





LAPSSET

What is The Lapsset corridor program?

. LAPSSET Corridor stands for Lamu Port, South Sudan, Ethiopia, Transport Corridor.

. It is a regional multi-modal infrastructure project between KENYA, ETHIOPIA & SOUTH SUDAN.

The components are:

- Highways from Lamu - Isiolo - Moyale - Addis Ababa (Ethiopia) and Isiolo - Lodwar - Nakodok - Juba (South Sudan)
- Crude oil pipelines from South Sudan - Lokichar - Lamu
- Product oil pipelines from Lamu to Hawassa
- Standard Gauge Railway Lamu - Isiolo - Moyale - Addis Ababa (Ethiopia) and Isiolo - Lodwar - Nakodok - Juba (South Sudan)

. The program is the single largest infrastructure project in Africa.



Regional Market & Demand

. Kenya: Population increased from 41.4M in 2011 to 49.7M in 2017. Over the same period, GDP per capita increased from USD 2,436 to USD 2,961

(CAGR: 2.8%)

. Ethiopia: Population increased from 87.7M in 2010 to 105M in 2017. Over the same period, GDP per capita increased from USD 1,075 to USD 1,724

(CAGR: of 7.0%)

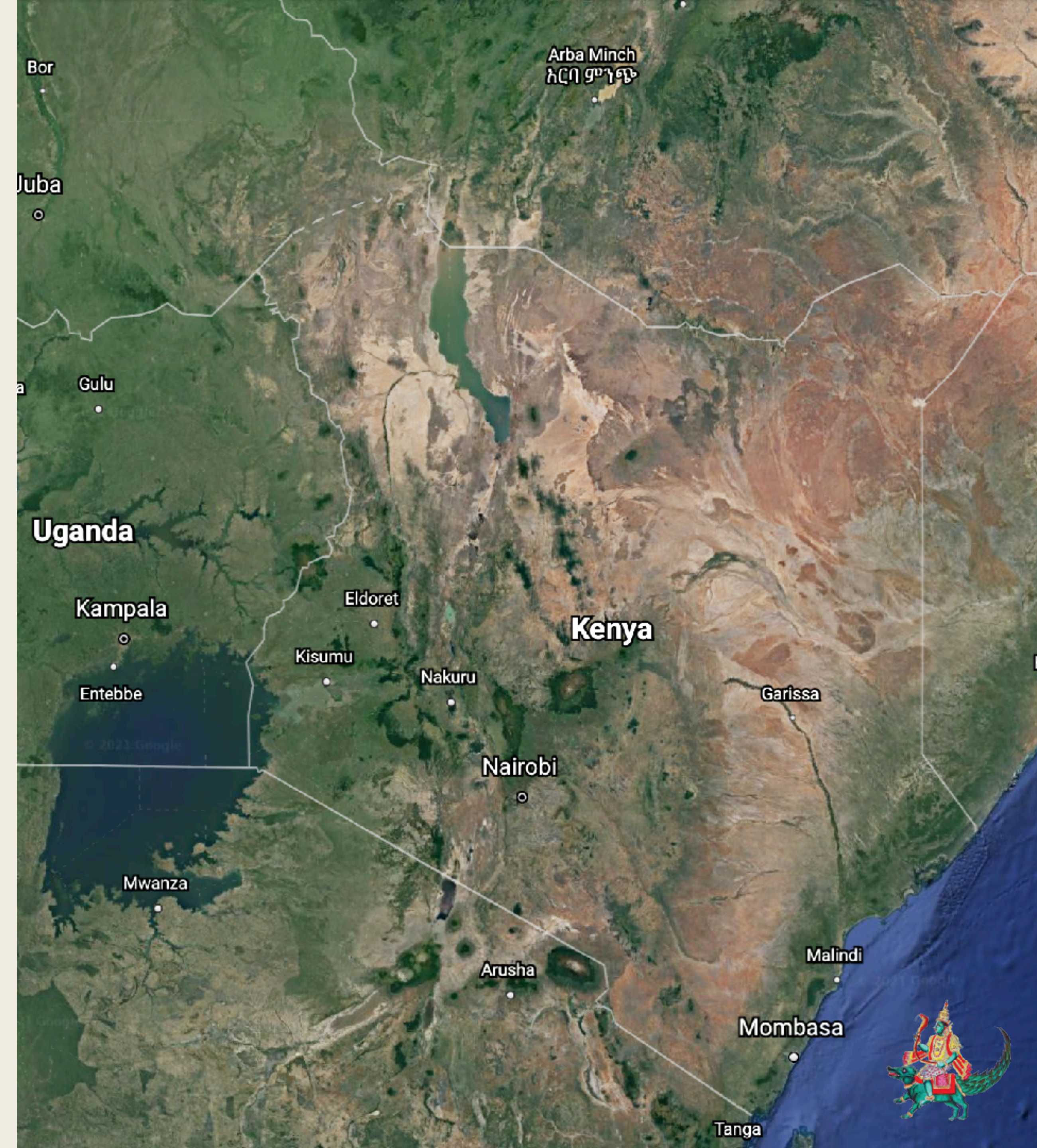
. South Sudan: Population increased from 10.0M in 2010 to 12.5M in 2017. Over the period from 2010 to 2016, GDP per capita increased from USD 4,103 to USD 1,678 (CAGR: -13.9%)

