

**RAY INTERNATIONAL PETROCHEMICAL LIMITED**

**BUSINESS PLAN**

**FOR**

**WASTE OIL RECYCLING**

## **1.0. EXECUTIVE SUMMARY**

RAY INTERNATIONAL PETROCHEMICAL LIMITED is an innovative waste management company that creates high-grade fuel oil made from waste oil, using a self-cleaning filter that reduces labour by 75 percent, maintenance by 50 percent, in 60 percent less production space.

According to research, over 200 million gallons of used motor oil are improperly disposed of by being dumped on the ground, tossed in the trash (ending up in dumpsites), and poured down storm sewers and drains.

RAY INTERNATIONAL PETROCHEMICAL LIMITED is a company incorporated in Tanzania, the shareholders are renowned for rich experience in the waste/Used Lube Oil re-refining with related activities, production of high grade fuel oil, blending of waste lube oil to convert it to different grades of automotive engine oil & industrial oil, processing of light hydraulic oil and de-odorized low aromatic white spirit.

RAY INTERNATIONAL PETROCHEMICAL LIMITED will also offer advanced, easy operative, most economical and highly profitable technology and expertise for the production of all our products and services. The company anticipate that will provide the majority of equipment and machines of all equipment contract and supplies to be sourced from China and India

The company facility will result in the employment of a construction workforce averaging 12 people and an initial operational workforce of seven to 10 employees. With the enforcement of environmental legislation in Tanzania, there is a growing need for wastes generated in the course of industry to be effectively treated prior to disposal using best available technologies.

Efficient environmental management, especially in terms of waste management, has become necessary company practice due to legislative impacts and the expectations of the corporate sector and the entire country. Industries are currently mandated to meet their obligations for due diligence in their activities and maintain a duty of care for the environment.

RAY INTERNATIONAL PETROCHEMICAL LIMITED, we believe the industry in the whole of Dar es Salaam would benefit from the existence of a state-of-the-art treatment facility that would act as a catalyst for future industry growth in the area. Our proposed facility will perform crucial roles in automotive oil waste management in the whole of Houston and the surrounding area.

We strongly believe that the protection of the environment is the responsibility of the whole community and that RAY INTERNATIONAL PETROCHEMICAL LIMITED can work closely with the government of Dar es Salaam to achieve the goal of Ecologically Sustainable Development (ESD).

The company shareholders believe that the establishment of this facility capable of offering best available technology should greatly

reduce uncontrolled environmental impacts from waste automotive oil. Additional benefit will include total management of wastes, reduction in contaminated sites and a reduction in long-term risks to the Government and the general community.

## 2.0 The Sponsors

**RAY INTERNATIONAL PETROCHEMICAL LIMITED** will be sponsoring this project. The Company is jointly owned by two shareholders

Name of shareholders	% Ownership	Nationality
Husain Mohsen Alaiwi Ali	50	Bahraini
Ali Shahan Mandoub Abdallah	50	Syrian

## 2.1 Location

The project will be located at Plot **No. 2, Kididimo/Mkwalia street, Mkuranga, District, Coast region**

## 2.2 Project Investment Cost

The estimated capital investment cost of the project is US \$500,000 as shown in the schedule below:

### RAY INTERNATIONAL PETROCHEMICAL LIMITED COST US\$

Land and Buildings	<b>100,000.00</b>
Machinery & Equipment	200,000.00
Motor Vehicles	120,000.00
Furniture & Fixtures	5,000.00
Pre exp	15,000.00
Others	45,000.00
Working Capital	15,000.00
<b>TOTAL</b>	<b>500,000.00</b>

### **2.3 Financing Pattern**

The project will be financed by equity by US\$ 500,000

### **3.0 Our Products and Services**

RAY INTERNATIONAL PETROCHEMICAL LIMITED, a waste management recycling company based in Dar es Salaam, reclaims used motor oil and filters, along with industrial commodities. Though waste oil is required for reuse in much of Tanzania, the company want to capture an underserved market, made from processed waste oil.

