


# THE CONCEPT OF GREEN TRANSPORT CORRIDORS:

## "THE NORTHERN CORRIDOR GREEN FREIGHT STRATEGY 2030"

### ESCAP REGIONAL COOPERATION MECHANISM ON LOW CARBON TRANSPORT

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**Hanoi, Vietnam (Online Participation)**

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**NORTHERN CORRIDOR TRANSIT AND TRANSPORT COORDINATION AUTHORITY**




# PRESENTATION OUTLINE

1. "Overview of the Northern Corridor"
2. "The Northern Corridor Green Freight Strategy 2030"
3. "Key achievements and challenges"

# THE NORTHERN CORRIDOR

The Northern Corridor is a **multimodal surface transport system** linking countries of the Great Lakes region to the Kenyan sea Port of Mombasa. **It was established in 1985 through a treaty know as the Northern Corridor Transit and Transport Agreement (NCTTA)** which has **12 protocols**.

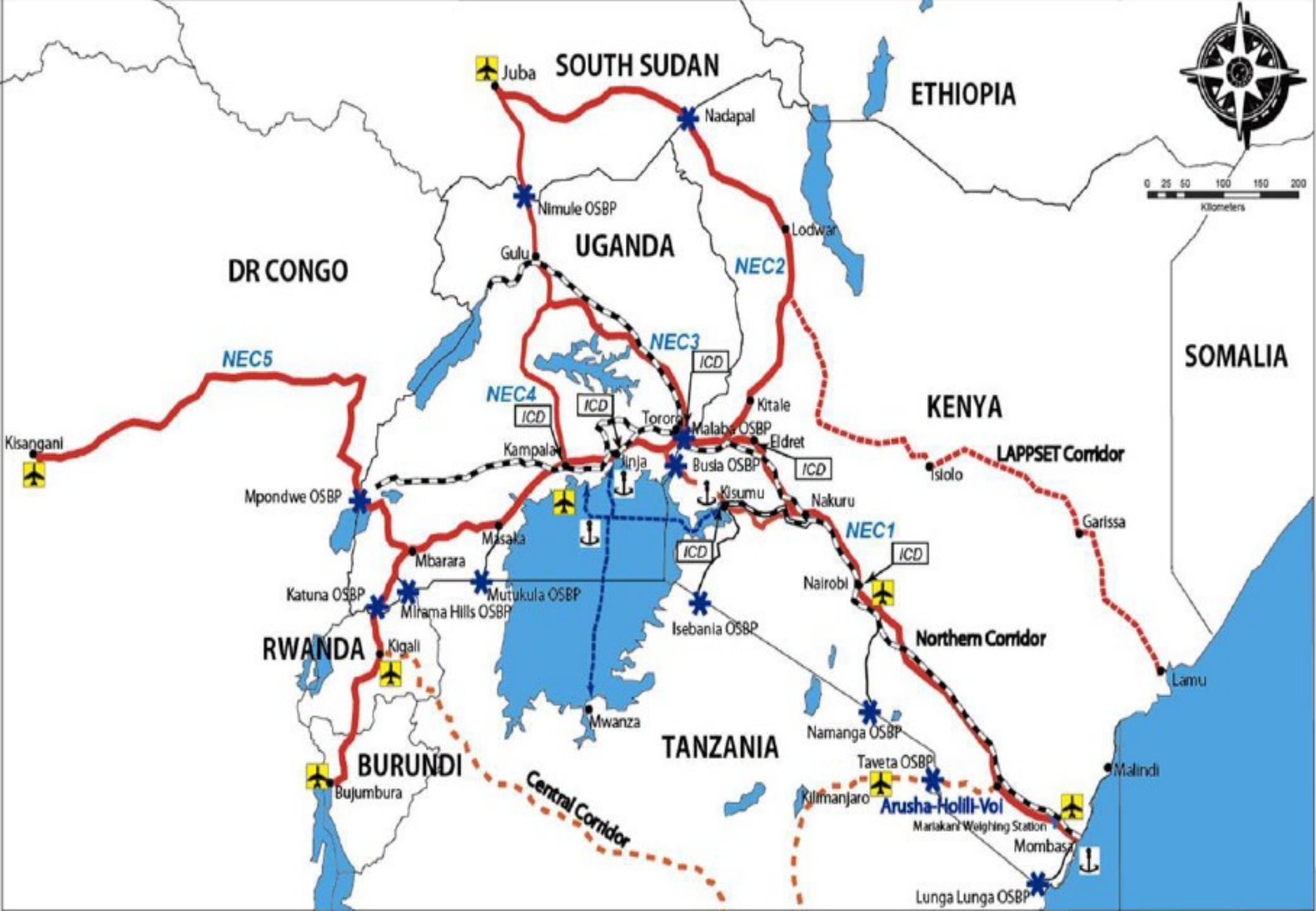
The member States of the Corridor include **Burundi, DR Congo, Kenya, Rwanda, South Sudan and Uganda**. The Corridor also serves **Northern Tanzania, Somalia,** and **Ethiopia**.