. Uganda: Population increased from 33.9M in 2010 to 42.9M in 2017. Over the same period, GDP per capita increased from USD 1,585 to USD 1,768

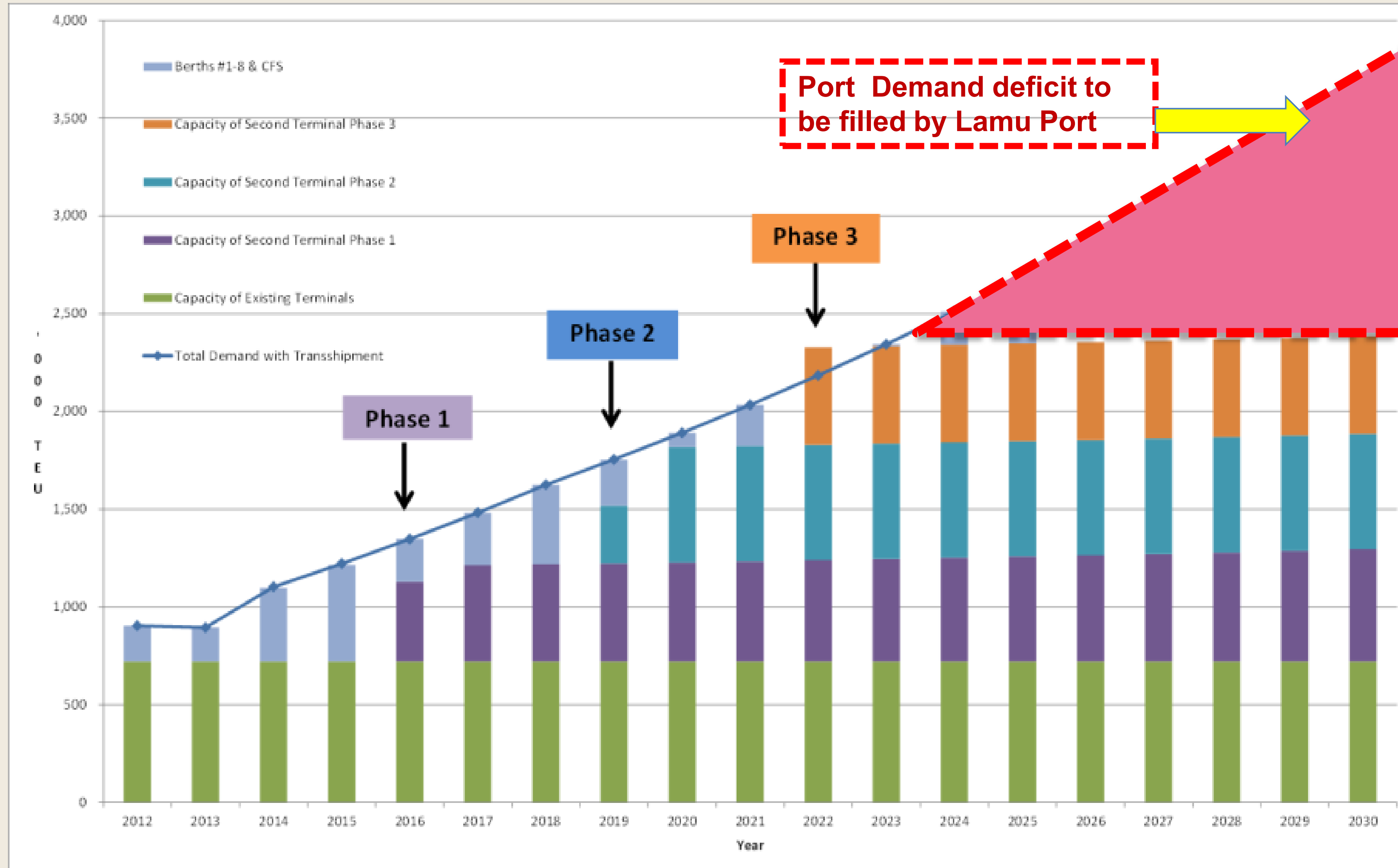
(CAGR: 1.6%)

