Project Developer: Diana Stephen Mbogo

Business Name: Millennium Engineers Enterprises Ltd

Project Name: Sardine Fishing Industry – Lake Victoria

MILLENNIUM ENGINEERS

Lighting up Africa

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Executive Summary

Millennium Engineers is a Tanzanian renewable energy startup company specialized in solar and wind energy technologies. The company is incubated by the Dar es Salaam Teknohama Business Incubator, DTBi under the Commission of Science and Technology, COSTECH. We develop customized projects by looking into the needs of a specific community, industry or business then developing a solution using either or both energy technologies while working alongside the customer to ensure the solution caters for their needs while still addressing cost, culture, efficiency and the environment. MEE Ltd alongside its international partner (technology manufacturer of wind turbines) have installed a number of hybrid (solar and wind) energy systems solutions across the SADC countries and provides consultancy services to several international renewable energy companies. The company through its founder is a member of the "African Women Energy Entrepreneurs Framework (AWEEF)" under the UN Environment.

MEE is growing its business by currently developing a business project to phase out kerosene lanterns at Lake Victoria using customised solar fishing lamps.

Mwanza, and its surrounding islands are situated on the southern coast of Lake Victoria and form the epicenter of Tanzania's sardine fishing industry. This industry is a $13Bn USD market that uses pressurized kerosene lanterns during night fishing to attract plankton, which in turn attract sardines. On the other hand, the locals use conventional methods of drying which has led to deforestation due to the cutting of trees for the activity. The project aims to transition the low-income sardine fishing industry in Lake Victoria, away from

kerosene lanterns and traditional conventional methods towards cleaner, more affordable renewable energy solutions. In turn this will increase the value of sardines in the global market through innovating two major areas of the sardine fishing industry value chain. The community will benefit four-fold environmentally, economically, socially and through gender impact. This business project's success will be measured across a triple bottom line; generating more income for fishers' families and community, addressing pressing social issues, and significantly reducing CO2 levels.

Total project cost is assumed to be $777311 of which $77311 will be contributed by the company equivalent to 10% while $700,000 equivalent to 90% will be contributed by project partners, grants and fundraising when required. Sales revenue will be generated from leasing fishing lamps and sardine drying resulting in average quarterly sales of $33885, therefore the total projected sales revenue for 3 years is 861300.

1. Introduction

Overview:

Millennium Engineers is a Tanzanian renewable energy start up company specialized in solar and wind energy technologies. The company was legally registered on 7th June 2016 by the Business Registration and Licensing Agency (BRELA) with registration number 126940. We provide 'end-to-end' solar and wind energy solutions to public and private projects, resolving energy requirements in urban and rural areas.

Millennium Engineers provides alternative energy solutions includes: solar/wind hybrid power backup to cater for unreliable power supply and fuel costs for generator; solar water pumps for community drinking water and irrigation; solar water heaters to serve electricity bills and conserve environment, solar fishing lamps, solar drying solutions and commercial and community solar systems to support businesses, education, health and other social-economic activities.

Our services include technical consultancy in renewable energy technologies, installation and maintenance of solar and wind energy equipment, energy auditing, project development and management, financial modelling and analysis of renewable energy investment. We believe that clean and reliable energy solutions are ideal for solving the pressing energy problem in Tanzania and across Africa. MEE intends to grow its business by developing a business project to help improve the value chain of the sardine fishing industry in Tanzania by phasing out kerosene lanterns and the conventional methods of sardine drying. This initiative was inspired by the market size, level of socio-economic impact and the environmental effect the current solutions produce.

Vision Statement:

Our vision is to help alleviate poverty and improve business value chains by providing sustainable and affordable energy solutions to the general public and corporations, while working to achieve the SDGs 2, 5, 7 and 13 by 2030.

Mission statement:

Our mission is to lead the global transition to renewable energy by providing solutions in various industries that create value to people's life, businesses and environment. While it's no small ambition, a world without fossil fuels is already evolving and transforming the way we live. Our part to play in that transition is to deliver customized cost effective renewable energy solutions to communities, businesses and specific industries.

