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EREA LPC REPORT

COMPARATIVE STUDY ON REGULATORY FRAMEWORK ON PETROLEUM STORAGE AND TRANSPORTATION

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INTRODUCTION

The issue of harmonization of policies and frameworks is recognized as a pillar in the development of East African Community and is clearly reflected in the EAC Treaty. This is also valid for the petroleum sector, and the Treaty includes explicit statements on the adoption of common policies for joint fossil exploration and exploitation in the region.

This report presents a comparative analysis of regulatory frameworks on petroleum storage and transportation for the countries in the East African region, namely Kenya, Tanzania (the transit countries) Uganda, Rwanda and Burundi (the landlocked countries) members of EREA. The petroleum transportation is done from the two main sea ports of Mombasa and Dar-es Salaam.

This report focus on the status of regulatory frameworks in the EREA countries. The report aims at promoting the enhancement and harmonization of the variant frameworks to facilitate the development of good regulatory practices based on the principles of autonomy, transparency, accountability, non-discrimination, investment promotion and protection, and competition.

I. RWANDA

I.1 REGULATORY FRAMEWORK ON PETROLEUM STORAGE AND TRANSPORTATION IN RWANDA

I.1.1 STATUS

The petroleum industry is typically divided into three major components: upstream, midstream and downstream. Some midstream operations, such as refining, are usually categorised as downstream. Rwanda has no upstream oil industry or refinery activities, so all petroleum operations are downstream. The present petroleum operations therefore exclude refining and processing of petroleum products.

This report covers transportation, storage and sale of petroleum products. Petroleum products imported and used in Rwanda include white fuels (gasoline, diesel, kerosene, various industrial & auto lubricants, etc.); black fuels (bitumen, black oil, etc.) and other petroleum products such as Liquefied Petroleum Gas (LPG). Gasoline (petrol super) and diesel are the main products consumed, 80% of which are used in transport.

As a landlocked non-oil producing country, Rwanda imports petroleum products through Kenya and Uganda and Tanzania and is transported by trucks through the northern and central corridor respectively.

The consumption of petroleum in Rwanda stands at 23 million litres per month. This constitutes about 20% of total national imports and has been steadily rising in the past five years, with an average annual increase of 12 per cent.

Rwanda petroleum storage infrastructure essentially consists of government and private sector owned fuel depots equivalent to 72,000,000 litres.

In order to ensure appropriate strategic reserve, GoR maintains 60 million litters.

Internal transportation of fuel in Rwanda is carried out by trucks from Kenya (Nairobi and Eldoret) and Dar Es Salaam. The supply is relatively constant. However, there is a limited storage capacity for fuel in the country. To address that issue, the Government partnered with private oil dealers to have reserves of up to 150 million litres. In 2015, Societe Petroliere LTD has completed the construction of 21 million litres capacity in Rusororo Sector, Gasabo District, in Kigali where the inland terminal for the proposed Eldoret-Kampala-Kigali pipeline for refined petroleum products will be located.

The market players are largely private companies which import products for distribution, mainly through retail outlets. The key demand segments for petroleum products are road transportation, thermal power generation and aviation. The augmented vehicles on the road and expansion of air traffic at Kigali International airport has contributed to rising demand for petroleum products.

In order to meet international standards, different strategies have been set for rehabilitation of the existing storage facilities. One of them is the PPP model where a private company take the Government depot on lease, manage it within a certain period and pay annual fee to the GoR during the concession.

Further development of storage facilities remains a key objective for the petroleum subsector.

I.1.2 CHALLENGES

Rwanda has very low security over petroleum-based energy products and the global market for petroleum products can be volatile. Price volatility and shocks are a cause of concern due to Rwanda's extremely high vulnerability.

Rwanda has a challenge related to ensuring quality of supply, uneven product quality results from a lack of clear standards, quality control mechanisms and capacities to carry out adequate quality control.