Substantial growth in port volumes is foreseen due to the following three trends.

- . Consumption growth exceeds production growth
- . Significant growth in imports
- . Considerable growth in exports



Port Demand Integrating Lamu Port City



Completion of Berth #1 in Lamu.



Lamu Port Base Case Projections

Table 3-8: Overall Cargo Forecast for the Port of Lamu (Base Case) – 2021 to 2040

Throughput (000s tons)	2021	2022	2023	2024	2025	2030	2035	2040
Lamu - container forecast in TEU	129,036	202,962	287,694	315,646	346,578	510,249	636,943	752,461
Lamu - container forecast in tons*	1,290.4	2,029.6	2,876.9	3,156.5	3,465.8	5,102.5	6,369.4	7,524.6
Lamu - breakbulk forecast	254.5	393.0	549.3	598.5	648.4	882.8	1,019.9	1,135.3
Lamu - dry bulk forecast	905.7	1,435.8	2,051.0	2,263.0	2,488.2	3,694.3	4,655.3	5,516.1
Lamu - liquid bulk forecast	861.6	1,343.3	1,882.6	2,026.3	2,173.3	2,930.1	3,499.3	3,975.2
Lamu - Base Case forecast in tons	3,312.2	5,201.6	7,359.9	8,044.2	8,775.7	12,609.7	15,543.9	18,151.2

Source: MTBS



7 key components of Lapsset

1.Lamu Port and SEZ

2.Highways

3.Oil Pipelines

4.Railway

5.International Airports

6.Resort Cities

7.High grand falls dam

Items Highlighted in **RED** will not be discussed today.

