

# OILCOM (T) LIMITED

## PROPOSED BUSINESS PLAN

### FOR

**THE ESTABLISHMENT OF AVIATION FUEL (JET A-1 AND AVGAS) STORAGE TANK AND TRUCK FILLING PROJECT AT DAR ES SALAAM INTERNATIONAL AIRPORT, ILALA DSTRIC, DAR ES SALAAM REGION, TANZANIA.**



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## **List of Abbreviations**

4WD - Four Wheel Driver  
CAPEX - Capital Expenditure  
CIF- Central in Flight  
EU - European Union  
GDP - Growth Domestic Products  
IRR - Internal rate of return  
Kg - kilo gram  
LTD - Limited  
MIS - Management Information System  
MT - Metric Ton  
MW - Mega Watts  
NBS - National Bureau of standard  
NEMC - National Environment Management Council  
OPEX - Operating Expenditure  
SIDO- Small Development Organization  
SWOC - Strength Weakness Opportunity Challenge  
TANESCO - Tanzania Electric Supply Company  
TIC- Tanzania Investment Centre  
TZS - Tanzania Shilling  
UK - United Kingdom  
US\$ - United State Dollar  
USA - United state of America  
VAT - Value Added tax  
VETA - Vocation Education Training Authority

## EXECUTIVE SUMMARY

In Tanzania, fuel is supplied by the private companies. These private companies are regulated by the Tanzanian agency called Energy and Water Utilities Regulatory Authority (EWURA). Administratively, EWURA is under the Ministry of Water and Irrigation but on specific technical matters, EWURA reports to the Ministry of Energy or the Ministry of Water and Irrigation. Tanzania mainland has total of 21 operational petroleum receiving terminals located around Dar es salaam, Tanga and Mtwara ports with a total storage capacity of 1, 178,125 cubic meters, these terminals receive petroleum products directly from berthing facilities and can store products to meet the country's demand of about 115 M<sup>3</sup> per day.

Bulk procurement system monitoring continues to be means of procure key petroleum products in the country through Dar es salaam, tanga and Mtwara region ports. The key products are petrol, diesel, kerosine and **Jet A- 1 and Avgas** as the key area of this study. The government through ministry of energy and other stakeholder are still find the best scenario of procure LPG through BPS to attain the in tendered economic benefits. on other end, HFO demand for the products continues to decline, the products could continue to imported under individual private arrangement.

OILCOM Tanzania Limited as a private company; imports, distributes, and markets premium-quality petroleum products across East and Central Africa. OILCOM was incorporated on the 26th of July, 1990, as a company limited by shares under the Companies Ordinance. In the past years

OILCOM aimed at expanding rapidly petroleum products in Tanzania and sub regions by purchasing major equipment's for installation of the aviation bulk storage facilities at Julius Nyerere international Airport in Dar es salaam. As for this important JNIA have been in constant searching on the better way in terms of safety, speed and sureness to deliver quality fuel services to customers. The company will install bulk storage tanks for Jet A-1 and Avgas as fuels for aircraft operation.

This project proposal entails setting up yard for aviation fuel bulk storage by leasing space for construction and installation of aviation fuel storage tanks at JNIA to a space measures a total area of 372.5-meter square. The assonated cost according to contract is estimated to 9.32US\$ per meter square per annum VAT inclusive and investment cost of US\$ 671,228.24 for construction and installation of aviation fuel storage tanks for contract period of 10 years from date of contract commencement which shall be stated 15<sup>th</sup> November 2022.for Aviation fuel facilities.

The company will contract and install aviation fuel bulk storage according to 372.5 square meter space at Julius Nyerere International Airport, in Dar es Salaam, Tanzania. The company will Refinery petroleum to Jet A-1 and Avgas for air craft for local and international flight. The company will install 15 refuellers each cost 350,000US\$ as additional facilities apart from construction of Storage tanks for aviation fuels tanks. The total storage is estimated to 462 metric cubic and current facility areas is 362.27-meter square and additional facility area is 372.5-meter

squire. The anticipated price of fuel at the prevailing world market price per liter for private company is estimated to 1US\$.

The proposed integrated project is estimated to cost a total of US\$ 17,641,376.39 this including, own equity of 100% as proceeds from capital contribution of the project. The Current asset of US\$ 1,276,210 during the first year of operation and it increase as the project will be in full operation (see income statement), fixed assets 8,346.245US\$ and total liquidity of 4,856,829US\$. The project will be implemented within 10 years.

The whole process of production lines is looking at providing direct employment to at least 47 permanent jobs on full implementation and operation of the project. The industry is divided into 5 Departments; Administration and finance (3), Management (5), Maintenance (10), Operation (25) and store and logistic (4)

Based on the Impact Investment Index analysis, the company can develop projections that the project can deliver both value for money in the context of broad socioeconomic impact and return on investment while complying with governance requirements. In this regard therefore, OILCOM (T) LIMITED will promote the industrialization process in the country, create employment, attract new technologies, expand foreign exchange earnings and ultimately contribute substantially to the country's economic growth.

On the basis of all the analysis done on this Business Plan on all aspects of assessment on both SWOC Analysis, market analysis, risk analysis and the financial analysis, the proposed investment options in the project as prescribed on this business plan have shown that the project is commercially viable. Nonetheless, OILCOM (T) LIMITED through professional consultative manner, will continue to find ways of implementing cost effective options given time and financial resources that will be made available. Financial analysis results show that when the construction of plant facility is financed using a combination of equity debt ratio (100:0), it gives an IRR of about 8.4%. The computed IRR is well above Dollar market of the annual loan interest rate of (8.00%) which is technically interpreted that the project is financially viable. The payback period for the project is estimated at 8years, which is within the range for this type of investment. Sensitivity analysis results also favor the project. Financial analysis for the project has shown feasible returns. Based on the investment scope and the assumptions taken in this Business Plan, the project will not face any difficulties during establishment, according to the projected cash flow be in a position to accomplish repayment of the loan and start generating profit.

## **1.0. BUSINESS OVERVIEW AND BACK GROUND INFORMATION.**

### **1.1. Overview – Petroleum sector and bulk storage facilities in Tanzania.**

In Tanzania, fuel is supplied by the private companies. These private companies are regulated by the Tanzanian agency called Energy and Water Utilities Regulatory Authority (EWURA). Administratively, EWURA is under the Ministry of Water and Irrigation but on specific technical matters, EWURA reports to the Ministry of Energy or the Ministry of Water and Irrigation. In 2016, a total of 5.5 billion litres of petroleum products (diesel, petrol, kerosene, Jet-A1 and HFO) was imported into the country. Dar es Salaam port is the main entry point of petroleum products with 99% of all import, while the remaining 1% enters in Tanzania through the Kenyan border at Sirari. In 2016, 60% of the total imported petroleum products were destined to the local market while the rest (40%) was in transit for neighbors' countries, mainly Zambia, DRC, Rwanda, Malawi, Burundi and Uganda. (Source: EWURA, 2018)

Petroleum infrastructure in the mid and downstream sub sector are berthing facilities storage terminal and distribution facilities. Berthing facilities include Kurasini oil Jetties at tanga and Mtwara ports. Port total operational storage capacities for liquid petroleum is 1,180,275 cubic meter as at 31<sup>st</sup> December, 2019 there were 1,581 operational petrol station in the country whereby most of them are located in urban areas<sup>1</sup>. Despite an increase in the country demand for petroleum product in rural areas, there still limited investments in petrol station in this area. The government is analyzing various options to attract investment in petrol stations in rural areas so as to ensure petroleum products are supplied there in an environment that is safe to human and the environment. Also, LPG operational receiving and storage capacity more than double in 2019 to reported storage capacity of 17,000MT.

### **1.2. Tanzania storage terminal infrastructure**

Tanzania mainland has total of 21 operational petroleum receiving terminals located around Dar es salaam, tanga and Mtwara ports with a total storage capacity of 1, 178,125 cubic meters, these terminals receive petroleum products directly from berthing facilities and can store products to meet the country's demand of about 115 cubic metres per day. There is another terminal in tanga with a capacity of 7,200 cubic meters under development. The terminals are mainly for receiving petroleum products if it is rehabilitated and gets connected to the receiving manifold.