Petroleum imports is insufficient to cope with rising demand and existing infrastructure does not all comply with international environmental, health and safety risk management. Significant resources are required to upgrade existing infrastructure and build new infrastructure to increase storage to anticipated market demand and appropriate reserve levels.

Lack of clear consumption figures reduces the potential to monitor and improve the subsector's performance, or to plan appropriately. There is a need to improve data collection and sharing across institutions.

The capacities of Government and private depots including airport aviation fuel storage. The total storage capacity is insufficient for efficient commercial storage and distribution resulting in heavy delays in trucks offloading.

I.1.3 REGULATION

Rwanda Utilities Regulatory Authority (RURA) regulates public utilities including renewable and non-renewable energy, industrial gases, pipelines and storage facilities. As the regulator, RURA's principal mandate is to ensure consumer protection from uncompetitive practices while ensuring that such utilities operate in an efficient, sustainable, and reliable manner. RURA also has the role of ensuring quality of service standards for petroleum, assessing and reviewing energy tariff structures, licensing retail petroleum filling stations and related storage facilities.

The regulatory framework for the petroleum industry in Rwanda, specifically petroleum storage and transportation, comprises of the legal instruments outlined here-below:

- Regulation n° 05/R/RTP/GP-EWS/RURA/2018 of 15/11/2019 governing road transportation of petroleum products in Rwanda

- Regulation n° 04/R/RTP/GP-EWS/RURA/2018 of 15/11/2019 governing aboveground petroleum facilities and importation of fuel in Rwanda
- Regulation n°07/R/GP-EWS/RURA/2021 of 25/02/2021 modifying and complementing the regulation n° 04/R/GP-EWS/RURA/2019 of 15/11/2019 governing aboveground petroleum storage facilities and importation of fuel in Rwanda.

II. TANZANIA

II.1 STATUS

Tanzania has not yet discovered oil and imports petroleum products for domestic consumption. The government liberalized the downstream operations since 2000. Oil marketing companies import petroleum products for local consumptions as well as transit business through bulk procurement arrangement. The country demand for petroleum products is estimated to be over 1.8 million metric tons per year.

Tanzania has 29 upcountry inland storage depots with total storage capacity of 75,626 cubic metres. These depots are located in towns or cities where there is or there was a railway service product from the receiving terminal being delivered to the depots by the use of railway wagons and trucks. However, most of these depots are non-operational because distribution of petroleum products is now mainly through road tankers that can supply directly to the retail outlets or final users.

Tanzania also has 22 petroleum receiving terminals for liquid petroleum products with a total storage capacity of 1,288,201 cubic meters.19 in Dar es Salaam, 2 in Mtwara and 1 in Tanga. These can store products to meet the country's demand for about 112 days. There are 6 Liquified Petroleum Gas (LPG) storage facilities with a total storage capacity of 15,750 MT.

The up-stream, mid-stream and downstream activities are governed by the Petroleum Act. 2015. This sector legislation gives mandates EWURA to perform technical, economical and safety regulatory functions in respect of petroleum activities. In discharging its functions EWURA is required to regulate the sub0sector in an effective, efficient and transparent manner.

Dar Es Salaam has the greatest number and diversity of oil terminals in Sub-Saharan Africa: 13 separate installations with a total storage capacity of almost 500,000 m^3, equivalent to 137 days of consumption.

REGULATION

The Petroleum Act, Cap 392 and the Energy and Water Utilities Regulatory Authority (EWURA) Act, Cap. 414 mandate EWURA to regulate mid and down-stream petroleum sub-sectors in Tanzania Mainland. In undertaking its regulatory roles, EWURA involves all stakeholders in the mid and down-stream sub sectors in order to safeguard the interest of the Government, regulated suppliers and the public at large.

EWURA ensures that petroleum products and the petroleum infrastructure conform to standards and specifications. The Tanzanian Bureau of Standards is the entity that sets standards in Tanzania.

The key legal instrument governing the petroleum subsector in the country is the Petroleum Act, 2015, Cap. 392 which governs petroleum downstream operations.