Problem:

Lake Victoria is the world's second largest freshwater lake, providing food and jobs for millions of people in Africa. Lake Victoria supplies around 55% of all fish consumption in Africa (Odongkara et al., 2016), and over half of the lake's total yearly catch is a type of sardine called Dagaa which is caught at night by fishermen. Even so, the sardines fishing industry value chain faces a number of challenges around affordable energy for both fishing lighting and sardines drying.

Fishers spend 40% of their monthly profits for servicing fishing lightings while risking their health, and their lives, by using pressurized kerosene lanterns that additionally contribute to significant levels of greenhouse gas emissions. Before departing for the nights fishing, all fishing lanterns require

small repairs and to be filled with kerosene, of which this process takes approximately three hours each afternoon. Each fishing boat takes eight lanterns for their night's fishing and pressurizes them for lighting once they reach their fishing location. Through the night each lantern is revisited a number of times to be re-pressurized to maintain its brightness.

To preserve the fish, it is dried on the sandy surfaces of the fishing islands. Unfortunately, current ways of drying cannot guarantee a good quality and constant supply of dry fish. Heavy rains are the main culprit which wash the Dagaa away and causes what is left-over to rot, and, in the open sandy beaches, animals and insects have access to the drying Dagaa where they are free to eat and contaminate it. Particularly during the rainy season fishers can lose up to 30% of their catch (Ibengwe, L., 2012) because of this, and the remaining catch ends up having low nutritional value. Often only 30% of the catch is suitable for human consumption and the remaining 70% is used for animal feeds (Bille et al, 2006), leading to huge unnecessary food waste and lack of food security.

The industry has limited work opportunities for women further hampering household income. Majority of the communities are dependent upon the fishing industry and as such, other small businesses generate profits based on the primary income flows of the fishing industry. The project aims to close the gap of women involvement in the value chain of sardines fishing industry through capacity building on business and relevant technological training. The project will therefore empower local women to add value in the sardine fishing industry while addressing gender inequality issues, income generation and environmental challenges.

The Value Proposition:

As current lightings expenditure is high, the renting of lamps is set at a price point considerably lower than kerosene and other lighting solutions in the market. By charging $1.5 per night to rent the solar lamps the fishers stand to save up to 50% on their current expenditure. Lantern for night fishing costs $40 USD per month to run and maintain. As there are 18 nights of fishing in any given month, renting our solar alternative generates $22 USD extra per lamp per month. Over the period of one year each fishing boat stands to generate an additional $ 2100 of profit.

On the other hand, the conventional sardine drying depends on natural sunlight and requires wide open land space, causing cutting of trees that leads to high deforestation rates in the proposed island, also contributing to greenhouse gas emissions. Also, the current approach takes up to 2 days of full sunlight, while the proposed solar drying solution takes only 5 hours which serves 19 more hours to invest in adding value to the sardine value chain.

By focusing on the low-income fishing sector, we increase household incomes that in-turn enables domestic access to energy. Access to 'clean and affordable energy' is a primary goal, while simultaneously being the chosen method to achieve it. Targets are to build an inspiring business project that can be replicated in similar fishing communities around the globe. This project's success will be measured across a triple bottom line; generating more income for fishers' families, addressing pressing social issues, and significantly reducing CO_2 levels.

2. The Product/Service:

MEE intends to deliver the service of renting out Solar fishing lamps that have been designed while working alongside the fishers of Lake Victoria for over a year co-designing the lamps. The solar lamps have been designed for maximum market uptake with a design similar in look and function to the kerosene lanterns used for the past 60 years. Its watertight casing reduces maintenance costs and increases ease of use, additionally its solar rechargeable battery offers 9hrs of power on its 500lm mode, and up to 14hrs of power on its 300lm mode.

The lamps are typically deployed in 'systems' of 8 lamps (number of lamps used on one fishing boat), the 8 lamps are set up with a charging box and its respective 200W panel. The panel is mounted onto a modular frame which can support as many systems as is needed. Specially sourced charging ports and connectors are sourced (unavailable directly in East Africa), thus creating a closed charging system reducing any risks of potential by-pass or equipment theft.