RAY INTERNATIONAL PETROCHEMICAL LIMITED will also blend oil with additives to produce different grades of motor engine oil and industrial oil. RAY INTERNATIONAL PETROCHEMICAL LIMITED also plan to process diesel to produce light hydraulic oil and process kerosene oil to produce different grades of de-odorized low aromatic white spirit.

### **4.0 Our Mission and Vision Statement**

- Our vision at RAY INTERNATIONAL PETROCHEMICAL LIMITED is to produce unique and affordable products from waste oil that are properly re-refined into lubricants, processed into fuel oils, and used as raw materials for the refining and petrochemical industry.
- Our mission at RAY INTERNATIONAL PETROCHEMICAL LIMITED is to establish a waste oil recycling facility that will utilize proven, appropriate technology to minimize environmental impacts from the treatment, transport, storage and disposal of motor oil.

### **5.0 Our Business Structure**

RAY INTERNATIONAL PETROCHEMICAL LIMITED facility will be designed to minimize any impacts on the surrounding environment. The operational procedures will be developed to ensure that the facility is managed and operated in accordance with company and legislative requirements. The parameters and procedures have been selected from best practices adopted by a handful of top companies throughout the United States.

The auditing programme documented in the facility's management plan will ensure that the highest safety and environmental standards will be maintained throughout the operational life of the facility. A summary of the management commitments and responsibilities to ensure the development of an environmentally responsible facility is outline below.

- Chief Executive Officer (Owner)
- Company Manager
- Human Resources and Admin Manager
- Facility Operations Supervisor
- Facility Operator
- Facility Maintenance Mechanic
- Recycling Technician
- Facility Maintenance Helper
- Labourer

## **6.0. Job Roles and Responsibilities**

### **6.1 Chief Executive Officer**

- Increases management's effectiveness by recruiting, selecting, orienting, training, coaching, counselling, and disciplining managers; communicating values, strategies, and objectives; assigning accountabilities; planning, monitoring, and appraising job results
- Creates, communicates, and implements the organization's vision, mission, and overall direction – i.e. leading the development and implementation of the overall organization's strategy.
- Tasked with fixing prices and signing business deals
- Tasked with providing direction for the business
- Tasked with signing checks and documents on behalf of the company
- Evaluates the success of the organization

## **6.2 Company Manager**

- Tasked with overseeing the smooth running of the company
- Makes sure that quality is maintained at all times
- Maps out strategy that will lead to efficiency amongst workers in the company
- Tasked with training, evaluation and assessment of the workforce
- Make sure operation of equipment by completing preventive maintenance requirements; calling for repairs.
- Make sure that the company meets the expected safety and health standard at all times.

## **6.3 Human Resources and Admin Manager**

- Tasked with overseeing the smooth running of HR and administrative tasks for the organization

- Defines job positions for recruitment and managing interviewing process
- Carries out staff induction for new team members
- Tasked with training, evaluation and assessment of employees
- Oversees the smooth running of the daily business activities

#### **6.4 Facility Operations Supervisor**

- Ensures Health and Safety is the number one priority by complying with all safe work practices, policies, and processes and acting in a safe manner at all times
- Performs multiple site-specific plant operations, including but not limited to, drum pumping, drum dumping, truck offloading/loading in compliance with DOT segregation requirements, scanning applications for waste tracking, loading trucks and conveyor belts, and warehousing
- Supervises multiple employees including operators and foreman to ensure safety and production goals are achieved in plant operations
- Ensures that employees follow and maintain all applicable Health and Safety Standard Operating Procedures
- Ensures that plant-specific permit and compliance standards are maintained at all times
- Works under the direction of the Plant Operations Manager

#### **6.5 Facility Operator**

- Follow and support all safety policies and procedures
- Ensure all waste or by-products are disposed of according to relevant rules and regulations
- Perform material sampling

- Conduct sample analysis
- Record sampling results
- Inform Supervisor of any variances
- Maintain accurate and neat records and production samples as required
- Monitor wastewater prior to discharge or treatment
- Clean and maintain operating area per daily/weekly/monthly cleaning schedule
- Perform daily/weekly/monthly maintenance as directed
- Clean and calibrate sampling probes
- Identify process challenges and coordinate troubleshooting efforts with Supervisor
- Record inbound & outbound weights of materials throughout unit operations
- Record shipping/receiving information
- Record all quality or inspection data as instructed
- Record all production data as instructed

#### **6.6 Facility Maintenance Mechanic**

- Responsible for daily directing and performing preventative and routine maintenance on a variety of facility equipment including, but not limited to: pumps, compressors, vehicles, basic instrumentation, heat exchangers, pressure vessels, and other equipment.
- Advises plant personnel on maintenance equipment related concerns.

