITIONING TO CLEANER COOKING  
STRATEGY, CLIMATE CHANGE MITIGATION, JOBS CREATION,  
GOVERNMENT INCOME.

FORECASTED IMPLEMENTATION PERIOD: 5 YEARS

PLANT CAPACITY: 1MT OF BRIQUETTES PER HOUR

## 1.0. EXECUTIVE SUMMARY.

JIKOPOWER is a registered business name (Proprietorship) under The Business Names Registration Act (Cap 213) with Certificate of Registration **No. 577410** issued on **5<sup>th</sup> July 2024**.

The project promoter is a Tanzania woman inspired to contribute in supporting a country transition into cleaner and sustainable clean cooking energy. Having been passionate of the need to transform the cooking practices in Tanzania, the proprietor wishes to establish a plant that will transform the bio-waste into high quality industrial briquettes to be marketed around the entire country.

The business plan has been prepared to enable JikoPower to set a proper business-oriented direction for the production of briquettes as fuel for cooking. The implementation of this project for this first phase will include the following activities:

- Registration of project to TIC
- Importation of briquetting machine
- Obtaining various permit and license
- Construction of industrial building
- Recruiting
- The purchase of initial trucks
- Equipping the company with relevant facilities

During this initial phase of investment, the proposed project is estimated to cost about US\$ 105,000.00. The project is sponsored by shareholders equity of USD 84,000 and the remaining amount of US\$ 21,000 will be a loan facility to be secured from local lenders.

### 1.1 THE PROJECT PROMOTER.

The sole business proprietor is a Tanzanian woman entrepreneur with a diverse professional and business backgrounds.

Name	Status	Nationality
ADRIANA CLEMENCE LYAMBA	Sole Proprietor	Tanzanian

### 1.2 LOCATION.

The project head office will be located **at Salasala, Kinodnoni district, Dar Es Salaam.**

### 1.3 Management and work force

Initially the business plan to recruit 5 employees.

### 1.4 OBJECTIVE OF STUDY

The main objective of this business plan is to depict the commercial feasibility of the project.

## 2.0 MARKET POTENTIAL

Tanzania cooking practices is characterized by use of biomass as the mains source of fuel for cooking. It is estimated that over 80% of Tanzanian cook using biomass (firewood and charcoal), this practices among others have negative consequences to the environment, health, economy, and general wellbeing of the communities. Cooking is a life-necessity which makes it indispensable and thus environmentally cleaner energy for cooking should be of paramount as it contribute in climate changes. Use of biomass results into deforestation and nature degradation which has ultimate effects to the eco-system.

Increasing Tanzania population coupled with growth of economic activities put significant pressure on the energy demand for cooking. Reliance on biomass for cooking is no longer sustainable and pose a greater threat to the environment and on human existence. It is now timely and very important that alternative and sustainable cleaner energy for cooking be supported to mitigate the situation.

According to a National Bureau of Statistics (NBS) report on **Impact of Access to Sustainable Energy Survey (IASSES2021/22)**, 92% of the Tanzania mainland households use wood fuel (firewood and charcoal) as their main energy for cooking. Further, it was found that 66% of households use tier zero (0) cooking stoves while 32% use tier 1 to 3 stoves which are self-built or manufactured biomass stoves. Tiers 0 to 3 are considered low-quality stove of higher emission, inefficient and detrimental to households health and wellbeing. This project aims to contribute to addressing the situation and aligned to government's clean cooking strategy (2024-2034) with an ambitious target to transit 80% of the population.

## **2.1 PRODUCTS**

The main product of the proposed project is to produce the cleaner cooking solutions including:

- Industrial briquettes
- Efficient Cooking stoves powered by briquettes.

## **2.2 MARKETS**

Proposed briquettes and stoves to be produced target to serve the institutions, business and any venture preparing meals to serve many people. Secondary, the project will target households' customers to also transform their cooking practices.

## **2.3 SUPPLY POSITION**

As explained above, cooking practices in Tanzania is still dominated with use of biomass and poorly made stoves, use of cleaner solutions are still in low level. The current practices have a wider negative impact to our climate, health, economy, and socioeconomic development of the country. Part of the initiative to address the challenge include increased capacity of suppliers of cleaner cooking solutions.

## **2.4 COMPETITION**

Due to the limited awareness, availability and other dominant traditional cooking practices, the competition is still low. It is anticipated as the government clean cooking initiatives grows, new entrants on production side as well as demand will grow at the same time. This translates into risk of unmatched demand and supply over the upcoming longer period.