The 8 lamps are connected to the charging box, which is in turn connected to the panel. The charging box has a 16-digit LCD display and acts as the lock/unlock mechanism for the lamps. A 16-digit code is generated upon receiving rental payment for the lamps and last for a specific period of time before the box locks again, disabling the charging mechanism. This system will allow the hub operators to carefully monitor which lamps have been paid for and which have not, and will make for a more efficient customer payment check.

The drying solution needs to dry faster than the sun, improve the quality of the sardines and protect it from rain making it possible to dry at all times in any weather condition. Having the basic comparison where 4000kg of wet sardines can be dried in a 2500sqm plot of land in one single fishing cycle (18

fishing days a month), our design is geared towards being able to dry 2,400kg of wet sardines in a single day in just 500sqm plot.

The design is a greenhouse structure, designed in modular compartments of 5 for ease to scale. The total surface area is 980sq. feet (20x49) per facility and a rack installation of 70sqm spread over 6 layers maximizing drying space efficiency, with a heating system powered by gas and a solar system powering fans for ventilation to achieve the optimum conditions for drying.

Each facility will thus offer 980sq.feets of drying space which can dry 1200kg of wet sardines at one time. This is a significant amount more than the traditional drying methods, with a much higher output. Furthermore, the heating element of the facility is aimed at being able to dry 2 times the amount in one single day, therefore drying 2,400kg of wet sardines in one single day, hence 43,200kg in a single fishing cycle.

It was researched that a typical small bucket a bucket of about 20kg of dried sardines on open sandy ground costs approx. $4.2, while a bucket of 20 Litres of sardines dried in our initial prototype costs approx. $7.3. So, our service is adding approx. $3.1 of value.

We aim at procuring 1000 solar fishing lamps and establish 8 sardine drying facilities for the sardines. The solutions saves the fishers an extra 3 hours for the solar fishing lights and 5 more hours for the drying solution, time converted towards their family, other productive activities, or simple recreation.

3. Industry and Market Analysis:

Mwanza and the surrounding islands are situated on the southern coast of Lake Victoria and form the epicentre of Tanzania's sardine fishing industry. Income levels for many fishing families are low and as such, so are the educational and health outcomes; additionally, access to affordable energy

remains a challenge. Majority of the communities are dependent upon the fishing industry and as such, other small businesses generate profits based on the primary income flows of the fishing industry.

Our total addressable market is that of Lake Victoria in Tanzania that uses approximately 600000 fishing lanterns, fueled by kerosene, or LED lead-acid batteries accompanied with wooden flotillas every night of fishing. Our beachhead market however is that of Mwanza and the surrounding islands, containing about 280,000 lamps. The global market is conservatively estimated at 5M units. The project will be executed in two areas; Kasalazi Island and Kayenze Ndogo in Mwanza, Tanzania.

Market research has been conducted using the beachhead market of Mwanza and the surrounding islands. 30 fishing boat owners and over 200 fishermen as the primary customer base have been interviewed and worked alongside in the development of the solution. The primary outcome of the market research was recognition of the strong desire to transition away from kerosene, LED Lead acid batteries, wooden flotillas and the conventional drying to some cleaner and better alternatives. Fishers have expressed in frequent and different ways how much they dislike working with kerosene, how time consuming it is to prepare the kerosene lanterns each afternoon for that nights fishing and the loss of revenues due to the poor drying methods. While at the same time costing them $3,840 USD annually for lamps maintenance for each fishing boat.

4. Competition

While working alongside the fishers (our customers) for a period of one year developing the solution (solar fishing lamps) we also interviewed over 100 fishers on their choice of solution and why. We also paid close attention to the available solutions in the market, their design and manufacturer, why they were selling out and many failing in the market.