- Ensures that all safety practices are followed during maintenance activities Communicates immediately to the Supervisor any safety issues which cannot be immediately resolved at his level.
- Is responsible for the daily scheduling and prioritization of Maintenance activities
- Initiates purchase orders for consumable supplies.

### **6.7 Recycling Technician**

- Identify and remove non process-able material from a moving conveyor.
- Visibly identify potential hazards or items that may affect the operation of the line and stop the process until such hazards can be removed.
- Complete other tasks as requested by the MRF Supervisor and plant management.

### **6.8 Facility Maintenance Helper**

- Perform all maintenance operations in accordance with technical specifications and safety regulations.
- Help maintain equipment such as: feed systems, conveying systems, scrubber systems, shaker systems, classifying systems, discharge hopper systems, weigh systems, cement storage systems, central mixer systems, load carrying systems, drive systems, water systems, air systems, electrical systems, crusher systems, hydraulic systems, recycling systems, structural systems, and other miscellaneous equipment.
- Assist with periodic inspections in accordance with the company Prescribed Inspection Schedule.

- Perform all pre and post-trip inspections and complete daily inspection reports.
- Operate vehicles and equipment in a safe manner. Follow proper procedures and complete required documentation if an accident or injury occurs. Notify manager or Safety Department as required.
- Understand and comply with all safety rules set forth by the company and governmental regulatory agencies.
- Other duties as assigned

### **6.9 Labourer**

- Assist in the hydro blasting of plant equipment
- Clean-up of plant process areas
- Conduct inspections of equipment's integrity.
- Clean-up hazardous waste spills by vacuum trucks, pump carts, absorbent material, pressure washer, steam cleaner and other means.
- Handle materials that are flammable, toxic, corrosive, and reactive.
- Enter confined spaces to clean tanks and vessels.
- Perform Lockout, Tag-Out (LOTO) and energy isolation as required.
- Follow all safety procedures and take an active role in personal safety and the safety of those around them.
- Operate a forklift, man-lift, vacuum truck, backhoe, and other heavy equipment.
- Perform other daily duties as assigned with little supervision.

### **7,0 SWOT Analysis**

RAY INTERNATIONAL PETROCHEMICAL LIMITED due to our zeal for excellence have been able to contact some of the finest business consultants in Dar es Salaam to look through our business concept.

Together we were able to accord ourselves the second chance to be sure that we have what it takes to run a standard waste oil recycling facility that can compete favourably in the industry. Outlined below is a of the result of our SWOT Analysis conducted for RAY INTERNATIONAL PETROCHEMICAL LIMITED.:

#### **7.1 Strength**

- Vast Industry Experience
- Regulatory Agencies Increasingly Engaging in Initiatives in Educating about the Vast Health Hazards of the Inadequate Disposal of Used Motor Oil
- Dar es Salaam motor market

#### **7.2 Weakness**

- Rising Supply of Counterfeit Engine Oil Product
- Government Regulations Regarding the Emission are Anticipated to Restrain the growth of this Market

#### **7.3 Opportunities**

- Growing Demand for Re-Refined used Oil in a Petroleum Refinery is also Boosting the Automotive Oil Recycling Market
- Increase in Government Regulations on Automotive Oil Recycling Market During the Forecast Period

#### **7.4 Challenges**

- Issue Related Towards the Content of the Highly Toxic Material While These Oils are in the Processing

## **8.0 MARKET ANALYSIS**

- **Market Trends**

Our raw material, waste oil and petroleum products originate from crankcase and lubrication wastes generated during the normal maintenance of motorized vehicles and machinery. These oils may be used directly without reprocessing as road oils for dust control, or may be mixed with virgin fuel oil for use in boilers for heating or electrical power generation.