One of the key objectives of the Northern Corridor is **guaranteeing free passage of transit traffic** through the respective territories of the Member States.

The highest policy making organs are the **Council of Ministers** and **the Executive Committee**. The Northern Corridor is **managed and coordinated** by the Northern Corridor Transit and Transport Coordination Authority **(NCTTCA)** Secretariat whose **Headquarters are in Mombasa, Kenya**



It is the busiest route in East & Central Africa.


SOUTH SUDAN
Juba
Nadapal
ETHIOPIA
Nimule OSBP
UGANDA
Lodwar
Gulu
DR CONGO
NEC2
NEC3
NEC5
NEC4
ICD
SOMALIA
Kitale
KENYA
Tororo
Malaba OSBP
Eldret
Kisangani
Kampala
Jinja
Busia OSBP
LAPPSET Corridor
Isiolo
Mpondwe OSBP
Kisumu
Nakuru
Garissa
NEC1
Masaka
Mbarara
Nairobi
Katuna OSBP
Mutukula OSBP
Mirama Hills OSBP
Isebania OSBP
Northern Corridor
RWANDA
Kigali
Lamu
Mwanza
Namanga OSBP
TANZANIA
Taveta OSBP
Malindi
BURUNDI
Kilimanjaro
Arusha-Holili-Voi
Bujumbura
Central Corridor
Mariakani Weighing Station
Mombasa
Lunga Lunga OSBP
0 25 50 100 150 200
Kilometers