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<sup>1</sup> the mid and downstream petroleum sub sector performance review report for year 2019

### **1.3. Bulk procurement system (BPS) monitoring:**

Bulk procurement system monitoring continues to be means of procure key petroleum products in the country through Dar es salaam, tanga and Mtwara region ports. The key products are petrol, diesel, kerosine and **Jet A- 1 and Avgas** as the key area of this study. Although BPS, the two products are still procured by companies through individual private arrangement. The government through ministry of energy and other stakeholder are still find the best scenario of procure LPG through BPS to attain the in tendered economic benefits. on other end, HFO demand for the products continues to decline, the products could continue to imported under individual private arrangements, others petroleum products that are imported through individual arrangements includes lubricants, baseoil, pet coke and bitumen.

### **1.4. Petroleum Products imports**

All the key petroleum products that are imported into Tanzania are received through Dar es salaam, tanga and Mtwara region ports. Mainly petroleum products imported into the country are petrol, diesels, kerosine Jet A1 and HFO. The main increases of importation of petroleum product are in the ongoing Government projects including construction of roads, standard gauge projects, Mwalimu Nyerere Hydro power, in additional fuel was highly needed in agriculture sector amid high farming activities due to favorable rainy season.

The volume of imported for transit to neighboring country also contribute to increase of importation of fuel. Efficiency of Dar Es Salaam and tanga Port attracted oil companies in the neighboring countries which are land locked to continues use the Tanzania transit routes for importation of petroleum products.

### **1.5. Aviation fuel consumption and distribution**

Aviation fuel comprises of Jet A-1 and Avgas that are mainly used to run aircraft for local ana international flights. Similar to their petroleum products, the Authority has a role of ensuring availability of aviation fuel to meet airport fuel demands. Only 3 active petroleum wholesalers supplied aviation fuels at airports, namely Puma Energy (T) Limited, Total (T) Limited and Oilcom (T) Limited. A total of 217,996,436 Liters of Jet A-1 and 562,199 Liters of Avgas were distributed and consumed at various airports in Tanzania between 2020 -2021. Mostly of Jet A - 1 sale are made at Julius Nyerere International Airport (JNIA) in Dar es salaam. With 70% of total Jet A-1 sales being made JNIA and 100% of Avgas also sold to aircraft that refuel at JNIA, Kilimanjaro international airport and Abeid Karume International Airport in Zanzibar consumed 11% and 12% of Jet A-1 respectively, while the rest of airports consume the remining portion, while the frequency of local flight to various airport

increased and new routes introduced most of the aircraft refuel at JNIA. In the year has role of ensuring as fuel.

Currently in Tanzania there is a dichotomy between the large multinational petroleum companies, the OILCOM (T) LIMITED seek to exploit this dichotomy in Aviation fuel services opportunities; it will operate in a way that will add value to aircraft companies and while not troubling her own production of other petroleum products it provides. The company provides the following services: distributes, and markets premium-quality petroleum products across East and Central Africa<sup>2</sup>

## **1.6. The company overviews**

OILCOM Tanzania Limited imports, distributes, and markets premium-quality petroleum products across East and Central Africa. OILCOM was incorporated on the 26th of July, 1990, as a company limited by shares under the Companies Ordinance. In the past years

OILCOM has expanded rapidly in the sub regional petroleum business. The headquarters of OILCOM is in Dar es Salaam, the main port and commercial capital of Tanzania, and from there the wings of investment spread out to the neighboring countries of Malawi, Rwanda, Zambia, Kenya, and the Democratic Republic of Congo. The main goal of OILCOM is focused on commitment, efficiency and customer satisfaction.

OILCOM has its own Depots at Strategic locations with following Storage Capacities. In Tanzania, 76,000 Cu<sup>3</sup> in Dar es Salaam 4,800 Cu<sup>3</sup> in Mtwara 6,000 Cu<sup>3</sup> in Isaka (Near Kahama) 2,200 Cu<sup>3</sup> in Kigoma. In Democratic Republic of Congo, 8,000 Cu<sup>3</sup> in Lumumbashi In Zambia, 5,000 Cu<sup>3</sup> in Lusaka In Malawi, 2,500 Cu<sup>3</sup> in In Rwanda, 18,000 Cu<sup>3</sup> in Kigali OILCOM has Aviation Fueling Facilities at Dar es Salaam International Airport, Mwanza Airport & Kigoma Airport in Tanzania.

OILCOM is one of the Major Company in On-Shore Bunkering to various Military Vessels, Offshore Drilling Rigs, Commercial Shipping Lines, Tug Boats, Marine Vessels, Speed Boats, Chase Boats, Seismic Survey Vessels, etc. OILCOM has recently set up its own LPG Storage at Dar es Salaam with a capacity of 500 Metric Tons and has become one of the major players in the Tanzanian market in a very short time. OILCOM is supported by its own sister company Al-Hushoom Investments which is the back bone of OILCOM in transportation of Petroleum Products through East & Central Africa with fleet of more than 400 Trucks. OILCOM Petro Card helps its customers to fuel their vehicles from the nearest OILCOM Petrol Station within Dar es Salaam and presently at few strategic locations within up-country areas 24x7.<sup>3</sup>

## **1.7. Project concept in Julius Nyerere International Airport**

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<sup>2</sup> <https://www.theigc.org/wp-content/uploads/2014/08/Background-note.pdf>

<sup>3</sup> [https://rocketreach.co/oilcom-tanzania-limited-profile\\_b5df746bf42e487a](https://rocketreach.co/oilcom-tanzania-limited-profile_b5df746bf42e487a)

The proposed aimed to expand her oil production by purchasing major equipment's for installation of the aviation bulk storage facilities at Julius Nyerere international Airport in Dar es salaam. As for this important JNIA have been in constant searching on the better way in terms of safety, speed and sureness to deliver quality fuel services to customers. The company will install bulk storage tanks for Jet A-1 and Avgas as fuels for aircraft operation. The project will include, Mounded bullets and accessories, Bullet corrussion Safety fittings, pumps and Aviation piping; Firefighting system; Electrical system and cubbing; Other utilities and accessories; Jetty Piping and Filling shed equipment's. All these machines and equipment's will be imported from different countries in the world such as India/EUA, China, France and USA.

However, the company is already involved in supplying Jet A-1 and Avgas to mostly of airports in Tanzania, but heavy construction of Bulk storage for aviation equipment's as will result of the significant investment in Tanzanian operations, the company is looking to register at the Tanzania investment Center. For that purpose, this business plan is prepared to outline the required information about the company and the operations being conducted for the Tanzania Investment Centre only. It is to be considered private and confidential.

The company will be established a layout of the project which is prepared to comply to NFPA 56 and SANS 10067-3, 2015 standard. The plant will be located within Julius Nyerere International Airport in Ilala District, Dar Es Salaam Region. Whereas the yard is already secured with necessary amenities for Bulk storage for aviation fuel and the management already enter into contractual agreement with Tanzania Airports Authority for leasing space for construction and installation of aviation fuel storage tanks at JNIT in August 2022.

Other major capital expenditure will involve procurement of workshop tools and equipment, modern processing machines and equipment; purchase of utility motor vehicles, furniture and fittings, and fencing of the project sites:

#### **1.8. The company objectives include the followings;**

- i. To carry on the business of producer, refinery, stores, supplies, and distributors of petroleum and its products and explore for, produce, refine, treat, distil, manufacture, smelt, store, transport, use, experiment with, market, distribute, exchange, purchase, sell and otherwise dispose of any kind of petroleum products, oil, gas and other volatile substance,
- ii. To construct, erect, equip and carry on the business of petrol station with all usual or convenient building, petrol an oil pumps, plant of the said business, to carry on the business of garage proprietor's, service proprietor's, mechanical engineering, manufactures, etc
- iii. To tender for and enter contracts of manufacturing, procurement, and supply of equipment and machinery in the industry.

- iv. To carry on the business of importers and exporters of heavy plant and equipment.

### **1.9. Project setup at Julius Nyerere International Airport - Dar es salaam, Tanzania.**

This project proposal entails setting up yard for aviation fuel bulk storage by leasing space for construction and installation of aviation fuel storage tanks at JNIA to a space measures a total area of 372.5-meter square. The associated cost according to contract is estimated to 9.32US\$ per meter square per annum VAT inclusive and investment cost of US\$ 671,228.24 for construction and installation of aviation fuel storage tanks for contract period of 10 years from date of contract commencement which shall be stated 15<sup>th</sup> November 2022.

For Aviation fuel facilities, the company is well equipped of all laboratories facilities from using modern technology. The project will be created in the said site above.