Experts suggest the emissions of heavy metals and other related environmental problems should be carefully evaluated before burning or otherwise recycling waste oil. Indeed the process of refining waste oil to produce lubrication oils or fuel oils is technologically possible and currently is being practiced in many areas.

But hindrance in removing impurities of lead, dirt, metals, oxidation products, and water, along with environmental standards and product specifications, have negatively affected the widespread practice of recycling in the past.

However, the improvement of recycling technology, coupled with economic incentives, may aid the resurgence of recycling petroleum products in the near future. Waste oil and its impurities pose potential threats to the environment, whether the waste oil is indiscriminately dumped on land or into watercourses or burned.

Notably, even the refining process may produce acid sludge and contaminated clays that must be disposed of in a way that is safe environmentally. Economic and environmental benefits in using waste oils to produce BD are emphasized when it is sourced, produced, and sold locally.

Presently, heterogeneous acid-catalyzed was found to be the most merit sustainable technology among available BD production technologies as it offers low energy requirement and easy separation and purification technology of BD and glycerol.

Meanwhile, there are still opportunities for developing other technologies to tackle the problem in handling such oil stock with an unpredictable composition as well as enhancing the revenue from BD and its by-product. Finding compact technology to prepare and process waste oils into BD can provide a flexible way to optimize the economic and environmental feasibilities of the BD production from waste oils.

### **8.1 Our Target Market**

Aside from the refining and petrochemical industry we plan to serve, our business location, Dar es Salaam, provides us with adequate supply of raw materials and a viable market for our products. Dar es Saalam remains the most populous city in the Tanzania with an estimated 2021 population of 5,000,000

### **8.1 Our Competitive Advantage**

At RAY INTERNATIONAL PETROCHEMICAL LIMITED, our competitive advantage is our revolutionary approach to the re-refining of waste oil.

All wastes directed to our facility will be assessed to determine the most appropriate treatment and disposal process.

We will encourage generators to segregate waste at the source wherever possible to ensure waste treatment costs are left to a minimum. We will also provide scientific and environmental advice to industries in our region to optimize processes, minimize waste and assist generators to meet cleaner production targets.

We make use of the Wiped Film Evaporator (WFE), a Short path distillation; followed by Solvent extraction or Mild Hydro fining finishing process involved for the recycling (Re-refining) of Waste Oil to Base Oil group I, group II and group II+ with zero environmental waste: no air, no solid and no liquid pollution.

The WFE is ideally suited to process hard-to-handle, heat sensitive and viscous materials. These are just some of the many and varied products that the WFE processes. It is designed to carry out deodorization, distilling, concentration, re-boiling, solvent recovery and stripping, then re-refined oil is ready for oil blending stage.

## **9. SOURCES OF INCOME**

- i. Fuel oil
- ii. Oil blended with additives
- iii. Light hydraulic oil
- iv. De-odorized low aromatic white spirit.

## **10.0 .PUBLICITY AND ADVERTISING STRATEGY**

Our publicity strategy will be based on giving our clients the products they need for the right price. We plan to maintain an extensive

marketing campaign that will ensure maximum visibility for the business in our targeted market. Below is an overview of the publicity and advertising strategies:

- Establish relationships with petrochemical and automotive businesses within the target market.
- We hope to place adverts on both print (community based newspapers and magazines) and electronic media platforms; we will also advertise our on automotive magazines, waste management and other relevant environmental sustainability programs on radio and TV
- We will also sponsor relevant community based events/programs
- We also plan to make use of various online platforms to promote the business. This will make it easier for people to enter our website with just a click of the mouse. We will take advantage of the internet and social media platforms such as; Instagram, Facebook , twitter, YouTube, Google + et al to promote our brand
- We also plan to mount our Bill Boards on strategic locations all around Dar es Saaam.
- We also plan to distribute our fliers and handbills in target areas
- We plan to make sure that all our workers wear our branded shirts and all our official vehicles are well branded with our company's logo et al.