The result was showed that there are a few direct competitors with similar type of products in the same target area. These competitors, have not established a legal registered business nor follow any tax laws in the area, rather they sell their products as common user commodities. The matter was later reported to the local authorities who immediately stopped all solar business activities around the lake zone until a policy was passed (early July 2018). The new formed policies that will not only require all vendors and businesses on the solar fishing lamps to have a business licence and comply to all taxes but also protect the interest of the fishers by providing quality products testes by the Tanzania Bureau of Standards (TBS). These policies followed after an intensive research done under the Commission of Science and Technology (COSTECH).

Most of our competitor's products are cheaper and are sold out as products; hence they use a different and business model compared to us. This reduces the chances of most fishers to purchase their products due to lack of financial means. The design of their products also did not align with existing cultural aspects which is, their lamps couldn't be attached to existing flotillas used by the fishers while also the efficiency of the products being low as they don't produce the required fishing light brightness (dispersion) required for fishing.

They have attempted to enter our market and have failed on two fronts, their lamps did not account for culture i.e. they could not be connected to existing flotillas for fishing, or ownership of design and hence, the fishers did not take to the functionality. Secondly, the competitors were originally based in distant countries (China, India and Europe) and failed to form close relationships with the communities in which they operate.

Our primary competitive advantage is the relationships we have established with the fishing communities and their user-centered approach in designing the solution.

5. SWOT Analysis

Our Network

We have national and international partners that include manufacturers, suppliers and customers. Some of the aforementioned are Ecolibri in Italy, Marteeza Investments in Swaziland, Charles Mott Foundation in Michigan USA, Telkom in South Africa, Rural Energy Agency in Tanzania, Sagar Energy Solutions, SUNLIT, VIVUNES & Omnivotalic), Organizations (EEP Africa, DOEN Foundation, SELCO Foundation, Tech Force, Energy4Impact) and DTBi under the Commission of Science and Technology in Tanzania.

We are also a member and regional focal point for the African Women Energy Entrepreneurs Framework, AWEEF under UN Environment Programme whose umbrella enabled us to acquired financial resources (grants) for this business project.

Our Local capabilities

Our in depth knowledge and understanding of African local business, social, cultural and economic issues with their deep functional and industry knowledge has helped Millennium Engineers keep ourselves in our clients/communities shoes. As such, we have successfully managed to execute a good number of projects (Development of Renewable Energy solution for Telecommunication towers, Installation of a 5.5kW hybrid wind-solar energy solution at Amadi University, Development of a Hybrid energy solution for the Ocean group of hotels) which created value to people's lives and environment.

Policies

The business ties directly with the Tanzania government policy of environment conservation and fighting against climate change. According to Tanzania National Environment Policy 1997, section 52 of the policy states that "The main objective is the sound management of the impacts of energy development and use in order to minimise environmental degradation. The policy objectives to be pursued are: -

(i) Minimization of wood fuel consumption through the development of alternative energy sources and wood fuel energy efficiency;

(ii) Promotion of sustainable renewable energy resources;

(iii) Assessment and control of development and use of energy

(iv) Energy efficiency and conservation.

The project has more both internal and external favorable factors to be built and operated successfully. In reducing weaknesses, and threats, the project

will follow all government and legal procedures including cooperate taxes, business licenses and all other business permits required at the project area.

Strength	Weaknesses
• High demand for the solution • High fuel and maintainance costs for existing solutions • Our beachhead market: 280,000 lanterns to be phased out. • Co-designed solution with target customers • Customer relationship built • National and international technology partnerships • Work experince in different African countries • Financial resources (grants) from umbrella organization AWEEF, TEF	• Need for additional staff/ team members. • Low marketing skills/ personnel. • No current permanent local team on site. • Operational start-up cost • High shipment/transportation cost for the equipment
Opportunities	**Measures to counteract the risks**
• High demand for a replacement of kerosene larterns. • Project rapid expansion toneareby island of lake victoria • The global market is huge • Carbon financing since the project offsets thousands of CO2 annually.	• Find cheaper logistics company to handle equipment shipment and transport to site. • Provide intensive training to staff/local team • Provide training to the customers on how to use the lamps and the importance of returning them on time. • Working closely with the local authorities to met project objectives. • Work with a selected group of fishers first (trustworthy)
THREAT	
• Challenge in obtaining qualifiying staff at the local area. • A change in government policies. • Damage, theft or loss of equipment on site. • Fisher's failure to adhere to product handling and return of the lamps at the end of the fishing night.	

