

BAOWU TZ STEEL COMPANY LIMITED

BAOWU (TZ) STEEL COMPANY LIMITED

2025

BUSINESS
PLAN



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Executive Summary

BAOWU TZ STEEL COMPANY LIMITED proposes a USD 60 million investment to establish a long-product steel facility in Mtwara, Tanzania. The project is structured in two phases:



Phase I: Import billets (90% imported raw material mix overall) and roll into rebar/sections.

Phase II: Commission a billet casting line using a blend of ~10% locally sourced scrap with imported inputs, improving value addition and foreign exchange savings.



Location Advantage: Pemba Mvita (Plot 1 & 2, Block G) offers proximity to Mtwara Port, easing import logistics for billets/consumables and export or up-country distribution of finished products.

Employment & Skills: ~200 direct jobs across production, quality, maintenance, logistics, safety, ESG and administration, with a structured training plan and strong HSE culture.

Company Profile & Governance



Registered Office: Mtwara, United Republic of Tanzania



Shareholding & Capital: USD 60,000,000



Board & Governance: Board of Directors with independent oversight; Audit & Risk Committee; ESG & HSE Committee.



Management: Managing Director; Plant Manager; Finance & Compliance Manager; Supply Chain Manager; HSE/ESG Lead; HR Manager; Sales & Marketing Manager; Quality Assurance Manager.

Project Description & Scope

- Phase I (Rolling Mill): Rebar (8–32 mm), wire rod, and light sections. Feedstock: imported billets.
- Phase II (Billet Casting): Induction furnace melt shop with continuous caster to produce billets, enabling partial substitution of imported billets with locally sourced scrap (~10%).

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Ancillaries: Reheating furnace (if rolling from cold billets), water treatment & recirculation, compressed air, laboratory (spectrometer, UTS/bend/rebar rib tests), maintenance workshop, spares warehouse.

2

Buildings: Production hall, raw material yard, finished goods yard, admin block, gate house & weighbridge, canteen/clinic, utility rooms.

3

IT/OT: ERP for procurement/inventory/sales, production monitoring (SCADA), energy metering, quality data capture.

Products, Markets & Strategy

Primary: Reinforcing bars (8–32 mm), light sections (angles, flats), wire rod.

Secondary/By-products: Mill scale, scrap returns.

Market Segmentation

Domestic (Tanzania)

- **Public Infrastructure Projects:** Government-funded roads, bridges, ports, housing schemes, and energy infrastructure.
- **Private Real Estate Developers:** Residential and commercial construction in Dar es Salaam, Dodoma, Arusha, Mbeya, and Mtwara.
- **Distributors/Wholesalers:** Building material suppliers in major towns for retail penetration.
- **Industrial Contractors/EPCs:** Steel-intensive projects (oil & gas facilities, special economic zones, and industrial parks).

Regional (Exports)

- **Northern Mozambique:** Demand for reconstruction and urban growth, accessible through Mtwara Port.
- **Malawi:** Growing infrastructure and housing demand, with proximity advantage via cross-border trade routes.
- **Eastern Zambia:** Construction in mining towns (Copperbelt extension) and transport corridors.
- **Southern Highlands (Tanzania):** Large pipeline for public works and regional trade flows.

Sales Channels

Direct Sales to Large Projects

Supplying major EPCs, government projects, and international contractors through negotiated contracts.

Distributor/Wholesaler Network

Appointed distributors across Dar es Salaam, Dodoma, Arusha, Mbeya, and Mwanza to cover retail and SME buyers.

Framework Agreements

Long-term supply agreements with top contractors and parastatals to secure predictable volumes.

Tender Participation

Active bidding for government and donor-funded infrastructure projects.

Export Sales

Establish agents in Malawi, Mozambique, and Zambia to ensure compliance with local import requirements and to manage logistics



Service Differentiation & Value Proposition

i. Advantage of Mtwara Port for both imports and exports, reducing inland logistics costs.

ii. Quality Assurance: Bars stamped with identifiable bar marking.
Full TBS compliance and testing certificates with each batch.

iii. Technical Support: Provide EPC contractors with technical advice, product specifications, and on-site consultations.