#### **10.0 PRICING STRATEGY**

Our pricing at RAY INTERNATIONAL PETROCHEMICAL LIMITED will be based on serving our customers with expert service and product knowledge, to build our marketing plan to reach diverse individuals and industries, while also maximizing profits.

We believe that to get the right pricing for our products, we need to make sure that we [choose a good location for our business](#), choose our suppliers wisely, and reduce the cost of running our facility to the barest minimum. Also, make sure we attract buyers to our business, as against taking our products to buyers; with this, we would have successfully removed the cost of transporting the goods and other logistics from the equation.

hydraulic oil, and gearbox oil are all examples of used oil.

## 2.2 Waste oil recycling process

The general process of waste lubricating oil recycle begins with straining out any solid contaminants, such as dirt and mud. The remaining mixture is then distilled to remove water from it. From there, it's heated in order to liquefy all of its components, including chlorinated compounds and other contaminants like sulfuric acid. These are separated from one another during distillation and compression processes. In addition, hydrogen sulfide can be recovered from them; more commonly known as rotten egg gas, it has applications as a colorless and highly toxic gas used for lead batteries. Recovered oils can either be sold on for use by those industries or reprocessed themselves into new oils which are shipped to their final end-users.

Waste lubricating oil residue after complete recovery may be incinerated at high temperatures (1300 °C). This further decomposes

organic compounds that would otherwise remain untreated. Waste gases released from burning residue will be subjected to soot cleaning and thermal treatment: they exit through stack without releasing dioxins or furans.

### Benefit

From an environmental point of view, recycling waste lubricating oil is far better than throwing it away. In fact, if all lubricants in North America were recycled instead of thrown away as trash... more than 11 million barrels of oil could be recovered each year— enough to fuel more than 1.2 million cars and save consumers roughly \$2 billion annually in lessening their carbon footprint.

## 2.3 **Market Strategy**

According to expert, personal selling is the most effective method for marketing packaging accommodation services because the customers and institutions. The project will use marketing agents (Real estate agent) who will be paid commissions on successful deals. Marketing in all types of media and publicity will support and enhance personal selling

The project will use internet and print media for advertising.

## 2.4 **Pricing**

The pricing policy for the project will be based on the service cost and competition levels considering various variables namely:

- Service positioning
- Gain market share from competitors
- Achieving profitability and liquidity financial performance goals

## 2.5 **Monitoring and Evaluation**

The Management has full commitment to ensuring good use of the resources and sustainable environment. Thus, the management philosophy is through business process, the company will strive to ensure compliance to standards and safety.

## 3.0 **Project Investment Cost**

The estimated capital investment cost of the project is US \$500,000 as shown in the schedule below:

## RAY INTERNATIONAL PETROCHEMICAL LIMITED INVESTMENT COST

US\$

<b>PARTICULAR</b>	<b>US\$</b>
Land and Buildings	<b>100,000.00</b>
Machinery & Equipment	200,000.00
Motor Vehicles	120,000.00
Furniture & Fixtures	5,000.00
Pre exp	10,000.00
Others	15,000.00
Working Capital	50,000.00
<b>TOTAL</b>	<b>500,000.00</b>

### 4.0 **Financing Pattern**

The project will be financed by equity by US\$ 500, 000

### 4.1 **Projected Project Operating Costs**

In order to realize its intended objective, the project will have to meet the operating costs which is estimated to be 10% of the total annual revenue.

### 5.0 **Aspect of Project Sustainability**

The project sponsors having studied market conditions and the infrastructure in Tanzania are convinced that the project will be able to operate undisturbed. The growing of tourism sector and economic

activities in Dar es Salaam City gives them assurance of a steady market. The peace and tranquility that exist in Tanzania is another aspect of assured business sustainability.

## **6.0 Monitoring and Evaluation**

The monitoring and evaluation tools will be applied in running this project as well, the project sponsors are determined to cooperate fully with the government and other stakeholders for smooth business running.

