

# **BUSINESS PLAN**

## **PRODUCTION OF SOLAR BATTERIES AND INVERTERS**

**THREE FU LIMITED**

# INVESTMENT PROPOSAL

## THREE FU LIMITED

### Solar Battery and Inverter Manufacturing Plant

**Location:** Vikindu Village, Mkuranga District, Pwani Region – Tanzania

**Total Project Cost:** USD 1,500,000

**Promoters' Equity (25%):** USD 375,000

**Investment Sought (75%):** USD 1,125,000

## 1. EXECUTIVE SUMMARY

Three Fu Limited proposes to establish a modern manufacturing plant for **solar batteries and inverters** in Vikindu Village, Mkuranga District, Pwani Region.

The project aims to support Tanzania's industrialization and renewable energy goals by locally manufacturing high-quality:

- Deep-cycle solar batteries
- Lithium battery packs
- Hybrid and off-grid solar inverters

The company will reduce import dependency, create employment, and supply both local and regional markets.

The project qualifies for TIC incentives under manufacturing and renewable energy investment categories.

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## 2. COMPANY PROFILE

Item	Description
Company Name	Three Fu Limited
Legal Status	Limited Liability Company
Sector	Renewable Energy Manufacturing
Location	Vikindu, Mkuranga District, Pwani Region
Ownership	Private Investors
Employment	40 Direct Jobs

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# 3. PROJECT DESCRIPTION

## 3.1 Products

### Solar Batteries

- 12V 100Ah Deep Cycle
- 12V 200Ah Solar Batteries
- 24V Lithium Battery Systems

### Solar Inverters

- 1kVA – 3kVA Inverters
  - 5kVA – 10kVA Hybrid Inverters
  - Off-grid inverters
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## 3.2 Production Capacity

Product	Monthly Capacity	Annual Capacity
Solar Batteries	2,000 units	24,000 units
Inverters	1,500 units	18,000 units

Initial production utilization:

- Year 1: 60%
- Year 2: 75%
- Year 3 onwards: 85–90%

# 4. LOCATION JUSTIFICATION

Vikindu, Mkuranga District is strategically selected because:

- Close to Dar es Salaam Port (import/export advantage)
- Accessible via major highway
- Availability of industrial land
- Reliable electricity and water supply
- Access to skilled and semi-skilled labor

# 5. PROJECT COST STRUCTURE

**Total Investment: USD 1,500,000**

Item	Amount (USD)
Land & Building Construction	240,000
Machinery & Equipment	460,000
Raw Materials (Initial Stock)	270,000
Working Capital	250,000
Licenses & Regulatory Costs	20,000
Utilities Installation	60,000
Contingency	200,000
<b>TOTAL</b>	<b>1,500,000</b>

## Financing Plan

Source	Amount (USD)	%
Promoters Equity	375,000	25%
Investors/Loan	1,125,000	75%
<b>Total</b>	<b>1,500,000</b>	<b>100%</b>

# 6. MARKET ANALYSIS

## 6.1 Market Opportunity

- Increasing rural electrification demand
- Growth in solar installations
- Unstable grid electricity
- Government renewable energy initiatives
- Growing regional demand (EAC & SADC)

Over 60% of rural households rely on solar power systems.

# 7. FINANCIAL PROJECTIONS (5 YEARS)

## Key Assumptions:

- Average Battery Price: USD 150
- Average Inverter Price: USD 200
- Gradual increase in production capacity
- 10% annual growth in sales
- Operating cost growth: 5% annually

## 7.1 Revenue Projections

### Year 1 (60% Capacity)

Batteries:

- $24,000 \times 60\% = 14,400$  units
- $14,400 \times \$150 = \$2,160,000$

Inverters:

- $18,000 \times 60\% = 10,800$  units
- $10,800 \times \$200 = \$2,160,000$

Total Revenue Year 1:  
USD 4,320,000

### 5-Year Revenue Forecast

#### Year Revenue (USD)

Year 1 4,320,000

Year 2 5,000,000

Year 3 5,600,000

Year 4 6,200,000

Year 5 6,800,000

## 7.2 Operating Costs (Annual Estimate – Year 1)

Expense	USD
Raw Materials	2,400,000
Salaries	180,000

<b>Expense</b>	<b>USD</b>
Utilities	60,000
Maintenance	40,000
Marketing	50,000
Admin & Misc	70,000
<b>Total Operating Cost</b>	<b>2,800,000</b>

## **7.3 Profit Projection**

<b>Item</b>	<b>USD</b>
Revenue (Year 1)	4,320,000
Operating Cost	2,800,000
Gross Profit	1,520,000
Estimated Net Profit (after tax & finance)	900,000 – 1,000,000

Projected break-even: Within 2 years.

## **8. ECONOMIC IMPACT**

- 40 direct jobs created
- Over 100 indirect jobs
- Import substitution
- Increased tax contribution
- Support to Tanzania's renewable energy policy
- Contribution to industrialization agenda

## **9. REGULATORY & TISEZA COMPLIANCE**

The project qualifies under TIC manufacturing category and will apply for:

- Certificate of Incentives
- VAT deferment on capital goods
- Import duty exemptions
- Corporate tax incentives (as applicable)

# 10. IMPLEMENTATION SCHEDULE

Phase	Duration
Land acquisition	2 months
Construction	5 months
Machinery installation	2 months
Staff recruitment	1 month
Trial production	1 month
Full operations	Within 12 months

# 11. PROJECT DESIGN CONCEPT

## Factory Layout Design

The plant will consist of:

1. Raw Material Storage Area
2. Battery Assembly Line
3. Inverter PCB Assembly Section
4. Quality Testing Laboratory
5. Packaging Section
6. Finished Goods Warehouse
7. Administration Block

Flow Design:

Raw Materials → Assembly → Testing → Packaging → Warehouse → Distribution

# 12. CONCLUSION

Three Fu Limited presents a high-impact manufacturing investment aligned with:

- Tanzania Development Vision 2025
- Industrialization Agenda
- Renewable Energy Strategy

With strong financial returns, strategic location, and growing demand, the project is commercially viable and suitable for TISEZA certification and investment promotion.