## **2.5 PROMOTION**

Various promotion strategies will be deployed including awareness raising and direct reach out to institution and households' customers.

### 3.0 ASPECTS OF PROJECT SUSTAINABILITY

The project is sustainable, it advocates for use of bio waste (e.g sawdust, rice husk, bagasse, etc) to produce briquettes as energy for cooking. The existing demand to transit the population using market approach makes this project more sustainable.

#### 3.1 QUALITY CONTROL SYSTEM

The processing machines will be of high quality to ensure upholding of the standards as required by TBS standard no. TZS1323. Supply of the machine will be contracted to provide trainings on machine operations to ensure adherence to standards of final products.

#### 3.2 ENVIRONMENT PROTECTION

The project is a pro-environment one, it converts the bio-waste into marketable products.

### 4.0 Project Investment Cost

The estimated total investment cost of the project is **US\$ 105,000**,

#### JIKOPOWER

PARTICULAR	US\$
Land and Buildings	15,000
Briquetting Machine	56,500
Motor Vehicle	21,500
Working Capital	12,500
<b>TOTAL</b>	<b>105,000*</b>

*\*Total cost is for phase one of the project implementation.*

**(i) Land and Building: Us \$15,000**

The enterprise has already secured an industrial plot in Dar es salaam where the industrial shed will be built to house the plant.

**(ii) Briquetting Machine: US\$ 56,500**

The machine supplier has been identified and advance payment made to initiate fabrication of the machine. The cost estimate includes local clearing, installations and commissioning of the plant.

**(iii) Motor Vehicles:US\$21,500**

Initially, the project will procure one truck to facilitate the operations, more trucks will be added during phase two of scaling the business.

**(iv) Initial Working Capital: US\$12,000**

It is estimated that the amount will be used to cover the initial capital to set up the business including compliances and sourcing of raw materials to kick-start the operations.

#### **4.1 Financing pattern**

Initial project financing sources will be mainly by equity US\$ **84,000** complemented by a debt of **US\$ 21,000** from local lenders.

## **5.0 Financial Analysis**

### **5.1 Considerations and Assumptions:**

In developing the projected financial statements, the following assumptions were made in a conservative manner for the period of 5 years.

- The corporate tax charged is 30% on realized profits.
- Production volumes of 900,000MT for briquettes, 96 units for stoves per year with a 10% annual increment.
- Gross profit margin of 40% and average operating costs of 7.5%
- Selling price of USD0.26 per Kg of briquettes, USD444 and USD463 per unit of cookstoves of different sizes.

### **5.2 Financial Statements:**

On average the annual sales amount to USD338,000, profit of USD53,000 and Total assets of 240,000 per annum. The cash flows remain positive with an average of USD171,000 per year.

## **6.0 Feasibility of the Project**

Successful implementation of this project comes with numerous socioeconomic benefits making feasibly and worth pursuing.

- The project aligned to national agenda of transiting 80% of the population to cleaner cooking solutions by year 2034.
- The project will significantly contribute to reducing the number of trees to be cut for cooking energy. It plays an eco-friendly role as it uses waste material to produce energy products for cooking.
- It will generate substantial revenue to the government in the form of corporate tax, value added tax and pay as you earn.

- The project will contribute in transferring of knowledge and skills for other to replicate and implement in other parts of the country.
- Employment will be created with a minimum of five permanent and many others along the up and down streams of the value chain.

## 7.0 Implementation

Project implementation is anticipated as follows: -

S/N	ACTIVITY	PERIOD
1	Processing TIC Certificate of Incentive	September 2024
2	Land acquisition and building set up	September to October 2024
3	Machines ordering	August-October 2024
5	Installation of machines	October-November 2024
6	Commercial Operations	December 2024

## 8.0 Conclusion and recommendations

Given the state of cooking practices in Tanzania, ongoing public awareness initiatives, the government buy in and its strategy to transit 80% of the entire population, the project is technically feasible, viable, and generally bankable. This is augmented by the fact that the project sponsor is passionate and committed to realize it.

The proprietor hereby recommended that the project be approved by Tanzania Investment Centre and be granted the TIC Certificate of Incentives with its associated privileges and benefits as provided for under the Tanzania Investment Act, 1997.