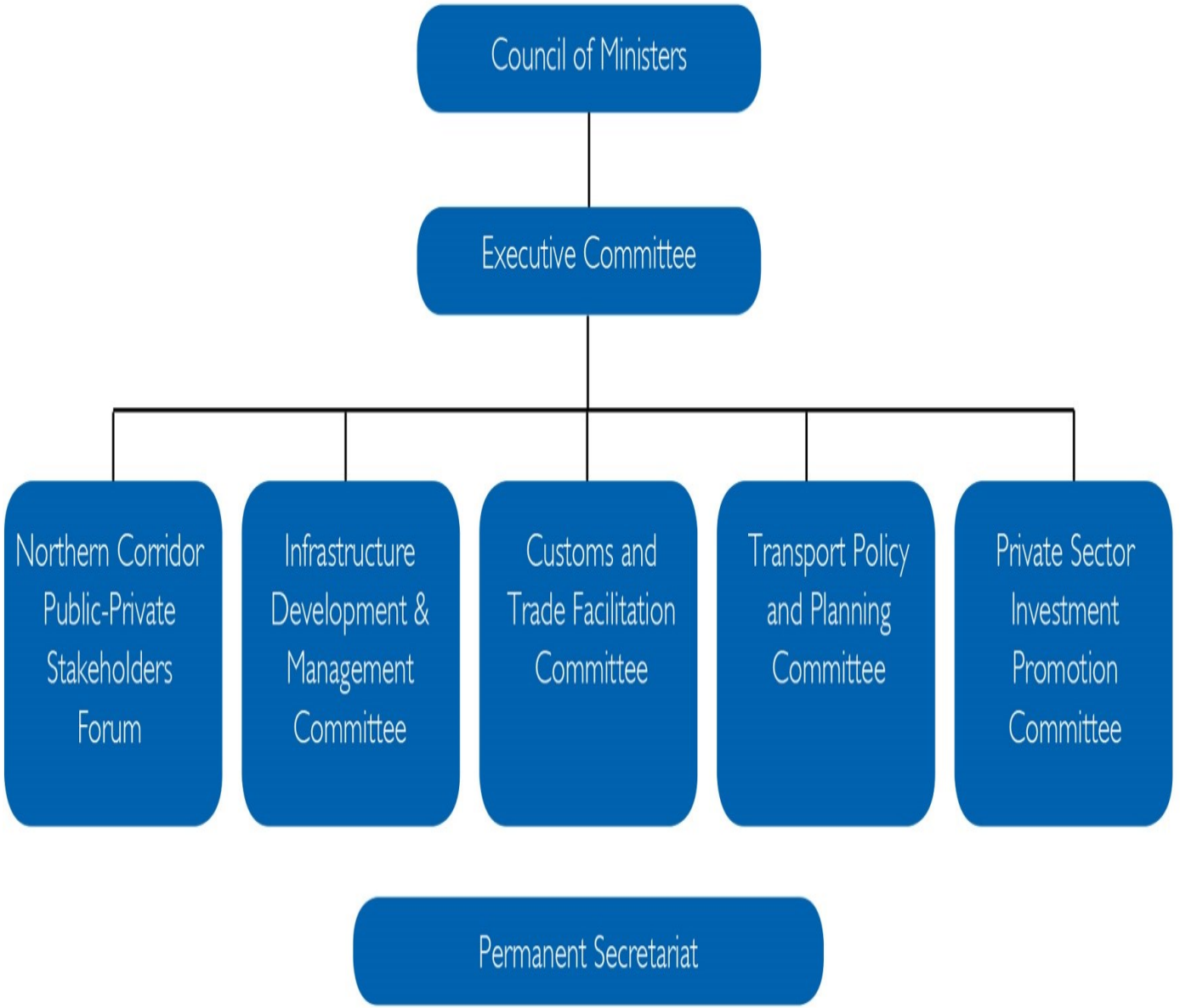
# AREAS OF FOCUS



# THE TWELVE PROTOCOLS

1. Maritime Port Facilities
2. Routes and Facilities
3. Custom Control and Operations
4. Documentation and Procedures
5. Transport of Goods by Rail
6. Transport of Goods by Road
7. Transport of Goods through Inland Waterways
8. Transport by Pipeline
9. Multimodal Transport of Goods
10. Handling of Dangerous Goods
11. Transit Agencies, Traders and Employees
12. New Protocol: Environmental Protection