The following tools regulate the subject matter:

- The Petroleum (General) Regulations, 2011 GN. No. 163
- The Petroleum (Wholesale, Storage, Retail and Consumer Installations Operations) Rules, 2020, GN. No. 217;
- The Petroleum (Marine Loading and Off-Loading Operations) Rules, 2018, GN. No. 279
- The Petroleum (Pipeline Operations) Rules, 2015 GN. No. 477
- The Petroleum (Liquefied Petroleum Gas) Rules, 2020 GN. No. 825

II.2 CHALLENGES

Lack of knowledge and public awareness related to HSE on petroleum products. Some members of the community rush to collect petroleum products from fuel road tankers involved in accidents, other sell petroleum products in residential houses. These malpractices may result into fatal accidents, health problems and environmental damage. EWURA will continue to conduct public awareness on HSE related issues.

III. UGANDA

III.1 STATUS

Prior to presenting the current status of transportation and storage of petroleum products in Uganda, it is important to present the status of transportation and storage of petroleum in the Country. Uganda discovered commercial quantities of crude oil in 2006. Currently Uganda has 6.5 billion barrels of stock tank oil in place (STOIIP) and is expected to construct a 60,000 barrels of oil per day refinery alongside a 1445km crude oil pipeline to Tanga in Tanzania. This pipeline is one of the tools which will be used to transport petroleum to Tanga.

In Uganda, Petroleum products like Diesel, Gasoline, Kerosene and Jet A1 are transported by road making it costly, susceptible to adulteration, accidents and uncertain supplies.

Storage of petroleum products

Jinja Storage Terminal (JST) was established in the 1970's as a strategic reserve, to enhance security of petroleum supply in Uganda. The Uganda National Oil Company (UNOC) entered into a Joint Venture with M/s One Petroleum Ltd, to ensure rehabilitation, operation and management of the terminal to industry standards. The terminal was fully rehabilitated.

UNOC currently manages and operates the 30 million litre capacity Jinja Storage Terminal (JST) in Eastern Uganda and plans are underway to construct facilities for receiving fuel by Barge via Lake Victoria.JST provides a cost-effective alternate route for petroleum products using barges which will not only reduce pressure on the road but also reduce over reliance on the route through Kenya.

Kampala Storage Terminal (KST) as it is popularly known, when complete will keep up to 320 million litres of refined petroleum products. These products will be received as import through Kenya and Tanzania and later from the planned refinery in Hoima. KST will also have an extension terminal to serve as a storage facility for Liquified Petroleum Gas (LPG).

It is expected that Kampala Storage Terminal will reduce Uganda's petroleum products(fuel) shortages that usually lead to speculations and sometimes abnormal increase in fuel prices. Enhancing security of petroleum products supply will also cause the activation of suppressed demand. KST also planned

serves as a central storage facility for petroleum products from the planned Hoima refinery.

KST will serve as a distribution hub for forward markets of Burundi, Rwanda, South Sudan, DRC and Northern Tanzania

There is a Project of constructing a fuel storage terminal and Lake Victoria fuel transport system at Bugiri-Bukasa village in Uganda.

REGULATION

The upstream and midstream parts of the Petroleum value chain in Uganda which cater for transportation and storage of petroleum are regulated by the Petroleum Authority of Uganda (PAU). The Authority' mission is to regulate and monitor the petroleum sector in order to create lasting value for Ugandans and to contribute to Uganda being a sound investment destination.

The Petroleum Authority of Uganda (PAU) is a statutory body established under Section 9 of the Petroleum (Exploration, Development and Production) Act 2013, and in line with the National Oil and Gas Policy for Uganda which was approved in 2008. The mandate of the PAU is to monitor and regulate the exploration, development and production, together with the refining, gas conversion, transportation and storage of petroleum in Uganda. This includes ensuring that petroleum operations in Uganda are carried out in accordance with the relevant laws, regulations and guidelines in line with international best practice for the petroleum industry.