**APPENDIX (I)****JIKOPOWER CAPITAL STRUCTURE (USD)**

<b>PARTICULAR</b>	<b>USD</b>
Land	6,000
Buildings	9,000
Machinery	56,500
Vehicles (Trucks)	21,500
Working Capital	12,000
<b>TOTAL</b>	<b>105,000</b>

**APPENDIX (II)****JIKOPOWER PROJECTED INCOME STATEMENT (USD)**

<b>Income Statement</b>		<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>
<b>Total Revenue</b>	USD	276,889	304,578	335,036	368,539	405,393
<b>Cost of Sales</b>	USD	(166,133)	(182,747)	(201,021)	(221,123)	(243,236)
<b>Gross Profit</b>	USD	<b>110,756</b>	<b>121,831</b>	<b>134,014</b>	<b>147,416</b>	<b>162,157</b>
<b>Operating expenditure:</b>						
Total Opex	USD	(41,533)	(45,687)	(50,255)	(55,281)	(60,809)
<b>EBITDA</b>	USD	<b>69,222</b>	<b>76,144</b>	<b>83,759</b>	<b>92,135</b>	<b>101,348</b>
Depreciation	USD	(8,250)	(8,013)	(7,798)	(7,603)	(7,427)
Finance Cost		(1,551)	(1,256)	(936)	(590)	(215)
<b>Profit before Tax</b>	USD	<b>59,421</b>	<b>66,876</b>	<b>75,025</b>	<b>83,942</b>	<b>93,706</b>
Taxation	USD	(17,826)	(20,063)	(22,508)	(25,183)	(28,112)
<b>Profit after tax</b>	USD	<b>41,595</b>	<b>46,813</b>	<b>52,518</b>	<b>58,759</b>	<b>65,594</b>

## APPENDIX (III)

### JIKOPOWER PROJECTED BALANCE SHEET STATEMENT (USD)

Balance Sheet		2025	2026	2027	2028	2029
<b>Current assets</b>						
Cash	USD	58,286	109,258	165,400	227,243	295,369
<b>Non-current assets</b>						
Net PPE	USD	84,750	76,738	68,940	61,337	53,910
<b>Total assets</b>	<b>USD</b>	<b>143,036</b>	<b>185,996</b>	<b>234,340</b>	<b>288,579</b>	<b>349,279</b>
<b>Current liabilities</b>						
Overdraft	USD	-	-	-	-	-
<b>Non-current liabilities</b>						
LT loan	USD	17,442	13,588	9,415	4,895	0
<b>Total liabilities</b>	<b>USD</b>	<b>17,442</b>	<b>13,588</b>	<b>9,415</b>	<b>4,895</b>	<b>0</b>
<b>Equity</b>						
Share capital	USD	84,000	84,000	84,000	84,000	84,000
Prior year RE	USD	-	41,595	88,408	140,925	199,684
Current RE	USD	41,595	46,813	52,518	58,759	65,594
Total Retained earnings	USD	41,595	88,408	140,925	199,684	265,279
<b>Total equity</b>	<b>USD</b>	<b>125,595</b>	<b>172,408</b>	<b>224,925</b>	<b>283,684</b>	<b>349,279</b>

## APPENDIX (IV)

### JIKOPOWER PROJECTED CASH FLOW STATEMENT (USD)

Cash Flow Statement		2025	2026	2027	2028	2029
<b>Cash flow from operation</b>						
EBITDA	USD	69,222	76,144	83,759	92,135	101,348
Taxation	USD	(17,826)	(20,063)	(22,508)	(25,183)	(28,112)
	<b>USD</b>	<b>51,396</b>	<b>56,082</b>	<b>61,251</b>	<b>66,952</b>	<b>73,236</b>
<b>Cash flow from investments</b>						
Acquisition of fixed assets	USD	(93,000)	-	-	-	-
	<b>USD</b>	<b>(93,000)</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Cash flow from financing</b>						
Equity-Grant	USD	84,000	-	-	-	-
Loan		21,000				
Debt Repayment		(5,110)	(5,110)	(5,110)	(5,110)	(5,110)
Dividend payout	USD	-	-	-	-	-
	<b>USD</b>	<b>99,890</b>	<b>(5,110)</b>	<b>(5,110)</b>	<b>(5,110)</b>	<b>(5,110)</b>
<b>Changes in cash</b>		<b>58,286</b>	<b>50,972</b>	<b>56,142</b>	<b>61,843</b>	<b>68,127</b>
Opening cash balance	USD		58,286	109,258	165,400	227,243
<b>Closing cash balance</b>	<b>USD</b>	<b>58,286</b>	<b>109,258</b>	<b>165,400</b>	<b>227,243</b>	<b>295,369</b>

APPENDIX (V)

JIKOPOWER PROJECTED TERM LOAN REPAYMENT SCHEDULE (USD)