The proposed project will therefore involve the following activities:

- ❖ Additional Acquisition of mentioned machineries and equipment's to ensure maximum production of final mining products
- ❖ Development of processing camps and infrastructure
- ❖ Construction of laboratories building, storage warehouses, workshops and offices
- ❖ Importation and installation of fuel aviation storage and processing plants, laboratory for noble metal testing
- ❖ Procurement and installation of environmental protection plant equipment
- ❖ Importation and installation of equipment, machinery and plants for fuel aviation processing plant
- ❖ Procurement of heavy-duty trucks fleet for transportation of Aviation fuel and tailings. Other utility vehicles will also be procured for the project. This will include pickups, 4-WD station wagons to facilitate movement. Armored vehicles will also be procured for transportation.
- ❖ Purchase of furniture, equipment, fittings and administration motor vehicles, fencing of the factory compound and storage yard.

## 2.0. PROJECT OVERVIEW

### 2.1. The industry

OILCOM (T) LIMITED is a Tanzanian company registered in Tanzania with certificate of incorporation number 18300 of 26th of July, 1990 the Company with Taxpayer Identification Number 100-143-690. OILCOM has expanded rapidly in the sub regional petroleum business. The headquarters of OILCOM is in Dar es Salaam, the main port and commercial capital of Tanzania, and from there the wings of investment spread out to the neighboring countries of Malawi, Rwanda, Zambia, Kenya, and the Democratic Republic of Congo. The main goal of OILCOM is focused on commitment, efficiency and customer satisfaction.

The main office of the company is located at Kurasini, mandela road, plot No. 312/4 Mandela Road, Ilala district, Dar Es Salaam City in Tanzania. The anticipated project site will be located at Julius Nyerere International Airport to plot with squire meter of 372.5 leased for ten years.

The initial Authorized Share Capital of the company is TZS 100,000/= divided into 100 ordinary shares of TZS 1,000/= each and the company have the power to divide the original or any increased capital into several classes, and to attach thereto any preferential, deferred, qualified or other special rights privileges, restrictions or conditions. Unless the conditions of issues shall otherwise expressly declare, every issue of shares, whether preference or otherwise, or any such rights, privileges or conditions shall not be altered or modified except in accordance with the registered Articles or Association. The liability of the members is limited and the following names compromise the company ownership and principal shareholding as illustrated on Table 1 below.

**Table 2.1. Company Ownership and Principal Shareholders**

S/No.	Shareholder's Name	Address	Occupation of Subscriber	Number of Shares
1.	HAROON PIRMOHAMED (TANZANIAN)	P O BOX 71731, DAR ES SALAAM, TANZANIA	Private Company By Share, Domicile In Tanzania- Incorporate Number 18300	1
2.	PIRMOHAMED ABDULRAHIM PILMOHAMED (TANZANIAN)	P O BOX 1406, IRINGA, TANZANIA	Private Company By Share, Domicile In Tanzania- Incorporate Number 18300	1

## **2.2. Business Plan Objectives**

The objectives of this study are two-fold. First is to determine the viability of the proposed project and serve as a business plan for the company's development program. Secondly, the business plan will act as a supporting document in the company's application for Tanzania Investment Centre (TIC) Certificate of Incentives so as to access exemptions on duties, VAT deferments and other benefits and protections as statutorily provided for under Tanzania Investment Act (1997). The project promoters have commissioned a reputable engineering and project planning consulting firm to advice on detailed technical and economic evaluation of the project and in determining its viability. As the report will be used to raise debt financing for the project, it is tailored to meet standard requirements of financial institutions in the region.

## **2.3. Project Technical aspect –Aviation and turbine fuel refining:**

### **2.3.1. Explanatory note of fuel aviation**

Almost all jet fuel is made from petroleum. A small percentage is made from oil sands. Shale oil was refined into jet fuel in the 1970s and 1980s, but this is no longer economical. Recently, the Fischer-Tropsch process has been used to manufacture a synthetic jet fuel blend componentt. There is widespread interest in this process, so it may contribute increasing amounts of jet fuel in the future.

Refining is the process of converting crude petroleum, also called crude oil or simply crude, into high-value products. The most important are transportation fuels – gasoline, jet fuel, and diesel fuel. Other important products include aviation gasoline, liquefied petroleum gas (LPG), heating fuel, lubricating oil, wax, and asphalt.

### **2.3.2. Raw Materials for fuel aviation**

Raw Material As it comes out of the ground, crude oil can be as thin and light-colored as apple cider or as thick and black as melted tar. Thin crudes have relatively low densities and thus high API gravities. Therefore, they are called high-gravity crudes; conversely, thick crudes with relatively high densities are low-gravity crudes. High-gravity crudes contain more of the lighter products and generally have a lower sulfur and nitrogen content, which makes them easier to refine. However, modern refining processes are capable of turning low-gravity crudes into high-value products. Refining low-gravity crudes requires more complex and expensive processing equipment, more processing steps and energy; therefore, it costs more. All crude oils are composed primarily of hydrocarbons of the paraffin, naphthene, and aromatic classes. Each class contains a very broad range of molecular weights

## **Refining Processes**

Today's refinery is a complex combination of interdependent processes, the result of a fascinating intertwining of advances in chemistry, engineering, and metallurgy. These processes can be divided into three basic categories:

### **Separation processes**

The feed to these processes is separated into two or more components based on some physical property, usually boiling point. These processes do not otherwise change the feedstock. The most common separation process in the refinery is distillation

### **Upgrading processes**

These processes improve the quality of a material by using chemical reactions to remove any compounds present in trace amounts that give the material the undesired quality. Otherwise, the bulk properties of the feedstock are not changed. The most commonly used upgrading processes for jet fuel are sweetening, hydrotreating, and clay treatment.

### **Conversion processes**

These processes fundamentally change the molecular structure of the feedstock, usually by "cracking" large molecules into small ones, for example, catalytic cracking and hydrocracking

## **2.4. Project establishment Overview**

### **2.4.1. Project design description**

This section provides guidance for the design of bulk storage tanks, operating storage tanks, ground vehicle fuelling tanks, miscellaneous use tanks, product recovery system tanks, contaminated fuel storage tanks, and jet engine test cell fuel storage tanks. Design guidance on issues related to storage tanks such as protection, location, coatings, product recovery, and spill containment systems are also covered in this chapter. This chapter generally applies to new tank.

### **2.4.2. General Criteria.**

Design liquid fuel storage tanks to comply with the operational requirements of the particular command having jurisdiction of the facility. Ensure that the design is appropriate for the mission of the facility. Consider the operational requirements of the users of the fuel.

### **2.4.3. Materials.**

All aboveground storage tanks shall be constructed of steel or concrete encased steel.

### **2.4.4. Protection and design requirements**

Provide protection to preserve product quality and ensure minimal losses by evaporation, dilution, leakage, substitution, theft, contamination, attack, sabotage, fire, and damage to the environment. Use aboveground steel tanks unless the mission of the facility or other practical considerations dictate be used.

Fuel storage facilities provide an operating and reserve supply of fuel. The types and sizes of storage tanks depend on safety, economics, terrorist activity, locality, and intended service. Provide separate storage for each type and grade of fuel. For aviation activities, provide a minimum of two tanks for each type of fuel.

### **2.4.5. Storage Capacity.**

The capacity or size of each fuel storage tank is based upon the logistical and mission requirements for the facility and any other facility to be supported from it. For a stated volume of each fuel, fewer tanks of larger size will result in maximum economy. The appropriate Owner approval will determine the number and size of tanks required. Provide a minimum of two tanks at aviation activities for each type of aviation turbine fuel to receive and isolate new receipts until tested and checked for quality and quantity while the facility continues to function with stocks on hand. In general, capacities of individual tanks should not exceed 50 percent of the total storage volume required for each type and grade of fuel. Do not provide tanks with capacities greater than 100,000 barrels (16,000,000 L) except when larger tanks are specifically authorized by the Owner.

### **2.4.6. Tank Spacing.**

Provide a minimum distance between the shells of vertical tanks, both aboveground and underground, of not less than one diameter of the larger tank. Space adjacent groups of more than two pairs in a single row with at least 20 feet (6m) between the nearest tanks of the groups. In addition to requirements listed in report, tanks located in facilities governed by NFPA 30A, such as marine/motor fuel dispensing facilities, shall comply with NFPA 30A.

#### **2.4.7. Distance From Buildings and Property Lines.**

Locate tanks a sufficient distance from buildings and property lines to prevent the ignition of vapors from the tank and to protect buildings and their occupants or contents from damage by a tank fire. Assume that the maximum internal pressure in a fire exposure will not exceed 2.5 psig (17 kPa).