The roles and functions of the Petroleum Authority of Uganda are described in Part III of the Petroleum (Exploration, Development and Production) Act 2013 and Part II of the Petroleum (Refining, Conversion, Transmission and Midstream Storage) Act, 2013 together with Section 7.2.4 of the National Oil and Gas Policy. These include:

i) Efficient management of the petroleum resources
ii) Ensuring Environment, Health, Safety and Social Protection during Petroleum and its related activities
iii) Monitoring of operations to ensure cost efficiency and that the project are economically feasible
iv) Management of the country's Petroleum, and other related data; and
v) Growing the participation of Ugandans in the sector
vi) Institutionalize a multi-media stakeholder engagement strategy

The petroleum sector (storage and transportation) is governed by the following regulations:

- The petroleum (refining, conversion, transmission and midstream storage) regulations, 2016.
- The petroleum (refining, conversion, transmission and midstream storage) (health, safety and environment) regulations, 2016
- The petroleum (refining, conversion, transmission and midstream storage) (national content) regulations, 2016

Regulation of transportation of petroleum products in Uganda

The petroleum supply department under the Ministry of Energy and Mineral Development regulates the downstream segment of the petroleum value chain. The key legal instruments used to regulate the transportation and storage of petroleum products are listed below: -

i) The Petroleum Supply Act, 2003
ii) The petroleum Supply (General) Regulations 2009

IV. BURUNDI

IV.1 STATUS

Burundi has no oil or gas resources all petroleum products are imported from Middle Est via Tanzania. As imported petroleum products are supplied via the neighbouring country, their supply is costly and often irregular. The petroleum sector, , is under the control of the Ministry in charge of Energy which supervises oil imports. The needs of the products approach 20 million litres.

Commercial trade also relies on the Port at DAR. Burundi is therefore at risk of being with any disruption in supply.

The government's oil price policy is used to keep the selling price constant while adapting the level of taxation to compensate for changes in the world market. The price of fuel at the pumps varies throughout the country.

With regard to transportation, the fuel is transported by road from Tanzania and by fuel tankers. Oil products in the region are distributed using two main routes that include the Northern and Central corridors. The Northern corridor serves Kenya, Uganda, Rwanda, Burundi, Eastern DRC and Southern Sudan through

the Mombasa port. The Central Corridor serves Tanzania, Uganda, Rwanda, Burundi and Eastern DRC through the Dar es Salaam port. Fuel distribution by road is well organized but fuel shortages occur sometimes due to the fuel pipeline having insufficient capacity to meet demand.

Burundi is intended constructing two storage facilities in the northern and southern regions.

IV.2 REGULATION

With regards to petroleum and petroleum products, AREEN is responsible for:

- Proposing changes to the regulations applicable to petroleum products;
- offering licenses to import, export and market petroleum products;
- instructing and issuing an opinion on the application files for the granting of certificates;
- proposing sanctions against certificate holders in the event of failure to meet their obligations;
- organizing periodic consultations with operators, consumers and other institutions in the petroleum sector;
- assessing the impact of outcome measures on the performance of the petroleum products sector;
- ensuring good governance in the petroleum and petroleum products sector;
- ensuring the quality of imported petroleum and petroleum products;
- ensuring compliance with international norms and standards relating to equipment and infrastructure for the transport, distribution and marketing of petroleum products;
- auditing companies importing and exporting petroleum products;
- daily follow up of the global trend in oil and petroleum product prices;
- making technical proposal of the reference prices and the price structure of petroleum and petroleum products;
- proposing the official price structure for petroleum and petroleum products, taking into account the variation in the international price of these products;
- issuing an opinion on any request for the granting of licenses and keep a list of those issued by the competent authority;
- Mediating the conflicts between the various stakeholders on one side and the conflicts between the various stakeholders and consumers of petroleum and petroleum products on the other hand.