6. Operations Plan

Patents and Permits: The Company is legally registered already with tax number and certificate allowing us to apply for a new business licence to operate specifically at our project area. The company is registered as a limited

company to enable us to have different services, products and work in a variety of fields/industries and countries. It has patented company logo as well. Due to continuous product development and services the company has yet to patent its products. The company will patent its products and solutions in the future once the need arises.

How we operate: Millennium Engineers is a renewable energy company specialized in wind and solar energy technologies. We develop customized project by looking into a specified community, industry or business field then developing a solution using either or both solar and wind energy technologies while working alongside the customer to ensure the solution caters for their needs while still addressing cost, culture, efficiency and the environment. Hence said some projects use both technologies while some use only one as of the case of this project. For each project the development is handled by the company top management team, while a local team is extensively trained, hired and also included in some of the development phase to later cater for the operations and maintenance of the project in that specific market area. Our local teams report back to the head office (top management team) according to agreed time phases.

The funds obtained will also be used to train and hire our local team in this specific project. No funds will be moved to cater for a different project as each project is independently developed and already running. The company is developing this single project as a way of scaling out our operations and activities in the industry. Alongside this project the company will start training (consultancy works) neighbouring countries and communities on the development of similar projects (Solar Fishing lamps).

Key resources: the project required a good technical manufacturer of the lamps and solar driers; hence we sourced a manufacturer in India and China who would handle the manufacturing of the lamps according to our specifications.

The project will require us to purchase land near the shore of the lake to setup the charging station and small office for the business. This would be obtained with the assistance of the local government.

Personnel hired to oversee the operation will be young women from the local community, as this also pilots our training for future scale up. A full scale up will require a local workforce in addition to a team of solar engineers for installations and maintenance. We will specifically target women to train for these positions, which not only increase women's employment opportunities; it also diversifies the workforce's skill sets, creating further employment opportunity.

Service delivery method: The Company will rent out the solar lamps for every 18 fishing days a month to the fishers at the charging station which will also serve as an office space for providing the service. Each evening the fishers will rent and pay the rental fee at the station/office and return them in the morning after the nights' fishing for recharge again during the day.

The fishers will be registered and a membership fee of $12 per lamp use annually will be charged. This will serve as guarantee for them, while the company will use these funds to purchase insurance for the lamps in the case of any damages or misfortune at the lake. The company will run sardine drying services charging per volume (Kg) brought in the facilities

7. Marketing Plan

To encourage clean and socially inclusive industrial practices, we understand the need for economic incentive. The structure of our business models reflects this understanding by utilising a leasing model that sets rates at a price point lower than current lightings and drying expenditure; our customers immediately see a positive return.

Marketing strategy for our services:

a) Door to door to get a face to face engagement with the customers. This method gives enough room to share important details about the product/idea to the customers, respond to questions and clarification.
b) Social media, Using online platform like facebook Ads, Twitter and Instagram ads.
c) Advertisement in Mainstream media like local televisions and Radio stations which have greater audience.
d) Community meeting: Since the communities are are strongly bonded once convinced as a community we would obtain a good customer base.
e) Promotion events; aim to drive attention of the public towards the services. By targeting our customers to benefit with gifts and discounts when they bring another customer to our network service. This will automatically attract the public to participate and follow up.
f) MEE will also continue to attend exhibitions like the Alternative Energy Week (organized by the Ministry of environments), Annual renewable energy week, trade fairs, and international trade exhibitions as well.

These appearances will provide both promotional platforms and communication forums.