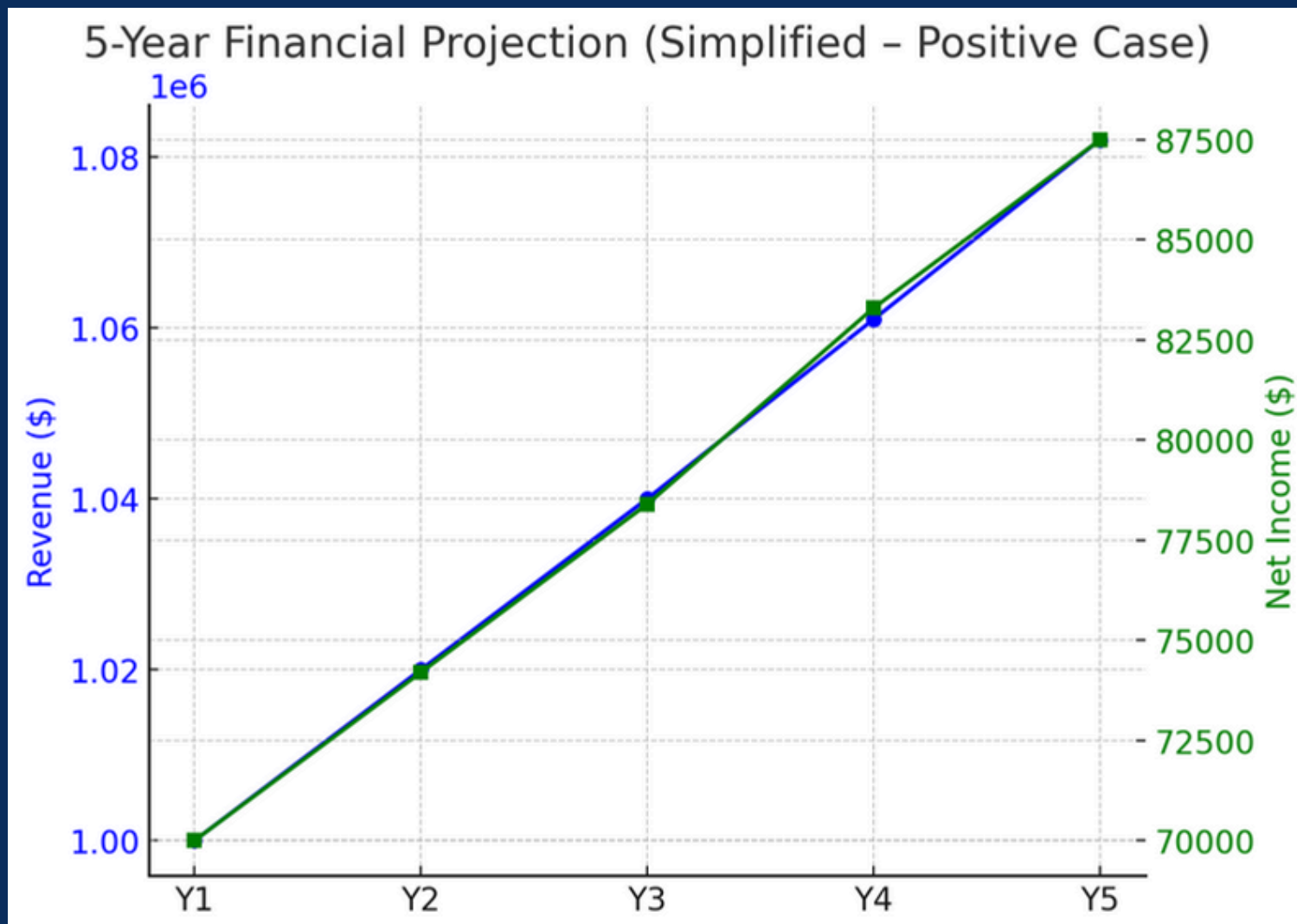
iv. After-Sales Service: Dedicated account managers for key clients; feedback loop for continuous quality improvement.

v. Flexibility: Ability to tailor bar lengths, bundle sizes, and product mix per project requirements.

vi. Sustainability Branding: Position as an environmentally responsible supplier (EIA-certified, ESG reporting, water recycling, scrap utilization).