# THE NORTHERN CORRIDOR TECHNICAL COMMITTEES



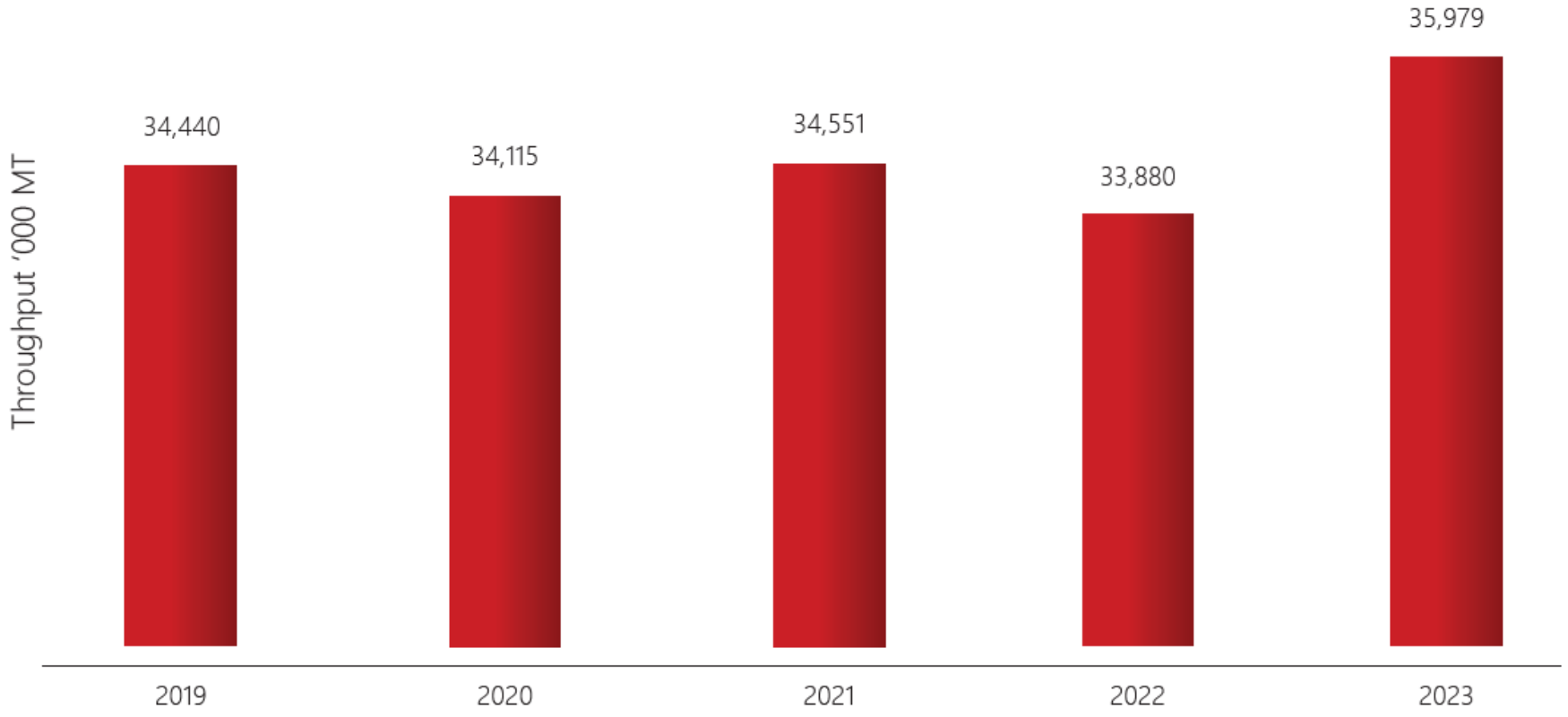
# THE NORTHERN CORRIDOR GREEN FREIGHT STRATEGY 2030: BACKGROUND

- Mombasa Port handled **35.98 million tons** of total cargo throughput encompassing imports, exports, and transshipments **(KPA, 2023)**.
- The Northern Corridor features about **12,700Km** of road infrastructure and facilitates a daily road freight movement of about **75,000 tons** in about **2000-3000 trucks** from Mombasa Port to the hinterlands of Kenya and EAC nations.
- In 2017, the **Northern Corridor** in collaboration with **UNEP (CCAC)** and **UNCTAD** developed a transformative **Green Freight Program** (2017-2021) aimed at reducing **fuel consumption** and **carbon emissions** across member states.
- The review of the **Corridor Green Freight Program (2017-2021)** and stakeholder interviews carried out in December 2023 highlighted critical factors hindering effective implementation of sustainable freight transport solution in the region such as; ***lack of specialized expertise and funds***, ***lack of focus on sustainable infrastructure***, ***low public awareness***, *and* ***inadequate attention to cross-cutting priorities*** *(i.e., social, safety, and environmental factors).*