8. Management

Project functions

1. Assess, select and draw contracts with users for the business project
2. Select and train local women for project oversight
3. Design and install charging station
4. Procure solar lamps from manufacturer and conduct training sessions in their use
5. Set up repayment system
6. Run baselines with stakeholders
7. Project initiation and monitoring
8. Project close and evaluation

Monitoring and Evaluation

MEE activities will take the form of participatory sessions before and during the project cycle. Three levels of stakeholder will be concentrated on.

a. **The end users**; to assess product improvements, health improvements, safety perceptions and use of additional free time.
b. **Fishers' families**; measuring household income and resulting use of any increase.
c. **Project officers**; as local women will be brought into the project for oversight information will be used to identify any gaps in training, and assess the success of their integration into the role highlighting any challenges that need addressing.

All above data will be analysed in participatory evaluation sessions. Lessons learned will be essential in securing the success of the future scale up of this business project.

Expertise

MEE Ltd has a top management team of five personnels headed by the CEO who oversees all company activities. MEE Ltd management team;

1. Managing Director: Diana Mbogo

   Background: Bsc in Mechanical Engineering, International business and leadership training from University of New Mexico and a 3 years working experience in startups development. She would be in charge of overall company activities and management.

2. Chief Technical Officer: Audifasi Tarimo

   Background: Bsc in Mechanical Engineering, Solar & Wind technology training in Italy, 7 years working experience in the practical engineering systems. He is in charge of technical training of local personnel, product development, quality assurance of our equipments, overseeing installations and maintenance of our system equipments (solar lamps & charging station).

3. Chief Operations Officer: Jastus Assey

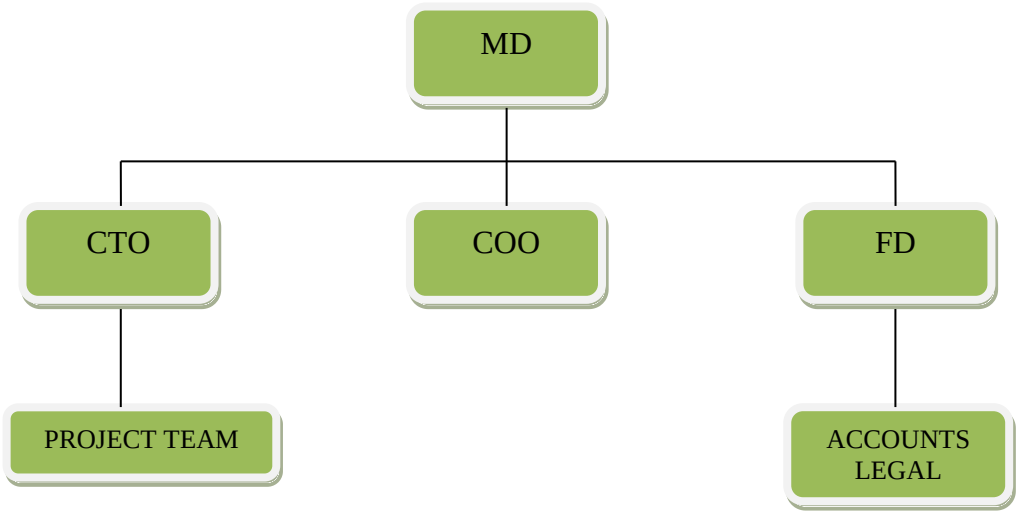
   Background: Bsc in Logistics and Procurement and also has a working experience of 4 years in the military industry. He is in charge of company operation activities, equipment procurement and delivery on site, setting up meeting and contracts with stakeholders.

4. Finance Director: Victoria Japhet

Background: MBA Finance; has a working experience of 12 years in microfinance banks and business. She will ensure proper utilization and management of funds to ensure achievement of company objectives for the project. She will also handle the set up repayment system of the leasing model and the management.

5. Chief Accountant and Business development: Opalinan Nanyaro, MBA Accounts, has a working experience of 9 years in cooperate company accounts, tax and business development. She oversees Company legal activities, permits and business licenses and business bank accounts handling.