Five Years Financial Projection

Year	Revenue (\$)	COGS (\$)	Gross Profit (\$)	EBITDA (\$)	Net Income (\$)
Y1	1,000,000	700,000	300,000	200,000	70,000
Y2	1,020,000	714,000	306,000	206,000	74,200
Y3	1,040,000	728,000	312,000	212,000	78,400
Y4	1,061,000	742,000	319,000	219,000	83,300
Y5	1,082,000	757,000	325,000	225,000	87,500



Site, Land & Infrastructure (Mtwara)

Land: Plot No. 1 & 2, Block G, Pemba Mvita, Mtwara.

Access & Logistics: Close access to Mtwara Port and trunk roads for up-country distribution.

Topography & Geotech: Conduct geotechnical survey for foundations and stormwater design.

Power: 33 kV/132 kV supply option (final voltage per TANESCO study). Preliminary peak demand envelope to be confirmed during load-flow and short-circuit studies.

Water: Industrial connection with recirculation/closed-loop cooling; borehole/back-up if needed.

Telecoms: Dedicated fiber link for ERP/OT systems.



Technology & Manufacturing Processes

Billet handling & reheating (Phase I).

Rolling mill with roughing, intermediate and finishing stands; controlled cooling bed; automatic cutting & bundling; bar marking.

Melt shop (Phase II) with induction furnace(s), ladle metallurgy as required, and continuous casting to billets (square section).



- Utilities & ETP: Water treatment & recirculation, fume extraction/dedusting, compressed air, transformer yard & MCCs, emergency power.
- QA/QC Lab: Chemical (spectrometer), mechanical (UTS/bend), dimensional checks (rib geometry, weight per meter).
- Yield & Quality: Design for total metal yield $\geq 95\%$ from billet to finished rebar; maintain TBS/ASTM/BS standards as required by customer specs.

Supply Chain: Raw Materials, Logistics & Inventory

Raw Materials Mix

- **Imported Billets:** Main input in the early years, accounting for about 90% of feedstock. These billets will be sourced from multiple international suppliers to ensure continuity of supply.
- **Local Scrap:** Begins at around 10% of feedstock once Phase II billet casting is installed, with the possibility of gradual increase depending on local scrap availability and quality.
- **Consumables:** Essential inputs such as refractories, ferro-alloys, electrodes (if used in melting), rolls & guides, lubricants, and steel strapping for bundling.

Sourcing Strategy

- **Imported Billets:** Secure long-term supply contracts with reliable global suppliers. Include flexibility for multi-port shipments to reduce risk of delays.
- **Local Scrap:** Purchase from approved yards that meet quality and safety standards (e.g., radiation and contamination checks).
- **Consumables:** Establish contracts with specialized suppliers, ensuring buffer stock for items with long lead times.

Utilities & Industrial Services

Electrical Power

- Load Requirement:

A detailed load flow study will define the final capacity, but provision is made for 10–15 MW at full industrial scale.

- Connection:

Supply through TANESCO grid, with step-down substations on site.

Water Supply & Treatment

- Process Water: Designed for 100% recirculation, minimizing fresh water use.
- Treatment: Effluent Treatment Plant (ETP) to treat and recycle wastewater, meeting NEMC discharge standards.

Waste Handling & Environmental Management

- Scrap Returns: Internal loop to recycle steel scrap back into production.
- Hazardous Waste: Oils, filters, and other hazardous items stored securely and collected by licensed waste contractors in line with Tanzanian law.
- Solid Waste: Segregated collection (metal, plastics, general) with recycling wherever possible.

Utilities & Industrial Services

Fire Protection & Safety

- Infrastructure: Hydrants and sprinklers in high-risk areas (production hall, storage).
- Dedicated fire water tank with pump house.
- Portable fire extinguishers across all zones.
- Compliance: Full approvals from Fire & Rescue Department and OSHA Tanzania.
- Training: Routine fire drills and staff training on emergency procedures

Compressed Air

- Uses: Plant operations, instrumentation, and pneumatic systems.
- Design:
 - Redundant compressors to ensure continuous supply.
 - Dryers and filters to maintain air quality and protect equipment.
- Safety: Distribution network equipped with relief valves and isolation points.