#### **2.4.8. Aboveground Tanks.**

Locate aboveground tanks with consideration of fire safety. The first consideration is to prevent the ignition of vapors from the tank, and the second consideration is to protect the building and its occupants or contents from damage by a tank fire. As a protective measure, provide all aboveground tanks with some form of emergency relief venting for fire exposure in accordance with NFPA 30.

#### **2.4.9. Tank Truck and Tank Car Off-Loading and Loading Facilities.**

For fire resistant or protected horizontal aboveground tanks and underground tanks, provide a minimum separation of 25 feet (7.6 m) from tank truck and tank car off-loading and loading facilities. For all other tanks, provide a minimum separation of 50 feet (15 m) from tank truck and tank car off-loading and loading facilities. General requirement of tank truck for offloading and loading fuel must comply with the following criterions;

- All aviation, diesel fuel marine (F-76), additive, and lube oil tank. Interiors shall be 100 percent coated, including floor, shell, and underside of the roof,
- Other products. Coat the floor, the underside of the fixed roof, and the bottom 40 inches (1000 mm) of the tank shell. Additional coating of up to 100 percent requires economic justification and The Owner approval. \1\ Tanks containing E85 are not to be coated internally unless otherwise approved by The Owner.
- For all products, tank interiors shall be 100 percent coated. Tanks containing E85 are not to be coated internally unless otherwise approved by The Owner.,
- For all products coat the interior and exterior of carbon steel piping located inside the tank, and steel appurtenances inside all tanks. Carbon steel piping, and steel appurtenances located inside of tanks containing E85 are not to be coated internally unless otherwise approved by The Owner.

#### **2.4.10. General Design Considerations.**

Provide pumps, piping, valves, and tanks to collect and store usable aviation turbine fuel which would otherwise become waste from operational or maintenance activities. Consider a product recovery system for other products. Include a tank to

collect fuel/water mixtures from tank and equipment sumps, equipment drains, product saver tanks, high point vents, low point drains, and any other equipment from which fuel/water mixtures can be collected. Separate the fuel and water portions. Filter the fuel portion and return to operating storage tanks. Do not discharge the water portion to surface water without additional treatment and permits or treat the water portion as wastewater.

#### **2.4.11. OILCOM (T) LIMITED towards project implementation**

The company will contract and install aviation fuel bulk storage according to 372.5 square meter space at Julius Nyerere International Airport, in Dar es Salaam, Tanzania. The company will Refinery petroleum to Jet A-1 and Avgas for air craft for local and international flight. Apart from constructing Bulk storage tanks the company will purchase the following set complete set of aviation fuel production facilities as prescribed section 4.2.1 to this report.

The company will install 15 refuellers each cost 350,000US\$ as additional facilities apart from construction of Storage tanks for aviation fuels tanks. The total storage is estimated to 462 metric cubic and current facility areas is 362.27-meter squares and additional facility area is 372.5-meter square.

The basis for pricing has been from EWURA dated 21<sup>st</sup> September 2022 JET A-1 price per barrel is 134.6US\$ and per metric ton is 1063.3US\$ per gallon is 3.205 and per Liter is 0.852.US\$. EWURA as a regulatory agent. The aviation fuel selling price is govern by world market price therefore Oilcom selling price at the prevailing world market price per liter for private company is estimated to 1US\$. In this report setting price in all financial calculation is 1US\$ per liter. The first year of sales, the anticipated revenue gain is 16,860,000US\$

	<u>YEAR 1</u>
TOTAL SALES REVENUE	
ANNUAL SALES AVGAS	60,000
ANNUAL SALE JET A-1	16,800,000
TOTAL OPERATING REVENUE	16,860,000

### **2.5. Technical Characteristic of the project.**

#### **2.5.1. Project Location and site analysis**

Based on physical inspection of the proposed site at Julius Nyerere International Airport, the availability of basic and essential industrial infrastructure such transport, water supply, effluent disposal, electric power supply, telecommunication system and security were all checked out and are ok for factory establishment. The realization of the project development requires successful completion of a number of necessary activities and facilities to enable a successful

development of the project. The project location is already installed necessary utilities such as reliable supplies of energy, water, transportation, telecommunications services, waste disposal and other services are in place.

### **2.5.2. Buildings and related fixed cost**

Buildings and other related structures all in place, OILCOM (T) LIMITED will rent the area for building Bulk storage Aviation fuel tanks with a capacity of storing Avgas and Jet A-1 5000 and 1400,000Liters per month. However, the total major construction of tanks, yard and buildings, and finished processing a structure, the estimated cost of rental charge and buildings 3,186,564US\$.factory overhead cost of 745,671US\$ The minor rehabilitations costs are inclusive of contingency and reflect prevailing cost of building materials and other cost.

### **2.5.3. Machinery and Equipment.**

Proper machinery selection is one of the key problems in the development of an industry. The machinery must suit the two-fold requirements of the developing countries, i.e. it should be up-to-date to allow for competitive production. In view of the foregoing, an effort has been made to choose from modern technological alternatives, a level that strikes a balance between fixed costs based on depreciation and variable costs based essentially on wages.

The requirements of various items of equipment have been worked out taking into consideration the production programs, average equipment utilization and normal productivity level of an average worker etc. While working out details of equipment required, it has been assumed that the plant will be working in a double shift of 16 hours a day, 25 days a month or a total of 300 days a year.

The projects machinery and equipment will be sourced from Europe and Asia are estimated to cost 430,991.58US\$, this includes, pump equipment set, electrical & cabling systems, Jetty pipping, fire fighting system and tanker loading facilities. All these machines and equipment's will be imported from different countries in the world such as India/EUA, China, France and USA.

The total cost of machineries and equipment's is estimated to cost 430,991.58US\$, these cost assumptions are C.I.F Dar es Salaam and include installation, commissioning, consultancy, port charges and transport to the project site. Calculated depreciation of machines and other working facilities is estimated to cost 461,399S\$US\$ and increases tremendously.

### **2.5. 4.. Motor Vehicles**

The company will purchase 15 refuelers trucks amounted to 350,000US\$ each, a folk lift and management operational vehicle to facilities operational of the project. The total investment in purchasing motor vehicle is estimated to 5,652,500US\$

### **2.5.5. Furniture & Fittings and computers**

This cost item includes the purchase of various office furniture: tables, chairs cabinets, safes, telecommunication gadgets, firefighting equipment, air conditioners etc. A budget of 25,076.28US\$ will be allocated from general administration budget for furniture fittings and computer accessories. The total budget for furniture and fittings is small due to nature of industry as few or minor requirement of furniture and fittings.

### **2.5.6. Pre-Operational Expenses**

Under pre-operational expenses are considered costs like company formation, preliminary project studies, business plan preparation costs, licenses, permits and authorization, including processing of TIC Certificate of Incentives, and legal fees, travelling expenses, initial recruitment and training expenses, and interest accrued during project construction period. Budget allocated for this is 85,375US\$

### **2.5.7. Initial Working Capital**

This item will mainly cover initial imports of raw materials estimated to last for the first three months of operations. Otherwise, raw materials will generally be maintained at one month's stock and debtors at one month's sales volume constitute the biggest portion of current assets. Trade credits will be 15 days for the items listed. The initial working capital allocated budget is 8,346,244.57US\$.

### **2.5.8. Project Financing**

The project costs, including fixed costs (machinery, equipment, building renovations, motor vehicles, office furniture and equipment and pre-operation expenses will be financed by a combination of bank term loan and shareholders own resources. Working capital requirements will be financed by short term bank financing in form of overdraft facility. The project promoters are planning to finance project cost in the following pattern:

### **2.5.9. Project Implementation**

Full implementation of the project is planned to take place by early November 2022. Machineries and motor vehicles will be imported immediately while construction/renovation works are in process.

### **2.5.10. Auxiliary Materials/ services**

Falling under this category is packing bags, paper for bags for bran, lubricants, grease and other miscellaneous items.

**Utilities and service facilities that will need to be provided in this plant are as follows:**

- (i) Workshop
- (ii) Electric power
- (iii) Water supply
- (iv) Miscellaneous facilities {Canteen; First Aid Kit, Storage and transport and Office Facilities}

**(i) Workshop**

It is necessary to make provision for a small workshop in the plant premises so that certain maintenance operations could be carried out following sudden breakdowns and major routine matters. The facility will comprise of necessary machines like small centre lathe, drilling machine, welding set, soldering and gas-cutting equipment including complete electrical kit to take care of necessary electrical maintenance as well as to replace worn-out parts and periodic oil and greases needs for the plant. Equipment provision has been restricted to the minimum.