The following legal instruments regulates the subject matter:

- *'' Décret N°100/110 du 25 juin 2008 portant réglementation de l'importation et de la commercialisation des produits pétroliers''*

- *''Ordonnace Ministerielle N°750/934 du 14/07/2009 portant mesure d'exécution du décret N°100/110 du 25 juin 2008 portant réglementation de l'importation et de la commercialisation des produits pétroliers''*

IV.3 CHALLENGES

Burundi is facing in the sector to the lack of appropriate legislation. Until now, the act organizing the sector is under the Parliament since 2016. In addition, the Regulator does not allow setting prices according to the World market of petroleum; its proposition has to be approved by the Minister first and high authorities of the Country. Consequently, a shortage of the product is regularly observed. Moreover, the quasi-monopolistic status of one society that imports more than 80% of the product has to be changed. Finally, the lack of foreign currency for importation of products including petroleum and the gap of official exchange and the forex bureau are a headache for the government.

V. KENYA

V.1 STATUS

The midstream sector in Kenya involves the transportation, storage and wholesale marketing of crude or refined petroleum products.

The most important methods include pipeline, rail, barge and truck. Each method has its own advantages and is desirable in certain situations, and minute amounts of oil may use several of these transportation methods during its transit time.

Pipelines and other transport systems can be used to move crude oil from production sites to refineries and deliver the various refined products to downstream distributors. The major stakeholder at this stage in Kenya include; the O&S (operation and support) investors, Kenya Pipeline Company Ltd and Kenya Petroleum Refineries in Mombasa. The existing mid-stream facilities like the Kenya Oil Refinery and other storage and handling/ receipt facilities off-shore were also included in this study.

The downstream sector commonly refers to the refining of petroleum crude oil and the processing and purifying of raw natural gas, as well as the marketing and distribution of products derived from crude oil and natural gas. It partly overlaps with the mid-stream sector described above.

The downstream sector touches consumers through retailing of products such as gasoline or petrol, kerosene, jet fuel, diesel oil, heating oil, fuel oils, lubricants, waxes, asphalt, natural gas, and Liquefied Petroleum Gas (LPG) as well as hundreds of petrochemicals.

V.2 REGULATION

The role of EPRA in Petroleum sub sector is:

- Reviewing of government policy on petroleum;
- Governing the petroleum sector with focus on licensing, issuing of construction permits, developing standards for bulk petroleum transportation and petroleum costs and prices monitoring;
- Take the lead in the formulation, review and enforcement of rules, regulations and codes for the petroleum sector;
- Identifying gaps in EHS and developing interventions to address the gaps to ensure that EHS clearly understands standards and rules that it is expected to regulate. This will include the review and enhancement of existing standards.

The petroleum sector (storage and transportation) is governed by the following regulation:

- The Energy (Licensing of Petroleum Road Transportation Business) Regulations 2013
- The Energy (Licensing of Petroleum Road Transportation Business) (Amendment) Regulations 2019
- Energy (licensing of petroleum logistics business and facility construction) regulations, 2013
- Energy (licensing of petroleum road transportation business) regulations, 2013
- The Energy (Minimum Operational Stocks and Capacity Sharing) Regulations, 2014
- The Petroleum (Liquefied Petroleum Gas) Regulations, 2019

EPRA issues the following licenses in regards to Petroleum storage and transportation:

- Petroleum Road Tanker Permit
- Petroleum Driver
- Storage of Petroleum Product Except LPG
- Transport of Petroleum Products by rail
- Transport of Petroleum Products by road
- Pipeline transportation
- Storage of Crude Oil

V.3 CHALLENGE

The transport of petroleum products has met with various challenges such as:

(1) Frequent road accidents from foreign registered vehicles due to driver exhaustion;
(2) Lack of licensing regime for fresh water marine transport which may become a significant mode of transportation in six (6) months' time;
(3) Weak regulations to promote and enforce the common user principles so as to prevent duplication of storage infrastructure

VI. ZANZIBAR

VI.1 STATUS

The downstream petroleum sector in Zanzibar is liberalized. The operators in industry sell an average of 6.3 million litres of automotive fuels, per month (2010 – 2013).