<b>Principal (USD)</b>	<b>21,000</b>	<b>Number of Payments:</b>	<b>60</b>		
<b>Loan Tenor</b>	<b>5</b>	<b>Monthly Rate:</b>	<b>0.67%</b>		
<b>Annual Int. Rate</b>	<b>8%</b>				
<b>1st paymnt Date</b>	<b>31/01/2025</b>	<b>Monthly Installment:</b>	<b>426</b>	<b>USD</b>	
<b>Nper</b>	<b>12</b>				
<b>Month</b>	<b>Payment No.</b>	<b>Payment:</b>	<b>Principal:</b>	<b>Interest:</b>	<b>Balance</b>
31/01/2025	1	(426)	(286)	(140)	20,714
28/02/2025	2	(426)	(288)	(138)	20,426
31/03/2025	3	(426)	(290)	(136)	20,137
30/04/2025	4	(426)	(292)	(134)	19,845
31/05/2025	5	(426)	(294)	(132)	19,552
30/06/2025	6	(426)	(295)	(130)	19,256
31/07/2025	7	(426)	(297)	(128)	18,959
31/08/2025	8	(426)	(299)	(126)	18,659
30/09/2025	9	(426)	(301)	(124)	18,358
31/10/2025	10	(426)	(303)	(122)	18,055
30/11/2025	11	(426)	(305)	(120)	17,749
31/12/2025	12	(426)	(307)	(118)	17,442
31/01/2026	13	(426)	(310)	(116)	17,132
28/02/2026	14	(426)	(312)	(114)	16,821
31/03/2026	15	(426)	(314)	(112)	16,507
30/04/2026	16	(426)	(316)	(110)	16,191
31/05/2026	17	(426)	(318)	(108)	15,873
30/06/2026	18	(426)	(320)	(106)	15,553
31/07/2026	19	(426)	(322)	(104)	15,231
31/08/2026	20	(426)	(324)	(102)	14,907
30/09/2026	21	(426)	(326)	(99)	14,581
31/10/2026	22	(426)	(329)	(97)	14,252
30/11/2026	23	(426)	(331)	(95)	13,921
31/12/2026	24	(426)	(333)	(93)	13,588
31/01/2027	25	(426)	(335)	(91)	13,253
28/02/2027	26	(426)	(337)	(88)	12,916
31/03/2027	27	(426)	(340)	(86)	12,576
30/04/2027	28	(426)	(342)	(84)	12,234
31/05/2027	29	(426)	(344)	(82)	11,890
30/06/2027	30	(426)	(347)	(79)	11,543
31/07/2027	31	(426)	(349)	(77)	11,194
31/08/2027	32	(426)	(351)	(75)	10,843
30/09/2027	33	(426)	(354)	(72)	10,490
31/10/2027	34	(426)	(356)	(70)	10,134
30/11/2027	35	(426)	(358)	(68)	9,775
31/12/2027	36	(426)	(361)	(65)	9,415
31/01/2028	37	(426)	(363)	(63)	9,052
29/02/2028	38	(426)	(365)	(60)	8,686
31/03/2028	39	(426)	(368)	(58)	8,318
30/04/2028	40	(426)	(370)	(55)	7,948
31/05/2028	41	(426)	(373)	(53)	7,575
30/06/2028	42	(426)	(375)	(51)	7,200
31/07/2028	43	(426)	(378)	(48)	6,822
31/08/2028	44	(426)	(380)	(45)	6,442
30/09/2028	45	(426)	(383)	(43)	6,059
31/10/2028	46	(426)	(385)	(40)	5,674
30/11/2028	47	(426)	(388)	(38)	5,286
31/12/2028	48	(426)	(391)	(35)	4,895
31/01/2029	49	(426)	(393)	(33)	4,502
28/02/2029	50	(426)	(396)	(30)	4,106
31/03/2029	51	(426)	(398)	(27)	3,708
30/04/2029	52	(426)	(401)	(25)	3,306
31/05/2029	53	(426)	(404)	(22)	2,903
30/06/2029	54	(426)	(406)	(19)	2,496
31/07/2029	55	(426)	(409)	(17)	2,087
31/08/2029	56	(426)	(412)	(14)	1,675
30/09/2029	57	(426)	(415)	(11)	1,261
31/10/2029	58	(426)	(417)	(8)	843
30/11/2029	59	(426)	(420)	(6)	423
31/12/2029	60	(426)	(423)	(3)	0
<b>TOTAL</b>		<b>(25,548)</b>	<b>(21,000)</b>	<b>(4,548)</b>	