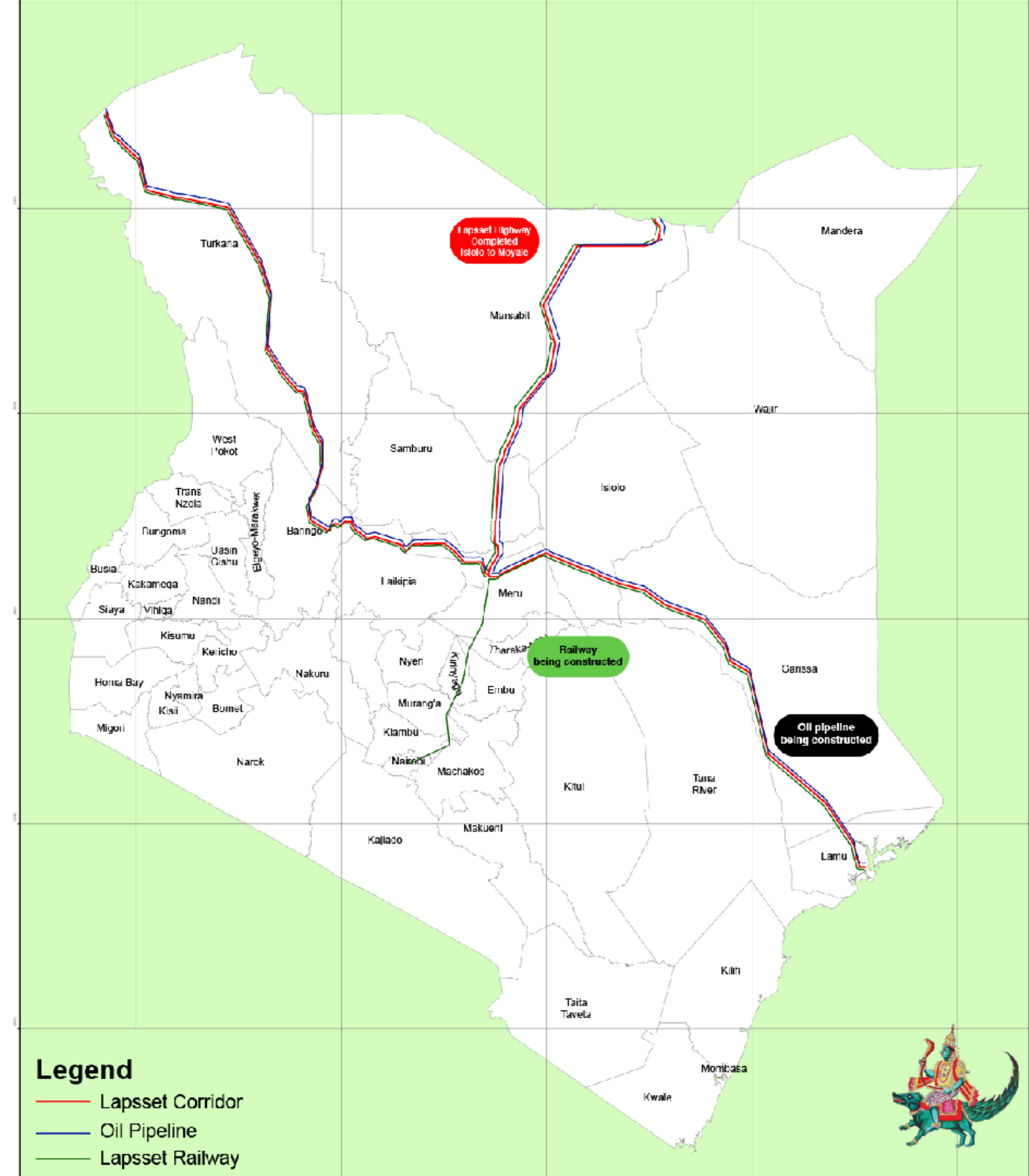
Additional components: Electricity transmission, Fibre optic connectivity, water supply

500 meter - inner corridor