## **7.0 Financial Analysis**

### **7.1 Considerations and Assumptions:**

The corporate tax charged is 30% of the profits. Capital investment allowance is 50%. The capital assets are exempted from custom duty and Value Added Tax. The straight-line method to depreciate the project's capital items has been applied, it is assumed to be 10% annual depreciation.

It is assumed that the major building raw material will be procured from local market and other will be imported. Revenues have been conservatively estimated based on experience of the promoters and trends in the real estate industry.

8 years financial projections have been worked out

## 7.2 Financial Statements:

### 7.3 Projected Rental Revenue

For projection purposes, it is assumed that the economic life of the project is 5 years, and that revenue from business commence from the first year of operation P

#### RAY INTERNATIONAL PETROCHEMICAL LIMITED ROJECTED INCOME & EXPENDITURE STATEMENT (US\$)

-	1	2	3	4	5
Revenue	600,000.00	630,000.00	661,500.00	694,575.00	729,303.75

### 7.4 Projected Profit and Loss Statement

The Income and Expenditure Statement shows the projected income for the 10 years period. The position depicted is that the project earns profit throughout its life. Accumulated after tax profits grow from. US \$ 115,500.00 in first year to US \$ 643,729.54 in 5<sup>th</sup> year

#### RAY INTERNATIONAL PETROCHEMICAL LIMITED PROJECTED INCOME & EXPENDITURE STATEMENT (US\$)

-	1	2	3	4	5
Revenue	600,000.00	630,000.00	661,500.00	694,575.00	729,303.75
<b>Operating Expenses:</b>	420,000.00	441,000.00	463,050.00	486,202.50	510,512.63
<b>Gross Profit Before Interest and Depreciation</b>	180,000.00	189,000.00	198,450.00	208,372.50	218,791.13
<b>Depreciation</b>					

	15,000.00	15,000.00	15,000.00	15,000.00	15,000.00
<b>Gross Profit</b>	165,000.00	174,000.00	183,450.00	193,372.50	203,791.13
Tax (30%)	49,500.00	52,200.00	55,035.00	58,011.75	61,137.34
<b>Profit After Tax</b>	115,500.00	121,800.00	128,415.00	135,360.75	142,653.79
Accumulated Profit	115,500.00	237,300.00	365,715.00	501,075.75	643,729.54

### 7.5 Projected Cash Flows

This is shown in the Projected Cash Flows Statement in appendix II. They indicate that the project will meet its entire financial obligation, the Accumulated cash flow in the first year **US\$1,020,000** and grow up to **US\$ 17,388,120** in 10<sup>th</sup> year, refer appendix III

#### RAY INTERNATIONAL PETROCHEMICAL LIMITED PROJECTED CASH FLOW US\$

	0	1	2	3	4	5
<b>SOURCES:</b>						
Profit before interest and depreciation	-	180,000.00	189,000.00	198,450.00	208,372.50	218,791.13
Equity	500,000.00					
<b>Total Sources</b>	500,000.00	180,000.00	189,000.00	198,450.00	208,372.50	218,791.13
<b>Applications:</b>						
Capital expenditure	470,000.00	-		-	-	-
working Capital	30,000.00					

&Others						
Cash	0	117,000.00	122,850.00	128,992.50	135,442.13	142,214.23
Tax	-	63,000.00	66,150.00	69,457.50	72,930.38	76,576.89
<b>Sub total</b>	<b>500,000.00</b>	<b>180,000.00</b>	<b>189,000.00</b>	<b>198,450.00</b>	<b>208,372.50</b>	<b>218,791.13</b>
<b>Total applications</b>	<b>500,000.00</b>	<b>180,000.00</b>	<b>189,000.00</b>	<b>198,450.00</b>	<b>208,372.50</b>	<b>218,791.13</b>
Accumulated cash		117,000.00	239,850.00	368,842.50	504,284.63	646,498.86

## 7.5 Projected Balance Sheet

The projected Balance Sheet of the projected is shown in the financial statements under total owners' equity of the project increases from US\$ in **500,000** at the end of first year of operation to US \$ **1,143,729.54** at the end of 10th