# THE NORTHERN CORRIDOR GREEN FREIGHT STRATEGY 2030: BACKGROUND

## Cargo Throughput through the Port of Mombasa

**Figure 3:** Annual Mombasa port throughput '000' in MT




Data Source: KPA 2019-2023

# THE NORTHERN CORRIDOR GREEN FREIGHT STRATEGY 2030: BACKGROUND

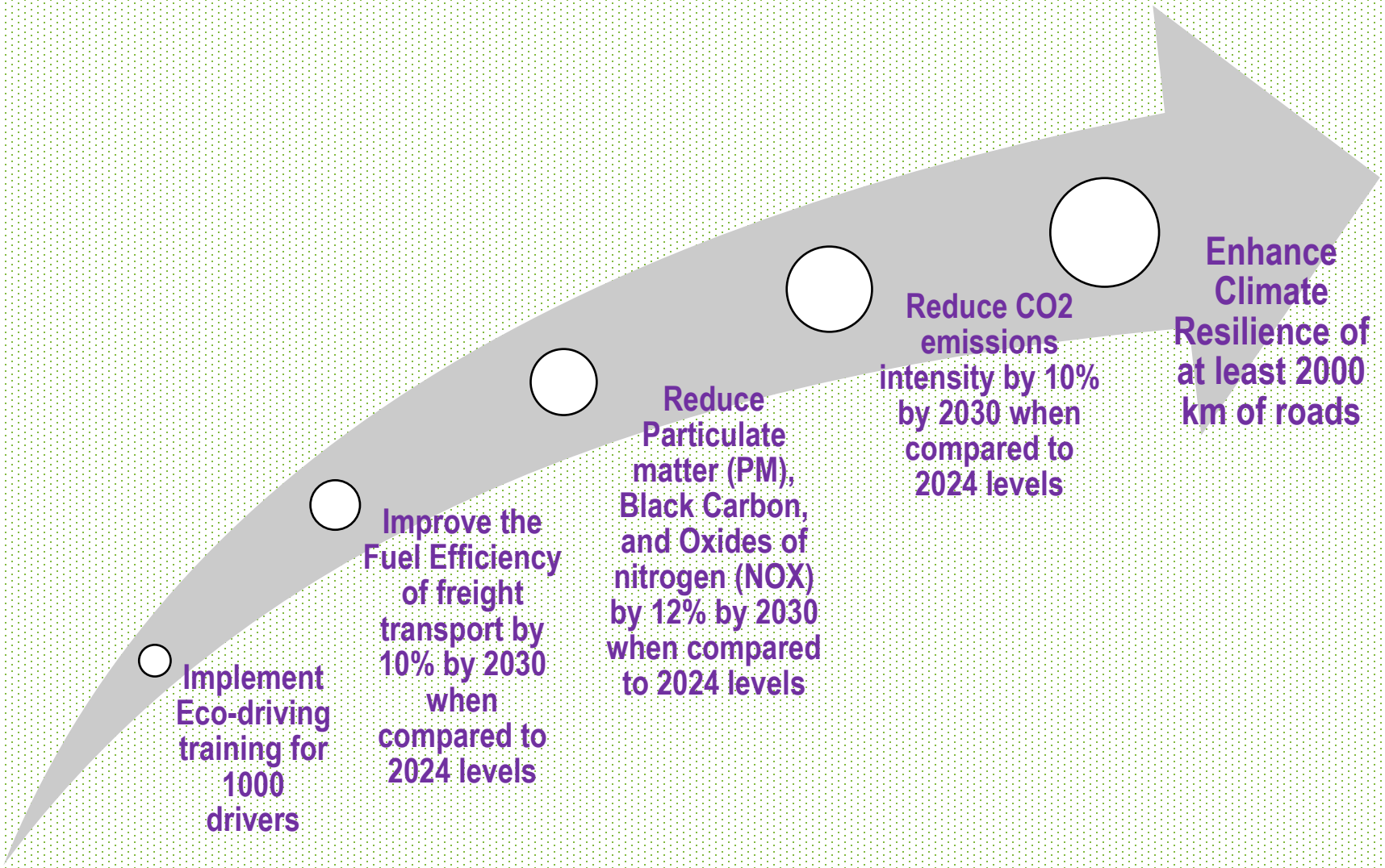
- In 2023, Northern Corridor with partnership with **UNEP(CCAC),** Smart Freight Centre **(SFC),** and Kuhne Foundation **(KF)** developed the **Northern Corridor Green Freight Strategy 2030** with targets and proposed improvement measures for implementation until 2030.