100km - economic corridor



LAPSSET PROGRESS MAP



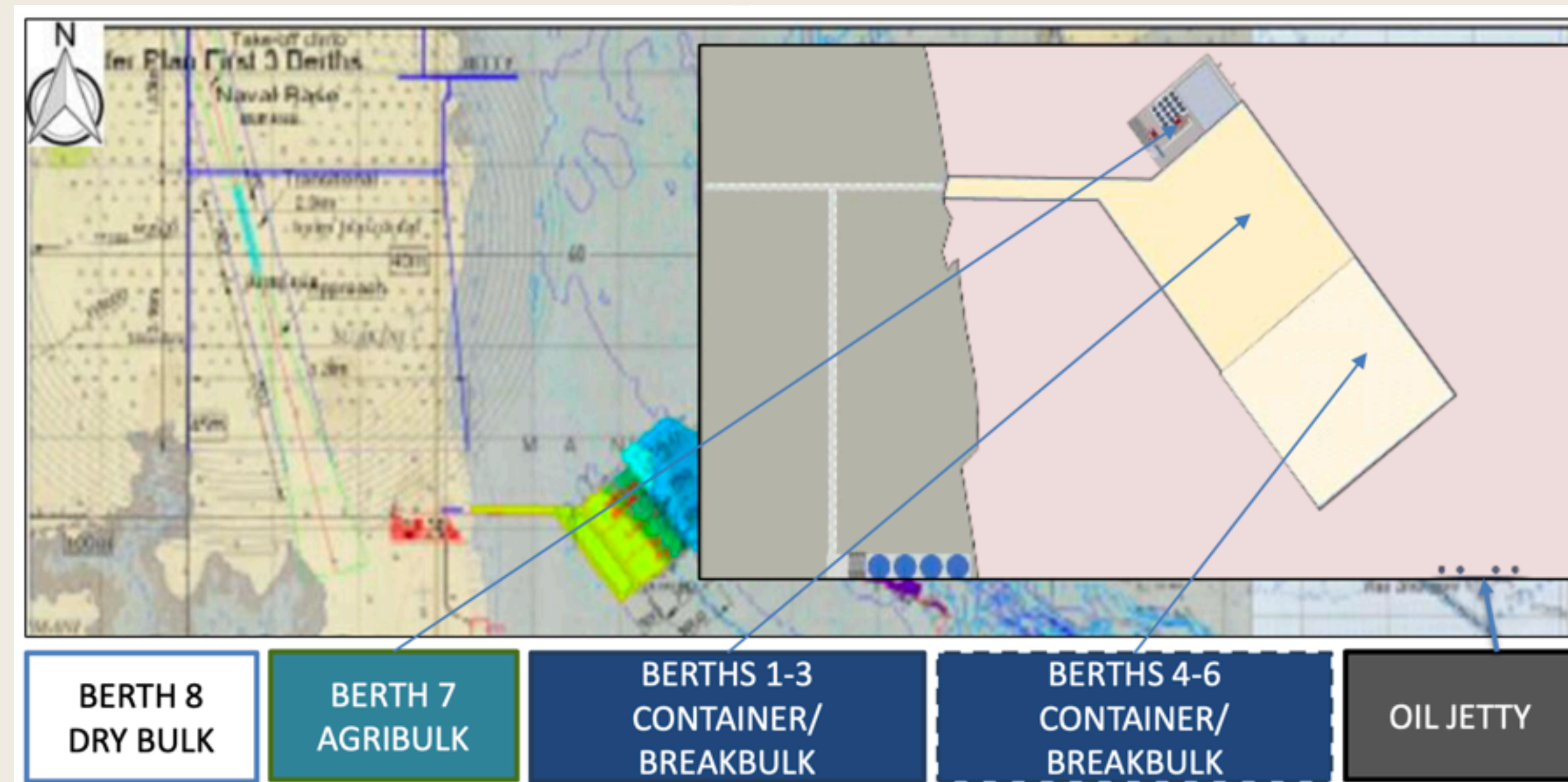
PPP Investment opportunities at Lamu Port