**(ii) Electric Power and Generator**

The proposed site will be supplied with industrial production 3-phase standard power supply from Tanzania Electric Supply Company (TANESCO), the electricity is available through the National Grid Line from Kinyerezi, Dar es Salaam the main power station distributor and electric transformer 2000KVA substation nearby the project site. There also a two-diesel generator with a capacity 1000KVA each. Lighting system well head Lamps, flamed enclosed with 40W led light will be installed. As part of an alternative power supply, the company will install UPS system in case of abruptly power cut off with a capacity of 10KVA minimum with a battery bank.

**(iii) Water Supply**

Apart from the needs of electric power, water is also required for the actual process and other social needs. The proposed site has close to DAWASCO - Dar es Salaam Urban water supply Authority water network, the agency is major supplier of water to urban and peri urban area in the region. The main line from this source will be tapped and let to the land site and water collected in an overhead reservoir provided at the top of the building of the plant. Adequate provision has been made in the project cost for the overhead tank and supply and laying of pipelines etc.

**(iv) Miscellaneous Facilities e.g. First Aid Kit, Storage and Transport, Office Facilities etc**

- Provision has been made in the project costs for necessary facilities for external telephones and fire alarm system;

- Sickness and ill-health are recognized to be among the cause of absenteeism and low morale leading to decreased production, increased waste and bad employee-management relations. Therefore, necessary provision has been made for the canteen and first aid facilities in case of accidents, sudden sickness etc.
- Necessary provision for furniture and office equipment has been made in the Capital Cost estimates.
- Provision has also been made for the various types of weighing equipment in various sections for material-handling equipment etc.

#### **2.5.12. Warehousing and distribution**

The Oilcom (T) Limited's warehousing service is ready to meet 24/7/365 in provision of drilling services and necessary material and chemicals imported. The efficiency of on-site combined with focal lift is already accommodated all needs and reduce supply chain costs. The industry uses electronics inventory management system means will ready for the efficiently movements of goods to next level.

The industry will use quick dispatch for fast distribution of final products and packed by manual means or by semi-automatic machines. The industry will take Extra care is therefore taken to make it hygienic so that the products do not get spoiled during storage.

#### **2.5.13. Waste management for industry**

In order to create a sustainable society, it is necessary to develop effective utilization of all sorts of wastes. One of the major wastes from our living is fiber wastes. Fiber wastes are generally divided to nonindustrial (organic chemicals) and industrial wastes (inorganic Chemicals)

In his strategic management for Oilcom (T) Limited's; the industry has to move from an understanding of improvement at all costs to an understanding of continuous and balanced improvement once established. In modern times, environmental protection is being implemented not because it is enforced law, but as an administrative philosophy.

Rapid degradation in environmental conditions has changed at attitude of industrial managers toward ecological environment and had them consider ecology a significant factor while taking decisions related to industrial management. Parameters responsible for environmental pollution include chemicals discharged into air, water and soil as well as energy pollution all these will be taken into consideration of the proposed project.

Noise pollution caused by poorly planned settlement programs is also included in this plan. Furthermore, safety and health of those working in production will be also taken into account by installing modern machines free from noise pollution.

### **3.0. MANPOWER AND SALARY BUDGET**

#### **3.1. Employment**

The whole process of production lines is looking at providing direct employment to at least 47 permanent jobs on full implementation and operation of the project. The industry is divided into 5 Departments; Administration and finance (3), Management (5), Maintenance (10), Operation (25) and store and logistic (4)

#### **3.2. Recruitment**

Recruitment of the operation department personnel's will be carried out by giving first preference to ex-technician from our local technical institutes such as Vocation Education Training Authority "VETA" and employees of OILCOM (T) LIMITED in Tanzania, based on demonstration of skills and aptitude basis and their willingness to work for OILCOM (T) LIMITED. Careful methodology is being worked out by a competent management consultant who will set the job descriptions. To ensure that the right calibre is recruited. Recruitment of expatriate personnel will be carried out in consultation with the relevant authorities in Government and the collaborating agencies.

#### **3.3. Training and the use of consultants**

The Company plans to initially carry out on the job training for most of the technical staff to be dispatched to the project site by the suppliers of the plant which will be specified under sales agreement. In general, the company will ensure that employees acquire new skills and procedures to increase their productivity fourfold. Educational materials will be subsidized or paid for to motivate the workers to develop themselves.

Whereas the company will endeavor to obtain the best talents to fill the permanent posts in the organization, it is intended where necessary, to continue with the policy of hiring out some specialized skills by way of consultants. Alternatively, those skills not required throughout the year will be left to consultants. These include legal counsels, systems and management consultants. To ensure efficient and scientific management, operational manuals will be prepared for the core functions of the company.

#### **3.4. Organization and Management**

The project will be managed by qualified professionals given the vast experience that the promoters have acquired over years in running and managing similar businesses. The Board of Directors formulates policy and offer strategic business guidance to management and regularly monitor and evaluate performance of the company.

All the production line will be under the administrator under which the day-to-day leader/management of production line will be vested in the management team headed by a Administrator. The Administrator is to be assisted by qualified and experienced personnel.

Table 3.1. Proposed organization and manpower requirement for the plant is as follows:

S/No.	DEPARTMENT	NUMBER S	MONTHLY SALARY US\$	ANNUAL BUDGET US\$
A	<b>ADMINISTRATION AND FINANCE</b>			
	Office Administrator	1	782.61	9,391.32
	Drivers	2	434.78	10,434.72
	Accountant	1	652.17	7,826.04
	<b>SUB TOTAL</b>	<b>3</b>	<b>1,217.39</b>	<b>19,826.04</b>
	<b>MANAGEMENT</b>			
	Project manager	1	1,173.91	14,086.92
	Drivers	1	330.43	3,965.16
	<b>SUB TOTAL</b>	<b>5</b>	<b>2,721.73</b>	<b>37,878.12</b>
C	<b>MAINTAINANCE</b>			
	Mechanics	1	913.00	10,956.00
	Electrician	1	913.00	10,956.00
	Chemical Processing engineer	1	870.00	10,440.00
	Plumbing	1	1,087.00	13,044.00
	Laboratory Technician	2	783.00	18,792.00
	Maintenance Planners	1	761.00	9,132.00
	Drivers	2	326.09	7,826.16
	Senior ICT	1	1,348.00	16,176.00

D	<b>SUB TOTAL</b>	10	7,001.09	97,322.16
	<b>OPERATION</b>			
	Supervisors	1	1,043.00	12,516.00
	Production Engineers	1	1,043.48	12,521.76
	safety personnels	4	696.00	33,408.00
	Quality controller	2	874.00	20,976.00
	Tank filling personals and driver	15	874.00	157,320.00
	Utility worker	2	522.00	12,528.00
	<b>SUB TOTAL</b>	25	5,052.48	249,269.76
E	<b>STORE AND LOGISTIC</b>			
	Purchasing Coordinator	1	1,087.00	13,044.00
	Store supervisor	1	652.00	7,824.00
	Drivers	2	330.43	7,930.32
	<b>SUB TOTAL</b>	4	2,069.43	28,798.32
<b>GRAND TOTAL</b>		47	18062.12	433,094.40

## 4.0. PROJECT FINANCING AND CAPITAL INVESTMENT SUMMARY

### 4.1. Project Cost & Financing Pattern

The proposed integrated project is estimated to cost a total of US\$ 17,641,376.39 this including, own equity of 100% as proceeds from capital contribution of the project. The Current asset of US\$ 1,276,210 during the first year of operation and it increase as the project will be in full operation (see income statement), fixed assets 8,346.245US\$ and total liquidity of 4,856,829US\$. The project will be implemented within 10 years.