Organization Structure



9. Financial Plan

Key Assumptions

Due to the nature of the business, quality and quantity of equipments required to deliver the business services, there would be high initial investment costs in

development and business setup. The company has secured grant funding from the African Women Energy Entrepreneurs Framework, AWEEF which is under the UN Environment Program. Initially for the first 3 years of operation the business will procure 1000 solar lanterns and 5 sardine solar drying facilities, and then increasing another 10000 lamps for renting and 8 sardine solar driers every end of the third year continuously for the next ten years. The procurement of the additional lamps every 3 years will also be funded under the initial business project.

The lamps are rented for 18 fishing days every month, for the first year we assume only half of the fishing lamps will be rented out every month then increasing gradually with years, as the current demand for the lamps is 68,000. As the fishermen obtain financial benefits from our services we assume they will be financially able to purchase their own lamps from us at the end of 6 – 12 months allowing others in demand of our services to again access.

Cost Estimations & Projections

The business requires us to purchase land near the shore of the lake to setup the charging station and office facility for providing our services. The land will be obtained with the assistance of the local government in the area at an assumed market price of $13000 for the area.

The business uses local currency, Tanzanian Shillings for its operations even though we have used USD currency in the development of our business plan and financial template for easiness considering most of our funds are acquired in this currency. All conversions and rate fluctuations have been considered.

Revenue Projections

The business will have 3 revenue streams from 3 different services that we would be providing; leasing the solar fishing lamps at $1.9 per lamp per day for 18 fishing days a month, sardine drying and consultancy/trainings which ranges from work to work but with an average pricing of $100 for the training per person.

Our customers are already willing to pay for our services, due to the fact that the current available solutions are costly, bring health hazards to our potential customers. Our selling strategies will fall under 'High volume, low margin' where I'll be offering services at high volume with cheap, plain and affordable price.

Total project cost is assumed to be USD 777311 of which USD 77311 will be contributed by the company funds equivalent to 10%. International Environment grants will contribute USD 700,000 equivalent to 90% of the project fund. The service sales projections are assumed to be USD 861300 for the first three years of project operations.

The estimated revenue is assumed to be as follows for the first three years;

Year	**2023**	**2024**	**2025**
Total Revenue (USD)	135540	311040	414720

Financial Projections on the Financial Statements (Refer to the financial analysis Excel sheet)

Milestones

Business Activities	Phase Number
• Securing required project funds • Recruiting main project officers needed • All necessary Permits & business licence to start operations (Business Licence for both site areas, TFDA,) • Contracts with all project stakeholders and partners • Acquiring land/space for the 2 project sites set-up and main office in Mwanza	Phase 1- 2nd quarter 2021
• Purchase and procuring project equipments, office furniture & appliances • Awareness and advocacy campaigns for climate change, renewable energy and gender related issues. • Training staff & local women • Recruiting project local staff (after training)	Phase 2- 3rd quarter 2021
• Insurance of project equipments • Equipment Installation and setting up facility on Site A (Mwanza Town) • Project set up & starts operations on site A	Phase 3- 4th quarter 2021
• Project evaluation & feedback on site A • Project operation & progress monitoring • Monitoring and accounting of project funds • Initial preparation for Site B (Zilagula Island)	Phase 4- 1st quarter 2021
• Project set up & starts operations on site B • Project evaluation & feedback on site B • Project operation & progress monitoring of site A & B	Phase 5- 2nd quarter 2022
• Project evaluation on predicted revenues • Measuring the achievements of project objectives • Measuring the project impact/socio-economic benefits • Revenues collected compared to predictions during project development	Phase 6- 3rd quarter 2022
• Business networking & membership into relevant organizations (fishing, export & renewable energy) • Reporting to donors & stakeholders on project progress • Establishing business relationships with key players in the industry	Phase 7- 4th quarter 2022

• Developing project documentary for showcase on exhibitions, to stakeholders and donors. • Project evaluation for expansion • Fundraising for project expansion	Phase 8- 1st quarter 2023

10. Appendices

Pressurized kerosene lantern being attached on a wooden flotilla

Our Solar Lantern attached on a flotilla, after a nights fishing