LCDA together with Transaction advisors have identified 2 terminals at Lamu Port and the New Lamu Industrial City & Lamu SEZ as being viable for Private Sector Investment under the PUBLIC PRIVATE PARTNERSHIP (PPP) framework.

. Lamu Port Agri bulk Terminal

. Lamu Port Liquid bulk Terminal

. Lamu SEZ



Lamu Port Agribulk Terminal

- . Agribulk import demand at the port of Lamu is projected to increase from 547,000 tons in 2023 to 3.3M tons in 2045.
- . Kenya is the largest demand driver for Agribulk volumes at the port of Lamu, generating approximately 70% of the ports total demand in 2045.
- . EIRR of **12%**

AGRIBULK TERMINAL INVESTMENTS

\$ 163M

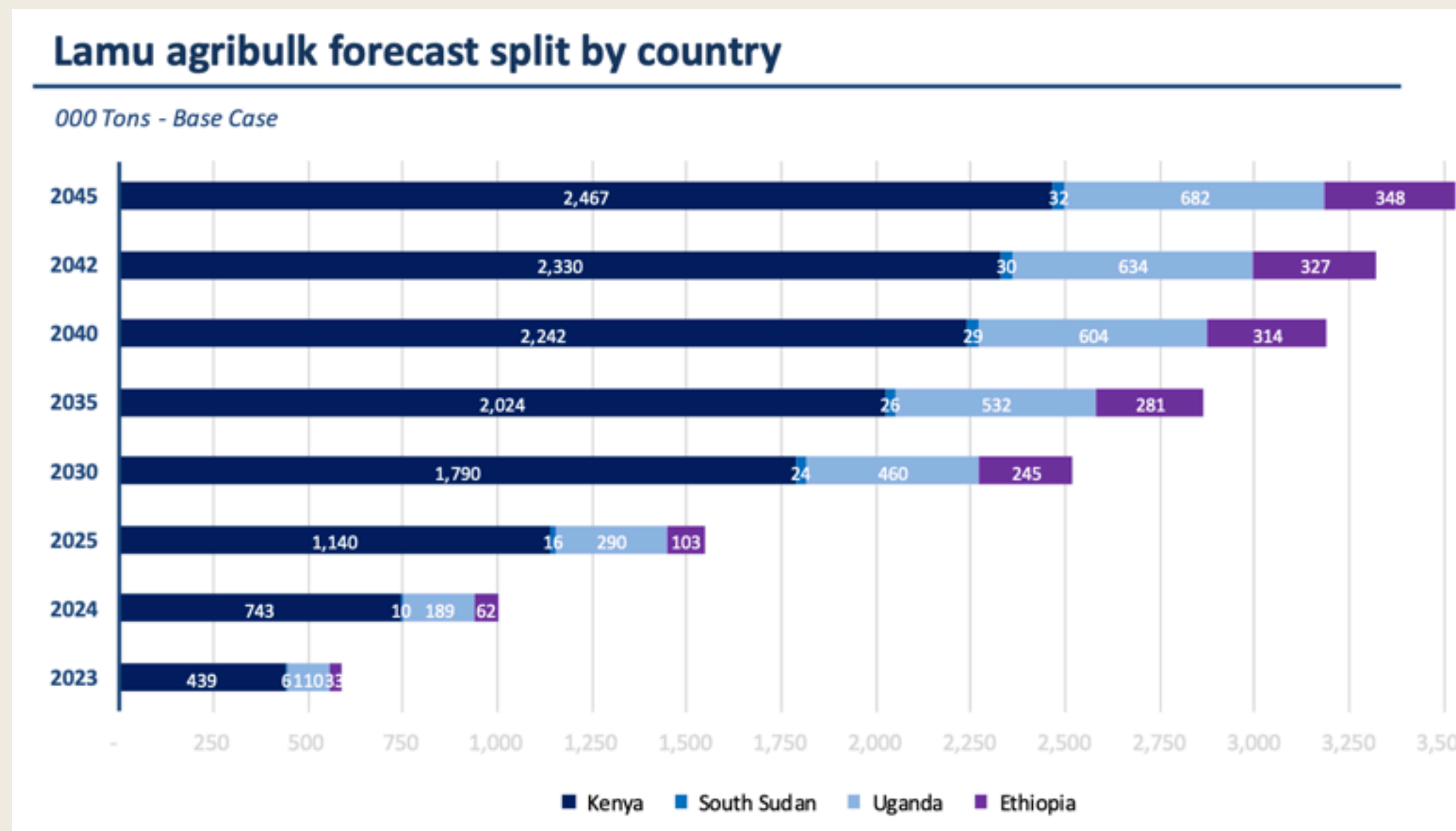
Total estimated upfront investments

\$ 210M

Total estimated full-period investments

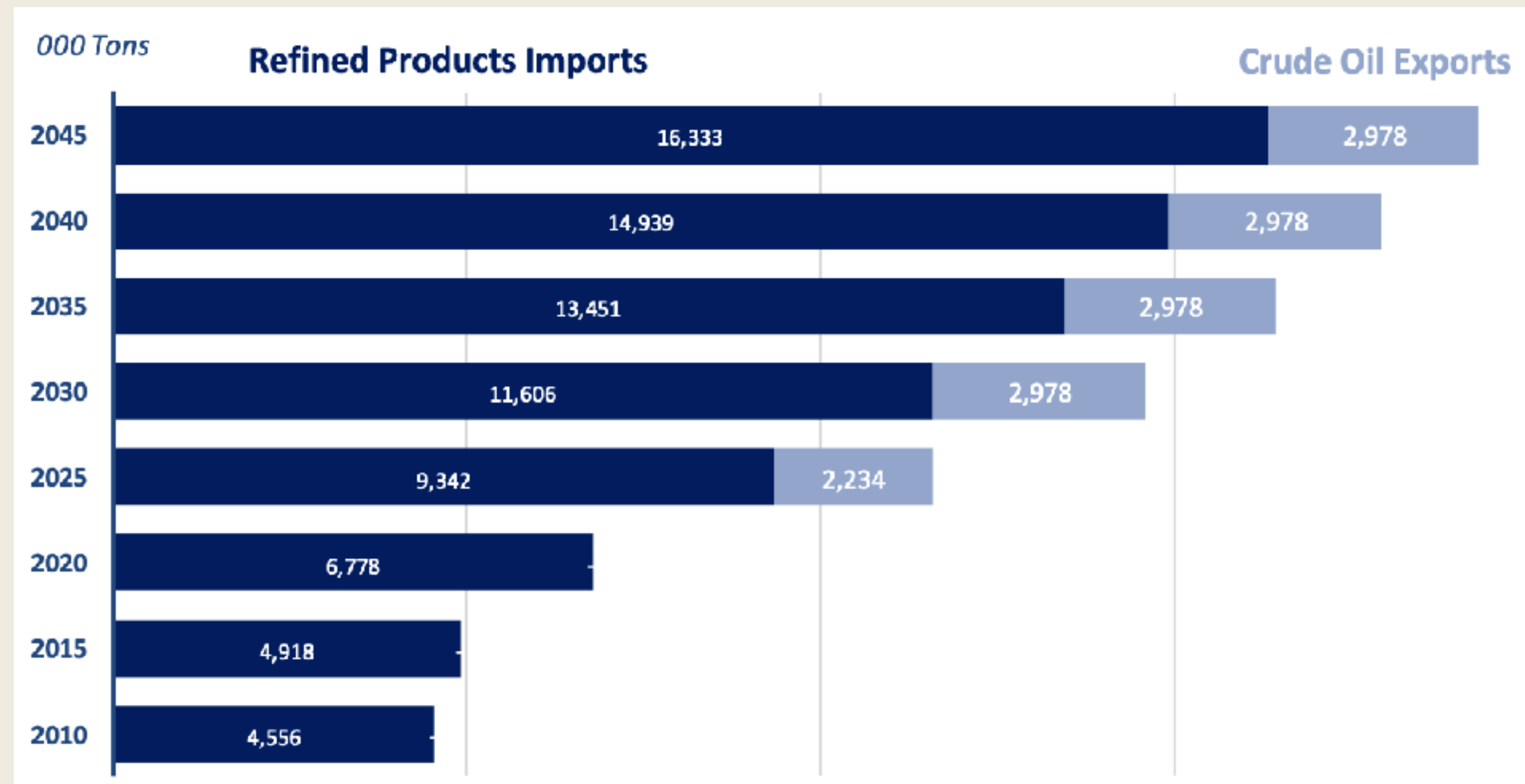
\$ 80M

Investment costs of the causeway, the largest CAPEX component



Lamu Port Liquid Bulk Terminal

- . Potential Lamu Port oil demand comprises both Kenyan refined oil imports and crude oil exports from the Lokichar basin.
- . The basin contains an estimated 560 million barrels in proven crude oil reserves;
- . This reserve would translate to 60,000 (low case) to 100,000 (high case) barrels per day of gross production. This yields a base case average production of 80,000 barrels per day.
- . Demand for refined oil product imports and crude oil exports in Kenya is expected to increase from 6.8M tons in 2020 to 19.3M tons in 2045



LIQUID BULK TERMINAL INVESTMENTS

\$ 61M

Total estimated upfront investments

\$ 94M

Total estimated full-period investments

22%

EIRR



New Lamu industrial City

KEY DEVELOPMENT INDUSTRIES FOR NLIC