- The **Northern Corridor Green Freight Strategy 2030** prioritizes; **enhancement of fuel efficiency, reduction of carbon footprint** to actively combat climate change, and **reduction of harmful pollutants** such as particulate matter, black carbon, and NOx, in order to safeguard public health and preserve air quality.

- The main objective of the **Northern Corridor Green Freight Strategy 2030** is to build **resilience against climate impacts** and ensure that the **Northern Corridor freight system remains robust** and **adaptable** in the face of a changing planet.

***Thus, by 2050, the Northern Corridor aspires to become a net-zero emission corridor***

# THE NORTHERN CORRIDOR GREEN FREIGHT STRATEGY 2030: TARGETS



# THE NORTHERN CORRIDOR GREEN FREIGHT STRATEGY 2030: PRIORITY ACTIONS

## A. ACTIONS TO BE LED BY NORTHERN CORRIDOR:

1. Green Freight Capacity Building Initiative
2. Driver and Fleet Manager Training Schemes
3. Establishing A Green Freight Transport Network
4. Operationalizing Emission Quantification Methodology
5. Implementing the Monitoring Plan

## B. ACTIONS TO BE SUPPORTED BY NORTHERN CORRIDOR:

1. Truck Operator Labelling Scheme
2. Modal Shift
3. Feasibility of Electrifying the Corridor and Freight Supply Chains
4. Technology Demonstration, Verification, and Rollout
5. Climate Resilient Corridor Initiative
6. Regulating the Import of Old Inefficient Trucks

# THE NORTHERN CORRIDOR GREEN FREIGHT STRATEGY 2030: GHG ACCOUNTING IN THE MEMBER STATES

## The Northern Corridor Emission Tracker

| Section | Malaba-Kampala |
|---|---|
| Km | 236.00 |

| | Total Daily Traffic | No Of Trucks with Empty Load | Average Loading (Tonne) | Average Fuel Efficiency (kmpl) - Loaded Truck | Average Fuel Efficiency (kmpl) - Empty Truck | Total Freight Movement (Million tonne-km)/Annual | Loaded Trip Total Fuel Consumption (Diesel-Million Liters)/Year | Empty Trip Total Fuel Consumption (Diesel-Million Liters)/Year | Total CO2 Emissions (Tonnes) - Loaded Trips | Total CO2 Emissions (Tonnes) - Empty Trips | **Total CO2 Emissions (Tonnes)** | **Total PM10 Emissions (Kg)/Year** | **Total BC Emissions (Kg)/Year** | **Total NOx Emissions (Kg)/Year** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| LDT/ 2-Axle | 683 | 276.615 | 15 | 2.09 | 2.22 | 880 | 16.7 | 10.7 | 43,128 | 27,637 | **70,765** | **3,509** | **1,493** | **95,089** |
| MCV - 3Axle | 120 | 48.6 | 20 | 0.96 | 2.06 | 206 | 6.4 | 2.0 | 16,497 | 5,233 | **21,730** | **1,695** | **300** | **39,335** |
| MCV-4 Axle | 90 | 36.45 | 10 | 1.59 | 1.41 | 77 | 2.9 | 2.2 | 7,470 | 5,734 | **13,204** | **1,271** | **225** | **29,502** |
| HCV- 5 & 6 Axle | 1965 | 795.825 | 32 | 2.02 | 2.6 | 5,402 | 49.7 | 26.3 | 128,380 | 67,891 | **196,271** | **64,664** | **13,217** | **1,254,332** |
| HCV- 7 & 8 Axle | 27 | 10.935 | 33 | 2.98 | 1.78 | 77 | 0.5 | 0.5 | 1,196 | 1,363 | **2,558** | **889** | **182** | **17,235** |
| HCV- >8 Axle | 2 | 0.81 | 20 | 2.98 | 2.68 | 3 | 0.0 | 0.0 | 89 | 67 | **156** | **66** | **13** | **1,277** |
| Total | 2887 | 1169.235 | | | | | | | 196,759 | 107,925 | **304,684** | **72,093** | **15,431** | **1,436,769** |