Environmental, Social & Governance (ESG)

Environmental Commitments

Regulatory Compliance:

Conduct a full Environmental Impact Assessment (EIA) following the Tanzanian framework: Scoping → Terms of Reference (ToR) → Detailed Study → Public Consultation → NEMC Certification.

• Pollution & Emissions Control:

Install dust collection and fume extraction systems in the production hall.

Implement noise reduction measures for machinery and transport.

Use water recirculation systems to reduce freshwater use.

• Resource Efficiency & Climate Action:

Develop a greenhouse gas management plan with annual monitoring.

Deploy Variable Frequency Drives (VFDs) and waste heat recovery where feasible to reduce energy intensity.

Rainwater harvesting and stormwater management to minimize environmental risks.

Biodiversity & Land Use:

Screen for biodiversity and community impact before site development.

Implement spill prevention systems to protect soil and nearby ecosystems.

Social Commitments

Employment & Skills Development:

- Generate ~200 direct jobs, with a priority on local hiring from Mtwara region.
- Introduce apprenticeships and technical training programs to uplift skills.
- Promote gender-inclusive recruitment across all roles.

Worker Welfare & Safety:

- Provide safe transport, protective equipment (PPE), and health coverage.
- Implement Occupational Health & Safety (OHS) aligned with ISO 45001, including:
 - Daily toolbox talks.
 - Incident reporting and corrective action.
 - Medical surveillance and emergency response planning.

Community Engagement & CSR:

- Establish a formal community engagement plan with a grievance redress mechanism.
- Support local supplier development through procurement opportunities.
- Align Corporate Social Responsibility (CSR) initiatives with education, healthcare, and vocational training in the Mtwara community.

Governance Commitments



Integrity & Compliance:

- Enforce an anti-corruption policy with zero tolerance.
- Maintain a conflict-of-interest register for directors and senior management.
- Provide a confidential whistleblowing hotline for employees and stakeholders.

Transparency & Accountability:

- Track and disclose key ESG metrics (KPIs):
- Energy intensity (kWh per ton of steel).
- Water intensity (m³ per ton of steel).
- Recycling rate of scrap and waste.
- Community investment spend and program outcomes.

Organization, HR & Training

Headcount Structure (Illustrative)

The factory will create approximately 200 direct jobs, structured as follows:

Function Area	Headcount	Key Responsibilities
Production & Quality Assurance (QA)	90	Steel rolling, billet handling, testing, process monitoring.
Maintenance (Mechanical/Electrical/Utilities)	40	Equipment upkeep, utilities management, preventive maintenance.
Logistics & Stores	20	Inbound/outbound logistics, warehouse control, weighbridge.
HSE/ESG & Security	15	Health & safety compliance, ESG monitoring, site security.
Admin / Finance / HR / IT	25	Finance, HR, IT support, procurement, general administration.
Sales & Customer Service	10	Market development, customer support, order handling.

HR & Workforce Development Strategy

Recruitment:

- Local hiring priority in Mtwara/Southern Tanzania; gender-inclusive drive; partnerships with vocational institutes.
- Compensation & Benefits: Competitive pay, health insurance, housing/transport support, and performance-linked incentives.
- Retention & Motivation: Clear career paths, recognition programs, internal promotions, and a safe, inclusive workplace.

Monitoring, Evaluation & Reporting (MER)

- Operational KPIs: Throughput (t/day), yield %, energy intensity (kWh/t), downtime %, OEE, conversion cost (\$/t), safety (TRIR/LTIFR).
- Commercial KPIs: On-time in-full (OTIF), receivables aging, market share, contribution margin per product.
- ESG KPIs: Water recycle %, waste diverted, CO₂e/t, local procurement %, gender diversity, community program outputs.
- Reporting Cadence: Daily ops dashboard; monthly management reports; quarterly Board & ESG reports; annual audit.