### 4.2. Project Capital Investment Summary

Investment Summary	
<b>land and Buildings</b>	
Annual land rent (@15,547US\$ per Month X12)	186,564.00
<b>Buildings</b>	
Pump house structure	
Aviation fuel storage tanks	
Steel rebars & concrete civil works	3,000,000.00
Operation & Management office	
Mounded bullets structure	
<b>Sub total Fixed Assets</b>	<b>3,186,564.00</b>
<b>Machineries and Equipment's</b>	
Pump equipment's set	74,550.00
Jetty piping	89,125.00
Electrical & cabling system	47,936.60
firefighting system	13,045.18
Tanker loading facilities	77,834.78
standby Generator	128,500.00
<b>Sub total Fixed Assets</b>	<b>430,991.56</b>
<b>Motor vehicles</b>	
Folk lift 3	115,000.00
Refuellers trucks 15@ 350,000US\$	5,250,000.00
Management & Operational vehicles 5	287,500.00
<b>Sub total Fixed Assets</b>	<b>5,652,500.00</b>
<b>Other Facilities</b>	
Furniture and fittings	6,571.43

Office Equipment	6,804.83
Other cost	11,700.00
Sub total Fixed Assets	25,076.26
<b>Sub total Fixed Assets</b>	<b>9,295,131.82</b>
<b>Up-to-date Asset</b>	
Pre operational expenses	85,375.00
Working capital- purchase Petroleum products	8,260,869.57
Sub total current Assets	8,346,244.57
<b>Total Investment</b>	<b>17,641,376.39</b>
<b>Equity + Loan</b>	
<b>Loan (0%)</b>	-
<b>equity (100%)</b>	<b>17,641,376.39</b>
<b>Total Equity</b>	<b>17,641,376.39</b>

## .0. RISK ANALYSIS

### 5.1. Risk Analysis

Risk is the probability that an event or action will adversely affect the organization. Risk assessment is the identification and analysis of risks associated with the achievement of operations, financial reporting and compliance goals and objectives. Risk management is a central part of the OILCOM (T) LIMITED. The industry's management will determine the level of operations, financial and compliance risk they are willing to assume. Risk assessment is one of the Company's management responsibilities.

### 5.2. Macroeconomic risk analysis

Since early 1986, the government of Tanzania has launched a comprehensive economic policy and stabilization plan with the aim to enhance the amount of infrastructure construction and improve the lives of the poor. During this time the main economic indicators significantly improved. However, uneven development of various region in the country, lack of relevant infrastructure in transportation, telecommunications, networking, health facilities, electricity and water supplies have proven to be investment barriers. Overall, Tanzania has a weak economic foundation but the project can achieve a greater impact in attaining social and economic goals for the country.

### 5.3. Finance risk analysis

- a) **Supply Risk:** The risk in Primary production relates to supply of raw material, transportation and price fluctuations. There is no assurance of enough supply of raw materials in the local market instead mostly of raw materials are imported.
- b) **Processing Risks:** The technology, machines and equipment used in Gas processing are in rudimentary stages all of which contribute to reducing production efficiency. Also, quality/fuel safety and standards consideration in the production environment is limited. In gold processing facilities operation know-how is very low as there are notarized labourers.
- c) **Sales/market risk:** Placing value added products on the consumer markets bears risk of demand fluctuations and rejections through retailers. Furthermore, distributor is not aware of the selling price mostly are controlled by world market.

### 5.4. Other potential external risk

- a) **Lack of Governance:** the governance mechanism in the value chain is underdeveloped, actors operate in an uncoordinated and unorganized fashion, and if rules exist, they are often ignored;
- b) **Lack of market coordination:** No lead organization has a coordinating role in relation to markets, technology and information such that producers and processors have no incentives for improving neither their product nor the chain process to promote sustainable income earning opportunities;
- c) **Unclear and conflicting roles regulatory authorities:** Regulatory Agencies are responsible for quality control as well as enforcing TBS, NEMC etc, are regulatory role in issuing licensing in Tanzania
- d) **Industry associations:** Associations are weak at all levels of the chain;
- e) **Operating procedures:** Standard procedures are inadequately enforced, or not enforced at all, because of relaxed production and trade regulations; and
- f) **Integration:** there is little vertical integration of importers, mid chain actors and processors.

### 5.4. Mitigating potential risk

The development of a large and complex project such as OILCOM (T) LIMITED is necessarily accompanied by multiple risks during all the phases of the project development, construction, operation and maintenance. The right approach to manage the project in a manner which is fairly and adequately address the multiple risks in a comprehensive as well as systematic manner is to use the risk analysis and management methodology which identifies the risk issues and their

instrumental cause. In this regard, the risk is eliminated or effectively managed by the party best suited with capacity to handle or deal with the risk factors.

## 6.0. ECONOMIC AND SOCIAL ASPECTS

The project is also likely to have a positive impact on the economy of coastal regions and Tanzania as a whole by creating employment, and contributing to Government revenues through various taxes, which will be paid. It also has potential for substantial exporting to foreign markets specially to neighboring countries in the Great Lakes Region. In summary the following table will show impact investment index framework

### 6.1. Impact Investment Index Framework

Impact Investment Index		
Frame Work for OILCOM (T) LIMITED		
Performance Area	Quantitative Indicator	Remarks
<b>Investment Capital</b>	Total investment capital, CAPEX and OPEX US\$ 17,641,376.39US\$	Substantial amount of capital invested into the domestic economy.
<b>Export Earnings</b>	Indicative Annual sales of earnings of 16,860,000US\$ out of annual average collection	Increased foreign earnings.
<b>Job requirements</b>	Job creation after plant in operation 2022-2027. DIRECT TANZANIAN JOBS 47 local employed workers	<ul style="list-style-type: none"> <li>• Reasonable number of direct jobs created to local Tanzanians with direct impact on poverty reduction through enhanced income generation; and</li> <li>• Improving skills development for Industrial production</li> </ul>
<b>Technology applied</b>	High Tech Environmentally friendly machinery	<ul style="list-style-type: none"> <li>• Enhancing technological transfer; and</li> <li>• Applied technology which is free from environmental pollution,</li> </ul>
<b>Other Implied Project Benefits</b>		
<ul style="list-style-type: none"> <li>▪ Increased sales to the Utility Companies providing services of electricity, water and sewerage, telecommunications;</li> <li>▪ Increased business transacted by local banks and institutions providing financial services;</li> <li>▪ Business opportunities for local entrepreneurs in market distribution channels,</li> </ul>		

- Business opportunities to contractors and sub-contractors during the minor construction phase;
- Increased regional intra-trade and international trade due to better infrastructure facility and links to markets;
- Increase of technology transfer & expertise to local employed staff,
- Capital spends in local economy over 17,641,376.39US\$ and
- Contribution to GDP growth through increased economic activities

Based on the Impact Investment Index analysis, the company can develop projections that the project can deliver both value for money in the context of broad socioeconomic impact and return on investment while complying with governance requirements. In this regard therefore, OILCOM (T) LIMITED will promote the industrialization process in the country, create employment, attract new technologies, expand foreign exchange earnings and ultimately contribute substantially to the country's economic growth.

## 7.0. FINANCIAL MODELLING AND ANALYSIS

The Financial Modelling and analysis, is the main source of information for assessing the potential financial viability of the OILCOM (T) LIMITED. The analysis is based on the assumptions that have been taken for the implementation of the site development, demand and the associated potential investment requirements for a 10years time period. The purpose of establishing this project is to speed up the country's economic development by being a catalyst for restructuring the existing local industrial set up and attracting new, both foreign and domestic entrepreneurs to a liberalized legal business framework.

### 7.1. Project investment inputs and revenue projects

#### *Expected quantities for production*

<i>All cost and revenue in US\$</i>	
<b><i>Revenue from selling Aviation Fuel</i></b>	
<i>Working days per month</i>	20.00
<i>Annual working days</i>	240.00
<i>Average sale of Avgas per month in Liter</i>	5,000.00
<i>Average sales of Jet A-1 per Month</i>	1,400,000.00
<i>Annual capacity per Liter Avgas</i>	60,000.00
<i>Annual capacity per Liter Jet A-1</i>	16,800,000.00
<i>Price of Agas per Liter</i>	1.00
<i>price of Jet A-1 per Liter</i>	1.00
<i>annual sales AvGas</i>	60,000.00
<i>Annual Sale Jet A-1</i>	16,800,000.00
<b><i>Total sales Revenue</i></b>	<b>16,860,000.00</b>

### 7.2. Production, Revenue and project viability

- ✚ The estimated revenue gain in provision of gas annually 16,860,000US\$ in the ten years of production per 60MT and 16,800MT of Avgas and Jet A-1 fuel in the first year and increases positively.
- ✚ Net profit before tax is 4,856,829US\$, second year earning is ten times to 5,339,734US\$, which show the profit is increasing, (see Income statement)
- ✚ Net profit after tax for the first years in production is 1,276,210US\$ and second year is increasing to 1,667,461US\$ for remaining year increasing positively, (see Income statement). But this first year of

production the company had negative provision to shareholders (see balance sheet)

- # Gross sales contribution in the first year of service is quietly promising (see Income statement)
- # The expected sales increase in a second year over 5%, this is due to the company will utilize all necessary machine and equipment during the operation of the project after imposed
- # Total investment cost of the project is 17,641,376.39US\$ whereas the own equity is 100% and loan-able amount 0 US\$ (see investment summary)
- # The end balance of project in cash flow statement is positive and increases tremendous. (See cash flow statement)
- # Testing the project viability is positive whereas IRR is positive 8.4% which is above bank assumed loan interest of 8%, and payback period of project is within 4 to 5 years. Which is project economic life
- # Return on investment is posit positive and increases tremendously (see balance sheet)
- # Breakeven point is positive from the first year of operation.