## GHG Emission Accounting: GHG emission baseline 2024 for Uganda

# THE NORTHERN CORRIDOR GREEN FREIGHT STRATEGY 2030: KEY MILESTONES/ACHIEVEMENTS

- ✓ Policy Organs Directives
- ✓ Objectives & action plan defined
- ✓ Green Freight Program Actions (policies, projects, strategies)
- ✓ Priority KPI and Targets selected

✓ 2016

- ✓ Piloted Port baseline data and assess current scenario

✓ 2017

**Program implementation (NCTTCA & Partners)**

1. Awareness campaigns on GHG emissions along the Corridor *(Kenya, Uganda, Rwanda)*
2. Trainings of heavy commercial truck drivers on eco-driving practices *(Kenya, Rwanda).*
3. Acquisition of roughometers to enable member States measure the riding quality (IRI) of their roads *(Burundi, DRC, and South Sudan).*
4. Regional Multimodal Transport Summit in a bid to *promote Modal Shift (Nairobi, Kenya)*
5. Implementation of the *2013 EAC Vehicle Load Control Bill* to control vehicle overloading

✓ 2023

**Plans**

**Implementation of the Northern Corridor Green Freight Strategy 2030 (NCTTCA & Partners)**

**The stakeholders validation workshop of the Northern Corridor Green Freight Strategy 2030 Implementation Action Plan 2024-2030 (NCTTCA&UNEP&KF)**

**Corridor emission data collection – 2024 baselines establishment -** for regular tracking and reporting, **training of truck drivers on eco-driving**, and **awareness campaigns on GHG emissions control (NCTTCA & Partners)**

**In-house training for capacity building on green corridors and sustainable transportation (NCTTCA & Partners)**

**Implementation of the 2013 EAC Vehicle Load Control Bill, advocacy for multimodal transport, and road safety**

# KEY CHALLENGES

1. Lack of reliable data on freight and logistics emissions for estimation, monitoring, and regular reporting

2. Insufficient public awareness campaigns on greenhouse gas (GHG) emissions along the Corridor

3. Limited technical expertise in the area of environment and climate change. ***There is need for continuous trainings of experts from Corridor Management Authorities to push for this important programme***

4. Limited funds to implement planned interventions under the Northern Corridor Green Freight Programmes/Strategies

# PHOTOS: TRAINING OF TRUCK DRIVERS ON ECO-DRIVING PRACTICES IN MOMBASA, KENYA






# PHOTOS: TRAINING OF TRUCK DRIVERS ON ECO-DRIVING PRACTICES IN MOMBASA, KENYA






# PHOTOS: SENSITISATION WORKSHOP ON GHG EMISSIONS CONTROL ALONG THE CORRIDOR AND TRAINING OF TRUCK DRIVERS ON ECO-DRIVING PRACTICES IN KIGALI, RWANDA






# PHOTOS: TRAINING OF TRUCK DRIVERS ON ECO-DRIVING PRACTICES IN KIGALI, RWANDA





# PHOTOS: CORRIDOR GHG ACCOUNTING

## GHG Accounting – Truck activity data collection at the weighbridge in Uganda




## GHG Accounting – On-road tallying of transit trucks in Rwanda



# Thank you