There is only one aviation fuel supplier who sales about 10 million litres of Jet A-1 per year. These petroleum products are primarily imported through the Mtoni where they are stored in four storage depots, three of which are privately owned.

In relation to the importation and sale of petroleum products ZURA is currently both the regulator and the administrator. ZURA has the mandate:

• To issue, review and cancel all regulatory petroleum licenses;

• To regulate tariffs in consultation with the Minister;

• Promoting effective competition and economic efficiency;

• Control quality, standard in consultation with ZBS;

• Lease agreement.

VI.2 REGULATION

ZURA regulates and acts as an administrator for the downstream petroleum in Zanzibar. Downstream includes the importation, unloading, transportation, storage, transforming, and selling of petroleum products in the country. ZURA is also responsible for setting and publishing the prices of petroleum products.

The petroleum sector (storage and transportation) is governed by the following regulation:

- The petroleum supply regulations, 2017 [made under section (48)]
- The Petroleum (Bulk Storage Facilities) Regulations, 2020
- The Petroleum (Marking and Quality Control) Regulations, 2019
- The Petroleum (Sampling and Testing) Regulations, 2020

VI.3 Challenges Facing ZURA

• Limited fuel supply logistics facilities, particularly insufficient petroleum storage facilities at the depot, resulting in shortages and sector diseconomies. The total storage capacity of Unguja is 16.375 million litres.

• The port at the Mtoni depot has a draft depth of only five metres (6 metres at high tide) which prohibits large tankers from berthing forcing importers to route fuel purchases through larger ports and transfer that cargo to shallower secondary vessels which has a substantial effect on pricing and supplies.

- ZURA is both regulator and administrator for petroleum products, which can result in some internal conflicts between the needs of those two roles.

- Lacks the necessary equipment and resources to properly monitor product quality. Adulteration of fuels is a common issue.
- ZURA currently lacks the capacity to properly monitor and check the quality of petroleum products imported into Zanzibar.

VII. COMPARATIVE ANALYSIS

VII.1 REGULATORY FRAMEWORK AND PROCESSES

All countries have established sector regulators. Rwanda, Tanzania and Burundi are countries with a multi-sector regulator which includes regulation of water utilities.

Most of the regulatory frameworks combine or include a segment of petroleum import and export with transport and storage.

In all countries, the regulatory frameworks of the Petroleum storage and transportation focus on:

- License requirements,
- Evaluation of license application,
- Pre-licensing inspection,
- Granting of licenses,
- Suspend, cancel, revoke, withdraw operational license
- Setting tariffs,
- Approving emergency response plan for the facility,
- Approving emergency preparedness plan,
- Establishing technical operational standards,
- Inspection of facilities,
- maintenance of petroleum minimum stocks or petroleum strategic reserve,
- compliance monitoring of the facility on matters including: (i) safety; (ii) health; (iii) security; (iv) handling of hazardous substances.

There are however, major differences between the EREA member countries concerning the consumption and storage capacities and also transportation mode (e.g Kenya and Tanzania use pipeline, road tankers, rail wagons and oil ship cargo, storage terminals,).

The quantity of petroleum stock required sufficient to carter the country requirements varies depending on country consumption.

The per capita consumption of petroleum products is different in EREA members thus the difference in investment in petroleum infrastructure. There are also large variations concerning the hydrocarbon resource potential. This will put constraints on the degree of institutional and legal framework harmonization that is feasible within the Community.

It is important for regulators to constantly evaluate their effectiveness through regulatory impact assessments and outsource special skills which they need for certain tasks like technical audits for compliance monitoring and especially incident investigations.

The regulatory process as a whole should be designed and implemented to achieve the ends of ensuring good petroleum industry practices and ensuring that there is safe, conducive and secure environment operators to undertake the regulated activities.