. **Iron and steel industries:** High demand for steel in the region with lower production. Kenya's steel demand is currently at 2.5 million tons, and is projected to double to 5 million tons by 2030.

. **Cement industry:** With major infrastructure and real estate developments ongoing, there is increased demand for cement in the region. Kenya alone consumed 5.7M tons of cement in 2015.

. **Petrochemical industry:** There are massive Oil and Gas reserves in the region that have been largely under-utilised leading to reliance on imports.

. **Leather industry:** Already a major industry in Ethiopia, leather production in Africa lags far behind its demand. The LAPSSSET partner states offer a significant cost advantage over other major leather producing countries such as China.



Lamu Special Economic Zone (SEZ)

. **NLIC:** Located within NEW LAMU INDUSTRIAL CITY and with close proximity to Lamu Port, Lamu SEZ saves the tenants time, costs, and creates connectivity, hence leading to market access of the participating industries.

. **Nautical characteristics:** The Lamu Port design includes berths capable of handling bulk carrier of 100,000 DWT - class, container ship of 100,000 DWT and general cargo ship of 30,000 DWT-class. This makes the Lamu Port more competitive than Mombasa Port.

. **Greenfield:** The Greenfield development with sufficient space availability, offers opportunity and flexibility to develop the asset free from existing obstacles.

. **Raw materials:** The recent discovery of oil, gas, rare minerals and coal in EAST AFRICA along the LAPSSET corridor makes Lamu a captive processing destination of these raw materials.