### **7.3. Objective and Scope of Financial Model**

#### **7.3.1. Objective**

The main objective of the financial modelling and analysis is to setup a financial model framework for potential generated revenues and operational & maintenance costs for the full operation of OILCOM (T) LIMITED based on the assumptions taken for the Market Analysis, the plan for the facility development, unit production costs and other overhead and operational charges.

#### **7.3.2. Scope**

The scope consists of a financial model that will be used to analyse the potential financial viability of the project based on the assumptions taken for the concept and scope of the project on the Market Analysis. The financial model has been developed in excel spread sheet and include information on costs, expenses and the subsequent sales revenue based on the average market prices and linked to the financial cash flow.

#### **7.3.3. Project financial plan.**

The project financial plan primarily consists of income statement, cash flow projection and balance sheet. From these 3 financial statements the project will derive Break even points, internal rate of returns, loan payment schedules, payback period and other financial ratios. These reports constitute reasonable estimate of

company financial future. More importantly, the process of thinking through the financial plan improves insight into inner financial working of company.

## ANNEX I - INCOME STATEMENT

### Income Statement Projections

(all numbers in USD)

#### Revenue

	<u>Year</u> <u>0</u>	<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>	<u>Year 4</u>	<u>Year 5</u>	<u>Year 6</u>	<u>Year 7</u>	<u>Year 8</u>	<u>Year 9</u>	<u>Year 10</u>	<u>TOTAL</u>
<b>Total sales Revenue</b>	-											
annual sales AvGas		60,000	63,000	66,150	69,458	69,458	72,930	72,930	76,577	76,577	80,406	707,485
Annual Sale Jet A-1		16,800,000	17,640,000	18,522,000	19,448,100	19,448,100	20,420,505	20,420,505	21,441,530	21,441,530	22,513,607	198,095,877
<b>Total Operating Revenue</b>	-	16,860,000	17,703,000	18,588,150	19,517,558	19,517,558	20,493,435	20,493,435	21,518,107	21,518,107	22,594,013	198,803,363

#### Expenses

	<u>Year</u> <u>0</u>	<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>	<u>Year 4</u>	<u>Year 5</u>	-	-	-	-	-	<u>Total</u>
Salaries		433,094	446,087	459,470	473,254	473,254	487,452	487,452	502,075	502,075	517,137	4,781,350
Social Charges & Pension Payments		86,619	89,217	91,894	94,651	94,651	97,490	97,490	100,415	100,415	103,427	956,270
Raw Materials ie, chemical, petroleum products etc		8,260,870	8,508,696	8,763,957	9,026,875	9,026,875	9,297,681	9,297,681	9,576,612	9,576,612	9,863,910	91,199,769
Overhead cost		745,671	768,041	791,082	814,814	814,814	839,259	839,259	864,437	864,437	890,370	8,232,183
Lubricants		130,435	134,348	141,065	148,118	148,118	155,524	155,524	163,301	163,301	171,466	1,511,200
Tires and tubes		1,878,261	1,934,609	1,992,647	2,052,426	2,052,426	2,113,999	2,113,999	2,177,419	2,177,419	2,242,742	20,735,948
Repair and Maintenance		65,217	67,174	69,189	71,265	71,265	73,403	73,403	75,605	75,605	77,873	719,998

Insurance/licensing/other charges		391,304	403,043	415,135	427,589	427,589	440,416	440,416	453,629	453,629	467,238	4,319,989
Other Costs		11,700	12,051	12,413	12,785	12,785	13,168	13,168	13,564	13,564	13,970	129,168
<b>Total Operating Costs</b>		<b>12,003,171</b>	<b>12,363,266</b>	<b>12,736,851</b>	<b>13,121,778</b>	<b>13,121,778</b>	<b>13,518,393</b>	<b>13,518,393</b>	<b>13,927,056</b>	<b>13,927,056</b>	<b>14,348,133</b>	<b>132,585,876</b>
<b>Operational Net Earnings before Depreciation, Interest &amp; Tax</b>		<b>4,856,829</b>	<b>5,339,734</b>	<b>5,851,299</b>	<b>6,395,780</b>	<b>6,395,780</b>	<b>6,975,042</b>	<b>6,975,042</b>	<b>7,591,051</b>	<b>7,591,051</b>	<b>8,245,879</b>	<b>66,217,487</b>
<i>%age Gross Contribution</i>		29	30	31	33	33	34	34	35	35	36	1
<b>Depreciation at 5% (mostly civil works)</b>		<b>461,399</b>	<b>467,227</b>	<b>511,989</b>	<b>559,631</b>	<b>559,631</b>	<b>610,316</b>	<b>610,316</b>	<b>664,217</b>	<b>664,217</b>	<b>721,514</b>	<b>5,959,574</b>
<b>Net Earnings before Tax &amp; Interest</b>		<b>4,395,430</b>	<b>4,872,507</b>	<b>5,339,310</b>	<b>5,836,149</b>	<b>5,836,149</b>	<b>6,364,726</b>	<b>6,364,726</b>	<b>6,926,834</b>	<b>6,926,834</b>	<b>7,524,365</b>	<b>60,257,913</b>
<b>Interest Paid (Bank Loan)</b>		<b>1,673,124</b>	<b>1,601,991</b>	<b>1,518,055</b>	<b>1,419,011</b>	<b>1,302,138</b>	<b>1,164,229</b>	<b>1,001,495</b>	<b>809,470</b>	<b>582,880</b>	<b>315,504</b>	<b>11,387,897</b>
<b>Tax (30%)</b>		<b>1,446,097</b>	<b>1,603,055</b>	<b>1,756,633</b>	<b>1,920,093</b>	<b>1,920,093</b>	<b>2,093,995</b>	<b>2,093,995</b>	<b>2,278,929</b>	<b>2,278,929</b>	<b>2,475,516</b>	<b>19,867,333</b>
<b>Net Earnings</b>		<b>1,276,210</b>	<b>1,667,461</b>	<b>2,064,622</b>	<b>2,497,045</b>	<b>2,613,918</b>	<b>3,106,502</b>	<b>3,269,236</b>	<b>3,838,436</b>	<b>4,065,026</b>	<b>4,733,345</b>	<b>29,131,800</b>



Net cash flow from investing activities	0	0	0	0	0	0	0	0	0	0
<b><u>CASH FLOW FROM FINANCING ACTIVITIES</u></b>										
Proceeds from capital contributed	17,641,376	0	0	0	0					0
Proceeds from loan		0	0	0	0					0
Payment of loan	0	0	0	0	0	0	0	0	0	0
Net cash flow from financing activities	17,641,376	0	0	0	0	0	0	0	0	0
<b><u>NET INCREASE/DECREASE IN CASH</u></b>	19,378,985	2,134,688	2,576,611	3,056,676	3,173,548	3,716,818	3,716,818	4,310,628	4,502,653	4,960,893
Cash at the beginning of the period	1,276,210	1,667,461	2,064,622	2,497,045	2,613,918	3,106,502	3,269,236	3,838,436	4,065,026	4,733,345
Cash at the end of the period	20,655,195	3,802,149	4,641,232	5,553,721	5,787,466	6,823,321	6,986,054	8,149,064	8,567,679	9,694,238