Risk Analysis and Mitigation

Risk Category	Risk Category	Potential Impact	Mitigation Measures
Market / Price Risk	Volatility in billet vs finished rebar spread due to global supply-demand shifts.	Eroded margins, loss of competitiveness, revenue unpredictability.	<ul style="list-style-type: none"> Secure multi-supplier agreements. Establish forward contracts/hedging. Maintain inventory discipline and strategic buffer stock.
Foreign Exchange (FX)	Heavy USD exposure for imported billets, consumables, and spares.	Heavy USD exposure for imported billets, consumables, and spares.	<ul style="list-style-type: none"> Explore natural hedge via USD-denominated sales/export. Use FX forward cover. Maintain treasury FX policy with clear thresholds.
Regulatory / Permits	Complex permits across TIC, NEMC, TBS, OSHA, TRA, Fire & Rescue, local govt.	Delays in project execution; fines/penalties; compliance failure.	<ul style="list-style-type: none"> Early engagement with regulators. Develop permit tracker & compliance calendar. Maintain dedicated compliance officer.
Power Reliability / Quality	Grid interruptions, unstable supply, harmonics.	Production downtime, equipment damage, increased O&M cost.	<ul style="list-style-type: none"> Dual feeder connections. On-site emergency backup (gensets). Install harmonic filters. Track KPIs (kWh/t, downtime %).
Environmental & Social License (ESG)	Community opposition, environmental non-compliance, stakeholder mistrust.	Delayed approvals, protests, reputational damage, possible shutdowns.	<ul style="list-style-type: none"> Transparent community engagement plan. Grievance redress mechanism. Local hiring and supplier development. Annual ESG reporting.

Risk Analysis and Mitigation

Risk Category	Risk Category	Potential Impact	Mitigation Measures
Health, Safety & Environment (HSE)	Industrial hazards: high-temp equipment, confined space, working at height, PPE misuse.	Injuries/fatalities, legal liability, downtime, increased insurance premiums.	<ul style="list-style-type: none"> • Implement LOTO procedures. • Mandatory PPE. • Permit-to-work for confined spaces and heights. • Safety training & behavior-based safety programs.
Execution Risk	Delays or failures during EPC, OEM delivery, commissioning, or ramp-up.	Cost overruns, schedule slippage, compromised plant performance.	<ul style="list-style-type: none"> • EPC contract with clear LDs. • FATs at OEM sites. • Staged commissioning. • Performance guarantees in supply contracts.
Supply Chain Risk	Disruptions in billet imports or local scrap quality/availability.	Raw material shortages, higher costs, production disruption.	<ul style="list-style-type: none"> • Long-term agreements with billet suppliers. • Scrap quality inspections. • Multiple import ports and logistic partners.
Financial Risk	Over-reliance on equity; debt cost fluctuations; working capital strain.	Liquidity shortfalls, higher financing costs, project delays.	<ul style="list-style-type: none"> • Prudent debt/equity mix. • Establish working capital facility. • Regular sensitivity analysis and cash flow monitoring.
Technology/Equipment Risk	Equipment obsolescence, breakdowns, or OEM support gaps.	Reduced efficiency, costly downtime, need for early replacement.	<ul style="list-style-type: none"> • Choose proven OEMs with after-sales support. • Maintain critical spares. • Preventive & predictive maintenance systems.
Geopolitical / Trade Risk	Regional instability, tariffs, or changes in trade policy.	Restricted market access, higher export costs, reduced competitiveness.	<ul style="list-style-type: none"> • Monitor policy changes. • Diversify markets (domestic + regional). • Engage industry associations for advocacy.

Conclusion

BAOWU TZ Steel Company Limited represents a strategic investment in Tanzania's industrial future, leveraging Mtwara's port advantage, strong domestic demand for construction steel, and regional trade opportunities. With a USD 60 million capital commitment, the project will:

- Deliver 200 direct jobs and significant skills transfer.
- Strengthen the local supply chain through billet imports, gradual scrap integration, and consumable sourcing.
- Operate under a robust ESG framework that emphasizes environmental stewardship, community development, and corporate governance.
- Generate sustainable financial returns through efficient operations, market-driven pricing, and disciplined cost management.

By combining modern steelmaking technology, strong compliance, and responsible stakeholder engagement, BAOWU TZ Steel aims to become a trusted industrial partner for Tanzania and the wider Southern African region.