SEZ INVESTMENTS

\$ 98M

Total estimated upfront investments

\$ 491M

Total estimated full-period investments

80%

Share of investments for Phases II and III

Land demand in hectares	2023	2027	2037	2047
Basic Storage	2	3	4	5
Warehousing	8	22	39	53
Light industries	8	68	328	608
Public Buildings	5	5	9	11
Roads	3	12	46	81
Landscaping	2	9	34	61
Total land demand in ha	29	119	460	820

Highways

Interregional Highways from Lamu to Isiolo, Isiolo to Nakodok and Juba (S. Sudan), Isiolo to Moyale and to Addis Ababa (Ethiopia), and Lamu to Garsen (Kenya)

. Isiolo - Marsabit - Moyale (505KM):

Works 100% complete.

One stop border post at Moyale 100% complete

. Lamu - Witu - Garsen (112KM):

Construction commenced in 2017.

60% complete

. Lamu - Garissa - Isiolo (538KM):

NEGOTIATIONS ONGOING, GOVERNMENT CONSIDERING VARIOUS FUNDING OPTIONS FOR THE ROAD SECTION

. Isiolo - Maralal - Lokichar (368KM):

Detailed designs completed.

Ready for funding

. Lokichar - Lodwar - Nakodok (338KM):

Certain sections commenced. Funding under World Bank.

68% Lamu Port link road completion rate.



Oil Pipelines

Crude oil pipeline from Lamu to Isiolo, Isiolo to Nakodok, and Nakodok to Juba (South Sudan)

. Joint Development Agreement (JDA):

Signed between the upstream companies and GOK in 2017.

. Front end engineering designs (FEED), strategic Environmental Assessment (SEA) and environmental and social Impact Assessment (ESIA) studies already completed.

. First oil flow expected by 2022.

Product Oil Pipeline from Lamu to Isiolo, Isiolo to Moyale (Kenya) and Moyale to Addis Ababa (Ethiopia)

. Bilateral Agreement between Kenya and Ethiopia to jointly develop the pipeline signed in 2018.

. Kenya Pipeline (KPC) preparing studies on the pipeline in 2019/2020

Both pipelines admitted under PIDA II



Crude Oil Pipeline

. Preliminary Engineering and feasibility studies undertaken in October 2014. Signed between the upstream companies and GOK in 2017.

. The feasibility study and preliminary engineering design of crude oil pipeline between Lokichar and Lamu was completed in May 2015.

PROJECT COST

Total estimated investment cost of US\$ 3,060 Million broken down as follows:

- . Lamu - Isiolo section (540KM) - US\$ 1,580 Million
- . Isiolo - Nakodok section (780KM) - US\$ 1,240 Million
- . Lamu Port Area section - US\$ 340 Million





DAVID J. MACKAY - VARUNA CONSULTANCY

Railway

Interregional Standard Gauge Railway lines from Lamu to Isiolo, Isiolo to Nakodok (Kenya/South Sudan border) and Juba (South Sudan), Isiolo to Moyale (Kenya/Ethiopia border) and Addis Ababa (Ethiopia) and Nairobi to Isiolo.

- . Preliminary engineering and feasibility studies carried out on the project lines.
- . Ethiopia/Kenya Technical Coordination Committee set up to develop a joint implementation plan and funding strategy.
- . A joint due diligence tour to China done in 2015.
- . Railway admitted under PIDA II
- . PROJECT COST: Total estimated investment cost - USD \$ 7.099 Billion
- . Project EIRR: 17.3%



Investment incentives in place

- . Capital goods and raw materials are zero rated.
- . Plant, machinery & equipment are duty exempt.
- . Some of the plant, machinery and equipment are exempt from VAT.
- . Market access in COMESA & EAC markets with no taxes.

Investment Allowance:

- . 100% Nairobi, Mombasa and Kisumu cities and
- . 150% those in other parts of the country.

Export Processing Zones (EPZ) Scheme:

- . 10 year tax holiday
- . 25% corporate tax for another 10 years
- . Duty and VAT Exemption
- . Single License
- . Exemption from stamp duty and
- . Exemption for withholding TAX.

Special Economic Zones (EPZ) Scheme

- . 10 year tax holiday
- . 15% corporate tax for another 10 years
- . Duty & VAT exemption
- . Single license
- . Exemption from stamp duty and
- . Exemption for withholding tax.

Incentives for listing in the Capital market

- . Issuance of at least 40% of share capital - 20% tax for 5 years
- . Issuance of at least 30% of share capital of share - 25% tax rate for 5 years
- . Issuance of at least 20% of share capital - 27% tax rate for 3 years.



Thank you! Any questions?



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