## ANNEX III - BALANCE SHEET

Pro forma balance sheet										
(all numbers in 000)	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
<b>ASSET</b>										
Current asset	1,276,210	1,667,461	2,064,622	2,497,045	2,613,918	3,106,502	3,269,236	3,838,436	4,065,026	4,733,345
Fixed asset	8,346,245	8,513,169	8,683,433	8,857,102	9,034,244	9,214,928	9,399,227	9,587,212	9,778,956	9,974,535
Liquidity	4,856,829	5,339,734	5,851,299	6,395,780	6,395,780	6,975,042	6,975,042	7,591,051	7,591,051	8,245,879
<b>TOTAL ASSET</b>	<b>14,479,284</b>	<b>15,520,364</b>	<b>16,599,354</b>	<b>17,749,926</b>	<b>18,043,941</b>	<b>19,296,473</b>	<b>19,643,505</b>	<b>21,016,699</b>	<b>21,435,033</b>	<b>22,953,759</b>
<b>NET ASSET MINUS DEPRECIATION</b>	<b>14,017,885</b>	<b>15,053,138</b>	<b>16,087,365</b>	<b>17,190,296</b>	<b>17,484,310</b>	<b>18,686,156</b>	<b>19,033,188</b>	<b>20,352,482</b>	<b>20,770,816</b>	<b>22,232,244</b>
<b>EQUITY &amp; LIABILITIES</b>										
Equity	255,883	268,122	279,537	291,594	298,990	312,257	320,734	335,525	345,434	362,174
Reserves										
<b>Total Own Equity</b>	<b>255,883</b>	<b>268,122</b>	<b>279,537</b>	<b>291,594</b>	<b>298,990</b>	<b>312,257</b>	<b>320,734</b>	<b>335,525</b>	<b>345,434</b>	<b>362,174</b>
Provisions	9,786,203	10,646,432	11,470,903	12,350,675	12,637,294	13,601,286	13,939,840	15,005,509	15,413,934	16,604,737
Long term loan	2,068,303	2,068,303	2,068,303	2,068,303	2,068,303	2,068,303	2,068,303	2,068,303	2,068,303	2,068,303
Short term Liabilities	1,907,495	2,070,282	2,268,622	2,479,724	2,479,724	2,704,311	2,704,311	2,943,145	2,943,145	3,197,030
<b>Total Equity &amp; Liabilities</b>	<b>14,017,885</b>	<b>15,053,138</b>	<b>16,087,365</b>	<b>17,190,296</b>	<b>17,484,310</b>	<b>18,686,156</b>	<b>19,033,188</b>	<b>20,352,482</b>	<b>20,770,816</b>	<b>22,232,244</b>
NET FA/CL	4.04	4.12	4.20	4.28	4.37	4.46	4.54	4.64	4.73	4.82
CL/CA	1.49	1.24	1.10	0.99	0.95	0.87	0.83	0.77	0.72	0.68
DEBIT/CAPITAL RATIOS	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
ROI	498.7	621.9	738.6	856.3	874.3	994.9	1019.3	1144.0	1176.8	1306.9
BREAK EVEN POINT	1.72	1.59	1.48	1.38	1.41	1.32	1.35	1.26	1.29	1.21
BREAK EVEN RATIO	3.29	3.09	2.92	2.76	2.76	2.62	2.62	2.49	2.49	2.38

## ANNEX IV - IRR

### IRR FOR THE PROJECT

	(all numbers inUSD)	
	Initial Investment	-17,641,376
<b>YEAR 1</b>	Additional Annual Net Profit	1,276,210
<b>YEAR 2</b>	Additional Annual Net Profit	1,667,461
<b>YEAR 3</b>	Additional Annual Net Profit	2,064,622
<b>YEAR 4</b>	Additional Annual Net Profit	2,497,045
<b>YEAR 5</b>	Additional Annual Net Profit	2,613,918
<b>YEAR 6</b>	Additional Annual Net Profit	3,106,502
<b>YEAR 7</b>	Additional Annual Net Profit	3,269,236
<b>YEAR 8</b>	Additional Annual Net Profit	3,838,436
<b>YEAR 9</b>	Additional Annual Net Profit	4,065,026
<b>YEAR 10</b>	Additional Annual Net Profit	4,733,345
	<b>IRR (in 10 years)</b>	<b>8.40%</b>

**THE IRR ABOVE INDICATES THAT THE EXPECTED RETURN ON THE US\$ 17,641,37600 INITIAL INVESTMENT AFTER 10 YEARS IS 8.40%.**

ANNEX V PAY BACK PERIOD

**Payback Period Analysis**

	Year	Beginning Balance	Net Cash Flows	Ending Balance
Cost of investment	0.00	17,641,376.39	0.00	17,641,376.39
	1.00	17,641,376.39	1,276,210.03	16,365,166.36
	2.00	16,365,166.36	1,667,460.89	14,697,705.47
	3.00	14,697,705.47	2,064,621.85	12,633,083.62
	4.00	12,633,083.62	2,497,045.11	10,136,038.52
	5.00	10,136,038.52	2,613,917.68	7,522,120.84
	6.00	7,522,120.84	3,106,502.30	4,415,618.54
	7.00	4,415,618.54	3,269,235.67	1,146,382.87
	8.00	1,146,382.87	3,838,435.94	2,692,053.07
	9.00	2,692,053.07	4,065,025.89	6,757,078.96
	10.00	6,757,078.96	4,733,344.82	11,490,423.77

<b>Payback Period =</b>	<b>8.00</b>	<b>Years</b>
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## **8.0. CONCLUDING REMARKS AND WAY FORWARD**

### **8.1. Evidence of project viability based on financial model and policy Framework support**

On the basis of all the analysis done on this Business Plan on all aspects of assessment on both SWOC Analysis, market analysis, risk analysis and the financial analysis, the proposed investment options in the project as prescribed on this business plan have shown that the project is commercially viable. Nonetheless, OILCOM (T) LIMITED through professional consultative manner, will continue to find ways of implementing cost effective options given time and financial resources that will be made available. Financial analysis results show that when the construction of plant facility is financed using a combination of equity debt ratio (100:0), it gives an IRR of about 8.4%. The computed IRR is well above Dollar market of the annual loan interest rate of (8.00%) which is technically interpreted that the project is financially viable. The payback period for the project is estimated at 8years, which is within the range for this type of investment. Sensitivity analysis results also favor the project. Financial analysis for the project has shown feasible returns. Based on the investment scope and the assumptions taken in this Business Plan, the project will not face any difficulties during establishment, according to the projected cash flow be in a position to accomplish repayment of the loan and start generating profit.

### **8.2. Policy Framework Support**

The development of the OILCOM (T) LIMITED is designed to tape advantages of the current Tanzanian market-oriented reforms. The Project will be developed and established to accelerate the industrialization process. The vision 2025 emphasizes the importance of the allocation of public funds for strategic investments and private sector financing for development investments.

The 15 years Perspective Plan (2020-2025); Priotize private investment in the context of Public Private Partnership. The First Five Years Development Plan (2020-2025) recognizes the fundamental role of the private sector in enabling the government to allocate its fund to strategic projects to facilitate a higher level of development. MKUKUTA III (2020-2025) identifies Public Private Partnership as a means of increasing the level of stakeholder participation and of easing the financial burden on the government. It should be noted that existing public resources are clearly insufficient to meet Tanzanian's huge development needs. The increased use of private enterprises participation in development projects can help alleviate the financing gap. This approach is now applied by OILCOM (T) LIMITED to ensure development of one among

the ultra-modern plant in Dar es Salaam Region. Private sector and investment have been recognized as the most significant potential source of additional funding required to facilitate development projects.

### **8.3. Conclusive Remarks and Way Forward**

The development of this project will be funded by private finances. The company acting through its various shareholders and structures will provide the initial risk capital amounting to 17,641,376.39US\$. The company will fund the development of the project major construction of bulk storage of aviation fuel building, offices, yard, and related buildings facilities and purchasing machines as stated on this business plan. Before the Company engages into the development of this project as a private enterprise, it needs to accomplish the pre development activities to make way for the development of the designated project. The company has to accomplish the following;

#### **a) Apply for TIC certificate**

The company by using this Business Plan and other required supporting documents should apply for the TIC Certificate at Tanzania investment centre Office. With this certificate, the company will be able to access tax reliefs which to a large extent will help to in reducing project costs, particularly in the purchasing of machineries and minor building of area of proposed industrial area.

#### **b) Conduct Environmental Impact Assessment.**

The company has to engage a consultant to conduct EIA in order to ensure that environmental and possibly other sustainability aspects are considered effectively in policy, plan and project development. The EIA Directive aims at introducing systematic assessment of the environmental effects of strategic land use related plans and programs. It typically applies to regional and local, development, waste and transport plans, within the country. EIA ensures that plans and programs take into consideration the environmental effects they cause.

#### **c) Minor rehabilitation to suit project Industrial requirement**

The company should engage a firm to make minor rehabilitation of existing structure that will suit project manufacturing requirements. The structure should include all vital service facilities described in this business plan. When possible, the process of design of the facility should be consultative insomuch that it should allow and incorporate ideas from experienced professionals

from the industry.

**d) Mobilizing Funds**

As previously discussed on the Financial Analysis of this business plan, financing mechanism for plant should be scrutinized well before commencing the project implementation. There may be several options of financing the project development but the company will find the best option. The investment team should do consultation with relevant financial institutions (Banks and non-bank Financial Institutions), both within and outside the country. This exercise should be more effective if the team works closely with central government agencies, particularly TIC and the Ministry of Industry & Trade and Ministry of Investment.