VIII. RECOMMENDED PRINCIPLES

EREA members have made a good start to implementing internationally accepted regulatory principles and practices. Especially encouraging are the procedures that regulators have adopted in assuring transparency, accountability, information dissemination and stakeholder participation. Regulators are encouraged to continue to expand the scope and modernization of methods in these areas. Governments need to pay greater attention to legislative frameworks in order to better guarantee regulatory autonomy and to give investors stronger assurance regarding the stability of regulatory frameworks.

EREA members are recommended to be guided by the below principles while issuing new regulations or reviewing existing regulations:

- The regulators needs to formulate a framework that furthers policy objectives.
- Regulators should assess and quantify the costs and benefits of proposed new regulation and should endeavor to periodically review existing regulations.
- The administrative burden of regulation should be consistent with its perceived importance.

IX. COMMON CHALLENGES TO ALL NRIs

Inadequate regulation and enforcement can harm the efficiency of fuel supply. Sector regulations that have not been updated in decades, lack sufficient coverage, or list outdated fuel specifications may deter entry of experienced operators adhering to high standards. An efficient legal framework for the downstream petroleum sector requires legislation that clearly defines and limits the role of the government in order to avoid undue interference and establishes principles and rules for the private and public participants in the supply chain in order to create a level playing field and promote fair, transparent, and healthy competition. Also inadequate storage facilities have led to high fuel prices in the region.

East African governments are racing to secure and stabilize the supply of petroleum products by investing in storage facilities to shore up their strategic reserves.

Rwanda, Uganda, Kenya and Tanzania are now focusing on storage facilities to streamline the petroleum products supply chain.

Inadequate storage facilities are one of the main reasons for high fuel prices in the region, due to the high demurrage charges that oil marketers pay because of ships spending too much time in the high seas before discharging.

Increasing the storage capacity will facilitate quick berthing of vessels, and save marketers about $2 million per month.

Most processed petroleum products are uplifted and transported by Road Tankers. This mode of transport also plays an important role when importing products into the country. Petroleum is wholly imported and subject to ever increasing international prices and uncertain supply. The high cost of petroleum imports affects the costs of production and development programmes.

X. CONCLUSION

Ensuring the reliability and safety of transportation and storage operations is a key priority across the industry.

As the marketplace continues to evolve at a rapid pace, countries need to keep logistics, storage systems and infrastructures up to date and working at maximum efficiency.

Robust and reliable systems compliant with all relevant standards and regulations are key to the safe and efficient transport and storage of oil and gas products.

Safe transportation relies on strong and compliant storage facilities built and maintained to prevent situations that may endanger human life or cause irreparable damage to the natural environment.

Transport infrastructure is a vital element of enhancing a country or region's economic development.

East African member states relies heavily on oil imports through private companies. However, all might change following the discovery of oil in Uganda and also in Kenya.

There is need to revise some of the regulations in order to take into consideration the global improvements in technology over the recent past together with the increasing concern for environmental conservation and sustainable development. This will include implementation of international best practices.

There is a need for harmonization of regulatory frameworks. Some of the key aspects of harmonization will be standardization and policy alignment. Through this strategic goal, the intention is to reduce the differences in the legal and regulatory aspects as well as promote common standards and codes of practice in the development of regulatory frameworks on petroleum sector in EREA member States.

The process of harmonizing the regulatory framework of the petroleum sector particularly within the East African Community is an essential measure to stimulate the integration process.

Despite these challenges, a harmonisation process can produce substantial benefits. Firstly, harmonisation of frameworks can potentially make operational processes more effective and efficient. Secondly, it could also improve the perception of the region as a stable and predictable area for investments. Finally, harmonisation will underpin the institutional and political process of developing the Community.

The existing regulatory frameworks in EREA members are to some degree already harmonized as they are developed with a common reference to international standards.

All regulatory frameworks should reflect independence, accountability to the public and the regulated industry, transparency, and should issue predictable regulations.