### RAY INTERNATIONAL PETROCHEMICAL LIMITED PROJECTED BALANCE SHEET

US \$

<b>Fixed Assets</b>	-	1	2	3	4	5
Opening balance	-	<b>470,000.00</b>	<b>455,000.00</b>	<b>440,000.00</b>	<b>425,000.00</b>	<b>410,000.00</b>
<b>Total Long-term Assets</b>	-	<b>470,000.00</b>	<b>455,000.00</b>	<b>440,000.00</b>	<b>425,000.00</b>	<b>410,000.00</b>
<b>Less depreciation</b>	-	<b>15,000.00</b>	<b>15,000.00</b>	<b>15,000.00</b>	<b>15,000.00</b>	<b>15,000.00</b>
<b>Closing balance</b>	-	<b>455,000.00</b>	<b>440,000.00</b>	<b>425,000.00</b>	<b>410,000.00</b>	<b>395,000.00</b>
Working capital	30,000.00	30,000.00	30,000.00	30,000.00	30,000.00	30,000.00
Accumulated cash	-	117,000.00	239,850.00	368,842.50	504,284.63	646,498.86

<b>Total assets</b>	<b>30,000.00</b>	<b>602,000.00</b>	<b>709,850.00</b>	<b>823,842.50</b>	<b>944,284.63</b>	<b>1,071,4</b>
Financed by						
Equity	500,000.00	500,000.00	500,000.00	500,000.00	500,000.00	500,000.00
Accumulated profit	-	115,500	237,300.00	365,715	501,076	64
Total equity	500,000.00	615,500.00	737,300.00	865,715.00	1,001,075.75	1,143,7
<b>Total equity and debts</b>	<b>500,000.00</b>	<b>615,500.00</b>	<b>737,300.00</b>	<b>865,715.00</b>	<b>1,001,075.75</b>	<b>1,143,7</b>

## 7.6 Projected payback period

Total investment is US \$ **500,000**,, cash accumulation in year 5 is US\$. **9,254,256**. which is **US\$ 1,254,256** more than the initial investment costs, the project payback Period is within 7 years, refer appendix V

### RAY INTERNATIONAL PAYBACK PERIO PAYBACK PERIOD

Year	Profit After Tax	Depreciation	Total Cash Flow	Accumulated Cash Flow
1	115500	<b>15,000.00</b>	<b>130,500.00</b>	130,500.00
2	121,800.00	<b>15,000.00</b>	<b>136,800.00</b>	267,300.00

3	128,415.00	<b>15,000.00</b>	<b>143,415.00</b>	410,715.00
4	135,360.75	<b>15,000.00</b>	<b>150,360.75</b>	561,075.75
5	142653.7875	<b>15,000.00</b>	<b>157,653.79</b>	718,729.54

### 7.7 Projected Risks

This is a real estate investment; no major risks have been identified for this kind of project so far. Unless a change in the country's political and economic stability occurs the project is more likely to prosper very fast for a very long period.

### 8.0. Economic Aspects

Implementation of this project will have the following social and economic values

- The project is an ideal option for utilization of the market
- The project will significantly contribute in increase of properties available for lease in Dar Es Salaam, Tanzania
- The project will create direct employment for **20** people on permanent contract basis leave alone temporary employees.
- It will create more business opportunities to local suppliers, which will also have a trickledown effect in the Tanzania economy as whole.

- It will generate substantial revenue to the government in the form of corporate tax paid for 8 years, value added tax and pay as you earn etc.
- The project will have transfer of knowledge and skills as far as managing of real estate

### 9.0 Implementation Schedule

Project implementation is expected to be relatively very short once project has been approved it is estimated that construction of serviced furnished apartment will be completed within two years: -

#### RAY INTERNATIONAL PROJECT IMPLEMENTATION

S/N	ACTIVITY	PERIOD
1	Processing TIC Certificate of Incentive	September 2022
2	Construction	October 2022- February 2024
3	Procurement furniture and other facilities	April 2024
4	Recruitment	July 2024
5	Testing business and in house training	August – September 2024
6	Commercial operations	September 2024

### 10.0 Conclusion and Recommendations

The project is technically feasible, financially viable, and economically sound, provided the sponsors will manage it efficiently.

It is 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.

